

Development at West Kowloon Cultural District

**Quarterly Environmental Monitoring and Audit (EM&A) Report
(May 2022 – July 2022)**

August 2022

This Quarterly EM&A Report has been reviewed and certified by the Environmental Team Leader (ETL) and verified by the Independent Environmental Checker (IEC).

Certified by:



CK WU

Environmental Team Leader (ETL)

West Kowloon Cultural District Authority

Date

26 August 2022

Verified by:



Claudine LEE

Independent Environmental Checker (IEC)

Meinhardt Infrastructure and Environment Ltd

Date

31 August 2022

This Report Consists of:

Part-1: EM&A at Lyric Theatre Complex

and

**Part-2: EM&A for Foundation and ELS
Works in Zones 2A, 2B & 2C**

Part-1: EM&A at Lyric Theatre Complex



Lyric Theatre Complex

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Contents

Executive summary	1
1 Introduction	2
1.1 Background	2
1.2 Project Organisation	2
1.3 Status of Construction Works in the Reporting Period	3
2 Summary of EM&A Requirements and Mitigation Measures	4
2.1 Monitoring Requirements	4
2.2 Environmental Mitigation Measures	5
3 Summary of EM&A Results	6
3.1 Monitoring Data	6
3.2 Monitoring Exceedances	6
3.2.1 1-hour TSP Monitoring	6
3.2.2 24-hour TSP Monitoring	6
3.2.3 Construction Noise Monitoring	6
3.2.4 Landscape and Visual Monitoring	7
4 Waste Management	8
4.1 Lyric Theatre Complex	8
5 Environmental Non-conformance	9
6 Comments, Recommendations and Conclusion	11
6.1 Comments	11
6.2 Recommendations	11
6.3 Conclusion	11
Figure 1 Site Layout Plan and Monitoring Stations	12
Appendices	13
A. Project Organisation	14
B. Construction Programme	15

C.	Environmental Mitigation Measures – Implementation Status	16
D.	Meteorological Data Extracted from Hong Kong Observatory	17
E.	Graphical Plots of the Monitoring Results	18
F.	Waste Flow table	19
G.	Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions	20

Executive summary

This Quarterly EM&A Report presents the monitoring works at Lyric Theatre Complex conducted from 1 May 2022 to 31 July 2022. The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

The impact stage EM&A programme for the Project includes air quality, noise, water quality, waste, landscape and visual monitoring. The recommended environmental mitigation measures were implemented on site and regular inspections were carried out to ensure that the environmental conditions are acceptable.

The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the contractors where appropriate in the reporting quarter.

Exceedance of Action and Limit Levels

There was no breach of Action and Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting quarter.

Implementation of Mitigation Measures

Construction phase weekly site inspections were carried out to confirm the implementation measures undertaken by the Contractors in the reporting quarter. The status of implementation of mitigation measures during the reporting quarter is shown in **Appendix C**.

Landscape and visual impact inspections were conducted as part of the abovementioned weekly site inspections during the reporting quarter. No adverse comment on landscape and visual aspects were made during these inspections.

Record of Complaints

Seven complaints were received during the reporting quarter.

Record of Notifications of Summons and Successful Prosecutions

No notifications of summons and successful prosecutions were recorded in the reporting quarter.

1 Introduction

1.1 Background

Mott MacDonald Hong Kong Limited (MMHK) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction of M+ Museum Main Works (Contract No.: CC/2015/3A/022) and Lyric Theatre Complex including the Foundation Works (Contract No.: CC/2015/3A/014), L1 Contract (Contract No. CC/2017/3A/030) and L2 Contract (Contract No. CC/2017/3A/031) at West Kowloon Cultural District (WKCD) (The Project) as part of the WKCD development. The Project Proponent is the West Kowloon Cultural District Authority (WKCDA). The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an “engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000” (Item 1 of Schedule 3) and “an underpass more than 100m in length under the built areas” (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the “Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District” which specifically includes the abovementioned category of DP under Item A.9, Part I, Schedule 2 of the EIAO. The captioned projects include part of the abovementioned underpass road located within the site boundary also falls under this same category.

The M+ museum development aims to provide an iconic presence for the M+ museum, semi-transparent vertical plane, housing education facilities, a public restaurant and museum offices. At ground and lower levels, generous access will be provided to the park and other West Kowloon Cultural District facilities, alongside a public resource centre, theatres, retail and dining, and back-of-house functions.

The 1,200-seat Lyric Theatre Complex will be Hong Kong's first world-class facility for dance performances, including ballet, contemporary and Chinese dance forms. In the run up to the opening of further major performing arts venues in the WKCD, it will also be used for a wide variety of performing arts events including drama, opera and musical performances. The Lyric Theatre Complex will act as a platform for Hong Kong's leading arts organisations and be a new major venue to show programmes from Asia and worldwide.

The Quarterly EM&A Report is prepared in accordance with the Clause 3.4 of the Environmental Permit No. EP-453/2013/B. This Quarterly EM&A Report presents the monitoring works conducted from 1 May 2022 to 31 July 2022. The purpose of this report is to summarise the findings in the EM&A of the project over the reporting period.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure together with the contact information of the key personnel are shown in **Appendix A**.

1.3 Status of Construction Works in the Reporting Period

During the reporting period, construction works at L2 undertaken include:

- LTC construction
 - Structure (Slab, wall, columns and beam)
 - Falsework and formwork erection
 - Reinforcement work
 - Concrete work
 - ABWF & MEP work
- ASDA and Lyric Theatre Promenade
 - Structure and BS works
- DSC cofferdam (Cofferdam A)
 - Removal of S1 strut
 - Backfill for portion of water main
 - Const. additional blinding layer & retaining wall
 - Trim down portion of pipe pile
- Extended basement
 - ABWF & MEP work
 - RC water tank
 - Late cast RC works (top slab/ backfill sunken etc.)
 - Carpark area plaster and paint
- Underpass and Associated Area
 - RC Structure
 - ABWF & MEP work
- M+ Day 2 Works
 - Install new waterstop at ends of UCP
 - Construct RC duct
 - Remove Plenum Block Wall & make good opening for Louvre
- P32 Interim Development
 - Structure works (Scaffold/forms/rebar concrete)
 - Remedial works & scaffold removal
 - Construct dog houses

The Construction Works Programme of the Project is provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**.

2 Summary of EM&A Requirements and Mitigation Measures

2.1 Monitoring Requirements

In accordance with the EM&A Manual, environmental parameters including air quality, noise, landscape and visual have been monitored. The specific parameters, monitoring frequency and the respective Action and Limit levels are given in **Table 2.1**. Locations of the monitoring stations are provided in **Figure 1**.

Table 2.1: Summary of Impact EM&A Requirements

Parameters	Descriptions	Locations	Frequencies	Action level	Limit level
Air Quality	24-Hour TSP	AM1 - International Commerce Centre	At least once every 6 days	143.6 µg/m ³	260 µg/m ³
	1-Hour TSP	AM1 - International Commerce Centre	At least 3 times every 6 days	273.7 µg/m ³	500 µg/m ³
	24-Hour TSP	AM2 - The Harbourside Tower 1	At least once every 6 days	151.1 µg/m ³	260 µg/m ³
	1-Hour TSP	AM2 - The Harbourside Tower 1	At least 3 times every 6 days	274.2 µg/m ³	500 µg/m ³
Noise	Leq, 30 minutes	NM1- The Harbourside Tower 1	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
Landscape & Visual	Monitor implementation of proposed mitigation measures during the construction stage	As described in Table 9.1 and 9.2 of the EM&A Manual	Bi-weekly	N/A	N/A

In the context of the monitoring activities at M+ Museum and the Lyric Complex, three monitoring stations had been considered, including AM1 (International Commerce Centre), AM2 (The Harbourside Tower 1) for air monitoring, and NM1 (The Harbourside Tower 1) for noise monitoring. Other monitoring locations were so far away from M+ Museum and the Lyric Complex and could not be representative for impact monitoring.

The Harbourside management office formally rejected our proposal of setting up air quality and noise monitoring equipment on its premises at the podium level of Tower 1 (AM2/NM1) on 10 November 2015. Nevertheless, a suitable air quality monitoring location at AM2 was identified on the ground floor in front of The Harbourside Tower 1, which is at the same location as that of baseline monitoring for consistency. No management approval is required on the ground floor for conducting the air monitoring. However, the electricity supply at AM2 was suspended from 31 August 2016. In order to have a more secure electricity supply, an alternative air monitoring location (AM2A) was identified at Austin Road West opposite to The Harbourside Tower 1, which

is close to Lyric Theatre Complex site entrance. This alternative air monitoring location was approved by EPD on 28 September 2016. Due to the works programme, the air monitoring location AM2A has been relocated to the alternative monitoring location AM2B at the 1st floor of Gammon's site office, which was approved by EPD on 21 February 2019. In view of the upcoming construction works to be undertaken at the air monitoring station AM2B, AM2B was no longer available for conducting the impact air quality monitoring. Hence, an alternative air monitoring location was identified on the ground floor in front of The Harbourside Tower 1 (AM2) which is at the same location as the baseline monitoring and this previously approved monitoring location had also been used for the EM&A Programme from November 2015 to August 2016, the relocation was approved by EPD on 27 May 2021.

Alternative noise monitoring location was identified at The Arch (NM2); however, The Arch management office formally rejected our proposal of setting up noise monitoring equipment on its premises on 23 November 2015. On the other hand, noise monitoring at G/F of Harbourside could not be representative. However, approval from the management office of the International Commerce Centre has been granted on 29 February 2016 for conducting noise monitoring at the alternative noise monitoring location identified at the podium floor (NM1A) which is free from screening to the construction activities.

In short, 2 air quality monitoring stations and 1 noise impact monitoring station were confirmed for the impact monitoring.

2.2 Environmental Mitigation Measures

Environmental mitigation measures have been recommended in the EM&A Manual. Summary of implementation status of the environmental mitigation measures is provided in **Appendix C**.

3 Summary of EM&A Results

3.1 Monitoring Data

Impact monitoring has been conducted in the reporting quarter. Meteorological data for the reporting quarter have been extracted from Hong Kong Observatory and presented in **Appendix D**. Monitoring data with graphical presentation for the reporting quarter are shown in **Appendix E**. A summary on the monitoring results is presented in **Table 3.1**.

Table 3.1: Summary of Monitoring Data

Parameter	Monitoring Location	Minimum	Maximum	Average
Air Quality				
1 hour TSP	AM1	18	54	27
	AM2	21	55	35
24 hour TSP	AM1	13	43	24
	AM2	20	43	27
Construction Noise				
Leq(30min)	NM1A	66	68	67

3.2 Monitoring Exceedances

Summary of the exceedances in the reporting quarter is tabulated in **Table 3.2**.

Table 3.2: Summary of Exceedances

Monitoring Station	Parameter	No. of Exceedance		Action Taken
		Action Level	Limit Level	
Air Quality				
AM1	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM2	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
Construction Noise				
NM1A	Leq(30min)	0	0	N/A

3.2.1 1-hour TSP Monitoring

All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

3.2.2 24-hour TSP Monitoring

All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

3.2.3 Construction Noise Monitoring

All construction noise monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance was recorded.

3.2.4 Landscape and Visual Monitoring

All landscape and visual impact inspections were conducted as scheduled in the reporting quarter. No adverse comment on landscape and visual aspects were recorded.

4 Waste Management

4.1 Lyric Theatre Complex

As advised by the Contractor (L2 Contract), 570.3 tonnes, 102.8 tonnes and 37.1 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137, Tuen Mun Area 38, and Chai Wan Public Fill Barging Point respectively in the reporting quarter, while 1,193.6 tonnes of general refuse were disposed of at SENT and WENT landfill. 71.7 tonnes of metals, 0.3 tonnes of paper/cardboard packaging, 0.1 tonnes of plastic and 0.0 tonne of timber were collected by recycling contractors in the reporting quarter. 0.0 tonne of inert C&D materials was reused on site. 0.0 tonne of fill materials was imported for use at site and 0.0 tonne of inert C&D materials was reused in other projects. 7.2 tonnes of inert C&D materials were disposed to sorting facility and 1.8 tonnes of chemical waste were collected by licensed contractors in the reporting quarter.

The actual amount of different types of waste generated by the activities of construction works at Lyric Theatre Complex in the reporting quarter are shown in **Appendix F**.

5 Environmental Non-conformance

There was no breach of Action or Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in the reporting quarter.

Seven complaints were received in the reporting quarter: three complaints in June and four complaints in July. No notifications of summons and successful prosecutions were received in the reporting quarter.

On 27 June 2022, the EPD received a complaint regarding muddy water discharge at the WKCD construction site. The complainant claimed that the WKCD construction site was continuously discharging muddy water into the sea, follow-up action was also demanded. The complainant had also provided photos and video demonstrating the concerned muddy water discharge. From the information provided by the contractor, no construction activities involving muddy materials or muddy water discharge were undertaken on 27 June 2022. And from the daily self-checking on the effluent quality, the wastewater was properly treated and was within compliance. Various mitigation measures and trainings were properly implemented including bundings at the seafront and regular site environmental committee meeting with subcontractor. From the on-site observation and prompt investigation during the site inspection on 27 June 2022, the brownish layer with bubbles observed was believed to be due to natural fluctuation or algae bloom in hot weather, which was not related to the construction works of Lyric Theatre Complex (L2 Contract). As concluded from the above investigation and findings, it could not directly imply the complaint was attributable to Lyric Theatre Complex (L2 Contract).

On 29 June 2022, the EPD received a complaint from a district councillor regarding polluted water discharge at the WKCD construction site. The complainant (nearby resident) claimed that great amount of polluted water was discharged from the WKCD construction site. The complainant had also provided video demonstrating the concerned polluted water discharge. On 30 June 2022, the EPD received a follow-up complaint from the district councillor regarding polluted water discharge. The complainant claimed that the WKCD construction site was still discharging polluted water, with some white bubbles floating to the water body near to the Harbour City. The complainant had also provided video demonstrating the concerned polluted water discharge. From the information provided by the contractor, no construction activities were undertaken and the site was closed on 29 and 30 June 2022. Various regular mitigation measures and trainings were properly implemented including bundings at the seafront and regular site environmental committee meeting with subcontractor. After the investigation, it was concluded that the complaints were not related to Lyric Theatre Complex (L2 Contract).

On 15 July 2022, EPD received a complaint from a public regarding construction dust issue at WKCD construction site and referred the case on the same day. The complainant claimed that a large construction site proximate to the Museum Drive was contributing to air pollution, such that the debris scratched the glass of the vehicles when the residents from The Arch were driving by. The complainant also claimed that the construction site was held responsible by a joint venture of various engineering companies, with one of them being "Chun Wo". Based on the above investigation, it was found that the concerned location was not within the site boundary of Lyric Theatre Complex (L2 Contract). Therefore, the complaint could not be attributable to Lyric Theatre Complex (L2 Contract). Nevertheless, the contractor is reminded to strengthen the implementation of the recommendations for dust mitigation measures to reduce impacts to the public.

On 22 July 2022, EPD received a complaint from a public regarding polluted water discharge issue at WKCD construction site and referred the case on the same day. The complainant claimed that polluted water from the WKCD construction site was observed flowing to the street. A photo was also provided by the complainant. Based on the above investigation, it was found that the concerned location was not within the site boundary of Lyric Theatre Complex (L2 Contract). Therefore, the complaint could not be attributable to Lyric Theatre Complex (L2 Contract).

On 26 July 2022, EPD received a complaint regarding polluted water discharge at the WKCD construction site. The complainant claimed that the construction site next to the West Kowloon Art Park was discharging polluted water to the water body. On the same day, EPD received another complaint regarding polluted water discharge at the WKCD construction site. The complainant claimed that the construction site next to the M+ Museum was discharging polluted water to the water body. A photo was also provided by the complainant showing the situation. After investigation, it was believed that these two complaints could not be attributable to Lyric Theatre Complex (L2 Contract). From the information provided by the contractor, no construction activities involving muddy materials or muddy water discharge were undertaken on 26 July 2022. And from the daily self-checking on the effluent quality, the wastewater was properly treated and was within compliance. Various mitigation measures and trainings were properly implemented including bundings at the seafront and regular site environmental committee meeting with subcontractor. From the on-site observation and prompt investigation during the site inspection on 27 July 2022, the brownish layer with bubbles observed was believed to be due to natural fluctuation or algae bloom in hot weather, which was not related to the construction works of Lyric Theatre Complex (L2 Contract).

As concluded from the above investigation and findings, it could not directly imply the complaints were attributable to Lyric Theatre Complex (L2 Contract). However, the contractor is reminded to strictly implement and maintain good site practices to avoid water pollution to the water body of Victoria Harbour.

The cumulative statistics on complaints, notifications of summons and successful prosecutions were provided in **Appendix G**.

6 Comments, Recommendations and Conclusion

6.1 Comments

Based on the observations made during site audits, landscape inspections, and construction dust and noise monitoring results, no non-compliances and exceedances of air quality and noise were recorded in the reporting quarter.

6.2 Recommendations

Reviewing the implementation of the recommended mitigation measures in the EM&A Manual, it was observed that they were effective and efficient in controlling the potential impacts due to construction of the project during the reporting period. Review of the effectiveness and efficiency of the EM&A programme will continue, and recommendations will be provided to remediate any potential impacts due to the project and to improve the EM&A programme if deficiencies of the existing EM&A programme are identified.

6.3 Conclusion

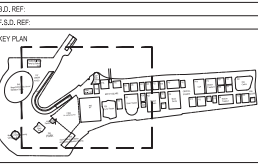
The EM&A programme as recommended in the EM&A Manual has been undertaken. The construction works and EM&A programme for M+ Museum was commenced on 31 October 2015 and completed on 28 February 2021; while the construction works and EM&A programme for Lyric Theatre Complex (L1 and L2 Contracts) was commenced on 1 March 2016, and the EM&A programme for L1 Contract was completed on 30 June 2021.

Monitoring of air quality and noise with respect to the Project is underway. In particular, the 1-hour TSP, 24-hour TSP and noise level (as Leq, 30 minutes) under monitoring have been checked against established Action and Limit levels. There was no breach of Action and Limit levels for Air Quality (1-hour TSP and 24-hour TSP) and Noise in this reporting quarter.

Seven complaints were received in the reporting quarter. No notifications of summons and successful prosecutions were received during the reporting quarter.

Weekly construction phase site inspections and bi-weekly landscape and visual impact inspections were conducted during the reporting quarter as required. It was observed that the Contractor had implemented all possible and feasible mitigation measures to mitigate the potential environmental impacts during construction phase works.

Figure 1 Site Layout Plan and Monitoring Stations



- NOTES
- WKCD BOUNDARY
 - M+ MUSEUM BOUNDARY
 - LYRIC THEATRE BOUNDARY
 - BOUNDARY OF UNDERPASS ROAD SERVING THE PLANNED WKCD
 - CONSTRUCTION AIR/NOISE MONITORING STATIONS

REMARKS:
THE AIR MONITORING STATION AM2B HAS BEEN RELOCATED TO THE ALTERNATIVE MONITORING STATION AM2 AT THE G/F OF HARBOURSIDE ON 1 JUNE 2021

REV.	DATE	DESCRIPTION	INITIAL

JOB TITLE: **M+ MUSEUM FOR VISUAL CULTURE (MAIN CONTRACT WORKS) & LYRIC THEATRE COMPLEX**

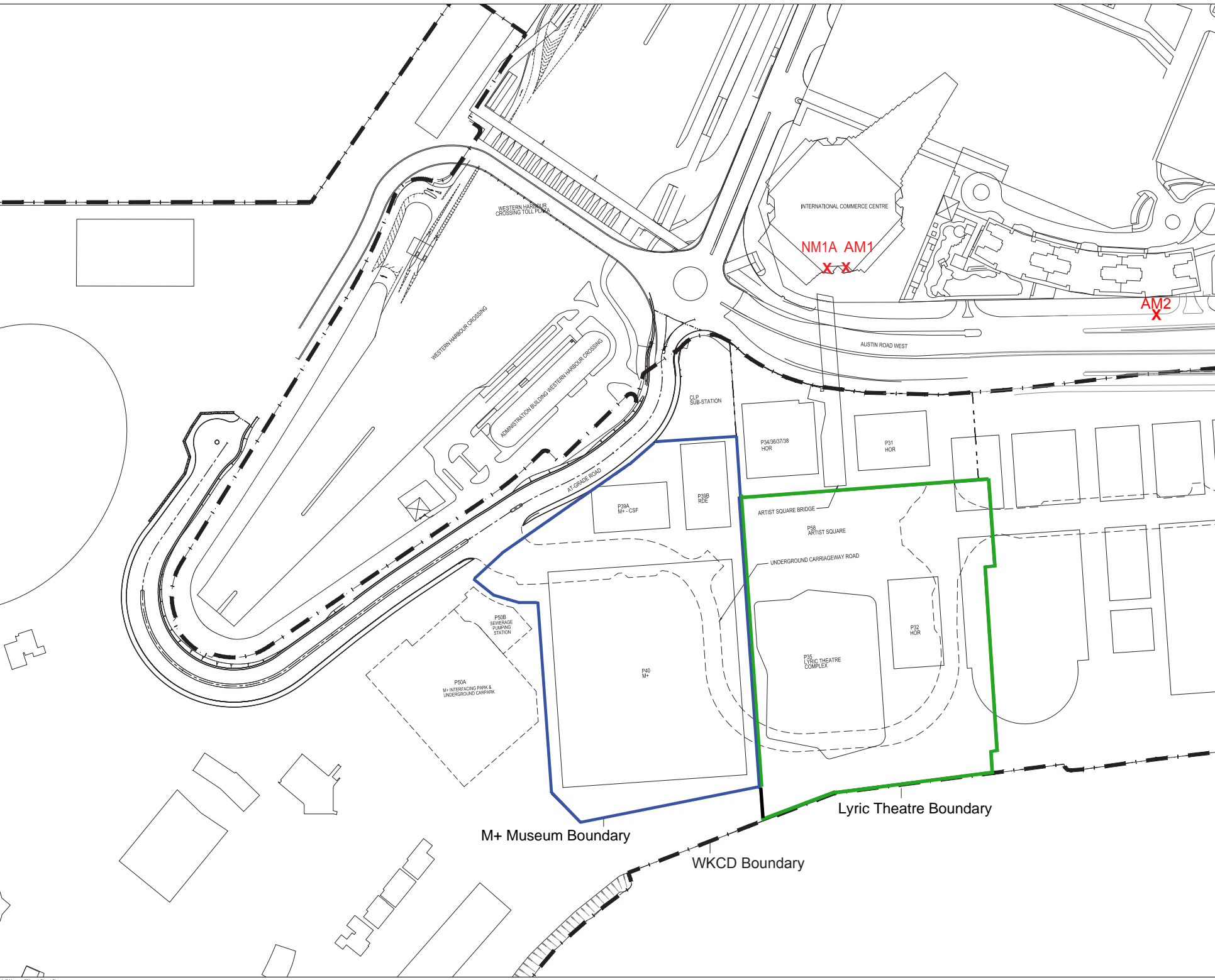
DRAWING TITLE: **PROPOSED LOCATIONS OF CONSTRUCTION AIR/NOISE MONITORING STATIONS**

SCALE	1:100	PRINTED	A1
CHECKED	DATE		
APPROVED	DATE		
DRAWN	DATE		
CONTRACT NO.			

DRAWING NO.	FIGURE 1	REV.	XA
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CAD REF NAME: XXXXX-4U-FMS-DWG-P03-03-000-000-000.dwg

AUTHORITY



Appendices

- A. Project Organisation
- B. Construction Programme
- C. Environmental Mitigation Measures – Implementation Status
- D. Meteorological Data Extracted from Hong Kong Observatory
- E. Graphical Plots of the Monitoring Results
- F. Waste Flow table
- G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

A. Project Organisation

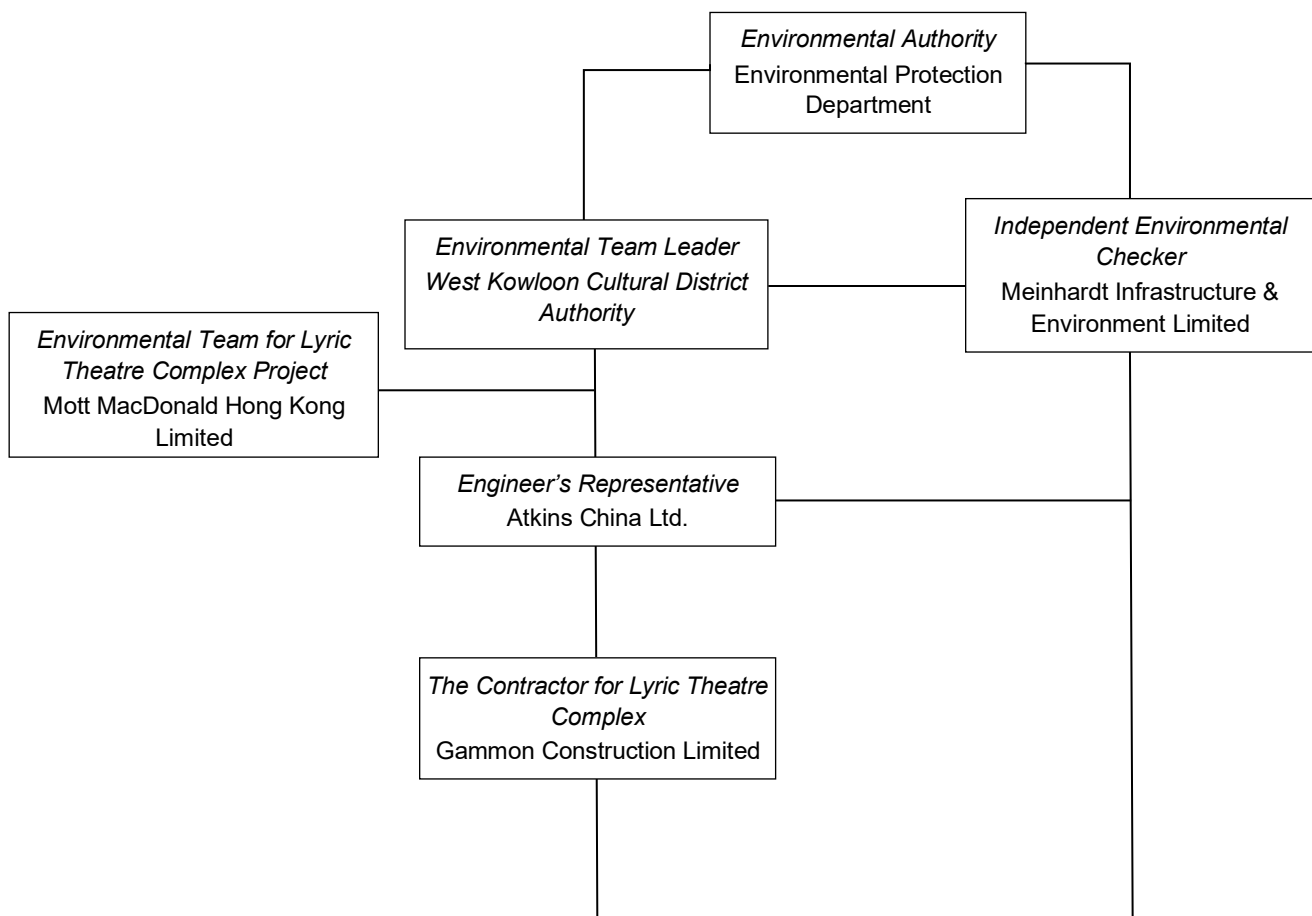


Table A-1: Contact information

Company Name	Role	Name	Telephone	Email
Atkins China Ltd.	Resident Engineer	Ms. Gloria Lui	5506 6361	gloria.lui@atkinglobal.com
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Claudine Lee	2859 5409	claudinelee@meinhardt.com.hk
Gammon Construction Limited (L2)	Environmental Manager	Mr. Ivan Chiu	9416 1664	ivan.chiu@gammonconstruction.com
Mott MacDonald Hong Kong Ltd.	Contractor's Environmental Team Leader	Mr. Thomas Chan	2828 5757	thomas.chan@mottmac.com
West Kowloon Cultural District Authority	Senior Project Manager (Safety, Health and Environment)	Mr. C.K. Wu	5506 9178	ck.wu@wkda.hk

B. Construction Programme

ID	Activity	RD	BL_Rev_00 Start	BL_Rev_00 Finish	BL_Rev_02 Start	BL_Rev_02 Finish	Start	Finish	LoE SUMM TF (approx, not for use)	2020	2021	2022	2023	2024	2025	
										Q	Q	Q	Q	Q	Q	
L2 CMWP_R02_04 2nd DRAFT IFA on 27Apr22 - ***LIVE*** (21st UPD; DD= 30Jun2022)																
GENERAL & PRELIMINARIES																
Contract Significant Dates																
Commencement & Completion Dates - CMWP_Rev_01																
Section Keydates																
KD05A	Complete Required Pedestrian Access Corridor and Floor Finishes at AURW		0	28-Feb-21			12-Nov-21		12-Nov-21 A							
KD05B	Complete Required Pedestrian Access Corridor & associated top slab at Avenue Level [if instructed]		0	14-Feb-21			12-Nov-21		12-Nov-21 A							
KD05C	PC for HO of Landscape Area at Avenue & Pedestrian level between P31 & P34 [if instructed]		0	28-Feb-21			05-Oct-22		08-Feb-23*	-126						
KD05	PC for HO of the Remaining Works for M+ Promenade South		0	24-Aug-20			13-Jan-23		17-Apr-23*	-94						
KD08	PC for HO Loc ICT/Risers Rms to APC for ICT Sys Instn Wrks		0	10-Feb-23			10-Sep-24		04-Dec-24*	-85						
KD10	PC for HO of ASDA, Lyric Theatre Promenade South to Authority		0	10-Feb-23			10-Sep-24		04-Dec-24*	-85						
KD09	PC for HO of RDE areas for Tenancy Fit-out Wrks		0	10-Feb-23			10-Sep-24		04-Dec-24*	-85						
KD11	PC for HO of Extended Basement for HO to Authority & HO of Carriageway to Relevant Govt Authority		0	10-Feb-23			12-Nov-24		10-Feb-25*	-90						
KD07	PRACTICAL COMPLETION for CWay 3A (M+ Day 2 Works)		0	10-Feb-23			09-Dec-24		08-Mar-25*	-57						
KD13	PRACTICAL COMPLETION for Lyric Theatre, EB & CWay 3B (Incl. Provisional PPE License)		0	08-Sep-23			10-Jan-25		08-Apr-25*	-88						
Stage Keydates																
KD01	Compl Dsgn Coord/Subm and obtn NNO for L1 Contr Bsmt constn wrks		0	20-Jul-19			20-Jul-19		20-Jul-19 A							
KD06	PC for Fountain Related Plantroom(s) (allow access to Project Contractor)		0	01-Apr-21			07-Jun-22		02-Aug-22*	-56						
KD03	OBTAIN OP for Lyric Theatre & Extended Basement		0	12-Dec-21			10-Sep-24		04-Dec-24*	-85						
KD14	Complete U/G road and the associated plantrooms at Zone 3A&3B Integrated Basement		0	04-Aug-22			26-Sep-24		19-Dec-24*	-84						
KD02	Obtain BA14 Acknowledge from BD for M+ Day2 A&A Works		0	12-Dec-22			08-Nov-24		06-Feb-25*	-90						
CMWP - Summary Program - Level 1																
SUM10	[LoE] CC_B Lyric Theatre - Substructure RC Structural Concrete		0			06-May-20	22-Jan-22	06-May-20 A	22-Jan-22 A							
SUM30	[LoE] CC_H - Vibration Isolation Spring System Remaining as of 30Apr2020 (AS=30Sep19)		0			09-May-20	10-Feb-21	09-May-20 A	10-Feb-21 A							
SUM25	[LoE] CC_E - DCS Cofferdam A Works & Obtain BA14		313			23-Jun-20	23-May-23	23-Jun-20 A	28-Aug-23	-33						
SUM24	[LoE] CC_D - Remaining Works for M+ Promenade South		219			18-Feb-21	13-Jan-23	18-Feb-21 A	17-Apr-23	-70						
SUM21	[LoE] CC_C - LT EVA1 & EVA2		636			12-Apr-21	09-Sep-24	12-Apr-21 A	06-Nov-24	123						
SUM27	[LoE] CC_G Extended Basement - ABWF Works (Incl. Deferred Areas Under Deck)		508			15-May-21	02-Feb-24	15-May-21 A	21-Mar-24	179						
SUM28	[LoE] CC_G Extended Basement - MEP 1st Fix to Final Fix (Incl. Deferred Areas Under Deck)		490			17-May-21	12-Jan-24	17-May-21 A	29-Feb-24	6						
SUM14	[LoE] CC_B Lyric Theatre - ABWF Work Including Theatres (Excl. Punch List Works)		744			28-May-21	14-Oct-24	28-May-21 A	07-Jan-25	3						
SUM35	[LoE] CC_J - M+ Day 2 Works (excl. connections to M+ and SZ_1 FS Changeover)		629			03-Jun-21	25-Jun-24	03-Jun-21 A	19-Aug-24	-25						
SUM23	[LoE] CC_C - Artist SQ Bridge (ASB_1/2/3; ASB_3; P31_2; P34_2; AS_1/2; ASB-6/P31 EVA)		526			21-Jun-21	22-May-24	21-Jun-21 A	05-Jun-24	233						
SUM15	[LoE] CC_B Lyric Theatre - MEP 1st to Final Fix (Excl. TH SYS done by SVE)		762			22-Jun-21	04-Nov-24	22-Jun-21 A	28-Jan-25	-33						
SUM11	[LoE] CC_B Lyric Theatre - Superstructure RC Structural Concrete		339			02-Jul-21	22-Jul-23	02-Jul-21 A	04-Oct-23	-6						
SUM22	[LoE] CC_C - HoR Development (P32-1, P29-1, P31-EVA)		526			03-Aug-21	17-Apr-24	03-Aug-21 A	05-Jun-24	69						
SUM31	[LoE] CC_I Carriageway 3B - ABWF Works		256			12-Aug-21	01-Apr-23	12-Aug-21 A	15-May-23	405						
SUM42	[LoE] CC_E - DCS Outside of Cofferdam A Works (Connect DIA1,600 & Remove Temp O'fall)		360			08-Sep-21	29-Sep-23	08-Sep-21 A	01-Nov-23	-5						
SUM32	[LoE] CC_I Carriageway 3B - MEP Works (1st Fix to Final Fix)		220			22-Mar-22	13-Feb-23	15-Sep-21 A	28-Mar-23	240						
SUM40	[LoE] CC_N Lifts & Escalators		512			14-Dec-21	02-Feb-24	14-Dec-21 A	26-Mar-24	50						
SUM41	[LoE] CC_B Lyric Theatre - Structural Steel by CSD		396			04-Mar-22	20-Oct-23	11-Mar-22 A	13-Dec-23	-27						
SUM26	[LoE] CC_F - Mods to Existing Pump Cell Civil & MEP Works (Excl. Options 2 Add. Pumps)		143			01-Mar-22	26-Sep-22	02-Jul-22	06-Jan-23	135						
SUM12	[LoE] CC_B Lyric Theatre - EWS Weather Tight Type		322			25-Jun-22	09-Sep-23	27-Aug-22	03-Nov-23	30						
SUM17	[LoE] CC_B Lyric Theatre - TH Systems (by SVE) Incl. T&C, Precom. & Commissioning		730			30-Aug-22	25-Nov-24	30-Aug-22	22-Feb-25	-33						
SUM20	[LoE] CC_C - LT Promenade & Pocket Square Bridge		543			04-Aug-22	31-Jul-24	14-Oct-22	12-Oct-24	-21						
SUM29	[LoE] CC_G Extended Basement - T&C		309			03-Jan-23	02-Feb-24	04-Mar-23	21-Mar-24	6						
SUM13	[LoE] CC_B Lyric Theatre - EWS Non-Weather Tight Type 4.1 & 4.3		293			23-Mar-23	25-Mar-24	25-Apr-23	24-May-24	51						
SUM33	[LoE] CC_I Underpass 3B & Associated Area - T&C		166			13-Apr-23	25-Oct-23	20-Jun-23	08-Jan-24	63						
SUM39	[LoE] CC_K - Water Main at Promenade		143			24-May-23	08-Jan-24	29-Aug-23	02-Mar-24	-23						
SUM16	[LoE] CC_B Lyric Theatre - T&C (Excluding Non-FSD ELV & Electrical)		134			12-Dec-23	11-Jun-24	01-Mar-24	13-Aug-24	8						
SUM18	[LoE] CC_B Lyric Theatre, EB, CWay 3B - Stat. Insp. & Approval (from Form 314/501 to BD OP)		91			17-May-24	10-Sep-24	09-Aug-24	04-Dec-24	-70						
SUM38	[LoE] CC_J - M+ Day 2 FS Changeover in 3A SZ_1, Connections to M+, Integrated T&C		58			29-Jul-24	26-Sep-24	22-Oct-24	19-Dec-24	-70						
SUM34	[LoE] CC_J Carriageway 3A - Stat. Insp. & Approvals (from Form 314A to BA14)		56			02-Sep-24	08-Nov-24	26-Nov-24	06-Feb-25	-70						



- Base Line ACT
- Rev_0 KD
- Base Line MS
- Milestone
- Current - Other Works
- Current - Struct Works
- Current - MEP Works
- Current - ABWF Works
- Current - Facade Works
- Critical Works

**L2 CMWP_R02_04 2nd DRAFT IFA on 27Apr22 -
 LIVE (21st UPD; DD = 30Jun2022)**

Date	Revision	Checked	Approved
06-Jul-22	CMWP Rev_2_04 -21st Update DD 30Jun22	NS	IH

C. Environmental Mitigation Measures – Implementation Status

Table C-1: Environmental Mitigation Measures Implementation Status

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
Air Quality Impact (Construction)				
2.1 & 10.3.1	<p>General Dust Control Measures</p> <p>Frequent water spraying for active construction areas (12 times a day or once every one hour), including Heavy construction activities such as construction of buildings or roads, drilling, ground excavation, cut and fill operations (i.e., earth moving)</p>	Obs	✓	Obs
2.1 & 10.3.1	<p>Best Practice For Dust Control</p> <p>The relevant best practices for dust control as stipulated in the Air Pollution Control (construction Dust) Regulation should be adopted to further reduce the construction dust impacts from the Project. These best practices include:</p> <p><i>Good Site Management</i></p> <ul style="list-style-type: none"> • Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. <p><i>Disturbed Parts of the Roads</i></p> <ul style="list-style-type: none"> • Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or • Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. <p><i>Exposed Earth</i></p> <ul style="list-style-type: none"> • Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seeding with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. <p><i>Loading, Unloading or Transfer of Dusty Materials</i></p>	Obs	Obs	Obs
		✓	✓	✓
		✓	✓	✓
		N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
	<ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. 	✓	✓	✓
	<i>Debris Handling</i>			
	<ul style="list-style-type: none"> Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. 	✓	✓	✓
	<ul style="list-style-type: none"> Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. 	✓	✓	✓
	<i>Transport of Dusty Materials</i>			
	<ul style="list-style-type: none"> Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. 	✓	✓	✓
	<i>Wheel washing</i>			
	<ul style="list-style-type: none"> Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. 	✓	✓	✓
	<i>Use of vehicles</i>			
	<ul style="list-style-type: none"> The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. 	✓	✓	✓
	<ul style="list-style-type: none"> Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. 	✓	✓	✓
	<ul style="list-style-type: none"> Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. 	✓	✓	✓
	<i>Site hoarding</i>			
	<ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 	✓	✓	✓
2.1 & 10.3.1	<p>Best Practicable Means for Cement Works (Concrete Batching Plant)</p> <p>The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2(93) should be followed and implemented to further reduce the construction dust impacts of the Project. These best practices include: Exhaust from Dust Arrestment Plant</p>			

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Wherever possible the final discharge point from particulate matter arrestment plant, where is not necessary to achieve dispersion from residual pollutants, should be at low level to minimise the effect on the local community in the case of abnormal emissions and to facilitate maintenance and inspection 	N/A	N/A	N/A
	<p>Emission Limits</p> <ul style="list-style-type: none"> All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke 	N/A	N/A	N/A
	<p>Engineering Design/Technical Requirements</p> <ul style="list-style-type: none"> As a general guidance, the loading, unloading, handling and storage of fuel, raw materials, products, wastes or by-products should be carried out in a manner so as to prevent the release of visible dust and/or other noxious or offensive emissions 	N/A	N/A	N/A
	<p>Non-Road Mobile Machinery (NRMM): All NRMMs operating on-site which are subject to emission control of Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are approved/exempted (as the case may be) and affixed with the requisite approval/exemption labels.</p>	✓	✓	✓
Noise Impact (Construction)				
3.1 & 10.4.1	<p>Good Site Practice Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction:</p> <ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 	✓	✓	✓
	<p>Adoption of Quieter PME</p>	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
3.1 & 10.4.1	The recommended quieter PME adopted in the assessment were taken from the EPD's QPME Inventory and "Sound Power Levels of Other Commonly Used PME" are presented in Table 4.26 in the EIA report. It should be noted that the silenced PME selected for assessment can be found in Hong Kong.	✓	✓	✓
3.1 & 10.4.1	Use of Movable Noise Barriers Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked.	✓	✓	✓
3.1 & 10.4.1	Use of Noise Enclosure/ Acoustic Shed The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and concrete pump. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No. 9/2010.	✓	✓	✓
3.1 & 10.4.1	Use of Noise Insulating Fabric Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, piling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric.	✓	Obs	✓
3.1 & 10.4.1	Scheduling of Construction Works outside School Examination Periods During construction phase, the contractor should liaise with the educational institutions (including NSRs LCS and CRGPS) to obtain the examination schedule and avoid the noisy construction activities during school examination periods.	N/A	N/A	N/A
Water Quality Impact (Construction)				
Construction site runoff and drainage				

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
4.1 & 10.5.1	<p>The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended to protect water quality and sensitive uses of the coastal area, and when properly implemented should be sufficient to adequately control site discharges so as to avoid water quality impacts:</p> <ul style="list-style-type: none"> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the WKCDA's Contractor prior to the commencement of construction; Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM standards under the WPCO. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the WKCDA's Contractor prior to the commencement of construction. All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities. 	Obs	✓	✓
		✓	✓	✓
		Obs	✓	Obs
		✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
	<ul style="list-style-type: none"> 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 sited wheel washing facility should be provided at construction site exit where practicable. Wash-water should have sand and silt settled out and removed regularly 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. 	✓	✓	✓
	<ul style="list-style-type: none"> Open stockpiles of construction materials or construction wastes on-site 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. 	✓	✓	✓
	<ul style="list-style-type: none"> Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and stormwater runoff being directed into foul sewers. 	✓	✓	✓
	<ul style="list-style-type: none"> Precautions should be taken at any time of the year when rainstorms are likely. Actions should be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC Note PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. 	✓	✓	✓
	<ul style="list-style-type: none"> Bentonite slurries used in piling or slurry walling should be reconditioned and reused wherever practicable. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	N/A	N/A	N/A
	<p>Barging facilities and activities</p> <p>Recommendations for good site practices during operation of the proposed barging point include:</p>			
	<ul style="list-style-type: none"> All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; 	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site. 	N/A	N/A	N/A
4.1 & 10.5.1	Sewage effluent from construction workforce Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	✓	✓	✓
4.1 & 10.5.1	General construction activities <ul style="list-style-type: none"> Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used. Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	✓ Obs	✓ Obs	✓ Obs
Waste Management Implications (Construction)				
6.1 & 10.7.1	Good Site Practices Recommendations for good site practices during the construction activities include:			
	<ul style="list-style-type: none"> 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 Training of site personnel in proper waste management and chemical handling procedures 	✓ ✓	✓ ✓	Obs ✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Provision of sufficient waste disposal points and regular collection of waste 	Obs	Rem, Obs	✓
	<ul style="list-style-type: none"> Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers 	✓	✓	✓
	<ul style="list-style-type: none"> Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads 	✓	✓	✓
	<ul style="list-style-type: none"> Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&D materials is not anticipated 	✓	✓	✓
6.1 & 10.7.1	<p>Waste Reduction Measures</p> <p>Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> Sort inert C&D material to recover any recyclable portions such as metals Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal Encourage collection of recyclable waste such as waste paper and aluminium cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force Proper site practices to minimise the potential for damage or contamination of inert C&D materials Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of wastes 	✓	✓	✓
6.1 & 10.7.1	<p>Inert and Non-inert C&D Materials</p> <p>In order to minimise impacts resulting from collection and transportation of inert C&D material for off-site disposal, the excavated materials should be reused on-site as fill material as far as practicable. In addition, inert C&D material generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation.</p> <ul style="list-style-type: none"> The surplus inert C&D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong. Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD. 	✓	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
	<ul style="list-style-type: none"> The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal of at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site. In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the Technical Circular (Works) No. 6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in accordance with the relevant requirements of the Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site. 	✓	✓	✓
6.1 & 10.7.1	<p>Chemical Waste</p> <ul style="list-style-type: none"> If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the "Code of Practice on the Packaging Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended. 	✓	✓	✓
6.1 & 10.7.1	<p>General Refuse</p> <p>General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	Obs	✓	✓

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	Jun 2022	Jul 2022
Land Contamination (Construction)				
7.1 & 10.8.1	<p>The potential for land contamination issues at the TST Fire Station due to its future relocation will be confirmed by site investigation after land acquisition. Where necessary, mitigation measures for minimising potential exposure to contaminated materials (if any) or remediation measures will be identified. If contaminated land is identified (e.g., during decommissioning of fuel oil storage tanks) after the commencement of works, mitigation measures are proposed in order to minimise the potentially adverse effects on the health and safety of construction workers and impacts arising from the disposal of potentially contaminated materials.</p> <p>The following measures are proposed for excavation and transportation of contaminated material:</p> <ul style="list-style-type: none"> To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when interacting directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; Stockpiling of contaminated excavated materials on site should be avoided as far as possible; The use of contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; Vehicles containing any contaminated excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; Truck bodies and tailgates should be sealed to stop any discharge; Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; Speed control for trucks carrying contaminated materials should be exercised; Observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap. 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354) and obtain all necessary permits where required; and 	N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Maintain records of waste generation and disposal quantities and disposal arrangements. 	N/A	N/A	N/A
Ecological Impact (Construction)				
No mitigation measure is required.				
Landscape and Visual Impact (Construction)				
Table 9.1 & 10.8 (CM1)	Trees should be retained in situ on site as far as possible. Should tree removal be unavoidable due to construction impacts, trees will be transplanted or felled with reference to the stated criteria in the Tree Removal Applications to be submitted to relevant government departments for approval in accordance to ETWB TCW No. 29/2004 and 3/2006.	✓	✓	✓
Table 9.1 & 10.8 (CM2)	Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM4)	Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM5)	Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A
Table 9.1 & 10.8 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A

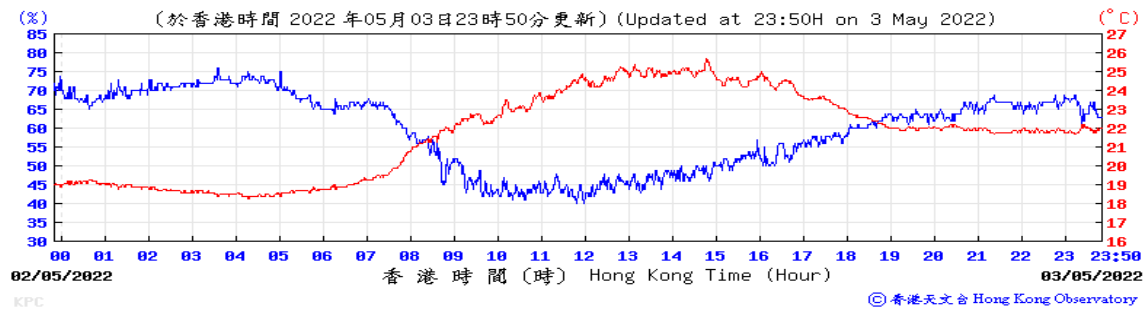
EM&A Ref.	Recommendation Measures	Implementation Stage		
		May 2022	L2 Jun 2022	Jul 2022
Table 9.2 & 10.9 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓
Table 9.2 & 10.9 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A
Table 9.2 & 10.9 (MCP4)	Control of night time lighting	✓	✓	✓
Table 9.2 & 10.9 (MCP5)	Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures.	N/A	N/A	N/A

N/A	-	Not Applicable
✓	-	Implemented
Obs	-	Observed
Rem	-	Reminder

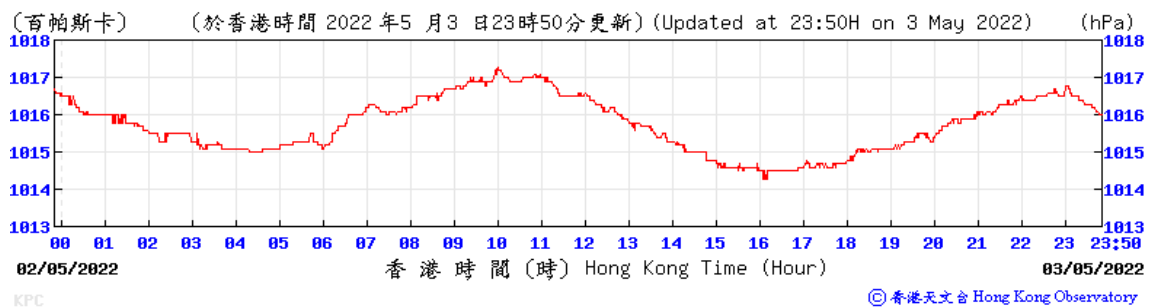
D. Meteorological Data Extracted from Hong Kong Observatory

Table D-1: Extract of Meteorological Observations for King's Park Automatic Weather Station in the reporting quarter

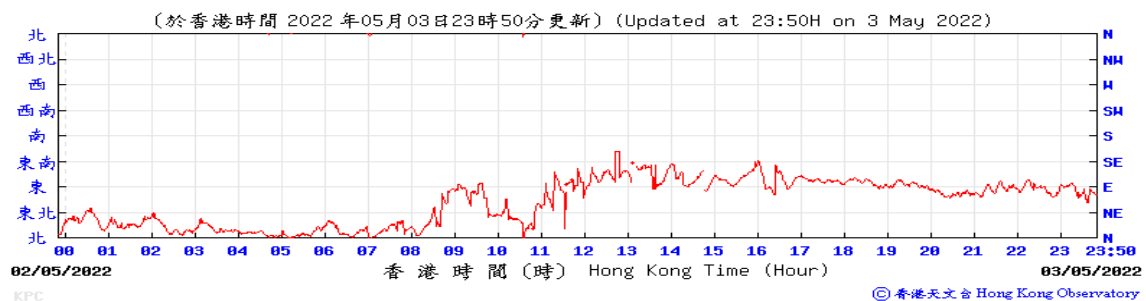
Temperature/Humidity:



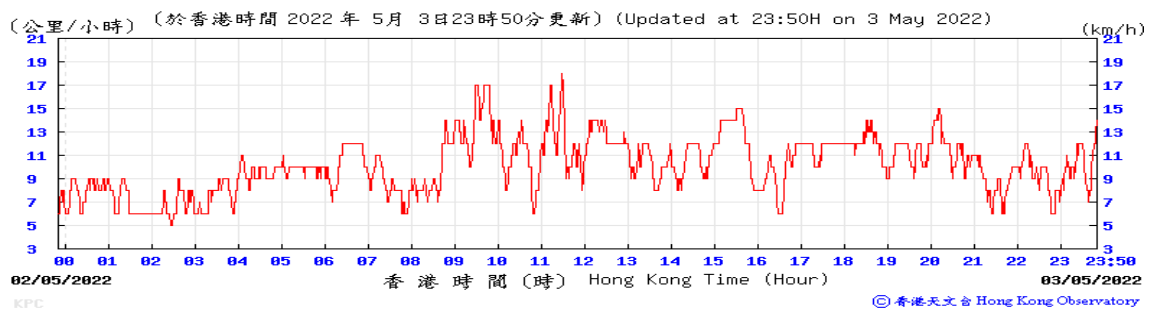
Pressure:



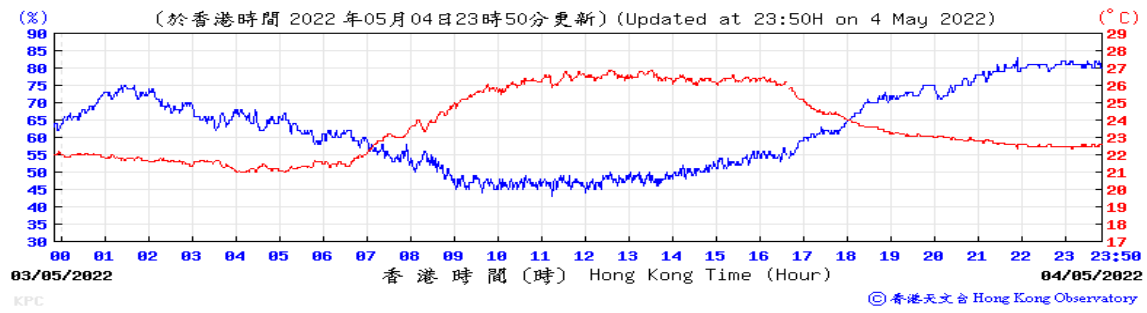
Wind Direction:



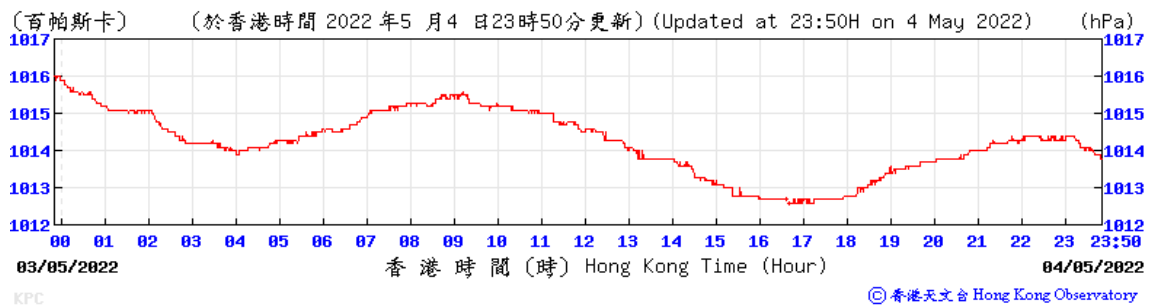
Wind Speed:



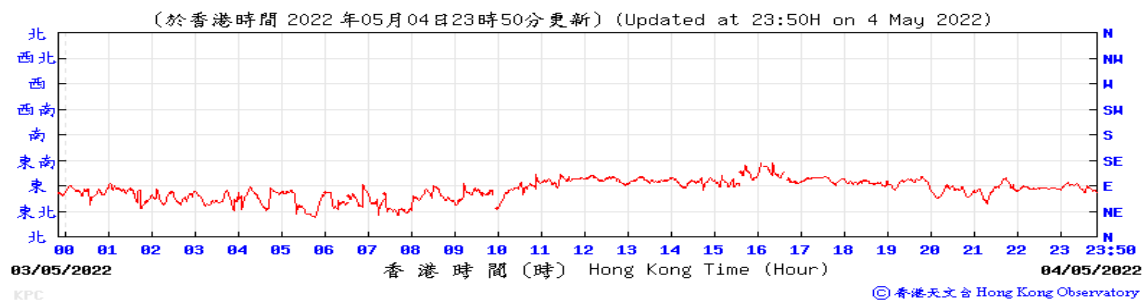
Temperature/Humidity:



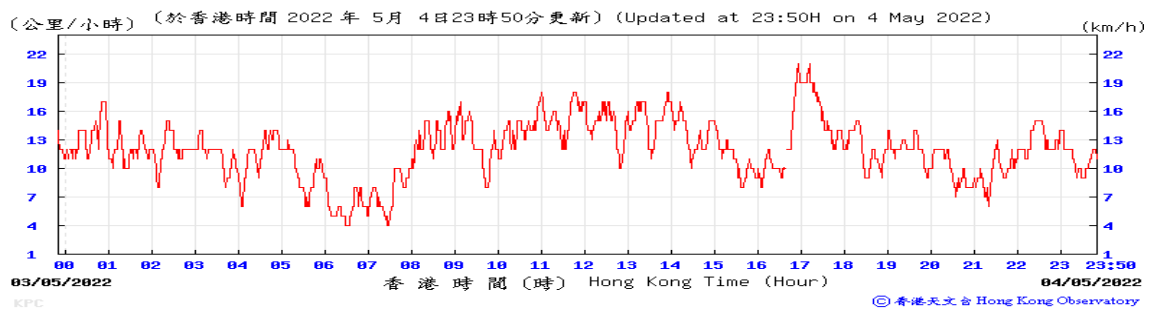
Pressure:



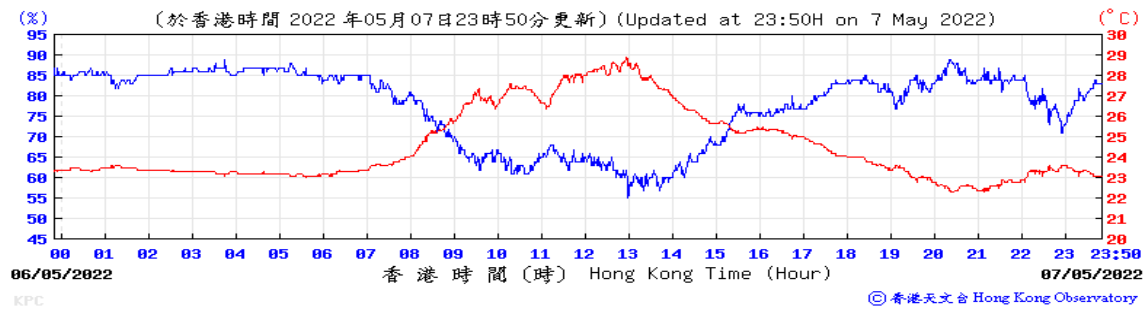
Wind Direction:



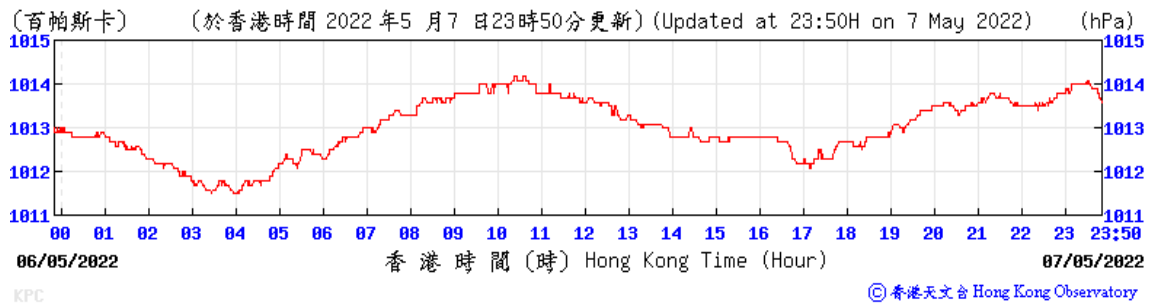
Wind Speed:



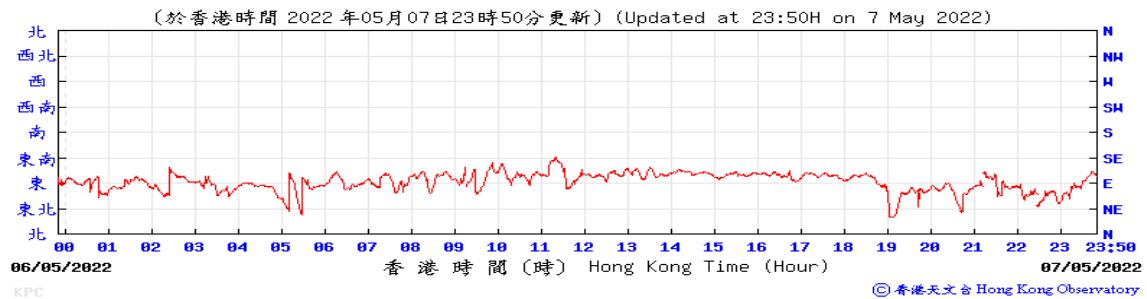
Temperature/Humidity:



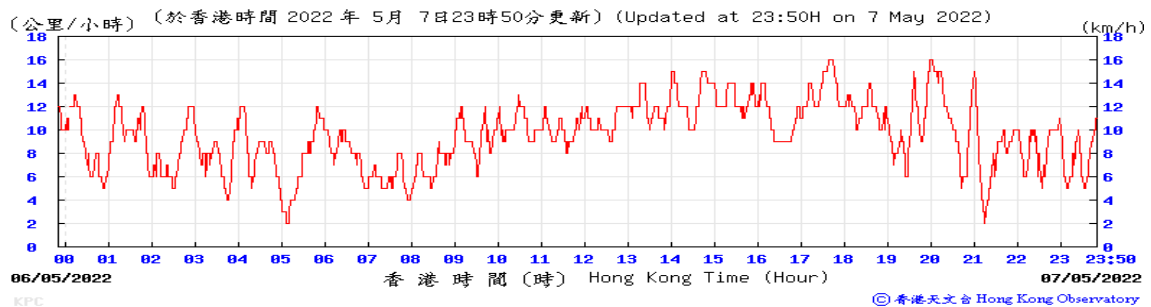
Pressure:



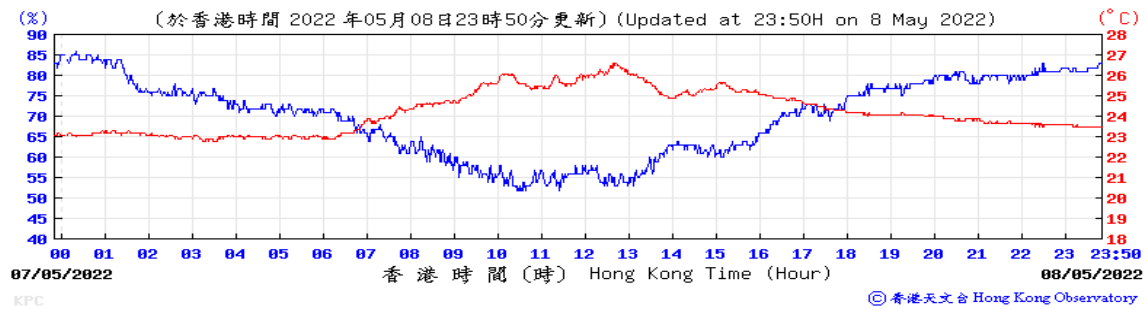
Wind Direction:



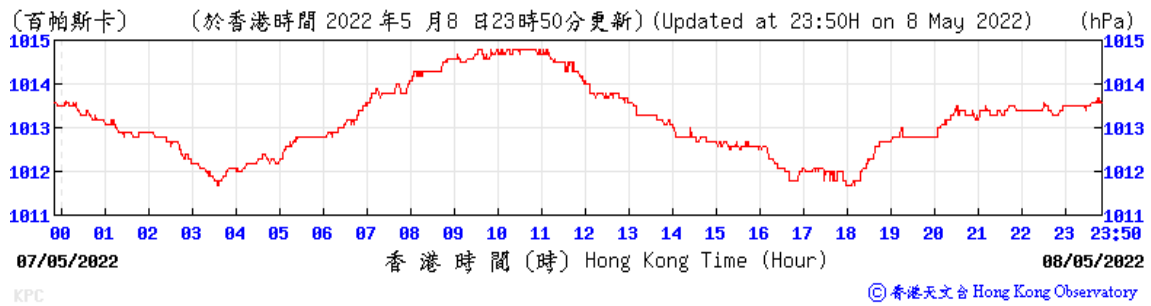
Wind Speed:



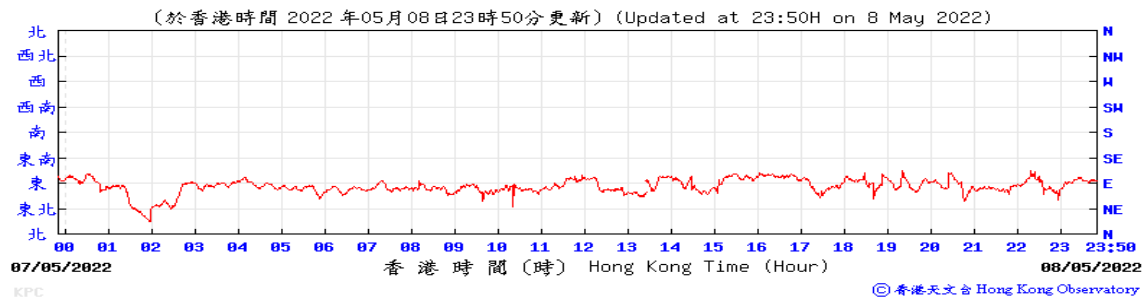
Temperature/Humidity:



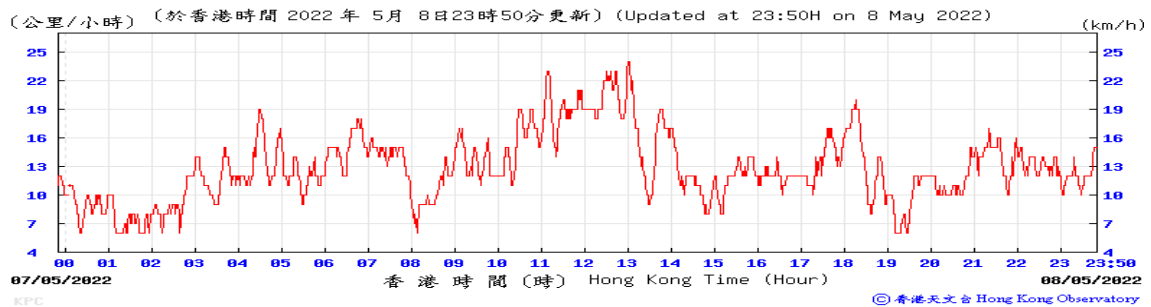
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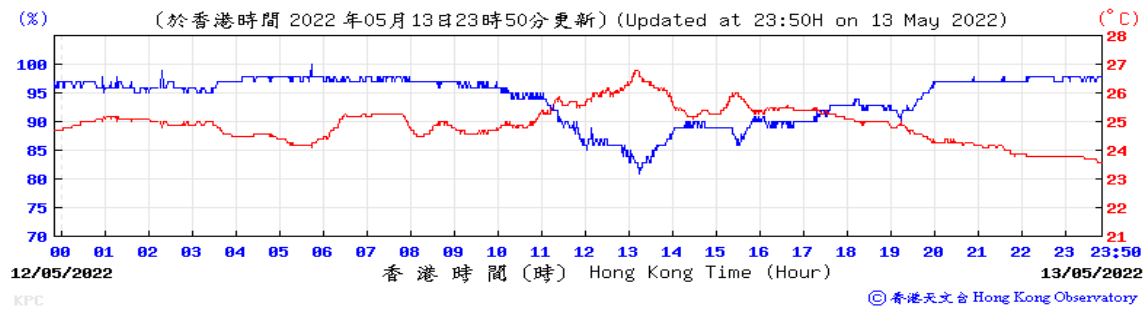
Wind Direction:



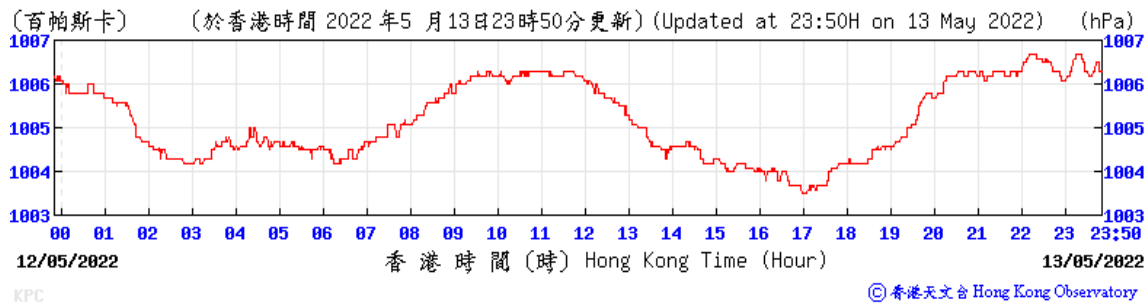
Wind Speed:



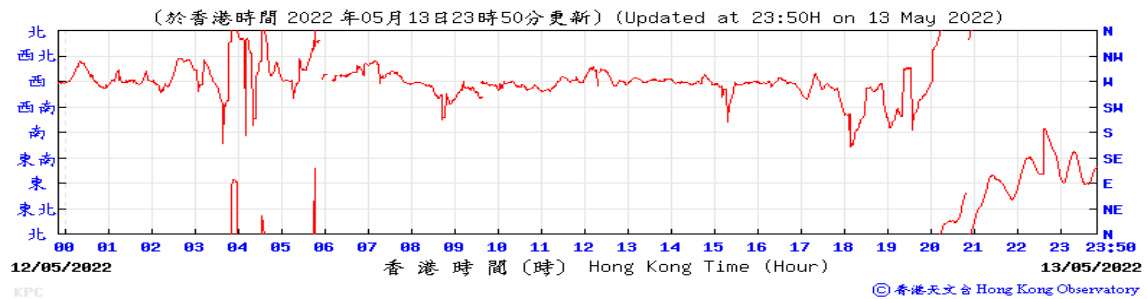
Temperature/Humidity:



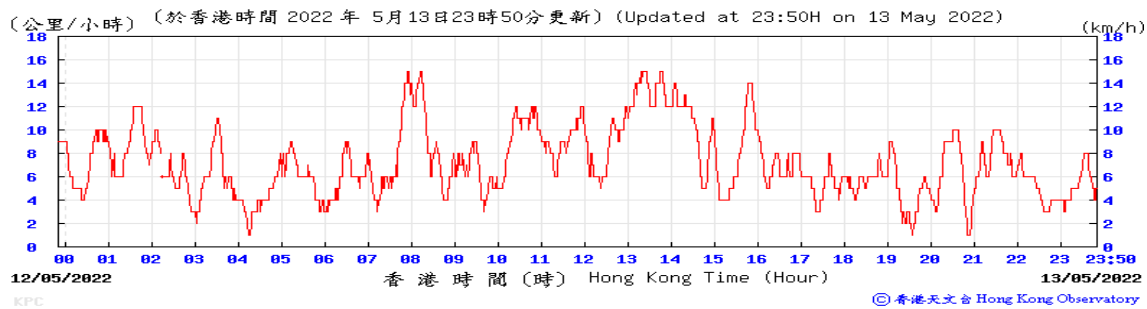
Pressure:



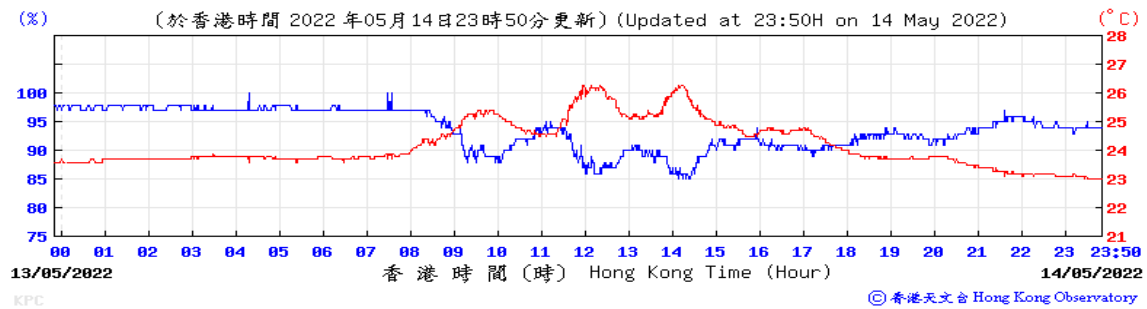
Wind Direction:



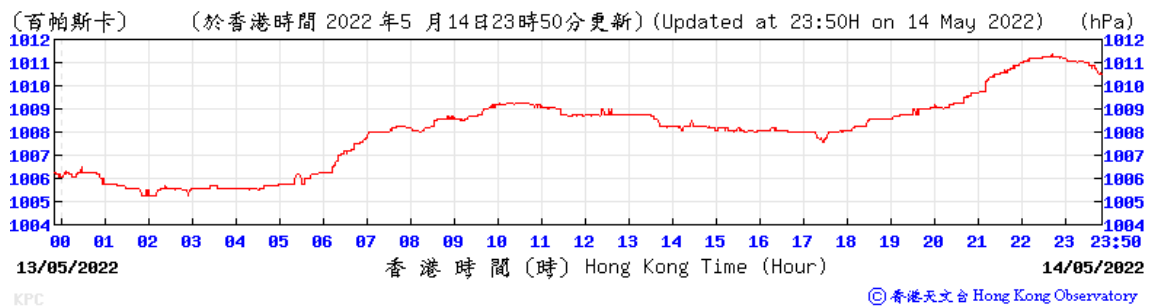
Wind Speed:



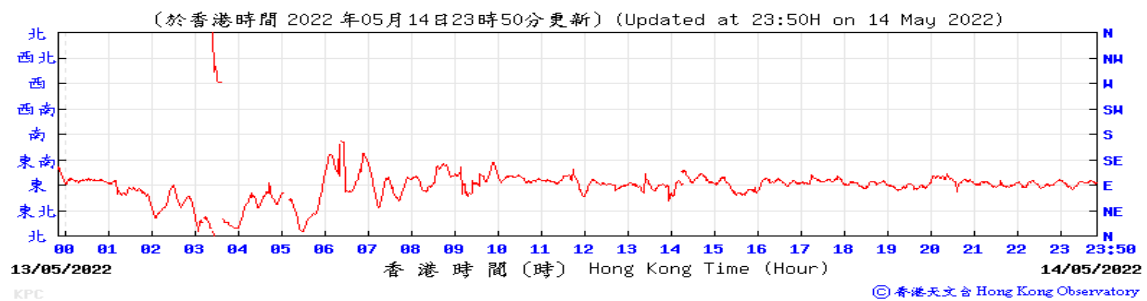
Temperature/Humidity:



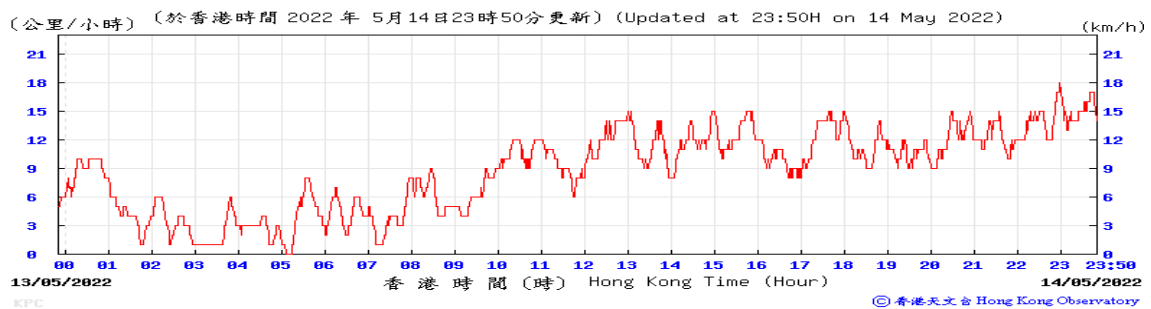
Pressure:



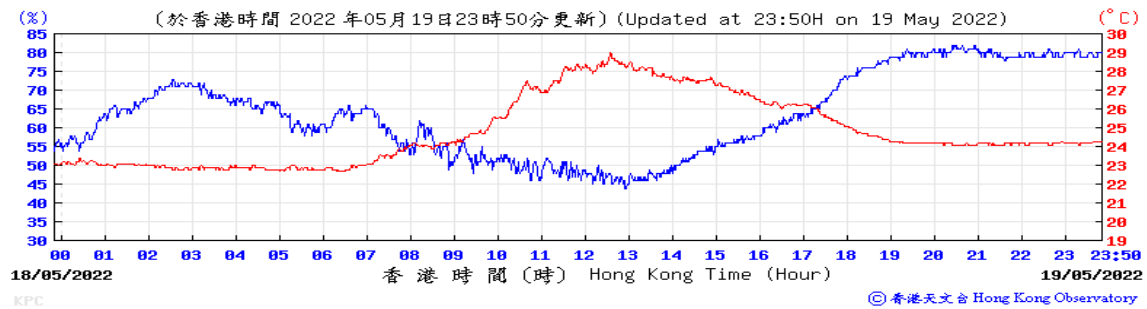
Wind Direction:



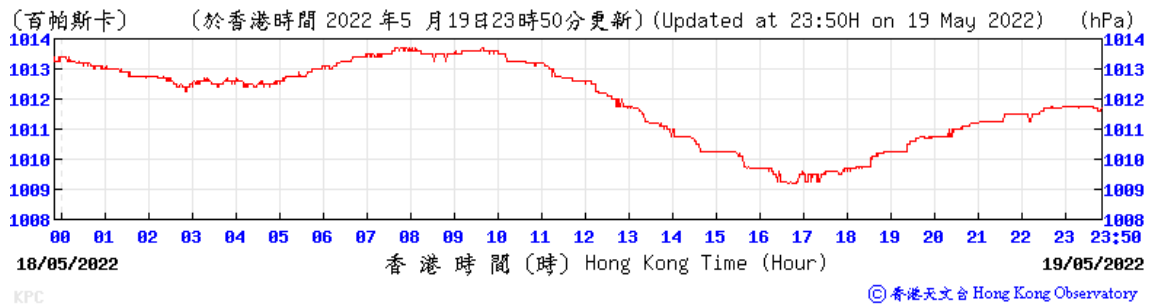
Wind Speed:



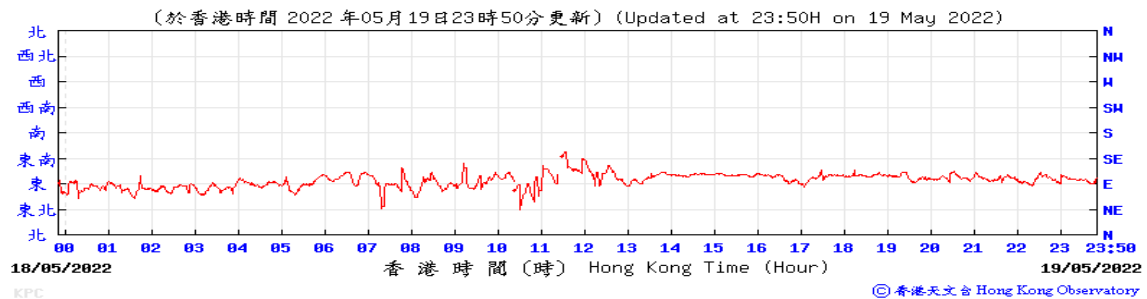
Temperature/Humidity:



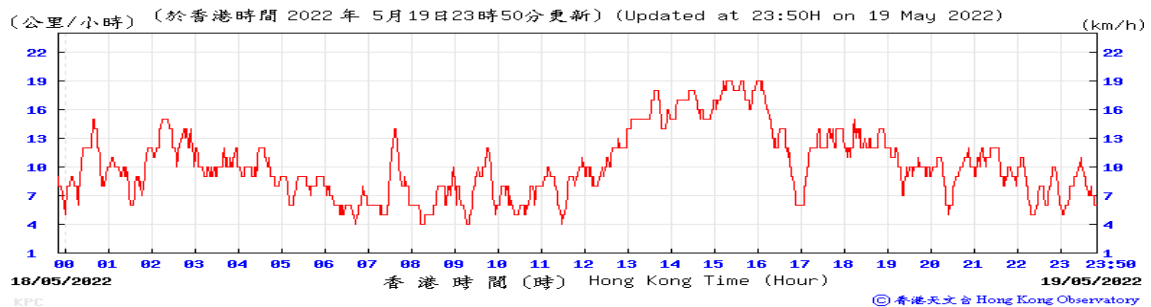
Pressure:



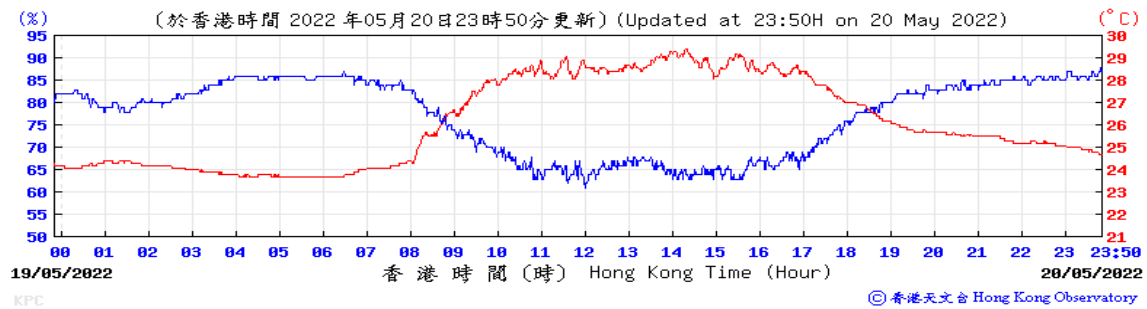
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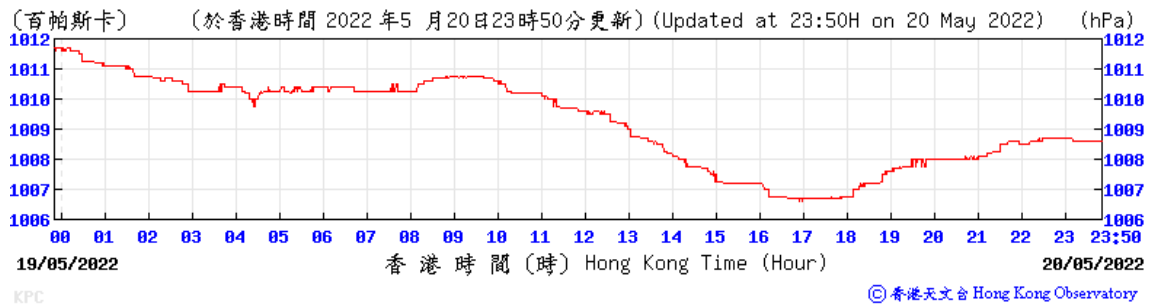
Wind Speed:



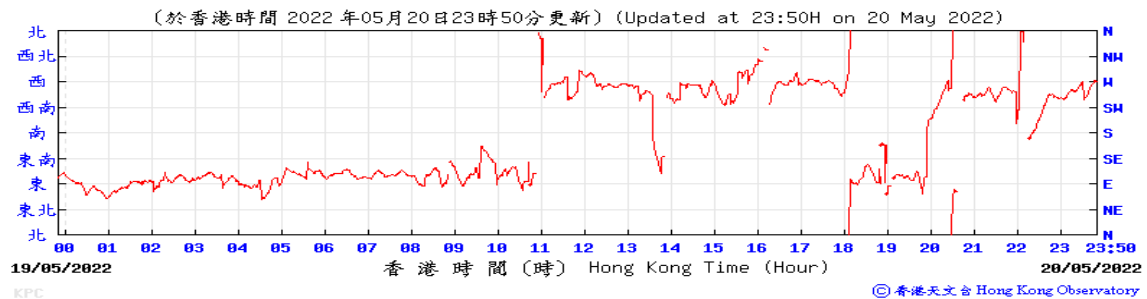
Temperature/Humidity:



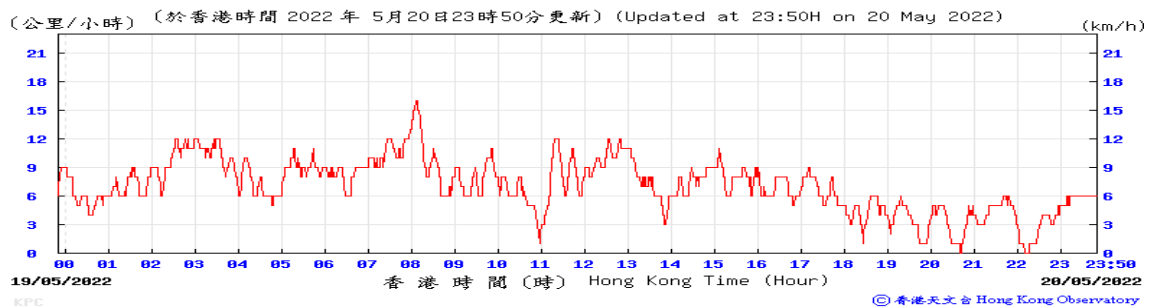
Pressure:



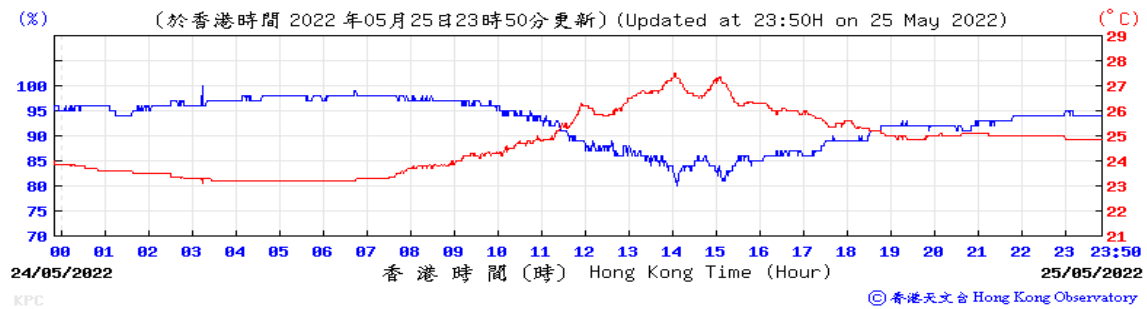
Wind Direction:



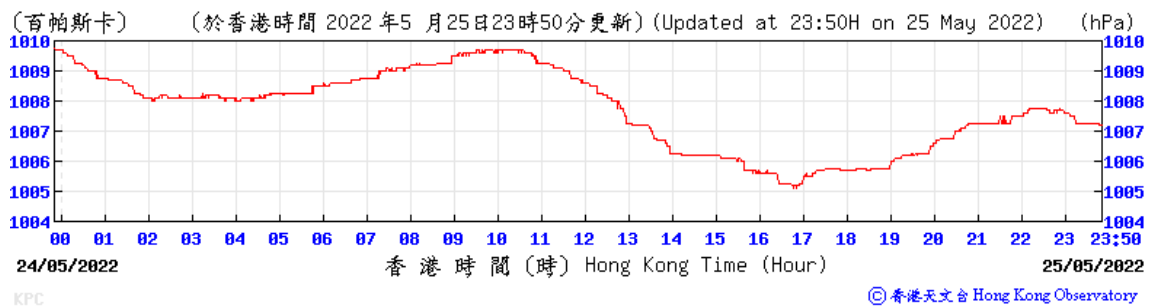
Wind Speed:



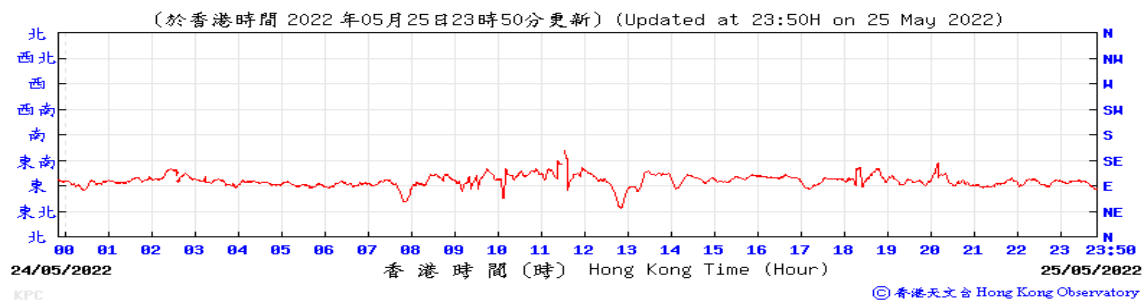
Temperature/Humidity:



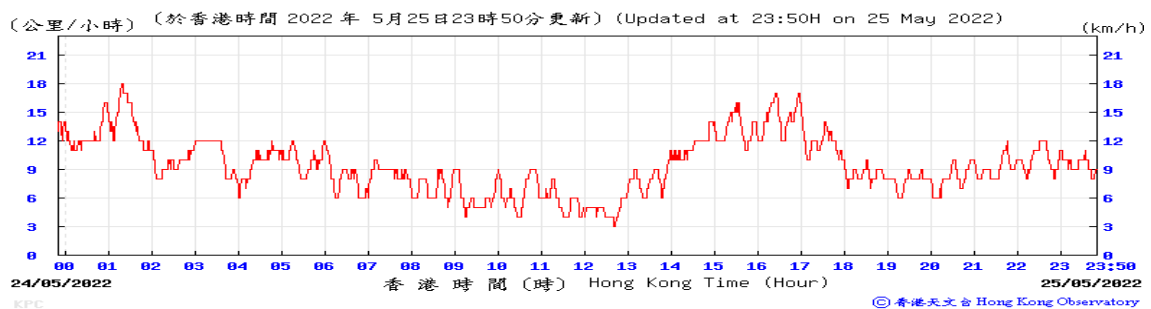
Pressure:



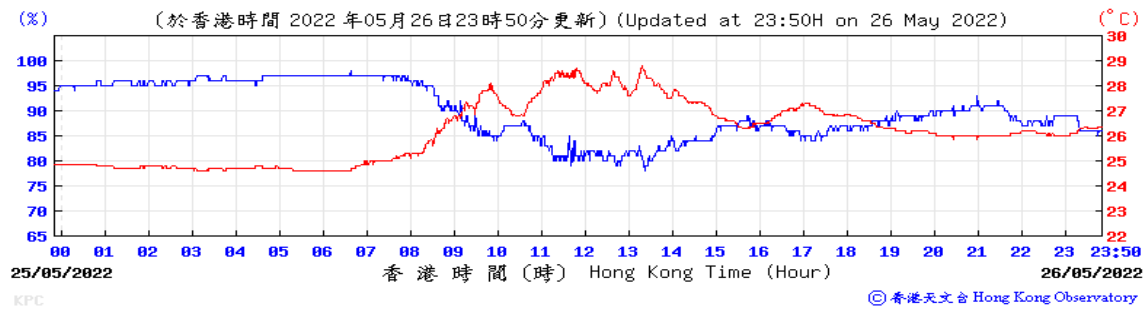
Wind Direction:



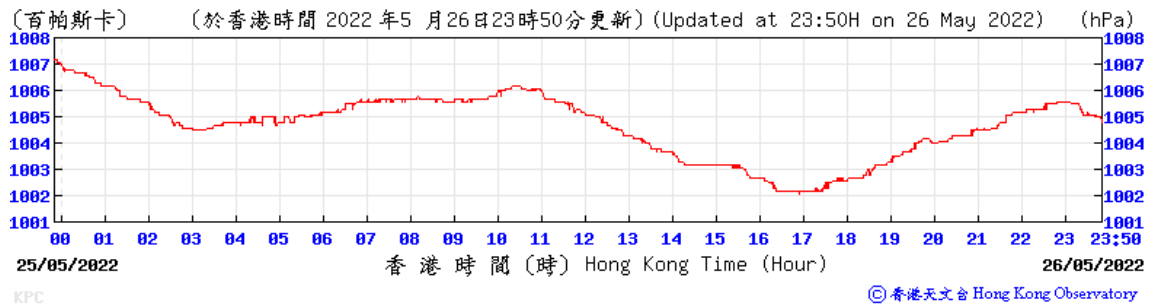
Wind Speed:



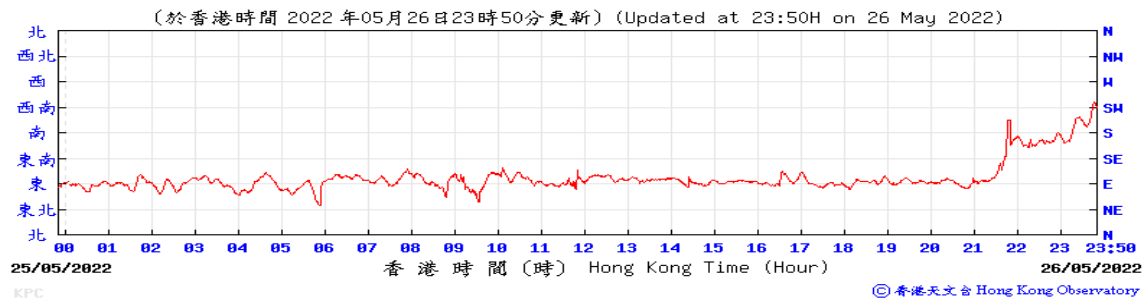
Temperature/Humidity:



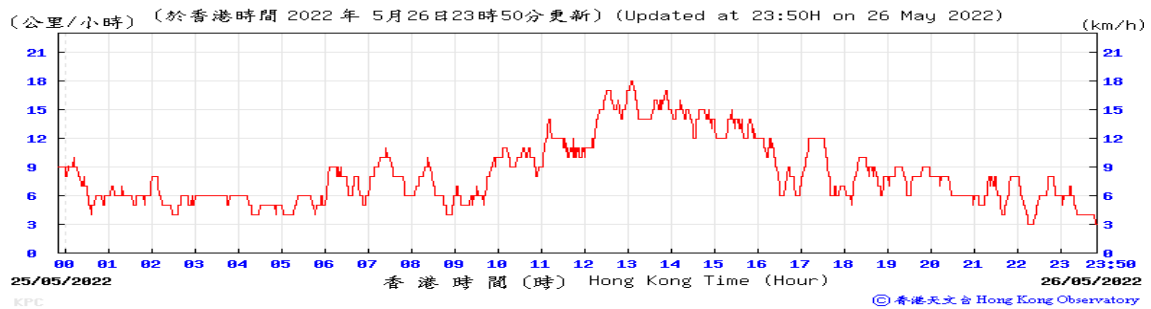
Pressure:



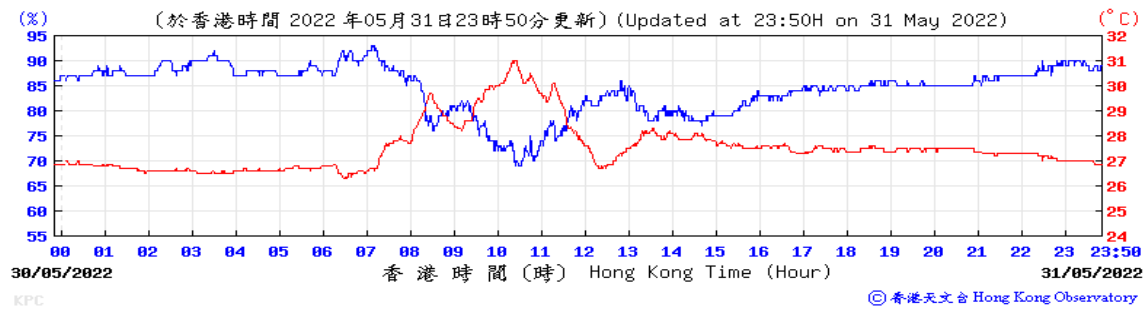
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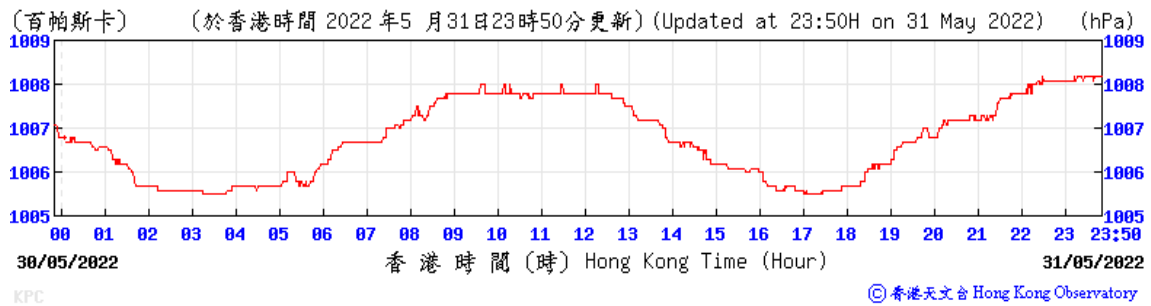
Wind Speed:



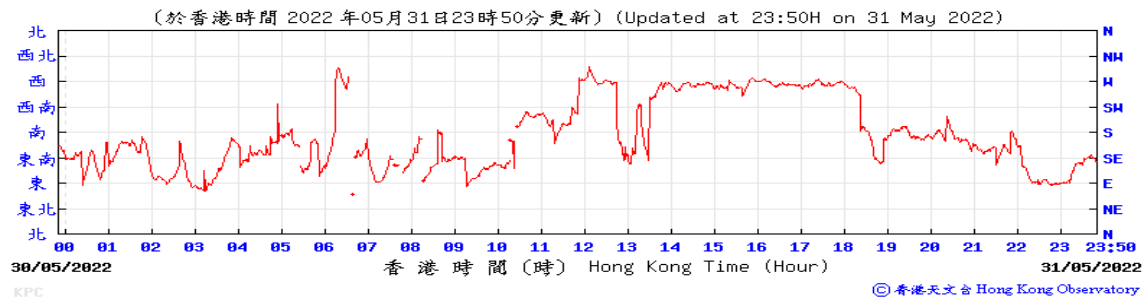
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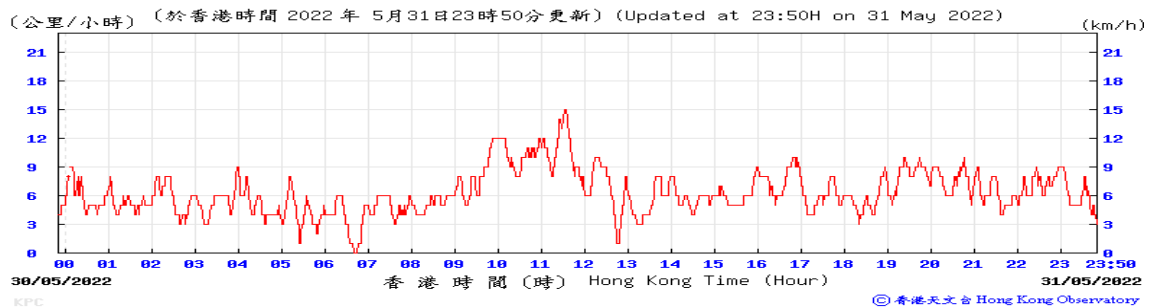
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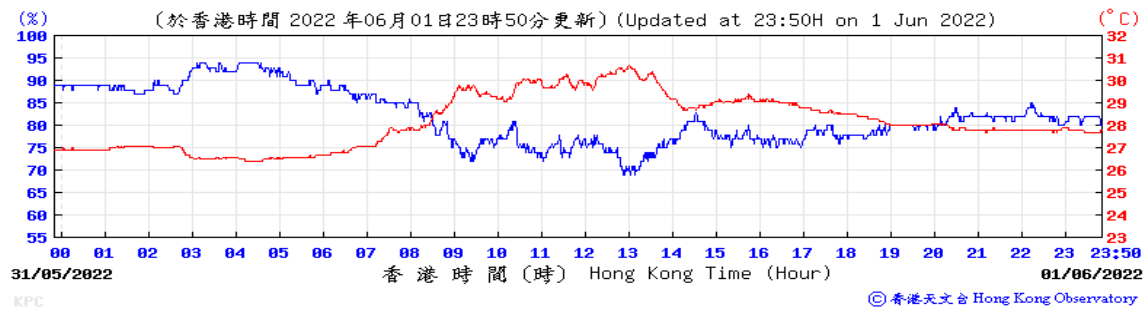
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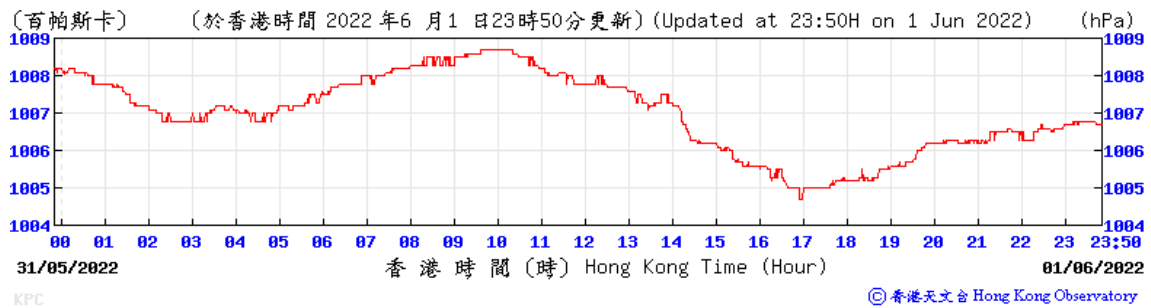
Wind Speed:



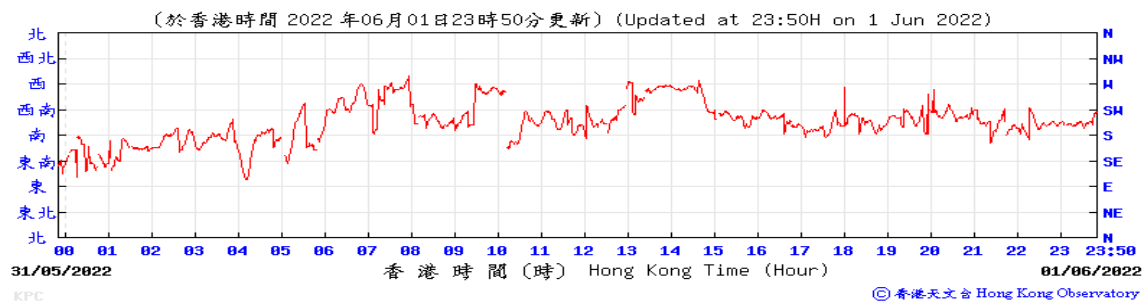
Temperature/Humidity:



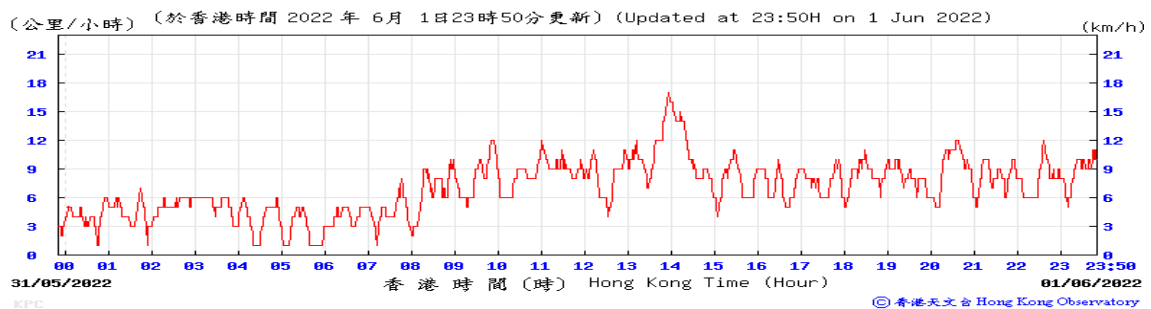
Pressure:



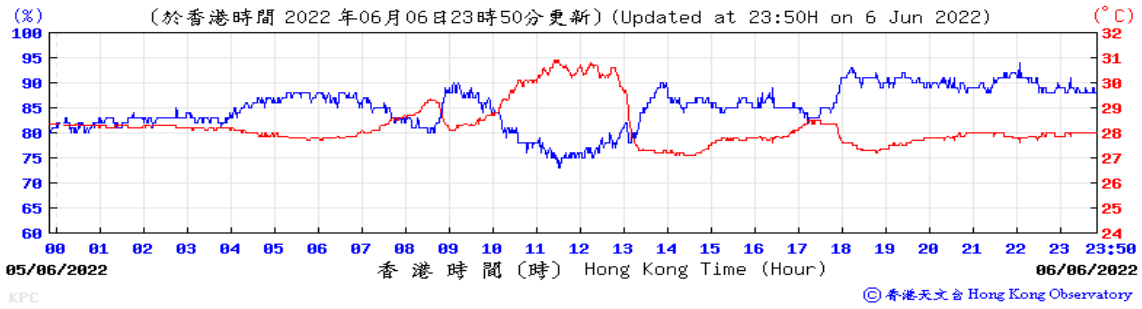
Wind Direction:



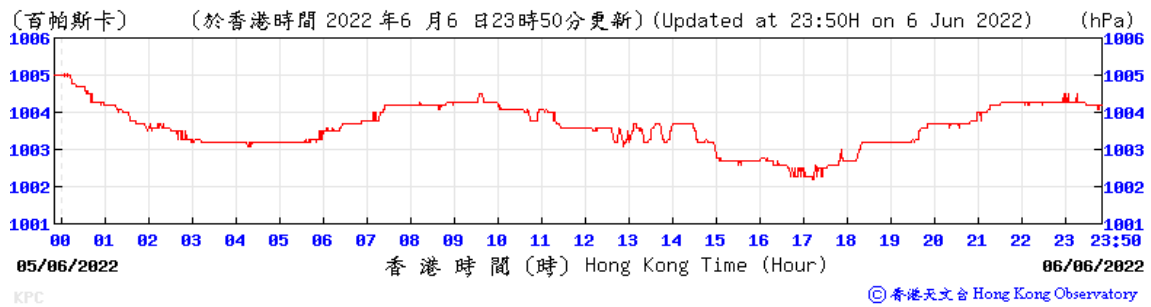
Wind Speed:



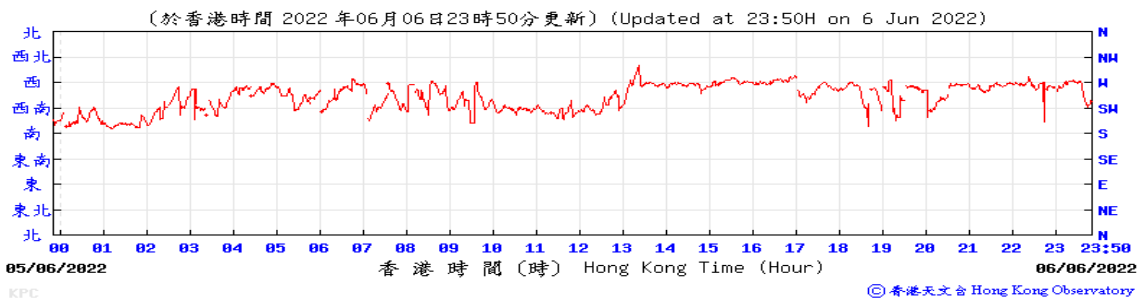
Temperature/Humidity:



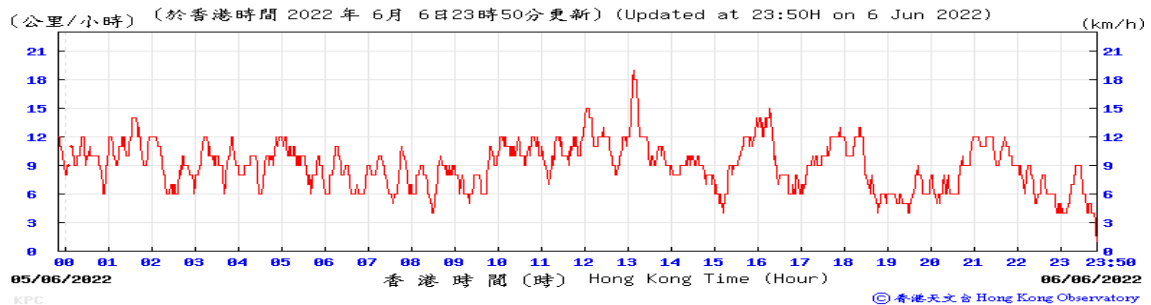
Pressure:



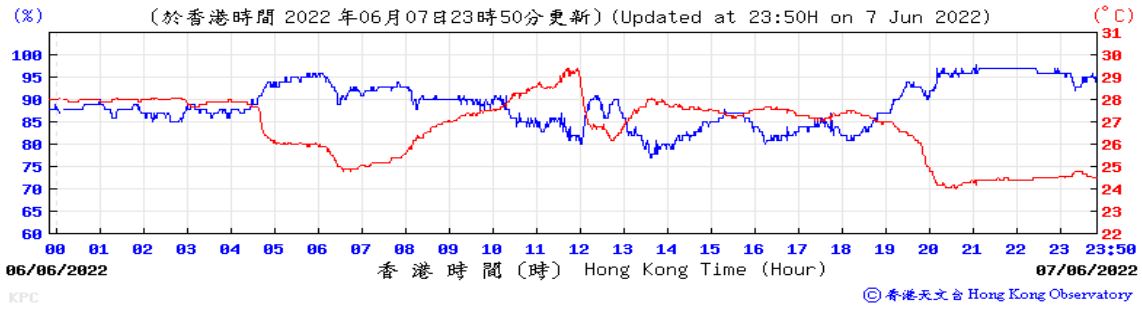
Wind Direction:



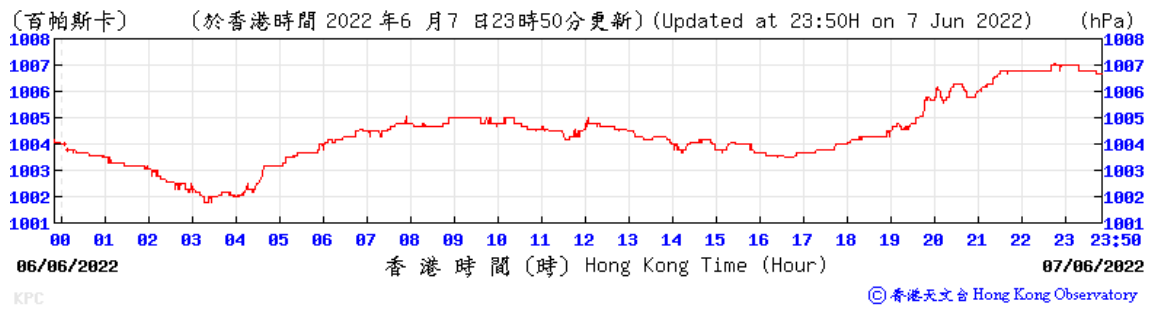
Wind Speed:



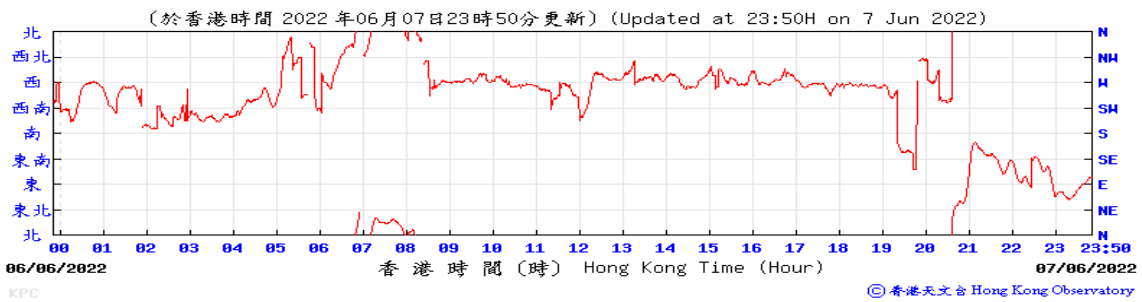
Temperature/Humidity:



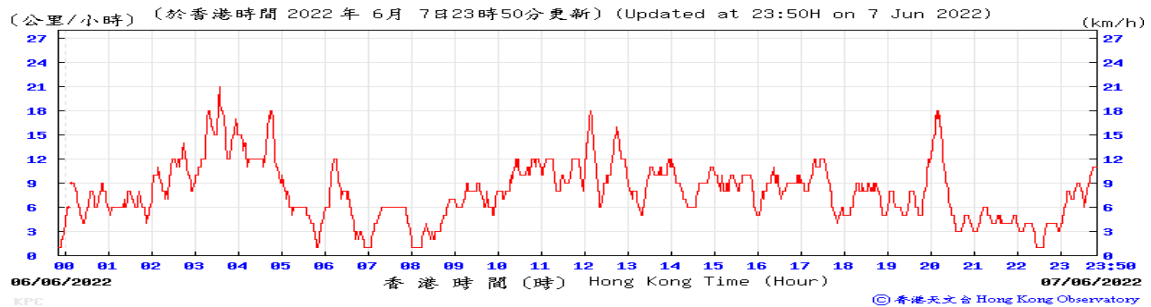
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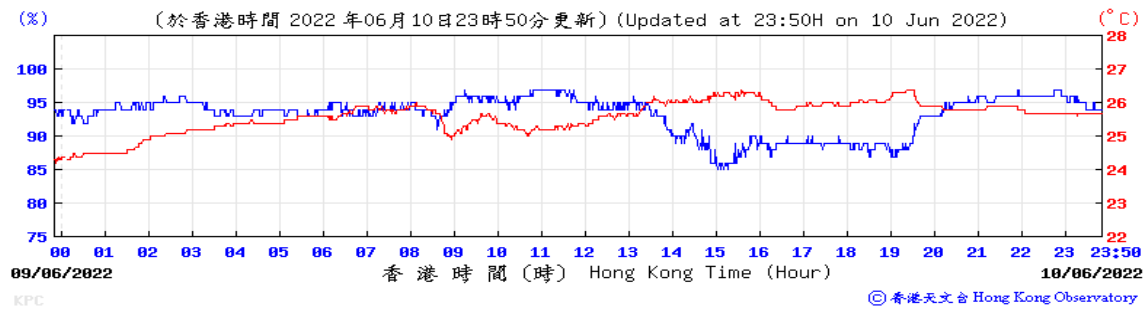
Wind Direction:



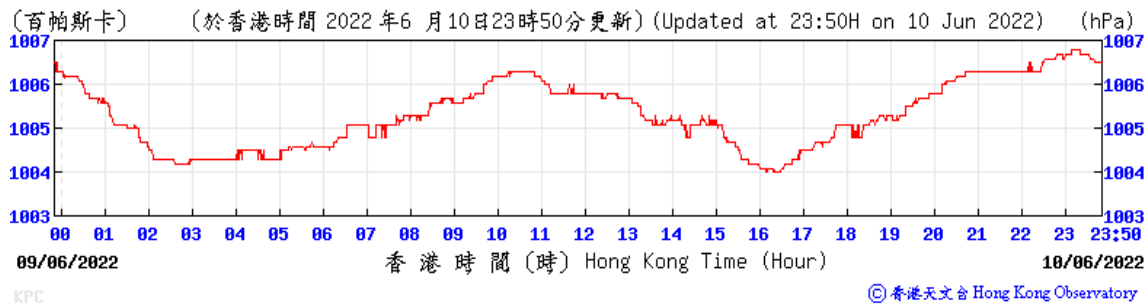
Wind Speed:



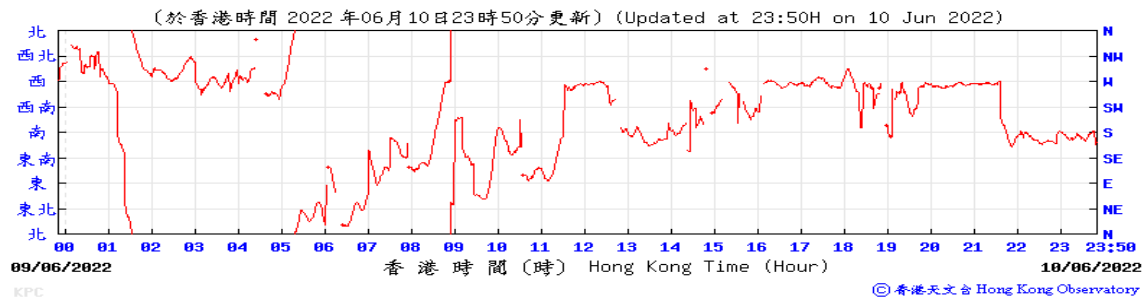
Temperature/Humidity:



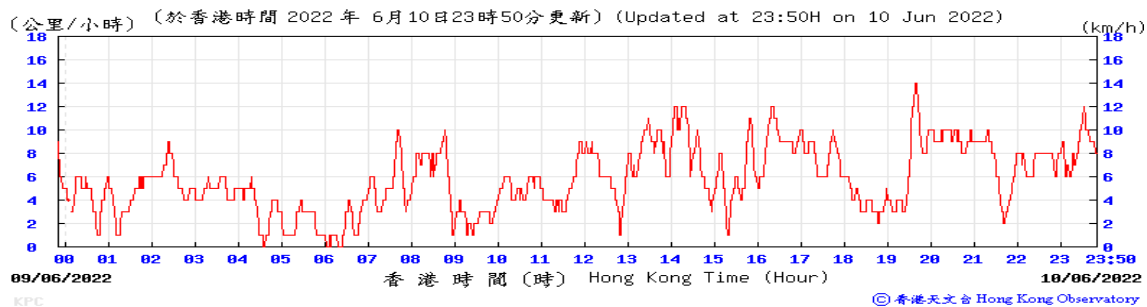
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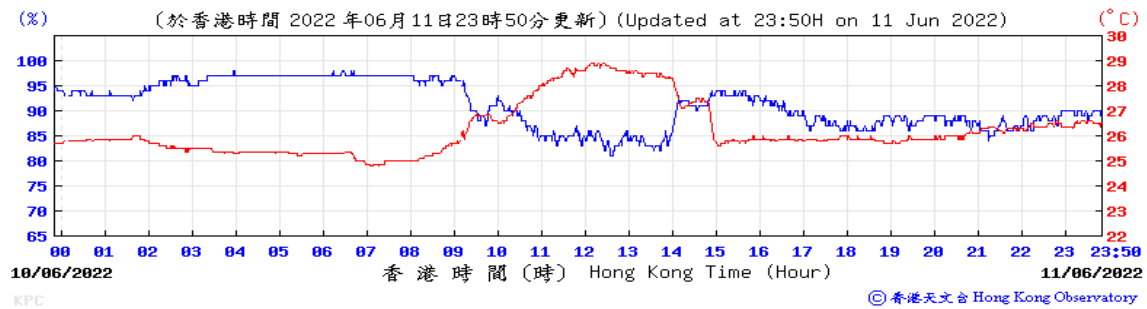
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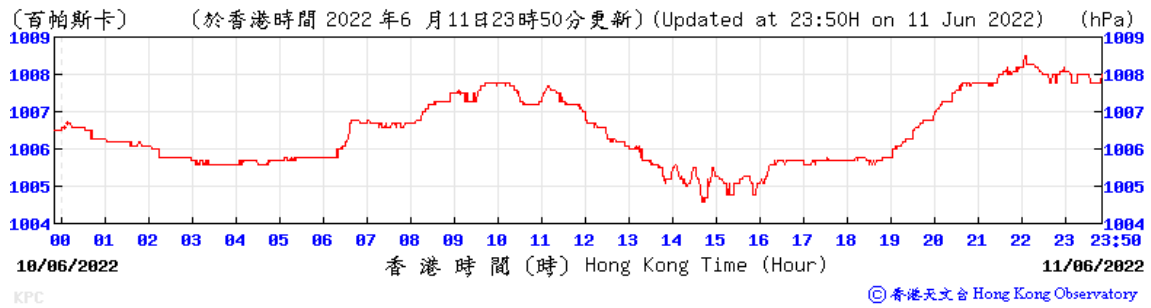
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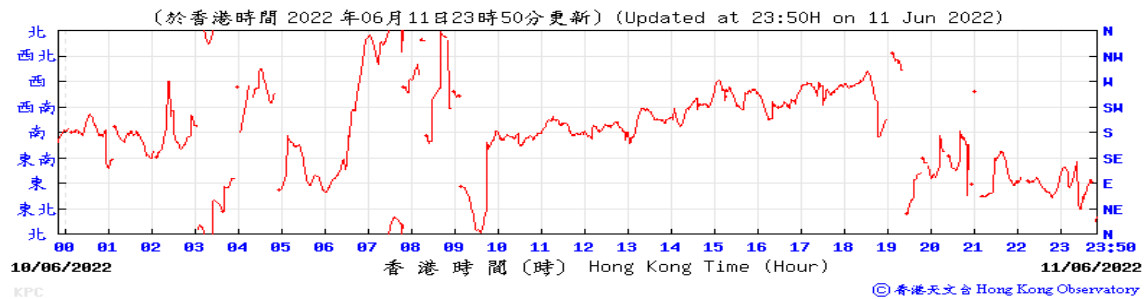
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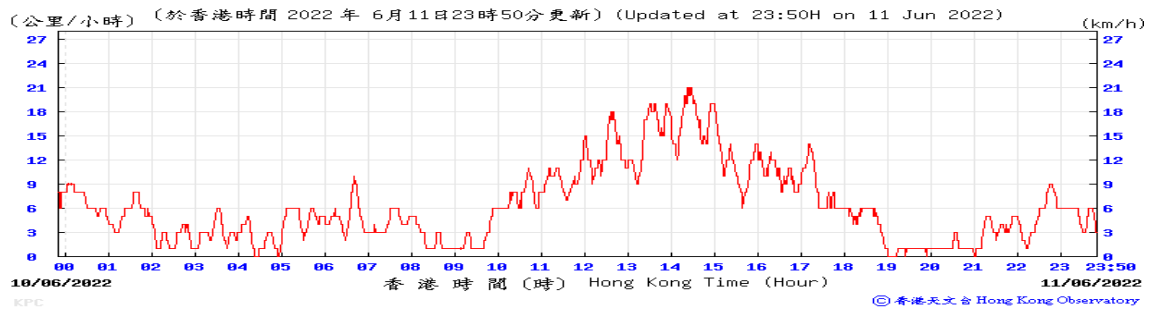
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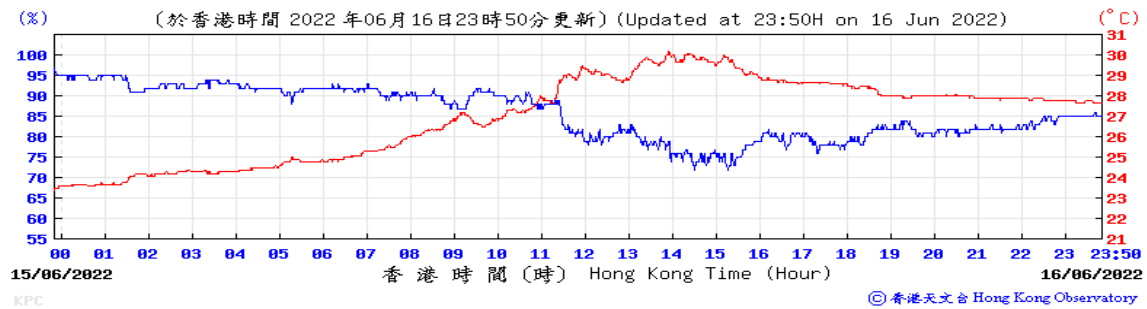
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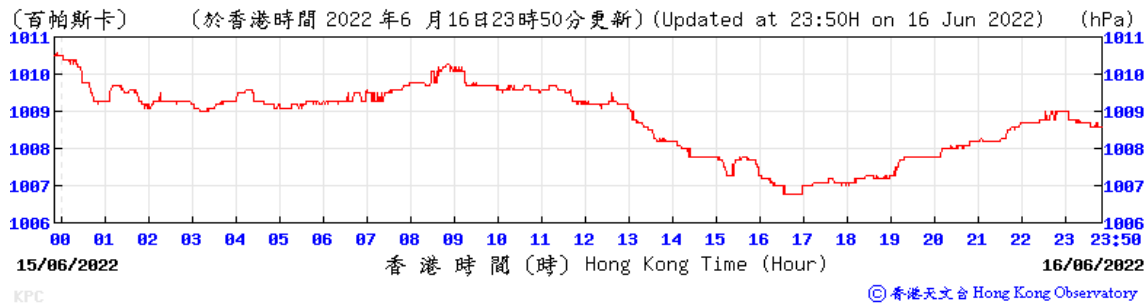
Wind Speed:



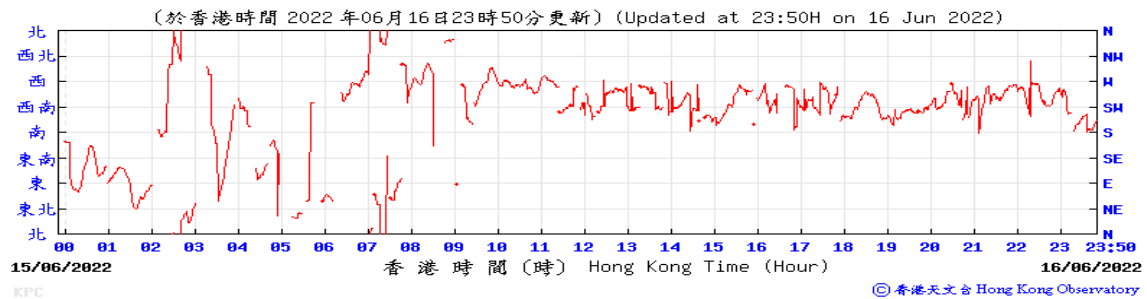
Temperature/Humidity:



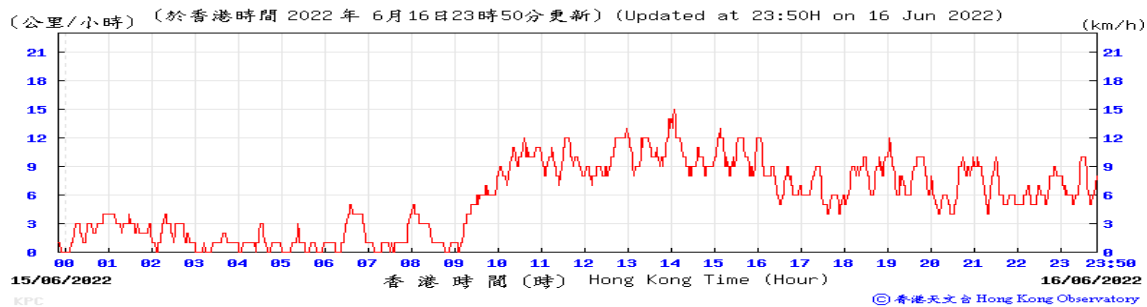
Pressure:



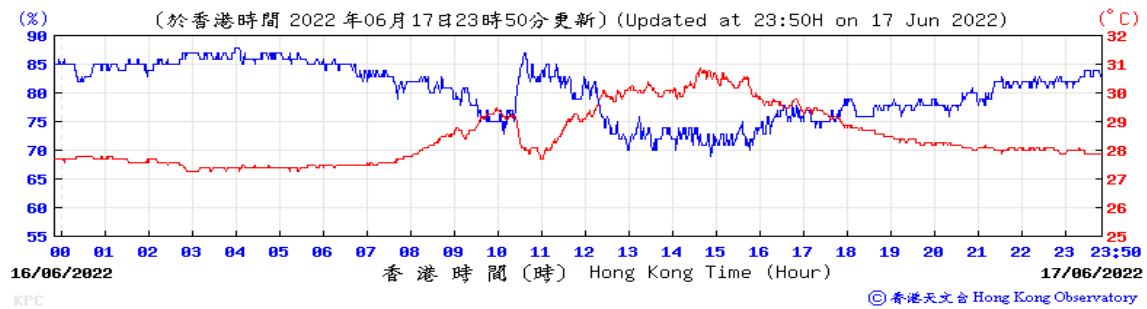
Wind Direction:



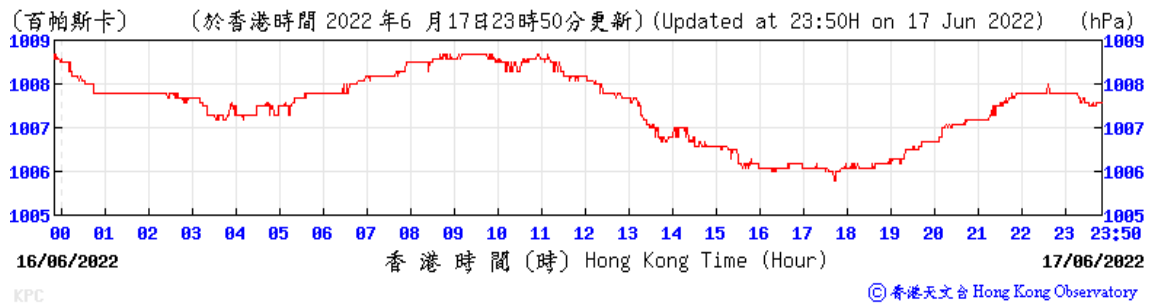
Wind Speed:



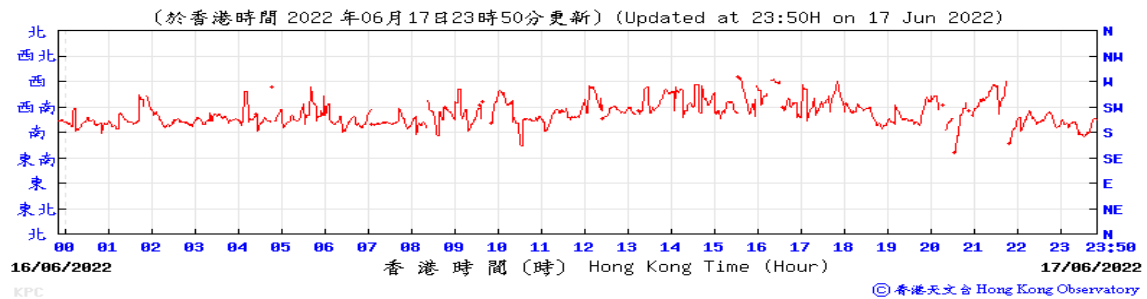
Temperature/Humidity:



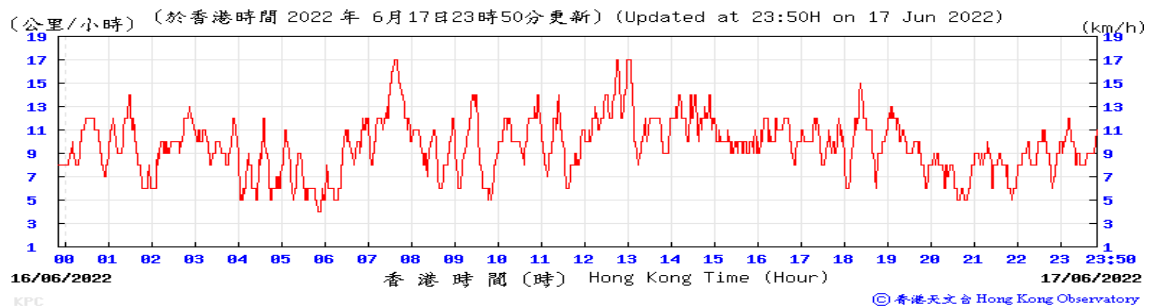
Pressure:



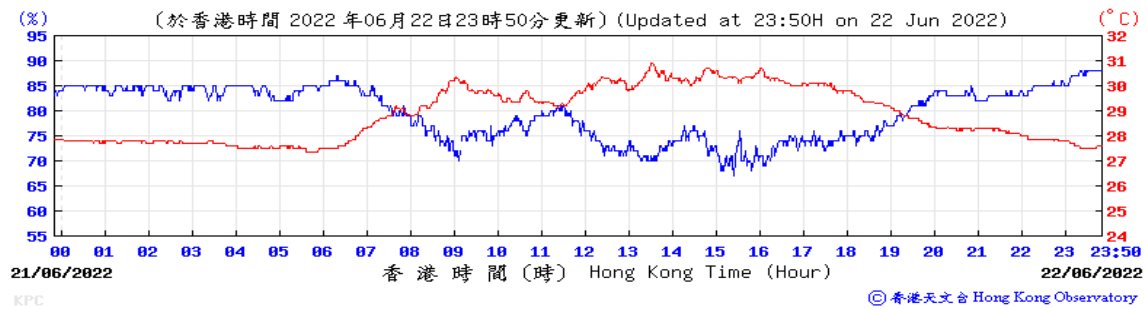
Wind Direction:



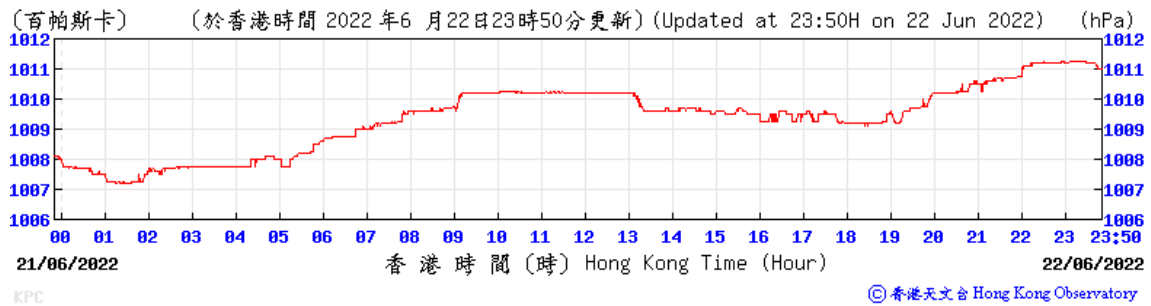
Wind Speed:



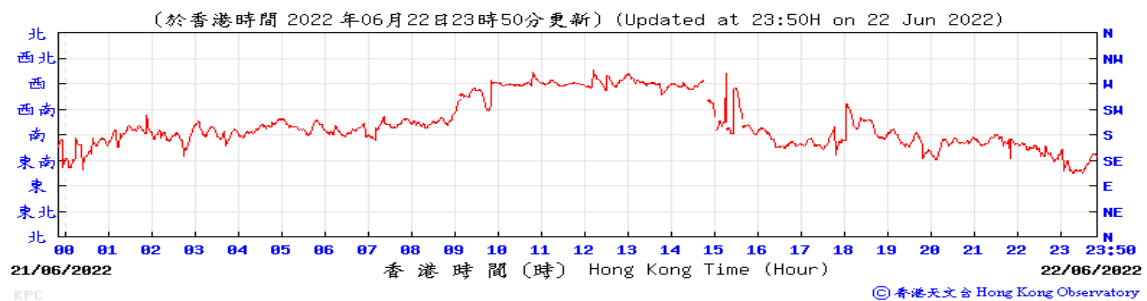
Temperature/Humidity:



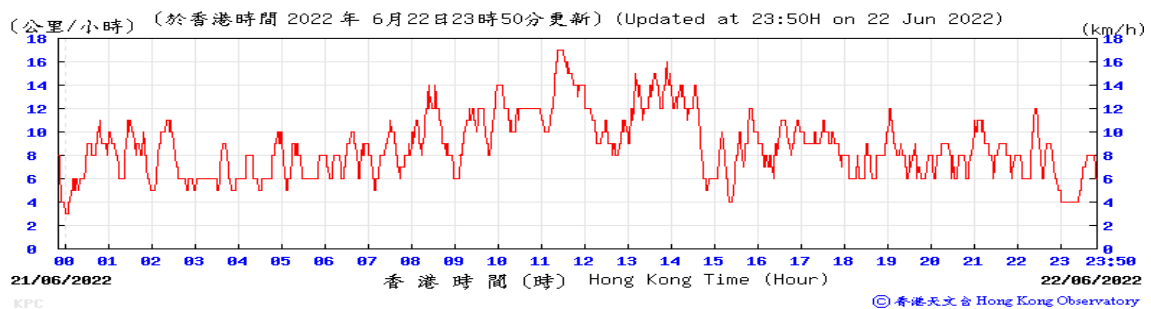
Pressure:



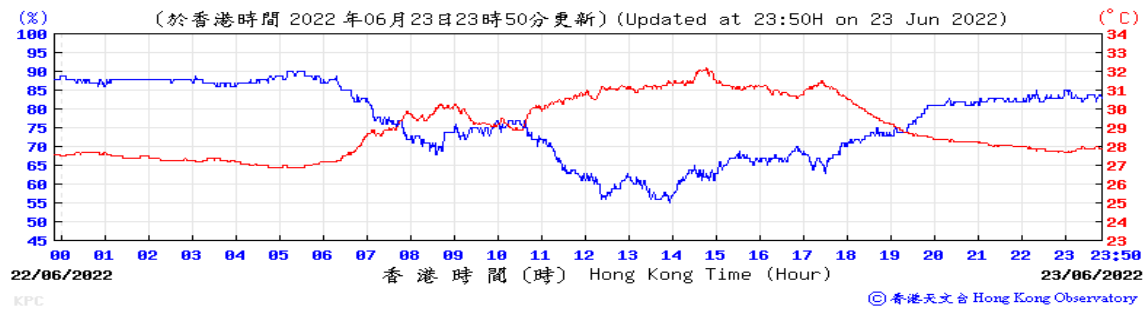
Wind Direction:



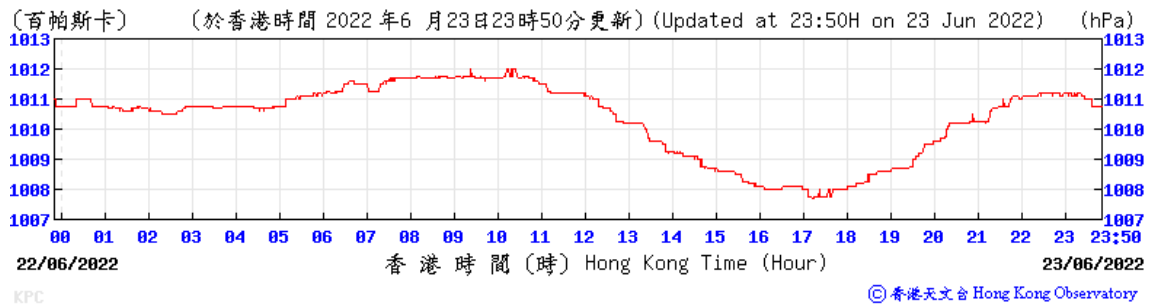
Wind Speed:



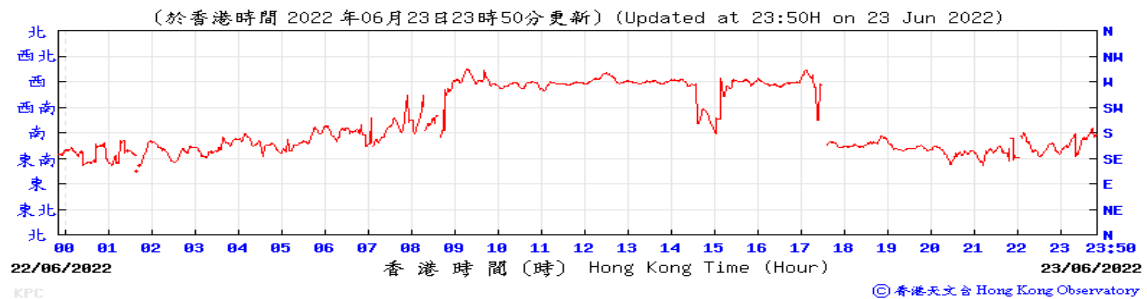
Temperature/Humidity:



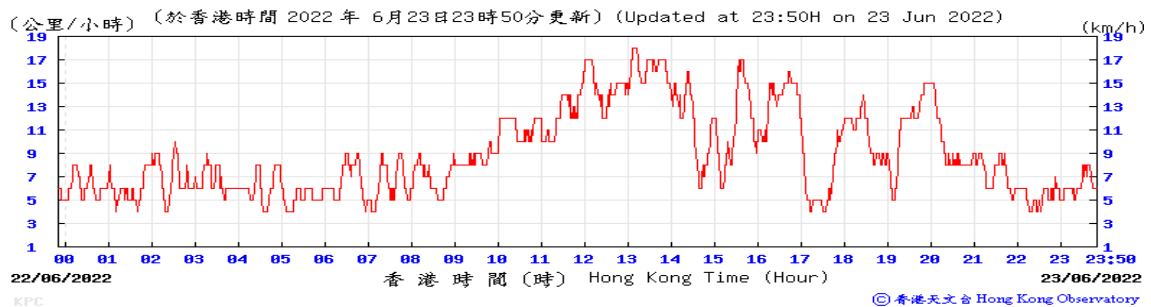
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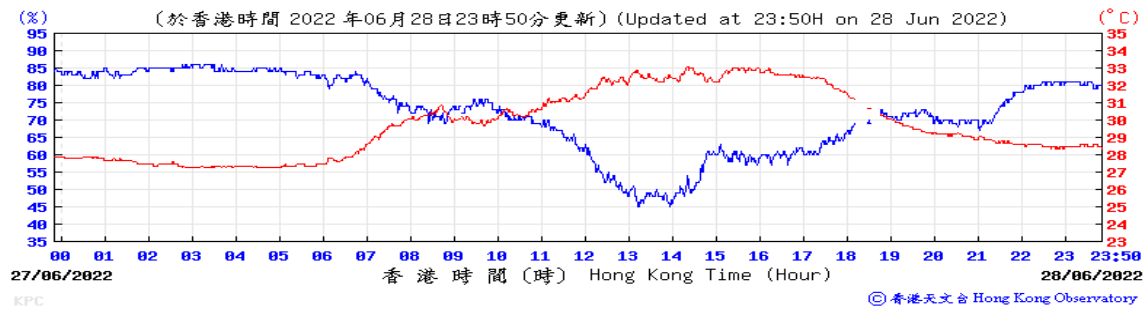
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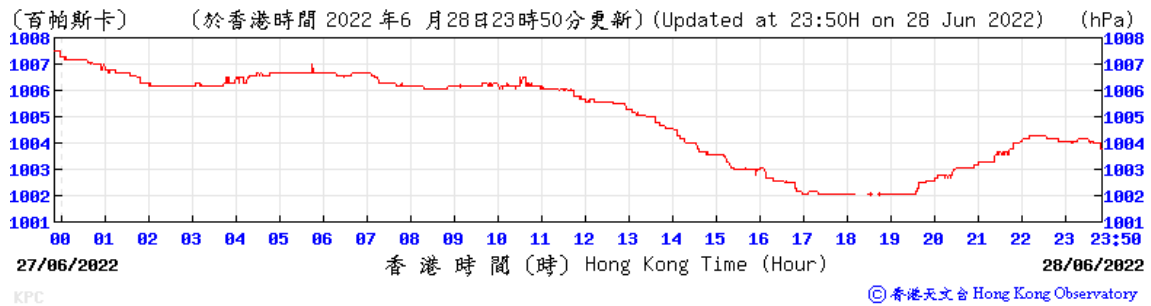
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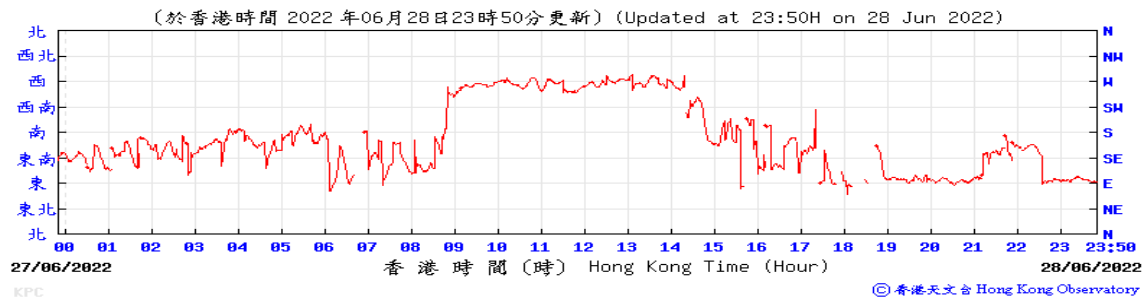
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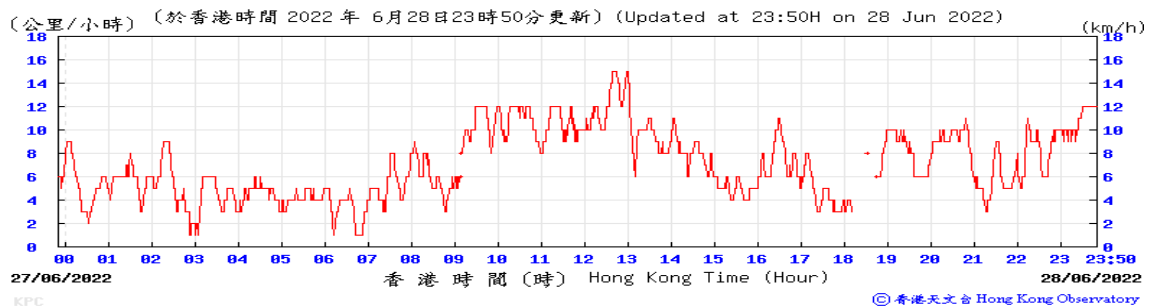
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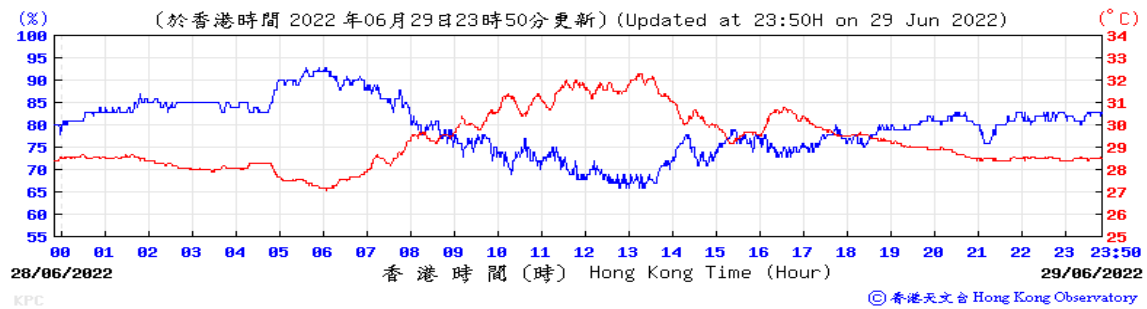
Wind Direction:



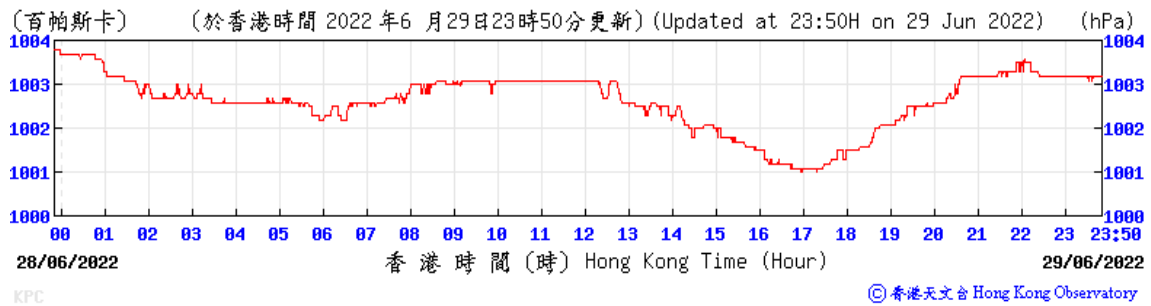
Wind Speed:



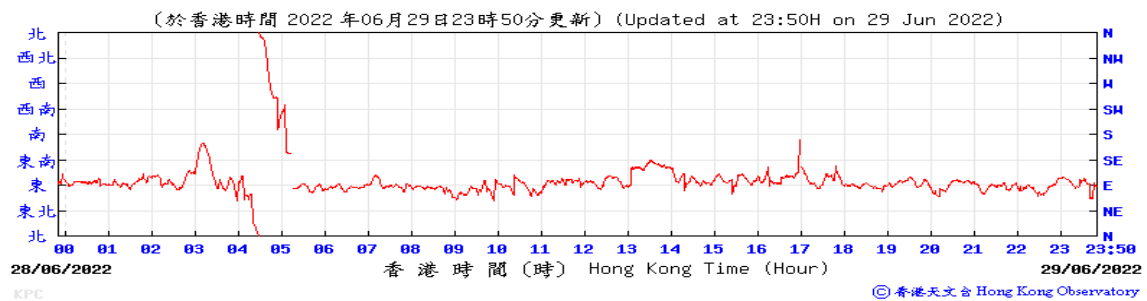
Temperature/Humidity:



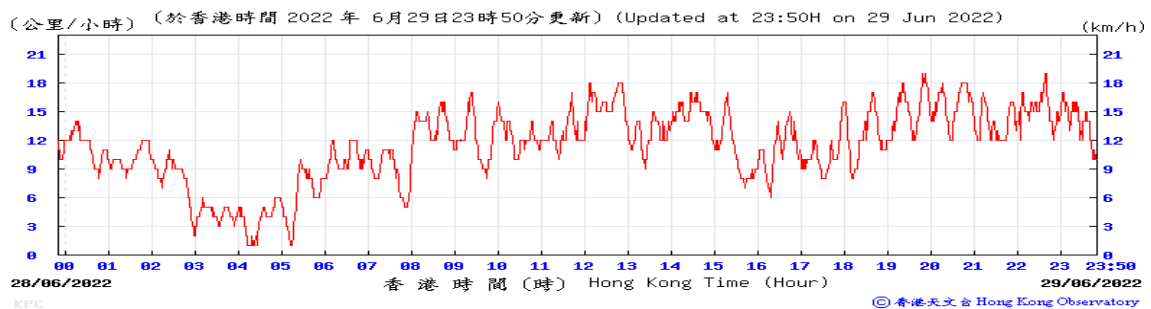
Pressure:



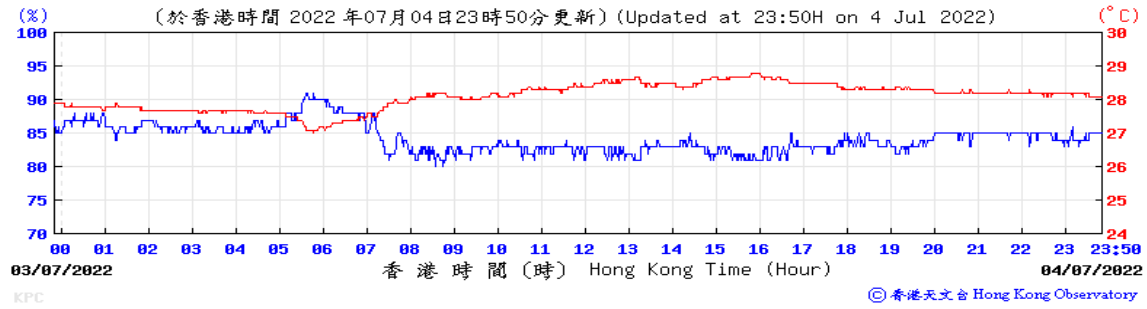
Wind Direction:



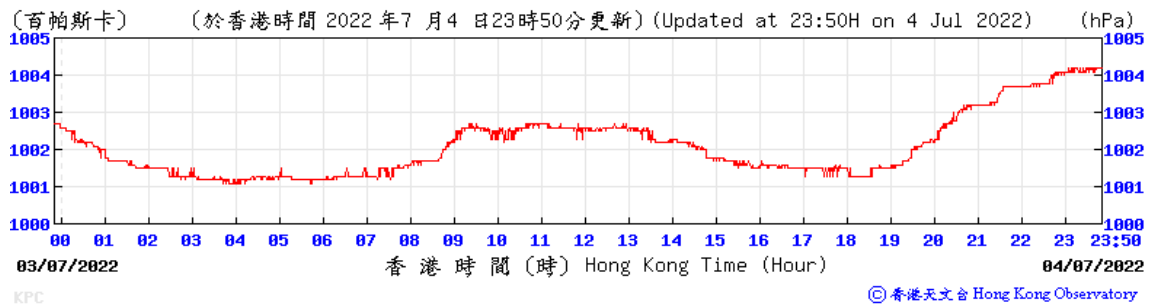
Wind Speed:



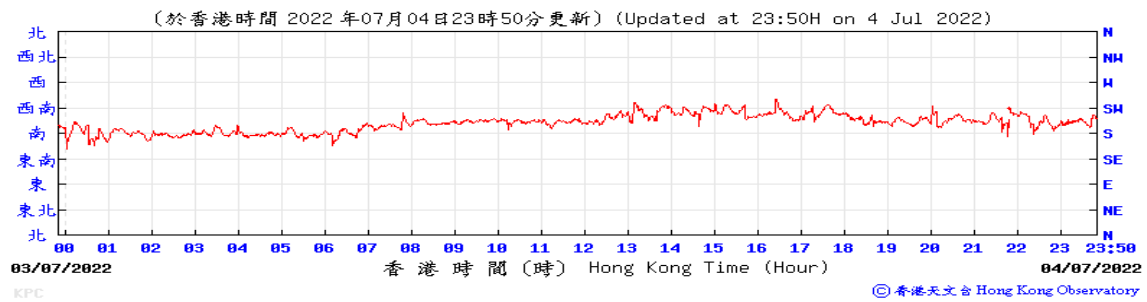
Temperature/Humidity:



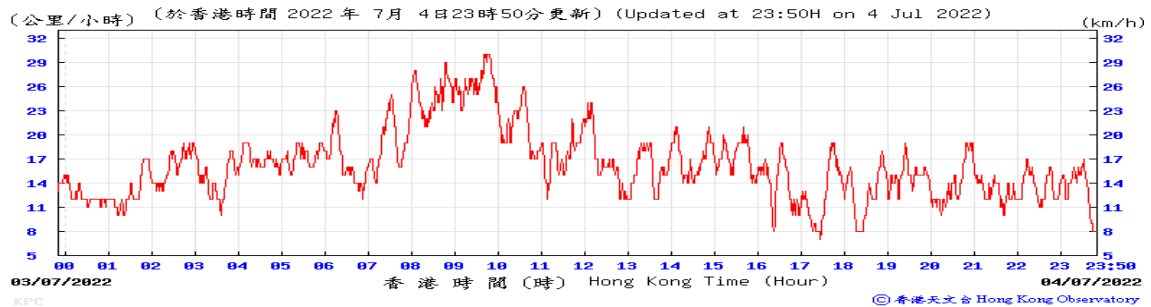
Pressure:



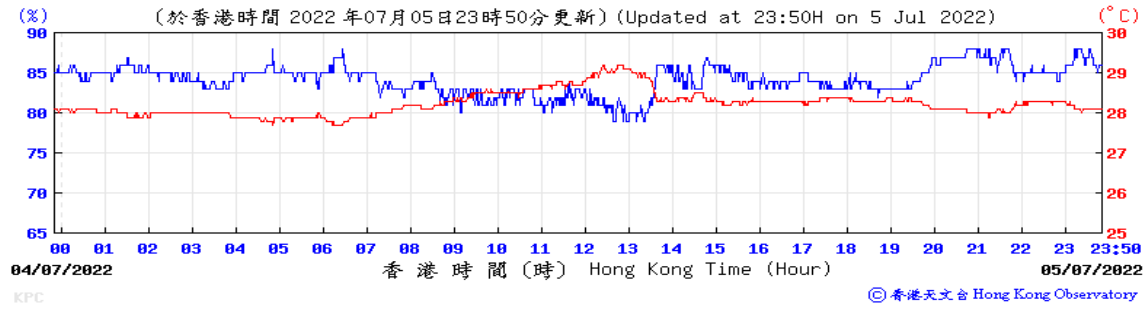
Wind Direction:



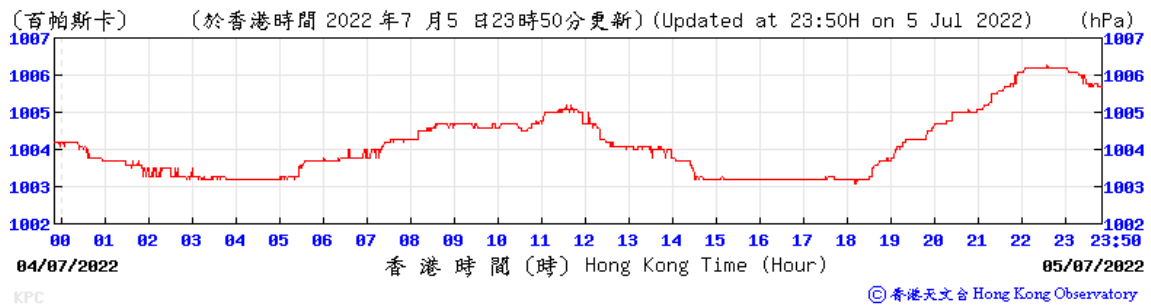
Wind Speed:



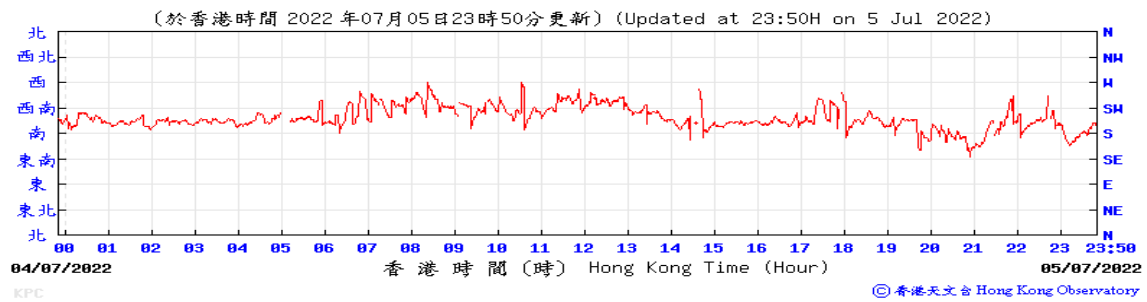
Temperature/Humidity:



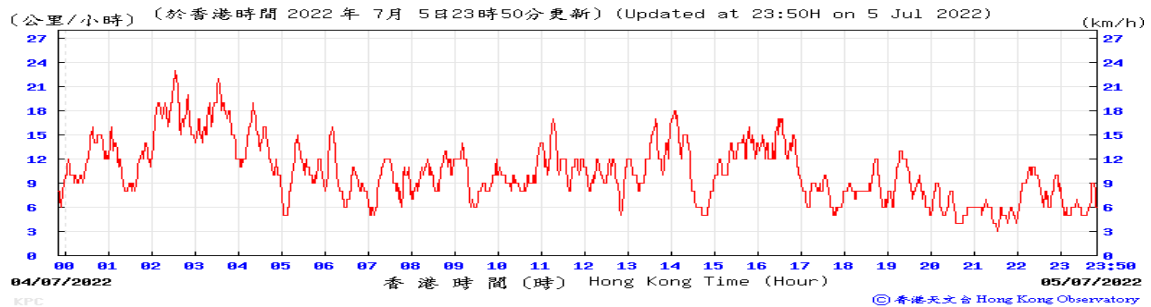
Pressure:



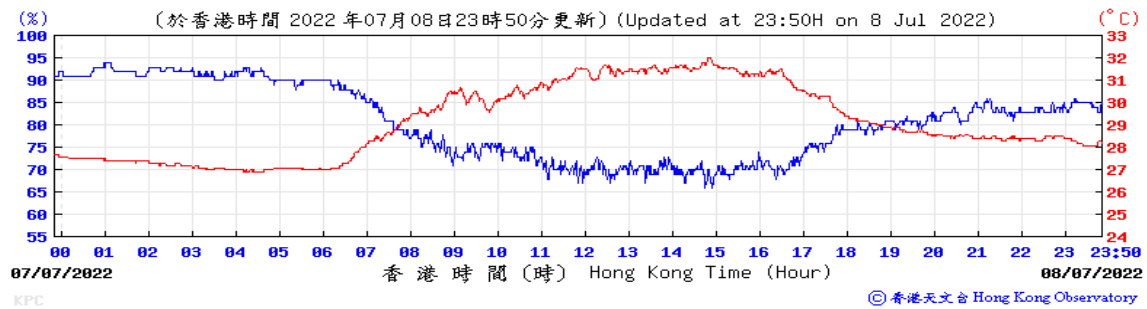
Wind Direction:



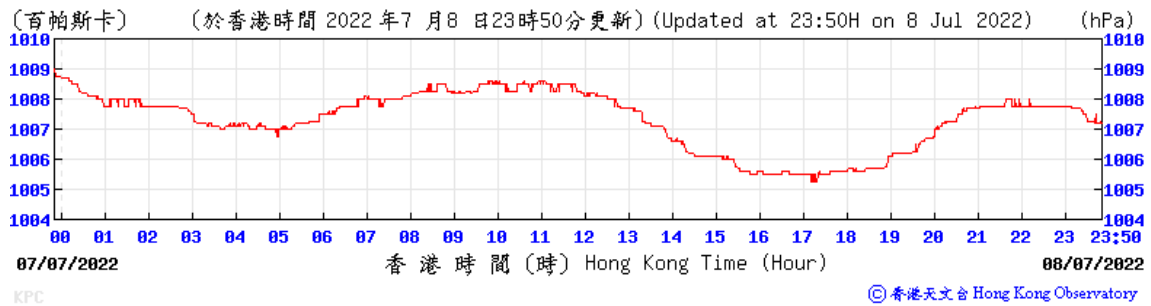
Wind Speed:



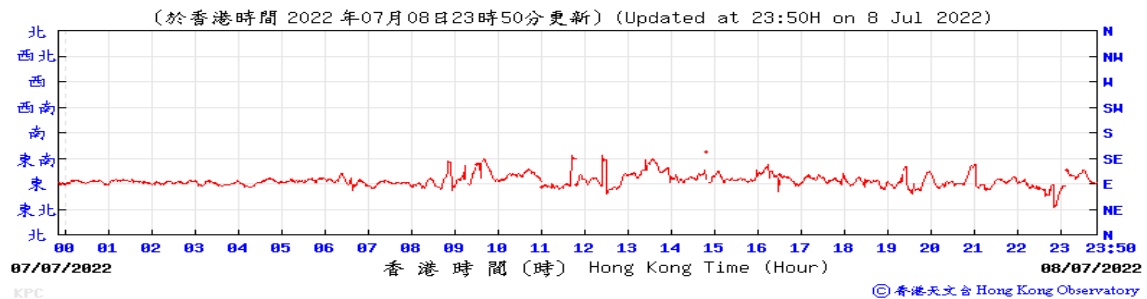
Temperature/Humidity:



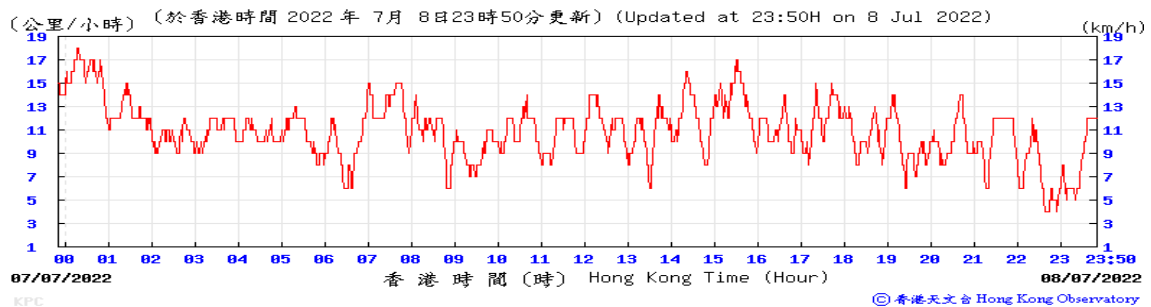
Pressure:



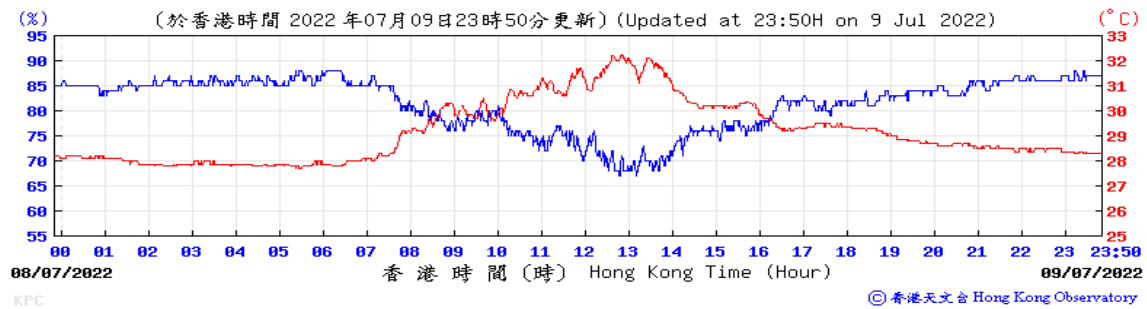
Wind Direction:



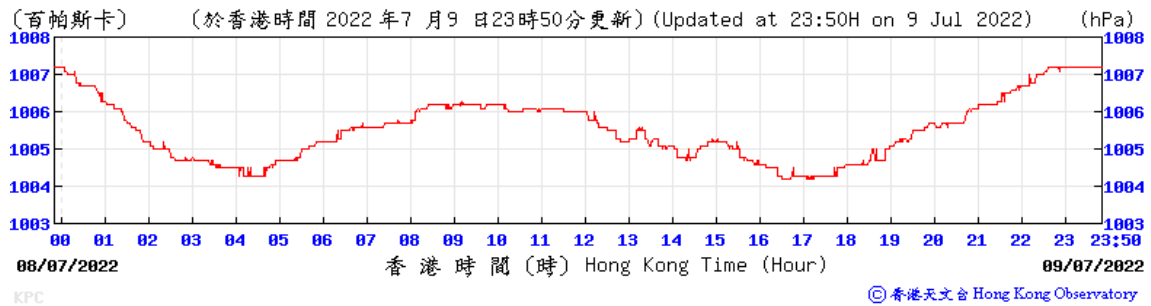
Wind Speed:



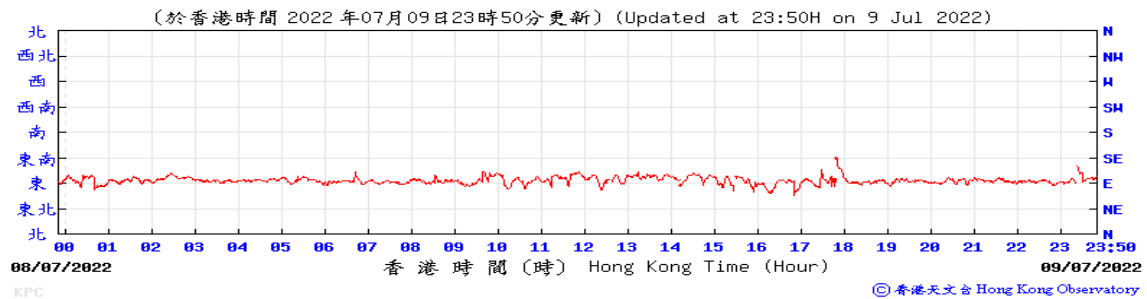
Temperature/Humidity:



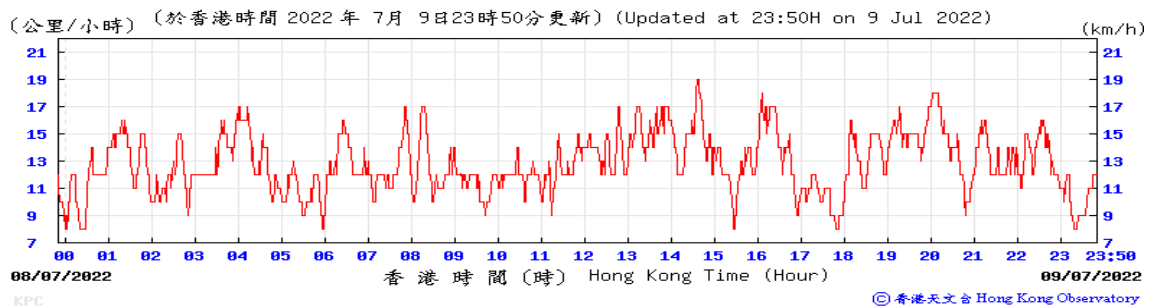
Pressure:



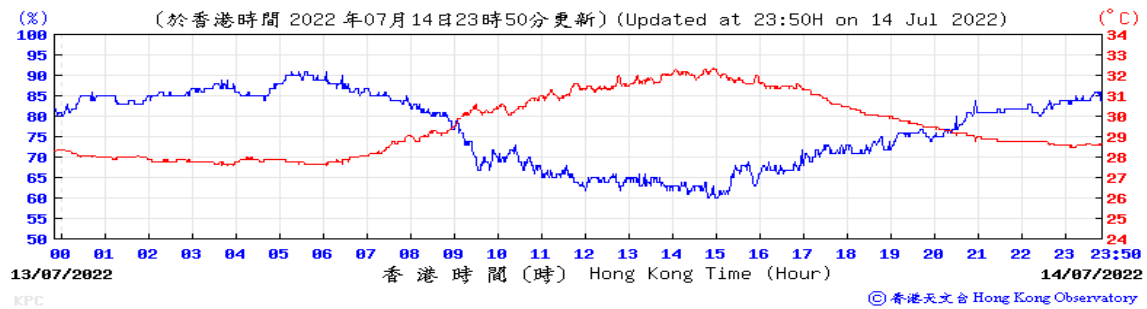
Wind Direction:



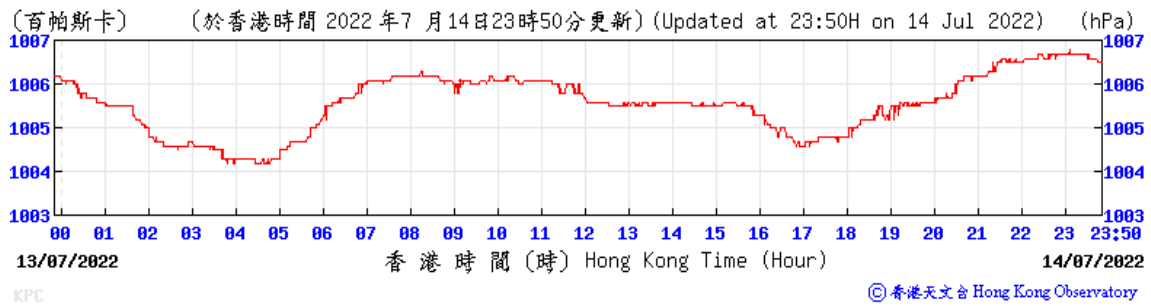
Wind Speed:



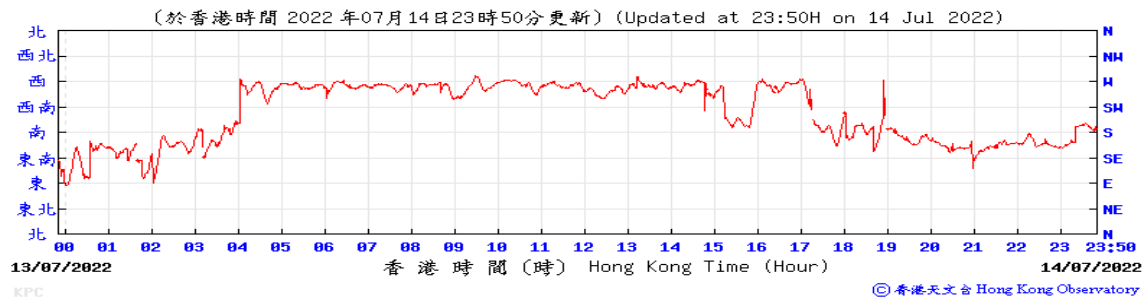
Temperature/Humidity:



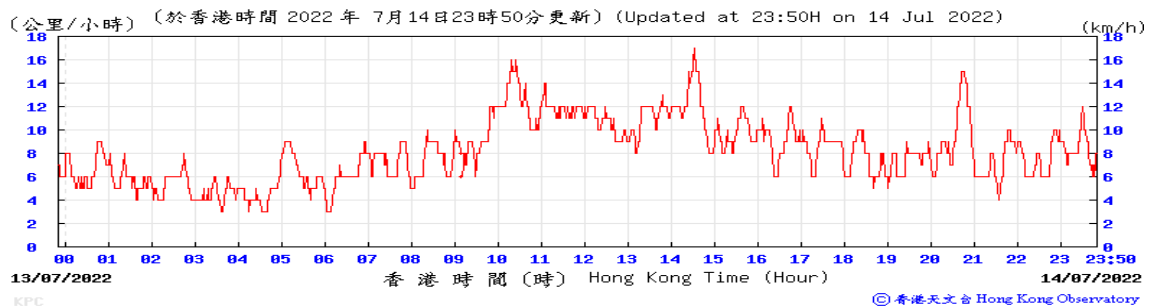
Pressure:



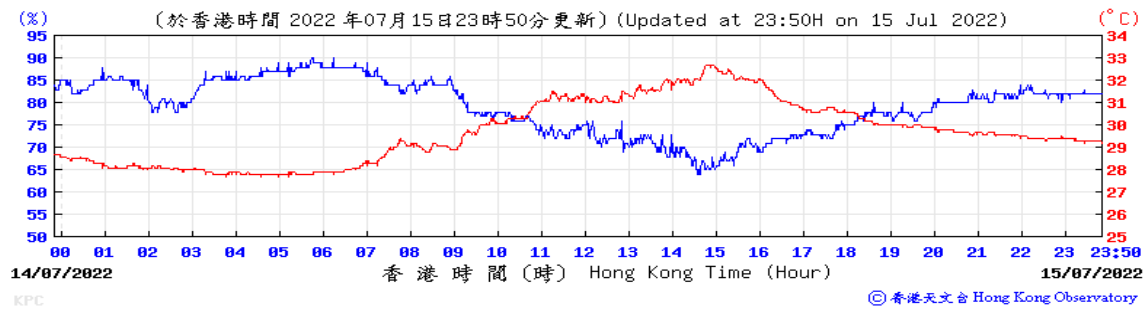
Wind Direction:



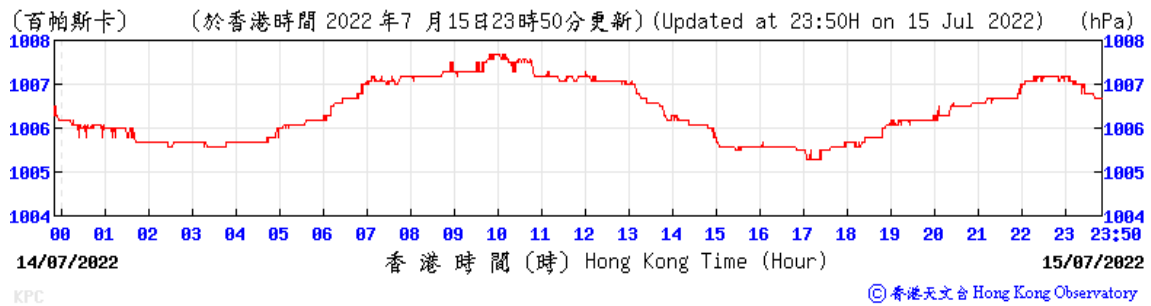
Wind Speed:



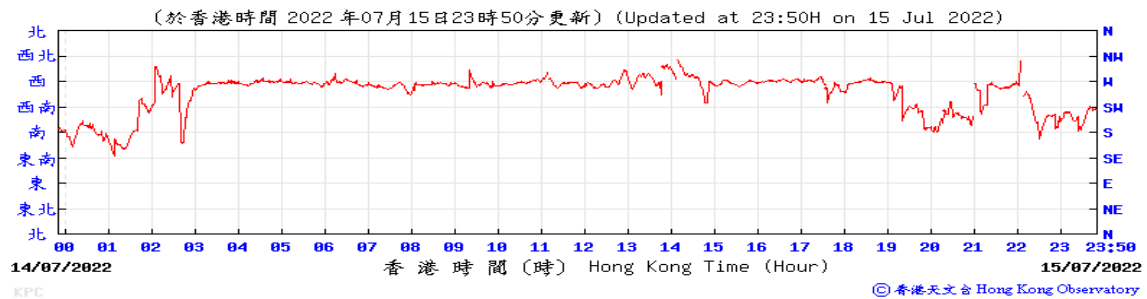
Temperature/Humidity:



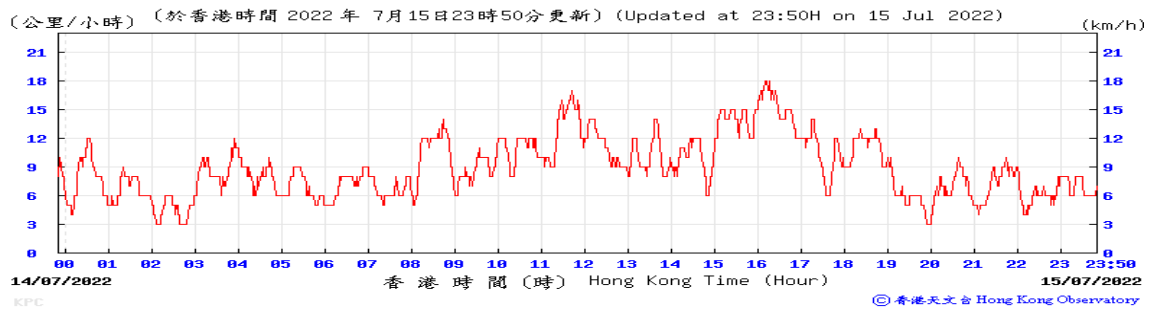
Pressure:



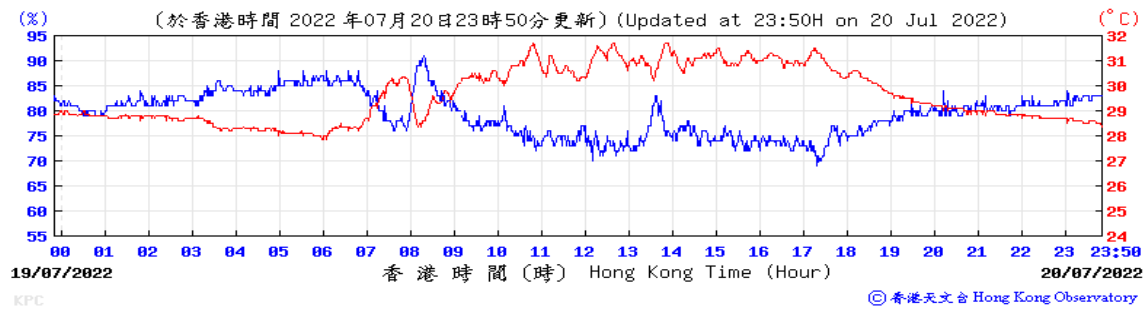
Wind Direction:



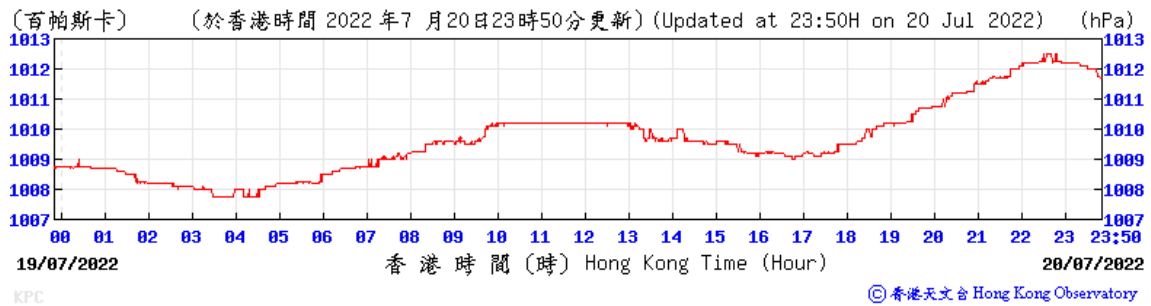
Wind Speed:



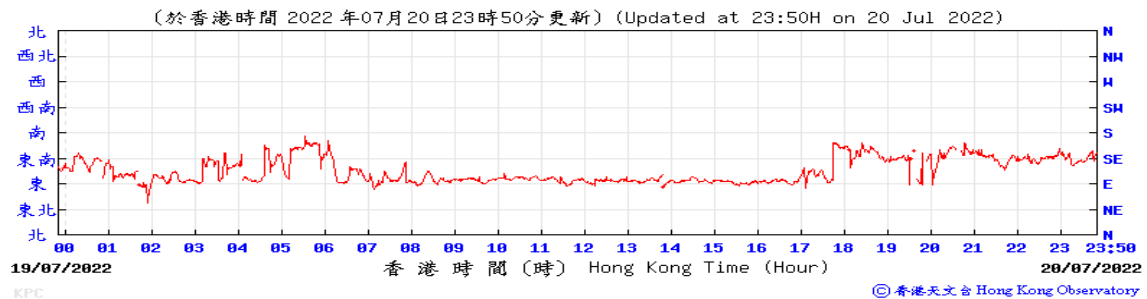
Temperature/Humidity:



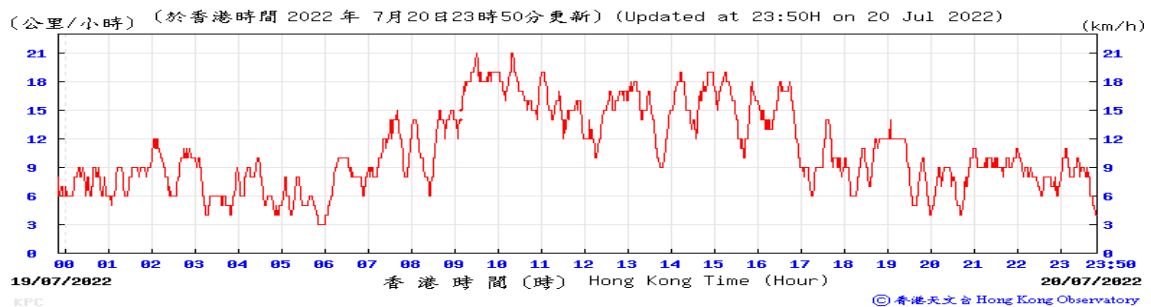
Pressure:



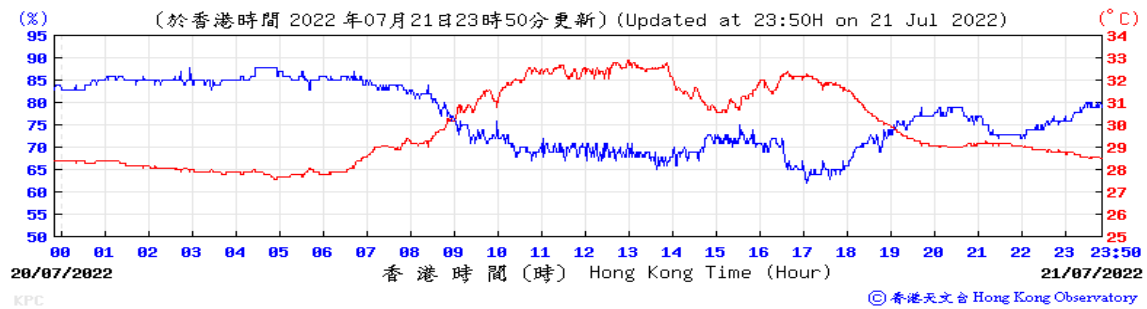
Wind Direction:



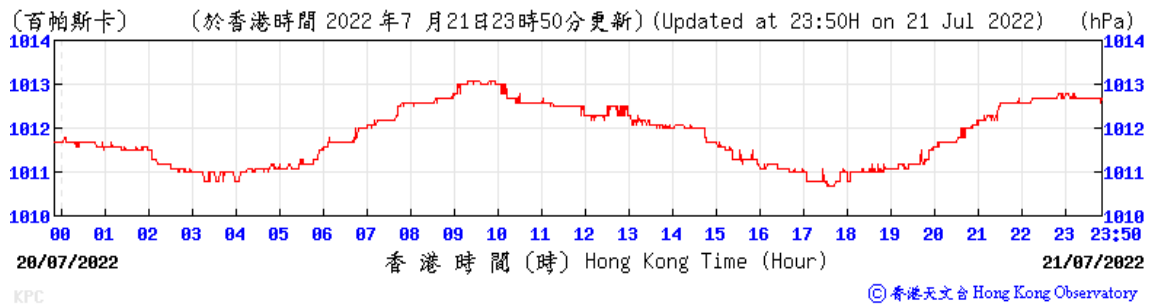
Wind Speed:



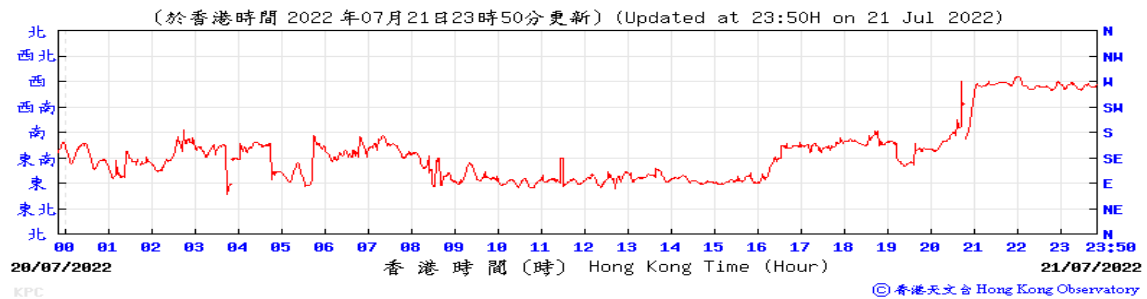
Temperature/Humidity:



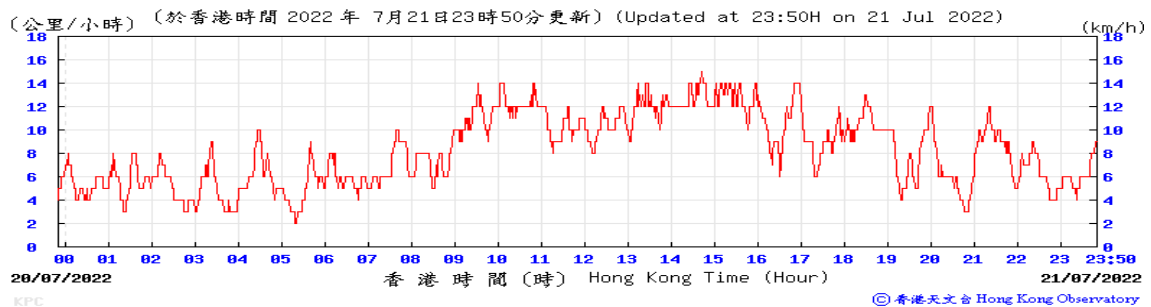
Pressure:



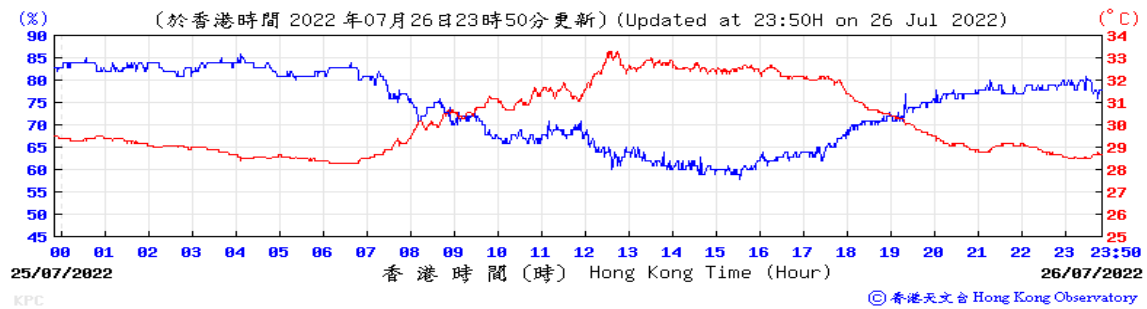
Wind Direction:



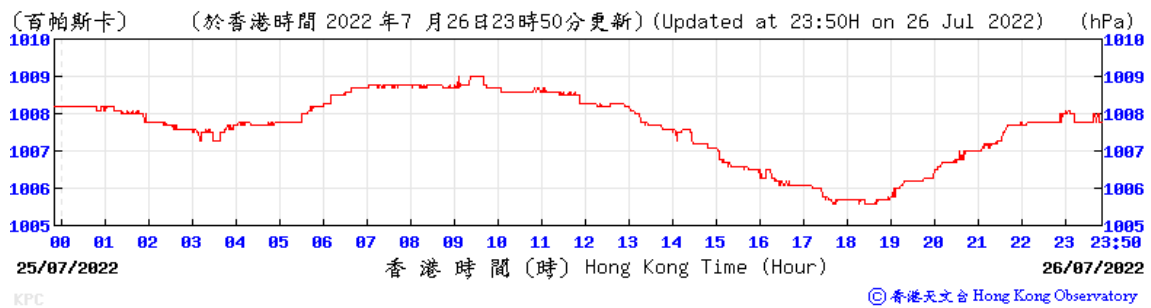
Wind Speed:



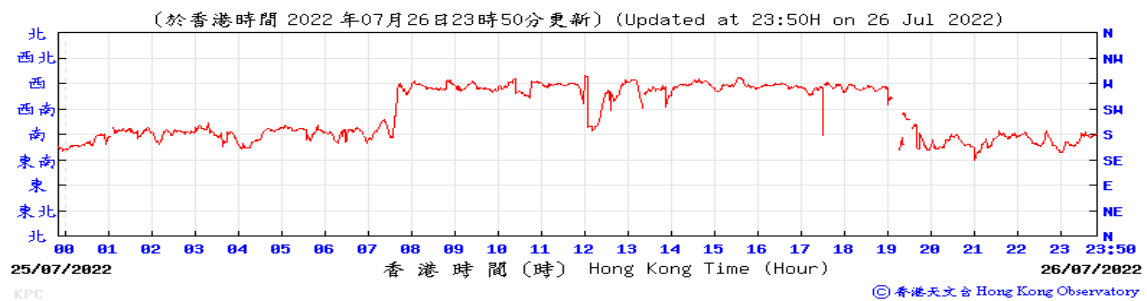
Temperature/Humidity:



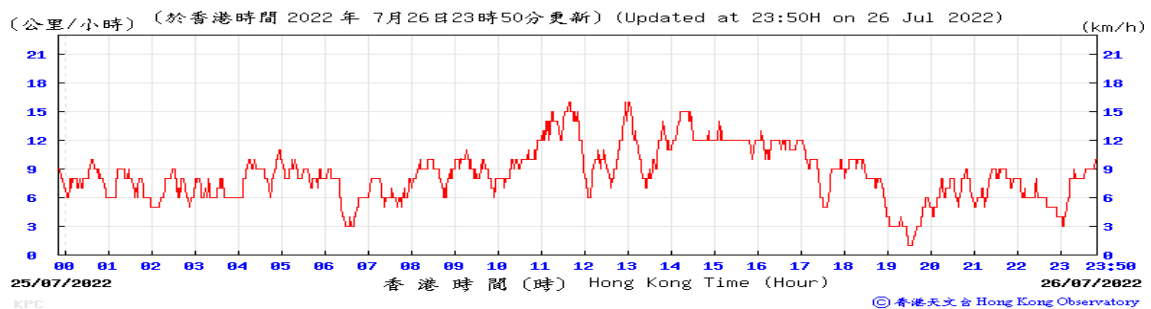
Pressure:



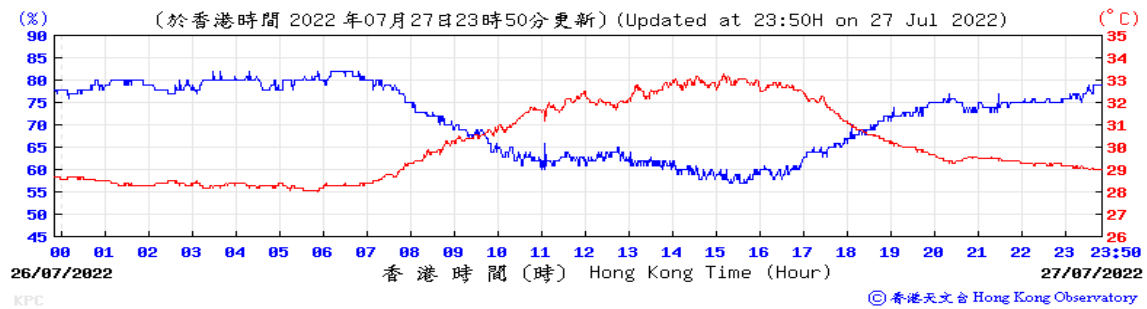
Wind Direction:



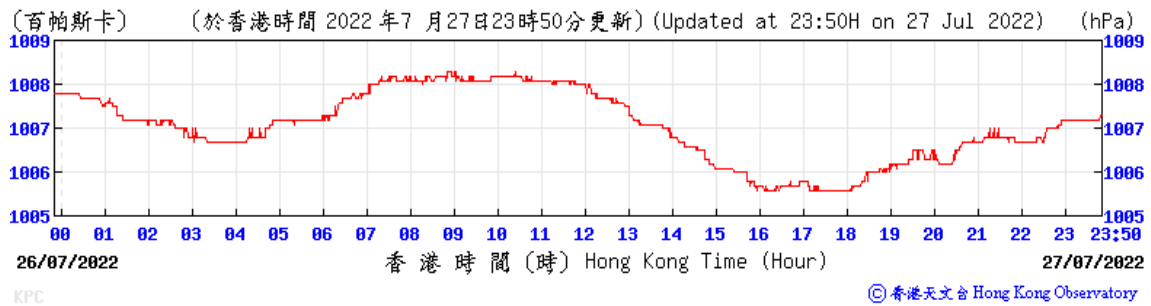
Wind Speed:



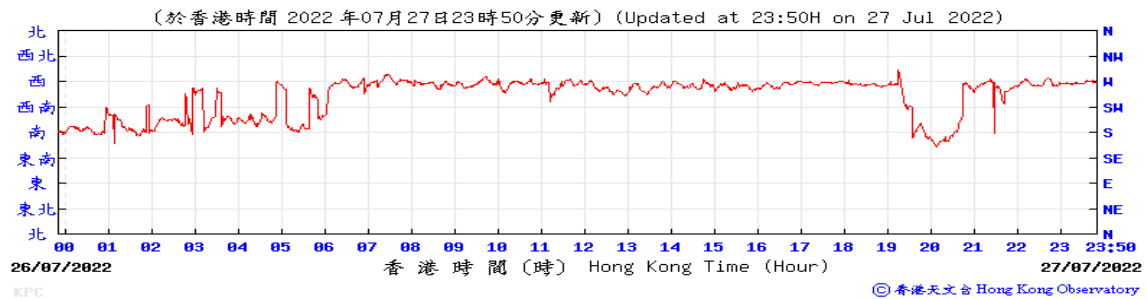
Temperature/Humidity:



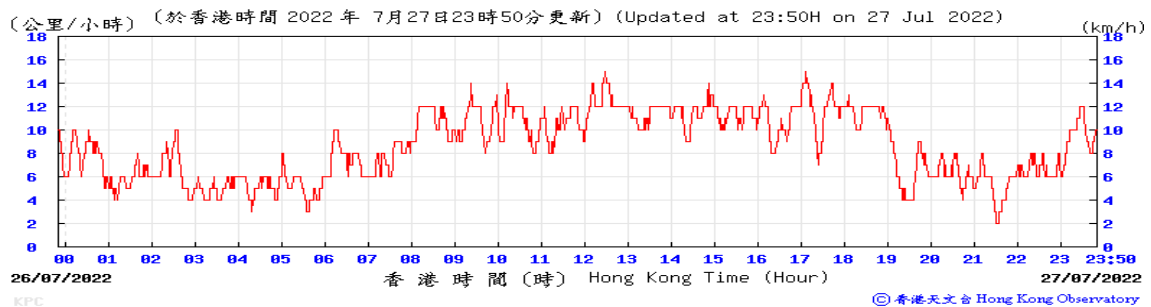
Pressure:



Wind Direction:



Wind Speed:

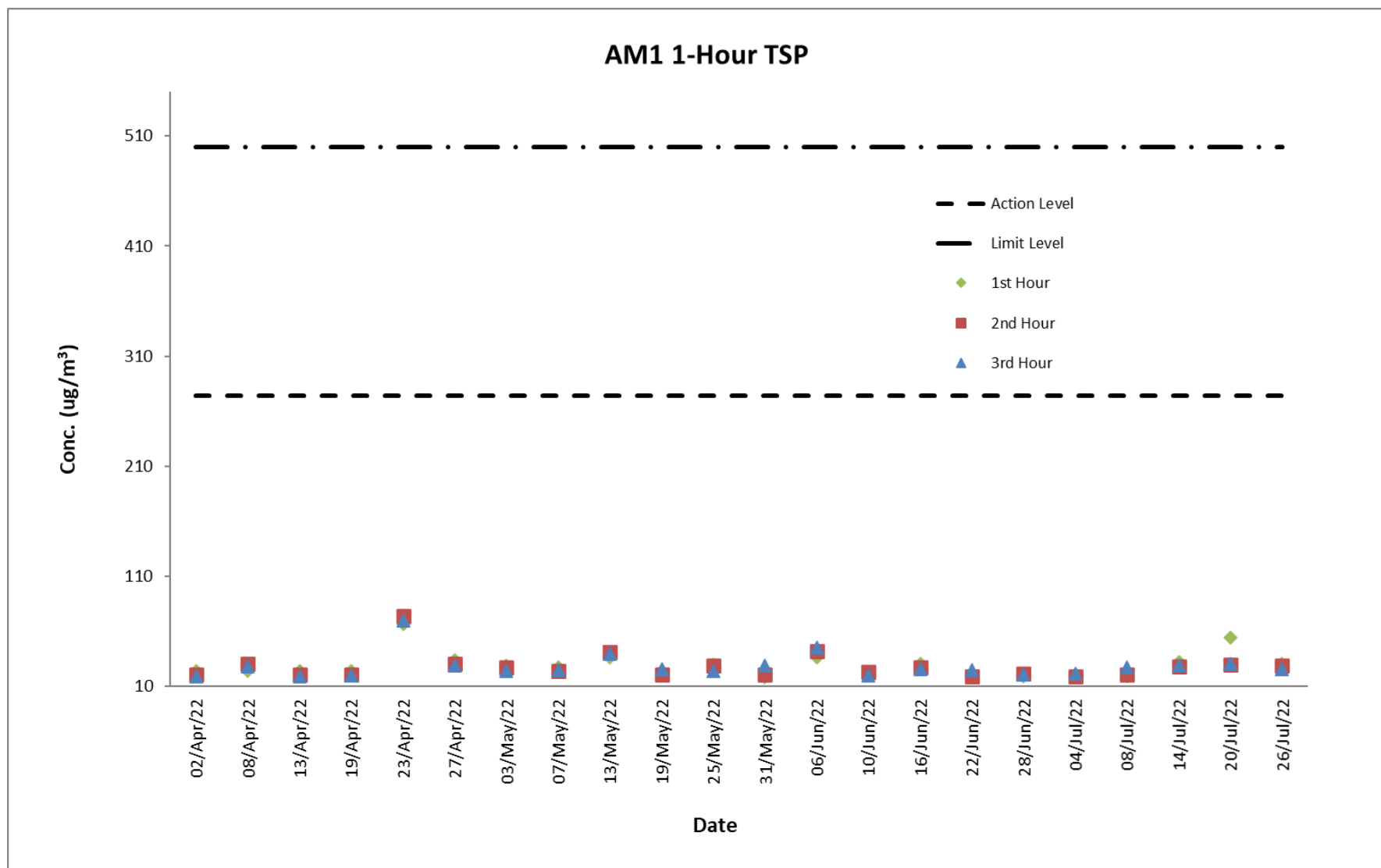


E. Graphical Plots of the Monitoring Results

Air Quality Monitoring Result at Station AM1 (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
03-May-22	Sunny	8:27 - 11:27	29	27	24	273.7	500
07-May-22	Fine	8:32 - 11:32	27	24	25	273.7	500
13-May-22	Cloudy	8:24 - 11:24	36	41	40	273.7	500
19-May-22	Cloudy	8:22 - 11:22	24	21	26	273.7	500
25-May-22	Cloudy	8:32 - 11:32	30	29	24	273.7	500
31-May-22	Fine	8:22 - 11:22	18	21	29	273.7	500
06-Jun-22	Cloudy	8:30 - 11:30	36	42	45	273.7	500
10-Jun-22	Cloudy	8:27 - 11:27	21	23	20	273.7	500
16-Jun-22	Cloudy	8:22 - 11:22	31	27	26	273.7	500
22-Jun-22	Cloudy	8:27 - 11:27	21	19	25	273.7	500
28-Jun-22	Sunny	8:24 - 11:24	19	22	21	273.7	500
04-Jul-22	Cloudy	8:22 - 11:22	21	19	22	273.7	500
08-Jul-22	Fine	8:22 - 11:22	19	21	27	273.7	500
14-Jul-22	Fine	8:20 - 11:20	32	28	29	273.7	500
20-Jul-22	Fine	8:32 - 11:32	54	30	31	273.7	500
26-Jul-22	Fine	8:23 - 11:23	31	29	26	273.7	500

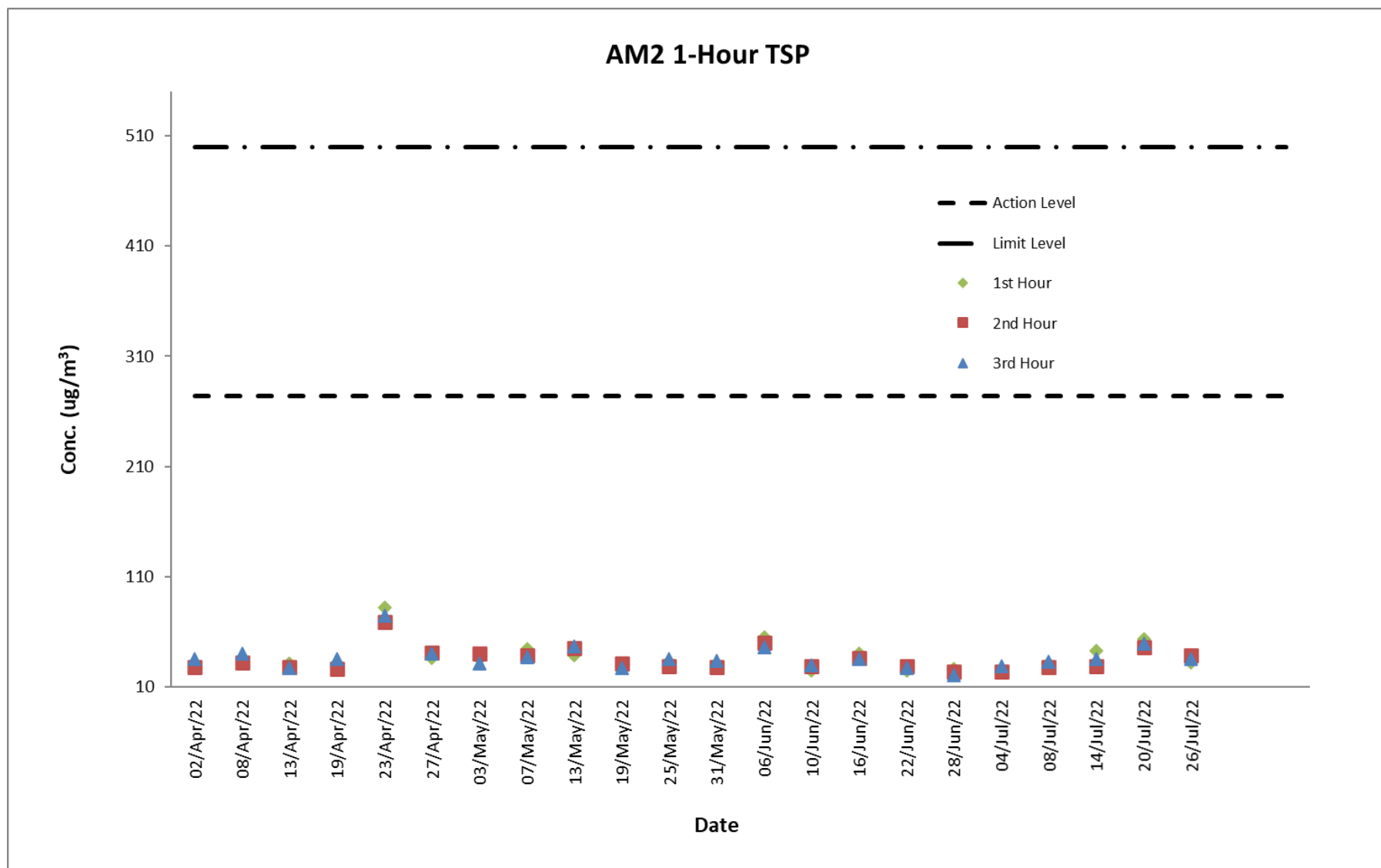
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (1-hour TSP)



Air Quality Monitoring Result at Station AM2 (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
03-May-22	Sunny	8:39 - 11:39	35	40	31	274.2	500
07-May-22	Fine	8:45 - 11:45	44	39	37	274.2	500
13-May-22	Cloudy	8:37 - 11:37	39	45	47	274.2	500
19-May-22	Cloudy	8:36 - 11:36	29	31	27	274.2	500
25-May-22	Cloudy	8:46 - 11:46	33	29	35	274.2	500
31-May-22	Fine	8:36 - 11:36	30	28	34	274.2	500
06-Jun-22	Cloudy	8:43 - 11:43	55	50	46	274.2	500
10-Jun-22	Cloudy	8:41 - 11:41	25	29	30	274.2	500
16-Jun-22	Cloudy	8:35 - 11:35	40	36	35	274.2	500
22-Jun-22	Cloudy	8:40 - 11:40	25	29	27	274.2	500
28-Jun-22	Sunny	8:38 - 11:38	26	24	21	274.2	500
04-Jul-22	Cloudy	8:37 - 11:37	25	24	29	274.2	500
08-Jul-22	Fine	8:36 - 11:36	31	28	33	274.2	500
14-Jul-22	Fine	8:34 - 11:34	43	29	35	274.2	500
20-Jul-22	Fine	8:46 - 11:46	53	46	49	274.2	500
26-Jul-22	Fine	8:38 - 11:38	32	39	35	274.2	500

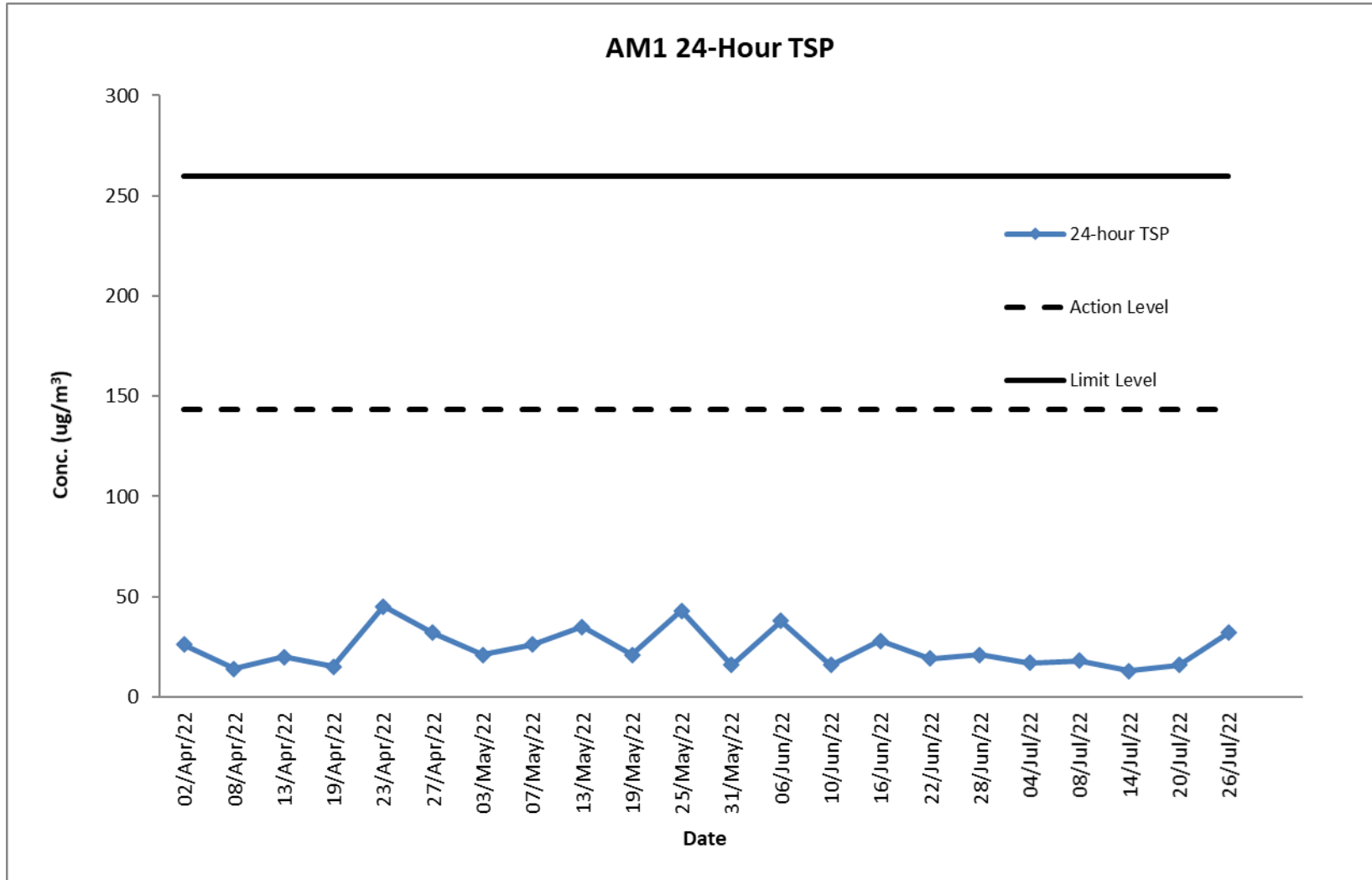
Graphical Presentation of Air Quality Monitoring Result at Station AM2 (1-hour TSP)



Air Quality Monitoring Result at Station AM1 (24-hour TSP)

Start		Finish		Filter Weight (g)		Reading		Sampling Time (hrs)	Flow Rate (m ³ /min)			Conc. (µg/m ³)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
03-May-22	08:25	04-May-22	08:25	2.7664	2.8038	24896.38	24920.38	24	1.26	1.26	1.26	21	Sunny	143.6	260
07-May-22	08:30	08-May-22	08:30	2.7564	2.8039	24920.38	24944.38	24	1.26	1.26	1.26	26	Fine	143.6	260
13-May-22	08:22	14-May-22	08:22	2.7549	2.8182	24944.38	24968.38	24	1.26	1.26	1.26	35	Cloudy	143.6	260
19-May-22	08:20	20-May-22	08:20	2.7642	2.8008	24968.38	24992.38	24	1.22	1.22	1.22	21	Cloudy	143.6	260
25-May-22	08:30	26-May-22	08:30	2.7595	2.8357	24992.38	25016.38	24	1.22	1.22	1.22	43	Cloudy	143.6	260
31-May-22	08:20	01-Jun-22	08:20	2.7509	2.7784	24016.38	24040.38	24	1.22	1.22	1.22	16	Fine	143.6	260
06-Jun-22	08:28	07-Jun-22	08:28	2.7658	2.8323	25040.38	25064.38	24	1.22	1.22	1.22	38	Cloudy	143.6	260
10-Jun-22	08:25	11-Jun-22	08:25	2.7848	2.8126	25064.38	25088.38	24	1.22	1.22	1.22	16	Cloudy	143.6	260
16-Jun-22	08:20	17-Jun-22	08:20	2.7696	2.8184	25088.38	25112.38	24	1.22	1.22	1.22	28	Cloudy	143.6	260
22-Jun-22	08:25	23-Jun-22	08:25	2.7818	2.8151	25112.38	25136.38	24	1.22	1.22	1.22	19	Cloudy	143.6	260
28-Jun-22	08:22	29-Jun-22	08:22	2.7714	2.8086	25136.38	25160.38	24	1.22	1.22	1.22	21	Sunny	143.6	260
04-Jul-22	08:20	05-Jul-22	08:20	2.7627	2.793	25160.38	25184.38	24	1.22	1.22	1.22	17	Cloudy	143.6	260
08-Jul-22	08:20	09-Jul-22	08:20	2.7574	2.789	25184.38	25208.38	24	1.22	1.22	1.22	18	Fine	143.6	260
14-Jul-22	08:18	15-Jul-22	08:18	2.7518	2.7762	25208.38	25232.38	24	1.26	1.26	1.26	13	Fine	143.6	260
20-Jul-22	08:30	21-Jul-22	08:30	2.7293	2.7577	25232.38	25256.38	24	1.26	1.26	1.26	16	Fine	143.6	260
26-Jul-22	08:20	27-Jul-22	08:20	2.7162	2.7744	25256.38	25280.38	24	1.26	1.26	1.26	32	Fine	143.6	260

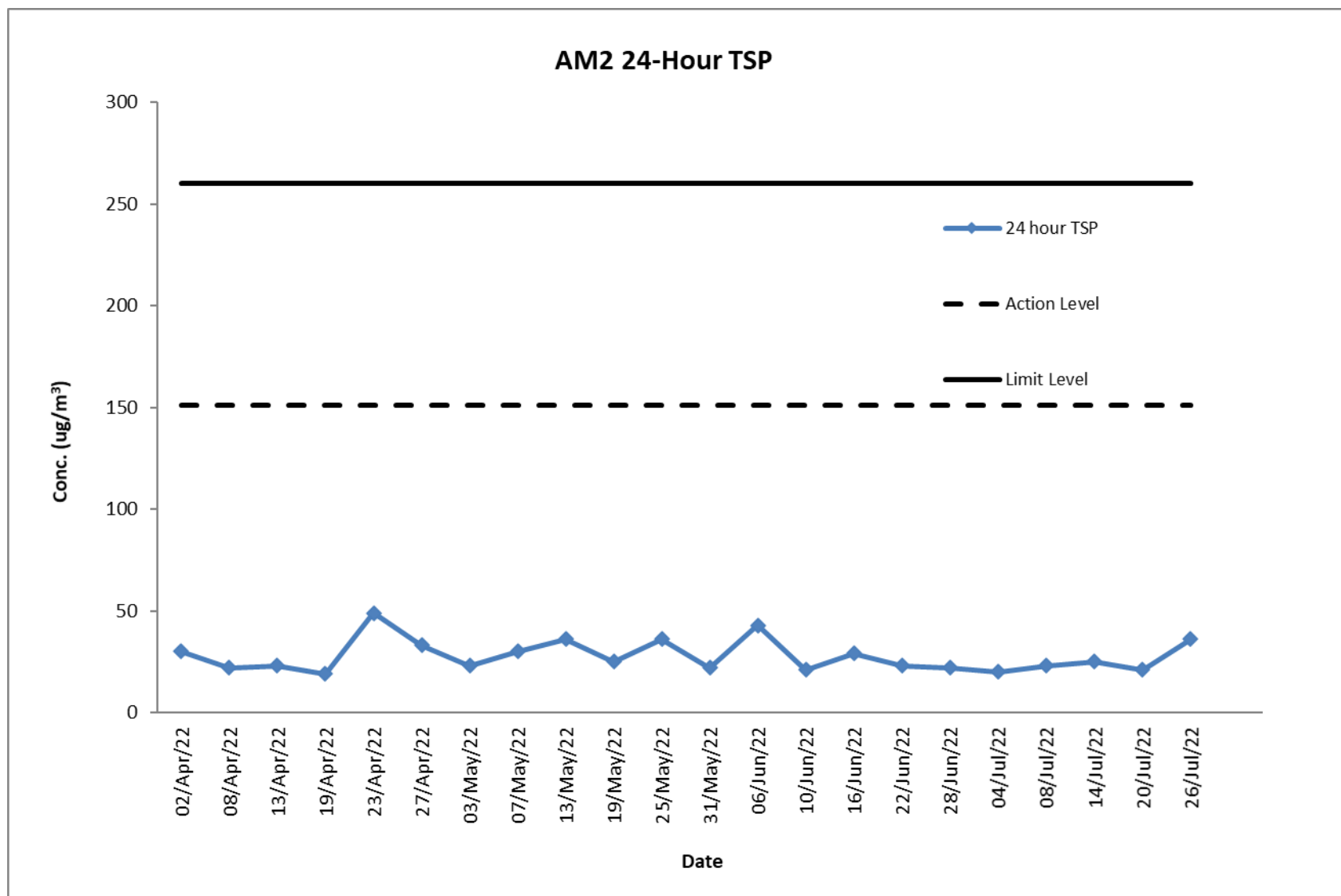
Graphical Presentation of Air Quality Monitoring Result at Station AM1 (24-hour TSP)



Air Quality Monitoring Result at Station AM2 (24-hour TSP)

Start		Finish		Sampling Time (hrs)	Conc. ($\mu\text{g}/\text{m}^3$)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time					
03-May-22	08:37	04-May-22	08:37	24	23	Sunny	151.1	260
07-May-22	08:43	08-May-22	08:43	24	30	Fine	151.1	260
13-May-22	08:35	14-May-22	08:35	24	36	Cloudy	151.1	260
19-May-22	08:34	20-May-22	08:34	24	25	Cloudy	151.1	260
25-May-22	08:44	26-May-22	08:44	24	36	Cloudy	151.1	260
31-May-22	08:34	01-Jun-22	08:34	24	22	Fine	151.1	260
06-Jun-22	08:41	07-Jun-22	08:41	24	43	Cloudy	151.1	260
10-Jun-22	08:39	11-Jun-22	08:39	24	21	Cloudy	151.1	260
16-Jun-22	08:33	17-Jun-22	08:33	24	29	Cloudy	151.1	260
22-Jun-22	08:38	23-Jun-22	08:38	24	23	Cloudy	151.1	260
28-Jun-22	08:35	29-Jun-22	08:35	24	22	Sunny	151.1	260
04-Jul-22	08:34	05-Jul-22	08:34	24	20	Cloudy	151.1	260
08-Jul-22	08:34	09-Jul-22	08:34	24	23	Fine	151.1	260
14-Jul-22	08:32	15-Jul-22	08:32	24	25	Fine	151.1	260
20-Jul-22	08:44	21-Jul-22	08:44	24	21	Fine	151.1	260
26-Jul-22	08:35	27-Jul-22	08:35	24	36	Fine	151.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM2 (24-hour TSP)



Noise Monitoring Result at Station NM1A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
03-May-22	09:22	65.1	61.0	66
03-May-22	09:27	64.2	60.4	
03-May-22	09:32	66.3	62.5	
03-May-22	09:37	65.6	61.5	
03-May-22	09:42	64.7	60.8	
03-May-22	09:47	65.9	61.6	
13-May-22	09:21	66.0	62.1	68
13-May-22	09:26	65.4	61.2	
13-May-22	09:31	66.3	62.8	
13-May-22	09:36	67.4	63.5	
13-May-22	09:41	66.1	62.4	
13-May-22	09:46	65.6	61.4	
19-May-22	09:20	65.1	61.0	67
19-May-22	09:25	64.2	60.9	
19-May-22	09:30	66.3	62.7	
19-May-22	09:35	65.4	61.8	
19-May-22	09:40	65.9	61.7	
19-May-22	09:45	66.6	62.2	
25-May-22	09:30	65.1	61.0	67
25-May-22	09:35	64.2	60.6	
25-May-22	09:40	66.4	62.7	
25-May-22	09:45	66.8	62.5	
25-May-22	09:50	65.9	61.3	
25-May-22	09:55	66.7	62.2	
31-May-22	09:20	65.0	61.1	68
31-May-22	09:25	66.6	62.2	
31-May-22	09:30	66.3	62.4	
31-May-22	09:35	67.6	63.8	
31-May-22	09:40	66.9	62.8	
31-May-22	09:45	67.2	63.1	
06-Jun-22	09:26	65.0	61.9	67
06-Jun-22	09:31	66.2	62.6	
06-Jun-22	09:36	65.4	61.7	
06-Jun-22	09:41	66.5	62.2	
06-Jun-22	09:46	65.7	61.1	
06-Jun-22	09:51	66.2	62.6	
16-Jun-22	09:10	64.0	60.9	66
16-Jun-22	09:15	65.1	61.5	
16-Jun-22	09:20	65.3	61.7	
16-Jun-22	09:25	64.6	60.4	
16-Jun-22	09:30	64.5	60.2	
16-Jun-22	09:35	65.7	61.0	
22-Jun-22	09:23	65.8	61.7	67
22-Jun-22	09:28	66.0	62.6	
22-Jun-22	09:33	65.1	61.5	
22-Jun-22	09:38	65.4	61.3	
22-Jun-22	09:43	66.2	62.4	
22-Jun-22	09:48	66.5	62.6	
28-Jun-22	09:21	65.6	61.7	66
28-Jun-22	09:26	64.0	60.5	
28-Jun-22	09:31	66.7	62.4	
28-Jun-22	09:36	65.2	61.5	
28-Jun-22	09:41	65.3	61.1	
28-Jun-22	09:46	64.7	60.6	

04-Jul-22	09:22	65.0	61.8	67
04-Jul-22	09:27	66.8	62.3	
04-Jul-22	09:32	66.2	62.4	
04-Jul-22	09:37	65.7	61.6	
04-Jul-22	09:42	65.6	61.7	
04-Jul-22	09:47	66.4	62.5	
14-Jul-22	09:19	65.0	61.2	67
14-Jul-22	09:24	64.2	60.4	
14-Jul-22	09:29	65.3	61.3	
14-Jul-22	09:34	66.8	62.5	
14-Jul-22	09:39	65.6	61.9	
14-Jul-22	09:44	65.2	61.7	
20-Jul-22	09:30	65.8	61.7	67
20-Jul-22	09:35	66.0	62.1	
20-Jul-22	09:40	66.2	62.6	
20-Jul-22	09:45	67.4	63.5	
20-Jul-22	09:50	66.5	62.6	
20-Jul-22	09:55	65.3	61.4	
26-Jul-22	09:22	65.3	61.3	66
26-Jul-22	09:27	64.0	60.4	
26-Jul-22	09:32	66.2	62.5	
26-Jul-22	09:37	64.6	60.9	
26-Jul-22	09:42	64.8	60.0	
26-Jul-22	09:47	65.9	61.2	

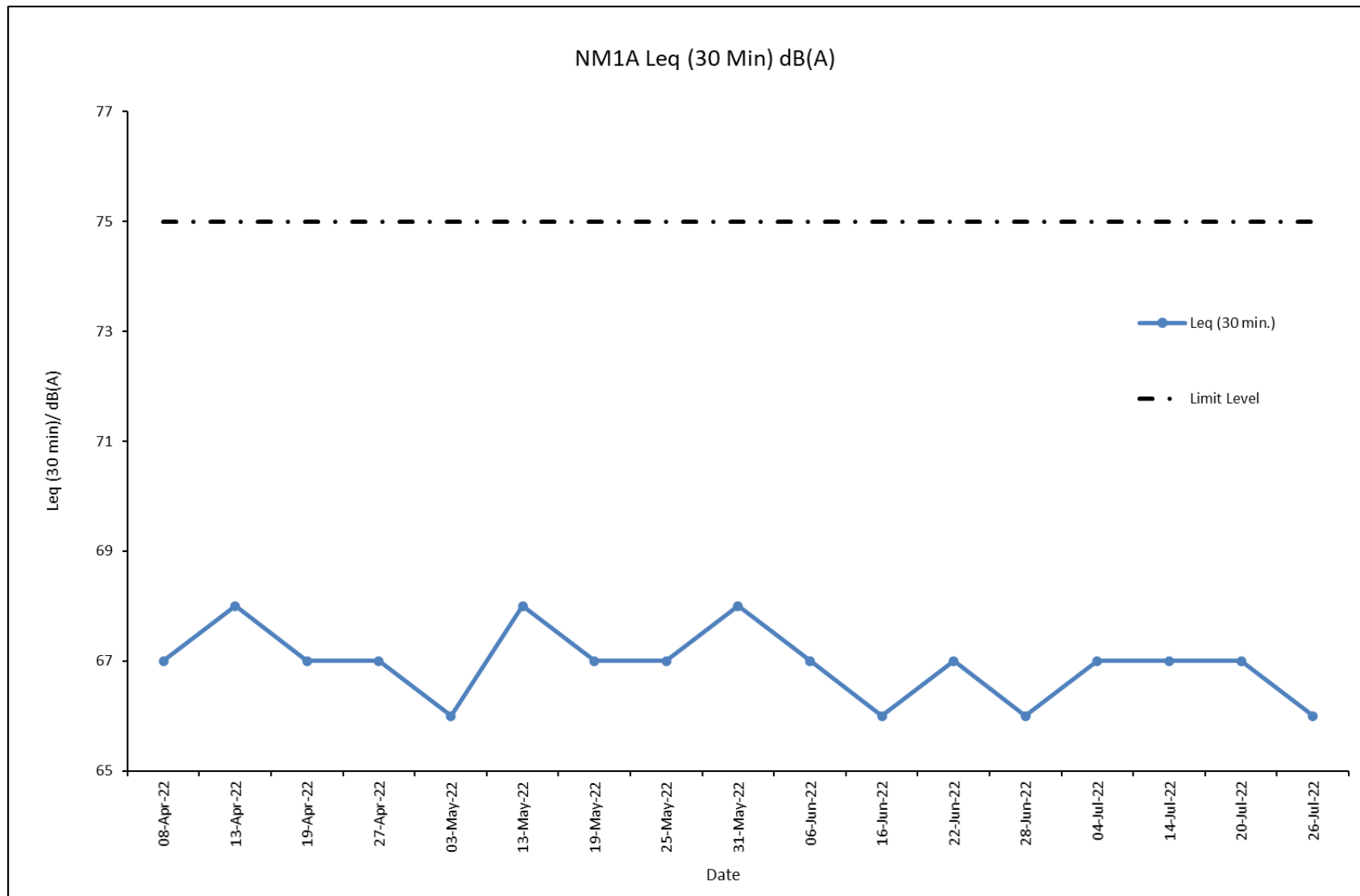
Remarks:

+3dB (A) correction was applied to free-field measurement.



The station set-up of a free-field measurement at Station NM1A.

Graphical Presentation Noise Monitoring Result at Station NM1A



F. Waste Flow table

Table F-1: Monthly Waste Flow Table for Lyric Theatre Complex

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
2016													
Mar	2702.1	0.0	0.0	0.0	2702.1	0.0	0.0	4.5	0.1	0.0	0.0	0.0	30.6
Apr	8631.5	0.0	0.0	0.0	8631.5	0.0	0.0	16.0	0.0	0.0	0.0	0.0	19.2
May	12487.8	0.0	0.0	0.0	12487.8	0.0	0.0	34.0	0.0	0.0	0.0	0.7	60.5
Jun	8600.8	0.0	0.0	0.0	8600.8	0.0	0.0	31.4	0.2	0.0	0.0	0.5	13.5
Jul	12624.2	0.0	0.0	0.0	12624.2	0.0	0.0	19.6	0.0	0.0	0.0	2.0	9.9
Aug	14419.9	0.0	0.0	0.0	14419.9	0.0	0.0	43.9	0.0	0.0	0.0	0.0	11.1
Sep	13671.3	0.0	0.0	0.0	13671.3	0.0	0.0	59.8	0.0	0.0	0.0	1.6	12.4
Oct	13088.9	0.0	0.0	0.0	13088.9	0.0	0.0	36.9	0.2	1.5	0.0	0.0	15.2
Nov	12424.7	0.0	0.0	0.0	12424.7	0.0	0.0	74.7	0.0	0.0	0.0	1.4	10.2
Dec	12487.6	0.0	0.0	0.0	12487.6	0.0	0.0	13.9	0.0	0.0	0.0	1.3	9.0
Sub-total (2016)	111138.8	0.0	0.0	0.0	111138.8	0.0	0.0	334.5	0.4	1.5	0.0	7.6	191.6
2017													
Jan	9607.8	0.0	0.0	0.0	9607.8	0.0	0.0	29.5	0.0	0.0	0.0	0.0	7.3
Feb	9108.2	0.0	0.0	0.0	9108.2	0.0	0.0	50.2	0.2	0.0	0.0	0.7	9.8
Mar	11361.7	0.0	0.0	0.0	11361.7	0.0	0.0	16.1	0.0	0.0	0.0	1.4	8.5
Apr	2591.5	0.0	0.0	0.0	2591.5	0.0	0.0	35.7	0.0	0.0	0.0	0.0	4.7
May	2579.3	0.0	0.0	99.0	2480.3	0.0	0.0	20.9	0.1	0.0	0.0	0.5	10.0
Jun	476.0	0.0	0.0	341.0	129.7	5.3	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Jul	3419.0	0.0	0.0	804.0	2615.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8
Aug	3730.9	0.0	0.0	1377.5	2353.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Sep	2108.2	0.0	0.0	1133.5	974.7	0.0	0.0	34.6	0.2	0.0	0.0	0.0	10.8
Oct	9159.0	0.0	0.0	7868.0	1291.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	9.3
Nov	5095.4	0.0	0.0	4352.0	725.2	18.1	0.0	0.0	0.0	0.0	0.0	0.0	38.8
Dec	3856.2	0.0	0.0	3076.0	780.2	0.0	0.0	0.0	0.2	0.0	0.0	0.4	8.4
Sub-total (2017)	63093.1	0.0	0.0	19051.0	44018.7	23.4	0.0	187.1	0.7	0.0	0.0	3.8	137.3

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
2018													
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Mar	6120.2	0.0	0.0	5782.0	338.2	0.0	0.0	0.0	0.0	1.0	0.0	0.5	17.6
Apr	14460.3	0.0	0.0	12484.1	1976.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	7.6
May	59783.7	0.0	0.0	46989.0	12794.7	0.0	0.0	59.6	0.0	0.0	0.0	0.0	9.4
Jun	53117.5	0.0	0.0	37642.8	15474.7	0.0	0.0	51.5	0.2	0.0	0.0	0.0	12.8
Jul	89901.5	0.0	0.0	85317.1	4584.4	0.0	165.1	114.6	0.0	0.0	0.0	0.0	41.3
Aug	35137.3	0.0	0.0	33731.6	1405.7	0.0	214.3	148.1	0.0	0.0	0.0	0.0	48.5
Sep	4924.3	0.0	0.0	4641.2	196.1	87.0	174.6	40.0	0.0	0.0	0.0	0.0	179.2
Oct	19099.9	0.0	0.0	11301.0	7642.8	156.1	0.0	106.3	0.4	0.0	0.0	0.0	528.5
Nov	104168.0	0.0	0.0	79811.6	24351.0	5.3	0.0	54.5	0.0	0.6	0.0	0.0	31.5
Dec	62989.9	0.0	0.0	51284.4	11699.9	5.6	0.0	95.1	0.0	0.6	0.0	0.0	65.9
Sub-total (2018)	449702.6	0.0	0.0	368984.8	80463.7	254.0	553.9	669.7	0.5	2.4	0.0	0.5	943.7
2019													
Jan	74479.1	0.0	0.0	69249.5	5229.7	0.0	318.0	326.7	0.2	0.0	0.0	0.0	76.3
Feb	21969.9	0.0	0.0	17723.9	4246.0	0.0	16.5	55.2	0.0	0.0	0.0	0.0	26.7
Mar	19311.9	0.0	0.0	8569.9	10742.0	0.0	337.8	61.5	0.0	0.0	0.0	0.0	36.3
Apr	28559.9	0.0	0.0	21280.3	7279.6	0.0	0.0	32.6	0.0	0.8	0.0	0.0	24.9
May	45418.0	0.0	0.0	11200.6	34217.4	0.0	0.0	27.4	0.2	0.5	0.0	0.0	33.7
Jun	66633.4	0.0	0.0	23874.5	42748.0	10.9	59.2	11.9	0.0	0.9	0.0	0.0	35.3
Jul	36619.6	0.0	0.0	1632.7	34960.9	26.0	64.4	120.7	0.0	0.0	0.0	0.0	57.9
Aug	2526.8	0.0	0.0	0.0	2499.0	27.8	31.9	40.2	0.0	0.8	0.0	0.0	66.3
Sep	4117.6	0.0	0.0	0.0	4088.7	28.9	95.2	19.0	0.0	0.6	0.0	0.0	127.4
Oct	6974.2	0.0	0.0	0.0	6948.1	26.1	15.9	11.4	0.2	1.0	0.0	0.6	223.6
Nov	5334.4	0.0	0.0	0.0	5304.1	30.3	0.0	8.9	0.0	0.0	0.0	0.0	151.6
Dec	6236.8	0.0	0.0	0.0	6236.8	0.0	0.0	70.6	0.0	0.0	0.0	0.0	98.9
Sub-total (2019)	318181.6	0.0	0.0	153531.3	164500.1	150.1	938.9	785.8	0.6	4.6	0.0	0.6	959.0

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
2020													
Jan	7089.9	0.0	0.0	0.0	7089.9	0.0	0.0	10.6	0.2	0.0	0.0	0.0	65.7
Feb	16822.3	0.0	0.0	0.0	16822.3	0.0	0.0	232.2	0.1	0.0	0.0	0.0	66.3
Mar	6559.0	0.0	0.0	0.0	6559.0	0.0	110.4	63.1	0.0	0.9	0.0	0.0	138.3
Apr	4997.9	0.0	0.0	1615.7	3382.2	0.0	159.2	1123.9	1.9	0.0	0.0	0.0	113.2
May	2236.0	0.0	0.0	452.3	1783.6	0.0	0.0	406.5	0.0	0.0	0.0	0.0	188.8
Jun	1134.3	0.0	0.0	0.0	1134.3	0.0	31.5	262.6	0.2	0.6	0.0	0.0	210.6
Jul	148.8	0.0	0.0	0.0	148.8	0.0	31.5	458.5	0.5	0.0	0.0	0.0	220.0
Aug	540.7	0.0	0.0	0.0	540.7	0.0	0.0	340.8	0.0	0.0	0.0	0.0	238.3
Sep	1432.3	0.0	0.0	0.0	1432.3	0.0	0.0	750.7	0.2	0.0	0.0	0.0	291.9
Oct	1381.5	0.0	0.0	0.0	1381.5	0.0	0.0	717.9	0.2	0.0	0.0	0.0	400.2
Nov	1444.1	0.0	0.0	0.0	1437.4	6.7	475.8	473.6	0.2	0.5	0.0	0.0	377.8
Dec	793.8	0.0	0.0	0.0	793.8	0.0	0.0	478.3	0.2	0.0	0.0	0.0	435.8
Sub-total (2020)	44580.6	0.0	0.0	2068.1	42505.8	6.7	808.3	5318.7	3.7	2.0	0.0	0.0	2746.8
2021													
Jan	881.4	0.0	0.0	0.0	881.4	0.0	0.0	835.1	0.4	0.0	0.0	0.0	497.0
Feb	544.7	0.0	0.0	0.0	544.7	0.0	0.0	100.5	0.3	0.0	0.0	0.0	504.7
Mar	406.1	0.0	0.0	0.0	406.1	0.0	0.0	455.8	0.3	0.0	0.0	0.0	881.7
Apr	633.0	0.0	0.0	0.0	633.0	0.0	0.0	429.9	0.7	0.0	0.0	0.0	613.0
May	1125.8	0.0	0.0	0.0	1125.8	0.0	0.0	355.1	0.2	0.1	0.0	0.0	355.2
Jun	877.3	0.0	0.0	0.0	877.3	0.0	0.0	98.4	0.2	0.0	0.0	0.4	420.3
Jul	8.9	0.0	0.0	0.0	0.0	8.9	0.0	43.9	2.0	0.0	0.0	0.0	278.2
Aug	1296.2	0.0	0.0	0.0	1296.2	0.0	0.0	161.5	0.0	0.0	0.0	0.0	459.1
Sep	1040.5	0.0	0.0	0.0	490.9	549.6	0.0	62.9	0.0	0.0	0.0	0.0	620.8
Oct	311.0	0.0	0.0	0.0	311.0	0.0	0.0	85.9	0.3	0.0	0.0	0.0	485.6
Nov	203.9	0.0	0.0	0.0	203.9	0.0	0.0	65.9	0.0	0.0	0.0	0.0	609.6
Dec	576.6	0.0	0.0	0.0	576.6	0.0	0.0	13.4	0.0	0.0	0.0	0.0	590.6
Sub-total (2021)	7905.3	0.0	0.0	0.0	7346.9	558.5	0.0	2708.2	4.4	0.1	0.0	0.4	6315.9

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Sorting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)	(in ton)
2022													
Jan	579.3	0.0	0.0	0.0	579.3	0.0	0.0	23.5	0.4	0.0	0.0	0.0	565.5
Feb	58.9	0.0	0.0	0.0	58.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	172.2
Mar	412.8	0.0	0.0	0.0	412.8	0.0	0.0	12.4	0.3	0.0	0.0	0.0	339.8
Apr	390.2	0.0	0.0	0.0	390.2	0.0	0.0	24.8	0.0	0.0	0.0	0.0	390.9
May	350.1	0.0	0.0	0.0	342.9	7.2	0.0	44.3	0.3	0.1	0.0	0.0	401.9
Jun	200.4	0.0	0.0	0.0	200.4	0.0	0.0	21.1	0.0	0.0	0.0	1.1	447.8
Jul	166.8	0.0	0.0	0.0	166.8	0.0	0.0	6.3	0.0	0.0	0.0	0.7	343.9
Sub-total (2022)	2158.5	0.0	0.0	0.0	2151.3	7.2	0.0	132.4	1.0	0.1	0.0	1.8	2662.0
Total	996760.4	0.0	0.0	543635.2	452125.3	999.9	2301.1	10136.2	11.3	10.6	0.0	14.7	13956.3

Note:

(1) 570.29, 102.77 and 37.05 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137, Tuen Mun Area 38, and Chai Wan Public Fill Barging Point respectively in the reporting quarter.

(2) The values in the table are rounded off to 1 decimal place.

G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Cumulative statistics for complaints, notifications of summons and successful prosecutions for the Project account for period starting from the date of commencement of construction works to the end of the reporting quarter are summarized in **Table G-1** below.

Table G-1: Statistics for complaints, notifications of summons and successful prosecutions for Lyric Theatre Complex

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting quarter (May 22 – Jul 22)	7	0	0
From 1 March 2016 to end of the reporting quarter	48	0	0

END OF PART-1

Part-2: EM&A for Foundation and ELS Works in Zones 2A, 2B & 2C

Foundation and ELS Works in Zones 2A, 2B & 2C

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The information supplied and contained within this report is, to
the best of our knowledge, correct at time of printing

Contents

Executive summary	1
1 Introduction	2
1.1 Background	2
1.2 Project Organisation	2
1.3 Environmental Status in the Reporting Period	2
2 Summary of EM&A Requirements and Mitigation Measures	4
2.1 Monitoring Requirements	4
2.2 Environmental Mitigation Measures	5
3 Summary of EM&A Results	6
3.1 Monitoring Data	6
3.2 Monitoring Exceedances	6
3.2.1 1-hour TSP Monitoring	7
3.2.2 24-hour TSP Monitoring	7
3.2.3 Construction Noise Monitoring	7
3.2.4 Landscape and Visual Monitoring	7
4 Waste Management	8
4.1 Zone 2A	8
4.2 Zone 2B & 2C	8
5 Environmental Non-conformance	9
6 Comments, Recommendations and Conclusion	11
6.1 Comments	11
6.2 Recommendations	11
6.3 Conclusion	11
Figure 1 Site Layout Plan and Monitoring Stations	12
Appendices	13
A. Project Organisation	14
B. Construction Programme	15

C.	Environmental Mitigation Measures – Implementation Status	16
D.	Meteorological Data Extracted from Hong Kong Observatory	17
E.	Graphical Plots of the Monitoring Results	18
F.	Waste Flow table	19
G.	Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions	20

Executive summary

This Quarterly EM&A Report presents the monitoring works conducted at Zone 2A and Zone 2B & 2C from 1 May 2022 to 31 July 2022.

The impact stage EM&A programme for the Project includes air quality, noise, water quality, waste, landscape and visual monitoring. The recommended environmental mitigation measures were implemented on site and regular inspections were carried out to ensure that the environmental conditions are acceptable.

The EM&A programme was carried out by the ET in accordance with the EM&A Manual requirements. It is concluded from the environmental monitoring and audit works that adequate environmental mitigation measures have been implemented by the contractors where appropriate in the reporting quarter.

Exceedance of Action and Limit Levels

There was no breach of Action or Limit Levels for Air Quality (1-hour TSP and 24-hour TSP) and Construction Noise in the reporting quarter.

Implementation of Mitigation Measures

Construction phase weekly site inspections were carried out to confirm the implementation measures undertaken by the Contractors in the reporting quarter. The status of implementation of mitigation measures during the reporting quarter is shown in **Appendix C**.

Landscape and visual impact inspections were conducted as part of the above-mentioned weekly site inspections during the reporting quarter. No adverse comment on landscape and visual aspects were made during these inspections.

Record of Complaints

Seven environmental complaints were received during the reporting quarter.

Record of Notifications of Summons and Successful Prosecutions

No notifications of summons and successful prosecutions were recorded in the reporting quarter.

1 Introduction

1.1 Background

Apex Testing & Certification Limited (Apex) was commissioned to undertake the Environmental Team (ET) services (including environmental monitoring and audit (EM&A)) for the construction activities in Zone 2A, consisting of Foundation, Excavation and Lateral Support Works for Integrated Basement and Underground Road (Contract No.: GW/2020/05/073) ; and Zone 2B & 2C consisting of Piling Works for Integrated Basement and Underground Road (Contract No.: CC/2020/2B/088) at WKCD. The major construction works and EM&A programme for Zone 2A and Zone 2B & 2C commenced on 3 October 2020 and 30 September 2021 respectively.

The overall works for the WKCD fall under two separate categories of Designated Project (DP) of the Environmental Impact Assessment Ordinance (EIAO), namely an “engineering feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000” (Item 1 of Schedule 3) and “an underpass more than 100m in length under the built areas” (Item A.9, Part I, Schedule 2). An Environmental Permit No. EP-453/2013/B (EP) was issued with respect to the “Underpass Road and Austin Road Flyover Serving the West Kowloon Cultural District” which specifically includes the abovementioned category of DP under Item A.9, Part I, Schedule 2 of the EIAO. The captioned projects include part of the abovementioned underpass road located within the site boundary falls under this same category.

The purpose of the development in Zone 2A and Zone 2B & 2C is to reserve for Integrated Basement (IB) and Underground Road (UR). The Zone 2A construction activities involve the foundation, excavation and lateral support (ELS) works, road works, drainage diversion works, and temporary car parking. The Zone 2B & 2C construction activities involve the piling works.

The Quarterly EM&A Report is prepared in accordance with the Clause 3.4 of the Environmental Permit No. EP-453/2013/B. This Quarterly EM&A Report presents the monitoring works at Zone 2A and Zone 2B & 2C from 1 May 2022 to 31 July 2022. The purpose of this report is to summarise the findings in the EM&A of the project over the reporting period.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure together with the contact information of the key personnel are shown in **Appendix A**.

1.3 Environmental Status in the Reporting Period

During the reporting period, construction works at Zone 2A undertaken include:

Zone 2A-1

- ELS (Stage 1) – Grouting / Pipe Pile Works
 - King Post & Erection of Steel Column for Working Platform
 - Stage 2 Grouting
- Pumping Test

- Installation of Pump Wells

Zone 2A-2

- ELS (Stage 1) – Grouting / Pipe Pile Works
 - King Post & Erection of Steel Column for Working Platform
 - Pipe Pile Construction
 - Stage 2 Grouting
- Pumping Test
 - Installation of Pump Wells
 - Pumping Test

During the reporting period, construction works at Zone 2B & 2C undertaken include:

KD01 (Stage 1-1), KD03 (Stage 3-1)

- Bored Pile Works
 - RCD Drilling, Airlifting, Cage Installation & Concreting and Excavation

KD02 (Stage 5-1)

- Bored Pile Works
 - Airlifting, Cage Installation & Concreting

KD04 (Stage 4-1)

- Bored Pile Works
 - RCD Drilling and Excavation

KD05 (Section 1), KD06 (Section 2)

- Predrilling
- Bored Pile Works
 - RCD Drilling, Airlifting, Cage Installation & Concreting and Excavation

KD07 (Section 3)

- Predrilling
- Trial Pile Works
 - Airlifting, Cage Installation & Concreting
- Bored Pile Works
 - RCD Drilling, Airlifting, Cage Installation & Concreting and Excavation

KD08 (Section 4)

- Bored Pile Works
 - RCD Drilling, Airlifting, Cage Installation & Concreting and Excavation
- Socketed Steel H Piling

KD09 (Section 5)

- Predrilling
- Bored Pile Works
 - RCD Drilling, Airlifting, Cage Installation & Concreting and Excavation
- Socketed Steel H Piling

The Construction Works Programme of the Project is provided in **Appendix B**. A layout plan of the Project is provided in **Figure 1**.

2 Summary of EM&A Requirements and Mitigation Measures

2.1 Monitoring Requirements

In accordance with the EM&A Manual, environmental parameters including air quality, noise, landscape and visual have been monitored. The specific parameters, monitoring frequency and the respective Action and Limit Levels are given in **Table 2.1**. Locations of the monitoring stations are provided in **Figure 1**.

Table 2.1: Summary of Impact EM&A Requirements

Parameters	Descriptions	Locations	Frequencies	Action Level	Limit Level
Air Quality	24-Hour TSP	AM3 - The Victoria Towers Tower 1	At least once every 6 days	152.4 µg/m ³	260 µg/m ³
	1-Hour TSP	AM3 - The Victoria Towers Tower 1	At least 3 times every 6 days	280.4 µg/m ³	500 µg/m ³
	24-Hour TSP	AM4 - Canton Road Government Primary School	At least once every 6 days	152.6 µg/m ³	260 µg/m ³
	1-Hour TSP	AM4 - Canton Road Government Primary School	At least 3 times every 6 days	278.5 µg/m ³	500 µg/m ³
	24-Hour TSP	AM5 - Topside Developments at West Kowloon Terminus Site	At least once every 6 days	141.1 µg/m ³	260 µg/m ³
	1-Hour TSP	AM5 - Topside Developments at West Kowloon Terminus Site	At least 3 times every 6 days	275.4 µg/m ³	500 µg/m ³
Noise	Leq, 30 minutes	NM2 - The Arch, Sun Tower	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
	Leq, 30 minutes	NM3 - The Victoria Towers Tower 1	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
	Leq, 30 minutes	NM4 - Canton Road Government Primary School	Weekly	When one documented complaint is received from any one of the sensitive receivers	70/65 dB(A) [^]
	Leq, 30 minutes	NM5 -Development next to Austin Station	Weekly	When one documented complaint is received from any one of the sensitive receivers	75 dB(A)
Landscape & Visual	Monitor implementation of proposed mitigation measures during the construction stage	As described in Table 9.1 and 9.2 of the EM&A Manual	Bi-weekly	N/A	N/A

Note:

[^]70 dB(A) for schools and 65 dB(A) during school examination periods.

The EM&A programme for the Project require 5 air monitoring stations and 5 noise quality monitoring stations located closest to the Project area. With regard to the monitoring activities at M+ Museum and the Lyric Complex, three monitoring stations had been considered, including AM1, AM2 for air monitoring, and NM1 for noise monitoring. In the context of the construction activities in Zone 2A and Zone 2B & 2C, all other monitoring locations including AM3, AM4, and AM5 for air monitoring; and NM2, NM3, NM4 and NM5 for noise monitoring, have been taken into account. However, access to all these originally designated monitoring stations was declined. Therefore, alternative monitoring stations was identified and proposed.

With regard to air monitoring, alternative monitoring locations (AM3A, AM4A, and AM5A) were identified at ground floor at the Northeast corner of West Kowloon Station's station box, at ground floor at the Southeast corner of West Kowloon Station's station box, and at ground floor at the North of West Kowloon Station's station box respectively. AM3A, AM4A, and AM5A were set in same direction to the area of major construction site activities in Zone 2A0. These alternative air monitoring locations (AM3A, AM4A, and AM5A) were approved by EPD on 29 September 2020.

For noise monitoring, alternative noise monitoring location (NM2A) was identified at the ground floor in front of The Arch - Sun Tower, which is at the same location as stated in the EM&A Manual for consistency. This alternative noise monitoring location was approved by EPD on 29 September 2020. Other alternative noise monitoring locations (NM3A, NM4A, and NM5A) were identified at the ground floor in front of the Xiqu Centre, at the ground floor next to Tsim Sha Tsui Fire Station, and at the Pedestrian road (ground floor) outside West Kowloon Station respectively. NM3A, NM4A and NM5A were set closer to the construction site boundary with more direct line sight to the major site activities and higher exposure to the construction noise with no disturbance to the premises' occupants during noise monitoring activities. These alternative noise monitoring locations (NM3A, NM4A, and NM5A) were approved by EPD on 29 September 2020.

Therefore, 3 air quality monitoring stations and 4 noise impact monitoring station were confirmed for the impact monitoring for construction activities in Zone 2A and Zone 2B & 2C.

2.2 Environmental Mitigation Measures

Environmental mitigation measures have been recommended in the EM&A Manual. Summary of implementation status of the environmental mitigation measures is provided in **Appendix C**.

3 Summary of EM&A Results

3.1 Monitoring Data

In accordance with the EM&A Manual, impact monitoring has been conducted in the reporting quarter. Meteorological data for the reporting quarter have been extracted from Hong Kong Observatory and presented in **Appendix D**. Monitoring data with graphical presentation for the reporting quarter are shown in **Appendix E**. A summary on the monitoring results are presented in **Table 3.1**.

Table 3.1: Summary of Monitoring Data

Parameter	Monitoring Location	Minimum	Maximum	Average
Air Quality				
1 hour TSP	AM3A	31	64	47
1 hour TSP	AM4A	31	68	47
1 hour TSP	AM5A	33	67	47
24 hour TSP	AM3A	32	60	45
24 hour TSP	AM4A	31	62	45
24 hour TSP	AM5A	35	68	46
Construction Noise				
Leq(30min)	NM2A	60	62	62
Leq(30min)	NM3A	60	65	65
Leq(30min)	NM4A	60	64	64
Leq(30min)	NM5A	63	65	64

3.2 Monitoring Exceedances

Summary of the exceedances in the reporting quarter is tabulated in **Table 3.2**.

Table 3.2: Summary of Exceedances

Monitoring Station	Parameter	No. of Exceedance		Action Taken
		Action Level	Limit Level	
Air Quality				
AM3A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM4A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
AM5A	1 hour TSP	0	0	N/A
	24 hour TSP	0	0	N/A
Construction Noise				
NM2A	Leq(30min)	0	0	N/A
NM3A	Leq(30min)	0	0	N/A
NM4A	Leq(30min)	0	0	N/A
NM5A	Leq(30min)	0	0	N/A

3.2.1 1-hour TSP Monitoring

All 1-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance of 1-hour TSP for Air Quality was recorded.

3.2.2 24-hour TSP Monitoring

All 24-hour TSP monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance of 24-hour TSP for Air Quality was recorded.

3.2.3 Construction Noise Monitoring

All construction noise monitoring was conducted as scheduled in the reporting quarter. No Action/ Limit Level exceedance of Noise was recorded in the reporting quarter.

3.2.4 Landscape and Visual Monitoring

All landscape and visual impact inspections were conducted as scheduled in the reporting quarter. No adverse comment on landscape and visual aspects were recorded.

4 Waste Management

4.1 Zone 2A

As advised by the Contractor, 156.88 tonnes, 694.25 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill, and Tuen Mun Area 38 respectively in the reporting quarter, while 25.64 tonnes of general refuse were disposed of at SENT landfill. 0.0 tonne of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastic and 0.0 tonne of timber were collected by recycling contractors in the reporting quarter. 0.0 tonne of inert C&D materials were reused on site. 0.0 tonne of fill materials were imported for use at site and 0.0 tonne of inert C&D materials was reused in other projects. 0.0 tonne of inert C&D materials was disposed to sorting facility and 0.0 tonne of chemical wastes was collected by licensed contractors in the reporting quarter.

4.2 Zone 2B & 2C

As advised by the Zone 2B & 2C Contractor, 29543.96 tonnes and 16647.81 tonnes of inert C&D material were disposed of at Tuen Mun Area 38 and Tseung Kwan O Area 137 Public Fill in the reporting quarter, while 46.58 tonnes of general refuse were disposed of at SENT landfill. 0.0 tonne of metals, 0.0 tonne of paper/cardboard packaging, 0.0 tonne of plastics and 0.0 tonne of timber was collected by recycling contractors in the reporting quarter. 9706.37 tonnes of inert C&D material were reused on site. 0.0 tonne of inert C&D material was imported for reuse at site and 39982.35 tonne of inert C&D material were reused in other projects. 0.0 tonne of inert C&D material was disposed to sorting facility and 0.0 tonne of chemical waste was collected by licensed contractors in the reporting quarter.

The actual amounts of different types of waste generated by the activities of construction works at Zone 2A and Zone 2B & 2C in the reporting quarter are shown in **Appendix F**.

5 Environmental Non-conformance

There was no breach of Action or Limit Levels for Air Quality (1-hour TSP and 24-hour TSP) and Construction Noise in the reporting quarter.

Seven complaints were received in the reporting quarter. Three complaints in June and four complaints in July. No notifications of summons and successful prosecutions were received in the reporting quarter.

On 27 June 2022, EPD has received a complaint regarding muddy water discharge at WKCD construction site and the complaint was referred by EPD on the same day. The complainant (a resident of the Harbourside) claimed that water from WKCD construction site was observed to be continuously discharged into the sea. Investigation revealed that no construction work was undertaken by WKCD Zone 2A site and no abnormalities were found at the seafront of Victoria Harbour on Zone 2A site on 27 June 2022. Besides, no water and site runoff discharge was observed on Zone 2B & 2C site on 27 June 2022. In addition, existing mitigation measures have been properly maintained on site. Thereby, the complaint might not be attributable to Zone 2 sites. Nonetheless, the Contractor is recommended to strictly maintain good site practices to avoid water pollution to the waterbody of Victoria Harbour.

On 29 June 2022, EPD has received a complaint from a district councilor regarding polluted water discharge at WKCD construction site. The complaint was referred by EPD on the same day. According to the video taken by the complainant (a resident of Kowloon Station), the complainant claimed that white bubble discharge was observed which contaminated the harbour at around 6:48am. Investigation revealed that no construction work was undertaken by WKCD Zone 2 sites on 29 June 2022. Moreover, as from the video provided by the complainant, the location of discharge was outside WKCD Zone 2 sites boundary. Thereby, the complaint might not be attributable to Zone 2 sites. Nonetheless, the Contractor is recommended to strictly maintain good site practices to avoid water pollution to the waterbody of Victoria Harbour.

On 30 June 2022, EPD has received a follow-up complaint from a district councilor regarding polluted water discharge at WKCD construction site. The complaint was referred by EPD on the same day. The complainant (a resident of Kowloon Station) claimed that white bubble discharge was observed at 6:40am and he also claimed that some white bubble even floated to the sea near the Harbour City. The complainant had also provided videos demonstrating the concerned water pollution. Investigation revealed that no construction work was undertaken by WKCD Zone 2 sites on 30 June 2022. Moreover, as from the video provided by the complainant, the location of discharge was outside WKCD Zone 2 sites boundary. Thereby, the complaint might not be attributable to Zone 2 sites. Nonetheless, the Contractor is recommended to strictly maintain good site practices to avoid water pollution to the waterbody of Victoria Harbour.

On 15 July 2022, WKCD has received a complaint referred by the EPD regarding construction dust pollution generated from WKCD construction site. On 15 July 2022, the complainant claimed that air pollution arose from a large construction site nearby the Museum Drive, so that the sand scratched the glass of the vehicles when the residents from The Arch were driving by. The complainant also mentioned that the construction site consisted of a joint venture of various engineering companies. According to the description provided by the complainant, the concerned air pollution issue on 15 July 2022 was not related to WKCD Zone 2A site. However, some sand

on the nearby public road might be possibly related to Zone 2B & 2C site activities. Thereby, the concerned sand on the public road might be attributable to Zone 2B & 2C site activities. In response, prompt actions have been taken by the Contractor to clean the public road and strengthen the dust control measures on site. In the meantime, existing mitigation measures (dust suppression measures, regular cleaning on the public road, wheel washing facility) have been implemented and properly maintained on Zone 2B & 2C site to avoid nuisance to the public. Dust monitoring is also regularly conducted at the site boundary with no exceedance. Nonetheless, the Contractors are recommended to maintain good practice on site, and strengthen the implementation of dust control measures to reduce impacts to the nearby neighbors.

On 22 July 2022, WKCD has received a complaint referred by the EPD regarding polluted water discharge from WKCD construction site to the public road. The complainant claimed that "地盤污水流出街 圓方溜冰場對出柯士甸道西西九文化區地盤" (Polluted water flowed out to the street from the WKCD construction site which located at the opposite side to the Element ice rink.). Investigation at Zone 2A site revealed that the concerned location was not within the site boundary of Zone 2A site. Thereby, the complaint might not be attributable to the Zone 2A site. Nevertheless, the Contractor is recommended to strengthen water pollution mitigation measures on site to reduce impacts to the public. Investigation at Zone 2B & 2C site revealed that the concerned water might possibly due to the water runoff from the vehicles after wheel washing when leaving the captioned site vehicular gate. The Contractor has been reminded to strengthen public road cleaning to minimise impacts to the public.

On 26 July 2022, the EPD has received a complaint from a public regarding polluted water discharge at WKCD construction site and referred the case on the same day. The complainant claimed that "投訴在藝術公園隔離地盤於下午排放污水" (Polluted water discharged from the construction site next to the Art Park in the afternoon). Investigation at Zone 2A site revealed that the concerned location was not within the site boundary of Zone 2A site. Thereby, the complaint might not be attributable to the Zone 2A site. Nevertheless, the Contractor is recommended to strictly maintain good site practices to avoid polluted water flowing into the nearby waterbody. Investigation at Zone 2B & 2C site revealed that the complaint might not be attributable to WKCD Zone 2B & 2C site. However, the Contractor has been reminded to strictly implement and maintain good site practices to avoid water pollution to the nearby waterbody.

On 26 July 2022, the EPD has also received a complaint from a public regarding polluted water discharge at WKCD construction site and referred the case on the same day. The complainant claimed that " M+ 藝術館旁邊的地盤非法排放污水" (Illegal discharge of polluted water from the construction site next to the M+ museum). Investigation at Zone 2A site revealed that the concerned location was not within the site boundary of Zone 2A site. Thereby, the complaint might not be attributable to the Zone 2A site. Nevertheless, the Contractor is recommended to strictly maintain good site practices to avoid polluted water flowing into the waterbody of Victoria Harbour. Investigation at Zone 2B & 2C site revealed that the complaint might not be attributable to WKCD Zone 2B & 2C site. However, the Contractor has been reminded to strictly implement and maintain good site practices to avoid water pollution to the nearby waterbody.

The cumulative statistics on complaints, notifications of summons and successful prosecutions were provided in **Appendix G**.

6 Comments, Recommendations and Conclusion

6.1 Comments

Based on the observations made during site audits and landscape inspections, and construction dust and noise monitoring results, no non-compliances and exceedances of air quality and construction noise were recorded in the reporting quarter.

6.2 Recommendations

Reviewing the implementation of the recommended mitigation measures in the EM&A Manual, it was observed that they were effective and efficient in controlling the potential impacts due to construction of the project during the reporting period. Review of the effectiveness and efficiency of the EM&A programme will continue, and recommendations will be provided to remediate any potential impacts due to the project and to improve the EM&A programme if deficiencies of the existing EM&A programme are identified.

6.3 Conclusion

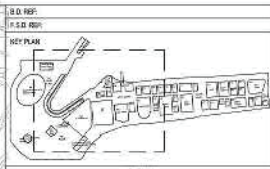
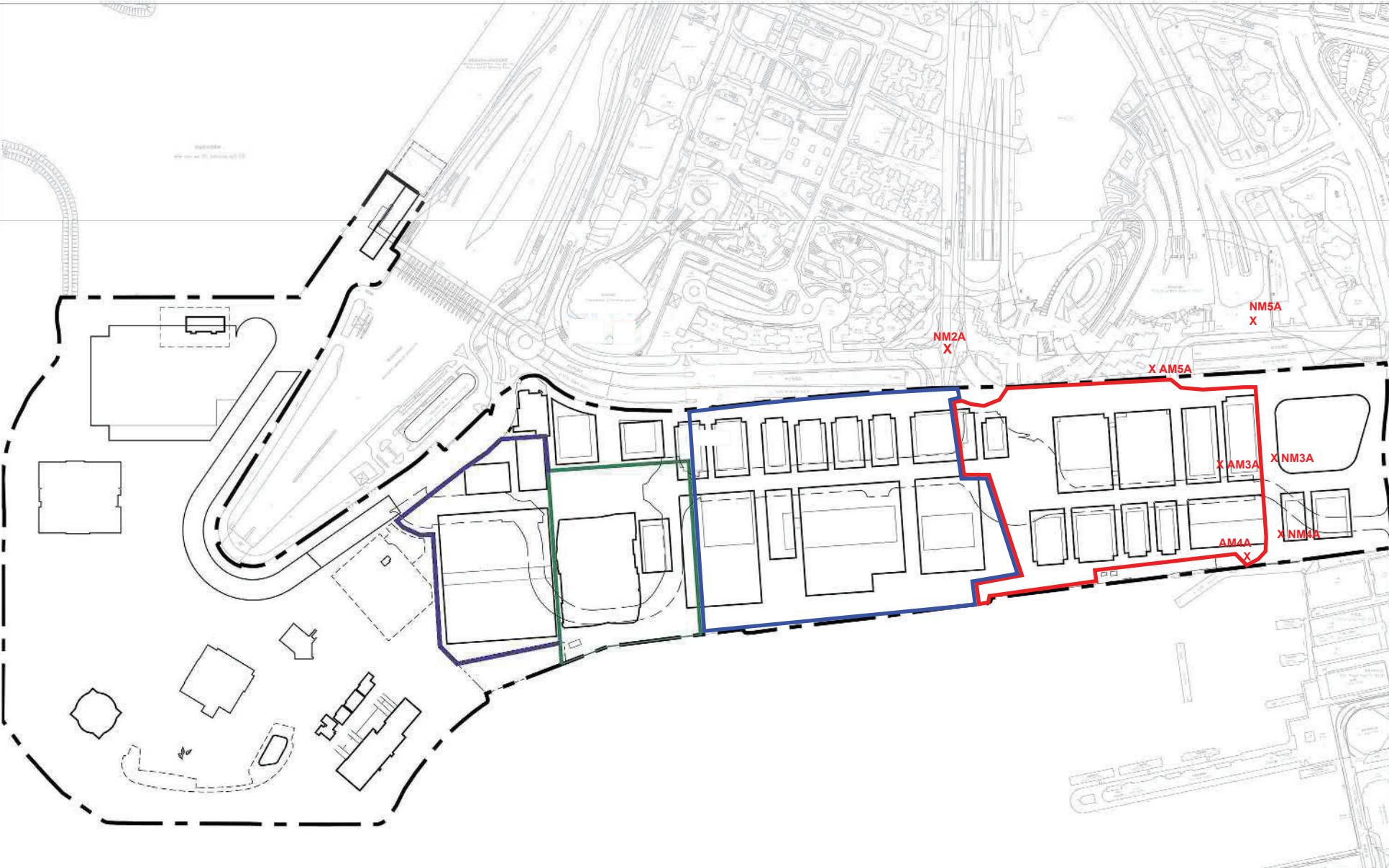
The EM&A programme as recommended in the EM&A Manual has been undertaken since the construction works of Zone 2A and Zone 2B & 2C commenced on 3 October 2020 and 30 September 2021 respectively.

Monitoring of air quality and noise with respect to the Project is underway. In particular, the 1-hour TSP, 24-hour TSP and noise level (as Leq, 30 minutes) under monitoring have been checked against established Action and Limit Levels. There was no breach of Action and Limit Levels for Air Quality (1-hour TSP and 24-hour TSP) and Construction Noise in this reporting quarter.

Seven complaints were received in the reporting quarter. No notifications of summons and successful prosecutions were received during the reporting quarter.

Weekly construction phase site inspections and bi-weekly landscape and visual impact inspections were conducted during the reporting quarter as required. It was observed that the Contractor had implemented all possible and feasible mitigation measures to mitigate the potential environmental impacts during construction phase works.

Figure 1 Site Layout Plan and Monitoring Stations



- NOTES**
- WKCD BOUNDARY
 - M+ MUSEUM BOUNDARY
 - LYRIC THEATRE BOUNDARY
 - - - BOUNDARY OF UNDERPASS ROAD SERVING THE PLANNED WKCD
 - X CONSTRUCTION AIR/NOISE MONITORING STATION

REMARKS:
 THE AIR MONITORING STATION AM2A HAS BEEN RELOCATED TO THE ALTERNATIVE MONITORING STATION AM2B AT 1ST FLOOR OF GAMMON'S SITE OFFICE ON 26 FEBRUARY 2019.

— Zone 2A Boundary
 — Zone 2B & 2C Boundary

REV	DATE	DESCRIPTION	INITIAL

JOB TITLE DEVELOPMENT AT WEST KOWLOON CULTURAL DISTRICT

DRAWING TITLE SITE LAYOUT PLAN AND MONITORING STATIONS

SCALE	1:50	PRINTED	A1
CHECKED		DATE	
APPROVED		DATE	
DRAWN	TY	DATE	15-10-2015

CONTRACT NO. -

DRAWING NO. **FIGURE 1** **REV.** XA

CAD REF NAME XXXX.dwg

AUTHORITY



Appendices

- A. Project Organisation
- B. Construction Programme
- C. Environmental Mitigation Measures – Implementation Status
- D. Meteorological Data Extracted from Hong Kong Observatory
- E. Graphical Plots of the Monitoring Results
- F. Waste Flow table
- G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

A. Project Organisation

Project Organization

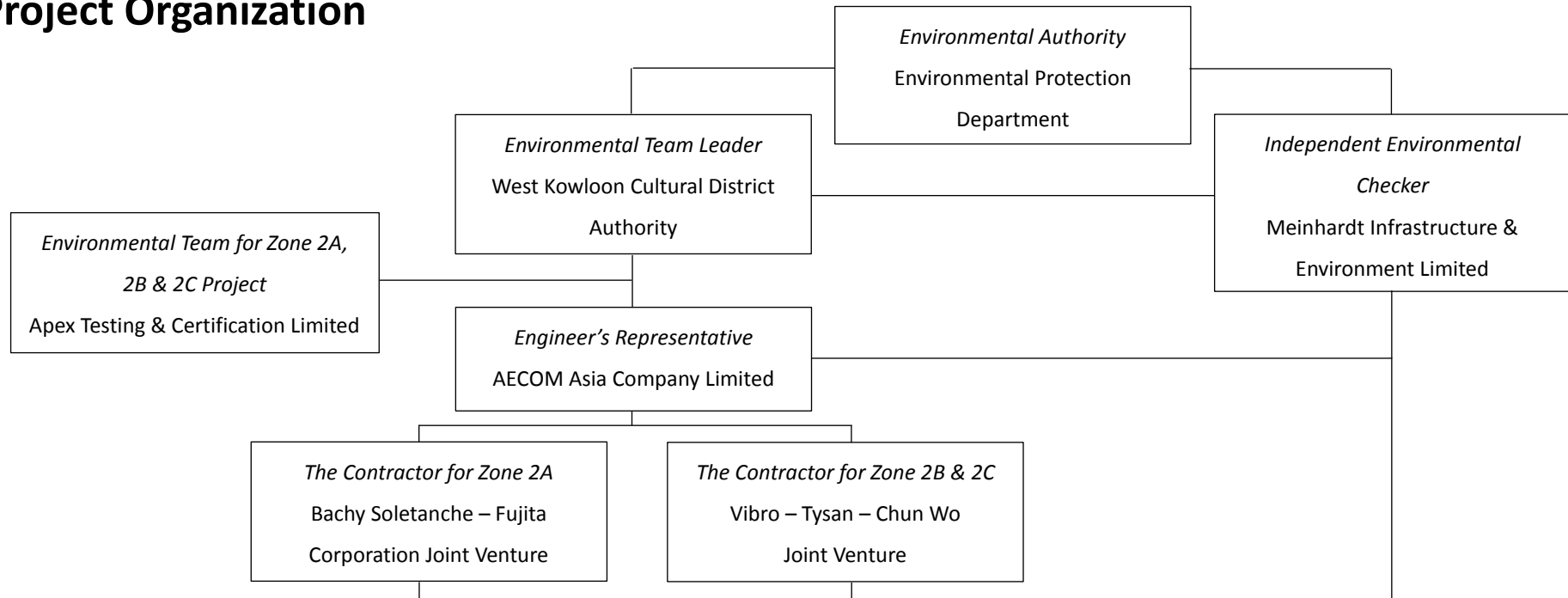


Table A-1: Contract Information

Company Name	Role	Name	Telephone	Email
West Kowloon Cultural District Authority	WKCDA Representative & Project ETL	Mr. C.K. WU	5506 9178	ck.wu@wkcd.a.hk
Meinhardt Infrastructure & Environment Limited	Independent Environmental Checker	Ms. Claudine LEE	2859 5409	caludinelee@meinhardt.com.hk
AECOM Asia Company Limited	Resident Engineer (Zone 2A)	Mr. Alex GBAGUIDI	3619 6287	alex.gbaguidi@aecom.com
AECOM Asia Company Limited	Resident Engineer (Zone 2B & 2C)	Ms. Carmen CHAN	6892 9271	carmen.chan@aecom.com
Bachy Soletanche – Fujita Corporation Joint Venture	Interface & Environmental Manager	Mr. Philip CHAN	9668 8403	philip.chan@soletanche-bachy.com
Vibro – Tysan – Chun Wo Joint Venture	Environmental Sustainability Manager	Mr. Tony YAM	2137 5586	tony_yam@vibro.com.hk
Apex Testing & Certification Limited	Contractor's Environmental Team Leader	Mr. Calvin LUI	9629 9718	calvinlui@apextestcert.com

B. Construction Programme

Zone 2A

Project Name: Foundation and ELS Works for Integrated Basement and Underground Road in Zone 2A of the West Kowloon Cultural District

3-Month Rolling Programme

Activity Description	Duration (Cal. Day)	Start Date	Finish Date	2022															
				May				June				July				August			
				6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
W104	W105	W106	W107	W108	W109	W110	W111	W112	W113	W114	W115	W116	W117	W118	W119	W120			
Zone 2A-1 Foundation, ELS Works and Blinding to Formation (KD01)																			
ELS (Stage 1) - Grouting / Pipe Pile Works																			
King Post (8/64 Nos Completed) & Erection of Steel Column for Working Platform (11/41 Nos completed)	472	15-May-21	29-Aug-22	[Gantt bar: Black from W104 to W107, Blue from W108 to W120]															
Stage 2 grouting (270/320 Nos Completed)	366	28-Sep-21	28-Sep-22	[Gantt bar: Black from W104 to W107, Red from W108 to W120]															
Pumping Test																			
Installation of Pump Wells (0/24 Nos completed)	57	28-Jun-22	23-Aug-22	[Gantt bar: Red from W110 to W120]															
Zone 2A-2 Foundation, ELS Works and Blinding to Formation (KD02)																			
ELS (Stage 1) - Grouting / Pipe Pile Works																			
King Post (0/86 Nos Completed) & Erection of Steel Column for Working Platform (0/65 Nos Completed)	182	21-May-22	18-Nov-22	[Gantt bar: Blue from W108 to W120]															
Pipe Pile Construction (4561/461 Nos Completed)	533	17-Nov-20	3-May-22	[Gantt bar: Black from W104 to W105]															
Stage 2 grouting (434/475 Nos Completed)	285	2-Oct-21	13-Jul-22	[Gantt bar: Black from W104 to W107, Red from W108 to W115]															
Pumping Test																			
Installation of Pump Wells (53/102 Nos completed)	62	11-Apr-22	11-Jun-22	[Gantt bar: Black from W104 to W107, Red from W108 to W109]															
Baseline Monitoring	1	13-Jun-22	13-Jun-22	[Gantt bar: Red at W110]															
Pumping Test	14	14-Jul-22	27-Jul-22	[Gantt bar: Red from W116 to W117]															

- Actual
- Remaining Works
- Critical Remaining Works

Project Name: Foundation and ELS Works for Integrated Basement and Underground Road in Zone 2A of the West Kowloon Cultural District

3-Month Rolling Programme

Activity Description	Duration (Cal. Day)	Start Date	Finish Date	2022												
				June				July				August				September
				3	10	17	24	1	8	15	22	29	5	12	19	26
W108	W109	W110	W111	W112	W113	W114	W115	W116	W117	W118	W119	W120	W121	W122	W123	
Zone 2A-1 Foundation, ELS Works and Blinding to Formation (KD01)																
ELS (Stage 1) - Grouting / Pipe Pile Works																
King Post (8/64 Nos Completed) & Erection of Steel Column for Working Platform (11/41 Nos completed)	472	15-May-21	29-Aug-22													
Stage 2 grouting (293/323 Nos Completed)	347	28-Sep-21	9-Sep-22													
Pumping Test																
Installation of Pump Wells (17/24 Nos completed)	60	4-Jun-22	2-Aug-22													
Zone 2A-2 Foundation, ELS Works and Blinding to Formation (KD02)																
ELS (Stage 1) - Grouting / Pipe Pile Works																
King Post (0/86 Nos Completed) & Erection of Steel Column for Working Platform (0/65 Nos Completed)	181	4-Jun-22	1-Dec-22													
Pipe Pile Construction (461/461 Nos Completed)	533	17-Nov-20	3-May-22													
Stage 2 grouting (472/472 Nos Completed)	250	2-Oct-21	8-Jun-22													
Pumping Test																
Installation of Pump Wells (90/90 Nos completed)	62	11-Apr-22	11-Jun-22													
Baseline Monitoring	1	21-Jun-22	21-Jun-22													
Pumping Test	14	22-Jun-22	5-Jul-22													

- - Actual
- - Remaining Works
- - Critical Remaining Works

Project Name: Foundation and ELS Works for Integrated Basement and Underground Road in Zone 2A of the West Kowloon Cultural District

3-Month Rolling Programme

Activity Description	Duration (Cal. Day)	Start Date	Finish Date	2022																											
				July					August					September					October												
				1	8	15	22	29	5	12	19	26	2	9	16	23	30	7	14	21	28										
W112	W113	W114	W115	W116	W117	W118	W119	W120	W121	W122	W123	W124	W125	W126	W127	W128	W129														
Zone 2A-1 Foundation, ELS Works and Blinding to Formation (KD01)																															
ELS (Stage 1) - Grouting / Pipe Pile Works																															
King Post (8/64 Nos Completed) & Erection of Steel Column for Working Platform (11/41 Nos completed)(Temporary suspended as per CA)	NA	15-May-21	NA																												
Stage 2 grouting (308/323 Nos Completed)	346	28-Sep-21	8-Sep-22	█					█																						
Pumping Test																															
Installation of Pump Wells (24/24 Nos completed)	15	4-Jun-22	18-Jun-22																												
Zone 2A-2 Foundation, ELS Works and Blinding to Formation (KD02)																															
ELS (Stage 1) - Grouting / Pipe Pile Works																															
King Post (0/86 Nos Completed) & Erection of Steel Column for Working Platform (0/65 Nos Completed)(Temporary suspended as per CA)	NA	NA	NA																												
Pipe Pile Construction (461/461 Nos Completed)	533	17-Nov-20	3-May-22																												
Stage 2 grouting (472/472 Nos Completed)	250	2-Oct-21	8-Jun-22																												
Pumping Test																															
Installation of Pump Wells (90/90 Nos completed)	62	11-Apr-22	11-Jun-22																												
Baseline Monitoring	1	4-Jul-22	4-Jul-22	█																											
Pumping Test	14	5-Jul-22	18-Jul-22	█																											

- █ - Actual
- █ - Remaining Works
- █ - Critical Remaining Works

Zone 2B & 2C

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	May				June				July				August			
									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13

Piling for Integrated Basement and U/G Road in Zone 2B & 2C

Contract Dates

Key Dates

KD for Zone 2B

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
KD01	KD01 (Stage 1-1) - (18 May 2022)		18-May-22	0		16-Jul-22*	-59	0%
KD03	KD03 (Stage 3-1) - (26 Aug 2022)		26-Aug-22	0		26-Aug-22*	0	0%

KD for Zone 2C

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
KD04	KD04 (Stage 4-1) - (26 Aug 2022)		25-Aug-22	0		26-Aug-22*	0	0%

Optional Works subjected to CA's Instruction

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
CO2A10	Last CAI date for Optional Works Item No.2A (330 Days to 390 Days after Commencement) if item No. 3 is	16-Aug-22		0	16-Aug-22		71	0%
CO3A	Last CAI date for Optional Works Item No.3 (within 280 Days after Commencement) [not exercised]	28-Apr-22		0	28-Apr-22 A			100%

Schedule of Milestones

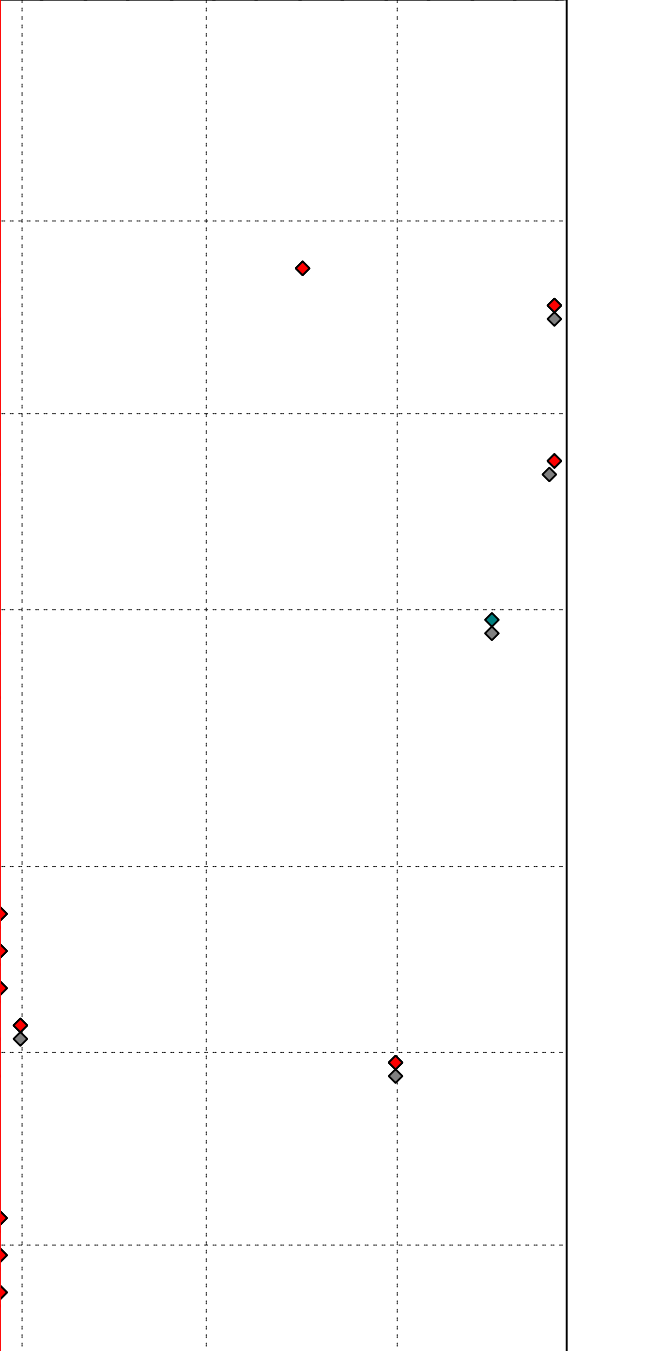
Cost Center A: Preliminaries

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
MS.A04	Milestone A04 - Month 6 (Jan 2022)		31-Jan-22	0		28-May-22*	-116	0%
MS.A05	Milestone A05 - Month 7 (Feb 2022)		28-Feb-22	0		28-May-22*	-88	0%
MS.A06	Milestone A06 - Month 9 (Apr 2022)		30-Apr-22	0		28-May-22*	-27	0%
MS.A07	Milestone A07 - Month 10 (May 2022)		31-May-22	0		31-May-22*	0	0%
MS.A08	Milestone A08 - Month 12 (Jul 2022)		31-Jul-22	0		31-Jul-22*	0	0%

Cost Center B: General and Hoarding Works

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
MS.B01	Milestone B01 - Month 2 (Sep 2021)		30-Sep-21	0		28-May-22*	-240	0%
MS.B02	Milestone B02 - Month 3 (Oct 2021)		31-Oct-21	0		28-May-22*	-209	0%
MS.B03	Milestone B03 - Month 4 (Nov 2021)		30-Nov-21	0		28-May-22*	-179	0%

Cost Center C: Socketed Steel H-Pile Foundation



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0

Date	Revision	Checked	Approved		
4-Mar-22	Rev.0	KL	B		

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	May				June				July				August			
									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13

MS.C03	Milestone C03 - Month 8 (Mar 2022)		31-May-22	0		28-May-22*	-23	0%
MS.C04	Milestone C04 - Month 9 (Apr 2022)		31-Jul-22	0		31-Jul-22*	0	0%

Cost Center D: Bored Pile Foundation at Eastern Part of Zone 2B (KD05/KD01)

MS.D02	Milestone D02 - Month 7 (Feb 2022)		31-Mar-22	0		28-May-22*	-89	0%
MS.D02^	Milestone D2A^ - Month 6 (Jan 2022)		31-Jan-22	0		28-May-22*	-117	0%
MS.D03	Milestone D03 - Month 8 (Mar 2022)		30-Apr-22	0		28-May-22*	-58	0%
MS.D03^	Milestone D3A^ - Month 8 (Mar 2022)		31-Mar-22	0		28-May-22*	-58	0%
MS.D04	Milestone D04 - Month 11 (Jun 2022)		30-Jun-22	0		30-Jun-22*	0	0%
MS.D04^	Milestone D4A^ - Month 10 (May 2022)		31-May-22	0		31-May-22*	0	0%

Cost Center E: Bored Pile Foundation at Middle Part of Zone 2B (KD06)

MS.E02	Milestone E02 - Month 8 (Mar 2022)		31-Jul-22	0		28-May-22*	-58	0%
MS.E03	Milestone E03 - Month 11 (Jun 2022)		30-Sep-22	0		30-Jun-22*	0	0%

Cost Center F: Bored Pile Foundation at Western Part of Zone 2B (KD07/KD03)

MS.F02	Milestone F02 - Month 11 (Jun 2022)		30-Jun-22	0		30-Jun-22*	0	0%
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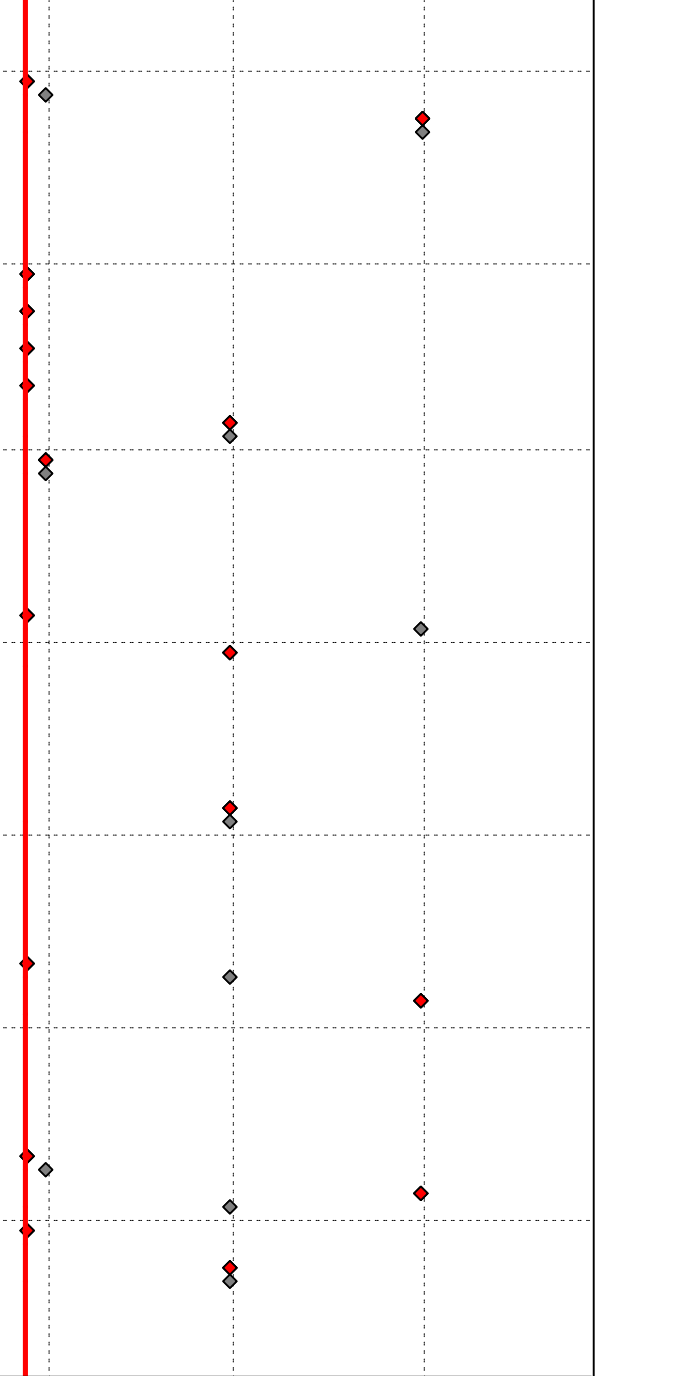
Cost Center G: Bored Pile Foundation at Western Part of Zone 2C (KD08/KD04)

MS.G02	Milestone G02 - Month 9 (Apr 2022)		30-Jun-22	0		28-May-22*	-28	0%
MS.G03	Milestone G03 - Month 12 (Jul 2022)		31-Aug-22	0		31-Jul-22*	0	0%

Cost Center H: Bored Pile Foundation at Eastern Part of Zone 2C (KD09/KD02)

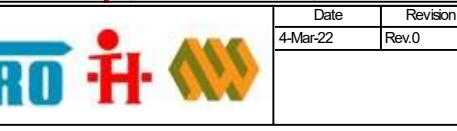
MS.H02	Milestone H02 - Month 8 (Mar 2022)		31-May-22	0		28-May-22*	-58	0%
MS.H03	Milestone H03 - Month 12 (Jul 2022)		30-Jun-22	0		31-Jul-22*	0	0%
MS.H2A^	Milestone H2A^ - Month 8 (Mar 2022)		31-Mar-22	0		28-May-22*	-58	0%
MS.H3A^	Milestone H3A^ - Month 11 (Jun 2022)		30-Jun-22	0		30-Jun-22*	0	0%

Cost Center M: Optional Works Item No. 1A: Tree Felling Works (KD10)

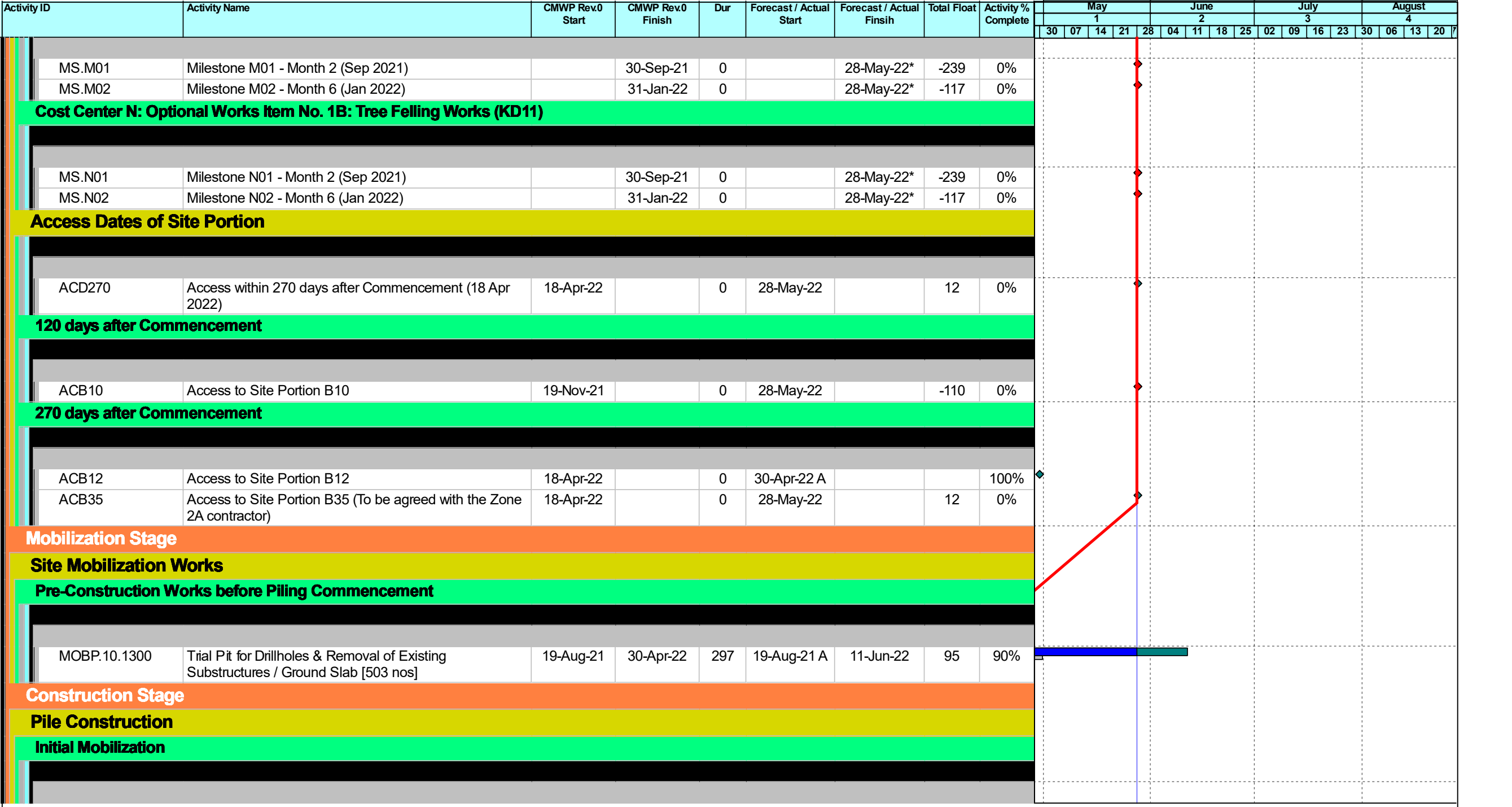


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



- ▬ Planned Bar
- ▬ Critical Bar
- ▬ Baseline
- ◆ Milestone
- ◆ Critical MS
- ◆ Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	May				June				July				August			
									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13
MO.1010	Initial Mobilization for Predrilling of BP (CCD / KD05 / KD01)	23-Jul-21	07-Sep-21	258	23-Jul-21 A	07-Jun-22	-16	80%																
MO.1020	Initial Mobilization for Predrilling of BP (CCE / KD06)	23-Jul-21	07-Sep-21	249	23-Jul-21 A	27-May-22 A		50%																
MO.1030	Initial Mobilization for Predrilling of BP (CCF / KD07 / KD03)	23-Jul-21	07-Sep-21	290	23-Jul-21 A	15-Jul-22	36	85%																
MO.1050	Initial Mobilization for Predrilling of BP (CCH / KD09 / KD02)	23-Jul-21	07-Sep-21	260	23-Jul-21 A	09-Jun-22	116	60%																

Predrilling

PD.1080	Predrilling for BP in KD05 [76 nos.]	30-Sep-21	30-Mar-22	200	30-Sep-21 A	07-Jun-22	-22	58%																
PD.1100	Predrilling for BP in KD06 [95 nos.] incl. 5 additional nos.	30-Sep-21	23-May-22	199	30-Sep-21 A	07-Jun-22	107	55%																
PD.1120	Predrilling for BP in KD07 [90 nos.] incl. 2 additional nos.	30-Sep-21	23-May-22	231	30-Sep-21 A	15-Jul-22	166	85%																
PD.1160	Predrilling for BP in KD09 [149 nos.] incl. 4 additional nos.	30-Sep-21	30-Mar-22	203	30-Sep-21 A	09-Jun-22	103	70%																

KD01 (Stage 1-1)

Bored Piles

CD07																								
07																								
CBA-BPC41Jb.10	BP - Excavation	13-Apr-22	22-Apr-22	39	13-May-22 A	28-Jun-22	-49	0%																
CBA-BPC41Jb.20	BP - RCD Drilling	23-Apr-22	05-May-22	10	29-Jun-22	11-Jul-22	-49	0%																
CBA-BPC41Jb.30	BP - Airlift, Cage Install and Concrete	06-May-22	12-May-22	5	12-Jul-22	16-Jul-22	-49	0%																
14																								
CBA-BP04.10	BP - Excavation	12-Apr-22	22-Apr-22	28	20-May-22 A	22-Jun-22	-49	0%																
CBA-BP04.20	BP - RCD Drilling	23-Apr-22	11-May-22	14	23-Jun-22	09-Jul-22	-49	0%																
CBA-BP04.30	BP - Airlift, Cage Install and Concrete	12-May-22	18-May-22	6	11-Jul-22	16-Jul-22	-49	0%																
CD05																								
04																								
P22&P19-BP11.30	BP - Airlift, Cage Install and Concrete	25-Feb-22	05-Mar-22	24	08-Apr-22 A	12-May-22 A		100%																
05																								
P22&P19-BP21.30	BP - Airlift, Cage Install and Concrete	19-Mar-22	28-Mar-22	25	20-Apr-22 A	21-May-22 A		100%																

KD02 (Stage 5-1)

Bored Piles

TD04									
03									

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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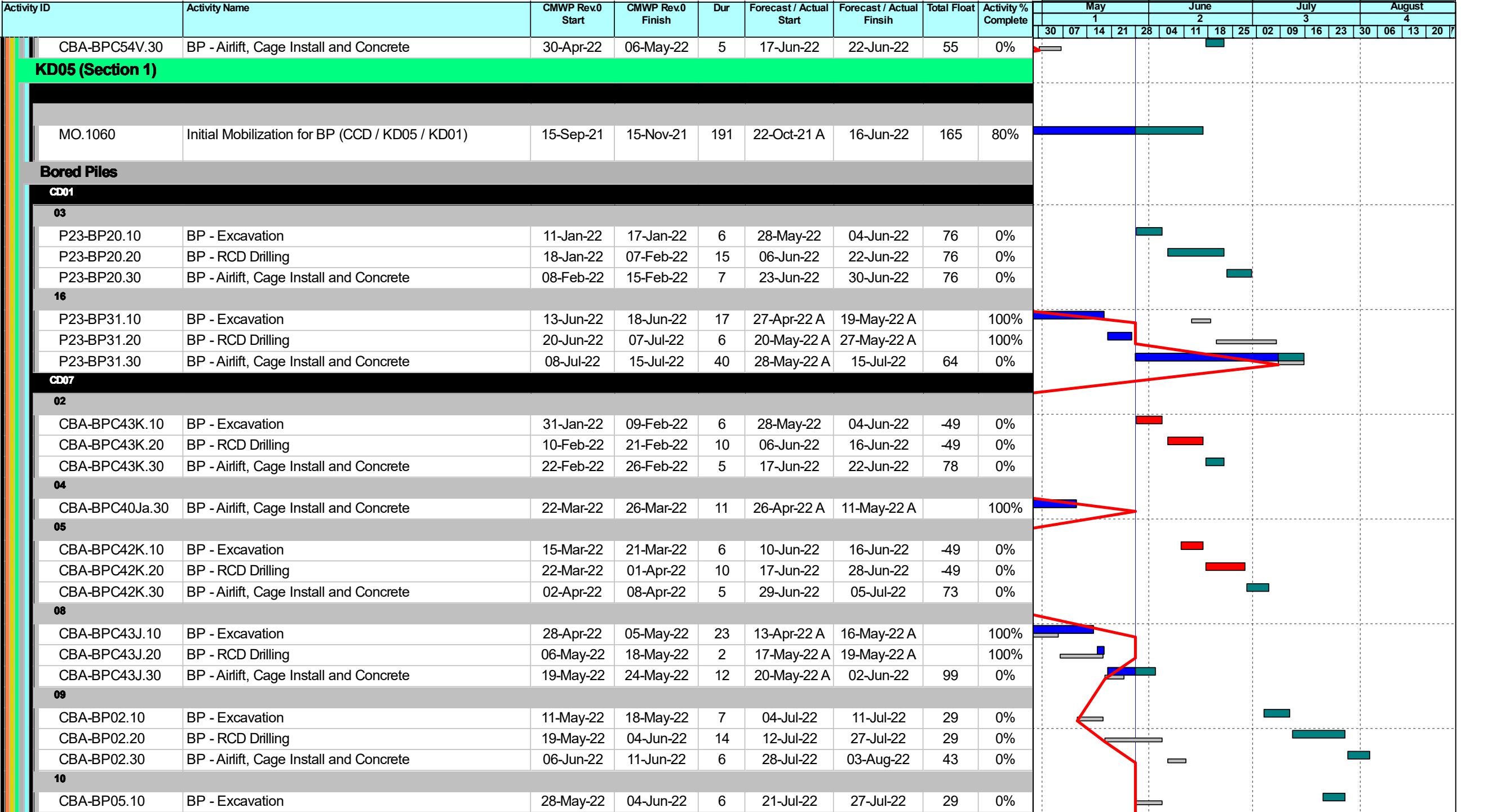
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		4-Mar-22	Rev.0	KL	B

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									1				2				3				4						
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	
P23-BP117.20	BP - RCD Drilling	10-Dec-21	10-Jan-22	7	22-Apr-22 A	30-Apr-22 A		100%																			
P23-BP117.30	BP - Airlift, Cage Install and Concrete	20-Jan-22	28-Jan-22	7	03-May-22 A	12-May-22 A		100%																			
KD03 (Stage 3-1)																											
Bored Piles																											
VD02																											
03																											
P28&P29-BP08.20	BP - RCD Drilling			4	23-Apr-22 A	28-Apr-22 A		100%																			
P28&P29-BP08.30	BP - Airlift, Cage Install and Concrete			9	29-Apr-22 A	12-May-22 A		100%																			
VD06																											
01																											
P28&P29-BP29.20	BP - RCD Drilling			3	26-Apr-22 A	29-Apr-22 A		100%																			
P28&P29-BP29.30	BP - Airlift, Cage Install and Concrete			11	30-Apr-22 A	16-May-22 A		100%																			
11																											
P28&P29-BP10.10	BP - Excavation			14	19-May-22 A	04-Jun-22	48	0%																			
P28&P29-BP10.20	BP - RCD Drilling			15	06-Jun-22	22-Jun-22	48	0%																			
P28&P29-BP10.30	BP - Airlift, Cage Install and Concrete			7	23-Jun-22	30-Jun-22	48	0%																			
VD09																											
01																											
CBA-BPC54Jb.10	BP - Excavation	26-Feb-22	04-Mar-22	6	28-May-22	04-Jun-22	-41	0%																			
CBA-BPC54Jb.20	BP - RCD Drilling	05-Mar-22	11-Apr-22	31	06-Jun-22	12-Jul-22	-41	0%																			
CBA-BPC54Jb.30	BP - Airlift, Cage Install and Concrete	12-Apr-22	21-Apr-22	6	13-Jul-22	19-Jul-22	27	0%																			
02																											
CBA-BPC54Ka.10	BP - Excavation	04-Apr-22	11-Apr-22	6	06-Jul-22	12-Jul-22	-41	0%																			
CBA-BPC54Ka.20	BP - RCD Drilling	12-Apr-22	25-May-22	33	13-Jul-22	19-Aug-22	-41	0%																			
CBA-BPC54Ka.30	BP - Airlift, Cage Install and Concrete	26-May-22	01-Jun-22	6	20-Aug-22	26-Aug-22	0	0%																			
KD04 (Stage 4-1)																											
Bored Piles																											
TD01																											
07																											
P30-BP06.10	BP - Excavation	31-May-22	07-Jun-22	6	21-Jun-22	27-Jun-22	24	0%																			
P30-BP06.20	BP - RCD Drilling	08-Jun-22	29-Jun-22	19	28-Jun-22	20-Jul-22	24	0%																			
P30-BP06.30	BP - Airlift, Cage Install and Concrete	30-Jun-22	09-Jul-22	8	21-Jul-22	29-Jul-22	24	0%																			
TD09																											
01																											
CBA-BPC54V.10	BP - Excavation	08-Apr-22	14-Apr-22	6	28-May-22	04-Jun-22	-38	0%																			
CBA-BPC54V.20	BP - RCD Drilling	19-Apr-22	29-Apr-22	10	06-Jun-22	16-Jun-22	-38	0%																			

■ Planned Bar ◆ Milestone
■ Critical Bar ◆ Critical MS
 Baseline ◆ Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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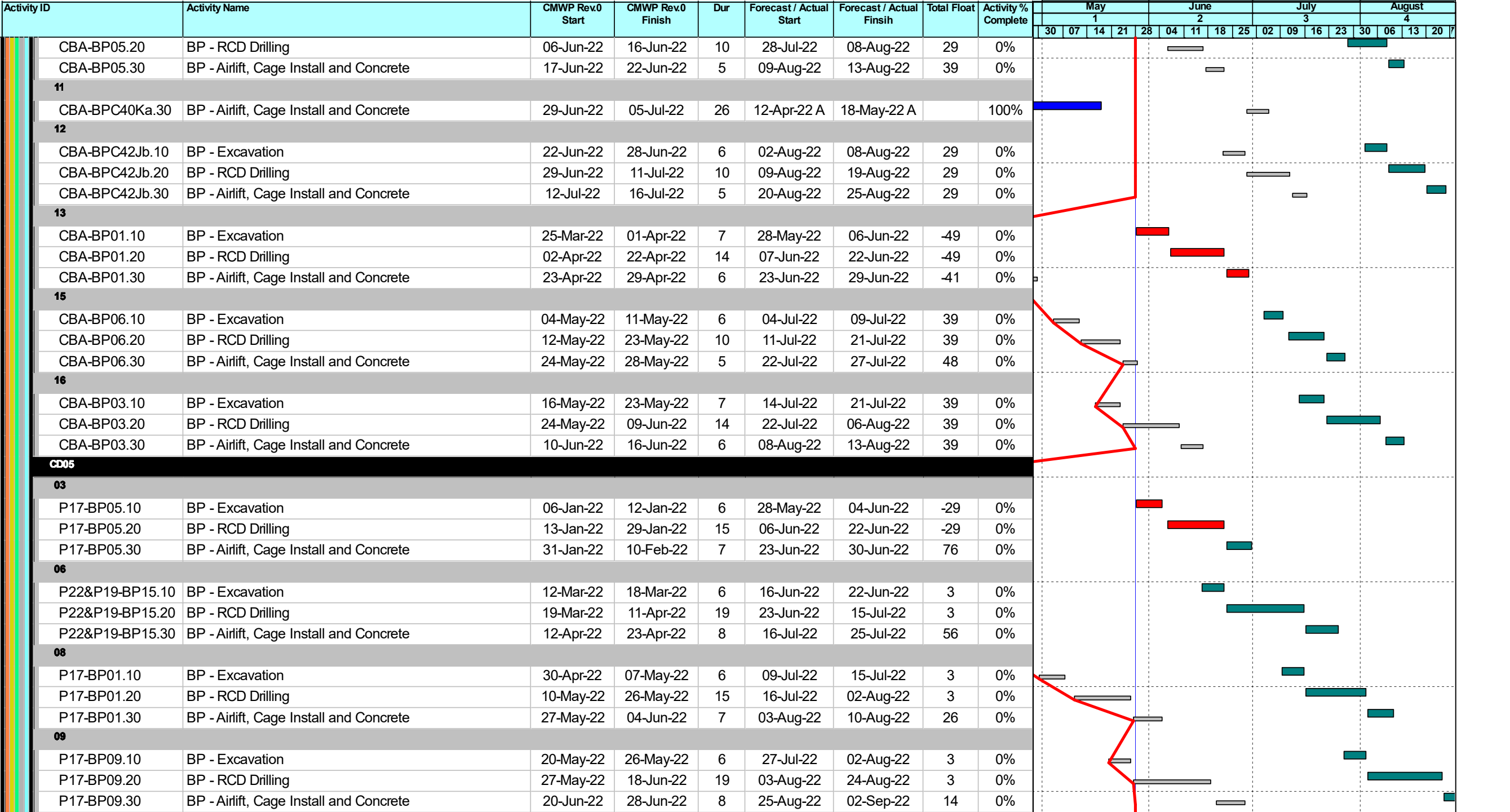
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4-Mar-22	Rev.0	KL	B



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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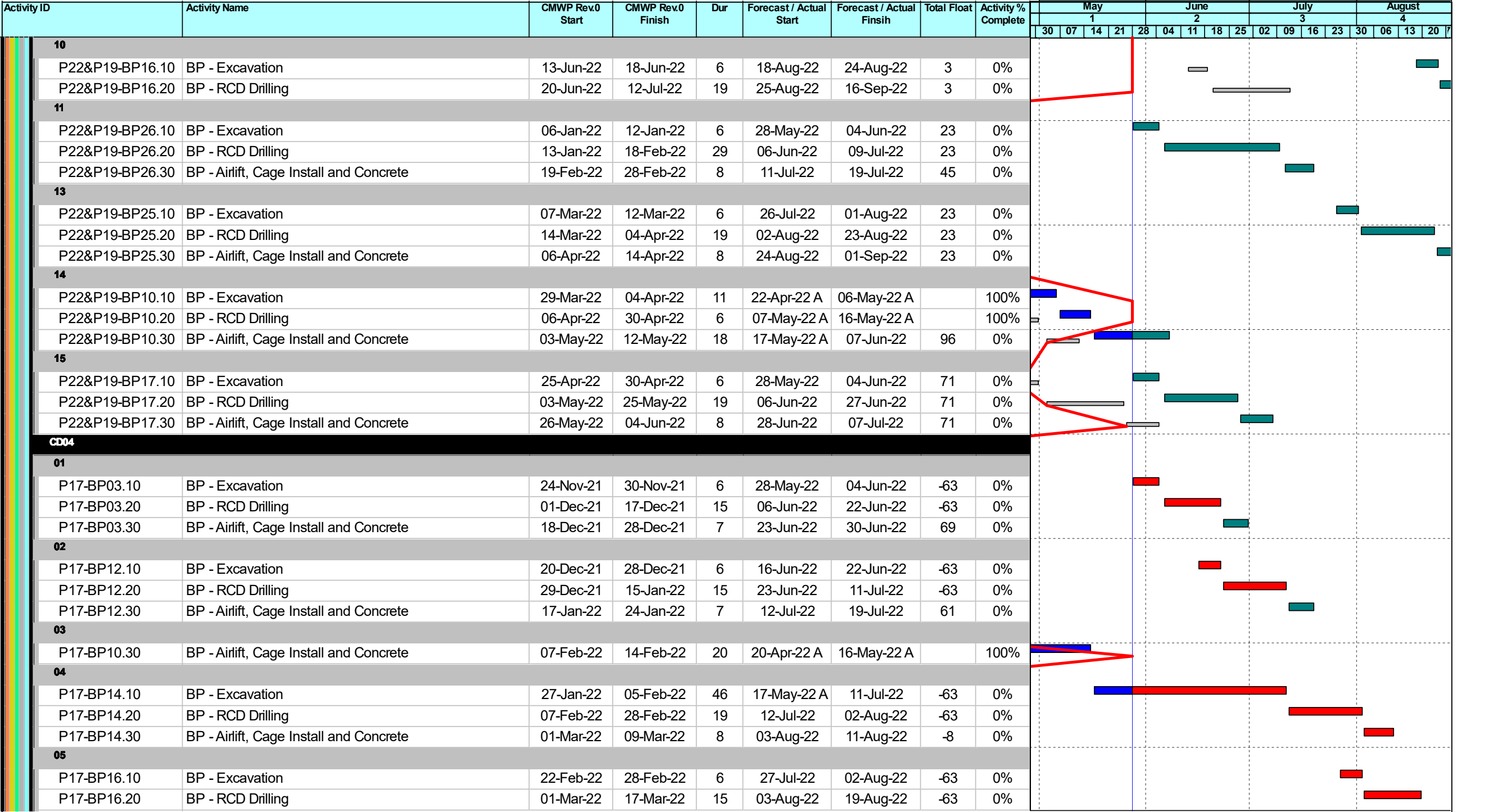


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 27 May 2022
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Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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									1				2				3				4					
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27
P17-BP16.30	BP - Airlift, Cage Install and Concrete	18-Mar-22	25-Mar-22	7	20-Aug-22	27-Aug-22	-15	0%																		
06																										
P17-BP02.10	BP - Excavation	11-Mar-22	17-Mar-22	6	13-Aug-22	19-Aug-22	-63	0%																		
P17-BP02.20	BP - RCD Drilling	18-Mar-22	04-Apr-22	15	20-Aug-22	06-Sep-22	-63	0%																		
14																										
P17-BP17.10	BP - Excavation	09-Jun-22	15-Jun-22	6	05-Jul-22	11-Jul-22	-21	0%																		
P17-BP17.20	BP - RCD Drilling	16-Jun-22	04-Jul-22	15	12-Jul-22	28-Jul-22	-21	0%																		
P17-BP17.30	BP - Airlift, Cage Install and Concrete	05-Jul-22	12-Jul-22	7	29-Jul-22	05-Aug-22	11	0%																		
15																										
P17-BP15.10	BP - Excavation	27-Jun-22	04-Jul-22	6	22-Jul-22	28-Jul-22	-21	0%																		
P17-BP15.20	BP - RCD Drilling	05-Jul-22	21-Jul-22	15	29-Jul-22	15-Aug-22	-21	0%																		
P17-BP15.30	BP - Airlift, Cage Install and Concrete	22-Jul-22	29-Jul-22	7	16-Aug-22	23-Aug-22	3	0%																		
16																										
P17-BP07.10	BP - Excavation	15-Jul-22	21-Jul-22	6	09-Aug-22	15-Aug-22	-21	0%																		
P17-BP07.20	BP - RCD Drilling	22-Jul-22	08-Aug-22	15	16-Aug-22	01-Sep-22	-21	0%																		
TD08																										
05																										
CBA-BPC400.10	BP - Excavation	08-Jan-22	14-Jan-22	6	28-May-22	04-Jun-22	73	0%																		
CBA-BPC400.20	BP - RCD Drilling	15-Jan-22	26-Jan-22	10	06-Jun-22	16-Jun-22	73	0%																		
CBA-BPC400.30	BP - Airlift, Cage Install and Concrete	27-Jan-22	04-Feb-22	5	17-Jun-22	22-Jun-22	78	0%																		
06																										
CBA-BPC39Jb.10	BP - Excavation	20-Jan-22	26-Jan-22	20	04-Apr-22 A	03-May-22 A		100%																		
CBA-BPC39Jb.20	BP - RCD Drilling	27-Jan-22	10-Feb-22	0	04-May-22 A	04-May-22 A		100%																		
CBA-BPC39Jb.30	BP - Airlift, Cage Install and Concrete	11-Feb-22	16-Feb-22	3	05-May-22 A	10-May-22 A		100%																		
07																										
CBA-BPC38Jb.10	BP - Excavation	04-Feb-22	10-Feb-22	14	03-May-22 A	20-May-22 A		100%																		
CBA-BPC38Jb.20	BP - RCD Drilling	11-Feb-22	22-Feb-22	32	21-May-22 A	28-Jun-22	73	0%																		
CBA-BPC38Jb.30	BP - Airlift, Cage Install and Concrete	23-Feb-22	28-Feb-22	5	29-Jun-22	05-Jul-22	73	0%																		
08																										
CBA-BPC38Ka.30	BP - Airlift, Cage Install and Concrete	07-Mar-22	11-Mar-22	3	26-Apr-22 A	29-Apr-22 A		100%																		
11																										
CBA-BPC40Na.10	BP - Excavation	12-May-22	18-May-22	8	13-May-22 A	23-May-22 A		100%																		
CBA-BPC40Na.20	BP - RCD Drilling	19-May-22	30-May-22	30	24-May-22 A	28-Jun-22	63	0%																		
CBA-BPC40Na.30	BP - Airlift, Cage Install and Concrete	31-May-22	06-Jun-22	5	29-Jun-22	05-Jul-22	68	0%																		
13																										
CBA-BPC39K.10	BP - Excavation	06-Jun-22	11-Jun-22	15	22-Apr-22 A	12-May-22 A		100%																		
CBA-BPC39K.20	BP - RCD Drilling	13-Jun-22	23-Jun-22	3	13-May-22 A	17-May-22 A		100%																		

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

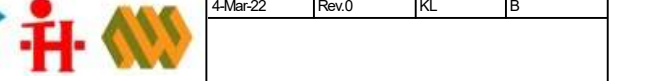
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Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finish	Total Float	Activity % Complete	May		June			July			August			
									1		2			3			4			
									30	07	14	21	28	04	11	18	25	02	09	16
CBA-BPC39K.30	BP - Airlift, Cage Install and Concrete	24-Jun-22	29-Jun-22	2	18-May-22 A	20-May-22 A		100%												
TD07																				
01																				
P18-BP10.10	BP - Excavation	19-Nov-21	25-Nov-21	6	28-May-22	04-Jun-22	-104	0%												
P18-BP10.20	BP - RCD Drilling	26-Nov-21	13-Dec-21	15	06-Jun-22	22-Jun-22	-104	0%												
P18-BP10.30	BP - Airlift, Cage Install and Concrete	14-Dec-21	21-Dec-21	7	23-Jun-22	30-Jun-22	-17	0%												
05																				
P18-BP02.10	BP - Excavation	17-Feb-22	23-Feb-22	6	09-Aug-22	15-Aug-22	-104	0%												
P18-BP02.20	BP - RCD Drilling	24-Feb-22	12-Mar-22	15	16-Aug-22	01-Sep-22	-104	0%												
06																				
P18-BP05.10	BP - Excavation	07-Mar-22	12-Mar-22	6	26-Aug-22	01-Sep-22	-104	0%												
16																				
P18-BP01.10	BP - Excavation	18-May-22	24-May-22	6	16-Jun-22	22-Jun-22	8	0%												
P18-BP01.20	BP - RCD Drilling	25-May-22	16-Jun-22	19	23-Jun-22	15-Jul-22	8	0%												
P18-BP01.30	BP - Airlift, Cage Install and Concrete	17-Jun-22	25-Jun-22	8	16-Jul-22	25-Jul-22	34	0%												
17																				
P18-BP08.10	BP - Excavation	10-Jun-22	16-Jun-22	6	09-Jul-22	15-Jul-22	8	0%												
P18-BP08.20	BP - RCD Drilling	17-Jun-22	09-Jul-22	19	16-Jul-22	06-Aug-22	8	0%												
P18-BP08.30	BP - Airlift, Cage Install and Concrete	11-Jul-22	19-Jul-22	8	08-Aug-22	16-Aug-22	23	0%												
Optional Item no. 3																				
CD04																				
12																				
P17-BP22.10	BP (Optional Item no.3) - Excavation	03-May-22	10-May-22	6	28-May-22	04-Jun-22	-21	0%												
P17-BP22.20	BP (Optional Item no.3) - RCD Drilling	11-May-22	27-May-22	15	06-Jun-22	22-Jun-22	-21	0%												
P17-BP22.30	BP (Optional Item no.3) - Airlift, Cage Install and Concrete	28-May-22	06-Jun-22	7	23-Jun-22	30-Jun-22	27	0%												
13																				
P17-BP18.10	BP (Optional Item no.3) - Excavation	21-May-22	27-May-22	6	16-Jun-22	22-Jun-22	-21	0%												
P17-BP18.20	BP (Optional Item no.3) - RCD Drilling	28-May-22	15-Jun-22	15	23-Jun-22	11-Jul-22	-21	0%												
P17-BP18.30	BP (Optional Item no.3) - Airlift, Cage Install and Concrete	16-Jun-22	23-Jun-22	7	12-Jul-22	19-Jul-22	19	0%												
17																				
P17-BP04.10	BP (Optional Item no.3) - Excavation	02-Aug-22	08-Aug-22	6	26-Aug-22	01-Sep-22	-21	0%												
TD08																				
10																				
CBA-BPC36Jb.10	BP (Optional Item no.3) - Excavation	28-Apr-22	05-May-22	6	28-May-22	04-Jun-22	63	0%												
CBA-BPC36Jb.20	BP (Optional Item no.3) - RCD Drilling	06-May-22	18-May-22	10	06-Jun-22	16-Jun-22	63	0%												

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
Based on CMWP Rev.0

	Date	Revision	Checked	Approved
	4-Mar-22	Rev.0	KL	B




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									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13
CBA-BPC36Jb.30	BP (Optional Item no.3) - Airlift, Cage Install and Concrete	19-May-22	24-May-22	5	17-Jun-22	22-Jun-22	73	0%																
12																								
CBA-BPC36Ka.10	BP (Optional Item no.3) - Excavation	24-May-22	30-May-22	6	22-Jun-22	28-Jun-22	63	0%																
CBA-BPC36Ka.20	BP (Optional Item no.3) - RCD Drilling	31-May-22	11-Jun-22	10	29-Jun-22	11-Jul-22	63	0%																
CBA-BPC36Ka.30	BP (Optional Item no.3) - Airlift, Cage Install and Concrete	13-Jun-22	17-Jun-22	5	12-Jul-22	16-Jul-22	63	0%																
TD07																								
18																								
P18-BP04.10	BP (Optional Item no.3) - Excavation	04-Jul-22	09-Jul-22	6	01-Aug-22	06-Aug-22	8	0%																
P18-BP04.20	BP (Optional Item no.3) - RCD Drilling	11-Jul-22	27-Jul-22	15	08-Aug-22	24-Aug-22	8	0%																
P18-BP04.30	BP (Optional Item no.3) - Airlift, Cage Install and Concrete	28-Jul-22	04-Aug-22	7	25-Aug-22	01-Sep-22	16	0%																
19																								
P18-BP11.10	BP (Optional Item no.3) - Excavation	21-Jul-22	27-Jul-22	6	18-Aug-22	24-Aug-22	8	0%																
P18-BP11.20	BP (Optional Item no.3) - RCD Drilling	28-Jul-22	13-Aug-22	15	25-Aug-22	10-Sep-22	8	0%																
KD06 (Section 2)																								
MO.1070																								
MO.1070	Initial Mobilization for BP (CCE / KD06)	15-Sep-21	15-Nov-21	175	22-Oct-21 A	28-May-22	309	50%																
Bored Piles																								
VD01																								
07																								
P23-BP12.10	BP - Excavation	29-Jun-22	06-Jul-22	22	10-May-22 A	04-Jun-22	55	0%																
P23-BP12.20	BP - RCD Drilling	07-Jul-22	28-Jul-22	19	06-Jun-22	27-Jun-22	55	0%																
P23-BP12.30	BP - Airlift, Cage Install and Concrete	29-Jul-22	06-Aug-22	8	28-Jun-22	07-Jul-22	199	0%																
14																								
P23-BP13.20	BP - RCD Drilling	16-Jan-23	04-Feb-23	11	27-Apr-22 A	12-May-22 A		100%																
P23-BP13.30	BP - Airlift, Cage Install and Concrete	06-Feb-23	13-Feb-23	11	13-May-22 A	26-May-22 A		100%																
VD02																								
15																								
P24&P27-BP09.10	BP - Excavation			6	14-Jul-22	20-Jul-22	74	0%																
P24&P27-BP09.20	BP - RCD Drilling			29	21-Jul-22	23-Aug-22	74	0%																
P24&P27-BP09.30	BP - Airlift, Cage Install and Concrete			8	24-Aug-22	01-Sep-22	151	0%																
VD07																								
02																								
P24&P27-BP27.10	BP - Excavation			6	04-Jul-22	09-Jul-22	-64	0%																

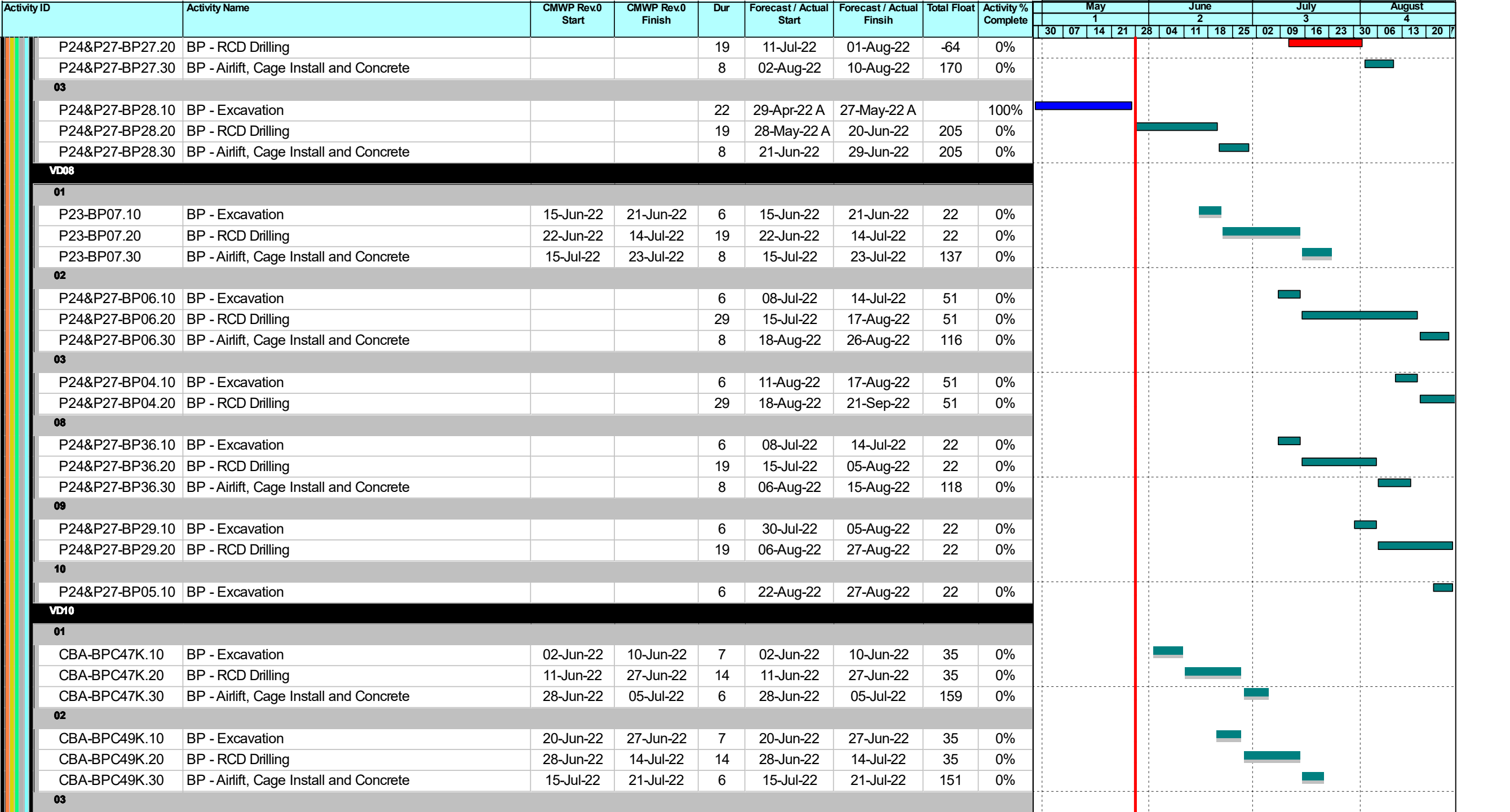
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 Data Date: 28-May-22
 Print Date: 30-May-22_17:49
 Page 11 of 31

- Planned Bar
- Critical Bar
- Baseline
- Milestone
- Critical MS
- Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0

Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



- Planned Bar
- Critical Bar
- Baseline
- Milestone
- Critical MS
- Baseline MS

West Kowloon Cultural District Authority
Piling for Retained Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0






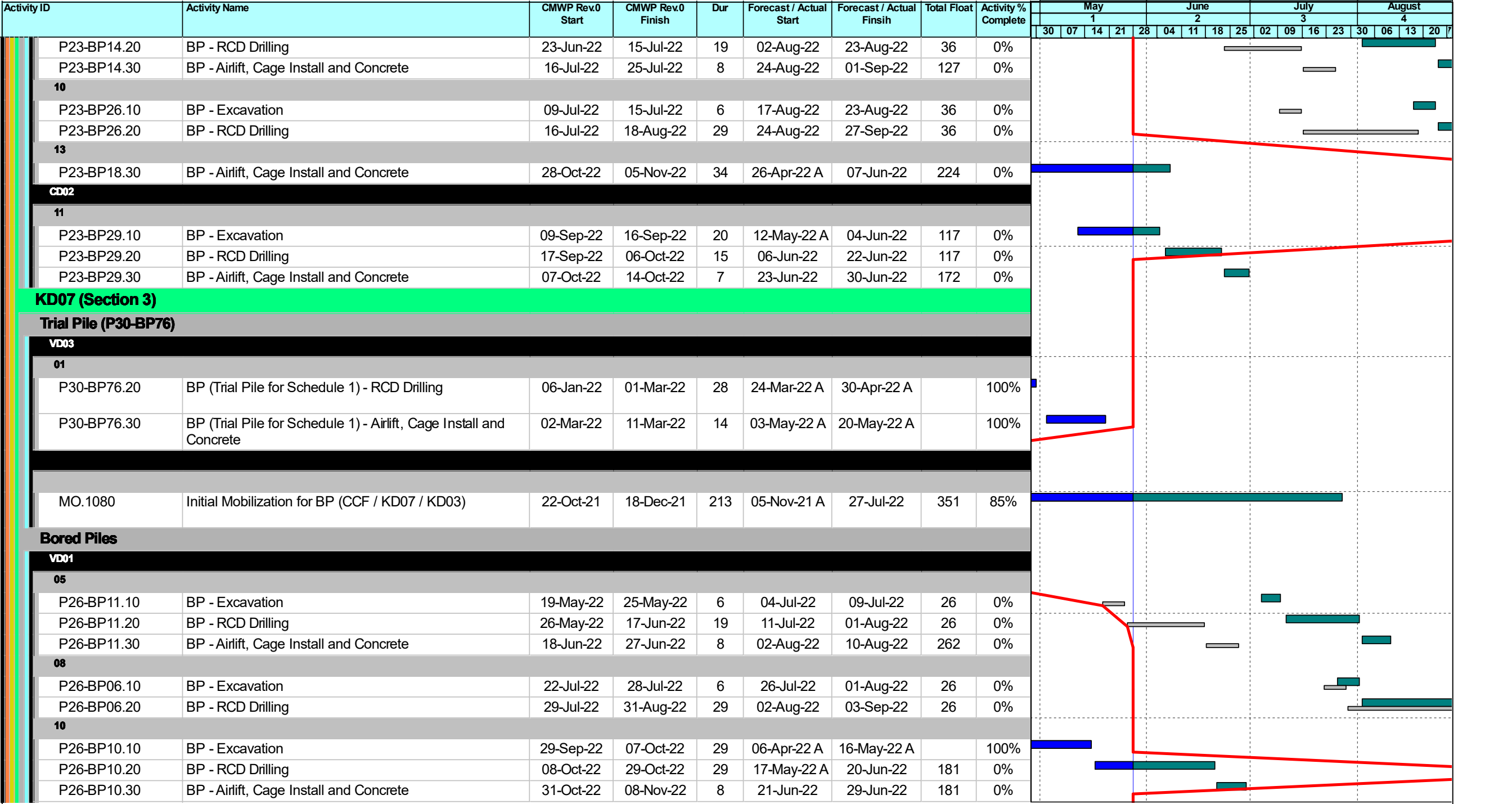
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									1							2				3				4												
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13	20	27										
CBA-BPC50Ka.10	BP - Excavation	08-Jul-22	14-Jul-22	6	08-Jul-22	14-Jul-22	35	0%																												
CBA-BPC50Ka.20	BP - RCD Drilling	15-Jul-22	19-Aug-22	31	15-Jul-22	19-Aug-22	35	0%																												
CBA-BPC50Ka.30	BP - Airlift, Cage Install and Concrete	20-Aug-22	26-Aug-22	6	20-Aug-22	26-Aug-22	126	0%																												
04																																				
CBA-BPC52Jb.10	BP - Excavation	13-Aug-22	19-Aug-22	6	13-Aug-22	19-Aug-22	35	0%																												
CBA-BPC52Jb.20	BP - RCD Drilling	20-Aug-22	26-Sep-22	31	20-Aug-22	26-Sep-22	35	0%																												
09																																				
CBA-BPC49J.10	BP - Excavation	19-Apr-22	25-Apr-22	6	28-May-22	04-Jun-22	20	0%																												
CBA-BPC49J.20	BP - RCD Drilling	26-Apr-22	02-Jun-22	31	06-Jun-22	12-Jul-22	20	0%																												
CBA-BPC49J.30	BP - Airlift, Cage Install and Concrete	04-Jun-22	10-Jun-22	6	13-Jul-22	19-Jul-22	165	0%																												
10																																				
CBA-BPC50Ja.10	BP - Excavation	27-May-22	02-Jun-22	6	06-Jul-22	12-Jul-22	20	0%																												
CBA-BPC50Ja.20	BP - RCD Drilling	04-Jun-22	11-Jul-22	31	13-Jul-22	17-Aug-22	20	0%																												
CBA-BPC50Ja.30	BP - Airlift, Cage Install and Concrete	12-Jul-22	18-Jul-22	6	18-Aug-22	24-Aug-22	140	0%																												
11																																				
CBA-BPC48J.10	BP - Excavation	04-Jul-22	11-Jul-22	7	10-Aug-22	17-Aug-22	20	0%																												
CBA-BPC48J.20	BP - RCD Drilling	12-Jul-22	27-Jul-22	14	18-Aug-22	02-Sep-22	20	0%																												
12																																				
CBA-BPC50Jb.10	BP - Excavation	21-Jul-22	27-Jul-22	6	27-Aug-22	02-Sep-22	20	0%																												
CD08																																				
02																																				
CBA-BPC46K.10	BP - Excavation	25-Aug-22	01-Sep-22	7	25-Aug-22	01-Sep-22	28	0%																												
09																																				
CBA-BPC46J.10	BP - Excavation	16-Dec-22	23-Dec-22	10	25-May-22 A	06-Jun-22	168	0%																												
CBA-BPC46J.20	BP - RCD Drilling	24-Dec-22	12-Jan-23	14	07-Jun-22	22-Jun-22	168	0%																												
CBA-BPC46J.30	BP - Airlift, Cage Install and Concrete	13-Jan-23	19-Jan-23	6	23-Jun-22	29-Jun-22	188	0%																												
CD06																																				
01																																				
P24&P27-BP30.10	BP - Excavation			6	28-May-22	04-Jun-22	-82	0%																												
P24&P27-BP30.20	BP - RCD Drilling			15	06-Jun-22	22-Jun-22	-82	0%																												
P24&P27-BP30.30	BP - Airlift, Cage Install and Concrete			7	23-Jun-22	30-Jun-22	116	0%																												
02																																				
P22&P19-BP22.10	BP - Excavation	15-Jan-22	21-Jan-22	18	28-Apr-22 A	21-May-22 A		100%																												
P22&P19-BP22.20	BP - RCD Drilling	22-Jan-22	16-Feb-22	45	23-May-22 A	15-Jul-22	-82	0%																												
P22&P19-BP22.30	BP - Airlift, Cage Install and Concrete	17-Feb-22	25-Feb-22	8	16-Jul-22	25-Jul-22	104	0%																												
03																																				
P22&P19-BP23.10	BP - Excavation	10-Feb-22	16-Feb-22	6	09-Jul-22	15-Jul-22	-82	0%																												

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
Based on CMWP Rev.0

			
Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



ID: 2B2C-20220527_w
 Data Date: 28-May-22
 Print Date: 30-May-22_17:50
 Page 15 of 31



West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0

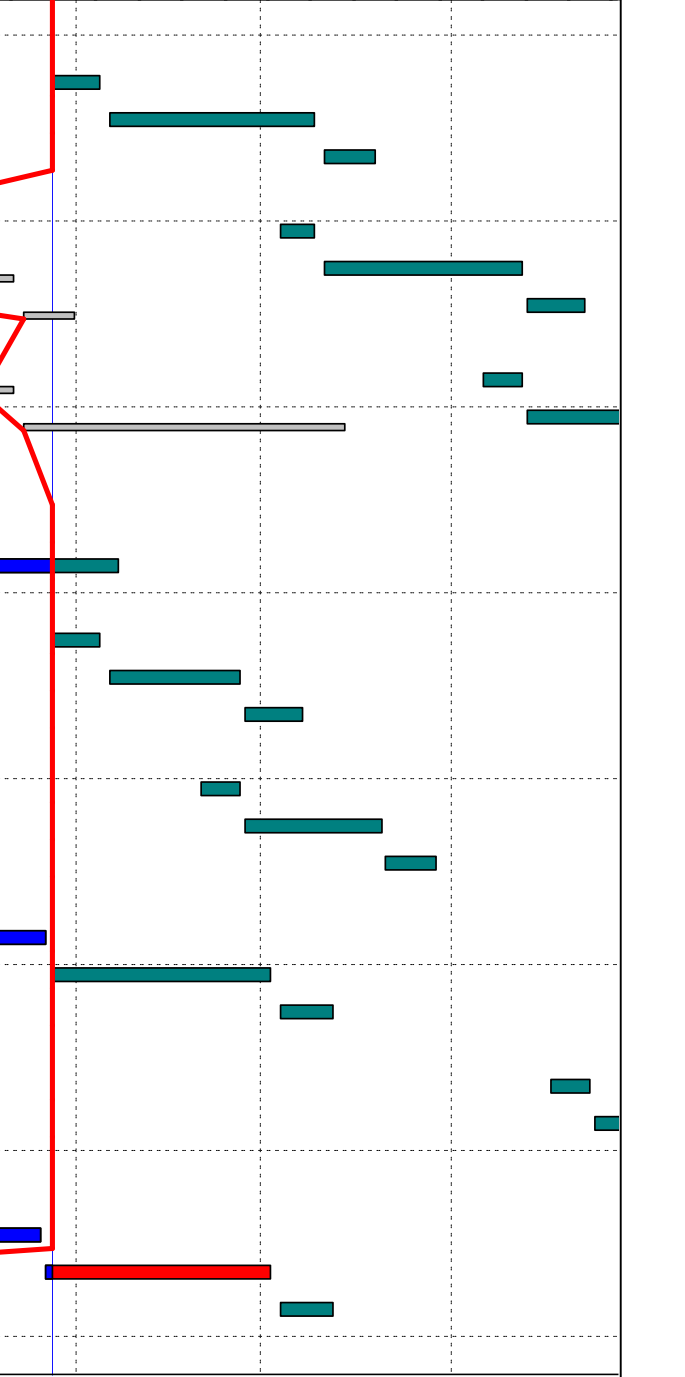


Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	May				June				July				August			
									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13

VD02									
02									
P24&P27-BP08.10	BP - Excavation			6	28-May-22	04-Jun-22	101	0%	
P24&P27-BP08.20	BP - RCD Drilling			29	06-Jun-22	09-Jul-22	101	0%	
P24&P27-BP08.30	BP - Airlift, Cage Install and Concrete			8	11-Jul-22	19-Jul-22	281	0%	
04									
P26-BP03.10	BP - Excavation	06-Apr-22	12-Apr-22	6	04-Jul-22	09-Jul-22	101	0%	
P26-BP03.20	BP - RCD Drilling	13-Apr-22	21-May-22	29	11-Jul-22	12-Aug-22	101	0%	
P26-BP03.30	BP - Airlift, Cage Install and Concrete	23-May-22	31-May-22	8	13-Aug-22	22-Aug-22	205	0%	
05									
P26-BP01.10	BP - Excavation	16-May-22	21-May-22	6	06-Aug-22	12-Aug-22	101	0%	
P26-BP01.20	BP - RCD Drilling	23-May-22	14-Jul-22	44	13-Aug-22	06-Oct-22	101	0%	
12									
P24&P27-BP14.10	BP - Excavation			29	30-Mar-22 A	10-May-22 A		100%	
P24&P27-BP14.20	BP - RCD Drilling			5	11-May-22 A	17-May-22 A		100%	
P24&P27-BP14.30	BP - Airlift, Cage Install and Concrete			17	18-May-22 A	07-Jun-22	200	0%	
13									
P28&P29-BP05.10	BP - Excavation			6	28-May-22	04-Jun-22	74	0%	
P28&P29-BP05.20	BP - RCD Drilling			19	06-Jun-22	27-Jun-22	74	0%	
P28&P29-BP05.30	BP - Airlift, Cage Install and Concrete			8	28-Jun-22	07-Jul-22	183	0%	
14									
P28&P29-BP09.10	BP - Excavation			6	21-Jun-22	27-Jun-22	74	0%	
P28&P29-BP09.20	BP - RCD Drilling			19	28-Jun-22	20-Jul-22	74	0%	
P28&P29-BP09.30	BP - Airlift, Cage Install and Concrete			8	21-Jul-22	29-Jul-22	172	0%	
16									
P24&P27-BP01.10	BP - Excavation			31	19-Apr-22 A	27-May-22 A		100%	
P24&P27-BP01.20	BP - RCD Drilling			29	28-May-22 A	02-Jul-22	287	0%	
P24&P27-BP01.30	BP - Airlift, Cage Install and Concrete			8	04-Jul-22	12-Jul-22	287	0%	
17									
P24&P27-BP13.10	BP - Excavation			6	17-Aug-22	23-Aug-22	74	0%	
P24&P27-BP13.20	BP - RCD Drilling			29	24-Aug-22	27-Sep-22	74	0%	

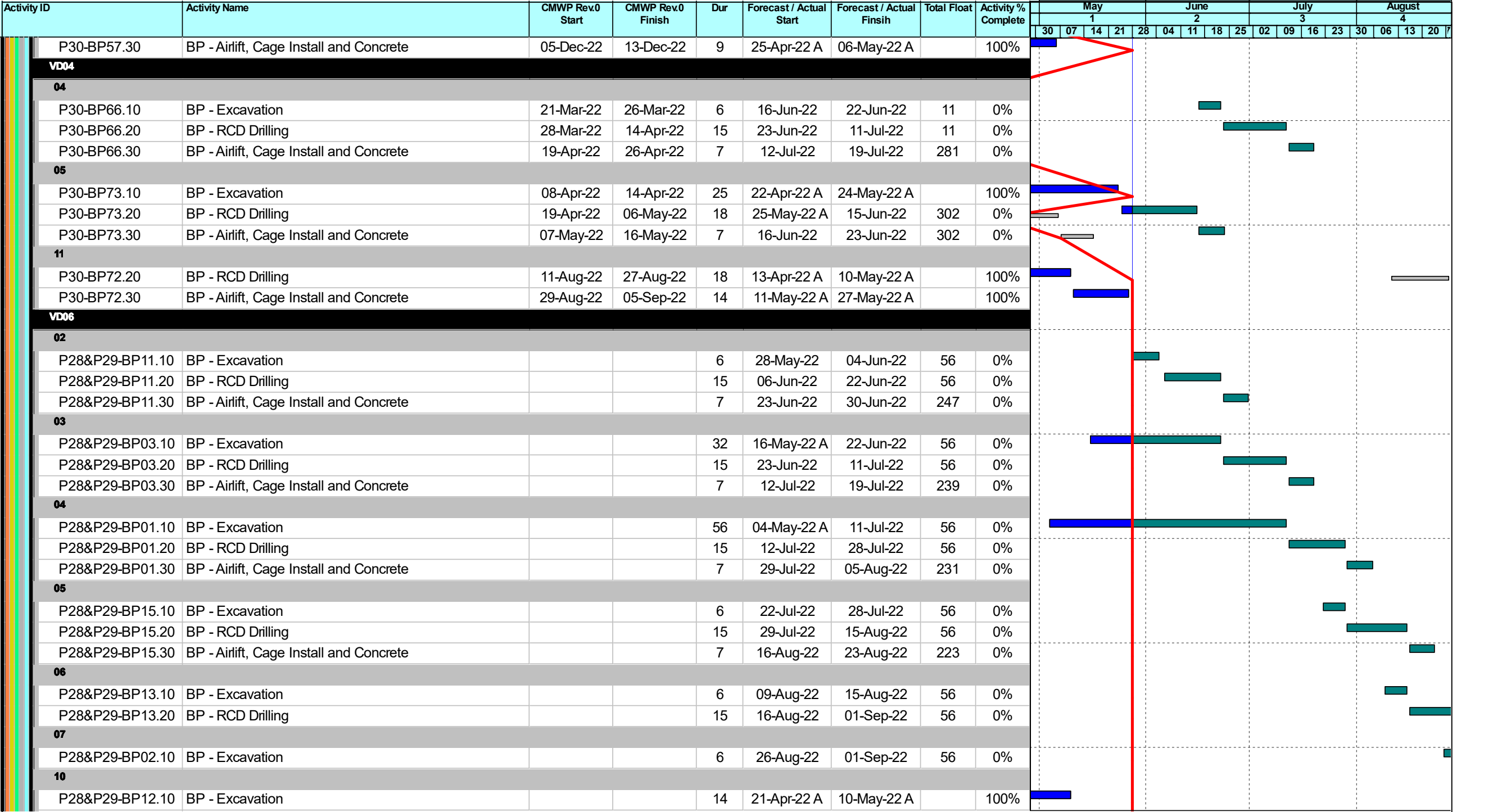
VD03									
02									
P30-BP59.10	BP - Excavation	23-Feb-22	01-Mar-22	111	06-Jan-22 A	26-May-22 A		100%	
P30-BP59.20	BP - RCD Drilling	02-Mar-22	04-Apr-22	30	27-May-22 A	02-Jul-22	-32	0%	
P30-BP59.30	BP - Airlift, Cage Install and Concrete	06-Apr-22	14-Apr-22	8	04-Jul-22	12-Jul-22	155	0%	
09									









Planned Bar	Milestone
Critical Bar	Critical MS
Baseline	Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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 Based on CMWP Rev.0

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		4-Mar-22	Rev.0	KL	B

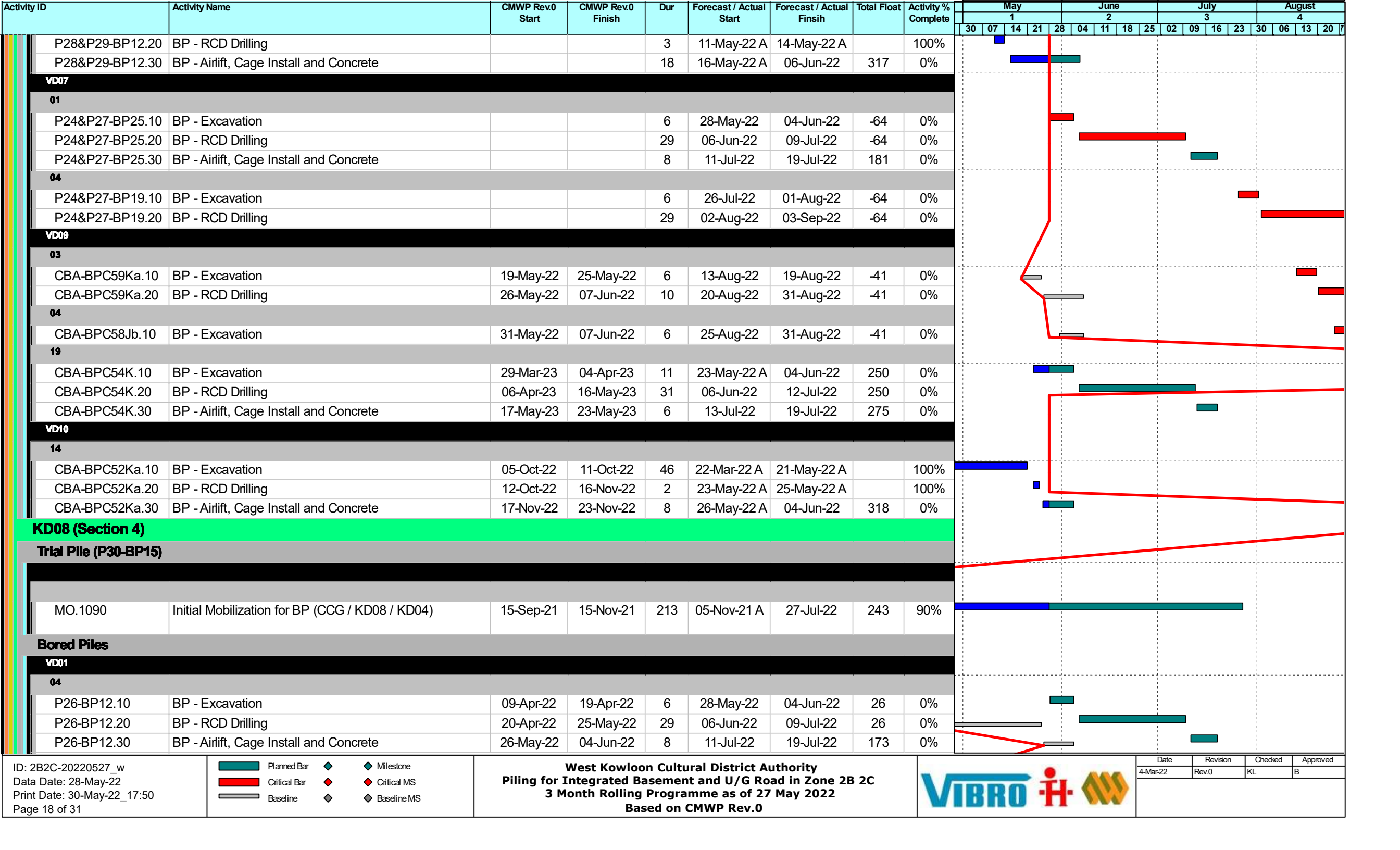


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Retaining Basement and U/G Road in Zone 2B 2C
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 Based on CMWP Rev.0



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4-Mar-22	Rev.0	KL	B



- Planned Bar
- Critical Bar
- Baseline
- Milestone
- Critical MS
- Baseline MS

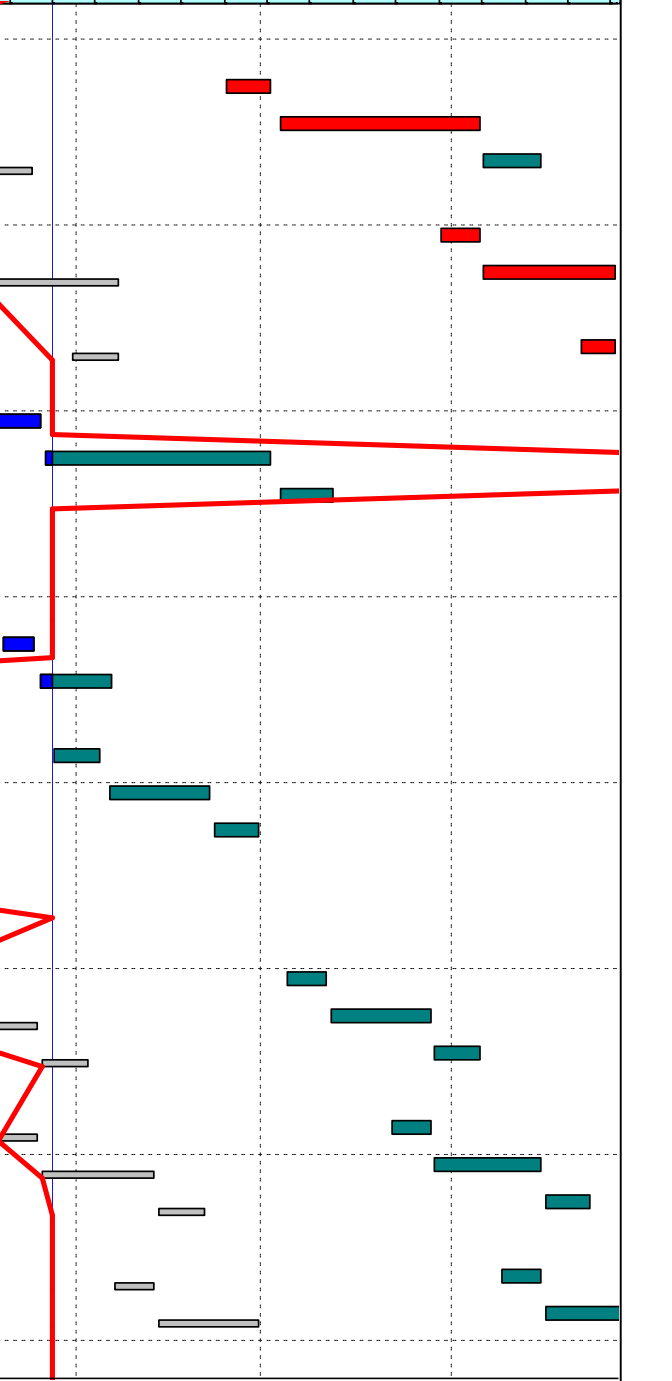
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									1				2				3				4			
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VD03									
03									
P30-BP44.10	BP - Excavation	29-Mar-22	04-Apr-22	6	25-Jun-22	02-Jul-22	-32	0%	
P30-BP44.20	BP - RCD Drilling	06-Apr-22	14-May-22	29	04-Jul-22	05-Aug-22	-32	0%	
P30-BP44.30	BP - Airlift, Cage Install and Concrete	16-May-22	24-May-22	8	06-Aug-22	15-Aug-22	134	0%	
04									
P30-BP50.10	BP - Excavation	07-May-22	14-May-22	6	30-Jul-22	05-Aug-22	-32	0%	
P30-BP50.20	BP - RCD Drilling	16-May-22	07-Jun-22	19	06-Aug-22	27-Aug-22	-32	0%	
05									
P30-BP55.10	BP - Excavation	31-May-22	07-Jun-22	6	22-Aug-22	27-Aug-22	-32	0%	
10									
P30-BP45.10	BP - Excavation	28-Nov-22	03-Dec-22	10	14-May-22 A	26-May-22 A		100%	
P30-BP45.20	BP - RCD Drilling	05-Dec-22	10-Jan-23	30	27-May-22 A	02-Jul-22	161	0%	
P30-BP45.30	BP - Airlift, Cage Install and Concrete	11-Jan-23	19-Jan-23	8	04-Jul-22	12-Jul-22	171	0%	

VD04									
01									
P30-BP41.10	BP - Excavation	19-Jan-22	25-Jan-22	78	10-Feb-22 A	19-May-22 A		100%	
P30-BP41.20	BP - RCD Drilling	26-Jan-22	15-Feb-22	4	20-May-22 A	25-May-22 A		100%	
P30-BP41.30	BP - Airlift, Cage Install and Concrete	16-Feb-22	23-Feb-22	9	26-May-22 A	06-Jun-22	202	0%	
02									
P30-BP47.10	BP - Excavation	09-Feb-22	15-Feb-22	6	28-May-22	04-Jun-22	11	0%	
P30-BP47.20	BP - RCD Drilling	16-Feb-22	04-Mar-22	15	06-Jun-22	22-Jun-22	11	0%	
P30-BP47.30	BP - Airlift, Cage Install and Concrete	05-Mar-22	12-Mar-22	7	23-Jun-22	30-Jun-22	188	0%	
03									
P30-BP58.30	BP - Airlift, Cage Install and Concrete	28-Mar-22	06-Apr-22	8	28-Apr-22 A	10-May-22 A		100%	
06									
P30-BP62.10	BP - Excavation	29-Apr-22	06-May-22	6	05-Jul-22	11-Jul-22	11	0%	
P30-BP62.20	BP - RCD Drilling	07-May-22	25-May-22	15	12-Jul-22	28-Jul-22	11	0%	
P30-BP62.30	BP - Airlift, Cage Install and Concrete	26-May-22	02-Jun-22	7	29-Jul-22	05-Aug-22	137	0%	
07									
P30-BP42.10	BP - Excavation	19-May-22	25-May-22	6	22-Jul-22	28-Jul-22	11	0%	
P30-BP42.20	BP - RCD Drilling	26-May-22	13-Jun-22	15	29-Jul-22	15-Aug-22	11	0%	
P30-BP42.30	BP - Airlift, Cage Install and Concrete	14-Jun-22	21-Jun-22	7	16-Aug-22	23-Aug-22	129	0%	
08									
P30-BP46.10	BP - Excavation	07-Jun-22	13-Jun-22	6	09-Aug-22	15-Aug-22	11	0%	
P30-BP46.20	BP - RCD Drilling	14-Jun-22	30-Jun-22	15	16-Aug-22	01-Sep-22	11	0%	
09									

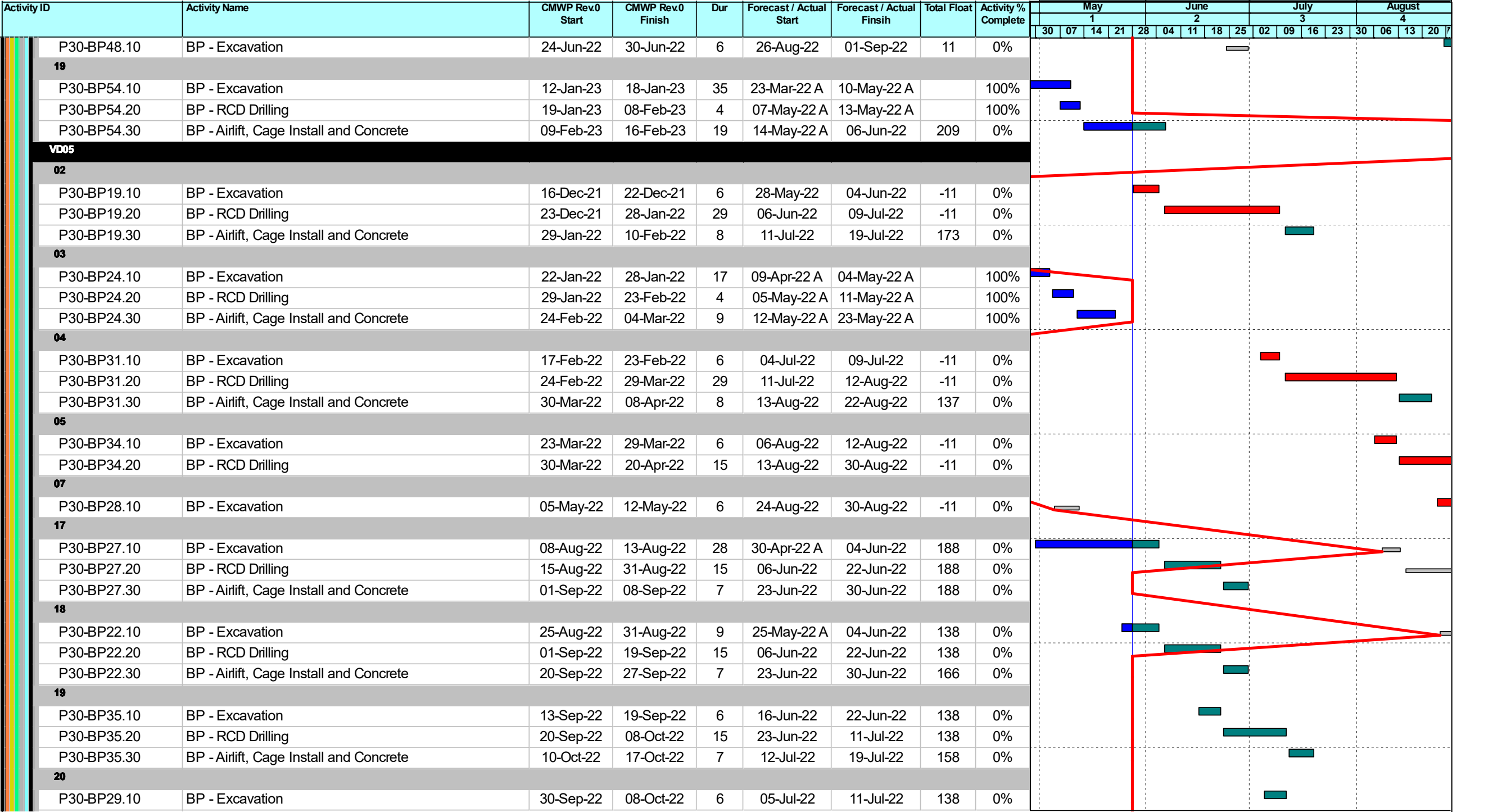


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 Data Date: 28-May-22
 Print Date: 30-May-22_17:50
 Page 19 of 31

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Retaining Basement and U/G Road in Zone 2B 2C
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	Planned Bar		Milestone
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									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13

CBA-BPC52Va.30	BP - Airlift, Cage Install and Concrete	14-May-22	19-May-22	5	29-Jun-22	05-Jul-22	110	0%
04								
P26-BP15.10	BP - Excavation	19-May-22	25-May-22	6	05-Jul-22	11-Jul-22	-38	0%
P26-BP15.20	BP - RCD Drilling	26-May-22	02-Jul-22	31	12-Jul-22	16-Aug-22	-38	0%
P26-BP15.30	BP - Airlift, Cage Install and Concrete	04-Jul-22	09-Jul-22	6	17-Aug-22	23-Aug-22	79	0%
05								
P26-BP16.10	BP - Excavation	24-Jun-22	02-Jul-22	7	09-Aug-22	16-Aug-22	-38	0%
P26-BP16.20	BP - RCD Drilling	04-Jul-22	19-Jul-22	14	17-Aug-22	01-Sep-22	-38	0%
06								
CBA-BPC54U.10	BP - Excavation	12-Jul-22	19-Jul-22	7	25-Aug-22	01-Sep-22	-38	0%

Socketed Steel H- Piles
Socketed Steel H- Pile Construction

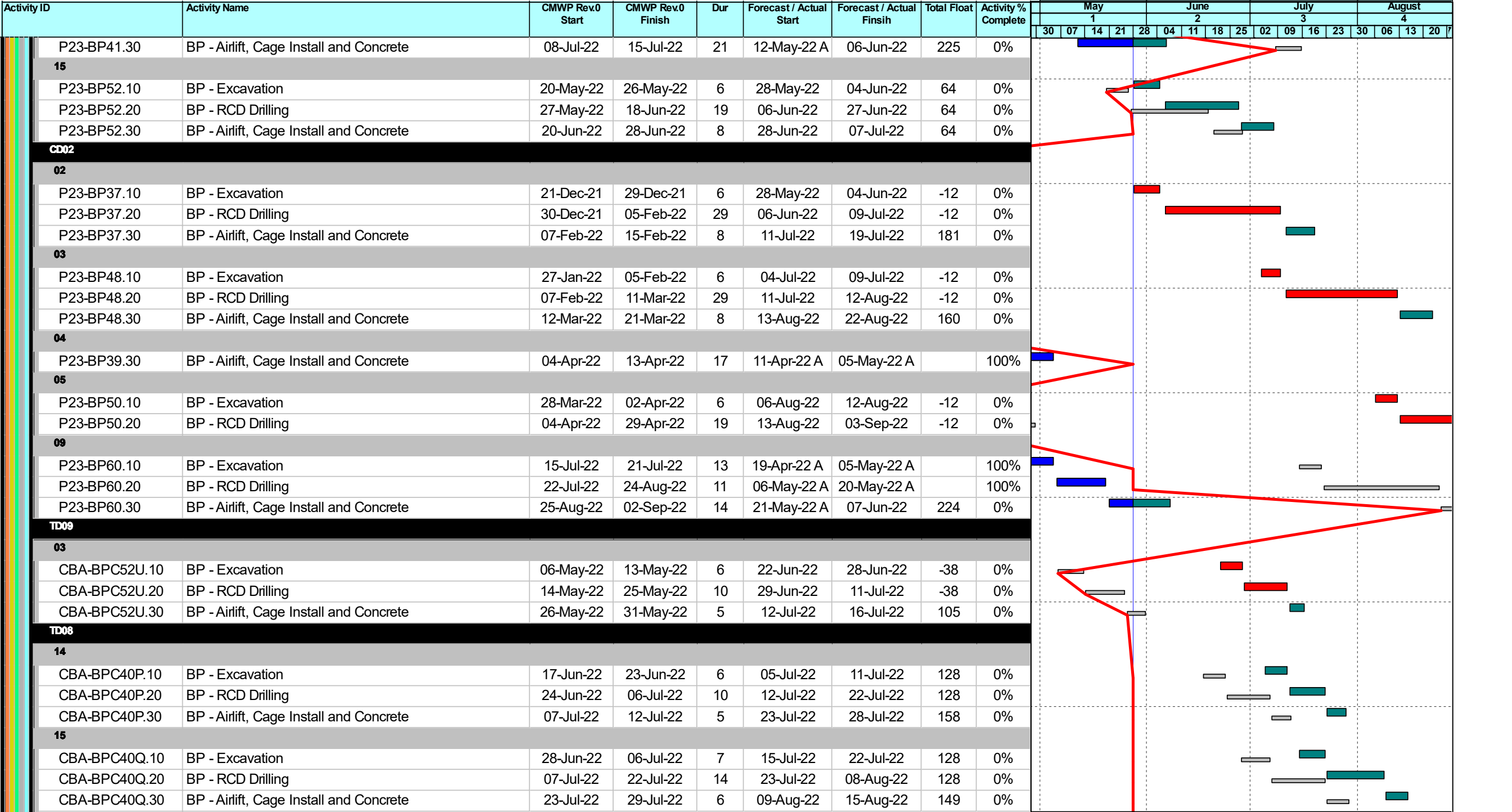
SHP-BW-52Y1a-P:	Socketed Steel H-Piling	21-Apr-22	30-Apr-22	9	28-May-22	08-Jun-22	42	0%
SHP-BW-53Y1-P2	Socketed Steel H-Piling	30-Apr-22	12-May-22	9	09-Jun-22	18-Jun-22	42	0%
SHP-BW-54Y1b-P:	Socketed Steel H-Piling	12-May-22	21-May-22	9	20-Jun-22	29-Jun-22	42	0%
SHP-C52Wa-P1	Socketed Steel H-Piling	17-May-22	26-May-22	9	24-Jun-22	05-Jul-22	42	0%
SHP-C52Wa-P2	Socketed Steel H-Piling	21-May-22	31-May-22	9	07-May-22 A	19-May-22 A		100%
SHP-C52Wa-P3	Socketed Steel H-Piling	26-May-22	06-Jun-22	9	19-Apr-22 A	29-Apr-22 A		100%
SHP-C52Wa-P5	Socketed Steel H-Piling	06-Jun-22	15-Jun-22	9	06-Jul-22	15-Jul-22	42	0%
SHP-C52Wa-P6	Socketed Steel H-Piling	10-Jun-22	20-Jun-22	9	11-Jul-22	20-Jul-22	42	0%
SHP-C52Xb-P1	Socketed Steel H-Piling	15-Jun-22	24-Jun-22	9	15-Jul-22	25-Jul-22	42	0%
SHP-C52Xb-P2	Socketed Steel H-Piling	20-Jun-22	29-Jun-22	9	20-Jul-22	29-Jul-22	42	0%
SHP-C52Xb-P3	Socketed Steel H-Piling	24-Jun-22	05-Jul-22	10	25-Apr-22 A	07-May-22 A		100%
SHP-C52Xb-P5	Socketed Steel H-Piling	05-Jul-22	14-Jul-22	7	19-May-22 A	27-May-22 A		100%
SHP-C52Xb-P6	Socketed Steel H-Piling	09-Jul-22	19-Jul-22	9	30-Jul-22	09-Aug-22	42	0%
SHP-C52Xc-P1	Socketed Steel H-Piling	14-Jul-22	23-Jul-22	9	04-Aug-22	13-Aug-22	42	0%
SHP-C52Xc-P2	Socketed Steel H-Piling	19-Jul-22	28-Jul-22	9	09-Aug-22	18-Aug-22	42	0%
SHP-C52Xc-P3	Socketed Steel H-Piling	23-Jul-22	02-Aug-22	6	16-May-22 A	23-May-22 A		100%
SHP-C52Xc-P4	Socketed Steel H-Piling	28-Jul-22	06-Aug-22	10	13-Apr-22 A	28-Apr-22 A		100%
SHP-C52Xc-P5	Socketed Steel H-Piling	02-Aug-22	11-Aug-22	9	13-Aug-22	23-Aug-22	89	0%
SHP-C52Xc-P6	Socketed Steel H-Piling	06-Aug-22	16-Aug-22	9	18-Aug-22	27-Aug-22	89	0%
SHP-C53W-P1	Socketed Steel H-Piling	11-Aug-22	20-Aug-22	9	23-Aug-22	01-Sep-22	89	0%
SHP-C53W-P2	Socketed Steel H-Piling	16-Aug-22	25-Aug-22	9	27-Aug-22	06-Sep-22	89	0%
SHP-C53W-P3	Socketed Steel H-Piling	20-Aug-22	30-Aug-22	9	06-May-22 A	18-May-22 A		100%
SHP-C53X-P3	Socketed Steel H-Piling	19-Sep-22	28-Sep-22	9	27-Apr-22 A	10-May-22 A		100%



- Planned Bar
- Critical Bar
- Baseline
- Milestone
- Critical MS
- Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0

Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



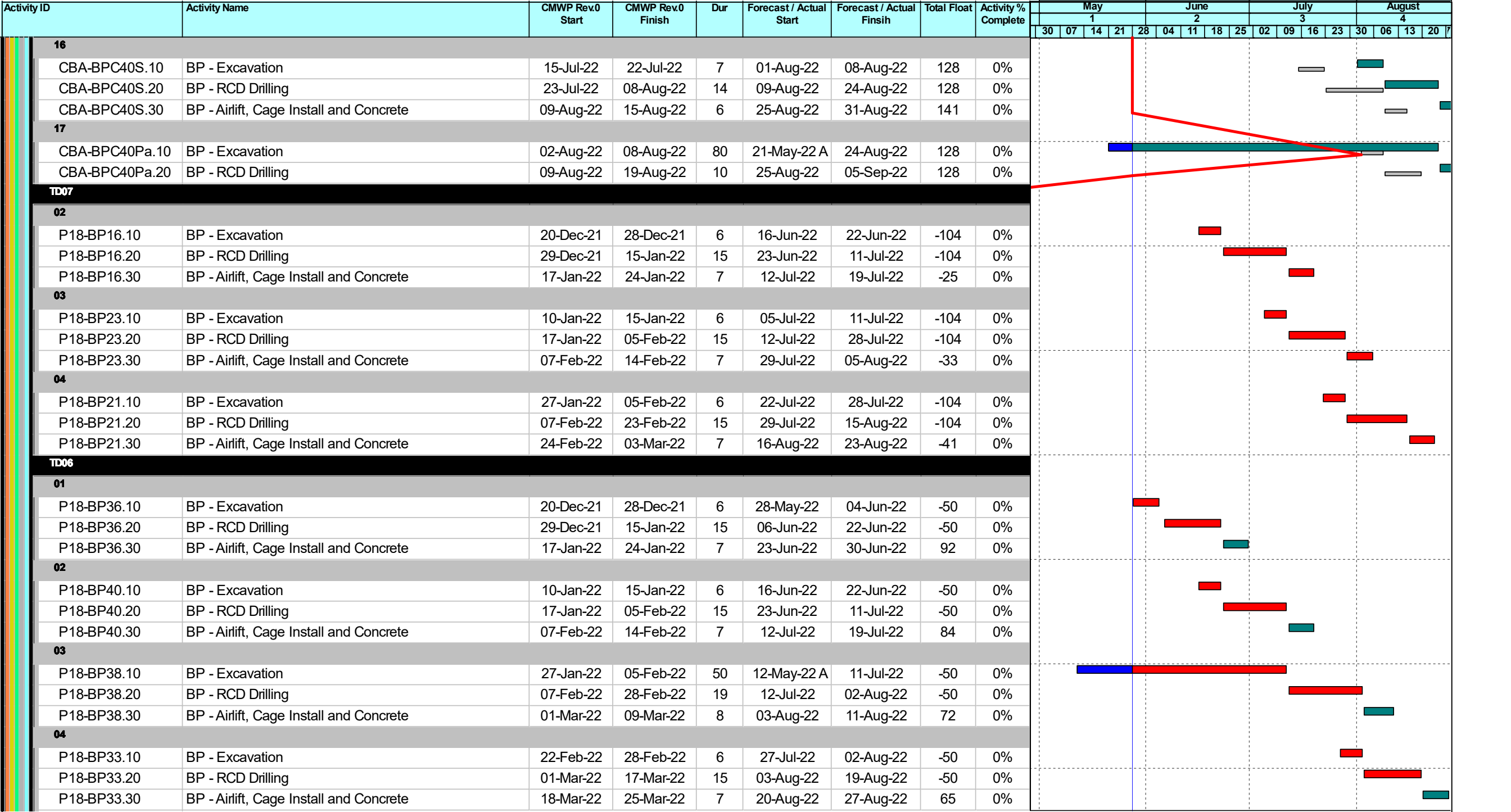
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 Page 24 of 31



West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

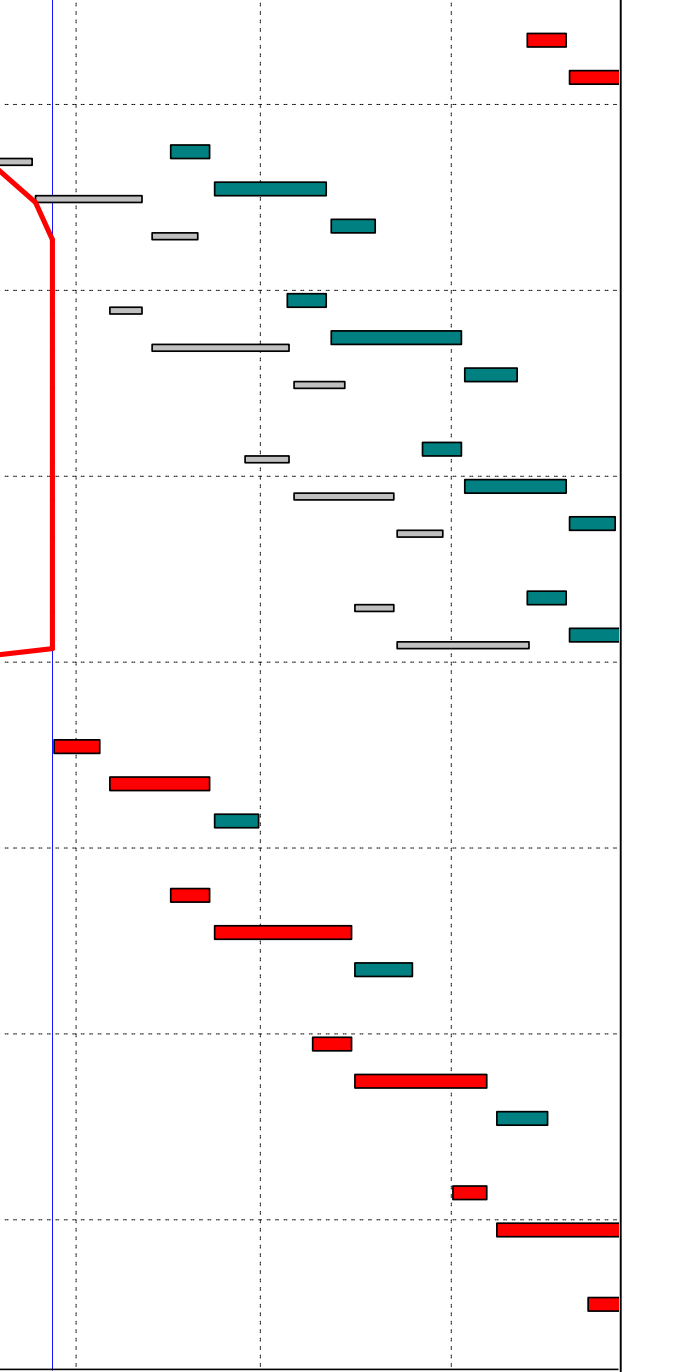
West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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 Based on CMWP Rev.0



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4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	CMWP Rev.0 Start	CMWP Rev.0 Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	May				June				July				August			
									1				2				3				4			
									30	07	14	21	28	04	11	18	25	02	09	16	23	30	06	13

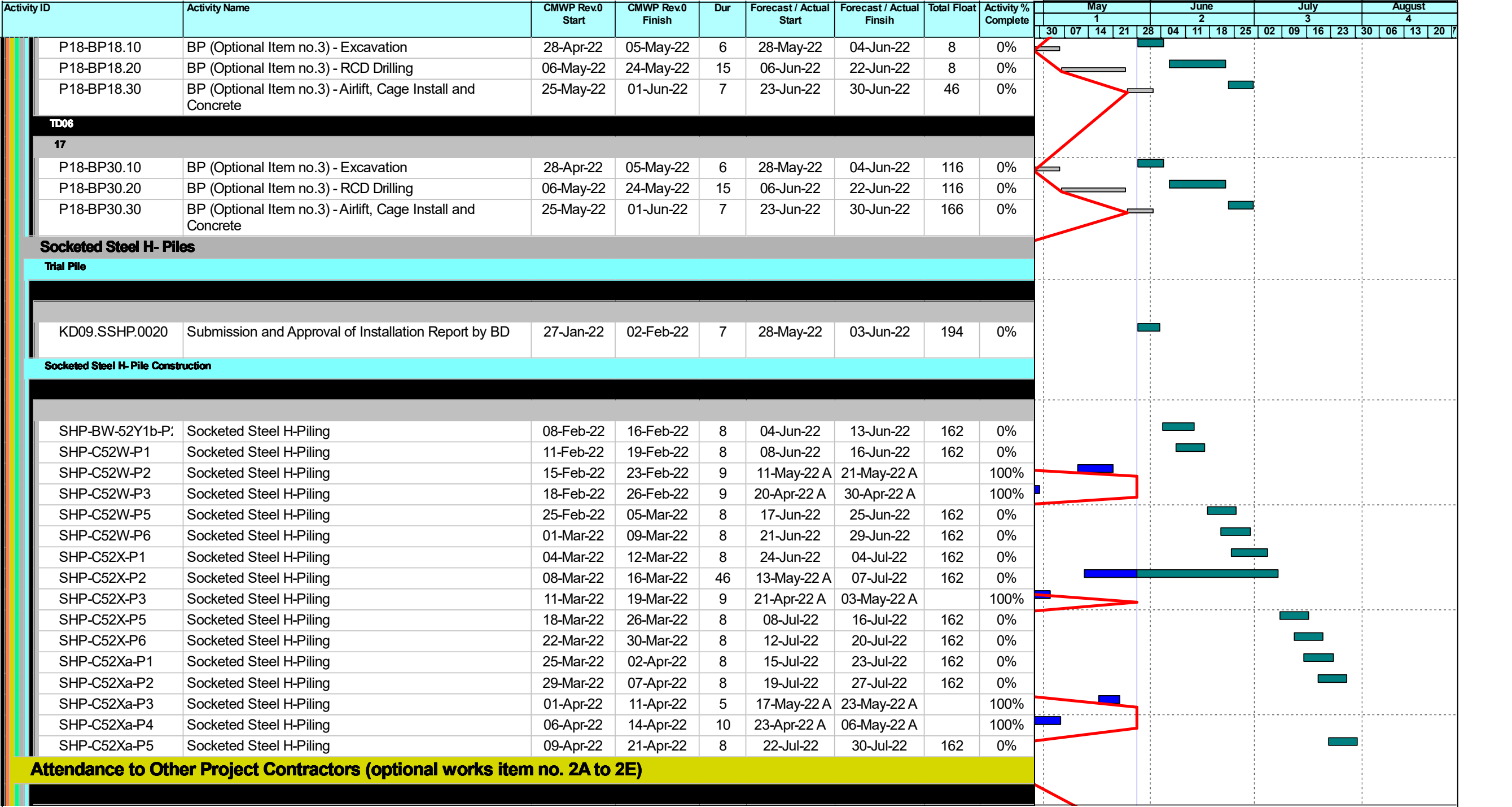
05									
P18-BP28.10	BP - Excavation	11-Mar-22	17-Mar-22	6	13-Aug-22	19-Aug-22	-50	0%	
P18-BP28.20	BP - RCD Drilling	18-Mar-22	04-Apr-22	15	20-Aug-22	06-Sep-22	-50	0%	
18									
P18-BP27.10	BP - Excavation	18-May-22	24-May-22	6	16-Jun-22	22-Jun-22	116	0%	
P18-BP27.20	BP - RCD Drilling	25-May-22	11-Jun-22	15	23-Jun-22	11-Jul-22	116	0%	
P18-BP27.30	BP - Airlift, Cage Install and Concrete	13-Jun-22	20-Jun-22	7	12-Jul-22	19-Jul-22	158	0%	
19									
P18-BP37.10	BP - Excavation	06-Jun-22	11-Jun-22	6	05-Jul-22	11-Jul-22	116	0%	
P18-BP37.20	BP - RCD Drilling	13-Jun-22	05-Jul-22	19	12-Jul-22	02-Aug-22	116	0%	
P18-BP37.30	BP - Airlift, Cage Install and Concrete	06-Jul-22	14-Jul-22	8	03-Aug-22	11-Aug-22	146	0%	
20									
P18-BP35.10	BP - Excavation	28-Jun-22	05-Jul-22	6	27-Jul-22	02-Aug-22	116	0%	
P18-BP35.20	BP - RCD Drilling	06-Jul-22	22-Jul-22	15	03-Aug-22	19-Aug-22	116	0%	
P18-BP35.30	BP - Airlift, Cage Install and Concrete	23-Jul-22	30-Jul-22	7	20-Aug-22	27-Aug-22	139	0%	
21									
P18-BP19.10	BP - Excavation	16-Jul-22	22-Jul-22	6	13-Aug-22	19-Aug-22	116	0%	
P18-BP19.20	BP - RCD Drilling	23-Jul-22	13-Aug-22	19	20-Aug-22	10-Sep-22	116	0%	
TD05									
01									
P18-BP48.10	BP - Excavation	20-Dec-21	28-Dec-21	6	28-May-22	04-Jun-22	-21	0%	
P18-BP48.20	BP - RCD Drilling	29-Dec-21	15-Jan-22	15	06-Jun-22	22-Jun-22	-21	0%	
P18-BP48.30	BP - Airlift, Cage Install and Concrete	17-Jan-22	24-Jan-22	7	23-Jun-22	30-Jun-22	109	0%	
02									
P18-BP60.10	BP - Excavation	10-Jan-22	15-Jan-22	6	16-Jun-22	22-Jun-22	-21	0%	
P18-BP60.20	BP - RCD Drilling	17-Jan-22	10-Feb-22	19	23-Jun-22	15-Jul-22	-21	0%	
P18-BP60.30	BP - Airlift, Cage Install and Concrete	11-Feb-22	19-Feb-22	8	16-Jul-22	25-Jul-22	97	0%	
03									
P18-BP63.10	BP - Excavation	04-Feb-22	10-Feb-22	6	09-Jul-22	15-Jul-22	-21	0%	
P18-BP63.20	BP - RCD Drilling	11-Feb-22	04-Mar-22	19	16-Jul-22	06-Aug-22	-21	0%	
P18-BP63.30	BP - Airlift, Cage Install and Concrete	05-Mar-22	14-Mar-22	8	08-Aug-22	16-Aug-22	86	0%	
04									
P18-BP62.10	BP - Excavation	26-Feb-22	04-Mar-22	6	01-Aug-22	06-Aug-22	-21	0%	
P18-BP62.20	BP - RCD Drilling	05-Mar-22	26-Mar-22	19	08-Aug-22	29-Aug-22	-21	0%	
05									
P18-BP61.10	BP - Excavation	21-Mar-22	26-Mar-22	6	23-Aug-22	29-Aug-22	-21	0%	



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 27 May 2022
 Based on CMWP Rev.0

		Date	Revision	Checked	Approved
		4-Mar-22	Rev.0	KL	B



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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		4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June			July			August			September	
									21	28	04	11	18	25	02	09	16	23	30

Piling for Integrated Basement and U/G Road in Zone 2B & 2C

Contract Dates

Key Dates

KD for Zone 2B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
KD01	KD01 (Stage 1-1) - 18 May 2022		18-May-22	0		25-Jun-22*	-33	0%
KD03	KD03 (Stage 3-1) - 26 Aug 2022		26-Aug-22	0		16-Sep-22*	-21	0%

KD for Zone 2C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
KD04	KD04 (Stage 4-1) - 26 Aug 2022		25-Aug-22	0		26-Aug-22*	0	0%

Optional Works subjected to CA's Instruction

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
CO2A10	Last CAI date for Optional Works Item No.2A (330 Days to 390 Days after Commencement) if item No. 3 is	16-Aug-22		0	16-Aug-22		71	0%

Access Dates of Site Portion

270 days after Commencement

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
ACB35	Access to Site Portion B35 (To be agreed with the Zone 2A contractor)	18-Apr-22		0	18-Jun-22		-9	0%

Mobilization Stage

Site Mobilization Works

Pre-Construction Works before Piling Commencement

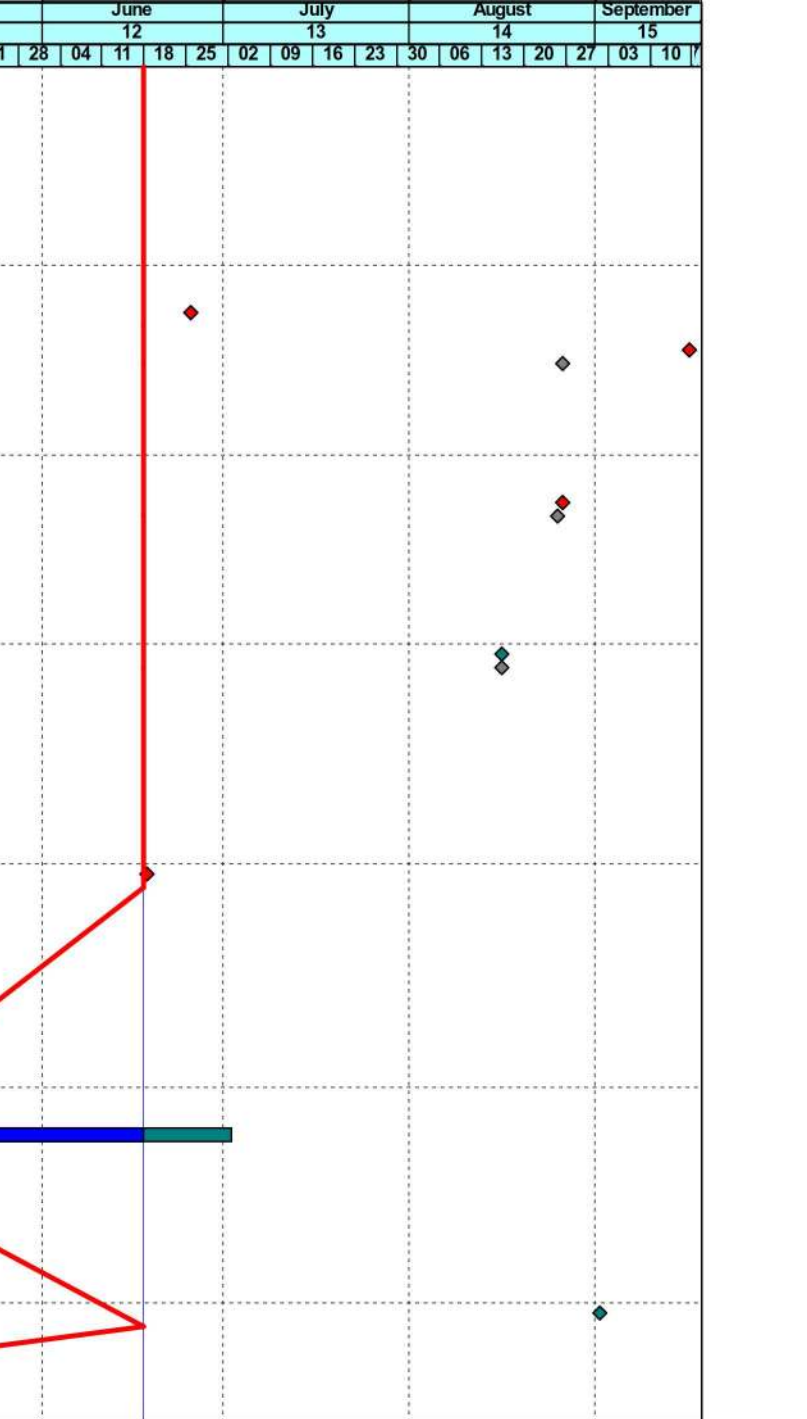
Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
MOBP.10.1300	Trial Pit for Drillholes & Removal of Existing Substructures / Ground Slab [503 nos]	19-Aug-21	30-Apr-22	318	19-Aug-21 A	02-Jul-22	85	97%

End of Mobilization

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete
MOBP.99.1080	End of Mobilization Stage		18-May-22	0		01-Sep-22*	24	0%

Construction Stage

Pile Construction



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



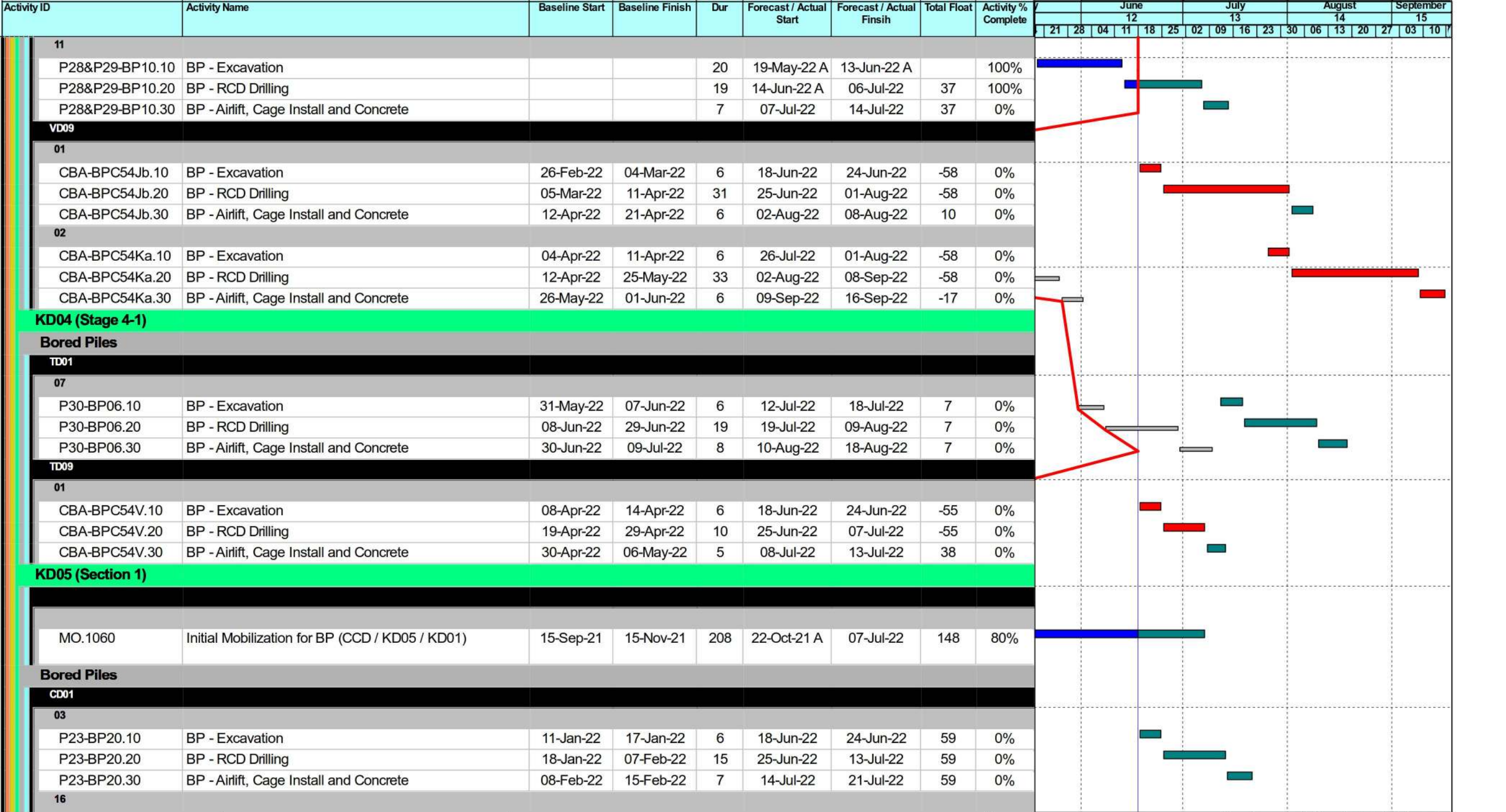
Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June			July			August			September	
									21	28	04	11	18	25	02	09	16	23	30
Initial Mobilization																			
MO.1010	Initial Mobilization for Predrilling of BP (CCD / KD05 / KD01)	23-Jul-21	07-Sep-21	275	23-Jul-21 A	27-Jun-22	-27	80%											
MO.1020	Initial Mobilization for Predrilling of BP (CCE / KD06)	23-Jul-21	07-Sep-21	249	23-Jul-21 A	27-May-22 A		50%											
MO.1030	Initial Mobilization for Predrilling of BP (CCF / KD07 / KD03)	23-Jul-21	07-Sep-21	307	23-Jul-21 A	04-Aug-22	19	85%											
MO.1050	Initial Mobilization for Predrilling of BP (CCH / KD09 / KD02)	23-Jul-21	07-Sep-21	277	23-Jul-21 A	29-Jun-22	99	60%											
Predrilling																			
PD.1080	Predrilling for BP in KD05 [76 nos.]	30-Sep-21	30-Mar-22	217	30-Sep-21 A	27-Jun-22	-39	58%											
PD.1100	Predrilling for BP in KD06 [95 nos.] incl. 5 additional nos.	30-Sep-21	23-May-22	196	30-Sep-21 A	04-Jun-22 A		55%											
PD.1120	Predrilling for BP in KD07 [90 nos.] incl. 2 additional nos.	30-Sep-21	23-May-22	258	30-Sep-21 A	04-Aug-22	150	85%											
PD.1160	Predrilling for BP in KD09 [149 nos.] incl. 4 additional nos.	30-Sep-21	30-Mar-22	200	30-Sep-21 A	29-Jun-22	86	70%											
KD01 (Stage 1-1)																			
Bored Piles																			
CD07																			
07																			
CBA-BPC41Jb.10	BP - Excavation	13-Apr-22	22-Apr-22	11	13-May-22 A	26-May-22 A		100%											
CBA-BPC41Jb.20	BP - RCD Drilling	23-Apr-22	05-May-22	4	27-May-22 A	01-Jun-22 A		100%											
CBA-BPC41Jb.30	BP - Airlift, Cage Install and Concrete	06-May-22	12-May-22	12	02-Jun-22 A	17-Jun-22 A		100%											
14																			
CBA-BP04.10	BP - Excavation	12-Apr-22	22-Apr-22	12	20-May-22 A	04-Jun-22 A		100%											
CBA-BP04.20	BP - RCD Drilling	23-Apr-22	11-May-22	2	06-Jun-22 A	08-Jun-22 A		100%											
CBA-BP04.30	BP - Airlift, Cage Install and Concrete	12-May-22	18-May-22	15	09-Jun-22 A	25-Jun-22	-33	0%											
CD05																			
05																			
P22&P19-BP21.30	BP - Airlift, Cage Install and Concrete	19-Mar-22	28-Mar-22	25	20-Apr-22 A	21-May-22 A		100%											
KD03 (Stage 3-1)																			
Bored Piles																			
VD06																			

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 17 June 2022
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4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June				July				August				September							
									21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	03	10			
									Gantt Chart																			
P22&P19-BP17.30	BP - Airlift, Cage Install and Concrete	26-May-22	04-Jun-22	8	19-Jul-22	27-Jul-22	54	0%																				
CD04																												
01																												
P17-BP03.10	BP - Excavation	24-Nov-21	30-Nov-21	6	18-Jun-22	24-Jun-22	-61	0%																				
P17-BP03.20	BP - RCD Drilling	01-Dec-21	17-Dec-21	15	25-Jun-22	13-Jul-22	-61	0%																				
P17-BP03.30	BP - Airlift, Cage Install and Concrete	18-Dec-21	28-Dec-21	7	14-Jul-22	21-Jul-22	52	0%																				
02																												
P17-BP12.10	BP - Excavation	20-Dec-21	28-Dec-21	6	07-Jul-22	13-Jul-22	-61	0%																				
P17-BP12.20	BP - RCD Drilling	29-Dec-21	15-Jan-22	15	14-Jul-22	30-Jul-22	-61	0%																				
P17-BP12.30	BP - Airlift, Cage Install and Concrete	17-Jan-22	24-Jan-22	7	01-Aug-22	08-Aug-22	44	0%																				
04																												
P17-BP14.10	BP - Excavation	27-Jan-22	05-Feb-22	14	17-May-22 A	02-Jun-22 A		100%																				
P17-BP14.20	BP - RCD Drilling	07-Feb-22	28-Feb-22	7	04-Jun-22 A	13-Jun-22 A		100%																				
P17-BP14.30	BP - Airlift, Cage Install and Concrete	01-Mar-22	09-Mar-22	12	14-Jun-22 A	27-Jun-22	30	100%																				
05																												
P17-BP16.10	BP - Excavation	22-Feb-22	28-Feb-22	6	25-Jul-22	30-Jul-22	-61	0%																				
P17-BP16.20	BP - RCD Drilling	01-Mar-22	17-Mar-22	15	01-Aug-22	17-Aug-22	-61	0%																				
P17-BP16.30	BP - Airlift, Cage Install and Concrete	18-Mar-22	25-Mar-22	7	18-Aug-22	25-Aug-22	-13	0%																				
06																												
P17-BP02.10	BP - Excavation	11-Mar-22	17-Mar-22	6	11-Aug-22	17-Aug-22	-61	0%																				
P17-BP02.20	BP - RCD Drilling	18-Mar-22	04-Apr-22	15	18-Aug-22	03-Sep-22	-61	0%																				
P17-BP02.30	BP - Airlift, Cage Install and Concrete	06-Apr-22	13-Apr-22	7	05-Sep-22	13-Sep-22	-21	0%																				
07																												
P17-BP08.10	BP - Excavation	29-Mar-22	04-Apr-22	6	29-Aug-22	03-Sep-22	-61	0%																				
P17-BP08.20	BP - RCD Drilling	06-Apr-22	26-Apr-22	15	05-Sep-22	22-Sep-22	-61	0%																				
14																												
P17-BP17.10	BP - Excavation	09-Jun-22	15-Jun-22	6	25-Jul-22	30-Jul-22	-38	0%																				
P17-BP17.20	BP - RCD Drilling	16-Jun-22	04-Jul-22	15	01-Aug-22	17-Aug-22	-38	0%																				
P17-BP17.30	BP - Airlift, Cage Install and Concrete	05-Jul-22	12-Jul-22	7	18-Aug-22	25-Aug-22	-6	0%																				
15																												
P17-BP15.10	BP - Excavation	27-Jun-22	04-Jul-22	6	11-Aug-22	17-Aug-22	-38	0%																				
P17-BP15.20	BP - RCD Drilling	05-Jul-22	21-Jul-22	15	18-Aug-22	03-Sep-22	-38	0%																				
P17-BP15.30	BP - Airlift, Cage Install and Concrete	22-Jul-22	29-Jul-22	7	05-Sep-22	13-Sep-22	-14	0%																				
16																												
P17-BP07.10	BP - Excavation	15-Jul-22	21-Jul-22	6	29-Aug-22	03-Sep-22	-38	0%																				
P17-BP07.20	BP - RCD Drilling	22-Jul-22	08-Aug-22	15	05-Sep-22	22-Sep-22	-38	0%																				
TD08																												







	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June		July		August		September	
									21	28	04	11	18	25	02	09
05																
CBA-BPC400.10	BP - Excavation	08-Jan-22	14-Jan-22	6	18-Jun-22	24-Jun-22	66	0%								
CBA-BPC400.20	BP - RCD Drilling	15-Jan-22	26-Jan-22	10	25-Jun-22	07-Jul-22	66	0%								
CBA-BPC400.30	BP - Airlift, Cage Install and Concrete	27-Jan-22	04-Feb-22	5	08-Jul-22	13-Jul-22	66	0%								
07																
CBA-BPC38Jb.10	BP - Excavation	04-Feb-22	10-Feb-22	14	03-May-22 A	20-May-22 A		100%								
CBA-BPC38Jb.20	BP - RCD Drilling	11-Feb-22	22-Feb-22	10	21-May-22 A	02-Jun-22 A		100%								
CBA-BPC38Jb.30	BP - Airlift, Cage Install and Concrete	23-Feb-22	28-Feb-22	3	04-Jun-22 A	08-Jun-22 A		100%								
11																
CBA-BPC40Na.10	BP - Excavation	12-May-22	18-May-22	20	13-May-22 A	07-Jun-22 A		100%								
CBA-BPC40Na.20	BP - RCD Drilling	19-May-22	30-May-22	3	08-Jun-22 A	11-Jun-22 A		100%								
CBA-BPC40Na.30	BP - Airlift, Cage Install and Concrete	31-May-22	06-Jun-22	4	13-Jun-22 A	17-Jun-22 A		100%								
13																
CBA-BPC39K.30	BP - Airlift, Cage Install and Concrete	24-Jun-22	29-Jun-22	2	18-May-22 A	20-May-22 A		100%								
TD07																
01																
P18-BP10.10	BP - Excavation	19-Nov-21	25-Nov-21	6	18-Jun-22	24-Jun-22	-121	0%								
P18-BP10.20	BP - RCD Drilling	26-Nov-21	13-Dec-21	15	25-Jun-22	13-Jul-22	-121	0%								
P18-BP10.30	BP - Airlift, Cage Install and Concrete	14-Dec-21	21-Dec-21	7	14-Jul-22	21-Jul-22	-34	0%								
05																
P18-BP02.10	BP - Excavation	17-Feb-22	23-Feb-22	6	29-Aug-22	03-Sep-22	-121	0%								
P18-BP02.20	BP - RCD Drilling	24-Feb-22	12-Mar-22	15	05-Sep-22	22-Sep-22	-121	0%								
06																
P18-BP05.10	BP - Excavation	07-Mar-22	12-Mar-22	6	16-Sep-22	22-Sep-22	-121	0%								
16																
P18-BP01.10	BP - Excavation	18-May-22	24-May-22	6	07-Jul-22	13-Jul-22	-9	0%								
P18-BP01.20	BP - RCD Drilling	25-May-22	16-Jun-22	19	14-Jul-22	04-Aug-22	-9	0%								
P18-BP01.30	BP - Airlift, Cage Install and Concrete	17-Jun-22	25-Jun-22	8	05-Aug-22	13-Aug-22	17	0%								
17																
P18-BP08.10	BP - Excavation	10-Jun-22	16-Jun-22	6	29-Jul-22	04-Aug-22	-9	0%								
P18-BP08.20	BP - RCD Drilling	17-Jun-22	09-Jul-22	19	05-Aug-22	26-Aug-22	-9	0%								
P18-BP08.30	BP - Airlift, Cage Install and Concrete	11-Jul-22	19-Jul-22	8	27-Aug-22	05-Sep-22	6	0%								
Optional Item no. 3																
CD04																
08																
P17-BP13.10	BP (Optional Item no.3) - Excavation	28-Apr-22	05-May-22	6	16-Sep-22	22-Sep-22	-61	0%								
12																







	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

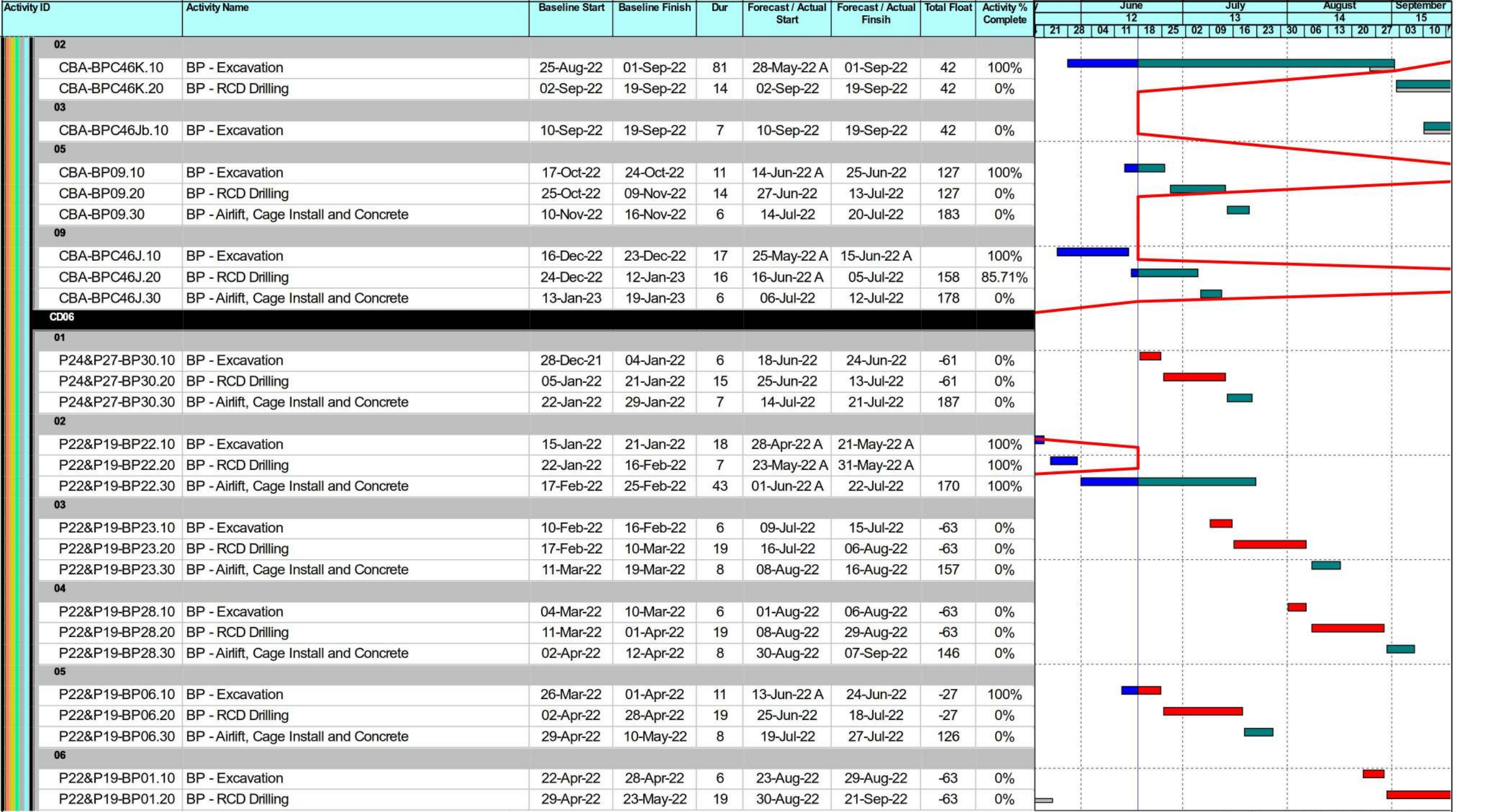
Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June				July				August				September				
									21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	03	10
P23-BP12.10	BP - Excavation	29-Jun-22	06-Jul-22	19	10-May-22 A	01-Jun-22 A		100%																	
P23-BP12.20	BP - RCD Drilling	07-Jul-22	28-Jul-22	32	02-Jun-22 A	11-Jul-22	44	100%																	
P23-BP12.30	BP - Airlift, Cage Install and Concrete	29-Jul-22	06-Aug-22	8	12-Jul-22	20-Jul-22	188	0%																	
14																									
P23-BP13.30	BP - Airlift, Cage Install and Concrete	06-Feb-23	13-Feb-23	11	13-May-22 A	26-May-22 A		100%																	
VD02																									
15																									
P24&P27-BP09.10	BP - Excavation	23-Jul-22	29-Jul-22	50	11-Jun-22 A	09-Aug-22	57	100%																	
P24&P27-BP09.20	BP - RCD Drilling	30-Jul-22	01-Sep-22	29	10-Aug-22	13-Sep-22	57	0%																	
P24&P27-BP09.30	BP - Airlift, Cage Install and Concrete	02-Sep-22	10-Sep-22	8	14-Sep-22	22-Sep-22	134	0%																	
VD07																									
02																									
P24&P27-BP27.10	BP - Excavation	24-Feb-22	02-Mar-22	6	23-Jul-22	29-Jul-22	-52	0%																	
P24&P27-BP27.20	BP - RCD Drilling	03-Mar-22	24-Mar-22	19	30-Jul-22	20-Aug-22	-52	0%																	
P24&P27-BP27.30	BP - Airlift, Cage Install and Concrete	25-Mar-22	02-Apr-22	8	22-Aug-22	30-Aug-22	153	0%																	
03																									
P24&P27-BP28.10	BP - Excavation	18-Mar-22	24-Mar-22	22	29-Apr-22 A	27-May-22 A		100%																	
P24&P27-BP28.20	BP - RCD Drilling	25-Mar-22	20-Apr-22	36	28-May-22 A	11-Jul-22	188	100%																	
P24&P27-BP28.30	BP - Airlift, Cage Install and Concrete	21-Apr-22	29-Apr-22	8	12-Jul-22	20-Jul-22	188	0%																	
VD08																									
01																									
P23-BP07.10	BP - Excavation	15-Jun-22	21-Jun-22	6	18-Jun-22	24-Jun-22	19	0%																	
P23-BP07.20	BP - RCD Drilling	22-Jun-22	14-Jul-22	19	25-Jun-22	18-Jul-22	19	0%																	
P23-BP07.30	BP - Airlift, Cage Install and Concrete	15-Jul-22	23-Jul-22	8	19-Jul-22	27-Jul-22	134	0%																	
02																									
P24&P27-BP06.10	BP - Excavation	08-Jul-22	14-Jul-22	6	12-Jul-22	18-Jul-22	48	0%																	
P24&P27-BP06.20	BP - RCD Drilling	15-Jul-22	17-Aug-22	29	19-Jul-22	20-Aug-22	48	0%																	
P24&P27-BP06.30	BP - Airlift, Cage Install and Concrete	18-Aug-22	26-Aug-22	8	22-Aug-22	30-Aug-22	113	0%																	
03																									
P24&P27-BP04.10	BP - Excavation	11-Aug-22	17-Aug-22	6	15-Aug-22	20-Aug-22	48	0%																	
P24&P27-BP04.20	BP - RCD Drilling	18-Aug-22	21-Sep-22	29	22-Aug-22	24-Sep-22	48	0%																	
08																									
P24&P27-BP36.10	BP - Excavation	08-Jul-22	14-Jul-22	6	12-Jul-22	18-Jul-22	19	0%																	
P24&P27-BP36.20	BP - RCD Drilling	15-Jul-22	05-Aug-22	19	19-Jul-22	09-Aug-22	19	0%																	
P24&P27-BP36.30	BP - Airlift, Cage Install and Concrete	06-Aug-22	15-Aug-22	8	10-Aug-22	18-Aug-22	115	0%																	
09																									
P24&P27-BP29.10	BP - Excavation	30-Jul-22	05-Aug-22	6	03-Aug-22	09-Aug-22	19	0%																	

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

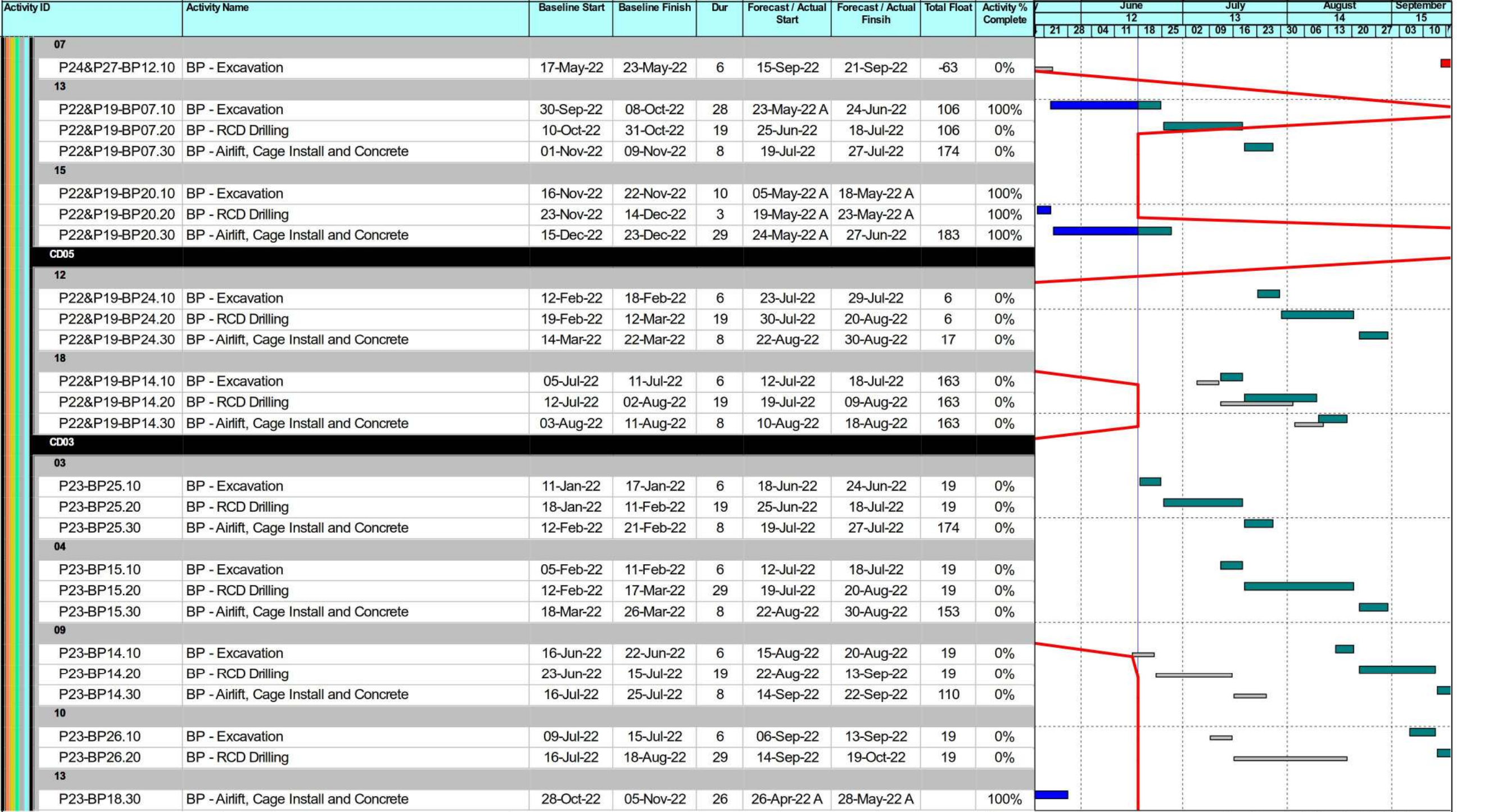


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

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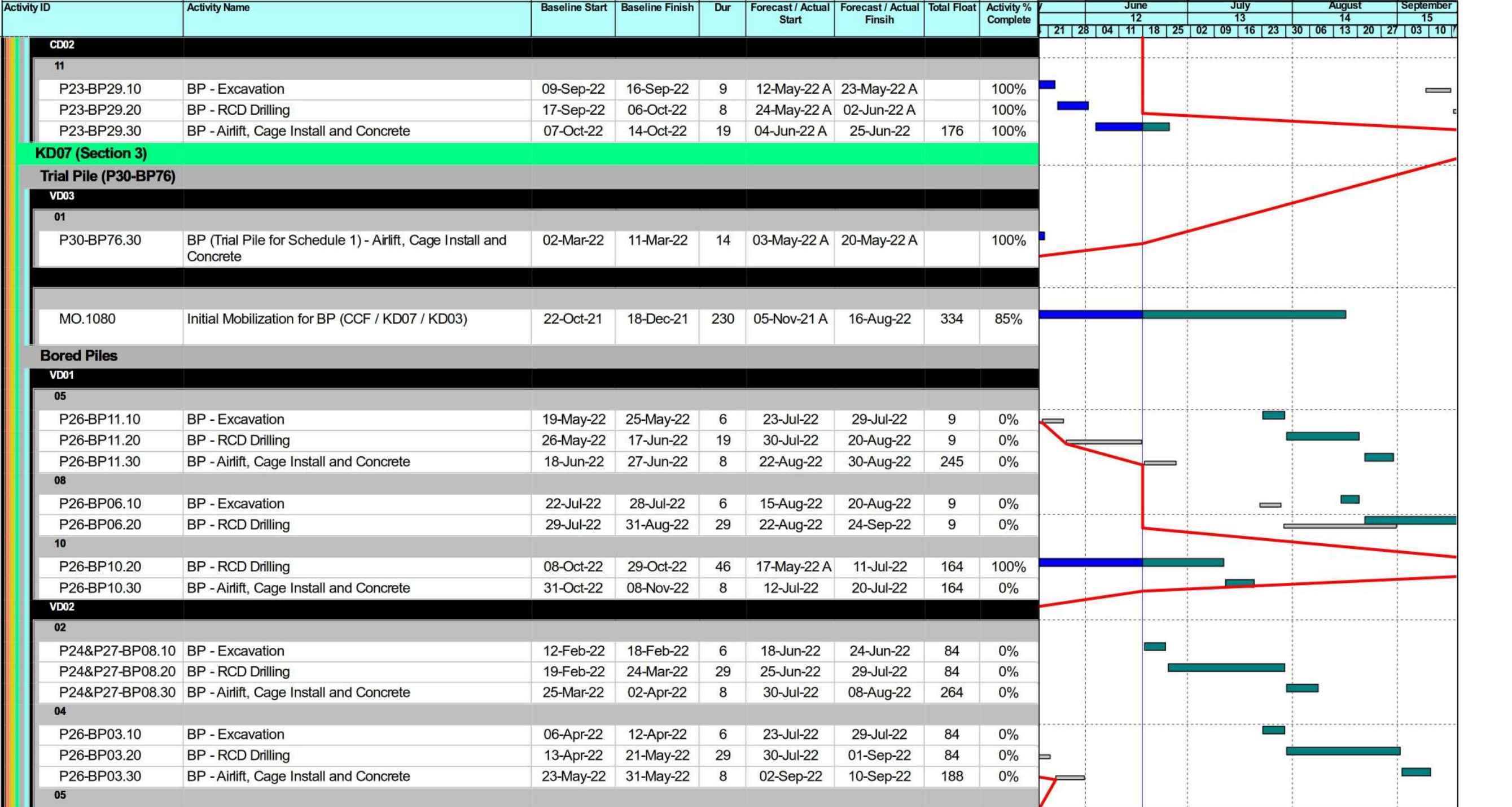


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
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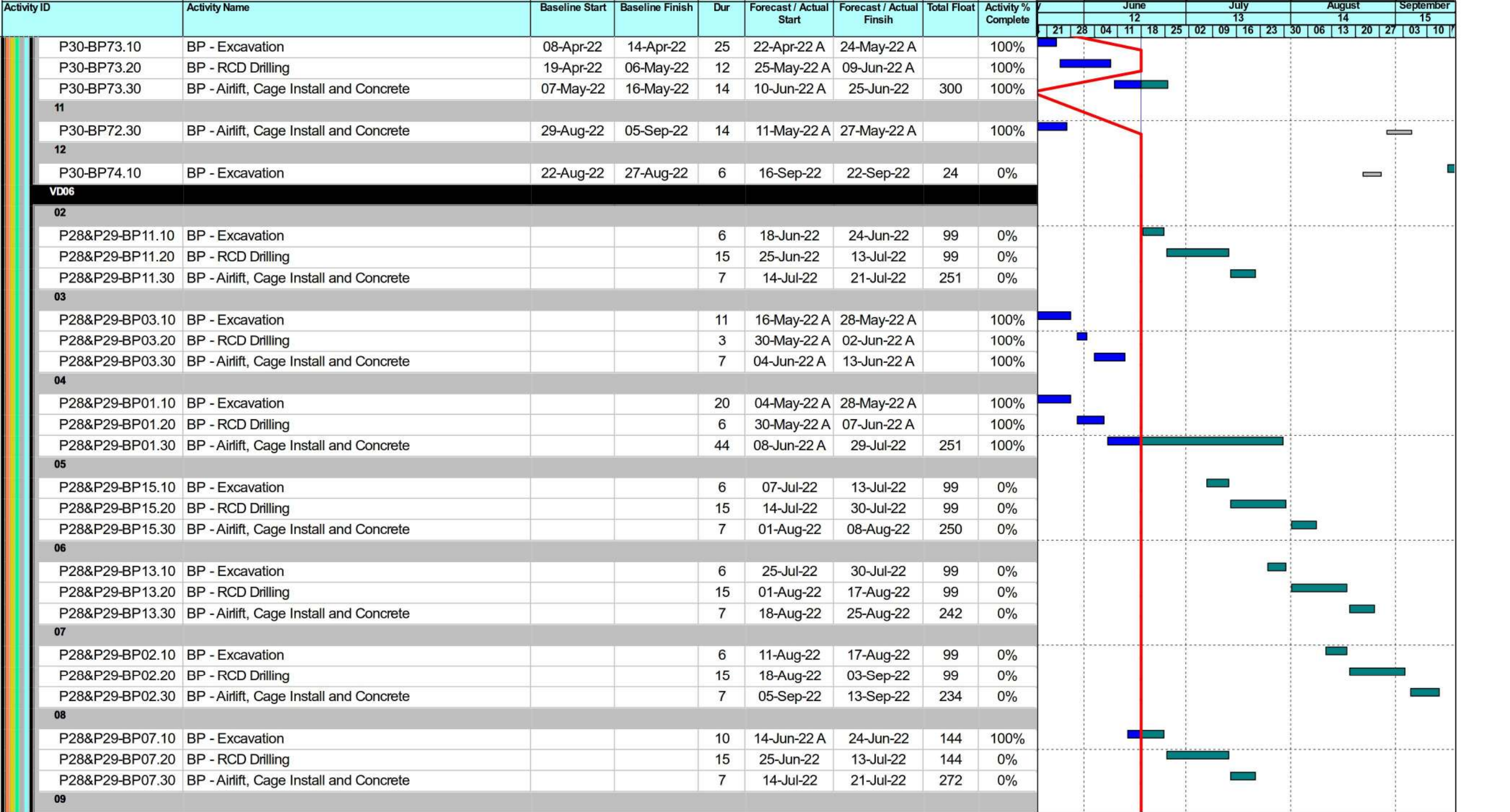


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



- Planned Bar
- Critical Bar
- Baseline
- Milestone
- Critical MS
- Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



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4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June			July			August			September	
									21	28	04	11	18	25	02	09	16	23	30

KD08 (Section 4)

Trial Pile (P30-BP15)

MO.1090

MO.1090	Initial Mobilization for BP (CCG / KD08 / KD04)	15-Sep-21	15-Nov-21	230	05-Nov-21 A	16-Aug-22	226	90%
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Bored Piles

VD01

04

P26-BP12.10	BP - Excavation	09-Apr-22	19-Apr-22	6	18-Jun-22	24-Jun-22	9	0%
P26-BP12.20	BP - RCD Drilling	20-Apr-22	25-May-22	29	25-Jun-22	29-Jul-22	9	0%
P26-BP12.30	BP - Airlift, Cage Install and Concrete	26-May-22	04-Jun-22	8	30-Jul-22	08-Aug-22	156	0%

VD03

03

P30-BP44.10	BP - Excavation	29-Mar-22	04-Apr-22	6	18-Jun-22	24-Jun-22	-3	0%
P30-BP44.20	BP - RCD Drilling	06-Apr-22	14-May-22	29	25-Jun-22	29-Jul-22	-3	0%
P30-BP44.30	BP - Airlift, Cage Install and Concrete	16-May-22	24-May-22	8	30-Jul-22	08-Aug-22	140	0%

04

P30-BP50.10	BP - Excavation	07-May-22	14-May-22	6	23-Jul-22	29-Jul-22	-3	0%
P30-BP50.20	BP - RCD Drilling	16-May-22	07-Jun-22	19	30-Jul-22	20-Aug-22	-3	0%
P30-BP50.30	BP - Airlift, Cage Install and Concrete	08-Jun-22	16-Jun-22	8	22-Aug-22	30-Aug-22	129	0%

05

P30-BP55.10	BP - Excavation	31-May-22	07-Jun-22	6	15-Aug-22	20-Aug-22	-3	0%
P30-BP55.20	BP - RCD Drilling	08-Jun-22	29-Jun-22	19	22-Aug-22	13-Sep-22	-3	0%
P30-BP55.30	BP - Airlift, Cage Install and Concrete	30-Jun-22	09-Jul-22	8	14-Sep-22	22-Sep-22	118	0%

10

P30-BP45.10	BP - Excavation	28-Nov-22	03-Dec-22	29	14-May-22 A	18-Jun-22	144	100%
P30-BP45.20	BP - RCD Drilling	05-Dec-22	10-Jan-23	29	18-Jun-22	22-Jul-22	144	0%
P30-BP45.30	BP - Airlift, Cage Install and Concrete	11-Jan-23	19-Jan-23	8	23-Jul-22	01-Aug-22	154	0%

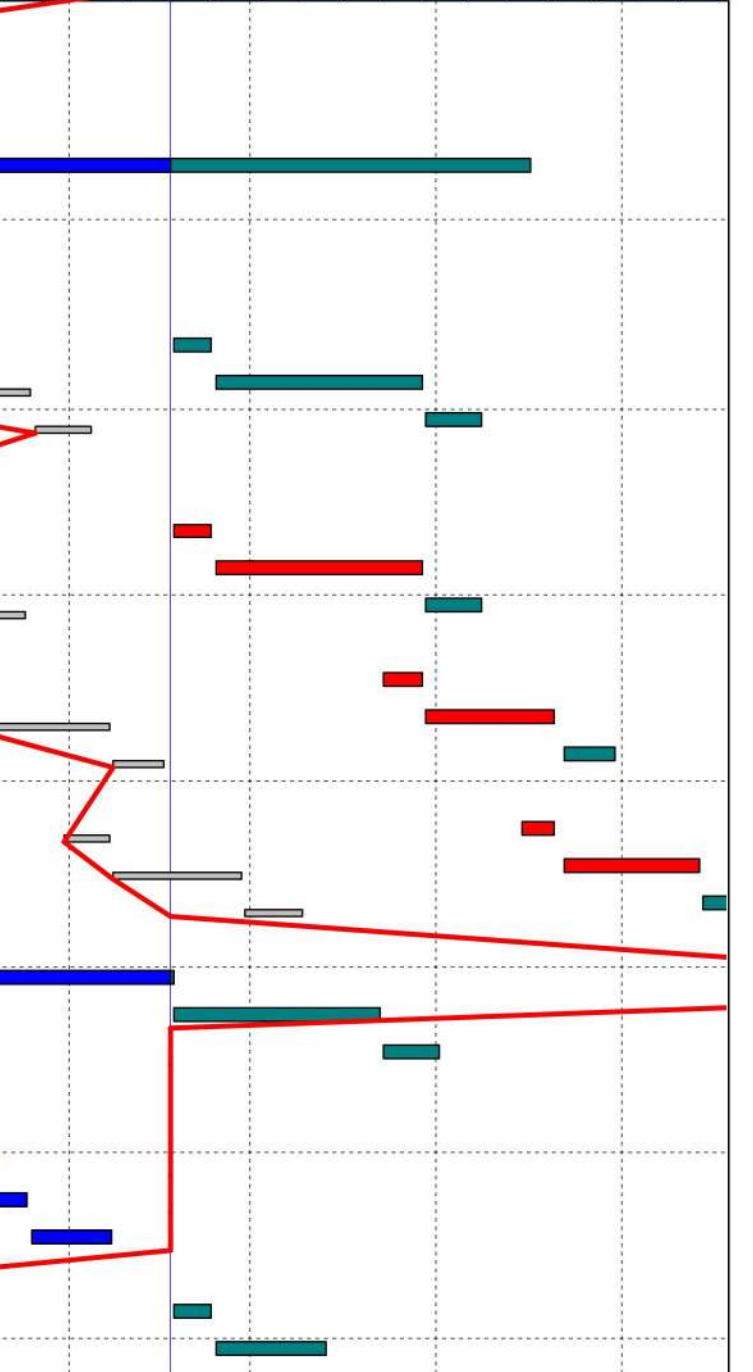
VD04

01

P30-BP41.10	BP - Excavation	19-Jan-22	25-Jan-22	78	10-Feb-22 A	19-May-22 A		100%
P30-BP41.20	BP - RCD Drilling	26-Jan-22	15-Feb-22	4	20-May-22 A	25-May-22 A		100%
P30-BP41.30	BP - Airlift, Cage Install and Concrete	16-Feb-22	23-Feb-22	10	26-May-22 A	08-Jun-22 A		100%

02

P30-BP47.10	BP - Excavation	09-Feb-22	15-Feb-22	6	18-Jun-22	24-Jun-22	24	0%
P30-BP47.20	BP - RCD Drilling	16-Feb-22	04-Mar-22	15	25-Jun-22	13-Jul-22	24	0%

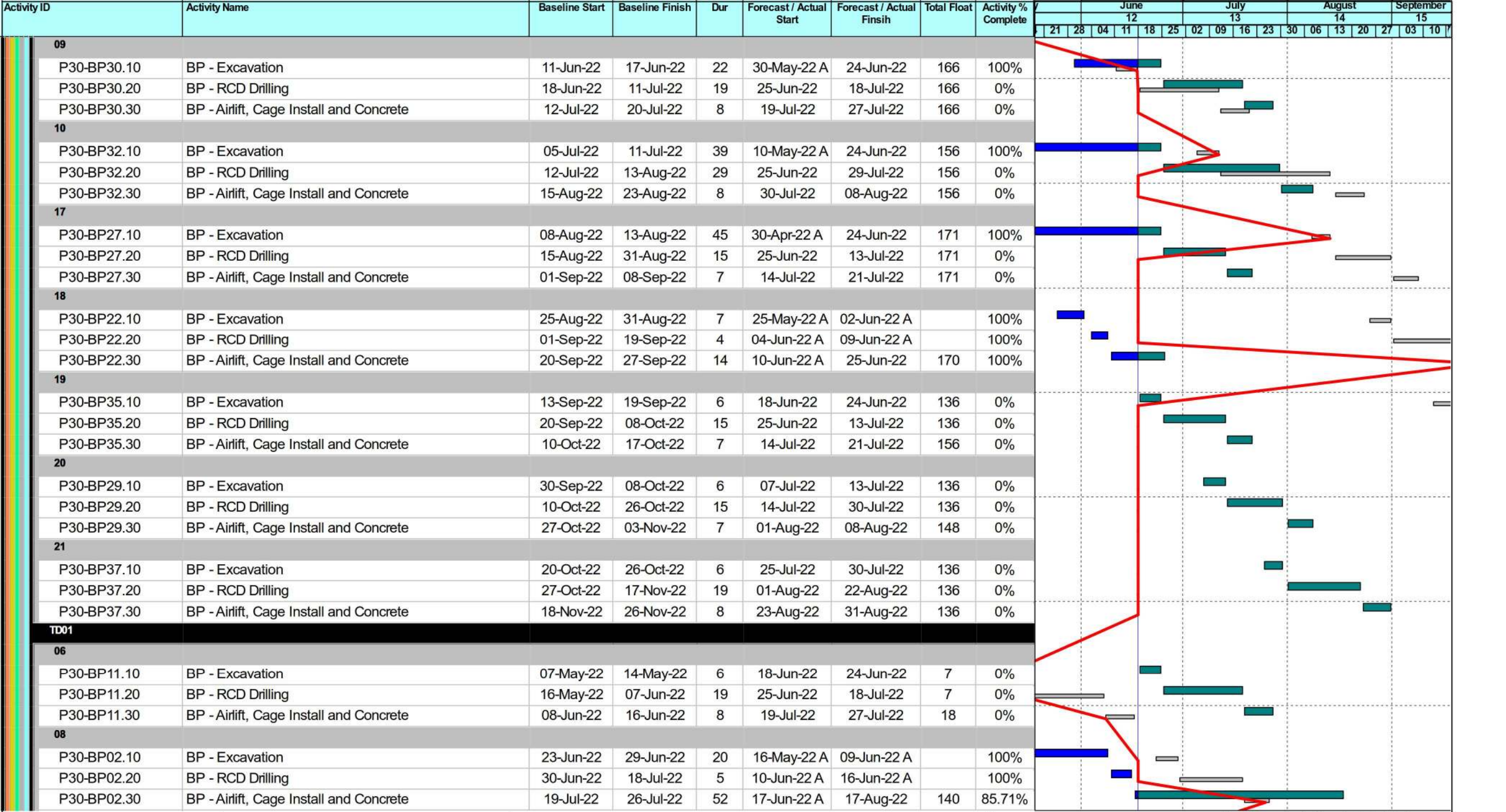


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



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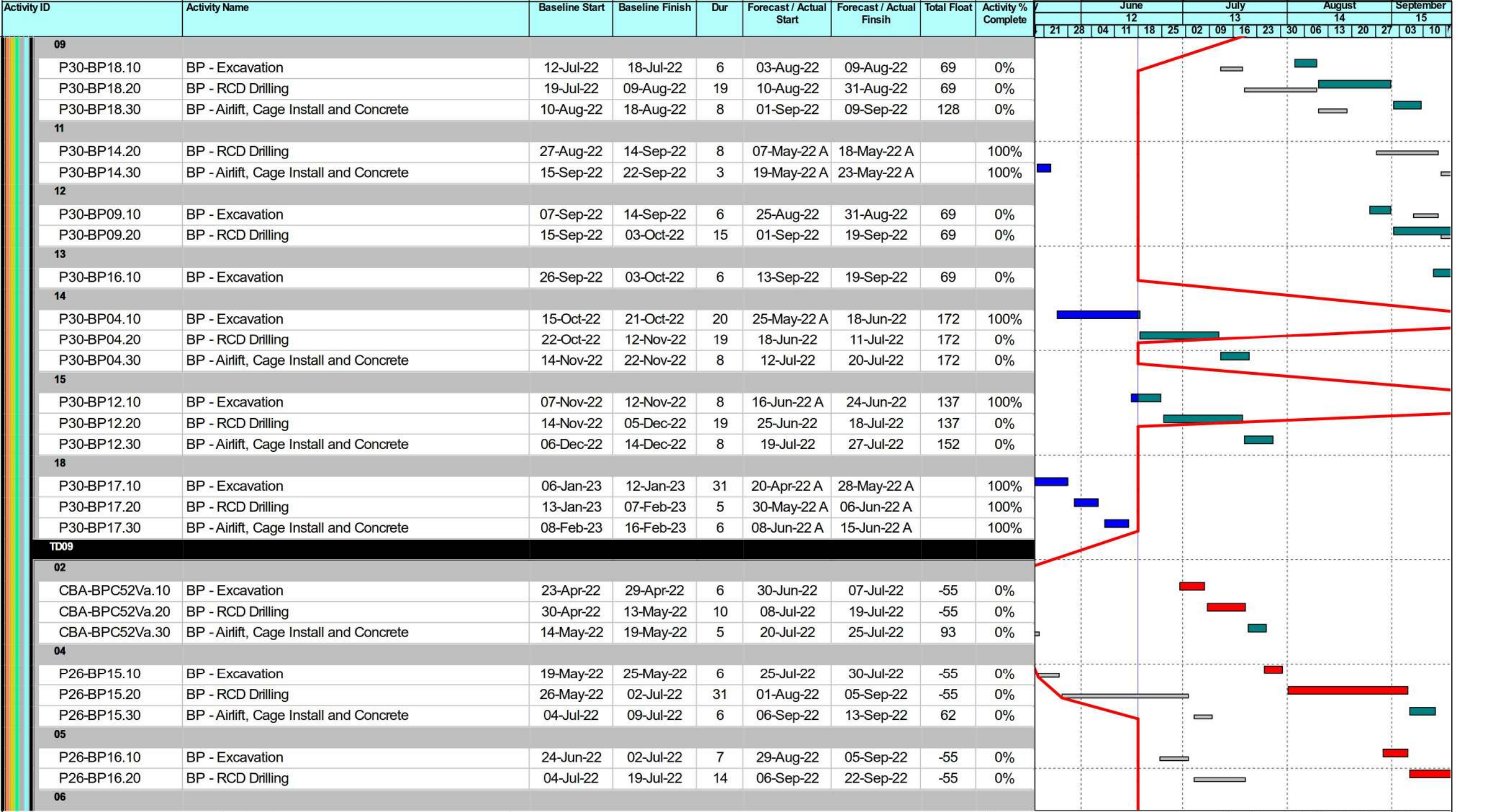








	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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 Based on CMWP Rev.0



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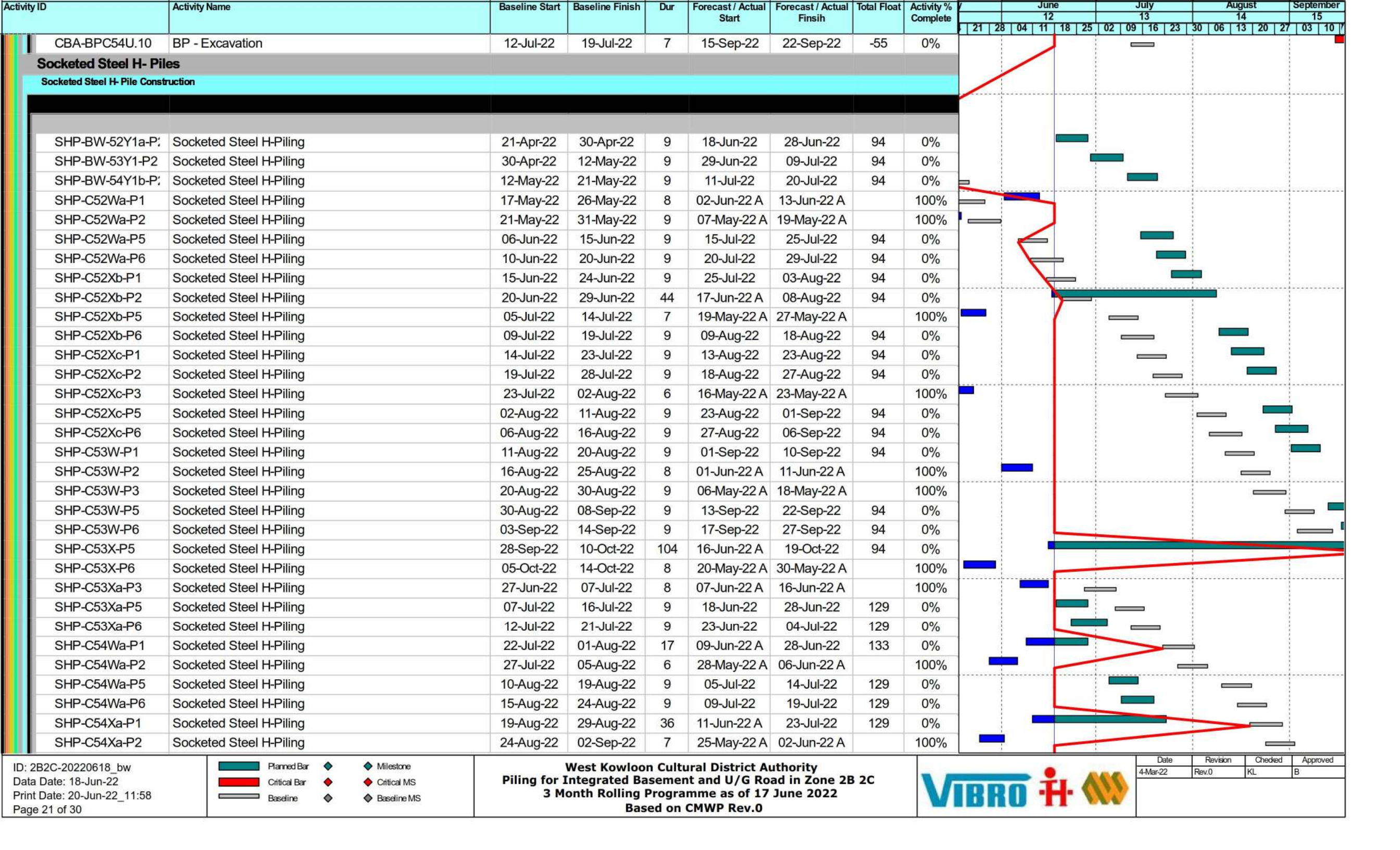


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June		July		August		September										
									21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	03	10
SHP-C54Xa-P5	Socketed Steel H-Piling	07-Sep-22	17-Sep-22	9	25-Jul-22	03-Aug-22	129	0%																	
SHP-C54Xa-P6	Socketed Steel H-Piling	13-Sep-22	22-Sep-22	9	29-Jul-22	08-Aug-22	129	0%																	
SHP-C54Xb-P1	Socketed Steel H-Piling	17-Sep-22	27-Sep-22	9	03-Aug-22	12-Aug-22	129	0%																	
SHP-C54Xb-P2	Socketed Steel H-Piling	22-Sep-22	03-Oct-22	55	14-Jun-22 A	17-Aug-22	129	0%																	
SHP-C54Xb-P5	Socketed Steel H-Piling	08-Oct-22	18-Oct-22	9	18-Aug-22	27-Aug-22	129	0%																	
SHP-C54Xb-P6	Socketed Steel H-Piling	13-Oct-22	22-Oct-22	7	23-May-22 A	31-May-22 A		100%																	
KD09 (Section 5)																									
Trial Piles (P23-BP68)																									
MO.1100	Initial Mobilization for BP (CCH / KD09 / KD02)	15-Sep-21	15-Nov-21	242	22-Oct-21 A	16-Aug-22	242	60%																	
Bored Piles																									
CD01																									
05																									
P23-BP53.10	BP - Excavation	28-Jan-22	07-Feb-22	6	07-Jul-22	13-Jul-22	153	0%																	
P23-BP53.20	BP - RCD Drilling	08-Feb-22	01-Mar-22	19	14-Jul-22	04-Aug-22	153	0%																	
P23-BP53.30	BP - Airlift, Cage Install and Concrete	02-Mar-22	10-Mar-22	8	05-Aug-22	13-Aug-22	160	0%																	
06																									
P23-BP40.10	BP - Excavation	23-Feb-22	01-Mar-22	6	29-Jul-22	04-Aug-22	153	0%																	
P23-BP40.20	BP - RCD Drilling	02-Mar-22	18-Mar-22	15	05-Aug-22	22-Aug-22	153	0%																	
P23-BP40.30	BP - Airlift, Cage Install and Concrete	19-Mar-22	26-Mar-22	7	23-Aug-22	30-Aug-22	153	0%																	
09																									
P23-BP64.30	BP - Airlift, Cage Install and Concrete	27-May-22	06-Jun-22	24	06-May-22 A	06-Jun-22 A		100%																	
10																									
P23-BP62.10	BP - Excavation	20-May-22	26-May-22	52	04-Apr-22 A	11-Jun-22 A		100%																	
P23-BP62.20	BP - RCD Drilling	27-May-22	18-Jun-22	24	13-Jun-22 A	11-Jul-22	188	100%																	
P23-BP62.30	BP - Airlift, Cage Install and Concrete	20-Jun-22	28-Jun-22	8	12-Jul-22	20-Jul-22	188	0%																	
11																									
P23-BP41.30	BP - Airlift, Cage Install and Concrete	08-Jul-22	15-Jul-22	16	12-May-22 A	31-May-22 A		100%																	
15																									
P23-BP52.10	BP - Excavation	20-May-22	26-May-22	6	18-Jun-22	24-Jun-22	47	0%																	
P23-BP52.20	BP - RCD Drilling	27-May-22	18-Jun-22	19	25-Jun-22	18-Jul-22	47	0%																	
P23-BP52.30	BP - Airlift, Cage Install and Concrete	20-Jun-22	28-Jun-22	8	19-Jul-22	27-Jul-22	47	0%																	
CD02																									
02																									
P23-BP37.10	BP - Excavation	21-Dec-21	29-Dec-21	6	18-Jun-22	24-Jun-22	-29	0%																	







	Planned Bar		Milestone
	Critical Bar		Critical MS
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West Kowloon Cultural District Authority
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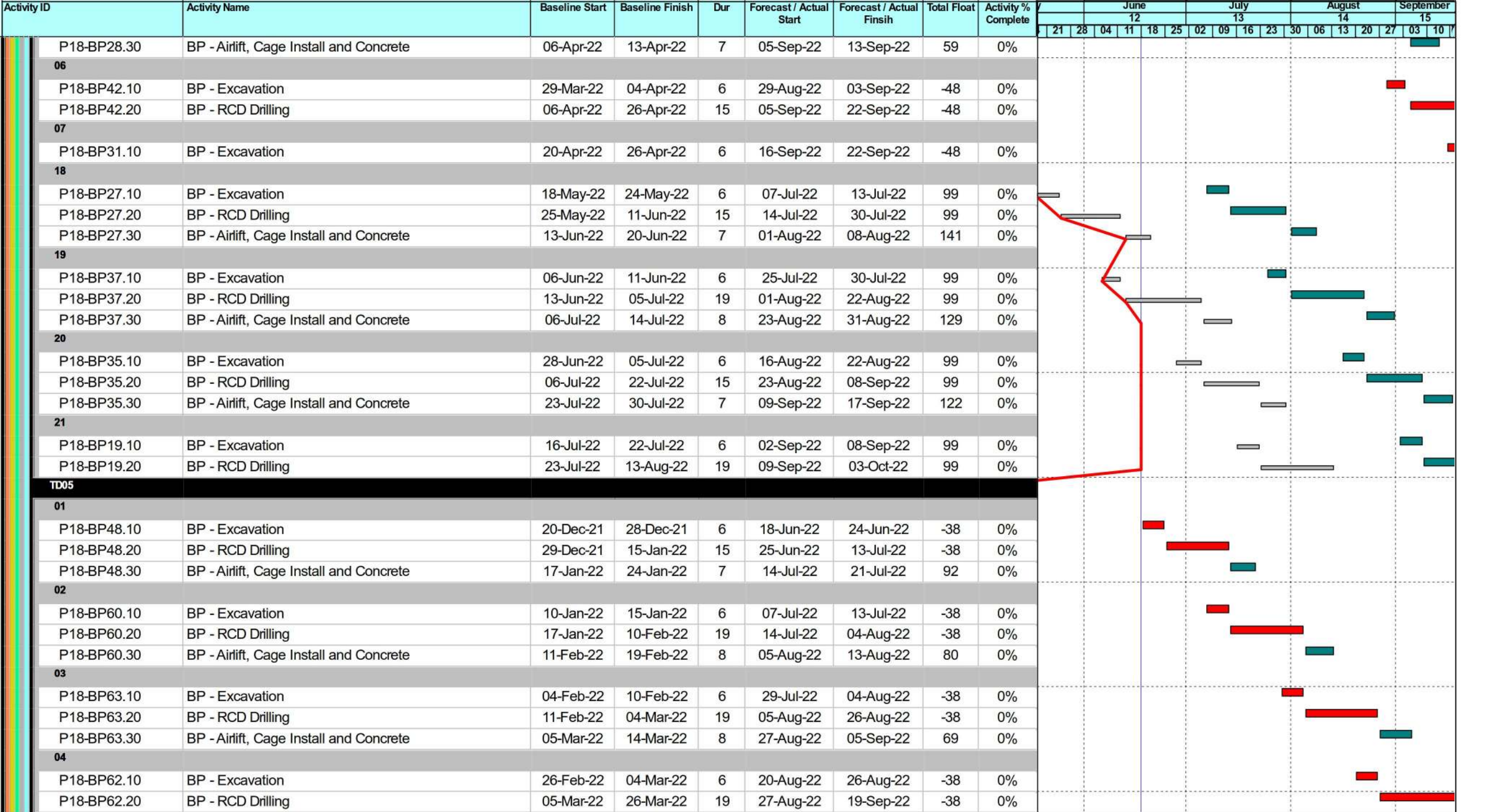
Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June		July		August		September										
									21	28	04	11	18	25	02	09	16	23	30	06	13	20	27	03	10
									Gantt Chart																
TD07																									
02																									
P18-BP16.10	BP - Excavation	20-Dec-21	28-Dec-21	6	07-Jul-22	13-Jul-22	-121	0%																	
P18-BP16.20	BP - RCD Drilling	29-Dec-21	15-Jan-22	15	14-Jul-22	30-Jul-22	-121	0%																	
P18-BP16.30	BP - Airlift, Cage Install and Concrete	17-Jan-22	24-Jan-22	7	01-Aug-22	08-Aug-22	-42	0%																	
03																									
P18-BP23.10	BP - Excavation	10-Jan-22	15-Jan-22	6	25-Jul-22	30-Jul-22	-121	0%																	
P18-BP23.20	BP - RCD Drilling	17-Jan-22	05-Feb-22	15	01-Aug-22	17-Aug-22	-121	0%																	
P18-BP23.30	BP - Airlift, Cage Install and Concrete	07-Feb-22	14-Feb-22	7	18-Aug-22	25-Aug-22	-50	0%																	
04																									
P18-BP21.10	BP - Excavation	27-Jan-22	05-Feb-22	6	11-Aug-22	17-Aug-22	-121	0%																	
P18-BP21.20	BP - RCD Drilling	07-Feb-22	23-Feb-22	15	18-Aug-22	03-Sep-22	-121	0%																	
P18-BP21.30	BP - Airlift, Cage Install and Concrete	24-Feb-22	03-Mar-22	7	05-Sep-22	13-Sep-22	-58	0%																	
22																									
P18-BP14.10	BP - Excavation	13-Sep-22	19-Sep-22	15	08-Jun-22 A	24-Jun-22	187	100%																	
P18-BP14.20	BP - RCD Drilling	20-Sep-22	08-Oct-22	15	25-Jun-22	13-Jul-22	187	0%																	
P18-BP14.30	BP - Airlift, Cage Install and Concrete	10-Oct-22	17-Oct-22	7	14-Jul-22	21-Jul-22	187	0%																	
TD06																									
01																									
P18-BP36.10	BP - Excavation	20-Dec-21	28-Dec-21	6	18-Jun-22	24-Jun-22	-48	0%																	
P18-BP36.20	BP - RCD Drilling	29-Dec-21	15-Jan-22	15	25-Jun-22	13-Jul-22	-48	0%																	
P18-BP36.30	BP - Airlift, Cage Install and Concrete	17-Jan-22	24-Jan-22	7	14-Jul-22	21-Jul-22	180	0%																	
02																									
P18-BP40.10	BP - Excavation	10-Jan-22	15-Jan-22	6	07-Jul-22	13-Jul-22	-48	0%																	
P18-BP40.20	BP - RCD Drilling	17-Jan-22	05-Feb-22	15	14-Jul-22	30-Jul-22	-48	0%																	
P18-BP40.30	BP - Airlift, Cage Install and Concrete	07-Feb-22	14-Feb-22	7	01-Aug-22	08-Aug-22	172	0%																	
03																									
P18-BP38.10	BP - Excavation	27-Jan-22	05-Feb-22	27	12-May-22 A	14-Jun-22 A		100%																	
P18-BP38.20	BP - RCD Drilling	07-Feb-22	28-Feb-22	22	15-Jun-22 A	11-Jul-22	-31	94.74%																	
P18-BP38.30	BP - Airlift, Cage Install and Concrete	01-Mar-22	09-Mar-22	8	12-Jul-22	20-Jul-22	91	0%																	
04																									
P18-BP33.10	BP - Excavation	22-Feb-22	28-Feb-22	6	25-Jul-22	30-Jul-22	-48	0%																	
P18-BP33.20	BP - RCD Drilling	01-Mar-22	17-Mar-22	15	01-Aug-22	17-Aug-22	-48	0%																	
P18-BP33.30	BP - Airlift, Cage Install and Concrete	18-Mar-22	25-Mar-22	7	18-Aug-22	25-Aug-22	67	0%																	
05																									
P18-BP28.10	BP - Excavation	11-Mar-22	17-Mar-22	6	11-Aug-22	17-Aug-22	-48	0%																	
P18-BP28.20	BP - RCD Drilling	18-Mar-22	04-Apr-22	15	18-Aug-22	03-Sep-22	-48	0%																	

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS







West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 17 June 2022
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Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B



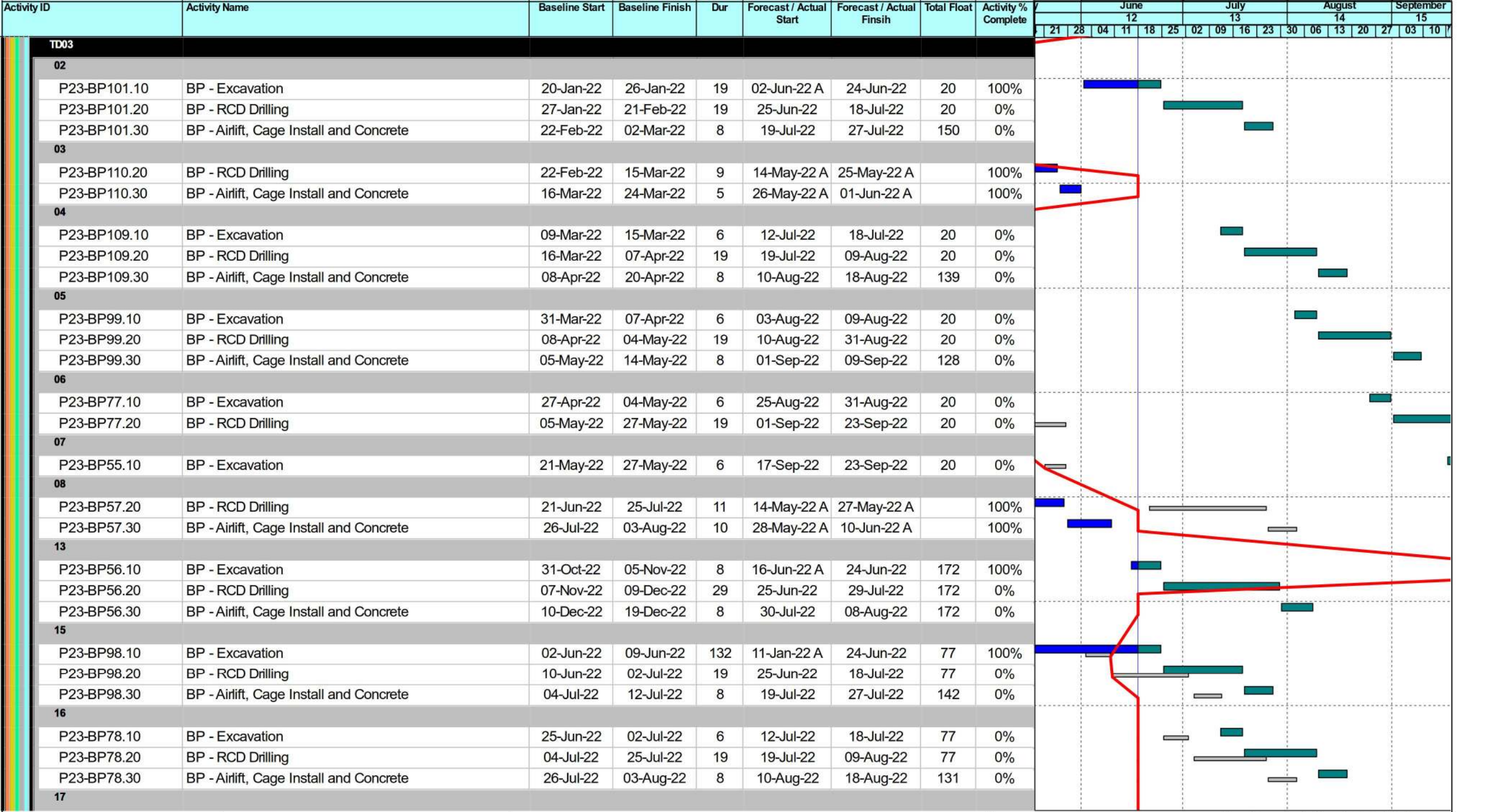
Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June		July			August			September	
									21	28	04	11	18	25	02	09	16	23
05																		
P18-BP61.10	BP - Excavation	21-Mar-22	26-Mar-22	6	13-Sep-22	19-Sep-22	-38	0%										
TD04																		
04																		
P23-BP107.10	BP - Excavation	04-Jan-22	10-Jan-22	6	18-Jun-22	24-Jun-22	67	0%										
P23-BP107.20	BP - RCD Drilling	11-Jan-22	04-Feb-22	19	25-Jun-22	18-Jul-22	67	0%										
P23-BP107.30	BP - Airlift, Cage Install and Concrete	05-Feb-22	14-Feb-22	8	19-Jul-22	27-Jul-22	142	0%										
05																		
P23-BP75.10	BP - Excavation	26-Jan-22	04-Feb-22	6	12-Jul-22	18-Jul-22	67	0%										
P23-BP75.20	BP - RCD Drilling	05-Feb-22	26-Feb-22	19	19-Jul-22	09-Aug-22	67	0%										
P23-BP75.30	BP - Airlift, Cage Install and Concrete	28-Feb-22	08-Mar-22	8	10-Aug-22	18-Aug-22	131	0%										
06																		
P23-BP73.10	BP - Excavation	21-Feb-22	26-Feb-22	6	03-Aug-22	09-Aug-22	67	0%										
P23-BP73.20	BP - RCD Drilling	28-Feb-22	21-Mar-22	19	10-Aug-22	31-Aug-22	67	0%										
P23-BP73.30	BP - Airlift, Cage Install and Concrete	22-Mar-22	30-Mar-22	8	01-Sep-22	09-Sep-22	120	0%										
07																		
P23-BP97.10	BP - Excavation	15-Mar-22	21-Mar-22	6	25-Aug-22	31-Aug-22	67	0%										
P23-BP97.20	BP - RCD Drilling	22-Mar-22	28-Apr-22	29	01-Sep-22	07-Oct-22	67	0%										
11																		
P23-BP108.10	BP - Excavation	26-Jan-22	04-Feb-22	6	18-Jun-22	24-Jun-22	47	0%										
P23-BP108.20	BP - RCD Drilling	05-Feb-22	10-Mar-22	29	25-Jun-22	29-Jul-22	47	0%										
P23-BP108.30	BP - Airlift, Cage Install and Concrete	11-Mar-22	19-Mar-22	8	30-Jul-22	08-Aug-22	156	0%										
12																		
P23-BP74.10	BP - Excavation	04-Mar-22	10-Mar-22	6	23-Jul-22	29-Jul-22	47	0%										
P23-BP74.20	BP - RCD Drilling	11-Mar-22	01-Apr-22	19	30-Jul-22	20-Aug-22	47	0%										
P23-BP74.30	BP - Airlift, Cage Install and Concrete	02-Apr-22	12-Apr-22	8	22-Aug-22	30-Aug-22	145	0%										
13																		
P23-BP84.10	BP - Excavation	26-Mar-22	01-Apr-22	6	15-Aug-22	20-Aug-22	47	0%										
P23-BP84.20	BP - RCD Drilling	02-Apr-22	12-May-22	29	22-Aug-22	24-Sep-22	47	0%										
14																		
P23-BP106.10	BP - Excavation	05-May-22	12-May-22	33	23-Apr-22 A	04-Jun-22 A		100%										
P23-BP106.20	BP - RCD Drilling	13-May-22	04-Jun-22	9	06-Jun-22 A	16-Jun-22 A		100%										
P23-BP106.30	BP - Airlift, Cage Install and Concrete	06-Jun-22	14-Jun-22	9	17-Jun-22 A	27-Jun-22	207	75%										
17																		
P23-BP116.10	BP - Excavation	06-Aug-22	12-Aug-22	26	14-May-22 A	15-Jun-22 A		100%										
P23-BP116.20	BP - RCD Drilling	13-Aug-22	03-Sep-22	21	16-Jun-22 A	11-Jul-22	169	63.16%										
P23-BP116.30	BP - Airlift, Cage Install and Concrete	05-Sep-22	14-Sep-22	8	12-Jul-22	20-Jul-22	180	0%										

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 17 June 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
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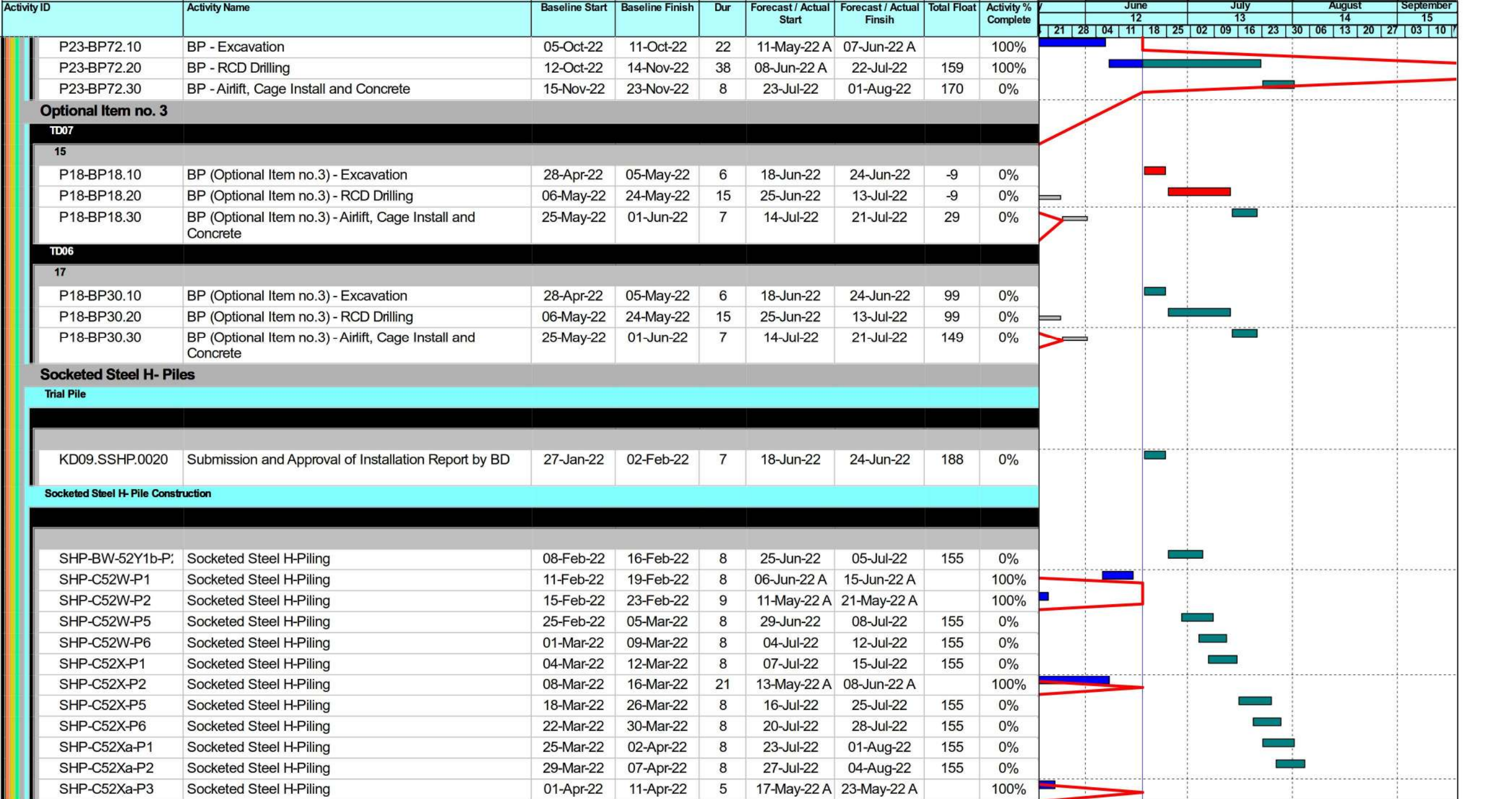


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B









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	Baseline		Baseline MS

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4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	Activity % Complete	June				July				August				September	
									12				13				14				15	
									21	28	04	11	18	25	02	09	16	23	30	06	13	20
SHP-C52Xa-P5	Socketed Steel H-Piling	09-Apr-22	21-Apr-22	8	30-Jul-22	08-Aug-22	155	0%														
Attendance to Other Project Contractors (optional works item no. 2A to 2E)																						
S1.AT.0020	Attendance at Section 1 Area (optional works item no. 2A) if item No. 3 is instructed (Duration TBC)	16-Aug-22	04-Sep-22	20	16-Aug-22	04-Sep-22	71	0%														

	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float	July					August					September				October		
								13					14					15				16		
								25	02	09	16	23	30	06	13	20	27	03	10	17	24	01	08	15

Piling for Integrated Basement and U/G Road in Zone 2B & 2C

Contract Dates

Key Dates

KD for Zone 2B

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
KD01	KD01 (Stage 1-1) - 18 May 2022		18-May-22	0		15-Jul-22 A	
KD03	KD03 (Stage 3-1) - 26 Aug 2022		26-Aug-22	0		22-Oct-22*	-57

KD for Zone 2C

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
KD04	KD04 (Stage 4-1) - 26 Aug 2022		25-Aug-22	0		22-Sep-22*	-27

Optional Works subjected to CA's Instruction

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
CO2A	Last CAI date for Optional Works Item No.2A (330 Days to 440 Days after Commencement)	05-Oct-22		0	05-Oct-22		71
CO2A10	Last CAI date for Optional Works Item No.2A (330 Days to 390 Days after Commencement) if item No. 3 is instructed	16-Aug-22		0	16-Aug-22		71

Access Dates of Site Portion

270 days after Commencement

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
ACB35	Access to Site Portion B35 (To be agreed with the Zone 2A contractor)	18-Apr-22		0	23-Jul-22		-44

Mobilization Stage

Site Mobilization Works

Pre-Construction Works before Piling Commencement

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
MOBP.10.1300	Trial Pit for Drillholes & Removal of Existing Substructures / Ground Slab [503 nos]	19-Aug-21	30-Apr-22	353	19-Aug-21 A	06-Aug-22	521

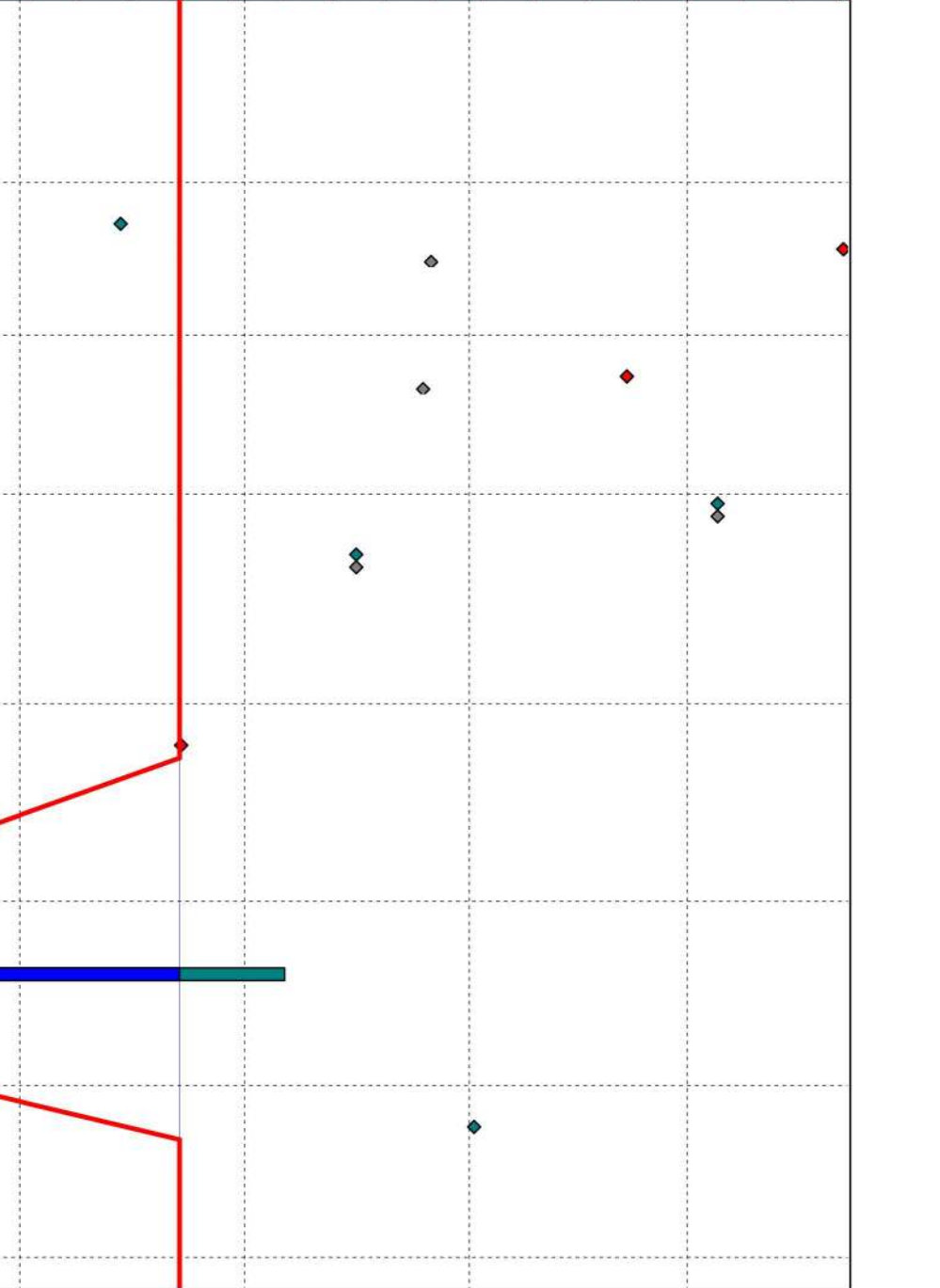
End of Mobilization

Activity ID	Activity Name	Baseline Start	Baseline Finish	Dur	Forecast / Actual Start	Forecast / Actual Finsih	Total Float
MOBP.99.1080	End of Mobilization Stage		18-May-22	0		01-Sep-22	495

Construction Stage

Pile Construction

Initial Mobilization

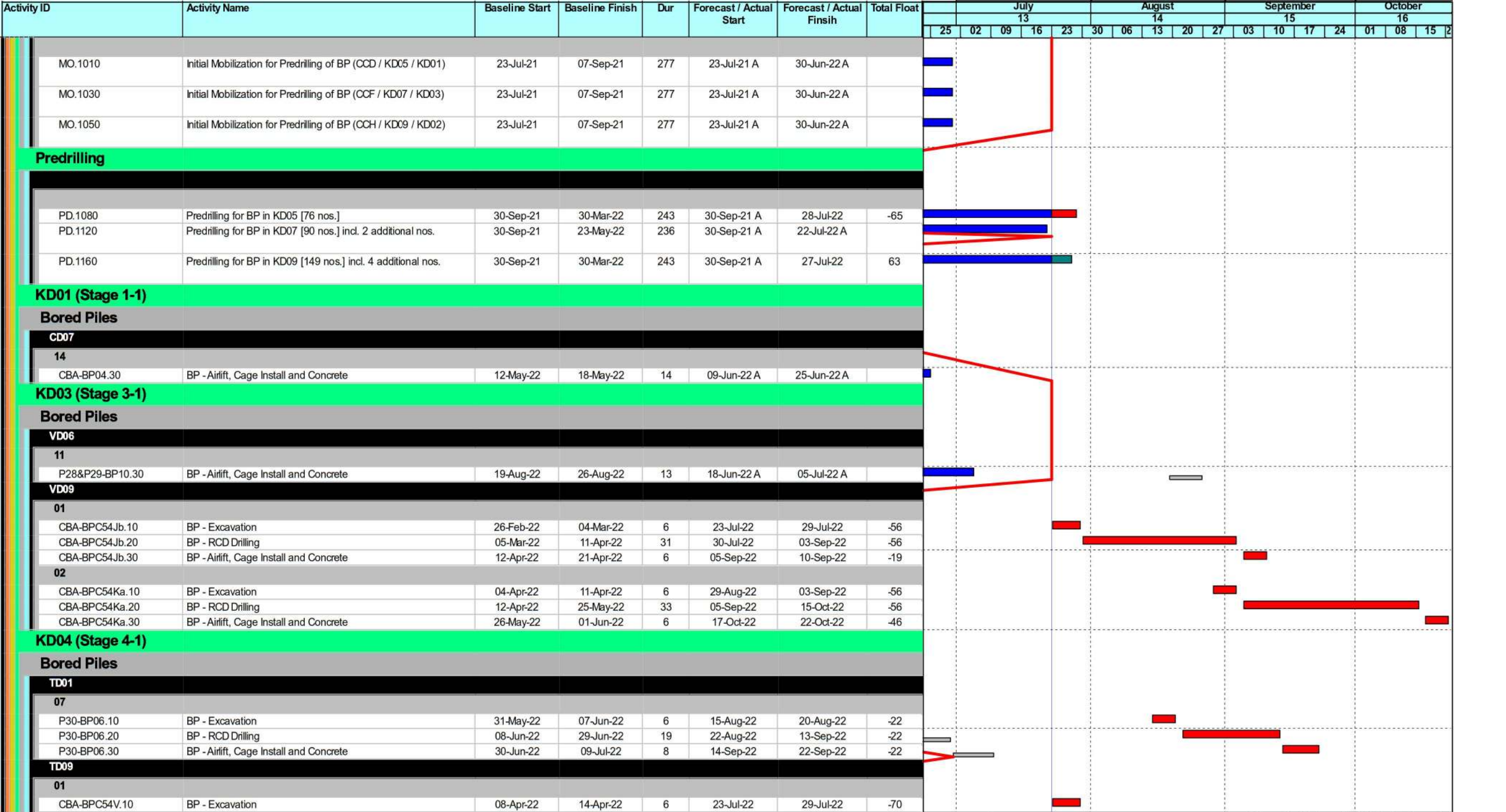


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	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 22 July 2022
 Based on CMWP Rev.0



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4-Mar-22	Rev.0	KL	B

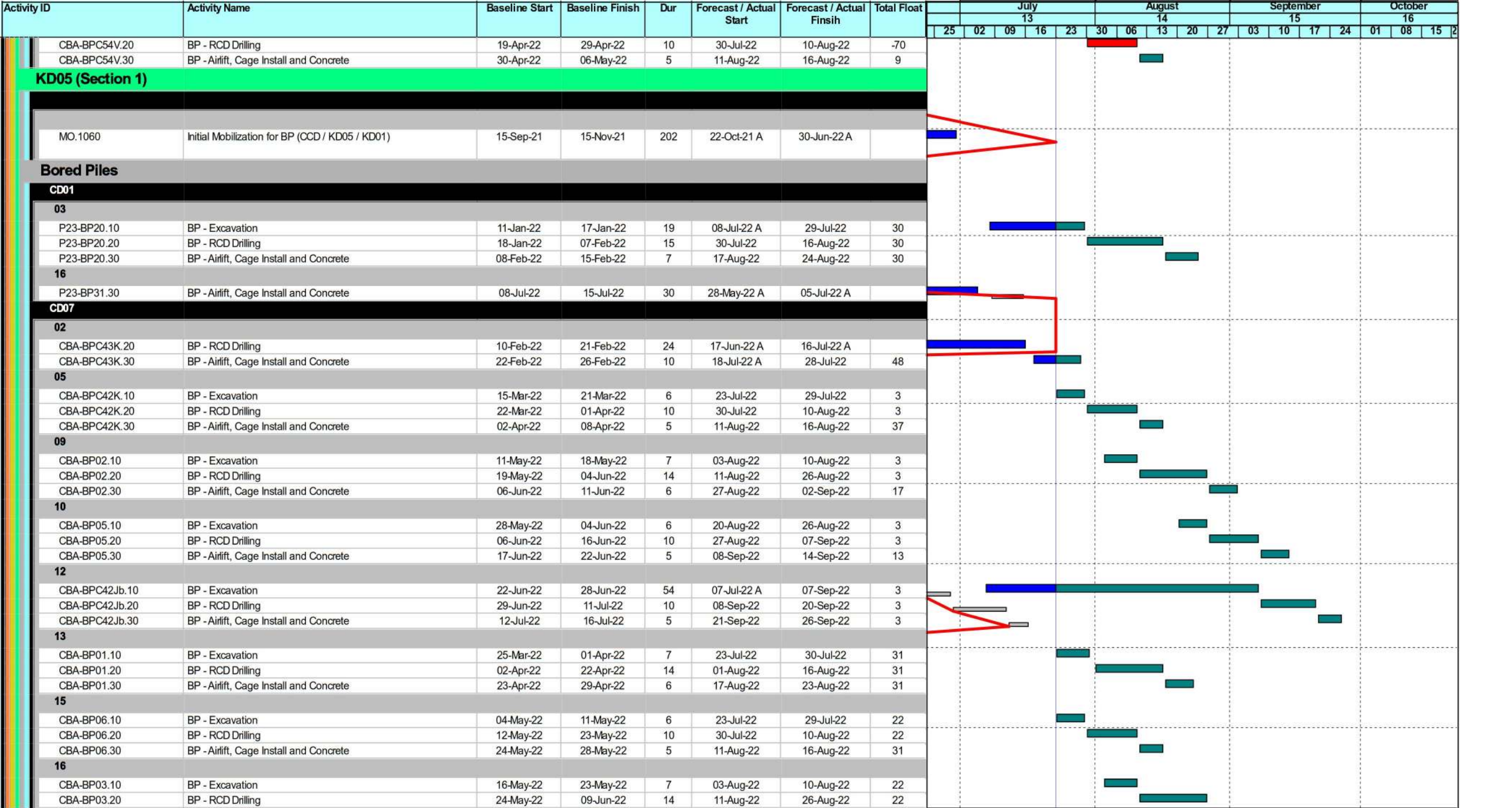


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 22 July 2022
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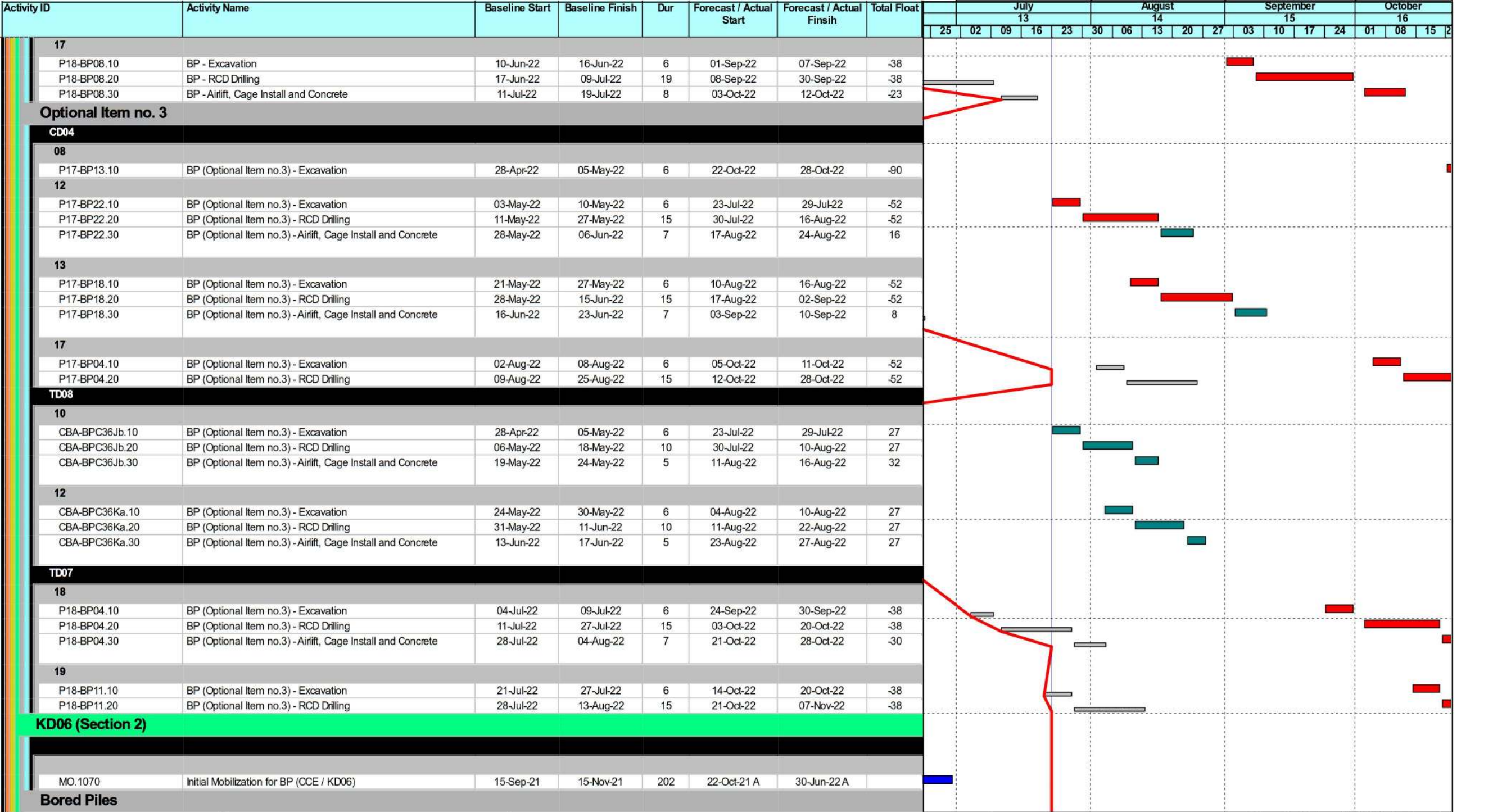


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

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 Based on CMWP Rev.0



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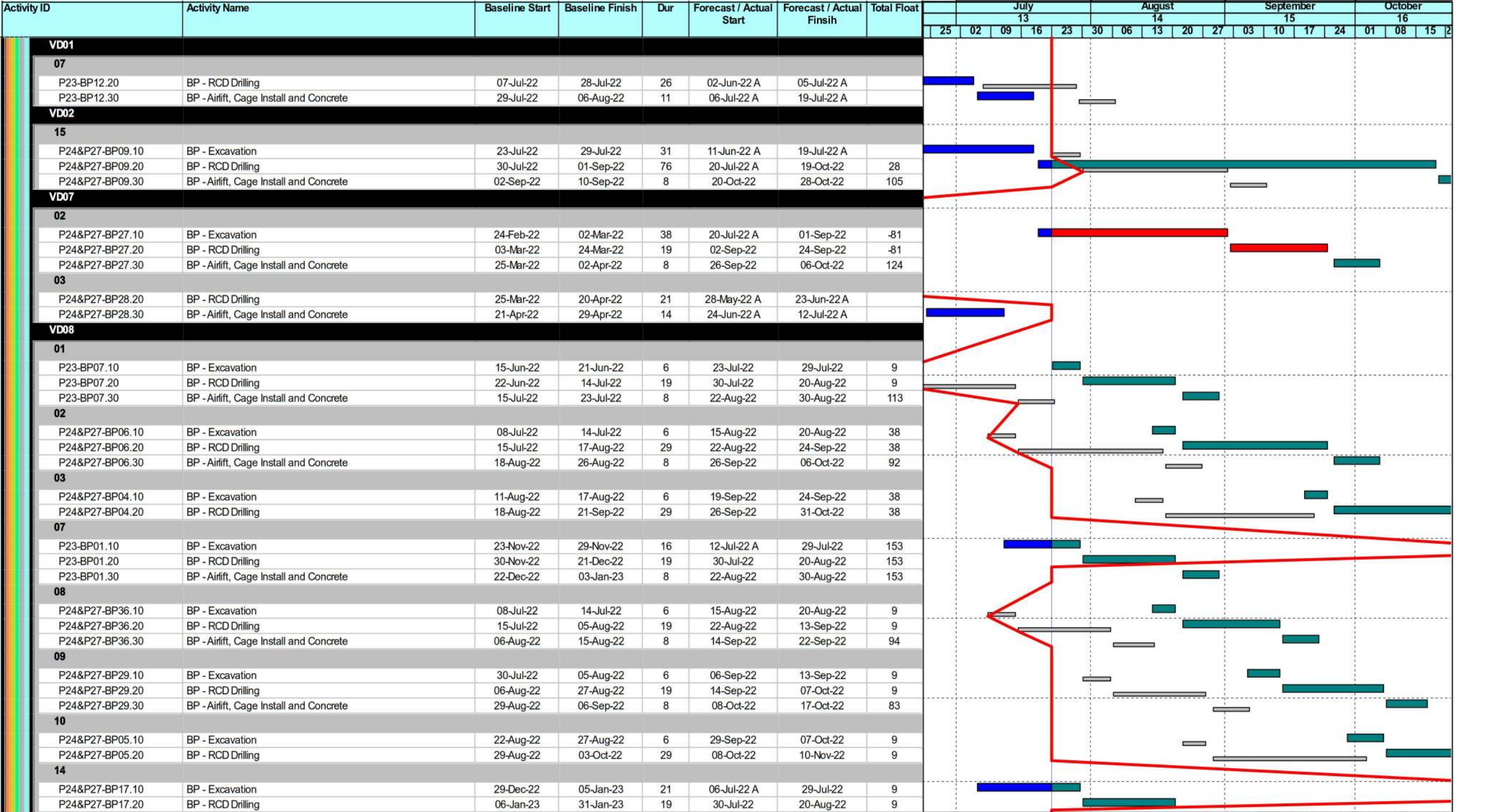


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

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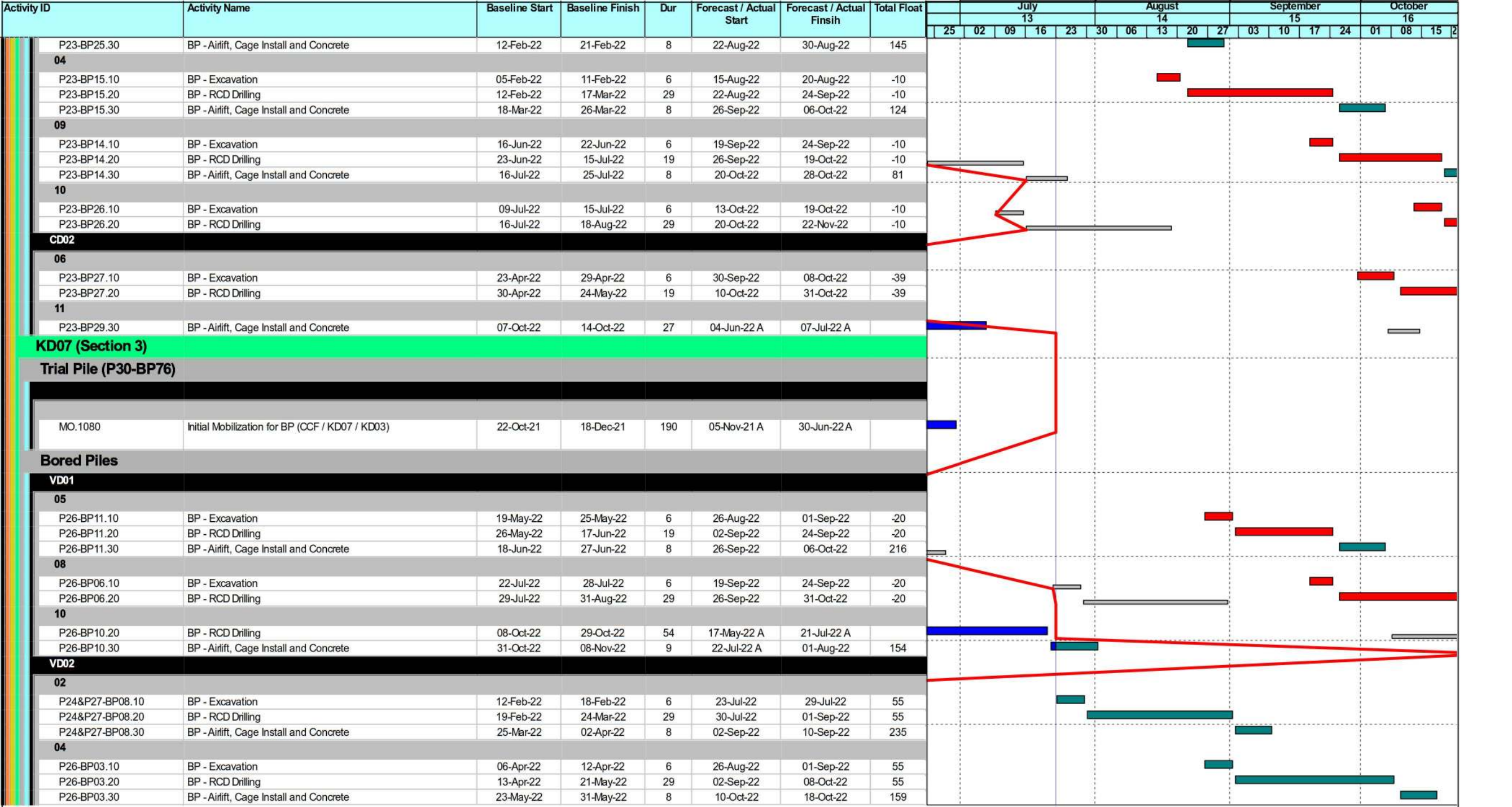


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

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3 Month Rolling Programme as of 22 July 2022
 Based on CMWP Rev.0



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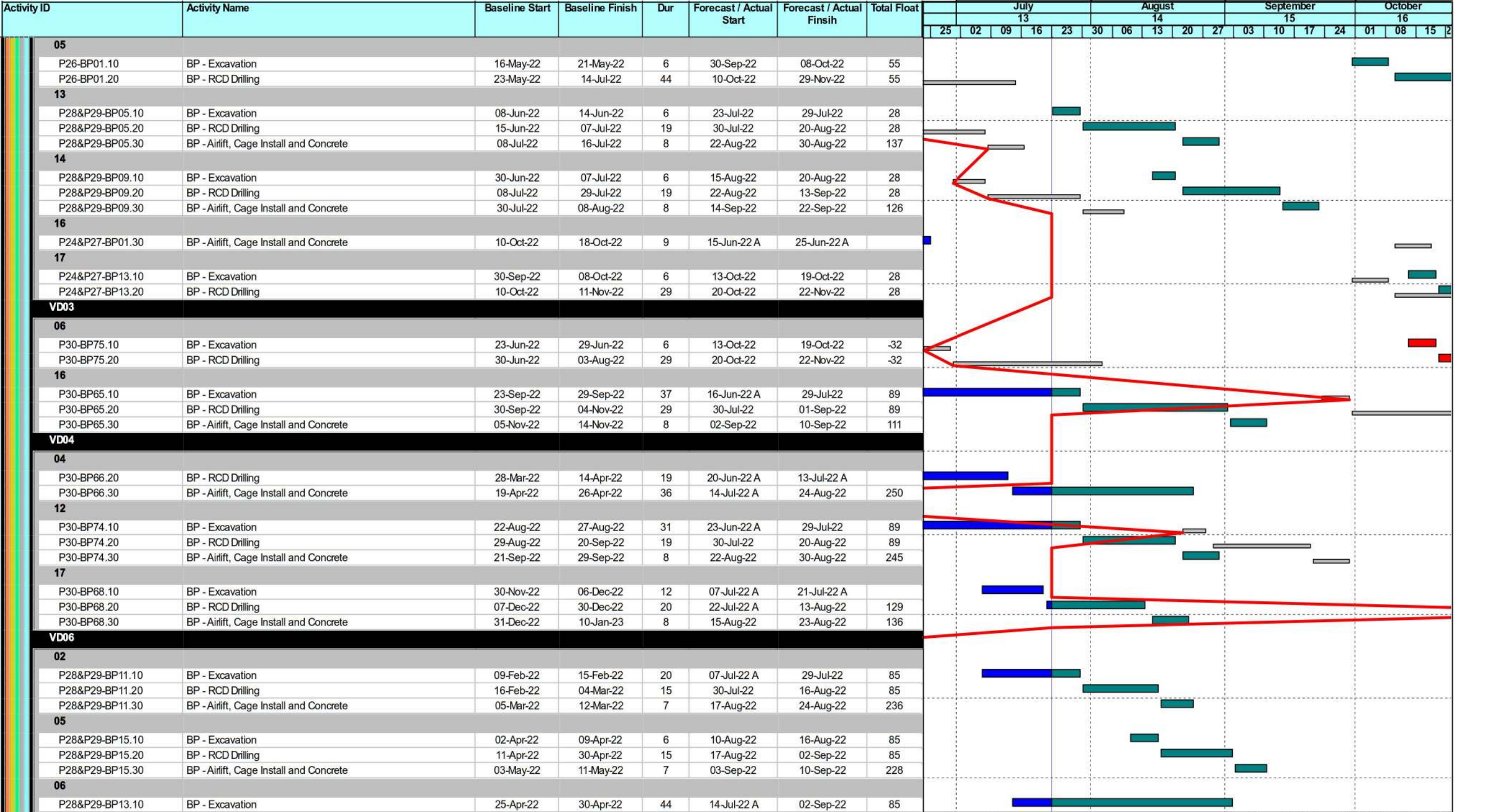


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

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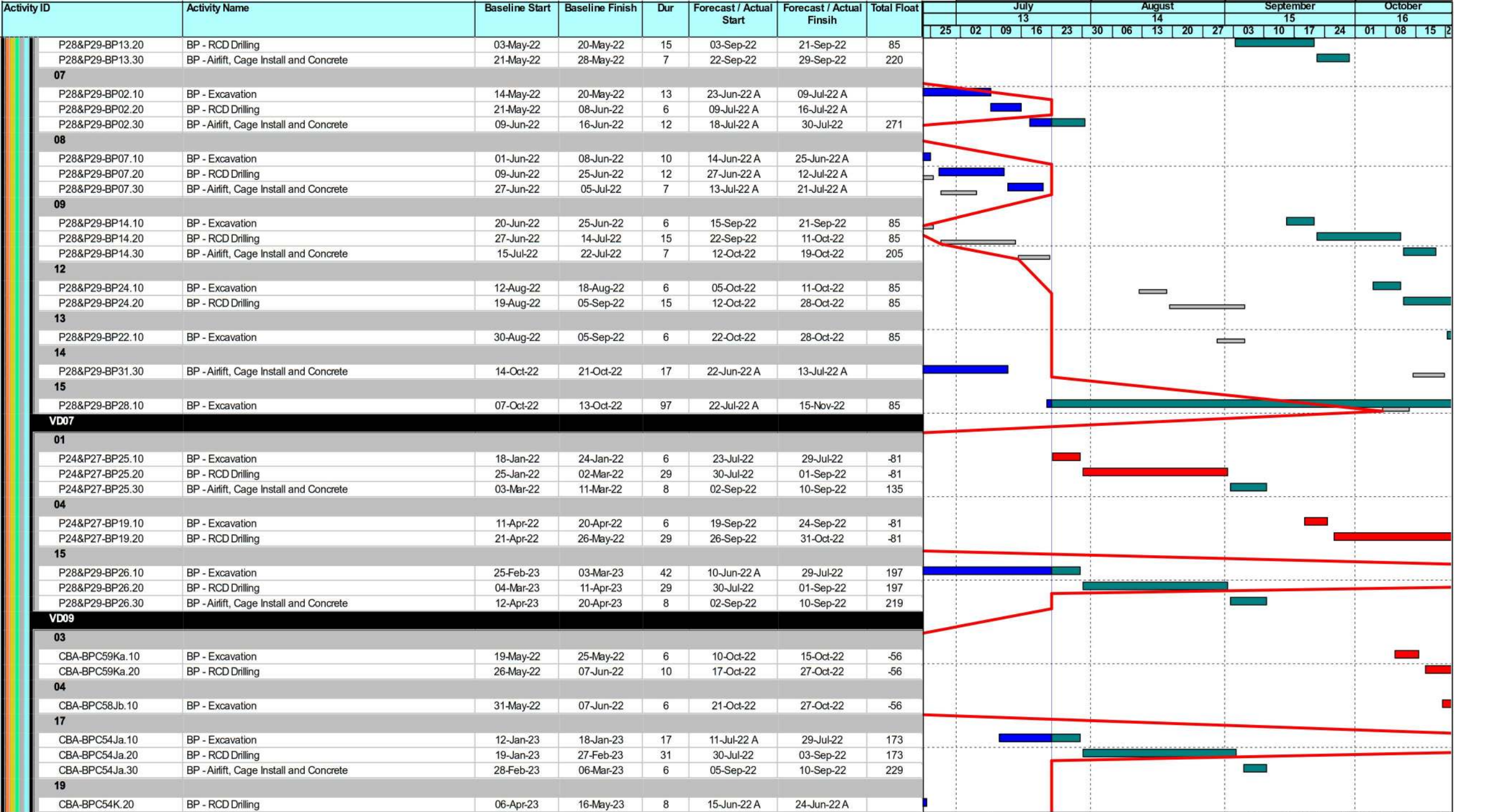








	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

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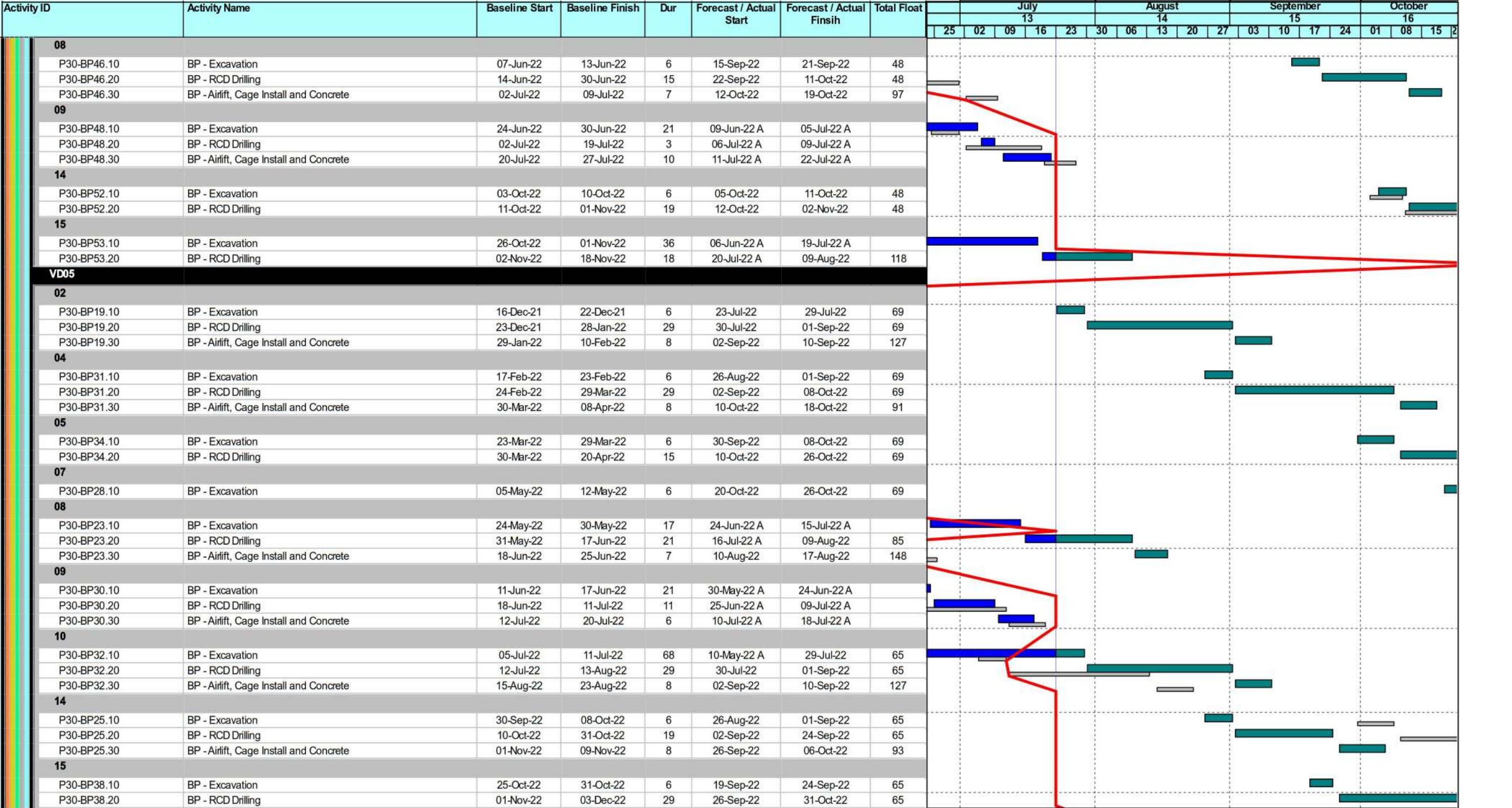


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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 Based on CMWP Rev.0



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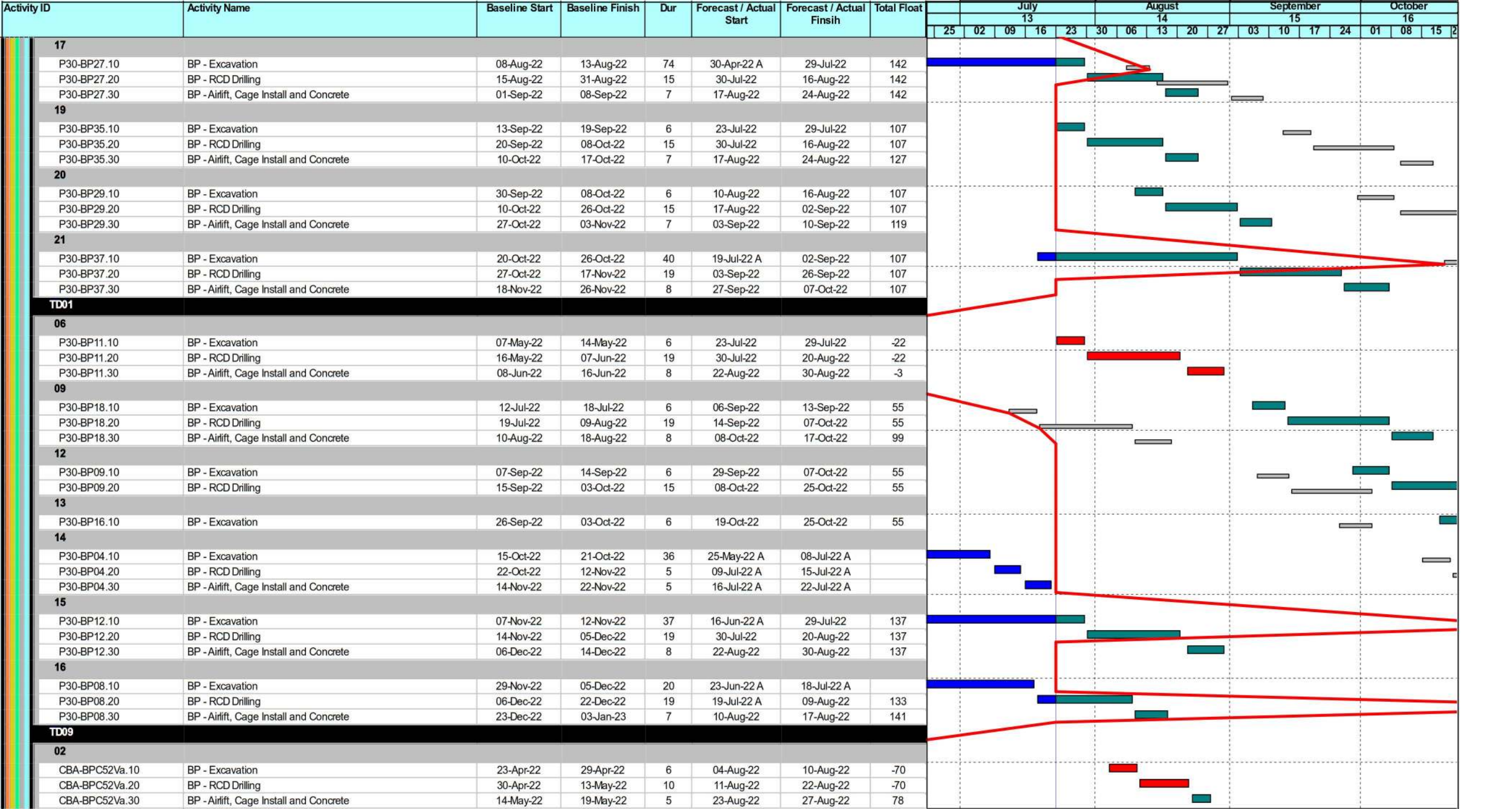








Planned Bar	Milestone
Critical Bar	Critical MS
Baseline	Baseline MS

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 Based on CMWP Rev.0



Date	Revision	Checked	Approved
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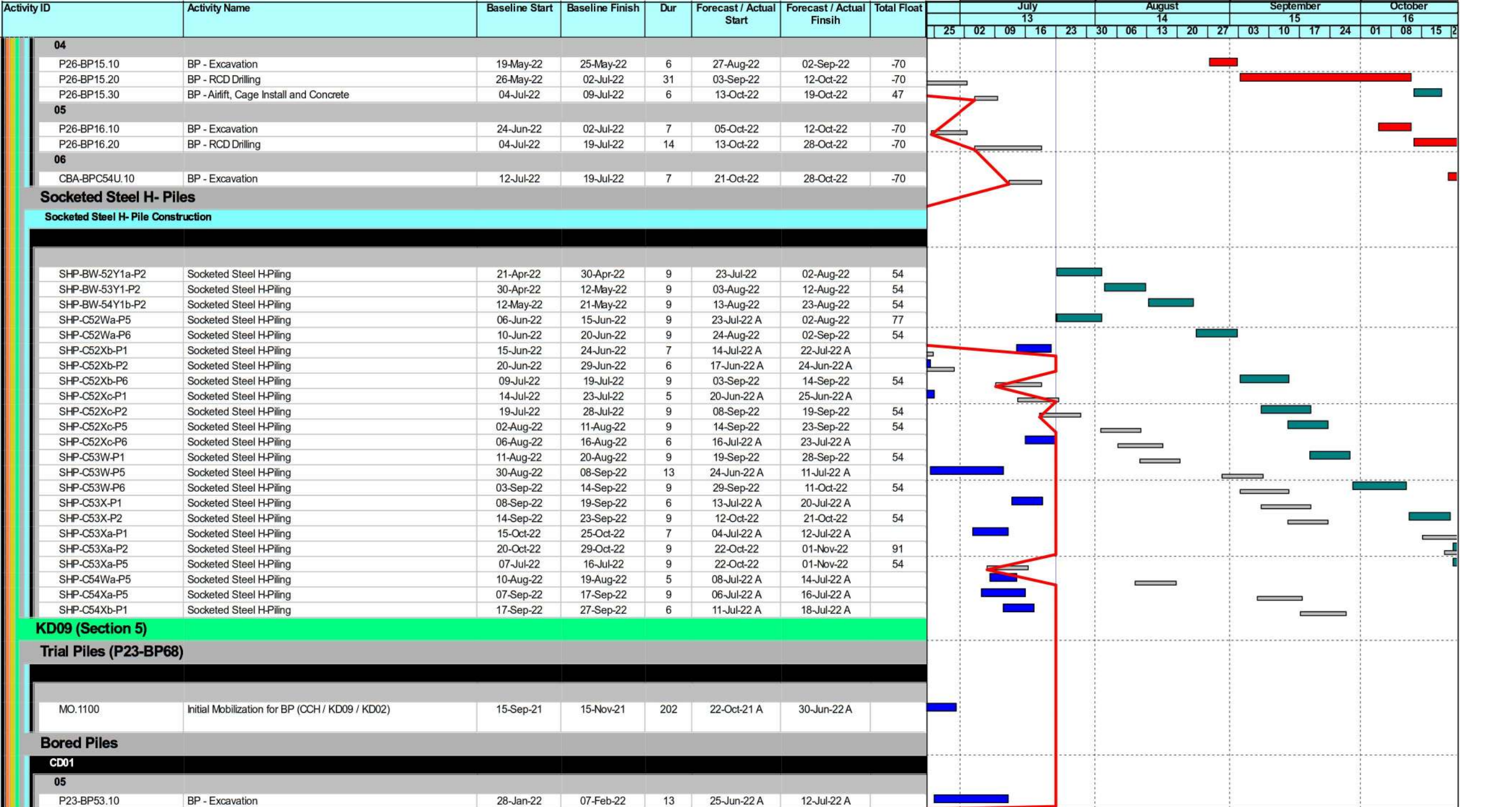


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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 Based on CMWP Rev.0



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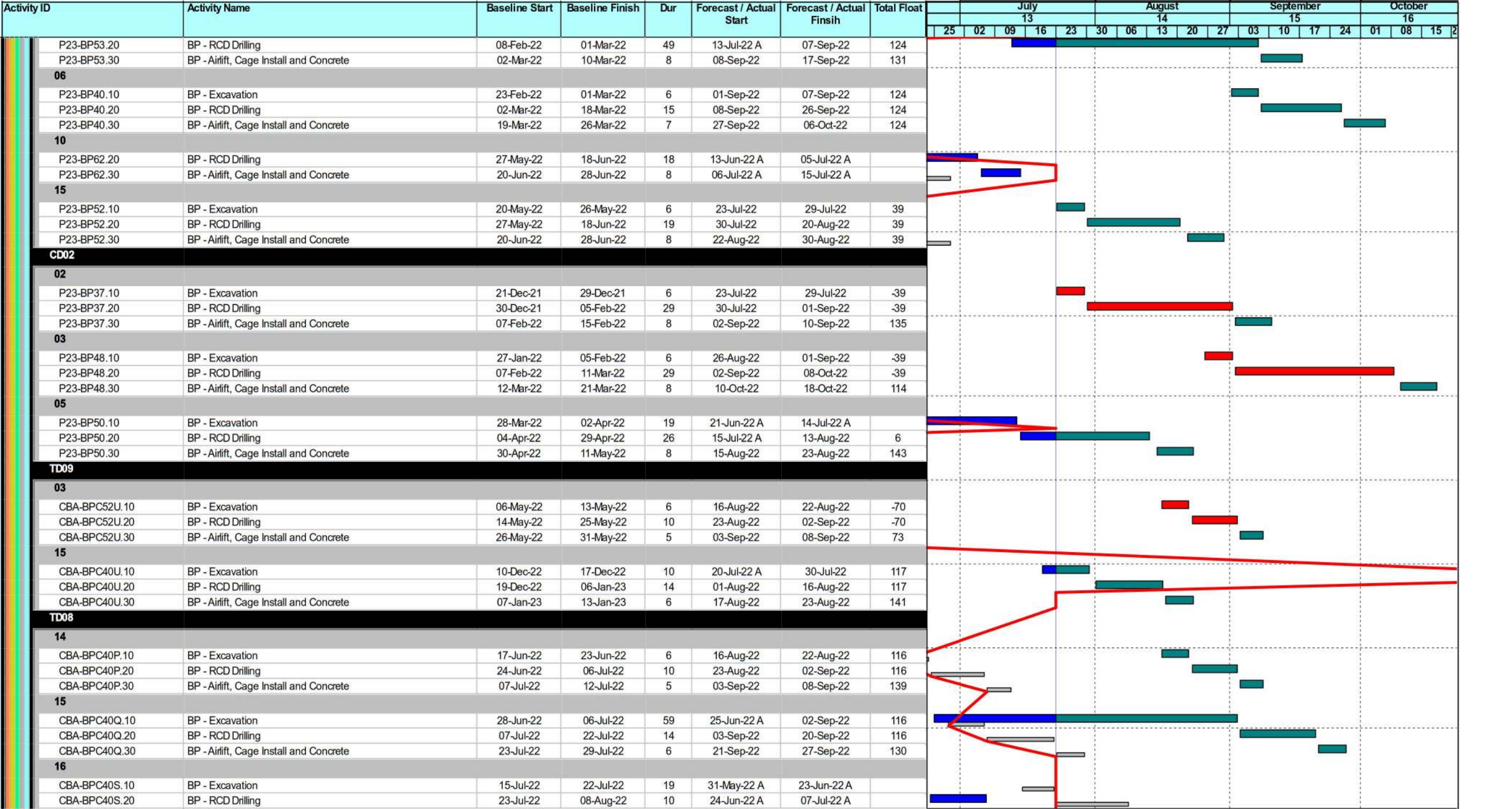


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
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 Based on CMWP Rev.0



Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

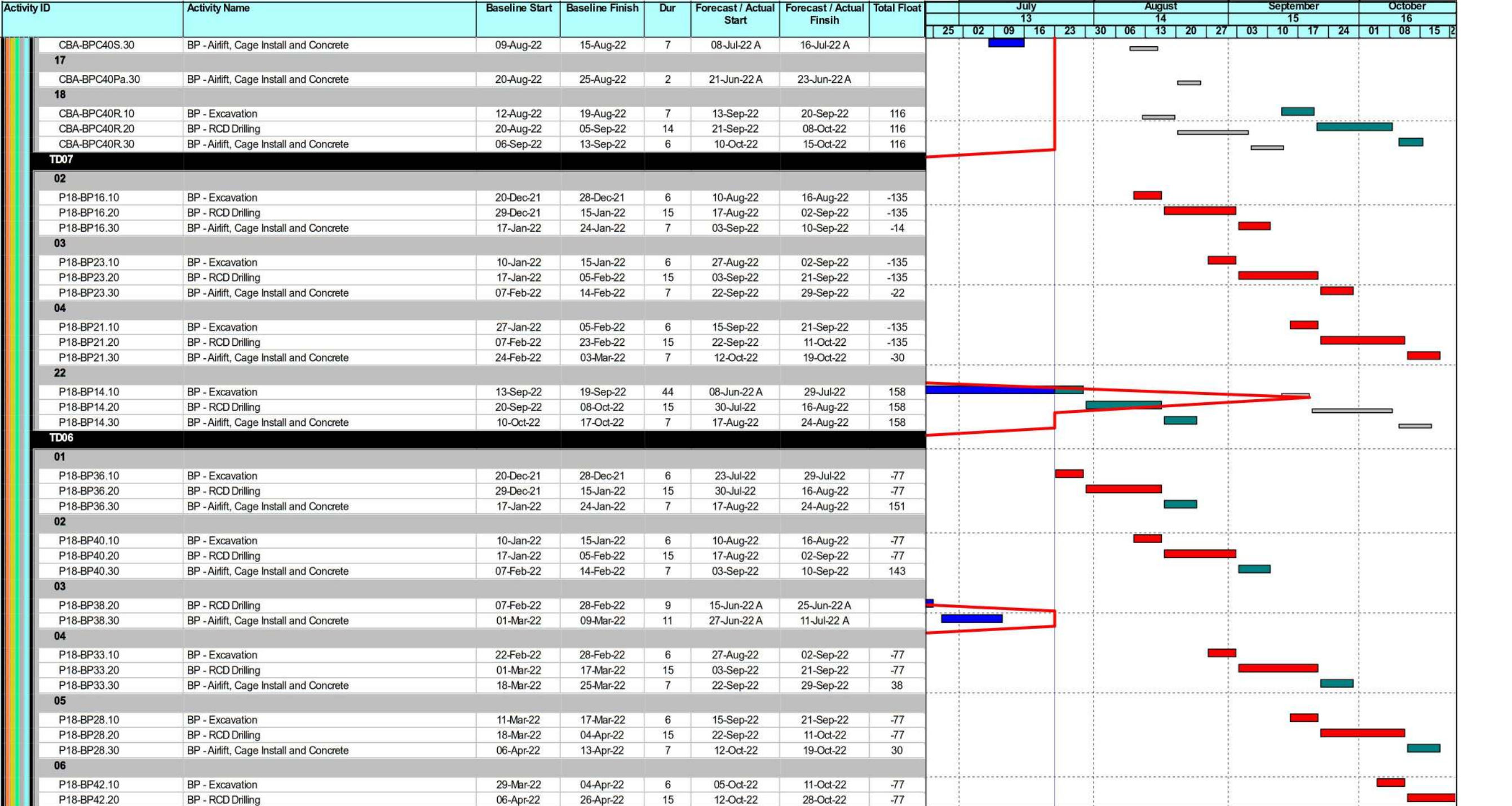


	Planned Bar		Milestone
	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 22 July 2022
Based on CMWP Rev.0



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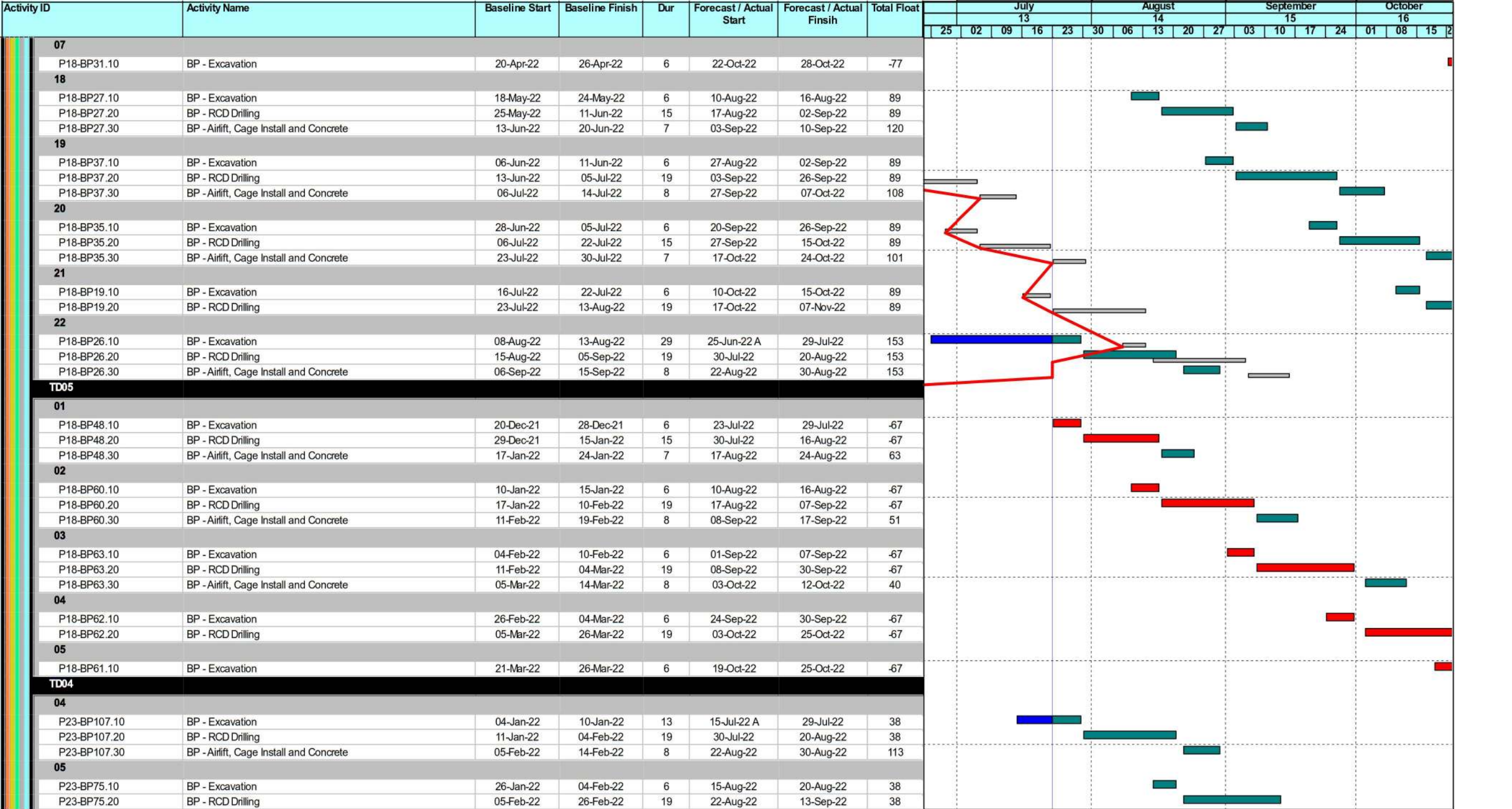


- Planned Bar
- Critical Bar
- Baseline
- Milestone
- Critical MS
- Baseline MS

West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 22 July 2022
 Based on CMWP Rev.0



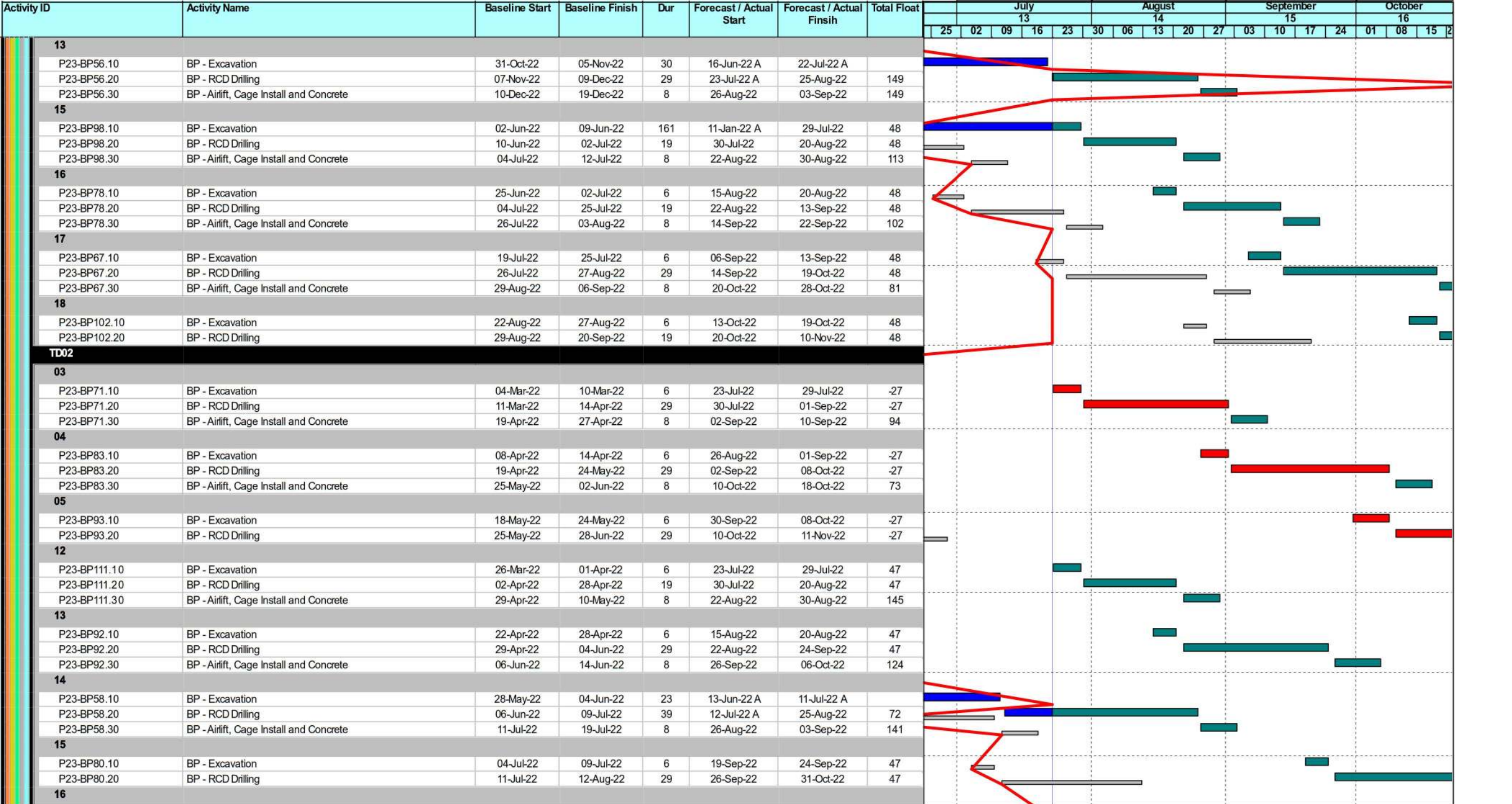
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4-Mar-22	Rev.0	KL	B



West Kowloon Cultural District Authority
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3 Month Rolling Programme as of 22 July 2022
 Based on CMWP Rev.0



Date	Revision	Checked	Approved
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	Critical Bar		Critical MS
	Baseline		Baseline MS

West Kowloon Cultural District Authority
Piling for Integrated Basement and U/G Road in Zone 2B 2C
3 Month Rolling Programme as of 22 July 2022
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Date	Revision	Checked	Approved
4-Mar-22	Rev.0	KL	B

C. Environmental Mitigation Measures – Implementation Status

Table C-1: Environmental Mitigation Measures Implementation Status

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
Air Quality Impact (Construction)							
2.1	General Dust Control Measures Frequent water spraying for active construction areas (12 times a day or once every one hour), including Heavy construction activities such as construction of buildings or roads, drilling, ground excavation, cut and fill operations (i.e., earth moving)	✓	✓	✓	✓	✓	Obs
2.1	Best Practice For Dust Control The relevant best practices for dust control as stipulated in the Air Pollution Control (construction Dust) Regulation should be adopted to further reduce the construction dust impacts from the Project. These best practices include: <i>Good Site Management</i> <ul style="list-style-type: none"> Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. 	Obs	✓	✓	✓	✓	Obs

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<i>Disturbed Parts of the Roads</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. 	✓	✓	✓	✓	✓	✓
	<i>Exposed Earth</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seeding with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. 						
	<i>Loading, Unloading or Transfer of Dusty Materials</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. 						
	<i>Debris Handling</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. 	N/A	N/A	N/A	N/A	N/A	N/A
	<i>Transport of Dusty Materials</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. 						

EM&A Ref.	Recommendation Measures	Implementation Stage					
		Zone 2A			Zone 2B & 2C		
		May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<i>Wheel washing</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. 						
	<i>Use of vehicles</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. 	✓	✓	✓	✓	✓	✓
	<i>Site hoarding</i>	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. 						

2.1 **Best Practicable Means for Cement Works (Concrete Batching Plant)**

The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2(93) should be followed and implemented to further reduce the construction dust impacts of the Project. These best practices include:

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<i>Exhaust from Dust Arrestment Plant</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> Wherever possible the final discharge point from particulate matter arrestment plant, where is not necessary to achieve dispersion from residual pollutants, should be at low level to minimise the effect on the local community in the case of abnormal emissions and to facilitate maintenance and inspection 						
	<i>Emission Limits</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> All emissions to air, other than steam or water vapour, shall be colourless and free from persistent mist or smoke 						
	<i>Engineering Design/Technical Requirements</i>	N/A	N/A	N/A	N/A	N/A	N/A
	<ul style="list-style-type: none"> As a general guidance, the loading, unloading, handling and storage of fuel, raw materials, products, wastes or by-products should be carried out in a manner so as to prevent the release of visible dust and/or other noxious or offensive emissions 						
	Non-Road Mobile Machinery (NRMM): All NRMMs operating on-site which are subject to emission control of Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are approved/exempted (as the case may be) and affixed with the requisite approval/exemption labels.	✓	✓	Obs	✓	Obs	Obs
Noise Impact (Construction)							
3.1	Good Site Practice						
	<ul style="list-style-type: none"> Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: 						
	<ul style="list-style-type: none"> only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; 	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; mobile plant should be sited as far away from NSRs as possible; and material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities. 	✓	✓	✓	✓	✓	✓
3.1	<p>Adoption of Quieter PME</p> <p>The recommended quieter PME adopted in the assessment were taken from the EPD's QPME Inventory and "Sound Power Levels of Other Commonly Used PME" are presented in Table 4.26 in the EIA report. It should be noted that the silenced PME selected for assessment can be found in Hong Kong.</p>	✓	✓	✓	✓	✓	✓
3.1	<p>Use of Movable Noise Barriers</p> <p>Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked.</p>	✓	✓	✓	Obs	Obs	Obs
3.1	<p>Use of Noise Enclosure/ Acoustic Shed</p> <p>The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and concrete pump. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No. 9/2010.</p>	✓	✓	✓	✓	Obs	Obs

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
3.1	<p>Use of Noise Insulating Fabric</p> <p>Noise insulating fabric can also be adopted for certain PME (e.g. drill rig, pilling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric.</p>	✓	✓	✓	✓	✓	✓
3.1	<p>Scheduling of Construction Works outside School Examination Periods</p> <p>During construction phase, the contractor should liaise with the educational institutions (including NSRs LCS and CRGPS) to obtain the examination schedule and avoid the noisy construction activities during school examination periods.</p>	✓	✓	✓	✓	✓	✓
Water Quality Impact (Construction)							
4.1	<p>Construction site runoff and drainage</p> <p>The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended to protect water quality and sensitive uses of the coastal area, and when properly implemented should be sufficient to adequately control site discharges so as to avoid water quality impacts:</p> <ul style="list-style-type: none"> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the WKCDA's Contractor prior to the commencement of construction; 	Obs	✓	✓	Obs	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM standards under the WPCO. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the WKCDA's Contractor prior to the commencement of construction. 	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	✓	Obs	Obs, Rem	✓	Obs	Obs
	<ul style="list-style-type: none"> Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities. 	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> 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 sited wheel washing facility should be provided at construction site exit where practicable. Wash-water should have sand and silt settled out and removed regularly 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. 	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Open stockpiles of construction materials or construction wastes onsite 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. 	✓	Obs	✓	Obs	Obs	Obs
	<ul style="list-style-type: none"> Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and stormwater runoff being directed into foul sewers. 	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Precautions should be taken at any time of the year when rainstorms are likely. Actions should be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC Note PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. 	Obs	Obs	Obs	✓	✓	✓
	<ul style="list-style-type: none"> Bentonite slurries used in piling or slurry walling should be reconditioned and reused wherever practicable. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	N/A	N/A	N/A	N/A	N/A	N/A
4.1	<p>Barging facilities and activities</p> <p>Recommendations for good site practices during operation of the proposed barging point include:</p>						
	<ul style="list-style-type: none"> All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; 	N/A	N/A	N/A	N/A	N/A	N/A

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material; and Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site. 	N/A	N/A	N/A	N/A	N/A	N/A
4.1	<p>Sewage effluent from construction workforce</p> <p>Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.</p>	✓	✓	✓	✓	✓	✓
4.1	<p>General construction activities</p> <ul style="list-style-type: none"> Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used. Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. 	Obs	✓	✓	✓	✓	Obs
		Obs	Obs	✓	✓	Obs	Obs
Waste Management Implications (Construction)							

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
6.1	Good Site Practices						
	<ul style="list-style-type: none"> Recommendations for good site practices during the construction activities include: 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 Training of site personnel in proper waste management and chemical handling procedures Provision of sufficient waste disposal points and regular collection of waste Appropriate measures to minimise windblown litter and dust/odour during transportation of waste by either covering trucks or by transporting wastes in enclosed containers Provision of wheel washing facilities before the trucks leaving the works area so as to minimise dust introduction to public roads Well planned delivery programme for offsite disposal such that adverse environmental impact from transporting the inert or non-inert C&D materials is not anticipated 	✓	✓	✓	✓	Obs	Obs
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
6.1	Waste Reduction Measures						
	Recommendations to achieve waste reduction include:						
	<ul style="list-style-type: none"> Sort inert C&D material to recover any recyclable portions such as metals Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal Encourage collection of recyclable waste such as waste paper and aluminium cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force 	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Proper site practices to minimise the potential for damage or contamination of inert C&D materials Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of wastes 	✓	✓	✓	✓	Obs	Obs
6.1	<p>Inert and Non-inert C&D Materials</p> <p>In order to minimise impacts resulting from collection and transportation of inert C&D material for off-site disposal, the excavated materials should be reused on-site as fill material as far as practicable. In addition, inert C&D material generated from excavation works could be reused as fill materials in local projects that require public fill for reclamation.</p> <ul style="list-style-type: none"> The surplus inert C&D material will be disposed of at the Government's PFRFs for beneficial use by other projects in Hong Kong. Liaison with the CEDD Public Fill Committee (PFC) on the allocation of space for disposal of the inert C&D materials at PFRF is underway. No construction work is allowed to proceed until all issues on management of inert C&D materials have been resolved and all relevant arrangements have been endorsed by the relevant authorities including PFC and EPD. The C&D materials generated from general site clearance should be sorted on site to segregate any inert materials for reuse or disposal of at PFRFs whereas the non-inert materials will be disposed of at the designated landfill site. 	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> In order to monitor the disposal of inert and non-inert C&D materials at respectively PFRFs and the designated landfill site, and to control fly-tipping, it is recommended that the Contractor should follow the Technical Circular (Works) No. 6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials issued by Development Bureau. In addition, it is also recommended that the Contractor should prepare and implement a Waste Management Plan detailing their various waste arising and waste management practices in accordance with the relevant requirements of the Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site. 	✓	✓	✓	✓	✓	✓
6.1	Chemical Waste <ul style="list-style-type: none"> If chemical wastes are produced at the construction site, the Contractor will be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the “Code of Practice on the Packaging Labelling and Storage of Chemical Wastes”. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor should use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	✓	✓	✓	✓	✓	✓

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
	<ul style="list-style-type: none"> Potential environmental impacts arising from the handling activities (including storage, collection, transportation and disposal of chemical waste) are expected to be minimal with the implementation of appropriate mitigation measures as recommended. 	Obs	✓	✓	Obs	✓	✓
6.1	<p>General Refuse</p> <p>General refuse should be stored in enclosed bins or compaction units separated from inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	✓	✓	✓	✓	✓	Obs
Land Contamination (Construction)							
7.1	<p>The potential for land contamination issues at the TST Fire Station due to its future relocation will be confirmed by site investigation after land acquisition. Where necessary, mitigation measures for minimising potential exposure to contaminated materials (if any) or remediation measures will be identified. If contaminated land is identified (e.g., during decommissioning of fuel oil storage tanks) after the commencement of works, mitigation measures are proposed in order to minimise the potentially adverse effects on the health and safety of construction workers and impacts arising from the disposal of potentially contaminated materials. The following measures are proposed for excavation and transportation of contaminated material:</p> <ul style="list-style-type: none"> To minimize the chance for construction workers to come into contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; 	N/A	N/A	N/A	N/A	N/A	N/A

EM&A Ref.	Recommendation Measures	Implementation Stage					
		Zone 2A			Zone 2B & 2C		
		May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
Table 9.1 (CM1)	Trees should be retained in situ on site as far as possible. Should tree removal be unavoidable due to construction impacts, trees will be transplanted or felled with reference to the stated criteria in the Tree Removal Applications to be submitted to relevant government departments for approval in accordance to ETWB TCW No. 29/2004 and 3/2006.	✓	✓	✓	✓	✓	✓
Table 9.1 (CM2)	Compensatory tree planting shall be incorporated to the proposed project and maximize the new tree, shrubs and other vegetation planting to compensate tree felled and vegetation removed. Also, implementation of compensatory planting should be of a ratio not less than 1:1 in terms of quality and quantity within the site.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM3)	Buffer trees for screening purposes to soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM4)	Softscape treatments such as vertical green wall panel /planting of climbing and/or weeping plants, etc, to maximize the green coverage and soften the hard architectural and engineering structures and facilities.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM5)	Roof greening by means of intensive and extensive green roof to maximize the green coverage and improve aesthetic appeal and visual quality of the building/structure.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM6)	Sensitive streetscape design should be incorporated along all new roads and streets.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM7)	Structure, ornamental planting shall be provided along amenity strips to enhance the landscape quality.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM8)	Landscape design shall be incorporated to architectural and engineering structures in order to provide aesthetically pleasing designs.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.1 (CM9)	Minimize the structure of marine facilities to be built on the seabed and foreshore in order to minimize the affected extent to the waterbody	N/A	N/A	N/A	N/A	N/A	N/A

		Implementation Stage					
		Zone 2A			Zone 2B & 2C		
EM&A Ref.	Recommendation Measures	May 2022	Jun 2022	Jul 2022	May 2022	Jun 2022	Jul 2022
Table 9.2 (MCP1)	Use of decorative screen hoarding/boards	✓	✓	✓	✓	✓	✓
Table 9.2 (MCP2)	Early introduction of landscape treatments	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 (MCP3)	Adoption of light colour for the temporary ventilation shafts for the basement during the transition period.	N/A	N/A	N/A	N/A	N/A	N/A
Table 9.2 (MCP4)	Control of night time lighting	✓	✓	✓	✓	✓	✓
Table 9.2 (MCP5)	Use of greenery such as grass cover for the temporary open areas will help achieve the visual balance and soften the hard edges of the structures.	N/A	N/A	N/A	N/A	N/A	N/A

N/A - Not Applicable

✓ - Implemented

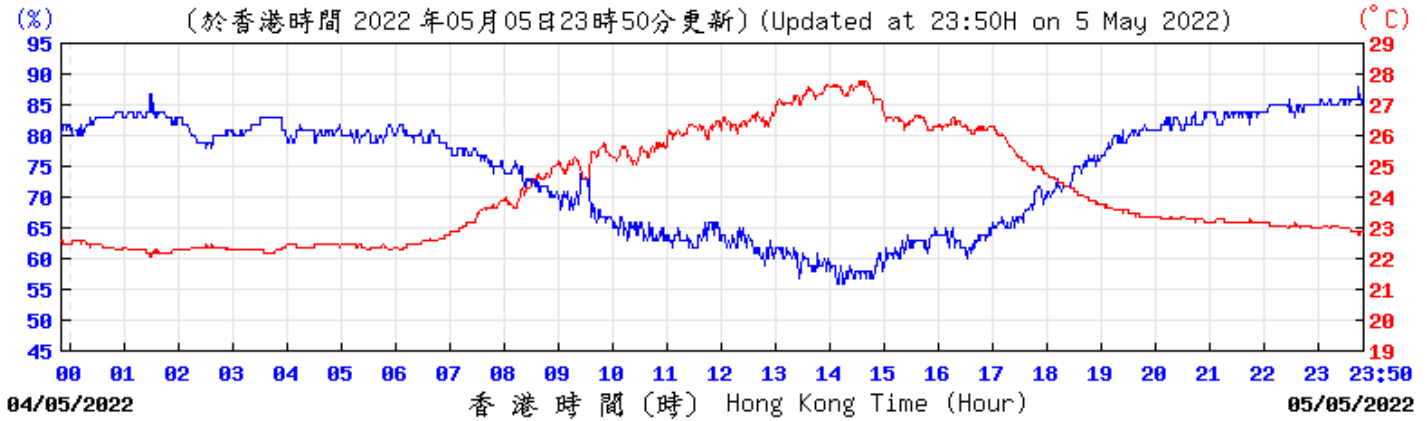
Obs - Observed

Rem - Reminder

D. Meteorological Data Extracted from Hong Kong Observatory

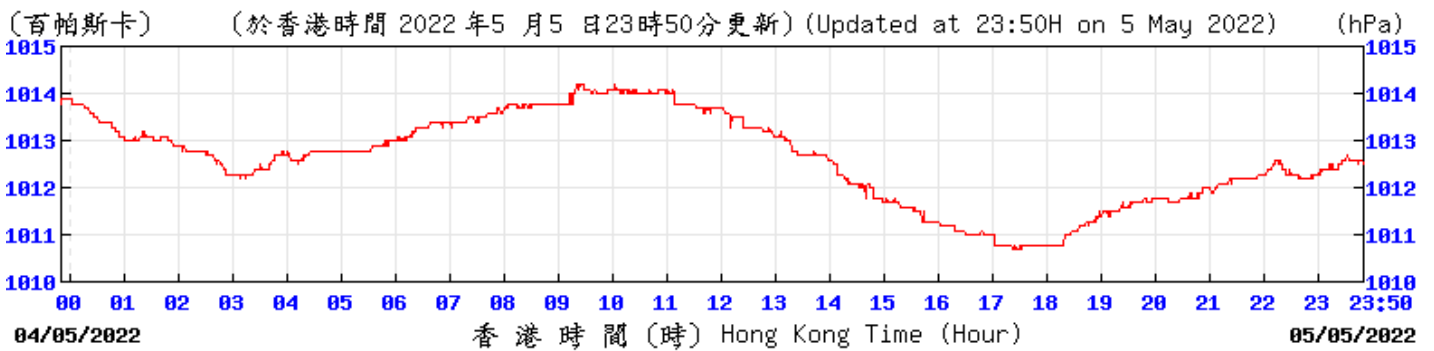
Extract of Meteorological Observations for King's Park Automatic Weather Station, May 2022

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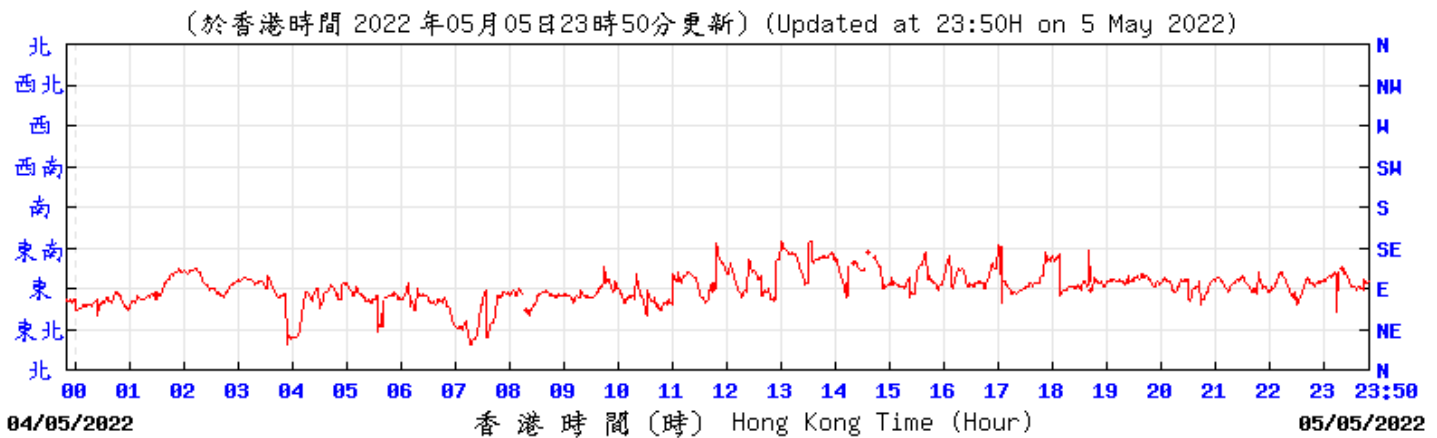
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Pressure:



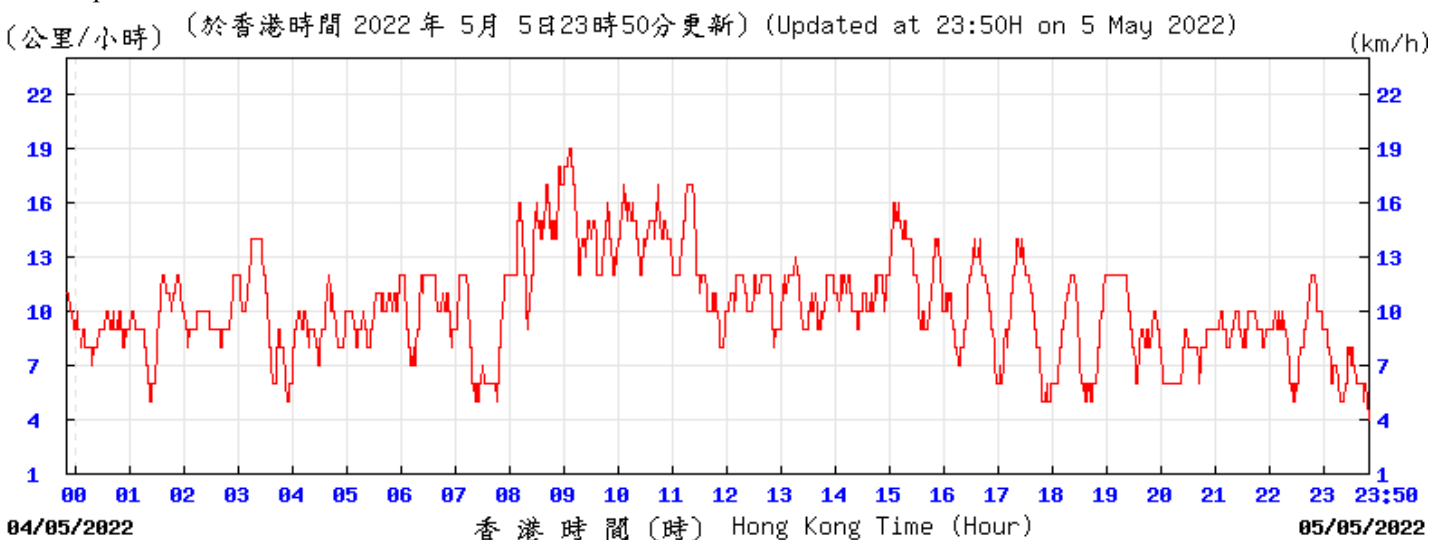
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Wind Direction:



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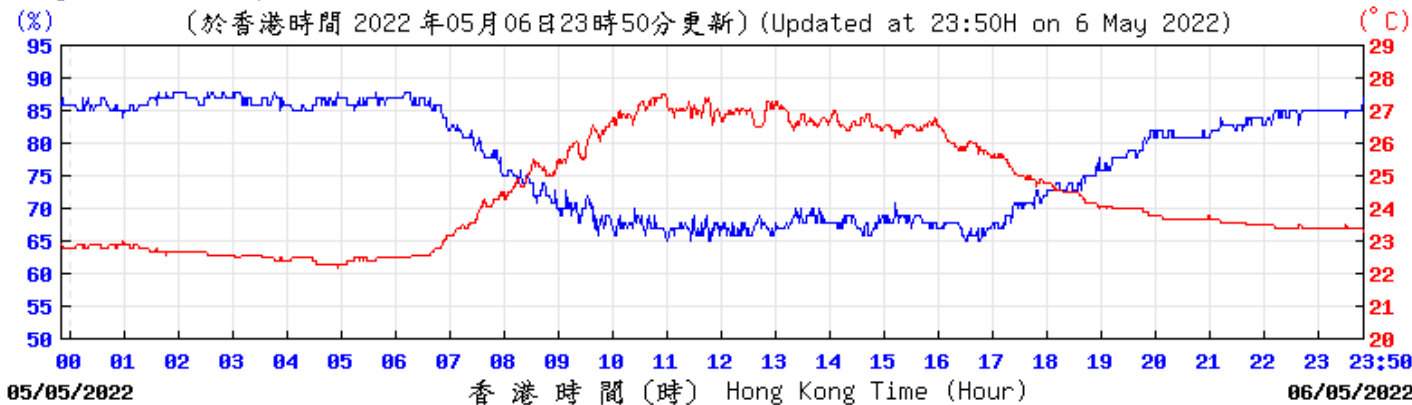
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KPC

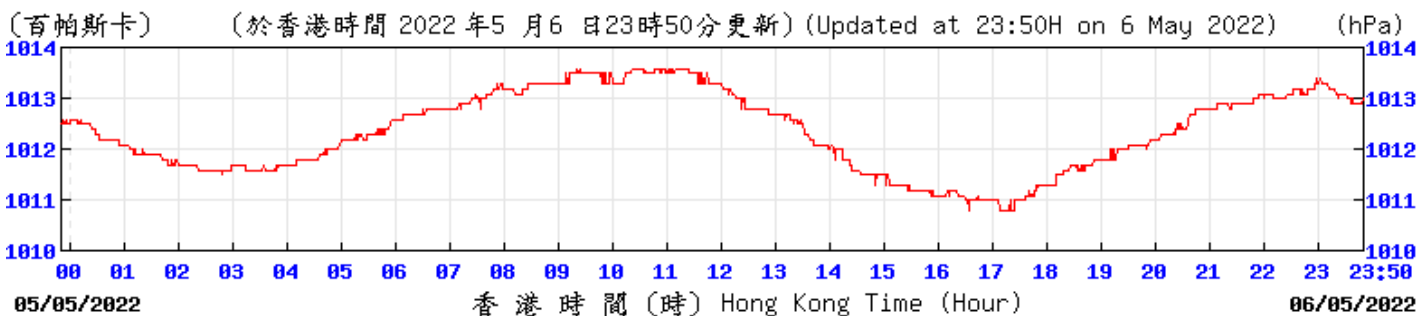
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Temperature/Humidity:



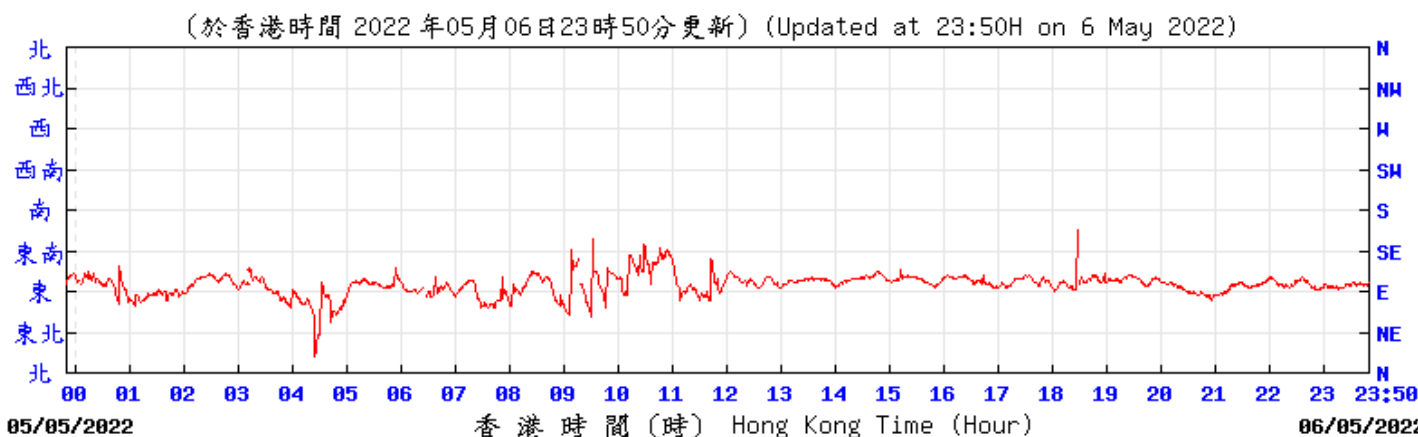
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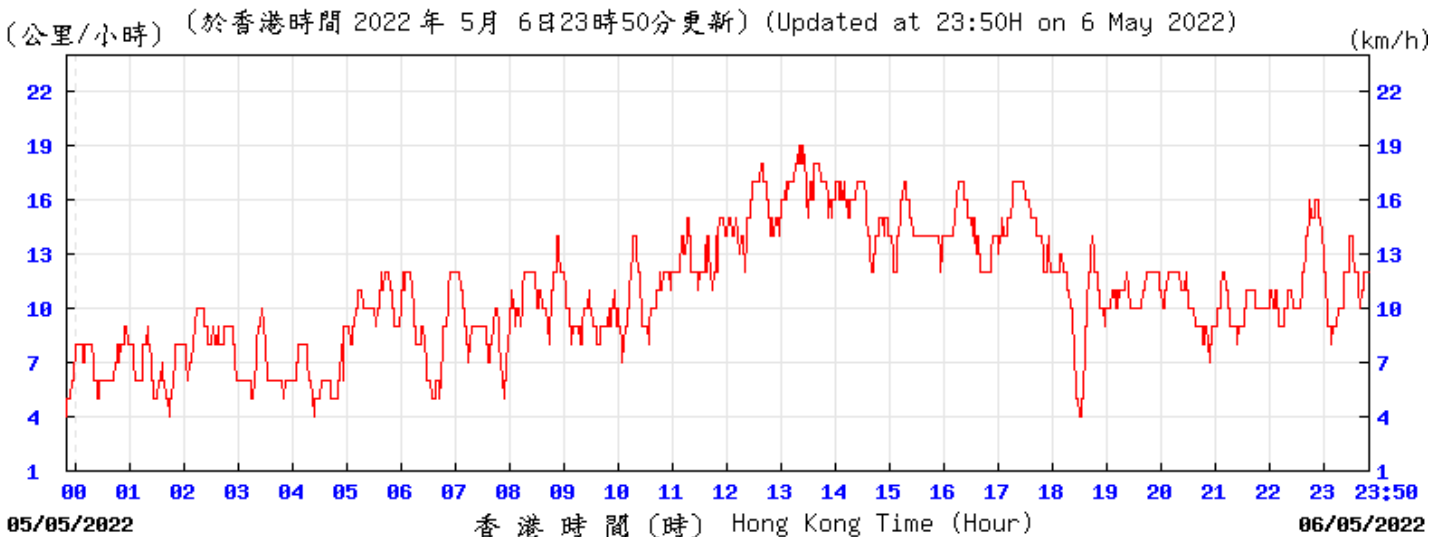
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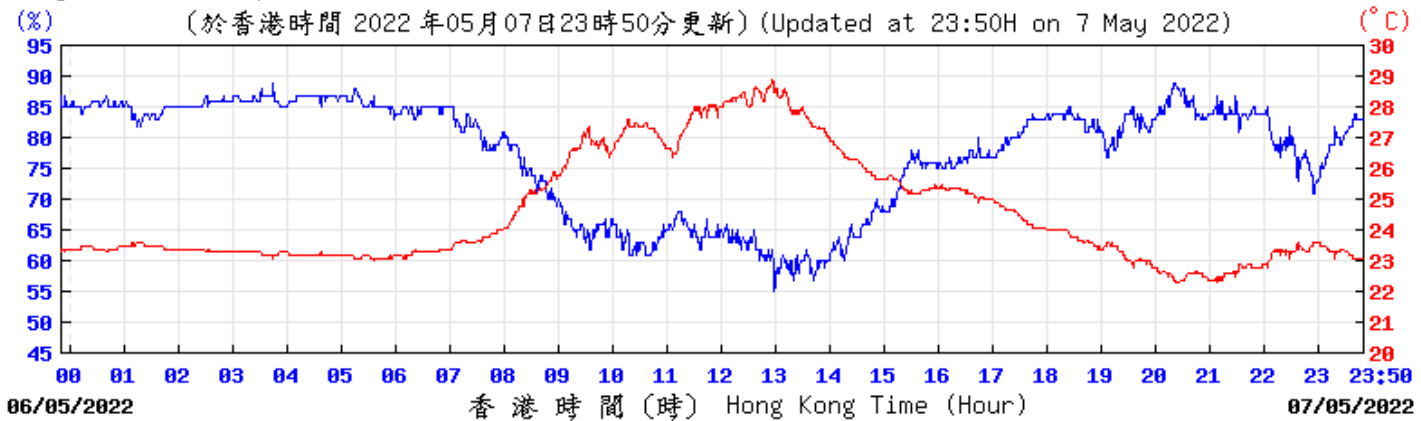
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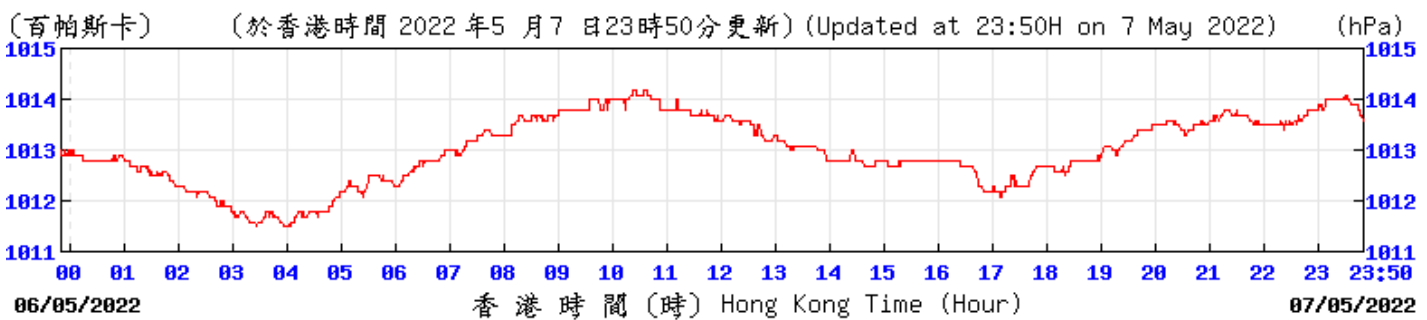
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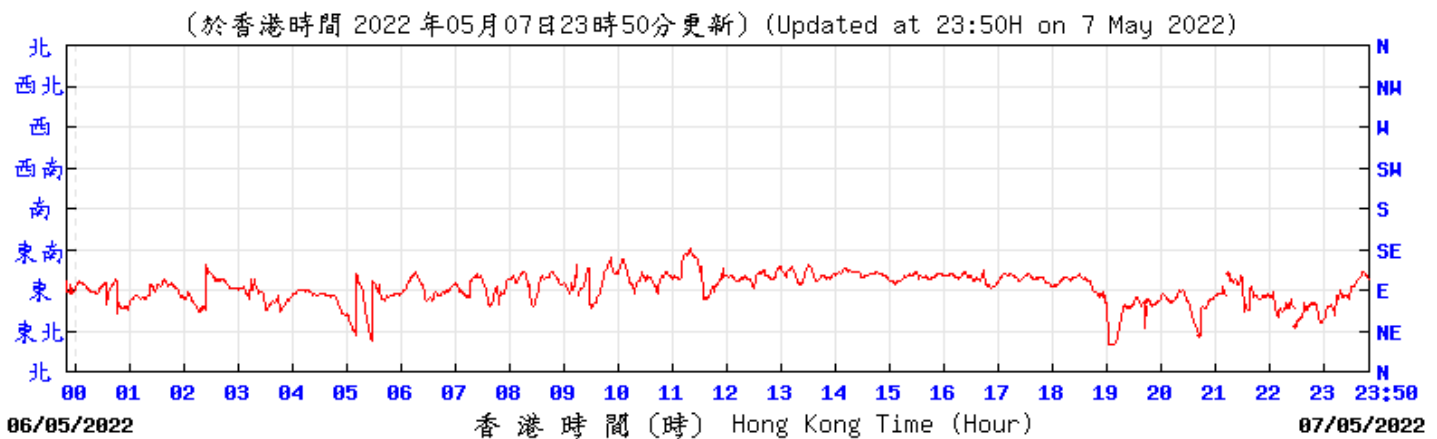
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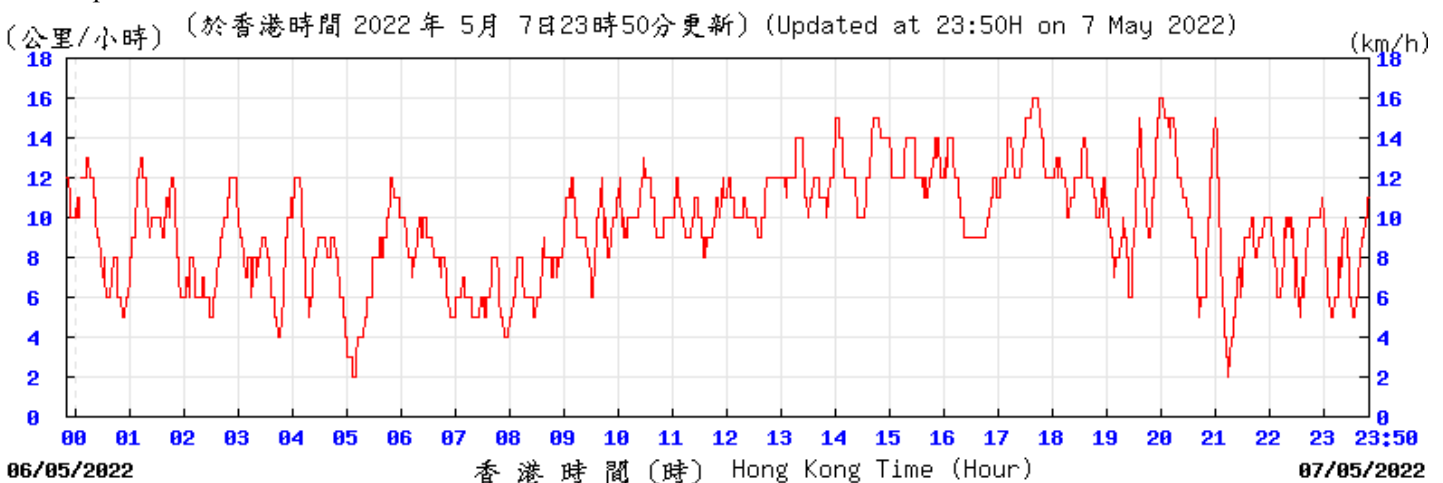
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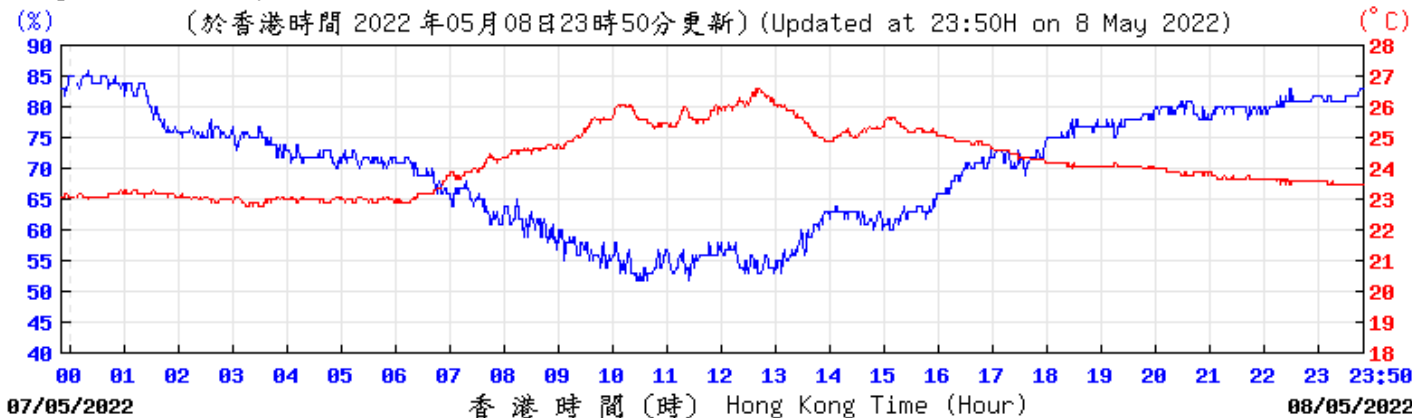
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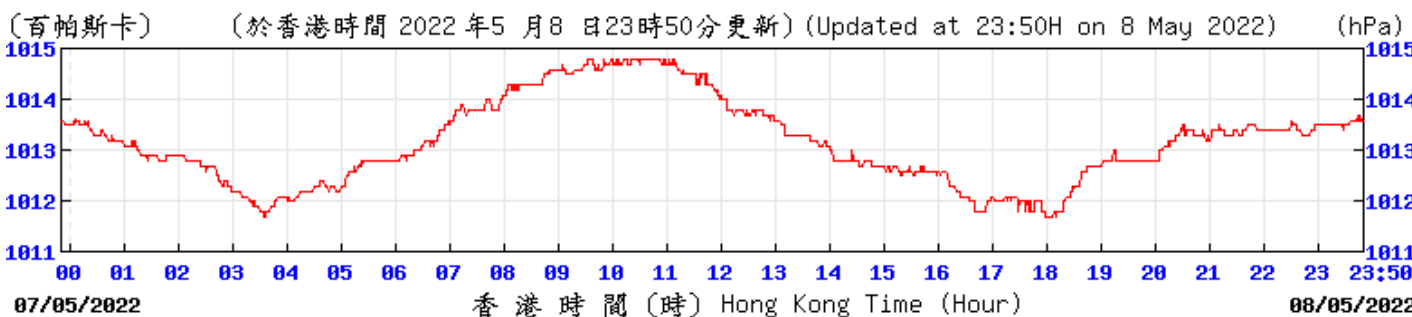
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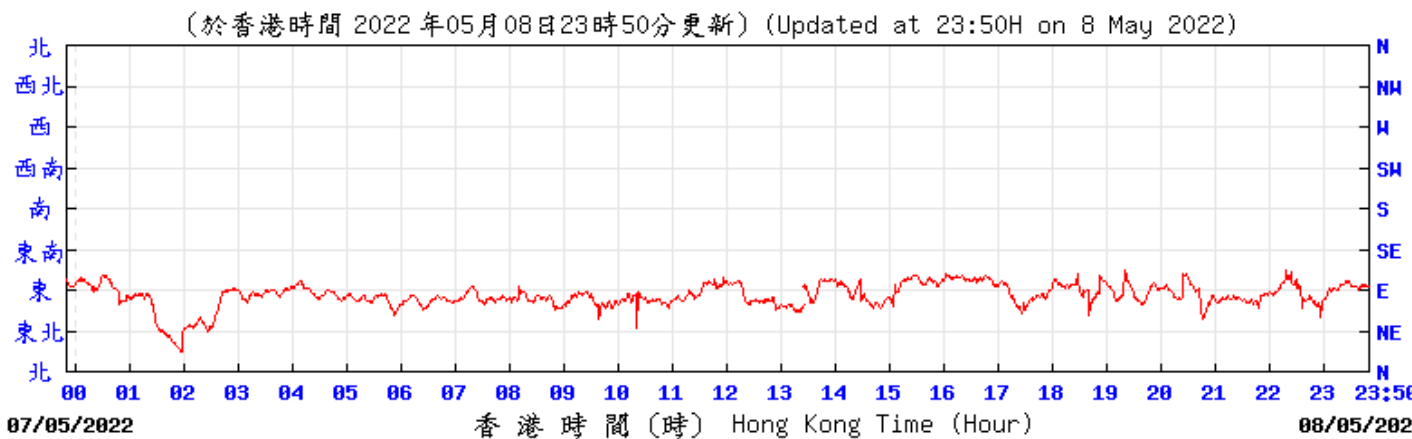
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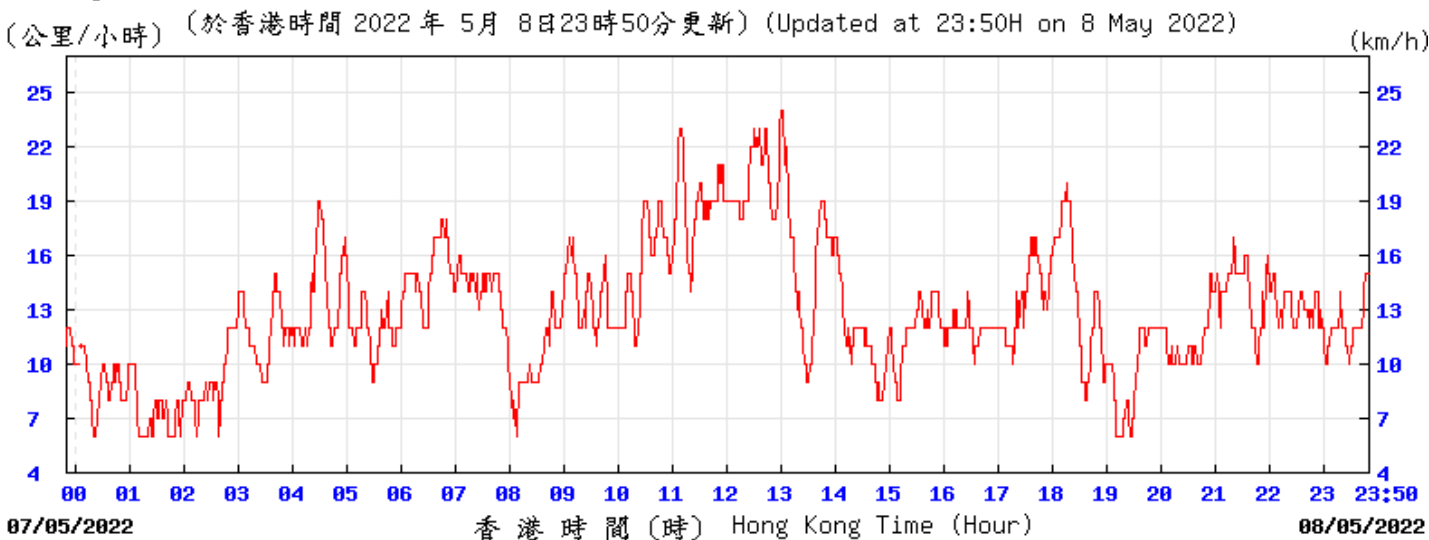
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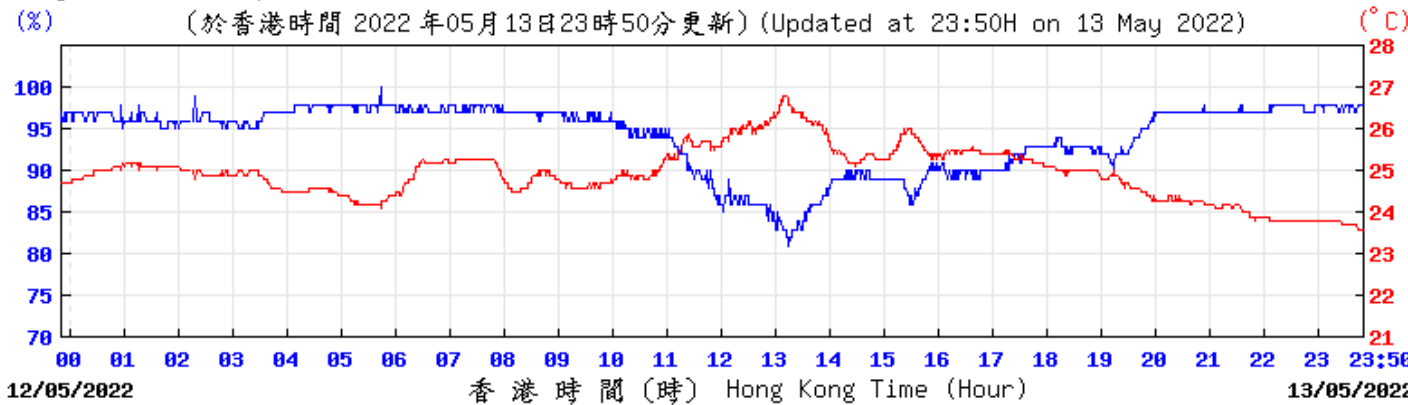
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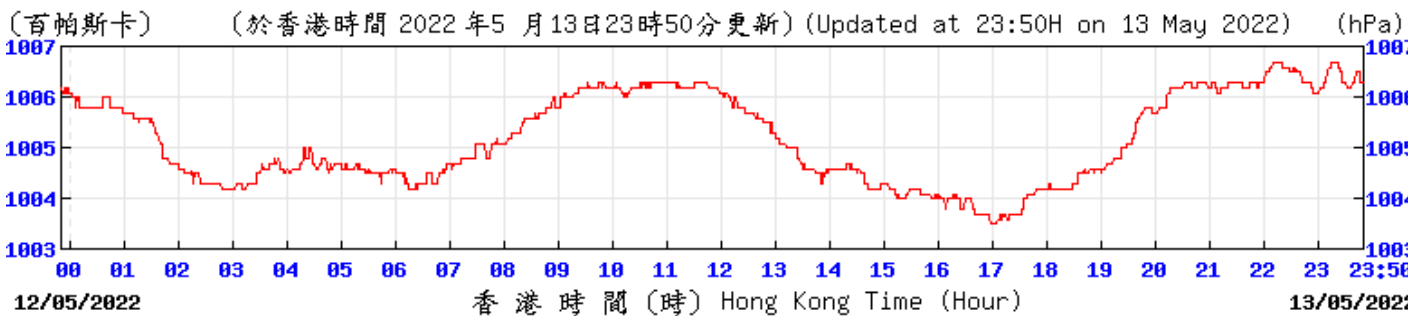
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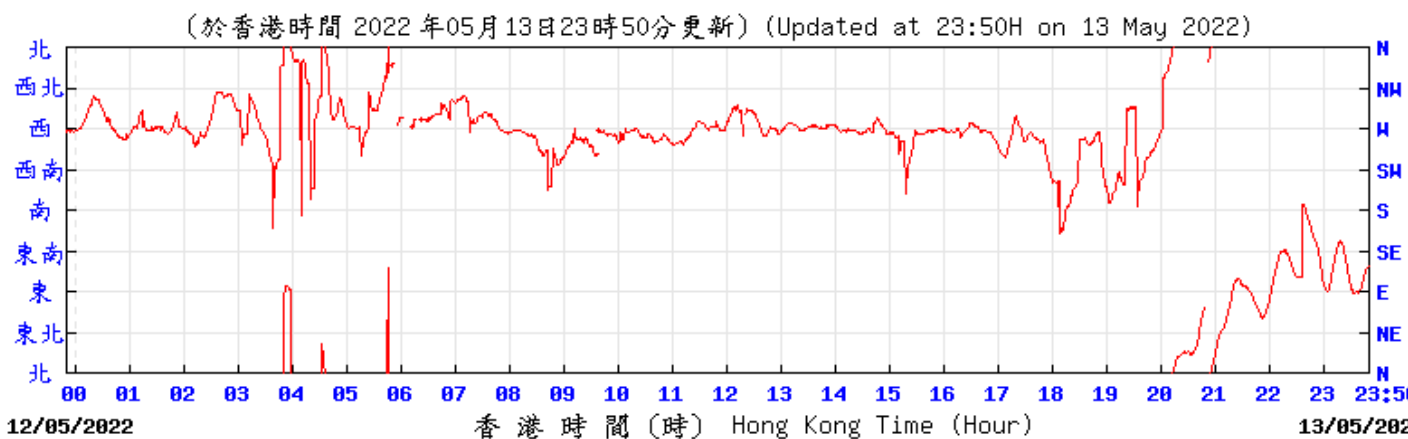
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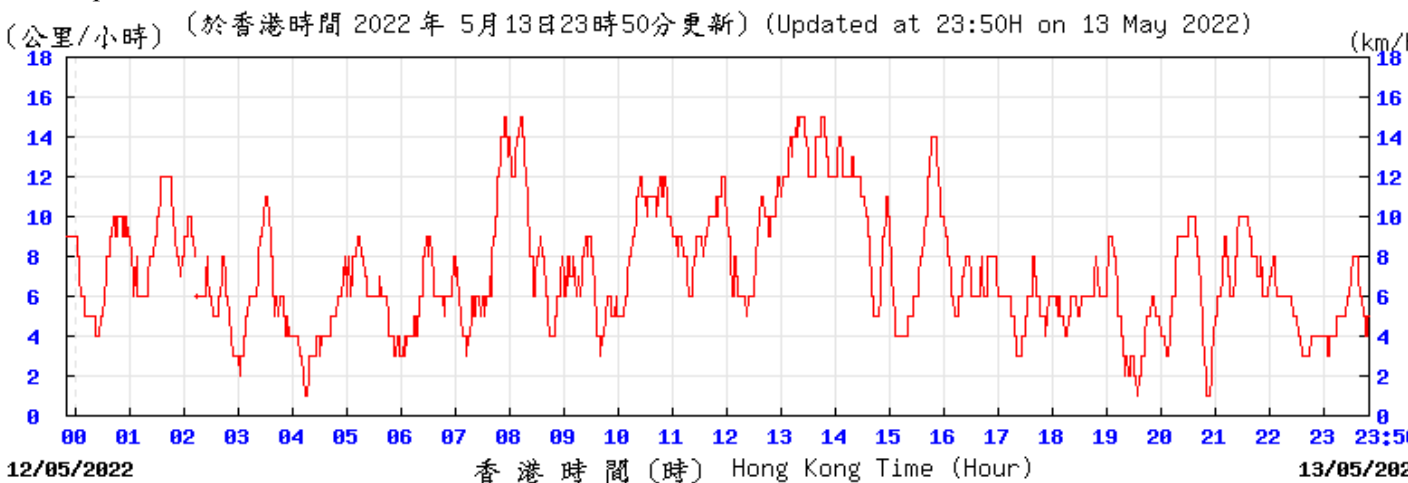
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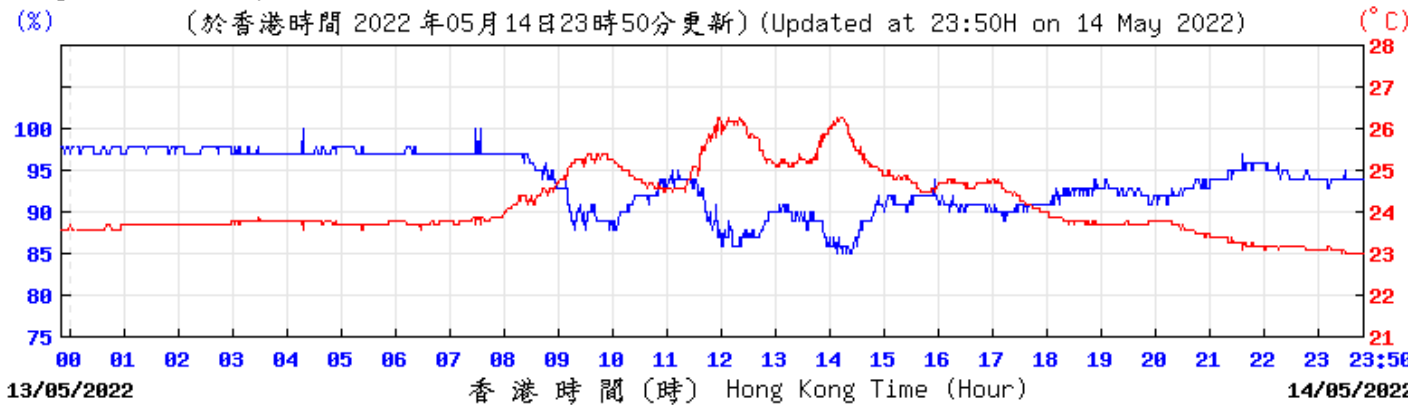
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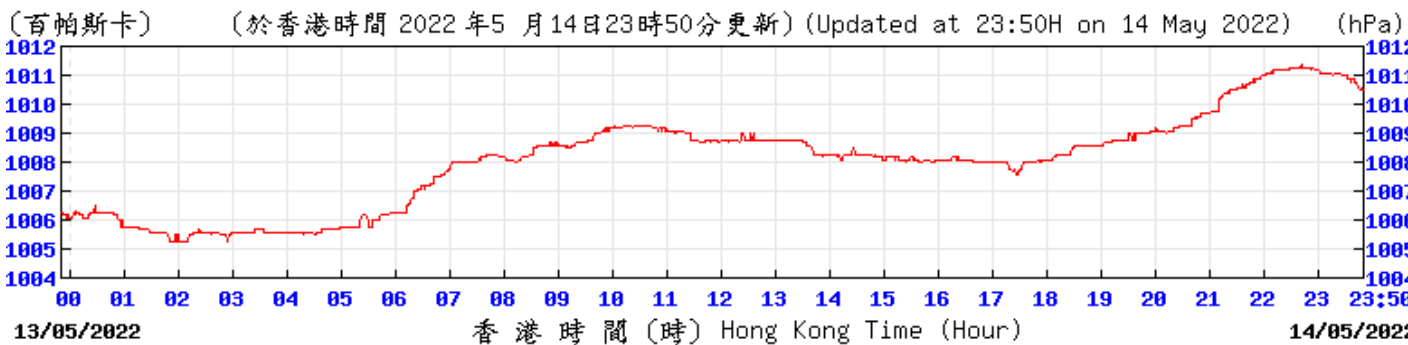
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Temperature/Humidity:



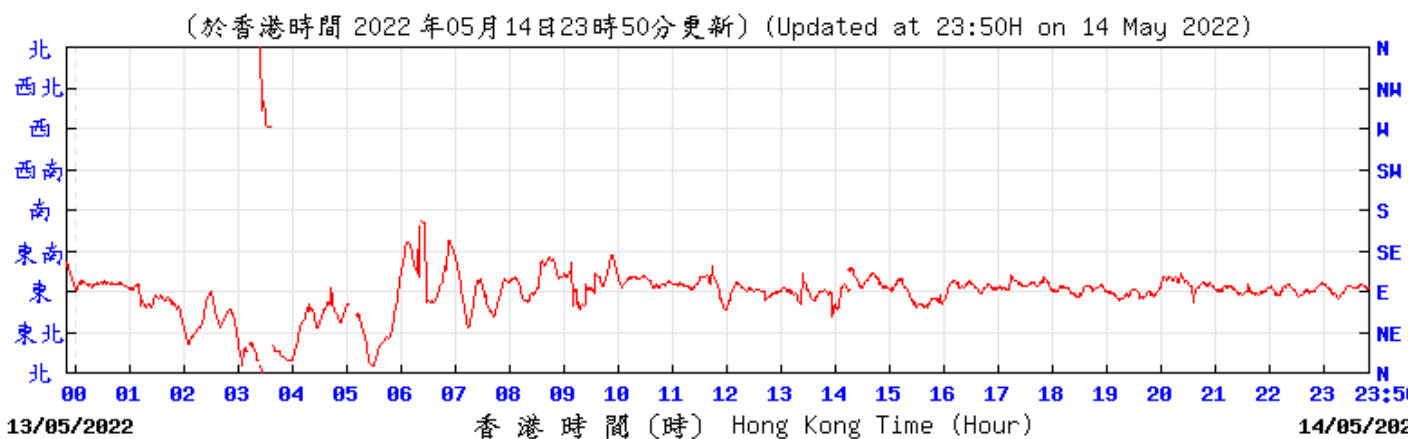
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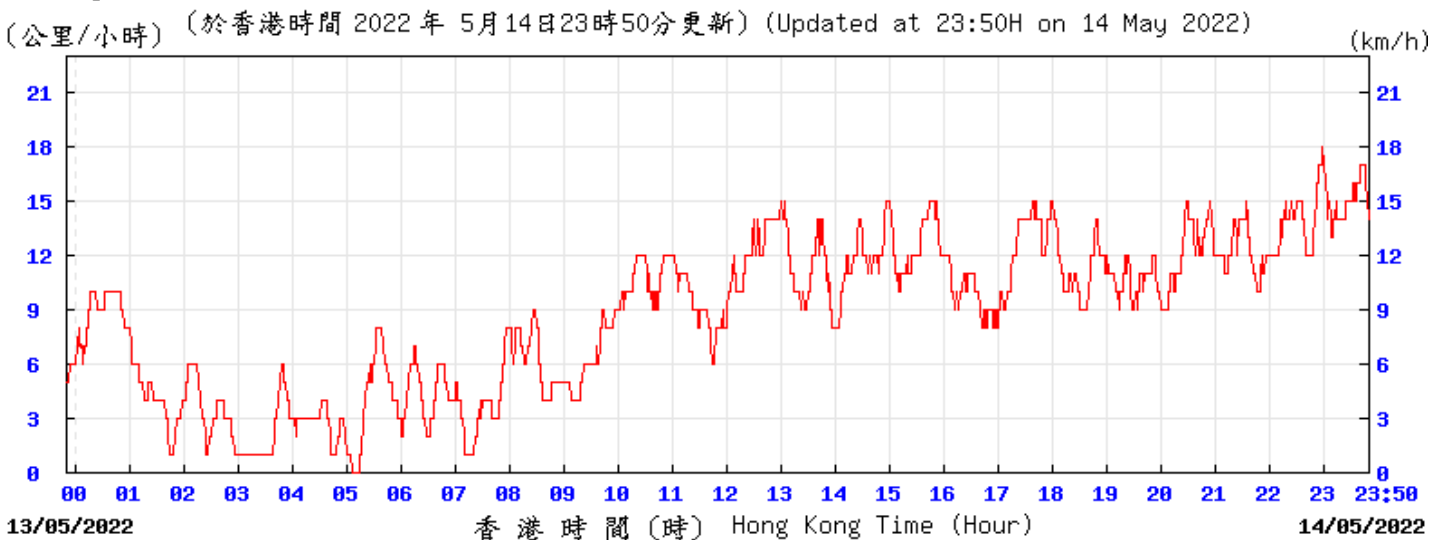
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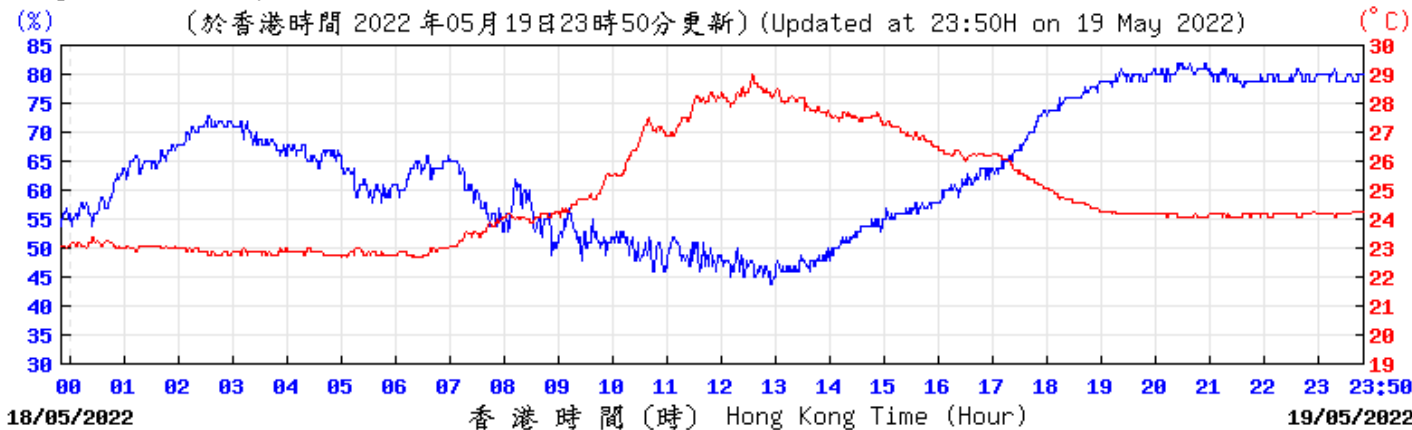
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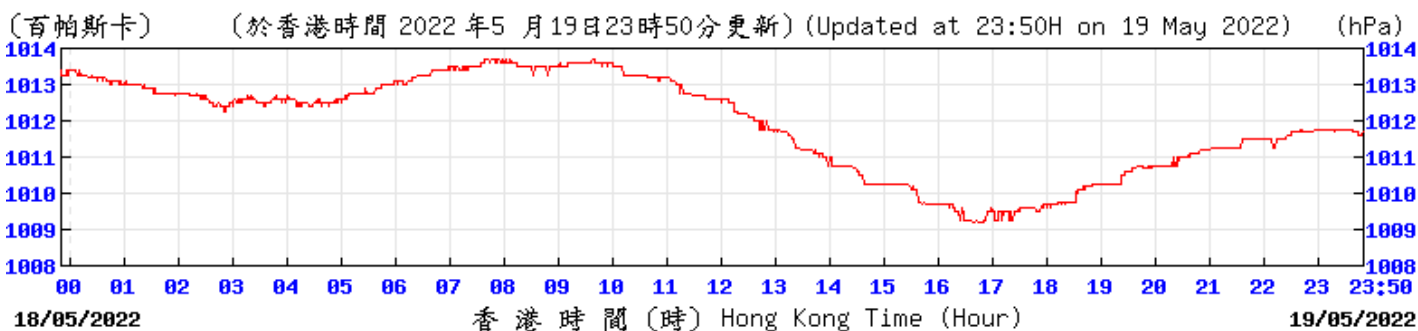
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Temperature/Humidity:



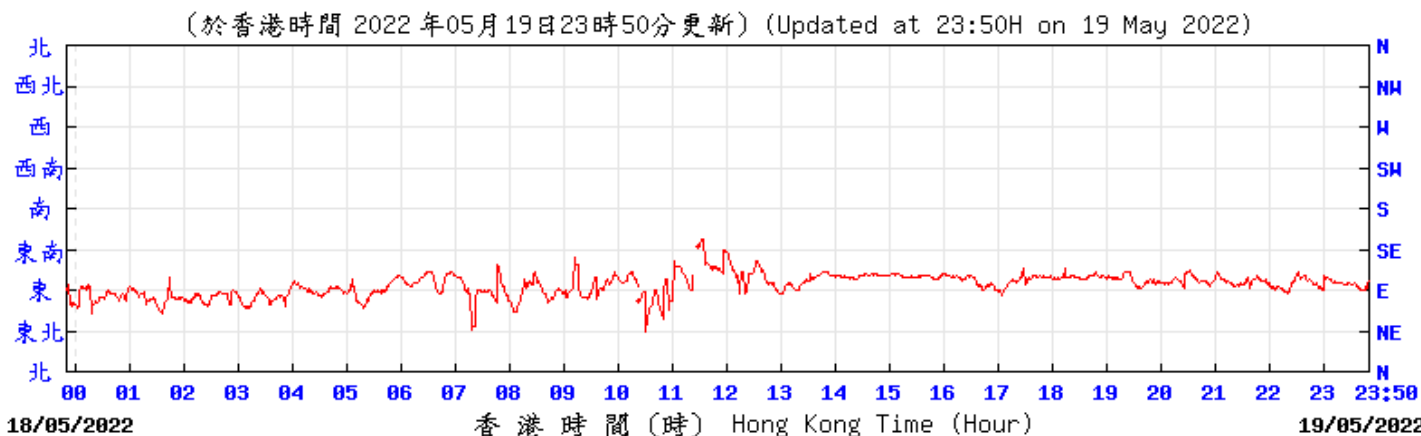
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Pressure:



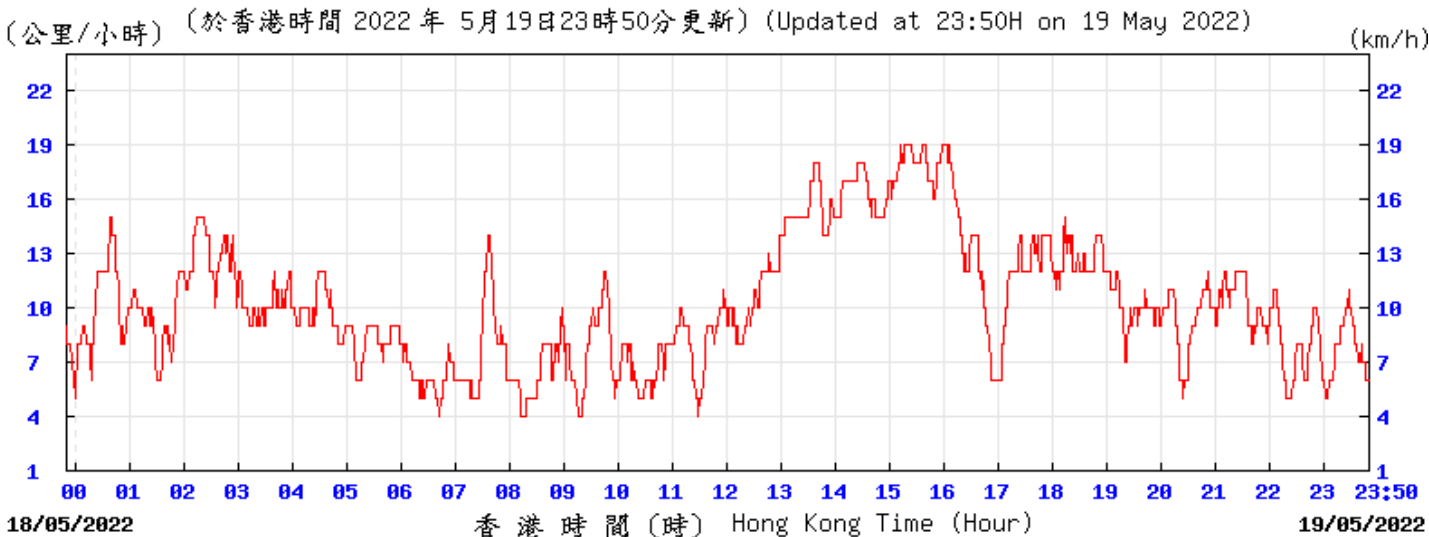
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Wind Direction:



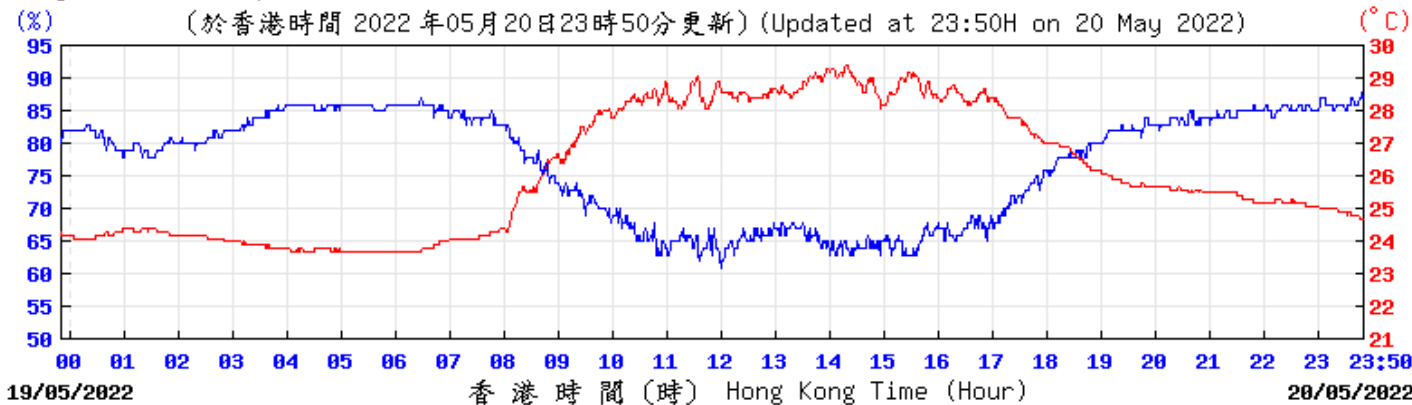
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Wind Speed:



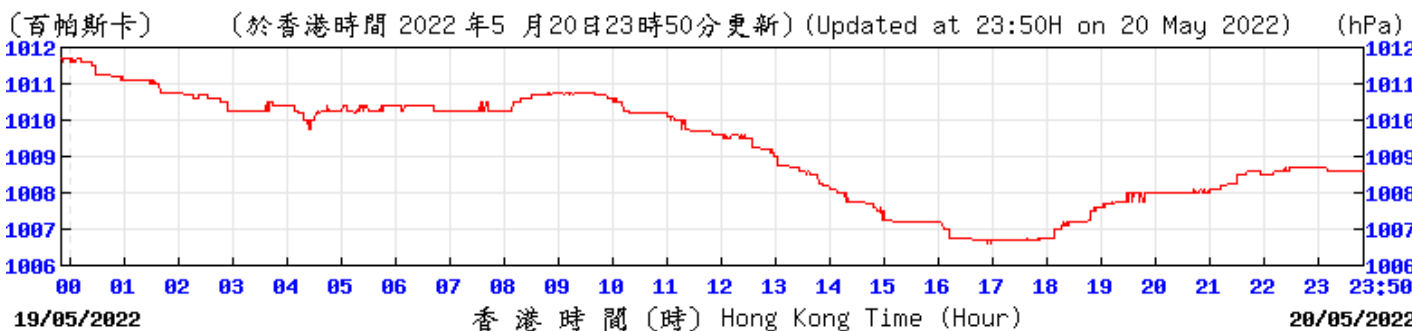
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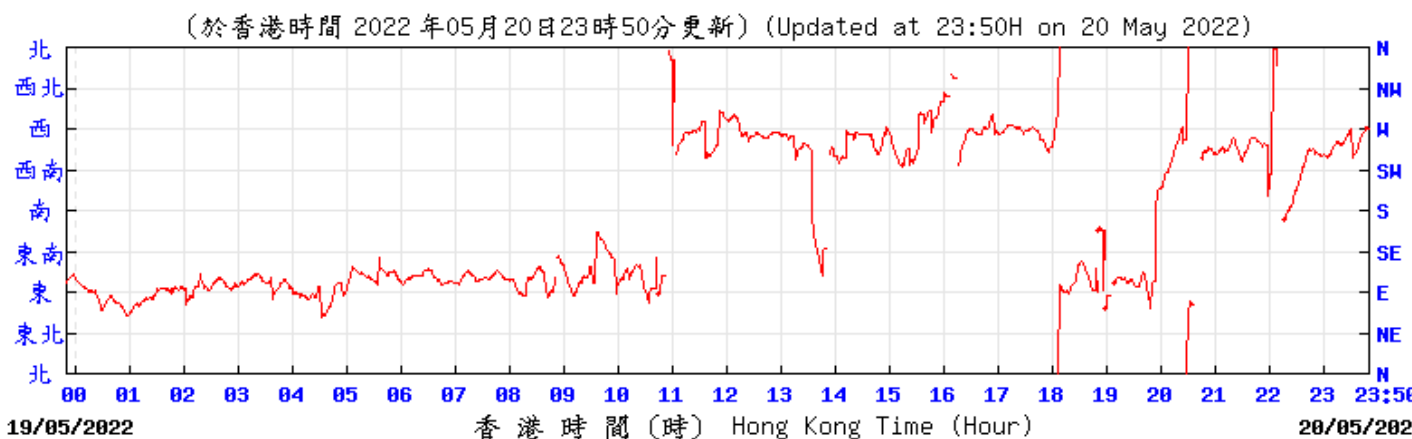
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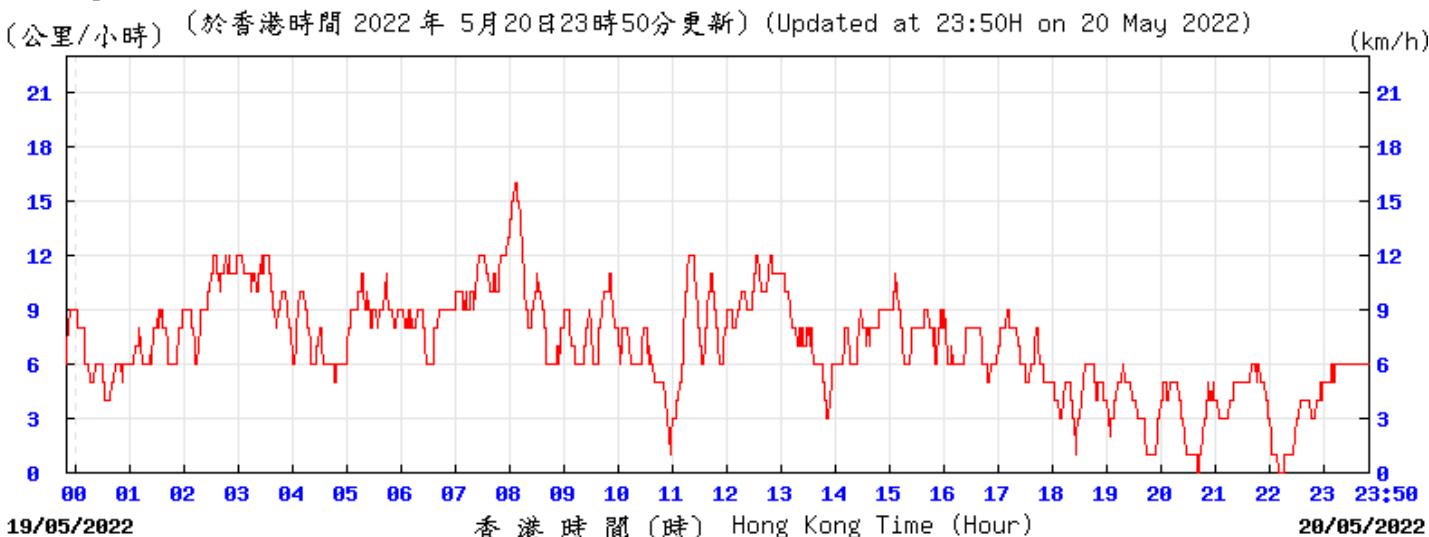
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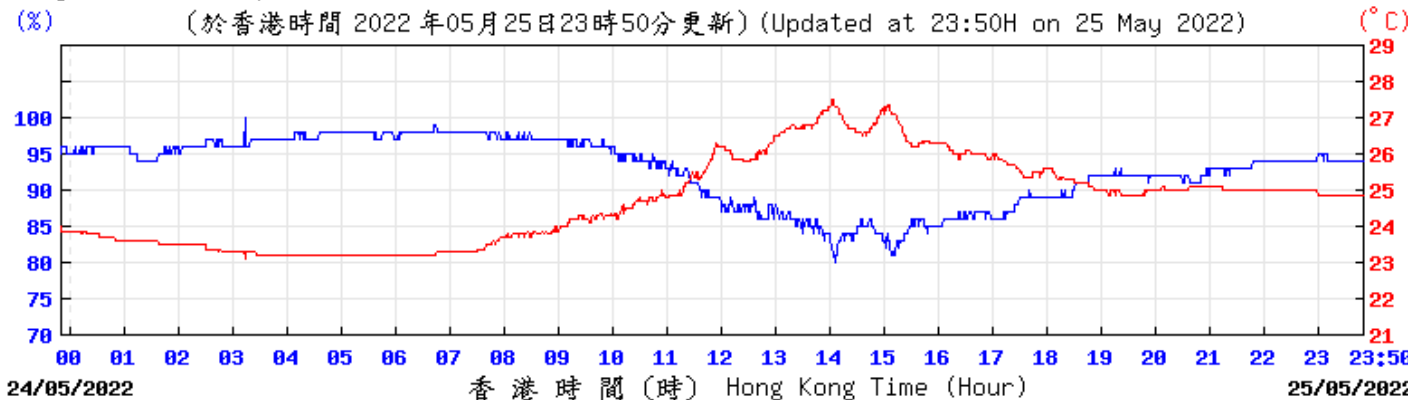
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Wind Speed:



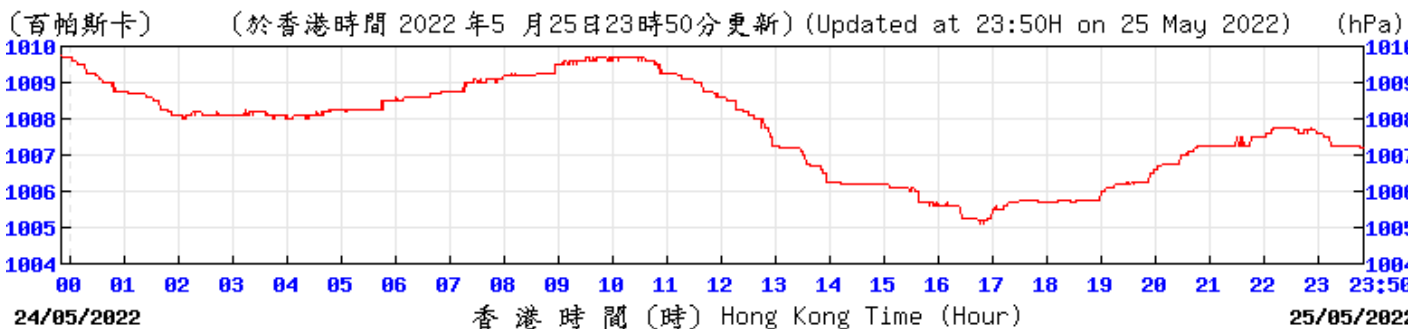
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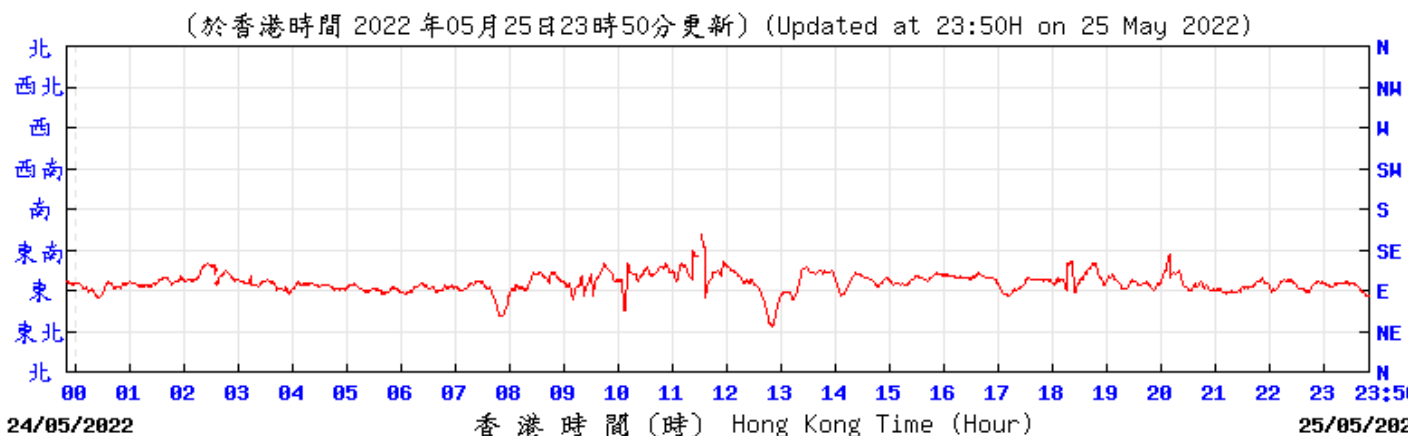
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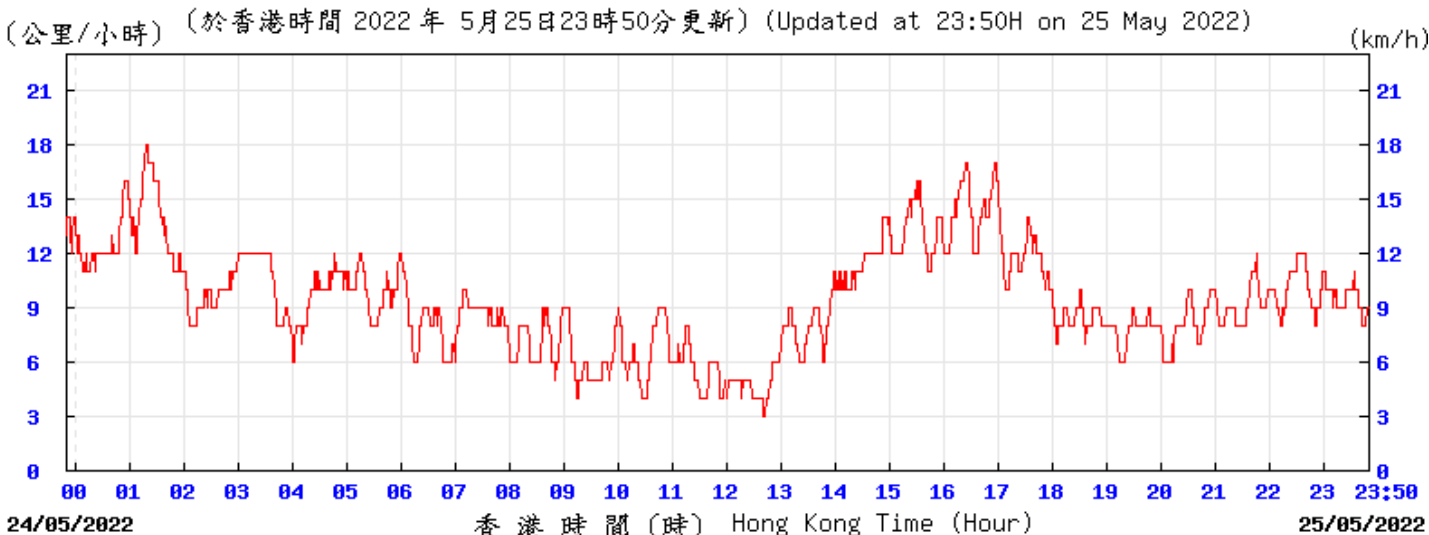
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Wind Direction:



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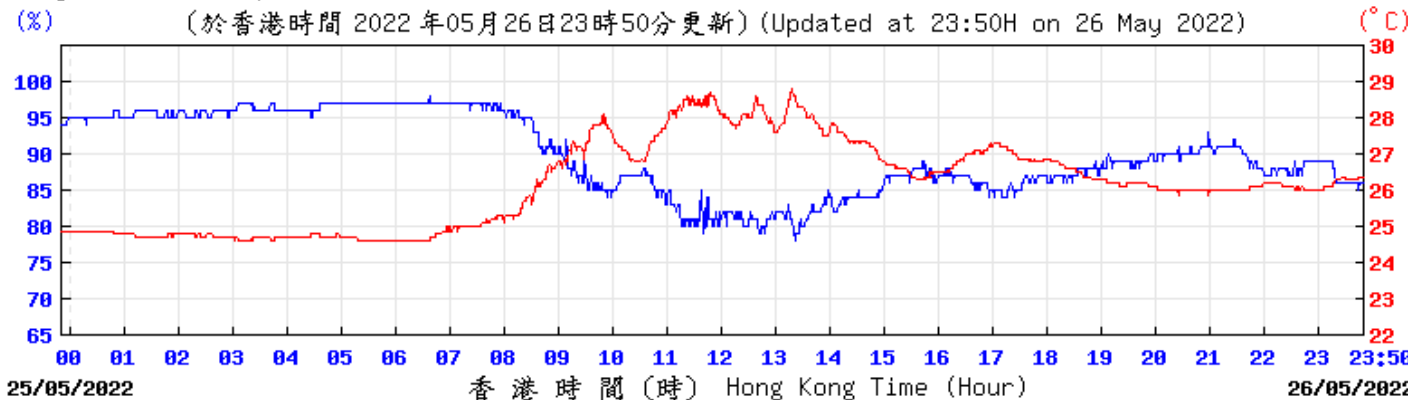
Wind Speed:



KPC

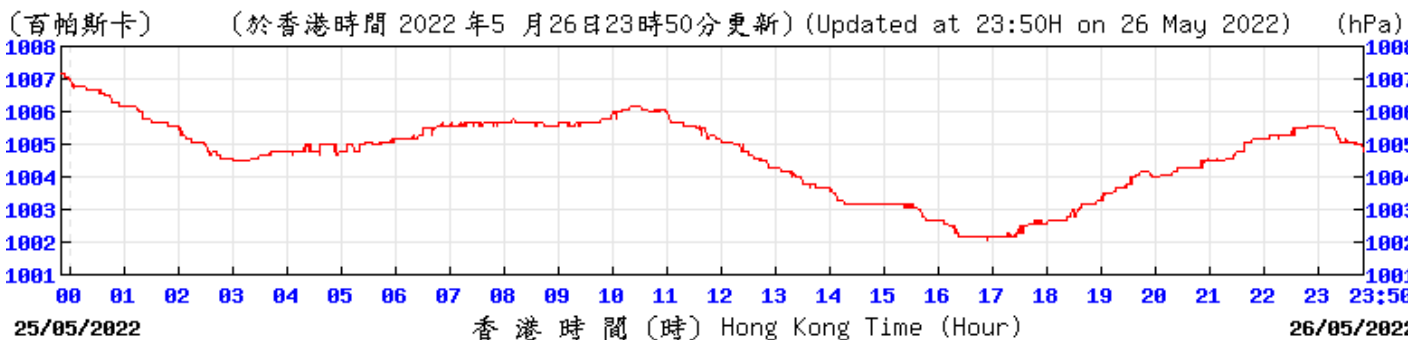
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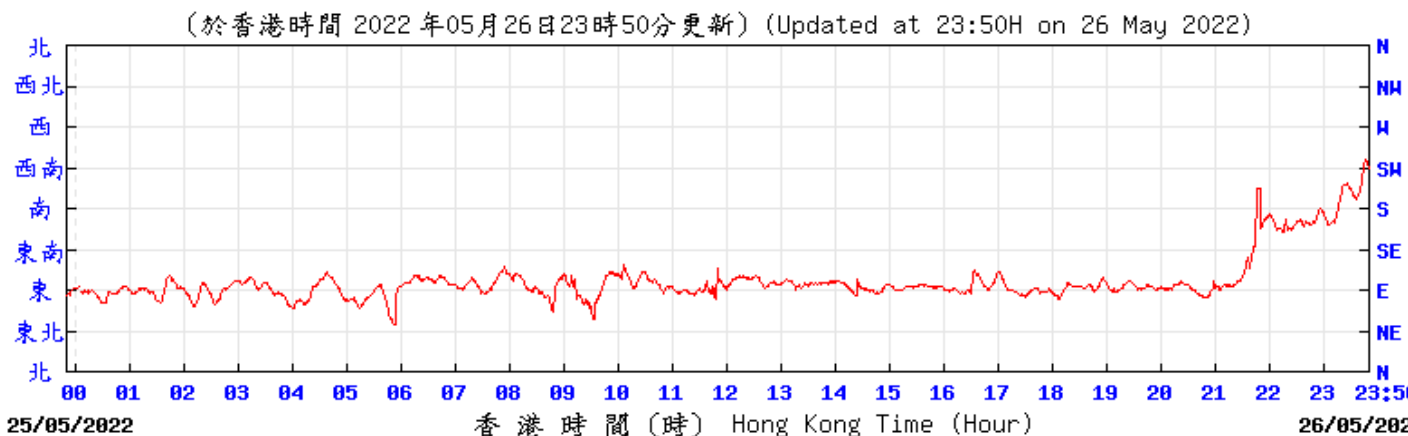
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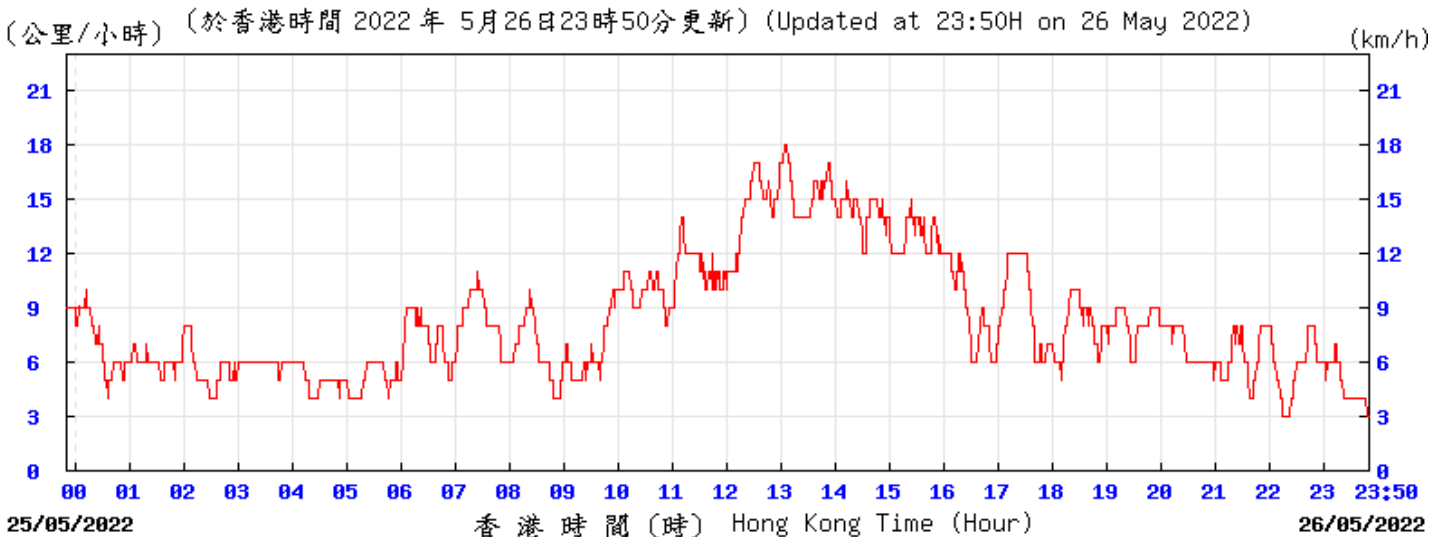
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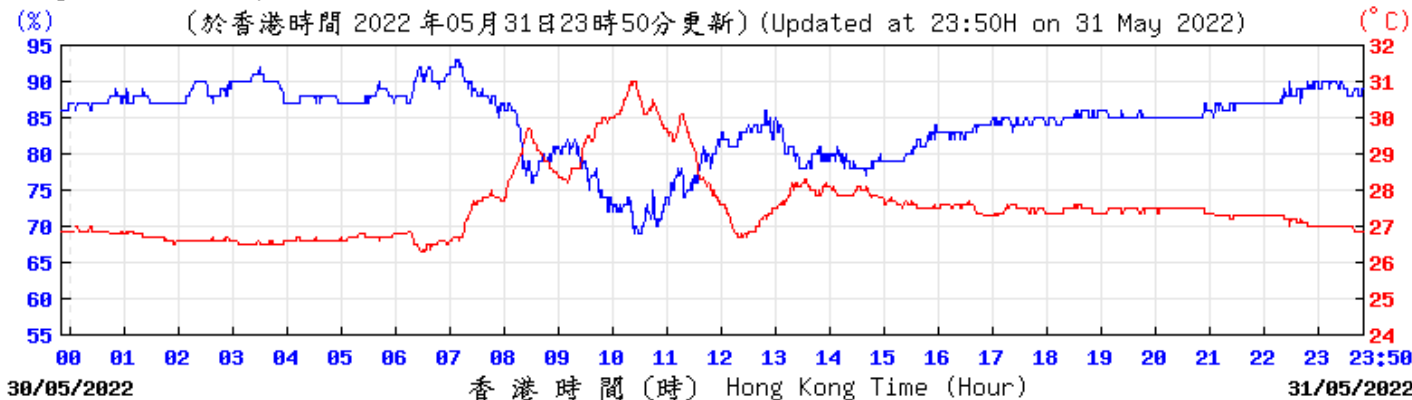
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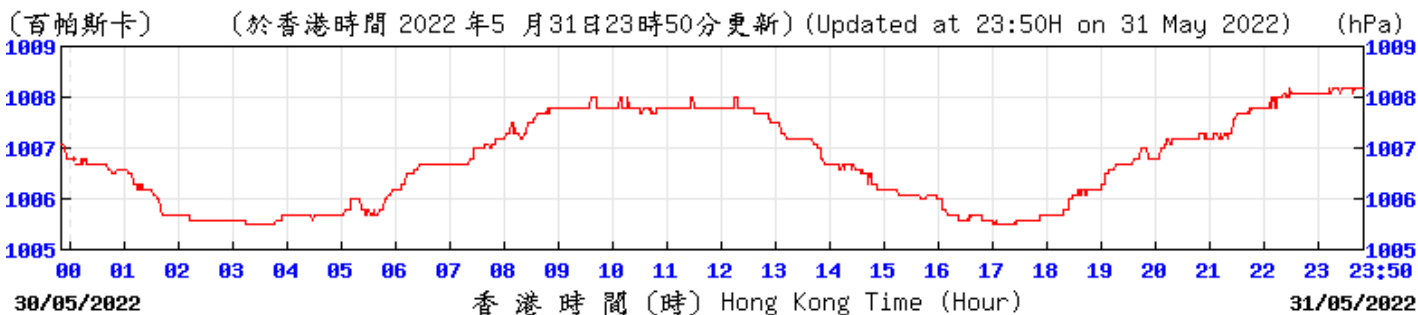
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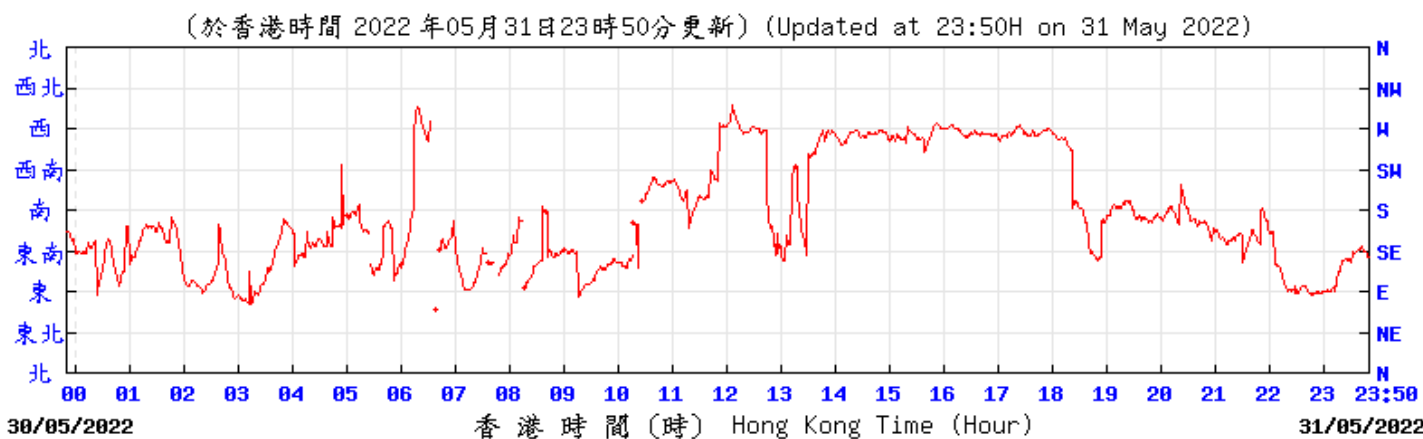
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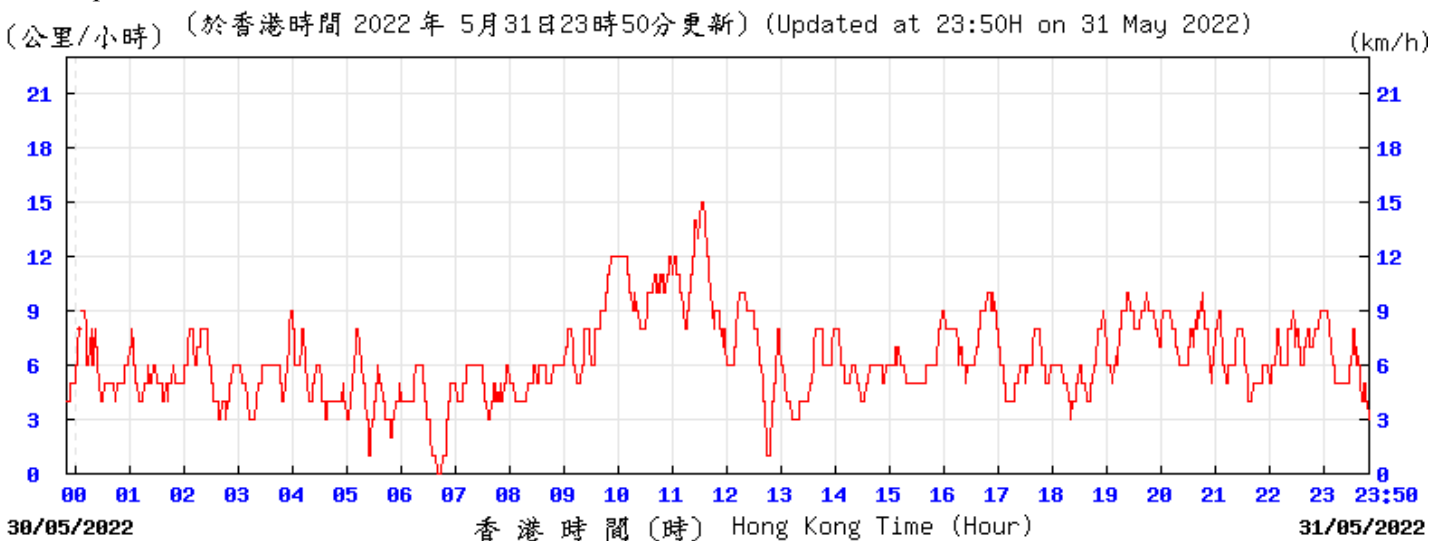
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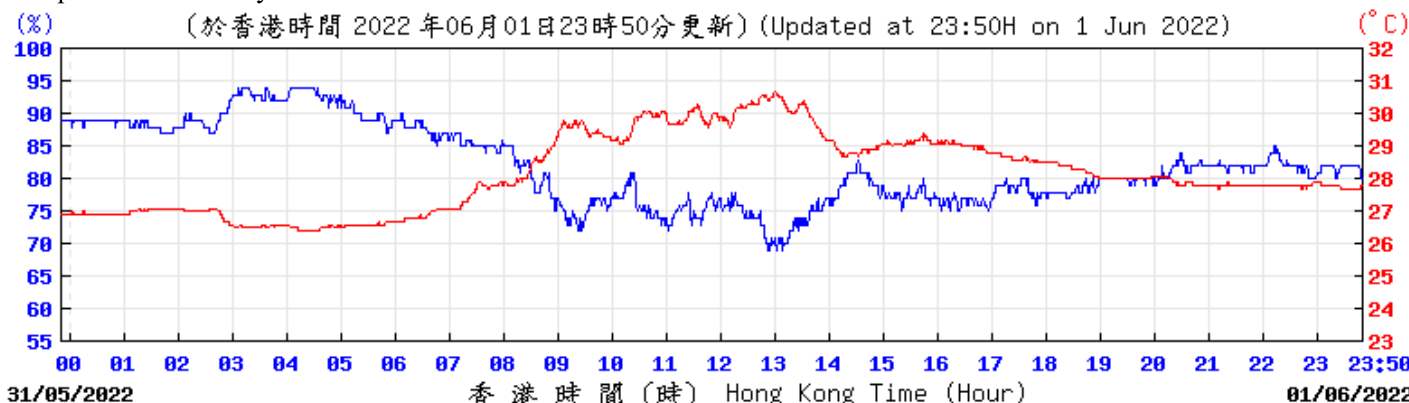
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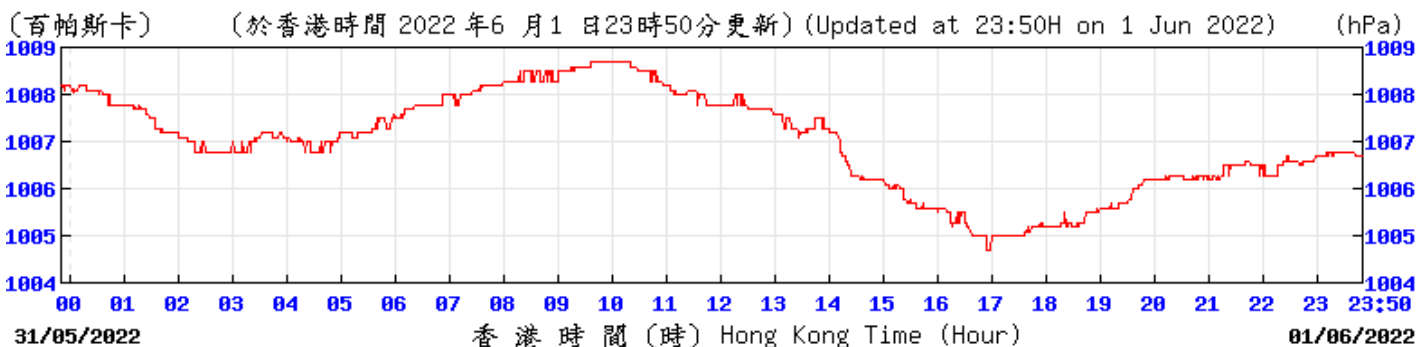
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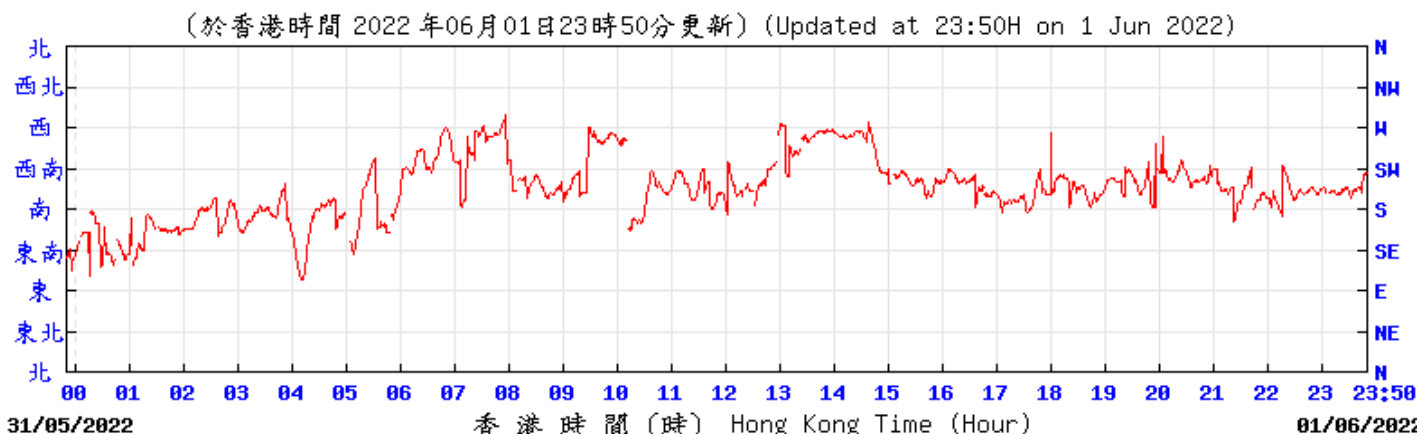
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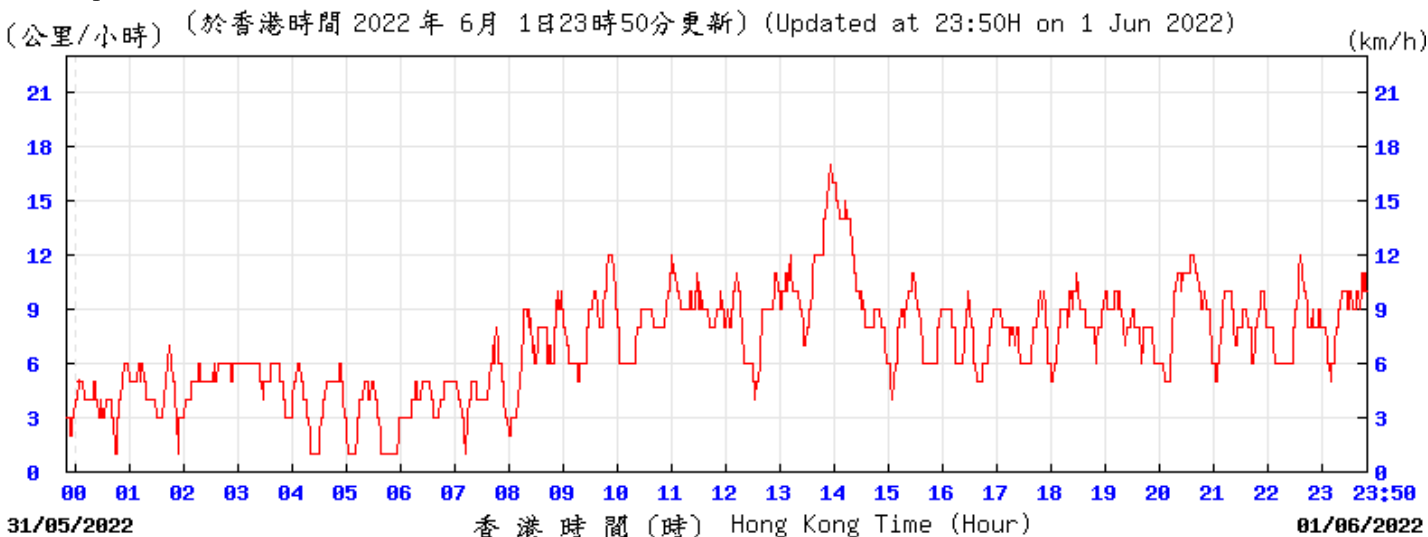
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Wind Direction:



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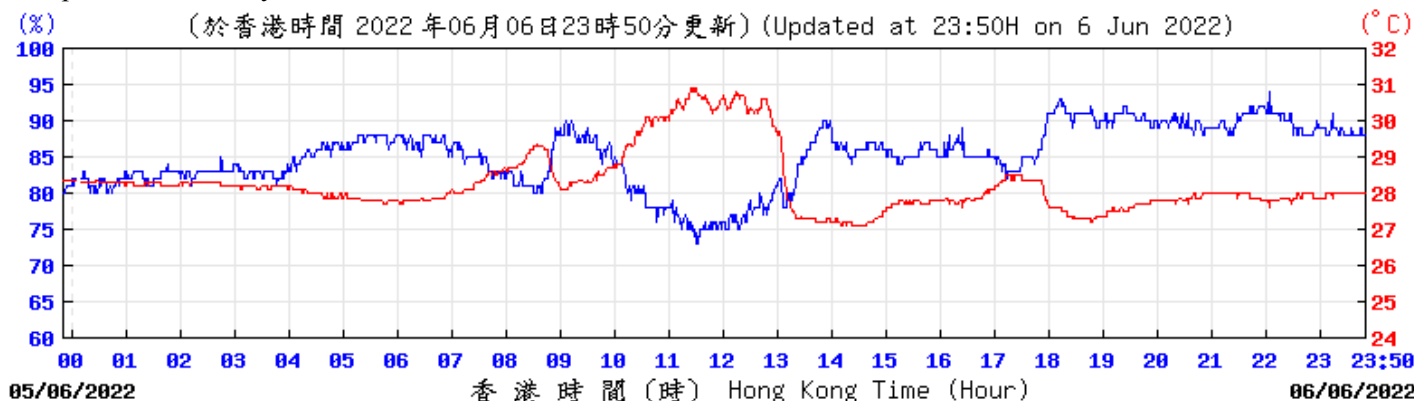


KPC

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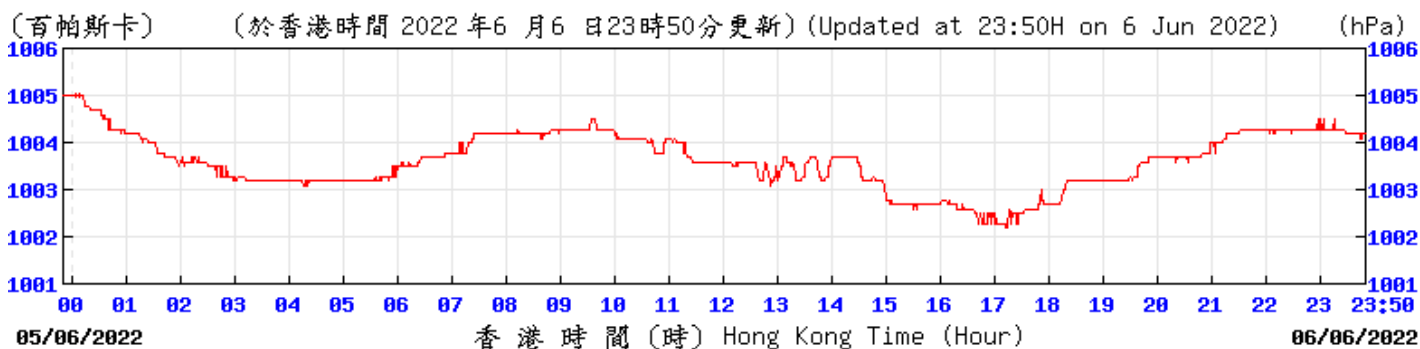
Extract of Meteorological Observations for King's Park Automatic Weather Station, June 2022

Temperature/Humidity:



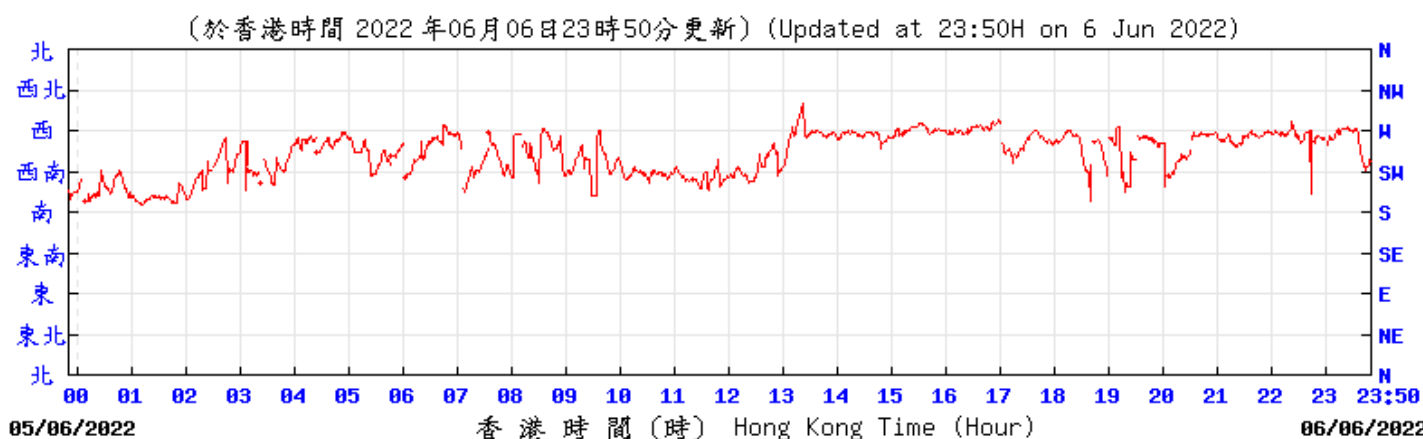
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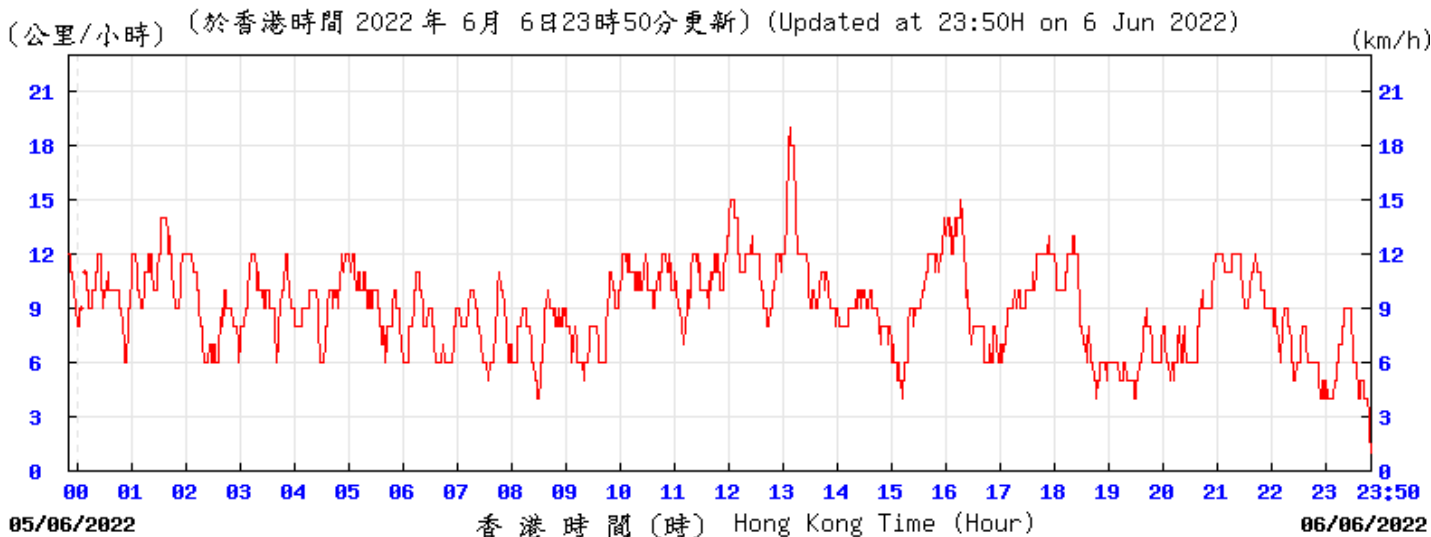
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Wind Direction:



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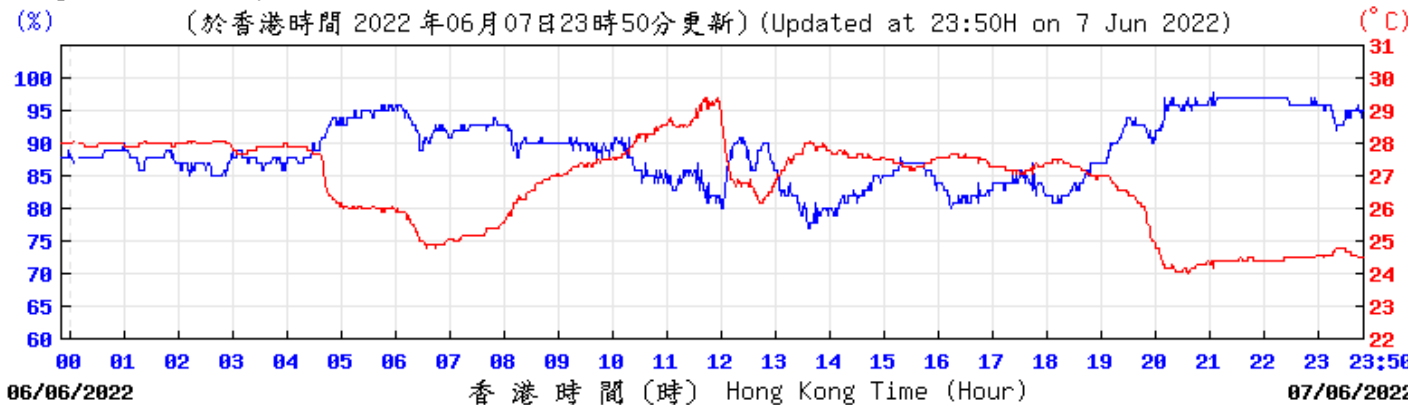
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KPC

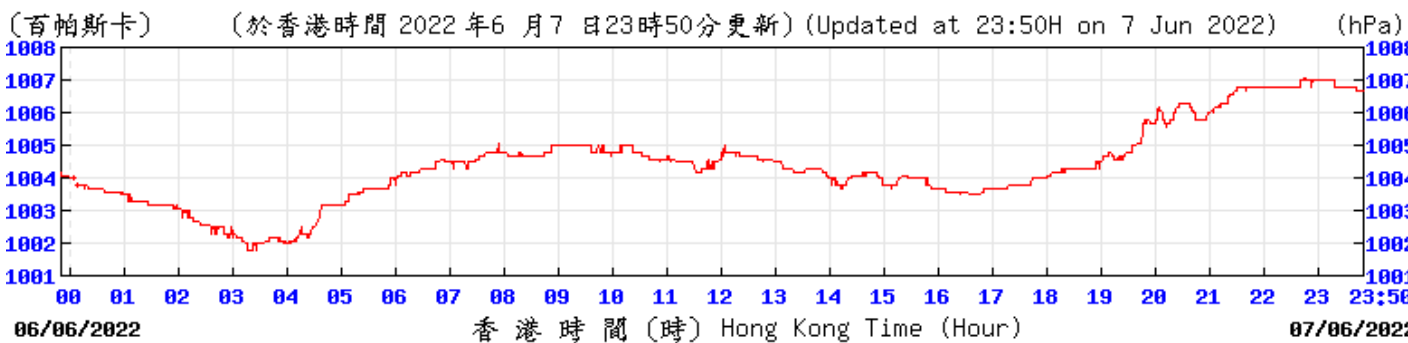
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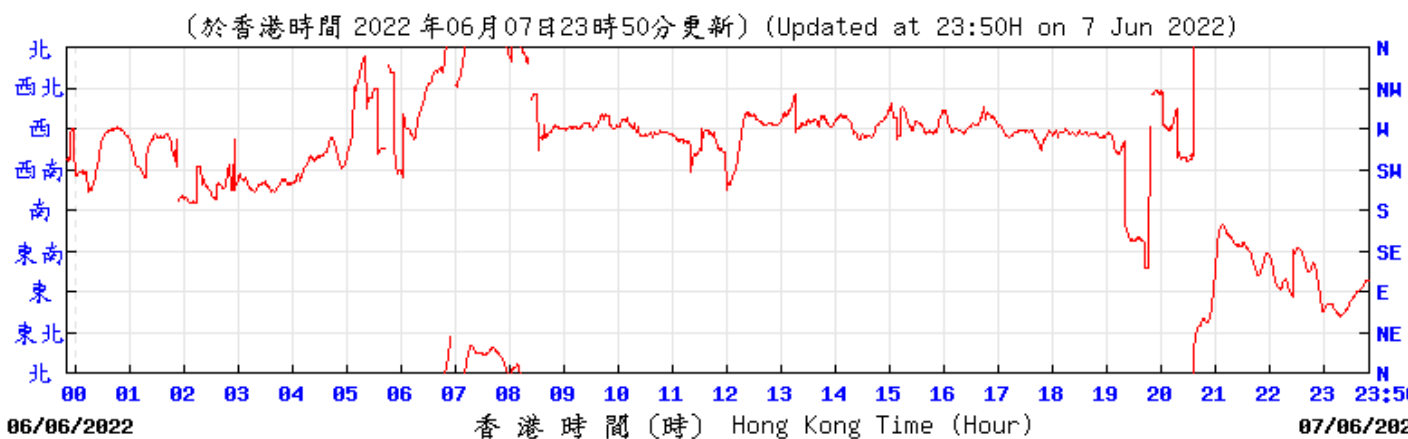
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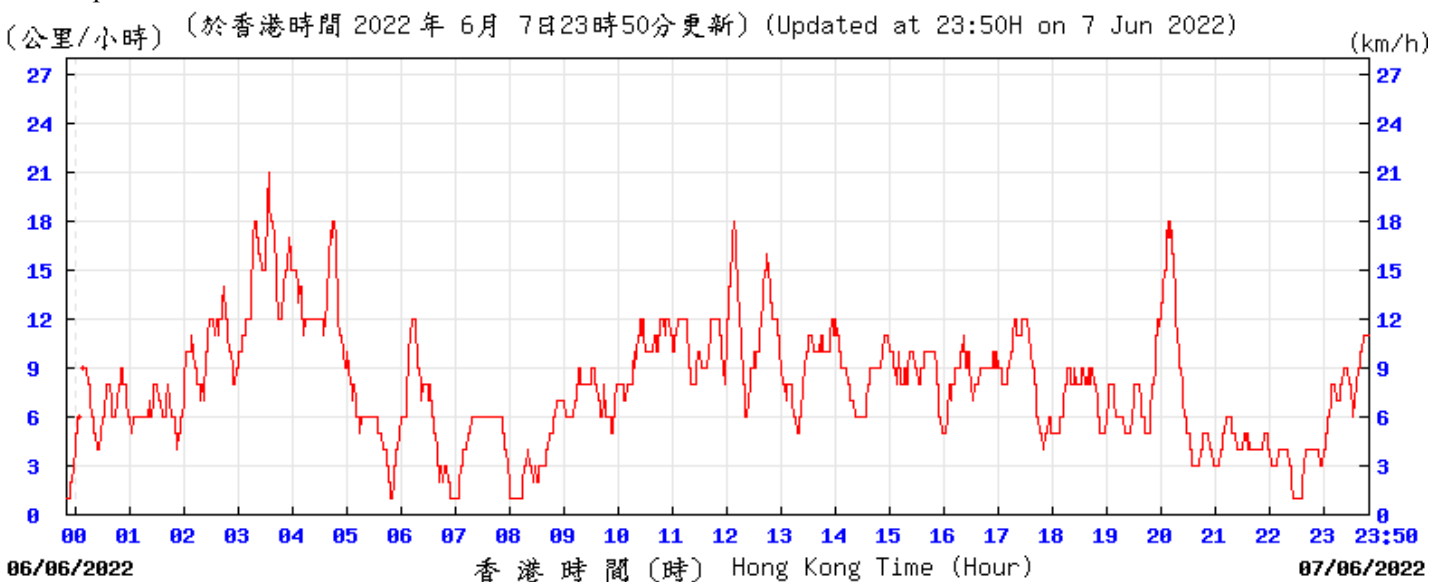
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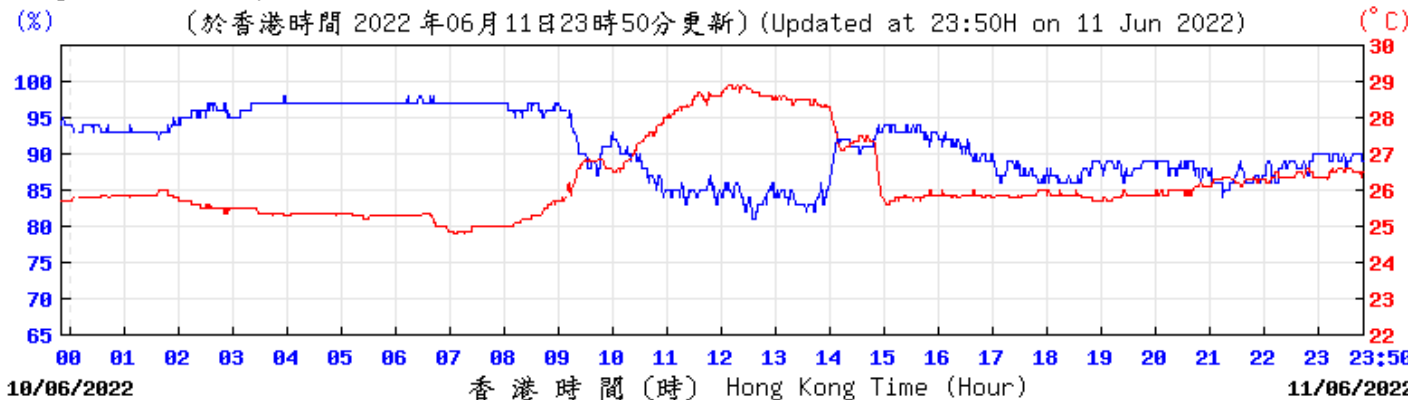
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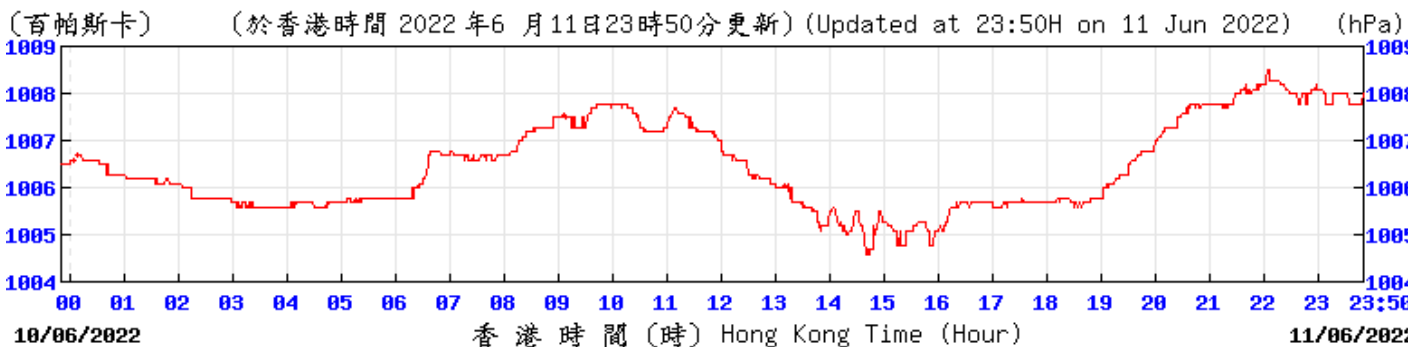
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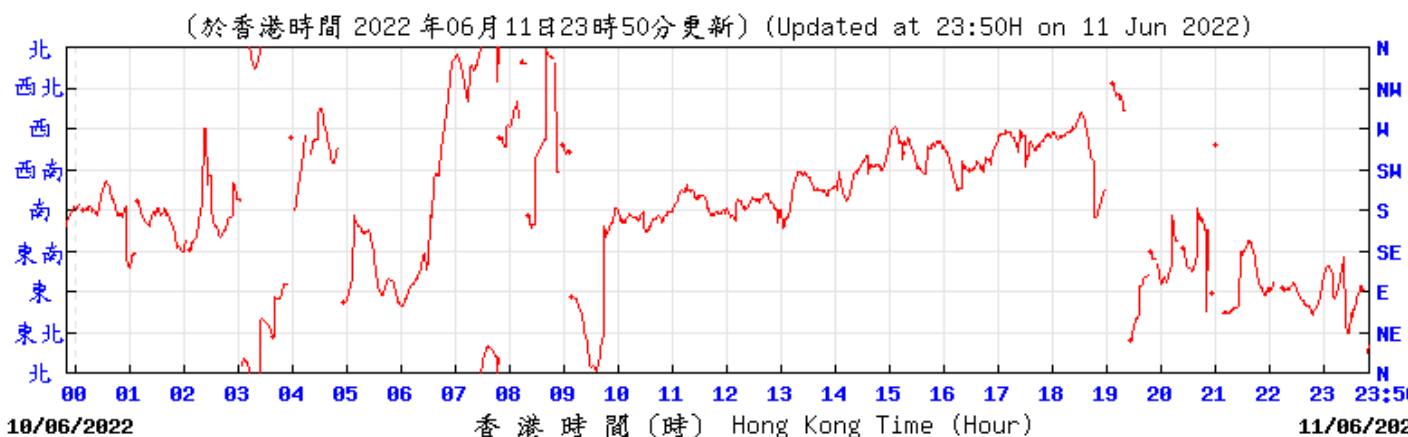
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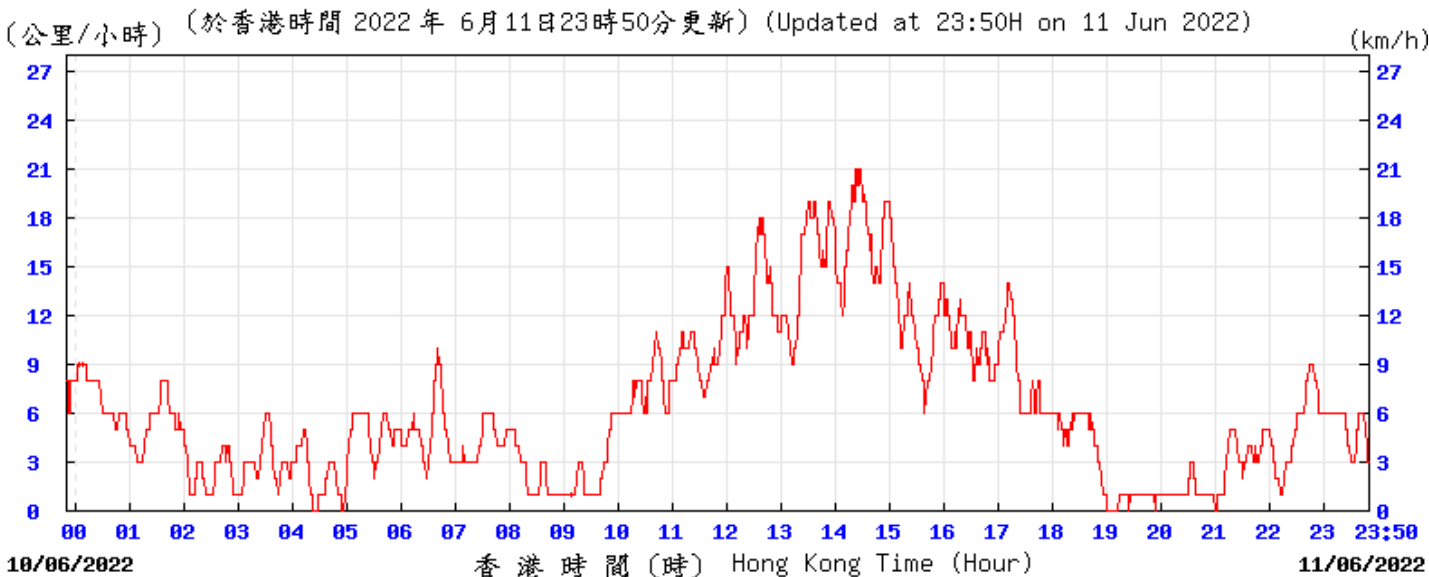
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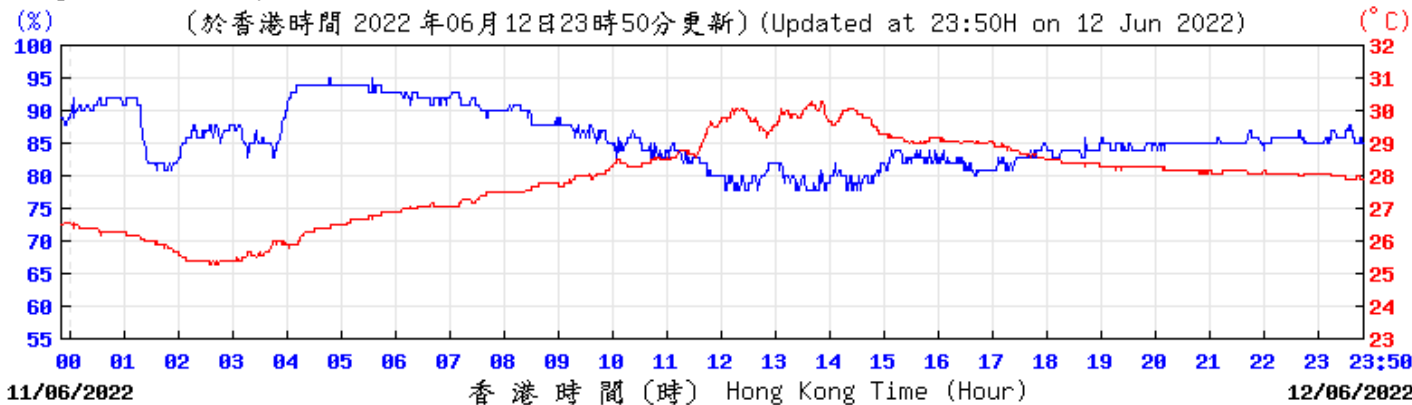
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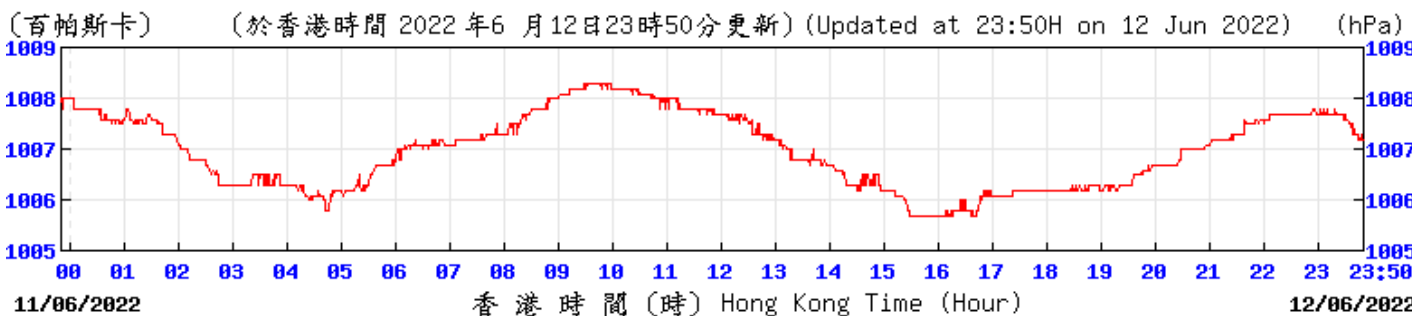
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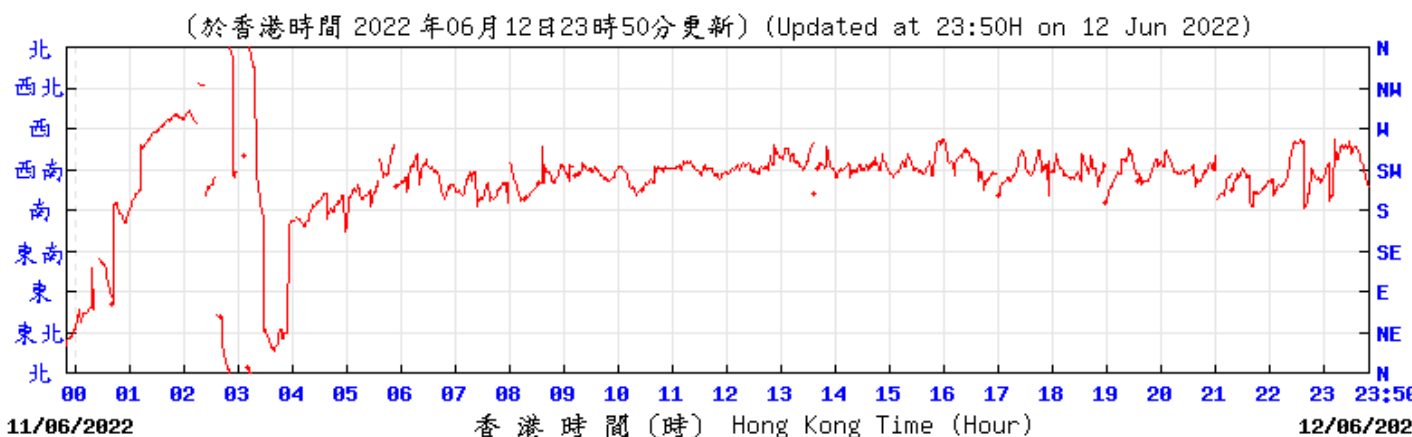
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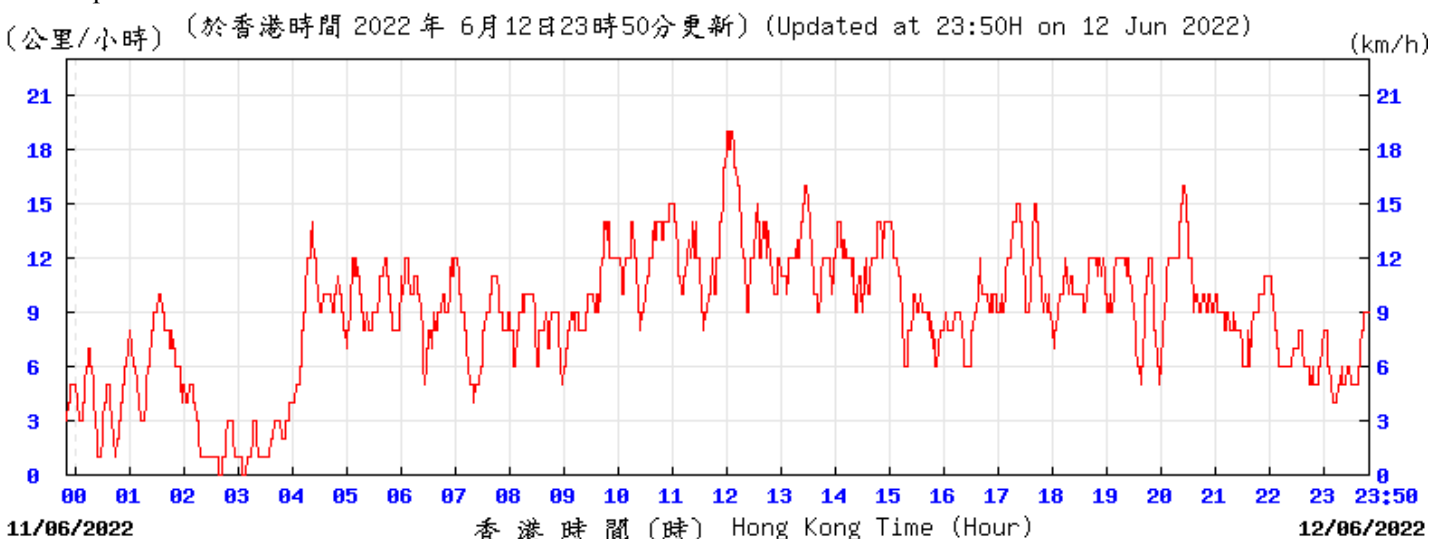
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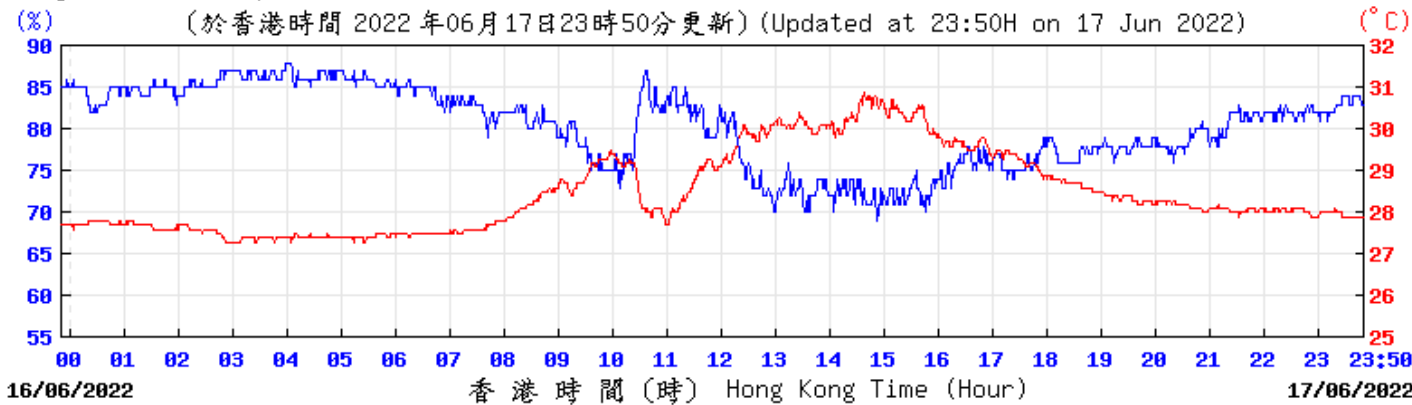
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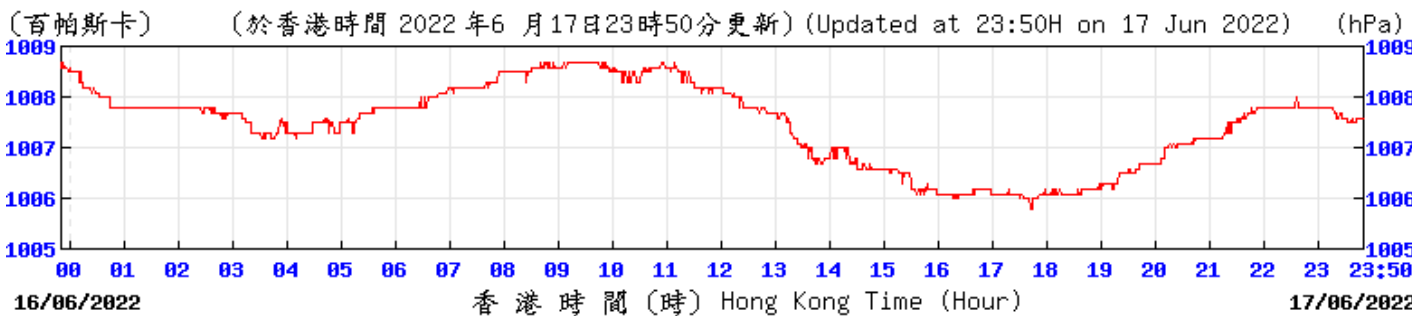
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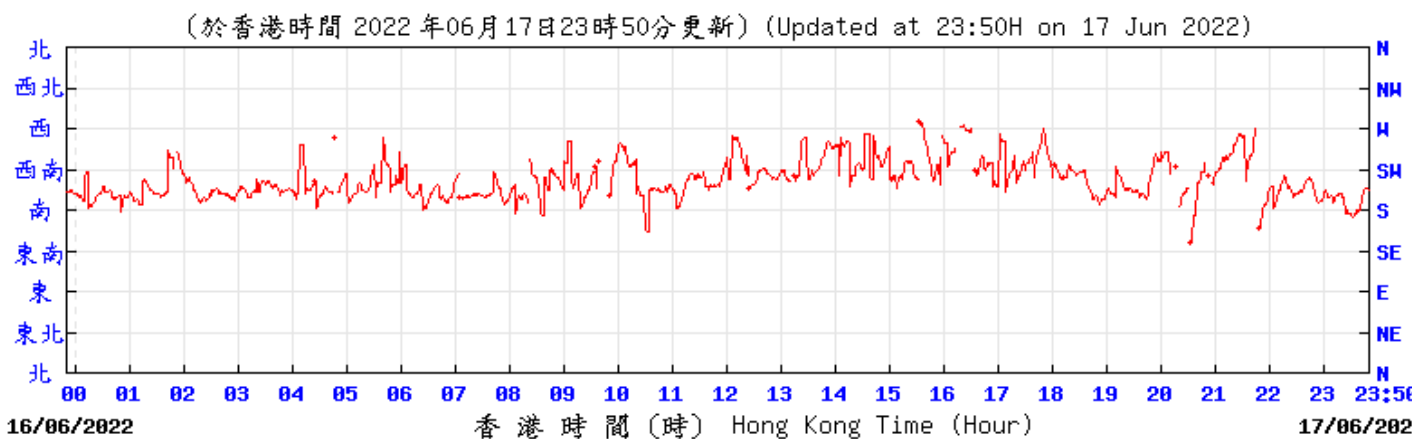
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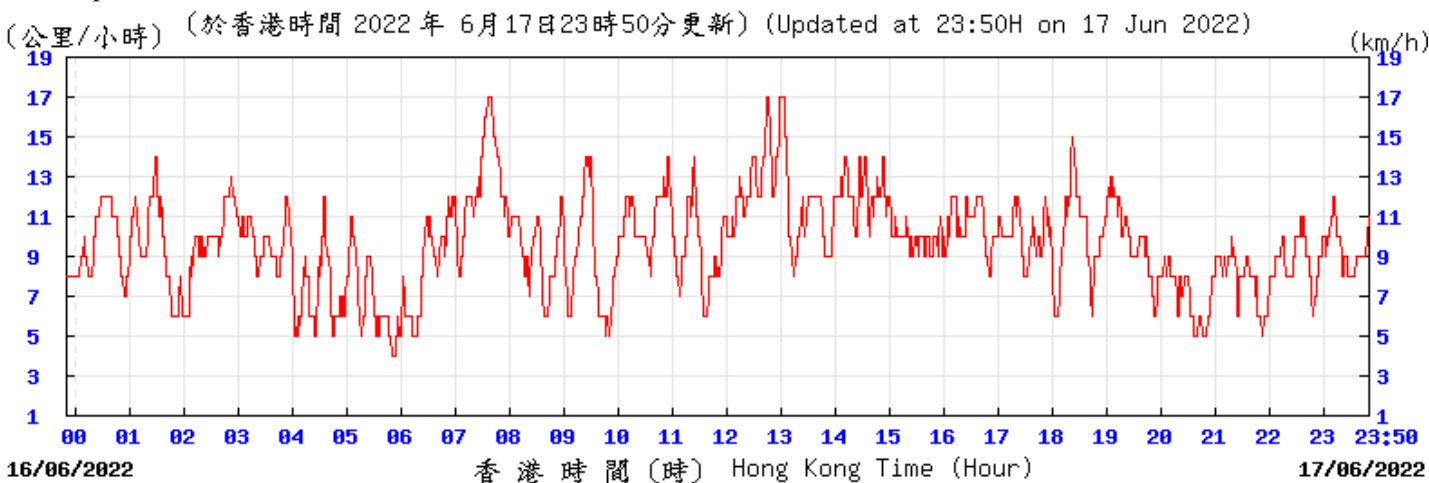
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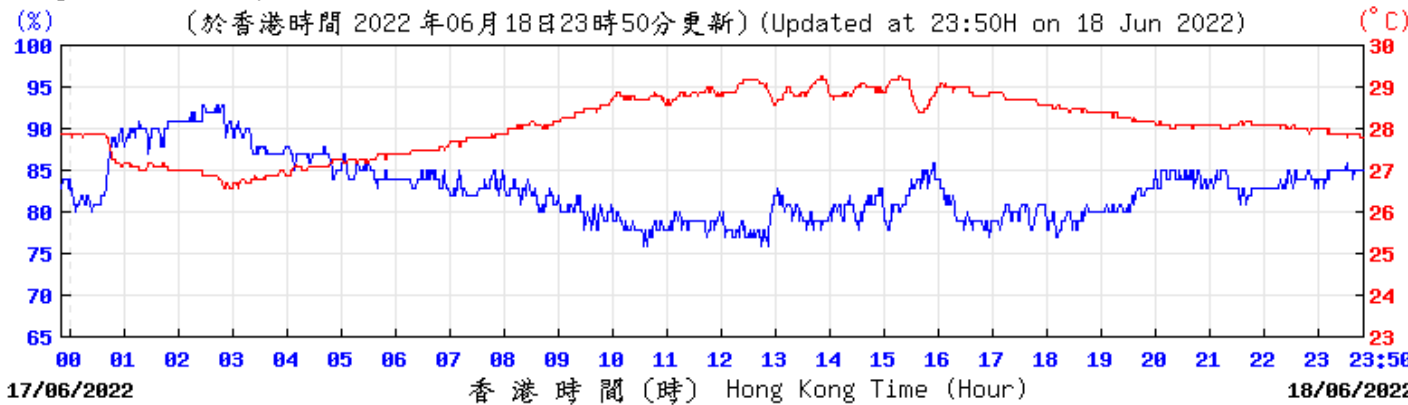
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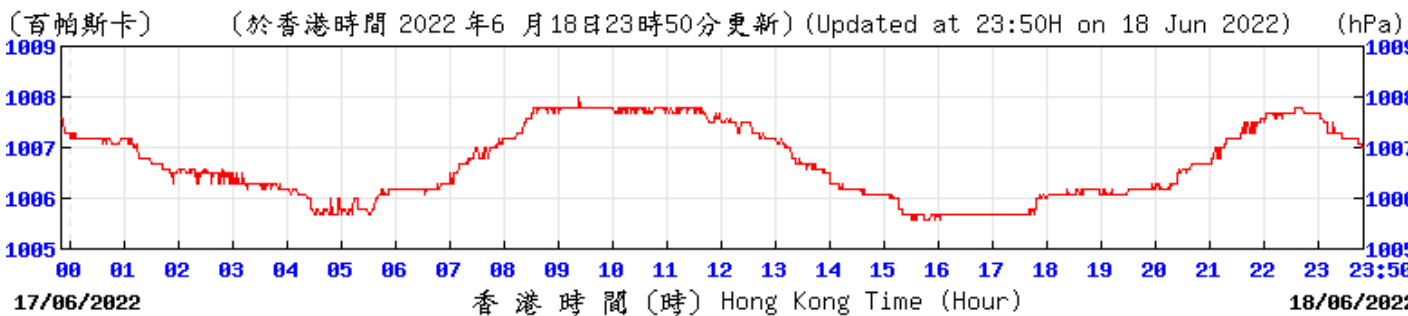
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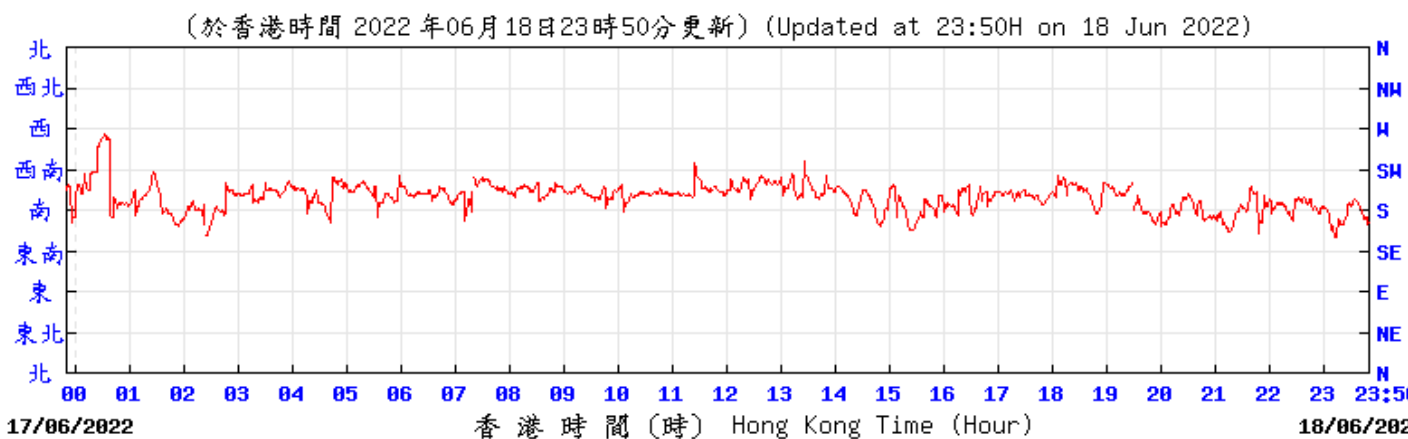
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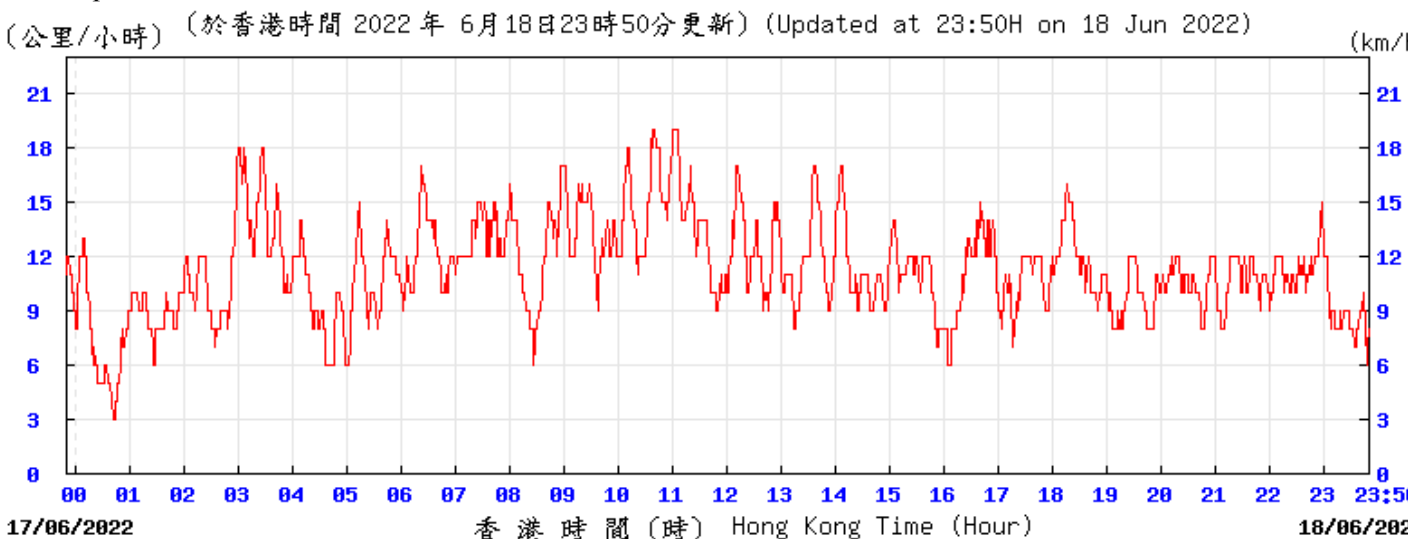
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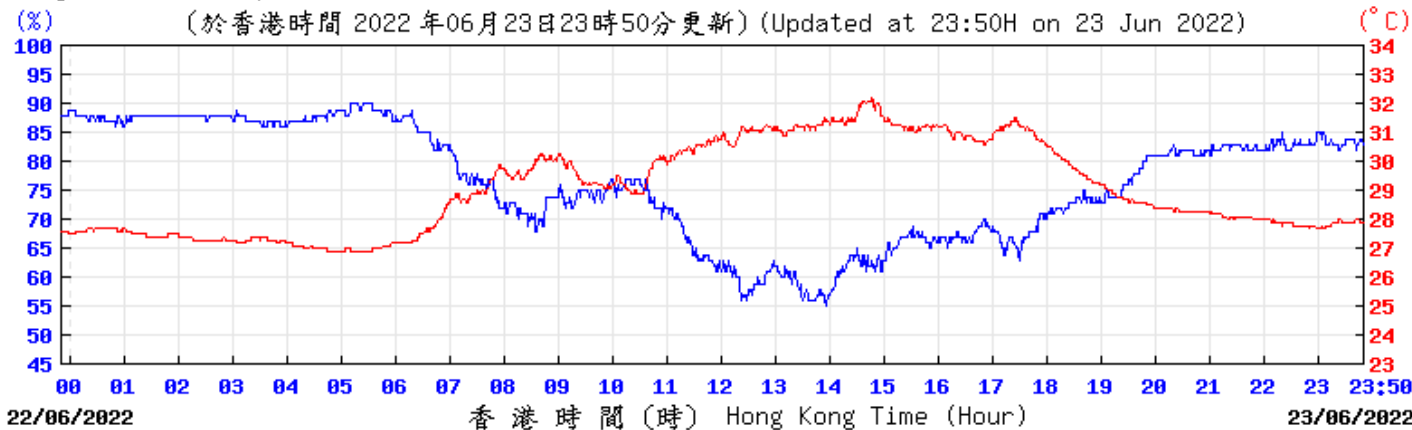
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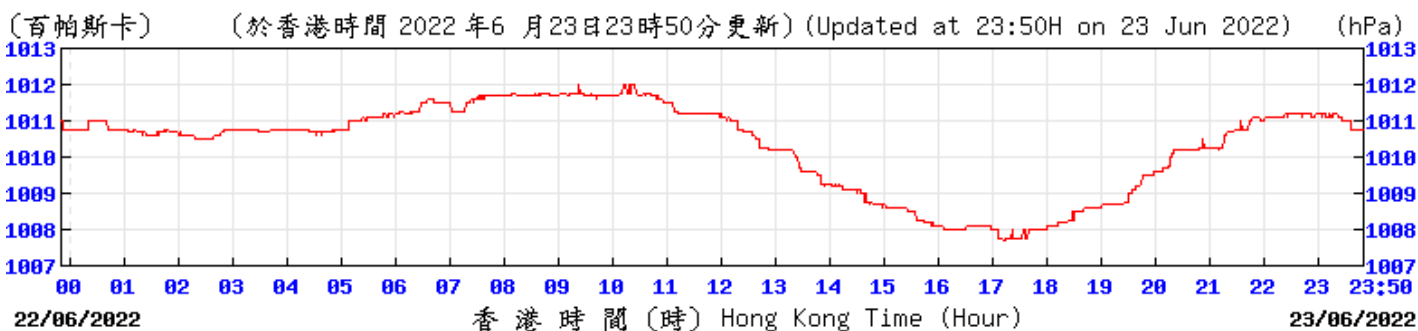
KPC

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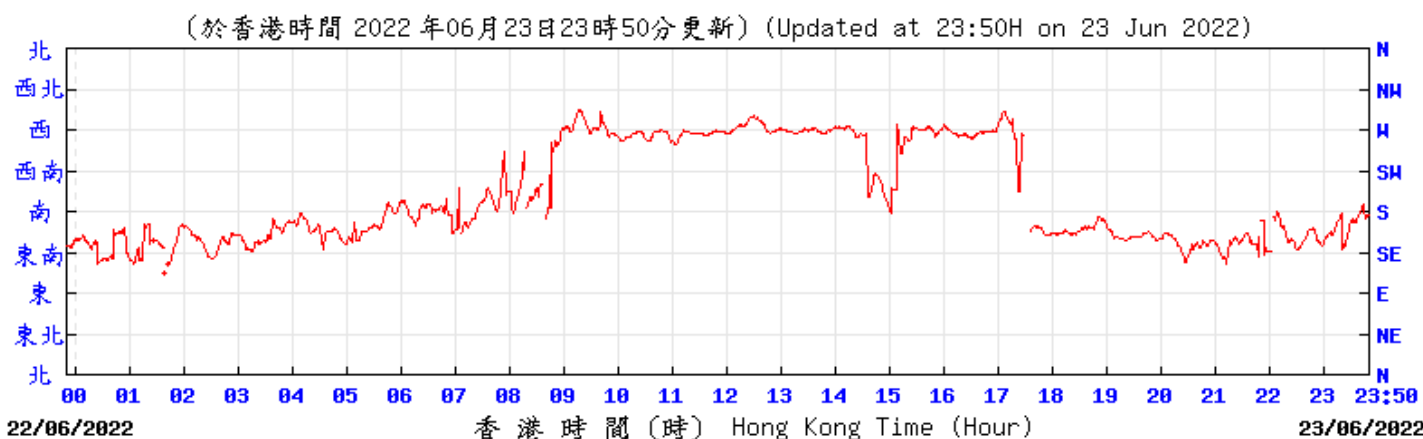
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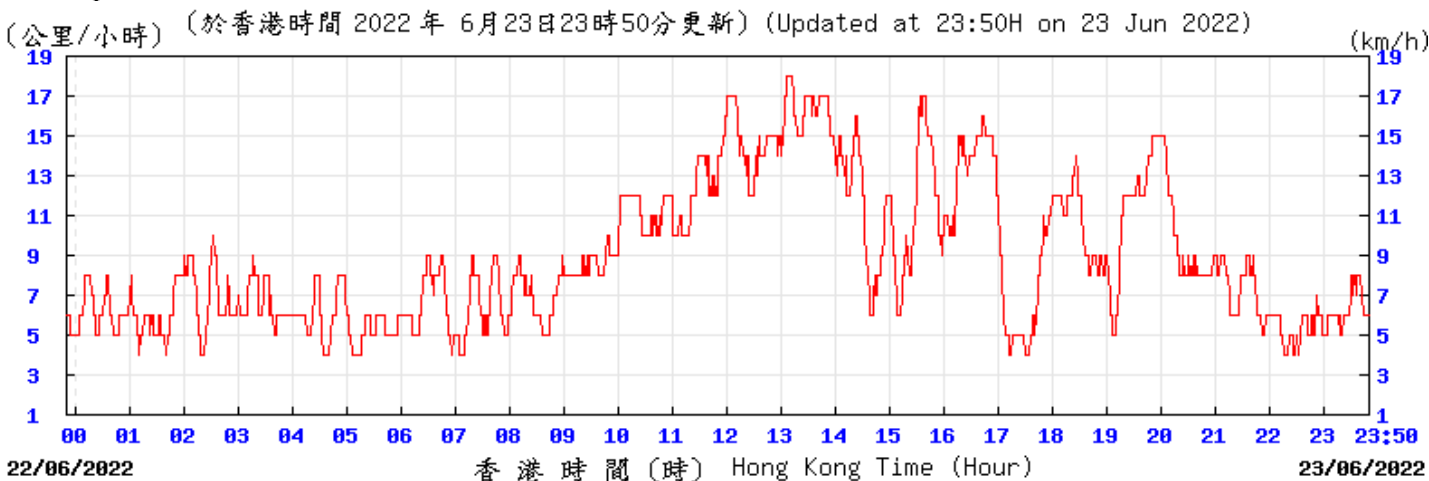
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Wind Direction:



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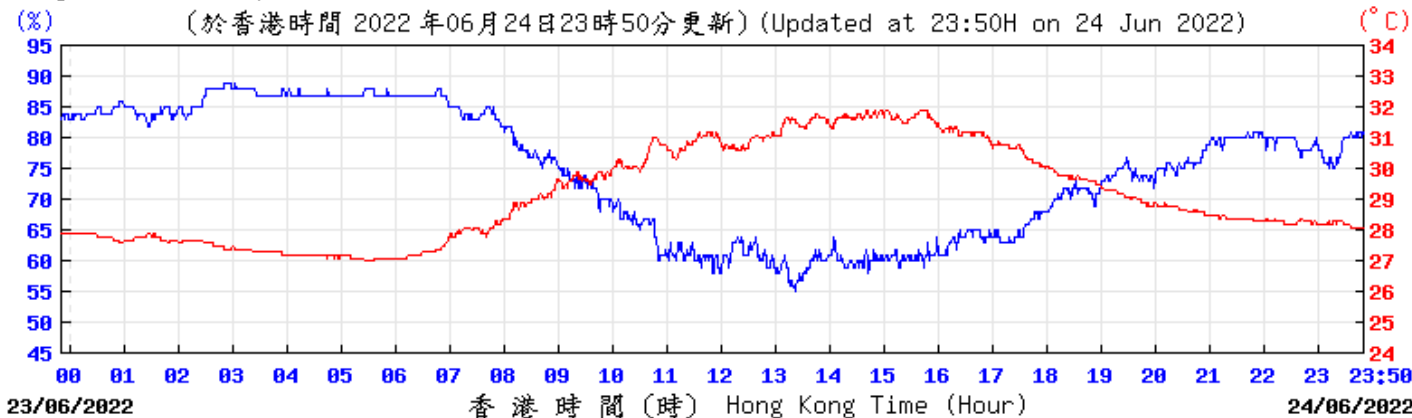
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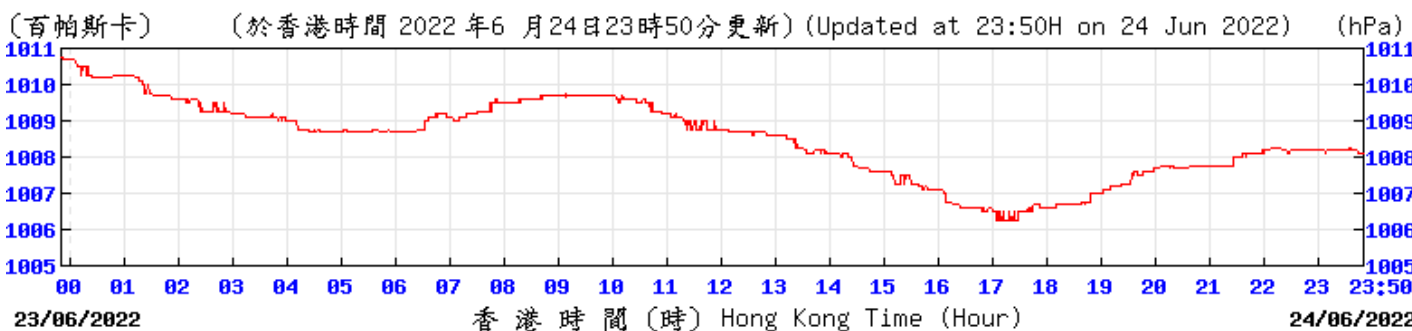
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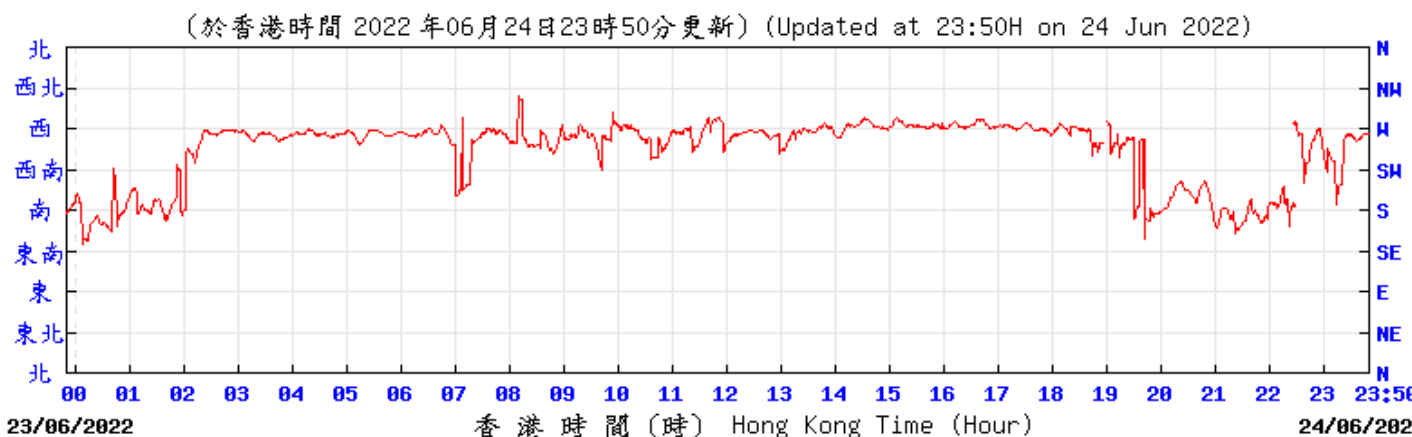
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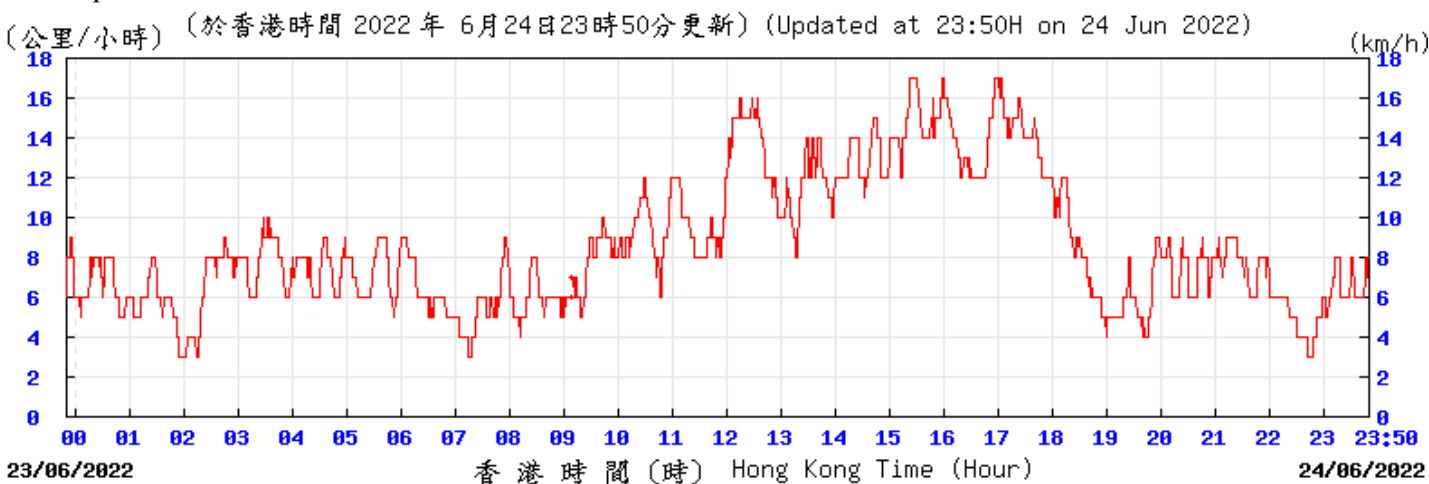
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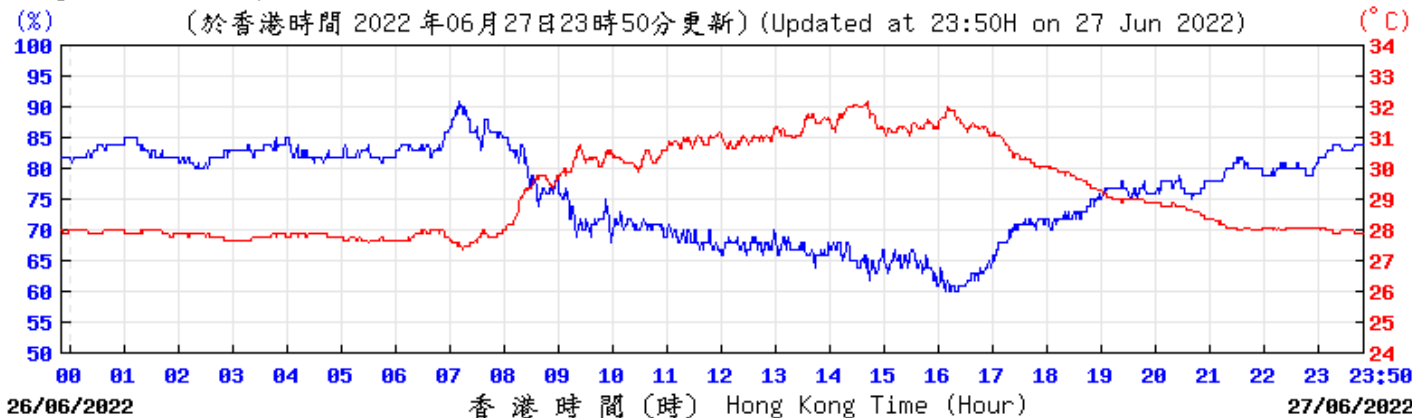
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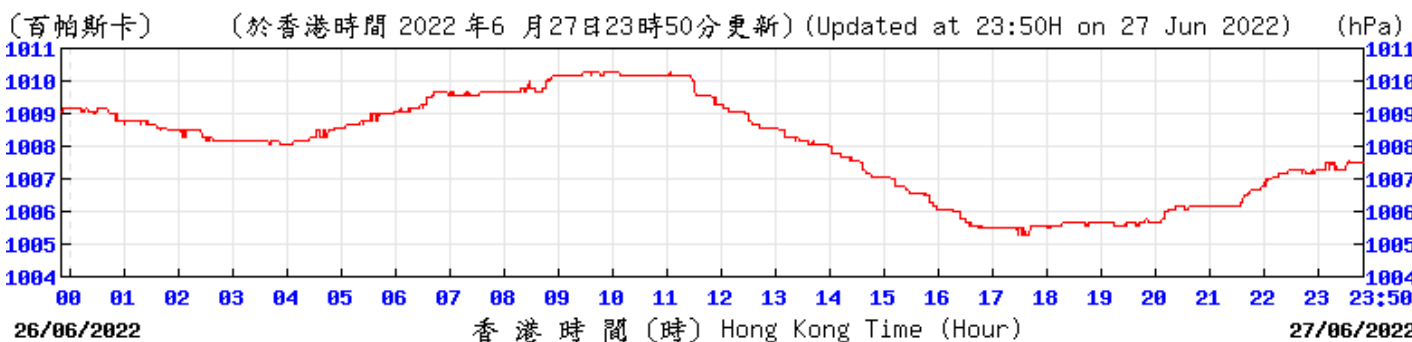
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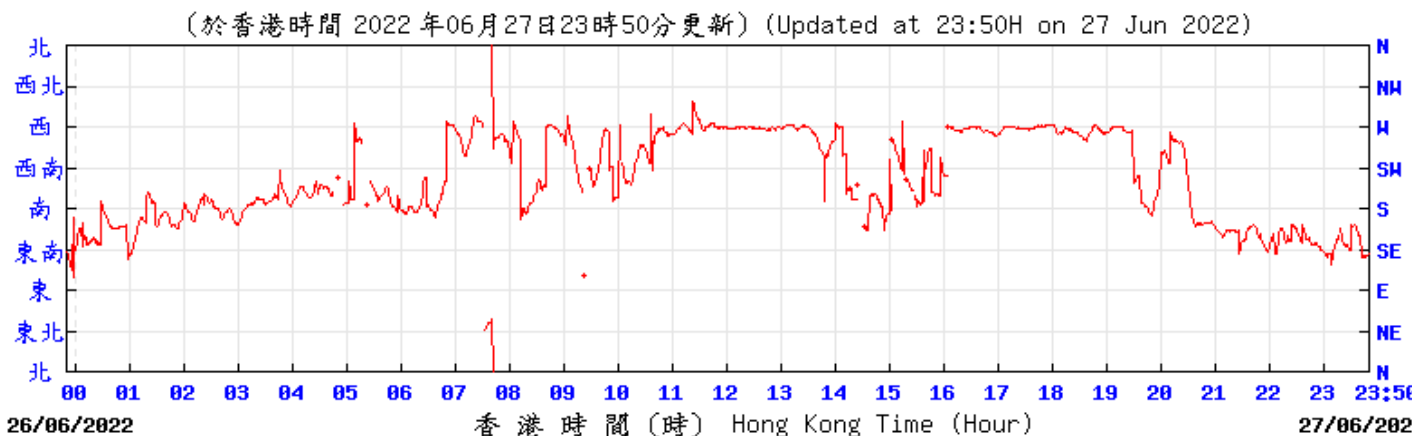
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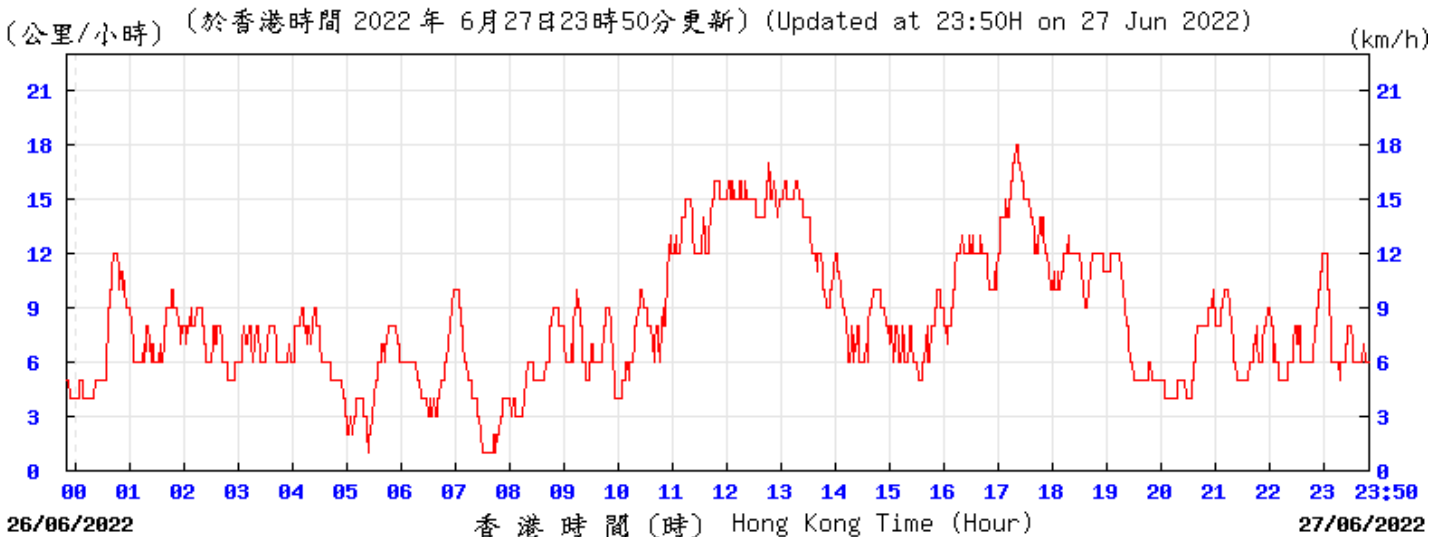
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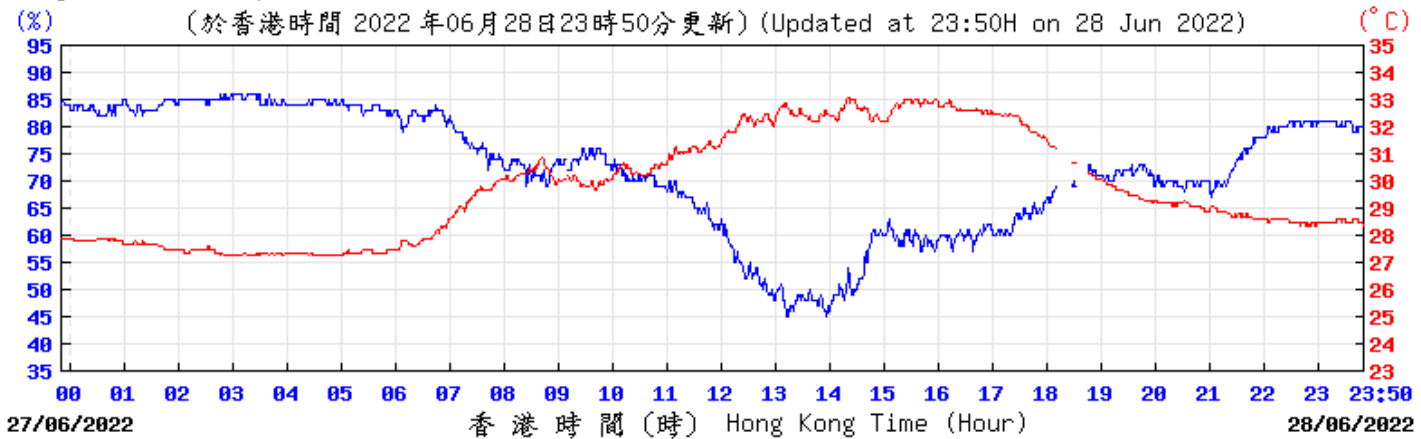
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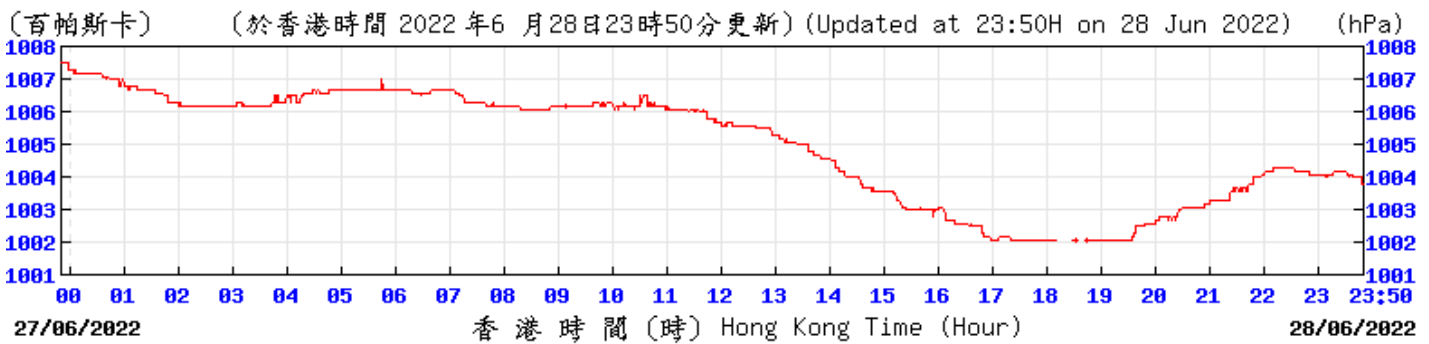
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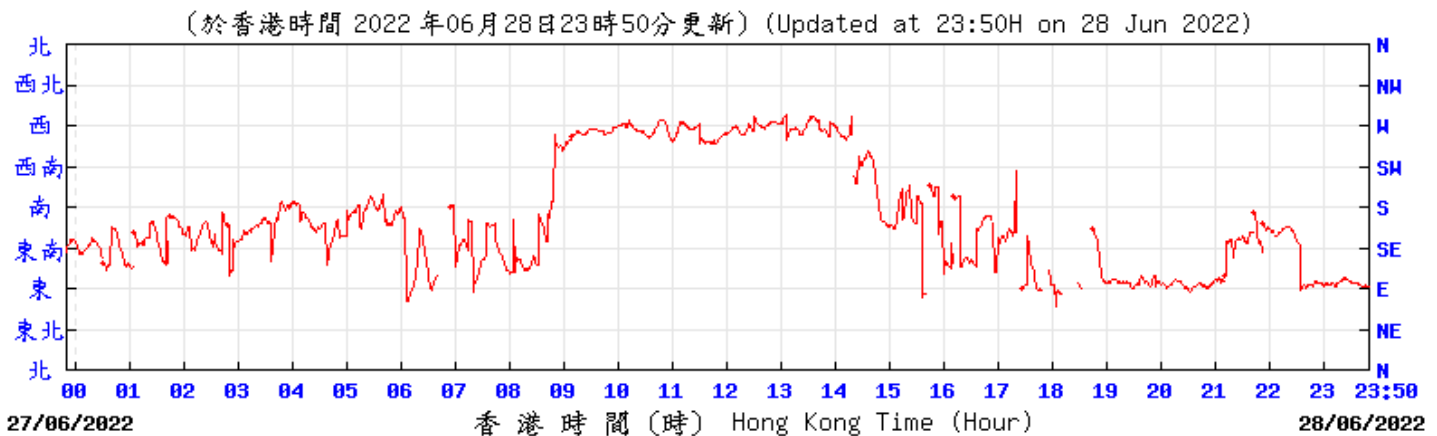
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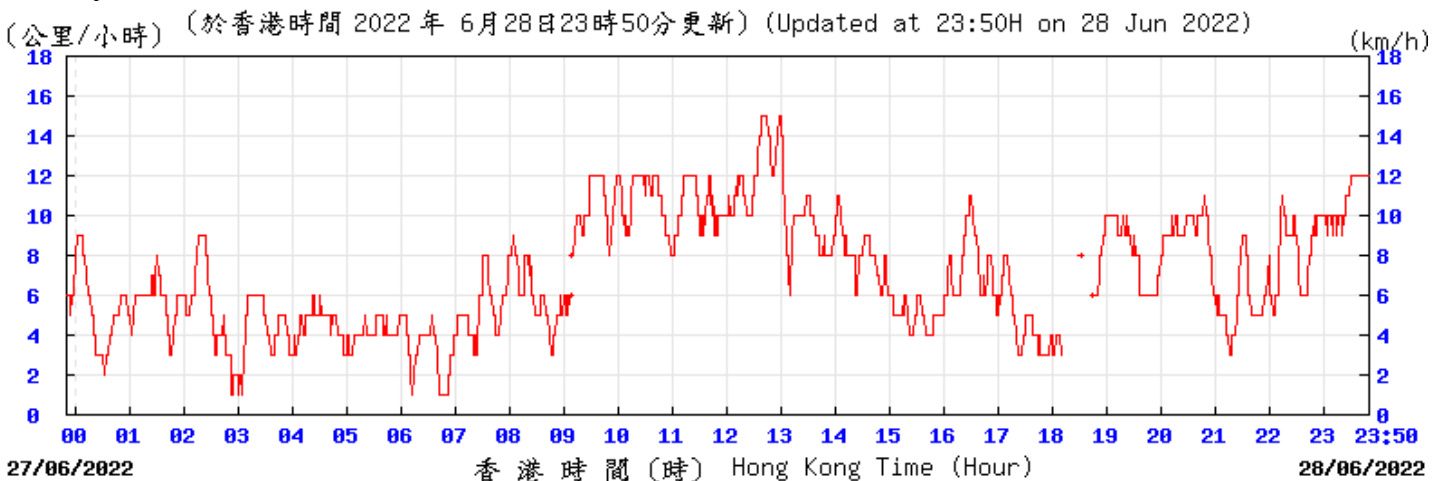
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Wind Direction:



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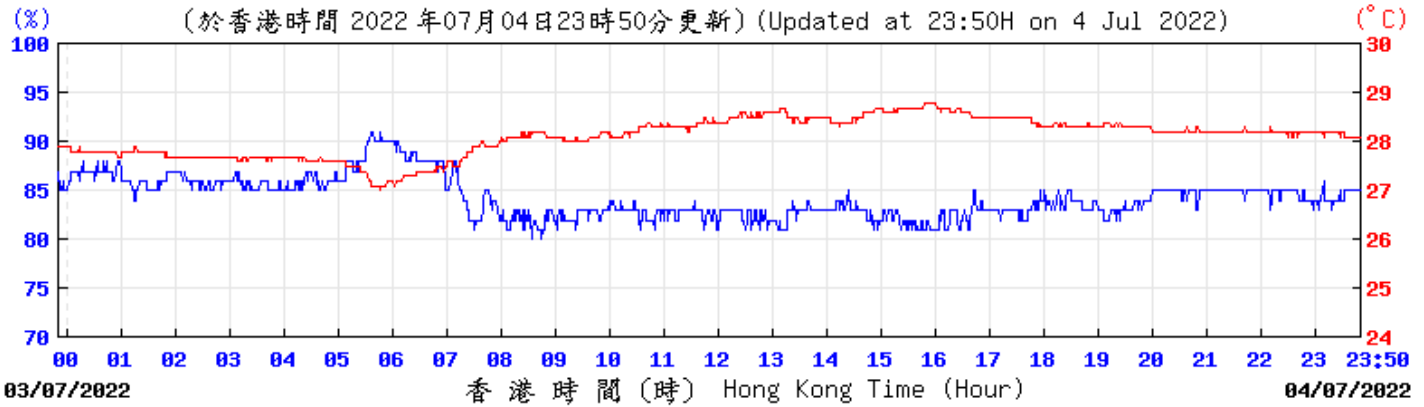
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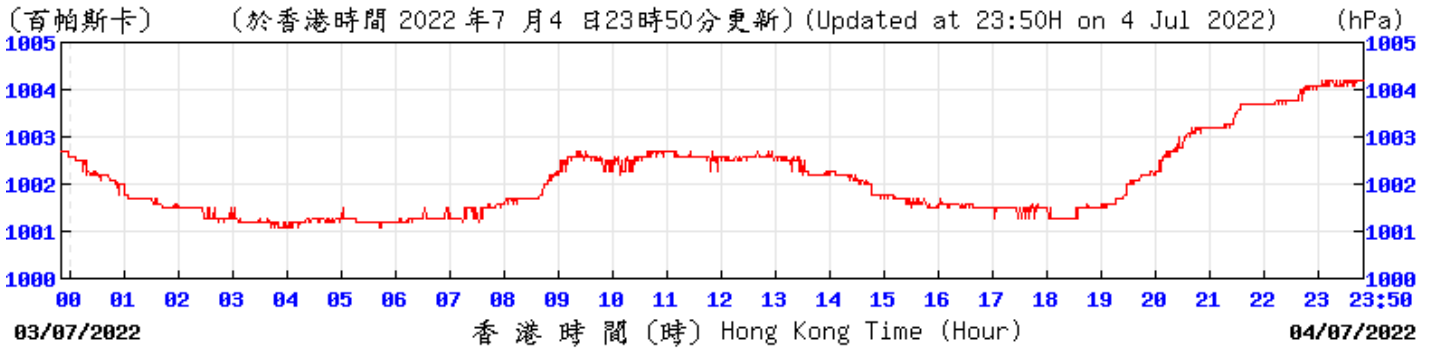
Extract of Meteorological Observations for King's Park Automatic Weather Station, July 2022

Temperature/Humidity:



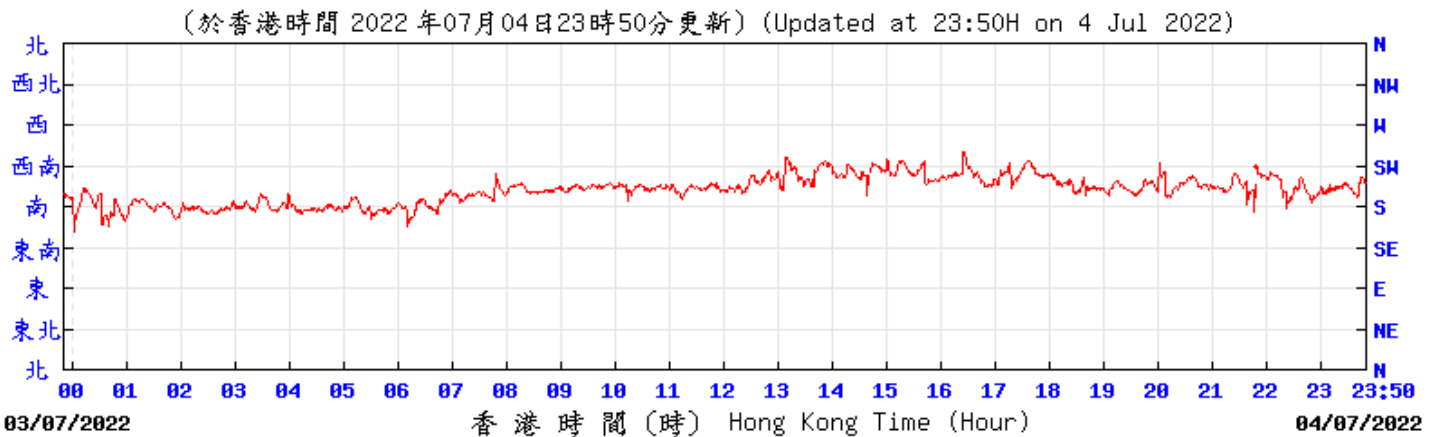
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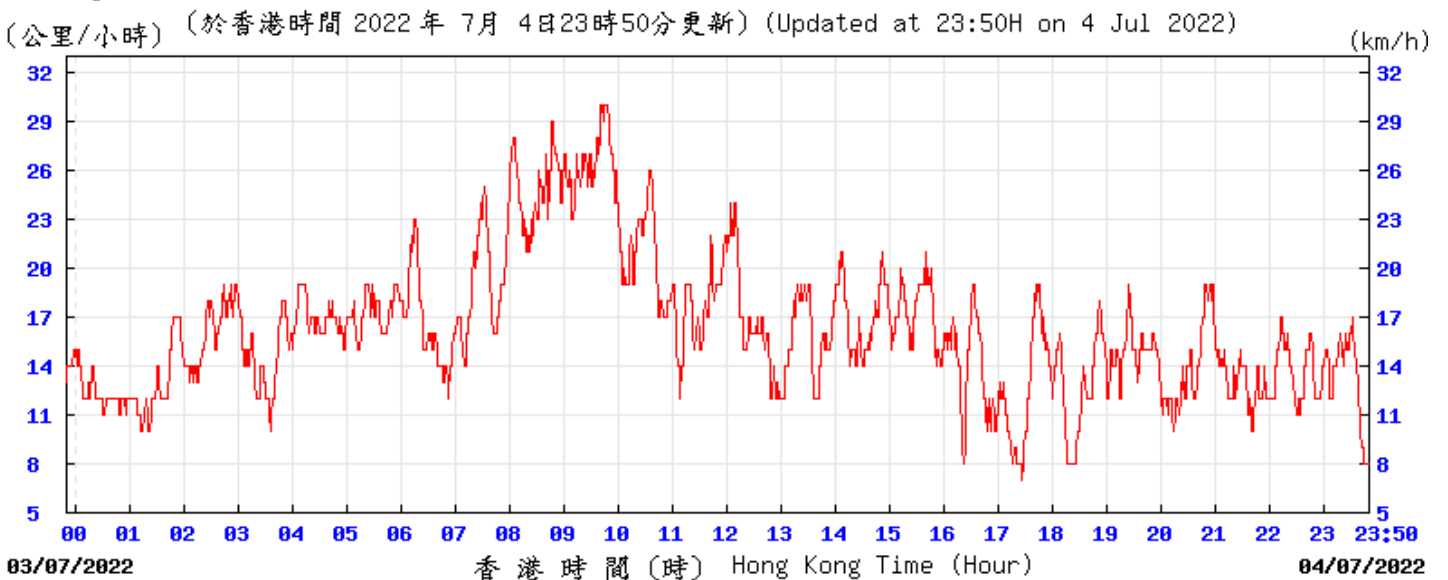
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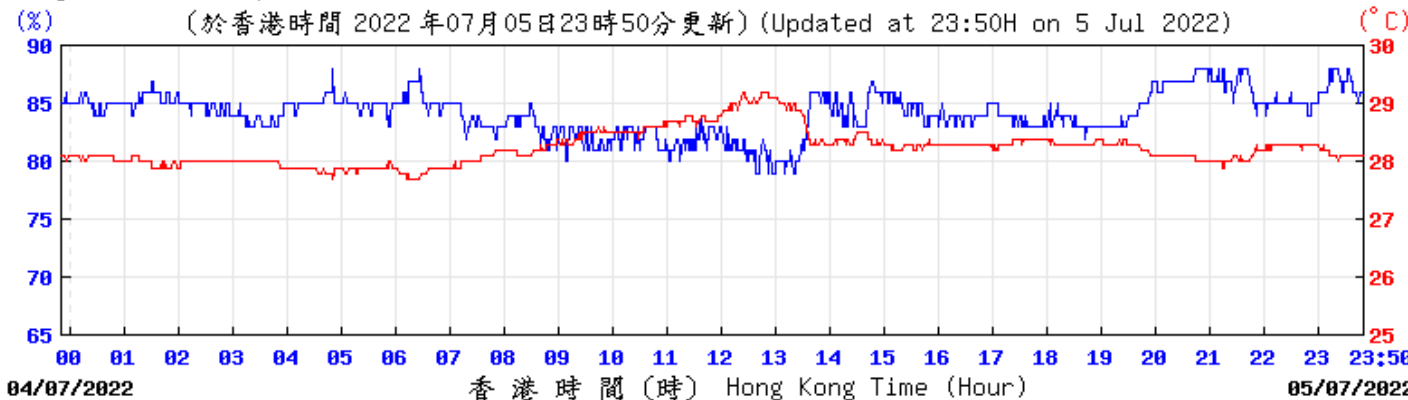
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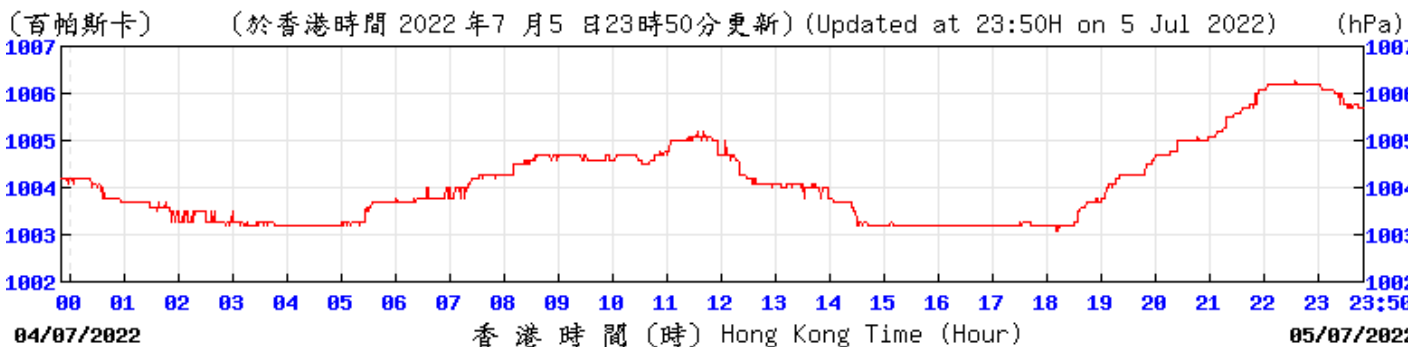
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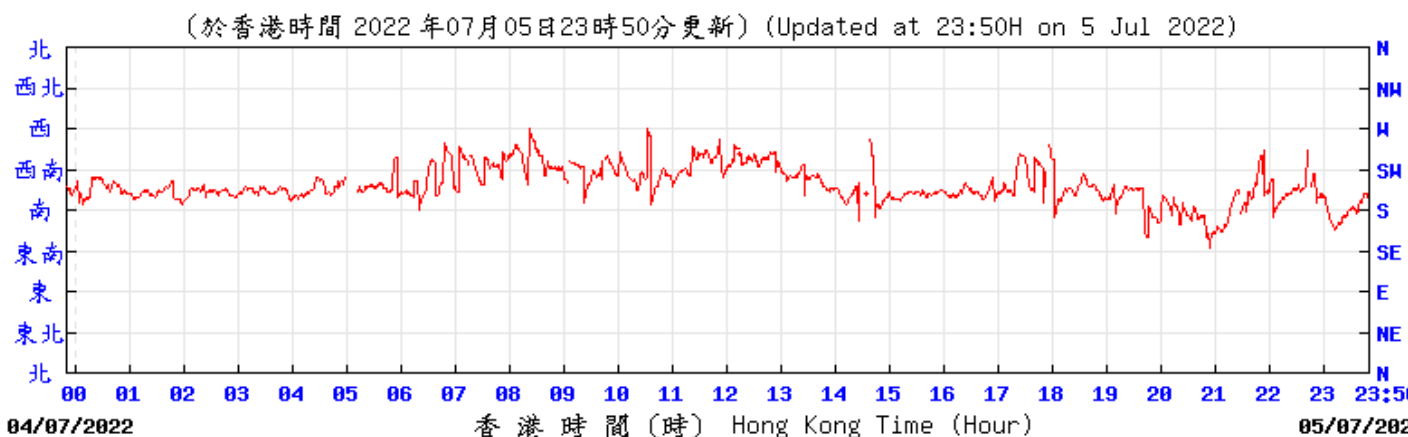
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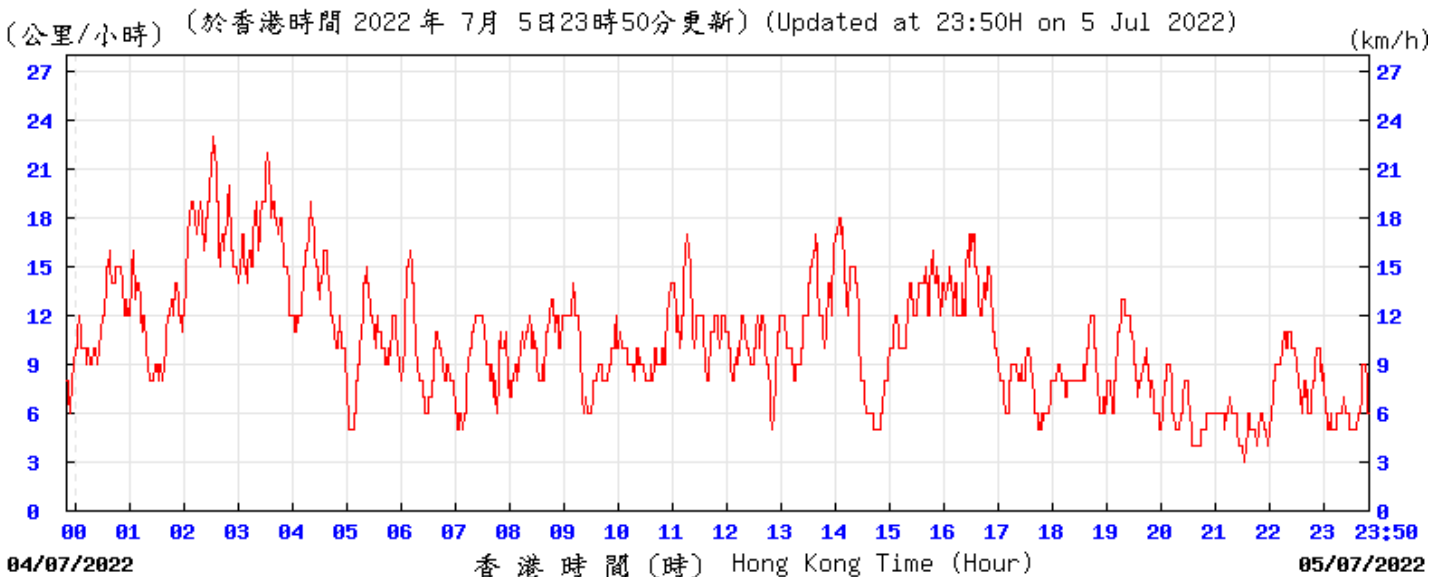
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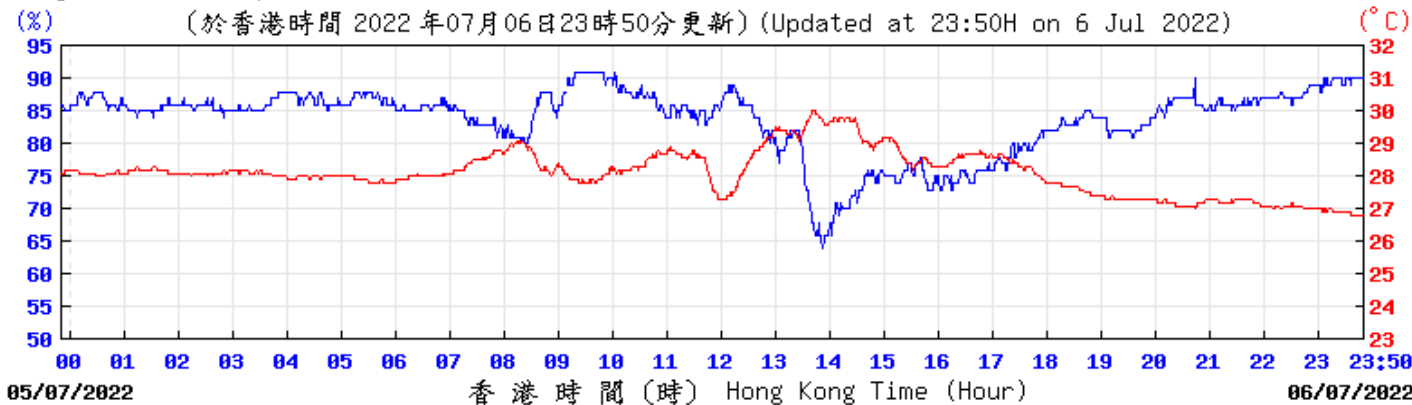
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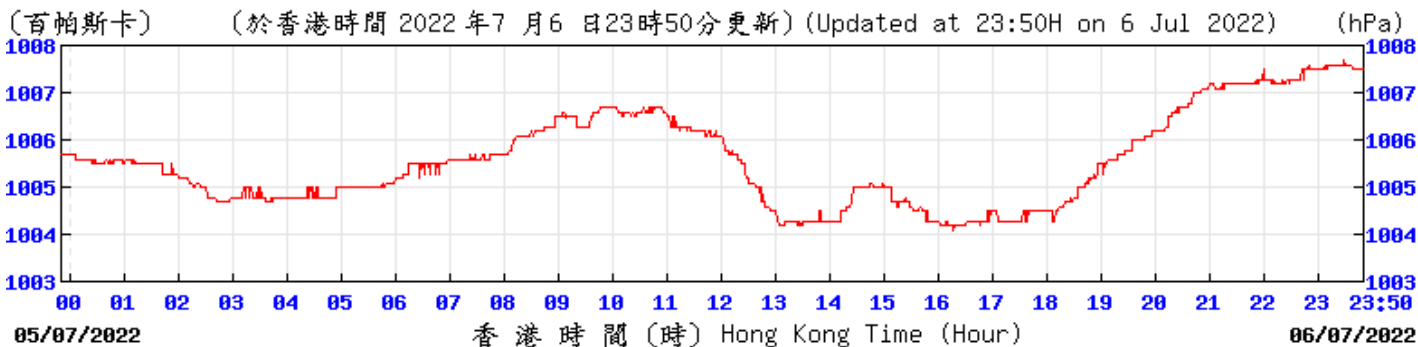
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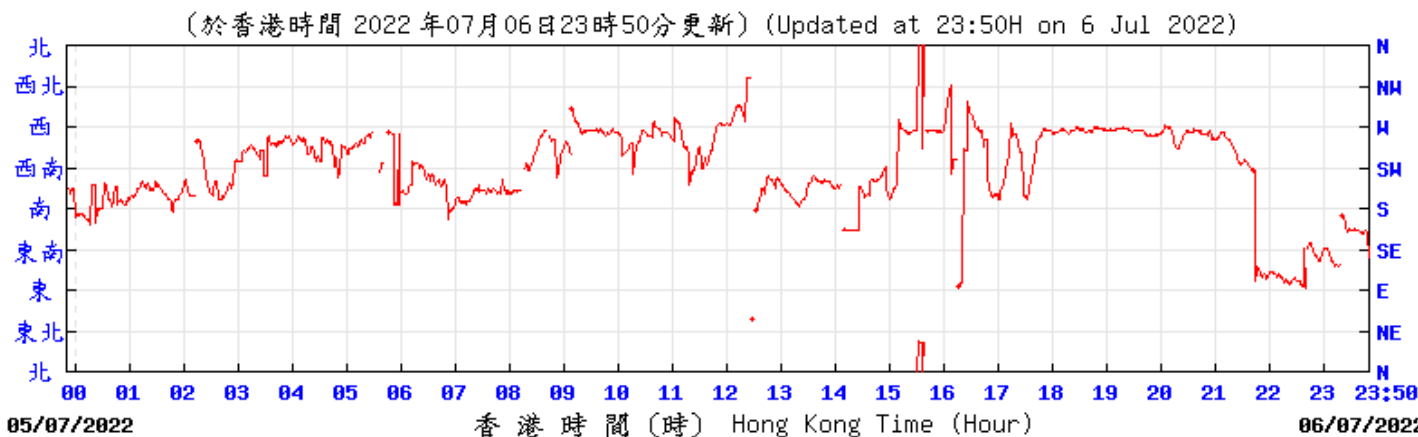
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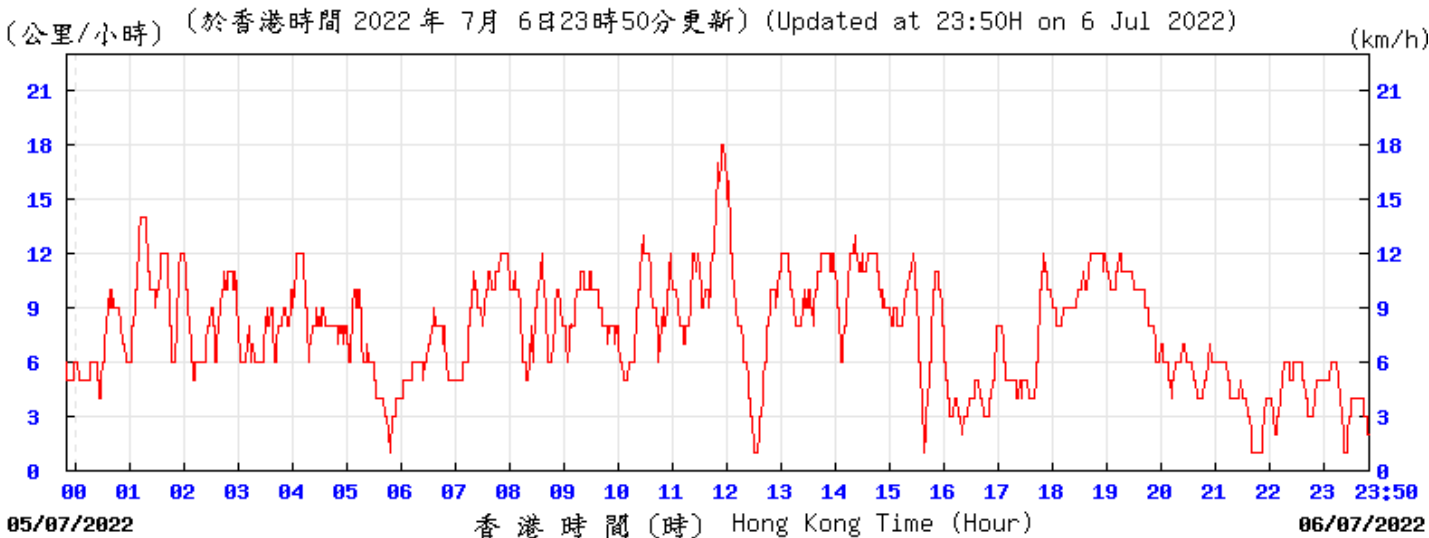
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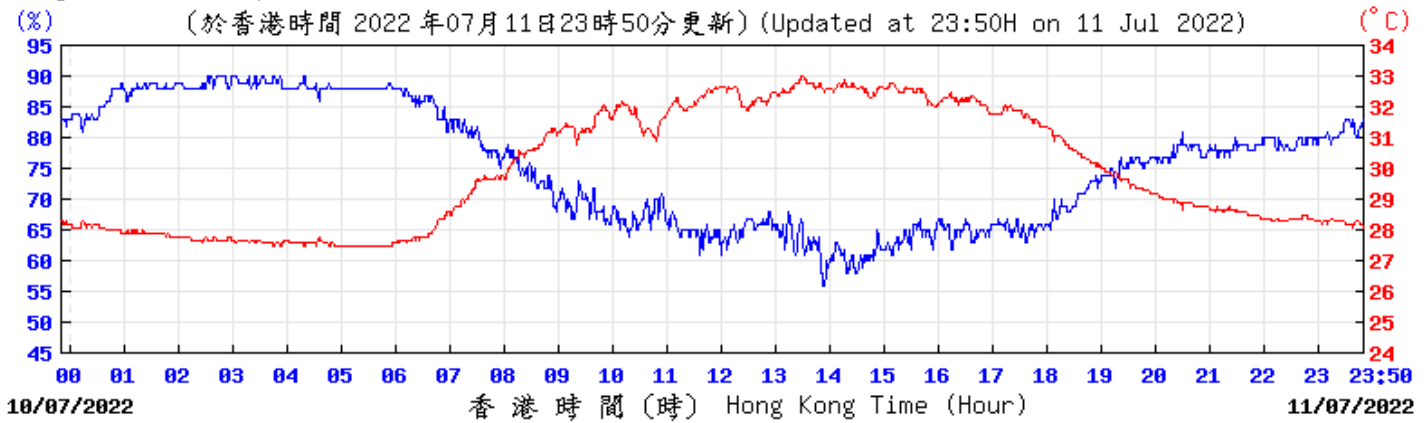
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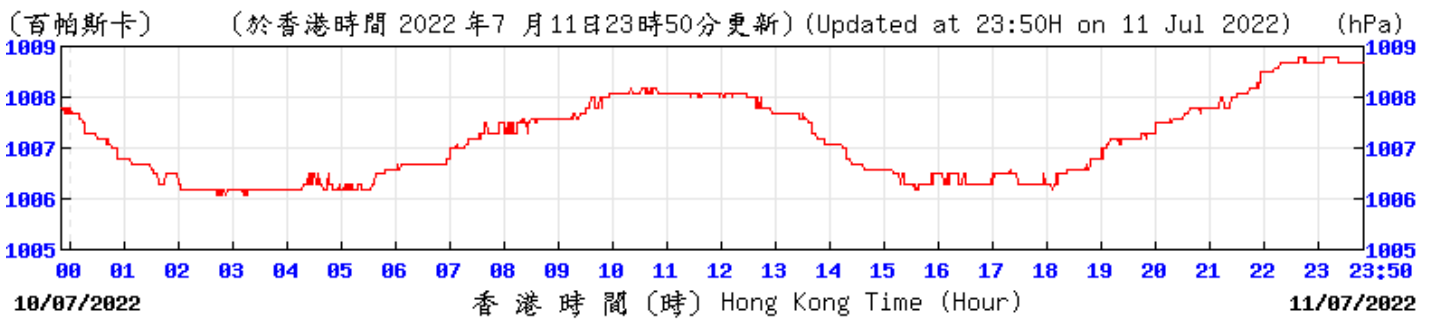
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Temperature/Humidity:



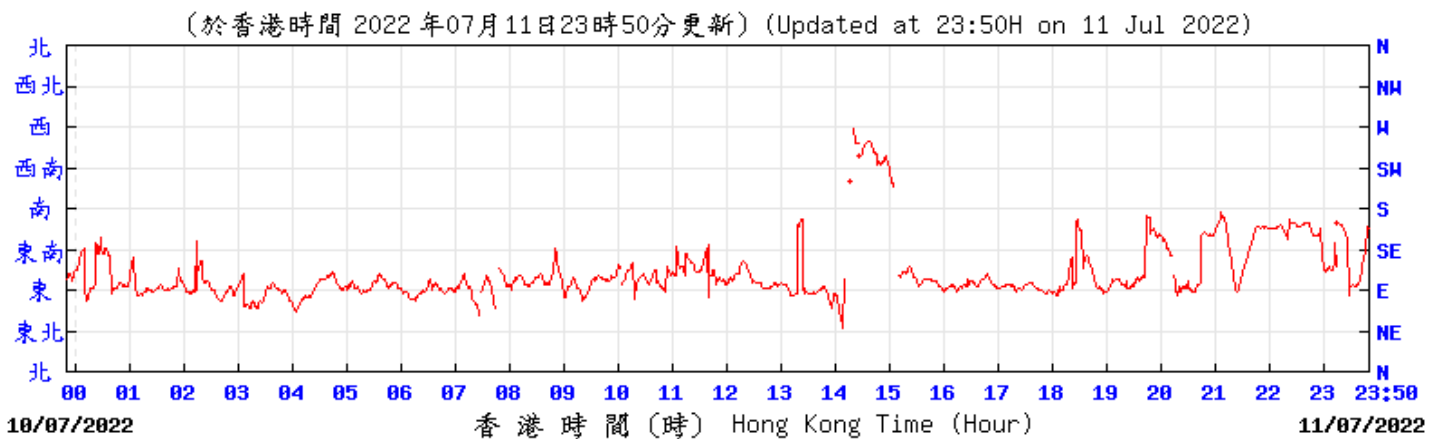
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Pressure:



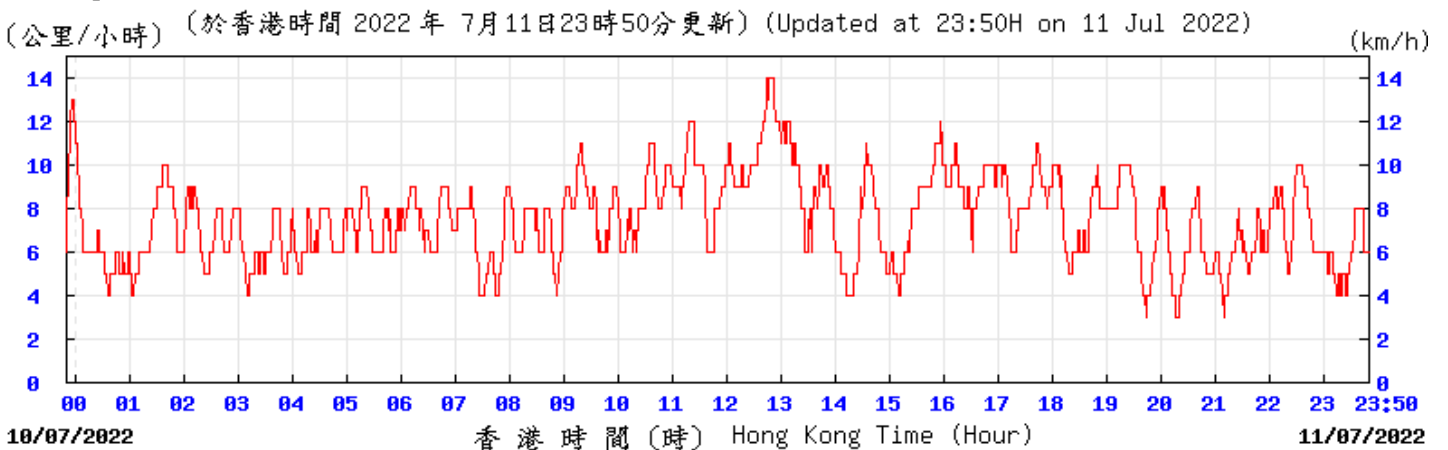
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Wind Direction:



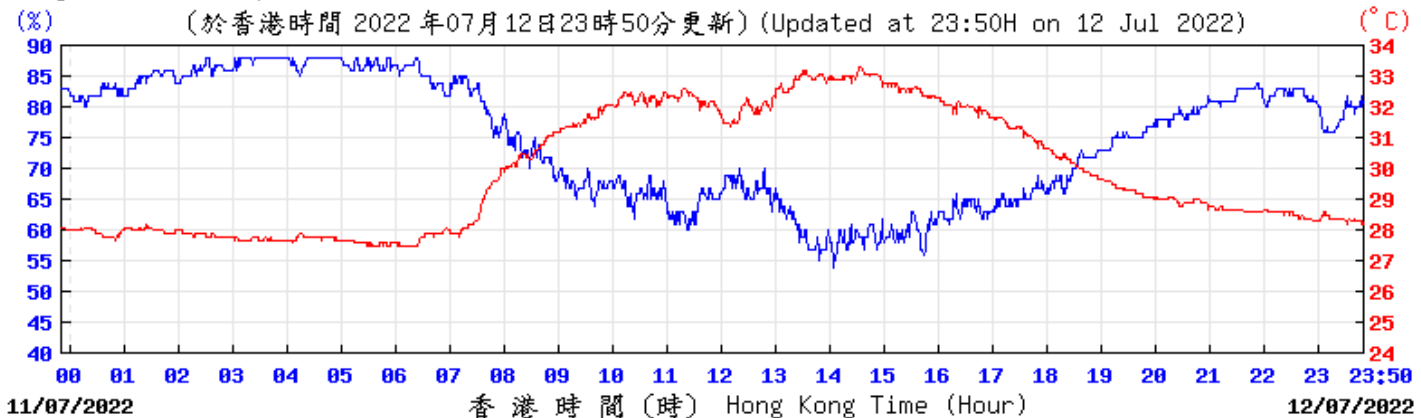
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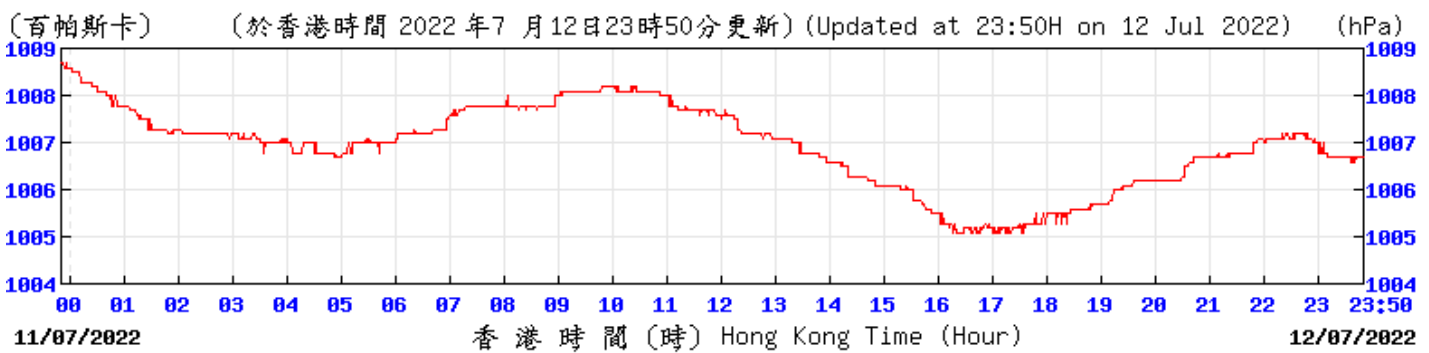
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Temperature/Humidity:



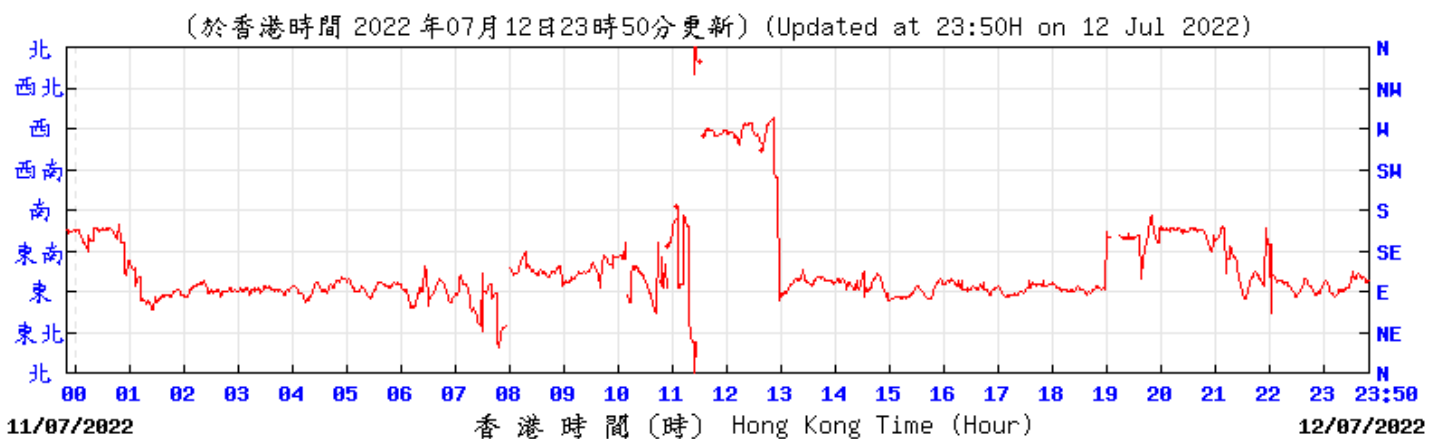
© 香港天文台 Hong Kong Observatory

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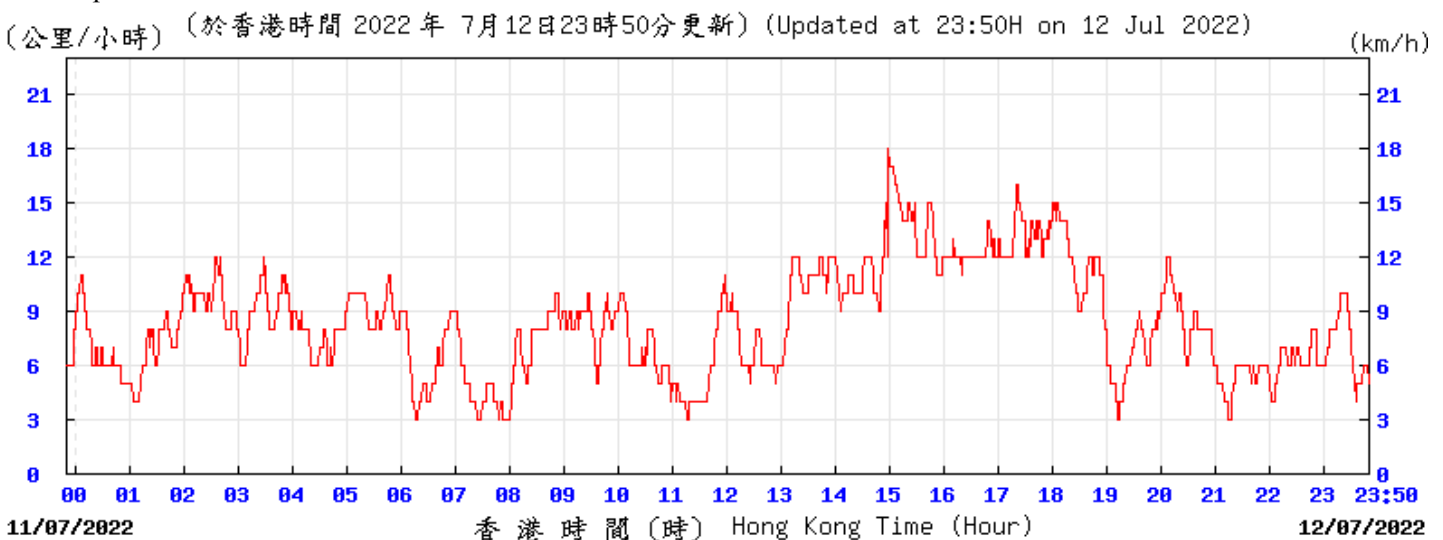
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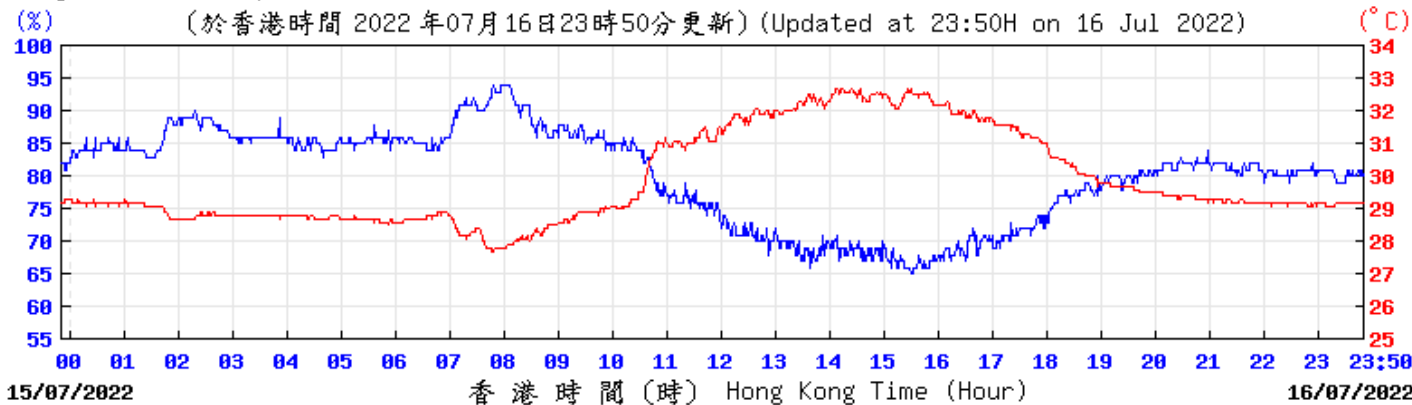
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Wind Speed:



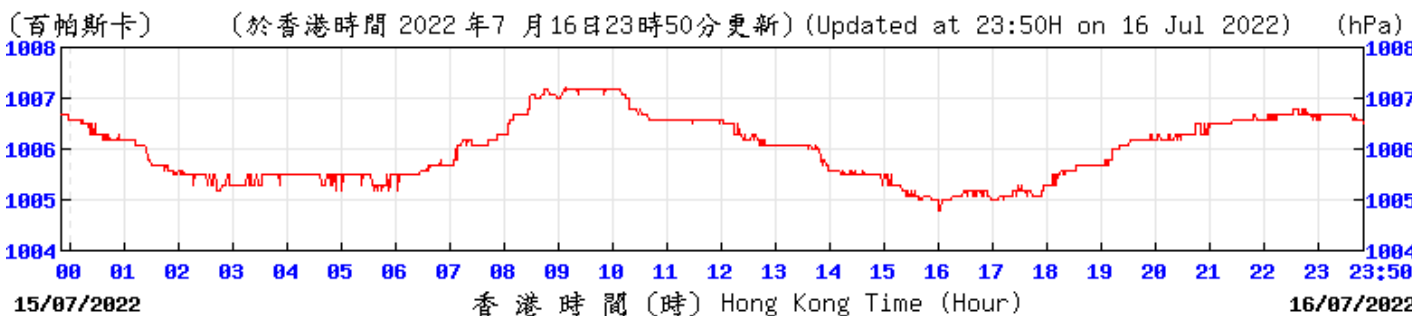
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Temperature/Humidity:



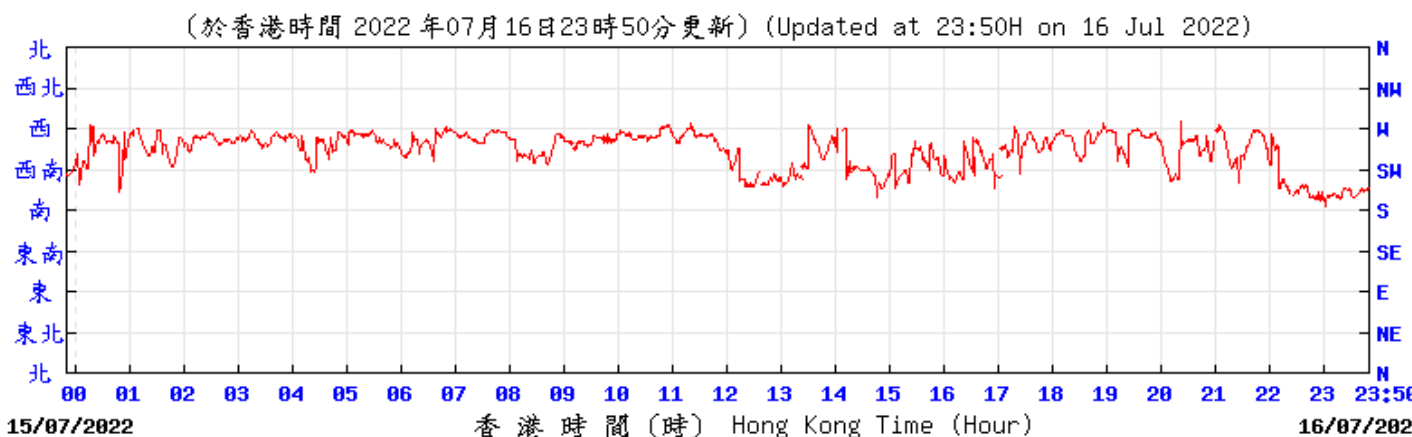
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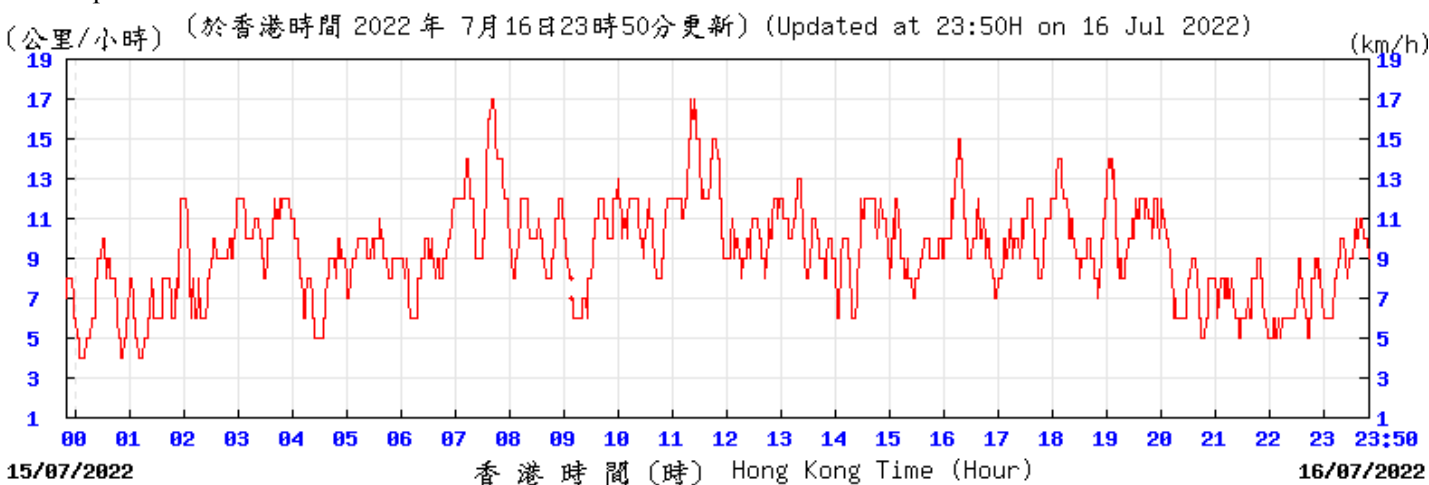
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Wind Direction:



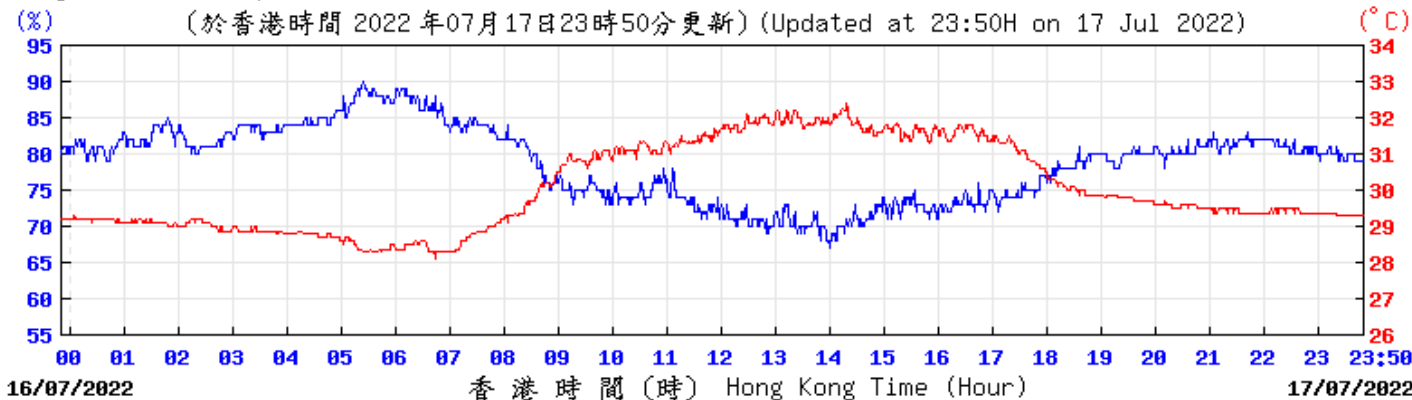
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Wind Speed:



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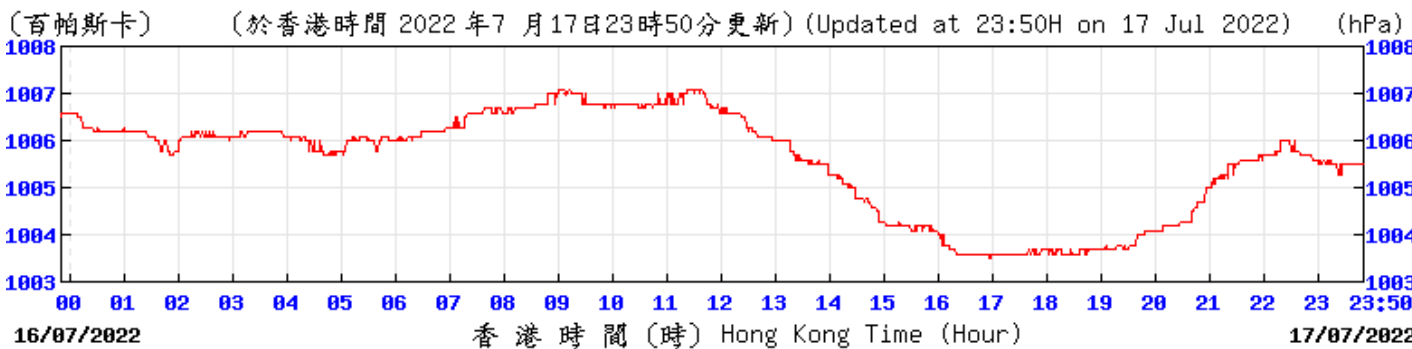
Temperature/Humidity:



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KPC

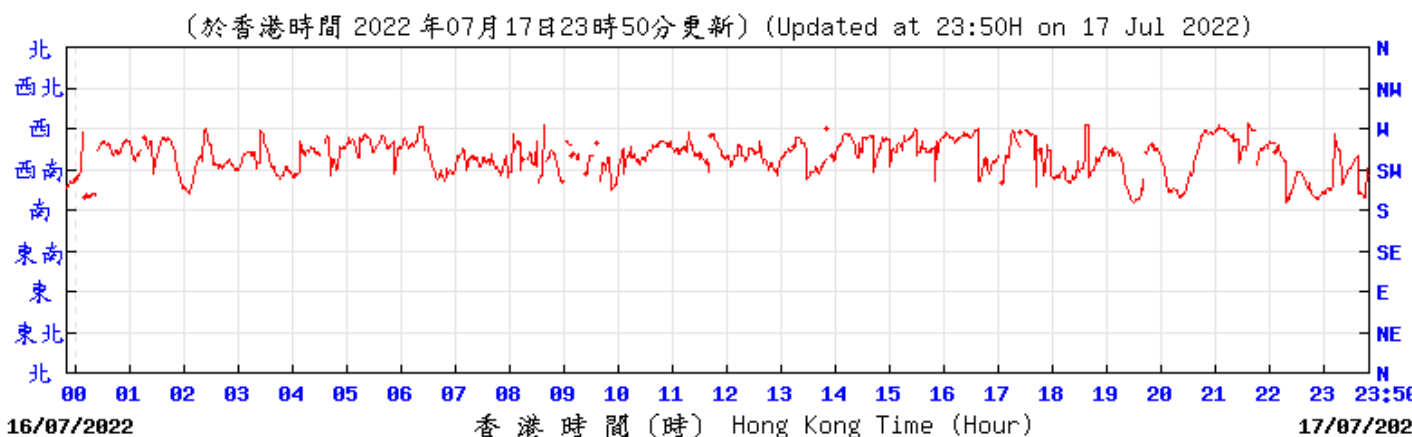
Pressure:



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KPC

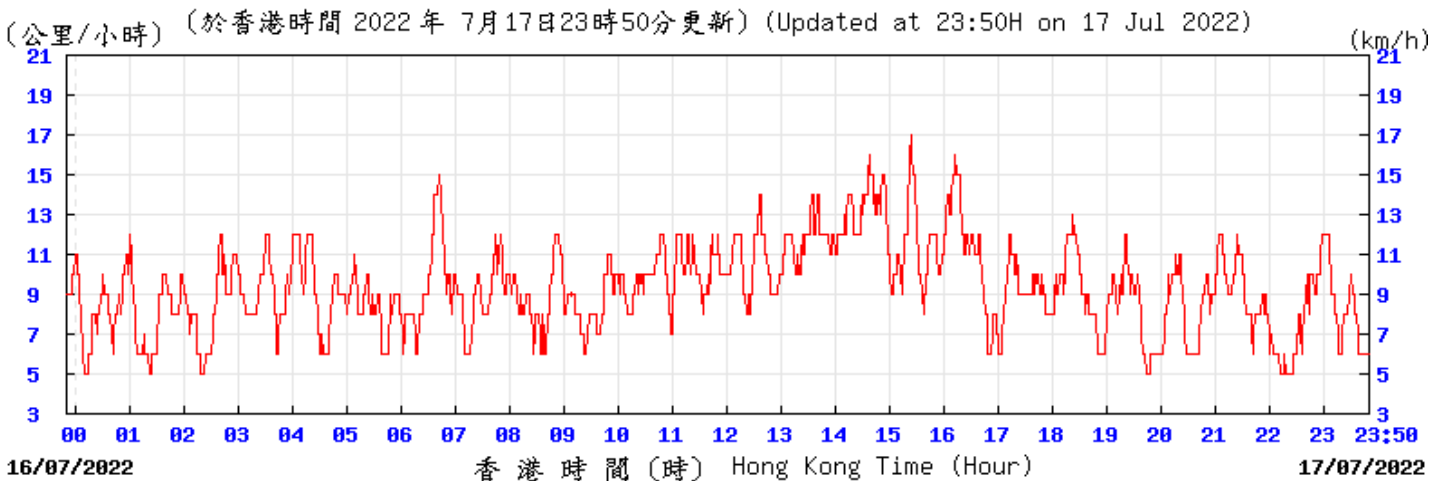
Wind Direction:



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KPC

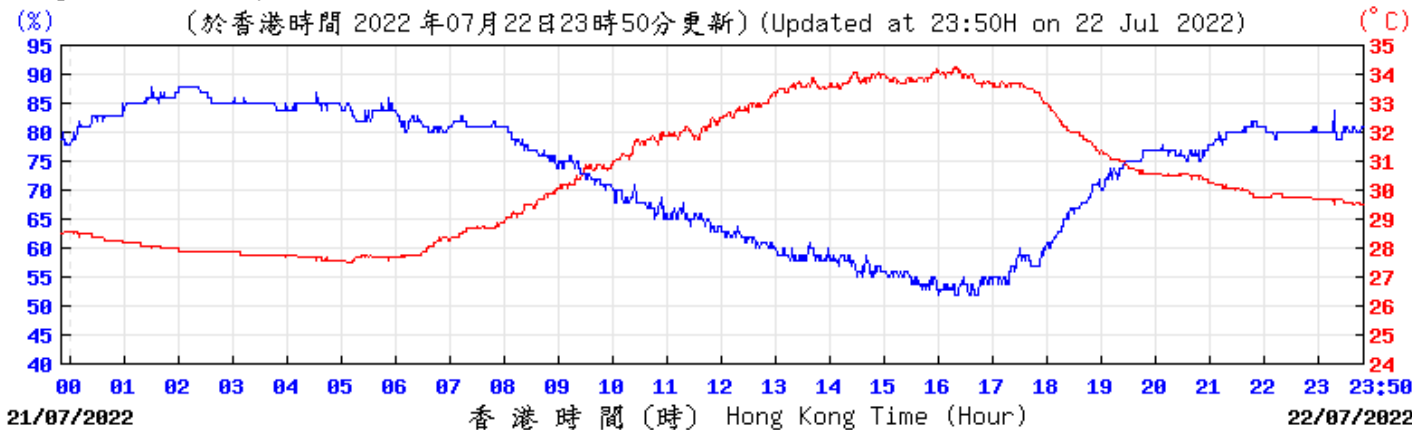
Wind Speed:



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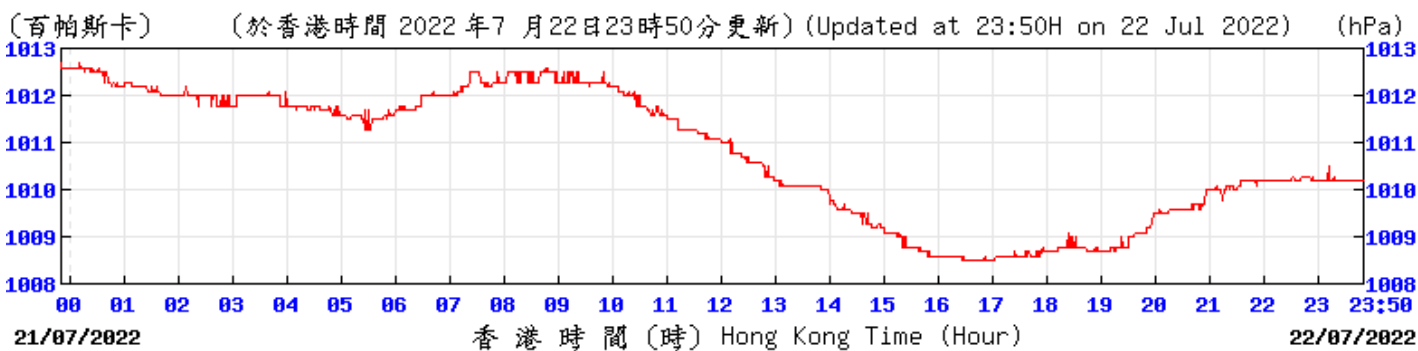
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Temperature/Humidity:



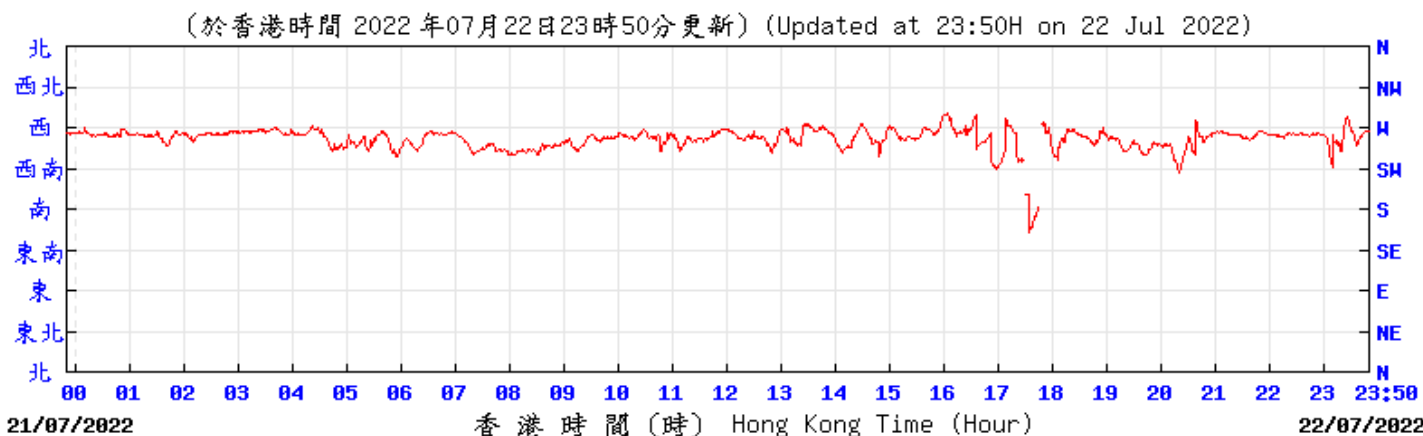
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Pressure:



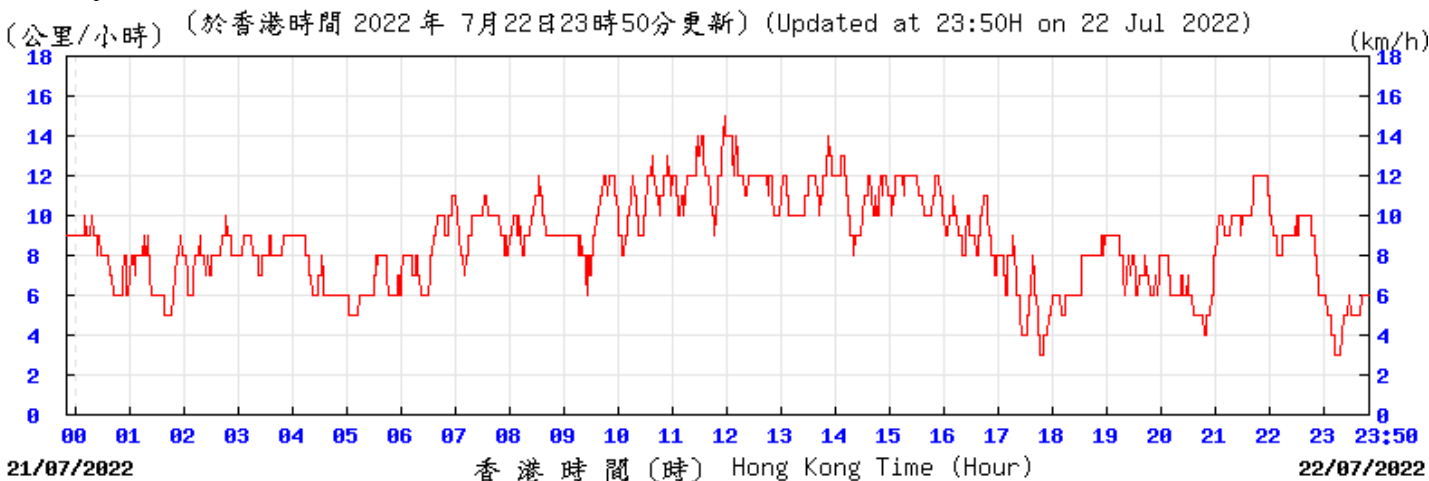
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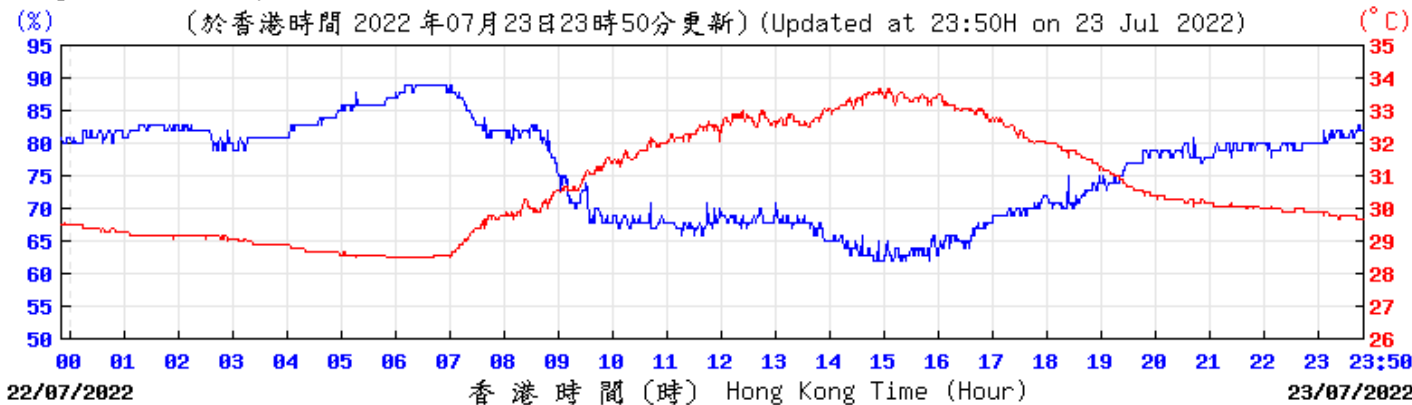
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Wind Speed:



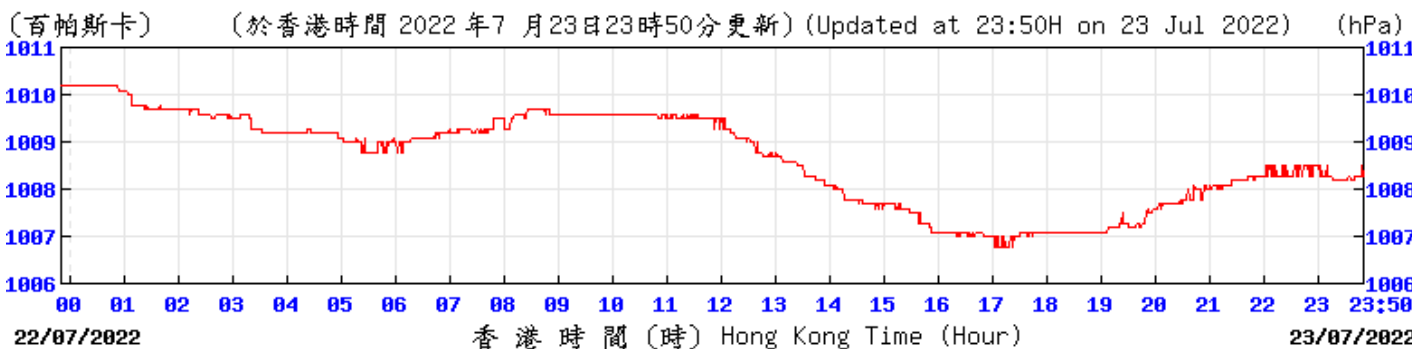
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Temperature/Humidity:



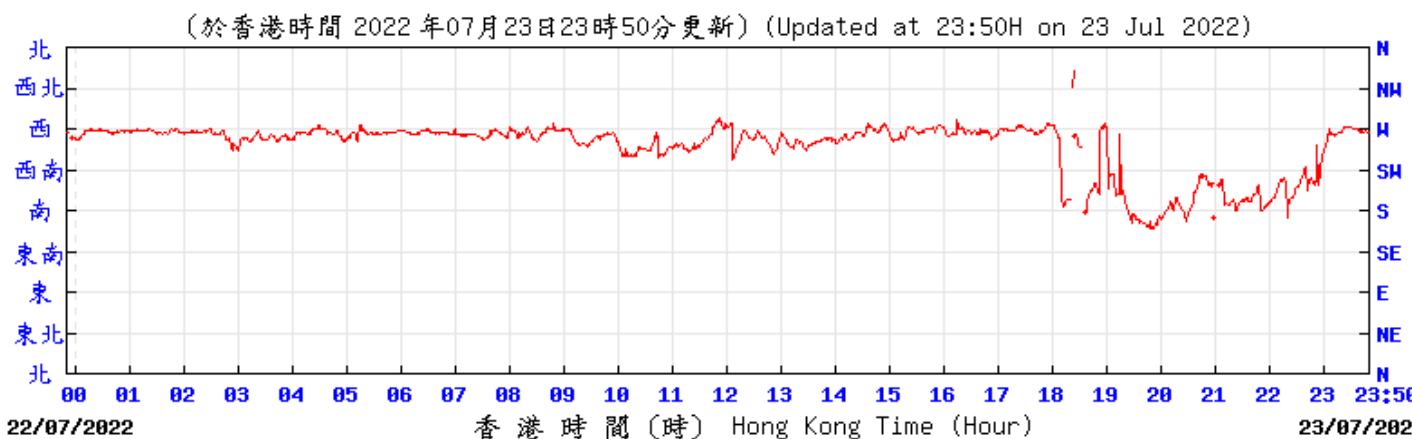
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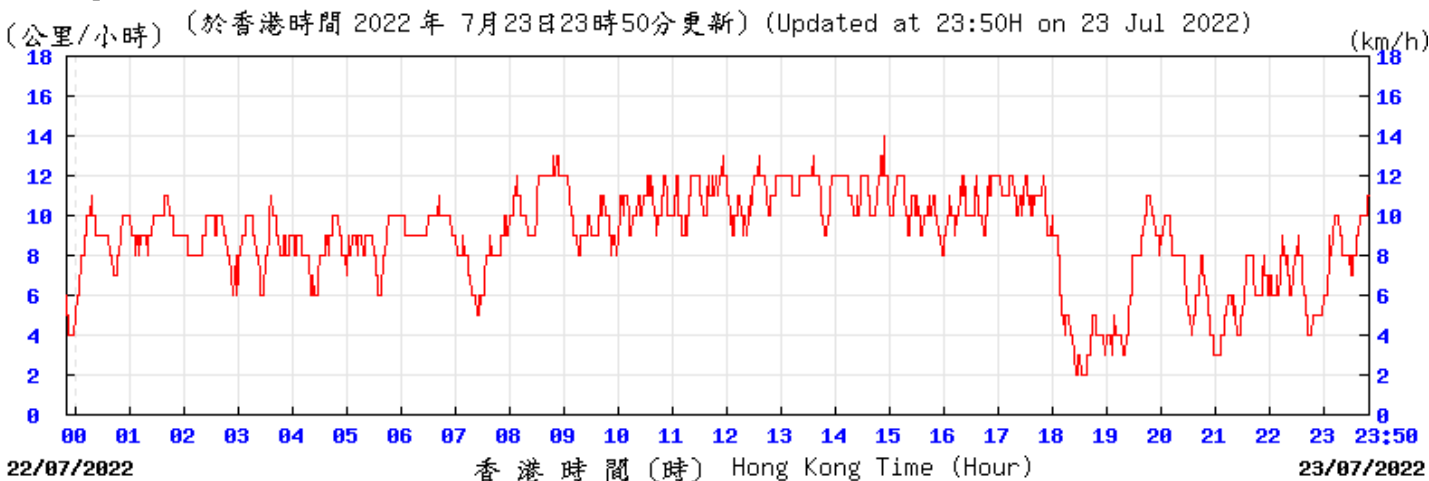
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Wind Direction:



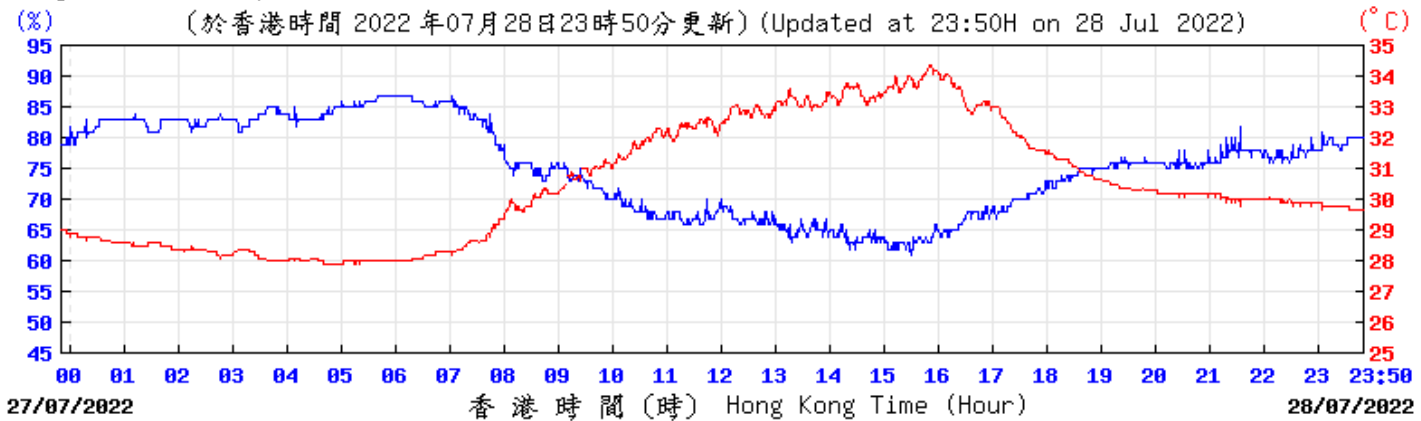
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Wind Speed:



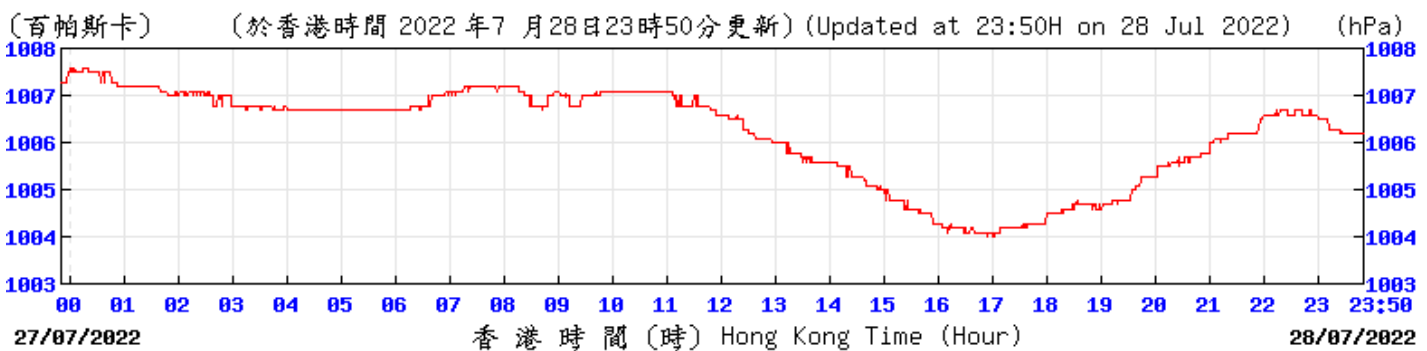
© 香港天文台 Hong Kong Observatory

Temperature/Humidity:



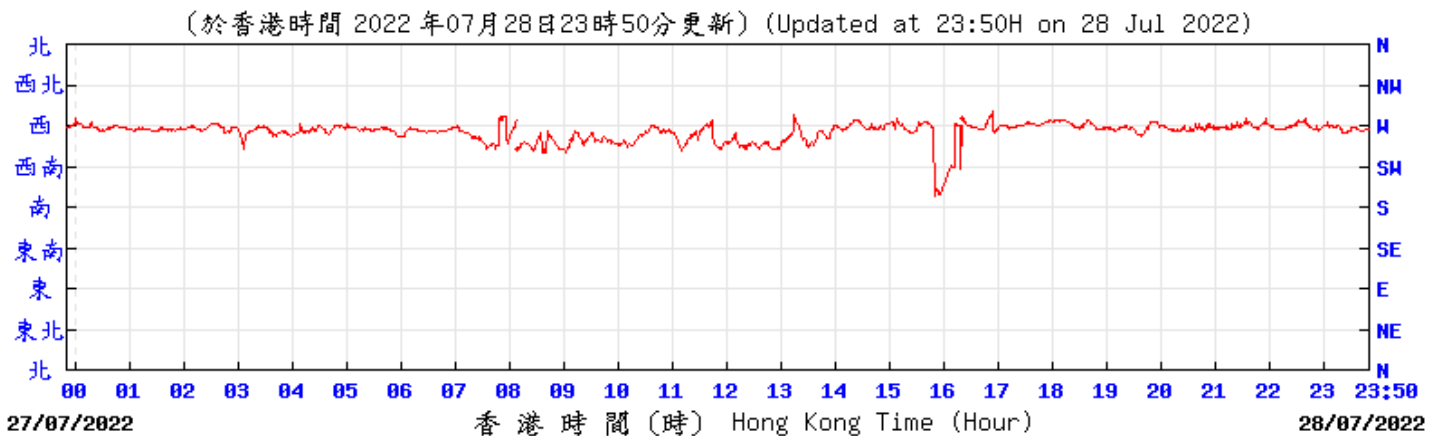
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Pressure:



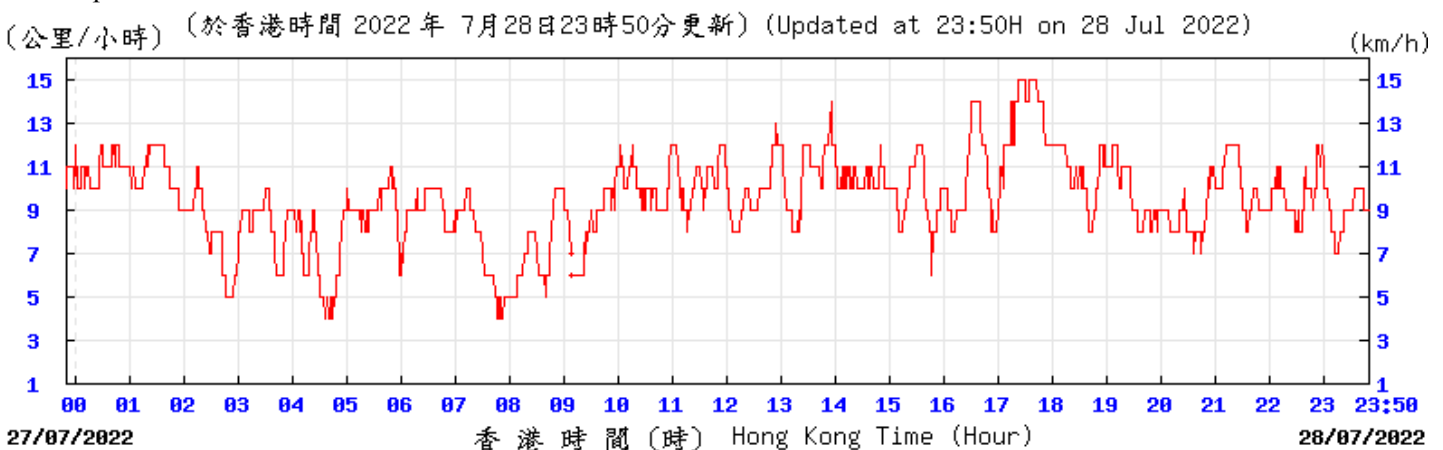
© 香港天文台 Hong Kong Observatory

Wind Direction:



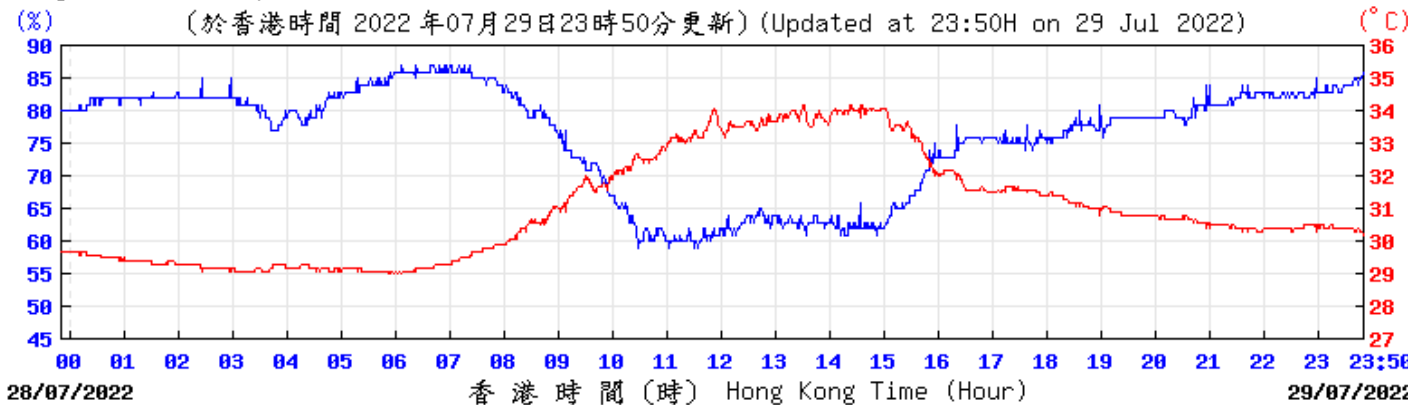
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Wind Speed:



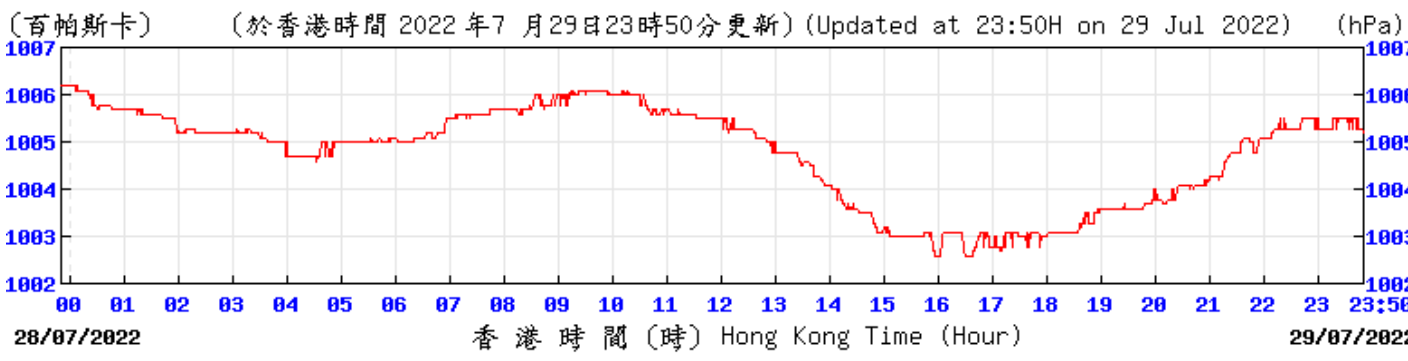
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Temperature/Humidity:



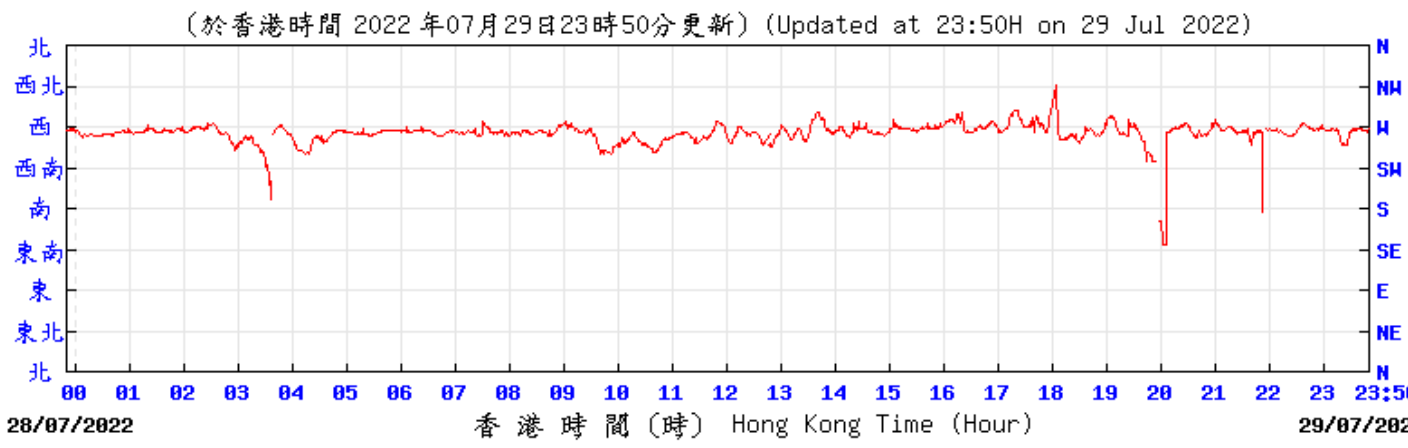
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Pressure:



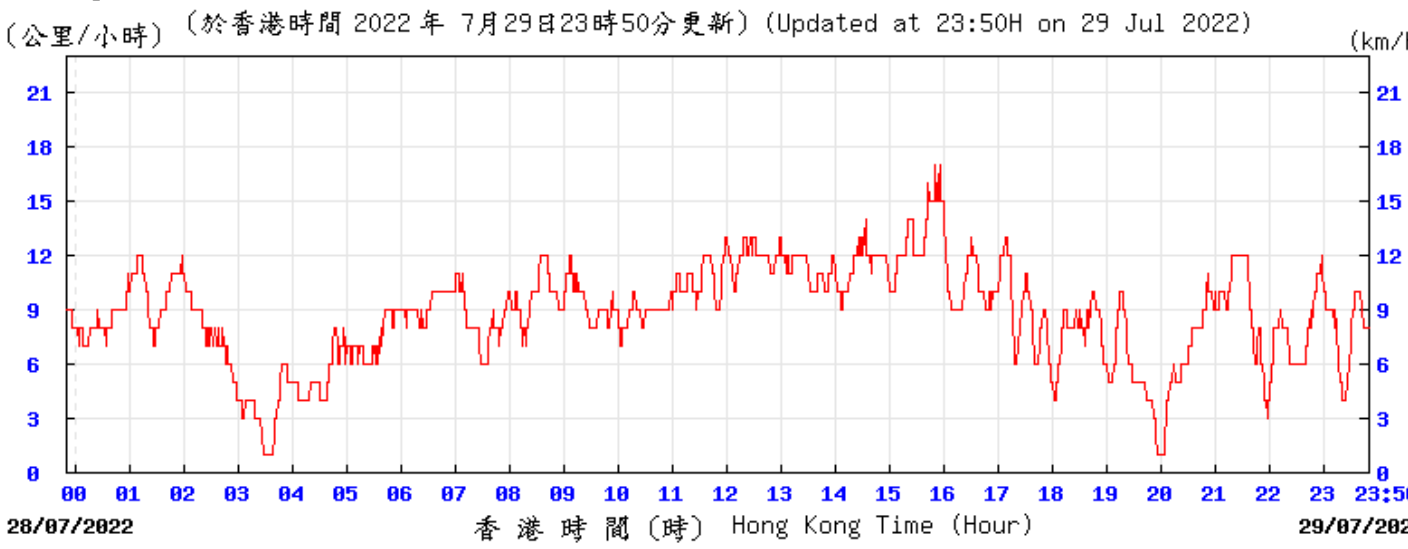
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Wind Direction:



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Wind Speed:



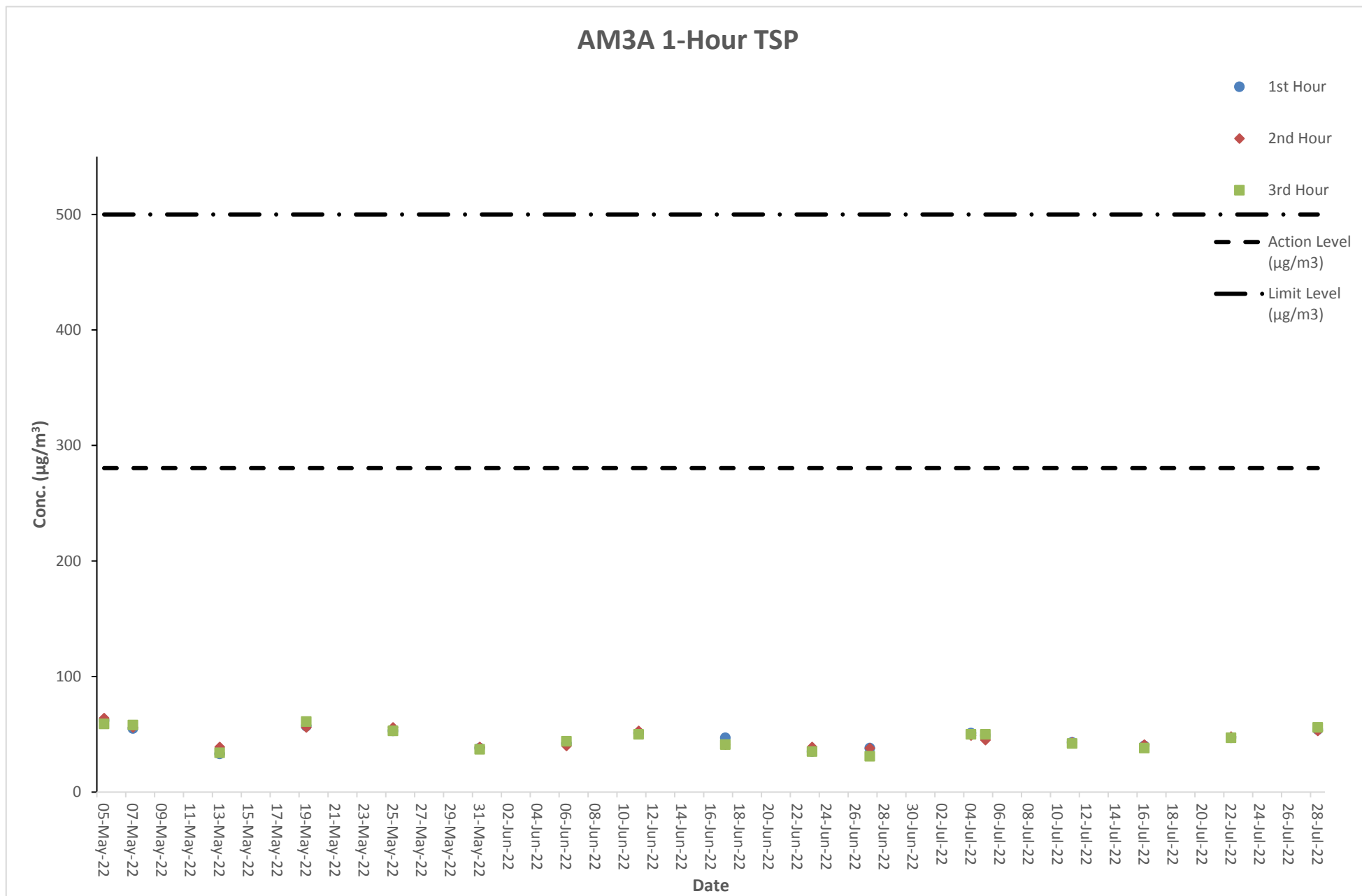
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E. Graphical Plots of the Monitoring Results

Air Quality Monitoring Result at Station AM3A (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
05-May-22	Fine	8:06 - 11:06	62	64	59	280.4	500
07-May-22	Cloudy	14:01 - 17:01	55	56	58	280.4	500
13-May-22	Cloudy	8:09 - 11:09	33	39	34	280.4	500
19-May-22	Fine	14:05 - 17:05	57	56	61	280.4	500
25-May-22	Cloudy	8:13 - 11:13	53	56	53	280.4	500
31-May-22	Cloudy	14:04 - 17:04	38	39	37	280.4	500
06-Jun-22	Cloudy	8:01 - 11:01	42	40	44	280.4	500
11-Jun-22	Cloudy	14:05 - 17:05	51	53	50	280.4	500
17-Jun-22	Cloudy	8:03 - 11:03	47	41	41	280.4	500
23-Jun-22	Fine	14:07 - 17:07	35	39	35	280.4	500
27-Jun-22	Cloudy	8:05 - 11:05	38	38	31	280.4	500
04-Jul-22	Cloudy	8:08 - 11:08	51	49	50	280.4	500
05-Jul-22	Cloudy	14:07 - 17:07	49	45	50	280.4	500
11-Jul-22	Cloudy	8:09 - 11:09	43	43	42	280.4	500
16-Jul-22	Fine	14:11 - 17:11	40	41	38	280.4	500
22-Jul-22	Fine	8:03 - 11:03	47	48	47	280.4	500
28-Jul-22	Fine	14:06 - 17:06	54	53	56	280.4	500

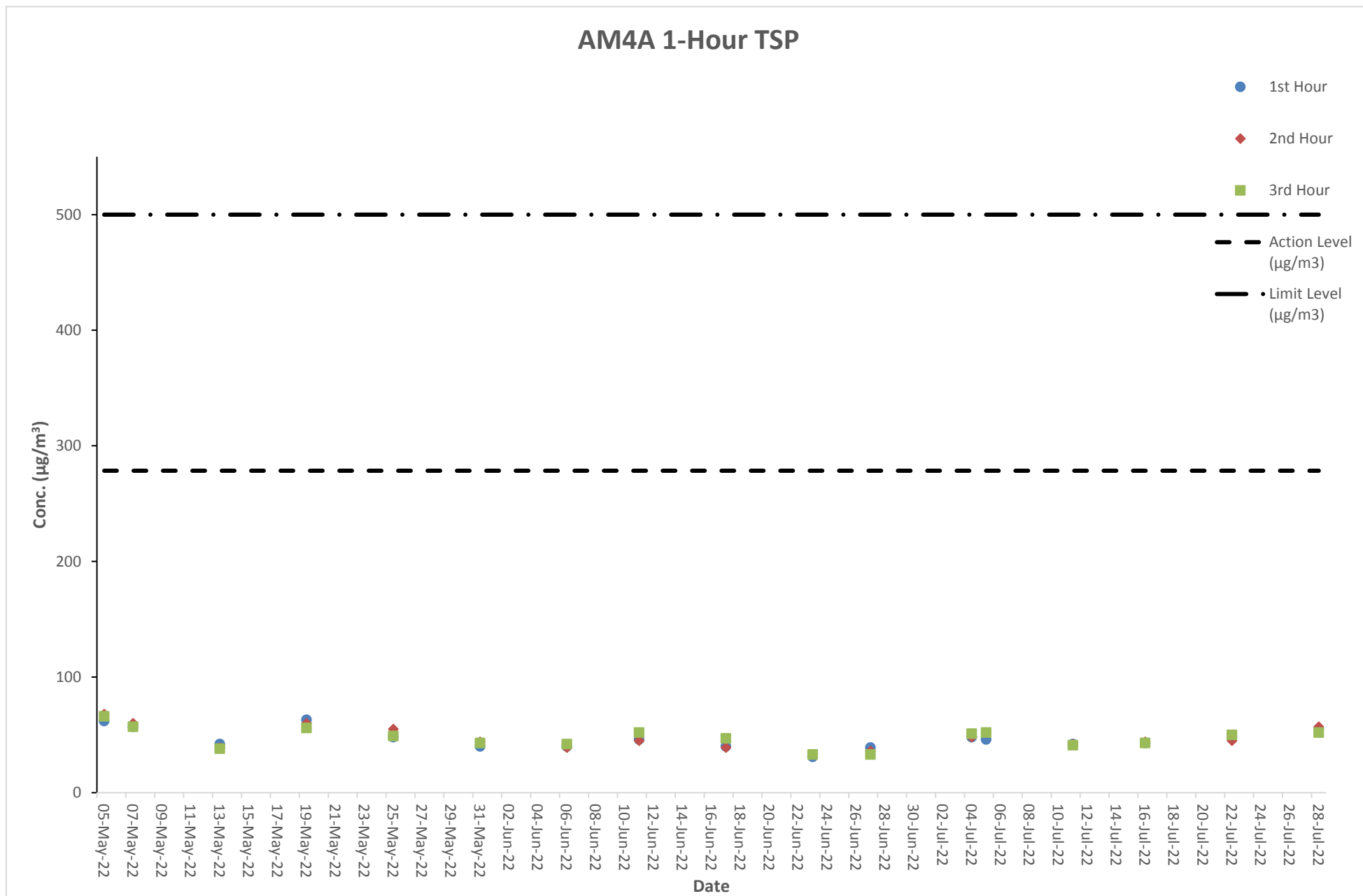
Graphical Presentation of Air Quality Monitoring Result at Station AM3A (1-hour TSP)



Air Quality Monitoring Result at Station AM4A (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
05-May-22	Fine	8:14 - 11:14	62	68	66	278.5	500
07-May-22	Cloudy	14:09 - 17:09	57	60	57	278.5	500
13-May-22	Cloudy	8:17 - 11:17	42	39	38	278.5	500
19-May-22	Fine	14:13 - 17:13	63	60	56	278.5	500
25-May-22	Cloudy	8:21 - 11:21	48	55	49	278.5	500
31-May-22	Cloudy	14:12 - 17:12	40	44	43	278.5	500
06-Jun-22	Cloudy	8:09 - 11:09	40	39	42	278.5	500
11-Jun-22	Cloudy	14:13 - 17:13	46	45	52	278.5	500
17-Jun-22	Cloudy	8:11 - 11:11	40	39	47	278.5	500
23-Jun-22	Fine	14:15 - 17:15	31	33	33	278.5	500
27-Jun-22	Cloudy	8:13 - 11:13	39	36	33	278.5	500
04-Jul-22	Cloudy	8:16 - 11:16	48	48	51	278.5	500
05-Jul-22	Cloudy	14:15 - 17:15	46	52	52	278.5	500
11-Jul-22	Cloudy	8:17 - 11:17	42	42	41	278.5	500
16-Jul-22	Fine	14:19 - 17:19	43	44	43	278.5	500
22-Jul-22	Fine	8:11 - 11:11	48	45	50	278.5	500
28-Jul-22	Fine	14:14 - 17:14	55	57	52	278.5	500

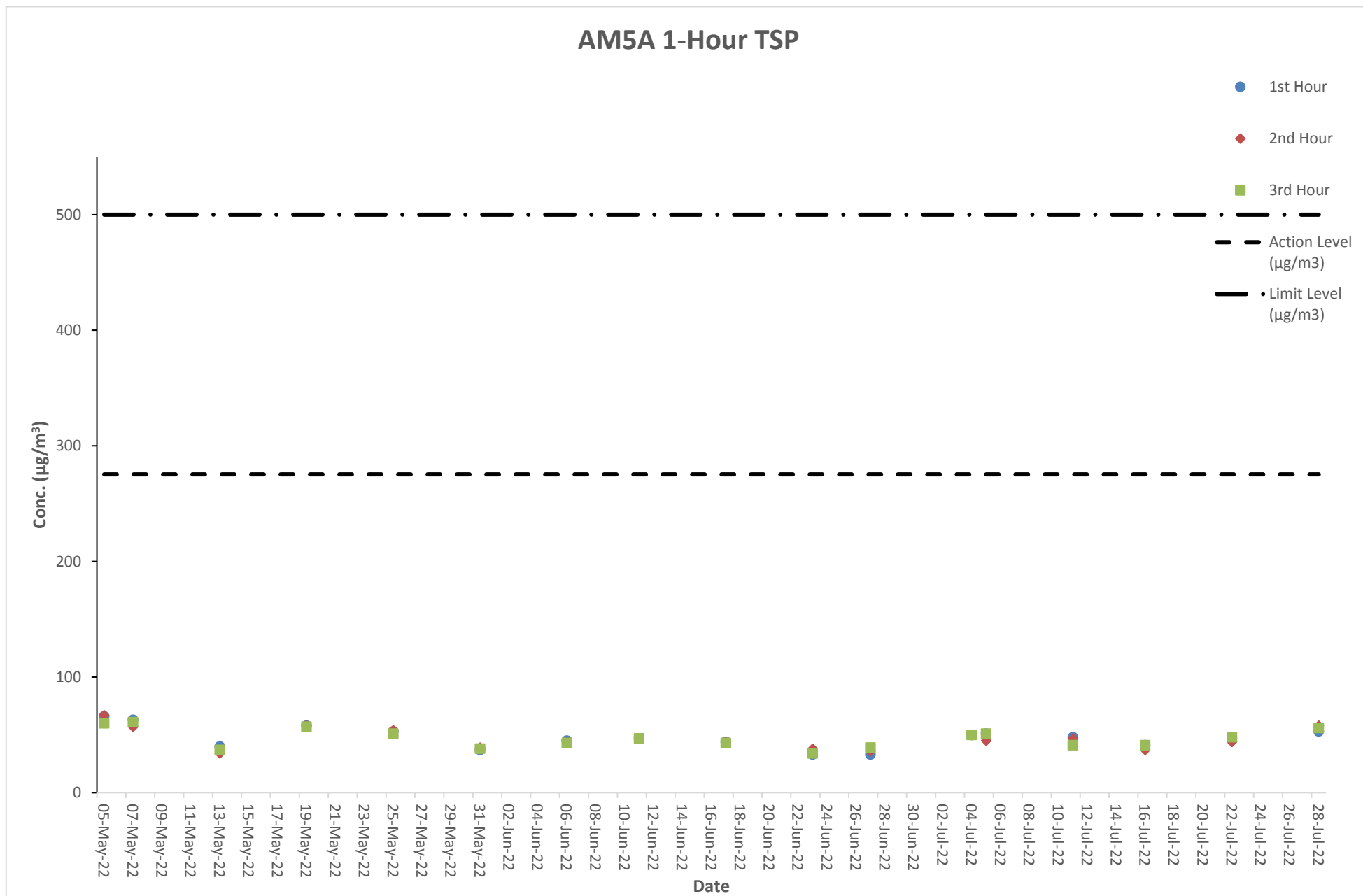
Graphical Presentation of Air Quality Monitoring Result at Station AM4A (1-hour TSP)



Air Quality Monitoring Result at Station AM5A (1-hour TSP)

Date	Weather Condition	Time	Conc. ($\mu\text{g}/\text{m}^3$)			Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
			1 st Hour	2 nd Hour	3 rd Hour		
05-May-22	Fine	8:29 - 11:29	66	67	60	275.4	500
07-May-22	Cloudy	14:26 - 17:26	63	57	61	275.4	500
13-May-22	Cloudy	8:32 - 11:32	40	34	37	275.4	500
19-May-22	Fine	14:30 - 17:30	58	58	57	275.4	500
25-May-22	Cloudy	8:36 - 11:36	53	54	51	275.4	500
31-May-22	Cloudy	14:20 - 17:20	37	39	38	275.4	500
06-Jun-22	Cloudy	8:24 - 11:24	45	44	43	275.4	500
11-Jun-22	Cloudy	14:30 - 17:30	47	47	47	275.4	500
17-Jun-22	Cloudy	8:26 - 11:26	44	44	43	275.4	500
23-Jun-22	Fine	14:32 - 17:32	33	38	34	275.4	500
27-Jun-22	Cloudy	8:28 - 11:28	33	36	39	275.4	500
04-Jul-22	Cloudy	8:31 - 11:31	50	50	50	275.4	500
05-Jul-22	Cloudy	14:32 - 17:32	51	45	51	275.4	500
11-Jul-22	Cloudy	8:32 - 11:32	48	47	41	275.4	500
16-Jul-22	Fine	14:36 - 17:36	41	37	41	275.4	500
22-Jul-22	Fine	8:26 - 11:26	47	44	48	275.4	500
28-Jul-22	Fine	14:22 - 17:22	53	58	56	275.4	500

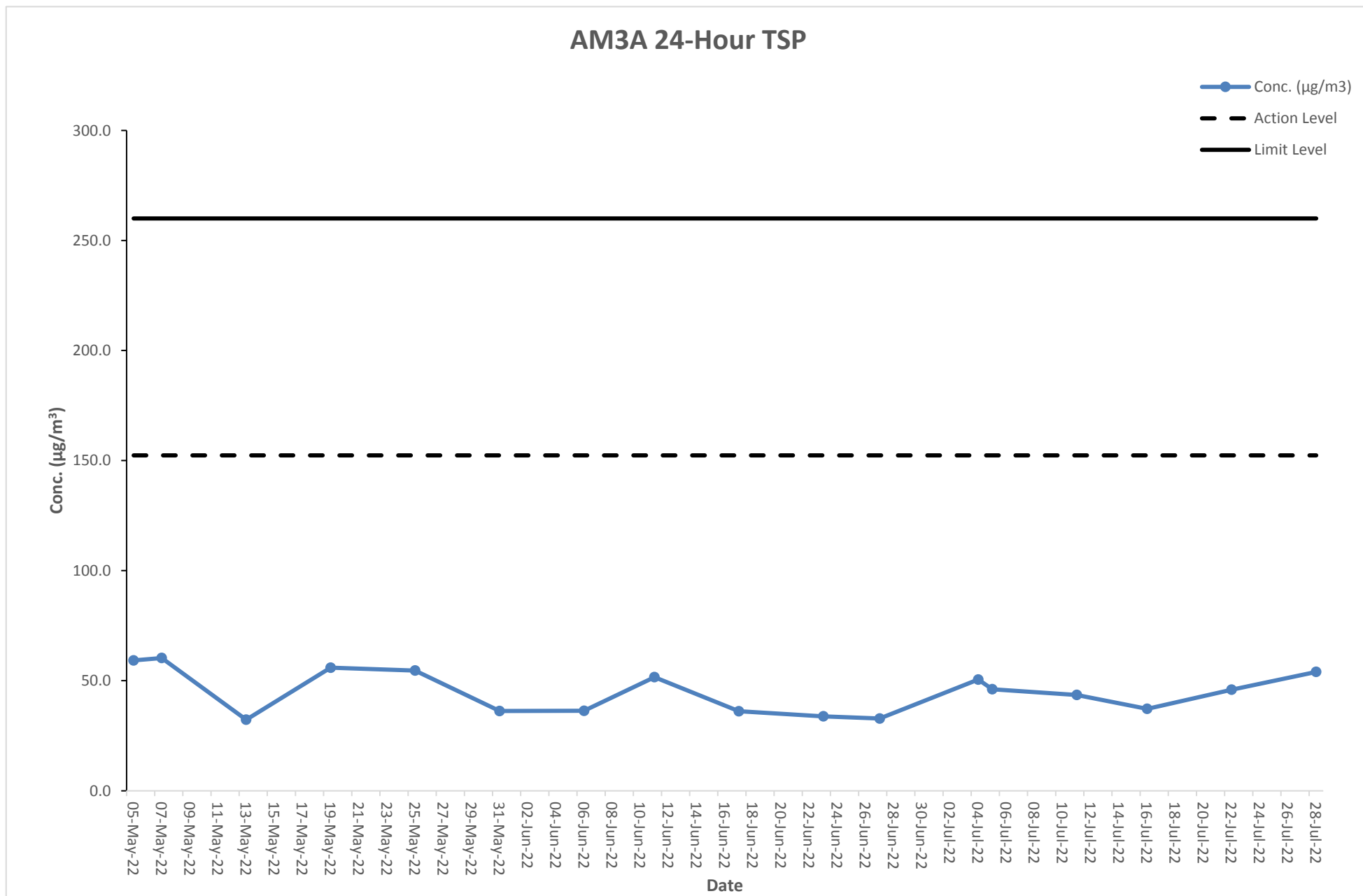
Graphical Presentation of Air Quality Monitoring Result at Station AM5A (1-hour TSP)



Air Quality Monitoring Result at Station AM3A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m ³ /min)			Conc. (µg/m ³)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
05-May-22	10:00	06-May-22	10:00	2.8051	2.9005	3529.8	3553.8	24	1.12	1.12	1.12	59.2	Sunny	152.4	260
07-May-22	10:00	08-May-22	10:00	2.8047	2.9017	3553.8	3577.8	24	1.12	1.12	1.12	60.3	Rainy	152.4	260
13-May-22	10:00	14-May-22	10:00	2.8085	2.8604	3577.8	3601.8	24	1.12	1.12	1.12	32.3	Rainy	152.4	260
19-May-22	10:00	20-May-22	10:00	2.8069	2.8969	3601.8	3625.8	24	1.12	1.12	1.12	55.9	Sunny	152.4	260
25-May-22	10:00	26-May-22	10:00	2.8042	2.8921	3625.8	3649.8	24	1.12	1.12	1.12	54.6	Rainy	152.4	260
31-May-22	10:00	01-Jun-22	10:00	2.8056	2.8639	3649.8	3673.8	24	1.12	1.12	1.12	36.2	Cloudy	152.4	260
06-Jun-22	10:00	07-Jun-22	10:00	2.8066	2.8650	3674.8	3698.8	24	1.12	1.12	1.12	36.3	Rainy	152.4	260
11-Jun-22	10:00	12-Jun-22	10:00	2.8047	2.8877	3698.8	3722.8	24	1.12	1.12	1.12	51.6	Rainy	152.4	260
17-Jun-22	10:00	18-Jun-22	10:00	2.8087	2.8669	3722.8	3746.8	24	1.12	1.12	1.12	36.1	Cloudy	152.4	260
23-Jun-22	10:00	24-Jun-22	10:00	2.8064	2.8608	3746.8	3770.8	24	1.12	1.12	1.12	33.8	Sunny	152.4	260
27-Jun-22	10:00	28-Jun-22	10:00	2.8063	2.8591	3770.8	3794.8	24	1.12	1.12	1.12	32.8	Cloudy	152.4	260
04-Jul-22	10:00	05-Jul-22	10:00	2.8086	2.8900	3794.8	3818.8	24	1.12	1.12	1.12	50.5	Cloudy	152.4	260
05-Jul-22	10:00	06-Jul-22	10:00	2.8014	2.8756	3818.8	3842.8	24	1.12	1.12	1.12	46.1	Cloudy	152.4	260
11-Jul-22	10:00	12-Jul-22	10:00	2.8035	2.8735	3842.8	3866.8	24	1.12	1.12	1.12	43.5	Sunny	152.4	260
16-Jul-22	10:00	17-Jul-22	10:00	2.8050	2.8649	3866.8	3890.8	24	1.12	1.12	1.12	37.2	Rainy	152.4	260
22-Jul-22	10:00	23-Jul-22	10:00	2.8084	2.8822	3890.8	3914.8	24	1.12	1.12	1.12	45.9	Sunny	152.4	260
28-Jul-22	10:00	29-Jul-22	10:00	2.8063	2.8932	3914.8	3938.8	24	1.12	1.12	1.12	54.0	Sunny	152.4	260

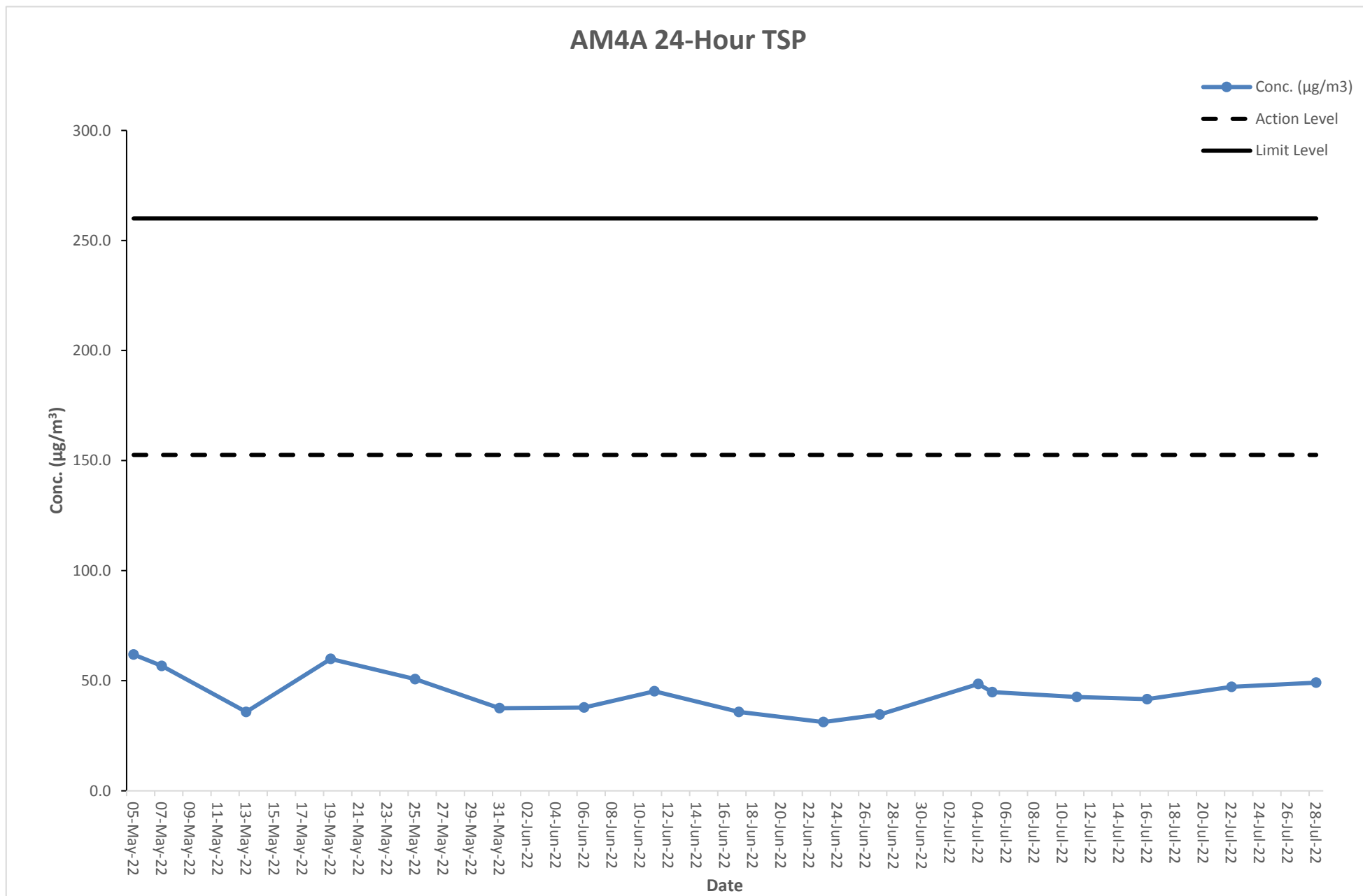
Graphical Presentation of Air Quality Monitoring Result at Station AM3A (24-hour TSP)



Air Quality Monitoring Result at Station AM4A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m ³ /min)			Conc. (µg/m ³)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
05-May-22	10:00	06-May-22	10:00	2.8028	2.9025	3949.4	3973.4	24	1.12	1.12	1.12	61.9	Sunny	152.6	260
07-May-22	10:00	08-May-22	10:00	2.8035	2.8947	3973.4	3997.4	24	1.12	1.12	1.12	56.7	Rainy	152.6	260
13-May-22	10:00	14-May-22	10:00	2.8033	2.8610	3997.4	4021.4	24	1.12	1.12	1.12	35.8	Rainy	152.6	260
19-May-22	10:00	20-May-22	10:00	2.8044	2.9008	4021.4	4045.4	24	1.12	1.12	1.12	59.9	Sunny	152.6	260
25-May-22	10:00	26-May-22	10:00	2.8051	2.8867	4045.4	4069.4	24	1.12	1.12	1.12	50.7	Rainy	152.6	260
31-May-22	10:00	01-Jun-22	10:00	2.8027	2.8631	4069.4	4093.4	24	1.12	1.12	1.12	37.5	Cloudy	152.6	260
06-Jun-22	10:00	07-Jun-22	10:00	2.8045	2.8653	4094.4	4118.4	24	1.12	1.12	1.12	37.8	Rainy	152.6	260
11-Jun-22	10:00	12-Jun-22	10:00	2.8087	2.8815	4118.4	4142.4	24	1.12	1.12	1.12	45.2	Rainy	152.6	260
17-Jun-22	10:00	18-Jun-22	10:00	2.8073	2.8650	4142.4	4166.4	24	1.12	1.12	1.12	35.8	Cloudy	152.6	260
23-Jun-22	10:00	24-Jun-22	10:00	2.8081	2.8583	4166.4	4190.4	24	1.12	1.12	1.12	31.2	Sunny	152.6	260
27-Jun-22	10:00	28-Jun-22	10:00	2.8066	2.8623	4190.4	4214.4	24	1.12	1.12	1.12	34.6	Cloudy	152.6	260
04-Jul-22	10:00	05-Jul-22	10:00	2.8052	2.8832	4214.4	4238.4	24	1.12	1.12	1.12	48.5	Cloudy	152.6	260
05-Jul-22	10:00	06-Jul-22	10:00	2.8086	2.8807	4238.4	4262.4	24	1.12	1.12	1.12	44.8	Cloudy	152.6	260
11-Jul-22	10:00	12-Jul-22	10:00	2.8018	2.8703	4262.4	4286.4	24	1.12	1.12	1.12	42.6	Sunny	152.6	260
16-Jul-22	10:00	17-Jul-22	10:00	2.8068	2.8737	4286.4	4310.4	24	1.12	1.12	1.12	41.6	Rainy	152.6	260
22-Jul-22	10:00	23-Jul-22	10:00	2.8024	2.8783	4310.4	4334.4	24	1.12	1.12	1.12	47.2	Sunny	152.6	260
28-Jul-22	10:00	29-Jul-22	10:00	2.8060	2.8851	4334.4	4358.4	24	1.12	1.12	1.12	49.1	Sunny	152.6	260

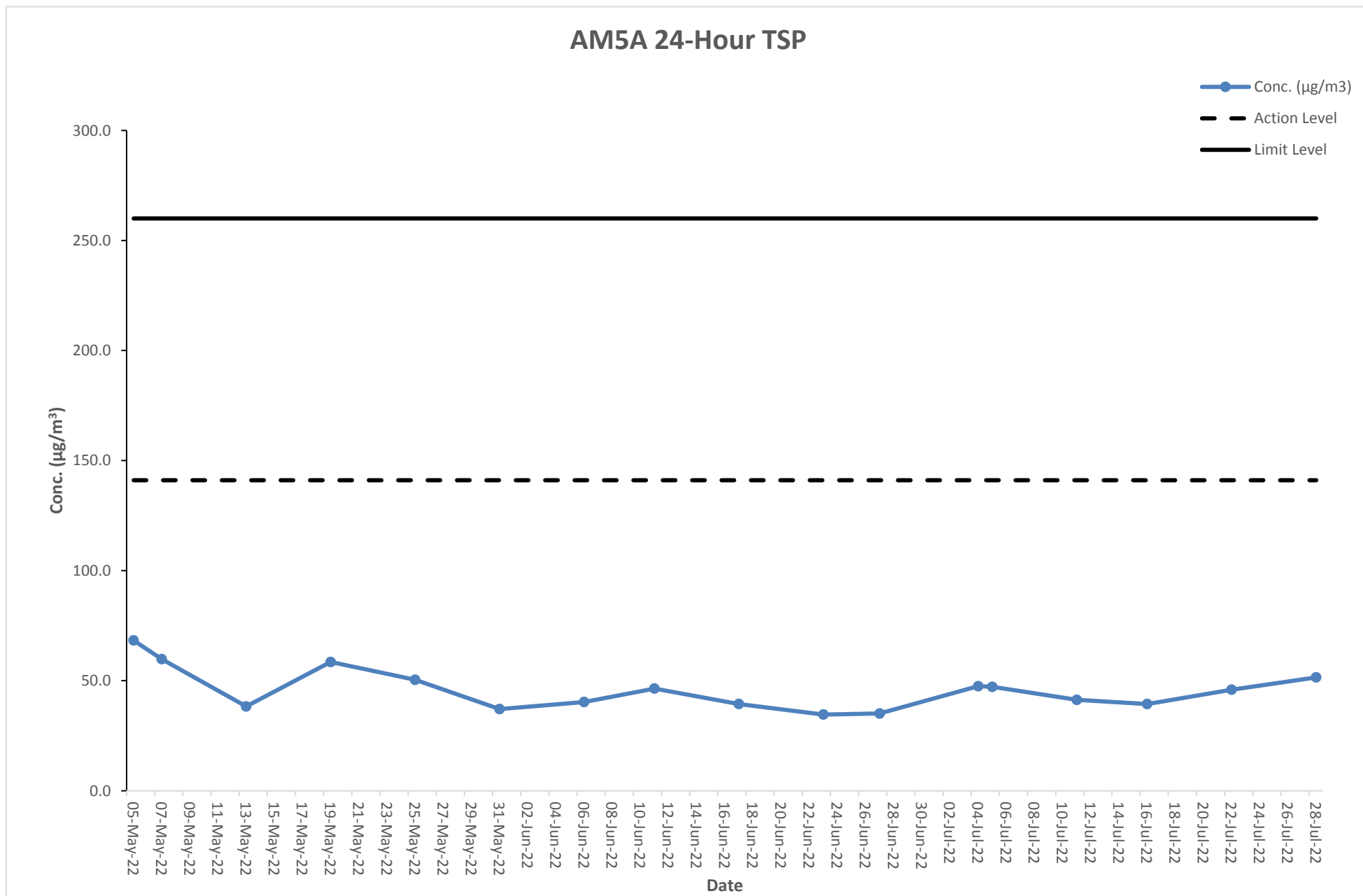
Graphical Presentation of Air Quality Monitoring Result at Station AM4A (24-hour TSP)



Air Quality Monitoring Result at Station AM5A (24-hour TSP)

Start		Finish		Filter Weight (g)		Elapsed Time Reading		Sampling Time (hrs)	Flow Rate (m ³ /min)			Conc. (µg/m ³)	Weather Condition	Action Level	Limit Level
Date	Time	Date	Time	Initial	Final	Initial	Final		Initial	Final	Average				
05-May-22	10:00	06-May-22	10:00	2.8022	2.9122	4089.6	4113.6	24	1.12	1.12	1.12	68.3	Sunny	141.1	260
07-May-22	10:00	08-May-22	10:00	2.8041	2.9004	4113.6	4137.6	24	1.12	1.12	1.12	59.8	Rainy	141.1	260
13-May-22	10:00	14-May-22	10:00	2.8055	2.8671	4137.6	4161.6	24	1.12	1.12	1.12	38.3	Rainy	141.1	260
19-May-22	10:00	20-May-22	10:00	2.8024	2.8966	4161.6	4185.6	24	1.12	1.12	1.12	58.5	Sunny	141.1	260
25-May-22	10:00	26-May-22	10:00	2.8025	2.8837	4185.6	4209.6	24	1.12	1.12	1.12	50.4	Rainy	141.1	260
31-May-22	10:00	01-Jun-22	10:00	2.8075	2.8673	4209.6	4233.6	24	1.12	1.12	1.12	37.1	Cloudy	141.1	260
06-Jun-22	10:00	07-Jun-22	10:00	2.8083	2.8732	4234.6	4258.6	24	1.12	1.12	1.12	40.3	Rainy	141.1	260
11-Jun-22	10:00	12-Jun-22	10:00	2.8067	2.8815	4258.6	4282.6	24	1.12	1.12	1.12	46.4	Rainy	141.1	260
17-Jun-22	10:00	18-Jun-22	10:00	2.8036	2.8670	4282.6	4306.6	24	1.12	1.12	1.12	39.4	Cloudy	141.1	260
23-Jun-22	10:00	24-Jun-22	10:00	2.8060	2.8616	4306.6	4330.6	24	1.12	1.12	1.12	34.6	Sunny	141.1	260
27-Jun-22	10:00	28-Jun-22	10:00	2.8051	2.8616	4330.6	4354.6	24	1.12	1.12	1.12	35.1	Cloudy	141.1	260
04-Jul-22	10:00	05-Jul-22	10:00	2.8075	2.8840	4354.6	4378.6	24	1.12	1.12	1.12	47.5	Cloudy	141.1	260
05-Jul-22	10:00	06-Jul-22	10:00	2.8066	2.8825	4378.6	4402.6	24	1.12	1.12	1.12	47.2	Cloudy	141.1	260
11-Jul-22	10:00	12-Jul-22	10:00	2.8070	2.8735	4402.6	4426.6	24	1.12	1.12	1.12	41.3	Sunny	141.1	260
16-Jul-22	10:00	17-Jul-22	10:00	2.8061	2.8695	4426.6	4450.6	24	1.12	1.12	1.12	39.4	Rainy	141.1	260
22-Jul-22	10:00	23-Jul-22	10:00	2.8012	2.8750	4450.6	4474.6	24	1.12	1.12	1.12	45.9	Sunny	141.1	260
28-Jul-22	10:00	29-Jul-22	10:00	2.8024	2.8853	4474.6	4498.6	24	1.12	1.12	1.12	51.5	Sunny	141.1	260

Graphical Presentation of Air Quality Monitoring Result at Station AM5A (24-hour TSP)

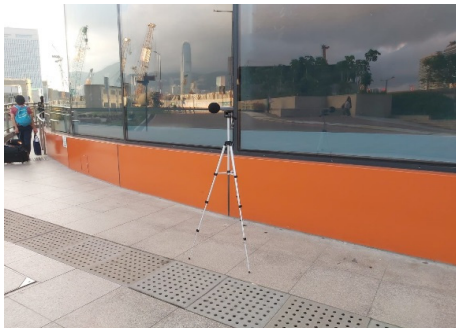


Noise Monitoring Result at Station NM2A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
05-May-22	8:36	63.0	60.2	61.4
05-May-22	8:41	63.9	59.4	
05-May-22	8:46	64.1	60.1	
05-May-22	8:51	64.3	59.9	
05-May-22	8:56	64.5	60.5	
05-May-22	9:01	64.7	59.3	
07-May-22	14:31	63.6	60.5	62.2
07-May-22	14:36	63.9	59.6	
07-May-22	14:41	63.1	59.9	
07-May-22	14:46	63.8	59.5	
07-May-22	14:51	64.6	60.0	
07-May-22	14:56	63.0	59.6	
13-May-22	8:39	63.3	59.7	61.8
13-May-22	8:44	64.1	60.0	
13-May-22	8:49	63.9	59.8	
13-May-22	8:54	63.3	59.0	
13-May-22	8:59	64.1	60.5	
13-May-22	9:04	62.8	60.1	
19-May-22	14:35	64.4	60.0	61.7
19-May-22	14:40	64.0	59.2	
19-May-22	14:45	62.9	58.7	
19-May-22	14:50	64.6	60.1	
19-May-22	14:55	63.4	59.7	
19-May-22	15:00	64.3	60.2	
25-May-22	8:43	64.3	58.8	61.8
25-May-22	8:48	62.9	60.3	
25-May-22	8:53	63.1	59.1	
25-May-22	8:58	64.0	59.5	
25-May-22	9:03	64.2	60.2	
25-May-22	9:08	63.8	60.0	
31-May-22	14:04	63.2	60.4	61.7
31-May-22	14:09	64.5	60.4	
31-May-22	14:14	62.8	59.9	
31-May-22	14:19	64.3	58.8	
31-May-22	14:24	64.4	59.0	
31-May-22	14:29	64.0	59.4	
06-Jun-22	8:31	63.9	58.9	61.6
06-Jun-22	8:36	63.7	58.9	
06-Jun-22	8:41	64.4	59.4	
06-Jun-22	8:46	64.1	60.2	
06-Jun-22	8:51	63.5	59.8	
06-Jun-22	8:56	63.3	59.6	
11-Jun-22	14:35	64.3	59.9	62.0
11-Jun-22	14:40	64.1	59.1	
11-Jun-22	14:45	64.7	59.2	
11-Jun-22	14:50	62.9	59.4	
11-Jun-22	14:55	63.9	59.8	
11-Jun-22	15:00	64.7	59.7	
17-Jun-22	8:33	64.4	58.6	61.6
17-Jun-22	8:38	64.7	59.8	
17-Jun-22	8:43	64.0	59.7	
17-Jun-22	8:48	63.6	58.6	
17-Jun-22	8:53	63.4	60.2	
17-Jun-22	8:58	63.6	60.1	
23-Jun-22	14:37	63.0	60.3	61.8
23-Jun-22	14:42	62.9	59.8	
23-Jun-22	14:47	62.9	59.1	
23-Jun-22	14:52	63.7	59.3	
23-Jun-22	14:57	63.9	59.0	
23-Jun-22	15:02	64.6	59.9	

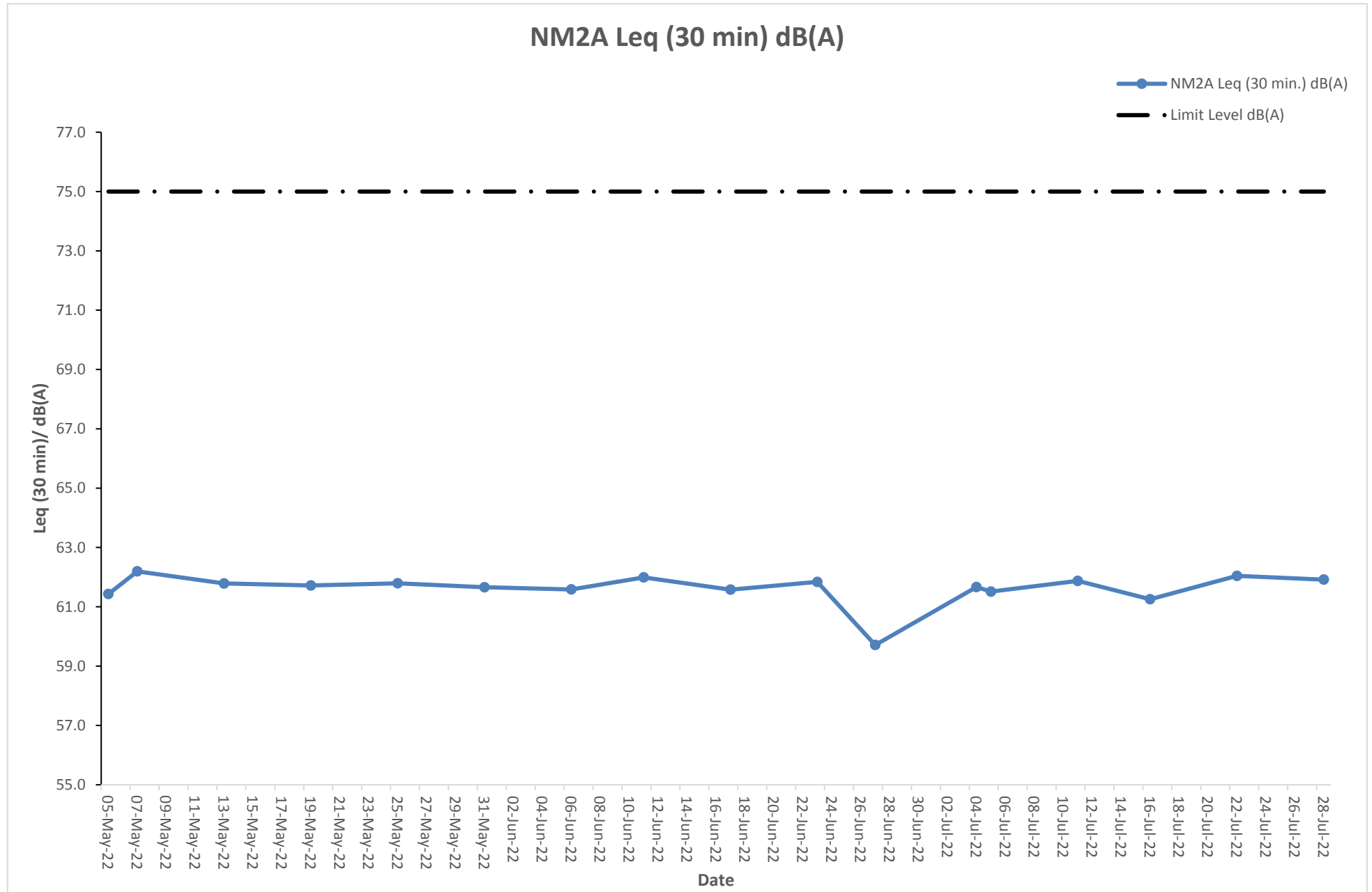
Noise Monitoring Result at Station NM2A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
27-Jun-22	8:35	62.6	57.4	59.7
27-Jun-22	8:40	61.9	58.2	
27-Jun-22	8:45	61.7	58.3	
27-Jun-22	8:50	61.7	58.4	
27-Jun-22	8:55	62.5	58.0	
27-Jun-22	9:00	61.4	58.1	
04-Jul-22	8:38	63.7	58.8	61.7
04-Jul-22	8:43	64.7	59.4	
04-Jul-22	8:48	64.5	59.2	
04-Jul-22	8:53	63.8	59.7	
04-Jul-22	8:58	64.1	59.7	
04-Jul-22	9:03	63.8	58.7	
05-Jul-22	14:37	64.4	59.3	61.5
05-Jul-22	14:42	63.8	60.1	
05-Jul-22	14:47	64.4	58.8	
05-Jul-22	14:52	63.8	60.1	
05-Jul-22	14:57	63.0	60.0	
05-Jul-22	15:02	63.1	58.6	
11-Jul-22	8:39	62.9	60.0	61.9
11-Jul-22	8:44	64.1	60.5	
11-Jul-22	8:49	64.0	60.3	
11-Jul-22	8:54	63.0	59.9	
11-Jul-22	8:59	63.5	59.0	
11-Jul-22	9:04	63.5	59.8	
16-Jul-22	14:41	64.5	60.2	61.3
16-Jul-22	14:46	64.6	59.3	
16-Jul-22	14:51	63.2	60.3	
16-Jul-22	14:56	64.4	58.9	
16-Jul-22	15:01	63.6	59.0	
16-Jul-22	15:06	64.5	60.0	
22-Jul-22	8:33	64.2	59.4	62.0
22-Jul-22	8:38	63.6	58.8	
22-Jul-22	8:43	63.6	59.0	
22-Jul-22	8:48	64.4	58.9	
22-Jul-22	8:53	63.7	60.5	
22-Jul-22	8:58	62.9	59.6	
28-Jul-22	14:06	62.8	59.5	61.9
28-Jul-22	14:11	63.2	59.0	
28-Jul-22	14:16	62.8	60.4	
28-Jul-22	14:21	64.2	59.5	
28-Jul-22	14:26	63.3	59.9	
28-Jul-22	14:31	64.6	60.5	



The station set-up of a façade measurement at station NM2A.

Graphical Presentation of Noise Monitoring Result at Station NM2A

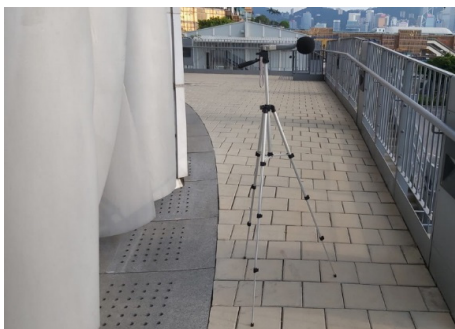


Noise Monitoring Result at Station NM3A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
05-May-22	10:06	66.9	62.0	64.9
05-May-22	10:11	66.6	62.2	
05-May-22	10:16	66.8	61.1	
05-May-22	10:21	66.0	61.2	
05-May-22	10:26	66.0	62.0	
05-May-22	10:31	67.0	62.1	
07-May-22	16:04	67.7	62.1	64.9
07-May-22	16:09	67.7	60.6	
07-May-22	16:14	67.4	61.0	
07-May-22	16:19	66.9	62.1	
07-May-22	16:24	66.1	61.9	
07-May-22	16:29	67.0	61.7	
13-May-22	10:09	67.7	61.3	64.9
13-May-22	10:14	66.1	61.0	
13-May-22	10:19	67.9	61.0	
13-May-22	10:24	67.6	60.6	
13-May-22	10:29	66.2	61.3	
13-May-22	10:34	66.2	60.5	
19-May-22	16:08	66.9	61.5	64.9
19-May-22	16:13	66.9	60.5	
19-May-22	16:18	67.9	61.2	
19-May-22	16:23	67.9	60.5	
19-May-22	16:28	67.9	61.1	
19-May-22	16:33	67.4	61.8	
25-May-22	10:13	66.7	60.7	65.0
25-May-22	10:18	66.9	62.1	
25-May-22	10:23	67.1	60.8	
25-May-22	10:28	66.9	61.4	
25-May-22	10:33	67.7	62.3	
25-May-22	10:38	66.7	62.0	
31-May-22	15:46	67.5	62.1	65.0
31-May-22	15:51	66.1	60.7	
31-May-22	15:56	67.8	62.1	
31-May-22	16:01	67.3	62.3	
31-May-22	16:06	67.6	62.3	
31-May-22	16:11	67.4	61.6	
06-Jun-22	10:01	66.2	61.5	64.6
06-Jun-22	10:06	66.7	61.7	
06-Jun-22	10:11	66.3	62.1	
06-Jun-22	10:16	67.5	61.8	
06-Jun-22	10:21	67.7	60.5	
06-Jun-22	10:26	67.0	61.7	
11-Jun-22	16:08	67.9	61.5	64.8
11-Jun-22	16:13	67.6	61.5	
11-Jun-22	16:18	67.5	61.5	
11-Jun-22	16:23	66.4	62.0	
11-Jun-22	16:28	66.3	60.8	
11-Jun-22	16:33	66.0	61.9	
17-Jun-22	10:03	67.2	60.6	64.9
17-Jun-22	10:08	67.0	61.9	
17-Jun-22	10:13	67.4	60.7	
17-Jun-22	10:18	66.2	61.2	
17-Jun-22	10:23	67.7	61.1	
17-Jun-22	10:28	67.5	61.6	
23-Jun-22	16:10	67.4	61.2	64.6
23-Jun-22	16:15	66.5	61.4	
23-Jun-22	16:20	66.8	60.6	
23-Jun-22	16:25	67.3	60.6	
23-Jun-22	16:30	67.8	61.3	
23-Jun-22	16:35	66.0	61.2	

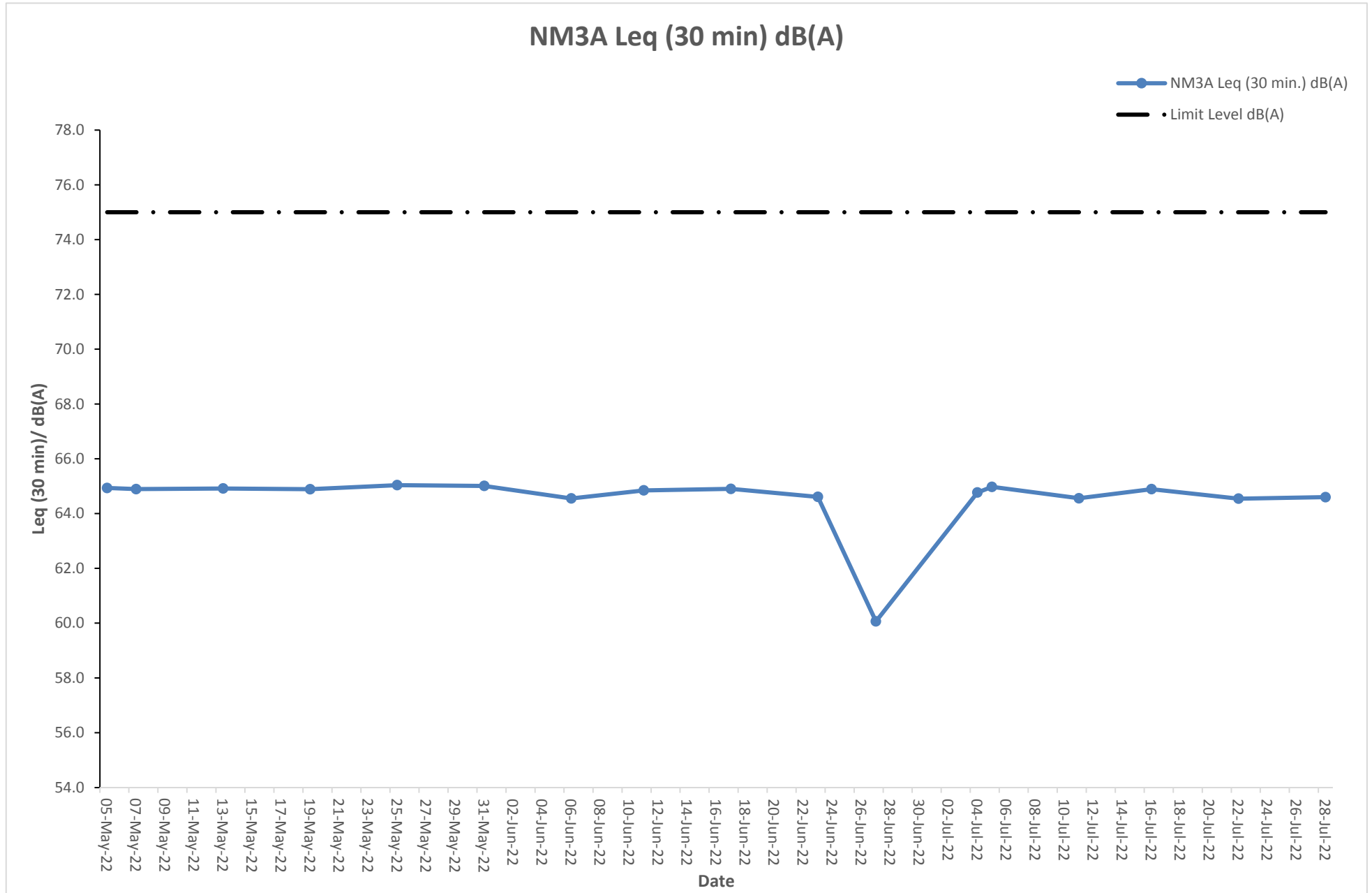
Noise Monitoring Result at Station NM3A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
27-Jun-22	10:05	62.8	57.3	60.1
27-Jun-22	10:10	61.8	57.1	
27-Jun-22	10:15	62.9	56.0	
27-Jun-22	10:20	62.8	56.4	
27-Jun-22	10:25	61.9	57.7	
27-Jun-22	10:30	62.8	56.9	
04-Jul-22	10:08	67.3	61.3	64.8
04-Jul-22	10:13	66.7	62.2	
04-Jul-22	10:18	66.3	61.2	
04-Jul-22	10:23	67.6	62.4	
04-Jul-22	10:28	67.4	62.3	
04-Jul-22	10:33	67.4	61.8	65.0
05-Jul-22	16:10	66.1	60.5	
05-Jul-22	16:15	67.7	61.0	
05-Jul-22	16:20	67.3	60.8	
05-Jul-22	16:25	66.0	61.7	
05-Jul-22	16:30	67.3	62.1	
05-Jul-22	16:35	67.8	61.1	64.6
11-Jul-22	10:09	66.8	61.7	
11-Jul-22	10:14	66.7	61.0	
11-Jul-22	10:19	67.4	60.7	
11-Jul-22	10:24	67.0	62.3	
11-Jul-22	10:29	67.7	61.6	
11-Jul-22	10:34	66.7	61.2	64.9
16-Jul-22	16:14	67.6	60.6	
16-Jul-22	16:19	66.0	61.6	
16-Jul-22	16:24	67.2	61.7	
16-Jul-22	16:29	67.4	61.5	
16-Jul-22	16:34	66.3	60.7	
16-Jul-22	16:39	67.7	61.9	64.5
22-Jul-22	10:03	67.8	62.0	
22-Jul-22	10:08	66.1	61.1	
22-Jul-22	10:13	67.3	61.1	
22-Jul-22	10:18	66.1	61.5	
22-Jul-22	10:23	67.3	60.6	
22-Jul-22	10:28	67.9	62.3	64.6
28-Jul-22	15:48	67.8	60.6	
28-Jul-22	15:53	66.4	60.7	
28-Jul-22	15:58	67.6	61.9	
28-Jul-22	16:03	67.5	61.0	
28-Jul-22	16:08	66.1	61.0	
28-Jul-22	16:13	66.9	61.5	



The station set-up of a façade measurement at station NM3A.

Graphical Presentation of Noise Monitoring Result at Station NM3A



Noise Monitoring Result at Station NM4A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
05-May-22	10:41	66.2	61.7	64.1
05-May-22	10:46	65.6	62.5	
05-May-22	10:51	65.6	61.3	
05-May-22	10:56	65.2	63.1	
05-May-22	11:01	65.8	62.8	
05-May-22	11:06	66.5	63.0	
07-May-22	16:39	66.9	61.3	64.0
07-May-22	16:44	65.6	63.1	
07-May-22	16:49	65.7	62.0	
07-May-22	16:54	66.8	63.2	
07-May-22	16:59	66.6	62.2	
07-May-22	17:04	66.2	61.8	
13-May-22	10:44	66.5	62.7	63.9
13-May-22	10:49	65.6	62.6	
13-May-22	10:54	65.3	62.6	
13-May-22	10:59	65.5	63.1	
13-May-22	11:04	65.6	61.8	
13-May-22	11:09	66.1	63.0	
19-May-22	16:43	66.3	61.9	64.0
19-May-22	16:48	66.9	62.2	
19-May-22	16:53	65.7	63.0	
19-May-22	16:58	65.4	63.1	
19-May-22	17:03	66.4	63.2	
19-May-22	17:08	66.3	63.1	
25-May-22	10:48	66.0	63.1	64.2
25-May-22	10:53	65.9	62.7	
25-May-22	10:58	66.5	62.1	
25-May-22	11:03	65.9	61.3	
25-May-22	11:08	66.8	62.0	
25-May-22	11:13	66.1	62.6	
31-May-22	16:21	66.3	62.2	64.1
31-May-22	16:26	65.0	62.7	
31-May-22	16:31	65.5	62.6	
31-May-22	16:36	66.5	62.8	
31-May-22	16:41	65.6	62.4	
31-May-22	16:46	65.9	62.2	
06-Jun-22	10:36	65.0	62.7	63.8
06-Jun-22	10:41	65.9	61.3	
06-Jun-22	10:46	65.0	62.9	
06-Jun-22	10:51	65.6	62.2	
06-Jun-22	10:56	66.1	63.0	
06-Jun-22	11:01	65.1	62.6	
11-Jun-22	16:43	65.0	62.3	64.0
11-Jun-22	16:48	65.6	62.8	
11-Jun-22	16:53	66.9	61.9	
11-Jun-22	16:58	66.9	63.1	
11-Jun-22	17:03	65.3	62.5	
11-Jun-22	17:08	65.5	61.9	
17-Jun-22	10:38	66.9	61.4	64.2
17-Jun-22	10:43	65.6	61.7	
17-Jun-22	10:48	66.0	61.5	
17-Jun-22	10:53	65.7	62.2	
17-Jun-22	10:58	66.7	62.7	
17-Jun-22	11:03	66.3	61.9	
23-Jun-22	16:45	65.7	61.4	64.3
23-Jun-22	16:50	66.4	62.0	
23-Jun-22	16:55	66.8	62.0	
23-Jun-22	17:00	65.8	61.5	
23-Jun-22	17:05	66.5	62.1	
23-Jun-22	17:10	66.0	61.8	

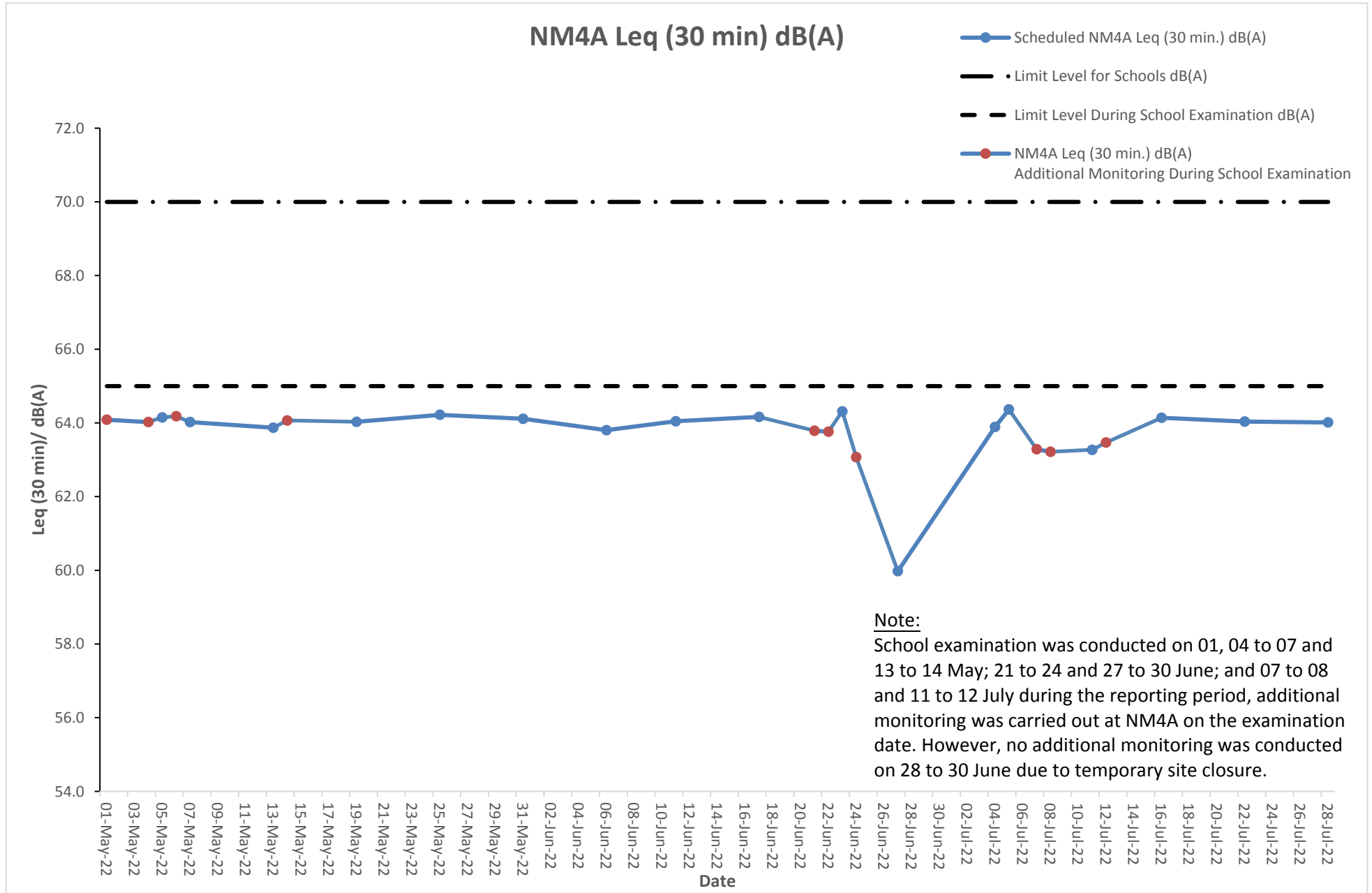
Noise Monitoring Result at Station NM4A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)
27-Jun-22	10:40	62.5	58.6	60.0
27-Jun-22	10:45	62.3	57.5	
27-Jun-22	10:50	62.6	58.2	
27-Jun-22	10:55	61.8	57.8	
27-Jun-22	11:00	62.2	57.6	
27-Jun-22	11:05	61.7	57.6	
04-Jul-22	10:43	66.7	62.9	63.9
04-Jul-22	10:48	66.4	61.3	
04-Jul-22	10:53	66.0	62.5	
04-Jul-22	10:58	66.2	63.0	
04-Jul-22	11:03	65.2	62.2	
04-Jul-22	11:08	66.2	61.4	
05-Jul-22	16:45	65.2	62.3	64.4
05-Jul-22	16:50	66.5	62.6	
05-Jul-22	16:55	66.5	61.4	
05-Jul-22	17:00	66.4	62.0	
05-Jul-22	17:05	65.2	61.9	
05-Jul-22	17:10	65.6	62.5	
11-Jul-22	10:44	65.2	60.8	63.3
11-Jul-22	10:49	65.3	61.1	
11-Jul-22	10:54	64.8	60.9	
11-Jul-22	10:59	65.2	61.0	
11-Jul-22	11:04	65.3	60.5	
11-Jul-22	11:09	65.6	60.1	
16-Jul-22	16:49	65.7	61.9	64.1
16-Jul-22	16:54	65.0	62.6	
16-Jul-22	16:59	65.0	62.3	
16-Jul-22	17:04	65.2	61.5	
16-Jul-22	17:09	66.4	63.1	
16-Jul-22	17:14	65.7	62.7	
22-Jul-22	10:38	66.6	61.6	64.0
22-Jul-22	10:43	65.9	62.9	
22-Jul-22	10:48	66.7	61.6	
22-Jul-22	10:53	65.8	62.2	
22-Jul-22	10:58	65.4	63.2	
22-Jul-22	11:03	66.5	62.5	
28-Jul-22	16:23	65.5	63.0	64.0
28-Jul-22	16:28	65.3	62.5	
28-Jul-22	16:33	65.3	62.9	
28-Jul-22	16:38	66.6	62.1	
28-Jul-22	16:43	65.2	62.6	
28-Jul-22	16:48	66.4	63.0	



The station set-up of a façade measurement at station NM4A.

Graphical Presentation of Noise Monitoring Result at Station NM4A



Noise Monitoring Result at Station NM5A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)	Leq (30 min.) +3 dB(A)
05-May-22	9:26	64.1	59.6	61.4	64.4
05-May-22	9:31	63.6	58.6		
05-May-22	9:36	63.1	59.1		
05-May-22	9:41	63.7	58.2		
05-May-22	9:46	63.5	59.3		
05-May-22	9:51	63.4	58.6	61.1	64.1
07-May-22	15:23	62.7	59.2		
07-May-22	15:28	62.3	59.5		
07-May-22	15:33	62.5	59.4		
07-May-22	15:38	63.2	59.1		
07-May-22	15:43	63.7	58.0	61.4	64.4
07-May-22	15:48	63.0	59.2		
13-May-22	9:29	62.4	58.3		
13-May-22	9:34	64.2	57.9		
13-May-22	9:39	63.3	58.9		
13-May-22	9:44	64.0	59.7	61.0	64.0
13-May-22	9:49	63.3	59.6		
13-May-22	9:54	63.2	57.8		
19-May-22	15:27	64.2	59.6		
19-May-22	15:32	62.9	58.0		
19-May-22	15:37	63.9	59.1	61.4	64.4
19-May-22	15:42	62.5	58.0		
19-May-22	15:47	63.9	58.9		
19-May-22	15:52	64.0	59.6		
25-May-22	9:33	63.4	57.9		
25-May-22	9:38	63.2	59.6	61.3	64.3
25-May-22	9:43	62.5	59.5		
25-May-22	9:48	63.4	58.4		
25-May-22	9:53	63.2	59.0		
25-May-22	9:58	63.9	58.4		
31-May-22	15:05	63.9	57.9	61.6	64.6
31-May-22	15:10	63.2	57.8		
31-May-22	15:15	62.8	58.8		
31-May-22	15:20	64.2	59.6		
31-May-22	15:25	64.0	58.0		
31-May-22	15:30	62.7	57.9	61.0	64.0
06-Jun-22	9:21	62.9	58.9		
06-Jun-22	9:26	62.6	59.6		
06-Jun-22	9:31	63.7	59.7		
06-Jun-22	9:36	62.7	58.7		
06-Jun-22	9:41	62.3	58.5	61.7	64.7
06-Jun-22	9:46	63.5	59.4		
11-Jun-22	15:27	63.1	59.4		
11-Jun-22	15:32	63.0	58.7		
11-Jun-22	15:37	63.2	58.2		
11-Jun-22	15:42	62.6	59.4	61.4	64.4
11-Jun-22	15:47	63.0	59.5		
11-Jun-22	15:52	64.1	58.6		
17-Jun-22	9:23	62.4	59.2		
17-Jun-22	9:28	63.7	58.6		
17-Jun-22	9:33	62.3	58.3	61.4	64.4
17-Jun-22	9:38	62.9	58.5		
17-Jun-22	9:43	64.1	57.8		
17-Jun-22	9:48	63.8	57.9		
23-Jun-22	15:29	62.5	59.7		
23-Jun-22	15:34	64.2	59.2	61.4	64.4
23-Jun-22	15:39	63.8	59.6		
23-Jun-22	15:44	63.3	59.1		
23-Jun-22	15:49	62.5	59.0		
23-Jun-22	15:54	64.0	59.7		

Noise Monitoring Result at Station NM5A

Date	Time	Measured L10 dB(A)	Measured L90 dB(A)	Leq (30 min.) dB(A)	Leq (30 min.) +3 dB(A)
27-Jun-22	9:25	61.7	56.9	60.0	63.0
27-Jun-22	9:30	62.7	56.7		
27-Jun-22	9:35	62.6	57.2		
27-Jun-22	9:40	61.4	56.7		
27-Jun-22	9:45	60.9	56.4		
27-Jun-22	9:50	62.4	57.7		
04-Jul-22	9:28	63.2	58.1	61.1	64.1
04-Jul-22	9:33	62.8	59.2		
04-Jul-22	9:38	63.7	59.5		
04-Jul-22	9:43	62.7	58.2		
04-Jul-22	9:48	63.8	59.4		
04-Jul-22	9:53	63.4	58.1		
05-Jul-22	15:29	64.2	58.3	61.1	64.1
05-Jul-22	15:34	64.0	58.7		
05-Jul-22	15:39	62.8	59.2		
05-Jul-22	15:44	63.2	58.0		
05-Jul-22	15:49	62.9	59.5		
05-Jul-22	15:54	63.5	59.4		
11-Jul-22	9:29	64.2	58.3	61.4	64.4
11-Jul-22	9:34	64.2	57.9		
11-Jul-22	9:39	64.1	58.9		
11-Jul-22	9:44	63.2	59.7		
11-Jul-22	9:49	64.2	59.6		
11-Jul-22	9:54	63.8	58.3		
16-Jul-22	15:33	62.3	57.8	61.4	64.4
16-Jul-22	15:38	62.9	57.9		
16-Jul-22	15:43	62.4	59.0		
16-Jul-22	15:48	63.4	58.2		
16-Jul-22	15:53	62.9	58.0		
16-Jul-22	15:58	62.6	57.8		
22-Jul-22	9:23	62.6	58.8	60.9	63.9
22-Jul-22	9:28	64.1	58.8		
22-Jul-22	9:33	62.7	59.1		
22-Jul-22	9:38	63.8	58.2		
22-Jul-22	9:43	64.1	58.3		
22-Jul-22	9:48	63.4	59.1		
28-Jul-22	15:07	62.6	59.7	61.0	64.0
28-Jul-22	15:12	64.2	58.8		
28-Jul-22	15:17	63.0	59.2		
28-Jul-22	15:22	63.9	59.5		
28-Jul-22	15:27	62.9	57.9		
28-Jul-22	15:32	63.3	59.1		

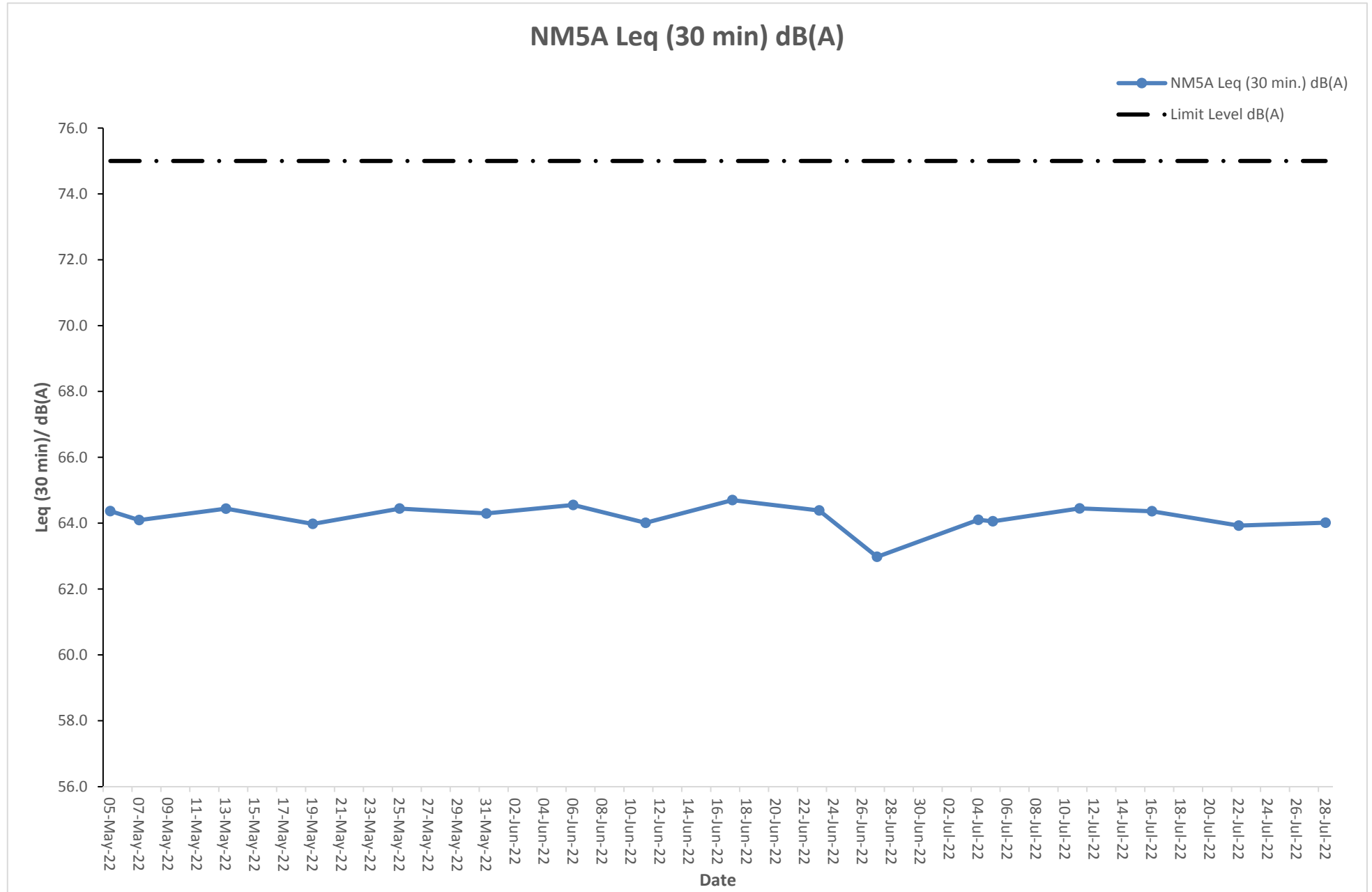
Remarks:

+3dB(A) correction was applied to free-field measurement.



The station set-up of a free-field measurement at station NM5A.

Graphical Presentation of Noise Monitoring Result at Station NM5A



F. Waste Flow table

Zone 2A

Table F-1: Monthly Waste Flow Table for Zone 2A

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Materials Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Srotng Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Aug													
Sep													
Oct													
Nov													
Dec													
Sub-total (2022)	7557.39	0.00	120.00	1077.83	6359.56	0.00	0.00	19.88	0.00	0.00	0.00	0.80	66.99
Total	96113.59	0.00	1392.72	11808.81	82912.06	0.00	1246.44	240.28	0.00	0.00	0.00	3.40	456.51

Note:

- 156.88 tonnes, 694.25 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill, and Tuen Mun Area 38 respectively in the reporting quarter.

* 56.45 tonnes of Inert C&D Materials to be included in Jun-2022 due to data delay in May-2022.

Zone 2B & 2C

Table I-1: Monthly Waste Flow Table for Zone 2B & 2C

Month	Actual Quantities of Inert C&D Materials Generated Monthly							Actual Quantities of C&D Materials Generated Monthly					
	Total Quantity Generated	Hard Rocks and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Disposed to Srotting Facility	Imported Fill	Metals	Paper/ Cardboard Packaging	Plastics	Wood/ Timber	Chemical Waste	Others, e.g. General Refuse
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2021													
Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oct	22.58	22.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.19
Nov	9265.04	10.45	125.93	0.00	9128.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.12
Dec	13462.30	62.94	1041.17	0.00	12358.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.62
Sub-total (2021)	22749.92	95.97	1167.10	0.00	21486.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.93
2022													
Jan	17427.64	0.00	2091.32	100.04	15236.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60
Feb	18230.98	0.00	991.53	1719.99	15519.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.90
Mar	24777.12	0.00	2176.32	11721.21	10879.59	0.00	0.00	0.00	0.00	0.00	0.00	1.40	16.15
Apr	32749.58	0.00	2409.00	22393.87	7946.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.79
May	18262.89	0.00	3141.32	15121.57	*12852.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.31
Jun	30747.96	0.00	3120.62	14645.87	12981.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84
Jul	34017.48	0.00	3444.43	10214.91	20358.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.43
Aug													
Sep													
Oct													
Nov													
Dec													
Sub-total (2022)	189065.80	0.00	17374.53	75917.46	95773.81	0.00	0.00	0.00	0.00	0.00	0.00	1.40	94.02
Total	211815.71	95.97	18541.62	75917.46	117260.66	0.00	0.00	0.00	0.00	0.00	0.00	1.40	137.95

Note:

- 16647.81 tonnes and 29543.96 tonnes of inert C&D material were disposed of as public fill to Tseung Kwan O Area 137 Public Fill and Tuen Mun Area 38 respectively in the reporting quarter.

- For inert C&D materials reused in other projects, the projects refer to (1) Ting On Street, (2) Sai Sha (Site B), (3) Poly U, and (4) Tung Chung.

* 411.57 tonnes of inert C&D Materials to be included in Jun-2022 due to data delay in May-2022.

G. Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Cumulative statistics for complaints, notifications of summons and successful prosecutions for the Project account for period starting from the date of commencement of construction works (i.e. 3 October 2020 for Zone 2A Foundation, Excavation and Lateral Support Works; 30 September 2021 for Zone 2B & 2C Piling Works) to the end of the reporting quarter and are summarized in the **Table G-1** and **Table G-2** below respectively.

Table G-1: Statistics for complaints, notifications of summons and successful prosecutions for Zone 2A Foundation, Excavation and Lateral Support Works

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting quarter (May 22 – Jul 22)	7	0	0
From 03 October 2020 to end of the reporting quarter	35	0	0

Table G-2: Statistics for complaints, notifications of summons and successful prosecutions for Zone 2B & 2C Piling Works

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting quarter (May 22 – Jul 22)	7	0	0
From 30 September 2021 to end of the reporting quarter	20	0	0

END OF THE REPORT