

88th Consolidated Monthly EM&A Report (February 2024)

0087/16/ED/1217 [00]

Contact No. KLN/2016/05 - Independent Environmental Checker for Contract No. KL/2015/02 Kai Tak Development- Stage 5A Infrastructure at Former North Apron Area

Document Control

Document Information

Project Title	Contact No. KLN/2016/05 - Independent Environmental Checker for Contract No. KL/2015/02 Kai Tak Development- Stage 5A Infrastructure at Former North Apron Area	
Document Title	88th Consolidated Monthly EM&A Report (February 2024)	
Fugro Project No.	0087/16	
Fugro Document No.	0087/16/ED/1217	
Issue Number	[00]	

Client Information

Client	Civil Engineering and Development Department		
Client Address	East Development Office, East Division 4,		
	8/F, South Tower, West Kowloon Government Offices, 11 Hoi Ting Road, Yau Ma Tei, Kowloon		

Project Team

Initials	Name	Role	Signature
CL	Calvin M.P. Leung	Independent Environmental Checker	Cabin Leuns
WS	Wingo H.W. So	Environmental Consultant	Wm



Contents

Exe	ecutive Summary	2
1.	Introduction	6
2.	Environmental Monitoring and Audit	11
3.	Site Inspection	14
4.	Environmental Complaint and Non-Compliance	15
5.	Implementation Status of Environmental Mitigation Measures	16
6.	Future Key Issues	17
7.	Conclusions	21

Appendices

Appendix A Monthly EM&A Report For Contract No. KL/2015/02 Kai Tak Development - Stage 5A Infrastructure at Former North Apron Area

Appendix B Monthly EM&A Report For Contract No. ED/2018/01 Kai Tak Development - Stage 4 infrastructure at the former runway and south apron

Appendix C Monthly EM&A Report For Contract No. ED/2018/05 Kai Tak Development - Stage 5B infrastructure works at the former north apron area



Executive Summary

- i. This is the 88th Consolidated Monthly EM&A Report which summaries the EM&A works undertaken by respective contract under EP-337/2009 within the period between 1 February and 29 February 2024.
- ii. The construction activities undertaken in the reporting month are summarized as follow:

Contract No. KL/2015/02:

- Reinstatement of PERE central Divider
- Construction of Subway SW6 Lift LT2 concrete structure

Contract No. ED/2018/01:

- Laying of stormwater drainage pipes/ sewer pipes/watermains and construction of associated manholes at Road L12d and at-grade road.
- E&M works for Underpass 03
- Construction of remaining works for Noise Barrier
- Construction of RC structure for Lift LT-1 and LT-2
- Construction of permanent railing for NDR
- Modification works at Shing Kai Road
- Install the lift cart for Lift LT-4;
- Laying of stormwater drainage pipes/ sewer pipes/ watermains
- Waterproofing works for ELD
- Construction of Seawater Intake Box Culvert
- Concreting and RC structure of Pumping Stations
- Construction of Observation Deck
- Construction of LCSD Temporary Office;
- Construction of Harbour Steps
- Concreting and RC structure of Toilet cum Changing Room
- Construction of pedestrian street near Shing Fung Road Roundabout
- Construction of Floating Stage
- Construction of Outfall 1&2

Contract No. ED/2018/05:

- Erect falsework and working platform for Decking of Elevated Walkway LW-02
- Dismantling Falsework and Portal Frame at LW-02
- RC Construction for Decking of Elevated Walkway LW-02
- RC Construction of LW02 Lift and Staircase
- Installation of post tensioning anchorage system at LW-02
- Construction of LW02 Pile cap PC-1
- Construction of LW02 structural steel roof
- Construction of Permanent Shaft Structure of SB-01



- Backfilling of SB01 zone B
- Demolition of Pile Cap of additional staircase at SB01
- Road and Drain Construction works for Road L16, Commercial Street and Road D1
- Construction works for DCS 2A5B and 2A10
- Road and drain construction works at Olympic Avenue
- Renovation works for Subway KS10 Lift and Staircase
- Renovation works for existing subways KS10
- Construction of Retaining Wall Type 1 for S14
- Construction of Pile Cap for S14
- Construction works for SMH404 and SMH505

Breaches of the Action and Limit Levels

- iii. No Action / Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.
- iv. No Action / Limit Level exceedance was recorded for 1-hr TSP monitoring in the reporting month.
- v. No Limit Level exceedance was recorded for noise monitoring in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

vi. No complaint, notification of summons or prosecution was received for Contract No. Contract No. KL/2015/02, Contract No. ED/2018/01 and Contract No. ED/2018/05 in this reporting month.

Reporting Changes

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

Future Key Issues

viii. The potential environmental impacts for the coming month and the control measures are shown in Table I:

Table I Summary of Key Issues for the Coming Month and Control Measures

Major Environmental Impact	t Control Measures				
Contract No. KL/2015/02:					
Noise, dust impact, water quality and waste generation	 Air quality impact (dust) Frequent watering of haul road and unpaved/exposed areas; Frequent watering or covering stockpiles with impervious materials or maintained wet; and Watering of any earth moving activities. Water quality impact (surface runoff)				



Major Environmental Impact

Control Measures

- Diversion of the collected effluent to de-silting facilities for treatment prior to discharge to public storm water drains;
- Provision of adequate de-silting facilities for treating surface run-off and other collected effluents prior to discharge;
- Provision of perimeter protection such as sealing of hoarding footings to avoid run-off from entering the existing storm water drainage system via public road; and

Noise Impact

- Machines and Plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;
- Regular maintenance of machines; and
- Use of movable noise barriers if necessary.

Waste /Chemical Management

- Avoided oil leakage from PME
- Provided drip tray with adequate capacity and well maintained to chemical and oil containers

Contract No. ED/2018/01:

- Sufficient watering of the works site with the active dust emitting activities,
- Limitation of the speed for vehicles on unpaved site roads.
- Properly cover the stockpiles,
- Good maintenance to the plant and equipment,
- Use of quieter plant and Quality Powered Mechanical Equipment (QPME),

mitigation measures environmental impact including Air • Appropriate desilting/ sedimentation devices provided Quality, Construction Noise,

for Provide movable noise barriers,

on site for treatment before discharge,

Water Quality, Chemical and Waste• Well maintain the drainage system to prevent the Management, Landscape and Visual spillage of wastewater during heavy rainfall,

shall be implemented:

- Onsite waste sorting and implementation of trip ticket system,
- Good management and control on construction waste
- Erection of decorative screen hoarding,
- Strictly following the Environmental Permits and Licenses, and
- Provide sufficient mitigation measures as recommended in Approved EIA Reports.

Contract No. ED/2018/05:



Major Environmental Impact	Control Measures
environmental impact including A Quality, Construction Noise, Water Quality, Chemical and Was	 Sufficient watering of the works site with the active dust emitting activities, Limitation of the speed for vehicles on unpaved site roads, Properly cover the stockpiles, Good maintenance to the plant and equipment, Use of quieter plant and Quality Powered Mechanical Equipment (QPME), Provide movable noise barriers, Airo Appropriate desilting/ sedimentation devices provided on site for treatment before discharge, Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall, Onsite waste sorting and implementation of trip ticket system, Good management and control on construction waste reduction, Erection of decorative screen hoarding, Strictly following the Environmental Permits and Licenses, and Provide sufficient mitigation measures as recommended in Approved EIA Report.



1. Introduction

1.1 Background

- 1.1.1 The Kai Tak Development is located in the south-eastern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.
- 1.1.2 A study of environmental impact assessment (EIA) was undertaken to consider the key issues of air quality, noise, water quality, waste, land contamination, cultural heritage and landscape and visual impact, and identify possible mitigation measures associated with the works. EIA Report (Register No. AEIAR-130/2009) was approved by the Environmental Protection Department (EPD) on 4 March 2009.
- 1.1.3 The EP-337/2009 was issued on 23 April 2009 for the new distributor roads serving the planned Kai Tak Development to the following scale and slope:
 - a. Road D1 a dual 2-lane carriageway of approximately 1.3 km long.
 - b. Road D2 a dual 3-lane carriageway of approximately 1.1 km long.
 - c. Road D3 a dual 2-lane carriageway of approximately 2.3 km long.
 - d. Road D4 a dual 2-lane carriageway of approximately 0.9 km long.
- 1.1.4 The Civil Engineering and Development Department HKSAR has appointed Fugro Technical Services Limited (FTS) to undertake the role of Independent Environmental Checker (IEC) for the Contract No. KL/2015/02.
- 1.1.5 This is the 88th Consolidated Monthly EM&A Report which summaries the EM&A works undertaken by respective contract under EP-337/2009 within the period between 1 February and 29 February 2024.

1.2 Summary of relevant Contract Information of Key Personnel

Party	Position	Name	Telephone	Fax/ E-mail
Contract No. KL/2015/02:				
Project Proponent (CEDD)	Senior Engineer	Mr. Ricky Chan	2116 3753	2116 0714
Engineer's Representative (AECOM)	SRE	Mr. Vincent Lee	2798 0771	2210 6110
IEC (FTS)	IEC	Mr. Calvin Leung	3565 4441	2450 8032
FT (Circuta ala)	ET Leader	Mr. K.S Lee	2151 2091	2107 1200
ET (Cinotech)	Audit Team Leader	Ms. Betty Choy	2151 2072	
Main Contractor (PWHJV)	Deputy Site Agent	Mr. W. M. Chen	9736 4284	2398 8301
Contract No. ED/2018/01:	-			
Due: ant Duran amount (CEDD)	Senior Engineer	Mr. Jason Wong	3579 2453	2739 0076
Project Proponent (CEDD)	Engineer	Ms. Chan Ka Yan	3579 2458	2739 0076
Engineer's Representative (AECOM)	CRE	Ms. Fanny Lau	3911 4201	3911 4288
IEC (Ramboll)	IEC	Mr. Y H Hui	3465 2850	3465 2899
ET (Ka Shing)	ET Leader	Mr. Chan Pang	6082 2973	2120 7752



Position	Name	Telephone	Fax/ E-mail
EO	Mr. Tony Tang	9433 2628	3465 8898
Permit Holder	Mr. Stephen Lo	3579 2470	cclo@cedd.gov.hk
Supervisor's Delegate	Mr. Vincent Lee	2798 0771	sre2@ktd-stage5.com
IEC	Mr. Kevin Li	9779 2247	kevin.li@aurecongroup. com
ET Leader	Mr. Pang Chan	6082 2973	stage5b@ka-shing.net
Contractor's Representative	Mr. Rex Lau	6282 5154	rex.lau@buildking.hk
	Permit Holder Supervisor's Delegate IEC ET Leader Contractor's	Permit Holder Supervisor's Delegate Mr. Vincent Lee IEC Mr. Kevin Li ET Leader Contractor's Mr. Pang Chan Mr. Pang Chan	Permit Holder Mr. Stephen Lo 3579 2470 Supervisor's Delegate Mr. Vincent Lee 2798 0771 IEC Mr. Kevin Li 9779 2247 ET Leader Mr. Pang Chan 6082 2973 Contractor's Mr. Rex Lau 6282 5154

1.3 Summary of Construction Programme and Activities

- 1.3.1 The construction programme of each Contract is summarized in the appendices of the corresponding Monthly EM&A report.
- 1.3.2 The major construction activities undertaken in the reporting month are summarized as follow:

Contract No. KL/2015/02:

- Reinstatement of PERE central Divider
- Construction of Subway SW6 Lift LT2 concrete structure

Contract No. ED/2018/01:

- Laying of stormwater drainage pipes/ sewer pipes/watermains and construction of associated manholes at Road L12d and at-grade road.
- E&M works for Underpass 03
- Construction of remaining works for Noise Barrier
- Construction of RC structure for Lift LT-1 and LT-2
- Construction of permanent railing for NDR
- Modification works at Shing Kai Road
- Install the lift cart for Lift LT-4;
- Laying of stormwater drainage pipes/ sewer pipes/ watermains
- Waterproofing works for ELD
- Construction of Seawater Intake Box Culvert
- Concreting and RC structure of Pumping Stations
- Construction of Observation Deck
- Construction of LCSD Temporary Office;
- Construction of Harbour Steps
- Concreting and RC structure of Toilet cum Changing Room
- Construction of pedestrian street near Shing Fung Road Roundabout
- Construction of Floating Stage



Construction of Outfall 1&2

Contract No. ED/2018/05:

- Erect falsework and working platform for Decking of Elevated Walkway LW-02
- Dismantling Falsework and Portal Frame at LW-02
- RC Construction for Decking of Elevated Walkway LW-02
- RC Construction of LW02 Lift and Staircase
- Installation of post tensioning anchorage system at LW-02
- Construction of LW02 Pile cap PC-1
- Construction of LW02 structural steel roof
- Construction of Permanent Shaft Structure of SB-01
- Backfilling of SB01 zone B
- Demolition of Pile Cap of additional staircase at SB01
- Road and Drain Construction works for Road L16, Commercial Street and Road D1
- Construction works for DCS 2A5B and 2A10
- Road and drain construction works at Olympic Avenue
- Renovation works for Subway KS10 Lift and Staircase
- Renovation works for existing subways KS10
- Construction of Retaining Wall Type 1 for S14
- Construction of Pile Cap for S14
- Construction works for SMH404 and SMH505

1.4 Summary of Inter-relationship with the environmental protection/ mitigation measures with the construction programme

1.4.1 The summary of inter-relationship with environmental protection/mitigation measures are presented as follow:

Major Environmental Impact	Control Measures			
Contract No. KL/2015/02:				
Noise, dust impact, water quality and waste generation	 Sufficient watering of the works site with active dust emitting activities; Properly cover the stockpiles by impervious materials; On-site waste sorting and implementation of trip ticket system Appropriate desilting/sedimentation devices provided on site for treatment before discharge; Use of quiet plant and well-maintained construction plant; Provide movable noise barrier to enclose the noisy plant; Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall; Provide drip trays with adequate capacity and well maintained to chemicals Provide sufficient mitigation measures as recommended in Approved EIA Report/Lease requirement. 			



Contract No. ED/2018/01:

The mitigation measures for Sufficient watering of the works site with the active dust environmental impact including Air emitting activities,

Quality, Construction Noise,

• Limitation of the speed for vehicles on unpaved site roads,

Water Quality, Chemical and Waste. Properly cover the stockpiles,

Management, Landscape and Visual. Good maintenance to the plant and equipment,

shall be implemented:

- Use of quieter plant and Quality Powered Mechanical Equipment (QPME),
- Provide movable noise barriers,
- Appropriate desilting/ sedimentation devices provided on site for treatment before discharge,
- Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall,
- Onsite waste sorting and implementation of trip ticket system,
- Good management and control on construction waste reduction,
- Erection of decorative screen hoarding,
- Strictly following the Environmental Permits and Licenses, and
- Provide sufficient mitigation measures as recommended in Approved EIA Reports.

Contract No. ED/2018/05:

The mitigation measures for Sufficient watering of the works site with the active dust environmental impact including Air emitting activities,

Quality, Construction Noise,

• Limitation of the speed for vehicles on unpaved site roads,

Water Quality, Chemical and Waste Properly cover the stockpiles,

Management, Landscape and Visual. Good maintenance to the plant and equipment,

shall be implemented:

- Use of quieter plant and Quality Powered Mechanical Equipment (QPME),
- Provide movable noise barriers,
- Appropriate desilting/ sedimentation devices provided on site for treatment before discharge,
- Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall,
- Onsite waste sorting and implementation of trip ticket system,
- Good management and control on construction waste reduction,
- Erection of decorative screen hoarding,
- Strictly following the Environmental Permits and Licenses, and
- Provide sufficient mitigation measures as recommended in Approved EIA Report.



1.5 Summary Status of Environmental Licences, Notifications and Permits

1.5.1 Detailed relevant environmental licenses, permits and/or notifications on environmental protection for this EP are presented in the appendices of the corresponding Monthly EM&A report.



2. Environmental Monitoring and Audit

2.1 Results and Observations

Air Quality

- 2.1.1 The schedule of air quality monitoring in reporting month is provided in the appendices of the corresponding Monthly EM&A report.
- 2.1.2 The weather conditions during the monitoring are provided in the appendices of the corresponding Monthly EM&A report.
- 2.1.3 The monitoring data of 24-hr TSP and 1 hour TSP are summarized in Table 2.1. Detailed monitoring data are presented in the appendices of the corresponding Monthly EM&A report.

Table 2.1 Summary of 24-hr and 1 hour TSP Monitoring Results

Parameter	Monitoring Station	Average (µg/m³)	Range (µg/ m³)	Action Level (µg/ m³)	Limit Level (µg/ m³)
Contract No.	KL/2015/02:				
1-hr TSP	AM2	62.4	39.6 – 106.2	346	500
24-hr TSP	AM2(A)	56.2	38.7 – 72.1	157	260
Contract No.	ED/2018/01:				
	AM3	40	31 – 51	182	
24-hr TSP	AM4(A)	/	/-/	187	260
	AM7	45	34 – 59	181	
	AM3	44	28 – 64	297	500
1-hr TSP	AM4(A)	57	39 – 75	326	
	AM7	45	29 – 67	315	-
Contract No.	ED/2018/05:				
24-hr TSP —	AM2(A)	45	24 – 68	175	250
	AM3	41	31 – 51	172	260
1 b TCD	AM2(A)	51	35 – 72	302	F00
1-hr TSP —	AM3	44	28 – 64	301	500



- 2.1.4 No Action / Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.
- 2.1.5 No Action / Limit Level exceedance was recorded for 1-hr TSP monitoring in the reporting month.
- 2.1.6 The monitoring data of 24-hr TSP was compared with the EIA predictions are presented in the appendices of the corresponding Monthly EM&A report.
- 2.1.7 The Event and Action Plan for air quality is given in the appendices of the corresponding Monthly EM&A report.

Noise

- 2.1.8 The schedule of noise monitoring in reporting month is provided in in the appendices of the corresponding Monthly EM&A report.
- 2.1.9 The noise monitoring data are summarized in Table 2.2. Detailed monitoring data are presented in the appendices of the corresponding Monthly EM&A report.

Table 2.2 Summary of Noise Impact Monitoring Results

Monitoring Stations	Construction Noise Level Leq _(30min) dB(A) (Range)	Action Level	Limit Level dB (A)
Contract No. KL/2015/02:			
M3(A)	62.6 – 75.5#		75
M4	73.9 – 76.7#		70*
M5(C)	61.6 – 74.8	When one	75
Contract No. ED/2018/01:		documented	
M11	71.2 – 73.5	complaint is	75
M12	65.0 – 67.8	received.	75
Contract No. ED/2018/05:			
M4(A)	72.0 – 72.5		75
M5(A)	74.2 – 74.6		75

^(*) Noise Limit Level is 65 dB(A) during school examination periods.



^(*) Measured noise level ≦ background / baseline noise level, detailed data refer to the corresponding Monthly EM&A report.

- 2.1.10 The noise monitoring data was compared with the EIA predictions are presented in the appendices of the corresponding Monthly EM&A report.
- 2.1.11 No Action / Limit Level exceedance was recorded for noise monitoring in the reporting month.
- 2.1.12 The Event and Action Plan for noise is given in in the appendices of the corresponding Monthly EM&A report.

Landscape and Visual

2.1.13 Site audits were carried out on a weekly basis to monitor and audit the landscape and visual mitigation measures within the site boundaries of this Project. Detailed of observations are presented in the appendices of the corresponding Monthly EM&A report.



3. Site Inspection

3.1 Site Inspection

- 3.1.1 Site inspections were carried out weekly to monitor the implementation of proper environmental pollution control and mitigation measures for the Project.
- 3.1.2 Detailed of observation, recommendation of site inspections and summary of the mitigation measures implementation schedule is provided in the appendices of the corresponding Monthly EM&A Report.



4. Environmental Complaint and Non-Compliance

4.1 Complaints, Notification of Summons and Prosecution

4.1.1 The summary of complaints, notification of summons and prosecution in the reporting month are shown as Table 4.1.

Table 4.1 Summary of Complaints, Notification of Summons and Prosecution

Event	No. of Event This Month	Remark	
Contract No. KL/2015/02:			
Complaint received	0	NA	
Notifications of any summons &	0	NΙΛ	
prosecutions received	0	NA	
Contract No. ED/2018/01:			
Complaint received	0	NA	
Notifications of any summons &	0	NΙΛ	
prosecutions received	U	NA	
Contract No. ED/2018/05:			
Complaint received	0	NA	
Notifications of any summons &	0	NIA	
prosecutions received	U	NA	

4.1.2 Detailed records are presented in the appendices of the corresponding Monthly EM&A report.



5. Implementation Status of Environmental Mitigation Measures

5.1 Implementation Status

5.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Reports, the EP and the EM&A Manuals. The implementation status of the mitigation measures during the reporting month are presented in the appendices of the corresponding Monthly EM&A report.

5.2 Waste Management

5.2.1 The amount of wastes generated of this Project during the reporting month is shown in the appendices of the corresponding Monthly EM&A report.



6. Future Key Issues

6.1 Construction Programme for the Next Two Months

6.1.1 The major site activities undertaken for the coming two months are summarized in follow:

Contract No. KL/2015/02:

- Reinstatement of PERE central Divider:
- Construction of Subway SW6 staircase ST2 and Lift LT2 concrete structure
- Reinstatement of SKLRP planter
- Construction of Road D1 footway

Contract No. ED/2018/01:

- Construction of manholes and chambers at Shing Kai Road and the at-grade road near NDR, SDR, Lift LT-4 and Noise Barrier
- Watermain connection and pressure test for watermains at Shing Kai Road and atgrade road near NDR
- Construction of LCSD Temporary Office
- Construction of bus stop at at-grade road and noise barrier
- Installation of precast parapet for Bridge D3
- Concreting and RC structure of Toilet cum Changing Room
- Install the lift cart for Lift LT-4
- Construction of Pumping Stations;
- Construction of Seawater Intake Box Culvert;
- Construction of Lift LT-1 & LT-2; Noise,
- Construction of Floating Stage; Noise,
- Construction of Harbour Steps Noise, A
- Diversion/ connection works (involving confined space) of Box Culvert
- Construction of Outfall 1&2
- Rising main laying works Noise,
- Construction of theater and dry fountain system near Toilet cum
- E&M works for Underpass D3
- Construction of Observation Deck

Contract No. ED/2018/05:

- Dismantling Falsework and Portal Frame at LW-02
- RC Construction for Decking of Elevated Walkway LW-02
- RC Construction of LW02 Lift and Staircase
- Installation of post tensioning anchorage system at LW-02
- Construction of LW02 Pile Cap PC-1
- Construction of LW02 structural steel roof
- Construction of Permanent Shaft Structure of SB-01



- Backfilling of SB01 Zone B
- Demolition of Pile Cap of additional staircase at SB01
- Road and Drain Construction Works for Road L16,
- Commercial Street and Road D1
- Construction Works for DCS 2A5B and 2A10
- Road and Drain Construction Works at Olympic Avenue
- Renovation Works for Subway KS10 Lift and Staircase
- Renovation works for existing subway KS10
- Construction of Retaining Wall Type 1 for S14
- Construction of Parapet for S14
- Construction Works for SMH404 and SMH505
- 6.1.2 The potential environmental impacts arising from the above construction activities and the control measures are shown in Table 6.1:

Table 6.1 Summary of Key Issues for the Coming Month and Control Measures

Major Environmental Impact	Control Measures
Contract No. KL/2015/02:	
	 Air quality impact (dust) Frequent watering of haul road and unpaved/exposed areas; Frequent watering or covering stockpiles with impervious materials or maintained wet; and Watering of any earth moving activities.
Noise, dust impact, water quality and waste generation	 Water quality impact (surface runoff) Diversion of the collected effluent to de-silting facilities for treatment prior to discharge to public storm water drains; Provision of adequate de-silting facilities for treating surface run-off and other collected effluents prior to discharge; Provision of perimeter protection such as sealing of hoarding footings to avoid run-off from entering the existing storm water drainage system via public road; and
	 Noise Impact Machines and Plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; Regular maintenance of machines; and Use of movable noise barriers if necessary.
	Waste /Chemical Management • Avoided oil leakage from PME



Major Environmental Impact	Control Measures	
	• Provided drip tray with adequate capacity and wel	
	maintained to chemical and oil containers	
Contract No. ED/2018/01:		
	 Sufficient watering of the works site with the active dus 	
	emitting activities,	
	 Limitation of the speed for vehicles on unpaved site roads, 	
	 Properly cover the stockpiles, 	
	 Good maintenance to the plant and equipment, 	
	 Use of quieter plant and Quality Powered Mechanica Equipment (QPME), 	
The mitigation measures f	or• Provide movable noise barriers,	
9	Air• Appropriate desilting/ sedimentation devices provided	
Quality, Construction Noise,	on site for treatment before discharge,	
Water Quality, Chemical and Was	te• Well maintain the drainage system to prevent the	
Management, Landscape and Visu	al spillage of wastewater during heavy rainfall,	
shall be implemented:	 Onsite waste sorting and implementation of trip ticker system, 	
	• Good management and control on construction waste	
	reduction,	
	 Erection of decorative screen hoarding, 	
	• Strictly following the Environmental Permits and	
	Licenses, and	
	 Provide sufficient mitigation measures as recommended 	
	in Approved EIA Reports.	
Contract No. ED/2018/05:		
	 Sufficient watering of the works site with the active duse emitting activities, 	
	 Limitation of the speed for vehicles on unpaved site roads, 	
	 Properly cover the stockpiles, 	
	 Good maintenance to the plant and equipment, 	
	• Use of quieter plant and Quality Powered Mechanica	
The mitigation measures f	or Equipment (QPME),	
environmental impact including A	Air• Provide movable noise barriers,	
Quality, Construction Noise,	 Appropriate desilting/ sedimentation devices provided 	
Water Quality, Chemical and Was	te on site for treatment before discharge,	
Management, Landscape and Visu	al• Well maintain the drainage system to prevent the	
shall be implemented:	spillage of wastewater during heavy rainfall,	
	 Onsite waste sorting and implementation of trip ticker system, 	
	 Good management and control on construction wasted reduction, 	
	Erection of decorative screen hoarding,	
	• Strictly following the Environmental Permits and	



Major Environmental Impact	Control Measures
	Provide sufficient mitigation measures as recommended
	in Approved EIA Report.

6.2 Monitoring Schedules for the Next Month

6.2.1 The tentative schedules for environmental monitoring in the coming month are provided in the appendices of the corresponding Monthly EM&A.



7. Conclusions

- 7.1.1 No Action / Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.
- 7.1.2 No Action / Limit Level exceedance was recorded for 1-hr TSP monitoring in the reporting month.
- 7.1.3 No Limit Level exceedance was recorded for noise monitoring in the reporting month.
- 7.1.4 No complaint, notification of summons or prosecution was received for Contract No. Contract No. KL/2015/02, Contract No. ED/2018/01 and Contract No. ED/2018/05 in this reporting month.
- 7.1.5 The potential environmental impacts arising from the coming two months of major construction activities and the control measures are shown in Table 6.1.



Appendix A

Monthly EM&A Report For Contract No. KL/2015/02 Kai Tak Development

- Stage 5A Infrastructure at Former North Apron Area



Civil Engineering and Development Department

EP-337/2009 – New Distributor Roads Serving the Planned KTD

Contract No. KLN/2016/04
Environmental Monitoring Works for
Contract No. KL/2015/02
Kai Tak Development – Stage 5A Infrastructure
at Former North Apron Area

Monthly EM&A Report February 2024

(Version 1.0)

Certified By

(Environmental Team Leader)

REMARKS:

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

CINOTECH accepts no responsibility for changes made to this report by third parties

CINOTECH CONSULTANTS LTD

Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083 Fax: (852) 3107 1388 Email: info@cinotech.com.hk



FUGRO TECHNICAL SERVICES LIMITED

19/F, Fugro House – KCC2 1 Kwai On Road, Kwai Chung New Territories, Hong Kong

Date 11 March 2024

Our Ref. MCL/ED/0094/2024/C

Cinotech Consultants Limited Rm 1710, Technology Park, 18 On Lai Street, Shatin, New Territories, Hong Kong

BY EMAIL

Attn.: Mr. K.S Lee

Dear Sir,

Contract No. KL/2015/02 Kai Tak Development –Stage 5A Infrastructure at Former North Apron Verification of Monthly EM&A Report for February 2024

We refer to your emails dated 7 and 11 March 2024 for the captioned report prepared by the ET.

We have no further comment and hereby verify the Report in accordance with Clause 3.3 of Environmental Permit no. EP-337/2009.

Should you require further information, please do not hesitate to contact the undersigned at 3565 4441.

Assuring you of our best attention at all times.

Yours faithfully, For and on behalf of

FUGRO TECHNICAL SERVICES LIMITED

Calvin Leung

Independent Environmental Checker

CL/ ws

c.c. CEDD – Attn.: Mr. Ricky Chan

Attn.: Mr. Michael So

AECOM – Attn.: Mr. Vincent Lee

Attn.: Mr. Teddy Shih

TABLE OF CONTENTS

	EXECUTIVE SUMMARY	1
	Introduction	. 1
	Environmental Monitoring Works	2
	Environmental Licenses and Permits	3
	Key Information in the Reporting Month	
	Future Key Issues	3
1	INTRODUCTION	.4
	Background	.4
	Project Organizations	
	Construction Activities undertaken during the Reporting Month	5
	Summary of EM&A Requirements	.6
2	AIR QUALITY	7
	Monitoring Requirements	.7
	Monitoring Locations	7
	Monitoring Equipment	
	Monitoring Parameters, Frequency and Duration	
	Monitoring Methodology and QA/QC Procedure	
	Results and Observations	11
3	NOISE	12
	Monitoring Requirements	12
	Monitoring Locations	
	Monitoring Equipment	
	Monitoring Parameters, Frequency and Duration	
	Monitoring Methodology and QA/QC Procedures	
	Maintenance and Calibration	
	Results and Observations	
4	COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS	16
5	LANDSCAPE AND VISUAL	17
	Monitoring Requirements	17
	Results and Observations	
6	ENVIRONMENTAL INSPECTION	18
U		
	Site Inspections	
	Review of Environmental Monitoring Procedures	
	Status of Waste Management	
	Implementation Status of Environmental Mitigation Measures	
	Summary of Mitigation Measures Implemented	
	Implementation Status of Event Action Plans	
	Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution	
7	FUTURE KEY ISSUES	22
	Monitoring Schedule for Next Month	23
8	CONCLUSIONS AND RECOMMENDATIONS	24
	Conclusions	24
	Recommendations	
	i	

LIST OF TABLES

Table I	Air Quality and Noise Monitoring Stations for this Project
Table II	Non-compliance Recorded for the Project in the Reporting Month
Table III	Summary Table for Key Information in the Reporting Month
Table 1.1	Key Project Contacts
Table 1.2	Construction Programme Showing the Inter-Relationship with Environmental
	Protection/Mitigation Measures
Table 2.1	Locations for Air Quality Monitoring
Table 2.2	Air Quality Monitoring Equipment
Table 2.3	Impact Dust Monitoring Parameters, Frequency and Duration
Table 2.4	Summary Table of Air Quality Monitoring Results during the reporting month
Table 3.1	Noise Monitoring Stations
Table 3.2	Noise Monitoring Equipment
Table 3.3	Noise Monitoring Parameters, Frequency and Duration
Table 3.4	Major Noise Source identified at the Designated Noise Monitoring Stations
Table 3.5	Baseline Noise Level and Noise Limit Level for Monitoring Stations
Table 4.1	Comparison of 1-hr TSP data with EIA predictions
Table 4.2	Comparison of 24-hr TSP data with EIA predictions
Table 4.3	Comparison of Noise Monitoring Data with EIA predictions
Table 6.1	Summary of Environmental Licensing and Permit Status
Table 6.2	Observations and Recommendations of Site Inspections

LIST OF FIGURES

Figure 1	Site Layout Plan
Figure 2	Location of Air Quality Monitoring Stations
Figure 3	Location of Noise Monitoring Stations
Figure 4	Location of Wind Data Monitoring Equipment

LIST OF APPENDICES

- A Action and Limit Levels for Air Quality and Noise
- B Copies of Calibration Certificates
- C Weather Information
- D Environmental Monitoring Schedules
- E 1-hour TSP Monitoring Results and Graphical Presentations
- F 24-hour TSP Monitoring Results and Graphical Presentations
- G Noise Monitoring Results and Graphical Presentations
- H Summary of Exceedance
- I Site Audit Summary
- J Event Action Plans
- K Environmental Mitigation Implementation Schedule (EMIS)
- L Summaries of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution
- M Summary of Waste Generation and Disposal Records
- N Construction Programme

EXECUTIVE SUMMARY

Introduction

- 1. This is the 86th Monthly Environmental Monitoring and Audit Report prepared by Cinotech Consultants Ltd. for "Contract No. KL/2015/02 Kai Tak Development Stage 5A Infrastructure at Former North Apron Area" (Hereafter referred to as "the Project"). This contract comprises one Schedule 2 designated project (DP), namely the new distributor road D1 serving the planned KTD. The DP is part of the designated project under Environmental Permit (EP) No.: EP-337/2009 ("New distributor roads serving the planned Kai Tak Development") respectively. This report documents the findings of EM&A Works conducted during February 2024.
- 2. With reference to the same principle of EIA report of the Project, air quality monitoring stations within 500m and noise monitoring stations within 300m from the boundary of this Project are considered as relevant monitoring locations. In such regard, the relevant air quality and noise monitoring locations are tabulated in **Table I** (see **Figure 2 and 3** for their locations).

Table I – Air Quality and Noise Monitoring Stations for this Project

Locations	Monitoring Stations In accordance with EM&A Manual	Alternative Monitoring Stations		
Air Quality Monitoring Stations				
	Yes (1-hour TSP)	N/A		
AM2 - Lee Kau Yan Memorial School	No (24-hour TSP)	AM2(A) – Ng Wah Catholic Secondary School		
Noise Monitoring Stations				
M3 - Cognitio College	No	M3(A) – The Bridge connecting The Latitude		
M4 - Lee Kau Yan Memorial School	Yes	N/A		
M5 – Nam Yuen	No	M5(C) – Mercy Grace's Home		

- 3. The major site activities undertaken in the reporting month included:
 - Reinstatement of PERE central Divider
 - Construction of Subway SW6 Lift LT2 concrete structure

Environmental Monitoring Works

- 4. Environmental monitoring for the Project was performed in accordance with the EM&A Manual and the monitoring results were checked and reviewed. Site Inspections/Audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- 5. Summary of the non-compliance in the reporting month for the Project is tabulated in **Table II**.

Table II Non-compliance Recorded for the Project in the Reporting Month

_	No. of Project-rel		
Parameter	Action Level	Limit Level	Action Taken
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Noise	0	0	N/A

1-hour & 24-hour TSP Monitoring

- 6. All 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 7. All 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise Monitoring

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

Environmental Licenses and Permits

- 9. Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, EP-337/2009 issued on 23 April 2009. All valid Licenses/Permits for this Project are shown in **Table 6.1**.
 - Billing Account for Construction Waste Disposal (A/C# 7026164).
 - Effluent Discharge License (WT00041367-2022).
 - Registration of Chemical Waste Producer (WPN5213-286-P3271-01).

Key Information in the Reporting Month

10. Summary of key information in the reporting month is tabulated in **Table III**.

Table III Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
Event	Number	Nature Action Taken		Status	Kemark
Complaint received			N/A	N/A	
Reporting Changes			N/A	N/A	
Notifications of any summons & prosecutions received			N/A	N/A	

Future Key Issues

11. The future key environmental issues in the coming two months include:

Stagnant water on the unused and damaged water-filled barriers & uncovered containers

- and manhole;
- Silt, construction materials or debris being washed through manhole into the drainage system
- Noise generated from operation of the equipment, especially for breaking activities;
- Dust generation from excavation works, stockpile storage & rock breaking activities;
- -Oil leakage from equipment and mobile plants;

1 INTRODUCTION

Background

- 1.1. The Kai Tak Development (KTD) is located in the south-eastern part of Kowloon Peninsula, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. It covers a land area of about 328 hectares. Stage 5A Infrastructure at Former North Apron Area is one of the construction stages of KTD. It contains one Schedule 2 DP including new distributor roads serving the planned KTD. The general layout of the Project is shown in **Figure 1.**
- 1.2. An Environmental Permit (EP) No. EP-337/2009 was issued on 23 April 2009 for new distributor roads serving the planned KTD to Civil Engineering and Development Department as the Permit Holder.
- 1.3. A study of environmental impact assessment (EIA) was undertaken to consider the key issues of air quality, noise, water quality, waste, land contamination, cultural heritage and landscape and visual impact, and identify possible mitigation measures associated with the works. An EIA Report (Register No. AEIAR-130/2009) was approved by the Environmental Protection Department (EPD) on 4 April 2009.
- 1.4. Cinotech Consultants Limited (Cinotech) was commissioned by Civil Engineering and Development Department (CEDD) to undertake the role of the Environmental Team (ET) for the Contract No. KL/2015/02 Stage 5A Infrastructure at Former North Apron Area. The construction work under KL/2015/02 comprises the construction of part of the Road D1 under the EP (EP-337/2009).
- 1.5. Cinotech Consultants Limited was commissioned by Civil Engineering and Development Department (CEDD) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. The commencement date of construction of Road D1 (part) under this Contract was on 16 January 2017.

Project Organizations

- 1.6. Different parties with different levels of involvement in the project organization include:
 - Project Proponent Civil Engineering and Development Department (CEDD).
 - The Engineer and the Engineer's Representative (ER) AECOM Asia Co. Ltd (AECOM).
 - Environmental Team (ET) Cinotech Consultants Limited (Cinotech).
 - Independent Environmental Checker (IEC) Fugro Technical Services Limited (FTS).
 - Contractor Peako Wo Hing Joint Venture (PWHJV).

1.7. The key contacts of the Project are shown in **Table 1.1**.

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Position	Phone No.	Fax No.
CEDD	Project Proponent	Mr. CHAN Wai Kit, Ricky	Senior Engineer	3579 2452	2739 0076
AECOM	Engineer's Representative	Mr. Vincent Lee	Senior Resident Engineer	2798 0771	2210 6110
Cinotech	Environmental	Mr. K.S Lee	Environmental Team Leader	2151 2091	3107 1388
Team		Ms. Betty Choi	Audit Team Leader	2151 2072	3107 1366
FTS	Independent Environmental Checker	Mr. Calvin Leung	Independent Environmental Checker	3565 4441	2450 8032
PWHJV	Contractor	Mr. W.M. Chen	Deputy Site Agent	9736 4284	2398 8301

Construction Activities undertaken during the Reporting Month

- 1.8. The site activities undertaken in the reporting month included:
 - Reinstatement of PERE central Divider
 - Construction of Subway SW6 Lift LT2 concrete structure
- 1.9. The construction programme for the Project is shown in **Appendix N**.
- 1.10. The construction programme showing the inter-relationship with environmental protection/mitigation measures are presented in **Table 1.2**.

Table 1.2 Construction Programme Showing the Inter-Relationship with Environmental Protection/Mitigation Measures

Construction Works	Major Environmental Impact	Control Measures
Refer to Section 1.8	Noise, dust impact, water quality and waste generation	 Sufficient watering of the works site with active dust emitting activities; Properly cover the stockpiles by impervious materials; On-site waste sorting and implementation of trip ticket system Appropriate desilting/sedimentation devices provided on site for treatment before discharge; Use of quiet plant and well-maintained construction plant; Provide movable noise barrier to enclose the noisy plant; Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall; Provide drip trays with adequate capacity and well maintained to chemicals Provide sufficient mitigation measures as recommended in Approved EIA Report/Lease requirement.

Summary of EM&A Requirements

- 1.11. The EM&A programme requires construction noise monitoring, air quality monitoring, landscape and visual monitoring and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:
 - All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event Action Plans;
 - Environmental requirements and mitigation measures, as recommended in the EM&A Manual under the EP.
- 1.12. The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 6 of this report.
- 1.13. This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely air quality and noise levels and audit works for the Project during the reporting month.

2 AIR QUALITY

Monitoring Requirements

2.1. According to EM&A Manual under the EP, 1-hour and 24-hour TSP monitoring were conducted to monitor the air quality for this Project. For regular impact monitoring, a sampling frequency of at least once in every six days at all of the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six days shall be undertaken when the highest dust impact occurs. **Appendix A** shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

- 2.2. 1-hour TSP impact dust monitoring was conducted at the air quality monitoring station, AM2 Lee Kau Yan Memorial School and 24-hour TSP impact dust monitoring were conducted at the air quality monitoring station, AM2(A) Ng Wah Catholic Secondary School in the reporting month. No Action/Limit Level exceedance was recorded.
- 2.3. **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 2**.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Stations	Locations	Location of Measurement
AM2 (1-hour TSP)	Lee Kau Yan Memorial School	Rooftop (about 8/F) Area
AM2(A) (24-hour TSP)	Ng Wah Catholic Secondary School	Rooftop (about 8/F) Area

Monitoring Equipment

2.4. **Table 2.2** summarizes the equipment used in the impact air monitoring programme. Copies of calibration certificates are attached in **Appendix B**.

Table 2.2 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator	• TISCH TE-5025A	1
1-hour TSP Dust Meter	 Sibata Scientific Technology LD-5R 	2
HVS Sampler	• TE-5170 c/w of TSP sampling inlet	1
Wind Anemometer	 Davis Instruments 6152 	1

Monitoring Parameters, Frequency and Duration

2.5. **Table 2.3** summarizes the monitoring parameters and frequencies of impact dust monitoring for the whole construction period. The air quality monitoring schedule for the reporting month is shown in **Appendix D**.

 Table 2.3
 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hr TSP	Three times / 6 days
24-hr TSP	Once / 6 days

Monitoring Methodology and QA/QC Procedure

1-hour TSP Monitoring

Measuring Procedures

2.6. The measuring procedures of the 1-hour dust meters were in accordance with the Manufacturer's Instruction Manual as follows:

(Equipment: Sibata Scientific Technology; Model no. LD-3B, LD-5R)

- The 1-hour dust meter is placed at least 1.3 meters above ground.
- Set POWER to "ON" and make sure that the battery level was not flash or in low level
- Allow the instrument to stand for about 3 minutes and then the cap of the air sampling inlet has been released.
- Push the knob at MEASURE position.
- Set time/mode setting to [BG] by pushing the time setting switch. Then, start the background measurement by pushing the start/stop switch once. It will take 6 sec. to complete the background measurement.
- Push the time setting switch to change the time setting display to [MANUAL] at the bottom left of the liquid crystal display.
- Finally, push the start/stop switch to stop the measuring after 1 hour sampling.

• Information such as sampling date, time, count value and site condition were recorded during the monitoring period.

Maintenance/Calibration

2.7. The following maintenance/calibration was required for the direct dust meters:

Check the meter at a 3-month interval and calibrate the meter at a 1-year interval throughout all stages of the air quality monitoring.

24-hour TSP Monitoring

Instrumentation

2.8. High volume (HVS) samplers (Model TE-5170), completed with appropriate sampling inlets, were employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50). Moreover, the HVS also met all the requirements in section 2.5 of the updated EM&A Manual.

Operating/Analytical Procedures

- 2.9. Operating/analytical procedures for the operation of HVS were as follows:
 - A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
 - No two samplers were placed less than 2 meters apart.
 - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
 - A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
 - A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
 - No furnaces or incineration flues were nearby.
 - Airflow around the sampler was unrestricted.
 - The sampler was more than 20 meters from the drip line.
 - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- 2.10. Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.

- 2.11. For TSP sampling, fiberglass filters have a collection efficiency of > 99% for particles of 0.3μm diameter were used.
- 2.12. The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- 2.13. The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.14. The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- 2.15. The shelter lid was closed and secured with the aluminium strip.
- 2.16. The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.17. After sampling, the filter was removed and sent to the HOKLAS laboratory (High Precision Chemical Testing Ltd.) for weighing. The elapsed time was also recorded.
- 2.18. Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

- 2.19. The following maintenance/calibration was required for the HVS:
 - The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
 - High volume samplers were calibrated at bi-monthly intervals using TE-5025A Calibration Kit through\hout all stages of the air quality monitoring.

Results and Observations

- 2.20. All 1-hour & 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 2.21. The weather information for the reporting month is summarized in **Appendix C.**
- 2.22. The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendices E and F** respectively.
- 2.23. The summary of exceedance record in reporting month is shown in **Appendix H**. No exceedance was recorded for the air quality monitoring.
- 2.24. According to our field observations during the monitoring, the major dust source identified at the two designated air quality monitoring stations are road traffic dust, exposed site area and open stockpiles, excavation works and site vehicle movements.
- 2.25. The summary of 1-hour and 24-hour TSP air quality monitoring results during the reporting month are shown in **Appendix E** and **Appendix F** respectively.

3 NOISE

Monitoring Requirements

3.1. According to EM&A Manuals under the EP, construction noise monitoring was conducted to monitor the construction noise arising from the construction activities within KTD. The regular monitoring frequency for each monitoring station shall be on a weekly basis and conduct one set of measurements between 0700 and 1900 hours on normal weekdays. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

3.2. Three designated monitoring stations were selected for noise monitoring programme. Noise monitoring was conducted at three designated monitoring stations (M3(A), M4, and M5(C)). **Figure 3** shows the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Locations	Location of Measurement
	The Bridge connecting The	In the middle of the foot
M3(A)	The Bridge connecting The Latitide	bridge connecting The
	Latitue	Latitude
M4	Lee Kau Yan Memorial School	Rooftop (about 7/F) Area
		Ground in front of the
		building entrance facing
		Prince Edward
		Road East (noise monitoring
M5(C)	Mercy Grace's Home	is not allowed on the rooftop
		from 27 February 2020, due
		to the coronavirus
		countermeasure in Mercy
		Grace's Home)

Monitoring Equipment

3.3. **Table 3.2** summarizes the noise monitoring equipment. Copies of calibration certificates are provided in **Appendix B**.

Table 3.2 Noise Monitoring Equipment

Equipment	Model and Make	Qty.
Integrating Sound Level Meter	BSW Atech BSWA 308	1
Calibrator	• SV 30A	1

Monitoring Parameters, Frequency and Duration

3.4. **Table 3.3** summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency	Measurement
M3(A)	$L_{10}(30 \text{ min.}) dB(A)$	0700-1900 hrs on	Once non	
M4	$L_{90}(30 \text{ min.}) dB(A)$		Once per	Façade
M5(C)	$L_{eq}(30 \text{ min.}) dB(A)$	normal weekdays	week	_

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2 m above the ground.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

frequency weightingtime weightingFast

time measurement : 30 minutes

- Prior to and after each noise measurement, the meter was calibrated using a
 Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before
 and after measurement was more than 1.0 dB, the measurement would be
 considered invalid and repeat of noise measurement would be required after recalibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused temporarily during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

- 3.5. The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- 3.6. The sound level meter and calibrator were checked and calibrated at yearly intervals.
- 3.7. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

Results and Observations

- 3.8. All construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. The summary of exceedance record in reporting month is shown in **Appendix H**.
- 3.9. The baseline noise level and the Noise Limit Level at each designated noise monitoring station are presented in **Table 3.5**.
- 3.10. Noise monitoring results and graphical presentations are shown in **Appendix G**.
- 3.11. The major noise source identified at the designated noise monitoring stations are shown in **Table 3.4**.

Table 3.4 Major Noise Source identified at the Designated Noise Monitoring Stations

Monitoring Stations	Locations	Major Noise Source
M3(A)	The Bridge connecting The Latitude	Traffic Noise Site vehicle movement
M4	Lee Kau Yan Memorial School	Traffic Noise Site vehicle movement Excavation works Daily school activities
M5(C)	Mercy Grace's Home	Traffic Noise Site vehicle movement

Kai Tak Development – Stage 5A Infrastructure at Former North Apron Area

Monthly EM&A Report –February 2024

Table 3.5 Baseline Noise Level and Noise Limit Level for Monitoring Stations

Station	Baseline Noise Level, dB (A)	Noise Limit Level, dB (A)
	N/A ⁽¹⁾	75
M3(A)	(at 0700 – 1900 hrs on normal	(at 0700 – 1900 hrs on
	weekdays)	normal weekdays)
	76.7 ⁽²⁾	70 ^(*)
M4	(at 0700 – 1900 hrs on normal	(at 0700 – 1900 hrs on
	weekdays)	normal weekdays)
	N/A ⁽¹⁾	75
M5(C)	(at 0700 – 1900 hrs on normal	(at 0700 – 1900 hrs on
	weekdays)	normal weekdays)

^(*) Noise Limit Level is 65 dB(A) during school examination periods.

 $CNL = 10 \log (10^{MNL/10} - 10^{BNL/10})$

Remarks: MNL = Measured Noise Level, BNL = Baseline Noise Level

Note (1): The background Noise Level was recorded during the Lunch Hour of Construction Site

⁽i.e. 12:00-13:00) and to be used as the referencing value for compliance checking for Noise Action and Limit Level.

Note (2): The noise level due to the construction work (CNL) was calculated by the following formula:

4 COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS

4.1. The EM&A data was compared with the EIA predictions as summarized in **Tables 4.1** to **4.3**.

Table 4.1 Comparison of 1-hr TSP data with EIA predictions

	Predicted 1-hr TSP conc		Measured 1-hr TSP conc.	
Station				
	2013), $\mu g/m^3$	2016), μg/m ³	Average	Range
AM2 – Lee Kau Yan Memorial School	290	312	62.4	39.6 – 106.2

Table 4.2 Comparison of 24-hr TSP data with EIA predictions

	Predicted 24-hr TSP conc.		Measured 24-hr TSP conc.	
Station	Scenario1 (Mid 2009 to Mid-2013),	Scenario2 (Mid 2013 to	Reportin (February 2	
	μg/m³	Late 2016), μg/m³	Average	Range
AM2(A) - Ng Wah				
Catholic Secondary School	145	169	56.2	38.7 - 72.1

Table 4.3 Comparison of Noise Monitoring Data with EIA predictions

Stations		Predicted Mitigated Construction Noise Levels during Normal Working Hour (Leq (30min) dB(A))	Reporting Month (February 2024), L _{eq (30min)} dB(A)
M3(A) – The Briconnecting The Lat	_	Not predicted in EIA Report	62.6 – 75.5 ⁽²⁾
M4 – Lee Kau Y Memorial Scho		47 – 74	73.9 – 76.7 (1)
M5(C) – Mercy Gr Home	race's	Not predicted in EIA Report	61.6 – 74.8

Remarks:

- (1) Since the baseline noise level was higher than those recorded during the construction period, the recorded noise levels were considered non-valid exceedance of Noise Limit Level.
- (2) Since the background noise level was higher than those recorded during the construction period, the recorded noise levels were considered non-valid exceedance of Noise Limit Level.
- 4.2. The average 1-hour TSP concentrations at AM2 in the reporting month were below the prediction in the approved Environmental Impact Assessment (EIA) Report.
- 4.3. The average 24-hour TSP concentrations at AM2(A) in the reporting month were below the prediction in the approved EIA Report.
- 4.4. The noise monitoring results in the reporting month from M4 were slightly higher than the range of the predicted mitigated constriction noise levels in the EIA Report.

Kai Tak Development – Stage 5A Infrastructure at Former North Apron Area Monthly EM&A Report –February 2024

4.5. Construction noise levels at M3(A) and M5(C) were not predicted in EIA Report.

5 LANDSCAPE AND VISUAL

Monitoring Requirements

5.1. According to EM&A Manual of the Kai Tak Development EIA Study, ET shall monitor and audit the contractor's operation during the construction period on a weekly basis, and to report on the contractor's compliance.

Results and Observations

- 5.2. Site audits were conducted on a weekly basis to monitor the timely implementation of landscape and visual mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix I**.
- 5.3. No non-compliance of the landscape and visual impact was recorded in the reporting month.
- 5.4. Should non-compliance of the landscape and visual impact occur, action in accordance with the action plan presented in **Appendix J** shall be performed.

6 ENVIRONMENTAL INSPECTION

Site Inspections

- 6.1. Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site inspections are attached in **Appendix I**.
- 6.2. Site inspections were conducted on 05, 14, 21 & 28 February 2024 in the reporting month. A joint site inspection with the representative of IEC, ER, the Contractor and the ET was conducted on 28 February 2024. The details of the observations during site inspection are summarized in **Table 6.2**.

Review of Environmental Monitoring Procedures

6.3. The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been recorded for the monitoring works:

Air Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations within and outside the construction site.
- The monitoring team recorded the temperature and weather conditions on the monitoring days.

Noise Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

Status of Environmental Licensing and Permitting

6.4. All permits/licenses obtained for the Project are summarized in **Table 6.1**.

Table 6.1 Summary of Environmental Licensing and Permit Status

	Valid P	Period	a		
Permit No.	From	То	Status		
Environmental Permit (EP)	Environmental Permit (EP)				
EP-337/2009	23 Apr 2009	N/A	Valid		
Effluent Discharge License					
WT00027495-2017	28 Mar 2017	31 Mar 2022	Expired		
WT00041367-2022	20 Jun 2022	31 Mar 2027	Valid		
Billing Account for Construction W	aste Disposal				
A/C# 7026164	20 Oct 2016	N/A	Valid		
Registration of Chemical Waste Pro	ducer				
WPN5213-229-P3271-01	14 Aug 2017	N/A	Valid		
Construction Noise Permit (CNP)					
GW-RE0915-19	08 Nov 2019	04 May 2020	Expired		
GW-RE0984-19	15 Dec 2019	24 Feb 2020	Expired		
GW-RE0083-20	01 Mar 2020	01 June 2020	Expired		
GW-RE0266-20	02 May 2020	31 Jul 2020	Expired		
GW-RE0779-21	30 Jul 2021	30 Nov 2021	Expired		
GW-RE0858-21	31 Jul 2021	30 Aug 2021	Expired		
GW-RE0636-23	06 Jun 2023	30 Jun 2023	Expired		
GW-RE0637-23	06 Jun 2023	30 Jun 2023	Expired		

Status of Waste Management

6.5. The amount of wastes generated by the major site activities of this Project during the reporting month is shown in **Appendix M**.

Implementation Status of Environmental Mitigation Measures

6.6. During site inspections in the reporting month, no non-conformance was identified. ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Table 6.2**.

Table 6.2 Observations and Recommendations of Site Inspections

Parameters	Date	Observations and Recommendations	Follow-up/Rectification
Water Quality	N/A	No environmental deficiency was identified in the reporting period.	N/A
Air Quality	N/A	No environmental deficiency was identified in the reporting period.	N/A
Noise	N/A	No environmental deficiency was identified in the reporting period.	N/A
Waste/ Chemical Management	N/A	No environmental deficiency was identified in the reporting period.	N/A
Landscape and Visual	N/A	No environmental deficiency was identified in the reporting period.	N/A
Permits/ Licenses	N/A	No environmental deficiency was identified in the reporting period.	N/A

Summary of Mitigation Measures Implemented

6.7. An updated summary of the EMIS is provided in **Appendix K**.

Implementation Status of Event Action Plans

6.8. The Event Action Plans for air quality, noise and landscape and visual are presented in **Appendix J**.

1-hr TSP Monitoring

6.9. No Action/Limit Level exceedance was recorded in the reporting month.

24-hr TSP Monitoring

6.10 No Action/Limit Level exceedance was recorded in the reporting month.

Construction Noise

6.11. No Action/Limit Level exceedance was recorded in the reporting month.

Monthly EM&A Report – February 2024

Landscape and visual

6.12. No non-compliance was recorded in the reporting month.

Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution

6.13. The summaries of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix L**.

7 FUTURE KEY ISSUES

- 7.1. Major site activities undertaken for the coming two months include:
 - Reinstatement of PERE central Divider;
 - Construction of Subway SW6 staircase ST2 and Lift LT2 concrete structure
 - Reinstatement of SKLRP planter
 - Construction of Road D1 footway
- 7.2. Key environmental issues in the coming month include:
 - Stagnant water on the unused and damaged water-filled barriers & uncovered containers and manhole
 - Silt, construction materials or debris being washed through manhole into the drainage system
 - Noise generated from operation of the equipment, especially for rock-breaking activities;
 - Dust generation from excavation works, stockpile and rock breaking activities;
 - Oil leakage from equipment and mobile plants;

7.3. The tentative major site activities is mentioned in Section 7.1 of this report. The impact prediction and control measures for the coming two months are summarized as follows:

Air quality impact (dust)

- Frequent watering of haul road and unpaved/exposed areas;
- Frequent watering or covering stockpiles with impervious materials or maintained wet; and
- Watering of any earth moving activities.

Water quality impact (surface runoff)

- Diversion of the collected effluent to de-silting facilities for treatment prior to discharge to public storm water drains;
- Provision of adequate de-silting facilities for treating surface run-off and other collected effluents prior to discharge;
- Provision of perimeter protection such as sealing of hoarding footings to avoid runoff from entering the existing storm water drainage system via public road; and

Noise Impact

- Machines and Plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;
- Regular maintenance of machines; and
- Use of movable noise barriers if necessary.

Waste /Chemical Management

- Avoided oil leakage from PME
- Provided drip tray with adequate capacity and well maintained to chemical and oil containers

Monitoring Schedule for Next Month

7.4. The tentative environmental monitoring schedules for next month are shown in **Appendix D**.

8 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

8.1. Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.

1-hr TSP Monitoring

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

24-hr TSP Monitoring

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

Construction Noise Monitoring

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

Landscape and visual

8.5. No non-compliance was recorded in the reporting month.

Complaint and Prosecution

8.6. No environmental complaint and environmental prosecution was received in the reporting month.

Recommendations

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

Water Impact

- To avoid accumulation of stagnant and ponding water on site.
- Bunds should be provided to surrounding areas of earthworks for flood protection.
- Manholes (including newly constructed ones) should always be adequately covered
 and temporarily sealed so as to prevent silt, construction materials or debris being
 washed into the drainage system and storm runoff being directed into foul sewers.
- Groundwater pumped out should be discharged via sediment traps/tanks.

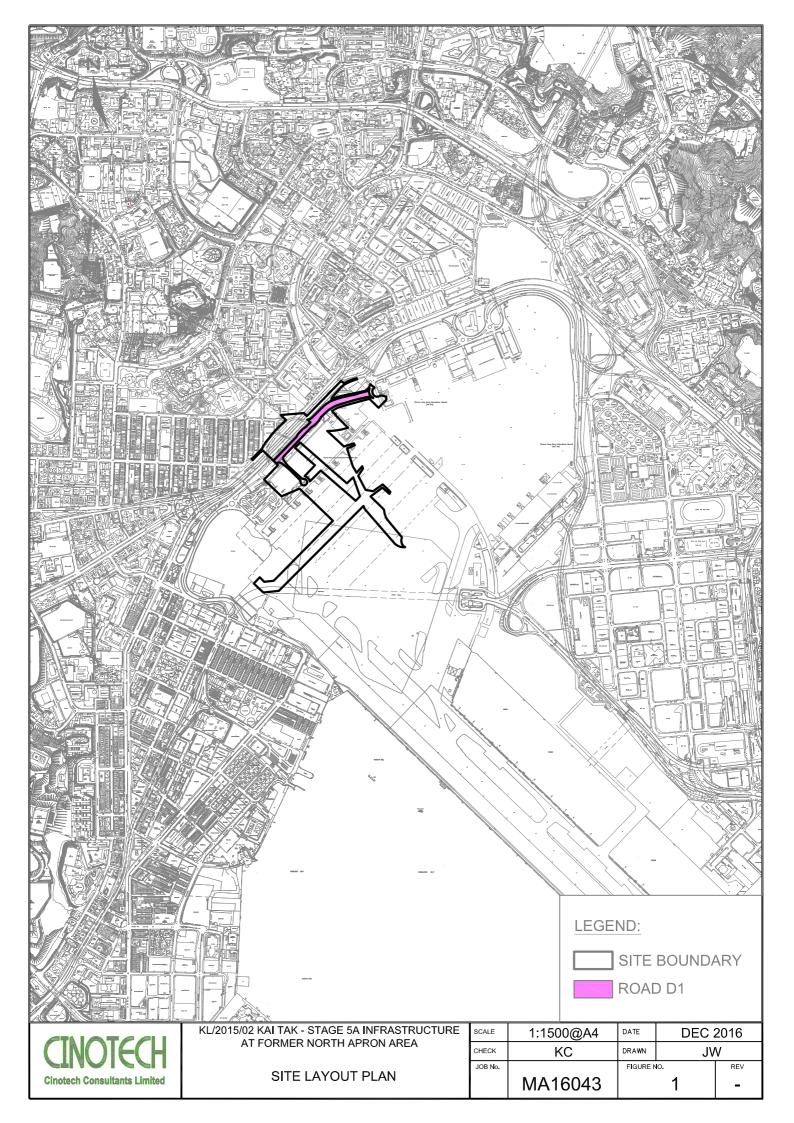
Air Quality

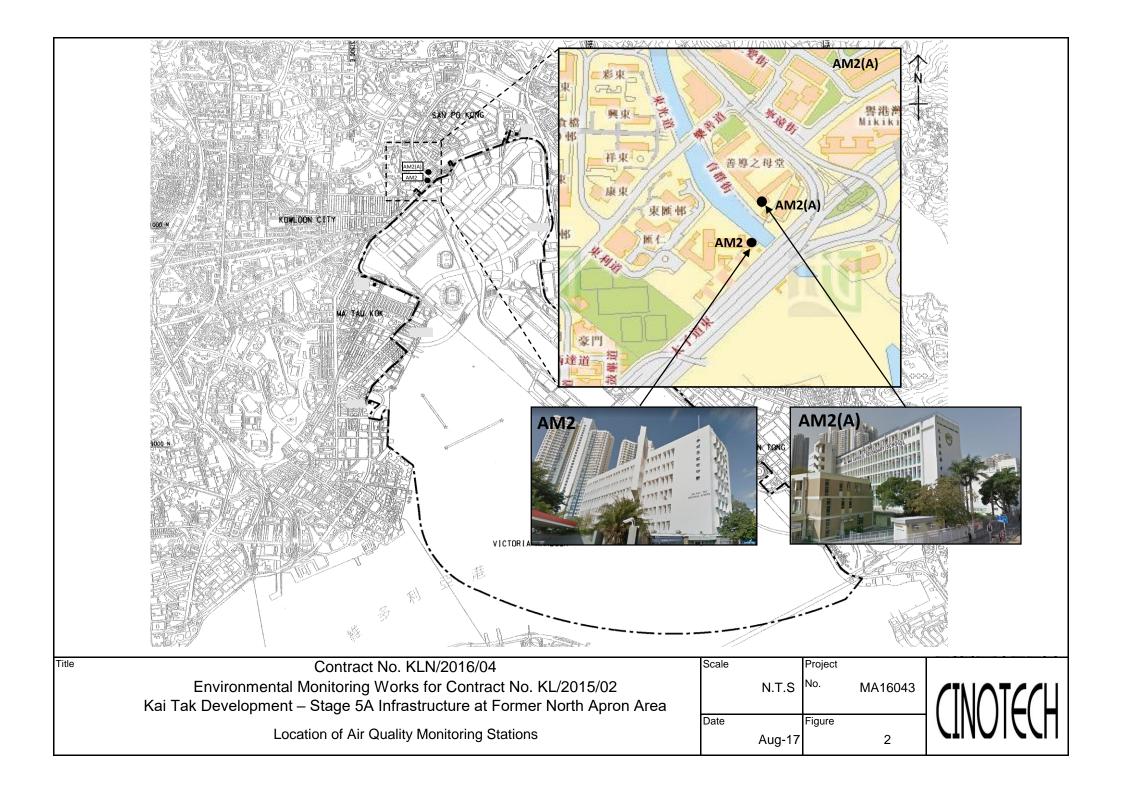
- The stockpile of dusty material should be covered by impervious materials or maintained wet.
- Water spraying should be provided during the rock-breaking activities conducted to minimize the dust generation.

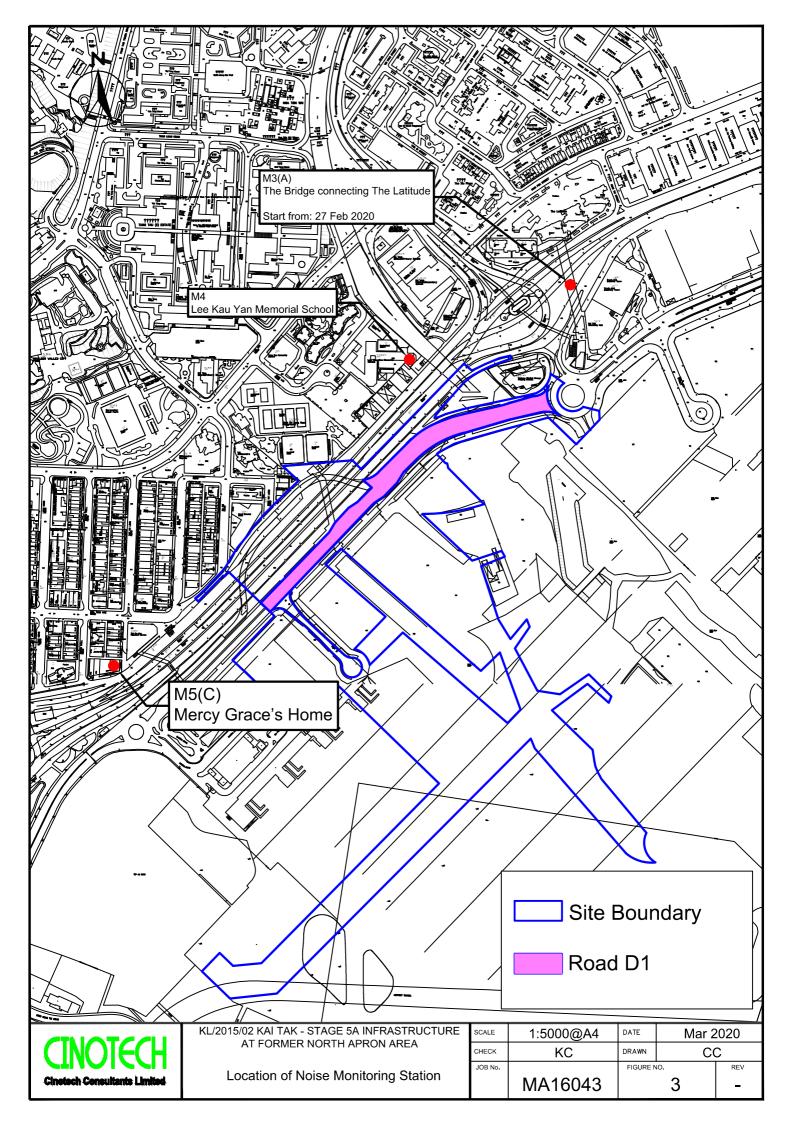
Waste/Chemical Management

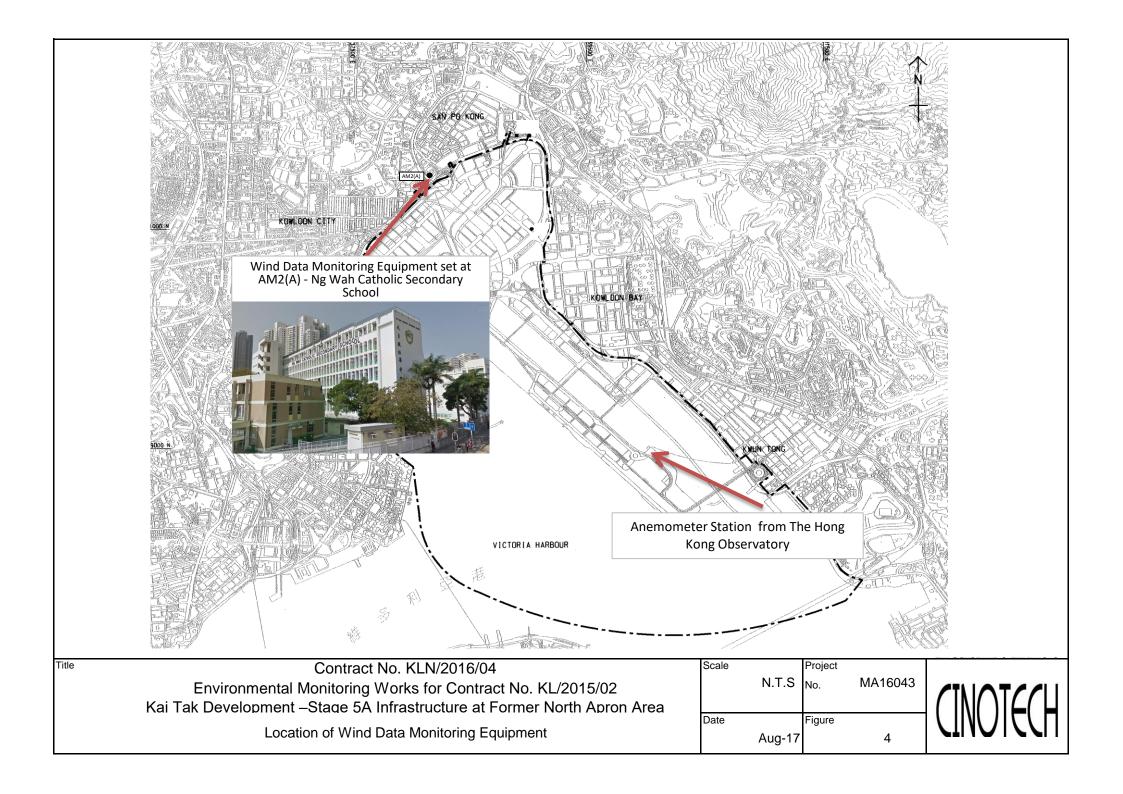
- Oil leakage from PME should be avoided.
- Drip tray with adequate capacity and well maintained should be provided to chemical & oil container.
- The construction/chemical material should be stored at the proper place.

FIGURES









APPENDIX A
ACTION AND LIMIT LEVELS FOR AIR
QUALITY AND NOISE

Appendix A - Action and Limit Levels

Table A-1 Action and Limit Levels for 1-Hour TSP

Location	Action Level, μg/m ³	Limit Level, μg/m³
AM2	346	500

Table A-2 Action and Limit Levels for 24-Hour TSP

Location	Action Level, μg/m ³	Limit Level, μg/m³
AM2(A)	157	260

Table A-3 Action and Limit Levels for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A) 70dB(A)/65dB(A)*

Remarks: If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed. *70dB(A) and 65dB(A) for schools during normal teaching periods and school examination periods, respectively.

APPENDIX B-1 COPIES OF CALIBRATION CERTIFCATES (AIR)

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16043/13/0040

Date: 6-Jan-24 Next Due Date: 6-Mar-24 Operator: Sequipment No.: A-01-13 Model No.: TE-5170 Serial No. 13						
Calibration Point	Λ.					
Temperature, Ta (K) 293.2 Pressure, Pa (mmHg) 765.1	52					
Temperature, Ta (K) 293.2 Pressure, Pa (mmHg) 765.1	And the Constitution					
Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.0						
Serial No. 3864 Slope, mc 0.05928 Intercept, bc -0.0 Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]^{1/2} -bc] / mc Next Calibration Date: 16-Jan-24 Qstd = {[ΔH x (Pa/760) x (298/Ta)]^{1/2} -bc] / mc Calibration Point Orfice HVS DH (orifice), in. of water [DH x (Pa/760) x (298/Ta)]^{1/2} Qstd (CFM) DW (HVS), in. of water Y-axis 1 3.5 3.72 63.28 10.2 3.23 2 11.0 3.35 57.18 8.0 2.86 3 8.5 2.95 50.34 5.5 2.37 4 5.6 2.39 40.97 3.3 1.84 5 3.0 1.75 30.14 2.0 1.43 Set Point Calculation Correlation Coefficient < 0.990, check and recalibrate.						
Last Calibration Date: 16-Jan-23 mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)] ^{1/2} Next Calibration Date: 16-Jan-24 Qstd = {[ΔH x (Pa/760) x (298/Ta)] ^{1/2} -bc} / mc						
Next Calibration Date: 16-Jan-24 Qstd = {[ΔH x (Pa/760) x (298/Ta)]^{1/2} -bc} / mc	3491					
Calibration of TSP Sampler						
Calibration Point DH (orifice), in. of water [DH x (Pa/760) x (298/Ta)]^{1/2} Qstd (CFM) DW (HVS), in. [ΔW x (Pa/760) x (298/Ta)]^{1/2} X - axis of water Y - axis S - axis Of water Y - axis S - axis Of water Y - axis Of water Of						
Calibration Point DH (orifice), in. of water [DH x (Pa/760) x (298/Ta)]^{1/2} Qstd (CFM) DW (HVS), in. [ΔW x (Pa/760) x (298/Ta)]^{1/2} X - axis of water Y - axis S - axis Of water Y - axis S - axis Of water Y - axis Of water Of						
DH (orifice), in. of water [DH x (Pa/760) x (298/Ta)] ^{1/2} Qstd (CFM) DW (HVS), in. [ΔW x (Pa/760) x (298/Ta)] ^{1/2} Y-axis 1 13.5 3.72 63.28 10.2 3.23 2 11.0 3.35 57.18 8.0 2.86 3 8.5 2.95 50.34 5.5 2.37 4 5.6 2.39 40.97 3.3 1.84 5 3.0 1.75 30.14 2.0 1.43 30.14 2.0 1.43 30.14						
in. of water in.	0/TE >1/2					
2 11.0 3.35 57.18 8.0 2.86 3 8.5 2.95 50.34 5.5 2.37 4 5.6 2.39 40.97 3.3 1.84 5 3.0 1.75 30.14 2.0 1.43 By Linear Regression of Y on X Slope , mw = 0.0553 Intercept, bw : -0.3308 Correlation coefficient* = 0.9931 *If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)] ^{1/2}	8/Ta)]**					
3 8.5 2.95 50.34 5.5 2.37 4 5.6 2.39 40.97 3.3 1.84 5 3.0 1.75 30.14 2.0 1.43 By Linear Regression of Y on X Slope , mw = 0.0553						
4 5.6 2.39 40.97 3.3 1.84 5 3.0 1.75 30.14 2.0 1.43 By Linear Regression of Y on X Slope , mw = 0.0553						
5 3.0 1.75 30.14 2.0 1.43 By Linear Regression of Y on X Slope , mw =						
By Linear Regression of Y on X Slope , mw =						
Slope , mw =0.0553 Intercept, bw :0.3308 Correlation coefficient* =0.9931 *If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)] ^{1/2}						
*If Correlation Coefficient < 0.990, check and recalibrate. Set Point Calculation From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to $\mathbf{mw} \ \mathbf{x} \ \mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x} \ (\mathbf{Pa/760}) \ \mathbf{x} \ (\mathbf{298/Ta})]^{1/2}$						
From the TSP Field Calibration Curve, take Qstd = 43 CFM From the Regression Equation, the "Y" value according to $\mathbf{mw} \ \mathbf{x} \ \mathbf{Qstd} + \mathbf{bw} = \left[\Delta \mathbf{W} \ \mathbf{x} \ (\mathbf{Pa/760}) \ \mathbf{x} \ (\mathbf{298/Ta}) \right]^{1/2}$						
From the Regression Equation, the "Y" value according to $\mathbf{mw} \ \mathbf{x} \ \mathbf{Qstd} + \mathbf{bw} = \left[\Delta \mathbf{W} \ \mathbf{x} \ (\mathbf{Pa/760}) \ \mathbf{x} \ (\mathbf{298/Ta}) \right]^{1/2}$						
mw x Qstd + bw = $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$						
Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.10						
Remarks:						
Conducted by: Wong Shing Kwai Signature: Date: 6-Ja	n-24					
Checked by: Henry Leung Signature: Lemy Mory Date: 6-Ja	1-24					

CINOTECH CONSULTANTS LIMITED

Digital Dust Indicator



Date of Calibration 30-Jan-24

Certificate of Calibration

Description:

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibr	ration Record	30-Mar-24
Model No.:	LD-5R					
Serial No.:	972780					
Equipment No.:	SA-01-09		Sensitivity	0.001 mg/m3	_	
High Volume Sa	mpler No.:	A-01-03	Before Sensiti	vity Adjustment	739 CPM	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	739 CPM	
		Ca	alibration of 1 h	r TSP		
Calibration		Laser Dust Monito	r		HVS	
Point	N.	fass Concentration (μg	/m3)	Mas	ss concentration ($\mu g/m^3$)
_		X-axis			Y-axis	
1		75.0			141.0	
3		65.0 54.0			121.0 100.0	
Average		64.7			120.7	
By Linear Regression of Y on X Slope , mw = 1.9517				cept, bw =	-5.5408	3
		Se	et Correlation F	actor		
	•	High Volume Sampler	2	actor	120.7	
Particaulate Con	centration by I		2	actor	64.7	
Particaulate Con Measureing time	centration by I	High Volume Sampler	2	actor		
Particaulate Con Measureing time Set Correlation I	centration by I	High Volume Sampler	(μg/m ³)	actor	64.7	
Particaulate Con Measureing time Set Correlation F SCF = [K=High	centration by I , (min) Factor , SCF h Volume San	High Volume Sampler Dust Meter (μg/m ³)	(μg/m³) 1g/m3)]		64.7	
Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by I (min) Factor , SCF Nolume San in according to the compare ween the Dust I	High Volume Sampler Dust Meter (μg/m³) npler / Dust Meter, (μ	ug/m³) ug/m3)] ual: gh Volume Samplume Sampler.	1.9 bler and The result	64.7	rate the Correlation
Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by I c, (min) Factor , SCF h Volume San in according to or was compare ween the Dust I bers are weigh	High Volume Sampler Dust Meter (µg/m³) npler / Dust Meter, (µ to the instruction manued with a calibrated Hi Monitor and High Volume	ug/m³) ug/m3)] ual: gh Volume Samplume Sampler.	1.9 bler and The result Litimed) Approved by:	64.7	y Xvoy

CINOTECH CONSULTANTS LIMITED

Digital Dust Indicator



Date of Calibration 30-Jan-24

Certificate of Calibration

Description:

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibration	ration Record	30-Mar-24
Model No.:	LD-5R				
Serial No.:	972781				
Equipment No.:	SA-01-10	Sensitivity	0.001 mg/m3	_	
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensitiv	vity Adjustment	734 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensitivi	ty Adjustment	734 CPM	
	Cal	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor			HVS	
Point	Mass Concentration (μg/1 X-axis	m3)	Mas	ss concentration (μ Y-axis	ıg/m³)
1	82.0			134.0	
2	72.0			116.0	
3	62.0			100.0	
Average	72.0			116.7	
Slope , mw = Correlation co		t Correlation F	eept, bw =	-5.7333	
Particaulate Con	centration by High Volume Sampler (_	actor	116.7	
Particaulate Concentration by Trigit Volume Sampler (µg/m ³)		<u> </u>	72.0		
Measureing time			60.0		
Set Correlation I	Factor, SCF				
SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] 1.6					
In-house method	in according to the instruction manua	1:			
The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler. Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)					
Calibrated by: Approved by: Learny Kerny Leung) Technical Officer (Wong Shing Kwai) Project Manager (Henry Leung)					



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 15, 2024

Rootsmeter S/N: 438320

Ta: 294
Pa: 755.4

°K

Operator: Jim Tisch

Calibration Model #: TE-5025A

Calibrator S/N: 3864

mm Hg

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4380	3.3	2.00
2	3	4	1	1.0270	6.4	4.00
3	5	6	1	0.9180	8.0	5.00
4	7	8	1	0.8750	8.9	5.50
5	9	10	1	0.7230	12.9	8.00

	Data Tabulation				
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)
1.0031	0.6975	1.4195	0.9956	0.6924	0.8823
0.9989	0.9727	2.0075	0.9915	0.9655	1.2477
0.9968	1.0858	2.2444	0.9894	1.0778	1.3950
0.9956	1.1378	2.3539	0.9882	1.1294	1.4631
0.9903	1.3697	2.8390	0.9829	1.3595	1.7645
	m=	2.11196		m=	1.32248
QSTD[b=	-0.05043	QA [b=	-0.03134
•	r=	0.99998	-4-	r=	0.99998

Calculations			
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd= Vstd/ΔTime		Qa=	Va/ΔTime
For subsequent flow rate calculations:			
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	Qa=	$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$

Standard Conditions			
Tstd: 298.15 °K			
Pstd:	760 mm Hg		
	Key		
ΔH: calibrator manometer reading (in H2O)			
ΔP: rootsmeter manometer reading (mm Hg)			
Ta: actual absolute temperature (°K)			
Pa: actual ba	rometric pressure (mm Hg)		
b: intercept			
m: slope			

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002

www.tisch-env.com

TOLL FREE: (877)263-7610 FAX: (513)467-9009



Certificate of Calibration - Wind Monitoring Station

Description: Ng Wah Catholic Seconday School - Weather Stations

Manufacturer: <u>Davis Instruments</u>

Model No.: <u>Davis 6152, Vantage Pro2</u>

Serial No.: <u>BC180522050</u>

Equipment No.: SA-03-03

Date of Calibration 5-Oct-2023

Next Due Date 5-Apr-2024

1. Performance check of Wind Speed

Wind Sp	peed, m/s	Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V1)	D = V1 - V2
0.0	0.0	0.0
1.3	1.4	-0.1
2.4	2.5	-0.1
3.5	3.5	0.0

2. Performance check of Wind Direction

Wind Di	rection (°)	Difference D (°)
Wind Direction Reading (V1)	Marine Compass Value (V1)	D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

- 1. Performance Wind Speed Test The wind meter was on-site calibrated against the anemometer
- 2. Performance Wind Direction Test The wind meter was on-site calibrated against the marine compass at four direction

Calibrated by:

Wong Shing Kwai

Approved by:

Henry Leung

APPENDIX B-2 COPIES OF CALIBRATION CERTIFCATES (NOISE)

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00373 Issue Date : 09 May 2023

Application No. : HP00247

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Sound Level Calibrator.

Equipment No.: : N-09-02

Manufacturer: : SVANTEK

Other information : Model No. SV 30A

Serial No. 10965

Date Received : 05 May 2023

Test Period : 08 May 2023 to 08 May 2023

Test Requested : Performance checking for Sound Level Calibrator

Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with

the documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00373 | Issue Date : 09 May 2023

Application No. : HP00247

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Description	Sound Meter
Manufacturer	BSWA Technology
Model No.	BSWA 308
Serial No.	570183
Microphone No.	590073
Equipment No.	N-12-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 0.3
114.0	114.3	+ 0.3	± 0.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00361 | Issue Date : 30 Mar 2023

Application No. : HP00236

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-04

Manufacturer: : BSWA Technology

Other information : N

Model No.	BSWA 308
Serial No.	580238
Microphone No.	570605

Date Received : 27 Mar 2023

Test Period : 28 Mar 2023 to 28 Mar 2023

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00361 Issue Date : 30 Mar 2023

Application No. : HP00236

Certificate of Calibration

Measuring equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 1.5
114.0	114.3	+ 0.3	± 1.5

Note

- : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
 - 2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

APPENDIX C WEATHER INFORMATION

February 2024

		February 2024		
Date	Mean Pressure (hPa)	Air Temperature	Mean Relative Humidity (%)	Precipitation (mm)
		Mean (°C)		
1-Feb-24	1018.0	21.1	92	0.2
2-Feb-24	1017.6	21.7	88	Trace
3-Feb-24	1018.8	19.6	85	Trace
4-Feb-24	1017.3	19.8	92	Trace
5-Feb-24	1018.8	20.4	86	Trace
6-Feb-24	1019.6	19.1	86	0.6
7-Feb-24	1017.3	16.8	90	Trace
8-Feb-24	1018.8	13.0	84	2.2
9-Feb-24	1023.5	12.7	77	0.6
10-Feb-24	1026.5	14.4	72	0.5
11-Feb-24	1026.9	17.4	60	0
12-Feb-24	1025.8	18.1	55	0
13-Feb-24	1023.2	19.2	71	0
14-Feb-24	1020.2	21.0	78	0
15-Feb-24	1019.0	22.3	70	0
16-Feb-24	1019.7	20.4	77	Trace
17-Feb-24	1017.4	19.5	82	Trace
18-Feb-24	1015.2	21.6	87	0
19-Feb-24	1015.1	22.7	88	0
20-Feb-24	1014.7	23.9	87	0
21-Feb-24	1014.5	24.5	82	0
22-Feb-24	1016.6	23.6	87	0
23-Feb-24	1019.9	20.4	85	Trace
24-Feb-24	1021.1	18.8	73	Trace
25-Feb-24	1020.7	17.1	71	0
26-Feb-24	1021.1	18.2	76	Trace
27-Feb-24	1020.9	17.6	73	Trace
28-Feb-24	1018.0	18.3	85	Trace
29-Feb-24	1017.6	18.7	85	Trace

	February 2024					
Ta		nd Speed and Direction	ons			
Date	Time	Wind Speed m/s	Direction			
1-Feb-24	0:00	1.1	W			
1-Feb-24	1:00	0.5	SSE			
1-Feb-24	2:00	0.2	SE			
1-Feb-24	3:00	0.5	SSE			
1-Feb-24	4:00	0.2	SSE			
1-Feb-24	5:00	0.6	SSW			
1-Feb-24	6:00	0.1	ESE			
1-Feb-24	7:00	0.2	SSE			
1-Feb-24	8:00	0.4	SE			
1-Feb-24	9:00	0.3	SSE			
1-Feb-24	10:00	0.6	SSE			
1-Feb-24	11:00	1.3	ESE			
1-Feb-24	12:00	1.3	ESE			
1-Feb-24	13:00	1.4	E			
1-Feb-24	14:00	1.5	SSE			
1-Feb-24	15:00	1.4	SE			
1-Feb-24	16:00	1.1	SSE			
1-Feb-24	17:00	0.7	SE			
1-Feb-24	18:00	0.3	SE			
1-Feb-24	19:00	0.2	SSE			
1-Feb-24	20:00	0.6	SSE			
1-Feb-24	21:00	0.6	SE			
1-Feb-24	22:00	0.4	SE			
1-Feb-24	23:00	0.3	SW			
2-Feb-24	0:00	0.5	SE			
2-Feb-24	1:00	0.2	SSE			
2-Feb-24	2:00	0.8	S			
2-Feb-24	3:00	0.2	S			
2-Feb-24	4:00	0.4	SSE			
2-Feb-24	5:00	0.4	SSE			
2-Feb-24	6:00	0.5	SSE			
2-Feb-24	8:00	0.1	SSE			
2-Feb-24	9:00	0.4	ESE			
2-Feb-24	10:00	0.6	SE			
2-Feb-24	11:00	1.1	S			
2-Feb-24	12:00	0.7	SW			
2-Feb-24	13:00	1.0	SW			
2-Feb-24	14:00	1.5	SW			
2-Feb-24	15:00	1.5	SW			
2-Feb-24	16:00	2.4	W			
2-Feb-24	17:00	2.7	W			
2-Feb-24	18:00	2.1	W			
2-Feb-24	19:00	1.1	WSW			
2-Feb-24	20:00	1.0	SSW			
2-Feb-24	21:00	2.0	WSW			
2-Feb-24	22:00	2.2	WNW			
2-Feb-24	23:00	2.0	W			

February 2024					
Table	II: Wind S	Speed and Direction	ns		
Date	Time	Wind Speed m/s	Direction		
3-Feb-24	0:00	0.9	WSW		
3-Feb-24	1:00	1.6	SW		
3-Feb-24	2:00	1.5	SW		
3-Feb-24	3:00	0.9	S		
3-Feb-24	4:00	0.5	S		
3-Feb-24	5:00	0.5	S		
3-Feb-24	6:00	0.9	SSW		
3-Feb-24	7:00	0.7	S		
3-Feb-24	8:00	0.2	S		
3-Feb-24	9:00	0.9	S		
3-Feb-24	10:00	0.8	SSE		
3-Feb-24	11:00	1.1	SE		
3-Feb-24	12:00	1.4	SSW		
3-Feb-24	13:00	1.2	SSE		
3-Feb-24	14:00	0.9	ESE		
3-Feb-24	15:00	1.4	ESE		
3-Feb-24	16:00	1.2	ESE		
3-Feb-24	17:00	0.9	SSE		
3-Feb-24	18:00	0.8	SSE		
3-Feb-24	19:00	0.3	SSE		
3-Feb-24	20:00	1.0	W		
3-Feb-24	21:00	1.3	WSW		
3-Feb-24	22:00	0.4	SE		
3-Feb-24	23:00	0.6	SSW		
4-Feb-24	0:00	1.2	WNW		
4-Feb-24	1:00	0.4	SSW		
4-Feb-24	2:00	0.9	S		
4-Feb-24	3:00	0.9	S		
4-Feb-24	4:00	0.9	SSW		
4-Feb-24	5:00	0.4	SSW		
4-Feb-24	6:00	0.6	SSE		
4-Feb-24	8:00	1.8	WNW		
4-Feb-24	9:00	0.8	SSW		
4-Feb-24	10:00	1.2	SW		
4-Feb-24	11:00	1.0	SSE		
4-Feb-24	12:00	0.9	SSE		
4-Feb-24	13:00	0.9	SE		
4-Feb-24	14:00	0.4	SSE		
4-Feb-24	15:00	0.6	SE		
4-Feb-24	16:00	0.9	Е		
4-Feb-24	17:00	0.8	ESE		
4-Feb-24	18:00	0.6	SE		
4-Feb-24	19:00	0.6	SSW		
4-Feb-24	20:00	0.3	SE		
4-Feb-24	21:00	0.5	SSE		
4-Feb-24	22:00	0.6	SE		
4-Feb-24	23:00	1.2	S		

	February 2024					
Ta	ble II: Wi	nd Speed and Directio	ns			
Date	Time	Wind Speed m/s	Direction			
5-Feb-24	0:00	0.6	S			
5-Feb-24	1:00	0.9	S			
5-Feb-24	2:00	0.5	S			
5-Feb-24	3:00	0.4	SSE			
5-Feb-24	4:00	0.4	SSE			
5-Feb-24	5:00	0.6	S			
5-Feb-24	6:00	0.5	S			
5-Feb-24	7:00	0.9	S			
5-Feb-24	8:00	1.7	SSW			
5-Feb-24	9:00	1.1	S			
5-Feb-24	10:00	0.5	SE			
5-Feb-24	11:00	0.9	SE			
5-Feb-24	12:00	1.3	SSE			
5-Feb-24	13:00	0.4	S			
5-Feb-24	14:00	0.5	SSW			
5-Feb-24	15:00	0.9	W			
5-Feb-24	16:00	1.0	SSW			
5-Feb-24	17:00	0.5	SSE			
5-Feb-24	18:00	0.7	S			
5-Feb-24	19:00	0.3	SE			
5-Feb-24	20:00	0.7	SSW			
5-Feb-24	21:00	0.3	SSW			
5-Feb-24	22:00	0.2	SSE			
5-Feb-24	23:00	0.6	WNW			
6-Feb-24	0:00	0.3	WSW			
6-Feb-24	1:00	1.0	SSW			
6-Feb-24	2:00	0.9	SW			
6-Feb-24	3:00	0.5	SW			
6-Feb-24	4:00	0.8	S			
6-Feb-24	5:00	1.4	SSW			
6-Feb-24	6:00	1.2	SW			
6-Feb-24	7:00	0.5	SSE			
6-Feb-24	8:00	0.4	SSE			
6-Feb-24	9:00	0.5	S			
6-Feb-24	10:00	1.4	WSW			
6-Feb-24	11:00	1.0	S			
6-Feb-24	12:00	1.7	SW			
6-Feb-24	13:00	1.6	SE			
6-Feb-24	14:00	1.5	SE			
6-Feb-24	15:00	1.2	S			
6-Feb-24	16:00	2.0	W			
6-Feb-24	17:00	1.8	W			
6-Feb-24	18:00	1.7	WNW			
6-Feb-24	19:00	1.9	NW W			
6-Feb-24	20:00	1.0	SSW			
6-Feb-24	21:00	0.7				
6-Feb-24	22:00	1.0	SSW			
6-Feb-24	23:00	0.7	S			

	February 2024					
Table	II: Wind S	speed and Direction	ns			
Date	Time	Wind Speed m/s	Direction			
7-Feb-24	0:00	1.0	SSW			
7-Feb-24	1:00	0.9	SSE			
7-Feb-24	2:00	1.3	S			
7-Feb-24	3:00	0.7	SSW			
7-Feb-24	4:00	0.7	SSW			
7-Feb-24	5:00	0.4	SSE			
7-Feb-24	6:00	0.6	SE			
7-Feb-24	7:00	0.7	SSE			
7-Feb-24	8:00	0.2	SE			
7-Feb-24	9:00	0.3	S			
7-Feb-24	10:00	0.4	SE			
7-Feb-24	11:00	0.4	SE			
7-Feb-24	12:00	0.7	SSE			
7-Feb-24	13:00	0.7	S S			
7-Feb-24	14:00	1.3	S			
7-Feb-24	15:00	1.9	S			
7-Feb-24	16:00	2.1	SSE			
7-Feb-24	17:00	2.3	S			
7-Feb-24	18:00	1.6	S			
7-Feb-24	19:00	1.7	SSE			
7-Feb-24	20:00	2.1	SSE			
7-Feb-24	21:00	1.9	S S			
7-Feb-24	22:00	1.9	S			
7-Feb-24	23:00	2.0	S			
8-Feb-24	0:00	2.1	SW			
8-Feb-24	1:00	2.3	S			
8-Feb-24	2:00	2.0	S			
8-Feb-24	3:00	2.4	SSW			
8-Feb-24	4:00	1.5	S			
8-Feb-24	5:00	2.1	S			
8-Feb-24	6:00	2.1	SSW			
8-Feb-24	7:00	1.5	SSW			
8-Feb-24	8:00	1.5	S			
8-Feb-24	9:00	1.7	SSW			
8-Feb-24	10:00	1.6	SSW			
8-Feb-24	11:00	1.4	SSW			
8-Feb-24	12:00	1.8	S			
8-Feb-24	13:00	1.8	SSW			
8-Feb-24	14:00	1.8	SSW			
8-Feb-24	15:00	1.6	SSE			
8-Feb-24	16:00	1.8	S			
8-Feb-24	17:00	1.5	S			
8-Feb-24	18:00	1.5	SSW			
8-Feb-24	19:00	2.1	SSW			
8-Feb-24	20:00	1.9	SSW			
8-Feb-24	21:00	2.0	S			
8-Feb-24	22:00	2.4	SSW			
8-Feb-24	23:00	1.9	S			

	February 2024					
Ta		nd Speed and Directio	ns			
Date	Time	Wind Speed m/s	Direction			
9-Feb-24	0:00	2.0	SSW			
9-Feb-24	1:00	2.0	S			
9-Feb-24	2:00	2.0	SSW			
9-Feb-24	3:00	1.9	S			
9-Feb-24	4:00	1.8	S			
9-Feb-24	5:00	2.0	SSW			
9-Feb-24	6:00	1.9	S			
9-Feb-24	7:00	2.2	SSW			
9-Feb-24	8:00	2.1	SW			
9-Feb-24	9:00	2.2	SSW			
9-Feb-24	10:00	2.1	SSW			
9-Feb-24	11:00	1.9	SSE			
9-Feb-24	12:00	2.1	S			
9-Feb-24	13:00	2.1	S			
9-Feb-24	14:00	1.5	S			
9-Feb-24	15:00	1.6	SSE			
9-Feb-24	16:00	2.5	S			
9-Feb-24	17:00	2.6	S			
9-Feb-24	18:00	2.2	SSE			
9-Feb-24	19:00	1.3	SSE			
9-Feb-24	20:00	1.9	SSE			
9-Feb-24	21:00	1.4	SSE			
9-Feb-24	22:00	2.1	S			
9-Feb-24	23:00	2.2	SSE			
10-Feb-24	0:00	1.8	S			
10-Feb-24	1:00	1.3	SSE			
10-Feb-24	2:00	1.4	S			
10-Feb-24	3:00	1.9	SSE			
10-Feb-24	4:00	1.7	SSE			
10-Feb-24	5:00	1.3	S			
10-Feb-24	6:00	1.5	S			
10-Feb-24	7:00	1.9	S			
10-Feb-24	8:00	2.1	S			
10-Feb-24	9:00	2.1	S			
10-Feb-24	10:00	1.7	SSW			
10-Feb-24	11:00	1.6	S			
10-Feb-24	12:00	1.9	SSW			
10-Feb-24	13:00	1.8	SSW			
10-Feb-24	14:00	1.5	S			
10-Feb-24	15:00	1.0	S			
10-Feb-24	16:00	0.9	S			
10-Feb-24	17:00	0.7	ESE			
10-Feb-24	18:00	0.0	SE			
10-Feb-24	19:00	0.1	SE			
10-Feb-24	20:00	0.1	SE			
10-Feb-24	21:00	0.1	SSE			
10-Feb-24	22:00	0.2	SSE			
10-Feb-24	23:00	0.3	S			

February 2024					
Table	II: Wind S	Speed and Direction	ns		
Date	Time	Wind Speed m/s	Direction		
11-Feb-24	0:00	0.0	SSE		
11-Feb-24	1:00	0.1	SSE		
11-Feb-24	2:00	0.7	SSE		
11-Feb-24	3:00	0.0	S		
11-Feb-24	4:00	0.0	ESE		
11-Feb-24	5:00	0.6	SW		
11-Feb-24	6:00	0.2	SSW		
11-Feb-24	7:00	0.0	Е		
11-Feb-24	8:00	0.5	SE		
11-Feb-24	9:00	1.4	S		
11-Feb-24	10:00	1.8	SSE		
11-Feb-24	11:00	1.8	S		
11-Feb-24	12:00	2.0	SSE		
11-Feb-24	13:00	1.7	SSE		
11-Feb-24	14:00	1.3	WSW		
11-Feb-24	15:00	0.5			
11-Feb-24	16:00	0.6	S S		
11-Feb-24	17:00	0.4	ESE		
11-Feb-24	18:00	0.0	S		
11-Feb-24	19:00	0.0	SE		
11-Feb-24	20:00	0.0	SE		
11-Feb-24	21:00	0.0	SE		
11-Feb-24	22:00	0.0	SE		
11-Feb-24	23:00	0.0	SSW		
12-Feb-24	0:00	0.0	SE		
12-Feb-24	1:00	0.0	S		
12-Feb-24	2:00	0.1	SSE		
12-Feb-24	3:00	0.0	S		
12-Feb-24	4:00	0.2	S		
12-Feb-24	5:00	0.2	S		
12-Feb-24	6:00	0.0	SSW		
12-Feb-24	7:00	0.0	S		
12-Feb-24	8:00	0.0	SSE		
12-Feb-24	9:00	1.6	SSW		
12-Feb-24	10:00	1.7	S		
12-Feb-24	11:00	2.2	W		
12-Feb-24	12:00	2.2	NW		
12-Feb-24	13:00	2.6	SSW		
12-Feb-24	14:00	1.6	ESE		
12-Feb-24	15:00	1.8	ESE		
12-Feb-24	16:00	1.3	SE		
12-Feb-24	17:00	1.2	SSW		
12-Feb-24	18:00	0.6	S		
12-Feb-24	19:00	0.3	SSW		
12-Feb-24	20:00	0.5	SSW		
12-Feb-24	21:00	1.8	WSW		
12-Feb-24	22:00	1.5	WSW		
12-Feb-24	23:00	0.6	S		

	Fe	ebruary 2024		1 [Febru	uary 2024	
Ta	ble II: Wii	nd Speed and Direction	ons	1 [Table	II: Wind S	Speed and Directio	ns
Date	Time	Wind Speed m/s	Direction	i i	Date	Time	Wind Speed m/s	Directio
13-Feb-24	0:00	0.5	SSE	1 1	15-Feb-24	0:00	0.2	SSW
13-Feb-24	1:00	0.4	SSW	1	15-Feb-24	1:00	0.1	SSE
13-Feb-24	2:00	0.5	S	1	15-Feb-24	2:00	0.5	S
13-Feb-24	3:00	0.0	S	1 [15-Feb-24	3:00	0.3	SSE
13-Feb-24	4:00	0.0	S	1 [15-Feb-24	4:00	0.6	SSE
13-Feb-24	5:00	0.0	SSE	1 [15-Feb-24	5:00	0.4	S
13-Feb-24	6:00	0.1	S	1 [15-Feb-24	6:00	0.4	SSE
13-Feb-24	7:00	0.2	SE	1 [15-Feb-24	7:00	0.2	SSE
13-Feb-24	8:00	0.8	SSE	1 [15-Feb-24	8:00	0.8	S
13-Feb-24	9:00	0.9	S	1 [15-Feb-24	9:00	1.2	S
13-Feb-24	10:00	0.6	S		15-Feb-24	10:00	1.3	SSW
13-Feb-24	11:00	0.4	S		15-Feb-24	11:00	0.5	SE
13-Feb-24	12:00	0.9	SSE		15-Feb-24	12:00	0.6	SSE
13-Feb-24	13:00	0.9	ESE		15-Feb-24	13:00	1.0	SE
13-Feb-24	14:00	1.2	ESE		15-Feb-24	14:00	0.9	S
13-Feb-24	15:00	1.2	SSW		15-Feb-24	15:00	0.6	SSE
13-Feb-24	16:00	1.3	SW		15-Feb-24	16:00	1.1	SE
13-Feb-24	17:00	1.8	WNW	l L	15-Feb-24	17:00	0.4	SSE
13-Feb-24	18:00	0.4	ESE	l L	15-Feb-24	18:00	0.1	SE
13-Feb-24	19:00	0.2	SE	l L	15-Feb-24	19:00	0.0	SSE
13-Feb-24	20:00	0.0	ESE	1 L	15-Feb-24	20:00	0.1	S
13-Feb-24	21:00	0.0	SW	! L	15-Feb-24	21:00	0.2	S
13-Feb-24	22:00	0.1	SSE	. L	15-Feb-24	22:00	0.2	SSE
13-Feb-24	23:00	0.0	SE	. L	15-Feb-24	23:00	0.1	SSE
14-Feb-24	0:00	0.4	SSW	l L	16-Feb-24	0:00	0.0	ESE
14-Feb-24	1:00	0.1	SSE		16-Feb-24	1:00	0.2	SSE
14-Feb-24	2:00	0.0	S		16-Feb-24	2:00	0.5	SSW
14-Feb-24	3:00	0.0	S		16-Feb-24	3:00	0.3	S
14-Feb-24	4:00	0.2	S	!	16-Feb-24	4:00	0.6	ESE
14-Feb-24	5:00	0.1	SSE	!	16-Feb-24	5:00	1.2	S
14-Feb-24	6:00	0.2	SSE	!	16-Feb-24	6:00	2.0	S
14-Feb-24	7:00	0.0	ESE	!	16-Feb-24	7:00	1.9	S
14-Feb-24	8:00	0.7	SSW	∤ ⊦	16-Feb-24	8:00	1.9	SSE
14-Feb-24	9:00	1.1	S	! ⊦	16-Feb-24	9:00	2.1	S
14-Feb-24	10:00	1.0	SSW	! ⊦	16-Feb-24	10:00	1.4	SSW
14-Feb-24	11:00	0.4	SSE	! ⊦	16-Feb-24	11:00	1.1	SSE
14-Feb-24	12:00	0.5	SE	∤ ⊦	16-Feb-24	12:00	1.8	ESE
14-Feb-24	13:00	1.7	SE	 	16-Feb-24	13:00	1.2	SE
14-Feb-24	14:00	0.9	SE	 	16-Feb-24	14:00	1.1	ESE
14-Feb-24	15:00	1.2	WSW	ł -	16-Feb-24	15:00	1.3	S
14-Feb-24	16:00	0.8	S	∤ ⊦	16-Feb-24	16:00	2.3	Wew
14-Feb-24	17:00	0.6	SSW	{	16-Feb-24	17:00	2.0	WSW
14-Feb-24	18:00	0.5	S	{	16-Feb-24 16-Feb-24	18:00	2.3	W SW
14-Feb-24	19:00	0.3	SSE	{		19:00	1.6	SW
14-Feb-24	20:00	0.1	SE S	1 F	16-Feb-24	20:00	1.6 1.0	SW SW
14-Feb-24	21:00 22:00	0.0	S	1 H	16-Feb-24	22:00	0.6	SW
14-Feb-24 14-Feb-24	23:00	0.0	S	1 H	16-Feb-24 16-Feb-24	23:00	0.6	SW
14-1700-24	23.00	0.0	ა	J L	10-170-24	23.00	0.5	_ 5 W

February 2024					
Table	II: Wind S	speed and Direction	ns		
Date	Time	Wind Speed m/s	Direction		
15-Feb-24	0:00	0.2	SSW		
15-Feb-24	1:00	0.1	SSE		
15-Feb-24	2:00	0.5	S		
15-Feb-24	3:00	0.3	SSE		
15-Feb-24	4:00	0.6	SSE		
15-Feb-24	5:00	0.4	S		
15-Feb-24	6:00	0.4	SSE		
15-Feb-24	7:00	0.2	SSE		
15-Feb-24	8:00	0.8	S		
15-Feb-24	9:00	1.2	S		
15-Feb-24	10:00	1.3	SSW		
15-Feb-24	11:00	0.5	SE		
15-Feb-24	12:00	0.6	SSE		
15-Feb-24	13:00	1.0	SE		
15-Feb-24	14:00	0.9	S		
15-Feb-24	15:00	0.6	SSE		
15-Feb-24	16:00	1.1	SE		
15-Feb-24	17:00	0.4	SSE		
15-Feb-24	18:00	0.1	SE		
15-Feb-24	19:00	0.0	SSE		
15-Feb-24	20:00	0.1	S		
15-Feb-24	21:00	0.2	S		
15-Feb-24	22:00	0.2	SSE		
15-Feb-24	23:00	0.1	SSE		
16-Feb-24	0:00	0.0	ESE		
16-Feb-24	1:00	0.2	SSE		
16-Feb-24	2:00	0.5	SSW		
16-Feb-24	3:00	0.3	S		
16-Feb-24	4:00	0.6	ESE		
16-Feb-24	5:00	1.2	S		
16-Feb-24	6:00	2.0	S		
16-Feb-24	7:00	1.9	S		
16-Feb-24	8:00	1.9	SSE		
16-Feb-24	9:00	2.1 1.4	S SSW		
16-Feb-24	10:00				
16-Feb-24 16-Feb-24	11:00	1.1	SSE ESE		
16-Feb-24	12:00 13:00	1.8 1.2	SE		
16-Feb-24	14:00	1.1	ESE		
16-Feb-24	15:00	1.3	S		
16-Feb-24	16:00	2.3	W		
16-Feb-24	17:00	2.0	WSW		
16-Feb-24	18:00	2.3	W		
16-Feb-24	19:00	1.6	SW		
16-Feb-24	20:00	1.6	SW		
16-Feb-24	21:00	1.0	SW		
16-Feb-24	22:00	0.6	S		
16-Feb-24	23:00	0.9	SW		

	February 2024					
Ta		nd Speed and Direction	ons			
Date	Time	Wind Speed m/s	Direction			
17-Feb-24	0:00	0.7	SSW			
17-Feb-24	1:00	0.7	SW			
17-Feb-24	2:00	1.1	SW			
17-Feb-24	3:00	1.8	SW			
17-Feb-24	4:00	0.8	W			
17-Feb-24	5:00	0.5	S			
17-Feb-24	6:00	1.1	SSW			
17-Feb-24	7:00	0.5	S			
17-Feb-24	8:00	0.5	S			
17-Feb-24	9:00	2.1	W			
17-Feb-24	10:00	1.8	WSW			
17-Feb-24	11:00	1.8	WSW			
17-Feb-24	12:00	1.1	WSW			
17-Feb-24	13:00	1.2	SSW			
17-Feb-24	14:00	1.5	WNW			
17-Feb-24	15:00	1.4	WSW			
17-Feb-24	16:00	1.6	WSW			
17-Feb-24	17:00	0.8	SSE			
17-Feb-24	18:00	2.7	SSW			
17-Feb-24	19:00	3.3	W			
17-Feb-24	20:00	3.9	NW			
17-Feb-24	21:00	0.9	SSW			
17-Feb-24	22:00	0.6	SW			
17-Feb-24	23:00	0.3	SE			
18-Feb-24	0:00	0.2	ESE			
18-Feb-24	1:00	0.1	SE			
18-Feb-24	2:00	0.2	SE			
18-Feb-24	3:00	0.2	SSW			
18-Feb-24	4:00	0.0	WSW			
18-Feb-24	5:00	0.0	SE			
18-Feb-24	6:00	0.2	SSW			
18-Feb-24	7:00	0.1	SSW			
18-Feb-24	8:00	0.2	SE			
18-Feb-24	9:00	0.4	SE			
18-Feb-24	10:00	1.0	S			
18-Feb-24	11:00	1.4	SSW			
18-Feb-24	12:00	1.5	SW			
18-Feb-24	13:00	1.1	SSE			
18-Feb-24	14:00	1.1	SW			
18-Feb-24	15:00	1.0	S			
18-Feb-24	16:00	1.1	SW			
18-Feb-24	17:00	1.5	SSW			
18-Feb-24	18:00	0.8	SSW			
18-Feb-24	19:00	0.7	SSW			
18-Feb-24	20:00	0.3	SSW			
18-Feb-24	21:00 22:00	0.1	WSW SSW			
18-Feb-24						
18-Feb-24	23:00	0.2	Е			

February 2024					
Table	II: Wind S	Speed and Direction	ns		
Date	Time	Wind Speed m/s	Direction		
19-Feb-24	0:00	0.2	SSW		
19-Feb-24	1:00	0.0	SE		
19-Feb-24	2:00	0.0	S		
19-Feb-24	3:00	0.0	S		
19-Feb-24	4:00	0.0	SSE		
19-Feb-24	5:00	0.0	SE		
19-Feb-24	6:00	0.1	SE		
19-Feb-24	7:00	0.2	SE		
19-Feb-24	8:00	0.3	SE		
19-Feb-24	9:00	0.8	SE		
19-Feb-24	10:00	0.7	Е		
19-Feb-24	11:00	0.8	Е		
19-Feb-24	12:00	0.9	SSE		
19-Feb-24	13:00	0.7	SE		
19-Feb-24	14:00	0.9	SE		
19-Feb-24	15:00	0.8	Е		
19-Feb-24	16:00	0.7	SSE		
19-Feb-24	17:00	1.0	WSW		
19-Feb-24	18:00	0.7	SSW		
19-Feb-24	19:00	0.8	SSE		
19-Feb-24	20:00	0.6	SW		
19-Feb-24	21:00	0.7	SSE		
19-Feb-24	22:00	0.6	S		
19-Feb-24	23:00	0.9	S		
20-Feb-24	0:00	1.0	SW		
20-Feb-24	1:00	0.6	S		
20-Feb-24	2:00	0.2	S		
20-Feb-24	3:00	0.3	SSE		
20-Feb-24	4:00	0.3	SE		
20-Feb-24	5:00	0.2	SSE		
20-Feb-24	6:00	0.6	SE		
20-Feb-24	7:00	0.3	S		
20-Feb-24	8:00	1.0	S		
20-Feb-24	9:00	1.0	SW		
20-Feb-24	10:00	1.9	SSW		
20-Feb-24	11:00	1.5	SSW		
20-Feb-24	12:00	1.1	S		
20-Feb-24	13:00	1.1	SSE		
20-Feb-24	14:00	1.2	S		
20-Feb-24	15:00	1.1	S		
20-Feb-24	16:00	1.6	SSW		
20-Feb-24	17:00	1.4	SW		
20-Feb-24	18:00	0.8	SSE		
20-Feb-24	19:00	0.9	SSW		
20-Feb-24	20:00	0.4	S		
20-Feb-24	21:00	0.9	SSE		
20-Feb-24	22:00	1.1	SSE		
20-Feb-24	23:00	0.8	S		

	Fe	ebruary 2024				Febru	uary 2024	
Ta	ble II: Wii	nd Speed and Direction	ons		Table	II: Wind S	Speed and Directio	ns
Date	Time	Wind Speed m/s	Direction	ľ	Date	Time	Wind Speed m/s	Directio
21-Feb-24	0:00	1.0	SSE	1	23-Feb-24	0:00	0.4	SSE
21-Feb-24	1:00	1.1	ESE	•	23-Feb-24	1:00	0.6	SSW
21-Feb-24	2:00	0.9	SE	•	23-Feb-24	2:00	0.6	SSE
21-Feb-24	3:00	0.6	SE	•	23-Feb-24	3:00	0.6	E
21-Feb-24	4:00	0.2	SSE	•	23-Feb-24	4:00	0.9	SSE
21-Feb-24	5:00	0.2	S		23-Feb-24	5:00	0.6	SSE
21-Feb-24	6:00	0.2	S		23-Feb-24	6:00	1.1	SSW
21-Feb-24	7:00	0.6	S	•	23-Feb-24	7:00	1.6	S
21-Feb-24	8:00	0.4	SSE	•	23-Feb-24	8:00	1.7	SSW
21-Feb-24	9:00	1.3	SW	•	23-Feb-24	9:00	2.1	S
21-Feb-24	10:00	0.9	SSE		23-Feb-24	10:00	1.9	SSW
21-Feb-24	11:00	1.8	SW		23-Feb-24	11:00	1.4	S
21-Feb-24	12:00	2.2	SW		23-Feb-24	12:00	1.6	S
21-Feb-24	13:00	1.4	SSE		23-Feb-24	13:00	1.6	SSE
21-Feb-24	14:00	1.3	SW		23-Feb-24	14:00	1.3	S
21-Feb-24	15:00	1.1	S		23-Feb-24	15:00	2.2	S
21-Feb-24	16:00	1.2	SE		23-Feb-24	16:00	1.4	SW
21-Feb-24	17:00	0.8	SSE		23-Feb-24	17:00	0.7	SW
21-Feb-24	18:00	1.6	W		23-Feb-24	18:00	1.8	S
21-Feb-24	19:00	1.6	WNW		23-Feb-24	19:00	1.0	SW
21-Feb-24	20:00	1.3	WSW		23-Feb-24	20:00	0.5	SW
21-Feb-24	21:00	0.3	ESE		23-Feb-24	21:00	0.8	S
21-Feb-24	22:00	0.1	SE		23-Feb-24	22:00	1.3	SSW
21-Feb-24	23:00	0.1	SSE		23-Feb-24	23:00	2.4	SSE
22-Feb-24	0:00	0.2	S		24-Feb-24	0:00	3.2	SSE
22-Feb-24	1:00	0.2	SSE		24-Feb-24	1:00	2.0	S
22-Feb-24	2:00	0.0	SSE		24-Feb-24	2:00	1.9	S
22-Feb-24	3:00	0.0	S		24-Feb-24	3:00	1.3	SSW
22-Feb-24	4:00	0.1	S		24-Feb-24	4:00	1.7	SSW
22-Feb-24	5:00	0.1	SSE		24-Feb-24	5:00	1.8	SSW
22-Feb-24	6:00	0.1	S		24-Feb-24	6:00	1.9	SSW
22-Feb-24	7:00	0.2	S		24-Feb-24	7:00	2.0	S
22-Feb-24	8:00	0.3	SSW		24-Feb-24	8:00	1.7	SSW
22-Feb-24	9:00	0.6	SSE	-	24-Feb-24	9:00	1.8	SSE
22-Feb-24	10:00	1.0	SSW		24-Feb-24	10:00	1.6	S
22-Feb-24	11:00	1.0	S		24-Feb-24	11:00	1.6	S
22-Feb-24	12:00	1.1	SSW		24-Feb-24	12:00	2.2	SSE
22-Feb-24	13:00	1.6	SSE		24-Feb-24	13:00	1.8	SSW
22-Feb-24	14:00	1.3	S		24-Feb-24	14:00	2.2	SSE
22-Feb-24	15:00	0.8	S		24-Feb-24	15:00	2.7	SSE
22-Feb-24	16:00	0.7	SSW		24-Feb-24	16:00	3.0	SSE
22-Feb-24	17:00	0.6	S		24-Feb-24	17:00	2.5	SSE
22-Feb-24	18:00	0.7	SE		24-Feb-24	18:00	2.9	SSE
22-Feb-24	19:00	0.6	SSE		24-Feb-24	19:00	2.5	SSE
22-Feb-24	20:00	0.6	ESE		24-Feb-24	20:00	2.6	SSE
22-Feb-24	21:00	0.9	SE ESE	}	24-Feb-24	21:00	1.6 2.0	S S
22-Feb-24	22:00		SSE		24-Feb-24 24-Feb-24	22:00		SE
22-Feb-24	23:00	0.5	SSE	ı L	24-1°CU-24	23:00	2.0	SE

	Febru	ary 2024	
Table	II: Wind S	speed and Direction	ns
Date	Time	Wind Speed m/s	Direction
23-Feb-24	0:00	0.4	SSE
23-Feb-24	1:00	0.6	SSW
23-Feb-24	2:00	0.6	SSE
23-Feb-24	3:00	0.6	Е
23-Feb-24	4:00	0.9	SSE
23-Feb-24	5:00	0.6	SSE
23-Feb-24	6:00	1.1	SSW
23-Feb-24	7:00	1.6	S
23-Feb-24	8:00	1.7	SSW
23-Feb-24	9:00	2.1	S
23-Feb-24	10:00	1.9	SSW
23-Feb-24	11:00	1.4	S S
23-Feb-24	12:00	1.6	S
23-Feb-24	13:00	1.6	SSE
23-Feb-24	14:00	1.3	S
23-Feb-24	15:00	2.2	S
23-Feb-24	16:00	1.4	SW
23-Feb-24	17:00	0.7	SW
23-Feb-24	18:00	1.8	S
23-Feb-24	19:00	1.0	SW
23-Feb-24	20:00	0.5	SW
23-Feb-24	21:00	0.8	S
23-Feb-24	22:00	1.3	SSW
23-Feb-24	23:00	2.4	SSE
24-Feb-24	0:00	3.2	SSE
24-Feb-24	1:00	2.0	S
24-Feb-24	2:00	1.9	S
24-Feb-24	3:00	1.3	SSW
24-Feb-24	4:00	1.7	SSW
24-Feb-24	5:00	1.8	SSW
24-Feb-24	6:00	1.9	SSW
24-Feb-24	7:00	2.0	S
24-Feb-24	8:00	1.7	SSW
24-Feb-24	9:00	1.8	SSE
24-Feb-24	10:00	1.6	S
24-Feb-24	11:00	1.6	S
24-Feb-24	12:00	2.2	SSE
24-Feb-24	13:00	1.8	SSW
24-Feb-24	14:00	2.2	SSE
24-Feb-24	15:00	2.7	SSE
24-Feb-24	16:00	3.0	SSE
24-Feb-24	17:00	2.5	SSE
24-Feb-24	18:00	2.9	SSE
24-Feb-24	19:00	2.5	SSE
24-Feb-24	20:00	2.6	SSE
24-Feb-24	21:00	1.6	S
24-Feb-24	22:00	2.0	S
24-Feb-24	23:00	2.0	SE

February 2024									
Table II: Wind Speed and Directions									
Date	Time	Wind Speed m/s	Direction						
			SSW						
25-Feb-24 25-Feb-24	0:00	2.0 1.9	SSW						
25-Feb-24 25-Feb-24	1:00								
	2:00	1.3	SSW						
25-Feb-24	3:00	3.0	SSE						
25-Feb-24	4:00	2.8	SSE						
25-Feb-24	5:00		S S						
25-Feb-24	6:00	2.3							
25-Feb-24	7:00	1.9 1.5	SSW						
25-Feb-24	8:00	2.1	S						
25-Feb-24	9:00		S						
25-Feb-24	10:00	2.0							
25-Feb-24	11:00	2.0	S						
25-Feb-24	12:00	1.9	S						
25-Feb-24	13:00	2.2	SSE						
25-Feb-24	14:00	2.3	SSE						
25-Feb-24	15:00	2.2	S						
25-Feb-24	16:00	1.7	S						
25-Feb-24	17:00	1.8	S						
25-Feb-24	18:00	2.0	S						
25-Feb-24	19:00	1.7	SSE						
25-Feb-24	20:00	1.6	SSE						
25-Feb-24	21:00	0.9	S						
25-Feb-24	22:00	0.7	SSE						
25-Feb-24	23:00	1.0	SSE						
26-Feb-24	0:00	0.8	S						
26-Feb-24	1:00	1.4	S						
26-Feb-24	2:00	1.2	S						
26-Feb-24	3:00	1.2	S						
26-Feb-24	4:00	1.2	SSW						
26-Feb-24	5:00	1.9	S						
26-Feb-24	6:00	2.0	SSW						
26-Feb-24	7:00	1.5	SW						
26-Feb-24	8:00	1.2	S						
26-Feb-24	9:00	1.5	S						
26-Feb-24	10:00	1.5	SSW						
26-Feb-24	11:00	1.6	S						
26-Feb-24	12:00	1.4	SSW						
26-Feb-24	13:00	1.1	SSE						
26-Feb-24	14:00	1.2	S						
26-Feb-24	15:00	0.9	SE						
26-Feb-24	16:00	1.1	S						
26-Feb-24	17:00	1.0	ESE						
26-Feb-24	18:00	0.5	SSE						
26-Feb-24	19:00	0.5	SSE						
26-Feb-24	20:00	0.4	ESE						
26-Feb-24	21:00	0.5	SSE						
26-Feb-24	22:00	0.7	S						
26-Feb-24	23:00	1.0	SSW						

	February 2024								
Table	II: Wind S	Speed and Direction	ns						
Date	Time	Wind Speed m/s	Direction						
27-Feb-24	0:00	0.8	SSW						
27-Feb-24	1:00	1.5	S						
27-Feb-24	2:00	1.7	S						
27-Feb-24	3:00	1.9	S						
27-Feb-24	4:00	2.3	SSE						
27-Feb-24	5:00	2.0	SSW						
27-Feb-24	6:00	2.5	SSW						
27-Feb-24	7:00	2.4	S						
27-Feb-24	8:00	2.1	S						
27-Feb-24	9:00	2.0	SSW						
27-Feb-24	10:00	1.6	SW						
27-Feb-24	11:00	1.4	S						
27-Feb-24	12:00	1.3	S S						
27-Feb-24	13:00	1.3	S						
27-Feb-24	14:00	1.0	SE						
27-Feb-24	15:00	0.9	SSE						
27-Feb-24	16:00	0.9	SSE						
27-Feb-24	17:00	0.7	ESE						
27-Feb-24	18:00	0.8	SE						
27-Feb-24	19:00	0.7	SE						
27-Feb-24	20:00	0.9	S						
27-Feb-24	21:00	0.5	S						
27-Feb-24	22:00	0.3	SSW						
27-Feb-24	23:00	0.2	SE						
28-Feb-24	0:00	0.2	SSE						
28-Feb-24	1:00	0.3	SSW						
28-Feb-24	2:00	0.5	SW						
28-Feb-24	3:00	0.4	SSE						
28-Feb-24	4:00	0.2	SSE						
28-Feb-24	5:00	0.7	SSW						
28-Feb-24	6:00	0.6	S						
28-Feb-24	7:00	0.5	S						
28-Feb-24	8:00	0.0	SE						
28-Feb-24	9:00	0.5	SW						
28-Feb-24	10:00	1.0	SSW						
28-Feb-24	11:00	0.8	SW						
28-Feb-24	12:00	0.7	SSE						
28-Feb-24	13:00	1.2	SW						
28-Feb-24	14:00	0.9	S						
28-Feb-24	15:00	1.3	S						
28-Feb-24	16:00	0.9	SSE						
28-Feb-24	17:00	0.5	S						
28-Feb-24	18:00	0.9	SSE						
28-Feb-24	19:00	0.7	S						
28-Feb-24	20:00	0.5	SW						
28-Feb-24	21:00	0.1	SSW						
28-Feb-24	22:00	0.0	S						
28-Feb-24	23:00	0.0	S						

APPENDIX C - WEATHERING CONDITINS DURING MONITORING PERIOD

	February 2024								
Ta	Table II: Wind Speed and Directions								
Date	Time	Wind Speed m/s	Direction						
29-Feb-24	0:00	0.0	SSE						
29-Feb-24	1:00	0.0	SSW						
29-Feb-24	2:00	0.1	SSE						
29-Feb-24	3:00	0.4	SSE						
29-Feb-24	4:00	0.3	SSW						
29-Feb-24	5:00	0.1	SSE						
29-Feb-24	6:00	0.0	SSW						
29-Feb-24	7:00	0.2	SSW						
29-Feb-24	8:00	0.1	SSE						
29-Feb-24	9:00	0.1	SSE						
29-Feb-24	10:00	0.2	SSE						
29-Feb-24	11:00	0.5	SSW						
29-Feb-24	12:00	0.9	SSE						
29-Feb-24	13:00	1.1	SSE						
29-Feb-24	14:00	0.9	S						
29-Feb-24	15:00	0.9	SSE						
29-Feb-24	16:00	1.5	SSE						
29-Feb-24	17:00	2.7	S						
29-Feb-24	18:00	2.5	S						
29-Feb-24	19:00	2.1	S						
29-Feb-24	20:00	2.7	SSE						
29-Feb-24	21:00	2.0	SSW						
29-Feb-24	22:00	3.1	S						
29-Feb-24	23:00	3.1	S						

February 2024								
Table	Table II: Wind Speed and Directions							
Date	Date Time Wind Speed m/s Direction							

APPENDIX D ENVIRONMENTAL MONITORING SCHEDULES

Contract No. KLN/2016/04

Environmental Monitoring Works for Contract No. KL/2015/02 Kai Tak Development –Stage 5A Infrastructure at Former North Apron Area Impact Air and Noise Monitoring Schedule for February 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	•			1-Feb	2-Feb	3-Feb
4-Feb	5-Feb	6-Feb	7-Feb	8-Feb	9-Feb	10-Feb
4100	3 1 00	1-hr TSP x 3 [AM2]	7 100	0 1 00	1-hr TSP x 3 [AM2]	10 1 65
		Noise [M3(A), M4 &				
	24-hr TSP [AM2(A)]			24-hr TSP [AM2(A)]		
11-Feb	12-Feb	13-Feb	14-Feb		16-Feb	17-Feb
				1-hr TSP x 3 [AM2]		
				Noise [M3(A), M4 &		
			24-hr TSP [AM2(A)]			
18-Feb	19-Feb	20-Feb			23-Feb	24-Feb
10 1 00	1) 100	1-hr TSP x 3 [AM2]	21100	22 1 00	23 1 00	21100
		Noise [M3(A), M4 &				
	24-hr TSP [AM2(A)]					24-hr TSP [AM2(A)]
25-Feb		27-Feb	28-Feb	29-Feb		
	1-hr TSP x 3 [AM2]					
	Noise [M3(A), M4 &					
	M5(C)]			24-hr TSP [AM2(A)]		
	- (- /]			- [()]		

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Air Quality Monitoring Station

AM2 - Lee Kau Yan Memorial School AM2(A) - Ng Wah Catholic Secondary School

Noise Monitoring Station

M3(A) - The Bridge connecting The Latitude M4 - Lee Kau Yan Memorial School M5(C) - Mercy Grace's Home

^{*} The noise level limit is 65dB(A) during the exam period

Contract No. KLN/2016/04

Environmental Monitoring Works for Contract No. KL/2015/02 Kai Tak Development –Stage 5A Infrastructure at Former North Apron Area Tentative Impact Air and Noise Monitoring Schedule for March 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Mar	2-Mar
					1-hr TSP x 3 [AM2]	
3-Mar	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar	9-Mar
				1-hr TSP x 3 [AM2]		
			24-hr TSP [AM2(A)]	Noise [M3(A), M4 &		
				M5(C)]		
10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar	16-Mar
			1-hr TSP x 3 [AM2]			
		A41	N			
		24-hr TSP [AM2(A)]	Noise [M3(A), M4 &			
17.14	10 M	10.14	M5(C)]	21.14	22.14	22.14
17-Mar	18-Mar	19-Mar 1-hr TSP x 3 [AM2]	20-Mar	21-Mar	22-Mar	23-Mar
		1-III 15F X 5 [AW12]				
		Noise [M3(A), M4 &				
	24-hr TSP [AM2(A)]	M5(C)]				24-hr TSP [AM2(A)]
24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar	30-Mar
27-1/1a1	1-hr TSP x 3 [AM2]	20-111	1-hr TSP x 3 [AM2]	20-11101	27-IVIAI	30-iviai
	1-m 101 x 5 [m:12]		1-III 101 X 5 [MI12]			
	Noise [M3(A), M4 &					
	M5(C)]			24-hr TSP [AM2(A)]		
31-Mar	1.20(0)]			[(11)]		
2 - 112112						

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Air Quality Monitoring Station

AM2 - Lee Kau Yan Memorial School AM2(A) - Ng Wah Catholic Secondary School

Noise Monitoring Station

M3(A) - The Bridge connecting The Latitude M4 - Lee Kau Yan Memorial School M5(C) - Mercy Grace's Home

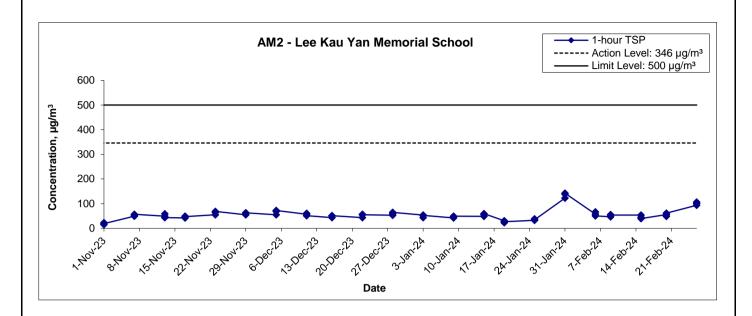
^{*} The noise level limit is 65dB(A) during the exam period

APPENDIX E 1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - 1-hour TSP Monitoring Results

Location AM2 -	Lee Kau Yaı	n Memorial School	
Date	Time	Weather	Particulate Concentration (µg/m³)
6-Feb-24	10:00	Fine	57.6
6-Feb-24	11:00	Fine	66.6
6-Feb-24	12:00	Fine	50.4
9-Feb-24	13:00	Fine	46.8
9-Feb-24	14:00	Fine	55.8
9-Feb-24	15:00	Fine	54.0
15-Feb-24	11:20	Fine	54.0
15-Feb-24	12:20	Fine	45.0
15-Feb-24	13:20	Fine	39.6
20-Feb-24	10:00	Fine	55.8
20-Feb-24	11:00	Fine	48.6
20-Feb-24	12:00	Fine	61.2
26-Feb-24	16:00	Fine	93.6
26-Feb-24	17:00	Fine	100.8
26-Feb-24	18:00	Fine	106.2
		Average	62.4
		Maximum	106.2
		Minimum	39.6

1-hr TSP Concentration Levels



Title Contract No. KLN/2016/04
Environmental Monitoring Works for Contract No. KL/2015/02
Kai Tak Development –Stage 5A Infrastructure at Former North Apron Area
Graphical Presentation of 1-hour TSP Monitoring Results

Feb 24

Е



APPENDIX F 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - 24-hour TSP Monitoring Results

Location AM2(A) - Ng Wah Catholic Secondary School

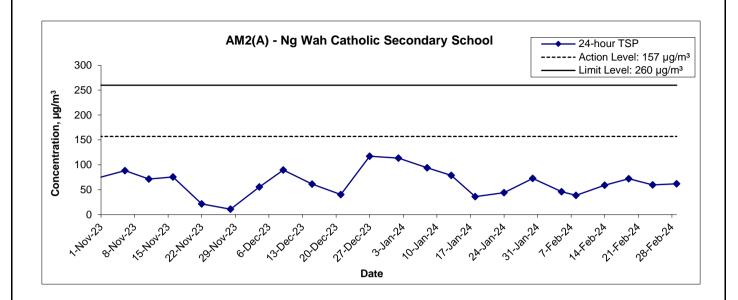
Start Date	Weather	Air Temp.	Atmospheric	Filter W	eight (g)	Particulate	Elapse	e Time	Sampling	Flow Rate	e (m³/min.)	Av. Flow	Total vol.	Conc.
Start Date	Condition	(K)	Pressure, Pa (mmHg)	Initial	Final	weight (g)	Initial	Final	Time (hrs.)	Initial	Final	(m ³ /min)	(m^3)	(µg/m³)
5-Feb-24	Fine	292.8	765.4	3.6920	3.7724	0.0804	11875.4	11899.4	24.0	1.22	1.22	1.22	1754.6	45.8
8-Feb-24	Fine	285.9	766.9	3.3306	3.3994	0.0687	11899.4	11923.4	24.0	1.23	1.23	1.23	1774.2	38.7
14-Feb-24	Sunny	294.7	765.7	3.7195	3.8229	0.1034	11923.4	11947.4	24.0	1.22	1.21	1.22	1750.0	59.1
19-Feb-24	Fine	296.3	762.2	3.2990	3.4246	0.1257	11947.4	11971.4	24.0	1.21	1.21	1.21	1742.4	72.1
24-Feb-24	Fine	291.0	766.7	3.3664	3.4713	0.1049	11971.4	11995.4	24.0	1.22	1.22	1.22	1760.5	59.6
29-Feb-24	Fine	289.0	765.6	3.3485	3.4575	0.1090	11995.4	12019.4	24.0	1.22	1.23	1.23	1764.6	61.8
													Min	38.7
													Max	72.1

Average

56.2

MA16043/App F - 24hr TSP

24-hr TSP Concentration Levels



Title Contract No. KLN/2016/04
Environmental Monitoring Works for Contract No. KL/2015/02
Kai Tak Development –Stage 5A Infrastructure at Former North Apron Area

Graphical Presentation of 24-hour TSP Monitoring Results

Scale

N.T.S

Feb 24

Project
No. MA16043
Appendix



APPENDIX G NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

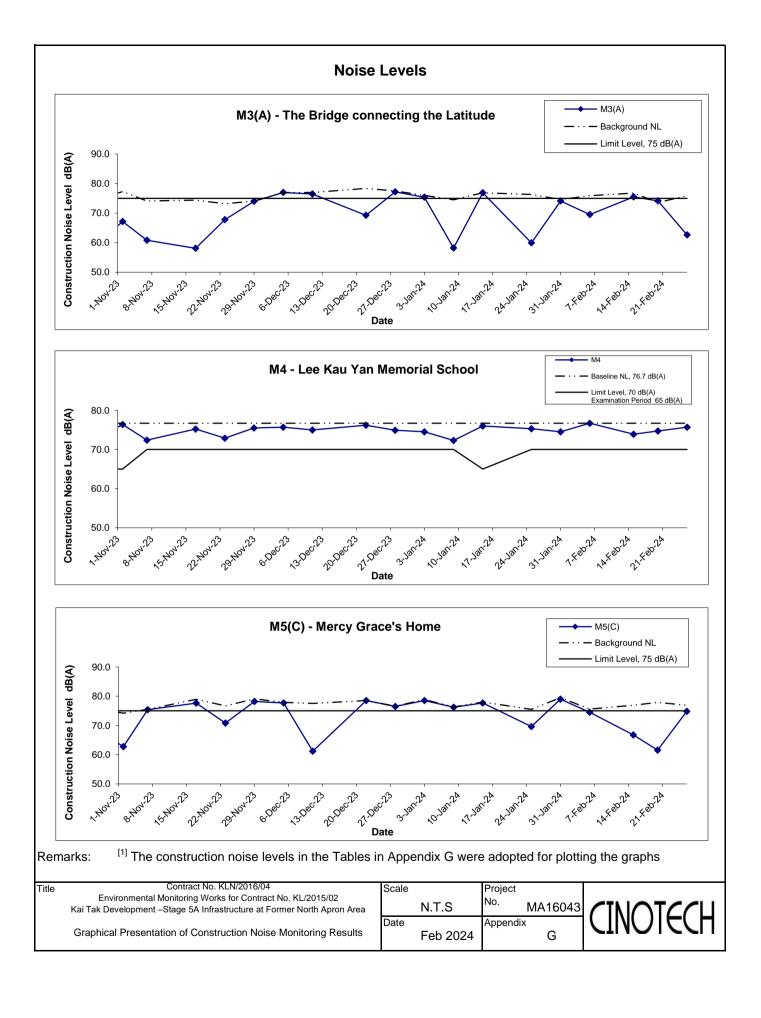
Appendix G - Noise Monitoring Results

Location M3(A) - The Bridge connecting The Latitude										
Unit: dB (A) (30-min)										
Date	Time	Weather	Measured Noise Level Background Noise Construction I				nstruction Noise Level			
			L _{eq}	L ₁₀	L 90	L _{eq}	L _{eq}			
6-Feb-24	15:00	Fine	76.8	78.1	74.1	75.9	69.5			
15-Feb-24	13:02	Sunny	75.5	78.0	72.4	76.8	75.5 Measured ≦ Backgrour			
20-Feb-24	12:53	Fine	76.9	79.0	73.9	73.6	74.2			
26-Feb-24	16:15	Fine	76.1	78.2	73.3	75.9	62.6			

Location M4 - Lee Kau Yan Memorial School										
			Unit: dB (A) (30-min)							
Date	Time	Weather	Measured Noise Level Baseline Level Construction Noise Le					nstruction Noise Level		
			L _{eq}	L ₁₀	L 90	L _{eq}		L _{eq}		
6-Feb-24	14:08	Fine	76.7	77.9	75.0		76.7	Measured ≤ Baseline		
15-Feb-24	16:41	Sunny	73.9	77.4	71.6	76.7	73.9	Measured ≤ Baseline		
20-Feb-24	11:13	Fine	74.7	76.6	72.5	76.7	74.7	Measured ≤ Baseline		
26-Feb-24	16:57	Fine	75.7	77.2	73.2		75.7	Measured ≤ Baseline		

Location M5(C) - Mercy Grace's Home										
Unit: dB (A) (30-min)										
Date	Time	Weather	Mea	sured Noise L	.evel	Background Noise	Co	nstruction Noise Level		
			L _{eq}	L ₁₀	L 90	L _{eq}		L _{eq}		
6-Feb-24	12:55	Fine	78.1	80.0	75.5	75.6	74.5			
15-Feb-24	9:47	Sunny	77.3	79.6	73.9	76.9	66.7			
20-Feb-24	10:20	Fine	78.0	80.0	74.1	77.9	61.6			
26-Feb-24	10:30	Fine	79.0	80.5	75.4	76.9	74.8			

MA16043/App G - Noise Cinotech



APPENDIX H SUMMARY OF EXCEEDANCE

Appendix H – Summary of Exceedance

Exceedance Record for Contract No. KL/2015/02 Reporting Month: February 2024

- (A) Exceedance Record for Air Quality (NIL in the reporting month)
- (B) Exceedance Record for Construction Noise (NIL in the reporting month)
- (C) Exceedance Record for Landscape and Visual (NIL in the reporting month)

APPENDIX I SITE AUDIT SUMMARY

Checklist Reference Number	240205
Date	05 February 2024 (Monday)
Time	14:00 – 16:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Noise	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection	
	G. Permits /Licences	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	No follow-up items are required from the previous site inspection (ref no.: 240129).	

	Name	Signature	Date
Recorded by	Serena Ng	<1	05 February 2024
Checked by	Charles Fung	-Chan	07 February 2024

Checklist Reference Number	240214
Date	14 February 2024 (Wednesday)
Time	14:00 – 16:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Noise	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection	
	G. Permits /Licences	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	No follow-up items are required from the previous site inspection (ref no.: 240205).	

	Name	Signature	Date
Recorded by	Serena Ng	<1	14 February 2024
Checked by	Charles Fung	-Chan	19 February 2024

Checklist Reference Number	240221
Date	21 February 2024 (Wednesday)
Time	09:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Noise	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection	
	G. Permits /Licences	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	No follow-up items are required from the previous site inspection (ref no.: 240214).	

	Name	Signature	Date
Recorded by	Charles Fung	Mas	21 February 2024
Checked by	Colman Wong	Colman	23 February 2024

Checklist Reference Number	240228
Date	28 February 2024 (Wednesday)
Time	9:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	B. Water Quality	
	No environmental deficiency was identified during site inspection.	
	C. Air Quality	
	No environmental deficiency was identified during site inspection.	
	D. Noise	
	No environmental deficiency was identified during site inspection.	
	E. Waste / Chemical Management	
	No environmental deficiency was identified during site inspection.	
	F. Visual and Landscape	
	No environmental deficiency was identified during site inspection	
	G. Permits /Licences	
	No environmental deficiency was identified during site inspection.	
	H. Others	
	No follow-up items are required from the previous site inspection (ref no.: 240221).	

	Name	Signature	Date
Recorded by	Serena Ng	<1	28 February 2024
Checked by	Charles Fung	-Chan	28 February 2024

APPENDIX J EVENT ACTION PLANS

Event/Action Plan for Air Quality

EVENT	ACTION				
	ET	IEC	ER	CONTRACTOR	
Action Level being	Identify source and investigate the	Check monitoring data submitted	1. Notify Contractor.	Rectify any unacceptable practice;	
exceeded by	causes of exceedance;	by ET;		2. Amend working methods if	
one sampling	2. Inform Contactor, IEC and ER;	2. Check Contractor's working		appropriate.	
	3. Repeat measurement to confirm finding.	method.			
Action Level being	Identify source and investigate the	Check monitoring data submitted	Confirm receipt of notification	1. Discuss with ET and IEC on proper	
exceeded by	causes of exceedance;	by ET;	of exceedance in writing;	remedial actions;	
two or more	2. Inform Contractor, IEC and ER;	2. Check Contractor's working	2. Notify Contractor;	2. Submit proposals for remedial	
consecutive	3. Increase monitoring frequency to daily;	method;	3. In consolidation with the IEC,	actions to ER and IEC within three	
sampling	4. Discuss with IEC and Contractor on	3. Discuss with ET and Contractor on	agree with the Contractor on the	working days of notification;	
	remedial actions required;	possible remedial measures;	remedial measures to be	3. Implement the agreed proposals;	
	5. Assess the effectiveness of	4. Advise the ER on the effectiveness	implemented;	4. Amend proposal if appropriate.	
	Contractor's remedial actions;	of the proposed remedial measures.	4. Supervise implementation of		
	6. If exceedance continues, arrange		remedial measures;		
	meeting with IEC and ER;		5. Conduct meeting with ET and		
	7. If exceedance stops, cease additional		IEC if exceedance continues.		
	monitoring.				
Limit Level being	Identify source and investigate the	Check monitoring data submitted	Confirm receipt of notification	Take immediate action to avoid	
exceeded by	causes of exceedance;	by ET;	of exceedance in writing;	further exceedance;	
one sampling	2. Inform Contractor, IEC, ER, and EPD;	2. Check Contractor's working	2. Notify Contractor;	2. Discuss with ET and IEC on proper	
	3. Repeat measurement to confirm finding;	method;	3. In consolidation with the IEC,	remedial actions;	
	4. Assess effectiveness of	3. Discuss with ET and Contractor on	agree with the Contractor on the	3. Submit proposals for remedial	
	Contractor's remedial actions and keep	possible remedial measures;	remedial measures to be	actions to ER and IEC within three	

	EPD, IEC and ER informed of	4. Advise the ER on the	implemented;	working days of notification;
	the results.	effectiveness of the proposed	4. Supervise implementation of	4. Implement the agreed proposals.
	the results.		·	4. Implement the agreed proposals.
		remedial measures.	remedial measures;	
			5. Conduct meeting with ET and	
			IEC if exceedance continues.	
Limit Level being	1. Notify IEC, ER, Contractor and	Check monitoring data submitted	Confirm receipt of notification	Take immediate action to avoid
exceeded by	EPD;	by ET;	of exceedance in writing;	further exceedance;
two or more	2. Repeat measurement to confirm	2. Check Contractor's working	2. Notify Contractor;	2. Discuss with ET, ER and IEC on
consecutive	findings;	method;	3. In consolidation with the IEC,	proper remedial actions;
sampling	3. Carry out analysis of Contractor's	3. Discuss amongst ER, ET, and	agree with the Contractor on the	3. Submit proposals for remedial
	working procedures to identify source and	Contractor on the potential remedial	remedial measures to be	actions to IEC within three working
	investigate the causes of exceedance;	actions;	implemented;	days of notification;
	4. Increase monitoring frequency to	4. Review Contractor's remedial	4. Supervise implementation of	4. Implement the agreed proposals;
	daily;	actions whenever necessary to	remedial measures;	5. Submit further remedial actions if
	5. Arrange meeting with IEC, ER	assure their effectiveness and	5. If exceedance continues,	problem still not under control;
	and Contractor to discuss the	advise the ER accordingly.	consider stopping the Contractor	6. Stop the relevant portion of works
	remedial actions to be taken;		to continue working on that	as instructed by the ER until the
	6. Assess effectiveness of		portion of work which causes the	exceedance is abated.
	Contractor's remedial actions and		exceedance until the	
	keep EPD, IEC and ER informed		exceedance is abated.	
	of the results;			
	7. If exceedance stops, cease additional			
	monitoring.			

Event/Action Plan for Construction Noise

EVENT	ACTION					
	ET	IEC	ER	CONTRACTOR		
Action Level	1. Notify ER, IEC and Contractor;	1. Review the investigation	1. Confirm receipt of	1. Submit noise mitigation		
being	2. Carry out investigation;	results submitted by the ET;	notification of failure in	proposals to IEC and ER;		
exceeded	3. Report the results of investigation	2. Review the proposed remedial	writing;	2. Implement noise mitigation		
	to the IEC, ER and Contractor;	measures by the Contractor and	2. Notify Contractor;	proposals.		
	4. Discuss with the IEC and	advise the ER accordingly;	3. In consolidation with the	(The above actions should be		
	Contractor on remedial measures	3. Advise the ER on the	IEC, agree with the	taken within 2 working days after		
	required;	effectiveness of the proposed	Contractor on the remedial	the exceedance is identified)		
	5. Increase monitoring frequency to	remedial measures.	measures to be implemented;			
	check mitigation effectiveness.	(The above actions should be	4. Supervise the			
	(The above actions should be taken	taken within 2 working days after	implementation of remedial			
	within 2 working days after the	the exceedance is identified)	measures.			
	exceedance is identified)		(The above actions should be			
			taken within 2 working days			
			after the exceedance is			
			identified)			
Limit Level	1. Inform IEC, ER, Contractor and	1. Discuss amongst ER, ET, and	1. Confirm receipt of	1. Take immediate action to		
being	EPD;	Contractor on the potential	notification of failure in	avoid further exceedance;		
exceeded	2. Repeat measurements to confirm	remedial actions;	writing;	2. Submit proposals for remedial		
	findings;	2. Review Contractor's remedial	2. Notify Contractor;	actions to IEC and ER within 3		
	3. Increase monitoring frequency;	actions whenever necessary to	3. In consolidation with the	working days of notification;		
	4. Identify source and investigate the	assure their effectiveness and	IEC, agree with the	3. Implement the agreed		
	cause of exceedance;	advise the ER accordingly.	Contractor on the remedial	proposals;		

5. Carry out analysis of Contractor's	(The above actions should be	measures to be implemented;	4. Submit further proposal if
working procedures;	taken within 2 working days after	4. Supervise the	problem still not under control;
6. Discuss with the IEC, Contractor	the exceedance is identified)	implementation of remedial	5. Stop the relevant portion of
and ER on remedial measures		measures;	works as instructed by the ER
required;		5. If exceedance continues,	until the exceedance is abated.
7. Assess effectiveness of		consider stopping the	(The above actions should be
Contractor's remedial actions and		Contractor to continue	taken within 2 working days after
keep IEC, EPD and ER informed of		working on that portion of	the exceedance is identified)
the results;		work which causes the	
8. If exceedance stops, cease		exceedance until the	
additional monitoring.		exceedance is abated.	
(The above actions should be taken		(The above actions should be	
within 2 working days after the		taken within 2 working days	
exceedance is identified)		after the exceedance is	
		identified)	

Event/Action Plan for Landscape and Visual

EVENT	ACTION				
ACTION LEVEL	ET	IEC	ER	CONTRACTOR	
Design Check	1. Check final	1. Check report.	Undertake remedial design if necessary		
	design conforms to	2. Recommend			
	the requirements	remedial design if			
	of EP and prepare	necessary			
	report.				
Non-conformity on one occasion	1. Identify Source	1. Check report	Notify Contractor	Amend working methods	
	2. Inform IEC and	2. Check Contractor's	2. Ensure remedial measures are properly	2. Rectify damage and	
	ER	working method	implemented	undertake any necessary	
	3. Discuss remedial	3. Discuss with ET and		replacement	
	actions with IEC,	Contractor on possible			
	ER and Contractor	remedial measures			
	4. Monitor remedial	4. Advise ER on			
	actions until	effectiveness of			
	rectification has	proposed remedial			
	been completed	measures.			
		5. Check implementation			
		of remedial measures.			
Repeated Non-conformity	1. Identify Source	1. Check monitoring	1. Notify Contractor	Amend working methods	
	Inform IEC and	report	2. Ensure remedial measures are properly	2. Rectify damage and	

ER		2. Check Contractor's	implemented	undertake any necessary
2. Inc	crease	working method		replacement
monit	nitoring	3. Discuss with ET and		
frequ	uency	Contractor on possible		
3. Dis	iscuss remedial	remedial measures		
action	ons with IEC,	4. Advise ER on		
ER a	and Contractor	effectiveness of		
4. Mo	onitor remedial	proposed remedial		
action	ons until	measures		
rectifi	ification has	5. Supervise		
been	n completed	implementation of		
5. If n	non-conformity	remedial measures.		
stops	os, cease			
addit	itional			
monit	nitoring			

APPENDIX K ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

sEIA Ref.	Recommended Mitigation Measures	Implementation Status
Constructi	ion Air Quality	
S6.5	8 times daily watering of the work site with active dust emitting activities.	۸
S6.8	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation	٨
	measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimize cumulative dust impacts.	
	Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting to	۸
	reduce dust emission.	
	Misting for the dusty material should be carried out before being loaded into the vehicle. Any vehicle with an open load carrying area should	٨
	have properly fitted side and tail boards.	
	Material having the potential to create dust should not be loaded from a level higher than the side and tail boards and should be dampened	٨
	and covered by a clean tarpaulin.	
	The tarpaulin should be properly secured and should extent at least 300 mm over the edges of the sides and tailboards. The material should	٨
	also be dampened if necessary before transportation.	
	The vehicles should be restricted to maximum speed of 10 km per hour and confined haulage and delivery vehicle to designated roadways	٨
	insider the site. Onsite unpaved roads should be compacted and kept free of lose materials.	
	Vehicle washing facilities should be provided at every vehicle exit point.	N/A(1)
	The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with	٨
	concrete, bituminous materials or hardcores.	
	• Every main haul road should be scaled with concrete and kept clear of dusty materials or sprayed with water so as to maintain the entire road	٨
	surface wet.	
	• Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the	٨
	three sides.	
	Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.	۸

S6.8	DWFI compound for JVBC:	N/A
	A DWFI compound is proposed at the downstream of JVC to contain pollution in drainage systems entering the KTAC and KTTS by	
	interception facilities until the ultimate removal of the pollution sources. Tidal barriers and desiliting facilities will form part of the	
	compounds to prevent any accumulation of sediment within the downstream section of JVBC and hence fully mitigate the potential odour	
	emissions from the headspace of JVBC near the existing discharge locations. The odour generating operations within the proposed desilting	
	compound will be fully enclosed and the odorous air will be collected and treated by high efficiency deodorizers before discharge to the	
	atmosphere.	
	Desilting compound for KTN:	N/A
	Two desilting compounds are proposed for KTN (at Site 1D6 and Site 1P1) to contain pollution in drainage systems entering the KTAC and	
	KTTS by interception facilities until the ultimate removal of the pollution sources. Tidal barriers and desiliting facilities will form part of the	
	compounds to prevent any accumulation of sediment within the downstream section of KTN and hence fully mitigate the potential odour	
	emissions from the headspace of KTN near the existing discharge locations. The odour generating operations within the proposed desilting	
	compound will be fully enclosed and the odorous air will be collected and treated by high efficiency deodorizers before discharge to the	
	atmosphere.	
	Decking or reconstruction of KTN within apron area:	N/A
	It is proposed to deck the KTN or reconstruct the KTN within the former Apron area into Kai Tak River from the south of Road D1 to the	
	north of Road D2 along the existing alignment of KTN. The Kai Tak River will compose of a number of channels flowing with nonodorous	
	fresh water and THEES effluent. The channel flowing with THEES effluent will be designed with the width of water surface of not more	
	than 16m.	
	Localised maintenance dredging:	N/A
	Localised maintenance dredging should be conducted to provide water depth of not less than 3.5m over the whole of KTAC and KTTS. With	
	reference to the water depth data recorded during the odour survey, only some of the areas in the northern part of KTAC (i.e. to the north of	
	taxiway bridge) including the area near the northern edge of KTAC, the area near western bank of KTAC, and the area near the JVC	
	discharge have water depths shallower than 3.5m. The area involved would be about 40% of the northern KTAC and the dredging depth	
	required would be from about 2.7m to less than 1m. The maintenance dredging to be carried out prior to the occupation of any new	
	development in the immediate vicinity of KTAC to avoid potential localized odour impacts at the future ASRs during the maintenance	

	dredging operation.	
	Improvement of water circulation in KTAC and KTTS:	N/A
	600m gap opening at the northern part of the former Kai Tak runway, the water circulation in KTAC and KTTS would be substantially	
	improved. Together with the improvement in water circulation, the DO level in KTAC and KTTS would also be increased.	
	In-situ sediment treatment by bioremediation:	
	Bioremediation would be applied to the entire KTAC and KTTS.	N/A
Construc	tion Noise	
S7.8	Use of quiet PME, movable barriers barrier for Asphalt Paver, Breaker, Excavator and Hand-held breaker and full enclosure for Air Compressor, Bar	۸
	Bender, Concrete Pump, Generator and Water Pump.	
S7.9	Good Site Practice:	
	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program.	٨
	Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program.	٨
	Mobile plant, if any, should be sited as far away from NSRs as possible.	
	Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down	٨
	to a minimum.	
	• Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the	۸
	nearby NSRs.	
	Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction	۸
	activities.	
S7.9	Scheduling of Construction Works during School Examination Period	٨
S7.8	(i) Provision of low noise surfacing in a section of Road L2; and	N/A
	(ii) Provision of structural fins	N/A
S7.8	(i) Avoid the sensitive façade of class room facing Road L2 and L4; and	N/A
	(ii) Provision of low noise surfacing in a section of Road L2 & L4	N/A
İ		

S7.8	(i) Provision of low noise surfacing in a section of Road L4 before occupation of Site 111; and	N/A
	(ii) Setback of building about 5m from site boundary.	N/A
S7.8	Setback of building about 35m to the northwest direction at 1L3 and 5m at Site 1L2.	N/A
S7.8	(i) avoid any sensitive façades with openable window facing the existing Kowloon City Road network; and Avoid the sensitive façade of	N/A
	class room facing Road L2 and L4; and	
	(ii) for the sensitive facades facing the To Kwa Wan direction, either setback the facades by about 5m to the northeast direction or do not	N/A
	provide the facades with openable window.	
S7.8	(i) avoid any sensitive facades with openable window facing the existing To Kwa Wan Road or	N/A
	(ii) provision of 17.5m high noise tolerant building fronting To Kwa Wan Road and restrict the height of the residential block(s) located at	N/A
	less than 55m away from To Kwa Wan Road to no more than 25m above ground	
S7.8	(i) avoid any sensitive facades with openable window facing the slip road connecting Prince Edward Road East and San Po Kong or other	۸
	alternative mitigation measures and at-source mitigation measures for the surrounding new local roads to minimise the potential traffic	
	noise impacts from the slip road	
S7.8	All the ventilation fans installed in the below will be provided with silencers or acoustics treatment.	
	(i) SPS	N/A
	(ii) ESS	N/A
	(iii) Tunnel Ventilation Shaft	N/A
	(iv) EFTS depot	N/A
S7.8	Installation of retractable roof or other equivalent measures	N/A
Construc	ion Water Quality	•
S8.8	The following mitigation measures are proposed to be incorporated in the design of the SPS at KTD, including:	
	Dual power supply or emergency generator should be provided at all the SPSs to secure electrical power supply;	N/A
	Standby pumps should be provided at all SPSs to ensure smooth operation of the SPS during maintenance of the duty pumps;	N/A
	An alarm should be installed to signal emergency high water level in the wet well at all SPSs; and	N/A
	For all unmanned SPSs, a remote monitor system connecting SPSs with the control station through telemetry system should be provided	N/A
	so that swift actions could be taken in case of malfunction of unmanned facilities	

S8.8	Construction Phase	
	Marine-based Construction	
	Capital and Maintenance Dredging for Cruise Terminal	
	Mitigation measures for construction of the proposed cruise terminal should follow those recommended in the approved EIA for CT Dredging.	N/A
S8.8	Fireboat Berth, Runway Opening and Road T2	
	Silt curtains should be deployed around the close grab dredger to minimize release of sediment and other contaminants for any dredging and filling	N/A
	activities in open water.	
S8.8	Dredging at and near the seawall area for construction of the public landing steps cum fireboat berth should be carried out at a maximum production	N/A
	rate of 1,000m³ per day using one grab dredger.	
S8.8	The proposed construction method for runway opening should adopt an approach where the existing seawall at the runway will not be removed until	N/A
	completion of all excavation and dredging works for demolition of the runway. Thus, excavation of bulk fill and majority of the dredging works will	
	be carried out behind the existing seawall, and the sediment plume can be effectively contained within the works area. As there is likely some	
	accumulation of sediments alongside the runway, there will be a need to dredge the existing seabed after completion of all the demolition works.	
	Dredging alongside the 600m opening should be carried out at a maximum production rate of 2,000m³ per day using one grab dredger.	
8.8	Dredging for Road T2 should be conducted at a maximum rate of 8,000m³ per day (using four grab dredgers) whereas the sand filling should be	N/A
	conducted at a maximum rate of 2,000m3 per day (using two grab dredgers).	
8.8	Silt screens shall be applied to seawater intakes at WSD seawater intake.	N/A

S8.8	Land-based Construction	
	Construction Runoff	
	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff	
	related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures	
	which include:	
	use of sediment traps	٨
	adequate maintenance of drainage systems to prevent flooding and overflow	۸
S8.8	Ideally, construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed	۸
	earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of	
	earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely,	
	exposed slope surfaces should be covered by tarpaulin or other means.	
S8.8	Construction site should be provided with adequately designed perimeter channel and pre-treatment facilities and proper maintenance. The	٨
	boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches	
	should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should	
	incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the	
	guidelines in Appendix A1 of ProPECC PN 1/94.	
S8.8	Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m³ capacity, are recommended as a	٨
	general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle	
	multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	
S8.8	Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m³ should be covered with tarpaulin or	٨
	similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any	
	drainage system.	
S8.8	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction	٨
	materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	
S8.8	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to	۸
	be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty	

	surface runoff during storm events.	
S8.8	Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water	N/A(1)
	drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.	
S8.8	All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on	٨
	roads. An adequately designed and located wheel washing bay should be provided at every site exit, and wash-water should have sand and silt	
	settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and	
	exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking	
	of soil and silty water to public roads and drains.	
S8.8	Drainage	
	It is recommended that on-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps	٨
	should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There should be no direct discharge	
	of effluent from the site into the sea	
S8.8	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled	٨
	release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all	
	times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction	
	work has finished or the temporary diversion is no longer required.	
S8.8	All fuel tanks and storage areas should be provided with locks and be located on sealed areas, within bunds of a capacity equal to 110% of the	٨
	storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters of the Victoria Harbour WCZ.	
S8.8	Sewage Effluent	
	Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The	٨
	construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers	
	of portable toilets should be provided by a licensed contractor to serve the large number of construction workers over the construction site. The	
	Contractor should also be responsible for waste disposal and maintenance practices.	

S8.8	Stormwater Discharges	
	Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes	۸
S8.8	Debris and Litter	
	In order to maintain water quality in acceptable conditions with regard to aesthetic quality, contractors should be required, under conditions of contract, to ensure that site management is optimised and that disposal of any solid materials, litter or wastes to marine waters does not occur	^
S8.8	Construction Works at or in Close Proximity of Storm Culvert or Seafront	
	The proposed works should preferably be carried out within the dry season where the flow in the drainage channel /storm culvert/ nullah is low.	۸
S8.8	The use of less or smaller construction plants may be specified to reduce the disturbance to the bottom sediment at the drainage channel /storm	۸
	culvert / nullah.	
S8.8	Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be	٨
	located well away from any water courses during carrying out of the construction works	
S8.8	Stockpiling of construction materials and dusty materials should be covered and located away from any water courses.	٨
S8.8	Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers.	٨
S8.8	Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable.	٨
S8.8	Mitigation measures to control site runoff from entering the nearby water environment should be implemented to minimize water quality impacts.	٨
	Surface channels should be provided along the edge of the waterfront within the work sites to intercept the runoff.	
S8.8	Construction effluent, site run-off and sewage should be properly collected and/or treated.	٨
S8.8	Any works site inside the storm water courses should be temporarily isolated, such as by placing of sandbags or silt curtains with lead edge at	N/A
	bottom and properly supported props to prevent adverse impact on the storm water quality.	
S8.8	Silt curtain may be installed around the construction activities at the seafront to minimize the potential impacts due to accidental spillage of	N/A
	construction materials.	
S8.8	Proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert/drainage channel/sea.	N/A

S8.8	Supervisory staff should be assigned to station on site to closely supervise and monitor the works	۸
S8.8	Marine water quality monitoring and audit programme shall be implemented for the proposed sediment treatment operation.	N/A
Construc	ction Waste Management	
S9.5	Good Site Practices	
	It is not anticipated that adverse waste management related impacts would arise, provided that good site practices are adhered to. Recommendations	
	for good site practices during the dredging activities include:	
	Nomination of an approved person, such as a site manager, be responsible for good site practices, arrangements for collection and effective	۸
	disposal to an appropriate facility, of all wastes generated at the site.	
	Training of site personnel in proper waste management and chemical waste handling procedures.	۸
	Provision of sufficient waste disposal points and regular collection for disposal.	۸
	Appropriate measure to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting	۸
	wastes in enclosed containers.	
	A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	۸
S9.5	Waste Reduction Measures	
	Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and	
	design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:	
	Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals	۸
	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and	۸
	their proper disposal	
	Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated	۸
	from other general refuse generated by the work force	
	Any unused chemicals or those with remaining functional capacity should be recycled	۸
	Proper storage and site practices to minimise the potential for damage or contamination of construction materials	۸

S9.5	Dredged Marine Sediment	
	The basic requirements and procedures for dredged mud disposal are specified under the ETWB TCW No. 34/2002. The management of the	N/A
	dredging, use and disposal of marine mud is monitored by the MFC, while the licensing of marine dumping is required under the Dumping at Sea	
	Ordinance and is the responsibility of the Director of Environmental Protection (DEP)	
S9.5	The dredged marine sediments would be loaded onto barges and transported to the designated disposal sites allocated by the MFC depending on	N/A
	their level of contamination. Sediment classified as Category L would be suitable for Type 1 - Open Sea Disposal. Contaminated sediment would	
	require either Type 1 – Open Sea Disposal (Dedicated Sites), Type 2 - Confined Marine Disposal, or Type 3 – Special Treatment / Disposal and must	
	be dredged and transported with great care in accordance with ETWB TCW No. 34/2002. Subject to the final allocation of the disposal sites by	
	MFC, the dredged contaminated sediment must be effectively isolated from the environment and disposed properly at the designated disposal site	
S9.5	It will be the responsibility of the contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged	
	have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report	
	to the DEP, prior to the dredging contract being tendered. The contractor for the dredging works should apply for allocation of marine disposal sites	
	and all necessary permits from relevant authorities for the disposal of dredged sediment. During transportation and disposal of the dredged marine	
	sediments requiring Type 1, Type 2, or Type 3 disposal, the following measures should be taken to minimise potential impacts on water quality:	
	Bottom opening of barges should be fitted with tight fitting seals to prevent leakage of material. Excess material should be cleaned from the	N/A
	decks and exposed fittings of barges and hopper dredgers before the vessel is moved	
	Monitoring of the barge loading should be conducted to ensure that loss of material does not take place during transportation. Transport	N/A
	barges or vessels should be equipped with automatic selfmonitoring devices as required under the Dumping at Sea Ordinance and as	
	specified by the DEP	
	Barges or hopper barges should not be filled to a level that would cause the overflow of materials or sediment laden water during loading or	N/A
	transportation	
S9.5	Construction and Demolition Material	
	Mitigation measures and good site practices should be incorporated into contract document to control potential environmental impact from handling	
	and transportation of C&D material. The mitigation measures include:	
	Where it is unavoidable to have transient stockpiles of C&D material within the Project work site pending collection for disposal, the	۸

	transient stockpiles should be located away from waterfront or storm drains as far as possible	
	• Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric	۸
	Skip hoist for material transport should be totally enclosed by impervious sheeting	۸
	• Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site	۸
	• The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with	۸
	concrete, bituminous materials or hardcores	
	The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure	۸
	dust materials do not leak from the vehicle	
	All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials	۸
	wet	
	The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation	٨
	from unloading	
	When delivering inert C&D material to public fill reception facilities, the material should consist entirely of inert construction waste and of size less	۸
	than 250mm or other sizes as agreed with the Secretary of the Public Fill Committee. In order to monitor the disposal of the surplus C&D material	
	at the designed public fill reception facility and to control fly tipping, a trip-ticket system as stipulated in the ETWB TCW No. 31/2004 "Trip Ticket	
	System for Disposal of Construction and Demolition Materials" should be included as one of the contractual requirements and implemented by an	
	Environmental Team undertaking the Environmental Monitoring and Audit work. An Independent Environmental Checker should be responsible for	
	auditing the results of the system.	
S9.5/-	Chemical Waste	
	(i) After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice	۸
	on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals should be collected by a licensed collector for disposal at the	
	CWTF or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation	
	(ii) Maintenance of vehicles and equipment involving activities with potential of leakage and spillage should only be undertaken within the areas	۸
	which are appropriately equipped to control these discharges.	

${\bf Appendix} \; K-Summary \; of \; Implementation \; Schedule \; of \; Mitigation \; Measures \; for \; Construction \; Phase$

S9.5	General R	tefuse	
	General re	efuse should be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector should be employed by	٨
	the contra	ctor to remove general refuse from the site, separately from C&D material. Effective collection and storage methods (including enclosed	
	and covere	ed area) of site wastes would be required to prevent waste materials from being blown around by wind, wastewater discharge by flushing	
	or leachin	g into the marine environment, or creating odour nuisance or pest and vermin problem	
Constructi	on Lands	cape and Visual	
S13.9	CM1	All existing trees should be carefully protected during construction.	۸
	CM2	Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to	۸
		relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees	
		should be agreed prior to commencement of the work.	
	СМЗ	Control of night-time lighting.	N/A(1)
	CM4	Erection of decorative screen hoarding.	۸

Remarks:

^	Compliance of mitigation measure
*	Recommendations were made during site audits but improved/rectified by the Contractor
#	Recommendations were made during site audits but has not yet been improved/rectified by the Contractor
•	Non-compliance but rectified by the Contractor
X	Non-compliance of mitigation measure
N/A	Not Applicable at this stage
N/A(1)	Not observed

APPENDIX L
SUMMARIES OF ENVIRONMENTAL
COMPLAINT, WARNING, SUMMON
AND NOTIFICATION OF SUCCESSFUL
PROSECUTION

Contract No. KLN/2016/04 Environmental Monitoring Works for Contract No. KL/2015/02 Kai Tak Development – Stage 5A Infrastructure at Former North Apron Area

Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution

Complaint Log

EPD Complaint Ref No.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
17-34438	Dakota Drive and Olympic Avenue	23 October 2017	The complainant concerned about the dust emission when vehicle running on the dry surface outside Dakota Drive and Olympic Avenue. In addition, vehicles were not clear enough before leaving the construction site.	In accordance with the information gathered in the investigation, construction activities were conducted with proper mitigation measures to minimize the dust impact arise from the construction site to the vicinity of this Project. Regular water spraying was provided to haul roads and unpaved areas within the site areas to reduce the dust impact arise from the construction site to the vicinity of this Project. The Contractor had also ensured vehicles and plants were wheel washed to be cleaned of mud and debris before leaving the construction site area. Therefore, the complaint is considered as non-project related. The following recommendations were made to further enhance the mitigation measures: • Where practicable, to provide sheltered area on the top and three sides for stockpiles of dusty materials, or perform frequent water spraying so as to maintain the entire surface wet; • Frequent checking and repair the gaps or broken tarpaulin sheets; and • To provide a hard-surfaced road between any cleaning facility and the public Road	Closed

Remarks: No complaint was received in the reporting month.

MA16043\App L

Contract No. KLN/2016/04 Environmental Monitoring Works for Contract No. KL/2015/02 Kai Tak Development – Stage 5A Infrastructure at Former North Apron Area

Appendix L – Summary of environmental complaint, warning, summon and notification of successful prosecution

Warnings / Summons and Successful Prosecutions received

Log Ref.	Received Date	Details of Warning / Summons and Successful Prosecutions	Investigation/Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A

Remarks: No warning/summon and prosecution was received in the reporting month.

MA16043\App L 2

APPENDIX M SUMMARY OF WASTE GENERATION AND DISPOSAL RECORDS Department: CEDD

Contract No.:

KL/2015/02

Project: Kai Tak Development - Stage 5A Infrastructure at Former North Apron Area



Monthly Summary Waste Flow Table for 2024

As at 1 March 2024

		Quantities o	f Inert C & D Ma	aterials Genera	ated Monthly		C	uantities of C &	& D Wastes Ger	nerated Month	ly
Month	Total Quantity Generated	Hard Rock and Large Broken	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ Cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m³)	(in '000m³)	(in '000m³)	(in '000m³)	(in '000m³)	(in '000m³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m³)
Jan	0.045	0	0	0	0.045	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar											
Apr											
May											
June											
Sub-total	70.255	0	0	0.406	69.849	0	0	0	0	0	2.947
July											
Aug											
Sept											
Oct											
Nov											
Dec											
Total	70.255	0	0	0.406	69.849	0	0	0	0	0	2.947

	Forecast of Total Quantities of C&D Materials to be Generated from the Contract*											
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ Cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse		
(in '000m³)	(in '000m³)	(in '000m³)	(in '000m³)	(in '000m³)	(in '000m³)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m³)		
72	0	0	1	69	0	0	0	0	0	3		

Notes:

- (1) The performance targets are given in PS clause 6(14).
- (2) The waste flow table shall also include C & D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging material.
- (4) The Contractor shall also submit the latest forcast of the total amount of C&D materials exected to be generated from the Works, together with a braskdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or excreeding 50,00 m³. (PS Cleuse 25.02A(7) refers).

APPENDIX N CONSTRUCTION PROGRAMME

Kai Tak Development

- Stage 5A Infrastructure At Former North Apron Area

Bar Chart Programme

<u> </u>		202	2	2023	3										2	024											\Box
	Anticipated Completion	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Removal of Traffic Deckings at Prince Edward Road East Outer	00.14 00		*******											-	+		-									-	
Eastbound in front of Shek Ku Lung Road Playground	29-May-23																										
- Reinstatement of Shek Ku Lung Road Playground	26-Oct-23																										
Reinstatement of Footpath of Prince Edward Road East in front of Shek Ku Lung Road Playground	27-Mar-24												### ### ### ### ### ### ### ### ### ##														
- Reinstatement of Stage 2	30-Nov-22																										
- Reinstatement of Stage 1	15-Mar-23																										
- Structural Works for LT2 & ST2	8-Feb-24																										
- Steel Works Erection for LT2 and ST2	8-Apr-24																										
- Finishing and E&M Works for LT2 and ST2	1-Oct-24																	90000									
- Road Works of Road D1 (Olympic Ave)	30-Dec-24																	00000									

Appendix B

Monthly EM&A Report For Contract No. ED/2018/01 Kai Tak Development

- Stage 4 infrastructure at the former runway and south apron



Environmental Monitoring and Audit Report for

Contract No. ED/2018/01 –

Kai Tak Development – Stage 4 infrastructure at the former runway and south apron

Contract No.: EDO 15/2018

February 2024

(Version 1.1)

Certified By: (Environmental Team Leader)



Ref.: CEDKTDS4EM00_0_0342L.24

11 March 2024

By Post and Email

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

Attention: Ms. Fanny Lau

Dear Madam,

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

Monthly EM&A Report for February 2024

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for February 2024 (Version 1.1) certified by the ET Leader and provided to us via email on 11 March 2024.

Please be advised that we have no further comment on the captioned Monthly EM&A Report in accordance with Condition 3.3 of EP-337/2009 and Condition 3.2 of EP-445/2013/B.

The ET Leader is reminded that it is the ET's responsibility to carry out the complaint investigation in accordance with the EM&A Manuals and Environmental Permits.

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

Yours faithfully, For and on behalf of Ramboll Hong Kong Limited

Y H Hui

Independent Environmental Checker

c.c. CEDD

Attn.: Mr. Jason Wong

Fax: 2739 0076

Ka Shing

Attn.: Mr. Chan Pang

By Email

Penta-Ocean Attn.: Mr. Daniel Ho

Fax: 2572 4080

Tab	ole of Content	Page
EXE	CUTIVE SUMMARY	1
	Breaches of Action and Limit Levels	1
	Complaint log	1
	Notifications of summons and successful prosecutions	2
	Report changes	2
	Key construction works in the reporting month	2
	Future key issues	3
1.	INTRODUCTION	5
	Project Background	5
	Project Organization	6
	Works Area and Construction Programme	6
	Construction works undertaken during reporting month	7
	Submission Status under the Environmental Permits	7
2.	AIR QUALITY MONITORING	8
	Monitoring Requirements	8
	Monitoring Locations	8
	Monitoring Parameters, Frequency and Duration	10
	Monitoring Equipment	11
	Monitoring Methodology and QA/QC Procedure	11
	Wind Data Monitoring	14
	Action and Limit Levels	14
	Impact Air Quality Monitoring results	14
3.	NOISE MONITORING	16
	Monitoring Requirements	16
	Monitoring Locations	16
	Monitoring Parameters. Frequency and Duration	18

	Monitoring Equipment	. 18
	Monitoring Methodology and QA/QC Procedure	. 19
	Maintenance and Calibration	. 19
	Action and Limit Levels	. 20
	Impact Noise Monitoring results	. 20
4.	COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS	. 22
5.	LANDSCAPE AND VISUAL MONITORING	. 25
	Results and Observations	. 25
6.	ENVIRONMENTAL SITE INSPECTION AND AUDIT	. 26
	Site Inspection	. 26
	Status of Waste Management	. 28
	Status of Environmental Licenses, Notification and Permits	. 28
	Implementation Status of Environmental Mitigation Measures	. 29
	Environmental Complaint and Non-compliance	. 29
	Notifications of summons and successful prosecutions	. 29
7.	FUTURE KEY ISSUES	. 31
	Construction Programme in the coming month	. 31
	Environmental Site Inspection and Monitoring Schedule for next month	. 32
8.	CONCLUSIONS	. 33
List of T	ables	
Table I	Non-compliance Record in the Reporting Month	
Table II	Summary of complaints in the Reporting Month	
Table III	Summary of summons and successful prosecutions in the Reporting Month	
Table IV	Summary of future key issues and potential impact in the coming month	
Table 1.1	Contact Information of Key Personnel	
Table 1.2	Major activities of the Project during reporting month	
Table 1.3	Summary of Status of Required Submission of EPs	

Table 2.1	Locations of Air Quality Monitoring Stations
Table 2.2	Proposed alternative monitoring locations for AM4(A)
Table 2.3	Air Quality Monitoring Parameters, Frequency and Duration
Table 2.4	Air Quality Monitoring Equipment
Table 2.5	Action and Limit Levels of 24-hour average TSP for Construction Dust Monitoring
Table 2.6	Action and Limit Levels of 1-hour average TSP for Construction Dust Monitoring
Table 2.7	Summary of 24-hour average TSP Monitoring Data during the reporting month
Table 2.8	Summary of 1-hour average TSP Monitoring Data during the reporting month
Table 3.1	Locations of Noise Monitoring Stations
Table 3.2	Proposed alternative monitoring locations for M11
Table 3.3	Noise Monitoring Parameters, Frequency and Duration
Table 3.4	Noise Monitoring Equipment
Table 3.5	Baseline Noise Level and Action and Limit Levels for Construction Noise Monitoring
Table 3.6	Summary of Noise Monitoring Data during the reporting month
Table 4.1	Comparison of 24-hour average TSP Monitoring Data with EIA predictions
Table 4.2	Comparison of 1-hour average TSP Monitoring Data with EIA predictions
Table 4.3	Comparison of Noise Monitoring Data with EIA predictions
Table 5.1	Summary of observations of Landscape and Visual impact during the reporting month
Table 6.1	Summary of site inspections observations during the reporting month
Table 6.2	Summary of Environmental Licenses, Notifications and Permits
Table 6.3	Summary of complaints in the Reporting Month
Table 6.4	Summary of summons and successful prosecutions in the Reporting Month
Table 7.1	Summary of future key issues and potential impact in the coming month

List of Figure

- Figure 1 Proposed works of Contract No. ED/2018/01
- Figure 2 Proposed Bus Stop And Associated Noise Barrier At Road D3A
- Figure 3 Future Pedestrian Connection Between Landscaped Deck And Private Developments
- Figure 4 Site Layout Plan
- Figure 5 New Opened Road on 31 December 2022
- Figure 6 Air Quality Monitoring Stations
- Figure 7 Proposed Alternative Monitoring Locations for AM4(A)
- Figure 8 Noise Monitoring Stations
- Figure 9 Proposed Alternative Monitoring Locations for M11

List of Appendices

- Appendix A Organization Chart of EM&A Team
- Appendix B Construction Programme
- Appendix C Apply permission for Environmental Monitoring
- Appendix D Environmental monitoring schedules
- Appendix E Photographic records
- Appendix F Calibration certificates, catalogue of air quality monitoring equipment
- Appendix G Weather information
- Appendix H 24-hr TSP monitoring results and graphical presentation
- Appendix I 1-hr TSP monitoring results and graphical presentation
- Appendix J Event and Action Plan for air quality
- Appendix K Calibration certificates, catalogue of noise monitoring equipment
- Appendix L Noise monitoring results and graphical presentation
- Appendix M Event and Action Plan for noise

Appendix N-Event and Action Plan for Landscape and Visual Impact

Appendix O – Waste Flow Table

Appendix P – Environmental Mitigation Implementation Schedule (EMIS)

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

EXECUTIVE SUMMARY

This is the 50th Monthly Environmental Monitoring & Audit (EM&A) report which summaries the findings of the EM&A Programme during the reporting period from 1 to 29 February 2024.

Breaches of Action and Limit Levels

- 1) 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 2) 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 3) Construction noise monitoring was conducted as scheduled in the reporting month. No Action Level and Limit Level exceedance was recorded in the reporting month.
- 4) Summary of the non-compliance in the reporting month for the Project is tabulated in Table I.

Table I Non-compliance Record in the Reporting Month

Daramatar	No. of Ex	Action Taken	
Parameter	Action Level	Limit Level	Action Taken
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Construction noise	0	0	N/A

Complaint log

5) No complaint was received in the reporting month. Summary of complaints in the reporting month is tabulated in Table II.

Table II Summary of complaints in the Reporting Month

Date of complaint received	Description of complaint	Investigation / Recommendations / Action taken	Close-out date / Status
NA	NA	NA	NA

Notifications of summons and successful prosecutions

6) No notification of summons and successful prosecutions was received in the reporting month. Summary of summons and successful prosecutions in the reporting month is tabulated in Table III.

Table III Summary of summons and successful prosecutions in the Reporting Month

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

Report changes

7) There was no reporting change in the reporting month.

Key construction works in the reporting month

- 8) Major construction activities undertake during the reporting month included:
 - Laying of stormwater drainage pipes/ sewer pipes/watermains and construction of associated manholes at Road L12d and at-grade road.
 - E&M works for Underpass 03
 - Construction of remaining works for Noise Barrier
 - Construction of RC structure for Lift LT-1 and LT-2
 - Construction of permanent railing for NDR
 - Modification works at Shing Kai Road

- Install the lift cart for Lift LT-4;
- Laying of stormwater drainage pipes/ sewer pipes/ watermains
- Waterproofing works for ELD
- Construction of Seawater Intake Box Culvert
- Concreting and RC structure of Pumping Stations
- Construction of Observation Deck
- Construction of LCSD Temporary Office;
- Construction of Harbour Steps
- Concreting and RC structure of Toilet cum Changing Room
- Construction of pedestrian street near Shing Fung Road Roundabout
- Construction of Floating Stage
- Construction of Outfall 1&2

Future key issues

9) The future key issues and potential impact in the coming month are given in Table IV.

Table IV Summary of future key issues and potential impact in the coming month

Future key issues in the coming month	Potential impact	
Construction of manholes and chambers at Shing Kai Road and the at-grade road near NDR, SDR, South Depressed Road, Lift LT-4 and Noise Barrier;	Noise and Air Quality, Chemical and Waste Management	
Watermain connection and pressure test for watermains at Shing Kai Road and at-grade road near NDR;	Noise, Air and Water Quality	
Construction of LCSD Temporary Office	Noise and Air Quality, Chemical and Waste Management	
Construction of bus stop at at-grade road and noise barrier	Noise and Air Quality, Chemical and Waste Management	
Installation of precast parapet for Bridge D3;	Noise and Air Quality, Chemical and Waste Management	
Construction of Toilet cum Changing Room;	Noise, Air and Water Quality	
Install the lift cart for Lift LT-4;	Noise and Air Quality, Chemical and Waste Management	
Construction of Pumping Stations;	Noise and Air Quality, Chemical and Waste Management	
Construction of Seawater Intake Box Culvert;	Noise and Air Quality, Chemical and Waste Management	
Construction of Lift LT-1 & LT-2;	Noise, Air and Water Quality	
Construction of Floating Stage;	Noise, Air and Water Quality	
Construction of Harbour Steps.	Noise, Air and Water Quality	
Diversion/ connection works (involving confined space) of Box Culvert	Noise and Air Quality, Chemical and Waste Management	
Construction of Outfall 1&2	Noise, Air and Water Quality	
Rising main laying works	Noise, Air and Water Quality	

Future key issues in the coming month	Potential impact
Construction of theater and dry fountain system near Toilet cum	Noise, Air and Water Quality
E&M works for Underpass D3;	Noise and Air Quality, Chemical and Waste Management
Construction of Observation Deck	Noise, Air and Water Quality

1. INTRODUCTION

Project Background

- 1.1 The Kai Tak Development (KTD) is located in the south-eastern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.
- 1.2 Contract No. ED/2018/01 Kai Tak Development stage 4 infrastructure at the former runway and south apron (The Project), comprises mainly the design and construction of a dual two- lane Road D3 (Metro Park Section), a single 2-lane Road L12d, a salt water pumping station, a sewage pumping station, landscaped deck and promenade above and adjoining Road D3 (Metro Park Section) respectively, some remaining road works at Road L14, noise barrier at Road D3A, and other associated works at the former runway and south apron. The proposed works are shown in Figure 1 and Figure 2. During the course of the Contract No. ED/2018/01, there may be modification of noise barriers in association with the construction of footbridges connecting to the landscaped deck of Road D3A by developers of adjacent lands (Figure 3). The proposed works and site boundary are shown in Figure 4.
- 1.3 The new road connecting Shing Fung Road & Shing Kai Road has been open for public vehicles since 31 December 2022. Detailed location referring to Figure 5.
- 1.4 Civil Engineering and Development Department (CEDD) had completed an Environmental Impact Assessment (EIA) and is the Permit Holder.
- 1.5 The construction work under ED/2018/01 comprises the EM&A Manuals (EIA Register Nos. AEIAR-130/2009 for Kai Tak Development and EIA Register Nos. AEIAR-170/2013 for Roads D3A and D4A) and Environmental Permit (EP) Nos. EP-337/2009 and Variation to the EP (VEP) No. EP-445/2013/B.
- 1.6 Air quality and noise monitoring has been proposed in the EM&A Manual with EIA Register Nos. AEIAR-130/2009 for Kai Tak Development while no air quality and noise monitoring are proposed in EM&A Manual with EIA Register Nos. AEIAR-170/2013 for Roads D3A and D4A.

Project Organization

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

Table 1.1 Contact Information of Key Personnel

Party	Role	Contact Person	Position	Phone No.	Fax No.
Civil Engineering and Development	eering and Project	Mr. Jason Wong	Senior Engineer	3579 2453	2739 0076
Department (CEDD)	Proponent	Ms. Chan Ka Yan	Engineer	3579 2458	2739 0076
AECOM Asia Co. Ltd. (AECOM)	Supervisor (act as Engineers' Representative (ER) listed in EM&A Manual)	Ms. Fanny Lau	CRE	3911 4201	3911 4288
Ramboll Hong Kong Limited (Ramboll)	Independent Environmental Checker (IEC)	Mr. Y H Hui	IEC	3465 2850	3465 2899
Ka Shing Management Consultant Limited (Ka Shing)	Environmental Team (ET)	Mr. Chan Pang	ET Leader	6082 2973	2120 7752
Penta-Ocean Construction Co., Ltd. (Penta-Ocean)	Contractor	Mr. Tony Tang	Environmental Officer	9433 2628	3465 8898

Works Area and Construction Programme

1.8 The construction works commenced on 20 January 2020. The construction programme of the Project is given in Appendix B.

Construction works undertaken during reporting month

1.9 Major construction works of the Project in the reporting month are summarized in Table 1.2:

Table 1.2 Major activities of the Project during reporting month

Laying of stormwater drainage pipes/ sewer pipes/watermains and construction of associated manholes at Road L12d and at-grade road	E&M works for Underpass 03
Construction of remaining works for Noise	Construction of RC structure for Lift LT-1 and
Barrier	LT-2
Construction of Permanent railing for NDR	Modification works at Shing Kai Road
Install the lift cart for Lift LT-4	Laying of stormwater drainage pipes/ sewer pipes/ watermains
Waterproofing works for ELD	Construction of Seawater Intake Box Culvert;
Concreting and RC structure of Pumping Stations	Construction of Observation Deck
Construction of LCSD Temporary Office;	Construction of Harbour Steps;
Concreting and RC structure of Toilet cum	Construction of pedestrian street near Shing
Changing Room	Fung Road Roundabout
Construction of Floating Stage	Construction of Outfall 1&2

Submission Status under the Environmental Permits

1.10 The status of required submission under Environmental Permit (EP) conditions under EP-337/2009 and Variation to the EP (VEP) No. EP-445/2013/B are summarized in Table 1.3.

Table 1.3 Summary of Status of Required Submission of EPs

EP Condition EP-337/2009	EP Condition EP-445/2013/B	Submission	Submission Date
Condition 1.11	Condition 1.12	Notification of Commencement Date of Construction of the Project	6 Jan 2020
Condition 2.3	Condition 2.3	Management Organization of Main Construction Companies	9 Sep 2019
Condition 2.3	Condition 2.3	Updated Management Organization of Main Construction Companies	17 Aug 2021
Condition 2.4	Condition 2.4	Design Drawings	6 Jan 2020
Condition 2.11	Condition 2.5	Landscape Mitigation Plans	13 Nov 2020
Condition 2.1	Condition 2.5	Landscape Mitigation Plans (Revision 2)	18 May 2021
NA	Condition 2.9	Detailed Design Plan of Traffic Noise Mitigation Measures	9 Dec 2022
Condition 3.2	NA	Baseline Monitoring Report	2 Jan 2020

EP Condition EP-337/2009	EP Condition EP-445/2013/B	Submission	Submission Date
Condition 3.2	NA	Revised Baseline Monitoring Report	28 Mar 2020
Condition 3.3	Condition 3.2	Monthly EM&A Report (January 2024)	20 Feb 2024

2. AIR QUALITY MONITORING

Monitoring Requirements

2.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009), impact air quality monitoring shall be carried out during the construction phase of the Project. For regular impact monitoring, a sampling frequency of at least once in every six says will be strictly observed at all of the monitoring stations for 24-hour TSP. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six days will be undertaken when the highest dust impact occurs.

Monitoring Locations

2.2 Three designated monitoring stations were selected for air quality monitoring programme. Impact air quality monitoring was conducted at three air quality monitoring stations in the reporting month. Table 2.1 describes the air quality monitoring locations, which are also depicted in Figure 6.

Table 2.1 Locations of Air Quality Monitoring Stations

Air Quality Monitoring Locations for the Project	Location of Measurement
AM3 - Sky Tower	Podium floor near T7
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Ground
AM7 – Hong Kong Children's Hospital	Rooftop

- 2.3 Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. No 24-TSP monitoring was conducted at AM4(A) while 1-hr TSP monitoring at AM4(A) were conducted on the ground floor with orienting to the Project site.
- 2.4 ET approached the potential sensitive receivers for monitoring station relocation since May 2022. ET conducted site visit in nearby area and found that there was no property management

- company in most of the nearby premises and could not approach the residents regarding the environmental monitoring. No permission can be applied for environmental monitoring.
- 2.5 For those premises have property management company, ET sent the proposal to owner / property management company and explained the purpose of environmental monitoring (refer to Appendix C Apply permission for Environmental Monitoring). Figure 7 shows the proposed alternative monitoring locations. No permission of setup and entry is received until the reporting month.
- 2.6 Summary of the status of for proposed alternative monitoring locations for AM4(A) are given in Table 2.2.

Table 2.2 Proposed alternative monitoring locations for AM4(A)

Proposed alternative monitoring locations for M11	Status upto reporting month
A1 - The Lok Sin Tong Modular Social Housing Scheme	Rejected application on 13 Oct 2022
A2 - Freder Centre	No reply from building management office
A3 - New Port Centre	No reply from building management office
A4 - 112 - 138 To Kwa Wan Road	No property management company and could not apply the permission.
A5 - 2 - 26 Hok Ling Street	No property management company and could not apply the permission.
A6 - 1 - 27 Hok Ling Street	No property management company and could not apply the permission.
A7 - 2 - 28 Tsun Fat Street	No property management company and could not apply the permission.
A8 - 1 - 27 Tsun Fat Street	No property management company and could not apply the permission.
A9 – 2 - 28 Yin On Street	No property management company and could not apply the permission.
A10 – 1 – 27 Yin On Street	No property management company and could not apply the permission.
A11 – 2 – 28 Shim Luen Street	No property management company and could not apply the permission.
A12 - 1 - 27 Shim Luen Street	No property management company and could not apply the permission.
A13 - 2 - 28 Hung Wan Street	No property management company and could not apply the permission.
A14 - 1 - 27 Hung Wan Street	No property management company and could not apply the permission.
A15 - 2 - 28 Pang Ching Street	No property management company and could not apply the permission.
A16 - 1 - 27 Pang Ching Street	No property management company and could not apply the permission.
A17 - 2 - 28 Ying Yeung Street	No property management company and could

Proposed alternative monitoring locations for M11	Status upto reporting month		
	not apply the permission.		
A18 - 1 - 27 Ying Yeung Street	No property management company and could not apply the permission.		
A19 - 2 - 28 Lun Cheung Street	No property management company and could not apply the permission.		
A20 - 1 - 27 Lun Cheung Street	No property management company and could not apply the permission.		
A21 - 2 - 28 Luk Ming Street	No property management company and could not apply the permission.		
A22 - 1 - 27 Luk Ming Street	No property management company and could not apply the permission.		
A23 - 2 - 28 Fung Yi Street	No property management company and could not apply the permission.		

2.7 No update for the approval of monitoring relocation in the reporting month and ET will resume the impact monitoring once the alternative monitoring location for AM4(A) are confirmed.

Monitoring Parameters, Frequency and Duration

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

Table 2.3 Air Quality Monitoring Parameters, Frequency and Duration

Air Monitoring Station	Location for Measurement	Parameter	Duration	Frequency
AM3 - Sky Tower	Podium floor near T7			
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Ground	- 24-hour average TSP - 1-hour	- 24 hours - 1 hour	Once every 6 daysThree times
AM7 - Hong Kong Children's Hospital	Rooftop	average TSP		every 6 days

- 2.9 The monitoring schedule for reporting month and next month is presented in Appendix D
- 2.10 Photographic records of the impact monitoring setup are shown in Appendix E.

Monitoring Equipment

2.11 24-hour average TSP and 1-hour average TSP levels were measured for impact monitoring. 24-hour average TSP levels were measured by the High Volume Samplers (HVS) and 1-hour average TSP levels were measured by direct reading method to indicate short-term impacts. Wind data monitoring equipment was set up at conspicuous locations for logging wind speed and wind direction near to the dust monitoring locations. Table 2.4 summarizes the equipment to be used in the air quality monitoring.

Table 2.4 Air Quality Monitoring Equipment

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

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

Monitoring Methodology and QA/QC Procedure

24-hour TSP Monitoring

Operating/Analytical Procedures

- 2.14 Setup criteria of HVS are shown as follows:
 - A horizontal platform with appropriate support to secure the samplers against gusty wind was provided.
 - No two samplers were placed less than 2m apart.
 - The distance between the sampler and an obstacle, such as buildings, was at least twice

- the height that the obstacle protrudes above the sampler.
- A minimum of 2m of separation from walls, parapets and penthouses was set for the rooftop samples.
- A minimum of 2m separation from any supporting structure, measured horizontally was set.
- No furnaces or incineration flues was nearby.
- Airflow around the sampler was unrestricted.
- Any wire fence and gate, to protect the samplers, was not caused any obstruction during monitoring.
- Permission were obtained to setup the samplers and to obtain access to the monitoring stations.
- A secured supply of electricity was provided to operate the samplers.
- 2.15 Prior to the commencement of the dust sampling, the flow rate of the HVS was properly set (between 1.1 m³/min. and 1.7 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- 2.16 For TSP sampling, Glass Fiber Filter Media 8" x 10" have a collection efficiency of > 99 % for particles of 0.3 μm diameter were used.
- 2.17 The power supply was checked to ensure the sampler worked properly and then placed any filter media at the designated air monitoring station.
- 2.18 The filter holding frame was removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.19 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure was sufficient to avoid air leakage at the edges.
- 2.20 The shelter lid was closed and secured with the aluminium strip.
- 2.21 The timer was programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.22 After sampling, the filter was removed from the HVS and put into a clean and labeled seal

plastic bag to avoid cross contamination. The elapsed time was also be recorded. The sampled filters were sent to the HOKLAS accredited or other internationally accredited laboratory for weighting.

Maintenance/Calibration

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

1-hour TSP Monitoring

Measurement Procedures

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

Maintenance/Calibration

- 2.25 The following maintenance/calibration are required for the direct dust meters:
 - To validity the accuracy of dust meter, compare the results measured by dust meter and HVS by direct reading method every 12 months throughout all stages of the air quality monitoring.

Wind Data Monitoring

- 2.26 Wind Anemometer was installed at the roof-top of AM7 Hong Kong Children's Hospital with 10m above ground and clear of constructions or turbulence caused by the buildings.
- 2.27 The wind data was captured by a data logger and the data was downloaded at least once per month for analysis.
- 2.28 The wind data monitoring equipment will be re-calibrated at least once every six months.
- 2.29 Wind direction is divided into 16 sectors of 22.5 degrees each.
- 2.30 Details of weather information during the monitoring period are shown in Appendix G.

Action and Limit Levels

2.31 The Action and Limit Levels of 24-hour average TSP and 1-hour average TSP are summarized in Table 2.5 and Table 2.6 respectively.

Table 2.5 Action and Limit Levels of 24-hour average TSP for Construction Dust Monitoring

Parameter	Air Monitoring Station	Action Level, μg/m ³	Limit Level, µg/m³
24-hour average TSP	AM3	182	260
	AM4(A)	187	260
	AM7	181	260

Table 2.6 Action and Limit Levels of 1-hour average TSP for Construction Dust Monitoring

Parameter	Air Monitoring Station	Action Level, μg/m ³	Limit Level, µg/m³
1-hour average TSP	AM3	297	500
	AM4(A)	326	500
	AM7	315	500

Impact Air Quality Monitoring results

2.32 Impact monitoring results for 24-hour average TSP and 1-hour average TSP levels at the designed air quality monitoring stations are summarized in Table 2.7 and Table 2.8

respectively.

2.33 Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. No 24-TSP monitoring was conducted at AM4(A) while 1-hr TSP monitoring at AM4(A) were conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for AM4(A) is confirmed.

Table 2.7 Summary of 24-hour average TSP Monitoring Data during the reporting month

Air Monitoring Station	Average TSP Concentration, μg/m ³	Range, μg/m ³	Action Level, μg/m ³	Limit Level, μg/m ³
AM3	40	31 – 51	182	260
AM4(A)	/	/ – /	187	260
AM7	45	34 – 59	181	260

Table 2.8 Summary of 1-hour average TSP Monitoring Data during the reporting month

Air Monitoring Station	Average TSP Concentration, µg/m ³	Range, µg/m ³	Action Level, μg/m ³	Limit Level, μg/m ³
AM3	44	28 - 64	297	500
AM4(A)	57	39 – 75	326	500
AM7	45	29 – 67	315	500

- 2.34 There was no Action and Limit Level exceedance of 24-hour average TSP and 1-hour average TSP levels recorded during the reporting month.
- 2.35 Graphical presentation and detailed monitoring results of 24-hour average TSP and 1-hour average TSP levels are shown in Appendix H and Appendix I respectively.
- 2.36 The Event and Action Plan is provided in Appendix J.
- 2.37 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

3. NOISE MONITORING

Monitoring Requirements

- 3.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009), impact noise monitoring shall be carried out during the construction phase of the Project.
- 3.2 Regular monitoring, $L_{Aeq, 30\text{-minute}}$, for each station will be on a weekly basis and conduct one set of measurements between 0700 1900 on normal weekdays.
- 3.3 If construction works are extended to include works during 1900 0700 as well as public holidays and Sundays, additional weekly impact monitoring will be carried out during the respective restricted hours periods.

Monitoring Locations

3.4 Two designated monitoring stations were selected for noise monitoring programme. Impact noise monitoring was conducted at two noise monitoring stations in the reporting month. Table 3.1 describes the noise monitoring locations, which are also depicted in Figure 8.

Table 3.1 Locations of Noise Monitoring Stations

Noise Monitoring Locations for the Project	Location of Measurement
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Ground (Façade)
M12 - Hong Kong Children's Hospital	Rooftop (Façade)

- 3.5 Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022.
- 3.6 ET approached the potential sensitive receivers for monitoring station relocation since May 2022. ET conducted site visit in nearby area and found that there was no property management company in most of the nearby premises and could not approach the residents regarding the environmental monitoring. No permission can be applied for environmental monitoring.

- 3.7 For those premises have property management company, ET sent the proposal to owner / property management company and explained the purpose of environmental monitoring (refer to Appendix C Apply permission for Environmental Monitoring). Figure 9 shows the proposed alternative monitoring locations. No permission of setup and entry is received until the reporting month.
- 3.8 Summary of the status of for proposed alternative monitoring locations for M11 are given in Table 3.2.

<u>Table 3.2 Proposed alternative monitoring locations for M11</u>

Tuble 5.2 Troposed difernative monitoring tocations for WIII				
Proposed alternative monitoring locations for M11	Status upto reporting month			
A1 - The Lok Sin Tong Modular Social Housing Scheme	Rejected application on 13 Oct 2022			
A2 - Freder Centre	No reply from building management office			
A3 - New Port Centre	No reply from building management office			
A4 - 112 - 138 To Kwa Wan Road	No property management company and could not apply the permission.			
A5 - 2 - 26 Hok Ling Street	No property management company and could not apply the permission.			
A6 - 1 - 27 Hok Ling Street	No property management company and could not apply the permission.			
A7 - 2 - 28 Tsun Fat Street	No property management company and could not apply the permission.			
A8 - 1 - 27 Tsun Fat Street	No property management company and could not apply the permission.			
A9 – 2 - 28 Yin On Street	No property management company and could not apply the permission.			
A ₁₀ – 1 – 27 Yin On Street	No property management company and could not apply the permission.			
A11 – 2 – 28 Shim Luen Street	No property management company and could not apply the permission.			
A12 - 1 - 27 Shim Luen Street	No property management company and could not apply the permission.			
A13 - 2 - 28 Hung Wan Street	No property management company and could not apply the permission.			
A14 - 1 - 27 Hung Wan Street	No property management company and could not apply the permission.			
A15 - 2 - 28 Pang Ching Street	No property management company and could not apply the permission.			
A16 - 1 - 27 Pang Ching Street	No property management company and could not apply the permission.			
A17 - 2 - 28 Ying Yeung Street	No property management company and could not apply the permission.			
A18 - 1 - 27 Ying Yeung Street	No property management company and could not apply the permission.			
A19 - 2 - 28 Lun Cheung Street	No property management company and could			

Proposed alternative monitoring locations for M11	Status upto reporting month
	not apply the permission.
A20 - 1 - 27 Lun Cheung Street	No property management company and could not apply the permission.
A21 - 2 - 28 Luk Ming Street	No property management company and could not apply the permission.
A22 - 1 - 27 Luk Ming Street	No property management company and could not apply the permission.
A23 - 2 - 28 Fung Yi Street	No property management company and could not apply the permission.

3.9 No update for the approval of monitoring relocation in the reporting month and ET will resume the impact monitoring once the alternative monitoring location for M11 are confirmed.

Monitoring Parameters, Frequency and Duration

3.10 The noise monitoring locations and monitoring frequency are listed in Table 3.3.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

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

^{*} Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022.

- 3.11 The monitoring schedule for reporting month and next month is presented in Appendix D.
- 3.12 Photographic records of the monitoring setup are shown in Appendix E.

Monitoring Equipment

3.13 As referred to in the Technical Memorandum (TM) issued under the Noise Control Ordinance (NCO), sound level meters in compliance with the IEC 61672-1 (Type 1) standard [this

standard replaced the International Electrotechnical Commission Publications 60651:1979 (Type 1) and 60804:1985 (Type 1)] were used for noise monitoring. Table 3.4 summarizes the equipment to be used in the noise monitoring.

Table 3.4 Noise Monitoring Equipment

Equipment	Model	Quantity
Sound Level Meter	RION NL52	2
Sound Level Calibrator	RION NC 74	2
Air Flowmeter	TSI TA440 Air Velocity	1

3.14 Calibration certificates, catalogue of equipment are given in Appendix K.

Monitoring Methodology and QA/QC Procedure

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

Maintenance and Calibration

3.21 The microphone head of the sound level meter and calibrator was cleaned with a soft cloth at

quarterly intervals.

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

Action and Limit Levels

3.24 The Baseline Noise Levels and Action and Limit Levels for construction noise is presented in Table 3.5.

Table 3.5 Baseline Noise Level and Action and Limit Levels for Construction Noise Monitoring

Time Period	Noise Monitoring Station	Baseline Noise Levels, dB (A)	Action Level	Limit Level ^
0700 – 1900 on	M11	68.3	When one documented	75 dB(A)
normal weekdays	M12	61.9	complaint is received.	75 db(71)

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

Impact Noise Monitoring results

- 3.25 Impact noise monitoring results at the designed noise monitoring stations are summarized in Table 3.6 respectively.
- 3.26 Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. 30-min noise monitoring at M11 were conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for M11 is confirmed.

Table 3.6 Summary of Noise Monitoring Data during the reporting month

Noise Monitoring Station	Measured L _{Aeq, 30-min} , Average, dB(A)	$\begin{array}{c} \text{Measured $L_{Aeq, 30\text{-min}},$} \\ \text{Range, $dB(A)$} \end{array}$	Action Level	Limit Level ^
M11	72.8	71.2 – 73.5	When one documented	75
M12	66.9	65.0 - 67.8	complaint is received	dB(A)

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

- 3.27 There were no Action Level exceedance of noise monitoring and Limit Level exceedance of L_{Aeq} , 30min recorded during the reporting month.
- 3.28 Graphical presentation and detailed monitoring results are shown in Appendix L.
- 3.29 The Event and Action Plan is provided in Appendix J.
- 3.30 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

4. COMPARISON OF EM&A RESULTS WITH EIA

PREDICTIONS

4.1 The environmental impacts predictions were given in Agreement No. CE 35/2006(CE) Kai Tak Development Engineering Study cum Design and Construction of Advance Works - Investigation, Design and Construction - Kai Tak Development Environmental Impact Assessment Report, EIA Register Nos. AEIAR-130/2009 for Kai Tak Development (The EIA Report). The EM&A data was compared with the EIA predictions as summarized in Table 4.1 to Table 4.3.

Table 4.1 Comparison of 24-hour average TSP Monitoring Data with EIA predictions

	ASR No. in	Predicted Cumulative Maximum 24-hour average TSP concentration		Measured 24-hr average TSP in
Air Monitoring Station	EIA report	Scenario 1 (Mid 2009 to Mid 2013),	Scenario 2 (Mid 2013 to Late 2016),	Reporting Month (February 2024) µg/m ³
		$\mu g/m^3$	$\mu g/m^3$	
AM3 - Sky Tower	A40^	106	138	31 - 51
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop*	A43^	123	195	/ – /
AM7 – Hong Kong Children's Hospital	PA60	NA	NA	34 – 59

Note:

<u>Table 4.2 Comparison of 1-hour average TSP Monitoring Data with EIA predictions</u>

		Predicted Cumulative Maximum		
		1-hour average TSP		Measured 1-hr
	ASR No. in	concentration		average TSP in
Air Monitoring Station	EIA report	Scenario 1	Scenario 2	Reporting Month
	LIA Teport	(Mid 2009 to	(Mid 2013 to	(February 2024)
		Mid 2013),	Late 2016),	$\mu g/m^3$
		$\mu g/m^3$	$\mu g/m^3$, 0
AM3 - Sky Tower	A40	217^	247^	28 - 64
AM4(A) - The Hong Kong				
Society for the Blind's Factory	A43	283^	409^	39 - 75
cum Sheltered Workshop*				
AM7 – Hong Kong Children's Hospital	PA60	NA	NA	29 – 67

Note:

[^] Prediction results are given in the Table 3.13 of the EIA report EIA Register Nos. AEIAR-130/2009 for Kai Tak Development.

^{*} Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. No 24-TSP monitoring was conducted at AM4(A) because of the assess limitation in the reporting month.

Table 4.3 Comparison of Noise Monitoring Data with EIA predictions

Noise Monitoring Station	NSR No. in EIA report	Predicted Mitigated Construction Noise Levels during Normal Daytime Working Hour LAeq, 30min, dB(A)	Measured Noise Level in Reporting Month (February 2024) L _{Aeq, 30min} , dB(A)
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop*	N18	50 – 76*	71.2 – 73.5
M12 - Hong Kong Children's Hospital	PN83, PN84, PN84A	NA	65.0 – 67.8

Note:

- 4.2 24-hr TSP monitoring result at AM3 were recorded lower than the prediction in the EIA Report. Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. No 24-TSP monitoring was conducted at AM4(A) because of the assess limitation in the reporting month. Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 4.3 No prediction in the EIA Report for 24-hour TSP monitoring results at AM7.
- 4.4 1-hour TSP monitoring results at AM3 and AM4(A) were recorded lower than the prediction in the EIA Report. Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. 1-hour TSP monitoring was conducted on the ground floor outside AM4(A) with facing to the Project Site because of the access limitation in the reporting month. Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 4.5 No prediction in the EIA Report for 1-hour TSP monitoring results at AM7.
- 4.6 Noise monitoring results at M11 were recorded lower than the prediction in the EIA Report.

[^] Prediction results are given in the Table 3.13 of the EIA report EIA Register Nos. AEIAR-130/2009 for Kai Tak Development.

^{*} Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. 1-hour TSP monitoring was conducted on the ground floor outside AM4(A) with facing to the Project Site because of the access limitation in the reporting month.

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

^{*}Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. Construction noise monitoring was conducted on the ground floor outside M11 with facing to the Project Site because of the access limitation in the reporting month.

Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. Construction noise monitoring was conducted on the ground floor outside M11 with facing to the Project Site because of the access limitation in the reporting month. Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

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

5. LANDSCAPE AND VISUAL MONITORING

5.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009 and AEIAR-170/2013), Landscape and Visual Monitoring shall be carried out during the construction phase of the Project. Regular impact monitoring will be conducted at least once per week.

Results and Observations

- 5.2 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.3 Site inspections were conducted on 1,6, 15, 22 and 29 February 2024 in the reporting month.
- 5.4 The summaries of site audits are attached in Table 5.1.

Table 5.1 Summary of observations of Landscape and Visual impact during the reporting month

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
01 February 2024	No	NA	NA
06 February 2024	No	NA	NA
15 February 2024	No	NA	NA
22 February 2024	No	NA	NA
29 February 2024	No	NA	NA

- 5.5 No non-compliance of the landscape and visual impact was recorded in the reporting month.
- 5.6 Should non-compliance of the landscape and visual impact occur, action in accordance with the action plan presented in Appendix N shall be performed.

6. ENVIRONMENTAL SITE INSPECTION AND AUDIT

Site Inspection

- 6.1 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 6.2 Site inspections were conducted on 1, 6, 15, 22 and 29 February 2024 in the reporting month.
- 6.3 The summaries of site audits are attached in Table 6.1.

Table 6.1 Summary of site inspections observations during the reporting month

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
01 February 2024	No	NA	NA
06 February 2024	Observation: The chemical, Tufguard BE, should be stored in proper area with secondary tray to prevent leakage.	Action Taken: The chemical, Tufguard BE, has been stored in the proper area with a secondary tray to prevent leakage.	Closed-out on 29 February 2024
		Action Taken:	

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
	Observation: The pack of waste battery should either be stored in chemical waste warehouse or collected by licenser for further treatment and disposal.	The pack of waste battery has been stored in chemical waste warehouse or collected by licenser for further treatment and disposal.	
15 February 2024	No	NA	NA
22 February 2024	Observation: The accumulation waste should be removed at pumping station.	Action Taken: The accumulation waste has been removed at pumping station.	Closed-out on 29 February 2024
	Observation: The oil spillage should be removed by oil absorbent at pumping station.	Action Taken: The oil spillage has been removed by oil absorbent at pumping station.	Closed-out on 29 February 2024
29 February 2024	No	NA	NA

Status of Waste Management

- 6.4 The amount of wastes generated by the major site activities of the work contracts within the Project during the reporting month is shown in Appendix O.
- 6.5 The Contractor was registered as a chemical waste producer for the Project. The Contractor was reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

Status of Environmental Licenses, Notification and Permits

6.6 A summary of the relevant permits, licenses and/or notifications on environmental protection for the Project is shown in Table 6.2.

Table 6.2 Summary of Environmental Licenses, Notifications and Permits

Environmental Licenses, Notifications and Permits	Ref. No.	Valid Form	Valid Till
Equipmental Domait and don ELAC	EP-337/2009	23 Apr 2009	N/A
Environmental Permit under EIAO	EP-445/2013/B	3 May 2022	N/A
Construction Dust Notification under APCO	445956	6 Jun 2019	N/A
Wastewater Discharge License under WPCO	WT00034610-2019	26 Sep 2019	30 Sep 2024
Waste Disposal Billing Account	7034450	28 Jun 2019	N/A
Registration as a Chemical Waste Producer	5218-286-P3182-03	18 Jul 2019	N/A
Construction Noise Permit	GW-RE0063-24	30 Jan2024	28 Jul 2024
	GW-RE0064-24	05 Feb 2024	04 Jul 2024
	GW-RE0082-24	14 Feb 2024	13 Aug 2024
	GW-RE0090-24	07 Feb 2024	29Apr2024
	GW-RE0092-24	01 Feb 2024	29 Apr 2024
	GW-RE0877-23	14 Aug 2023	13 Feb 2024
	GW-RE1252-23	19 Oct 2023	15 Apr 2024
	GW-RE1296-23	02 Nov 2023	01 Mar 2024
	GW-RE1364-23	14 Nov 2023	13 May 2024
	GW-RE1368-23	15 Nov 2023	14 May 2024
	GW-RE1436-23	01 Dec 2023	31 Mar 2024
	GW-RE1438-23	01 Dec 2023	31 Mar 2024
	GW-RE1654-23	07 Jan 2024	29 Apr 2024

Implementation Status of Environmental Mitigation Measures

- 6.7 The Contractor has implemented environmental mitigation measures and requires as stated in the EIA reports, the EP and the EM&A Manuals. The implementation status of the mitigation measures during the reporting month is summarized in Appendix P.
- 6.8 In response to the site audit findings, the Contractor carried out corrective actions with summary given in Appendix P.

Environmental Complaint and Non-compliance

6.9 No complaint was received in the reporting month. Summary of complaints in the reporting month is tabulated in Table 6.3.

Table 6.3 Summary of complaints in the Reporting Month

Date of complaint received	Description of complaint	Investigation / Recommendations / Action taken	Close-out date / Status
NA	NA	NA	NA

6.10 Complaint log and Complaint Investigation report are shown in Appendix Q.

Notifications of summons and successful prosecutions

6.11 No notification of summons and successful prosecutions was received in the reporting month. Summary of summons and successful prosecutions in the reporting month is tabulated in Table 6.4.

Table 6.4 Summary of summons and successful prosecutions in the Reporting Month

Date of receiving notification of summons or prosecutions	Description of event	Action taken	Close-out date / Status
---	----------------------	--------------	----------------------------

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

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

7. FUTURE KEY ISSUES

Construction Programme in the coming month

7.1 The major construction activities and potential impacts in the next reporting month as follow:

Table 7.1 Summary of future key issues and potential impact in the coming month

<u>1able 7.1 Summary of future key issues and potential impact in t</u>	ne coming monin
Future key issues in the coming month	Potential impact
Construction of manholes and chambers at Shing Kai Road and the at-grade road near NDR, SDR, Lift LT-4 and Noise Barrier	Noise and Air Quality, Chemical and Waste Management
Watermain connection and pressure test for watermains at Shing Kai Road and at-grade road near NDR	Noise and Air Quality, Landscape and Visual
Construction of LCSD Temporary Office	Noise and Air Quality, Chemical and Waste Management
Construction of bus stop at at-grade road and noise barrier	Noise and Air Quality, Chemical and Waste Management
Installation of precast parapet for Bridge D3	Noise and Air Quality, Chemical and Waste Management
Concreting and RC structure of Toilet cum Changing Room	Noise, Air and Water Quality
Install the lift cart for Lift LT-4	Noise and Air Quality, Chemical and Waste Management
Construction of Pumping Stations;	Noise and Air Quality, Chemical and Waste Management
Construction of Seawater Intake Box Culvert;	Noise and Air Quality, Chemical and Waste Management
Construction of Lift LT-1 & LT-2;	Noise, Air and Water Quality
Construction of Floating Stage;	Noise, Air and Water Quality
Construction of Harbour Steps	Noise, Air and Water Quality
Diversion/ connection works (involving confined space) of Box Culvert	Noise, Air and Water Quality
Construction of Outfall 1&2	Noise, Air and Water Quality
Rising main laying works	Noise, Air and Water Quality
Construction of theater and dry fountain system near Toilet cum	Noise, Air and Water Quality
E&M works for Underpass D3	Noise and Air Quality, Chemical and Waste Management
Construction of Observation Deck	Noise, Air and Water Quality

- 7.2 The mitigation measures for environmental impact including Air Quality, Construction Noise, Water Quality, Chemical and Waste Management, Landscape and Visual shall be implemented:
 - Sufficient watering of the works site with the active dust emitting activities,

- Limitation of the speed for vehicles on unpaved site roads,
- Properly cover the stockpiles,
- Good maintenance to the plant and equipment,
- Use of quieter plant and Quality Powered Mechanical Equipment (QPME),
- Provide movable noise barriers,
- Appropriate desilting/ sedimentation devices provided on site for treatment before discharge,
- Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall,
- Onsite waste sorting and implementation of trip ticket system,
- Good management and control on construction waste reduction,
- Erection of decorative screen hoarding,
- Strictly following the Environmental Permits and Licenses, and
- Provide sufficient mitigation measures as recommended in Approved EIA Reports.

Environmental Site Inspection and Monitoring Schedule for next month

7.3 The tentative schedule for weekly site inspection and air quality and noise monitoring in the next month is provided in Appendix D.

8. CONCLUSIONS

- 8.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 8.2 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. 1-hour TSP monitoring was conducted on the ground floor outside AM4(A) with facing to the Project Site because of the access limitation in the reporting month.
- 8.3 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since1 Sept 2022. No 24-hour TSP monitoring was conducted at AM4(A) because of the assess limitation in the reporting month.
- 8.4 Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded. Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. Impact monitoring was conducted on the ground floor outside M11 with facing to the Project Site because of the access limitation in the reporting month.
- 8.5 No complaint was received in the reporting month.
- 8.6 No notification of summons and successful prosecutions was received in the reporting month.

Figure

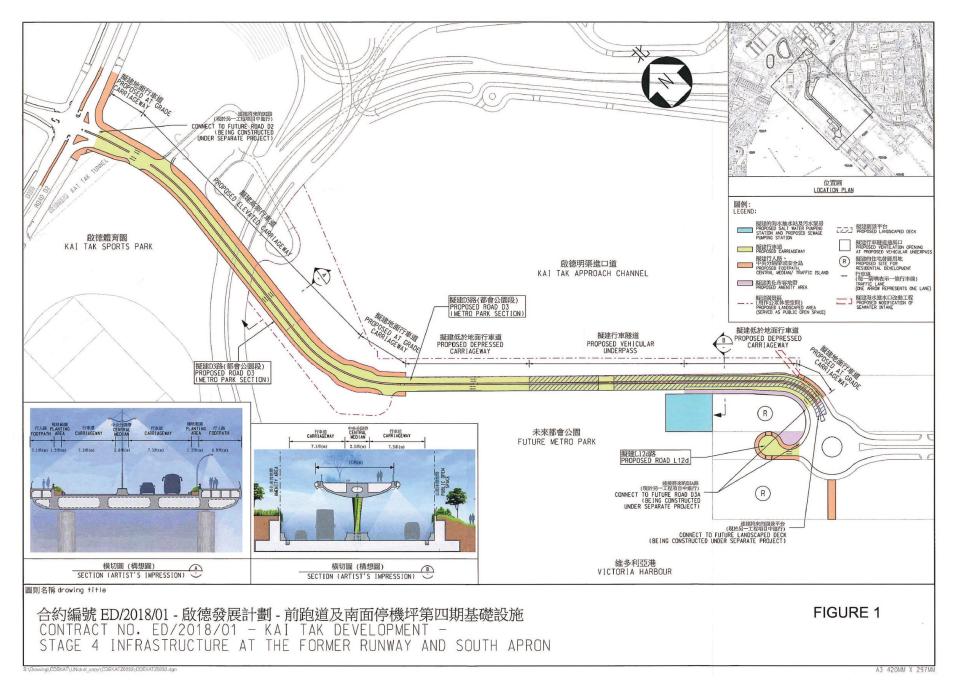


Figure 1 – Proposed works of Contract No. ED/2018/01

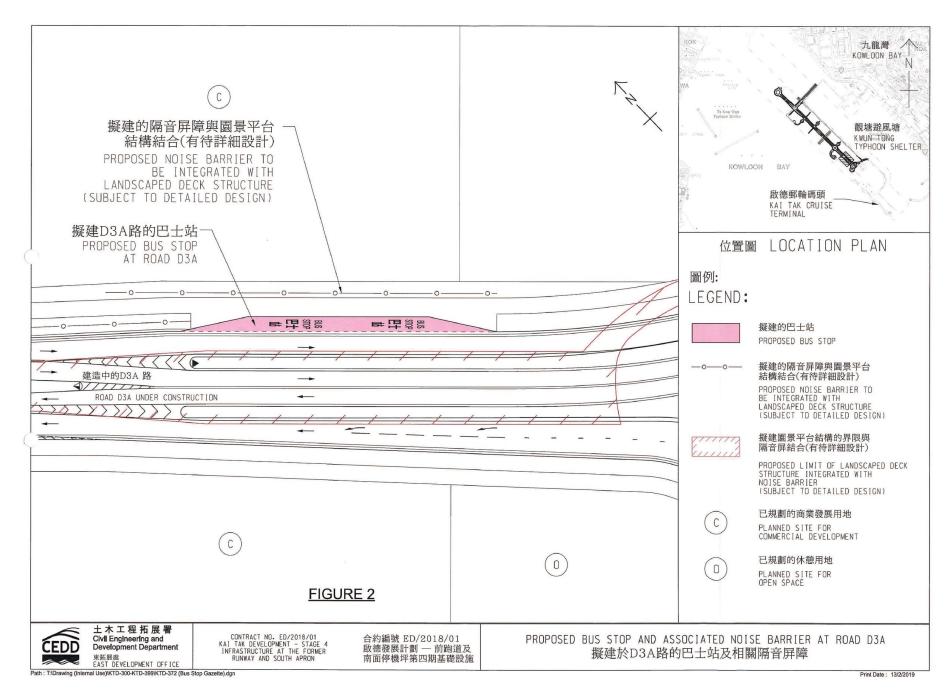


Figure 2 – Proposed Bus Stop And Associated Noise Barrier At Road D3A

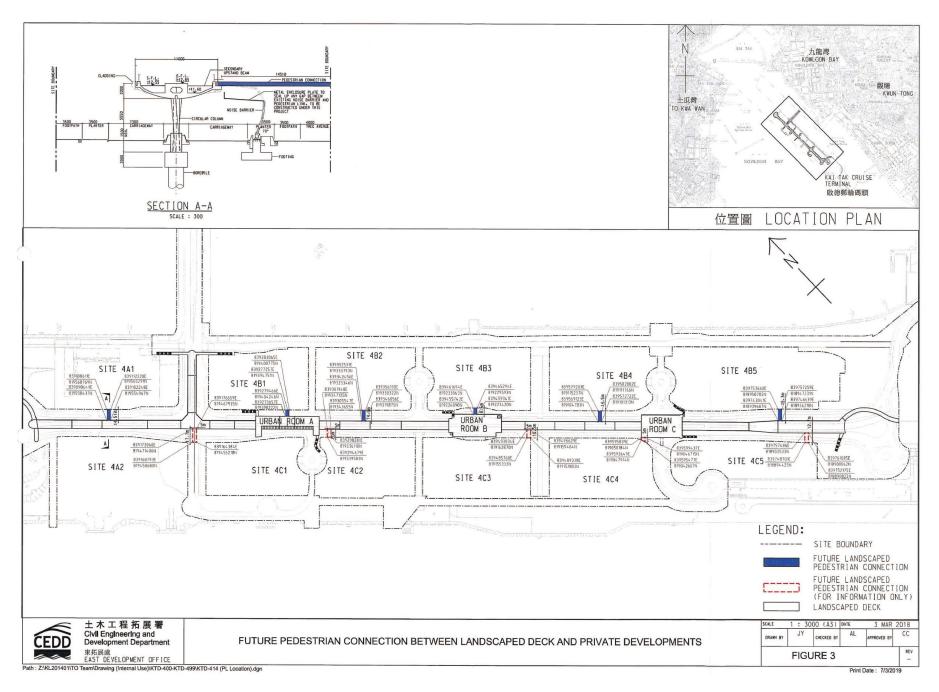


Figure 3 – Future Pedestrian Connection Between Landscaped Deck And Private Developments

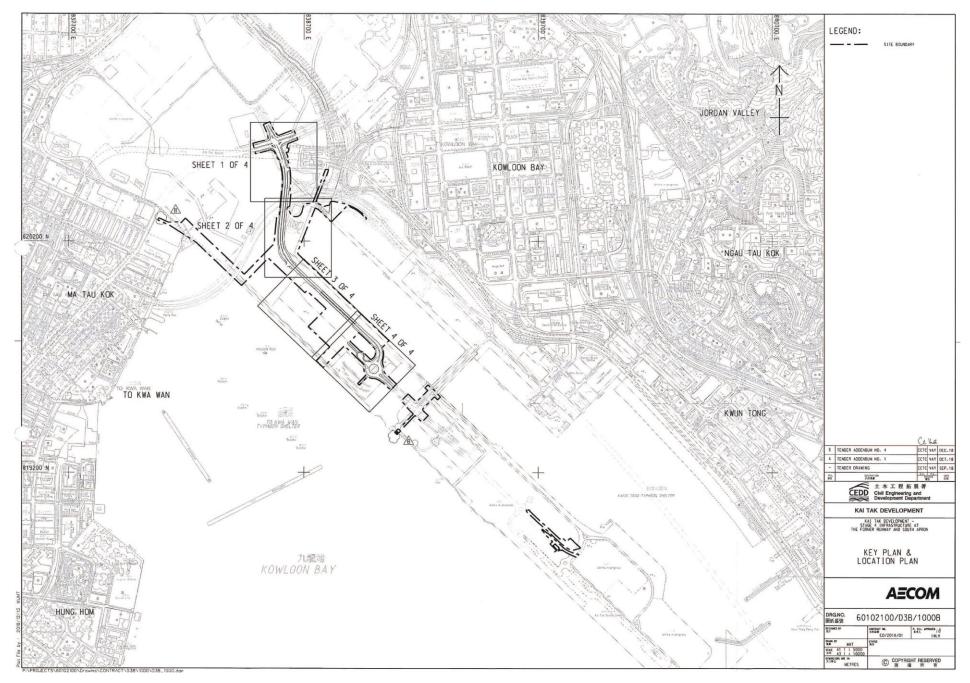
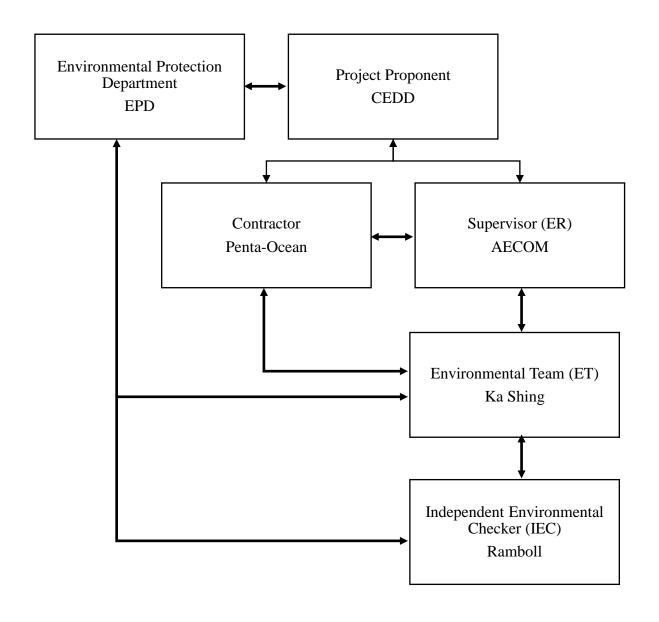


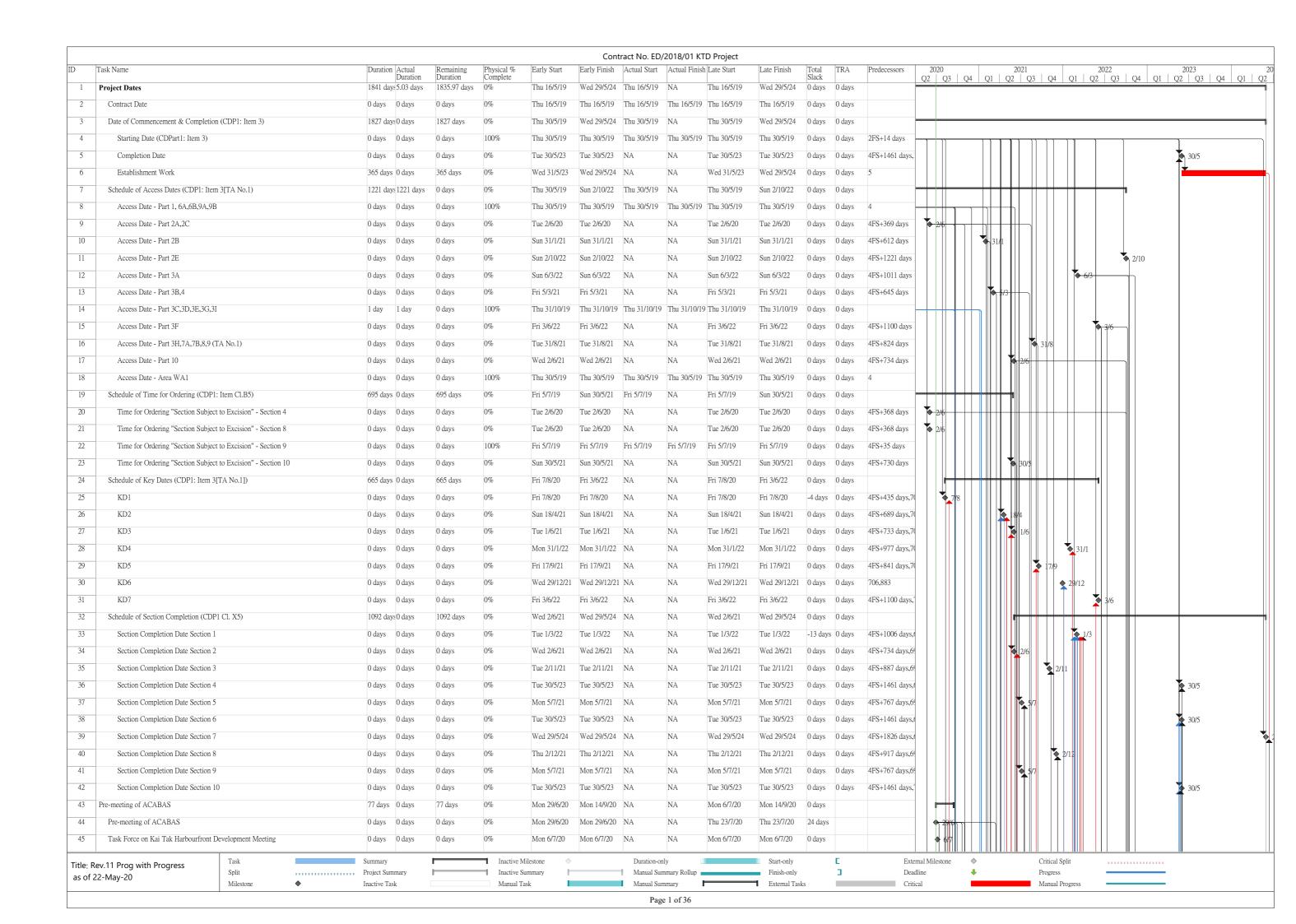
Figure 4 – Site Layout Plan

Appendix A – Organization Chart of EM&A Team



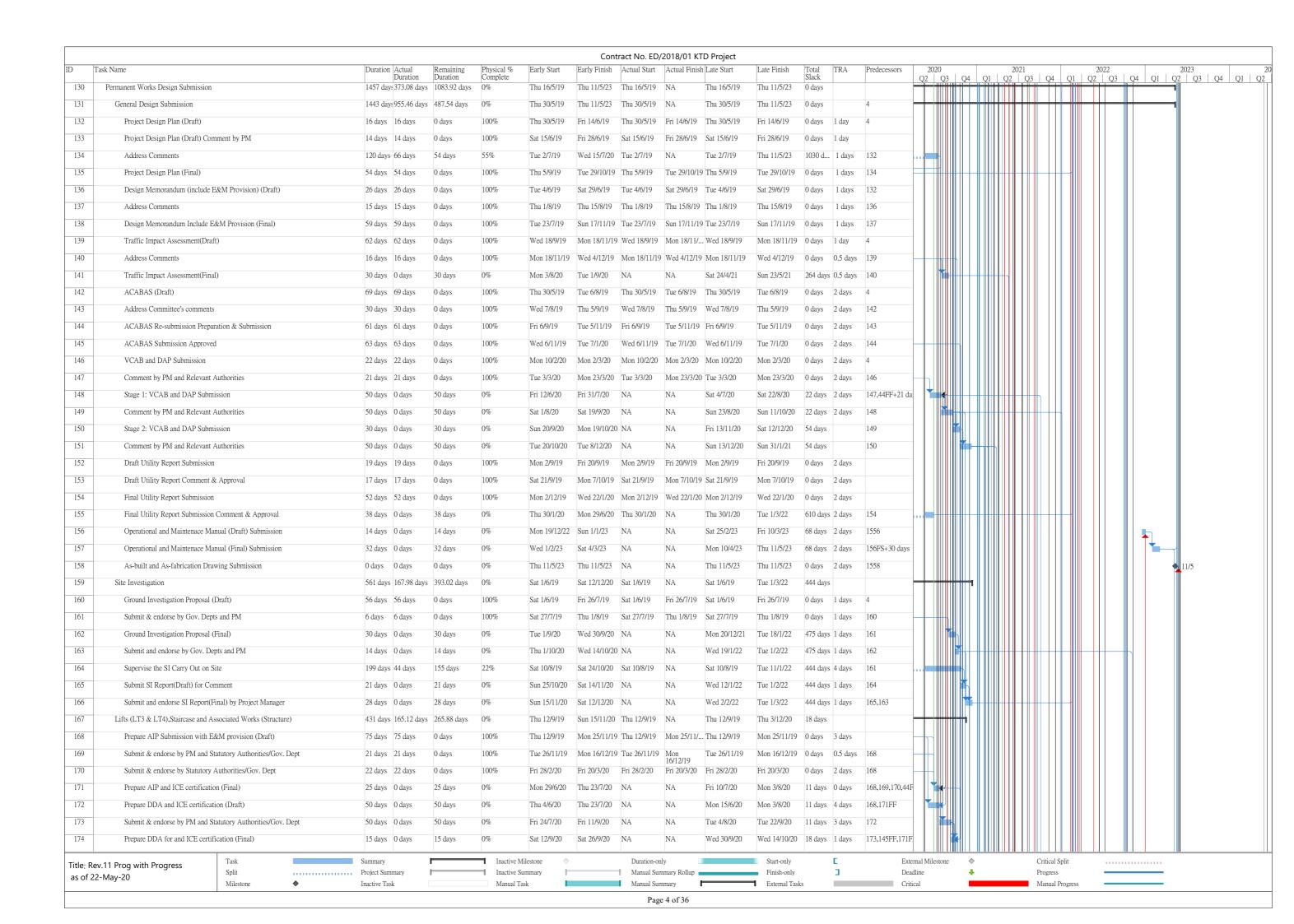
Link of communication

Appendix B – Construction Programme



							Cont	ract No. ED/	2018/01 KT	D Project												
)	Task Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA Prede		020 Q3 Q4	01 0	2021	04 01	202		2023 Q1 Q2 Q3	04
46	District Council Consultation	0 days		0 days	0%	Mon 14/9/20	Mon 14/9/20	NA	NA	Mon 14/9/20	Mon 14/9/20	0 days			14/9			V+ V1		Q3 Q4	Q1 Q2 Q3	
47	Project Manager's Instruction	8 days	8 days	0 days	0%	Thu 20/2/20	Fri 28/2/20	Thu 20/2/20	Fri 28/2/20	Thu 20/2/20	Fri 28/2/20	0 days										
48	PMI No. 001 - BIM Promenade Walk-through Video for Infrastructure in Kai Tak Stage 4	0 days	0 days	0 days	100%	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	0 days		0/2								
49	PMI No. 002 - Arranagement of Restricting Site Activities due to Spread of the Noval Coronavirus Between 29 January 2020 to 02 February 2020	0 days	0 days	0 days	100%	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	0 days		28/2								
50	Compensation Event	16 days	16 days	0 days	0%	Mon 10/2/20	Wed 26/2/20	Mon 10/2/20	Wed 26/2/20	Mon 10/2/20	Wed 26/2/20	0 days										
51	CE/001: BIM Promenade Walk-through Video for Infrastructure in Kai Tak Stage 4	0 days	0 days	0 days	100%	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	0 days		//2								
52	CE/002 - Arranagement of Restricting Site Activities due to Spread of the Noval Coronavirus Between 29 January 2020 to 02 February 2020	0 days	0 days	0 days	100%	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	0 days		16/2								
53	Early Warning	257 days	257 days	0 days	0%	Wed 10/7/19	Mon 23/3/20	Wed 10/7/19	Mon 23/3/20	Wed 10/7/19	Mon 23/3/20	0 days										
54	EW No. 001: CLP's 11kV and 132kV Cable Routing across Utility Trough of Bridge D3 and Alongside Road D3 (Metro Park Section)	0 days	0 days	0 days	100%	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	0 days										
5	EW No. 002: Deep Excavation Basement Construction Works from CKR-BEM Contract	0 days	0 days	0 days	100%	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	0 days										
56	EW No. 003: Overhang Cables of CLP Delay the Northern Depressed Road	0 days	0 days	0 days	100%	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	0 days										
57	EW No. 004: Late Commencement on Noise and Air Baseline Monitoring Delay the Northern Depressed Road CH1560 to 1720	0 days	0 days	0 days	100%	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	0 days										
8	EW No. 005: Maintain the SCL RoW which should have been diverted to the RoW Constructed by KTSP caused Disruption to the Construction of North Approach Ramp especially affect the KTD1	0 days	0 days	0 days	100%	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	0 days										
59	EW No. 006: Deferral of Design Deliverables	0 days	0 days	0 days	100%	Mon 16/12/19	Mon 16/12/19	Mon 16/12/19	Mon 16/12/	Mon 16/12/19	Mon 16/12/19	0 days										
60	EW No. 007: Delay on Driven H-piles by KTSP may affect the KD1	0 days	0 days	0 days	100%	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	0 days										
1	EW No. 008: Not Allow to Extract Sheetpiles of North Approach Ramp beside Kai Tak Sport Park as Discussed at the Interface Meeting	0 days	0 days	0 days	100%	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	0 days										
2	EW No. 010: Existing 150mm Fresh Water Pipe clashing with Bridge D3 and South Approach Ramp	0 days	0 days	0 days	100%	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	0 days										
3	EW No. 011: Additional Requirement for Special Arrangement for Design and Construction of Noise Barrier fir Future Connection of Footbridge FB10 from Development Site 4B5	0 days	0 days	0 days	100%	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	0 days										
54	EW No. 014: Planning of the Works in Revised Programme (Rev. 6)	0 days	0 days	0 days	100%	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	0 days		V2								
5	EW No. 015: Outbreak of Novel Coronavirus (Constraints on Working Time)	0 days	0 days	0 days	100%	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	0 days		/2								
5	EW No. 016: Outbreak of Novel Coronavirus (Late Supply of Agggregate)	0 days	0 days	0 days	100%	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	0 days		9/2								
7	EW No. 020: GEO Audit for Underpass D3	0 days	0 days	0 days	100%	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	0 days		13/3								
8	EW No. 021: Unforessen Underground Water at North Approach Ramp Bay 6	0 days	0 days	0 days	100%	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	0 days		12/3								
9	EW No. 022:Deferral of Interface Management Plan Submission for Noise Barrier Works	0 days	0 days	0 days	100%	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	0 days		13/3								
)	EW No. 023:Disruption of the Works due to Stockpile was not allowed to dispose to the Proposed Disposal Ground	0 days	0 days	0 days	100%	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	0 days		16/3								
1	EW No. 025: Broken Steel Casing for Bored Pile P02-BP2	0 days	0 days	0 days	100%	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	0 days		23/3								
2	Contractor's Notification of Compensation Event	14 days	0 days	14 days	0%	Thu 28/5/20	Thu 11/6/20	NA	NA	Tue 9/6/20	Tue 7/7/20	12 days		H								
3	Compensation Event (CNCE) No. 009 - Inclement Weather in April 2020	0 days	0 days	0 days	0%	Thu 28/5/20	Thu 28/5/20	NA	NA	Tue 7/7/20	Tue 7/7/20	40 days		•	-28 /5							
4	Compensation Event - Inclement Weather in May 2020	0 days	0 days	0 days	0%	Thu 11/6/20	Thu 11/6/20	NA	NA	Tue 9/6/20	Tue 9/6/20	-2 days			- 11/6							
5	Project Submission	1457 day	s 401.03 days	1055.97 days	0%	Thu 16/5/19	Thu 11/5/23	Thu 16/5/19	NA	Thu 16/5/19	Thu 11/5/23	0 days	0 days	-								
5	Submit Third Parties Insurance	71 days	71 days	0 days	100%	Tue 18/6/19	Tue 27/8/19	Tue 18/6/19	Tue 27/8/19	Tue 18/6/19	Tue 27/8/19	0 days	0 days 4									
7	Works Programme	160 days	160 days	0 days	0%	Thu 16/5/19	Tue 22/10/19	Thu 16/5/19	Thu 15/8/19	Thu 16/5/19	Tue 22/10/19	0 days										
3	Submit First Programme	20 days		0 days	100%	Thu 16/5/19	Tue 4/6/19	Thu 16/5/19	Tue 4/6/19	Thu 16/5/19	Tue 4/6/19	0 days	0 days 2									
)	Review and Comment by Project Manager	9 days		0 days	100%	Wed 5/6/19	Thu 13/6/19	Wed 5/6/19	Thu 13/6/19	Wed 5/6/19	Thu 13/6/19	0 days	0 days 78									
)	Revise and Resubmission of Works Programme	42 days		0 days	100%	Fri 14/6/19	Thu 25/7/19		Thu 25/7/19		Thu 25/7/19		0 days 79									
_	Final Review and Acceptance of the First Programme by Project Manager	20 days		0 days	100%	Sat 27/7/19	Thu 15/8/19		Thu 15/8/19		Thu 15/8/19		0 days 80									
2	Submit Health and Safety Management Plan (ACC Cl. D6(2))	6 days		0 days	100%	Thu 30/5/19	Tue 4/6/19	Thu 30/5/19			Tue 4/6/19		0.5 day 4									
3	Submit Teath and Safety Management Flan (ACC Cl. 1902)) Submit Detailed Programme for Safety Risk (ER Part 7, Cl. 7.3.4)	34 days		0 days	100%	Mon 9/12/19	Sat 11/1/20	Mon 9/12/19			Sat 11/1/20		0.5 day 4									
4 5	Submit Environmental Management Plan (ACC Cl. D20(2)) Submit BIM Models Deliverables	6 days 262 days	6 days 262 days	0 days	100%	Thu 30/5/19 Tue 13/8/19	Tue 4/6/19 Thu 30/4/20	Thu 30/5/19 Tue 13/8/19			Tue 4/6/19 Thu 30/4/20	0 days	0.5 day 4									
	Rev.11 Prog with Progress Task Split	Summary Project Sum	mary		Inactive M Inactive Su			Duration-on Manual Sun	ly 📗 nmary Rollup 🕳		Start-only Finish-only		C 3	External M Deadline		> ▶		itical Split ogress				
s of	22-May-20 Milestone	Inactive Tas			Manual Ta			Manual Sun			External Tasl		_	Critical				anual Progress				

							Cor	itract No. ED	/2018/01 KTD P	Project													
	Task Name	Duration		Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish Lat	te Start	Late Finish	Total Slack	TRA	Predecessors	2020	2 04 6		2021)	2022	04 01 1	2023	04 01
86	Existing Site Model (Topography)	46 days	Duration 46 days	0 days	100%	Tue 13/8/19	Fri 27/9/19	Tue 13/8/19	Fri 27/9/19 Tu	e 13/8/19	Fri 27/9/19	0 days	1 day		Q2 C	3 Q4 C	Q1 Q2	Q3 Q	04 Q1 C	22 Q3	Q4 Q1 0	Q2 Q3 	Q4 Q1
87	Existing Underground Utilities (UU) Model	33 days	33 days	0 days	100%	Mon 26/8/19	Fri 27/9/19	Mon 26/8/19	Fri 27/9/19 Mo	on 26/8/19	Fri 27/9/19	0 days	1 day										
88	3D Digital Survey For Existing Conditions	44 days	44 days	0 days	100%	Mon 2/9/19	Tue 15/10/19	Mon 2/9/19	Tue 15/10/19 Mo	on 2/9/19	Tue 15/10/19	0 days	1 day										
89	3D Photogrametry Model	46 days	46 days	0 days	100%	Mon 16/9/19	Thu 31/10/19	Mon 16/9/19	Thu 31/10/19 Mo	on 16/9/19	Thu 31/10/19	0 days	1 day										
90	AIP Model	16.92 day	16.92 days	0 days	100%	Fri 6/9/19	Sun 22/9/19	Fri 6/9/19	Sun 22/9/19 Fri	6/9/19	Sun 22/9/19	0 days	1 day										
91	Interfacing Contract Model	53 days	53 days	0 days	100%	Mon 9/9/19	Thu 31/10/19	Mon 9/9/19	Thu 31/10/19 Mo	on 9/9/19	Thu 31/10/19	0 days	1 day										
92	Monthly Updated BIM Model	1 day	1 day	0 days	100%	Thu 31/10/19	Thu 31/10/19	Thu 31/10/19	Thu 31/10/19 Th	u 31/10/19	Thu 31/10/19	0 days	1 day										
93	4D Model Linked Up with Programme	0 days		0 days	100%	Thu 30/4/20			Thu 30/4/20 Th			0 days			♦ 30/4								
94	Construction Method Simulation (CMS) in 3D Model	0 days		0 days	100%	Wed 22/4/20			Wed 22/4/20 We		Wed 22/4/20	0 days			\$ 22/4								
95	BIM Deliverables Schedule	896 days		892.28 days	0%	Thu 16/5/19		1 Thu 16/5/19		u 16/5/19	Tue 11/1/22	76 days			- 22								
96	Establish BIM Team	0 days		0 days	100%	Sat 3/8/19	Sat 3/8/19	Sat 3/8/19		t 3/8/19	Sat 3/8/19	0 days	1 day					'					
97	BIM Execution Plan	0 days		0 days	100%	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19 Sat		Sat 31/8/19	0 days	1										
98	BIM Submission Schedule				100%	Fri 16/8/19	Fri 16/8/19	Fri 16/8/19	Fri 16/8/19 Fri		Fri 16/8/19		_										
98	BIM 360 License	0 days	-	0 days								0 days	_										
		0 days		0 days	100%	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19 Sat		Sat 31/8/19	0 days											
.00	BIM/Drawing Management Software System	0 days		0 days	100%	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19 Sat		Sat 31/8/19	0 days											
101	CDE Setup		1 day	0 days	100%	Sat 31/8/19	Mon 9/9/19	Sat 31/8/19	Mon 9/9/19 Sat		Mon 9/9/19	0 days	-										
102	Clash Report Format	0 days	0 days	0 days	100%	Thu 12/9/19			Thu 12/9/19 Th		Thu 12/9/19	0 days	1 day										
103	Monthly Report Format	0 days	0 days	0 days	100%	Thu 12/9/19			Thu 12/9/19 Th		Thu 12/9/19	0 days											
104	Quality Assurance Plan for BIM	0 days	0 days	0 days	100%	Mon 30/9/19	Mon 30/9/19	Mon 30/9/19	Mon 30/9/19 Mo	on 30/9/19	Mon 30/9/19	0 days	1 day										
105	BIM Training Plan	0 days	0 days	0 days	100%	Thu 10/10/19	Thu 10/10/19	Thu 10/10/19	Thu 10/10/19 Th	u 10/10/19	Thu 10/10/19	0 days	1 day										
06	BIM Training Schedule for CIC Training	0 days	0 days	0 days	100%	Mon 30/9/19	Mon 30/9/19	Mon 30/9/19	Mon 30/9/19 Mo	on 30/9/19	Mon 30/9/19	0 days	1 day										
.07	Monthly BIM Progress Report	0 days	0 days	0 days	100%	Thu 16/5/19	Tue 31/12/19	Thu 16/5/19	Tue 31/12/19 Th	u 16/5/19	Tue 31/12/19	0 days	1 day		;								
108	Monthly Clash Report	1 day	1 day	0 days	100%	Tue 31/3/20	Tue 31/3/20	Tue 31/3/20	Tue 31/3/20 Tue	e 31/3/20	Tue 31/3/20	0 days	1 day										
109	BIM Object Libraries	1 day	1 day	0 days	100%	Thu 12/9/19	Thu 12/9/19	Thu 12/9/19	Thu 12/9/19 Th	u 12/9/19	Thu 12/9/19	0 days	1 day										
110	Trees Preservation and Removal Proposal (TPRP) for tress along promenade open space Submission	e 0 days	0 days	0 days	0%	Mon 2/11/20	Mon 2/11/20	NA	NA Su	n 17/1/21	Sun 17/1/21	63 days	1 day			4 2/11							
11	Trees Preservation and Removal Proposal (TPRP) for tress along promenade open space Submission Comment & Approval by Relevant Government Authories	e 360 days	0 days	360 days	0%	Mon 2/11/20	Wed 27/10/2	1 NA	NA Sui	n 17/1/21	Tue 11/1/22	76 days	1 day	110					\rightarrow				
12	Trees Preservation and Removal Proposal (TPRP) for tress along Sing Kai Submission	0 days	0 days	0 days	0%	Fri 31/7/20	Fri 31/7/20	NA	NA We	ed 30/9/20	Wed 30/9/20	52 days	1 day			31./7							
113	Trees Preservation and Removal Proposal (TPRP) for tress along Sing Kai Road Submission Comment & Approval by Relevant Government Authories	360 days	0 days	360 days	0%	Fri 31/7/20	Sun 25/7/21	NA	NA We	ed 30/9/20	Fri 24/9/21	61 days	1 day	112									
14	Temporary Traffic Management	478 days	447.84 days	30.16 days	0%	Thu 30/5/19	Fri 18/9/20	Thu 30/5/19	NA Th	u 30/5/19	Fri 25/9/20	7 days				H							
15	Submit Traffic Engineering Consultant and TTM Team Leader (PS1.16(3))	14 days	14 days	0 days	100%	Thu 30/5/19	Wed 12/6/19	Thu 30/5/19	Wed 12/6/19 Th	u 30/5/19	Wed 12/6/19	0 days	1 day	4									
16	Submit EP Mgt System Co-ordinator (PS Cl. 1.18N(2))	7 days	7 days	0 days	100%	Thu 30/5/19	Wed 5/6/19	Thu 30/5/19	Wed 5/6/19 Th	u 30/5/19	Wed 5/6/19	0 days	1 day	4									
17	Approve of EP Co-ordinator by Project Manager (PS Cl. 1.18N(2))	14 days	14 days	0 days	100%	Thu 6/6/19	Wed 19/6/19	Thu 6/6/19	Wed 19/6/19 Th	u 6/6/19	Wed 19/6/19	0 days	1 day	116									
118	Submit UU detection equipment for Supervisor approval (PS Cl. 1.25A(1))	7 days	7 days	0 days	100%	Thu 30/5/19	Wed 5/6/19	Thu 30/5/19	Wed 5/6/19 Th	u 30/5/19	Wed 5/6/19	0 days	1 day	4									
119	Submit & obtain approval: site office's location and layout plan (PS Cl. 1.45(11)) (7d	47 days	47 days	0 days	100%	Thu 30/5/19	Fri 18/10/19	Thu 30/5/19	Fri 18/10/19 Th	u 30/5/19	Fri 18/10/19	0 days	1 day	4									
20	submission + 14d approval) Submit Site survey record (PS Cl.1.47(7))	34 days	34 days	0 days	100%	Thu 30/5/19	Tue 2/7/19	Thu 30/5/19	Tue 2/7/19 Th	u 30/5/19	Tue 2/7/19	0 days	1 day	4									
21	Submit & obtain approval: fencing & hoarding plan (PS Cl. 1.48(10)	40 days		40 days	0%	Mon 10/8/20		NA			Fri 25/9/20		0.5 days	4									
22	Submit site facilities (PS Cl. 1.50S)	65 days		0 days	100%	Thu 30/5/19	Fri 2/8/19	Thu 30/5/19		u 30/5/19	Fri 2/8/19		0.5 days										
23	Submit security system (PS Cl. 1.53A(5))	36 days		0 days	100%	Thu 30/5/19	Thu 4/7/19		Thu 4/7/19 Th		Thu 4/7/19		0.5 days	4	$\parallel \parallel \parallel$								
24	Submit Interface Management Plan (PS Cl. 1.89(2))	47 days		0 days	100%	Thu 30/5/19			Mon 15/7/19 Th		Mon 15/7/19		0.5 days	4	$\parallel \parallel \parallel$								
25	Submit Subcontractor Management Plan (ACC Cl. C5(1))	13 days		0 days	100%	Thu 30/5/19			Tue 11/6/19 Th		Tue 11/6/19		0.5 days		_								
125	Submit Temporary Drainage and Sewerage Management Plan (PS Cl. 1.24A(1))	174 days		0 days	100%	Thu 30/5/19			Tue 19/11/19 Th		Tue 19/11/19			4	_								
	Submit Temporary Drainage and Sewerage Management Plan (PS Cl. 1.24A(1)) Submit EM&A Manual (ER Part 8, Cl. 8.2)								Tue 4/6/19 Th					4									
127	, ,	6 days	-	0 days	100%	Thu 30/5/19	Tue 4/6/19				Tue 4/6/19	0 days		4									
128	Submit Proposal of selection of suppliers of Plant and Materials (ACC Cl. C11(1) Submit Contractor's Management Team (ACC Cl. D1(3))	80 days 50 days		0 days	100%	Thu 30/5/19 Thu 30/5/19	Sat 17/8/19 Thu 18/7/19		Sat 17/8/19 Thu 18/7/19 Thu		Sat 17/8/19 Thu 18/7/19	0 days		4									
	Task	Summary			Inactive M	ilestone		Duration-o	nlv		Start-only		<u> </u>	r-	temal Mileston	e �		Cwie:	cal Split			<u> </u>	
	ev. 11 Prog with Progress	Project Sumi	nary		Inactive Su				mmary Rollup		Start-only Finish-only]		adline			Prog					
2 ان ر	Z-May-2U Milestone ◆	Inactive Task			Manual Ta	sk		Manual Su	mmary		External Task	cs		Cr	ritical			Man	ual Progress				



						Con	tract No. ED,	/2018/01 KT	D Project												
	Task Name	Duration Actual	Remaining	Physical %	Early Start		Actual Start			Late Finish		TRA	Predecessors	2020			2021	2022	2 61 51	2023	
75	Submit & endorse by PM and Statutory Authorities/Gov. Dept	Duration 50 days	Duration 50 days	Complete 0%	Sun 27/9/20	Sun 15/11/20	NA	NA	Thu 15/10/20	Thu 3/12/20	Slack 18 days	3 days	174	Q2 Q	Q4	Q1 Q2	Q3 Q4	Q1 Q2 Q	3 Q4 Q1	Q2 Q3	Q4 Q
76	Noise barrier fronting to 4B5 at Rd D3A & Bus Lay By (Section 5&9)	338 days 215.23 days		0%	Mon 4/11/19	Tue 6/10/20	Mon 4/11/19		Mon 4/11/19	Wed 7/10/20	1 day										
77	Prepare AIP Submission (Draft)	38 days 38 days	0 days	100%	Mon 4/11/19		9 Mon 4/11/19			Wed 11/12/19	0 days	2 days									
78	Submit & endorse by PM and Statutory Authorities/Gov. Dept	167 days 162 days	5 days	97%	Thu 12/12/19		Thu 12/12/19		Thu 12/12/19	Wed 27/5/20	1 day	2 days	177								
79	Prepare AIP and ICE certification (Final)	56 days 31 days	25 days	55%	Wed 22/4/20	Tue 16/6/20	Wed 22/4/20		Wed 22/4/20	Wed 17/6/20	1 day	0.5.1	178FF+21 days								
80	Prepare DDA Subm (Draft)	18 days 18 days	0 days	100%	Wed 1/4/20	Sat 18/4/20	Wed 1/4/20		Wed 1/4/20	Sat 18/4/20		0.5 days									
81	Submit & endorse by PM	55 days 35 days	20 days	64%	Sat 18/4/20	Thu 11/6/20	Sat 18/4/20	NA	Sat 18/4/20	Thu 6/8/20	56 days		180								
32	Submit & endorse by Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Wed 17/6/20	Wed 5/8/20	NA	NA	Thu 18/6/20	Thu 6/8/20	1 day		180,179								
33	Prepare DDA for and ICE certification (Final) (Original Contract Scope)	12 days 0 days	12 days	0%	Thu 6/8/20	Mon 17/8/20	NA	NA	Fri 7/8/20	Tue 18/8/20	1 day	1 days	181,182								
84	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Tue 18/8/20	Tue 6/10/20	NA	NA	Wed 19/8/20	Wed 7/10/20	1 day	1 days	183								
85	Decking for Underpass (Rd L14)	304 days 0 days	304 days	0%	Mon 20/7/20	Wed 19/5/21	NA	NA	Fri 31/7/20	Sun 30/5/21	11 days					+++++					
6	Structure Prepare AIP and ICE certification (Draft)	25 days 0 days	25 days	0%	Mon 20/7/20	Thu 13/8/20	NA	NA	Fri 31/7/20	Mon 24/8/20	11 days	3 days	44FF+12 days		4						
37	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Fri 14/8/20	Fri 2/10/20	NA	NA	Tue 25/8/20	Tue 13/10/20	11 days	0.5 days	186	- i							
38	Prepare AIP and ICE certification (Final)	15 days 0 days	15 days	0%	Sat 3/10/20	Sat 17/10/20	NA	NA	Wed 14/10/20	Wed 28/10/20	11 days	1 day	186,187								
9	Prepare DDA and ICE certification (Draft)	89 days 0 days	89 days	0%	Sun 18/10/20	Thu 14/1/21	NA	NA	Thu 29/10/20	Mon 25/1/21	11 days	1 day	186,188								
10	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Fri 15/1/21	Fri 5/3/21	NA	NA	Tue 26/1/21	Tue 16/3/21		0.5 days									
1	Prepare DDA and ICE certification (Final)	25 days 0 days	25 days	0%	Sat 6/3/21	Tue 30/3/21		NA	Wed 17/3/21	Sat 10/4/21	11 days		190	$+\parallel\parallel\parallel$							
2	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Wed 31/3/21	Wed 19/5/21		NA	Sun 11/4/21	Sun 30/5/21			191	-							
				0%							11 days	1 uay	171								
3	Road D3 Bridge & Approach Ramps	439 days 358.08 days			Thu 30/5/19		Thu 30/5/19		Thu 30/5/19	Thu 8/10/20	59 days		4								
4	D3 Bridge Substructure	439 days 358.08 days	s 80.92 days	0%	Thu 30/5/19	Mon 10/8/20			Thu 30/5/19	Thu 8/10/20	59 days										
5	Prepare AIP and ICE certification (Draft)	66 days 66 days	0 days	100%	Thu 30/5/19	Sat 3/8/19	Thu 30/5/19	Sat 3/8/19	Thu 30/5/19	Sat 3/8/19	0 days	3 days	4								
6	Submit & endorse by PM and Statutory Authorities/Gov. Dept	15 days 15 days	0 days	100%	Mon 5/8/19	Mon 19/8/19	Mon 5/8/19	Mon 19/8/19	Mon 5/8/19	Mon 19/8/19	0 days	1 days	195,138								
7	Prepare AIP and ICE certification (Final)	30 days 30 days	0 days	100%	Mon 23/12/19	Tue 21/1/20	Mon 23/12/19	Tue 21/1/20	Mon 23/12/19	Tue 21/1/20	0 days	0 days	195,196								
8	Prepare DDA and ICE certification (Draft)	106 days 106 days	0 days	100%	Fri 19/7/19	Sun 17/11/19	Fri 19/7/19	Sun 17/11/19	Fri 19/7/19	Sun 17/11/19	0 days	5 days	195								
99	Submit & endorse by PM	17 days 17 days	0 days	100%	Wed 20/11/19	Fri 6/12/19	Wed 20/11/19	Fri 6/12/19	Wed 20/11/19	Fri 6/12/19	0 days	3 days	198								
0	Submit & endorse by Statutory Authorities/Gov. Dept	45 days 45 days	0 days	100%	Fri 24/1/20	Wed 18/3/20	Fri 24/1/20	Wed 18/3/20	Fri 24/1/20	Wed 18/3/20	0 days	1 days	198								
)1	Prepare DDA for and ICE certification (Include P02-BP2 Remedial Pile)	105 days 75 days	30 days	71%	Mon 9/3/20	Sun 21/6/20	Mon 9/3/20	NA	Mon 9/3/20	Wed 19/8/20	59 days	1 days	200								
)2	(Contractor Bear DDA Approval Risk) Submit & endorse by PM and Statutory Authorities/Gov. Dept (Contractor Bear	50 days 0 days	50 days	0%	Mon 22/6/20	Mon 10/8/20	NA	NA	Thu 20/8/20	Thu 8/10/20	59 days	1 days	201	-	44						
03	DDA Approval Risk) D3 Bridge Superstructure	728 days 370.67 days	s 357.33 days	0%	Thu 30/5/19	Wed 26/5/21	Thu 30/5/19	NA	Thu 30/5/19	Wed 21/7/21	56 days										
)4	Prepare AIP and ICE certification (Draft)	101 days 101 days	0 days	100%	Thu 30/5/19	Sat 7/9/19	Thu 30/5/19		Thu 30/5/19	Sat 7/9/19	0 days	1 day									
05	Submit & endorse by PM and Statutory Authorities/Gov. Dept	19 days 19 days	0 days	100%	Mon 9/9/19	Fri 27/9/19		Fri 27/9/19		Fri 27/9/19			204								
)6	Prepare AIP and ICE certification (Final)	135 days 135 days	0 days	100%	Wed 20/11/19			7 Thu 2/4/20		Thu 2/4/20			205								
)7	Prepare DDA and ICE certification (Draft)	222 days 222 days	0 days	100%	Fri 19/7/19	Tue 25/2/20		Tue 25/2/20		Tue 25/2/20	0 days	3 days	205								
8	Submit & endorse by PM	23 days 23 days	0 days	100%	Wed 26/2/20	Thu 19/3/20	Wed 26/2/20	Thu 19/3/20	Wed 26/2/20	Thu 19/3/20	0 days	2 days	207								
)9	Submit & endorse by Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Mon 29/6/20	Mon 17/8/20	NA	NA	Thu 16/7/20	Thu 3/9/20	17 days	2 days	207,206FF+12	d							
10	Prepare DDA for and ICE certification (Final)	21 days 0 days	21 days	0%	Tue 18/8/20	Mon 7/9/20	NA	NA	Fri 4/9/20	Thu 24/9/20	17 days	1 days	208,206,209								
1	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Tue 8/9/20	Tue 27/10/20	NA	NA	Fri 25/9/20	Fri 13/11/20	17 days	2 days	210	1		$\ \ \ $					
12	Prepare AIP (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Thu 2/7/20	Sun 2/8/20	NA	NA	Thu 27/8/20	Sun 27/9/20	56 days	2 days		1							
13	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Mon 3/8/20	Sat 3/10/20	NA	NA	Mon 28/9/20	Sat 28/11/20	56 days	2 days	212								
14	Prepare AIP (E&M works) and ICE certification (Final)	32 days 0 days	32 days	0%	Sun 4/10/20	Wed 4/11/20	NA	NA	Sun 29/11/20	Wed 30/12/20	56 days	2 days	213	$+\parallel \parallel \parallel$							
15	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Thu 5/11/20	Tue 5/1/21		NA	Thu 31/12/20	Tue 2/3/21	56 days		214	$+\parallel\parallel\parallel$							
16	Prepare DDA (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Sat 5/12/20		NA	NA	Sat 30/1/21	Tue 2/3/21	56 days		215FF	$+\parallel\parallel\parallel$							
				0%																	
17	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days		Wed 6/1/21	Mon 8/3/21		NA	Wed 3/3/21	Mon 3/5/21	56 days		216								
18	Prepare DDA (E&M works) and ICE certification (Final)	17 days 0 days	17 days	0%	Tue 9/3/21	Thu 25/3/21		NA	Tue 4/5/21	Thu 20/5/21	56 days		217								
19	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Fri 26/3/21	Wed 26/5/21	NA	NA	Fri 21/5/21	Wed 21/7/21	56 days	2 days	218								
و. Þ	Lev.11 Prog with Progress	Summary		Inactive M	lilestone \Diamond		Duration-or	nly		Start-only		С	Ex	ternal Milestor			Critical Sp	lit			
	22-May-20	Project Summary		Inactive Su				mmary Rollup		Finish-only		3		adline	<u>+</u>		Progress	_			
	Milestone •	Inactive Task		Manual Ta	ISK		Manual Su	mmary F		External Task	S		Cri	tical			Manual Pro	ogress			

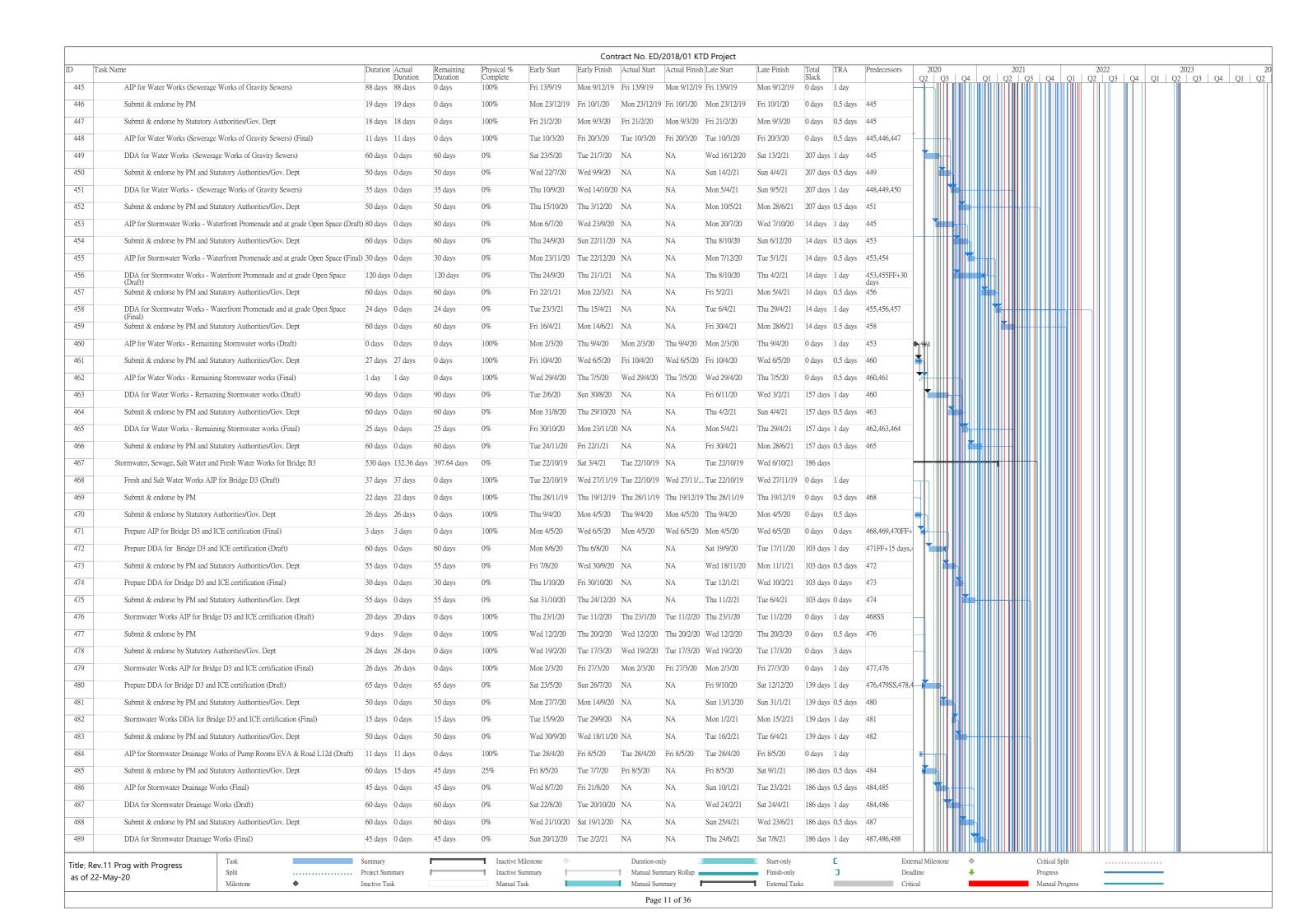
						Con	tract No. ED,	/2018/01 KT	TD Project																
-	Task Name	Duration Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2		M 0	2	021	04	21 2	2022	04 01	2023 Q2 Q3	04	
20	D3 North Approach Ramp (Structure)	398 days 348.95 days		0%	Mon 3/6/19	Sat 4/7/20	Mon 3/6/19	NA	Mon 3/6/19	Thu 8/10/20	96 days			QZ	δυ (24 Q!	Q2	T Q3	<u>V</u> 4 (Z1 Q.	2 Q3	V4 VI	Q2 Q3	Q4 (<u>11</u>
21	Prepare AIP and ICE certification (Draft))	51 days 51 days	0 days	100%	Mon 3/6/19	Tue 23/7/19	Mon 3/6/19	Tue 23/7/19	Mon 3/6/19	Tue 23/7/19	0 days	3 days	4												
22	Submit & endorse by PM and Statutory Authorities/Gov. Dept	100 days 100 days	0 days	100%	Thu 25/7/19	Fri 1/11/19	Thu 25/7/19	Fri 1/11/19	Thu 25/7/19	Fri 1/11/19	0 days	1 days	221												
23	Prepare AIP and ICE certification (Final)	14 days 14 days	0 days	100%	Tue 6/8/19	Thu 19/12/19	Tue 6/8/19	Thu 19/12/19	9 Tue 6/8/19	Thu 19/12/19	0 days	0 days	221,222												
224	Prepare DDA (Draft) with ICE certification	66 days 66 days	0 days	100%	Fri 19/7/19	Thu 20/2/20	Fri 19/7/19	Thu 20/2/20	Fri 19/7/19	Thu 20/2/20	0 days	5 days	221,223FF												
225	Submit & endorse by PM/Statutory Authorities/Gov. Dept	31 days 31 days	0 days	100%	Mon 20/1/20	Mon 23/3/20	Mon 20/1/20	Mon 23/3/20	Mon 20/1/20	Mon 23/3/20	0 days	3 days	224												
26	Prepare DDA for and ICE certification (Final)	45 days 45 days	0 days	100%	Wed 1/4/20	Fri 15/5/20	Wed 1/4/20	Fri 15/5/20	Wed 1/4/20	Fri 15/5/20	0 days		225												
27	Submit & endorse by PM/Statutory Authorities/Gov. Dept	50 days 6 days	44 days	12%	Sat 16/5/20	Sat 4/7/20	Sat 16/5/20	NA	Sat 16/5/20	Thu 8/10/20	96 days	0.5 days	226			+									
28	D3 North Approach Ramp (E&M Works)	329 days 0 days	329 days	0%	Thu 2/7/20	Wed 26/5/21	NA	NA	Fri 27/11/20	Thu 21/10/21	148 days														
29	Prepare AIP (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Thu 2/7/20	Sun 2/8/20	NA	NA	Fri 27/11/20	Mon 28/12/20	148 days	2 days			h III										
30	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Mon 3/8/20	Sat 3/10/20	NA	NA	Tue 29/12/20	Sun 28/2/21	148 days	2 days	229	-											
31	Prepare AIP (E&M works) and ICE certification (Final)	32 days 0 days	32 days	0%	Sun 4/10/20	Wed 4/11/20	NA	NA	Mon 1/3/21	Thu 1/4/21	148 days	2 days	230	-											
32	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Thu 5/11/20	Tue 5/1/21	NA	NA	Fri 2/4/21	Wed 2/6/21	148 days	2 days	231	-											
33	Prepare DDA (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Sat 5/12/20	Tue 5/1/21	NA	NA	Sun 2/5/21	Wed 2/6/21	148 days	2 days	232FF	-											
34	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Wed 6/1/21	Mon 8/3/21	NA	NA	Thu 3/6/21	Tue 3/8/21	148 days	2 days	233	-			.								
35	Prepare DDA (E&M works) and ICE certification (Final)	17 days 0 days	17 days	0%	Tue 9/3/21	Thu 25/3/21		NA	Wed 4/8/21	Fri 20/8/21	148 days		234	-											
36	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Fri 26/3/21	Wed 26/5/21		NA	Sat 21/8/21	Thu 21/10/21	148 days		235	-											
37	D3 South Approach Ramp	507 days 322.64 days		0%	Thu 30/5/19		Thu 30/5/19		Thu 30/5/19	Tue 16/2/21	122 days	2 411) 5													
38	Prepare AIP and ICE certification (Draft)	96 days 96 days	0 days	100%	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19			Mon 2/9/19	0 days	3 days													
39													220												
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	35 days 35 days	0 days	100%	Wed 25/9/19		Wed 25/9/19			Tue 29/10/19	1	1 day	238	_											
10	Prepare AIP Submission (Final)	76 days 76 days	0 days	100%	Fri 7/2/20		Fri 7/2/20	Mon 4/5/20		Mon 4/5/20		1 day	238,239												
41	Prepare DDA and ICE certification (Draft)	50 days 50 days	0 days	100%	Wed 1/4/20		Wed 1/4/20	Wed 20/5/20		Wed 20/5/20	0 days	-	240FF+15 days												
242	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days 2 days	58 days	3%	Thu 21/5/20		Thu 21/5/20		Thu 21/5/20	Wed 18/11/20	-		238,241												
43	Prepare DDA for and ICE certification (Final)	30 days 0 days	30 days	0%	Mon 20/7/20	Tue 18/8/20		NA	Thu 19/11/20	Fri 18/12/20	122 days		242,240FF+12	d											
44	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days 0 days	60 days	0%	Wed 19/8/20	Sat 17/10/20		NA	Sat 19/12/20	Tue 16/2/21	122 days	1 day	243												
45	D3 South Approach Ramp (E&M Works)	392 days 0 days	392 days	0%	Sat 23/5/20		NA	NA	Wed 18/11/20		179 days														
46	Prepare AIP (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%	Sat 23/5/20	Mon 22/6/20		NA	Wed 18/11/20		179 days	-													
47	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Tue 23/6/20	Sun 6/9/20		NA	Sat 19/12/20	Thu 4/3/21	179 days		246												
48	Prepare AIP (E&M works) and ICE certification (Final)	31 days 0 days	31 days	0%	Mon 7/9/20	Wed 7/10/20	NA	NA	Fri 5/3/21	Sun 4/4/21	179 days		247												
49	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Thu 8/10/20	Tue 22/12/20	NA	NA	Mon 5/4/21	Sat 19/6/21	179 days	1 day	248												
50	Prepare DDA (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%	Sun 22/11/20	Tue 22/12/20	NA	NA	Thu 20/5/21	Sat 19/6/21	179 days	1 day	249FF												
51	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Wed 23/12/20	Mon 8/3/21	NA	NA	Sun 20/6/21	Fri 3/9/21	179 days	1 day	250												
52	Prepare DDA (E&M works) and ICE certification (Final)	26 days 0 days	26 days	0%	Tue 9/3/21	Sat 3/4/21	NA	NA	Sat 4/9/21	Wed 29/9/21	179 days	1 day	251												
53	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Sun 4/4/21	Fri 18/6/21	NA	NA	Thu 30/9/21	Tue 14/12/21	179 days	1 day	252						+						
54	Road D3 Underpass and Depressed Road	823 days 236.99 days	586.01 days	0%	Thu 30/5/19	Sun 29/8/21	Thu 30/5/19	NA	Thu 30/5/19	Wed 11/1/23	500 days														
55	Underpass (Structure)	486 days 320.41 days	165.59 days	0%	Thu 30/5/19	Sat 26/9/20	Thu 30/5/19	NA	Thu 30/5/19	Wed 2/12/20	67 days														
56	Prepare AIP and ICE certification (Draft)	96 days 96 days	0 days	100%	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19	Mon 2/9/19	0 days	3 days	4												
57	Submit & endorse by PM and Statutory Authorities/Gov. Dept	17 days 17 days	0 days	100%	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19	0 days	1 days	256												
58	Prepare AIP and ICE certification (Final)	84 days 84 days	0 days	100%	Tue 14/1/20	Mon 6/4/20	Tue 14/1/20	Mon 6/4/20	Tue 14/1/20	Mon 6/4/20	0 days	2 days	256,257		$\ \ $										
59	Prepare DDA (Draft) Preparation	156 days 156 days	0 days	100%	Tue 3/9/19	Wed 5/2/20	Tue 3/9/19	Wed 5/2/20	Tue 3/9/19	Wed 5/2/20	0 days	3 days	256	1											
60	DDA (Draft) Submit & endorse by PM & Statutory Authorities/Gov. Dept	169 days 34 days	135 days	20%	Thu 6/2/20	Thu 23/7/20	Thu 6/2/20	NA	Thu 6/2/20	Mon 28/9/20	67 days	0.5 days	259												
61	Prepare DDA for and ICE certification (Final)	15 days 0 days	15 days	0%	Fri 24/7/20	Fri 7/8/20	NA	NA	Tue 29/9/20	Tue 13/10/20	67 days	1 day	260,258FF+21	d											
62	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Sat 8/8/20	Sat 26/9/20	NA	NA	Wed 14/10/20	Wed 2/12/20	67 days	1 day	261	$+\parallel\parallel\parallel$											
263	Underpass (E&M Works)	392 days 0 days	392 days	0%	Mon 3/8/20	Sun 29/8/21	NA	NA	Tue 10/11/20	Wed 11/1/23	99 days			$+\parallel\parallel\parallel$				 							
264	Prepare AIP (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Mon 5/10/20	Thu 5/11/20	NA	NA	Tue 10/11/20	Fri 11/12/20	36 days	2 days		$+\parallel\parallel\parallel$											
														1				<u> </u>	<u> </u>						_
	ev.11 Prog with Progress 2 May 20 Split	Summary Project Summary		Inactive M Inactive St			Duration-or Manual Sur	nly mmary Rollup •		Start-only Finish-only]		emal Milesto adline	one	+			tical Split gress						
of 2	2-May-20 Milestone	Inactive Task		Manual Ta			Manual Sur			External Tas				tical					nual Prog						

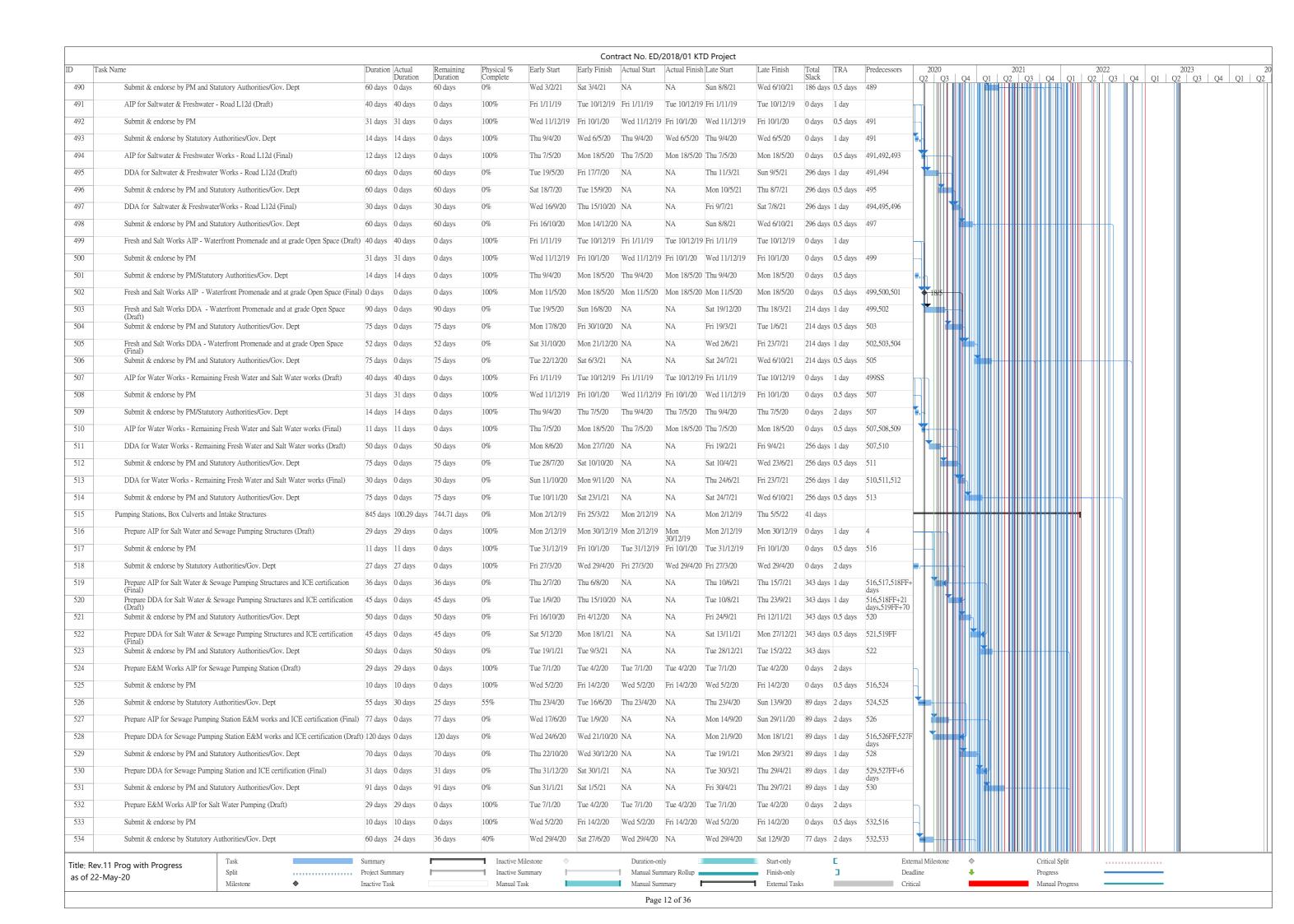
								TD Project														
ask Name	Duration Actual	Remaining Duration	Physical %	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish		TRA	Predecessors	2020	2 04	01 6	2021	04 03	2022	02 04	20)23	M C
Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Fri 6/11/20	Wed 6/1/21	NA	NA	Sat 12/12/20	Thu 11/2/21		2 days	264	Q2 Q1	5 Q4	Q1 C	22 Q3	Q4	Q2 C	25 Q4	QI Q2	Q3 Q4	4 Q
Prepare AIP (E&M works) and ICE certification (Final)	32 days 0 days	32 days	0%	Thu 7/1/21	Sun 7/2/21	NA	NA	Fri 12/2/21	Mon 15/3/21	36 days	2 days	265										
			0%		Sat 10/4/21	NA	NA	Tue 16/3/21	Sun 16/5/21			266										
Prepare DDA (E&M works) and ICE certification (Final)	17 days 0 days	17 days	0%	Sat 12/6/21	Mon 28/6/21	NA	NA	Sun 18///21	Tue 3/8/21	36 days	2 days	269										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Tue 29/6/21	Sun 29/8/21	NA	NA	Wed 4/8/21	Mon 4/10/21	36 days	2 days	270										
Prepare AIP (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Draft)	31 days 0 days	31 days	0%	Mon 3/8/20	Wed 2/9/20	NA	NA	Thu 31/3/22	Sat 30/4/22	605 days	1 day			Ь								
Submit & endorse by PM and Statutory Authorities/Gov. Dept	51 days 0 days	51 days	0%	Thu 3/9/20	Fri 23/10/20	NA	NA	Sun 1/5/22	Mon 20/6/22	605 days	1 day	272										
Prepare AIP (E&M works) and Architectural Finishes of of Underpass (Road	14 days 0 days	14 days	0%	Sat 24/10/20	Fri 6/11/20	NA	NA	Tue 21/6/22	Mon 4/7/22	605 days	2 days	273										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	74 days 0 days	74 days	0%	Sat 7/11/20	Tue 19/1/21	NA	NA	Tue 5/7/22	Fri 16/9/22	605 days	1 day	274			_							
Prepare DDA (E&M works) and Architectural Finishes of of Underpass (Road	31 days 0 days	31 days	0%	Sun 20/12/20	Tue 19/1/21	NA	NA	Wed 17/8/22	Fri 16/9/22	605 days	1 day	275FF										
· · · · · · · · · · · · · · · · · · ·	51 days 0 days		0%	Wed 20/1/21	Thu 11/3/21	NA	NA	Sat 17/9/22	Sun 6/11/22			276										
L14) and ICE certification (Final)																						
<u> </u>										-	-	278										
E&M Work for Pump House of Underpass D3	364 days 83.71 days	280.29 days	0%	Mon 24/2/20	Sun 21/2/21	Mon 24/2/20	NA	Mon 24/2/20	Wed 18/8/21	178 days												
Prepare AIP (E&M works) Submission (Draft)	11 days 11 days	0 days	0%	Mon 24/2/20	Thu 5/3/20	Mon 24/2/20	Thu 5/3/20	Mon 24/2/20	Thu 5/3/20	0 days	2 days											
Submit & endorse by PM and Statutory Authorities/Gov. Dept	160 days 78 days	82 days	49%	Fri 6/3/20	Wed 12/8/20	Fri 6/3/20	NA	Fri 6/3/20	Sat 15/8/20	3 days	2 days	281										
Prepare AIP (E&M works) and ICE certification (Final)	21 days 0 days	21 days	0%	Thu 13/8/20	Wed 2/9/20	NA	NA	Sun 16/8/20	Sat 5/9/20	3 days	2 days	282,44FF+12 da										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Thu 3/9/20	Thu 22/10/20	NA	NA	Sun 6/9/20	Sun 25/10/20	3 days	2 days	283										
Prepare DDA (E&M works) and ICE certification (Draft)	30 days 0 days	30 days	0%	Wed 30/9/20	Thu 29/10/20	NA	NA	Sat 3/10/20	Sun 1/11/20	3 days	2 days	284FF+7 days										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Fri 30/10/20	Fri 18/12/20	NA	NA	Mon 2/11/20	Mon 21/12/20	3 days	2 days	285										
Prepare DDA (E&M works) and ICE certification (Final)	15 days 0 days	15 days	0%	Sat 19/12/20	Sat 2/1/21	NA	NA	Tue 22/12/20	Tue 5/1/21	3 days	2 days	286										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Sun 3/1/21	Sun 21/2/21	NA	NA	Wed 30/6/21	Wed 18/8/21	178 days	2 days	287										
												207										
<u> </u>												4										
												4										
	33 days 33 days	0 days	100%						Wed 4/9/19	0 days	2 days	290										
Prepare AIP and ICE certification (Final)	44 days 44 days	0 days	100%	Mon 9/12/19	Tue 21/1/20	Mon 9/12/19	Tue 21/1/20	Mon 9/12/19	Tue 21/1/20	0 days	0 days	291										
Prepare DDA and ICE certification (Draft)	57 days 57 days	0 days	100%	Tue 24/9/19	Tue 19/11/19	Tue 24/9/19	Tue 19/11/1	9 Tue 24/9/19	Tue 19/11/19	0 days	5 days	290										
Submit & endorse by PM	17 days 17 days	0 days	100%	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	Thu 5/12/19	0 days	1 day	293										
Submit & endorse by Statutory Authorities/Gov. Dept	20 days 20 days	0 days	100%	Wed 19/2/20	Mon 9/3/20	Wed 19/2/20	Mon 9/3/20	Wed 19/2/20	Mon 9/3/20	0 days	1 day	293										
Prepare DDA for and ICE certification (Final)	30 days 0 days	30 days	0%	Sat 23/5/20	Sun 21/6/20	NA	NA	Sat 11/2/23	Sun 12/3/23	994 days	3 days	294,292FF,295										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days 0 days	60 days	0%	Mon 22/6/20	Thu 20/8/20	NA	NA	Mon 13/3/23	Thu 11/5/23	994 days	5 days	296										
Depressed Road (North) F&M Works		322 days	0%	Mon 21/9/20	Sun 8/8/21	NA	NA	Tue 17/11/20	Mon 4/10/21													
											1 day											
												200		Ţ								
		31 days										300										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Fri 22/1/21			NA	Sat 20/3/21	Wed 19/5/21			301										
Prepare DDA (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%	Sun 21/2/21	Tue 23/3/21	NA	NA	Mon 19/4/21	Wed 19/5/21	57 days	1 day	302FF										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Wed 24/3/21	Sun 23/5/21	NA	NA	Thu 20/5/21	Mon 19/7/21	57 days	1 day	303				<u> </u>						
Prepare DDA (E&M works) and ICE certification (Final)	16 days 0 days	16 days	0%	Mon 24/5/21	Tue 8/6/21	NA	NA	Tue 20/7/21	Wed 4/8/21	57 days	1 day	304										
Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Wed 9/6/21	Sun 8/8/21	NA	NA	Thu 5/8/21	Mon 4/10/21	57 days	1 day	305										
Depressed Road (South) and Substructure of Elevated Landscape Deck	463 days 333.16 days	s 129.84 days	0%	Mon 10/6/19	Mon 14/9/20	Mon 10/6/19	NA	Mon 10/6/19	Thu 15/10/20	31 days				\mathbf{H}								
			100%					Mon 10/6/19			1 days							<u> </u>				
												308										
Saonin & Graoise of Fri and Statutory Authorntes/OUV. Dept	or unys or unys	o unys	100 /0	Jan 3/0/17	1 uc 22/10/19	Dat 3/0/17	1 uc 22/10/1) Dat 3/0/17	1 uc 22/10/19	o uays	2 days	500										
7.11 Prog with Progress	-								Start-only		E .			e <	>							
-May-20 Split	Project Summary		Inactive Su Manual Ta			Manual Sur	mmary Rollup	_	Finish-only External Tas		1	Dead Criti	aime	4	•		Progress	_		_		
	Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare AIP (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare AIP (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare AIP (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare AIP (E&M works) Submission (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare AIP (E&M works) Submission (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare AIP (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Final) Prepare DDA (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept Prepare DDA (E&M works) and ICE certificatio	Submit & endonce by PM and Statutory Authorities/Gov. Dept	Submit & endorse by PM and Statatory Authorities/Gov. Dept 62 days 0 days 22 days	Submit & enclare by PM and Statutery Authentities/Gov. Dept 62 days 0.days 62 days 0.0	Seberal R. endome by PM and Settinery Authorities/Rev. Dept	Submit & costone by PM and Summory Authorises/Son, Dept	Selecti & encores by 150 and Statistics Authoritics/Cor. Dept 24 days 26 days 26 days 150 mil 1702 50	Schemic & makere by PM and Security Authorized Size. Detay 0.5 app. 0.6 app. 0.6 app. 0.6 pp. 0.6 pp.	Second Accesses for Plant and Secondary Assertation (Section 1997) Colors Propert APP CASA Missers and Information Section Colors Colors Propert APP CASA Missers and Information Section Colors Colors Colors Propert CASA CASA Missers and Information Section Colors Col	Schemic Andrew by FM and framework (International Conference on Confer	Semina Semina Control Private Private Semina Semina Control Private Private Semina Semina Control Private Semina Semina Control Private Private Semina Semina Semina Control Private Private Semina	Second Company Compa	Section Sect	Part Part	Profess Profess Section Profess Prof	Column C	Property Control of the Control	Property Property	Part	Part Part	Part Part	Process

							Con	tract No. ED/	2018/01 K	ID Project															
Task	Name	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors 202		04 /	01 6	2021	3 04	O1	1 00	022	04	01	2023 Q2 Q)3 0
10	Prepare AIP and ICE (certification (Final)	270 days	s 222 days	48 days	82%	Tue 15/10/19	Fri 10/7/20	Tue 15/10/19	NA	Tue 15/10/19	Mon 10/8/20	31 days 0 days	309,44FF+12 da		Q4 C							Q4	QI		3 Q
11	Prepare DDA certification (Draft)	27 days	27 days	0 days	100%	Mon 10/2/20	Sat 7/3/20	Mon 10/2/20	Sat 7/3/20	Mon 10/2/20	Sat 7/3/20	0 days 5 days	308												
12	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	24 days	51 days	32%	Wed 29/4/20	Thu 16/7/20	Wed 29/4/20	NA	Wed 29/4/20	Sun 16/8/20	31 days 1 days	311,310FF+6	H				 							
313	Prepare DDA for and ICE certification (Final)	10 days	0 days	10 days	0%	Fri 17/7/20	Sun 26/7/20	NA	NA	Mon 17/8/20	Wed 26/8/20	31 days 0.5 days	312					 							
314	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Mon 27/7/20	Mon 14/9/20	NA	NA	Thu 27/8/20	Thu 15/10/20	31 days 0.5 days	313					$\parallel \parallel \parallel$							
315	South Depressed Road (E&M Works)	382 days	s 0 days	382 days	0%	Mon 7/9/20	Thu 23/9/21	NA	NA	Fri 18/9/20	Mon 4/10/21	11 days						-							
316	Prepare AIP (E&M works) and ICE certification (Draft)	31 days	0 days	31 days	0%	Mon 7/9/20	Wed 7/10/20	NA	NA	Fri 18/9/20	Sun 18/10/20	11 days 1 day													
317	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days	0 days	76 days	0%	Thu 8/10/20	Tue 22/12/20	NA	NA	Mon 19/10/20	Sat 2/1/21	11 days 1 day	316												
18	Prepare AIP (E&M works) and ICE certification (Final)	31 days	0 days	31 days	0%	Wed 23/12/20	Fri 22/1/21	NA	NA	Sun 3/1/21	Tue 2/2/21	11 days 1 day	317		•										
19	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Sat 23/1/21		NA	NA	Wed 3/2/21	Mon 19/4/21	11 days 1 day	318					,							
20	Prepare DDA (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Tue 9/3/21	Thu 8/4/21	NA	NA	Sat 20/3/21	Mon 19/4/21	11 days 1 day	319FF												
21	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Fri 9/4/21	Wed 23/6/21		NA	Tue 20/4/21	Sun 4/7/21	11 days 1 day	320												
			,															1							
22	Prepare DDA (E&M works) and ICE certification (Final)	16 days		16 days	0%	Thu 24/6/21	Fri 9/7/21	NA	NA	Mon 5/7/21	Tue 20/7/21	11 days 1 day	321												
23	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Sat 10/7/21	Thu 23/9/21		NA	Wed 21/7/21	Mon 4/10/21	11 days 1 day	322												
24	Road Works (Civil Works)	-		465.99 days	0%	Tue 13/8/19	Fri 4/6/21	Tue 13/8/19		Tue 13/8/19	Tue 14/12/21	193 days													
15	Prepare AIP for At-grade Road D3 and ICE certification (Draft)	57 days	57 days	0 days	100%	Tue 13/8/19	Tue 8/10/19	Tue 13/8/19	Tue 8/10/19	Tue 13/8/19	Tue 8/10/19	0 days 1 day	293SS+75 days												
16	Submit & endorse by PM	21 days	21 days	0 days	100%	Wed 9/10/19	Tue 29/10/19	Wed 9/10/19	Tue 29/10/19	9 Wed 9/10/19	Tue 29/10/19	0 days 0.5 days	325												
27	Submit & endorse by Statutory Authorities/Gov. Dept	24 days	24 days	0 days	100%	Wed 30/10/19	Fri 22/11/19	Wed 30/10/19	Fri 22/11/19	Wed 30/10/19	Fri 22/11/19	0 days 1 day	325												
28	Prepare AIP for At-grade Road D3 and ICE certification (Final)	57 days	57 days	0 days	100%	Thu 5/3/20	Mon 4/5/20	Thu 5/3/20	Mon 4/5/20	Thu 5/3/20	Mon 4/5/20	0 days 0 days	326FS+12 days,327,44FF+1												
.9	Prepare DDA for At-grade Road D3 and ICE certification (Draft)	210 days	s 0 days	210 days	0%	Sat 23/5/20	Fri 18/12/20	NA	NA	Wed 2/12/20	Tue 29/6/21	193 days 5 days	325FS+100												
30	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sat 19/12/20	Wed 3/3/21	NA	NA	Wed 30/6/21	Sun 12/9/21	193 days 0.5 days	days,328FF+6 329			-									
31	Prepare DDA for At-grade Road D3 and ICE certification (Final)	16 days	0 days	16 days	0%	Thu 4/3/21	Fri 19/3/21	NA	NA	Mon 13/9/21	Tue 28/9/21	193 days 1 day	330												
32	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Sat 20/3/21	Fri 4/6/21	NA	NA	Wed 29/9/21	Tue 14/12/21	193 days 2 days	331												
33	Remaining Road Works (E&M Works)	382 days		382 days	0%	Mon 5/10/20	Thu 21/10/21	NA	NA	Sat 13/2/21	Tue 1/3/22	131 days													
34	Prepare AIP (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Mon 5/10/20	Wed 4/11/20		NA	Sat 13/2/21	Mon 15/3/21	131 days 1 day													
35	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Thu 5/11/20	Tue 19/1/21		NA	Tue 16/3/21	Sun 30/5/21	131 days 1 day	334		Į <u>. </u>										
36	Prepare AIP (E&M works) and ICE certification (Final)	31 days	1		0%	Wed 20/1/21	Fri 19/2/21		NA	Mon 31/5/21	Wed 30/6/21	131 days 1 day	335												
				31 days																					
37	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Sat 20/2/21		NA	NA	Thu 1/7/21	Tue 14/9/21	131 days 1 day	336												
38	Prepare DDA (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Tue 6/4/21		NA	NA	Sun 15/8/21		131 days 1 day	337FF												
39	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days	0 days	76 days	0%	Fri 7/5/21	Wed 21/7/21	NA	NA	Wed 15/9/21	Mon 29/11/21	131 days 1 day	338												
40	Prepare DDA (E&M works) and ICE certification (Final)	16 days	0 days	16 days	0%	Thu 22/7/21	Fri 6/8/21	NA	NA	Tue 30/11/21	Wed 15/12/21	131 days 1 day	339					,							
41	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days	0 days	76 days	0%	Sat 7/8/21	Thu 21/10/21	NA	NA	Thu 16/12/21	Tue 1/3/22	131 days 1 day	340												
342	Road L12d Works (Roadworks)	791 days	s 261.27 days	529.73 days	0%	Tue 6/8/19	Mon 4/10/21	Tue 6/8/19	NA	Tue 6/8/19	Tue 28/2/23	512 days						+							
43	Prepare AIP for Road L12d Submission (Draft)	64 days	64 days	0 days	100%	Tue 6/8/19	Tue 8/10/19	Tue 6/8/19	Tue 8/10/19	Tue 6/8/19	Tue 8/10/19	0 days 1 day	325												
14	Submit & endorse by PM and Statutory Authorities/Gov. Dept	377 days	s 227 days	150 days	60%	Wed 9/10/19	Mon 19/10/20	0 Wed 9/10/19	NA	Wed 9/10/19	Tue 15/3/22	512 days													
45		120 days	s 0 days	120 days	0%	Tue 20/10/20	Tue 16/2/21	NA	NA	Wed 16/3/22	Wed 13/7/22	512 days 0 days	343,44FF+12			4									
46	(Final) Prepare DDA for Road L12d (Include E&M Provision Works) and ICE certification	120 days	s 0 days	120 days	0%	Thu 19/11/20	Thu 18/3/21	NA	NA	Fri 15/4/22	Fri 12/8/22	512 days 1 day	days,344 343FS+260		T										
47	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Fri 19/3/21	Tue 1/6/21	NA	NA	Sat 13/8/22		512 days 0.5 days	days,345FF+30 346												
48	Prepare DDA for Road L12d (Include E&M Provision Works) and ICE certification			50 days	0%	Wed 2/6/21	Wed 21/7/21		NA	Thu 27/10/22		512 days 0 days	347,345FF												
49	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	75 days	0%	Thu 22/7/21	Mon 4/10/21		NA	Fri 16/12/22	Tue 28/2/23	512 days 0 days													
50	Road Lighting of Road D3 (E&M)			339.81 days	0%	Mon 6/1/20	Sun 18/4/21	Mon 6/1/20		Mon 6/1/20	Sun 1/8/21	105 days	340												
51	Prepare AIP (E&M works) Submission (Draft)		30 days	0 days	100%	Mon 6/1/20	Tue 4/2/20		Tue 4/2/20	Mon 6/1/20	Tue 4/2/20	0 days 2 days	251												
352	Submit & endorse by Statutory Authorities/Gov. Dept and PM		s 108 days	82 days	57%	Wed 5/2/20		Wed 5/2/20		Wed 5/2/20	Wed 25/11/20		351												
353	Prepare AIP (E&M works) and ICE certification (Final)	32 days		32 days	0%	Thu 13/8/20	Sun 13/9/20		NA	Thu 26/11/20	Sun 27/12/20														
354	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Mon 14/9/20	Thu 12/11/20	NA	NA	Mon 28/12/20	Thu 25/2/21	105 days 2 days	353												
tle. Rev 1	1 Prog with Progress	Summary			Inactive M	ilestone 🔷		Duration-on	ly		Start-only	Е	External Mile	stone	\langle		-m 1 III	Critical	Split	<u> </u>					
ACV. I	lay-20 Split	Project Sur	mmary		Inactive Su	immary 📗		Manual Sun	nmary Rollup		Finish-only	3	Deadline		•			Progres	śS		_		_		

Task										TD Project									 		
Task	Name	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors	2020 Q2 ()3 Q4	Q1 Q	2021 02 Q3	Q4 (2022 Q3 Q)4 Q1 Q	2023 Q2 Q3
355	Prepare DDA (E&M works) and ICE certification (Draft)	32 days		32 days	0%	Mon 12/10/20	Thu 12/11/20	NA	NA	Mon 25/1/21	Thu 25/2/21	105 days 2 days	354FF								
356	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Fri 13/11/20	Thu 28/1/21	NA	NA	Fri 26/2/21	Thu 13/5/21	105 days 2 days	355								
357	Prepare DDA (E&M works) and ICE certification (Final)	3 days	0 days	3 days	0%	Fri 29/1/21	Sun 31/1/21	NA	NA	Fri 14/5/21	Sun 16/5/21	105 days 2 days	356								
358	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Mon 1/2/21	Sun 18/4/21	NA	NA	Mon 17/5/21	Sun 1/8/21	105 days 2 days	357					Ш			
359	Road L12d Works (E&M Works)	329 days	s 0 days	329 days	0%	Mon 5/10/20	Sun 29/8/21	NA	NA	Mon 1/2/21	Sun 26/12/21	119 days									
360	Prepare AIP (E&M works) and ICE certification (Draft)	32 days	0 days	32 days	0%	Mon 5/10/20	Thu 5/11/20	NA	NA	Mon 1/2/21	Thu 4/3/21	119 days 2 days									
361	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Fri 6/11/20	Wed 6/1/21	NA	NA	Fri 5/3/21	Wed 5/5/21	119 days 2 days	360								
362	Prepare AIP (E&M works) and ICE certification (Final)		0 days	32 days	0%	Thu 7/1/21	Sun 7/2/21	NA	NA	Thu 6/5/21	Sun 6/6/21	119 days 2 days	361								
363	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	62 days	0%	Mon 8/2/21	Sat 10/4/21		NA	Mon 7/6/21	Sat 7/8/21	119 days 2 days									
364	Prepare DDA (E&M works) and ICE certification (Draft)		0 days	32 days	0%	Wed 10/3/21		NA	NA	Wed 7/7/21	Sat 7/8/21	119 days 2 days	363FF								
365																					
	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	62 days	0%	Sun 11/4/21		NA	NA	Sun 8/8/21	Fri 8/10/21	119 days 2 days	364								
366	Prepare DDA (E&M works) and ICE certification (Final)		0 days	17 days	0%	Sat 12/6/21	Mon 28/6/21		NA	Sat 9/10/21	Mon 25/10/21		365								
367	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Tue 29/6/21	Sun 29/8/21	NA	NA	Tue 26/10/21	Sun 26/12/21	119 days 2 days	366						╗		
368	Roadworks other than at-grade Road D3 and Road L12d (Civil Works)	609 days	s 238.54 days	370.46 days	0%	Mon 2/9/19	Sun 2/5/21	Mon 2/9/19	NA	Mon 2/9/19	Sun 23/5/21	21 days									
369	AIP for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Draft)	36 days	36 days	0 days	100%	Mon 2/9/19	Mon 7/10/19	Mon 2/9/19	Mon 7/10/19	9 Mon 2/9/19	Mon 7/10/19	0 days 0.5 days	S								
370	Submit & endorse by PM and Statutory Authorities/Gov. Dept	288 days	s 228 days	60 days	79%	Tue 8/10/19	Tue 21/7/20	Tue 8/10/19	NA	Tue 8/10/19	Tue 11/8/20	21 days 0.5 days	s 369								
371	AIP for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Final)	75 days	0 days	75 days	0%	Wed 22/7/20	Sun 4/10/20	NA	NA	Wed 12/8/20	Sun 25/10/20	21 days 0.5 days	370,44FF+12 days								
372	DDA for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Draft)	95 days	0 days	95 days	0%	Sat 1/8/20	Tue 3/11/20	NA	NA	Sat 22/8/20	Tue 24/11/20	21 days 1 day	371FF+30 day	s							
373	(Drait) Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Wed 4/11/20	Sun 17/1/21	NA	NA	Wed 25/11/20	Sun 7/2/21	21 days 0.5 days	s 372	$\parallel \parallel \parallel$							
374	DDA for Roadworks - Roadworks other than at-grade Road D3 and Road L12d	30 days	0 days	30 days	0%	Mon 18/1/21	Tue 16/2/21	NA	NA	Mon 8/2/21	Tue 9/3/21	21 days 0.5 days	s 371,372,373	$\parallel \parallel \parallel$							
375	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Wed 17/2/21	Sun 2/5/21	NA	NA	Wed 10/3/21	Sun 23/5/21	21 days 0.5 days	s 374								
376	Roadworks - EVA to Sewerage and Saltwater Pumping Station (Civil Works)	413 days	s 68.26 days	344.74 days	0%	Wed 4/3/20	Tue 20/4/21	Wed 4/3/20	NA	Wed 4/3/20	Fri 17/2/23	668 days									
377	AIP for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Draft)	46 davs	46 days	0 days	100%	Wed 4/3/20	Sat 18/4/20	Wed 4/3/20	Sat 18/4/20	Wed 4/3/20	Sat 18/4/20	0 days 0.5 days	S								
378	Submit & endorse by PM and Statutory Authorities/Gov. Dept		33 days	49 days	40%	Sat 18/4/20		Sat 18/4/20	NA	Sat 18/4/20	Mon 23/5/22	684 days	377								
379	AIP for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Final)	75 days		75 days	0%	Thu 9/7/20	Mon 21/9/20		NA	Tue 24/5/22	Sat 6/8/22	684 days 0.5 days		1	ШШ						
380	DDA for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Draft)		0 days	95 days	0%	Mon 20/7/20	Thu 22/10/20		NA	Thu 19/5/22	Sun 21/8/22	668 days 1 day	379FF+15 day	S							
381	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days		75 days	0%	Fri 23/10/20	Tue 5/1/21		NA	Mon 22/8/22	Fri 4/11/22	668 days 0.5 days									
382	DDA for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Final)	30 days		30 days	0%	Wed 6/1/21		NA	NA	Sat 5/11/22	Sun 4/12/22	668 days 0.5 days									
383	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Fri 5/2/21	Tue 20/4/21		NA	Mon 5/12/22	Fri 17/2/23	668 days 0.5 days	s 382								
384	Road Lighting of Road other than Road D3 (E&M)	356 days	s 0 days	356 days	0%	Fri 29/5/20	Wed 19/5/21	NA	NA	Tue 2/6/20	Sun 23/5/21	4 days					1				
385	Prepare AIP (E&M works) and ICE certification (Draft)	38 days	0 days	38 days	0%	Fri 29/5/20	Sun 5/7/20	NA	NA	Tue 2/6/20	Thu 9/7/20	4 days 2 days									
386	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Mon 6/7/20	Sun 20/9/20	NA	NA	Fri 10/7/20	Thu 24/9/20	4 days 2 days	385	7							
387	Prepare AIP (E&M works) and ICE certification (Final)	32 days	0 days	32 days	0%	Mon 21/9/20	Thu 22/10/20	NA	NA	Fri 25/9/20	Mon 26/10/20	4 days 2 days	386								
388	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Fri 23/10/20	Wed 23/12/20	0 NA	NA	Tue 27/10/20	Sun 27/12/20	4 days 2 days	387								
389	Prepare DDA (E&M works) and ICE certification (Draft)	32 days	0 days	32 days	0%	Sun 22/11/20	Wed 23/12/20) NA	NA	Thu 26/11/20	Sun 27/12/20	4 days 2 days	388FF	$\parallel \parallel \parallel$							
390	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Thu 24/12/20	Tue 23/2/21	NA	NA	Mon 28/12/20	Sat 27/2/21	4 days 2 days	389	$\parallel \parallel \parallel$							
391	Prepare DDA (E&M works) and ICE certification (Final)	23 days	0 days	23 days	0%	Wed 24/2/21	Thu 18/3/21	NA	NA	Sun 28/2/21	Mon 22/3/21	4 days 2 days	390	$\parallel \parallel \parallel$							
392	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	62 days	0%	Fri 19/3/21	Wed 19/5/21	NA	NA	Tue 23/3/21	Sun 23/5/21	4 days 2 days	391	$+\parallel\parallel\parallel$							
393	Roadworks other than at-grade Road D3 and Road L12d (E&M Works)	322 days		322 days	0%	Thu 2/7/20	Wed 19/5/21	NA	NA	Mon 6/7/20	Sun 23/5/21	4 days					╣╢╢╢				
394	Prepare AIP (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Thu 2/7/20		NA	NA	Mon 6/7/20	Wed 5/8/20	4 days 1 day									
395	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days		61 days	0%	Sun 2/8/20	Thu 1/10/20		NA	Thu 6/8/20	Mon 5/10/20	4 days 1 day	394	$\parallel \parallel \parallel$							
396					0%	Fri 2/10/20	Sun 1/11/20		NA NA	Tue 6/10/20	Thu 5/11/20			_							
	Prepare AIP (E&M works) and ICE certification (Final)		0 days	31 days								4 days 1 day	395								
397	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days		61 days	0%	Mon 2/11/20		NA	NA	Fri 6/11/20	Tue 5/1/21	4 days 1 day	396								
398	Prepare DDA (E&M works) and ICE certification (Draft)		0 days	31 days	0%	Wed 2/12/20		NA	NA	Sun 6/12/20	Tue 5/1/21	4 days 1 day	397FF								
399	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Sat 2/1/21	Wed 3/3/21	NA	NA	Wed 6/1/21	Sun 7/3/21	4 days 1 day	398								
itle· Rev 1	1 Prog with Progress	Summary			Inactive Mi	ilestone \diamondsuit		Duration-o	nly		Start-only	С	E	temal Milesto	ne 💠	41811	(Critical Split	 		
	lay-20 Split	Project Sur	mmary		Inactive Su Manual Tas	mmary		Manual Su	mmary Rollup		Finish-only	3	D	eadline	4		I	rogress			

							Con	tract No. ED,	/2018/01 K	ID Project												
Task	Name	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors		03 04	01 02	021 O3 O4	01 (2022 Q2 Q3	3 04	Q1 Q	2023
00	Prepare DDA (E&M works) and ICE certification (Final)	16 days		16 days	0%	Thu 4/3/21	Fri 19/3/21	NA	NA	Mon 8/3/21	Tue 23/3/21	4 days 1 day	399		25 Q4	Q1 Q2	Q3 Q4		22 Q3	, Q4	QI	
01	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Sat 20/3/21	Wed 19/5/21	NA	NA	Wed 24/3/21	Sun 23/5/21	4 days 1 day	400									1
12	DCS Seawater & Intake Box Culverts (approx 88m) (Section 2)	479 days	s 304.41 days	174.59 days	0%	Tue 13/8/19	Thu 3/12/20	Tue 13/8/19	NA	Tue 13/8/19	Tue 3/8/21	243 days										1
3	Prepare AIP Subm with ICE certification (Draft)	165 days	s 165 days	0 days	100%	Tue 13/8/19	Fri 24/1/20	Tue 13/8/19	Fri 24/1/20	Tue 13/8/19	Fri 24/1/20	0 days 3 days										
4	Submit & endorse by PM		85 days	0 days	100%	Thu 23/1/20	Thu 16/4/20	Thu 23/1/20	Thu 16/4/20	Thu 23/1/20	Thu 16/4/20	0 days 1 day	403									
5	Submit & endorse by Statutory Authorities/Gov. Dept		90 days	0 days	100%	Fri 24/1/20	Mon 27/4/20) Fri 24/1/20	Mon 27/4/20	0 days 1 day	403	[]								
7	Prepare AIP and ICE certification (Final)	0 days	-	0 days	100%	Thu 23/4/20		Thu 23/4/20			Mon 27/4/20	0 days 1 days	403,405,404	<u>♦ 27/4</u>								
	Prepare DDA and ICE certification	80 days	0 days	80 days	0%	Sat 23/5/20	Mon 10/8/20	NA	NA	Thu 21/1/21	Sat 10/4/21	243 days 5 days		7+1:								
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Tue 11/8/20	Tue 29/9/20	NA	NA	Sun 11/4/21	Sun 30/5/21	243 days 3 days	407									
	Prepare DDA for and ICE certification (Final)	15 days	0 days	15 days	0%	Wed 30/9/20	Wed 14/10/20) NA	NA	Mon 31/5/21	Mon 14/6/21	243 days 1 day	408									
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Thu 15/10/20	Thu 3/12/20	NA	NA	Tue 15/6/21	Tue 3/8/21	243 days 2 days	409				H					
	Seawater & Intake Box Culverts Diversion	248 days	s 49.98 days	198.02 days	0%	Wed 1/4/20	Fri 4/12/20	Wed 1/4/20	NA	Wed 1/4/20	Wed 6/10/21	306 days										
	Prepare AIP Subm (Draft)	32 days	32 days	0 days	100%	Wed 1/4/20	Sat 2/5/20	Wed 1/4/20	Sat 2/5/20	Wed 1/4/20	Sat 2/5/20	0 days 3 days										
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	51 days	21 days	30 days	41%	Sat 2/5/20	Mon 22/6/20	Sat 2/5/20	NA	Sat 2/5/20	Tue 17/11/20	148 days 3 days	412									
	Prepare AIP and ICE certification (Final)	15 days		15 days	0%	Tue 23/6/20	Tue 7/7/20	NA	NA	Wed 18/11/20	Wed 2/12/20	148 days 1 days										
5	Prepare DDA and ICE certification				0%	Tue 23/6/20	Tue 11/8/20		NA NA	Sun 25/4/21	Sun 13/6/21		412SS,413F	3.5(
		50 days		50 days								306 days 5 days		TJ								
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Wed 12/8/20	Wed 30/9/20		NA	Mon 14/6/21	Mon 2/8/21	306 days 3 days	415									
	Prepare DDA for and ICE certification (Final)	15 days	0 days	15 days	0%	Thu 1/10/20	Thu 15/10/20	NA	NA	Tue 3/8/21	Tue 17/8/21	306 days 1 day	416									1
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Fri 16/10/20	Fri 4/12/20	NA	NA	Wed 18/8/21	Wed 6/10/21	306 days 2 days	417									1
	Rising Main (Sewerage Works)	402 days	s 134 days	268 days	0%	Thu 2/1/20	Sat 6/2/21	Thu 2/1/20	NA	Thu 2/1/20	Sun 7/3/21	29 days										
	Prepare AIP (Draft)	35 days	35 days	0 days	100%	Thu 2/1/20	Wed 5/2/20	Thu 2/1/20	Wed 5/2/20	Thu 2/1/20	Wed 5/2/20	0 days 3 days	4									1
	Submit & endorse by PM	19 days	19 days	0 days	100%	Thu 6/2/20	Mon 24/2/20	Thu 6/2/20	Mon 24/2/20	Thu 6/2/20	Mon 24/2/20	0 days 1 day										
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	56 days	56 days	0 days	100%	Thu 27/2/20	Fri 22/5/20	Thu 27/2/20	Fri 22/5/20	Thu 27/2/20	Fri 22/5/20	0 days 2 days	420	 -								
_	Prepare AIP and ICE certification (Final)	75 days	0 davs	75 days	0%	Thu 2/7/20	Mon 14/9/20	NA	NA	Fri 31/7/20	Tue 13/10/20	29 days 0 days	420,422,421	_ \								
	Prepare DDA and ICE certification (Draft)	30 days		30 days	0%	Tue 15/9/20	Wed 14/10/20		NA	Wed 14/10/20	Thu 12/11/20		420SS,423									
			-																			
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Thu 15/10/20			NA	Fri 13/11/20	Fri 1/1/21	29 days 3 days	424,420									
	Prepare DDA and ICE certification (Final)	15 days	-	15 days	0%	Fri 4/12/20	Fri 18/12/20	NA	NA	Sat 2/1/21	Sat 16/1/21	29 days 0 days										
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sat 19/12/20	Sat 6/2/21	NA	NA	Sun 17/1/21	Sun 7/3/21	29 days 3 days	426,423			7						1
	Stormwater, Sewage, Salt Water and Fresh Water Works for Underpass and Depressed Road	641 days	s 151.9 days	489.1 days	0%	Fri 13/9/19	Mon 14/6/21	Fri 13/9/19	NA	Fri 13/9/19	Mon 28/6/21	14 days										1
	Stormwater Drainage AIP for Underpass and Depressed Roads and ICE certification (Draft)	72 days	72 days	0 days	100%	Mon 2/12/19	Tue 11/2/20	Mon 2/12/19	Tue 11/2/20	Mon 2/12/19	Tue 11/2/20	0 days 1 day										1
	Submit & endorse by PM	51 days	51 days	0 days	30%	Wed 12/2/20	Thu 2/4/20	Wed 12/2/20	Thu 2/4/20	Wed 12/2/20	Thu 2/4/20	0 days 0.5 day	s 429									
	Submit & endorse by Statutory Authorities/Gov. Dept	139 days	s 64 days	75 days	46%	Fri 20/3/20	Wed 5/8/20	Fri 20/3/20	NA	Fri 20/3/20	Fri 30/10/20	86 days	429									1
2	Prepare AIP and ICE certification (Final)	150 days	s 50 days	100 days	33%	Fri 3/4/20	Sun 30/8/20	Fri 3/4/20	NA	Fri 3/4/20	Sat 14/11/20	76 days	431FF+15 d	ays								1
3	Prepare DDA and ICE certification (Draft)	150 days		150 days	0%	Sat 23/5/20	Mon 19/10/20		NA	Sat 18/7/20		56 days 1 day	429,432FF+									
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days		90 days	0%	Tue 20/10/20	Sun 17/1/21		NA	Tue 15/12/20		56 days 0.5 day										
	Prepare DDA and ICE certification (Final)	31 days		31 days	0%	Mon 18/1/21	Wed 17/2/21		NA	Mon 15/3/21	Wed 14/4/21	56 days 1 day	434									
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days		75 days	0%	Thu 18/2/21	Mon 3/5/21		NA	Thu 15/4/21	Mon 28/6/21		435									
	Fresh and Salt Water Works AIP for Underpass, Depressed Road and ICE certification (Draft)	51 days	51 days	0 days	100%	Tue 8/10/19	Wed 27/11/19	Tue 8/10/19	Wed 27/11/19	Tue 8/10/19	Wed 27/11/19	0 days 1 day										
	Submit & endorse by PM	26 days	26 days	0 days	100%	Thu 28/11/19	Mon 23/12/19	Thu 28/11/19		Thu 28/11/19	Mon 23/12/19	0 days 0.5 day	s 437									
	Submit & endorse by Statutory Authorities/Gov. Dept	14 days	14 days	0 days	100%	Wed 8/4/20	Fri 24/4/20	Wed 8/4/20	Fri 24/4/20	Wed 8/4/20	Fri 24/4/20	0 days 3 days	437									
	Prepare AIP for Underpass, Depressed Road and ICE certification (Final)	22 days	22 days	0 days	100%	Sat 25/4/20	Sat 16/5/20	Sat 25/4/20	Sat 16/5/20	Sat 25/4/20	Sat 16/5/20	0 days 0 days	438,439									
-	Prepare DDA for Underpass, Depressed Road and ICE certification (Draft)	90 days	0 days	90 days	0%	Sun 17/5/20	Fri 14/8/20	NA	NA	Fri 2/10/20	Wed 30/12/20	138 days 1 day	440		h III							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days		75 days	0%	Sat 15/8/20	Wed 28/10/20		NA	Thu 31/12/20	Mon 15/3/21	138 days 0.5 day										
	Prepare DDA for Underpass, Depressed Road and ICE certification (Final)	30 days		30 days	0%	Thu 29/10/20			NA	Tue 16/3/21	Wed 14/4/21	138 days 0 days										
13																						
44	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	U days	75 days	0%	Sat 28/11/20	Wed 10/2/21	NA	NA	Thu 15/4/21	Mon 28/6/21	138 days 0 days	443									Ш
e: Rev.1	I Prog with Progress	Summary			Inactive M	ilestone 🔷		Duration-or	-		Start-only	Е		External Milesto	one \diamondsuit		Critical S _I	plit				
1	ay-20 Split	roject Sur	nmary		Inactive Su	ımmary 📗		Manual Su	mmary Rollup		Finish-only	3		Deadline	4		Progress		_			

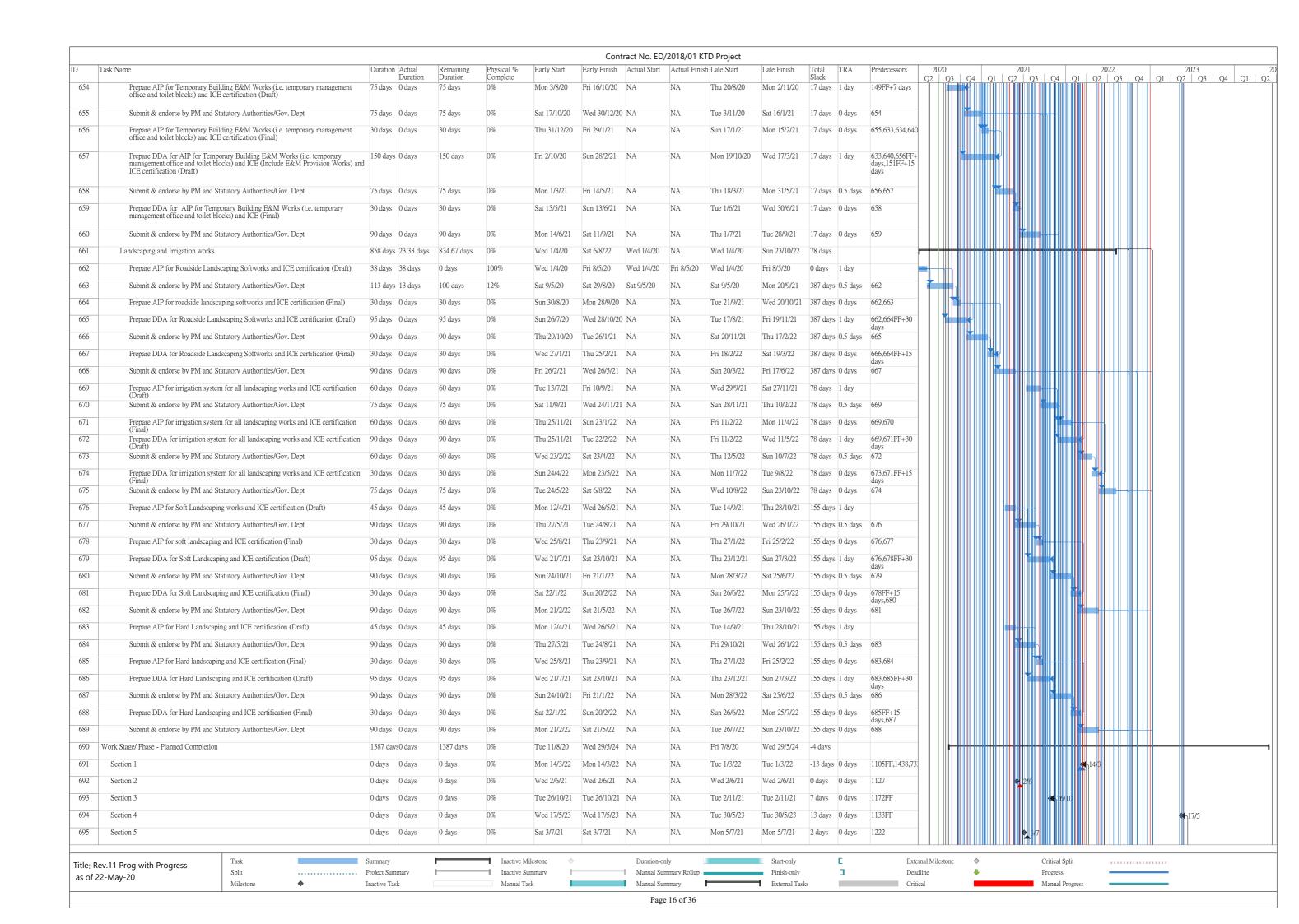




							Con	tract No. ED/	/2018/01 KT	TD Project												
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	h Late Start	Late Finish	Total TRA Slack	Predecessors	2020		01	2021 O2 O3	04 01	2022	03 04	2023	12 04
535	Prepare AIP for Salt Water Pumping Station E&M works and ICE certification	77 days		77 days	0%	Mon 17/8/20	Sun 1/11/20	NA	NA	Sun 13/9/20	Sat 28/11/20	27 days 2 days	534	Q2 	ψο Q4	QI	Q2 Q3	Q4 Q1	1 Q2	Q3 Q4	Q1 Q2 Q	<u>ع Q</u> 4
36	(Final) Prepare DDA for Salt Water Pumping Station E&M works and ICE certification	120 days	0 days	120 days	0%	Tue 4/8/20	Tue 1/12/20	NA	NA	Mon 31/8/20	Mon 28/12/20	27 days 1 day	534FF,535FF	+3(
37	(Draft) Submit to WSD for Plumbing and Irrigation Works for approval	0 days	0 days	0 days	0%	Tue 1/12/20	Tue 1/12/20	NA	NA	Tue 29/12/20	Tue 29/12/20	27 days 1 day	days,516 536			1/12						
38	Submit & endorse by PM and Statutory Authorities/Gov. Dept	91 days	0 days	91 days	0%	Wed 2/12/20	Tue 2/3/21	NA	NA	Tue 29/12/20	Mon 29/3/21	27 days 1 day	536,537			+						
39	Prepare DDA for Salt Water Pumping Station and ICE certification (Final)	31 days		31 days	0%	Wed 3/3/21	Fri 2/4/21	NA	NA	Tue 30/3/21	Thu 29/4/21	27 days 1 day	535FF+6									
40	Submit & endorse by PM and Statutory Authorities/Gov. Dept	91 days		91 days	0%	Sat 3/4/21	Fri 2/7/21	NA	NA	Fri 30/4/21	Thu 29/7/21	27 days 1 day	days,538 539									
													339									
541	AIP for Remaining Works of Salt Water & Sewerage Pumping and ICE certification (Draft)			0 days	0%	Mon 17/2/20	Sat 28/3/20			Mon 17/2/20	Sat 28/3/20	0 days 1 day	4									
42	Submit & endorse by PM	18 days	18 days	0 days	100%	Mon 30/3/20	Thu 16/4/20	Mon 30/3/20	Thu 16/4/20	Mon 30/3/20	Thu 16/4/20	0 days										
13	Submit & endorse by Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Mon 3/8/20	Sat 31/10/20	NA	NA	Sun 14/3/21	Fri 11/6/21	223 days 0.5 day	s 541,542									
14	AIP for Remaining Works of Salt Water Pumping & Sewage and ICE certification (Final)	90 days	0 days	90 days	0%	Sun 1/11/20	Fri 29/1/21	NA	NA	Sat 12/6/21	Thu 9/9/21	223 days 3 days	543									
45	DDA for Remaining Works of Salt Water & Sewage Pumping and ICE certification (Draft)	n 90 days	0 days	90 days	0%	Sun 6/12/20	Fri 5/3/21	NA	NA	Sat 17/7/21	Thu 14/10/21	223 days 1 day	541,544FF+3:	5								
16	Submit & endorse by PM and Statutory Authorities/Gov. Dept	93 days	0 days	93 days	0%	Sat 6/3/21	Sun 6/6/21	NA	NA	Fri 15/10/21	Sat 15/1/22	223 days 3 days										
17	DDA for Remaining Works of Salt Water & Sewage Pumping and ICE certification	on 35 days	0 days	35 days	0%	Mon 7/6/21	Sun 11/7/21	NA	NA	Sun 16/1/22	Sat 19/2/22	223 days 3 days	546,544FF+12	$2 \parallel \parallel \parallel$			T.					
48	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Mon 12/7/21	Fri 24/9/21	NA	NA	Sun 20/2/22	Thu 5/5/22	223 days 2 days	days 547	$-\parallel \parallel \parallel$								
49	AIP for Architectural works of Salt Water & Sewage Pumping and ICE certification	on 45 days	0 days	45 days	0%	Mon 5/4/21	Wed 19/5/21	NA	NA	Mon 3/5/21	Wed 16/6/21	28 days 1 day	4	$-\parallel \parallel \parallel$								
50	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days		60 days	0%	Thu 20/5/21	Sun 18/7/21		NA	Thu 17/6/21	Sun 15/8/21	28 days 0.5 day	s 549	$-\parallel \parallel \parallel$								
51					0%	Mon 19/7/21	Sat 18/9/21		NA	Mon 16/8/21				$\parallel \parallel \parallel$								
	AIP for Architectural works of Salt Water Pumping & Sewage and ICE certification (Final)			62 days							Sat 16/10/21	28 days 2 days										
52	DDA for Architectural works of Salt Water & Sewage Pumping and ICE certification (Draft)	60 days		60 days	0%	Fri 20/8/21	Mon 18/10/21		NA	Fri 17/9/21		28 days 1 day	549,551FF+30 days									
53	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Tue 19/10/21	Fri 17/12/21	NA	NA	Tue 16/11/21	Fri 14/1/22	28 days 0.5 day	s 552									
54	DDA for Architectural works of Salt Water & Sewage Pumping and ICE certification (Final)	36 days	0 days	36 days	0%	Sat 18/12/21	Sat 22/1/22	NA	NA	Sat 15/1/22	Sat 19/2/22	28 days 2 days	551FF+12 days,553									
55	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Sun 23/1/22	Fri 25/3/22	NA	NA	Sun 20/2/22	Fri 22/4/22	28 days 2 days	554					H		$+\parallel\parallel\parallel\parallel\parallel\parallel$		
56	AIP for Landscaping works of Salt Water & Sewage Pumping and ICE certification (Draft)	n 45 days	0 days	45 days	0%	Mon 5/4/21	Wed 19/5/21	NA	NA	Sun 2/5/21	Tue 15/6/21	27 days 1 day	4									
57	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Thu 20/5/21	Mon 19/7/21	NA	NA	Wed 16/6/21	Sun 15/8/21	27 days 0.5 day	s 556	$\parallel \parallel \parallel$								
58	AIP for Landscaping works of Salt Water Pumping & Sewage and ICE certification	n 62 days	0 days	62 days	0%	Tue 20/7/21	Sun 19/9/21	NA	NA	Mon 16/8/21	Sat 16/10/21	27 days 2 days	556,557	$-\parallel \parallel \parallel$								
59	(Final) DDA for Landscaping works of Salt Water & Sewage Pumping and ICE	62 days	0 days	62 days	0%	Thu 19/8/21	Tue 19/10/21	NA	NA	Wed 15/9/21	Mon 15/11/21	27 days 2 days	556,558FF+30									
50	certification (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days		61 days	0%	Wed 20/10/21			NA	Tue 16/11/21	Sat 15/1/22	27 days 0.5 day	days	$-\parallel \parallel \parallel$								
51	DDA for Landscaping works of Salt Water & Sewage Pumping and ICE	35 days		35 days	0%		Sun 23/1/22		NA	Sun 16/1/22	Sat 19/2/22	27 days 2 days		$\parallel \parallel \parallel$				[]				
62	certification (Final)				0%				NA	Sun 20/2/22			days,560									
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days		61 days		Mon 24/1/22					Thu 21/4/22	27 days 2 days	301									
i3	AIP for Seawater Intake and Box Culvert Structures for Pumping Station (approx. 160m) (Section 6) Submission (Draft)	58 days	58 days	0 days	100%	Tue 10/12/19	Wed 5/2/20	Tue 10/12/19	Wed 5/2/20	Tue 10/12/19	Wed 5/2/20	0 days 1 day										
64	Submit & endorse by PM	25 days	25 days	0 days	33%	Wed 5/2/20	Thu 5/3/20	Wed 5/2/20	Thu 5/3/20	Wed 5/2/20	Thu 5/3/20	0 days 0.5 day	s 563									
65	Submit & endorse by Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sat 23/5/20	Sat 11/7/20	NA	NA	Sun 28/3/21	Sun 16/5/21	309 days 0.5 day	s 563									
66	AIP for Seawater Intake and Box Culvert Structure (Final)	21 days	0 days	21 days	0%	Sun 12/7/20	Sat 1/8/20	NA	NA	Mon 17/5/21	Sun 6/6/21	309 days 0.5 day	s 563,565,564	$-\parallel \parallel \parallel$								
67	DDA for Seawater Intake and Box Culvert Structure (Draft)	15 days	0 days	15 days	0%	Sat 25/7/20	Sat 8/8/20	NA	NA	Sun 30/5/21	Sun 13/6/21	309 days 1 day	563,565,564,5	566								
58	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Sun 9/8/20	Sun 27/9/20		NA	Mon 14/6/21	Mon 2/8/21	309 days 0.5 day		$-\parallel \parallel \parallel$								
59	DDA for Seawater Intake and Box Culvert Structure (Final)	15 days		15 days	0%	Mon 28/9/20	Mon 12/10/20		NA	Tue 3/8/21	Tue 17/8/21	309 days 1 day	567,568,566F	E.								
				1										<u> </u>								
70	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Tue 13/10/20	Tue 1/12/20		NA	Wed 18/8/21	Wed 6/10/21	309 days 0.5 day	8 209									
71	Elevated Landscape Deck Staircase & Associated Work			445.51 days	0%	Thu 30/5/19		Thu 30/5/19		Thu 30/5/19	Mon 5/7/21	54 days					TI					
72	Elevated Landscape Deck Superstructure AIP and ICE certification (Draft)	96 days	96 days	0 days	100%	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19	Mon 2/9/19	0 days 3 days	4									
73	Submit & endorse by PM	15 days	15 days	0 days	100%	Tue 3/9/19	Tue 17/9/19	Tue 3/9/19	Tue 17/9/19	Tue 3/9/19	Tue 17/9/19	0 days 1 days	572									
74	Submit & endorse by Statutory Authorities/Gov. Dept	162 days	162 days	0 days	0%	Tue 24/9/19	Tue 3/3/20	Tue 24/9/19	Tue 3/3/20	Tue 24/9/19	Tue 3/3/20	0 days 0.5 day	s 573									
75	Prepare AIP and ICE certification (Final)	255 days	155 days	100 days	61%	Wed 20/11/19	Fri 31/7/20	Wed 20/11/19	NA NA	Wed 20/11/19	Thu 26/11/20	118 days 0.5 day	s 44FF+12 days	3 -	4-							
76	Prepare DDA and ICE certification (Draft)	75 days	0 days	75 days	0%	Fri 12/6/20	Sun 30/8/20	NA	NA	Thu 8/10/20	Sat 26/12/20	118 days 1 day	574FF+30 day	ys,:								
77	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Mon 31/8/20	Mon 19/10/20) NA	NA	Sun 27/12/20	Sun 14/2/21	118 days 0.5 day	s 576	$-\parallel \parallel \parallel$								
578	Prepare DDA for and ICE certification (Final)	22 days		22 days	0%	Tue 20/10/20			NA	Mon 15/2/21	Mon 8/3/21	118 days 1 day		$-\parallel \parallel \parallel$								
	. repair DD1 for and red continuation (1 mar)	22 days	o unyo	LL days	370	1 40 20/10/20	140 10/11/20	1111	1771	11011 1314141	111011 01 11 21	110 days 1 day	511									
41. D. C.	Dang with Danger	Summary			Inactive M	ilestone \Diamond		Duration-or	ıly		Start-only	Е	F	External Milest	one	\$		Critical Split				
le: Rev.1' of 22-M	Prog with Progress	Project Sum	nmary		Inactive Su				nmary Rollup		Finish-only	3		Deadline		₽		rogress	-		_	
141	Milestone •	Inactive Tas	sk		Manual Ta	sk		Manual Sur	nmarv		External Tasl	cs		Critical				Manual Progre	ess			

								tract No. ED/													
Task l	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total TRA Slack	Predecessors	2020 Q2	Q3 Q4	Q1 0	2021 Q2 Q3	Q4 O1)22 Q3	Q4 O
9	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Wed 11/11/20	Wed 30/12/20	NA	NA	Tue 9/3/21	Tue 27/4/21	118 days 1 day	578								
)	Elevated Landscape Deck - Lift (LT1<2)& Staircase include E&M Progvision: AIP and ICE Certification (Draft)	50 days	50 days	0 days	100%	Mon 7/10/19	Mon 25/11/19	Mon 7/10/19	Mon 25/11/19	Mon 7/10/19	Mon 25/11/19	0 days 3 days	44FF+12 days								
1	Submit & endorse by PM	21 days	21 days	0 days	100%	Tue 26/11/19	Mon 16/12/19	Tue 26/11/19		. Tue 26/11/19	Mon 16/12/19	0 days 1 days	580								
2	Submit & endorse by Statutory Authorities/Gov. Dept	120 days	85 days	35 days	71%	Fri 28/2/20	Fri 26/6/20	Fri 28/2/20	NA	Fri 28/2/20	Thu 13/8/20	48 days 1 days	580								
3	Prepare AIP and ICE certification (Final)	60 days	0 days	60 days	0%	Sat 27/6/20	Tue 25/8/20	NA	NA	Fri 14/8/20	Mon 12/10/20	48 days 0 days	580,581,582,44	F T	4						
34	Prepare DDA and ICE certification (Draft)	60 days	0 days	60 days	0%	Tue 11/8/20	Wed 14/10/20) NA	NA	Mon 28/9/20	Tue 1/12/20	48 days 1 day	580,583FF+50	d							
35	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Thu 15/10/20	Tue 12/1/21	NA	NA	Wed 2/12/20	Mon 1/3/21	48 days 0.5 days	s 584								
36	Prepare DDA for and ICE certification (Final)	30 days	0 days	30 days	0%	Wed 13/1/21	Thu 11/2/21	NA	NA	Tue 2/3/21	Wed 31/3/21	48 days 0.5 days	s 585,583FF+12	d		M ₄					
37	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Fri 12/2/21	Wed 12/5/21	NA	NA	Thu 1/4/21	Tue 29/6/21	48 days 2 days	586					_			
38	Elevated Landscape Deck - Open Space AIP Subm (Draft)	50 days	50 days	0 days	100%	Mon 10/2/20	Mon 30/3/20	Mon 10/2/20	Mon 30/3/20	Mon 10/2/20	Mon 30/3/20	0 days 3 days			-						
39	Submit & endorse by PM	21 days	21 days	0 days	100%	Mon 30/3/20	Mon 20/4/20	Mon 30/3/20	Mon 20/4/20	Mon 30/3/20	Mon 20/4/20	0 days 0.5 days	s 588								
90	Submit & endorse by Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Mon 6/7/20	Mon 24/8/20	NA	NA	Mon 28/9/20	Mon 16/11/20	84 days 1 days	588	-							
01	Prepare AIP and ICE certification (Final)	30 days		30 days	0%	Tue 25/8/20	Wed 23/9/20	NA	NA	Tue 17/11/20		84 days 2 days	588,590,44FF+	1	4						
)2	Prepare DDA and ICE certification (Draft)	75 days		75 days	0%	Thu 24/9/20	Sat 12/12/20		NA	Thu 17/12/20	Sat 6/3/21	84 days 1 day	590SS,591	$\parallel \parallel \parallel$							
03	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Sun 13/12/20	Sun 31/1/21		NA	Sun 7/3/21	Sun 25/4/21	84 days 0.5 days		$\parallel \parallel \parallel$							
94	Prepare DDA for and ICE certification (Final)	21 days		21 days	0%	Mon 1/2/21	Sun 21/2/21		NA	Mon 26/4/21	Sun 16/5/21	84 days 0.3 days	593,591FF+6 d								
05	Submit & endorse by PM and Statutory Authorities/Gov. Dept			50 days	0%	Mon 22/2/21	Mon 12/4/21		NA	Mon 17/5/21	Mon 5/7/21			ia,							
		50 days										84 days 0 days	394								
96	EVA for Open Space AIP Subm (Draft)		71 days	0 days	100%	Mon 10/2/20		Mon 10/2/20			Mon 20/4/20	0 days 3 days	506								
7	Submit & endorse by PM		2 days	0 days	100%	Tue 21/4/20		Tue 21/4/20	Mon 27/4/20		Mon 27/4/20	0 days 1 day	596	」'┃ ↓ ┃							
18	Submit & endorse by Statutory Authorities/Gov. Dept	50 days		50 days	0%	Mon 6/7/20	Mon 24/8/20		NA	Sun 4/10/20	Sun 22/11/20		596								
)	Prepare AIP and ICE certification (Final)	30 days		30 days	0%	Tue 25/8/20	Wed 23/9/20		NA	Mon 23/11/20	Tue 22/12/20	90 days 2 days	596,598,44FF+	-11							
)	Prepare DDA and ICE certification (Draft)	60 days	0 days	60 days	0%	Thu 24/9/20	Fri 27/11/20	NA	NA	Wed 23/12/20	Thu 25/2/21	90 days 1 day	598SS,599								
l l	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sat 28/11/20	Sat 16/1/21	NA	NA	Fri 26/2/21	Fri 16/4/21	90 days 0.5 days	s 600								
2	Prepare DDA for and ICE certification (Final)	30 days	0 days	30 days	0%	Sun 17/1/21	Mon 15/2/21	NA	NA	Sat 17/4/21	Sun 16/5/21	90 days 0 days	599FF+6 days,	60							
3	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Tue 16/2/21	Tue 6/4/21	NA	NA	Mon 17/5/21	Mon 5/7/21	90 days 0 days	602								
1	Waterfront Promenade and At-grade Open Space	533 days	5.98 days	527.02 days	0%	Wed 1/4/20	Wed 15/9/21	Wed 1/4/20	NA	Wed 1/4/20	Tue 28/9/21	13 days									
	Prepare AIP for Observation Deck with Lift (LT5) and Staircase and ICE (Include E&M Provision Works) certification (Draft)	24 days	24 days	0 days	100%	Wed 1/4/20	Fri 24/4/20	Wed 1/4/20	Fri 24/4/20	Wed 1/4/20	Fri 24/4/20	0 days 1 day		-	+						
6	Submit & endorse by PM and Statutory Authorities/Gov. Dept	14 dove	14 days	0 days	0%	Fri 24/4/20	Fri 8/5/20	Fri 24/4/20	Fri 8/5/20	Fri 24/4/20	Fri 8/5/20	0 days 1 day	605								
7	Prepare AIP for Observation Deck with Lift (LT5) and Staircase and ICE (Include				0%	Wed 16/9/20	Fri 16/10/20		NA	Thu 22/10/20	Sat 21/11/20	36 days 1 day	605,606,647FF								
'	E&M Provision Works) certification (Final)	31 days	0 days	31 days	0%	wed 10/9/20	FII 10/10/20	INA	NA	111u 22/10/20	Sat 21/11/20	30 days 1 day	003,000,047FF	,0							
8	Prepare DDA for Observation Deck with Lift and Staircase and ICE (Include E&M	I 100 days	0 days	100 days	0%	Sat 17/10/20	Sun 24/1/21	NA	NA	Sun 22/11/20	Mon 1/3/21	36 days 1 day	605,647,654,60)7							
9	Provision Works) certification (Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Mon 25/1/21	Sat 24/4/21	NA	NA	Tue 2/3/21	Sun 30/5/21	36 days 0.5 days	s 608,607	$\parallel \parallel \parallel$							
0	Prepare DDA for Observation Deck with Lift and Staircase and ICE (Include E&M	I 31 days	0 days	31 days	0%	Sun 25/4/21	Tue 25/5/21	NA	NA	Mon 31/5/21	Wed 30/6/21	36 days 1 day	609	$\parallel \parallel \parallel$							
1	Provision Works) certification (Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Wed 26/5/21	Mon 23/8/21	NA	NA	Thu 1/7/21	Tue 28/9/21	36 days 2 days	610	$\parallel \parallel \parallel$							
2	Prepare AIP for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Draft)	51 days	0 days	51 days	0%	Mon 14/9/20	Tue 3/11/20	NA	NA	Sun 27/9/20	Mon 16/11/20	13 days 2 days		$\parallel \parallel \parallel$							
	E&M Provision Works) certification (Draft)																				
.3	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Wed 4/11/20	Sun 17/1/21	NA	NA	Tue 17/11/20	Sat 30/1/21	13 days 0.5 days	612								
4	Prepare AIP for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Final)	60 days	0 days	60 days	0%	Mon 18/1/21	Thu 18/3/21	NA	NA	Sun 31/1/21	Wed 31/3/21	13 days 2 days	612,613								
5	, , ,	75 days	0 dave	75 days	0%	Tue 2/2/21	Sat 17/4/21	NA	NA	Mon 15/2/21	Fri 30/4/21	13 days 1 day	612,614FF+30	$\parallel \parallel \parallel$							
	Prepare DDA for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Draft)	, J days	o days	, o days	0 70	1 00 212121	Out 11/4/21	1111	1111	171011 1314141	111 50/4/21	15 days 1 day	days								
5	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 18/4/21	Wed 16/6/21	NA	NA	Sat 1/5/21	Tue 29/6/21	13 days 1 day	615	$\parallel \parallel \parallel$							
7	Prepare DDA for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Final)	31 days	0 days	31 days	0%	Thu 17/6/21	Sat 17/7/21	NA	NA	Wed 30/6/21	Fri 30/7/21	13 days 1 day	616,614FF+15	$\parallel \parallel \parallel$			iż				
													days								
.8	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	1	60 days	0%	Sun 18/7/21	Wed 15/9/21		NA	Sat 31/7/21	Tue 28/9/21	13 days 1 day	617								
.9	AIP for Cladding Design of Landscape Deck, Lifts and associated Works (Draft)	31 days	0 days	31 days	0%	Mon 20/7/20	Wed 19/8/20	NA	NA	Fri 21/8/20	Sun 20/9/20	32 days 1 day									
-																	2000111001110		1111		
e· Rev 11	Prog with Progress Task	Summary			Inactive Mi	lestone \Diamond		Duration-or	nly		Start-only	С	Ex	ternal Milesto	ne <	>	C	ritical Split			
		Project Sun	nmary		Inactive Sur	mmary		Manual Sur	nmary Rollup 🛮		Finish-only	3	De	adline	4		Pi	rogress			

							Cont	ract No. ED	/2018/01 K	TD Project										
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors			01 02	2021		2022	02 5
)	Submit & endorse by PM and Statutory Authorities/Gov. Dept	63 days		63 days	0%	Thu 20/8/20	Wed 21/10/20	NA	NA	Mon 21/9/20	Sun 22/11/20	32 days 3 day	ys 619	Q2 Q	Q3 Q4	Q1 Q2	Q3 Q4	Q1	Q2 (Q3 Q4
l l	AIP for Cladding Design of Landscape Deck, Lifts and associated Works (Final)	52 days	0 days	52 days	0%	Thu 22/10/20	Sat 12/12/20	NA	NA	Mon 23/11/20	Wed 13/1/21	32 days 2 day	ys 619,620							
2	DDA for Cladding Design of Landscape Deck, Lifts and associated Works (Draft)	61 days	0 days	61 days	0%	Thu 12/11/20	Mon 11/1/21	NA	NA	Mon 14/12/20	Fri 12/2/21	32 days 1 day	v 619,621FF+	30		444				
3	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	_	60 days	0%	Tue 12/1/21	Fri 12/3/21		NA	Sat 13/2/21	Tue 13/4/21	32 days 1 day	days							
1														22						
	DDA for Cladding Design of Landscape Deck, Lifts and associated Works (Final)	21 days	-	21 days	0%	Sat 13/3/21		NA	NA	Wed 14/4/21	Tue 4/5/21	32 days 1 day		023						
5	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Sat 3/4/21		NA	NA	Wed 5/5/21	Mon 5/7/21	32 days 2 day								
5	AIP for Balustrade and Railing of Promenade, Open Space and Assocated Works (Draft)	30 days	0 days	30 days	0%	Sat 1/8/20	Sun 30/8/20	NA	NA	Tue 29/9/20	Wed 28/10/20	59 days 1 day	У							
7	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Mon 31/8/20	Thu 29/10/20	NA	NA	Thu 29/10/20	Sun 27/12/20	59 days 1 day	y 626							
3	AIP for Balustrade and Railing of Promenade, Open Space and Assocated Works (Final)	25 days	0 days	25 days	0%	Fri 30/10/20	Mon 23/11/20	NA	NA	Mon 28/12/20	Thu 21/1/21	59 days 0.5 d	lays 626,627							
)	DDA for Balustrade and Railing of Promenade, Open Space and Assocated Works (Draft)	50 days	0 days	50 days	0%	Wed 4/11/20	Wed 23/12/20	NA	NA	Sat 2/1/21	Sat 20/2/21	59 days 1 day	626,628FF+	30		-				
)	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Thu 24/12/20	Sun 21/2/21	NA	NA	Sun 21/2/21	Wed 21/4/21	59 days 0 day	ys 629			*				
I	DDA for Balustrade and Railing of Promenade, Open Space and Assocated Works	15 days	0 days	15 days	0%	Mon 22/2/21	Mon 8/3/21	NA	NA	Thu 22/4/21	Thu 6/5/21	59 days 1 day	y 628,629,630			<u> </u>				
2	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Tue 9/3/21	Fri 7/5/21	NA	NA	Fri 7/5/21	Mon 5/7/21	59 days 0 day	ys 631			-		,		
3	Prepare AIP for Permanent Building Works (i.e. Ampitheater, Observation Tower,	60 days	0 days	60 days	0%	Wed 29/7/20	Sat 26/9/20	NA	NA	Thu 20/8/20	Sun 18/10/20	22 days 1 day		ys						
	Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Draft)	, 3																		
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 27/9/20	Wed 25/11/20	NA	NA	Tue 3/11/20	Fri 1/1/21	37 days 0.5 d	lays 633			-				
	Prepare AIP for Permanent Building Works (i.e.Ampitheater, Observation Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Final)	30 days	0 days	30 days	0%	Thu 26/11/20	Fri 25/12/20	NA	NA	Sat 2/1/21	Sun 31/1/21	37 days 0 day	633,634							
	Prepare DDA for Permanent Building Works (i.e. Ampitheater, Observation Tower Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Draft)	, 100 days	0 days	100 days	0%	Fri 2/10/20	Sat 9/1/21	NA	NA	Sun 8/11/20	Mon 15/2/21	37 days 1 day	y 633,635FF+ days,151FF- days		*	<u> </u>				
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sun 10/1/21	Thu 25/3/21	NA	NA	Tue 16/2/21	Sat 1/5/21	37 days 0.5 d	lays 635,636							
	Prepare DDA for Permanent Building Works (i.e. Ampitheater, Observation Tower Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) nd ICE certification (Final)			30 days	0%	Fri 26/3/21	Sat 24/4/21		NA	Sun 2/5/21	Mon 31/5/21	37 days 0 day				X				
)	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sun 25/4/21	Thu 8/7/21	NA	NA	Tue 1/6/21	Sat 14/8/21	37 days 0.5 d	lays 635,636,638							
)	Prepare AIP for Permanent Building E&M Works (i.e. Ampitheater, Observation	75 days			0%	Tue 14/7/20	Sat 26/9/20		NA	Wed 5/8/20	Sun 18/10/20	22 days 1 day			ЩШ					
	Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Draft)	75 days	0 days	75 days	076	Tue 14/1/20	Sat 20/9/20	NA	INA	Wed 3/6/20	Sull 16/10/20	zz days T day	y 149FF+7 ua	ys						
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 27/9/20	Wed 25/11/20	NA	NA	Mon 19/10/20	Thu 17/12/20	22 days 0.5 d	lays 640		 	~				
	Prepare AIP for Permanent Building E&M Works (i.e. Observation Tower, Toilet		0 days	30 days	0%	Thu 26/11/20	Fri 25/12/20	NA	NA	Fri 18/12/20	Sat 16/1/21	22 days 0 day	ys 640,641							
	Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Final)	3																		
3	Prepare DDA for Permanent Building E&M Works (i.e. Ampitheater, Observation Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE (Include E&M Provision Works) certification (Draft)	120 days	0 days	120 days	0%	Sun 27/9/20	Sun 24/1/21	NA	NA	Mon 19/10/20	Mon 15/2/21	22 days 1 day	640,642FF+ days,151FF- days		•	<u> </u>				
1	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days		60 days	0%	Mon 25/1/21	Thu 25/3/21		NA	Tue 16/2/21	Fri 16/4/21	22 days 0.5 d								
	Prepare DDA for Permanent Building E&M Works (i.e. Ampitheater, Observation Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) nd ICE certification (Final)	30 days	0 days	30 days	0%	Fri 26/3/21	Sat 24/4/21	NA	NA	Sat 17/4/21	Sun 16/5/21	22 days 0 day	ys 644							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Sun 25/4/21	Fri 23/7/21	NA	NA	Mon 17/5/21	Sat 14/8/21	22 days 0.5 d	lays 642,643,645	$-\parallel \parallel \parallel \parallel$						
	Prepare AIP for Temporary Building Works (i.e. temporary management office and			75 days	0%	Mon 3/8/20	Fri 16/10/20		NA	Thu 20/8/20	Mon 2/11/20	17 days 1 day								
	toilet blocks) and ICE certification (Draft)	, o days	- aujo	, o aujo		1.1011 5/0/20	11.10/10/20	1		20/0/20	11201 24 1 1/20	i, aujo i daj	, 1171117 Ua	~						
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sat 17/10/20	Wed 30/12/20	NA	NA	Tue 3/11/20	Sat 16/1/21	17 days 0 day	ys 647							
	Prepare AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE certification (Final)	30 days	0 days	30 days	0%	Thu 31/12/20	Fri 29/1/21	NA	NA	Sun 17/1/21	Mon 15/2/21	17 days 0 day	ys 633,634,648	,640						
	Prepare DDA for AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE (Include E&M Provision Works) and ICE certification (Draft)	150 days	0 days	150 days	0%	Fri 2/10/20	Sun 28/2/21	NA	NA	Mon 19/10/20	Wed 17/3/21	17 days 1 day	633,640,649 days,151FF-							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Mon 1/3/21	Fri 14/5/21	NA	NA	Thu 18/3/21	Mon 31/5/21	17 days 0.5 d								
2	Prepare DDA for AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE (Final)	30 days	0 days	30 days	0%	Sat 15/5/21	Sun 13/6/21	NA	NA	Tue 1/6/21	Wed 30/6/21	17 days 0 day	ys 651							
3	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Mon 14/6/21	Sat 11/9/21	NA	NA	Thu 1/7/21	Tue 28/9/21	17 days 0 day	ys 652							
e: Rev.11	i Prog with Progress	Summary			Inactive N			Duration-or	-		Start-only	Е		External Milesto	one <	·	Critical	-		
of 22-M	Split	Project Sur	nmary		Inactive S	ummary		Manual Su	mmary Rollup		Finish-only	3		Deadline	4	•	Progres	ess al Progress	_	



								ract No. ED/																		
Та	sk Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 C)3 Q4	Q1	2021 Q2 0		04 0		2022 2 Q3	3 Q4	O1	2023 Q2 Q	Q3 Q4
96	Section 6	0 days	0 days	0 days	0%	Thu 18/5/23	Thu 18/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	12 days	0 days	1357FF,1546FF,											18/5	<u> </u>
597	Section 7	0 days	0 days	0 days	0%	Wed 29/5/24	Wed 29/5/24	NA	NA	Wed 29/5/24	Wed 29/5/24	0 days	0 days	1549FF												
98	Section 8	0 days	0 days	0 days	0%	Wed 24/11/21	Wed 24/11/21	NA	NA	Thu 2/12/21	Thu 2/12/21	8 days	0 days	1144FF						≪ -24/1 I						
599	Section 9	0 days	0 days	0 days	0%	Sat 3/7/21	Sat 3/7/21	NA	NA	Mon 5/7/21	Mon 5/7/21	2 days	0 days	1222				e i	3/7							
700	Section 10	0 days	0 days	0 days	0%	Thu 11/5/23	Thu 11/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	19 days	0 days	1559FF											11/5	
701	KD1	0 days	0 days	0 days	0%	Tue 11/8/20	Tue 11/8/20	NA	NA	Fri 7/8/20	Fri 7/8/20	-4 days	0 days	758		11/8										
702	KD2		0 days	0 days	0%	Sat 17/4/21	Sat 17/4/21	NA	NA	Sun 18/4/21	Sun 18/4/21		0 days	791,821,771,774				1794								
703	KD3		0 days	0 days	0%	Mon 26/4/21	Mon 26/4/21		NA	Tue 1/6/21	Tue 1/6/21	36 days		822,821												
704	KD4						Fri 28/1/22			Mon 31/1/22				1255FF				2014			200					
			0 days	0 days	0%	Fri 28/1/22			NA		Mon 31/1/22	3 days								1	28/1					
705	KD5		0 days	0 days	0%	Fri 25/6/21		NA	NA	Fri 17/9/21	Fri 17/9/21	84 days		1252FF				(4 12	3/ 6							
706	KD6	0 days	0 days	0 days	0%	Tue 21/12/21	Tue 21/12/21	NA	NA	Wed 29/12/21	Wed 29/12/21	8 days	0 days	883						21	2					
07	KD7	0 days	0 days	0 days	0%	Thu 19/8/21	Thu 19/8/21	NA	NA	Fri 3/6/22	Fri 3/6/22	288 days	0 days	1254FF					44 19/8							
08 C	onstruction Works	1499 day	s 75.67 days	1423.33 days?	0%	Thu 16/5/19	Wed 29/5/24	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	0 days?														
709	Procurement of Materials and Equipments	615 days	12.7 days	602.3 days	0%	Thu 8/8/19	Wed 1/9/21	Thu 8/8/19	NA	Thu 8/8/19	Tue 22/2/22	140 days	3						7							
10	Office Accommodation	21 days	21 days	0 days	100%	Thu 8/8/19	Fri 20/12/19	Thu 8/8/19	Fri 20/12/19	Thu 8/8/19	Fri 20/12/19	0 days	1 day													
711	Lift Submission Preparation	15 days	0 days	15 days	0%	Sat 12/9/20	Sat 26/9/20	NA	NA	Wed 23/9/20	Wed 7/10/20	11 days	0.5 days	173												
12	Lift Comment & Approval	21 days	0 days	21 days	0%	Sun 27/9/20	Sat 17/10/20	NA	NA	Thu 8/10/20	Wed 28/10/20	11 days	0.5 days	711												
713	Lifts ((5 nos)	180 days		180 days	0%	Sun 18/10/20	Thu 15/4/21	NA	NA	Thu 29/10/20	Mon 26/4/21		30 days													
714	Pumps for Pump Room next to Underpass	150 days		150 days	0%	Sat 23/5/20	Thu 19/11/20		NA	Wed 8/7/20	Tue 5/1/21	37 days		112												
15	Elevated landscape deck soffit panels	120 days		120 days	0%	Mon 14/9/20		NA	NA	Thu 4/2/21	Mon 5/7/21	117 days														
16	Underpass & Depressed Rd - facades	120 days	0 days	120 days	0%	Tue 1/12/20	Thu 29/4/21	NA	NA	Wed 12/5/21	Mon 4/10/21	129 days	30 days													
17	E & M equipment & fittings (for Open space & Promenade)	120 days	0 days	120 days	0%	Tue 6/4/21	Fri 27/8/21	NA	NA	Mon 27/9/21	Tue 22/2/22	144 days	30 days													
718	Bridge Parapet Fabrication	120 days	0 days	120 days	0%	Mon 16/11/20	Mon 15/3/21	NA	NA	Wed 26/5/21	Wed 22/9/21	191 days	30 days													
19	Pumps for Salt and Sewage Pumping Stations	150 days	0 days	150 days	0%	Mon 5/4/21	Wed 1/9/21	NA	NA	Sun 19/9/21	Tue 15/2/22	167 days	30 days						-							
20	Excavation Permit	300 days	0 days	300 days	0%	Mon 31/8/20	Thu 2/9/21	NA	NA	Mon 23/11/20	Tue 1/3/22	69 days							7							
721	TTA Application for Junction Modification Rd L6 & D2	182 days	0 days	182 days	0%	Tue 1/9/20	Mon 1/3/21	NA	NA	Mon 23/11/20	Sun 23/5/21	83 days	2 days													
22	Interfaced DCS 3 x DN150mm chilled water pipes under contract no. 2852EM17A and 4 nos. of signaling cable along North Approach Ramp and Gate 3B (Agreed)	368 days	0 days	368 days	0%	Mon 31/8/20	Thu 2/9/21	NA	NA	Sat 27/2/21	Tue 1/3/22	180 days	3 day													
23	Section 1	842 days	107.17 days	734.83 days	0%	Thu 16/5/19	Mon 14/3/22	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	657 days	3													
24	Agree Interface Coordination Plan with CKR & KTSP	14 days	14 days	0 days	100%	Tue 27/8/19	Wed 11/9/19	Tue 27/8/19	Wed 11/9/19	Tue 27/8/19	Wed 11/9/19	0 days	0 days	1225,1226												
25	Ground Investigation	341 days	193.02 days	147.98 days	0%	Thu 12/9/19	Thu 5/11/20	Thu 12/9/19	NA	Thu 12/9/19	Sat 13/8/22	526 days	3	_												
26	GI Work		180 days	138 days	57%	Thu 12/9/19		Thu 12/9/19		Thu 12/9/19	Sat 13/8/22		0.5 days	724												
27	Part 1 - Junction Modification Rd L6 & D2	414 days		414 days	0%	Mon 5/10/20	Fri 25/2/22		NA	Mon 23/11/20		3 days	ois days	,2,												
			_										1 1													
28	XP Application for Junction Modification Rd L6 & D2	182 days		182 days	0%	Mon 5/10/20		NA	NA	Mon 23/11/20		49 days														
29	Stage 1: Trial Pit to locate the existing underground cables and utilities	14 days	0 days	14 days	0%	Thu 20/5/21	Fri 4/6/21	NA	NA	Mon 24/5/21	Tue 8/6/21	3 days	1 day	141,375,721,728												
30	Stage 2: Trial Pit to locate the existing underground cables and utilities	14 days	0 days	14 days	0%	Sat 5/6/21	Tue 22/6/21	NA	NA	Wed 9/6/21	Fri 25/6/21	3 days	1 day	729				1								
31	Stage 3: East Bound + Drop Kerb Modification + Road Marking	76 days	0 days	76 days	0%	Wed 23/6/21	Mon 20/9/21	NA	NA	Sat 26/6/21	Fri 24/9/21	3 days	1 day	730												
32	Stage 4: TTA for Central Divider	76 days	0 days	76 days	0%	Tue 21/9/21	Tue 21/12/21	NA	NA	Sat 25/9/21	Fri 24/12/21	3 days	1 day	731,113												
733	Stage 5: Construct 2 Dividers	51 days	0 days	51 days	0%	Wed 22/12/21	Fri 25/2/22	NA	NA	Tue 28/12/21	Tue 1/3/22	3 days	1 day	732												
34	Bridge D3 (Approach Ramp and Bridge) CH1087-1444.7	812 days	91.74 days	720.26 days	0%	Thu 16/5/19	Mon 7/2/22	Thu 16/5/19	NA	Mon 11/11/19	Wed 29/5/24	687 days	3								411 17					
35	North Approach Ramp	636 days	66.85 days	569.15 days	0%	Wed 25/12/19	Fri 18/2/22	Wed 25/12/19	NA	Wed 25/12/19	Tue 1/3/22	9 days		_	+ + + + + + + + + + + + + + + + + + +											
36	Procurement of Movement Joints for Bridge Works	180 days		180 days	0%	Tue 11/8/20	Sat 6/2/21	NA	NA	Fri 9/10/20	Tue 6/4/21		30 days	194,220		-										
37	Sheetpile Driven along North, Sourth & East Side ELS Cofferdam (assume 169	4 days		0 days	100%	Tue 14/1/20	Fri 17/1/20	Tue 14/1/20		Tue 14/1/20	Fri 17/1/20	0 days														
738	long) KTSP Completed Driven H-pile Installation				100%					Wed 25/12/19			- Luy													
			41 days	0 days		Wed 25/12/19					Mon 3/2/20	0 days	0.5.1	720												
739	Hoarding Removal along KTSP Site	5 days	5 days	0 days	100%	Tue 4/2/20	Sat 8/2/20	Tue 4/2/20	Sat 8/2/20	Tue 4/2/20	Sat 8/2/20	0 days	0.5 day	/58												
	T. 1	C			-	Glasta C		ъ	1		0			-	1110					10 "						
	.11 Prog with Progress	Summary Project Sum	ımary		Inactive M Inactive Su			Duration-on Manual Sun	ly 📗 nmary Rollup 🕳		Start-only Finish-only]	Externa Deadlia	al Milestoi ne	ne 🔷				cal Split ress						
s of 22-	May-20 Milestone ◆	Inactive Tas			Manual Ta			Manual Sun			External Tas	alen.		Critica		_				ual Progre						

							Con	tract No. ED,	/2018/01 KT	D Project										
Task Nam	2	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020	Q3 Q4	2021 O1 O2 O3 O4	2022 Q1 Q2 Q3	04 (2023 Q1 Q2 Q
740	Sheetpile Driven along Western ELS Cofferdam (assume 105m long)	8 days	8 days	0 days	100%	Tue 11/2/20	Wed 19/2/20	Tue 11/2/20	Wed 19/2/20	Tue 11/2/20	Wed 19/2/20	0 days	0.5 day	737,739		2	41	¥1 ¥2 ¥3		24 1 72
741	Excavattion with Shoring and Waling Installation with Rock Fill Replacement include Sand Raplacemnet Test with PWRL for KD1	44 days	44 days	0 days	100%	Thu 20/2/20	Wed 15/4/20	Thu 20/2/20	Wed 15/4/20	Thu 20/2/20	Wed 15/4/20	0 days	1 day							
742	Remaining Excavation with Shoring and Waling Installation with Rock Fill Replacement include Sand Raplacement Test with PWRL	37 days	0 days	37 days	0%	Tue 6/10/20	Wed 18/11/20) NA	NA	Tue 13/10/20	Wed 25/11/20	6 days	2 days	741,761						
743	North Approach Ramp (Bays No.2,3,4&5) (Next to BEM) (KD1)	106 day	s 34.01 days	71.99 days	0%	Wed 1/4/20	Tue 11/8/20	Wed 1/4/20	NA	Wed 1/4/20	Fri 7/8/20	-3 days			- - - - - - - - - - - - - -	1				
744	Bay No.3 Base Slab with Blinding (1)+(2)	15 days	15 days	0 days	100%	Wed 1/4/20	Wed 22/4/20	Wed 1/4/20	Wed 22/4/20	Wed 1/4/20	Wed 22/4/20	0 days	0.5 days	741SS+35 day	/S					
745	Bay No.3: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former	er) 42 days	22 days	20 days	45%	Wed 22/4/20	Thu 11/6/20	Wed 22/4/20	NA	Wed 22/4/20	Thu 11/6/20	-3 days		744						
746	May 2020 Inclement Weather	3 days	0 days	3 days	0%	Fri 12/6/20	Mon 15/6/20	NA	NA	Tue 9/6/20	Thu 11/6/20	-3 days		745,74SS						
47	Bay No. 3: Wall & Column Casted and Formwork & Falsework upto Soffit of	of 15 days	0 days	15 days	0%	Tue 16/6/20	Sat 4/7/20	NA	NA	Fri 12/6/20	Tue 30/6/20	-3 days	1 day	745,746						
748	Top Slab(6)+(7) Bay No. 3: Top Slab Construction with Formwork & Falsework Erection(8)	12 days	0 days	12 days	0%	Mon 6/7/20	Sat 18/7/20	NA	NA	Thu 2/7/20	Wed 15/7/20	-3 days	1 day	747						
749	Bay No.2 Base Slab with Blinding (1)+(2)	11 days	11 days	0 days	100%	Tue 28/4/20	Tue 12/5/20	Tue 28/4/20	Tue 12/5/20	Tue 28/4/20	Tue 12/5/20	0 days	1 day	741FS+2 days						
750	Bay No.2: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme			17 days	25%	Sat 16/5/20		Sat 16/5/20	NA	Sat 16/5/20	Thu 11/6/20	-1 day	1 day	749						
751	(3)+(4)+(5) Bay No. 2: Wall & Column Casted and Formwork & Falsework upto Soffit of	,		18 days	0%	Fri 12/6/20	Sat 4/7/20	NA	NA	Thu 11/6/20	Fri 3/7/20	-1 day		750	 ││ │					
752	Top Slab (6)+(7) Bay No. 2: Top Slab Construction with Formwork & Falsework Erection(8)				0%	Wed 8/7/20	Tue 21/7/20		NA NA	Sat 4/7/20			1 day	751,748FF+2						
	, , , , , , , , , , , , , , , , , , ,			12 days							Fri 17/7/20	-3 days		days						
753	Bay No.4 Base Slab with Blinding (1)+(2)		15 days	0 days	100%	Wed 1/4/20	Wed 13/5/20		Wed 13/5/20		Wed 13/5/20	0 days	1 day	741SS+35 day						
754	Bay No.4: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme (3)+(4)+(5)			14 days	36%	Thu 14/5/20	Tue 9/6/20	Thu 14/5/20		Thu 14/5/20	Tue 9/6/20	-3 days	1 day	753,750SS+7 days						
755	Bay No. 4: Wall & Column Casted and Formwork & Falsework upto Soffit of Top Slab (6)+(7)	of 20 days	0 days	20 days	0%	Wed 10/6/20	Sat 4/7/20	NA	NA	Sat 6/6/20	Tue 30/6/20	-3 days	1 day	754						
756	Bay No. 4: Top Slab Construction with Formwork & Falsework Erection (8)	14 days	0 days	14 days	0%	Mon 6/7/20	Tue 21/7/20	NA	NA	Thu 2/7/20	Fri 17/7/20	-3 days	1 day	755,751SS+4 days						
757	Backfill (9)	12 days	0 days	12 days	0%	Wed 22/7/20	Tue 4/8/20	NA	NA	Sat 18/7/20	Fri 31/7/20	-3 days	0.5 days	756,752,748						
758	Sheetpile Extraction and Road Reinstatement (10) (KD1)	6 days	0 days	6 days	0%	Wed 5/8/20	Tue 11/8/20	NA	NA	Sat 1/8/20	Fri 7/8/20	-3 days	0.5 days	757	i	*				
759	North Approach Ramp (Bays No.5 & 6) (Next to BEM)	92 days	0 days	92 days	0%	Mon 24/8/20	Mon 23/11/20	0 NA	NA	Thu 27/8/20	Thu 17/12/20	3 days								
760	Bay No.5 Base Slab with Blinding (1+2)	8 days	0 days	8 days	0%	Thu 10/9/20	Fri 18/9/20	NA	NA	Mon 14/9/20	Tue 22/9/20	3 days	1 day	749,753SS+4	da					
761	Bay No.5: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former	er) 12 days	0 days	12 days	0%	Sat 19/9/20	Mon 5/10/20	NA	NA	Wed 23/9/20	Thu 8/10/20	3 days	1 day	760		K				
762	(3+4+5) Bay No. 5: Wall & Column Casted and Formwork & Falsework upto Soffit of	of 20 days	0 days	20 days	0%	Tue 6/10/20	Thu 29/10/20	NA	NA	Fri 9/10/20	Mon 2/11/20	3 days	1 day	761,755SS+4						
763	Top Slab (6)+(7) Bay No. 5: Top Slab Construction with Formwork & Falsework Erection &	12 days	0 days	12 days	0%	Fri 30/10/20	Thu 12/11/20	NA	NA	Tue 3/11/20	Mon 16/11/20	3 days	1 day	days 762,227FF	-					
764	Removal (8) Bay No.6 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Mon 24/8/20	Wed 9/9/20	NA	NA	Thu 27/8/20	Sat 12/9/20	3 days	1 day	741SS+35 day	/S					
765	Bay No.6: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme			17 days	0%	Thu 10/9/20	Tue 29/9/20		NA	Wed 7/10/20	Tue 27/10/20	1		764						
766	(3)+(4)+(5) Bay No. 6: Wall & Column Casted and Formwork & Falsework upto Soffit of			27 days	0%	Wed 30/9/20	Tue 3/11/20		NA	Wed 28/10/20	Fri 27/11/20	21 days		765		TUII				
767	Top Slab(6)+(7)						Mon 23/11/20						1							
	Bay No. 6: Top Slab Construction with Formwork & Falsework Erection & Removal (8)			17 days	0%	Wed 4/11/20			NA	Sat 28/11/20	Thu 17/12/20		1 day	765,766						
768	North Approach Ramp (Bays 7&8) (Next to BEM)		0 days	56 days	0%	Tue 26/1/21	Wed 7/4/21		NA	Tue 26/1/21	Sat 17/4/21	0 days								
769	Bay 7: Blinding	1 day	0 days	1 day	0%	Tue 26/1/21	Tue 26/1/21		NA	Tue 26/1/21	Tue 26/1/21		0.5 days				1			
770	Bay 7: Base slab	9 days	0 days	9 days	0%	Wed 27/1/21		NA	NA	Wed 27/1/21	Fri 5/2/21	0 days	1 day	816,769						
771	Bay 7: Wall	13 days	0 days	13 days	0%	Sat 6/2/21	Wed 24/2/21	NA	NA	Wed 31/3/21	Sat 17/4/21	42 days	1 day	819,770						
772	Bay 8: Blinding	1 day	0 days	1 day	0%	Wed 27/1/21	Wed 27/1/21	NA	NA	Fri 5/2/21	Fri 5/2/21	8 days	0.5 days	769	7					
773	Bay 8: Base slab	9 days	0 days	9 days	0%	Sat 6/2/21	Fri 19/2/21	NA	NA	Sat 6/2/21	Fri 19/2/21	0 days	1 day	816,770,772			X			
774	Bay 8: Wall	13 days	0 days	13 days	0%	Sat 20/2/21	Sat 6/3/21	NA	NA	Sat 20/2/21	Sat 6/3/21	0 days	1 day	773,819						
775	Bays No.7&8: Backfilling	15 days	0 days	15 days	0%	Mon 8/3/21	Wed 24/3/21	NA	NA	Thu 18/3/21	Wed 7/4/21	9 days	1 day	774,767	$\parallel \parallel \parallel$					
776	Bays No.7&8: Extract Sheetpile	9 days	0 days	9 days	0%	Thu 25/3/21	Wed 7/4/21	NA	NA	Thu 8/4/21	Sat 17/4/21	9 days	0.5 days	775	$\parallel \parallel \parallel$					
777	North Approach Ramp (Bays No.2,3,4) (Next to KTSP)	149 day	s 0 days	149 days	0%	Mon 17/8/20	Tue 12/1/21	NA	NA	Tue 25/8/20	Fri 5/2/21	8 days			$\parallel \parallel \parallel$					
778	Bay No.3 Base Slab with Blinding (1)+(2)		0 days	15 days	0%	Mon 24/8/20	Wed 9/9/20		NA	Tue 1/9/20	Thu 17/9/20	7 days	1 day		$\parallel \parallel \parallel$					
779	Bay No.3: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme			17 days	0%	Thu 10/9/20	Tue 29/9/20		NA	Wed 7/10/20	Tue 27/10/20	21 days		778	$\parallel \parallel \parallel$					
780	(3)+(4)+(5) Bay No. 3: Wall & Column Casted and Formwork & Falsework upto Soffit of			27 days	0%	Wed 30/9/20	Tue 3/11/20		NA	Wed 7/10/20 Wed 28/10/20				779						
	Top Slab(6)+(7)											21 days								
781	Bay No. 3: Top Slab Construction with Formwork & Falsework Erection & Removal (8)			17 days	0%	Wed 4/11/20	Mon 23/11/20		NA	Sat 28/11/20	Thu 17/12/20		1	779,780						
782	Bay No.2 Base Slab with Blinding (1)+(2)		0 days	15 days	0%	Mon 17/8/20	Wed 2/9/20		NA	Tue 25/8/20		7 days		778FS-21 days	S					
783	Bay No.2: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme (3)+(4)+(5)	er) 17 days	0 days	17 days	0%	Thu 3/9/20	Tue 22/9/20	NA	NA	Wed 7/10/20	Tue 27/10/20	27 days	1 day	782						
itle: Rev.11 Pro	og with Progress	Summary			Inactive M	ilestone \Diamond		Duration-or			Start-only		С		xternal Milesto			olit		
s of 22-May-2	Split	Project Sur	mmary		■ Inactive Su	ımmary 🏻		Manual Sur	mmary Rollup 🔳		Finish-only		3	D	eadline	4	Progress			_

									/2018/01 KT											
Task Name		Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q3 0	04 01	2021 Q2 Q3	3 04 01	2022 Q2 Q3	Q4 Q1
34	Bay No. 2: Wall & Column Casted and Formwork & Falsework upto Soffit of Top Slab(6)+(7)	27 days		27 days	0%	Wed 23/9/20	Tue 27/10/20	NA	NA	Wed 28/10/20	Fri 27/11/20	27 days	1 day	783	X2 X2	Z- V1	1 22 1 23	V V V V V V V V V V V V V V V V V V V		77 1 21
35	Bay No. 2: Top Slab Construction with Formwork & Falsework Erection &	17 days	0 days	17 days	0%	Wed 28/10/20	Mon 16/11/20	NA	NA	Sat 28/11/20	Thu 17/12/20	27 days	1 day	783,784		14				
36	Removal (8) Bay No.4 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Tue 18/8/20	Thu 3/9/20	NA	NA	Wed 26/8/20	Fri 11/9/20	7 days	1 day	782SS+1 day						
37	Bay No.4: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former	17 days	0 days	17 days	0%	Fri 4/9/20	Wed 23/9/20	NA	NA	Sat 12/9/20	Sat 3/10/20	7 days	1 day	786						
38	(3)+(4)+(5) Bay No. 4: Wall & Column Casted and Formwork & Falsework upto Soffit of	27 days	0 days	27 days	0%	Thu 24/9/20	Wed 28/10/20	NA	NA	Mon 5/10/20	Thu 5/11/20	7 days	1 day	787						,
39	Top Slab(6)+(7) Bay No. 4: Top Slab Construction with Formwork & Falsework Erection &			17 days	0%	Thu 29/10/20			NA	Fri 6/11/20	Wed 25/11/20		1 day	787,788		14				,
90	Removal (8)																			,
	Bay No.2,3&4: Backfilling upto +3.0mPD	28 days		28 days	0%	Tue 24/11/20	Mon 28/12/20		NA	Fri 18/12/20	Fri 22/1/21	21 days		789,785,781,767						,
91	Bay No.4: Sheetpile Extraction (KD2)	12 days	0 days	12 days	0%	Tue 29/12/20			NA	Sat 23/1/21	Fri 5/2/21	21 days	0.5 days	790						,
	North Approach Ramp (Bays No.5,6) (Next to KTSP)	141 days	0 days	141 days	0%	Wed 18/11/20	Wed 7/4/21	NA	NA	Thu 26/11/20	Sat 10/4/21	3 days					7			,
93	Bay No.5 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Mon 23/11/20	Wed 9/12/20	NA	NA	Thu 26/11/20	Sat 12/12/20	3 days	1 day	741SS+35 days,		¥				,
94	Bay No.5: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former (3)+(4)+(5)	17 days	0 days	17 days	0%	Thu 10/12/20	Thu 31/12/20	NA	NA	Mon 14/12/20	Tue 5/1/21	3 days	1 day	793		I				,
95	Bay No. 5: Wall & Column Casted and Formwork & Falsework upto Soffit of	27 days	0 days	27 days	0%	Sat 2/1/21	Tue 2/2/21	NA	NA	Wed 6/1/21	Fri 5/2/21	3 days	1 day	794		*				,
96	Top Slab(6)+(7) Bay No. 5: Top Slab Construction with Formwork & Falsework Erection &	17 days	0 days	17 days	0%	Wed 3/2/21	Thu 25/2/21	NA	NA	Sat 6/2/21	Mon 1/3/21	3 days	1 day	794,795,791						
97	Removal (8) Bay No.6 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Wed 18/11/20	Fri 4/12/20	NA	NA	Thu 26/11/20	Sat 12/12/20	7 days	1 day	789						
98	Bay No.6: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former			17 days	0%	Sat 5/12/20	Thu 24/12/20		NA	Mon 14/12/20	Tue 5/1/21			797						
99	(3)+(4)+(5) Bay No. 6: Wall & Column Casted and Formwork & Falsework upto Soffit of			27 days	0%	Mon 28/12/20			NA	Wed 6/1/21	Fri 5/2/21			798						
	Top Slab(6)+(7)																			
00	Bay No. 6: Top Slab Construction with Formwork & Falsework Erection & Removal (8)			17 days	0%	Fri 29/1/21	Sat 20/2/21		NA	Sat 6/2/21	Mon 1/3/21			798,799						
01	Bay No.5&6: Backfilling upto +3.0mPD	26 days	0 days	26 days	0%	Fri 26/2/21	Sat 27/3/21	NA	NA	Tue 2/3/21	Wed 31/3/21	3 days	1 day	790,800,796						
)2	Bay No.5&6: Sheetpile Extraction (KD2)	6 days	0 days	6 days	0%	Mon 29/3/21	Wed 7/4/21	NA	NA	Thu 1/4/21	Sat 10/4/21	3 days	0.5 days	801,791						
13	North Approach Ramp (Bays 7&8) (Next to KTSP)	79 days	0 days	79 days	0%	Fri 29/1/21	Sat 17/4/21	NA	NA	Thu 11/2/21	Sat 17/4/21	0 days					7			,
)4	Bay 7: Base slab	9 days	0 days	9 days	0%	Fri 29/1/21	Mon 8/2/21	NA	NA	Thu 11/2/21	Wed 24/2/21	11 days	0.5 days	816,799		 				,
)5	Bay 7: Wall	12 days	0 days	12 days	0%	Mon 8/3/21	Sat 20/3/21	NA	NA	Mon 8/3/21	Sat 20/3/21	0 days	1 day	804,819,774			₹ 			,
6	Bay 8: Base slab	9 days	0 days	9 days	0%	Tue 9/2/21	Mon 22/2/21	NA	NA	Thu 25/2/21	Sat 6/3/21	11 days	0.5 days	804,816						,
7	Bay 8: Wall	12 days	0 days	12 days	0%	Tue 23/2/21	Mon 8/3/21	NA	NA	Mon 8/3/21	Sat 20/3/21	11 days	1 day	806,819						,
8	Bays No.7&8: Backfilling	15 days		15 days	0%	Mon 22/3/21		NA	NA	Mon 22/3/21	Sat 10/4/21		1 day	807,805						,
	Bays No.7&8: Extract Sheetpile				0%	Mon 12/4/21	Sat 17/4/21		NA	Mon 12/4/21	Sat 17/4/21			808,801,802						,
19			0 days	6 days									1 day							,
	Furniture	77 days		77 days	0%	Mon 19/4/21	Wed 21/7/21		NA	Thu 23/9/21	Tue 14/12/21			718						,
11	CH1087-1189: Parapet (28m per day per team) x 1 team + 6 day concreting			23 days	0%	Mon 19/4/21	Sat 15/5/21		NA	Thu 23/9/21	Thu 21/10/21	130 days	-	809,776,821						,
2	CH1087-1189: Central Median and Utilties Trough (6m per day per team) x 1 team	25 days	0 days	25 days	0%	Thu 27/5/21	Fri 25/6/21	NA	NA	Fri 22/10/21	Fri 19/11/21	122 days	1 day	811,236						,
13	CH1087-1189: Road Furniture	21 days	0 days	21 days	0%	Sat 26/6/21	Wed 21/7/21	NA	NA	Sat 20/11/21	Tue 14/12/21	122 days	3 days	812,358			111			,
[4	North Approach Ramp: Bay No. 1	135 days	0 days	135 days	0%	Fri 14/8/20	Mon 25/1/21	NA	NA	Fri 14/8/20	Mon 25/1/21	0 days								,
15	Bay 1: Base slab	27 days	0 days	27 days	0%	Fri 14/8/20	Mon 14/9/20	NA	NA	Fri 14/8/20	Mon 14/9/20	0 days	0.5 days	834						,
16	Bay 1: Wall	83 days	0 days	83 days	0%	Fri 16/10/20	Mon 25/1/21	NA	NA	Fri 16/10/20	Mon 25/1/21	0 days	3 days	819						,
17	Part 3G - CH1189.4 to CH1229 North Abutment	180 days	0 days	180 days	0%	Tue 15/9/20	Mon 26/4/21	NA	NA	Tue 15/9/20	Mon 26/4/21	0 days								,
18	North Abutment	180 days		180 days	0%	Tue 15/9/20	Mon 26/4/21	NA	NA	Tue 15/9/20	Mon 26/4/21	0 days								,
19	North Abutment - Base Slab	25 days		25 days	0%	Tue 15/9/20	Thu 15/10/20		NA	Tue 15/9/20	Thu 15/10/20		1 day	815						,
																<u>.</u>				,
20	North Abutment Wall (3.85m thk)	37 days		37 days	0%	Tue 26/1/21	Fri 12/3/21		NA	Tue 26/1/21	Fri 12/3/21	1	-	816						
21	North Abutment Wall (0.5m thk) (KD2) (KD3)	28 days		28 days	0%	Sat 13/3/21	Sat 17/4/21		NA	Sat 13/3/21	Sat 17/4/21			820						
22	Install bridge bearing	7 days	0 days	7 days	0%	Mon 19/4/21	Mon 26/4/21		NA	Mon 19/4/21	Mon 26/4/21	0 days	0.5 days	821,736						
23 .	At Grade Road Works CH1000-2124	157 days	0 days	157 days	0%	Tue 10/8/21	Fri 18/2/22	NA	NA	Thu 4/11/21	Tue 1/3/22	9 days								
4	CH1000-1087 At grade road works	60 days	0 days	60 days	0%	Tue 10/8/21	Thu 21/10/21	NA	NA	Wed 15/12/21	Tue 1/3/22	106 days	1 day	776,809,332,341				•		
5	CH1444.7-1560 At grade road works	45 days	0 days	45 days	0%	Wed 22/12/21	Fri 18/2/22	NA	NA	Wed 5/1/22	Tue 1/3/22	9 days	1 day	1293,826,219						
26	Ch2050 to 2124: At grade road works	50 days	0 days	50 days	0%	Mon 25/10/21	Tue 21/12/21	NA	NA	Thu 4/11/21	Tue 4/1/22	9 days	1 day	1438,219						
27 Brid	ige D3 Bored Pile	17 days	17 days	0 days	0%	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	Thu 5/12/19	0 days								
28	Pre-drilling Works		15 days	0 days	100%	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	Thu 5/12/19	0 days	0.5 day							
	-																		<u>. </u>	
e: Rev.11 Prog	with Progress	Summary Project Sur	nmarv		Inactive M Inactive Su	_		Duration-on Manual Sur	lly nmary Rollup =		Start-only Finish-only		C 3	Extern Deadli	al Milestone ne	♣		Critical Split Progress		
of 22-May-20		Inactive Ta		-	Manual Ta			Manual Sun			External Tasi		-	Critica		*		Manual Progres		

								tract No. ED/															
Task Na	ame	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q3	04	202 1 Q2		01	2022 Q2 C	03 04	Q1 C	2023 22 Q3 (
29	Part 3C - CH1229 to CH1279	823 day	s? 137.51 days	685.49 days?	0%	Thu 16/5/19	Sat 19/2/22	Thu 16/5/19	NA	Mon 11/11/19	Wed 29/5/24	676 da											
30	Abutment A01 Piling	0 days	0 days	0 days	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1841 d											
331	CH1189: Bored Pile (A01-BP1) by Rig 1(Contractor Bear DDA Approval Risk)	61 days	40 days	21 days	66%	Tue 31/3/20	Tue 16/6/20	Tue 31/3/20	NA	Tue 31/3/20	Tue 16/6/20	0 days	1 day	839									
332	CH1189: Bored Pile (A01-BP2) by Rig 1 (Contractor Bear DDA Approval Risk	29 days	29 days	0 days	100%	Mon 13/4/20	Tue 19/5/20	Mon 13/4/20	Tue 19/5/20	Mon 13/4/20	Tue 19/5/20	0 days	1 day										
333	Abutment A01: Pile Testing (28d curing & 14 test) - 1 full-core to be carried out	t 37 days	0 days	37 days	0%	Wed 17/6/20	Fri 31/7/20	NA	NA	Wed 17/6/20	Fri 31/7/20	0 days	5 days	831,832									
334	Abutment A01: Proof-drilling Works	11 days	0 days	11 days	0%	Sat 1/8/20	Thu 13/8/20	NA	NA	Sat 1/8/20	Thu 13/8/20	0 days	2 day	833									
835	Mobilization of plant and material	6 days	6 days	0 days	100%	Mon 11/11/19	Sat 16/11/19	Mon 11/11/19	Sat 16/11/19	Mon 11/11/19	Sat 16/11/19	0 days	1 days	14,194,193									
336	CH1229: Pre-drilling Works	21 days	21 days	0 days	100%	Tue 19/11/19	Thu 12/12/19	Tue 19/11/19	Thu 12/12/19	Tue 19/11/19	Thu 12/12/19	0 days	0.5 days										
337	Pier P01 Piling, Pilecap & Pier	0 days	0 days	0 days	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1841 d											
338	Bored pile (P01-BP2) @ CH1229 by Rig 1 (Contractor Bear DDA Approval	44 days	44 days	0 days	100%	Fri 17/1/20	Wed 11/3/20	Fri 17/1/20	Wed 11/3/20	Fri 17/1/20	Wed 11/3/20	0 days	0.5 days										
339	Risk) Bored pile (P01-BP1) @ CH1229 by Rig 1 (Contractor Bear DDA Approval	38 days	38 days	0 days	100%	Mon 24/2/20	Wed 8/4/20	Mon 24/2/20	Wed 8/4/20	Mon 24/2/20	Wed 8/4/20	0 days	0.5 days	838SS+30 days		_							
40	Risk) Pier P01: Pile Testing (18d curing & 14 test)	45 days	0 days	45 days	0%	Sat 23/5/20	Thu 16/7/20	NA	NA	Mon 6/7/20	Wed 26/8/20	35 days	3 days	839		_							
841	Pier P01: Proof-drilling Works	10 days	0 days	10 days	0%	Fri 17/7/20	Tue 28/7/20	NA	NA	Thu 27/8/20	Mon 7/9/20	35 days	1 day	839,840									
842	Pile Cap P01 @ CH1229	98 days	0 days	98 days	0%	Mon 15/6/20	Sun 11/10/20	NA	NA	Sat 29/8/20	Fri 13/11/20	28 days				-							
343	Excavation with Shoring Installation ~2600m3 Prod. Rate: 160m3/day/team	17 days	0 days	17 days	0%	Wed 29/7/20	Mon 17/8/20	NA	NA	Tue 8/9/20	Sat 26/9/20	35 days	1 day	841									
844	Pilecap - Formwork Design and Method Statement Submission		0 days	0 days	0%	Mon 15/6/20	Mon 15/6/20		NA	Sat 29/8/20	Sat 29/8/20	75 days	-		♦ 15/6								
845	Pilecap - Formwork Design and Method Statement Comment & Appraoval		0 days	30 days	0%	Mon 15/6/20	Tue 14/7/20		NA	Sat 29/8/20	Sun 27/9/20	75 days		844									
846	Pilecap structure		0 days	24 days	0%	Tue 18/8/20	Mon 14/9/20			Mon 28/9/20	Wed 28/10/20			845,843		z							
347	Backfill		0 days	14 days	0%	Tue 15/9/20	Wed 30/9/20		NA	Thu 29/10/20	Fri 13/11/20	35 days	-	846									
348	Pier - Formwork Design and Method Statement Submission		0 days	0 days	0%	Mon 7/9/20	Mon 7/9/20		NA	Sat 10/10/20	Sat 10/10/20	33 days	-			7/0							
49	Pier - Formwork Design and Method Statement Comment & Appraoval	35 days		35 days	0%	Mon 7/9/20	Sun 11/10/20		NA	Sat 10/10/20	Fri 13/11/20	33 days	-	848		111							
50	Pier P01 @ CH1229			49 days	0%	Wed 28/10/20			NA NA	Sat 14/11/20	Wed 13/1/21	15 days		847,211,849									
51	CH1269: Pre-drilling Works		0 days		0%	Wed 20/11/19				Wed 20/11/19	Thu 19/12/19			835,836									
352			30 days	0 days										ŕ									
	Abandon the Installed defected Bored pile (P02-BP2) @ CH1269		35 days	0 days	100%	Tue 11/2/20		Tue 11/2/20			Sun 22/3/20		0.5 days	851									
353	Pier P02 Piling, Pilecap & Pier			1 day?	0%	Thu 16/5/19	Thu 16/5/19		NA	Wed 29/5/24	Wed 29/5/24	1840 d											
354	Predrilling works for Bored pile (P02-BP2)(Abandoned) @ CH1269		0 days	11 days	0%	Wed 3/6/20	Mon 15/6/20		NA	Tue 9/6/20	Sat 20/6/20		0.5 days										
355	Casing Extraction for Abandoned P02-BP2 Bored Pile		0 days	20 days	0%	Sat 20/6/20	Wed 15/7/20		NA	Mon 22/6/20	Thu 16/7/20		•	854									
856	Bored pile (P02-BP2)(Remedial) @ CH1269		0 days	30 days	0%	Thu 16/7/20	Wed 19/8/20		NA	Fri 17/7/20	Thu 20/8/20			855,854									
357	Bored pile (P02-BP1) @ CH1269 (Contractor Bear DDA Approval Risk) (Rig 2	2) 26 days	26 days	0 days	100%	Fri 21/2/20	Sat 18/4/20			Fri 21/2/20	Sat 18/4/20		0.5 days										
358	Pile Testing (18d curing & 14 test)	32 days	0 days	32 days	0%	Thu 20/8/20	Fri 25/9/20	NA	NA	Wed 2/9/20	Sat 10/10/20	11 days	0.5 days	852,857,856									
359	Proof-drilling Works	9 days	0 days	9 days	0%	Sat 26/9/20	Thu 8/10/20	NA	NA	Mon 12/10/20	Wed 21/10/20			839,840,858									
860	Pile Cap ELS - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 29/6/20	Mon 29/6/20	NA	NA	Tue 22/9/20	Tue 22/9/20	85 days	1 day		♦ 29	6							
861	Pile Cap ELS - Temp. Works Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 29/6/20	Tue 28/7/20	NA	NA	Tue 22/9/20	Wed 21/10/20	85 days	1 day	860									
362	Pile Cap P02 @ CH1270	120 day	s 0 days	120 days	0%	Mon 24/8/20	Sat 16/1/21	NA	NA	Thu 22/10/20	Fri 29/1/21	11 days											
863	Drive sheetpile (~75m). Prod. Rate: 5m/day/side/team	17 days	0 days	17 days	0%	Fri 9/10/20	Thu 29/10/20	NA	NA	Thu 22/10/20	Wed 11/11/20	11 days	2 days	861,858,140,859	j								
64	Excavation ~1677m3 & lateral support. Prod. Rate: 100m3/day/team	18 days	0 days	18 days	0%	Fri 30/10/20	Thu 19/11/20	NA	NA	Thu 12/11/20	Wed 2/12/20	11 days	1 days	863									
365	Pilecap Formwork Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 24/8/20	Mon 24/8/20	NA	NA	Thu 12/11/20	Thu 12/11/20	80 days	1 day			24/8							
366	Pilecap Formwork - Design and Method Statement Comment & Appraoval	21 days	0 days	21 days	0%	Mon 24/8/20	Sun 13/9/20	NA	NA	Thu 12/11/20	Wed 2/12/20	80 days	1 day	865									
367	Pilecap structure	36 days	0 days	36 days	0%	Fri 20/11/20	Mon 4/1/21	NA	NA	Thu 3/12/20	Sat 16/1/21	11 days	1 day	866,864,863		*							
368	Backfill and extract sheet pile	11 days	0 days	11 days	0%	Tue 5/1/21	Sat 16/1/21	NA	NA	Mon 18/1/21	Fri 29/1/21	11 days	2 day	867									
69	Pier - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 7/9/20	Mon 7/9/20	NA	NA	Thu 31/12/20	Thu 31/12/20	115 days	1 day			7/9							
370	Pier - Temp. Works Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 7/9/20	Tue 6/10/20	NA	NA	Thu 31/12/20	Fri 29/1/21	115 days	1 day	869		*							
371	Pier P02 @ CH1270	49 days	0 days	49 days	0%	Mon 18/1/21	Thu 18/3/21	NA	NA	Sat 30/1/21	Wed 31/3/21	11 days	1 day	868,211,870									
872	Stage 1: Bridge deck between CH1229-1311	340 day	s 0 days	340 days	0%	Mon 2/11/20	Tue 21/12/21	NA	NA	Tue 19/1/21	Wed 29/12/21	5 days							-				
873	Bridge Deck - Temp. Works Design and Method Statement Submission		0 days	0 days	0%	Mon 2/11/20	Mon 2/11/20		NA	Tue 19/1/21	Tue 19/1/21	78 days	1 day			4 2/11							
																			<u> </u>				<u> </u>
	Prog with Progress Task Split	Summary Project Sur	mmary		Inactive Mi Inactive Sur			Duration-on Manual Sur	nly IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Start-only Finish-only	ا	[]		ernal Milestono dline	: ♦ ↓		Critical Progres		-			
s of 22-May	y-20 Milestone ◆	Inactive Ta			Manual Tas			Manual Sur			External Tas			Crit					al Progress	_			

) Task Nar		ъ :		ъ	D1 : : : :	n				TD Project	1	m	DD 4	1	2020		2000	-		2027		1	2022	
Task Nar	ne	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total Slack	ΓRA P		2020 Q3 Q	4 Q1	2021 Q2 Q	3 Q4	Q1 (2022 Q2 Q3	3 Q4	Q1 0	2023 Q2 Q3	O4
74	Bridge Deck - Temp. Works Design and Method Statement Comment & Appraoval	35 days	0 days	35 days	0%	Mon 2/11/20	Sun 6/12/20	NA	NA	Tue 19/1/21	Mon 22/2/21	78 days 1	day 8	73										
375	CH1229-1311: Deck Falsework erection Part 1	32 days	0 days	32 days	0%	Tue 23/2/21	Wed 31/3/21	NA	NA	Tue 23/2/21	Wed 31/3/21	0 days 1	l day 8	74,922			-							
876	CH1229-1311: Deck Falsework erection Part 2	28 days	0 days	28 days	0%	Thu 1/4/21	Fri 7/5/21	NA	NA	Thu 1/4/21	Fri 7/5/21	0 days 3	3 days 8	75,871			**							
877	CH1229-1311: Structure deck	50 days	0 days	50 days	0%	Wed 7/4/21	Sat 5/6/21	NA	NA	Wed 7/4/21	Sat 5/6/21	0 days 2	2 day 4	75,483,736,875										
878	CH1229-1311: Prestressing	18 days	0 days	18 days	0%	Thu 24/6/21	Thu 15/7/21	NA	NA	Thu 24/6/21	Thu 15/7/21	0 days 0).5 day 8	77FS+14 days			 							
879	CH1229-1311: Falsework Under Main Deck Removal	12 days	0 days	12 days	0%	Fri 16/7/21	Thu 29/7/21	NA	NA	Fri 16/7/21	Thu 29/7/21	0 days 0).5 day 8	78										
880	CH1229-1311: Utility Trough (0.67m per day per team) x 4 team	70 days	0 days	70 days	0%	Fri 16/7/21	Thu 7/10/21	NA	NA	Thu 22/7/21	Wed 13/10/21	5 days 9	days 2	19,878										
381	CH1229-1311: Central Median (6m per day per team) x 2 team	31 days	0 days	31 days	0%	Fri 16/7/21	Fri 20/8/21	NA	NA	Sat 2/10/21	Mon 8/11/21	65 days 3	3 days 8	78										
882	CH1229-1311: Parapet (28m per day per team) x 2 team + 6x2 day concreting			21 days	0%	Fri 8/10/21	Tue 2/11/21	NA	NA	Fri 15/10/21	Mon 8/11/21	5 days 3	3 days 8	80										
83	CH1229-1311: Removal of Falsework (KD6)	42 days		42 days	0%	Wed 3/11/21	Tue 21/12/21		NA	Tue 9/11/21	Wed 29/12/21			80,882,881										
384	CH1229-1311: Road Furniture	15 days		15 days	0%	Sat 21/8/21		NA	NA	Sat 27/11/21	Tue 14/12/21	81 days 1		81,358										
			-										uay o	51,556										
885	Part 3D - CH1279 to CH1311	196 days		196 days	0%	Mon 7/6/21	Sat 29/1/22		NA	Wed 16/6/21	Fri 11/2/22	7 days												
886	Stage 1: Bridge deck between CH1269-1311	196 days		196 days	0%	Mon 7/6/21	Sat 29/1/22		NA	Wed 16/6/21	Fri 11/2/22	7 days												
387	CH1269-1311: Structure deck	50 days		50 days	0%	Mon 7/6/21		NA	NA	Wed 16/6/21	Fri 13/8/21			75,483,736,877										
388	Prestressing CH1269 - 1311 Bridge Spans	21 days	0 days	21 days	0%	Mon 23/8/21	Wed 15/9/21	NA	NA	Tue 31/8/21	Fri 24/9/21	7 days 3	3 day 8	87FS+14 days										
889	CH1269-1311: Utility Trough (0.67m per day per team) x 2 team	64 days	0 days	64 days	0%	Thu 16/9/21	Thu 2/12/21	NA	NA	Sat 25/9/21	Fri 10/12/21	7 days 0).5 day 8	88,219										
90	CH1269-1311: Parapet (28m per day per team) x 1 team + 6 day concreting	17 days	0 days	17 days	0%	Fri 3/12/21	Wed 22/12/2	1 NA	NA	Sat 11/12/21	Mon 3/1/22	7 days 3	3 days 8	89				i i						
391	CH1269-1311 : Central Median (6m per day per team) x 1 team	15 days	0 days	15 days	0%	Thu 23/12/21	Wed 12/1/22	NA	NA	Wed 5/1/22	Fri 21/1/22	8 days 1	day 8	89,890										
392	CH1269-1311: Road Furniture	15 days	0 days	15 days	0%	Thu 13/1/22	Sat 29/1/22	NA	NA	Sat 22/1/22	Fri 11/2/22	8 days 1	l day 8	91,358				l l l l						
393	Stage2: Bridge deck between CH1189-1229	823 days?	0 days	823 days?	0%	Thu 16/5/19	Sat 19/2/22	NA	NA	Tue 27/4/21	Wed 29/5/24	579 da												
394	CH1189-1229: Deck Falsework erection	1 day?	0 days	1 day?	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1840 d												
95	CH1189-1229: Deck Falsework erection	22 days	0 days	22 days	0%	Tue 27/4/21	Mon 24/5/21	NA	NA	Tue 27/4/21	Mon 24/5/21	0 days 1	l day 8	50,822										
396	CH1189-1229: Structure deck	27 days		27 days	0%	Tue 25/5/21	Fri 25/6/21		NA	Tue 25/5/21	Fri 25/6/21	0 days 2		95,475,483										
397	CH1189-1229: Prestressing	18 days		18 days	0%	Wed 14/7/21		NA	NA	Wed 14/7/21	Tue 3/8/21			96FS+14 days										
98	CH1189-1229: Falsework Under Main Deck Removal																							
		15 days		15 days	0%	Wed 4/8/21	Fri 20/8/21		NA	Wed 4/8/21	Fri 20/8/21	1	-	78,897										
399	CH1189-1229: Utility Trough (0.67m per day per team) x 2 team	63 days		63 days	0%	Wed 4/8/21	Tue 19/10/21		NA	Wed 13/10/21	Tue 28/12/21	58 days 3		19,897										
00	CH1189-1229 : Central Median (6m per day per team) x 1 team	16 days		16 days	0%	Sat 21/8/21	Wed 8/9/21		NA	Fri 21/1/22	Fri 11/2/22	125 days 3		97,881										
901	CH1189-1229 : Parapet (28m per day per team) x 1 team + 6 day concreting	20 days	0 days	20 days	0%	Wed 3/11/21	Thu 25/11/21		NA	Mon 17/1/22	Fri 11/2/22	61 days 5		99,882										
902	CH1189-1229: Road Furniture	15 days	0 days	15 days	0%	Mon 31/1/22	Sat 19/2/22	NA	NA	Sat 12/2/22	Tue 1/3/22	8 days 1	day 9	00,892,358,901										
903	Part 3E - CH1311 to CH1372	652 days	94.1 days	557.9 days	0%	Tue 12/11/19	Fri 21/1/22	Tue 12/11/19	NA	Tue 12/11/19	Wed 29/5/24	698 days							1					
904	Pre-drilling Works	31 days	31 days	0 days	0%	Tue 12/11/19	Tue 17/12/19	Tue 12/11/19	Tue 17/12/1	9 Tue 12/11/19	Tue 17/12/19	0 days 0).5 day											
905	Bored pile (P03-BP1) @ CH1311 (Rig 2) (Contractor Bear DDA Design Risk)	40 days	40 days	0 days	100%	Tue 17/3/20	Fri 8/5/20	Tue 17/3/20	Fri 8/5/20	Tue 17/3/20	Fri 8/5/20	0 days 0).5 day 9	04										
906	Bored pile (P03-BP2) @ CH1311 (Contractor Bear DDA Design Risk) (Rig 2)	36 days	25 days	11 days	69%	Wed 22/4/20	Thu 4/6/20	Wed 22/4/20	NA	Wed 22/4/20	Thu 4/6/20	0 days 3	3 day											
907	Pile Testing (18 curing & 14 test)	35 days	0 days	35 days	0%	Sat 6/6/20	Sat 18/7/20	NA	NA	Sat 6/6/20	Sat 18/7/20	0 days 3	day 9	06FS+1 day,90										
008	Proof-drilling Works	11 days	0 days	11 days	0%	Mon 20/7/20	Fri 31/7/20	NA	NA	Mon 20/7/20	Fri 31/7/20	0 days 2	2 days 9	07										
909	Pile Cap P03 @ CH1311	76 days		76 days	0%	Tue 7/7/20	Mon 5/10/20		NA	Fri 31/7/20		21 days			 									
910	Pile Cap @ CH1311 by Open Cut	46 days		46 days	0%	Sat 1/8/20	Wed 23/9/20		NA	Wed 28/10/20	Sat 19/12/20	72 days	9	08										
911	Pilecap Formwork Design and Method Statement Submission	0 days		0 days	0%	Tue 7/7/20	Tue 7/7/20		NA	Tue 30/4/24	Tue 30/4/24		l day		777									
912	Pilecap Formwork Design and Method Statement Comment & Appraoval	30 days		30 days	0%	Tue 7/7/20	Wed 5/8/20		NA	Tue 30/4/24	Wed 29/5/24	days		11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
												days	-											
913	Excavation with Shoring Installation ~2600m3 Prod. Rate: 160m3/day/team	17 days		17 days	0%	Sat 1/8/20	Thu 20/8/20		NA	Sat 1/8/20	Thu 20/8/20			08										
14	Pilecap Formwork - design and Method Statement Submission	0 days		0 days	0%	Mon 20/7/20	Mon 20/7/20		NA	Fri 31/7/20	Fri 31/7/20	11 days 1			2017									
915	Pilecap Formwork - Design and Method Statement Comment & Appraoval	21 days		21 days	0%	Mon 20/7/20	Sun 9/8/20		NA	Fri 31/7/20	Thu 20/8/20	11 days 1		14										
916	Pilecap structure	24 days	0 days	24 days	0%	Fri 21/8/20	Thu 17/9/20	NA	NA	Fri 21/8/20	Thu 17/9/20	0 days 1	day 9	15,908,913		┧║║								
917	Backfill	13 days	0 days	13 days	0%	Fri 18/9/20	Mon 5/10/20	NA	NA	Fri 18/9/20	Mon 5/10/20	0 days 1	l day 9	16										
918	Agree Interface Coordination Plan with CKP-KTW (HY/2014/07)	14 days	0 days	14 days	0%	Tue 6/10/20	Wed 21/10/20) NA	NA	Tue 6/10/20	Wed 21/10/20	0 days 0) days 9	17		21/10								
:tlo: D=::11 D	Task	Summary	<u> </u>		Inactive M	filestone \Diamond	1	Duration-on	ly		Start-only			External N	filestone	<u> </u>		Critical Sp	lit	1111 11 11			111111	_
tie: Rev.11 Pi s of 22-May-	og with Progress	Project Sumi	mary		Inactive S	ummary			nmary Rollup		Finish-only		3	Deadline		•		Progress		_				
	Milestone ◆	Inactive Task	k		Manual Ta	ask		Manual Sun	nmary		External Task	CS II		Critical				Manual Pr	ogress					

									/2018/01 KT											
Task Nam	е	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q	3 04 01	2021 Q2 Q		2022 Q1 Q2 Q3	Q4 Q1
9	Allow access to CKR-KTW contractor for sheet pile wall installation. PS App.1.18 2.7(A)(c)	60 days		60 days	0%	Thu 22/10/20	Sun 20/12/20	NA	NA	Thu 22/10/20	Sun 20/12/20		0 days	917,918						
20	Pier - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 12/10/20	Mon 12/10/20	NA	NA	Mon 16/11/20	Mon 16/11/20	35 days	1 day			♦ 12/16				
1	Pier - Temp. Works Design and Method Statement Comment & Approval	35 days	0 days	35 days	0%	Mon 12/10/20	Sun 15/11/20	NA	NA	Mon 16/11/20	Sun 20/12/20	35 days	1 day	920						
2	Pier P03 @ CH1311	49 days	0 days	49 days	0%	Mon 21/12/20	Mon 22/2/21	NA	NA	Mon 21/12/20	Mon 22/2/21	0 days	1 day	916,919,850SS+						
13	Pre-drilling Works	15 days	15 days	0 days	100%	Wed 4/12/19	Wed 18/12/19	Wed 4/12/19	Wed 18/12/	. Wed 4/12/19	Wed 18/12/19	0 days	0.5 days		\coprod					
4	Diversion of existing 150mm dia. Watermain (agreed)	54 days	42 days	12 days	78%	Sat 28/3/20	Fri 5/6/20	Sat 28/3/20	NA	Sat 28/3/20	Sat 14/11/20	134 days	2 days							
15	Bored pile (P04-BP2) @ CH1351 (Rig 2)	52 days		51 days	0%	Fri 22/5/20	Wed 21/10/20	Fri 22/5/20	NA	Fri 22/5/20	Tue 19/1/21	73 days		923,856						
16	Bored pile (P04-BP1) @ CH1351 (Rig 2)		0 days	53 days	0%	Tue 11/8/20	Tue 13/10/20		NA	Mon 16/11/20	Tue 19/1/21	80 days		202,924,923,925						
7											Thu 4/3/21			926,925						
18	Pile Testing (14d curing & 14 test)		0 days	35 days	0%	Thu 22/10/20			NA	Wed 20/1/21		73 days		<u> </u>						
	Proof-drilling Works	11 days		11 days	0%	Thu 3/12/20	Tue 15/12/20		NA	Fri 5/3/21	Wed 17/3/21	73 days	2 days	927						
.9	Pile Cap P04 @ CH1351 with ELS	47 days	0 days	47 days	0%	Wed 16/12/20	Thu 11/2/21	NA	NA	Thu 1/4/21	Mon 31/5/21	85 days		933SS,928						
0	Pile Cap @ CH1351	97 days	0 days	97 days	0%	Mon 2/11/20	Mon 1/3/21	NA	NA	Tue 16/2/21	Mon 31/5/21	73 days								
1	Pilecap ELS- Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 2/11/20	Mon 2/11/20	NA	NA	Tue 16/2/21	Tue 16/2/21	106 days	1 day			4 2/11				
2	Pilecap ELS - Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 2/11/20	Tue 1/12/20	NA	NA	Tue 16/2/21	Wed 17/3/21	106 days	1 day	931						
13	Drive sheetpile (~75m). Prod. Rate: 10m/day/side/team	10 days	0 days	10 days	0%	Wed 16/12/20	Tue 29/12/20	NA	NA	Thu 18/3/21	Mon 29/3/21	73 days	2 days	932,928						
4	Excavation with Shoring Installation ~2600m3 Prod. Rate: 160m3/day/team	19 days	0 days	19 days	0%	Wed 30/12/20	Thu 21/1/21	NA	NA	Tue 30/3/21	Fri 23/4/21	73 days	2 day	933						
15	Pilecap Formwork- Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 1/12/20	Tue 1/12/20	NA	NA	Thu 25/3/21	Thu 25/3/21	114 days	1 day			♠ 1/12				
6	Pilecap Formworks - Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Tue 1/12/20	Wed 30/12/20	NA	NA	Thu 25/3/21	Fri 23/4/21	114 days	1 day	935						
7	Pile Cap structure	19 days	0 days	19 days	0%	Fri 22/1/21	Tue 16/2/21	NA	NA	Sat 24/4/21	Mon 17/5/21	73 days	1 day	846,936,934						
8	Backfill and extract sheet pile	11 days		11 days	0%	Wed 17/2/21	Mon 1/3/21	NA	NA	Tue 18/5/21	Mon 31/5/21	73 days	2 days	937						
9	Pier - Temporary Design and Method Statement Submission		0 days	0 days	0%	Mon 4/1/21	Mon 4/1/21		NA	Sun 2/5/21	Sun 2/5/21	118 days		, , ,						
)					0%	Mon 4/1/21		NA	NA	Sun 2/5/21				939						
l l	Pier - Temporary Design and Method Statement Comment & Appraoval	30 days		30 days							Mon 31/5/21	118 days								
	Pier P04 @ CH1351		0 days	49 days	0%	Tue 2/3/21		NA	NA	Tue 1/6/21	Thu 29/7/21	73 days		938,922,211,940						
	Stage 3: Bridge deck between CH1311-1351	145 days	s 0 days	145 days	0%	Fri 30/7/21	Fri 21/1/22	NA	NA	Fri 30/7/21	Sat 29/1/22	0 days	1 day						1	
	CH1311-1351: Deck Falsework erection	21 days	0 days	21 days	0%	Fri 30/7/21	Mon 23/8/21	NA	NA	Fri 30/7/21	Mon 23/8/21	0 days	3 days	941,922,879						
1	CH1311-1351: Structure deck	30 days	0 days	30 days	0%	Tue 24/8/21	Tue 28/9/21	NA	NA	Tue 24/8/21	Tue 28/9/21	0 days	5 days	475,483,736,896						
5	CH1311-1351: Prestressing	21 days	0 days	21 days	0%	Mon 18/10/21	Wed 10/11/21	NA	NA	Mon 18/10/21	Wed 10/11/21	0 days	3 days	944FS+14 days,8				The second		
.6	CH1311-1351: Utility Trough (0.67m per day per team) x 4 team	30 days	0 days	30 days	0%	Thu 11/11/21	Wed 15/12/21	NA	NA	Fri 26/11/21	Mon 3/1/22	13 days	0.5 day	219,880,945				1		
7	CH1311-1351: Central Median (6m per day per team) x 2 team	15 days	0 days	15 days	0%	Thu 11/11/21	Sat 27/11/21	NA	NA	Wed 5/1/22	Fri 21/1/22	44 days	3 days	945				<u> </u>		
-8	CH1311-1351: Parapet (28m per day per team) x 2 team + 6 day concreting	16 days	0 days	16 days	0%	Thu 23/12/21	Thu 13/1/22	NA	NA	Tue 4/1/22	Fri 21/1/22	7 days	1 day	945,888,890,946						
.9	CH1311-1351: Road Furniture	7 days	0 days	7 days	0%	Fri 14/1/22	Fri 21/1/22	NA	NA	Sat 22/1/22	Sat 29/1/22	7 days	1 day	947,358,948				1		
0	Part 1 - CH1372 to CH1386	149 days	s 0 days	149 days	0%	Mon 23/8/21	Tue 22/2/22	NA	NA	Mon 23/8/21	Tue 1/3/22	0 days						0		
1	Bridge deck between CH1351-1386	149 days	s 0 days	149 days	0%	Mon 23/8/21	Tue 22/2/22	NA	NA	Mon 23/8/21	Tue 1/3/22	0 days								
2	CH1351-1386: Deck Falsework erection	22 days		22 days	0%	Mon 23/8/21	Thu 16/9/21		NA	Mon 23/8/21	Thu 16/9/21	0 days	4 days	941,922,898FS+				<u>.</u>		
3	CH1351-1386: Structure deck	30 days		30 days	0%	Fri 17/9/21	Mon 25/10/21		NA	Fri 17/9/21	Mon 25/10/21		1	952,736,976						
4	CH1351-1386: Prestressing	14 days			0%		Fri 26/11/21		NA	Thu 11/11/21	Fri 26/11/21	0 days		953FS+14 days,9						
				14 days																
5	CH1351 - CH1386: Utility Trough (0.67m per day per team) x 4 team		0 days	30 days	0%	Sat 27/11/21	Tue 4/1/22		NA	Sat 27/11/21	Tue 4/1/22	1		219,954						
6	CH1351 - CH1386: Central Median (6m per day per team) x 1 team		0 days	15 days	0%	Sat 27/11/21	Tue 14/12/21		NA	Sat 27/11/21	Tue 14/12/21			954						
7	CH1351 - CH1386: Parapet (28m per day per team) x 1 team + 6 day concreting	20 days	0 days	20 days	0%	Wed 5/1/22	Thu 27/1/22		NA	Wed 12/1/22	Mon 7/2/22	6 days	4 days	955						
8	CH1351-1386 Falsework removal	19 days	0 days	19 days	0%	Fri 28/1/22	Tue 22/2/22	NA	NA	Tue 8/2/22	Tue 1/3/22	6 days	1 day	955,957						
9	CH1351 - CH1386: Road Furniture (Section 1)	8 days	0 days	8 days	0%	Fri 28/1/22	Wed 9/2/22	NA	NA	Mon 14/2/22	Tue 22/2/22	11 days	2 day	956,358,957						
0	Part 1 - CH1386 to CH1394 South Abutment	352 days	s 0 days	352 days	0%	Fri 3/7/20	Sat 4/9/21	NA	NA	Sat 25/7/20	Thu 16/9/21	10 days						-		
51	Bored Pile (A02-BP2) @ CH1386 by Rig 1	42 days	0 days	42 days	0%	Fri 3/7/20	Thu 20/8/20	NA	NA	Sat 25/7/20	Fri 11/9/20	19 days	3 days	831FS+12 days		⊦╂╫╽║║				
52	Bored Pile (A02-BP1) @ CH1386 by Rig 1	63 days	0 days	63 days	0%	Tue 28/7/20	Sat 10/10/20	NA	NA	Wed 19/8/20	Tue 3/11/20	19 days	3 days	202FF,961FF+42						
i3	Pile Testing	35 days	0 days	35 days	0%	Mon 12/10/20	Sat 21/11/20	NA	NA	Wed 4/11/20	Mon 14/12/20	19 days	4 days	962						
	T. 1	S			<u> </u>	1-4		ъ .:	-1		0		Г		1347			0	lia	<u> </u>
	og with Progress Split	Summary Project Sur	mmary		Inactive M Inactive St	_		Duration-or Manual Sur	nly 📗 mmary Rollup 🕳		Start-only Finish-only]	Exter Dead	nal Milestor line	ne ♦ ♣		Critical Sp Progress	ını	
of 22-May-2	Milestone •	Inactive Ta			Manual Ta			Manual Sur	mmary I		External Tasl	ks		Critic				Manual Pr	ogress	

								tract No. ED													
Task l	Name	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA		2020 Q3	04 01	2021 Q2 Q)3 O4		2022 Q3 Q4	2023 Q1 Q2
964	Proof-drilling Works	11 days	0 days	11 days	0%	Mon 23/11/20	Fri 4/12/20	NA	NA	Tue 2/2/21	Wed 17/2/21	58 days	2 days	963	103	V+ VI		44 رد <u>ج</u>	Q1 Q2	Q3 Q4	<u>V1</u> <u>Q2</u>
965	South Abutment	166 day	s 0 days	166 days	0%	Wed 3/2/21	Thu 26/8/21	NA	NA	Thu 18/2/21	Tue 7/9/21	10 days		968SS,964		3					
966	South Abutment ELS- Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 4/1/21	Mon 4/1/21	NA	NA	Tue 19/1/21	Tue 19/1/21	15 days	1 day			4/1					
967	South Abutment ELS - Design and Method Statement Comment & Appraoval	30 davs	0 days	30 days	0%	Mon 4/1/21	Tue 2/2/21	NA	NA	Tue 19/1/21	Wed 17/2/21	15 days	1 day	966							
968	Drive sheetpile (~900m) Prod. Rate: 10m/d/team		0 days	11 days	0%	Wed 3/2/21	Thu 18/2/21		NA	Thu 18/2/21	Tue 2/3/21	10 days		964,967,980							
969	Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team		0 days	11 days	0%	Fri 19/2/21	Wed 3/3/21		NA	Mon 22/3/21	Tue 6/4/21	26 days		968			1				
970	Blinding layer	1 day	0 days	1 day	0%	Thu 4/3/21	Thu 4/3/21		NA	Wed 7/4/21	Wed 7/4/21	26 days	0 days	969							
971	South Abutment Formwork- Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 21/12/20	Mon 21/12/2	0 NA	NA	Tue 9/3/21	Tue 9/3/21	78 days	1 day			◆ 21/1	.2				
972	South Abutment Formwork - Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 21/12/20	Tue 19/1/21	NA	NA	Tue 9/3/21	Wed 7/4/21	78 days	1 day	971							
973	Base Slab	36 days	0 days	36 days	0%	Wed 17/3/21	Fri 30/4/21	NA	NA	Thu 8/4/21	Fri 21/5/21	16 days	2 days	970,972,986							
974	Wall (3.85m thk). Prod. Rate: 18d/bay/team	39 days	0 days	39 days	0%	Mon 3/5/21	Fri 18/6/21	NA	NA	Sat 22/5/21	Thu 8/7/21	16 days	3 days	973							
975	Wall (0.5m thk)	52 days	0 days	52 days	0%	Sat 19/6/21	Thu 19/8/21	NA	NA	Fri 9/7/21	Tue 7/9/21	16 days	2 days	974				h			
976	Install bridge bearing	8 days	0 days	8 days	0%	Fri 27/8/21	Sat 4/9/21	NA	NA	Wed 8/9/21	Thu 16/9/21	10 days	1 day	975,736,822,965				4			
977	South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)		s 0 days	259 days	0%	Mon 21/9/20	Fri 6/8/21	NA	NA	Sun 15/11/20	Sat 4/12/21	45 days	-								
978	South Approach Ramp ELS - Temp. Works Design and Method Statement				0%	Mon 21/9/20	Mon 21/9/20		NA	Sun 15/11/20			1 dov			21.60					
	Submission		0 days	0 days							Sun 15/11/20			070		711/3					
979	South Approach Ramp ELS - Temp. Works Design and Method Statement Comment & Approval		0 days	30 days	0%	Mon 21/9/20	Tue 20/10/20		NA	Sun 15/11/20	Mon 14/12/20			978							
980	Drive sheetpile (~240m) Prod. Rate: 10m/d/team	26 days	0 days	26 days	0%	Mon 23/11/20	Tue 22/12/20) NA	NA	Tue 15/12/20	Sat 16/1/21	19 days	2 days	979,962,963							
981	Excavation ~2,688m3 & lateral support. Prod. Rate: 160m3/day/team	19 days	0 days	19 days	0%	Wed 23/12/20	Sat 16/1/21	NA	NA	Mon 18/1/21	Mon 8/2/21	19 days	2 days	980							
982	Rock Replacement	7 days	0 days	7 days	0%	Sun 17/1/21	Sat 23/1/21	NA	NA	Tue 9/2/21	Mon 15/2/21	23 days	1 day	981							
983	Blinding layer. Prod. Rate: 2bays/day	1 day	0 days	1 day	0%	Mon 25/1/21	Mon 25/1/21	NA	NA	Tue 16/2/21	Tue 16/2/21	16 days	1 day	981,982							
984	Sourth Approach - Formworks Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 1/12/20	Tue 1/12/20	NA	NA	Mon 18/1/21	Mon 18/1/21	48 days	1 day			♦ 1/12					
185	South Approach Ramp Formworks Design and Method Statement Comment &	30 days	0 days	30 days	0%	Tue 1/12/20	Wed 30/12/2	0 NA	NA	Mon 18/1/21	Tue 16/2/21	48 days	1 day	984							
986	Appraoval 6 x Base Slab Prod. Rate: 12d/bay/team x 2 teams	40 days	0 days	40 days	0%	Tue 26/1/21	Tue 16/3/21	NA	NA	Wed 17/2/21	Wed 7/4/21	16 days		983,985,244							
87	6 x Wall. Prod. Rate: 12d/bay/team x 3 level x 2 teams		0 days	78 days	0%	Wed 17/3/21	Tue 22/6/21		NA	Mon 28/6/21	Tue 28/9/21	82 days		986							
	·																				
38	Backfilling ~4,765.89m3 within approach ramp to formation level (160m3/day) +12d shoring removal x 2 (considered time for SRT)	38 days	0 days	38 days	0%	Wed 23/6/21	Fri 6/8/21	NA	NA	Fri 22/10/21	Sat 4/12/21	100 days	2 days	987							
189	CH1386-1444: South Approach Ramp (50m): Parapet, Central Median & Furnitur	e 43 days	0 days	43 days	0%	Wed 15/12/21	Wed 9/2/22	NA	NA	Wed 15/12/21	Wed 9/2/22	0 days		988				1	[[
90	CH1386-1444: Central Median and Utilities Trough (5m per day per team) x 1			23 days	0%	Wed 15/12/21	Thu 13/1/22	NA	NA	Wed 15/12/21	Thu 13/1/22	0 days	2 days	253,956							
991	team CH1386-1444: Parapet (10m per day per team) x 2 team + 2 team x 6 day		0 days	13 days	0%	Fri 14/1/22	Fri 28/1/22		NA	Fri 14/1/22	Fri 28/1/22		2 days	988,253,990							
992	concreting				0%		Wed 9/2/22							990,358,991							
	CH1386-1444: Road Furniture	7 days		7 days		Sat 29/1/22			NA	Sat 29/1/22	Wed 9/2/22		1 day								
993	CH1087 - 1444: Bitumen Paving and Lighting		0 days	60 days	0%	Thu 30/12/21			NA	Wed 15/12/21	Tue 1/3/22	-11 days	1 day	813,884,892FF,9							
994	2.6 Utility Laying	1 day?	0 days	1 day?	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1840 d									
995	CH1087-1311 (224m): Utility Laying (by Others) (Agreed)	63 days	0 days	63 days	0%	Wed 29/12/21	Tue 1/3/22	NA	NA	Wed 29/12/21	Tue 1/3/22	0 days									
996	CLP (132kV)	63 days	0 days	63 days	0%	Wed 29/12/21	Tue 1/3/22	NA	NA	Wed 29/12/21	Tue 1/3/22	0 days	1 day	899,955SS+32 d					Þinnu -		
997	CLP (11kV)	63 days	0 days	63 days	0%	Wed 29/12/21	Tue 1/3/22	NA	NA	Wed 29/12/21	Tue 1/3/22	0 days	1 day	996SS							
998	HKCG	53 days	0 days	53 days	0%	Wed 29/12/21	Sat 19/2/22	NA	NA	Sat 8/1/22	Tue 1/3/22	10 days	1 day	997SS					>		
999	CATV	23 days	0 days	23 days	0%	Wed 29/12/21	Thu 20/1/22	NA	NA	Thu 3/2/22	Fri 25/2/22	36 days	1 day	998SS							
1000	Towngas telecom		0 days	27 days	0%	Wed 29/12/21			NA	Thu 3/2/22	Tue 1/3/22	36 days		999SS							
1001	PCCW-HKT		0 days	23 days	0%	Wed 29/12/21			NA	Sun 6/2/22	Mon 28/2/22	39 days		1000SS							
													1								
1002	Fresh and Salt Watermains (by POC)		0 days	24 days	0%	Wed 29/12/21			NA	Sun 6/2/22	Tue 1/3/22	39 days	1 day	1001SS							
1003	CH1311-1396 (85m): Utility Laying (by Others) (Agreed)		0 days	84 days	0%	Thu 7/10/21	Wed 29/12/2	1 NA	NA	Fri 4/2/22	Tue 1/3/22	62 days									
1004	CLP (11kV)	26 days	0 days	26 days	0%	Wed 5/1/22	Sun 30/1/22	NA	NA	Fri 4/2/22	Tue 1/3/22	30 days	1 day	899,955							
1005	PCCW-HKT	18 days	0 days	18 days	0%	Wed 5/1/22	Sat 22/1/22	NA	NA	Sat 12/2/22	Tue 1/3/22	38 days	1 day	1004SS							
1006	Sat and Fresh Watermain (by POC)	18 days	0 days	18 days	0%	Wed 5/1/22	Sat 22/1/22	NA	NA	Sat 12/2/22	Tue 1/3/22	38 days	1 day	1005SS					!! !!		
1007	Underpass and Depressed Road	619 day	s 142.15 days	476.85 days	0%	Tue 3/9/19	Mon 4/10/21	Tue 3/9/19	NA	Tue 3/9/19	Tue 1/3/22	120 days									
				1																<u></u>	
itle: Rev.11	Prog with Progress Task	Summary			Inactive N			Duration-o			Start-only	<u></u>	E	External M	ilestone	\$	<u></u>	Critical			
	ay-20 Split	Project Sur	mmary		Inactive S	ummary		─ Manual Su	mmary Rollup 🍙		Finish-only		3	Deadline		4		Progres	SS		_

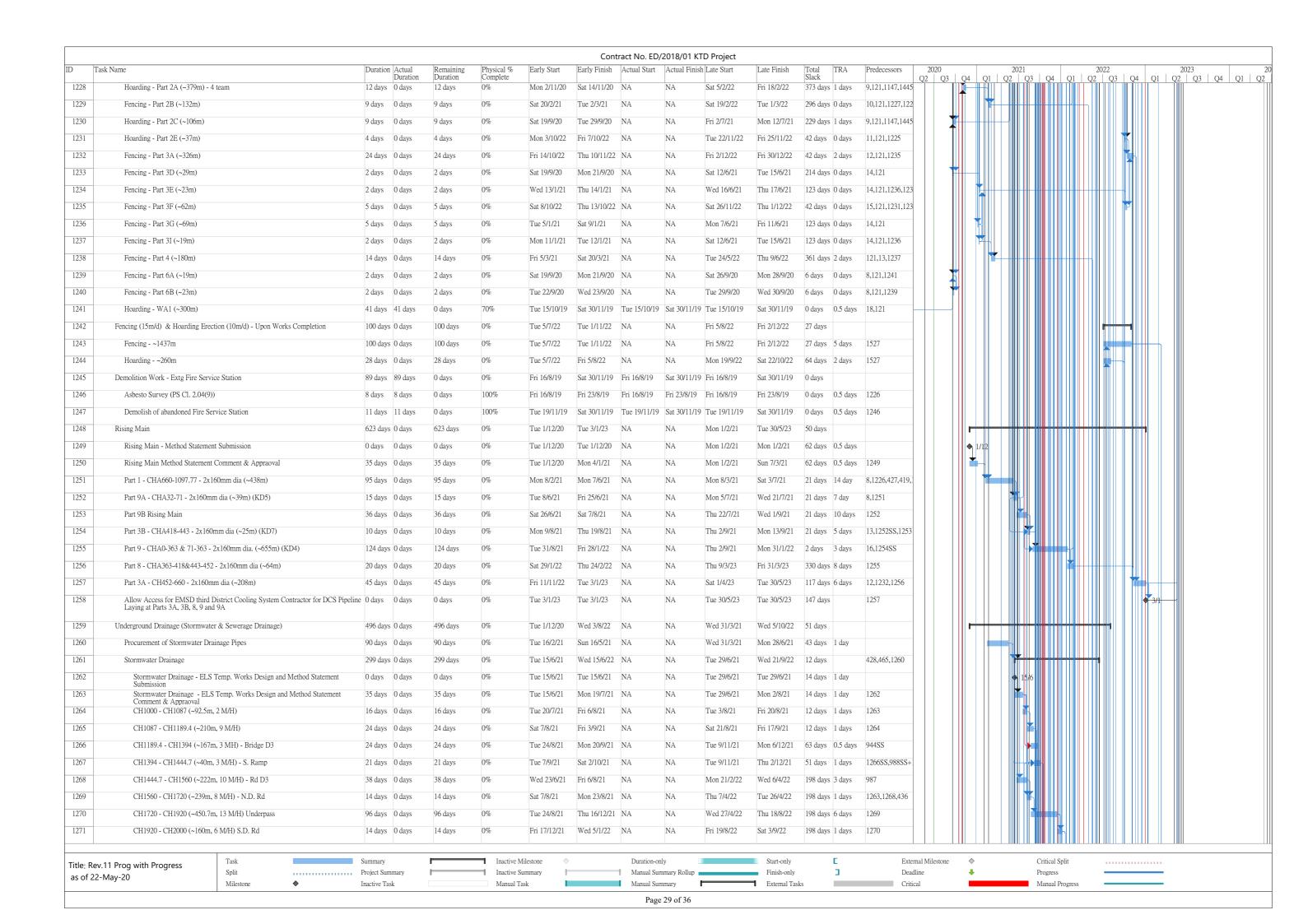
		_	1					tract No. ED/															
Task l	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack		Predecessors	2020 Q2 Q3	Q4	Q1	2021 Q2 Q3	3 Q4	Q1	2022 Q2 Q)4 Q
08	North Depressed Rd (CH1560-1720)	562 days	211.42 days	350.58 days	0%	Tue 3/9/19	Tue 27/7/21	Tue 3/9/19	NA	Tue 3/9/19	Tue 1/3/22	177 days	S										
09	Ground Monitoring Works	17 days	17 days	0 days	100%	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19	0 days	2 days		1								
10	Mobilization	7 days	7 days	0 days	100%	Fri 1/11/19	Fri 8/11/19	Fri 1/11/19	Fri 8/11/19	Fri 1/11/19	Fri 8/11/19	0 days	0 days										
11	Complete the Diveration of Existing Overhang Cable along the North Depressed	1 day	1 day	0 days	100%	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	0 days	0.5 days										
2	Drive Sheet Pile (380m, 15,000m penetration depth) Prod. Rate by 2 teams	39 days	39 days	0 days	100%	Fri 22/11/19	Thu 9/1/20	Fri 22/11/19	Thu 9/1/20	Fri 22/11/19	Thu 9/1/20	0 days	0.5 days	1009,1010,1011									
	(around 125m penetration depth per day per team)																						
3	Pumping Test	120 days	75 days	45 days	0%	Thu 20/2/20	Fri 17/7/20	Thu 20/2/20	NA	Thu 20/2/20	Sat 18/7/20	1 day	0.5 days	1012									
.4	CH1560 - CH1720 North Depress Road	449 days	98.66 days	350.34 days	0%	Mon 20/1/20	Tue 27/7/21	Mon 20/1/20	NA	Mon 20/1/20	Tue 1/3/22	177 days	S				***						
15	Excavation with Shoring Installation - Prod Rate: 270m3/d/team. (~36,611m3). 1 team	145 days	98 days	47 days	0%	Mon 20/1/20	Sat 18/7/20	Mon 20/1/20	NA	Mon 20/1/20	Sat 18/7/20	-11 days	1 day	1012									
16	CNCE No. 73 - April 2020 Inclement Weather	8 days	0 days	8 days	0%	Mon 20/7/20	Tue 28/7/20	NA	NA	Tue 7/7/20	Wed 15/7/20	-11 days	;	1015,73									
17	May 2020 - Inclement Weather	3 days	0 days	3 days	0%	Wed 29/7/20	Fri 31/7/20	NA	NA	Thu 16/7/20	Sat 18/7/20	-11 days	;	1016,74								,	
18	Rock Fill Replacement (Final Level)	6 days	0 days	6 days	0%	Sat 1/8/20	Fri 7/8/20	NA	NA	Mon 20/7/20	Sat 25/7/20	-11 days	3	1013,1015,1017	#								
19	6 Bay Base Slabs + 3 Levels Wall Both Sides	55 days	0 days	55 days	0%	Wed 3/6/20	Fri 7/8/20	NA	NA	Thu 21/5/20	Sat 25/7/20	-11 days	3	1015SS+107 day	y								
20	Base Slab and Wall Below 4th Level Shoring	25 days	0 days	25 days	0%	Sat 8/8/20	Sat 5/9/20	NA	NA	Mon 27/7/20	Mon 24/8/20	-11 days	0.5 days	1019,1015,1018	🛓								
21	Backfilling and 4th Level Shoring Removal	18 days		18 days	0%	Mon 7/9/20	Sat 26/9/20	NA	NA	Tue 25/8/20	Mon 14/9/20	-11 days		1020									
22	Wall Construction (between 3rd and 4th levels shoring) and Remaining Base			24 days	0%	Mon 28/9/20	Wed 28/10/20		NA	Tue 15/9/20	Wed 14/10/20			1021									
23	Slab Backfilling and 3rd Level Shoring Removal	18 days		18 days	0%	Thu 29/10/20			NA	Thu 15/10/20	Thu 5/11/20	-11 days		1022									
24	Structure Works Below 2nd & 3rd Levels Shoring	23 days		23 days	0%		Tue 15/12/20		NA	Fri 6/11/20	Wed 2/12/20	-11 days		1023									
25	Backfilling and 2nd Level Shoring Removal	18 days		18 days	0%	Wed 16/12/20		NA	NA	Thu 3/12/20	Wed 23/12/20			1024									
26	Remaining Wall Construction	30 days	0 days	30 days	0%	Sat 9/1/21	Tue 16/2/21	NA	NA	Thu 24/12/20	Sat 30/1/21	-11 days	;	1025									
27	Backfill & extract sheet pile (CH1560 to CH1720)	26 days	0 days	26 days	0%	Wed 17/2/21	Thu 18/3/21	NA	NA	Mon 1/2/21	Fri 5/3/21	-11 days	1 day	1026									
28	Emergency walkway & median barrier installation	20 days	0 days	20 days	0%	Tue 1/6/21	Thu 24/6/21	NA	NA	Mon 3/1/22	Tue 25/1/22	177 days	s 2 days	1027									
29	Parapet installation	27 days	0 days	27 days	0%	Fri 25/6/21	Tue 27/7/21	NA	NA	Wed 26/1/22	Tue 1/3/22	177 days	s 3 days	1028									
0	CH1720 - CH1850 (130m long) (2 x teams)	477 days	0 days	477 days	0%	Mon 15/6/20	Mon 4/10/21	NA	NA	Mon 15/6/20	Mon 4/10/21	0 days			I								
31	Drive sheet pile (approx. 17000m penetration depth, 380m/day)	46 days	0 days	46 days	0%	Mon 15/6/20	Sat 8/8/20	NA	NA	Mon 15/6/20	Sat 8/8/20	0 days	2 day										
2	Pumping Test	22 days	0 days	22 days	0%	Mon 10/8/20	Thu 3/9/20	NA	NA	Mon 10/8/20	Thu 3/9/20	0 days	1 days	1031,1045	🛓								
3	CH1720 - CH1850 (130m long) (2 x teams) Top Portion: Excavation with	42 days	0 days	42 days	0%	Fri 4/9/20	Sat 24/10/20	NA	NA	Fri 4/9/20	Sat 24/10/20	0 days	2 day	1032	$+ + + \top_{i}$								
	Shoring Installation = 23,000 cu.m. (320m3/d/team x 2)																						
34	CH1720 - CH1850 (130m long) (2 x teams) Bottom Portion: Excavation with Shoring Installation = 23,876 cu.m. (250m3/d/team x 2)	52 days	0 days	52 days	0%	Tue 27/10/20	Mon 28/12/20	NA NA	NA	Tue 27/10/20	Mon 28/12/20	0 days	1 day	1033									
15	Rock fill - Prod. Rate: (3,469m3) (160m3/d/team. 2 team)	6 days	0 days	6 days	0%	Tue 29/12/20	Tue 5/1/21	NA	NA	Tue 29/12/20	Tue 5/1/21	0 days	1 day	1033,1034	_	$\ \ \ _{\frac{1}{2}}$							
36	Base Slab - 8 bays, Prod. Rate: 12d/team/bay include pipe laying, 4 teams	26 days		26 days	0%	Wed 3/3/21	Thu 1/4/21		NA	Wed 3/3/21	Thu 1/4/21	0 days		1035,1042,262									
37	Wall - 8 bays. Prod. Rate: 3 level of shoring 12d/bay/level/team. 4 teams				0%		Tue 6/7/21																
		75 days		75 days		Tue 6/4/21			NA	Tue 6/4/21	Tue 6/7/21	1		1036									
38	Top Slab - 8 bays. Prod. Rate: 18d/team/bay, 4 teams	38 days		38 days	0%	Wed 7/7/21	Thu 19/8/21		NA	Wed 7/7/21	Thu 19/8/21			1037]]]]]				
39	Falsework Removal	37 days		37 days	0%	Fri 20/8/21	Mon 4/10/21		NA	Fri 20/8/21	Mon 4/10/21		2 day	1038									
40	Sheetpile Extraction and Backfill	13 days	0 days	13 days	0%	Fri 20/8/21		NA	NA	Fri 17/9/21	Mon 4/10/21	24 days	1 day	1038					i+				
1	Underground Plant Room next to Underpass	45 days	0 days	45 days	0%	Wed 6/1/21	Tue 2/3/21	NA	NA	Wed 6/1/21	Tue 2/3/21	0 days											
42	Underground pump house structure	45 days	0 days	45 days	0%	Wed 6/1/21	Tue 2/3/21	NA	NA	Wed 6/1/21	Tue 2/3/21	0 days	3 day	714,1035,262,28	3								
43	Underpass & South Depressed Road CH1850-1950 - (100m long) 8 bays x 13.5m long	120 days	65.36 days	54.64 days	0%	Wed 26/2/20	Thu 23/7/20	Wed 26/2/20	NA	Wed 26/2/20	Sat 8/8/20	14 days											
14	Drive sheet pile (12,530m embedded length sheetpile) Prod. Rate 380m/team/day	32 days	32 days	0 days	100%	Wed 26/2/20	Mon 6/4/20	Wed 26/2/20	Mon 6/4/20	Wed 26/2/20	Mon 6/4/20	0 days	5 days		h								
45	Pumping Test	80 days	29 days	51 days	36%	Fri 17/4/20	Thu 23/7/20	Fri 17/4/20	NA	Fri 17/4/20	Sat 8/8/20	14 days	2 days	1044								.∥∭∦	
5	Underpass & South Depress Road (CH1850 to CH1950)	539 days	27.64 days	511.36 days	0%	Thu 23/4/20	Wed 13/10/21	Thu 23/4/20	NA	Thu 23/4/20	Tue 1/3/22	139 days	S										
7	Excavation with Shoring Installation (Upper Portion) - Prod. Rate: 270m3/d/team. 1	80 days	24 days	56 days	23%	Thu 23/4/20	Thu 30/7/20	Thu 23/4/20	NA	Thu 23/4/20	Fri 4/9/20	31 days	5 days	1045SS+6 days	—	$\ \ \ $							
48	team 16,000m3) Excavation with Shoring Installation (Lower Portion) - Prod. Rate: 270m3/d/team. 1			65 days	0%	Fri 31/7/20	Fri 16/10/20		NA	Sat 5/9/20	Mon 23/11/20			1047,1045FF+1									
49	team 16,000m3) Rock fill - Prod. Rate: 160m3/d/team (1,745m3)		0 days	7 days	0%	Sat 17/10/20	Sat 24/10/20		NA	Tue 24/11/20	Tue 1/12/20	31 days		days 1047,1048	-								
50	Blinding		0 days	1 day	0%		Tue 27/10/20		NA	Wed 2/12/20	Wed 2/12/20		0.5 days										
	Dimuit	ı uay	oudys	1 uny	0 70	1 uc 2//10/20	1 uc 27/10/20	1411	17/1	11 Cu 2/12/20	**************************************	J1 uays	o.J uays	1017									Ш
o. Dec. 11	1 Progravith Progress	Summary			Inactive M	ilestone \Diamond		Duration-on	ıly		Start-only		Е	Exte	emal Milestone	♦			Critical	Split			
e: Rev.11 of 22-M	av-20 Split	Project Sun			Inactive Su	ımmary 📗		Manual Sur	mmary Rollup •		Finish-only		3	Dea	dline	•			Progress	3	_		
-	Milestone •	Inactive Ta	sk		Manual Ta	sk		Manual Sur	nmary		External Tas	ks		Crit	ical				Manual	Progress	_		_

Tasl	LAT	F :		D	D1	E 1 0				KTD Project	T . TO	m . 1 :	D 1	220		\1			2022
Tasl	k Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Fin	ish Late Start	Late Finish	Total TRA Slack		020 Q3 Q4	Q1 Q2		2022 1 Q2 Q3 Q4	4 Q1 Q2	2023 2 Q3
051	Underpass Formworks Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 14/9/20	Mon 14/9/20	NA	NA	Tue 3/11/20	Tue 3/11/20	50 days 1 day		◆ 14/9					
052	Underpass Formworks Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 14/9/20	Tue 13/10/20	NA	NA	Tue 3/11/20	Wed 2/12/20	50 days 1 day	1051						1
.053	Casting base slab (12d/bay/team x 3) (6 bays)	26 days	0 days	26 days	0%	Wed 28/10/20	Thu 26/11/20	NA	NA	Thu 3/12/20	Tue 5/1/21	31 days 2 day	1050,1052,262						
1054	Waterproofing & Bacfilling before S3 Shoring Removal	12 days	0 days	12 days	0%	Fri 27/11/20	Thu 10/12/20	NA	NA	Wed 6/1/21	Tue 19/1/21	31 days 1 day	1053						
1055	S3 Shoring ELS Removal + North/South End Re-propping	7 days	0 days	7 days	0%	Fri 11/12/20	Fri 18/12/20	NA	NA	Wed 20/1/21	Wed 27/1/21	31 days 1 day	1054						
1056	Wall Construction up to soffit of S2 Shoring (12d/bay/team x 3) (6 bays)	24 days	0 days	24 days	0%	Sat 19/12/20	Tue 19/1/21	NA	NA	Thu 28/1/21	Sat 27/2/21	31 days 2 day	1055		h				
1057	Waterproofing & Bacfilling before S2 Shoring Removal	12 days	0 days	12 days	0%	Wed 20/1/21	Tue 2/2/21	NA	NA	Mon 1/3/21	Sat 13/3/21	31 days 1 day	1056						
058	S2 Shoring ELS Removal + North/South End Re-propping	7 days	0 days	7 days	0%	Wed 3/2/21	Wed 10/2/21	NA	NA	Mon 15/3/21	Mon 22/3/21	31 days 1 day	1057		Ř				
059	Wall Construction up to soffit of S1 Shoring (12d/bay/team x 3) (6 bays)	24 days	0 days	24 days	0%	Thu 11/2/21	Sat 13/3/21	NA	NA	Tue 23/3/21	Thu 22/4/21	31 days 2 day	1058						
060	Waterproofing & Bacfilling before S1 Shoring Removal	12 days	0 days	12 days	0%	Mon 15/3/21	Sat 27/3/21	NA	NA	Fri 23/4/21	Fri 7/5/21	31 days 1 day	1059						
061	S1 Shoring ELS Removal + North/South End Re-propping	7 days		7 days	0%	Mon 29/3/21	Thu 8/4/21	NA	NA	Sat 8/5/21	Sat 15/5/21	31 days 1 day	1060						
.062	Scaffold erection for roof slab	24 days		24 days	0%	Fri 9/4/21	Fri 7/5/21	NA	NA	Mon 17/5/21	Tue 15/6/21	31 days 2 day	1061						
063	Roof slab construction (18d/bay/team x 3) (6 bays)	42 days		42 days	0%	Sat 8/5/21	Mon 28/6/21		NA	Wed 16/6/21	Wed 4/8/21	31 days 4 days	1062						
.064	Waterproofing & Backfilling upto tunnel top	42 days		28 days	0%	Tue 29/6/21	Sat 31/7/21		NA	Thu 5/8/21	Mon 6/9/21	31 days 4 days	1063						
.065																			
	Scaffold removal after 28 days from casting	22 days		22 days	0%	Mon 26/7/21	Thu 19/8/21		NA	Thu 13/1/22	Thu 10/2/22	141 days 1 day	1063FS+22 days						
1066	Sheetpile extraction (Ch1851-CH1950)	22 days		22 days	0%	Mon 2/8/21	Thu 26/8/21		NA	Tue 7/9/21	Mon 4/10/21	31 days 1 day	1064						
067	Emergency walkway & median barrier installation		0 days	9 days	0%	Fri 24/9/21	Tue 5/10/21		NA	Fri 11/2/22	Mon 21/2/22	112 days 1 day	323,1066,1040,1						
068	Parapet installation	7 days	0 days	7 days	0%	Wed 6/10/21	Wed 13/10/21	NA	NA	Tue 22/2/22	Tue 1/3/22	112 days 1 day	1067			1 1 1 1 1 1 1 1			
069	CH1950 - CH2020 (70m long) (2 x teams) 4 bays x 17.5m long - Average 3 layers of shoring	f 209 days	s 0 days	209 days	0%	Fri 19/3/21	Mon 29/11/21	NA	NA	Sat 6/3/21	Tue 1/3/22	-11 days							
1070	Drive sheet pile (approx. 8,800m embedded length sheetpile), 380m/team/day	24 days	0 days	24 days	0%	Fri 19/3/21	Mon 19/4/21	NA	NA	Sat 6/3/21	Tue 6/4/21	-11 days 1 day	1027						
1071	Excavation with Shoring Installation - Prod. Rate: 2 teams x 250m3/d/team. (14.500m3)	30 days	0 days	30 days	0%	Tue 20/4/21	Wed 26/5/21	NA	NA	Wed 7/4/21	Wed 12/5/21	-11 days 1 day	1049,1070						
.072	Rock Fill Replacement	6 days	0 days	6 days	0%	Thu 27/5/21	Wed 2/6/21	NA	NA	Thu 13/5/21	Thu 20/5/21	-11 days 0.5 days	s 1071		HIII K				
1073	Blinding	1 day	0 days	1 day	0%	Thu 3/6/21	Thu 3/6/21	NA	NA	Fri 21/5/21	Fri 21/5/21	-11 days 0.5 days	s 1071,1072						
074	Base Slab - 4 bays. Prod. Rate: 12d/team/bay include pipe laying. 2 team	26 days	0 days	26 days	0%	Fri 4/6/21	Tue 6/7/21	NA	NA	Sat 22/5/21	Tue 22/6/21	-11 days 2 days	1073						
075	Wall - 4 bays. Prod. Rate: 3 level of shoring 12d/bay/level/team. 2 teams	67 days	0 days	67 days	0%	Wed 16/6/21	Thu 2/9/21	NA	NA	Wed 2/6/21	Fri 20/8/21	-11 days 6 days	1074SS+9 days			· ·			
076	Backfill & extract sheet pile (CH1950 to CH2020)	25 days	0 days	25 days	0%	Fri 3/9/21	Mon 4/10/21	NA	NA	Sat 21/8/21	Sat 18/9/21	-11 days 2 days	1075			T			
077	CH1950 to CH2020: Emergency walkway & median barrier installation	20 days	0 days	20 days	0%	Tue 5/10/21	Thu 28/10/21	NA	NA	Mon 3/1/22	Tue 25/1/22	73 days 2 days	1075,1076			11-			
078	CH1950 to CH2020: Pavement work	7 days	0 days	7 days	0%	Fri 29/10/21	Fri 5/11/21	NA	NA	Wed 26/1/22	Sat 5/2/22	73 days 1 day	1077			T			
1079	CH1950 to CH2020: Parapet installation	20 days	0 days	20 days	0%	Sat 6/11/21	Mon 29/11/21	NA	NA	Mon 7/2/22	Tue 1/3/22	73 days 2 day	1076,1077,1078			N#			
1080	South Depressed Road CH2020-2050 (40m long) (2 x teams) 5 bays x 13.5m long -	134 days	s 0 days	134 days	0%	Mon 2/8/21	Tue 11/1/22	NA	NA	Sun 5/9/21	Tue 1/3/22	30 days							
1081	Average 2 layers of shoring Open Excavation	17 days		17 days	0%	Tue 5/10/21	Mon 25/10/21	NA	NA	Mon 20/9/21	Mon 11/10/21	-11 days 3 days	1076						
1082	Blinding	2 days		2 days	0%	Tue 26/10/21			NA	Tue 12/10/21		-11 days 0 days				.			
1083	South Depress Road - Formworks Design and Method Statement Submission	0 days		0 days	0%	Mon 2/8/21	Mon 2/8/21		NA	Sun 5/9/21	Sun 5/9/21	34 days 1 day				△ 2/8			
1084	South Depress Road - Formworks Design and Method Statement Comment &	40 days		40 days	0%	Mon 2/8/21	Fri 10/9/21		NA	Sun 5/9/21	Thu 14/10/21		1083						
	Appraoval												1083						
085	Base Slab - 3 bays. Prod. Rate: 12d/team/bay include pipe laying. 2 teams	12 days		12 days	0%	Thu 28/10/21			NA	Fri 15/10/21	Thu 28/10/21								
1086	Wall - 3 bays. Prod. Rate: 2 level of shoring 12d/bay/level/team. 2 teams	12 days		12 days	0%	Fri 12/11/21	Thu 25/11/21		NA	Sat 30/10/21	Fri 12/11/21	-11 days 0.5day	1085SS+13 days						
1087	Wall - 3 bays. Prod. Rate: 2 level of shoring 12d/bay/level/team. 2 teams	12 days		12 days	0%	Sat 20/11/21	Fri 3/12/21		NA	Mon 8/11/21	Sat 20/11/21	-11 days 0.5day	1086SS+7 days						
1088	Backfill & extract sheet pile	19 days		19 days	0%	Fri 26/11/21	Fri 17/12/21		NA	Fri 14/1/22	Tue 8/2/22	39 days 1 day	1086						
1089	Curing and Formwork Ramoval	19 days		19 days	0%	Fri 26/11/21	Fri 17/12/21		NA	Thu 30/12/21	Fri 21/1/22	27 days 1 day	1086						
1090	Emergency walkway & median barrier installation	6 days	0 days	6 days	0%	Sat 18/12/21	Fri 24/12/21	NA	NA	Wed 9/2/22	Tue 15/2/22	39 days 2 days	1086,1088,323			14			
1091	Pavement work	6 days	0 days	6 days	0%	Tue 28/12/21	Tue 4/1/22	NA	NA	Wed 16/2/22	Tue 22/2/22	39 days 1 day	1090						
1092	Parapet installation	6 days	0 days	6 days	0%	Wed 5/1/22	Tue 11/1/22	NA	NA	Wed 23/2/22	Tue 1/3/22	39 days 1 day	1090,1088,1091						
1093	5.0 CH1386-1950 (564m): Utlity Laying Team 2 (by Others)	332 days	s 0 days	332 days	0%	Sat 17/4/21	Mon 14/3/22	NA	NA	Thu 19/8/21	Tue 1/3/22	-13 days			│║┃│ ┢ ┤╢╢				
1094	CLP (132kV)	30 days	0 days	30 days	0%	Fri 14/1/22	Sat 12/2/22	NA	NA	Mon 31/1/22	Tue 1/3/22	17 days 1 day	946,990,1027				<u> </u>		
1095	HKCG	18 days	0 days	18 days	0%	Fri 14/1/22	Mon 31/1/22	NA	NA	Tue 25/1/22	Fri 11/2/22	11 days 1 day	946,990,1027						
	11 Drog with Drogress Task	Summary			Inactive N	filestone 🔷		Duration-or	ılv		Start-only	Е	External M	lestone \diamondsuit		Critical Split			<u> </u>
itle: Rev.1 as of 22-N	11 Prog with Progress		nmary		Inactive S				mmary Rollup		Finish-only	3	Deadline			Progress			
	Milestone •	Inactive Ta	ısk		Manual Ta	ask		Manual Sur	nmary		External Tas	ks	Critical			Manual Progre	èss		

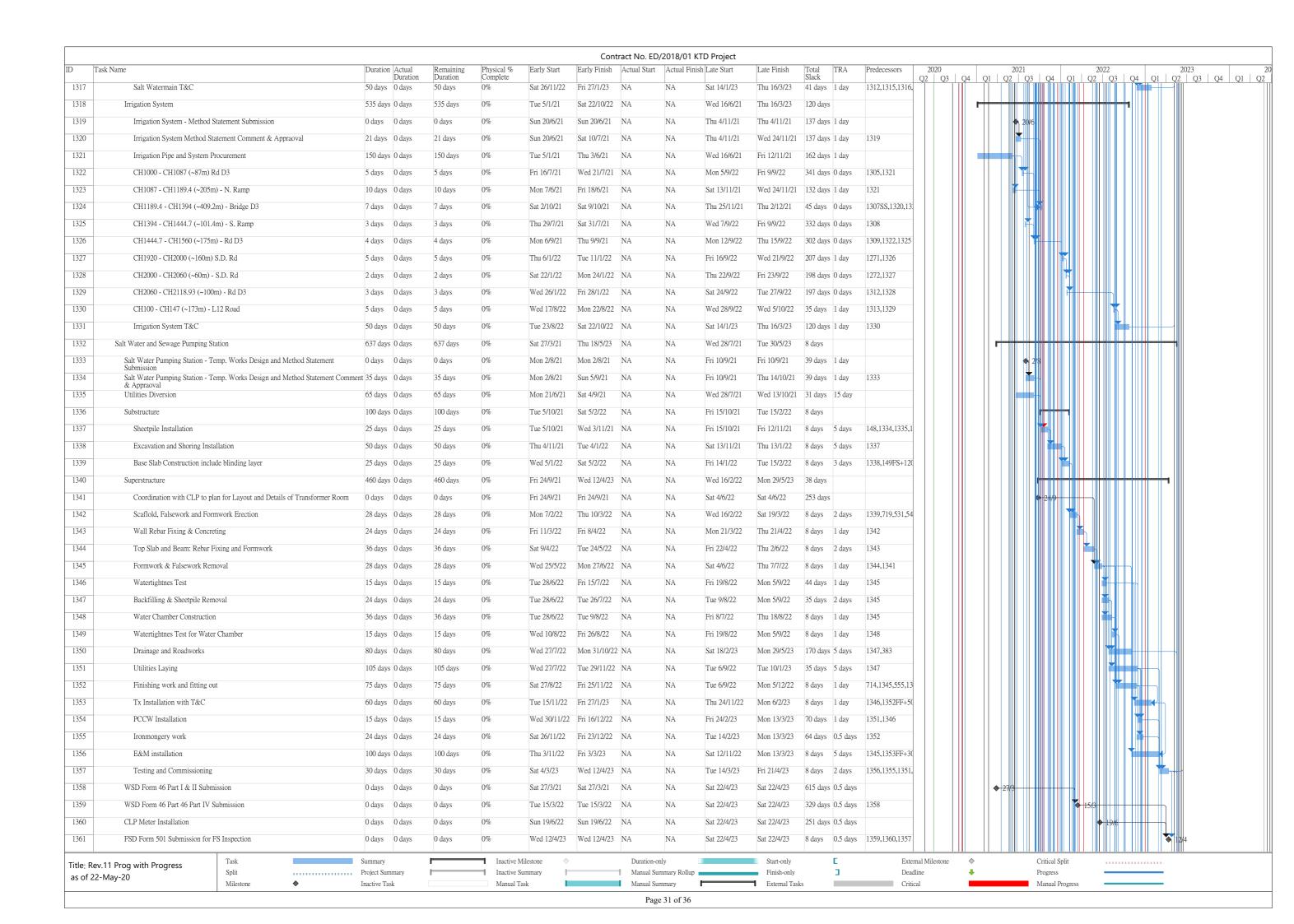
1097	CATV Towngas telecom North & South Depress Raod and Underpass: Finishing and E&M Works Finishing & Fitting Out Work, and E&M Works Installation Pump Room Next to Underpass: Finishing and E&M Works Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	Duration 15 days 13 days 15 days 120 days 120 days 158 days 60 days 25 days 0 days 824 days 45 days	Duration 0 days 0 days 0 days 0 days s 0 days s 0 days	Remaining Duration 15 days 13 days 15 days 120 days 120 days 158 days 60 days 25 days 0 days	Physical % Complete 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	Early Start Fri 21/1/22 Fri 28/1/22 Fri 4/2/22 Tue 5/10/21 Tue 5/10/21 Sat 17/4/21 Sat 17/4/21 Fri 16/7/21	Early Finish Fri 4/2/22	NA NA NA NA NA NA NA NA	D/2018/01 KT t Actual Finish NA NA NA NA NA NA NA		Late Finish Tue 15/2/22 Sun 20/2/22 Tue 1/3/22	Total Slack 11 days 1 day 11 days 1 day 11 days 1 day		020 Q3 Q	Q4 Q1	2021 Q2 Q		Q1	2022 Q2 Q	03 Q4	ļ Q1	2023 Q2 Q	
1097	Towngas telecom North & South Depress Raod and Underpass: Finishing and E&M Works Finishing & Fitting Out Work, and E&M Works Installation Pump Room Next to Underpass: Finishing and E&M Works Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	13 days 15 days 120 days 120 days 158 days 60 days 25 days 0 days 824 days	0 days 0 days 0 days 0 days s 0 days s 0 days	15 days 13 days 15 days 120 days 120 days 158 days 73 days 60 days 25 days	0% 0% 0% 0% 0% 0%	Fri 28/1/22 Fri 4/2/22 Tue 5/10/21 Tue 5/10/21 Sat 17/4/21 Sat 17/4/21	Wed 9/2/22 Fri 18/2/22 Tue 1/3/22 Tue 1/3/22 Tue 26/10/21	NA NA NA	NA NA NA	Tue 8/2/22 Tue 15/2/22	Sun 20/2/22	11 days 1 day 11 days 1 day	1095SS+7 days, 1096SS+7 days	\Q	r+ QI	Q2	ψ3 <u></u>	Q1	<u>Q</u> 2 <u>Q</u>	23 Q4	+ QI	<u> Q2 </u>	<u>√</u> 2 (
1098	Towngas telecom North & South Depress Raod and Underpass: Finishing and E&M Works Finishing & Fitting Out Work, and E&M Works Installation Pump Room Next to Underpass: Finishing and E&M Works Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	15 days 120 days 120 days 158 days 73 days 60 days 25 days 0 days 824 days	O days	15 days 120 days 120 days 158 days 73 days 60 days	0% 0% 0% 0% 0%	Fri 4/2/22 Tue 5/10/21 Tue 5/10/21 Tue 5/10/21 Sat 17/4/21 Sat 17/4/21	Fri 18/2/22 Tue 1/3/22 Tue 1/3/22 Tue 26/10/21	NA NA NA	NA NA	Tue 15/2/22								*					
1099	North & South Depress Raod and Underpass: Finishing and E&M Works Finishing & Fitting Out Work, and E&M Works Installation Pump Room Next to Underpass: Finishing and E&M Works Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	120 days 120 days 158 days 73 days 60 days 25 days 0 days 824 days	s 0 days s 0 days s 0 days	120 days 120 days 158 days 73 days 60 days 25 days	0% 0% 0% 0%	Tue 5/10/21 Tue 5/10/21 Sat 17/4/21 Sat 17/4/21	Tue 1/3/22 Tue 1/3/22 Tue 26/10/21	NA NA	NA		Tue 1/3/22	11 days 1 day	1097SS+7 days			1	41 IIIII III	414					
1100 F 1110 F	Finishing & Fitting Out Work, and E&M Works Installation Pump Room Next to Underpass: Finishing and E&M Works Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	120 days 158 days 73 days 60 days 25 days 0 days 824 days	s 0 days s 0 days	120 days 158 days 73 days 60 days 25 days	0% 0% 0% 0%	Tue 5/10/21 Sat 17/4/21 Sat 17/4/21	Tue 1/3/22 Tue 26/10/21	NA		Tue 5/10/21			-07,0017 44.50				/II IIII III			y III III	'		
1101	Pump Room Next to Underpass: Finishing and E&M Works Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 ffsite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	158 days 73 days 60 days 25 days 0 days 824 days 100 days	o days	158 days 73 days 60 days 25 days	0% 0%	Sat 17/4/21 Sat 17/4/21	Tue 26/10/21		NA		Tue 1/3/22	0 days											
1102 1103 1104 1105 F 1106 Section 1107 Offs 1108 MD 1109 Den 1110 I 1111 I 1111 CH8 111 CH8 1111 CH8	Finishing Works and E&M installation Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	73 days 60 days 25 days 0 days 824 days	0 days 0 days 0 days 0 days 0 days 0 days	73 days 60 days 25 days	0%	Sat 17/4/21		NA		Tue 5/10/21	Tue 1/3/22	0 days 8 days	306,271,323,108				T						
1103 1104 1105 F 1106 Section 1107 Offs 1108 MD 1109 Den 1110 I 1111 I 1111 C 1111 C 1111 S 1	Pump Installation Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 ifsite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	60 days 25 days 0 days 824 days	0 days 0 days 0 days 0 days	60 days 25 days	0%		Thu 15/7/21		NA	Thu 19/8/21	Tue 1/3/22	102 days											
1104 1105 F 1106 Section 1107 Offs 1108 MD 1109 Den 1110 I 1111 I 1111 CH8 1112 CH8 111	Testing and Commissioning Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	25 days 0 days 824 days 100 days	0 days 0 days s 0 days	25 days		Fri 16/7/21		NA	NA	Thu 19/8/21	Mon 15/11/21	102 days 3 days	1042FS+36 days			+							
1105 F 1106 Section 1107 Offs 1108 MD 1109 Den 1110 I 1111 I 1111 CH8 1111	Planned Completion for Section 1 ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	0 days 824 days 100 days	0 days		0%		Fri 24/9/21	NA	NA	Tue 16/11/21	Thu 27/1/22	102 days 2 days	1102										
1106 Section 1107 Offs 1108 MD 1109 Den 1110 I 1111 I 11112 C 11113 CH8 1114 T 1115 C 1116 S 1117 E 1118 F 1119 CH7	ons 2,4 and 8 Fisite 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	824 days	o days	0 days		Sat 25/9/21	Tue 26/10/21	NA	NA	Fri 28/1/22	Tue 1/3/22	102 days 1 days	1102,1103										
1107 Offs 1108 MD 1109 Den 1110 I 1111 I 1111 CH8 11115 CS 11116 SS 11117 E 11118 F 11119 CH7	Tristie 14 units of precast box culvert with outfall fabrication DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	100 days			0%	Mon 14/3/22	Mon 14/3/22	NA	NA	Tue 1/3/22	Tue 1/3/22	-13 days	1408,1414,1068,					1	14/3				
1108 MD 1109 Den 1110 I 1111 I 11112 C 11113 CH8 11114 T 11115 C 11116 S 11117 E 11118 F 11119 CH7	DN application emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall		0.1	824 days	0%	Mon 10/8/20	Wed 17/5/23	NA	NA	Mon 17/8/20	Wed 29/5/24	6 days									#		
Den Den Den Den Den Den Den	emolition of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30) Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall	45 days	0 days	100 days	0%	Mon 19/10/20	Fri 19/2/21	NA	NA	Thu 3/12/20	Thu 8/4/21	38 days 30 days	406,414										
1110 I 1111 I 11112 C 11113 CH8 11114 I 1115 C 11116 S 11117 E 11118 F 11119 CH7	Installation of Silt Curtain with Concrete Sinkers Demolition of Existing Seawall		0 days	45 days	0%	Mon 26/10/20	Wed 9/12/20	NA	NA	Sun 21/1/24	Tue 5/3/24	1182 d 1 days											
1111	Demolition of Existing Seawall	67 days	0 days	67 days	0%	Thu 10/12/20	Thu 4/3/21	NA	NA	Wed 6/3/24	Wed 29/5/24	962 days											
1111	Demolition of Existing Seawall	6 days		6 days	0%	Thu 10/12/20	Wed 16/12/20	0 NA	NA	Thu 23/5/24	Wed 29/5/24	1023 d 1 day	1108										
1112 CH8 1113 CH8 1114 T 1115 C 1116 S 1117 E 1118 F 1119 CH7		37 days		37 days	0%	Thu 10/12/20	Mon 25/1/21	NA	NA	Wed 6/3/24	Mon 22/4/24	962 days 1 day	1108										
CH8 1113 CH8 1114 T 1115 C 1116 S 1117 E 1118 F 1119 CH7		30 days		30 days	0%	Tue 26/1/21		NA	NA	Tue 23/4/24		962 days 1 day	1111										
1114 T 1115 C 1116 S 1117 E 1118 F 1119 CH7	H86 to CH70 ELS Works	136 days		136 days	0%	Mon 10/8/20	Thu 21/1/21	NA	NA	Mon 17/8/20	Sat 27/2/21	6 days											
1115 C 1116 S 1117 E 1118 F 1119 CH7	Temporary Works Design Preparation	25 days		25 days	0%	Mon 10/8/20	Mon 7/9/20		NA	Mon 17/8/20		6 days 1 days											
1116 S 1117 F 1118 F 1119 CH7	Comment by PM	25 days		25 days	0%	Tue 8/9/20	Thu 8/10/20		NA	Tue 15/9/20		6 days 1 days	1114										
1117 E 1118 F 1119 CH7	Sheetpiling Installation with Grouting & Pumping Test (56m long on plan)	50 days		50 days	0%	Fri 16/10/20	Mon 14/12/20		NA	Fri 16/10/20		0 days 1 day	1420,1423,1115										
1118 F 1119 CH7 1120 S	Excavation with Shoring Installation (1350 cu.m., 150 cu.m./d)	12 days		12 days	0%	Tue 15/12/20			NA	Tue 22/12/20	Thu 7/1/21	6 days 3 day	1116										
1119 CH7	Preparation of formation and laying of blinding layer	18 days		18 days	0%		Thu 21/1/21		NA	Thu 4/2/21	Sat 27/2/21		1117										
1120 S	170 to CH30 ELS Works	43 days		43 days	0%		Thu 21/1/21 Thu 7/1/21	NA	NA	Mon 16/11/20		0 days	1117										
	Sheetpiling Installation (80m on plan)			14 days	0%		Tue 1/12/20		NA	Mon 16/11/20	Tue 1/12/20		1116SS+25 days										
1101 T	Excavation with Shoring Installation (4500 cu.m., 160 cu.m./d x 1 team) and	14 days			0%		Thu 7/1/21		NA NA			0 days 0.5 day											
1121 F	Preparation of Formation and Laying of Blinding Layer	29 uays	0 days	29 days	070	W Ed 2/12/20	111u //1/21	INA	IVA	W Cu 2/12/20	111u //1/21	0 days 1 day	1120										
1122 DCS	CS Seawater Intake (Insitu Section Bay 15)	41 days	0 days	41 days	0%	Fri 8/1/21	Sat 27/2/21	NA	NA	Fri 8/1/21	Sat 27/2/21	0 days 1 days			11								
1123	Construction of Cast in-situ Box Culvert with feeder pipe installation with Connection to Extisting Box Culvert(Bay 15, approx. 12m long)	41 days	0 days	41 days	0%	Fri 8/1/21	Sat 27/2/21	NA	NA	Fri 8/1/21	Sat 27/2/21	0 days 1 day	1117,1121										
		151 1	0.1	151.1	n.er	1 1 10 10 1	T 21/0/21	N. 1	N. 1	3.5 1/0/01	TD 20/5/22	0.1											
	ecast Units Installation	151 days		151 days	0%	Mon 1/3/21	Tue 31/8/21		NA	Mon 1/3/21	Tue 30/5/23	0 days	1100 1110				ГШ						
	Preparation for Connecting Precast Units and Cast In-situ Bay 15	6 days		6 days	0%	Mon 1/3/21	Sat 6/3/21	NA	NA	Mon 1/3/21	Sat 6/3/21	0 days 1 days	1123,1118										
		37 days		37 days	0%	Mon 8/3/21	Thu 22/4/21		NA	Mon 8/3/21	Thu 22/4/21	0 days 2 days	1125,1107SS+75 days										
I127 I	Inspection Shaft Construction and Backfilling Upto +2.0mPD + Feeder Pipe Laying + Backfilling upto Final Formation Level	33 days	0 days	33 days	0%	Fri 23/4/21	Wed 2/6/21	NA	NA	Fri 23/4/21	Wed 2/6/21	0 days 0.5 day	1126										
1128 S	Seawall Reinstatement	75 days	0 days	75 days	0%	Thu 3/6/21	Tue 31/8/21	NA	NA	Sat 25/2/23	Tue 30/5/23	518 days 2 days	1127								\mathbb{H}		
1129 Sect	ction 4: Part 2E	225 days	0 days	225 days	0%	Mon 15/8/22	Wed 17/5/23	NA	NA	Sat 10/9/22	Tue 30/5/23	10 days									+		
1130 A	Abandon Existing DCS - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 15/8/22	Mon 15/8/22	NA	NA	Sat 10/9/22	Sat 10/9/22	26 days 1 day								11/8			
	Abandon Existing DCS - Temp. Works Design and Method Statement Comment &	35 days	0 days	35 days	0%	Mon 15/8/22	Sun 18/9/22	NA	NA	Sat 10/9/22	Fri 14/10/22	26 days 1 day	1130										
	Appraoval Part 2E - Abandon of existing DCS	185 days	-	185 days	0%	Mon 3/10/22			NA	Sat 15/10/22	Tue 30/5/23	10 days 9 days	20,1131										
	Planned Completion for Section 4	0 days		0 days	0%	Wed 17/5/23			NA	Tue 30/5/23	Tue 30/5/23	10 days	1132									17/5	į
	ction 8: Part 2A - Diversion & abandon of extg DCS box culvert	194 days		194 days	0%	Thu 1/4/21	Wed 24/11/2		NA	Fri 9/4/21	Thu 2/12/21	4 days											
		0 days		0 days	0%	Thu 1/4/21	Thu 1/4/21	NA NA	NA	Fri 9/4/21	Fri 9/4/21	8 days 1 day											
N	Method Statement Submission Diversion & Abandon of Existing DCS Box Box Culvert - Temp. Works Design and			21 days	0%	Thu 1/4/21	Wed 21/4/21		NA	Fri 9/4/21	Thu 29/4/21	8 days 1 day	1135										
N	Method Statement Comment & Appraoval	. Li days	Ganys	21 days	070	1.1u 1/4/21	04 21/4/21	11/1	11/1	111 /17121	1110 2717121	J duy 1 day	1155										
1137	TTA Implementation	1 day	0 days	1 day	0%	Thu 22/4/21	Thu 22/4/21	NA	NA	Fri 30/4/21	Fri 30/4/21	7 days 0.5 day	1136										
			1															(11111111111111111111111111111111111111			Ш		
tle. Pov 11 D=-		Summary			Inactive	Milestone 🔷	,	Duration-	-only		Start-only	Е	External Mi	lestone	♦		Critical	l Split					
itle: Rev.11 Pro is of 22-May-20	og with Progress	Project Sum	nmary sk			Summary I			Summary Rollup		Finish-only	3					Progress						

									/2018/01 KT															
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finisl	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q3	04	01	2021 O2 C)3	04 01	2 21 Q2	2022	04	4 Q
38	Sheetpile Installation	25 days		25 days	0%	Fri 23/4/21	Mon 24/5/21	NA	NA	Mon 3/5/21	Tue 1/6/21		1 day	1137	Q2 Q3		Q1							
39	Excavation with Shoring	52 days	0 days	52 days	0%	Tue 25/5/21	Mon 26/7/21	NA	NA	Wed 2/6/21	Tue 3/8/21	7 days	1 day	1138										Ш
10	Diversion of existing DCS box culvert	26 days	0 days	26 days	0%	Tue 27/7/21	Wed 25/8/21	NA	NA	Wed 4/8/21	Thu 2/9/21	7 days	2 days	1137,410,1139					in l					Ш
1	Break up existing box culvert (4 walls) + top slab	35 days	0 days	35 days	0%	Thu 26/8/21	Thu 7/10/21	NA	NA	Fri 3/9/21	Sat 16/10/21	7 days	2 days	1140										Ш
12	Construct new walls at existing box culvert	20 days	0 days	20 days	0%	Fri 8/10/21	Mon 1/11/21	NA	NA	Mon 18/10/21	Tue 9/11/21	7 days	1 days	1141										Ш
13	Abandon existing DCS box culvert	20 days	0 days	20 days	0%	Tue 2/11/21	Wed 24/11/21	NA	NA	Wed 10/11/21	Thu 2/12/21	7 days	1 days	1142										Ш
14	Planned Completion for Section 8	0 days		0 days	0%	Wed 24/11/21	Wed 24/11/21	NA	NA	Thu 2/12/21	Thu 2/12/21	7 days	0 days	1143						2274/11				Ш
	Section 3	729 days		729 days	0%	Thu 16/5/19	Tue 26/10/21		NA	Tue 2/6/20	Tue 2/11/21	6 days	o day o							1 2 2 1 1				Ш
16	Part 2C - Lift LT3 & LT4	729 days		729 days	0%	Thu 16/5/19	Tue 26/10/21		NA	Tue 2/6/20	Tue 2/11/21	6 days												Ш
17												-	0 3	4EC : 260 J	1 2/6									Ш
	Access Date - Part 2A,2C	0 days		0 days	0%	Tue 2/6/20		NA	NA	Tue 2/6/20	Tue 2/6/20	0 days		4FS+369 days	2/6									Ш
18	Mobilization of plant and materials	15 days	0 days	15 days	0%	Thu 16/5/19		NA	NA	Sat 4/7/20	Tue 21/7/20	337 days	-											Ш
19	TTA implementation	4 days	0 days	4 days	0%	Tue 2/6/20	Fri 5/6/20	NA	NA	Fri 17/7/20	Tue 21/7/20	37 days	1 day	1147	Ť									Ш
50	Carry out Titpit and Identify Underground Utilities location	12 days	0 days	12 days	0%	Mon 15/6/20	Fri 26/6/20	NA	NA	Mon 22/6/20	Fri 3/7/20	7 days												
51	Discuss with Relevant Utilities Undertakers	18 days	0 days	18 days	0%	Sat 27/6/20	Tue 14/7/20	NA	NA	Sat 4/7/20	Tue 21/7/20	7 days		1150										Ш
52	Slew CLP Cable and Abandon Telecom Cable (tentative)	75 days	0 days	75 days	0%	Wed 15/7/20	Mon 12/10/20) NA	NA	Wed 22/7/20	Mon 19/10/20	6 days	4 days	1148,1149,1151										
53	Lift Tower Foundation - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 4/8/20	Tue 4/8/20	NA	NA	Tue 15/9/20	Tue 15/9/20	42 days	1 day		• 4	.8								
54	Lift Tower Foundation - Temp. Works Design and Method Statement Comment &	35 days	0 days	35 days	0%	Tue 4/8/20	Mon 7/9/20	NA	NA	Tue 15/9/20	Mon 19/10/20	42 days	1 day	1153										Ш
55	Appraoval Intall Sheetpile, ELS, Excavation and Temp. Works Installation (Shoring, Drainage	38 days	0 days	38 days	0%	Tue 13/10/20	Thu 26/11/20	NA	NA	Tue 20/10/20	Thu 3/12/20	6 days	2 days	1154,1152								#		Ш
6	& Slope Protection) Foundation Construction (Pad Footing include blinding layer, formwork erection,	38 days	0 days	38 days	0%	Fri 27/11/20	Wed 13/1/21	NA	NA	Fri 4/12/20	Wed 20/1/21	6 days	2 days	1148,1152,175,1			ЫШ							Ш
57	rebar fixing & concreting) Sheepile Extraction & Backilling	13 days	0 days	13 days	0%	Thu 14/1/21	Thu 28/1/21	NA	NA	Thu 21/1/21	Thu 4/2/21	6 days	1 day	1156										Ш
58	Lift Tower - Temp. Works Design and Method Statement Submission	0 days	-	0 days	0%	Mon 2/11/20	Mon 2/11/20		NA	Fri 1/1/21	Fri 1/1/21	60 days	_			2/1								Ш
9				-	0%		Sun 6/12/20		NA	Fri 1/1/21	Thu 4/2/21			1158			•							Ш
	Lift Tower - Temp. Works Design and Method Statement Comment & Appraoval	35 days	-	35 days		Mon 2/11/20							-											Ш
0	Lift Shaft Tower: 3 Lifts x 20 day/Lift, Falsework & Formwork Erection, Rebar Fixing & Concreting	63 days		63 days	0%	Fri 29/1/21	Mon 19/4/21		NA	Fri 5/2/21	Mon 26/4/21			1156,1159,1157										Ш
Į.	Lift installation (LT3 & LT4)	90 days	0 days	90 days	0%	Tue 20/4/21	Fri 6/8/21	NA	NA	Tue 27/4/21	Fri 13/8/21	6 days	5 days	1160,713										Ш
2	E & M installation	30 days	0 days	30 days	0%	Sat 7/8/21	Fri 10/9/21	NA	NA	Sat 14/8/21	Fri 17/9/21	6 days	3 days	1161										Ш
53	Louvers and Glazing Installation	26 days	0 days	26 days	0%	Fri 21/5/21	Mon 21/6/21	NA	NA	Sat 14/8/21	Mon 13/9/21	71 days	2 days	1160FS+25 days										Ш
4	Parapet Installation and Finishing Works	40 days	0 days	40 days	0%	Tue 22/6/21	Sat 7/8/21	NA	NA	Tue 14/9/21	Tue 2/11/21	71 days	4 days	1163										Ш
55	CLP Meter Installation	0 days	0 days	0 days	0%	Mon 1/2/21	Mon 1/2/21	NA	NA	Fri 20/8/21	Fri 20/8/21	200 days	0.5 day				4 1/2							Ш
66	EMSD Submission Form 5 for Lift Inspection	0 days	0 days	0 days	0%	Mon 1/3/21	Mon 1/3/21	NA	NA	Fri 20/8/21	Fri 20/8/21	172 days	0.5 day	1165			1/	3						Ш
57	EMSD Lift Inspection	0 days	0 days	0 days	0%	Sun 14/3/21	Sun 14/3/21	NA	NA	Fri 3/9/21	Fri 3/9/21	172 days	0.5 day	1166FS+14 days			4 1	4/3						Ш
58	Issuance of Lift Use Permit	0 days	0 days	0 days	0%	Mon 29/3/21	Mon 29/3/21	NA	NA	Sat 18/9/21	Sat 18/9/21	172 days	0.5 day	1167FS+15 days			\$	29/1						Ш
59	Testing & commissioning with Statutory Inspection	36 days	0 days	36 days	0%	Sat 11/9/21	Tue 26/10/21	NA	NA	Sat 18/9/21	Tue 2/11/21	6 days	1 days	1162,1168					4					Ш
70	Footpath	28 days	0 days	28 days	0%	Tue 20/4/21	Mon 24/5/21	NA	NA	Tue 8/6/21	Mon 12/7/21	40 days	1 days	1160				4.]						Ш
71	Open Space within Part 2C	94 days	-	94 days	0%	Tue 25/5/21	Mon 13/9/21		NA	Tue 13/7/21	Tue 2/11/21	40 days	-	1170,1230				411						Ш
72	Planned Completion for Section 3	0 days		0 days	0%	Tue 26/10/21	Tue 26/10/21		NA	Tue 2/11/21	Tue 2/11/21			1171,1168,1169,						30400				Ш
	Sections 5 and 9: Noise Barrier Installation				0%			Fri 20/3/20		Fri 20/3/20	Mon 5/7/21		-	1171,1100,1109,						7.20/10				Ш
			6.83 days	-		Fri 20/3/20						1 day	1 uay											Ш
74	1.0 Noise Barrier Shop Drawing Preparation, Offsite Fabrication		s 20.86 days		0%	Mon 6/4/20		Mon 6/4/20		Mon 6/4/20	Mon 7/12/20	60 days												Ш
75	CNP and TTA available	0 days		0 days	0%	Wed 24/6/20	Wed 24/6/20		NA	Thu 20/8/20	Thu 20/8/20	47 days			4 24/6									
76	Expose the Extisting Noise Barrier Foundation		25 days	45 days	36%	Mon 6/4/20	Fri 3/7/20	Mon 6/4/20	NA	Mon 6/4/20	Tue 7/7/20	3 days	1 day			$\ \ \ $								
17	Implement TTA	2 days	0 days	2 days	0%	Mon 13/7/20	Tue 14/7/20	NA	NA	Wed 18/11/20	Thu 19/11/20	107 days	0.5 day											
78	Expose the Extisting Noise Barrier Foundation under Existing Footpath	15 days	0 days	15 days	0%	Wed 15/7/20	Fri 31/7/20	NA	NA	Fri 20/11/20	Mon 7/12/20	107 days	1 day	1177										
79	Carry out the Site Survey for Existing Holding Down Bolt at Existing Landscaped	6 days	0 days	6 days	0%	Wed 24/6/20	Thu 2/7/20	NA	NA	Thu 20/8/20	Wed 26/8/20	47 days	1 day	1175	-	$\ \ \ $								
80	Noise Barrier Shop Drawings Preparation	30 days	0 days	30 days	0%	Fri 31/7/20	Thu 3/9/20	NA	NA	Fri 21/8/20	Thu 24/9/20	18 days	0.5 day	1176FF+18 days										
31	Noise Barrier Shop Drawings Comment by PM	18 days	0 days	18 days	0%	Fri 4/9/20	Thu 24/9/20	NA	NA	Fri 25/9/20	Sat 17/10/20	18 days	0.5 day	1180										
32	PMAA Panel Material Sample Submission	0 days		0 days	0%	Sat 2/5/20	Sat 2/5/20	NA	NA	Sat 6/6/20	Sat 6/6/20	30 days	1 days		♦ 2/5									Ш
				<u></u>																<u> </u>				Щ
	i Prog with Progress	Summary Project Sun	nmary		Inactive Mi			Duration-on Manual Sur	nly Unmary Rollup		Start-only Finish-only		[]	Exter Dead	nal Milestone ine	•				ical Split gress				
of 22-M	lay-20 Milestone	Inactive Ta		-	Manual Ta			Manual Sur			External Tas	1.	_	Critic		_				nual Progre				

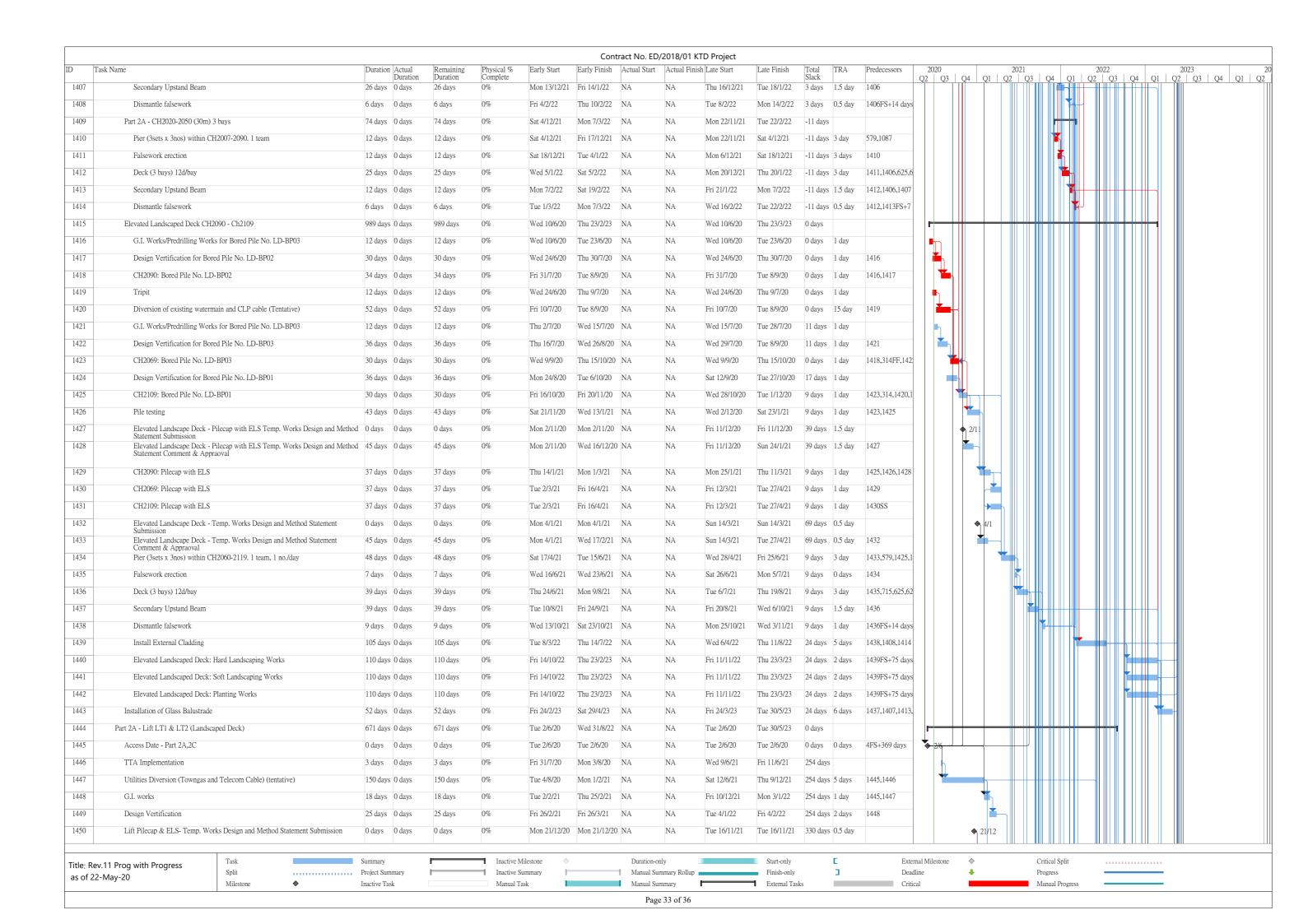
								tract No. ED,	/2010/01 KI	Project														
Tas	k Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finisl	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q3	04	202	Q3 C)4 ()1	2022	2 Q3 Q4	4 01	2023 Q2	
183	PMAA Panel Material Comment and Approval by PM	18 days		18 days	0%	Sat 2/5/20	Fri 22/5/20	NA	NA	Sat 6/6/20	Sat 27/6/20	30 days	1 days	1182		7		\(\frac{1}{2}\)		1 22	25 Q4		1 72	<u>V</u> .
184	PMAA Panel Material Coloring Sample Submission	0 days	0 days	0 days	0%	Thu 4/6/20	Thu 4/6/20	NA	NA	Mon 29/6/20	Mon 29/6/20	20 days	1 days	1183	4/6									
185	PMAA Panel Material Coloring Sample Comment and Approval by PM	10 days	0 days	10 days	0%	Thu 4/6/20	Mon 15/6/20	NA	NA	Mon 29/6/20	Fri 10/7/20	20 days	1 days	1184										
186	Material Testing and Offsite Fabrication	247 days	0 days	247 days	0%	Mon 1/6/20	Tue 2/2/21	NA	NA	Wed 10/6/20	Wed 17/2/21	9 days												
187	Holding Down Bolt Procurement	61 days	0 days	61 days	0%	Fri 5/6/20	Tue 4/8/20	NA	NA	Wed 10/6/20	Sun 9/8/20	5 days	1 days											
188	Holding Down Bolt Testing	45 days	0 days	45 days	0%	Wed 5/8/20	Fri 18/9/20	NA	NA	Mon 10/8/20	Wed 23/9/20	5 days	1 day	1187										
189	Structural Steelwork Procurement	81 days		81 days	0%	Mon 1/6/20	Thu 20/8/20	NA	NA	Sat 13/6/20	Tue 1/9/20	12 days	1 day											
190	Structural Steel Frame Material Testing	46 days	_	46 days	0%	Fri 21/8/20	Mon 5/10/20		NA	Wed 2/9/20	Sat 17/10/20	12 days		1189										
191	Structural Steel Frame Fabrication and Delivery	120 days		120 days	0%	Tue 6/10/20	Tue 2/2/21		NA	Sun 18/10/20	Sun 14/2/21	12 days		1181,1190										
192	Structural Steel Frame Start Delivery to Stie	0 days		0 days	0%	Wed 25/11/20			NA	Tue 8/12/20	Tue 8/12/20	12 days		1191SS+51 days		25/								
193	Polymethyl Metharylate (PMMA) and Associated Aluminium Sub-frame	121 days			0%	Tue 16/6/20	Wed 14/10/2		NA	Sat 11/7/20	Sun 8/11/20	25 days		1185	1	100	†							
	Procurement																							
194	Polymethyl Metharylate (PMMA) panel fabrication and delivery	101 days		101 days	0%	Thu 15/10/20			NA	Mon 9/11/20	Wed 17/2/21	25 days	30 days	1193,1181										
195	Temp Works Design for Noise Barrier	106 days	_		0%	Sat 13/6/20	Mon 19/10/2		NA	Fri 19/6/20	Sat 24/10/20	5 days												
196	ELS Design Preparation for Noise Barrier with ICE	18 days		18 days	0%	Wed 17/6/20	Thu 9/7/20		NA	Tue 23/6/20	Wed 15/7/20	5 days												
197	ELS Design for Noise Barrier Comment by AECOM	21 days	0 days	21 days	0%	Fri 10/7/20	Thu 30/7/20		NA	Thu 16/7/20	Wed 5/8/20	6 days	1 day	1196										
198	Temporary Works Platform Design Preparation	36 days	0 days	36 days	0%	Sat 13/6/20	Mon 27/7/20	NA	NA	Fri 19/6/20	Sat 1/8/20	5 days	1 day											
199	Temporary Working Platform Design Submit for AECOM Comment	19 days	0 days	19 days	0%	Tue 28/7/20	Tue 18/8/20	NA	NA	Mon 3/8/20	Mon 24/8/20	5 days	1 day	1198										
200	Temporary Working Platform Fabrication	51 days	0 days	51 days	0%	Wed 19/8/20	Mon 19/10/2	0 NA	NA	Tue 25/8/20	Sat 24/10/20	5 days	1 day	1199										
201	2.0 Noise Barrier Footing and Modification Existing Column Stud	184 days	2.71 days	181.29 days	0%	Fri 20/3/20	Sat 19/9/20	Fri 20/3/20	NA	Fri 20/3/20	Wed 23/9/20	4 days		_		1								
202	Take up the Works Area	1 day	1 day	0 days	0%	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	0 days												
203	Ground Investigation Works	25 days	0 days	25 days	0%	Sat 4/7/20	Sat 1/8/20	NA	NA	Wed 8/7/20	Wed 5/8/20	3 days	1 day	1176										
204	Diversion of Existing Utilities and ELS Construction	42 days	0 days	42 days	0%	Mon 3/8/20	Sat 19/9/20	NA	NA	Thu 6/8/20	Wed 23/9/20	3 days	1 day	1197,1203										
205	Fooing with Column Stud Construction	61 days	0 days	61 days	0%	Wed 23/9/20	Sat 5/12/20	NA	NA	Thu 24/9/20	Mon 7/12/20	1 day												
206	Bay 1 & 3 Fooing with Column Stud and Modification of Existing Column Stud	10 days	0 days	10 days	0%	Wed 23/9/20	Tue 6/10/20	NA	NA	Thu 24/9/20	Wed 7/10/20	1 day	1 day	1188,1204,184FI										
207	along Bay 1 & 3 Bay 2 & 4 Fooing with Column Stud and Modification of Existing Column along	10 days	0 days	10 days	0%	Wed 7/10/20	Sat 17/10/20	NA	NA	Thu 8/10/20	Mon 19/10/20	1 day	1 day	1206										
208	Bay 2&4 Bay 5 & 7 Fooing with Column Stud, Modification of Existing Stud along Bay 5&7			10 days	0%		Fri 30/10/20		NA	Tue 20/10/20	Sat 31/10/20		1 day	1207										
209	Bay 6 Fooing with Column Stud, Modification of Existing Stud along Bay 6	10 days			0%	Sat 31/10/20	Wed 11/11/2		NA	Mon 2/11/20	Thu 12/11/20		1 day	1208										
210	Backfill and extract sheet pile	21 days			0%	Thu 12/11/20			NA	Fri 13/11/20	Mon 7/12/20		1 day	1209										
211	Modification of Remaining Colum Stud	50 days		50 days		Mon 7/12/20		NA	NA	Tue 8/12/20	Sat 6/2/21	1 day	1	.207										
212	Modification of Remaining Column Stud	50 days		50 days	0%	Mon 7/12/20		NA NA	NA NA	Tue 8/12/20	Sat 6/2/21		1 day	1210,1178										
						Wed 19/8/20								1210,1170										
213	Noise Barrier Installation	258 days			0%			NA	NA	Sat 26/9/20	Mon 5/7/21	1	1 day	1100]									
214	CNP Application	31 days		31 days	0%	Wed 19/8/20			NA	Sat 26/9/20	Mon 26/10/20			1199		1								
215	Temporary Platform Delivery to Site	0 days		,	0%		Mon 19/10/2		NA	Tue 27/10/20	Tue 27/10/20		0.5 day			19/10								
216	Temporary Platform On-site Assembly (Night Time)	36 days			0%		Tue 1/12/20		NA	Tue 27/10/20	Mon 7/12/20	5 days		1214,1215										
217	Structural Steel Frame Installation	119 days		119 days		Mon 7/12/20	Wed 5/5/21		NA	Tue 8/12/20	Thu 6/5/21		1 day	1192,1212SS,12										
218	PMMA and Associated Aluminum Sub-frame Installation	117 days	0 days	117 days		Fri 8/1/21	Wed 2/6/21	NA	NA	Sat 9/1/21	Thu 3/6/21	1 day	1 day	1194SS+50 days				1						
219	Lighting Installation	25 days	0 days	25 days	0%	Thu 3/6/21	Sat 3/7/21	NA	NA	Fri 4/6/21	Mon 5/7/21	1 day	1 day	1218FF+25 days										
220	Rainwater downpipe	25 days	0 days	25 days	0%	Thu 3/6/21	Sat 3/7/21	NA	NA	Fri 4/6/21	Mon 5/7/21	1 day	1 day	1218FF+25 days				4						
221	Bus Lay-by	25 days	0 days	25 days	0%	Thu 3/6/21	Sat 3/7/21	NA	NA	Fri 4/6/21	Mon 5/7/21	1 day		1218FF+25 days				4						
222	Planned Completion for Section 5 & Section 9	0 days	0 days	0 days	0%	Sat 3/7/21	Sat 3/7/21	NA	NA	Mon 5/7/21	Mon 5/7/21	1 day	0 days	1218,1219,1220,				3/7						
223	Section 6	1201 day	8.73 days	1192.27 days?	0%	Thu 16/5/19	Tue 30/5/23	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	298 da		_								+++		
224	Fencing (15m/d) & Hoarding Erection (10m/d)	915 days	185.72 days	729.28 days	0%	Tue 15/10/19	Thu 10/11/22	Tue 15/10/19	NA	Tue 15/10/19	Fri 30/12/22	42 days		_	+									
225	Hoarding - Part 1 (~57m)	51 days	0 days	51 days	0%	Tue 1/12/20	Mon 1/2/21	NA	NA	Wed 21/9/22	Mon 21/11/22	536 days	1 day	121,8		╢╅								
226	Fencing - Part 1 (758m)	6 days	0 days	6 days	0%	Sat 19/9/20	Fri 25/9/20	NA	NA	Mon 1/3/21	Sat 6/3/21	130 days	0 days	121,8		$\parallel \parallel \parallel$								
227	Fencing - Part 2A (~458m) - 4 team	12 days			0%	Wed 3/2/21	Fri 19/2/21		NA	Sat 5/2/22	Fri 18/2/22	296 days	1	9,121,1147,1445		$\ \cdot\ $								
																	1				<u> </u>	Щ		_
	11 Prog with Progress	Summary Project Sun	ımarv		Inactive Mile Inactive Sun			Duration-or	nly Ummary Rollup		Start-only Finish-only		[]	Externa Deadlin	l Milestone e	•		Critic Prog	cal Split ress					
s of 22-1	May-20 Milestone ◆	Inactive Ta		-	Manual Task			Manual Su			External Tas	1.	_	Critical		_			al Progress					



							Con	tract No. ED	/2018/01 K	TD Project												
Task N	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack		2020	Q4 Q1	2021	03 0	04 01		2022 Q3	04	O1
72	CH2000 - CH2060 (~84m, 2 M/H) - S.D. Rd	14 days		14 days	0%	Thu 6/1/22	Fri 21/1/22	NA	NA	Mon 5/9/22	Wed 21/9/22	198 days 1 days	1085SS+12 days	3 Q3	V+ VI	1 22			. 1 22		Ť	QI I
73	CH2060 - CH2118.93 (~50.7m, 2 M/H) - Rd D3	14 days	0 days	14 days	0%	Mon 4/10/21	Wed 20/10/21	1 NA	NA	Fri 3/12/21	Sat 18/12/21	51 days 1 days	1267									
74	CH100 - CH147 (~169m, 5 M/H) - L12 Road	38 days	0 days	38 days	0%	Mon 2/5/22	Wed 15/6/22	NA	NA	Sat 2/7/22	Mon 15/8/22	51 days 3 days	1275,1229						∥¥			
75	Open Space & Promenade (~457m, 11 M/H)	76 days	0 days	76 days	0%	Tue 25/1/22	Sat 30/4/22	NA	NA	Tue 29/3/22	Thu 30/6/22	51 days 6 days	1504,458,459,12						###	<u> </u>		
76	L12d Stormwater	50 days	0 days	50 days	0%	Thu 21/10/21	Fri 17/12/21	NA	NA	Wed 26/1/22	Mon 28/3/22	80 days	1273,490							<u> </u>		
77	Sewerage Drainage	496 days	0 days	496 days	0%	Tue 1/12/20	Wed 3/8/22	NA	NA	Sat 29/5/21	Wed 5/10/22	51 days							₩₩	,		
78	Procurement of Sewerage Pipes	90 days	0 days	90 days	0%	Tue 1/12/20	Sun 28/2/21	NA	NA	Sat 29/5/21	Thu 26/8/21	179 days 0.5 days										
79	Sewerage Drainage - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Wed 2/6/21	Wed 2/6/21	NA	NA	Sat 28/8/21	Sat 28/8/21	87 days 0.5 days				4 2/	5					
80	Sewerage Drainage - Temp. Works Design and Method Statement Comment &	21 days	0 days	21 days	0%	Wed 2/6/21	Tue 22/6/21	NA	NA	Sat 28/8/21	Fri 17/9/21	87 days 0.5 days	1279									
1	Appraoval CH1000 - CH1087 (~68m, 3 M/H)	19 days	0 days	19 days	0%	Tue 15/6/21	Wed 7/7/21	NA	NA	Fri 27/8/21	Fri 17/9/21	62 days 1 days	428,451,465,466									
2	CH1087 - CH1189.4 (~47m, 1 no M/H)	14 days	0 days	14 days	0%	Sat 4/9/21	Mon 20/9/21	NA	NA	Sat 18/9/21	Wed 6/10/21	12 days 1 days	1265,1278,1280,				4					
83	CH100 - CH147 (~156m, 6 M/H) - L12 Road	41 days		41 days	0%	Thu 16/6/22	Wed 3/8/22	NA	NA	Tue 16/8/22	Wed 5/10/22	51 days 3 days	1274,1280,1275,									
	Underground Watermain	629 days		629 days	0%	Tue 15/12/20	Fri 27/1/23		NA	Fri 14/5/21	Thu 16/3/23	41 days							Щ			
285	Fresh Watermain	519 days		519 days	0%	Tue 15/12/20	Wed 14/9/22		NA	Fri 14/5/21	Thu 16/3/23	119 days								الللل	,	.
286	Fresh Watermain - Method Statement Submission	0 days		0 days	0%	Tue 1/6/21	Tue 1/6/21		NA	Sat 7/8/21	Sat 7/8/21	67 days 1 days				1/	5			/ 		$\ \cdot \ $
287	Fresh Watermain - Ivietnou Statement Submission Fresh Watermain Method Statement Comment & Appraoval				0%	Tue 1/6/21	Mon 5/7/21			Sat 7/8/21	Fri 10/9/21		1286									
87	**	35 days		35 days					NA			67 days 1 days	1286									$\ \cdot \ $
	Fresh Watermain Procurement	120 days		120 days	0%	Mon 11/1/21	Mon 10/5/21		NA	Fri 14/5/21	Fri 10/9/21	123 days 1 days	1200 1207									$\ \cdot \ $
39	CH1000 - CH1087 (~191m) Rd D3	20 days		20 days	0%	Tue 6/7/21	Wed 28/7/21		NA	Sat 11/9/21	Wed 6/10/21	58 days 1 days	1288,1287									
90	CH1087 - CH1189.4 (~212m) - N. Ramp	4 days		4 days	0%	Tue 21/9/21	Sat 25/9/21		NA	Thu 7/10/21	Mon 11/10/21		1282,467,1289									
1	CH1189.4 - CH1394 (~409.2m) - Bridge D3	42 days	0 days	42 days	0%	Tue 10/8/21	Tue 28/9/21		NA	Fri 15/10/21	Thu 2/12/21	54 days 2 days	1288,944FF									
2	CH1394 - CH1444.7 (~101.4m) - S. Ramp	10 days	0 days	10 days	0%	Tue 6/7/21	Fri 16/7/21	NA	NA	Mon 15/8/22	Thu 25/8/22	332 days 0 days	988SS+10 days,									
93	CH1444.7 - CH1560 (~165m) - Rd D3	30 days	0 days	30 days	0%	Mon 12/7/21	Sat 14/8/21	NA	NA	Sat 27/11/21	Tue 4/1/22	116 days 0 days	988SS+15 days									
1	CH1720 - CH1920 (~25m) - Underpass	2 days	0 days	2 days	0%	Fri 17/12/21	Sat 18/12/21	NA	NA	Fri 16/9/22	Sat 17/9/22	221 days 0 days	1270,444									
5	CH2060 - CH2118.93 (~47m) - Rd D3	2 days	0 days	2 days	0%	Sat 16/10/21	Mon 18/10/21	1 NA	NA	Wed 15/12/21	Thu 16/12/21	51 days 0 days	1273SS+10 days									
,	CH100 - CH147 (~280m) - L12 Road	30 days	0 days	30 days	0%	Tue 17/5/22	Tue 21/6/22	NA	NA	Tue 28/6/22	Tue 2/8/22	35 days 2 days	1297									
7	Open Space & Promenade (~1,093m)	110 days	0 days	110 days	0%	Thu 30/12/21	Mon 16/5/22	NA	NA	Wed 12/1/22	Fri 27/5/22	10 days 1 day	1497,458,111									
	Freshwater main across Kai Tak River	50 days	0 days	50 days	0%	Tue 17/5/22	Fri 15/7/22	NA	NA	Tue 15/11/22	Thu 12/1/23	151 days 1 day	1297,514						111 1			
)	L12d Freshwater	50 days	0 days	50 days	0%	Tue 15/12/20	Wed 17/2/21	NA	NA	Tue 15/11/22	Thu 12/1/23	569 days	498							$+ \ \ $		
0	Fresh Watermain T&C	51 days	0 days	51 days	0%	Sat 16/7/22	Wed 14/9/22	NA	NA	Fri 13/1/23	Thu 16/3/23	151 days 1 day	1297,1296,1298,									+
1	Salt Watermain	591 days	0 days	591 days	0%	Mon 1/2/21	Fri 27/1/23	NA	NA	Sun 20/6/21	Thu 16/3/23	41 days			+				HH			1
12	Salt Watermain - Method Statement Submission	0 days	0 days	0 days	0%	Mon 24/5/21	Mon 24/5/21	NA	NA	Mon 13/9/21	Mon 13/9/21	112 days 1 day				4 24,	'5					
)3	Salt Watermain Method Statement Comment & Appraoval	35 days	0 days	35 days	0%	Mon 24/5/21	Sun 27/6/21	NA	NA	Mon 13/9/21	Sun 17/10/21	112 days 1 day	1302									
04	Salt Watermain Procurement	120 days	0 days	120 days	0%	Mon 1/2/21	Mon 31/5/21	NA	NA	Sun 20/6/21	Sun 17/10/21	139 days 1 day										
)5	CH1000 - CH1087 (~157m) Rd D3	15 days	0 days	15 days	0%	Mon 28/6/21	Thu 15/7/21	NA	NA	Thu 18/8/22	Sat 3/9/22	341 days 1 days	1304,1303									
06	CH1087 - CH1189.4 (~218m) - N. Ramp	4 days	0 days	4 days	0%	Mon 27/9/21	Thu 30/9/21	NA	NA	Tue 12/10/21	Sat 16/10/21	12 days 1 day	1290									
07	CH1189.4 - CH1394 (~409.2m) - Bridge D3	40 days	0 days	40 days	0%	Sat 2/10/21	Thu 18/11/21	NA	NA	Mon 18/10/21	Thu 2/12/21	12 days 0.5 days	1291SS,1303,45									
08	CH1394 - CH1444.7 (~101.4m) - S. Ramp	10 days	0 days	10 days	0%	Sat 17/7/21	Wed 28/7/21	NA	NA	Fri 26/8/22	Tue 6/9/22	332 days 1 day	1292									
809	CH1444.7 - CH1560 (~165m) - Rd D3	18 days		18 days	0%	Mon 16/8/21	Sat 4/9/21		NA	Wed 29/6/22	Wed 20/7/22	258 days 1 day	1293									$\ \cdot \ $
10	CH1560 - CH1720 (~160m) - NDR	50 days		50 days	0%	Fri 19/11/21	Wed 19/1/22		NA	Thu 21/7/22	Sat 17/9/22	197 days	1307,1309,444									
1	CH1720 - CH1920 (~25m) - Underpass	3 days		3 days	0%	Thu 20/1/22	Sat 22/1/22		NA	Mon 19/9/22	Wed 21/9/22	197 days 1 day	1294,1310									
2	CH2060 - CH2118.93 (~47m) - Rd D3	2 days		2 days	0%	Mon 24/1/22			NA NA	Thu 22/9/22	Fri 23/9/22	197 days 0 days	1294,1310									
.3	CH100 - CH147 (~455m) - L12 Road	47 days	-	47 days	0%		Tue 16/8/22		NA	Wed 3/8/22	Tue 27/9/22	35 days 2 days	1295,1311									
14	L12d Salt Watermain	50 days		50 days	0%	Wed 22/0/22 Wed 17/8/22	Mon 17/10/22		NA NA	Wed 3/6/22 Wed 16/11/22	Fri 13/1/23	75 days 1 day	1313,498									
				1									,									
315	Open Space & Promenade (~1,093m)	110 days		110 days	0%	Tue 17/5/22	Sat 24/9/22		NA	Sat 28/5/22	Sat 8/10/22	10 days 1 day	1297,458									$\ \cdot \ $
316	Saltwater main across Kai Tak River	51 days	o days	51 days	0%	Ivion 26/9/22	Fri 25/11/22	NA	NA	Tue 15/11/22	Fri 13/1/23	41 days 1 day	1315,514									
le: Rev.11	Prog with Progress	Summary			Inactive N			Duration-o	-		Start-only	<u> </u>	External	Milestone	♦			cal Split				
	sy-20 Split	Project Sun	nmary		Inactive S	ummary		Manual Su	mmary Rollup		Finish-only	3	Deadline		4		Prog	ress				



Sec	FSD Inspection Issuance of FS Certificate Salt Water and Sewage Pumping Station: Landscaping hardworks and softworks Salt Water and Sewage Pumping Station: Planting Works ection 6 Completion eawater Intake Box Culvert (~169m) Access Date - Part 4 Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling Reinstate seawall	0 days 110 days 110 days 110 days 0 days 647 days 290 days 24 days 10 days 256 days 44 days 44 days	Duration 0 days	Duration 0 days 0 days 110 days 110 days 0 days 647 days 0 days 290 days 34 days 24 days 10 days	Physical % Complete 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%		Sat 29/4/23 Thu 18/5/23 Sat 15/4/23 Sat 15/4/23 Tue 30/5/23 Mon 8/5/23	NA NA NA NA	NA NA NA NA NA NA NA NA NA	Late Start Thu 11/5/23 Tue 30/5/23 Wed 11/1/23 Wed 11/1/23 Tue 30/5/23 Fri 5/3/21 Fri 5/3/21	Tue 30/5/23 Tue 30/5/23	Total Slack 8 days 0.5 da 8 days 0.5 da 35 days 2 day 35 days 2 day 0 days 0 days	ys 1362FS+15 days 562,1351,548	2020 Q2 Q3 Q	04 Q1 1	2021 Q2 Q3	Q4	Q1	2022 Q2 Q	Q3 Q4	Q1
Se	Issuance of FS Certificate Salt Water and Sewage Pumping Station: Landscaping hardworks and softworks Salt Water and Sewage Pumping Station: Planting Works ection 6 Completion leawater Intake Box Culvert (~169m) Access Date - Part 4 Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	0 days 110 days 110 days 110 days 0 days 647 days 290 days 24 days 10 days 256 days 44 days 44 days	0 days	0 days 110 days 110 days 0 days 647 days 0 days 290 days 34 days 24 days 10 days	0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	Thu 18/5/23 Wed 30/11/22 Wed 30/11/22 Tue 30/5/23 Fri 5/3/21 Fri 5/3/21 Thu 19/5/22 Thu 19/5/22	Thu 18/5/23 Sat 15/4/23 Sat 15/4/23 Tue 30/5/23 Mon 8/5/23 Fri 5/3/21 Mon 8/5/23	NA NA NA NA NA NA NA NA	NA NA NA NA NA NA NA NA	Tue 30/5/23 Wed 11/1/23 Wed 11/1/23 Tue 30/5/23 Fri 5/3/21	Tue 30/5/23 Mon 29/5/23 Mon 29/5/23 Tue 30/5/23 Tue 30/5/23	8 days 0.5 da 35 days 2 day 35 days 2 day 0 days	ys 1362FS+15 days 562,1351,548 562,1351,548							1	
Se Se	Salt Water and Sewage Pumping Station: Landscaping hardworks and softworks Salt Water and Sewage Pumping Station: Planting Works ection 6 Completion eawater Intake Box Culvert (~169m) Access Date - Part 4 Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	110 days 110 days 0 days 647 days 0 days 290 days 34 days 10 days 256 days 44 days 44 days 44 days	0 days	110 days 110 days 0 days 647 days 0 days 290 days 24 days 10 days	0% 0% 0% 0% 0% 0% 0%	Wed 30/11/22 Wed 30/11/22 Tue 30/5/23 Fri 5/3/21 Fri 5/3/21 Thu 19/5/22 Thu 19/5/22	Sat 15/4/23 Sat 15/4/23 Tue 30/5/23 Mon 8/5/23 Fri 5/3/21 Mon 8/5/23	NA NA NA NA	NA NA NA NA	Wed 11/1/23 Wed 11/1/23 Tue 30/5/23 Fri 5/3/21	Mon 29/5/23 Mon 29/5/23 Tue 30/5/23	35 days 2 day 35 days 2 day 0 days	562,1351,548 562,1351,548								
Se	Salt Water and Sewage Pumping Station: Planting Works section 6 Completion seawater Intake Box Culvert (~169m) Access Date - Part 4 Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	110 days 0 days 647 days 0 days 290 days 34 days 24 days 10 days 256 days 44 days 44 days	0 days	110 days 0 days 647 days 0 days 290 days 34 days 24 days 10 days	0% 0% 0% 0% 0% 0%	Wed 30/11/22 Tue 30/5/23 Fri 5/3/21 Fri 5/3/21 Thu 19/5/22 Thu 19/5/22	Sat 15/4/23 Tue 30/5/23 Mon 8/5/23 Fri 5/3/21 Mon 8/5/23	NA NA NA	NA NA NA	Wed 11/1/23 Tue 30/5/23 Fri 5/3/21	Mon 29/5/23 Tue 30/5/23 Tue 30/5/23	35 days 2 day 0 days	562,1351,548								
See See	eawater Intake Box Culvert (~169m) Access Date - Part 4 Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	0 days 647 days 0 days 290 days 34 days 24 days 10 days 256 days 44 days 44 days	0 days	0 days 647 days 0 days 290 days 34 days 24 days 10 days	0% 0% 0% 0% 0%	Tue 30/5/23 Fri 5/3/21 Fri 5/3/21 Thu 19/5/22 Thu 19/5/22	Tue 30/5/23 Mon 8/5/23 Fri 5/3/21 Mon 8/5/23	NA NA NA	NA NA NA	Tue 30/5/23 Fri 5/3/21	Tue 30/5/23 Tue 30/5/23	0 days									
Sec	Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	647 days 0 days 290 days 34 days 24 days 10 days 50 days 44 days 44 days	0 days	647 days 0 days 290 days 34 days 24 days 10 days	0% 0% 0% 0%	Fri 5/3/21 Fri 5/3/21 Thu 19/5/22 Thu 19/5/22	Mon 8/5/23 Fri 5/3/21 Mon 8/5/23	NA NA	NA NA	Fri 5/3/21	Tue 30/5/23		1350,1363,1364,								!
	Access Date - Part 4 Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	0 days 290 days 34 days 24 days 10 days 256 days 50 days 44 days 44 days	0 days	0 days 290 days 34 days 24 days 10 days	0% 0% 0%	Fri 5/3/21 Thu 19/5/22 Thu 19/5/22	Fri 5/3/21 Mon 8/5/23	NA	NA			0 days								111 11 11 1	at III
	Part 4 - CHA.0-79 (79m) CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	290 days 34 days 24 days 10 days 256 days 50 days 44 days 44 days	0 days	290 days 34 days 24 days 10 days 256 days	0% 0%	Thu 19/5/22 Thu 19/5/22	Mon 8/5/23			Fri 5/3/21	n						.mm 10 11 12	.11			++
	CHA 0-24 Precast Section Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	34 days 24 days 10 days 256 days 50 days 44 days 44 days	0 days 0 days 0 days 0 days 0 days	34 days 24 days 10 days 256 days	0%	Thu 19/5/22		NA			Fri 5/3/21	0 days 0 day	4FS+645 days		♦ 5/.	3			$\neg \ \ $		
	Temporary ELS & Excavation and Shoring Installation Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	24 days 10 days 256 days 50 days 44 days 44 days	0 days 0 days 0 days 0 days	24 days 10 days 256 days	0%		Tue 28/6/22		NA	Fri 10/6/22	Tue 30/5/23	18 days							-		+-
	Install 3 nos. 8 m long precast units (2.5 days per unit) CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	10 days 256 days 50 days 44 days 44 days	0 days 0 days 0 days	10 days 256 days		Thu 19/5/22		NA	NA	Fri 10/6/22	Wed 20/7/22	18 days							-		
	CHA 24-79 (75m) (5 units) Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	256 days 50 days 44 days 44 days 44 days	0 days	256 days	0%		Thu 16/6/22	NA	NA	Fri 10/6/22	Fri 8/7/22	18 days 1 day	1384,1386,1238,								
	Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	50 days 44 days 44 days 44 days	0 days			Fri 17/6/22	Tue 28/6/22	NA	NA	Sat 9/7/22	Wed 20/7/22	18 days 2.5 da	ys 1371								
	Temporary ELS & Excavation Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	50 days 44 days 44 days 44 days	0 days		0%	Wed 29/6/22	Mon 8/5/23	NA	NA	Thu 21/7/22	Tue 30/5/23	18 days									+
	Unit 1 & 3 (41 days per unit) Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	44 days 44 days 44 days		unjo	0%	Wed 29/6/22	Fri 26/8/22		NA	Thu 21/7/22	Sat 17/9/22	18 days 1 day	1372								
	Unit 2 & 4 (41 days per unit) Unit 5 & 6 (41 days per unit) Remove struts and backfilling	44 days 44 days	,		0%	Sat 27/8/22	Thu 20/10/22		NA	Mon 19/9/22		18 days 3 day									
	Unit 5 & 6 (41 days per unit) Remove struts and backfilling	44 days	0 days		0%	Fri 21/10/22	Sat 10/12/22		NA	Fri 11/11/22	Mon 2/1/23	18 days 3 day									Щ
	Remove struts and backfilling				0%	Mon 12/12/22		NA	NA	Tue 3/1/23	Sat 25/2/23										
												18 days 3 day									
	Reinstate seawall	24 days			0%	Mon 6/2/23		NA	NA	Mon 27/2/23	Sat 25/3/23	18 days 1 day									
		50 days			0%	Mon 6/3/23	Mon 8/5/23		NA	Mon 27/3/23	Tue 30/5/23	18 days 1 day	1378								
	Part 10 - CHA79-89 (10m)	286 days			0%	Wed 2/6/21	Wed 18/5/22		NA	Wed 2/6/21	Thu 9/6/22	0 days							7		
	Access Date - Part 10	0 days	0 days	0 days	0%	Wed 2/6/21	Wed 2/6/21	NA	NA	Wed 2/6/21	Wed 2/6/21	0 days 0 day	4FS+734 days,1'			2/6					
	Tempoary Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Sun 2/1/22	Sun 2/1/22	NA	NA	Tue 22/2/22	Tue 22/2/22	40 days					1	♦ 2/1.			
	Tempoary Works Design and Method Statement Comment by PM	21 days	0 days	21 days	0%	Mon 3/1/22	Wed 26/1/22	NA	NA	Tue 22/2/22	Thu 17/3/22	40 days	1382								
	Temporary ELS & Excavation	14 days	0 days	14 days	0%	Fri 25/2/22	Sat 12/3/22	NA	NA	Fri 18/3/22	Sat 2/4/22	18 days 0 day	1388,1381,1391,						$-\ \ \ $		
	Box Culvert with Feeder Installation	47 days	0 days	47 days	0%	Mon 14/3/22	Wed 11/5/22	NA	NA	Mon 4/4/22	Wed 1/6/22	18 days 6 day	1384,1381,1391						4		
	Remove struts and backfilling	6 days	0 days	6 days	0%	Thu 12/5/22	Wed 18/5/22	NA	NA	Thu 2/6/22	Thu 9/6/22	18 days 1 day	1392,1385								
	Part 1 - CH89-165 (76m) 6 Units	193 days	0 days	193 days	0%	Mon 16/8/21	Fri 8/4/22	NA	NA	Mon 6/9/21	Wed 1/6/22	18 days							7		
	Temporary ELS & Excavation	25 days	0 days	25 days	0%	Mon 16/8/21	Mon 13/9/21	NA	NA	Mon 6/9/21	Wed 6/10/21	18 days 0.5 da	ys 9,1147,1445								
	Unit 1 & 3 (41 days per unit)	44 days	0 days	44 days	0%	Tue 14/9/21	Sat 6/11/21	NA	NA	Thu 7/10/21	Sat 27/11/21	18 days 4 day	1388,418,570								
	Unit 2 & 4 (41 days per unit)	44 days	0 days	44 days	0%	Mon 8/11/21	Thu 30/12/21	NA	NA	Mon 29/11/21	Fri 21/1/22	18 days 4 day	1389								
	Unit 5 & 6 (41 days per unit)	44 days	0 days	44 days	0%	Fri 31/12/21	Thu 24/2/22	NA	NA	Sat 22/1/22	Thu 17/3/22	18 days 4 day	1390								
	Remove struts and backfilling	36 days	0 days		0%	Fri 25/2/22	Fri 8/4/22	NA	NA	Thu 21/4/22	Wed 1/6/22	43 days 1 day	1390,1391								
El	Elevated Landscape Deck CH1920 - 2090	1178 day	s 11.27 days	1166.74 days?	0%	Thu 16/5/19	Sat 29/4/23	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	321 da							_##		\coprod
	Agree Interface Coordination Plan with KL/2014/01 Contractor		14 days		100%	Thu 16/5/19	Fri 31/5/19	Thu 16/5/19		Thu 16/5/19	Fri 31/5/19	0 days 0 day									
	Ch1920-CH2060	1 day?		-	0%	Sat 23/5/20	Sat 23/5/20		NA	Wed 29/5/24		1467 d									
	Part 1 - CH1919-2020 (70m) 4 bays	181 days		-	0%	Mon 5/7/21	Thu 10/2/22		NA	Wed 8/9/21		3 days									
	Pier Temporary Works Design and Method Statement Submission	0 days			0%	Mon 5/7/21	Mon 5/7/21		NA	Wed 8/9/21		65 days 1 day				♦ 5/7					
	Pier Temporary Works Design and Method Statement Comment & Approval				0%	Mon 5/7/21	Wed 18/8/21		NA	Wed 8/9/21											
		45 days		1								65 days 1 day									
	CH1930 Pier (1set x 3nos.):	12 days			0%	Tue 5/10/21	Tue 19/10/21		NA	Fri 8/10/21		3 days	1075,1076,1066								
	CH1950-CH2020: Pier (3sets x 3nos) - 1 day/no 1 team	11 days			0%		Mon 1/11/21		NA	Sat 23/10/21	Thu 4/11/21	3 days 2 day	579,1398,1399								
	Falsework Temporary Works Design and Method Statement Submission	0 days		-	0%	Wed 1/9/21	Wed 1/9/21		NA	Tue 21/9/21		20 days 1 day					1/9				
	Falsework Temporary Works Design and Method Statement Comment & Approval	45 days	0 days	-	0%	Wed 1/9/21	Fri 15/10/21		NA	Tue 21/9/21	Thu 4/11/21	20 days 1 day									
	Falsework erection	10 days	0 days	10 days	0%	Tue 2/11/21	Fri 12/11/21	NA	NA	Fri 5/11/21	Tue 16/11/21	3 days 1 day	1400,1402								
	Deck & Secondary Upstand Beam Temporary Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Wed 1/9/21	Wed 1/9/21	NA	NA	Sun 3/10/21	Sun 3/10/21	32 days 1 day					1/9				
	Deck & Secondary Upstand Beam Temporary Works Design and Method Statement Comment & Approval	45 days	0 days	45 days	0%	Wed 1/9/21	Fri 15/10/21	NA	NA	Sun 3/10/21	Tue 16/11/21	32 days 1 day	1404								
	Deck (4 bays) 12d/bay & link bridge (12d/bay)	25 days	0 days	25 days	0%	Sat 13/11/21	Sat 11/12/21	NA	NA	Wed 17/11/21	Wed 15/12/21	3 days 1 day	1403,625,623FS								
D. 415	Task	Summary			Inactive Mi	ilestone \Diamond		Duration-on	ıly		Start-only	Е	Exter	nal Milestone	♦		Critical S	Split			<u> </u>
Rev.11 Pr f 22-May-	rog with Progress	Project Sun	nmary		Inactive Su			Manual Sun			Finish-only	_	23,101					_			



						Con	tract No. ED)/2018/01 i	CTD Project													
Та	ask Name	Duration Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish				Late Finish	Total Slack	TRA	Predecessors 2020	2 04 6:	2021		04	2022			2023	
1451	Lift Pilecap and ELS - Temp. Works Foundation Design and Method Statement	30 days 0 days	30 days	0%	Mon 21/12/20	Tue 19/1/21	NA	NA	Tue 16/11/21	Wed 15/12/21		0.5 day	1450 Q2 Q	3 Q4 Q1	Q2 	Q3	Q4 C	21 Q2	Q3 Q4	Q1 Q2	Q3	_Q4
1452	Comment & Appraoval Intall Sheetpile, ELS, Excavation and Temp. Works Installation (Shoring, Drainage	38 days 0 days	38 days	0%	Tue 2/2/21	Sat 20/3/21	NA	NA	Thu 16/12/21	Fri 4/2/22	259 days	2 days	1447,1451	#								
1453	& Slope Protection) Footing Construction	75 days 0 days	75 days	0%	Thu 13/5/21	Wed 11/8/21		NA	Sat 5/2/22	Sat 7/5/22	218 days		1452,1449,587		#							
1454	Sheepile Extraction & Backilling	25 days 0 days	25 days	0%	Thu 12/8/21	Thu 9/9/21		NA	Mon 9/5/22	Tue 7/6/22	218 days		1453									
													1433									
1455	Lift Structure - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Tue 1/6/21	Tue 1/6/21	NA	NA	Tue 3/5/22	Tue 3/5/22	336 days				1/	6						
1456	Lift Structure - Temp. Works Design and Method Statement Comment & Appraova	l 36 days 0 days	36 days	0%	Tue 1/6/21	Tue 6/7/21	NA	NA	Tue 3/5/22	Tue 7/6/22	336 days	0.5 day	1455									
1457	Lift Tower: Falsework & Formwork Erection, Rebar Fixing & Concreting	63 days 0 days	63 days	0%	Fri 10/9/21	Thu 11/11/21	NA	NA	Wed 8/6/22	Tue 9/8/22	271 days	3 days	1454,1157,1456									
1458	Lift installation (LT1 & LT2)	90 days 0 days	90 days	0%	Fri 24/12/21	Tue 19/4/22	NA	NA	Fri 11/11/22	Tue 28/2/23	261 days	1 day	1457FS+36 days									
1459	E & M installation	33 days 0 days	33 days	0%	Wed 20/4/22	Fri 27/5/22	NA	NA	Wed 1/3/23	Wed 12/4/23	261 days	3 days	1458									
1460	Louvers and Glazing Installation	27 days 0 days	27 days	0%	Sat 11/12/21	Fri 14/1/22	NA	NA	Thu 8/9/22	Wed 12/10/22	220 days	3 days	1457FS+25 days					\mathbb{H}				
1461	Parapet Installation and Finishing Works	40 days 0 days	40 days	0%	Sat 15/1/22	Sat 5/3/22	NA	NA	Thu 13/10/22	Mon 28/11/22	220 days	3 days	1460									
1462	Testing & commissioning	15 days 0 days	15 days	0%	Sat 28/5/22	Wed 15/6/22	NA	NA	Thu 13/4/23	Sat 29/4/23	261 days	0.5 days	1459									
1463	CLP Meter Installation	0 days 0 days	0 days	0%	Mon 18/4/22	Mon 18/4/22	NA	NA	Mon 18/4/22	Mon 18/4/22	0 days	0.5 day						♦ 18/4				
1464	EMSD Submission Form 5 for Lift Inspection	0 days 0 days	0 days	0%	Wed 15/6/22	Wed 15/6/22		NA	Tue 2/5/23	Tue 2/5/23		0.5 day	1458,1462						5/6			
1465	EMSD Lift Inspection	0 days 0 days	0 days	0%	Wed 29/6/22	Wed 29/6/22		NA	Tue 16/5/23	Tue 16/5/23	320 days		1464FS+14 days						20/6			
																			, UK7			
1466	Issuance of Lift Use Permit	0 days 0 days	0 days	0%	Thu 14/7/22	Thu 14/7/22		NA	Tue 30/5/23	Tue 30/5/23		0.5 day	1465FS+15 days						14//			
1467	Staircase ST1	100 days 0 days	100 days	0%	Fri 12/11/21	Tue 15/3/22		NA	Fri 25/11/22	Sat 25/3/23	309 days		587,367,1457									
1468	Finishing and E&M Works	50 days 0 days	50 days	0%	Wed 16/3/22	Tue 17/5/22	NA	NA	Mon 27/3/23	Tue 30/5/23	309 days	0.5 day	1467,367									
1469	L12d Underground Drainage and Utilities Laying	75 days 0 days	75 days	0%	Mon 7/3/22	Tue 7/6/22	NA	NA	Tue 29/11/22	Tue 28/2/23	220 days	1 day	1457,1460,1461									
1470	L12d Roadworks and Pedestrian, with Light Pole	36 days 0 days	36 days	0%	Wed 8/6/22	Wed 20/7/22	NA	NA	Wed 1/3/23	Sat 15/4/23	220 days	1 day	1469,349						$\left\{ \left\ \cdot \right\ \right\ \left\ \cdot \right\ \right\ $			
1471	L12d Roadworks and Pedestrian	36 days 0 days	36 days	0%	Thu 21/7/22	Wed 31/8/22	NA	NA	Mon 17/4/23	Tue 30/5/23	220 days	1 day	1470									
1472	Open Space & Promenade	564 days 0 days	564 days	0%	Mon 28/6/21	Thu 18/5/23	NA	NA	Sun 1/8/21	Tue 30/5/23	9 days				-							
1473	Open Space & Promenade (From Northern End - CH1720)	564 days 0 days	564 days	0%	Mon 28/6/21	Thu 18/5/23	NA	NA	Sun 15/8/21	Tue 30/5/23	9 days				-							
1474	Observation Deck	358 days 0 days	358 days	0%	Tue 1/3/22	Fri 12/5/23	NA	NA	Fri 6/5/22	Tue 30/5/23	14 days											
1475	Foundation - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Tue 1/3/22		NA	NA	Fri 6/5/22	Fri 6/5/22	66 days	0.5 day						1/3				
1475	Foundation - Temp. Works Design and Method Statement Submission Foundation - Temp. Works Design and Method Statement Comment &		45 days	0%	Tue 1/3/22	Thu 14/4/22		NA	Fri 6/5/22	Sun 19/6/22	66 days		1475,639,646					11.3				
	Appraoval	45 days 0 days									1											
1477	G.I. works for LT5	12 days 0 days	12 days	0%	Sat 4/6/22	Fri 17/6/22		NA	Mon 20/6/22	Mon 4/7/22	13 days		1447,611,604,15									
1478	Design Vertification	25 days 0 days	25 days	0%	Sat 18/6/22	Mon 18/7/22		NA	Tue 5/7/22	Tue 2/8/22	13 days	1 day	1477						<u> </u>			
1479	Predrilling works for Socket H- pile	12 days 0 days	12 days	0%	Tue 19/7/22	Sat 30/7/22	NA	NA	Wed 3/8/22	Sun 14/8/22	15 days		1478									
1480	Socket H-pile Installation	37 days 0 days	37 days	0%	Mon 1/8/22	Tue 13/9/22	NA	NA	Mon 15/8/22	Tue 27/9/22	12 days	2 days	367,1155,726,14									
1481	Pile Testing	43 days 0 days	43 days	0%	Wed 14/9/22	Fri 4/11/22	NA	NA	Wed 28/9/22	Fri 18/11/22	12 days	1 day	1480									
1482	Structure & Lift Core - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Mon 20/6/22	Mon 20/6/22	NA	NA	Wed 5/10/22	Wed 5/10/22	107 days	0.5 day						♠ 2	20/6			
1483	Structure & Lift Core - Temp. Works Design and Method Statement	45 days 0 days	45 days	0%	Mon 20/6/22	Wed 3/8/22	NA	NA	Wed 5/10/22	Fri 18/11/22	107 days	0.5 day	1482									
1484	Comment & Appraoval Trech Excavation for Pipe Laying Works	30 days 0 days	30 days	0%	Sat 4/6/22	Sat 9/7/22	NA	NA	Wed 15/6/22	Wed 20/7/22	9 days	2 days	15									
1485	Pipe laying works, Cable Laying and Drawpits	36 days 0 days	36 days	0%	Mon 11/7/22	Sat 20/8/22	NA	NA	Thu 21/7/22	Wed 31/8/22	9 days	5 days	15,1484									
1486	Observation Deck: Substructure with Excavation/ELS works	36 days 0 days	36 days	0%	Sat 5/11/22	Fri 16/12/22		NA	Sat 19/11/22	Sat 31/12/22	12 days	_	163,506,1483,14									
1487	Observation Deck: Superstructure with Lift Core and Staircase work	72 days 0 days	72 days	0%	Sat 17/12/22	Sun 26/2/23		NA	Mon 2/1/23	Tue 14/3/23	16 days		1486									
1488	LT5: Lift installation with T&C and Statutory Inspection	60 days 0 days	60 days	0%	Mon 27/2/23	Fri 12/5/23		NA	Wed 15/3/23	Tue 30/5/23	14 days		713,1487									
1489	E&M and ABWF works, Landscaping and paving works	110 days 0 days	110 days	0%	Sat 17/12/22	Thu 4/5/23		NA	Thu 12/1/23	Tue 30/5/23	21 days	3 days	1528,717,1486									
1490	Toilet	416 days 0 days	416 days	0%	Mon 28/6/21	Wed 16/11/22	2 NA	NA	Sun 15/8/21	Fri 24/2/23	41 days						\square					
1491	Foundation - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Mon 28/6/21	Mon 28/6/21	NA	NA	Sun 15/8/21	Sun 15/8/21	48 days	0.5 days				28/6						
1492	Foundation - Temp. Works Design and Method Statement Comment & Appraoval	45 days 0 days	45 days	0%	Sat 24/7/21	Mon 6/9/21	NA	NA	Sun 15/8/21	Tue 28/9/21	22 days	0.5 days	1491,639,646		1							
1493	Footing	16 days 0 days	16 days	0%	Thu 16/9/21	Wed 6/10/21	NA	NA	Wed 29/9/21	Tue 19/10/21	10 days	0.5 days	987,611,604,618									
1494	Structure - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Mon 26/7/21	Mon 26/7/21	NA	NA	Fri 3/9/21	Fri 3/9/21	39 days	0.5 days				♠ 26/7						
1495	Structure - Temp. Works Design and Method Statement Comment &	47 days 0 days	47 days	0%	Mon 26/7/21	Fri 10/9/21	NA	NA	Fri 3/9/21	Tue 19/10/21	39 days	2 days	1494									
	Appraoval															111						
	7.11 Prog with Progress	Summary Project Summary		Inactive M Inactive Su			Duration-c	only ımmary Rollup		Start-only Finish-only		C 3	External Milestor Deadline	ie ♦ ♣			itical Split ogress	-				
as of 22	-May-20	Inactive Task	-	Manual Ta			Manual Su			External Tas	1.	_	Critical				anual Prog					

						Cont		/2010/0110	TD Project												
T	ask Name	Duration Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	sh Late Start	Late Finish	Total Slack	TRA	Predecessors	2020	M 01 1 6	2021	04 01	2022 Q2 Q3 Q	01 0	2023	04 0
96	Structure work	45 days 0 days	45 days	0%	Thu 7/10/21	Mon 29/11/21	NA	NA	Wed 20/10/21	Fri 10/12/21	10 days	0.5 days	1493,506,1495	Q2 Q3 Q	24 Q1 C	Q2 Q3	Q4 Q1	Q2 Q3 Q	24 Q1 C	2 Q3	<u>Q4</u> <u>Q</u> .
97	MIC toilet unit	24 days 0 days	24 days	0%	Tue 30/11/21	Wed 29/12/21	NA	NA	Sat 11/12/21	Tue 11/1/22	10 days	0.5 days	1496								
98	MIC toilet unit: E&M and ABWF works	75 days 0 days	75 days	0%	Thu 30/12/21	Thu 31/3/22	NA	NA	Wed 23/2/22	Wed 25/5/22	43 days	3 days	1497,717					<u>- </u>			
199	Observation Tower Construction	31 days 0 days	31 days	0%	Thu 30/12/21	Tue 8/2/22	NA	NA	Wed 19/1/22	Sat 26/2/22	16 days	1 day	1496,1497								
500	Observation Tower: Building Works and E&M Works	76 days 0 days	76 days	0%	Wed 9/2/22	Thu 12/5/22	NA	NA	Mon 28/2/22	Tue 31/5/22	16 days	1 day	1499								
501	Refuse Collection Block and Back of House: Structure Works	101 days 0 days	101 days	0%	Wed 9/2/22	Sat 11/6/22	NA	NA	Fri 20/5/22	Sat 17/9/22	82 days	1 day	1496,1497,1499				#_				
502	Refuse Collection Block and Back of House: Building Works and E&M	131 days 0 days	131 days	0%	Mon 13/6/22	Wed 16/11/22	NA	NA	Mon 19/9/22	Fri 24/2/23	82 days	1 day	1501								
03	Works Amphitheater	95 days 0 days	95 days	0%	Wed 9/2/22	Sat 4/6/22	NA	NA	Wed 11/5/22	Wed 31/8/22	74 days	5 days	1496,639,646,14				#_				
04	Fast food (Light Refreshment) kiosk deck	45 days 0 days	45 days	0%	Tue 30/11/21	Mon 24/1/22	NA	NA	Thu 20/1/22	Wed 16/3/22	41 days	0.5 days	611,1496,604,61								
05	Fast food (Light Refreshment) Kiosk: Building Works and E&M Works	86 days 0 days	86 days	0%	Sat 26/2/22	Sat 11/6/22		NA	Thu 17/3/22	Thu 30/6/22	16 days		1504,639,646,14								
06	Fitness Ground Lawn & Water Play Plaza	82 days 0 days	82 days	0%	Mon 13/6/22	Sat 17/9/22		NA	Sat 2/7/22	Sat 8/10/22	16 days		days,1500FF+25								
07	Stepped Stage and Seating & Back of House Facility (under Bridge D3)	30 days 0 days	30 days	0%	Mon 22/8/22	Mon 26/9/22		NA	Thu 1/9/22	Sat 8/10/22	9 days		1503,1485								
08				0%																	
)9	Trim and form formation level within Open Space & Promenade area	45 days 0 days	45 days		Tue 27/9/22	Sat 19/11/22		NA NA	Mon 10/10/22	Wed 30/11/22			1507,1505,1506,								
	Paving work & Hard Landscaping Works	45 days 0 days	45 days	0%		Thu 12/1/23		NA	Thu 1/12/22	Thu 26/1/23	1	2 days	1508,1500,1498								
0	ABWF, E&M work and street furniture	75 days 0 days	75 days	0%		Mon 20/2/23		NA	Sat 25/2/23	Tue 30/5/23	79 days		1508,1509SS,15								
.1	FSD Form 501 Submission for FS Inspection	0 days 0 days	0 days	0%	Mon 9/1/23		NA	NA	Mon 1/5/23	Mon 1/5/23	111 days		1510SS+50 days						9/1		
2	FSD Inspection	0 days 0 days	0 days	0%	Tue 24/1/23	Tue 24/1/23		NA	Tue 16/5/23	Tue 16/5/23	111 days		1511FS+15 days						24/1		
.3	Issuance of FS Certificate	0 days 0 days	0 days	0%	Wed 8/2/23	Wed 8/2/23		NA	Tue 30/5/23	Tue 30/5/23	111 days	0.5 day	1512FS+15 days						▼ 8/2 ·		
4	Landscaping works and Planting works	100 days 0 days	100 days	0%	Fri 13/1/23	Thu 18/5/23	NA	NA	Fri 27/1/23	Tue 30/5/23	9 days	4 days	1509,668,1503,6							f	
5	Open Space & Promenade (From CH1720 - South End)	477 days 0 days	477 days	0%	Mon 12/7/21	Mon 13/2/23	NA	NA	Sun 1/8/21	Tue 30/5/23	18 days										
6	Modification Seawall - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Mon 12/7/21	Mon 12/7/21	NA	NA	Sun 1/8/21	Sun 1/8/21	20 days	1 day				♦ 12/7					
17	Modification Seawall - Temp. Works Design and Method Statement Comment & Appraoval	2 30 days 0 days	30 days	0%	Mon 12/7/21	Tue 10/8/21	NA	NA	Sun 1/8/21	Mon 30/8/21	20 days	2 days	1516								
.8	Modification (Seawall) CH1720-1820	150 days 0 days	150 days	0%	Wed 11/8/21	Fri 11/2/22	NA	NA	Tue 31/8/21	Thu 3/3/22	17 days	1 day	1517								
19	Modification (Seawall) CH1820-1920	150 days 0 days	150 days	0%	Wed 15/9/21	Fri 18/3/22	NA	NA	Thu 7/10/21	Fri 8/4/22	17 days	1 day	1518SS+30 days)			
0	Temporary toilet	24 days 0 days	24 days	0%	Mon 13/9/21	Tue 12/10/21	NA	NA	Fri 14/1/22	Mon 14/2/22	100 days	0.5 days	506,655,660				h '				
21	Temporary Toilet: Building Works and E&M Works	75 days 0 days	75 days	0%	Wed 13/10/21	Wed 12/1/22	NA	NA	Sat 28/1/23	Sat 29/4/23	385 days	0.5 day	1520,655,660							╢	
2	Temporary Management Office: Structure Works	45 days 0 days	45 days	0%	Sat 25/9/21	Thu 18/11/21	NA	NA	Wed 26/1/22	Tue 22/3/22	100 days	0.5 days	1520SS+10 days			N N		\perp			
23	Temporary Management Office: Building Works and E&M Works	100 days 0 days	100 days	0%	Fri 19/11/21	Tue 22/3/22	NA	NA	Wed 23/3/22	Sat 23/7/22	100 days	0.5 day	1522,655,660				+	,		╢	
.4	Floating Stage Concrete structure	18 days 0 days	18 days	0%	Sat 19/3/22	Sat 9/4/22	NA	NA	Sat 9/4/22	Tue 3/5/22	17 days	0 days	1519,1518,1522				+	<u>k</u>			
25	Stepped Seating at Southern End	24 days 0 days	24 days	0%	Mon 11/4/22	Wed 11/5/22	NA	NA	Wed 4/5/22	Tue 31/5/22	17 days	0.5 days	1524								
26	Trim and form formation level within Open Space & Promenade area	14 days 0 days	14 days	0%	Thu 12/5/22	Fri 27/5/22	NA	NA	Wed 1/6/22	Fri 17/6/22	17 days	0 days	1525								
27	Paving work and Landscaping Works	30 days 0 days	30 days	0%	Sat 28/5/22	Mon 4/7/22	NA	NA	Sat 18/6/22	Sat 23/7/22	17 days	0.5 days	1526,1522,1525,								
28	ABWF, E&M work and street furniture	75 days 0 days	75 days	0%	Tue 5/7/22	Fri 30/9/22		NA	Mon 25/7/22	Sat 22/10/22	17 days		1527,717,1523								
29	CLP Meter Installation	0 days 0 days	0 days	0%	Fri 30/9/22	Fri 30/9/22		NA	Mon 1/5/23	Mon 1/5/23	212 days	-	1528,1521,1523					3	n/9		
30	FSD Form 501 Submission for FS Inspection	0 days 0 days	0 days	0%	Thu 8/12/22	Thu 8/12/22		NA	Mon 1/5/23	Mon 1/5/23		0.5 day							8/12		
31	FSD Inspection	0 days 0 days	0 days	0%	Thu 22/12/22			NA	Tue 16/5/23	Tue 16/5/23	144 days		1530FS+15 days						22/12		
32	Issuance of FS Certificate					Fri 6/1/23						-	1531FS+15 days								
33	Open Space & Promenade: Landscaping works	0 days 0 days	0 days	0%	Fri 6/1/23 Mon 3/10/22	Mon 13/2/23		NA	Tue 30/5/23 Mon 24/10/22	Tue 30/5/23	144 days	-	1528,668,1243FI						6/1		
		110 days 0 days	110 days					NA		Sat 4/3/23	17 days										
34	Open Space & Promenade: Planting works	110 days 0 days	110 days	0%	Mon 3/10/22	Mon 13/2/23		NA	Mon 24/10/22	Sat 4/3/23	17 days		1528,668,1243FI								
35	Part 1, 2A, 2B - Road L12	193 days 0 days	193 days	0%	Tue 23/8/22	Mon 17/4/23		NA	Thu 6/10/22	Tue 30/5/23	35 days		405/11								
6	Trim road formation	3 days 0 days	3 days	0%	Tue 23/8/22	Thu 25/8/22		NA	Thu 6/10/22	Sat 8/10/22	35 days	-	1274,1283,1296,					5			
7	Lay sub base	7 days 0 days	7 days	0%	Fri 26/8/22	Fri 2/9/22		NA		Mon 17/10/22			1536					<u> </u>			
38	Lay kerb	12 days 0 days	12 days	0%	Sat 3/9/22	Sat 17/9/22	NA	NA	Tue 18/10/22	Mon 31/10/22	35 days	1 day	1537					F			
39	Construct pedestrian street/ footpath	14 days 0 days	14 days	0%	Mon 19/9/22	Thu 6/10/22	NA	NA	Tue 1/11/22	Wed 16/11/22	35 days	1 day	1538					*			
40	Install central median	14 days 0 days	14 days	0%	Fri 7/10/22	Sat 22/10/22	NA	NA	Thu 17/11/22	Fri 2/12/22	35 days	1 day	1539					Ĭ			
e. Re	v.11 Prog with Progress	Summary		Inactive M	filestone \Diamond	1	Duration-o	nly		Start-only			Exte	nal Milestone	♦	C	Critical Split			<u>nut</u>	
	-May-20	Project Summary		Inactive S	ummary		Manual Su	mmary Rollup		Finish-only		3	Dead	line	4	P	rogress				

							Conf	ract No. ED/	2018/01 KT	D Project													
	Task Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q	03 Q4	01 0	2021 2 Q3 Q4	1 01 02	2022 Q3 Q4	01 0	2023 02 Q3	O4 O1
1541	Concrete infill between profile barrier	7 days	0 days	7 days	0%	Mon 24/10/22	Mon 31/10/22	NA	NA	Sat 3/12/22	Sat 10/12/22	35 days	0 days	1540						F			
542	Road pavement	5 days	0 days	5 days	0%	Tue 1/11/22	Sat 5/11/22	NA	NA	Mon 12/12/22	Fri 16/12/22	35 days	0 days	1541						<u></u>			
543	Install street furniture (Part 1, 2A, 2B - Road L12)	131 days	0 days	131 days	0%	Mon 7/11/22	Mon 17/4/23	NA	NA	Sat 17/12/22	Tue 30/5/23	35 days	6 days	1542									
544	Planting Works for Underpass, South Depress Road and At-Grade Road	130 days	0 days	130 days	0%	Mon 7/11/22	Sat 15/4/23	NA	NA	Mon 19/12/22	Tue 30/5/23	36 days	10 days	668									
545	Landscaping Works for Underpass, South Depress Road and At-Grade	130 days	0 days	130 days	0%	Mon 7/11/22	Sat 15/4/23	NA	NA	Mon 19/12/22	Tue 30/5/23	36 days	10 days	668									
546	Planned Completion for Section 6	0 days	0 days	0 days	0%	Thu 18/5/23	Thu 18/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	9 days	0 days	1533,1543,1532,								18/5	
547	Section 7	365 days	0 days	365 days	0%	Mon 6/3/23	Wed 29/5/24	NA	NA	Mon 6/3/23	Wed 29/5/24	0 days											
548	Establishment work for landscape softwork	365 days	0 days	365 days	0%	Mon 6/3/23	Wed 29/5/24	NA	NA	Mon 6/3/23	Wed 29/5/24	0 days	10 days	1533,1534									
549	Planned Completion for Section 7	0 days	0 days	0 days	0%	Wed 29/5/24	Wed 29/5/24	NA	NA	Wed 29/5/24	Wed 29/5/24	0 days		1548,6									
550	Section 10 (Subject to Excision)	614 days	0 days	614 days	0%	Tue 20/4/21	Thu 11/5/23	NA	NA	Mon 10/5/21	Tue 30/5/23	15 days					_					ı	
551	Decking for Underpass (Rd L14)	614 days	0 days	614 days	0%	Tue 20/4/21	Thu 11/5/23	NA	NA	Mon 10/5/21	Tue 30/5/23	15 days					-					ı	
552	Deck for Underpass (Road L14) - Temp. Works Design and Method Statement	0 days	0 days	0 days	0%	Tue 20/4/21	Tue 20/4/21	NA	NA	Mon 10/5/21	Mon 10/5/21	20 days	0.5 day				•	20/4					
553	Deck for Underpass (Road L14) - Temp. Works Design and Method Statement Comment & Appraoval	21 days	0 days	21 days	0%	Tue 20/4/21	Mon 10/5/21	NA	NA	Mon 10/5/21	Sun 30/5/21	20 days	0.5 day	1552			<u> </u>						
554	Support along U-through	225 days	0 days	225 days	0%	Mon 31/5/21	Tue 1/3/22	NA	NA	Mon 31/5/21	Tue 1/3/22	0 days	10 days	23,185,1553,192									
555	Plinth installation along support	123 days	0 days	123 days	0%	Wed 2/3/22	Fri 29/7/22	NA	NA	Wed 2/3/22	Fri 29/7/22	0 days	6 days	1554					<u> </u>				
556	Placing of beam along underpass	90 days	0 days	90 days	0%	Thu 1/9/22	Sun 18/12/22	NA	NA	Thu 1/9/22	Mon 19/12/22	0 days	4 days	1555FS+28 days						+	\parallel		
557	Finishing and E&M Works	110 days	0 days	110 days	0%	Mon 19/12/22	Fri 5/5/23	NA	NA	Thu 12/1/23	Tue 30/5/23	20 days		1556,279						•			
558	Cover-up (Roof)	115 days	0 days	115 days	0%	Mon 19/12/22	Thu 11/5/23	NA	NA	Mon 19/12/22	Thu 11/5/23	0 days	5 days	1556							<u> </u>	H	
59	Planned Completion for Section 10	0 days	0 days	0 days	0%	Thu 11/5/23	Thu 11/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	19 days	0.5 days	1558,158,1557								11/5	

Appendix C – Apply permission for Environmental Monitoring

Propose alternative monitoring location: The Lok Sin Tong Modular Social Housing Scheme Status: Rejected application Email on: 10 May 2022 Email on: 13 October 2022 Subject The Lok Sin Tong Benevolent Society Kowloon - Apply Subject The Lok Sin Tong Benevolent Society Kowloon - Reject to Apply permission for Environmental Monitoring for Stage 4 of Kai Tak permission for Environmental Monitoring for Stage 4 of Kai Tak Development Development From To To Bcc Bcc 2022-05-10 15:48 2022-10-13 15:52 Date Figure 1 Impact dust measurement setup.jpg(~1.2 MB) Company: The Lok Sin Tong Benevolent Society Kowloon Figure 2 Impact noise measurement setup.jpg(~979 KB) By Email Company: The Lok Sin Tong Benevolent Society Kowloon By Email Referring to the communication between your staff and me regarding the captioned work at 21 September 2022, the Lok Sin Tong Benevolent Society Kowloon was rejected the apply permission for Environmental Monitoring Dear Mada for Stage 4 of Kai Tak Development. 5 May 2022 Due to electricity supply and security concern in Modular House , Environmental monitoring at Modular House is not allowed open. Should you have any enquires regarding the measurement, please do not hesitate to contact Re: Environmental Monitoring for Kai Tak Development - Stage 4 Infrastructure at the former runway and south Thank you for your kind attention and I look forward to receiving your favourable reply soon. We, Ka Shing Management Consultant Limited (KS), is appointed by Civil Engineering and Development Department (CEDD), working as Environmental Team (ET) to conduct the monitoring and audit works as part of Yours Sincerely, the EM&A programme of the Kai Tak Development - Stage 4 Infrastructure at the former runway and south apron (KTD Stage 4 Project) starting from July 2019 to May 2024. Lee Wing Hang Ka Shing Management Consultant Limited KTD Stage 4 project is located in the south-eastern part of Kowloon Peninsular of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. Your premise, Hong Kong Society for Blind Workshop and Hotels, is one of the proposed sensitive receivers. We would like to obtain your kind permission for entering the premise to carry out baseline and impact monitoring, baseline dust monitoring (1-hour and 24-hour TSP monitoring) and baseline noise monitoring (30minute) would need to conduct continuously for 14 days, our propose baseline monitoring date is June 2022. After baseline monitoring, impact dust monitoring (1-hour and 24-hour TSP monitoring) and impact noise monitoring (30-minute) would take place between 08:00 hrs to 18:00 hrs in normal working days once every six The monitoring location will be located on the roof top floor of The Lok Sin Tong Modular Social Housing Scheme at Junction of Sung Wong Toi Road and To Kwa Wan Road facing to Kai Tak Development area. 220V power supply is needed for 24-hour TSP monitor with size 0.5m (L) x 0.5m (W) x 1.4m (H). We will pay for the electricity. Similar setup photo records are shown in Figure 1 and Figure 2 for your kindly reference. Our technician will stay at the measurement point for 1-hour TSP and 30-mintue noise measurement. We hope to conduct site visit at 13:30 pm of 25 May 2022 (Wed). Should you have any enquires regarding the measurement, please do not hesitate to contact Thank you for your kind attention and I look forward to receiving your favourable reply soon. Yours Sincerely Lee Wing Hang Ka Shing Management Consultant Limited

pose alternative monitoring location: Freder Centre
tus: No reply from building management office unit the reporting month
ail on: 19 July 2022
Freder Centre - Apply permission for Environmental Monitoring for Stage 4 of Kai Tak Development
From 100110C003
ТО
Bcc Scott Sc
Date 2022-07-19 13:33
 Figure 1 Impact dust measurement setup.jpg(~1.2 MB) Figure 2 Impact noise measurement setup.jpg(~979 KB)
Company Forder Control
Company: Freder Centre By Email
Dear Sin
Re: Environmental Monitoring for Kai Tak Development - Stage 4 Infrastructure at the former runway and south appron
We, Ka Shing Management Consultant Limited (KS), is appointed by Civil Engineering and Development
Department (CEDD), working as Environmental Team (ET) to conduct the monitoring and audit works as part of the EM&A programme of the Kai Tak Development - Stage 4 Infrastructure at the former runway and south apron (KTD Stage 4 Project) starting from July 2019 to May 2024.
KTD Stage 4 project is located in the south-eastern part of Kowloon Peninsular of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. Your premise, Hong Kong Society for Blind Workshop and Hotels, is one of the proposed sensitive receivers.
We would like to obtain your kind permission for entering the premise to carry out baseline and impact monitoring, baseline dust monitoring (1-hour and 24-hour TSP monitoring) and baseline noise monitoring (30- minute) would need to conduct continuously for 14 days, our propose baseline monitoring date is August 2022.
After baseline monitoring, impact dust monitoring (1-hour and 24-hour TSP monitoring) and impact noise monitoring (30-minute) would take place between 08:00 hrs to 18:00 hrs in normal working days once every six days.
The monitoring location will be located on the roof top floor of Freder Centre at Junction of Sung Wong Toi Road and To Kwa Wan Road facing to Kai Tak Development area. 220V power supply is needed for 24-hour TSP monitor with size 0.5m (l) x 0.5m (l) x 0.5m (l) x 1.5m (l) x 0.5m (l) x
we hope to conduct site visit at 15:30pm of 26 July 2022 (Tue).
Should you have any enquires regarding the measurement, please do not hesitate to contact at
Thank you for your kind attention and I look forward to receiving your favourable reply soon.
Yours Sincerely,
Lee Wing Hang Ka Shing Management Consultant Limited

Propose alternative monitoring location: New Port Centre Status: No reply from building management office unit the reporting month Email on: 19 July 2022 Email on: 17 August 2022 New Port Centre - Apply permission for Environmental Kum Shing Group and Hong Kong Energy Infrastructure Limited -Monitoring for Stage 4 of Kai Tak Development Apply permission for Environmental Monitoring for Stage 4 of Kai From Tak Development From To Bcc To Bcc Date 2022-07-19 13:33 2022-08-17 11:54 Date Figure 1 Impact dust measurement setup.jpg(~1.2 MB) Figure 2 Impact noise measurement setup.jpg(~979 KB) Figure 1 Impact dust measurement setup.jpg(~1.2 MB) Company: New Port Centre & Synergis management services limited Figure 2 Impact noise measurement setup.jpg(~979 KB) plug 01.jpg(~2.6 MB) By Email Company: Kum Shing Group and Hong Kong Energy Infrastructure Limited Dear Sir Re: Environmental Monitoring for Kai Tak Development - Stage 4 Infrastructure at the former runway and south By Email apron Dear Si We, Ka Shing Management Consultant Limited (KS), is appointed by Civil Engineering and Development Department (CEDD), working as Environmental Team (ET) to conduct the monitoring and audit works as part of Re: Environmental Monitoring for Kai Tak Development - Stage 4 Infrastructure at the former runway and south the EM&A programme of the Kai Tak Development - Stage 4 Infrastructure at the former runway and south apron (KTD Stage 4 Project) starting from July 2019 to May 2024. We, Ka Shing Management Consultant Limited (KS), is appointed by Civil Engineering and Development KTD Stage 4 project is located in the south-eastern part of Kowloon Peninsular of the HKSAR, comprising the Department (CEDD), working as Environmental Team (ET) to conduct the monitoring and audit works as part of apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau the EM&A programme of the Kai Tak Development - Stage 4 Infrastructure at the former runway and south apron Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. Your premise, New Port Centre, is one of the proposed (KTD Stage 4 Project) starting from July 2019 to May 2024. We would like to obtain your kind permission for entering the premise to carry out baseline and impact KTD Stage 4 project is located in the south-eastern part of Kowloon Peninsular of the HKSAR, comprising the monitoring, baseline dust monitoring (1-hour and 24-hour TSP monitoring) and baseline noise monitoring (30apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau minute) would need to conduct continuously for 14 days, our propose baseline monitoring date is August 2022. Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. Your premise, New Port Centre, is one of the proposed sensitive receivers. After baseline monitoring, impact dust monitoring (1-hour and 24-hour TSP monitoring) and impact noise monitoring (30-minute) would take place between 08:00 hrs to 18:00 hrs in normal working days once every six We would like to obtain your kind permission for entering the premise to carry out baseline and impact monitoring, baseline dust monitoring (1-hour and 24-hour TSP monitoring) and baseline noise monitoring (30minute) would need to conduct continuously for 14 days, our propose baseline monitoring date is August 2022. The monitoring location will be located on the roof top floor of New Port Centre at Junction of Sung Wong Toi Road and To Kwa Wan Road facing to Kai Tak Development area. 220V power supply is needed for 24-hour TSP After baseline monitoring, impact dust monitoring (1-hour and 24-hour TSP monitoring) and impact noise monitor with size 0.5m (L) x 0.5m (W) x 1.4m (H). We will pay for the electricity. Similar setup photo records are shown in Figure 1 and Figure 2 for your kindly reference. Our technician will stay at the monitoring (30-minute) would take place between 08:00 hrs to 18:00 hrs in normal working days once every six measurement point for 1-hour TSP and 30-mintue noise measurement. The monitoring location will be located on the roof top floor of New Port Centre at Junction of Sung Wong We hope to conduct site visit at 13:30pm of 26 July 2022 (Tue). Toi Road and To Kwa Wan Road facing to Kai Tak Development area. 220V power supply is needed for 24-hour TSP monitor with size 0.5m (L) x 0.5m (W) x 1.4m (H). We will pay for the electricity. Similar setup photo Should you have any enquires regarding the measurement, please do not hesitate to contact records are shown in Figure 1 and Figure 2 for your kindly reference. Our technician will stay at the measurement point for 1-hour TSP and 30-mintue noise measurement. Thank you for your kind attention and I look forward to receiving your favourable reply soon. We hope to loan the company on the roof top floor of Plug 01 for 24-hour TSP monitor of power supply. Yours Sincerely, Should you have any enquires regarding the measurement, please do not hesitate to contact Lee Wing Hang Ka Shing Management Consultant Limited Thank you for your kind attention and I look forward to receiving your favourable reply soon.

Yours Sincerely,

Ka Shing Management Consultant Limited

Propose alternative monitoring location: New Port Centre Status: No reply from building management office unit the reporting month Email on: 19 August 2022 Email on: 15 September 2022 New Port Centre - Apply permission for Environmental Monitoring for Stage 4 of Kai Tak Development Subject RE: Kum Shing Group and Hong Kong Energy Infrastructure Limited - Apply permission for Environmental Monitoring for To Bcc Stage 4 of Kai Tak Development 2022-09-15 15:35 From • Figure 1 Impact dust measurement setup.jpg(~1.2 MB) Figure 2 Impact noise measurement setup.jpg(~979 KB) To Figure 3 expect Impact dust measurement setup.png(~267 KB) Figure 4 power supply plug.jpg(~2.6 MB) Company: New Port Centre & Synergis management services limited 2022-08-19 08:36 Re: Environmental Monitoring for Kai Tak Development - Stage 4 Infrastructure at the former runway and south Dear Mr. LEE, We, Ka Shing Management Consultant Limited (KS), is appointed by Civil Engineering and Development Department (CEDD), working as Environmental Team (ET) to conduct the monitoring and audit works as part of the EM&A programme of the Kai Tak Development - Stage 4 Infrastructure at the former runway and south apron As we do not have ownership to the roof, we'd suggest you to approach the management company of Newport (KTD Stage 4 Project) starting from July 2019 to May 2024. Center for further discussion. KTD Stage 4 project is located in the south-eastern part of Kowloon Peninsular of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau https://www.synergis.com.hk/html/en/ Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling. Your premise, New Port Centre, is one of the proposed sensitive receivers. We would like to obtain your kind permission for entering the premise to carry out baseline and impact monitoring, baseline dust monitoring (1-hour and 24-hour TSP monitoring) and baseline noise monitoring (30best, minute) would need to conduct continuously for 14 days, our propose baseline monitoring date is August 2022. Paul Lee After baseline monitoring, impact dust monitoring (1-hour and 24-hour TSP monitoring) and impact noise monitoring (30-minute) would take place between 08:00 hrs to 18:00 hrs in normal working days once every six The monitoring location will be located on the roof top floor of New Port Centre at Junction of Sung Wong Toi Road and To Kwa Wan Road facing to Kai Tak Development area. 220V power supply is needed for 24-hour TSP monitor with size 0.5m (L) \times 0.5m (W) \times 1.4m (H). We will pay for the electricity. Similar setup photo records are shown in Figure 1 and Figure 2 for your kindly reference. The expect of impact dust measurement setup photo records are shown in Figure 3 and the power supply will come from the roof of the socket (Figure 4) for reference. Our technician will stay at the measurement point for 1-hour TSP and 30-mintue Should you have any enquires regarding the measurement, please do not hesitate to contact Thank you for your kind attention and I look forward to receiving your favourable reply soon. Yours Sincerely, Ka Shing Management Consultant Limited

Appendix D – Environmental monitoring schedules

Contract No. EDO 15/2018 Environmental Monitoring at Kai Tak Development Stage 4 Infrastructure at the former runway and south apron Environmental Monitoring and Weekly Site Inspection Schedule for February 2024

February 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Weekly Site Inspection	2 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	3
4	5	6 Weekly Site Inspection + SSMC meeting	7	8 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	9	10
11	12	13	14 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	15 Weekly Site Inspection	16	17
18	19	20 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	21	22 Weekly Site Inspection	23	24
25	26 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	27	28	29 Weekly Site Inspection		

NOTE:

1) Site inspection schedule and Impact monitoring schedule may be changed due to unforeseen circumstance (e.g. adverse weather).

Air Quality Monitoring Station

AM3 - Sky Tower

AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

AM7 - Hong Kong Children's Hospital

Noise Quality Monitoring Station

M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

M12 - Hong Kong Children's Hospital

Contract No. EDO 15/2018 Environmental Monitoring at Kai Tak Development Stage 4 Infrastructure at the former runway and south apron Tentative Environmental Monitoring and Weekly Site Inspection Schedule for March 2024

March 2024

Weekly Site Inspection 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12 15 16	Sun	Mon	Tue	Wed	Thu	Fri	Sat
3 4 5 6 7 Weekly Site Inspection Weekly Site Inspection AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12 9 10 11 12 Weekly Site Inspection+ SMC meeting 13 14 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12 15 16 17 18 19 20 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12 22 23 24 25 24-hr TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12 28 Weekly Site Inspection 24-hr TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12 29 30						1	24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3,
10	3	4	5	6	7 Weekly Site Inspection	24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7	
17	10	11	Weekly Site Inspection+	13	24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7		16
24-hr TSP: AM3, Weekly Site Inspection 24-hr TSP: AM3,	17	18	19	24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7		22	23
AM4(A), AM7 30-min Noise: M11, M12 AM4(A), AM7 AM4(A), AM7 AM4(A), AM7	24	24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7	26		Weekly Site Inspection 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3,	29	30
31	31						

NOTE:

- 1) Site inspection schedule and Impact monitoring schedule may be changed due to unforeseen circumstance (e.g. adverse weather).
- 2) Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A) and M11), the premises owner rejected ET to conduct impact monitoring starting from 1 Sept 2022. No 24-TSP monitoring will be conducted at AM4(A) while 1-hr TSP at AM4(A) and 30-min noise monitoring at M11 will be conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for AM4(A) and M11 are confirmed.

Air Quality Monitoring Station

AM3 - Sky Tower

AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

AM7 - Hong Kong Children's Hospital

Noise Quality Monitoring Station

M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

M12 - Hong Kong Children's Hospital

Appendix E – Photographic records

Impact TSP Monitoring



Measurement setup at AM3



Measurement setup at AM4(A)



Measurement setup at AM7

Impact Noise Monitoring



Measurement setup at M11



Measurement setup at M12



Weather Station at the rooftop of Hong Kong Children's Hospital

Appendix F – Calibration certificates, catalogue of air quality monitoring equipment

Catalogue of High Volume Sampler (HVS)



consistent particulate sampling. The mass flow controller adjust the motor speed as the filter media collects particulate to maintain a constant flow rate throughout the entire sample duration. The system utilizes a stainless steel filter holder for use with standard 8" x 10" filter paper. The anodized aluminum shelter and robust electrical components allow the system to operate a continuous 24 hour sample.

ABOUT US: Tisch Environmental Inc. Tisch Environmental is the benchmark for high volume air sampling, particulate. metals, volatiles, and specialty monitoring equipment. Since the company's inception in 1953 as General Metal Works, our product line has expanded from the first high volume air sampler to include high-tech and custom samplers. Our clients are professionals from every sector of the regulatory and industrial markets.

Flapsed Time Indicator

Brush Style Motor

36-60 CFM

Made In USA

Aluminum Outdoor Shelter

Dickson Chart Recorder, 24 Hour

Stainless Steel Filter Holder

TISCH 🕡 www.tisch-env.com



TSP MFC

MFC TSP Ambient Air Sampler

Particulate Size: Total Suspended Particulate (TSP) EPA Designation: CFR 40 Part 50 Appendix B Flow Controller: Mass Flow Controller Motor Style: Brush Style Motor Assembly

Pressure Recorder: Dickson Chart Recorder, 24 hour

Timer: 7 Day Mechanical

Elapsed Time Indicator: Mechanical, Hours and Tenths

Flow Range: 39-60CFM, 1.09M³M-1.68M³M

Housing: Anodized Aluminum Filter Holder: Stainless Steel, 8" x 10" 4" Recorder Charts: Box of 100

Filter Holder: 8" x 10" Stainless Steel with hold down frame

US EPA Reference Method Sampling, CFR Appendix J Part 50 Regulatory Compliance

Institutional Studies Construction Sites

Bridge and Water Tower Painting Sites

Fence Line Monitoring Industrial Monitoring Landfill Monitoring

Public Health Applications

TE-5170 TSP MFC, 110 Volt 60 Hertz, 8 Amps TE-5170X TSP MFC, 220 Volt 50 Hertz 4 Amps TE-5170XZ TSP MFC, 220 Volts 60 Hertz, 4 Amps

TE-5028 -Variable Flow Calibration Kit TE-HVC-V Xcalibrator HiVol Calibrator

TE-3000 Filter Holder Cartridge TE-G653 8" x 10" Glass Fiber Filter Media TE-33384 Motor Brush Set (110volt) TE-33378 Motor Brush Set (220volt) TE-116311 Replacement Motor (110volt) TE-116312 Replacement Motor (220volt) TE-106 Recorder Charts

TE-160 Recorder Pen Points TE-5018 Gasket 8" x 10"

Weight: 75lbs, Shelter

Shipping Dimensions: 46"W x 23"L x 20" H, Shelter 19"W x 19"L x 20"H, Lid

Assembled Dimensions: 28"W x 28"L x 61"H



Calibration Certificate of HVS

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

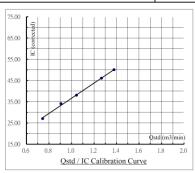
Calibration curve ref. No. :	ATSPC-01-2023121201	Date of calibration :	12/12/2023
Location :	Sky Tower	Sampler :	TE-5170X
Calibration Data			
Ambient barometric pressure	, Pa =762.1 (mmHg)	Ambient temperature, Ta =	297.85 (deg K)
Qstd Slope, m = 2.0142	24	Qstd Intercept, b = 0.0	20850

Calibration Curve

Plate No.	H ₂ O	Qstd	I	IC
Flate No.	(in)	(m ³ / min)	(chart)	(corrected)
18	7.80	1.378	50.0	50.08
13	6.60	1.267	46.0	46.07
10	4.50	1.045	38.0	38.06
7	3.40	0.907	34.0	34.06
5	2.30	0.744	27.0	27.04

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [(1) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	35.690	0.9383	0.9988



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $\begin{array}{ll} Remark: & Qstd \ (\ m^3 \ / \ min \) = 1/m \ [\ Sqrt \ (\ H_2O \ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \) - b \]. \\ \\ IC \ (\ corrected \) = 1 \ [\ Sqrt \ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \]. \\ \\ FLOW \ (\ corrected \) = Sqrt \ (\ FLOW \ (\ mano \) \ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \) \end{array}$

	O?			
Calibrated by:			Checked by :	
Name: (Poon Tsz Wing)	Name: (Choy Ching Yee)	

Form No. INS-HVS-CAL dd 16 01 2020

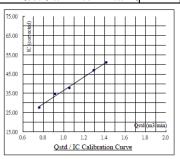
Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

Calibration curve ref. No. :	ATSPC-01-2024020901	Date of calibration :	09/02/2024	
Location :	Sky Tower	Sampler :	TE-5170X	
Calibration Data				
Ambient barometric pressure	, Pa =767.4 (mmHg)	Ambient temperature, Ta =	288.55 (deg K)	
Ostd Slope, m = 2.0142	24	Ostd Intercept, b = 0.00	20850	

Calibration Curve				
Plate No.	H ₂ O	Qstd	I	IC
Flate No.	(in)	(m ³ / min)	(chart)	(corrected)
18	7.90	1.415	50.0	51.06
13	6.60	1.292	46.0	46.97
10	4.40	1.053	37.0	37.78
7	3.30	0.911	34.0	34.72
	2.20	0.750	27.0	22.62

 Subsequent calculation of sampler flow
 Calibration equation
 Slope, m
 Intercept, b
 Corr. coeff., r

 Dickson recorder
 Qstd = 1/m1 [(1) (Sqrt ((Pav / 760) (298 / Tav))) - b1]
 34.998
 1.6194
 0.9968



Calibration curve requirements: (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $\begin{array}{ll} \mbox{Remark:} & \mbox{Qstd} \ (\mbox{m}^3 \ / \mbox{min} \) = 1/m \ [\ \mbox{Sqrt} \ (\mbox{H}_2 \mbox{O} \ (\mbox{Pa} \ / \ 760 \) \ (\mbox{298} \ / \mbox{Ta} \)) - b \]. \\ & \mbox{IC} \ (\mbox{corrected} \) = I \ [\mbox{Sqrt} \ (\mbox{(} \mbox{Pa} \ / \ 760 \) \ (\mbox{298} \ / \mbox{Ta} \) \]. \\ \end{array}$

Form No. INS-HVS-CAL dd 16 01 2020

Calibration Certificate of HVS

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

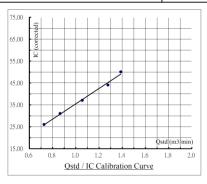
Calibration curve ref. No. : ATS		TSPC-01-2023121203		Date of calibration :	12/12/2023	
Location : Hong Kong Children's Hospital			Sampler :	TE-5170X		
Calibration Data						
Ambient barometric p	ressure, Pa =	762.1	(mmHg)	Ambient temperature, Ta =	297.85	(deg K)
Qstd Slope, m =	2.01424			Qstd Intercept, b = 0.0	20850	

Calibration Curve

Plate No.	H ₂ O	Qstd	I	IC
Plate No.	(in)	(m ³ / min)	(chart)	(corrected)
18	7.90	1.387	50.0	50.08
13	6.70	1.277	44.0	44.07
10	4.60	1.056	37.0	37.06
7	3.10	0.865	31.0	31.05
5	2.20	0.727	26.0	26.04

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [(I) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	35.036	0.4376	0.9966



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $\begin{array}{ll} Remark: & Qstd \ (\ m^3 \ / \ min \) = 1/m \ [\ Sqrt \ (\ H_2O \ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \) \cdot b \]. \\ \\ IC \ (\ corrected \) = I \ [\ Sqrt \ (\ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \]. \\ \\ FLOW \ (\ corrected \) = Sqrt \ (\ FLOW \ (\ mano \) \ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \). \end{array}$

Calibrated by		03		Checked by:			
Name:	(Poon Tsz Wing)	Name :	(Choy Ching Yee)

Form No. INS-HVS-CAL dd 16 01 2020

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

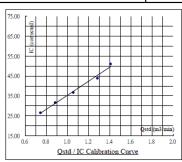
Calibration curve ref. No. :	ATSPC-01-2024020903	Date of calibration :	09/02/2024
Location : Hong Ko	ng Children's Hospital	Sampler :	TE-5170X
Calibration Data			
Ambient barometric pressure,	Pa =767.4 (mmHg)	Ambient temperature, Ta =	288.55 (deg K)
Qstd Slope, m = 2.0142	4	Qstd Intercept, b = 0.	020850

Calibration Curve

Plate No.	H ₂ O	Qstd	I	IC
Plate No.	(in)	(m ³ /min)	(chart)	(corrected)
18	7.80	1.406	50.0	51.06
13	6.50	1.282	43.0	43.91
10	4.40	1.053	36.0	36.76
7	3.10	0.882	31.0	31.66
5	2.20	0.742	26.0	26.55

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / ml [(I)(Sqrt((Pav / 760)(298 / Tav))) - bl]	35.247	0.1676	0.9942



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m 3 / min).

Remark: $Qstd(m^3/min) = 1/m[Sqrt(H_2O(Pa/760)(298/Ta)) - b].$ IC(corrected) = I[Sqrt((Pa/760)(298/Ta))].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

Calibrated by : Checked by : Checked by : Name : (Choy Ching Yee)

Form No. INS-HVS-CAL dd 16 01 2020

Calibration Certificate of HVS

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

Calibration curve ref. No. :	ATSPC-01-2023061901	Date of calibration :	19/06/2023	
Model no :	GS2310	Serial number :	10346	
Calibration Data				

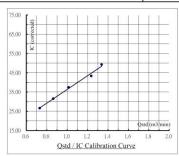
Ambient barometric	pressure, Pa =	755.3	(mmHg)	Ambient temperature,	Га =	305.25	(deg K)
Qstd Slope, m =	2.01424			Qstd Intercept, b =	0.0208	50	

Calibration Curve

Plate No.	H ₂ O (in)	Qstd (m ³ /min)	I (chart)	IC (corrected)
18	7.60	1.338	50.0	49.25
13	6.50	1,236	44.0	43.34
10	4.40	1.015	38.0	37.43
7	3.20	0.864	32.0	31.52
5	2.30	0.731	27.0	26.60

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r	
Dickson recorder	Qstd = 1 / m1 [(1) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	35.675	0.6397	0.9953	



Calibration curve requirements: (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

Qstd (m^3 / min) = 1/m [Sqrt (H_2O (Pa / 760) (298 / Ta)) - b]. IC (corrected) = I [Sqrt ((Pa / 760) (298 / Ta))].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

Calibrated by	'alibrated by :			Checked by:			
Name:	(Poon Tsz Wing)	Name: (Wong Yin Tong)			

Form No. INS-HVS-CAL dd 16 01 2020

Orifice Transfer Standard Certification Worksheet TE-5025A



RECALIBRATION **DUE DATE:** May 17, 2024

Calibration Certification Information					
Cal. Date: May 17, 2023	Rootsmeter S/N: 438320	Ta: 297	°K		
Operator: Jim Tisch		Pa: 745.0	mm Hg		
Calibration Model #: TE	-5025A Calibrator S/N: 0006				

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4270	3.2	2.00
2	3	4	1	1.0000	6.4	4.00
3	5	6	1	0.8940	7.9	5.00
4	7	8	1	0.8490	8.8	5.50
5	9	10	1	0.6990	12.8	8.00

		Data Tabulat	ion		
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	√∆H(Ta/Pa)
0.9793	0.6863	1.4025	0.9957	0.6978	0.8929
0.9751	0.9751	1.9835	0.9914	0.9914	1.2628
0.9731	1.0885	2.2176	0.9894	1.1067	1.4119
0.9719	1.1448	2.3258	0.9882	1.1639	1.4808
0.9666	1.3829	2.8051	0.9828	1.4060	
	m=	2.01424		m=	1.26128
QSTD	b=	0.02085	QA	b=	0.01328
	r=	0.99999		r=	0.99999

Calculatio	ns
Vstd= ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va= ΔVol((Pa-ΔP)/Pa)
Qstd= Vstd/ΔTime	Qa= Va/ΔTime
For subsequent flow ra	te calculations:
$Qstd= 1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$	Qa= $1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$

71572	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrator	manometer reading (in H2O)
ΔP: rootsmete	er manometer reading (mm Hg)
Ta: actual abs	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in

RECALIBRATION

the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002

www.tisch-env.com TOLL FREE: (877)263-7610 FAX: (513)467-9009

Catalogue of Dust Meter (TSI Sidepak AM510)

The SidePak AM510 monitor's easy-to-read display shows your data as both real-time aerosol mass-concentration and 8-hour time-weighted average (TWA). With its convenient data logging and long battery life, the AM510 is also ideal for extended sampling. The easy-to-use TrakPro Data Analysis Software lets you create effective graphs and reports.

User Friendly

- + Small, lightweight and quiet to maximize worker acceptance
- + Rugged design with secure belt clip
- + Easy-to-understand user interface with only four keys
- + Lockable keypad prevents tampering while sampling
- + User-adjustable sample flow rate
- + Define, label and store multiple calibration constants
- + Easy-to-read LCD display
- + Convenient, threaded tripod socket accommodates area sampling

Advanced Features

- + Smart Battery Management System provides precise run time information, maximizes battery capacity and speeds charging
- Integrated pump allows use of size-selective aerosol inlet conditioners
- + Built-in impactors let you choose "none," 1.0, 2.5 or 10-micron cut off
- + 10-mm Dorr-Oliver cyclone for respirable sampling
- + Display shows real-time concentrations (mg/m3) and "on-the-fly" TWA as you data log
- + Display statistics: max, min and average readings, elapsed time and 8-hour TWA

Quick and Easy Reports

- + Convenient preprogramming for occupational exposure sampling
- + Data log for long periods and store multiple tests
- + Analyze data, print graphs and create reports with TrakPro Data Analysis Software
- + USB port lets you conveniently connect to your computer

Power to Spare

- + Long-lasting NiMH rechargeable battery packs eliminate
- + Choice of rechargeable NiMH smart battery packs or AA-cell pack

Model AM510 SidePak Personal Aerosol Monitor

Sensitivity

90° light scattering, Sensor Type 670 nm laser diode 0.001 to 20 mg/m³ Aerosol Concentration Range (calibrated to respirable fraction of ISO 12103-1,

A1 test dust)

Particle Size Range 0.1 to 10 micrometer (µm) Minimum Resolution 0.001 mg/m³

Zero stability ±0.001 mg/m3 over 24 hours

using 10-second time-constant

Temperature Coefficient Approximately +0.0005 mg/m³ per °C (for variations from temperature

at which instrument was last zeroed)

Flow Rate

User-adjustable, 0.7 to 1.8 Range liters/min (L/min)

Temperature Range

32 to 120°F (0 to 50°C) Storage Range -4 to 140°F (-20 to 60°C)

Operational Humidity

0 to 95% RH, non-condensing

Time Constant (LCD display)

Jser-adjustable, 1 to 60 seconds

Data Logging

Approx. 31,000 Data Points Logging Interval User-adjustable, 1 second to 1 hour

User-Select Calibration Factors

Factory Setting 1.0 (non-adjustable) User-defined Settings 3, with user-defined labels Range 0.1 to 10.0, user-adjustable

Physical

Weight

4.2 x 3.7 x 2.8 in. (106 x 92 x 70 mm) with 801723, 801724, 801729 or External Dimensions

801743 battery

5.1 x 3.7 x 2.8 in. (130 x 92 x 70 mm) with 801708, 801722, 801728,

801735, or 801736 battery 16 oz (0.46 kg) with 801723, 801724,

801729 or 801743 battery 19 oz (0.54 kg) with 801708, 01722,

801728, 801735, or 801736 battery Display Tripod Socket 2 line x 12 character LCD 1/4-20 female thread

Power Supply/Charger (P/N 2613210) Input Voltage Range 100 to 240 VAC. S0 to 60 Hz

Input Voltage Range Output Voltage 9 VDC @ 1.0 A

Maintenance

Recommended annually Factory Clean/Calibrate User Zero Calibration Before each use User Flow Calibration As needed

Communications Interface

Type Connector, Instrument USB Mini-B (socket)

Minimum Computer Requirements for

TrakPro™ Data Analysis Software Communications Port Universal Serial Bus (USB)

v 1.1 or higher

Microsoft Windows® XP, or 7 Operating System (32-bit or 64-bit) operating systems

Battery Performance

Battery Options	Charge Time (hrs)*	Intrinsic Safety Rating	Run Time (hrs @ 1.7 L/min)
1600 mAH NiMH Pack, 4.8 V (P/N 801723)	3.0	No	7.1
1650 mAH NiMH Pack, 4.8V (P/N 801724, 801729 or 801743)	3.5	CSA**	7.5
2700 mAH NiMH Pack, 4.8 V (P/N 801722 or 801728)	5.5	No	12.0
2700 mAH NiMH Pack, 4.8 V (P/N 801735)	5.5	No	12.0
6-Cell AA-size Alkaline Pack*** (P/N 801708 or 801736 with six user-supplied AA cells)	N/A	No	22.5

*Of a fully depleted battery

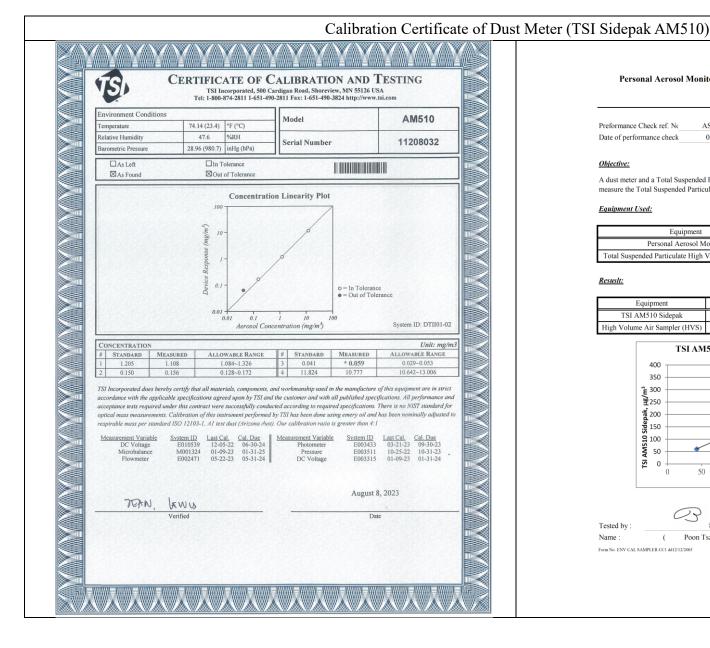
**All dust plugs and dust gaskets must be installed.

***Using Energizer AA-size, E91 alkaline batteries.

Battery Level Indicator

The Smart Battery Management System™ technology utilizes a built-in "gauge" in the SidePak™ battery packs. The gauge monitors battery capacity and calculates run time information by dividing capacity of the battery (mAH) by the instantaneous current consumed by the instrument (mA). This calculation is correct for current operating conditions and can change due to current (mA) consumption or changes in battery capacity.





Personal Aerosol Monitor Performance check with High Volume Sampler

Preformance Check ref. No	AS0220602-1	Report Issue Date	02/06/2023	
Date of performance check	02/06/2023			

Objective:

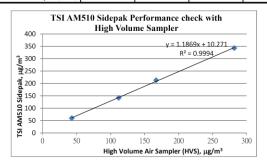
A dust meter and a Total Suspended Particulate High Volume Air Sampler (HVS) were placed together to measure the Total Suspended Particulate (TSP) concentrations simultaneously to check the performance.

Equipment Used:

Equipment	Manufacturer and Model	Serial Number
Personal Aerosol Monitor	TSI AM510 Sidepak	11208032
Total Suspended Particulate High Volume Air Sampler	GS2310	10346

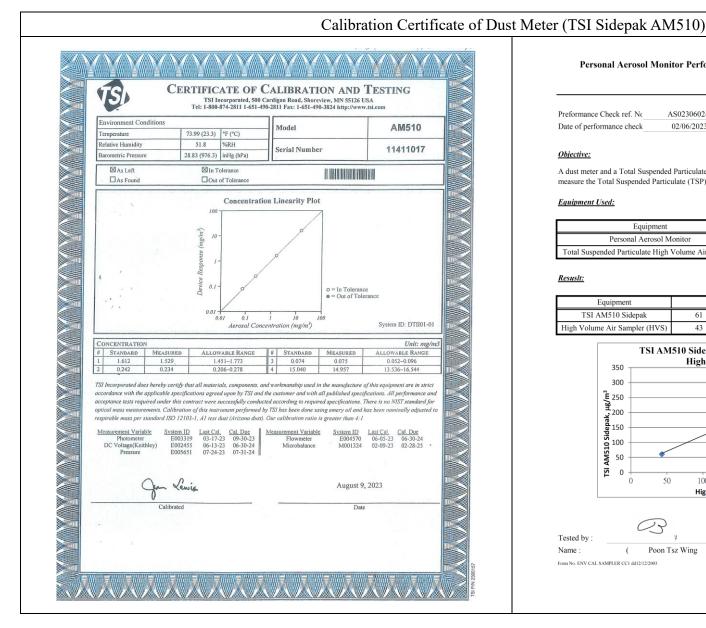
Resustt:

Equipment		Measurement Result, μg/m ³							
TSI AM510 Sidepak	60	142	213	343					
High Volume Air Sampler (HVS)	43	112	167	282					



Checked by Tested by

Form No. ENV CAL SAMPLER CC1 dd12/12/2003



Personal Aerosol Monitor Performance check with High Volume Sampler

Preformance Check ref. No	AS0230602-5	Report Issue Date	02/06/2023	
Date of performance check	02/06/2023			

Objective:

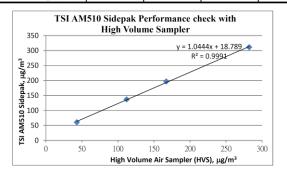
A dust meter and a Total Suspended Particulate High Volume Air Sampler (HVS) were placed together to measure the Total Suspended Particulate (TSP) concentrations simultaneously to check the performance.

Equipment Used:

Equipment	Manufacturer and Model	Serial Number
Personal Aerosol Monitor	TSI AM510 Sidepak	11411017
Total Suspended Particulate High Volume Air Sampler	GS2310	10346

Resusit:

Equipment	Measurement Result, μg/m ³						
TSI AM510 Sidepak	61	137	197	311			
High Volume Air Sampler (HVS)	43	112	167	282			



Tested by Checked by Name: Poon Tsz Wing Name: Wong Yin Tong

Form No. ENV CAL SAMPLER CC1 dd12/12/2003

Catalogue of Weather Station

Cabled Vantage Pro2™ & Vantage Pro2 Plus™ Stations



6152C 6162C

Vantage Pro2™

The Vantage Pro2[™] (# 6152C) and Vantage Pro2[™] Plus (# 6162C) cabled weather stations include two components: the Integrated Sensor Suite (ISS) and the console. The ISS contains the sensor interface module (SIM), rain collector, an anemometer, and a passive radiation shield. The Vantage Pro2 console provides the user interface, data display, and calculations. The Vantage Pro2 Plus weather station includes two additional sensors that are optional on the Vantage Pro2 and purchased separately: the UV Sensor and the Solar Radiation Sensor. The console and ISS are powered by an AC-power adapter connected to the console. Batteries can be installed in the console to provide a backup power supply. Use WeatherLink® to let your weather station interface with a computer, log data, and upload weather information to the Internet. The 6152C and 6162C models rely on passive shielding to reduce solar-radiation induced temperature errors in the outside temperature sensor readings.

Integrated Sensor Suite (ISS)

Operating Temperature	-40° to +150°F (-40° to +65°C)
Non-operating Temperature	-40° to +158°F (-40° to +70°C)
	5 mA (average) at 4 to 6 VDC for ISS only. 10 mA average for both console and ISS
Connectors, Sensor	Modular RJ-11
Cable Type	4-conductor, 26 AWG
Cable Length, Anemometer	40' (12 m) (included); 240' (73 m) (maximum recommended)

Maximum displayable wind decreases as the length of cable increases, at 140' (42 m) of cable, the maximum wind speed displayed is 135 mph (60 m/s); at 240' (73 m), the maximum wind speed displayed is 100 mph (34 m/s)

Wind Speed Sensor Solid state magnetic sensor Wind Direction Sensor Wind vane with potentiometer (214 cm2) collection area Temperature Sensor Type...... PN Junction Silicon Diode Relative Humidity Sensor Type Film capacitor element Sensor Inputs

ISS Dimensions(not including anemometer or bird spikes):

Vantage Pro2 with Fan-Asprated Rad Shield........... 20.8" x 9.4" x 16.0" (528 mm x 239 mm x 406 mm) Vantage Pro2 Plus with Standard Rad Shield 14.3" x 9.7" x 14.5" (363 mm x 246 mm x 368 mm) Vantage Pro2 Plus with Fan-Aspirated Rad Shield 21.1" x 9.7" x 16.0" (536 mm x 246 mm x 406 mm)



DAVIS [""||| * Davis Instruments 3465 Diablo Ave., Hayward, CA 94545-2778 USA (510) 732-9229 * FAX (510) 670-0589 * sales@davisinstruments.com * www.davisinstruments.com

DS6152C, 6162C Rev. W 12/7/18

Vantage Pro2

Ultra Violet (UV) Radiation Index (requires UV sensor)

Historical Graph Data Hourly Average, Daily, Monthly Highs Alarm High Threshold from Instant Calculation

Wind

Wind Chill (Calculated)

Source...... United States National Weather Service (NWS)/NOAA

Equation Used Osczevski (1995) (adopted by US NWS in 2001)

Variables Used Instant Outside Temperature and 10-min. Avg. Wind Speed

Current Display Data Instant Calculation

Current Graph Data Instant Calculation; Hourly, Daily and Monthly Low

Historical Graph Data. Hourly, Daily and Monthly Lows Alarm..... Low Threshold from Instant Calculation

Wind Direction

Monthly Dominant

Monthly Dominants

Wind Speed

other units are converted from mph and rounded to nearest 1 km/hr, 0.1

m/s or 1 knot

length of cable from anemometer to ISS increases.)

Current Display Data Instant

Current Graph Data Instant Reading; 10-minute and Hourly Average; Hourly High; Daily,

Monthly and Yearly High with Direction of High

Highs with Direction of Highs

High Thresholds from Instant Reading and 10-minute Average

Calibration Certificate of Weather Station



Cal Lab Limited 校正實驗室有限公司

Room 2103, Technology Plaza, 29-35 Sha Tsui Road.

Tsuen Wan, NT, Hong Kong

Tel: +852 25680106 Email: info@callab.com.hk Fax: +852 30116194 Website: www.callab.com.hk

Calibration Certificate No.: CC0062308

Information provided by customer

Customer Castco Testing Centre Limited Address: 33, On Kui Street, Fanling, N.T.

Equipment identification provided by customer

Equipment Description Manufacturer Model No. Serial No. Assigned equipment No.: Weather Station Davis Vantage PRO 2 6152CEU AZ170710016 AAST-WS-03

Certificate Information

Calibration Procedure:

Date of Receipt: Date of Calibration: Due Date of Calibration:

4 August 2023 14 August 2023 N/A

JJF 1183-2007, JJF 1076-2020, SOP-116

Calibration Condition: Adjustment: Appearance: Remark:

24.3°C, 52%RH, 1002hPa N/A Good N/A

Reference Equipment Identification

Equipment Description Model Serial No. **Expiration Date** Platinum resistance thermometer KPPRHT-A-1 KCI I-1095, KCI P-1095 9 November 2024 Humidity sensor KPPRHT-A-1 KCI I-1095, KCI P-1095 9 November 2024 Hot Wire Anemometer 9535 T95351316004 11 August 2024

Note1: The estimated expanded uncertainties have been calculated in "Evaluation and expression of uncertainty in measurement" and give an internal estimated to have a level The standard (s) and instrument used in the calibration are traceable to national or international recognized standard and are calibrated on a schedule to maintain the

accuracy and good condition

Note3: The result reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long term stability of the

has uniment. The results shows in this calibration certificate relate only to the item calibrated, and the result only applies to the calibration item as received Calibration Item/ parameter marked with * is out of scope of Cal Lab Limited (A2LA 3815.01).

Company Chop:

Certificate Issue Date: 17 August 2023

1. The certificate shall not be reproduced except in full, without written approval of Cal Lab Limited 2. The certificate is issued subject to the latest Terms and Conditions, available at our web site

CC0062308 Page 1 of 2

CALIBRATION

Cal Lab Limited 校正實驗室有限公司

Room 2103, Technology Plaza, 29-35 Sha Tsui Road, Tsuen Wan, NT, Hong Kong Tel: +852 25680106 Email: info@callab.com.hk

Calibration Certificate No.: CC0122402

Customer Information

Castco Testing Centre Limited Address: 33, On Kui Street, Fanling, N.T.

Equipment Identification

Equipment Description Manufacturer Model No. Serial No. Assigned equipment No.: Weather Station Davis Vantage PRO 2 BD190307008 AAST-WS-O-1

Website: www.callab.com.bl

Certificate Information

Date of Receipt: 6 February 2024 Date of Calibration: Due Date of Calibration: N/A Calibration Procedure:

16 February 2024 JJF 1183-2007, JJF 1076-2001, SOP-116

Fax: +852 30116194

Calibration Condition: 21.5°C, 55%RH, 1012hPa Adjustment: N/A Appearance: Good Remark:

N/A

Reference Equipment Identification

Equipment Description Model Serial No. Expiration Date Platinum resistance thermometer KPPRHT-A-1 KCI I-1095 KCI P-1095 9 November 2024 Humidity sensor KPPRHT-A-1 KCI I-1095, KCI P-1095 9 November 2024 Hot Wire Anemometer 9535 T95351316004 11 August 2024

Note1: The estimated expanded uncertainties have been calculated in "Evaluation and expression of uncertainty in measurement" and give an internal estimated to have a level of confidence of \$5%. A coverage factor of 25 assumed unless explicitly stated.

Note2: The standard (s) and instrument used in the calculation are straceable or national or international recognized standard and are calculated on a schedule to maintain the

accuracy may go to this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long term stability of the The result shows in this calibration certificate relate only to the item calibrated, and the result only applies to the calibration item as r

Approved By:

when

Warren Yeung

Company Chop:

Certificate Issue Date: 16 February 2024

1. The certificate shall not be reproduced except in full, without written approval of Cal Lab Limited 2. The certificate is issued subject to the latest Terms and Conditions, available at our web site

CC0122402 Page 1 of 2

Appendix G – Weather information

General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)
01/02/2024	19.8	23.9	0.2
02/02/2024	18.6	25.7	Trace
03/02/2024	17.7	22.5	Trace
04/02/2024	19.3	20.5	Trace
05/02/2024	19.6	21.7	Trace
06/02/2024	18	20.3	0.6
07/02/2024	14.7	18.4	Trace
08/02/2024	11.6	14.8	2.2
09/02/2024	11	14.2	0.6
10/02/2024	11.3	18.6	0.5
11/02/2024	13.6	22.8	0
12/02/2024	15.5	21.2	0
13/02/2024	16.8	22.8	0
14/02/2024	18.3	25.1	0
15/02/2024	19.7	26	0
16/02/2024	19.4	22	Trace
17/02/2024	17.8	21.2	Trace
18/02/2024	19.9	23.6	0
19/02/2024	21.1	25.1	0
20/02/2024	22	26	0
21/02/2024	22.5	27.8	0
22/02/2024	22.4	25.2	0
23/02/2024	19.3	22.9	Trace
24/02/2024	17.5	21.6	Trace
25/02/2024	15.6	19.2	0
26/02/2024	16.8	21.1	Trace
27/02/2024	15.9	19.5	Trace
28/02/2024	17.5	19.3	Trace
29/02/2024	16.2	22	Trace

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

NOTE2: Trace means rainfall less than 0.05 mm

https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2024&m=2

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
01/02/2024	0:00	0.9	225	02/02/2024	0:00	0.4	112.5	03/02/2024	0:00	0	135	04/02/2024	0:00	0.4	247.5
01/02/2024	1:00	0.4	225	02/02/2024	1:00	0.9	135	03/02/2024	1:00	0	180	04/02/2024	1:00	0.4	292.5
01/02/2024	2:00	0.4	22.5	02/02/2024	2:00	0.9	22.5	03/02/2024	2:00	0.4	67.5	04/02/2024	2:00	0.4	292.5
01/02/2024	3:00	0.4	22.5	02/02/2024	3:00	1.3	180	03/02/2024	3:00	0.9	135	04/02/2024	3:00	0	247.5
01/02/2024	4:00	0.4	247.5	02/02/2024	4:00	0.9	90	03/02/2024	4:00	0.4	45	04/02/2024	4:00	0.4	202.5
01/02/2024	5:00	0.4	202.5	02/02/2024	5:00	0.9	67.5	03/02/2024	5:00	0.4	67.5	04/02/2024	5:00	0.4	247.5
01/02/2024	6:00	0.4	225	02/02/2024	6:00	0.4	112.5	03/02/2024	6:00	0.4	67.5	04/02/2024	6:00	0.4	247.5
01/02/2024	7:00	0.4	225	02/02/2024	7:00	0.9	112.5	03/02/2024	7:00	0.4	67.5	04/02/2024	7:00	0.4	247.5
01/02/2024	8:00	0.4	202.5	02/02/2024	8:00	0.4	90	03/02/2024	8:00	0.9	45	04/02/2024	8:00	0.4	180
01/02/2024	9:00	0.4	247.5	02/02/2024	9:00	0.9	45	03/02/2024	9:00	0.4	90	04/02/2024	9:00	0.4	22.5
01/02/2024	10:00	0.4	270	02/02/2024	10:00	0.4	225	03/02/2024	10:00	0.9	112.5	04/02/2024	10:00	0.4	247.5
01/02/2024	11:00	0.9	247.5	02/02/2024	11:00	0.4	112.5	03/02/2024	11:00	0.4	112.5	04/02/2024	11:00	0.4	247.5
01/02/2024	12:00	1.3	247.5	02/02/2024	12:00	0.4	202.5	03/02/2024	12:00	0.4	112.5	04/02/2024	12:00	0	270
01/02/2024	13:00	0.9	247.5	02/02/2024	13:00	0.4	225	03/02/2024	13:00	0.4	112.5	04/02/2024	13:00	0.4	22.5
01/02/2024	14:00	0.4	315	02/02/2024	14:00	0.9	67.5	03/02/2024	14:00	0.4	157.5	04/02/2024	14:00	0.4	22.5
01/02/2024	15:00	0.4	225	02/02/2024	15:00	0.9	225	03/02/2024	15:00	0	112.5	04/02/2024	15:00	0.4	247.5
01/02/2024	16:00	0.4	247.5	02/02/2024	16:00	0.4	180	03/02/2024	16:00	0.4	45	04/02/2024	16:00	0.4	247.5
01/02/2024	17:00	0.4	45	02/02/2024	17:00	0.9	135	03/02/2024	17:00	0.4	90	04/02/2024	17:00	0	202.5
01/02/2024	18:00	0.4	247.5	02/02/2024	18:00	0.9	22.5	03/02/2024	18:00	0.9	90	04/02/2024	18:00	0.4	157.5
01/02/2024	19:00	0.4	22.5	02/02/2024	19:00	1.3	315	03/02/2024	19:00	0.4	45	04/02/2024	19:00	0.4	225
01/02/2024	20:00	0.4	180	02/02/2024	20:00	0.9	112.5	03/02/2024	20:00	1.3	67.5	04/02/2024	20:00	0.4	180
01/02/2024	21:00	0.9	180	02/02/2024	21:00	0.9	337.5	03/02/2024	21:00	0.9	90	04/02/2024	21:00	0.4	225
01/02/2024	22:00	0.4	180	02/02/2024	22:00	0.4	135	03/02/2024	22:00	0.9	90	04/02/2024	22:00	0.4	225
01/02/2024	23:00	0.4	225	02/02/2024	23:00	0.9	202.5	03/02/2024	23:00	0.4	135	04/02/2024	23:00	0.4	247.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
05/02/2024	0:00	0	202.5	06/02/2024	0:00	0	90	07/02/2024	0:00	0.4	270	08/02/2024	0:00	0.4	112.5
05/02/2024	1:00	0.4	180	06/02/2024	1:00	0	90	07/02/2024	1:00	0.4	135	08/02/2024	1:00	0.4	135
05/02/2024	2:00	0.4	45	06/02/2024	2:00	0.9	135	07/02/2024	2:00	0.4	180	08/02/2024	2:00	0.4	157.5
05/02/2024	3:00	0.4	337.5	06/02/2024	3:00	0.4	112.5	07/02/2024	3:00	0.4	270	08/02/2024	3:00	0.4	135
05/02/2024	4:00	0.4	315	06/02/2024	4:00	0.9	90	07/02/2024	4:00	0.4	22.5	08/02/2023	4:00	0.4	135
05/02/2024	5:00	0.4	247.5	06/02/2024	5:00	0.9	90	07/02/2024	5:00	0.4	22.5	08/02/2023	5:00	0.9	112.5
05/02/2024	6:00	0.4	225	06/02/2024	6:00	0.4	247.5	07/02/2024	6:00	0.4	292.5	08/02/2024	6:00	0.9	112.5
05/02/2024	7:00	0.9	225	06/02/2024	7:00	0.4	202.5	07/02/2024	7:00	0.4	22.5	08/02/2024	7:00	0.9	157.5
05/02/2024	8:00	0.9	247.5	06/02/2024	8:00	0.9	67.5	07/02/2024	8:00	0.4	112.5	08/02/2024	8:00	1.3	135
05/02/2024	9:00	0.4	225	06/02/2024	9:00	0.4	90	07/02/2024	9:00	0.4	112.5	08/02/2024	9:00	1.3	112.5
05/02/2024	10:00	0.9	225	06/02/2024	10:00	0.9	90	07/02/2024	10:00	0.4	112.5	08/02/2024	10:00	1.8	112.5
05/02/2024	11:00	0.9	292.5	06/02/2024	11:00	0.9	135	07/02/2024	11:00	0	180	08/02/2024	11:00	0.9	90
05/02/2024	12:00	0.4	202.5	06/02/2024	12:00	0.4	135	07/02/2024	12:00	0.4	112.5	08/02/2024	12:00	0.9	135
05/02/2024	13:00	0.9	225	06/02/2024	13:00	0.4	67.5	07/02/2024	13:00	0.4	270	08/02/2024	13:00	0.9	135
05/02/2024	14:00	0.4	112.5	06/02/2024	14:00	0.4	90	07/02/2024	14:00	0.4	157.5	08/02/2024	14:00	0.9	112.5
05/02/2024	15:00	0.4	67.5	06/02/2024	15:00	0.4	90	07/02/2024	15:00	0.4	270	08/02/2024	15:00	1.3	135
05/02/2024	16:00	0.9	22.5	06/02/2024	16:00	0.4	112.5	07/02/2024	16:00	0.4	270	08/02/2024	16:00	1.3	112.5
05/02/2024	17:00	0.4	112.5	06/02/2024	17:00	0.4	135	07/02/2024	17:00	0.4	270	08/02/2024	17:00	1.3	112.5
05/02/2024	18:00	0.4	90	06/02/2024	18:00	0.4	112.5	07/02/2024	18:00	0.9	247.5	08/02/2024	18:00	1.3	45
05/02/2024	19:00	0.4	270	06/02/2024	19:00	0.4	90	07/02/2024	19:00	0.9	247.5	08/02/2024	19:00	0.9	112.5
05/02/2024	20:00	0.9	135	06/02/2024	20:00	0.4	67.5	07/02/2024	20:00	0.9	270	08/02/2024	20:00	0.9	90
05/02/2024	21:00	0.9	135	06/02/2024	21:00	0.9	67.5	07/02/2024	21:00	0.9	270	08/02/2024	21:00	0.9	112.5
05/02/2024	22:00	0.9	112.5	06/02/2024	22:00	0.9	90	07/02/2024	22:00	0.9	225	08/02/2024	22:00	0.9	112.5
05/02/2024	23:00	0.4	247.5	06/02/2024	23:00	1.3	22.5	07/02/2024	23:00	0.4	225	08/02/2024	23:00	0.9	90

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
09/02/2024	0:00	0.4	45	10/02/2024	0:00	0.9	45	11/02/2024	0:00	0.4	135	12/02/2024	0:00	0.9	112.5
09/02/2024	1:00	0.4	67.5	10/02/2024	1:00	0.9	225	11/02/2024	1:00	0.4	112.5	12/02/2024	1:00	0.9	112.5
09/02/2024	2:00	1.3	67.5	10/02/2024	2:00	0.9	225	11/02/2024	2:00	0.4	90	12/02/2024	2:00	0.4	112.5
09/02/2024	3:00	0.9	67.5	10/02/2024	3:00	0.9	225	11/02/2024	3:00	0.4	112.5	12/02/2024	3:00	0.9	112.5
09/02/2024	4:00	0.4	90	10/02/2024	4:00	1.3	225	11/02/2024	4:00	1.3	112.5	12/02/2024	4:00	0.4	112.5
09/02/2024	5:00	0.4	22.5	10/02/2024	5:00	1.3	247.5	11/02/2024	5:00	0.9	90	12/02/2024	5:00	0.4	112.5
09/02/2024	6:00	0.4	112.5	10/02/2024	6:00	0.9	247.5	11/02/2024	6:00	0.9	247.5	12/02/2024	6:00	0.9	135
09/02/2024	7:00	0.9	112.5	10/02/2024	7:00	1.3	90	11/02/2024	7:00	0.9	247.5	12/02/2024	7:00	0.9	112.5
09/02/2024	8:00	0.9	112.5	10/02/2224	8:00	0.9	112.5	11/02/2024	8:00	0.4	247.5	12/02/2024	8:00	0.4	45
09/02/2024	9:00	0.4	112.5	10/02/2024	9:00	1.3	90	11/02/2024	9:00	1.3	247.5	12/02/2024	9:00	0.9	90
09/02/2024	10:00	0.4	112.5	10/02/2024	10:00	1.3	90	11/02/2024	10:00	0.4	247.5	12/02/2024	10:00	0.9	112.5
09/02/2024	11:00	0.9	135	10/02/2024	11:00	0.9	67.5	11/02/2024	11:00	0.4	247.5	12/02/2024	11:00	1.3	135
09/02/2024	12:00	0.4	247.5	10/02/2024	12:00	1.3	45	11/02/2024	12:00	0.4	247.5	12/02/2024	12:00	1.8	135
09/02/2024	13:00	0.4	247.5	10/02/2024	13:00	1.3	45	11/02/2024	13:00	0	225	12/02/2024	13:00	1.8	135
09/02/2024	14:00	0.9	112.5	10/02/2024	14:00	1.3	67.5	11/02/2024	14:00	0	202.5	12/02/2024	14:00	0.4	135
09/02/2024	15:00	1.3	112.5	10/02/2024	15:00	0.9	67.5	11/02/2024	15:00	0.4	180	12/02/2024	15:00	0.4	135
09/02/2024	16:00	0.9	112.5	10/02/2024	16:00	1.3	90	11/02/2024	16:00	0.9	225	12/02/2024	16:00	0.4	135
09/02/2024	17:00	0.9	112.5	10/02/2024	17:00	1.3	90	11/02/2024	17:00	0.9	202.5	12/02/2024	17:00	0.9	112.5
09/02/2024	18:00	0.9	112.5	10/02/2024	18:00	1.3	90	11/02/2024	18:00	0.4	157.5	12/02/2024	18:00	0.4	112.5
09/02/2024	19:00	0.9	135	10/02/2024	19:00	1.3	90	11/02/2024	19:00	0.4	225	12/02/2024	19:00	0.9	112.5
09/02/2024	20:00	0.9	135	10/02/2024	20:00	1.3	22.5	11/02/2024	20:00	0.4	135	12/02/2024	20:00	1.3	112.5
09/02/2024	21:00	0.4	112.5	10/02/2024	21:00	1.3	135	11/02/2024	21:00	0.9	90	12/02/2024	21:00	1.3	112.5
09/02/2024	22:00	1.8	90	10/02/2024	22:00	1.3	90	11/02/2024	22:00	0.9	112.5	12/02/2024	22:00	1.3	112.5
09/02/2024	23:00	0.9	337.5	10/02/2024	23:00	1.8	112.5	11/02/2024	23:00	0.4	112.5	12/02/2024	23:00	0.4	112.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
13/02/2024	0:00	0.9	45	14/02/2024	0:00	0.4	247.5	15/02/2024	0:00	0.9	135	16/02/2024	0:00	1.3	67.5
13/02/2024	1:00	0.9	45	14/02/2024	1:00	0.4	292.5	15/02/2024	1:00	0.9	180	16/02/2024	1:00	1.3	90
13/02/2024	2:00	0.4	270	14/02/2024	2:00	0.9	270	15/02/2024	2:00	1.3	67.5	16/02/2024	2:00	0.9	90
13/02/2024	3:00	0.4	135	14/02/2024	3:00	0.4	45	15/02/2024	3:00	0.9	135	16/02/2024	3:00	0.4	90
13/02/2024	4:00	0.4	112.5	14/02/2024	4:00	0.4	67.5	15/02/2024	4:00	0.9	45	16/02/2024	4:00	0.4	135
13/02/2024	5:00	0.4	112.5	14/02/2024	5:00	0.9	22.5	15/02/2024	5:00	0.4	67.5	16/02/2024	5:00	0.9	67.5
13/02/2024	6:00	0.4	90	14/02/2024	6:00	0.9	90	15/02/2024	6:00	0.9	67.5	16/02/2024	6:00	0.4	112.5
13/02/2024	7:00	0.4	112.5	14/02/2024	7:00	0.9	180	15/02/2024	7:00	0.9	67.5	16/02/2024	7:00	0.9	112.5
13/02/2024	8:00	0.4	112.5	14/02/2024	8:00	0.9	270	15/02/2024	8:00	0.9	45	16/02/2024	8:00	1.8	22.5
13/02/2024	9:00	0.4	112.5	14/02/2024	9:00	0.9	157.5	15/02/2024	9:00	1.3	90	16/02/2024	9:00	0.9	22.5
13/02/2024	10:00	0.4	135	14/02/2024	10:00	0.9	67.5	15/02/2024	10:00	0.9	45	16/02/2024	10:00	2.2	90
13/02/2024	11:00	0.4	112.5	14/02/2024	11:00	0.4	90	15/02/2024	11:00	0.9	270	16/02/2024	11:00	1.3	22.5
13/02/2024	12:00	0.4	112.5	14/02/2024	12:00	0.9	22.5	15/02/2024	12:00	0.9	270	16/02/2024	12:00	1.3	22.5
13/02/2024	13:00	0.4	67.5	14/02/2024	13:00	0.9	90	15/02/2024	13:00	0.9	90	16/02/2024	13:00	1.8	90
13/02/2024	14:00	0.9	112.5	14/02/2024	14:00	0.9	45	15/02/2024	14:00	1.3	22.5	16/02/2024	14:00	0.9	135
13/02/2024	15:00	0.9	112.5	14/02/2024	15:00	1.3	90	15/02/2024	15:00	0.4	67.5	16/02/2024	15:00	0.9	157.5
13/02/2024	16:00	0.4	112.5	14/02/2024	16:00	0.9	22.5	15/02/2024	16:00	0.9	112.5	16/02/2024	16:00	1.3	112.5
13/02/2024	17:00	0.4	112.5	14/02/2024	17:00	1.3	225	15/02/2024	17:00	0.4	225	16/02/2024	17:00	1.8	90
13/02/2024	18:00	0.9	90	14/02/2024	18:00	1.3	135	15/02/2024	18:00	0.9	270	16/02/2024	18:00	0.9	90
13/02/2024	19:00	0.4	112.5	14/02/2024	19:00	0.4	315	15/02/2024	19:00	0.4	247.5	16/02/2024	19:00	0.9	337.5
13/02/2024	20:00	0.4	112.5	14/02/2024	20:00	0.4	157.5	15/02/2024	20:00	0.4	225	16/02/2024	20:00	0.9	225
13/02/2024	21:00	0.4	112.5	14/02/2024	21:00	0.9	225	15/02/2024	21:00	0.9	247.5	16/02/2024	21:00	0.4	270
13/02/2024	22:00	0.9	135	14/02/2024	22:00	0.4	90	15/02/2024	22:00	0.9	225	16/02/2024	22:00	1.3	337.5
13/02/2024	23:00	0.4	112.5	14/02/2024	23:00	0.9	67.5	15/02/2024	23:00	0.9	225	16/02/2024	23:00	0.9	112.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
17/02/2024	0:00	1.3	90	18/02/2024	0:00	0.9	112.5	19/02/2024	0:00	0.4	112.5	20/02/2024	0:00	0.9	112.5
17/02/2024	1:00	0.9	135	18/02/2024	1:00	0.9	135	19/02/2024	1:00	0.4	135	20/02/2024	1:00	0.9	90
17/02/2024	2:00	0.9	22.5	18/02/2024	2:00	0.9	112.5	19/02/2024	2:00	0.4	112.5	20/02/2024	2:00	0.4	157.5
17/02/2024	3:00	1.8	180	18/02/2024	3:00	0.9	112.5	19/02/2024	3:00	0.4	90	20/02/2024	3:00	0.9	157.5
17/02/2024	4:00	1.8	112.5	18/02/2024	4:00	0.4	112.5	19/02/2024	4:00	0.9	90	20/02/2024	4:00	0.9	157.5
17/02/2024	5:00	1.3	135	18/02/2024	5:00	0.9	112.5	19/02/2024	5:00	0.4	337.5	20/02/2024	5:00	0.4	135
17/02/2024	6:00	1.3	112.5	18/02/2024	6:00	0.9	112.5	19/02/2024	6:00	0.9	22.5	20/02/2024	6:00	0.4	112.5
17/02/2024	7:00	0.9	90	18/02/2024	7:00	1.3	135	19/02/2024	7:00	0.9	337.5	20/02/2024	7:00	0.4	90
17/02/2024	8:00	0.9	112.5	18/02/2024	8:00	0.9	112.5	19/02/2024	8:00	0.9	112.5	20/02/2024	8:00	0.9	90
17/02/2024	9:00	1.3	90	18/02/2024	9:00	0.9	247.5	19/02/2024	9:00	0.9	180	20/02/2024	9:00	0.4	337.5
17/02/2024	10:00	1.3	112.5	18/02/2024	10:00	0.4	112.5	19/02/2024	10:00	0.4	247.5	20/02/2024	10:00	0.9	22.5
17/02/2024	11:00	0.9	112.5	18/02/2024	11:00	0	112.5	19/02/2024	11:00	1.3	90	20/02/2024	11:00	0.9	337.5
17/02/2024	12:00	0.9	112.5	18/02/2024	12:00	0.4	135	19/02/2024	12:00	1.3	247.5	20/02/2024	12:00	0.9	112.5
17/02/2024	13:00	0.4	112.5	18/02/2024	13:00	0.9	112.5	19/02/2024	13:00	1.3	225	20/02/2024	13:00	0.9	180
17/02/2024	14:00	0.4	90	18/02/2024	14:00	1.3	112.5	19/02/2024	14:00	0.9	292.5	20/02/2024	14:00	0.4	247.5
17/02/2024	15:00	0.4	112.5	18/02/2024	15:00	0.9	90	19/02/2024	15:00	0.4	292.5	20/02/2024	15:00	1.3	90
17/02/2024	16:00	0.9	292.5	18/02/2024	16:00	0.4	90	19/02/2024	16:00	1.3	292.5	20/02/2024	16:00	1.3	247.5
17/02/2024	17:00	0.9	22.5	18/02/2024	17:00	0.9	112.5	19/02/2024	17:00	0.9	292.5	20/02/2024	17:00	1.3	225
17/02/2024	18:00	0.9	22.5	18/02/2024	18:00	1.3	112.5	19/02/2024	18:00	1.8	270	20/02/2024	18:00	0.9	112.5
17/02/2024	19:00	0.9	22.5	18/02/2024	19:00	0.9	225	19/02/2024	19:00	0.4	315	20/02/2024	19:00	1.3	112.5
17/02/2024	20:00	0.9	67.5	18/02/2024	20:00	0.4	180	19/02/2024	20:00	0.4	247.5	20/02/2024	20:00	0.9	112.5
17/02/2024	21:00	0.4	45	18/02/2024	21:00	0.4	180	19/02/2024	21:00	1.3	270	20/02/2024	21:00	0.9	135
17/02/2024	22:00	0.4	90	18/02/2024	22:00	0.4	112.5	19/02/2024	22:00	0.9	0	20/02/2024	22:00	0.4	112.5
17/02/2024	23:00	0.9	112.5	18/02/2024	23:00	0.4	135	19/02/2024	23:00	1.3	45	20/02/2024	23:00	0.4	247.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
21/02/2024	0:00	1.3	112.5	22/02/2024	0:00	0.4	112.5	23/02/2024	0:00	0.4	112.5	24/02/2024	0:00	0.9	135
21/02/2024	1:00	1.3	112.5	22/02/2024	1:00	0.4	90	23/02/2024	1:00	0.9	112.5	24/02/2024	1:00	0.9	90
21/02/2024	2:00	0.9	135	22/02/2024	2:00	0.4	112.5	23/02/2024	2:00	0.9	112.5	24/02/2024	2:00	0.4	90
21/02/2024	3:00	0.9	135	22/02/2024	3:00	1.3	225	23/02/2024	3:00	0.4	157.5	24/02/2024	3:00	1.3	67.5
21/02/2024	4:00	0.9	135	22/02/2024	4:00	0.9	270	23/02/2024	4:00	0.4	22.5	24/02/2024	4:00	0.9	45
21/02/2024	5:00	0.4	135	22/02/2024	5:00	0.9	247.5	23/02/2024	5:00	0.4	270	24/02/2024	5:00	0.9	90
21/02/2024	6:00	1.3	90	22/02/2024	6:00	0.4	270	23/02/2024	6:00	0.4	225	24/02/2024	6:00	0.9	90
21/02/2024	7:00	1.3	90	22/02/2024	7:00	0.4	67.5	23/02/2024	7:00	0.9	67.5	24/02/2024	7:00	0.9	112.5
21/02/2024	8:00	0.9	112.5	22/02/2024	8:00	0.9	112.5	23/02/2024	8:00	0.9	157.5	24/02/2024	8:00	0.9	135
21/02/2024	9:00	0.9	90	22/02/2024	9:00	1.3	90	23/02/2024	9:00	0.9	315	24/02/2024	9:00	0.9	112.5
21/02/2024	10:00	0.9	90	22/02/2024	10:00	0.9	337.5	23/02/2024	10:00	0.4	90	24/02/2024	10:00	0.9	112.5
21/02/2024	11:00	0.9	45	22/02/2024	11:00	1.3	135	23/02/2024	11:00	0.4	45	24/02/2024	11:00	0.9	112.5
21/02/2024	12:00	0.9	112.5	22/02/2024	12:00	1.8	67.5	23/02/2024	12:00	0.9	90	24/02/2024	12:00	0.9	112.5
21/02/2024	13:00	0.9	90	22/02/2024	13:00	0.9	135	23/02/2024	13:00	1.3	90	24/02/2024	13:00	0.9	112.5
21/02/2024	14:00	0.4	90	22/02/2024	14:00	1.3	292.5	23/02/2024	14:00	1.8	90	24/02/2024	14:00	0.9	112.5
21/02/2024	15:00	0.9	90	22/02/2024	15:00	1.3	247.5	23/02/2024	15:00	1.3	67.5	24/02/2024	15:00	1.3	112.5
21/02/2024	16:00	1.3	135	22/02/2024	16:00	0.9	45	23/02/2024	16:00	1.3	90	24/02/2024	16:00	1.3	112.5
21/02/2024	17:00	1.8	135	22/02/2024	17:00	0.9	247.5	23/02/2024	17:00	1.3	45	24/02/2024	17:00	0.9	112.5
21/02/2024	18:00	1.3	112.5	22/02/2024	18:00	0.9	337.5	23/02/2024	18:00	0.4	202.5	24/02/2024	18:00	0.9	135
21/02/2024	19:00	1.3	90	22/02/2024	19:00	0.9	45	23/02/2024	19:00	0.9	67.5	24/02/2024	19:00	0.9	112.5
21/02/2024	20:00	1.3	90	22/02/2024	20:00	1.3	22.5	23/02/2024	20:00	0.4	90	24/02/2024	20:00	0.9	90
21/02/2024	21:00	1.3	202.5	22/02/2024	21:00	0.9	112.5	23/02/2024	21:00	0.9	90	24/02/2024	21:00	1.3	90
21/02/2024	22:00	2.2	112.5	22/02/2024	22:00	0.9	112.5	23/02/2024	22:00	0.9	135	24/02/2024	22:00	0.4	112.5
21/02/2024	23:00	1.3	112.5	22/02/2024	23:00	0.9	135	23/02/2024	23:00	0.4	135	24/02/2024	23:00	0.9	112.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
25/02/2024	0:00	0.9	112.5	26/02/2024	0:00	0.9	90	27/02/2024	0:00	0.9	90	28/02/2024	0:00	0.9	225
25/02/2024	1:00	0.9	112.5	26/02/2024	1:00	0.9	112.5	27/02/2024	1:00	0.9	90	28/02/2024	1:00	0.4	112.5
25/02/2024	2:00	1.3	45	26/02/2024	2:00	0.9	112.5	27/02/2024	2:00	0.9	90	28/02/2024	2:00	0.9	67.5
25/02/2024	3:00	0.4	45	26/02/2024	3:00	0.9	112.5	27/02/2024	3:00	1.3	67.5	28/02/2024	3:00	0.4	135
25/02/2024	4:00	0.9	45	26/02/2024	4:00	0.4	90	27/02/2024	4:00	0.9	67.5	28/02/2024	4:00	0.4	157.5
25/02/2024	5:00	0.9	90	26/02/2024	5:00	0.4	90	27/02/2024	5:00	0.9	135	28/02/2024	5:00	0.4	157.5
25/02/2024	6:00	1.3	337.5	26/02/2024	6:00	1.3	112.5	27/02/2024	6:00	0.4	135	28/02/2024	6:00	0.4	112.5
25/02/2024	7:00	0.9	67.5	26/02/2024	7:00	0.9	112.5	27/02/2024	7:00	0.4	135	28/02/2024	7:00	0.4	112.5
25/02/2024	8:00	0.9	337.5	26/02/2024	8:00	0.9	90	27/02/2024	8:00	0.4	90	28/02/2024	8:00	0.4	112.5
25/02/2024	9:00	0.9	112.5	26/02/2024	9:00	0.9	112.5	27/02/2024	9:00	0.9	292.5	28/02/2024	9:00	0.9	180
25/02/2024	10:00	0.9	22.5	26/02/2024	10:00	0.9	112.5	27/02/2024	10:00	0.9	247.5	28/02/2024	10:00	0.9	112.5
25/02/2024	11:00	1.3	67.5	26/02/2024	11:00	0.4	112.5	27/02/2024	11:00	0.9	270	28/02/2024	11:00	0.4	90
25/02/2024	12:00	0.9	90	26/02/2024	12:00	0.4	135	27/02/2024	12:00	0.9	270	28/02/2024	12:00	0.4	135
25/02/2024	13:00	0.9	90	26/02/2024	13:00	1.3	112.5	27/02/2024	13:00	0.4	67.5	28/02/2024	13:00	0.4	90
25/02/2024	14:00	0.9	90	26/02/2024	14:00	0.4	90	27/02/2024	14:00	0.4	67.5	28/02/2024	14:00	0.4	90
25/02/2024	15:00	0.4	135	26/02/2024	15:00	0.9	90	27/02/2024	15:00	0.9	112.5	28/02/2024	15:00	0.4	112.5
25/02/2024	16:00	0.4	135	26/02/2024	16:00	0.9	112.5	27/02/2024	16:00	0.9	90	28/02/2024	16:00	0.9	112.5
25/02/2024	17:00	0.9	135	26/02/2024	17:00	0.4	90	27/02/2024	17:00	0.4	90	28/02/2024	17:00	0.9	112.5
25/02/2024	18:00	0.9	337.5	26/02/2024	18:00	1.3	112.5	27/02/2024	18:00	0.9	112.5	28/02/2024	18:00	1.3	157.5
25/02/2024	19:00	0.9	135	26/02/2024	19:00	0.9	112.5	27/02/2024	19:00	1.3	45	28/02/2024	19:00	1.3	67.5
25/02/2024	20:00	0.9	112.5	26/02/2024	20:00	0.9	112.5	27/02/2024	20:00	0.9	67.5	28/02/2024	20:00	0.9	45
25/02/2024	21:00	0.4	112.5	26/02/2024	21:00	1.3	90	27/02/2024	21:00	0.4	135	28/02/2024	21:00	0.9	67.5
25/02/2024	22:00	0.9	112.5	26/02/2024	22:00	1.3	225	27/02/2024	22:00	0.4	90	28/02/2024	22:00	0.4	90
25/02/2024	23:00	0.4	112.5	26/02/2024	23:00	1.3	225	27/02/2024	23:00	0.9	90	28/02/2024	23:00	0.9	112.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/02/2024	0:00	0.4	112.5												
29/02/2024	1:00	1.3	22.5												
29/02/2024	2:00	1.3	45												
29/02/2024	3:00	0.9	90												
29/02/2024	4:00	1.3	180												
29/02/2024	5:00	1.3	135												
29/02/2024	6:00	0.9	112.5												
29/02/2024	7:00	0.9	225												
29/02/2024	8:00	1.3	157.5												
29/02/2024	9:00	1.3	247.5												
29/02/2024	10:00	0.9	270												
29/02/2024	11:00	1.3	247.5												
29/02/2024	12:00	0.9	270												
29/02/2024	13:00	0.4	247.5												
29/02/2024	14:00	0.9	225												
29/02/2024	15:00	1.3	247.5												
29/02/2024	16:00	0.9	247.5												
29/02/2024	17:00	0.9	247.5												
29/02/2024	18:00	0.4	225												
29/02/2024	19:00	0.4	270												
29/02/2024	20:00	0.4	247.5												
29/02/2024	21:00	0.4	247.5												
29/02/2024	22:00	0.9	90												
29/02/2024	23:00	0.4	135												

Appendix H-24-hr TSP monitoring results and graphical presentation

Location: AM3 – Sky Tower

Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter we	eight (g)	Particulate	Elapse	e Time	Sampling Time	Flow (cf		Av. Flow	Total vol.	Conc.
		(°C)	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m ³ /min)	(m^3)	$(\mu g/m^3)$
02/02/2024	Cloudy	23.4	1017.6	18.1774	18.2552	0.0778	2024/2/2 9:24	2024/2/3 9:24	1440.0	50	50	1.38	1989	39
08/02/2024	Cloudy	14.6	1018.8	18.3547	18.4165	0.0618	2024/2/8 13:32	2024/2/9 13:32	1440.0	50	50	1.40	2021	31
14/02/2024	Sunny	25.3	1020.2	18.1914	18.2583	0.0669	2024/2/14 9:28	2024/2/15 9:28	1440.0	50	50	1.39	1997	34
20/02/2024	Sunny	22.8	1014.7	15.1999	15.3024	0.1025	2024/2/20 13:37	2024/2/21 13:37	1440.0	50	50	1.39	2000	51
26/02/2024	Cloudy	17.6	1021.1	14.3179	14.4151	0.0972	2024/2/26 9:36	2024/2/27 9:36	1440.0	50	50	1.41	2025	48

Maximum	51
Minimum	31
Average	40
Action Level	182
Limit Level	260

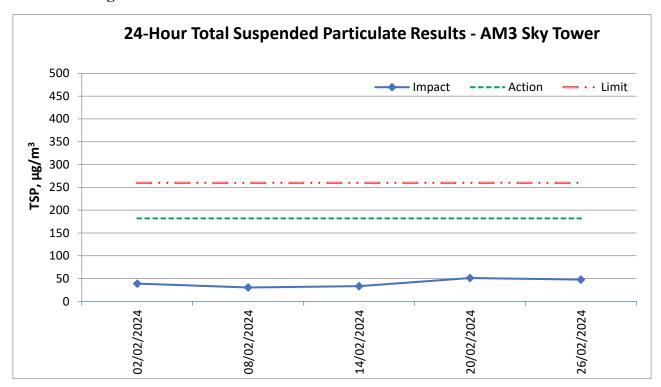
Location: AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. No 24-TSP monitoring was conducted at AM4(A) ET will resume the impact monitoring once the alternative monitoring location for AM4(A) is confirmed.

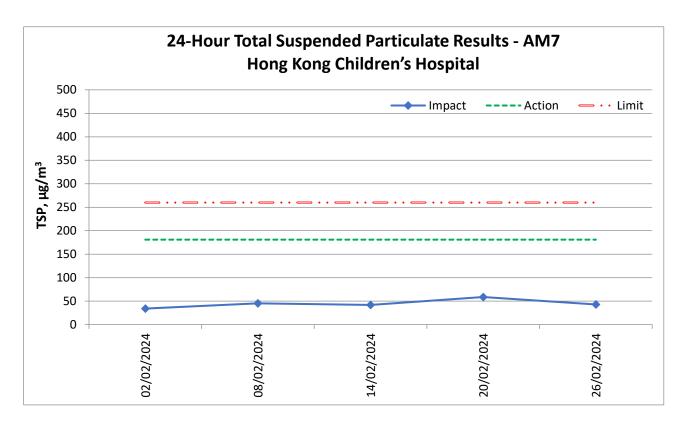
Location: AM7 – Hong Kong Children's Hospital

Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter w	eight (g)	Particulate	Elapse	Time	Sampling Time	Flow (cf		Av. Flow	Total vol.	Conc.
		(°C)	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m³/min)	(m^3)	$(\mu g/m^3)$
02/02/2024	Cloudy	23.4	1017.6	18.3124	18.3825	0.0701	2024/2/2 9:34	2024/2/3 9:34	1440.0	50	50	1.42	2047	34
08/02/2024	Cloudy	14.6	1018.8	14.3611	14.4553	0.0942	2024/2/8 13:35	2024/2/9 13:35	1440.0	50	50	1.44	2080	45
14/02/2024	Sunny	25.3	1020.2	18.3649	18.4503	0.0854	2024/2/14 9:26	2024/2/15 9:26	1440.0	50	50	1.42	2042	42
20/02/2024	Sunny	22.8	1014.7	14.3607	14.4955	0.1348	2024/2/20 13:39	2024/2/21 13:39	1440.0	56	56	1.59	2291	59
26/02/2024	Cloudy	17.6	1021.1	14.2923	14.3849	0.0926	2024/2/26 9:51	2024/2/27 9:51	1440.0	52	52	1.49	2153	43

24-hour average TSP



Note: Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. No 24-TSP monitoring was conducted at AM4(A). ET will resume the impact monitoring once the alternative monitoring location for AM4(A) is confirmed.



Appendix 1 – 1-hr 1SP monitoring results and graphical presentation

Location:
AM3 Sky Tower

Date	Measure	eme	nt Period	1-hr TSP concentration, g/m ³	Weather			
	9:00	-	10:00	28				
02/02/2024	10:00	-	11:00	32	Cloudy			
	11:00	-	12:00	34				
	13:00	-	14:00	40				
08/02/2024	14:00	-	15:00	43	Cloudy			
	15:00	-	16:00	46				
	9:00	-	10:00	33				
14/02/2024	10:00	-	11:00	39	Sunny			
	11:00	-	12:00	37				
	13:00	-	14:00	64				
20/02/2024	14:00	-	15:00	58	Sunny			
	15:00	1	16:00	61				
	9:00	-	10:00	46				
26/02/2024	10:00	-	11:00	51	Cloudy			
	11:00	-	12:00	52				
N	1aximum	1		64				
N	//inimum	-		28				
	Average			44				
Ac	tion Lev	el		297				
Li	mit Leve	:1		500				

Date Measurement Period 1-hr TSP concentration, μg/m³ Weather 14:00 39 13:00 Location: 14:00 15:00 41 02/02/2024 Cloudy AM4(A) -15:00 16:00 41 The Hong Kong 9:00 10:00 48 Society for the 08/02/2024 10:00 11:00 52 Cloudy Blind's Factory 54 cum **Sheltered** 11:00 12:00 Workshop 13:00 14:00 56 14/02/2024 14:00 15:00 59 Sunny 15:00 16:00 54 9:00 10:00 71 20/02/2024 10:00 11:00 74 Sunny 12:00 75 11:00 63 14:30 15:30 26/02/2024 15:30 16:30 67 Cloudy 16:30 17:30 67 75 Maximum Minimum 39

NOTE: Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since1 Sept 2022. 1-hr TSP monitoring at AM4(A) were conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for AM4(A) is confirmed.

57

326

500

Average

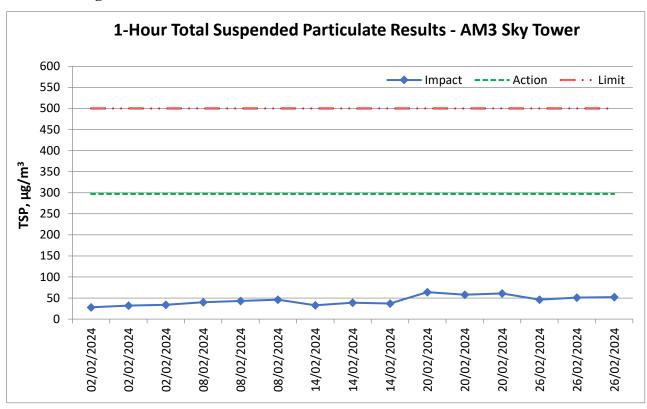
Action Level

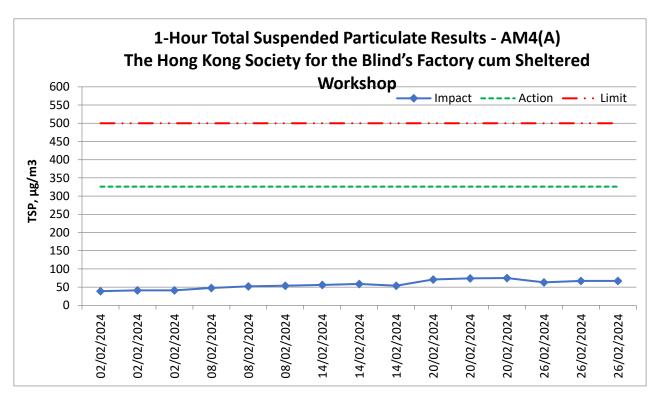
Limit Level

Location:
AM7 Hong Kong
Children's
Hospital

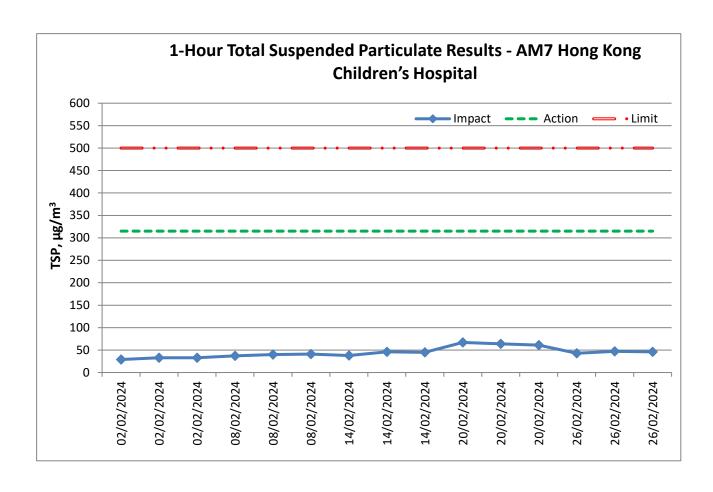
	Date	Measure	mei	nt Period	1-hr TSP concentration, μg/m ³	Weather			
		9:00	-	10:00	29				
	02/02/2024	10:00	-	11:00	33	Sunny			
5		11:00	-	12:00	33				
		13:00	-	14:00	37				
	08/02/2024	14:00	-	15:00	40	Sunny			
		15:00	-	16:00	41				
		9:00	-	10:00	38				
	14/02/2024	/2024 10:00		11:00	46	Cloudy			
		11:00	-	12:00	45				
		13:00	-	14:00	67				
	20/02/2024	14:00	-	15:00	64	Cloudy			
		15:00	-	16:00	61				
		9:30	-	10:30	43				
	26/02/2024	10:30	-	11:30	47	Sunny			
		13:00	-	14:00	46				
	N	Maximum			67				
	1	Minimum			29				
		Average			45				
		ction Leve			315				
	L	imit Leve	1		500				

1-hour average TSP





NOTE: Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (AM4(A)), the premises owner rejected ET to conduct impact monitoring since1 Sept 2022. 1-hr TSP monitoring at AM4(A) were conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for AM4(A) is confirmed.



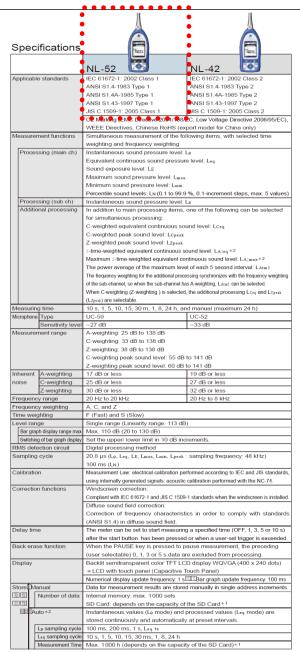
Appendix J – Event and Action Plan for air quality

F	Action						
Event	ET	IEC	Supervisor / ER	Contractor			
Action Level being exceeded by one sampling	 Identify source and investigate the causes of exceedance; Inform Contractor, IEC and Supervisor /ER; Repeat measurement to confirm finding. 	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	 Rectify any unacceptable practice; Amend working methods if appropriate. 			
Action Level being exceeded by two or more consecutive	Identify source and investigate the causes of exceedance;	 Check monitoring data submitted by ET; Check Contractor's 	Confirm receipt of notification of exceedance in writing;	on proper remedial actions;			
sampling	2. Inform Contractor, IEC and Supervisor /ER;	working method; 3. Discuss with ET and	2. Notify Contractor;3. In consolidation with the	2. Submit proposals for remedial actions to			
	3. Increase monitoring frequency to daily;	remedial measures;	IEC, agree with the Contractor on the remedial	Supervisor /ER and IEC within three working day			
	4. Discuss with IEC and Contractor on remedial actions required;	4. Advise the Supervisor /ER on the effectiveness of the proposed remedial	measures to be implemented; 4. Supervise implementation	of notification; 3. Implement the agreed proposals;			
	5. Assess the effectiveness of Contractor's remedial actions;	measures.	of remedial measures; 5. Conduct meeting with ET and IEC if exceedance	4. Amend proposal if appropriate.			
	6. If exceedance continues, arrange meeting with IEC and Supervisor /ER;		continues.				
	7. If exceedance stops, cease additional monitoring.						
Limit Level being exceeded by one	1. Identify source and investigate the causes of	\mathcal{E}	1. Confirm receipt of notification of exceedance	1. Take immediate action to avoid further exceedance;			
sampling	exceedance; 2. Inform Contractor, IEC,	2. Check Contractor's working method;	in writing; 2. Notify Contractor;	2. Discuss with ET and IEC on proper remedial			
	Supervisor /ER, and EPD; 3. Repeat measurement to confirm finding;	3. Discuss possible remedial measures with ET and Contractor;	3. In consolidation with the IEC, agree with the Contractor on the remedial	actions; 3. Submit proposal for remedial actions to			
	C,	4. Advise the Supervisor /ER	measures to be	Supervisor /ER and IEC			

F. 4	Action					
Event	ET	IEC	Supervisor / ER	Contractor		
	Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results.	on the effectiveness of the proposed remedial measures.	 implemented; Supervise implementation of remedial measures; Conduct meeting with ET and IEC if exceedance continues. 	within three working days of notification; 4. Implement the agreed proposals.		
Limit Level being exceeded by two or more consecutive sampling	 Notify IEC, Supervisor /ER, Contractor and EPD; Repeat measurement to confirm findings; Carry out analysis of Contractor's working procedures to identify source and investigate the causes of exceedance; Increase monitoring frequency to daily; Arrange meeting with IEC, Supervisor /ER and Contractor to discuss the remedial action to be taken; Assess effectiveness of Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results; If exceedance stop, cease additional monitoring. 	submitted by ET; 2. Check Contractor's working method; 3. Discuss with Supervisor /ER, ET, and Contractor on the potential remedial actions; 4. Review Contractor's remedial actions whenever necessary to assure their	 Confirm receipt of notification of exceedance in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; Supervise implementation of remedial measures; If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. 	 Take immediate action to avoid further exceedance; Discuss with ET and IEC on proper remedial actions; Submit proposal for remedial actions to Supervisor /ER and IEC within three working days of notification; Implement the agreed proposals; Submit further remedial actions if problem still not under control; Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated. 		

 $\label{eq:continuous_problem} \begin{tabular}{ll} Appendix $K-$ Calibration certificates, catalogue of noise monitoring equipment \end{tabular}$

Catalogue of Sound Level Meter



Data r	ecall	Allows viewing of stored data			
Setup	memory	Up to five setup configurations can be saved in internal memory, for later recall			
,		Start up via file settings previously stored on SD card possible			
Wavefe	orm recording *3	Start up the me column provinces y stored on the start possible			
_	format	Uncompressed waveform WAVE file			
	mpling frequency	Select 48 kHz, 24 kHz or 12 kHz			
	ta length	Select 24 bit or 16 bit			
	DC output	Output DC signals using a frequency weighting characteristic selected by processing			
Outputs	Output voltage	2.5 V. 25 mV / dB at bar graph display full scale			
	AC output	Output AC signals using a frequency weighting characteristic selected by			
	AC output	processing or by A, C, Z-weighting.			
	Output voltage	1 V (rms values) at bar graph display full scale			
	Comparator	Turns on when the open-collector output exceeds the set value			
	output*2	(max. applied voltage 24 V. max. current 60 mA, allowable dissipation 300 mW).			
USB					
		Allows USB to be connected to a computer and recognized as a removable disl			
50 50 5		Allows USB to be controlled via communication commands			
	32C communication	Allows for RS-232C communication via use of a dedicated cable			
_	continuous output*2				
	oe of Instantaneous value				
dat	1 10000000 14140	Leq, Lmax, Lmin, Lpeak			
Ou	tput interval	100 ms			
Print o	out	Printing of measurement results on dedicated printer DPU-414			
Powe	r requirements	Four IEC R6 (size AA) batteries (alkaline or rechargeable batteries) or external power supply			
Ba	ttery life (23 ℃)	Alkaline battery LR6 (AA): 26 h Ni-MH secondary battery: 25 h			
		At the maximum * Depends on the setting			
AC	adapter	NC-98C (NC-34 for previous models cannot be used)			
Ext	emal power voltage	5 to 7 V (rated voltage: 6 V)			
Cu	rrent consumption	Approximately 90 mA (normal operation, rated voltage)			
Ambie	nt Temperature	−10 to +50 °C			
condit	ions Humidity	10 to 90 % RH (non-condensing)			
Dustpi	roof / water-resistant	IP code: IP54 (except for microphone)			
perfor	mance * 4	See precautions regarding waterproofing			
Dimer	nsions, weight	Approx. 250 (H) x 76 (W) x 33 mm(D), approx. 400 g (with batteries)			
	ied accessories	Storage case x 1, Windscreen WS-10 x 1, Windscreen fall prevention rubber x 1,			
		Hand strap x 1, LR6 (AA) alkaline batteries x 4, SD card 512 MB×1 (NX-42EX			
		preinstalled model only)			

Options

Product name	Product number
Extended function program (Inst.on 512 MB SD card)	NX-42EX
Waveform recording program*2 (Inst.on 2 GB SD card)	NX-42WR
Octave, 1/3 octave real-time analysis program*2 (Inst.on 512 MB SD card)	NX-42RT
FFT analysis program *2 (Inst.on 512 MB SD card)	NX-42FT
Data management software for environmental measurement	AS-60
Data management software for environmental measurement (Includes the octave and 1/3 octave data management software)	AS-60RT
Data management software for environmental measurement (Includes the vibration level data management software)	AS-60∨M
Waveform analysis software	CAT-WAVE
SD Card 512 MB	SD-512M
SD Card 2 GB	SD-2G
AC adapter (100 ∨ to 240 ∨)	NC-98C
Battery pack	BP-21
Microphone extension cables	EC-04 (from 2 m)
BNC-Pin output code	CC-24
Comparator output cable	CC-42C
Printer	DPU-414
Printer cable	CC-42P
RS 232C serial I/O cable	CC-42R
USB cable	_
Sound calibrator	NC-74
All-weather windscreen	WS-15
Windscreen mounting adapter	WS-15006
Rain-protection windscreen	WS-16
Sound level meter tripod	ST-80
All-weather windscreen tripod	ST-81

*1 Use Rion fully guaranteed products. *2 NX-42EX required (sold separately). *3 NX-42WR required (sold separately *4 Protection against harmful dust and water splashing from any direction.

Precautions regarding waterproofing

Before use, verify that the rubber bottom cover and the battery compartment lid are firmly closed. To maintain the water and dust proof rating, internal packing replacement is required every two years (at cost



- * Windows is a trademark of Microsoft Corporation.
- * Specifications subject to change without notice.

Distributed by:

Te blicy.

RION CO., LTD.

3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442

This product is environment-friendly. It does not include toxic chemicals on our policy.

This product is certified to an International Protection rating of IP54 (dust protected and resistant to splashing water).
This leaffet is printed with environmentally friendly vegetable-based ink on recycled paper.

1011-4 🖾 1212.P.D

Calibration Certificate of Sound Level Meter



中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CEPREI CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE

CALIBRATION CERTIFICATE

证书编号: 2HB23001488-0004 Certificate No.



委托单位: Client	Castco Testing Centre Limited		
仪器名称: Description		Sound Level Meter	
型号规格:		NL-52	
Model/Type 制造商: Manufacturer	<u>//A</u>	RION	
机身号: Serial No.		01287681	
管理号: Asset No.		AAST-SLM-12	
接收日期: Rec. Date	2023-07-28	_ 校准日期: _ Cal. Date	2023-08-07
签发日期:	2023-08-08	建议校准周期: Reference Cal. Perio	12个月(12 months)
App. Date 结论: Conclusion	所校准项目符合技术要求	求(The calibrated items meet th	

Calibrated by

赛宝计量检测中心

投诉电话: 020-87236896

同址: www.ceprei-cal.com

邮件: cal@ceprei.com

签发: Approved by

总部地址:广州市增城区朱村街朱村大道西78号 实验室地址:广州市增城区朱村街朱村大道西78号 客服电话: 020-87237633 传真: 020-87236189 CEPREI Calibration and Testing Centre HQ Addr: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Add. of the Lab: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Service Tel: 020-87237633 Fax: 020-87236189 Complaint Tel: 020-87236896

Email: cal@ceprei.com Website: www.ceprei-cal.com

印章:

Stamp

第1页,共9页 Page of

DIRECTIONS

1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS) 认可, 认可证书号为: CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

2. 本机构出具的数据均可溯源到国际单位制(SI)单位和社会公用计量标准。

The data issued by this laboratory is traceable to International system of Units (SI) and national primary standards.

- 3. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):
- * JJG 188-2017 声级计检定规程: Sound pressure level: (20~130)dB: Frequency Weighting: (20~130)dB, (10
- · IFEIR分离 · IFEIR分离网络中注层编号为L13344的证书附件。超出范围的内容未被认可,其结果结论所依据的合格评定活动不在认可 范围角。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the result/econclusions are based are outside the scope of accreditation.)

4. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration): 证书号/有效期/溯源单位 技术指标

(Description)	(Certificate No./Due Date/Traceability to)	(Specification)	(Measuring Range)
093)	GFJGJL1001230304187/2024-04-13/航空 304所	U=(0.05~0.20)dB (k=2)	10Hz~20kHz
正弦信号发生器(243165	4GC22000542-0057/2023-10-26/賽宝(广州)	f: ±1mHz; 失真度 Distortion: <-70dB	f: 0.001Hz~200kHz; <i>U</i> : 100µV~5Vrms
	4GC22000429-0039/2023-08-29/賽宝(广州)		10Hz~50kHz
数字多用表(MY5300648 3)	4GC22000447-0003/2023-09-26/賽宝(广州)	0.06%; DCI: ±0.05%; ACI	$\begin{array}{lll} DCV:(0-1000)V; & ACV \\ :(0.001-750)V@(3Hz\sim \\ 300kHz); & DCI:(0-3)A \\ : & ACI:(0-3)A@(3Hz\sim \\ 5kHz); & R:(0-100)M\Omega \\ : & f:3Hz\sim 300kHz \end{array}$
	The second secon	also also advanta a service also sale sales sales	2011 - 501-11-

功率放大器(2536312) 4GC22000600-0093/2023-11-30/賽宝(广州) 频率响应: ±1dB, 失真度 20Hz~50kHz

3月本版大森(236912) : 50.2% PULSE分析系統(3160-1 dGC23000001-0137/2024-01-03/賽宝(广州) 頻車:U_{si}=0.01%_c+2:电圧: 頻率:0.001Hz-51.2kHz, U_{si}=0.10%_ck-2 电圧(1-10²⁻³0)V

5. 校准地点(The calibration place): 广州市增城区朱村街朱村大道西78号9栋110室

6. 环境条件(Environmental conditions): 温度(Temperature): 25.3℃ 相对湿度(Relative Humidity): 65%

7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标 准不确定度乘以包含概率约为95%时对应的包含因子k得到。

The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.

8. 证书中"P"、"合格"代表"测量结果在允许范围内","F"、"不合格"代表"测量结果不在允许范围内","N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。

"P" and "Pass" in this certificate stand for "Low Limit's the measured value "High Limit", "F" and "Fail" stand for "the measured value \(- Low Limit or the measured value \(- High Limit", "NA" stands for "Not Applicable or The technical specification has not been confirmed det." The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement uncertainty, etc.

第3页,共9页

Calibration Certificate of Sound Level Meter

9. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。 The reference calibration period is based on the reference documents and normal operating conditions of the calibrated instrument. It is only for reference. The client may decide the calibration period of the instrument according to the

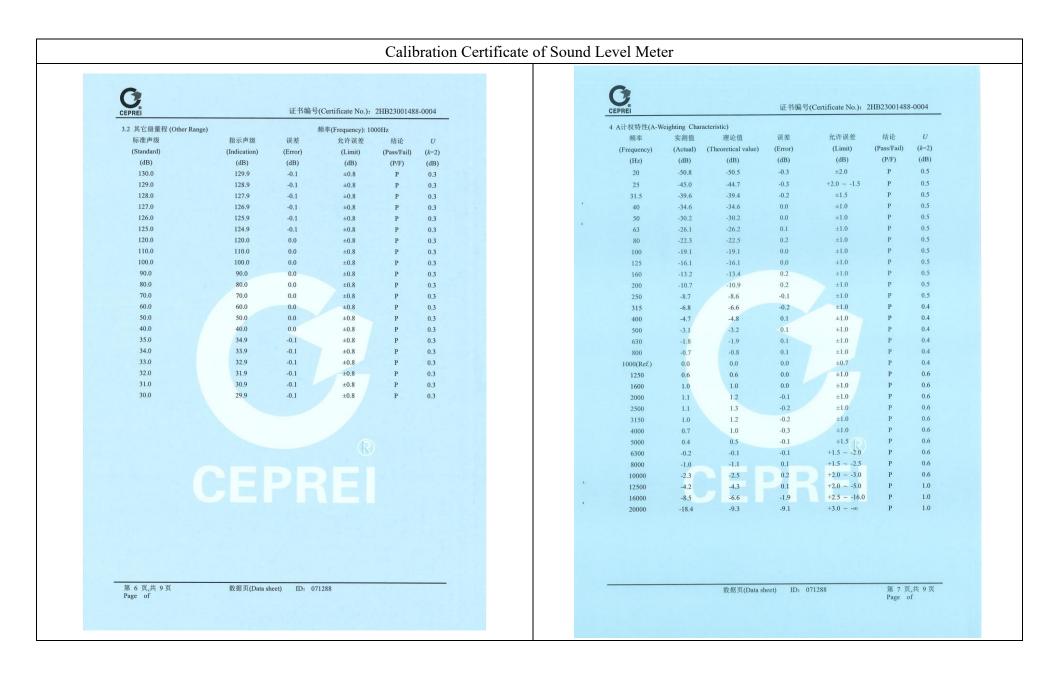


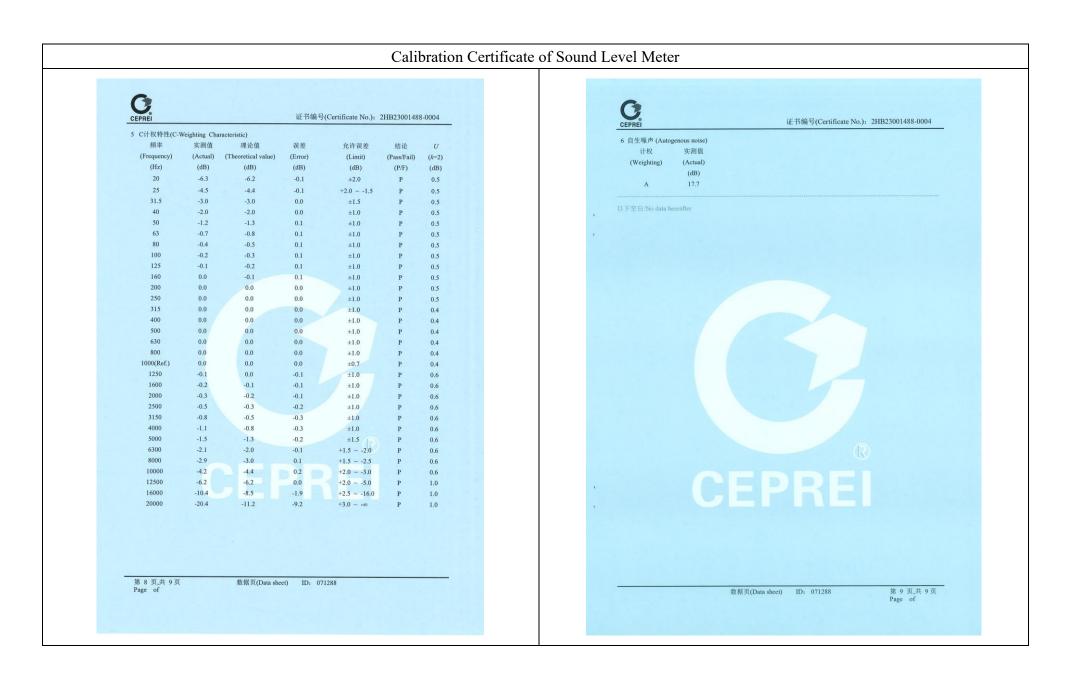
- 注: 1.本证书未经本机构书面授权,不得部分复制。(The certificate shall not be partly reproduced without written approval of the laboratory.)
- 2.本次校准结果仅与被校物有关。(The results are only related to the items calibrated.)
- 3."委托方"、"委托方联络信息"由委托方提供,"制造厂"、"型号规格"、"出厂骗号"以及"设备编号"为仪器 上标注。委托方对上面内容如有异议。须在收到证书后二十个工作目均提出 The information Client and Contact Information are provided by client, and the Manufacurer, Model/Type, Serial
- The information Client and Contact Information are provided by client, and the Manufacurer, Model/Type, Serial No. and Equipment No. are marked on the items. Client shall submit any objection within 20 working days after receiving the certificate for the information above.

第 4 页,共 9 页 Page of

actual use.







Calibration Certificate of Sound Level Meter



证书结号(Certificate No.), 2HR23001488,0003

说 明 DIRECTIONS

- 1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS)认可,认可证书号为: CNAS L13344.
- This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.
- 本机构出具的数据均可溯源到国际单位制(SI)单位和社会公用计量标准。
 The data issued by this laboratory is traceable to International system of Units (SI) and national primary standards.
- 3. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):

 "JUG 188-2017 声级计检定规程: Sound pressure level: (20~130)dB; Frequency Weighting: (20~130)dB, (10 Hz~00Hz)
- IDE 2003.12/ · 详细内答语查看CNAS网站中注册编号为L13344的证书附件。超出范围的内容未被认可,其结果结论所依据的合格评定活动不在认可 范围内。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results/conclusions are based are outside the scope of accreditation.)
- 4. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration):

名 称	业节亏/有效期/溯源单位	技术指标	侧重池围
(Description)	(Certificate No./Due Date/Traceability to)	(Specification)	(Measuring Range)
实验室标准传声器(2246 093)	GFJGJL1001230304187/2024-04-13/航空 304所	U=(0.05~0.20)dB (k=2)	10Hz~20kHz
6)	4GC22000542-0057/2023-10-26/賽宝(广州)	Distortion: <-70dB	f: 0.001Hz~200kHz; <i>U</i> : 100μV~5Vrms
	4GC22000429-0039/2023-08-29/赛宝(广州)		10Hz~50kHz
数字多用表(MY5300648 3)	4GC22000447-0003/2023-09-26/賽宝(广州)	0.06%; DCI: ±0.05%; ACI	
功率放大器(2536312)	4GC22000600-0093/2023-11-30/賽宝(广州)	频率响应: ±1dB, 失真度 : ≤0.2%	20Hz~50kHz
PULSE分析系统(3160-1 06540)	4GC23000001-0137/2024-01-03/賽宝(广州)	频率:U _{rel} =0.001%,k=2;电压: U _{rel} =0.10%,k=2	頻率:0.001Hz~51.2kHz, 电压:(1×10 ⁻⁵ ~30)V
声校准器(2272351)	4GC22000600-0073/2023-11-29/春宝(广州)	1级 First Level	31.5Hz~16kHz

- 校准地点(The calibration place): 广州市增城区朱村街朱村大道西78号9栋110室
- 6. 环境条件(Environmental conditions):
- 温度(Temperature): 25.3℃ 相对湿度(Relative Humidity): 65%
- 7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标准不确定度乘以包含概率约为95%时对应的包含因子k得到。

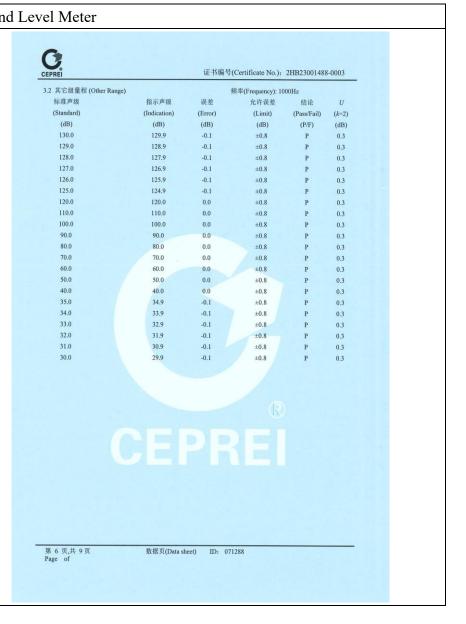
The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.

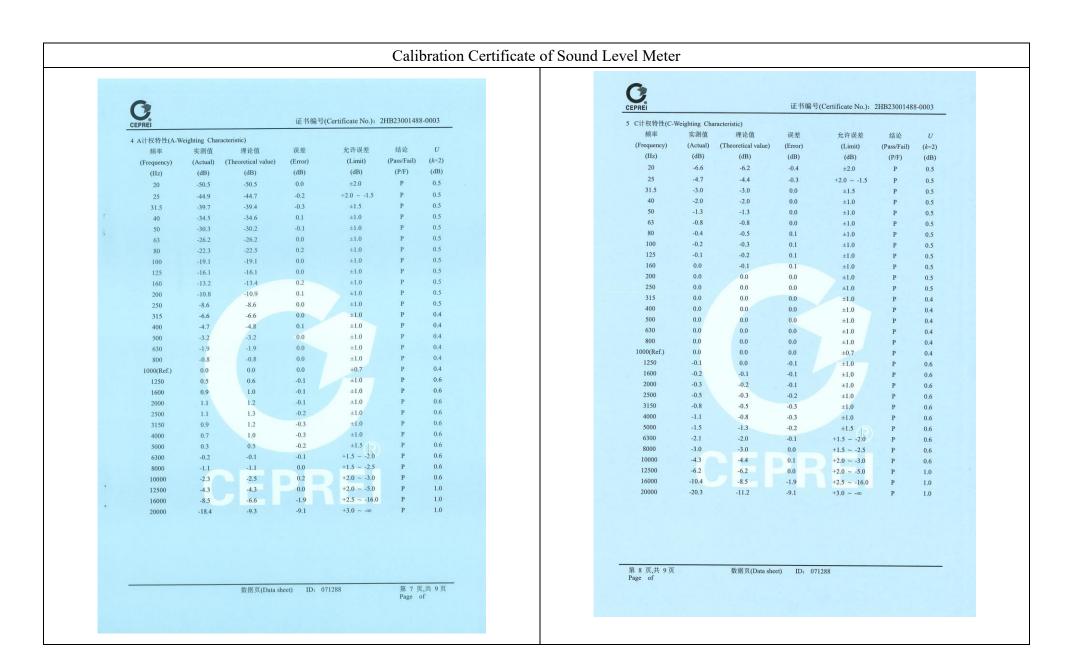
8. 证书中"P"、"合格"代表"测量结果在允许范围内"、"F"、"不合格"代表"测量结果不在允许范围内"、"N/A"代表"不适用成本情标管的无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。

"P" and "Pass" in this certificate stand for "Low Limit the measured value ≤High Limit", "F" and "Fail" stand for "the measured value ≤Low Limit or the measured value >High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc." The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement uncertainty, etc.

第 3 页,共 9 页 Page of

Calibration Certificate of Sound Level Meter 证书编号(Certificate No.): 2HB23001488-0003 1 外观与工作正常性检查 (Appearance and Function Check) 无影响证书中测量结果准确度的因素和缺陷。 There are no factor and defect that affect the measurement result accuracy of the certificate. 頻率(Frequency)=1000Hz 2 指示声级调整 (Indication SPL Calibration) 放大器型号 放大器编号 传声器型号 传声器编号 (Preamplifier Type) (Preamplifier SN.) (Microphone Type) (Microphone SN.) 校准后示值 U声校准器型号 标准声压级 校准前示值 (Reference SPL) (Before Calibration) (After Calibration) (k=2) (Calibrator Type) (dB) (dB) (dB) (dB) 93.8 0.2 94.0 93.8 3 级线性 (Level Linearity) 頻率(Frequency): 8000Hz 3.1 参考级量程 (Reference Range) 指示声级 允许误差 U误差 标准声级 (Standard) (Indication) (Error) (Limit) (Pass/Fail) (k=2)(dB) (dB) (dB) (P/F) (dB) (dB) 130.0 129.8 -0.2 ±0.8 0.3 128.8 -0.2 ±0.8 0.3 129.0 -0.2 ±0.8 0.3 127.8 128.0 0.3 -0.2 ±0.8 127.0 126.8 0.3 ± 0.8 126.0 125.9 -0.1 125.0 124.9 -0.1 0.3 119.9 -0.1 ±0.8 120.0 0.3 ±0.8 110.0 0.0 110.0 ±0.8 0.3 0.0 100.0 100.0 ±0.8 0.3 90.0 90.0 0.0 80.0 79.9 -0.1 ±0.8 0.3 69.9 -0.1 ±0.8 0.3 70.0 ±0.8 0.3 60.0 0.0 60.0 0.3 -0.1 ±0.8 49.9 50.0 ±0.8 0.3 40.0 39.9 -0.1 0.3 35.0 34.8 -0.2 ±0.8 0.3 33.8 -0.2 ±0.8 34.0 0.3 32.9 -0.1 33.0 0.3 31.8 -0.2 ±0.8 32.0 ±0.8 0.3 31.0 30.8 -0.2 29.8 -0.2 ±0.8 0.3 30.0 第 5 页,共 9 页 数据页(Data sheet) ID: 071288 Page of





Catalogue of Sound Calibrator

For microphone calibration NC-74

How to use

Carefully insert the microphone all the way into the coupler of the NC-74. Then simply turn the power on to apply a constant sound pressure level to the diaphragm of the microphone.



The performance of the NC-74 is suitable for calibration of high-precision sound level meters. The unit is compact, lightweight, and easy to use. Two IEC LR6 (size AA) alkaline batteries will power the unit for more than 30 hours of continuous use at room temperature.

pressure. Based on the information provided by the sensor, the CPU controls the signal amplitude. This allows the unit to always provide the correct output for achieving constant sound pressure level, regardless of fluctuations



Using the 1/2-inch adap

level meter microphones with 1 inch diameter, the 1/2-inch microphone adapter can be removed, 1/2-inch microphones are calibrated with the adapter



Applicable standards	JIS C1515:2004 Class 1		
Suitable microphones	1-inch microphones	IEC 61094-1 Type LS1P UC-27 UC-25 UC-34	
	1/2-inch microphones	IEC 61094-1 Type LS2aP UC-59 UC-57 UC-53A UC-52 UC-26 UC-30 UC-31 UC-31 UC-33P	
Nominal sound pressure level	94 dB		
Sound pressure level tolerance	±0.3 dB		
Nominal frequency	1 kHz		
Frequency tolerance	±1.0 % or less		
Power requirements	IEC LR6 (size AA) alkal	line battery X 2	
Dimensions, mass	Approx. 49 (H) × 80 (W) × 74 (D) mm Approx. 200 g (including batteries)		
Supplied accessories	Case × 1 IEC LR6 (size AA) alkaline battery × 2 1/2-inch microphone adapter NC-74-002 × 1		



* Specification subject to change without notice.



3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442 http://www.rion.co.jp/english/

Calibration Certificate of Sound Calibrator



委托单位:

中国赛宝实验室计量检测中心(工业和信息化部电子第五研究所计量检测中心)

Castco Testing Centre Limited

CALIBRATION CERTIFICATE

证书编号: 2HB23001488-0001 Certificate No.





Sound Level Calibrator 仪器名称: Description NC-74 型号规格: Model/Type RION 制造商: Manufacturer 34178129 机身号: Serial No. AAST-SLC-05 管理号: Asset No. 2023-07-28 2023-08-08 接收日期: 校准日期: Cal. Date Rec. Date 2023-08-10 12个月(12 months) 建议校准周期: 签发日期: Reference Cal. Period App. Date 结论: 所校准项目符合技术要求(The calibrated items meet the technical requirements) Conclusion

Inspected by 印章:

Stamp

赛宝计量检测中心 总部地址:广州市增城区朱村街朱村大道西78号 实验室地址:广州市增城区朱村街朱村大道西78号 客服电话: 020-87237633 传真: 020-87236189

投诉电话: 020-87236896 邮件: cal@ceprei.com 阿址: www.ceprei-cal.com CEPREI Calibration and Testing Centre

HQ Addr: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Add. of the Lab: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Service Tel: 020-87237633 Fax: 020-87236189 Complaint Tel: 020-87236896

Email: cal@ceprei.com Website: www.ceprei-cal.com

第1页共5页 Page of

Calibration Certificate of Sound Calibrator

L 出作品(Cartiflosto No.)。2HR23001488-0001

说 明 DIRECTIONS

I. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS)认可,认可证书号为: CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

2. 本机构出具的数据均可溯源到国际单位制(SI)单位和社会公用计量标准。

The data issued by this laboratory is traceable to International system of Units (SI) and national primary standards.

- 3. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):
 JJG 176-2022 声校准器检定规程: Sound Pressure Level: 94dB、104dB、114dB、124dB(63Hz~8kHz): 94dB、104dB、114dB、31.5Hz~16kHz): Frequency: 31.5Hz~16kHz; Harmonic Distortion: 0.1%~10%. (20Hz~20Hz):
- ZORITZY 转继角序等演查看CNAS网站中往屏檐号为L13344的证书册件,超出范围的内容未被认可,其结果/结论所依据的含格评定活动不在认可 范围内。(Please see the attachment of certificate No. L1344 at (CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results'conclusions are based are outside the scope of accreditediation.)
- 4. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration):

(Description)	(Certificate No./Due Date/Traceability to)	(Specification)	(Measuring Range)
093)	304所	U=(0.05~0.20)dB (k=2)	10Hz~20kHz
前置放大器(3194482) 数字多用表(MY5300648 3)		DCV: ±0.0035%; ACV: ± 0.06%; DCI: ±0.05%; ACI : ±0.1%; R: ±0.01%; f: ±0.001%	:(0.001~750)V@(3Hz~

PULSE分析系统(3050-1 4GC23000001-0135/2024-01-03/賽宝(广州) 频率: $U_{rel}=0.001\%$, $L_{rel}=0.001\%$, $L_{rel}=0.001\%$, 电压: $(1\times10^5\sim30)$ V

- 校准地点(The calibration place): 广州市增城区朱村街朱村大道西78号9栋110室
- 6. 环境条件(Environmental conditions):
- 温度(Temperature): 22.6℃ 相对湿度(Relative Humidity): 58%
- 7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标准不确定度乘以包含概率约为95%时对应的包含因子k得到。

The extended uncertainty given in this certificate is evaluated according to JIF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor extrainty in the continuous to the coverage probability about 95%.

- 8. 证书中"P"、"合格"代表"测量结果在允许范围内", "F"、"不合格"代表"测量结果不在允许范围内", "N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。
- "P" and "Pass" in this certificate stand for "Low Limit≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value <Low Limit or the measured value \Low Limit or the measured value \Low High Limit", "NA stands for "Not Applicable or The technical specification has not been confirmed ete." The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement uncertainty, etc.
- 9. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

第 3 页,共 5 页 Page of



Calibration Certificate of Sound Calibrator



Complaint Tel: 020-87236896

Website: www.ceprei-cal.com

Email: cal@ceprei.com

投诉电话: 020-87236896

网址: www.ceprei-cal.com

邮件: cal@ceprei.com

DIRECTIONS

- 1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS) 认可,认可证书号为: CNAS L13344。
- This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.
- 2. 本机构出具的数据均可溯源到国际单位制(SI)单位和社会公用计量标准。

The data issued by this laboratory is traceable to International system of Units (SI) and national primary standards.

- 3. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):
- JJG 176-2022 声校准器检定规程: Sound Pressure Level: 94dB、104dB、114dB、124dB(63Hz~8kHz): 94dB . 104dB. 114dB,(31.5Hz~16kHz); Frequency: 31.5Hz~16kHz; Harmonic Distortion: 0.1%~10%. (20Hz~ 20kHz)
- 详细内容请查看CNAS网站中注册编号为L13344的证书别件。超出范围的内容未被认可,其结果/结论所依据的合格评定活动不在认可范围角、(Please see the attachment of certificate No. L13344 at (CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results/conclusions are based are outside the scope of accreditation.)
- 4. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration): 证书号/有效期/溯源单位 技术指标 测量范围 (Certificate No./Due Date/Traceability to) (Specification) (Measuring Range) 前置放大器(2239843) GFJGJL1001230304185/2024-03-22/航空 頻率响应: ±0.1dB

(100pA~1A) @ (10 Hz~100kHz); R: 10µ

电压:(1×10⁻⁵~30)V 10Hz~25kHz

PULSE分析系统(3160-1 4GC23000528-0009/2024-08-16/賽宝(广州) 频率:Urg=0.001%,k=2;电压: 频率:0.001Hz~51.2kHz, 093)

- 5. 校准地点(The calibration place):
- 广州市增城区朱村街朱村大道西78号9栋110室
- 6. 环境条件(Environmental conditions):
- 温度(Temperature): 21.2°C 相对湿度(Relative Humidity): 60%
- 7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标 准不确定度乘以包含概率约为95%时对应的包含因子k得到。

The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.

8. 证书中"P"、"合格"代表"测量结果在允许范围内", "F"、"不合格"代表"测量结果不在允许范围 内","N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应 结合实际测量的要求合理使用, 如考虑测量结果测量不确定度的影响等。

"P" and "Pass" in this certificate stand for "Low Limit≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value < Low Limit or the measured value > High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc". The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement

9. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委 托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

> 第 3 页,共 5 页 Page of

第1页,共5页

Page of

Calibration Certificate of Sound Calibrator CEPRE 证书编号(Certificate No.): 2HB23001715-0001 1 外观与工作正常性检查 (Appearance and Function Check) 无影响证书中测量结果准确度的因素和缺陷。 There are no factor and defect that affect the measurement result accuracy of the certificate. 2 声压级 (Sound Pressure Level) 规定声压级 测量声压级 声压级差的绝对值 结论 (Prescribed SPL) (Measured SPL) (Absolute value of SPL) (dB) (dB) (dB) 94 93.86 0.14 ≤0.25 0.10 3 頻率 (Frequency) 规定频率 测量频率 频率误差的绝对值 结论 (Prescribed Fre.) (Measured Fre.) (Absolute value of Fre.) (Pass/Fail) (k=2) (Hz) (Hz) (%) (%) (%) 1000 1003.7 0.37 ≤0.70 0.10 4 总失真+噪声 (Distortion and noise) 规定声压级 规定频率 总失真+噪声 接受限 结论 Urel (Prescribed SPL) (Measured Fre.) (Distortion and noise) (Limit) (Pass/Fail) (k=2) (dB) (Hz) (%) (%) (%) 94 1000 0.69 < 2.50 5.0 数据页(Data sheet) ID: 013393 第 5 页.共 5 页 Page of

Catalogue of Air Flow Meter (TSI TA440)

SPECIFICATIONS

Velocity

Resolution

Range (TA410) Range (TA430, TA440) Accuracy (TA410)162

0 to 20 m/s (0 to 4,000 ft/min) 0 to 30 m/s (0 to 6,000 ft/min) ±5% of reading or ±0.025 m/s (±5 ft/min), whichever is greater

Accuracy (TA430, TA440)¹⁶² ±3% of reading or ±0.015 m/s (±3 ft/min), whichever is greater 0.01 m/s (1 ft/min)

Duct Size (TA430, TA440) Dimensions

1 to 635 cm in increments of 0.1 cm (1 to 250 inches in increments of 0.1 in.)

Volumetric Flow Rate (TA430, TA440)

Range Actual range is a function of velocity, and duct size

Temperature

Range (TA410, TA430) -18 to 93°C (0 to 200°F) Range (TA440) -10 to 60°C (14 to 140°F) Accuracy³ ±0.3°C (±0.5°F) Resolution 0.1°C (0.1°F)

Relative Humidity (TA440 only)

Range Accuracy⁴ ±3% RH Resolution 0.1% RH

Wet Bulb Temperature (TA440 only)

5 to 60°C (40 to 140°F) Range Resolution 0.1°C (0.1°F)

Dew Point (TA440 only)

-15 to 49°C (5 to 120°F) Range Resolution 0.1°C (0.1°F)

Instrument Temperature Range 5 to 45°C (40 to 113°F)

Operating (Electronics) Model TA410, TA430 -18 to 93°C (0 to 200°F) Model TA440 -10 to 60°C (14 to 140°F) Operating (Probe) -20 to 60°C (-4 to 140°F) Storage

Data Storage Capabilities (TA430, TA440)

12,700+ samples and 100 test IDs

Logging Interval (TA430, TA440)

1 second to 1 hour



Airflow Instruments, TSI Instruments Ltd. Visit our website at www.airflowinstruments.co.uk for more information.

Tel: +44 149 4 459200 Germany Tel: +49 241 523030 Tel: +33 49111 87 64

Time Constant (TA430, TA440)

User selectable

External Meter Dimensions

8.4 cm x 17.8 cm x 4.4 cm (3.3 in. x 7.0 in. x 1.8 in.)

Meter Weight with Batteries

0.27 kg (0.6 lbs.)

Meter Probe Dimensions

Probe Length 101.6 cm (40 in.) Probe Diameter of Tip 7.0 mm (0.28 in.) Probe Diameter of Base 13.0 mm (0.51 in.)

Articulating Probe Dimensions

Articulating Section Length 19.7 cm (7.8 in.) Diameter of Articulating Knuckle 9.5 mm (0.38 in.)

Power Requirements

Four AA-size batteries or AC adapter

	TA410	TA430, TA430-A	TA440, TA440-A
Velocity range 0 to 20.00 m/s (0 to 4000 ft/min)	+		
Velocity range 0 to 30.00 m/s (0 to 6000 ft/min)		+	+
Temperature	+	+	+
Flow		+	+
Humidity, wet bulb, dew point			1+1
Probe	Straight	Straight or -A articulated	Straight or -A articulated
Variable time constant		+	+
Manual data logging		+	+
Auto save data logging			+
Statistics		+	+
Review data		+	+
LogDat2 downloading software		+	+
Free Certificate of Calibration	+	+	+

The accuracy statement begins at 30 ft/min through 4000 ft/min (0.15 m/s through 20 m/s) for the Model TA410, and 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s) for Models TA430 and TA440.

Accuracy with instrument case at 25°C (77°F), add uncertainty of 0.03°C/°C (0.05°F/°F)

for change in instrument temperature.

*Accuracy with probe at 25°C (77°F). Add uncertainty of 0.2% RH/°C (0.1% RH/°F) for change in probe temperature. Includes 1% hysteresis.

P/N 2980548 Rev D (A4) ©2014 TSI Incorporated

Calibration Certificate of Air Flow Meter



Cal Lab Limited 校正實驗室有限公司

Room 2103, Technology Plaza, 29-35 Sha Tsui Road, Tsuen Wan, NT, Hong Kong

Tel: +852 25680106 Email: info@callab.com.hk Fax: +852 30116194 Website: www.callab.com.hk



Calibration Certificate No.: CC0242312 Information provided by customer

Customer: Castco Testing Centre Limited Address: 33, On Kui Street, Fanling, N.T.

Equipment identification provided by customer

Equipment Description Manufacturer Model No. Serial No. Assigned equipment No.

Air Velocity Monitor TSI AIRFLOW TA440 TA4401232005 AAST-FLOW-02

Certificate Information

Date of Receipt: 15 December 2023 Calibration Condition: 21.3°C, 56%RH, 1014hPa
Date of Calibration: 18 December 2023 Adjustment: N/A
Due Date of Calibration: N/A Appearance: Good

Due Date of Calibration: N/A Appearance:
Calibration Procedure: SOP-112 Remark:

 Reference Equipment Identification

 Equipment Description
 Model
 Serial No.
 Expiration Date

 Hot Wire Anemometer
 9535
 195351316004
 11 August 2024

Result of Calibration

Air Velocity

Reference Reading (m/s)	Measured Reading (m/s)	Error (m/s)	Uncertainty (%)	Technical Requirement	Technical Reference Doc
0.99	0.99	0.00	3.6	±5%	Mfr's Spec.
2.02	2.03	0.01	3.6	±5%	Mfr's Spec.
5.01	4.98	-0.03	3.6	±5%	Mfr's Spec.
7.96	8.07	0.11	3.6	±5%	Mfr's Spec.

Note: The estimated expanded uncertainties have been calculated in "Evaluation and expression of uncertainty in measurement" and give an internal estimated to have a level of confidence of SYSA. A coverage factor of 3 is assumed unless explicitly stated.

Note: The standard is and instruments used in the statistican are traccalled to institution or international recognized standard and are estimated on a schedule to maintain the

excuracy and good condition.

Note3: The result reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long term stability of the

instrument.

Notes: The result shows in this calibration certificate relate only to the item calibrated, and the result only applies to the calibration item as received.

et: The result shows in this calibration certificate relate only to the item calibrated, and the result only applies to the calibration item as received.

Calibrated By:

Checked and Approved By:

Company Chop:

Wing Cheng Warren Yeung

Certificate Issue Date: 19 December 2023

*** End of Certificate ***

1. The certificate shall not be reproduced except in full, without written approval of Cal Lab Limited

2. The certificate is issued subject to the latest Terms and Conditions, available at our web site

CC0242312

Appendix L – Noise monitoring results and graphic	al presentation

M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

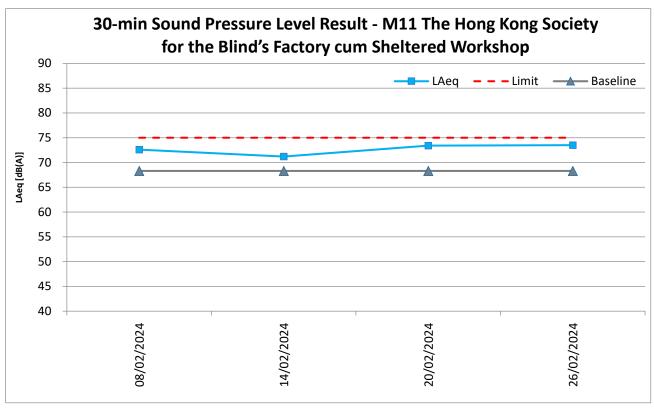
Data Tama (0C)	XX7 .1		Measured Noise Level at M11, dB(A)							
Date	Temp (°C)	Weather	Tin	ne	;	Baseline	\mathcal{L}_{Aeq}	L_{A10}	L_{A90}	Limit
08/02/2024	14.6	Cloudy	10:16	-	10:46	68.3	72.6	75.6	61.3	75
14/02/2024	25.3	Sunny	14:22	-	14:52	68.3	71.2	73.8	64.4	75
20/02/2024	22.8	Sunny	10:08	-	10:38	68.3	73.4	76.1	63.8	75
26/02/2024	17.6	Cloudy	13:58	-	14:28	68.3	73.5	75.7	64.4	75
			N	Maximum			73.5			
			N	Λi	inimum		71.2			
			-	A	verage		72.8			

NOTE: Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. 30-min noise monitoring at M11 were conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for M11 is confirmed.

M12 - Hong Kong Children's Hospital

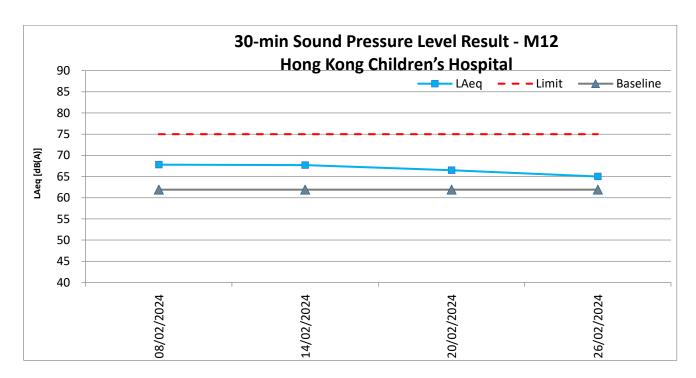
	5		1									
D.t.	T (0C)	(0C) W/41		Measured Noise Level at M12, dB(A)								
Date	Temp (°C) Weather		7	Γiı	me	Baseline	\mathcal{L}_{Aeq}	L_{A10}	L _{A90}	Limit		
08/02/2024	14.6	Cloudy	14:00	-	14:30	61.9	67.8	68.6	60.5	75		
14/02/2024	25.3	Sunny	10:26	-	10:56	61.9	67.7	73.4	58.4	75		
20/02/2024	22.8	Sunny	15:02	-	15:32	61.9	66.5	68.4	62.2	75		
26/02/2024	17.6	Cloudy	10:06	-	10:36	61.9	65.0	67.0	62.4	75		
]	Maximum	1	67.8					
					Minimum	1	65.0					
					Average		66.9					

 $L_{Aeq,\ 30\text{-min}}$ graphical results of M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop



NOTE: Due to the relocation of The Hong Kong Society for the Blind's Factory cum Sheltered Workshop (M11), the premises owner rejected ET to conduct impact monitoring since 1 Sept 2022. 30-min noise monitoring at M11 were conducted on the ground floor with orienting to the Project site. ET will resume the impact monitoring once the alternative monitoring location for M11 is confirmed.

LAeq, 30-min graphical results of M12 - Hong Kong Children's Hospital



Appendix M – Event and Action Plan for noise

Every		Ac	tion	
Event	ET	IEC	Supervisor / ER	Contractor
Action Level being exceeded	 Notify Supervisor / ER, IEC and Contractor; Carry out investigation; Report the results of investigation to the IEC, Supervisor / ER and Contractor; Discuss with the IEC and Contractor on remedial measures required; Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working days after the exceedance is identified.) 	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures submitted by the Contractor and advise the ER accordingly; 3. Advise the Supervisor / ER on the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified.)	 Confirm receipt of notification of failure in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified.) 	 Submit noise mitigation proposal to IEC and Supervisor / ER; Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified.)
Limit Level being exceeded	1. Inform IEC, Supervisor /ER, Contractor and EPD; 2. Repeat measurement to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contract's working procedure; 6. Discuss remedial measures required with the IEC, Contractor and Supervisor /ER; 7. Assess effectiveness of	1. Discuss the potential remedial actions with Supervisor /ER, ET and Contractor; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the Supervisor /ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified.)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC and Supervisor /ER within 3 working days of notification; Implement the agreed proposal; Submit further proposal if problem still not under control; Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated. (The above actions should be

Event	Action									
Event	ET	IEC	Supervisor / ER	Contractor						
	Contractor's remedial		exceedance until the	taken within 2 working days						
	actions and keep IEC,		exceedance is abated.	after the exceedance is						
	EPD, and Supervisor /ER		(The above actions should be	identified.)						
	informed of the results;		taken within 2 working days after							
	8. If exceedance stops, cease		the exceedance is identified.)							
	additional monitoring.									
	(The above actions should be									
	taken within 2 working days									
	after the exceedance is									
	identified.)									

Appendix N – Event and Action Plan	for Landscape and Visual Impact

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

Appendix O – Waste Flow Table



- Monthly Summary Waste Flow Table Appendix F

Name of Department: CEDD Contract No.: ED/2018/01

Monthly Summary Waste Flow Table for February 2024

				mont	iny Summi					,				
	Ad	tual Quantitie	s of Inert C&	D Materials (Generated I	Monthly			Actu	ual Quantities	of C&D Waste	es Generated M	onthly	,
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contrac	Reused other Proj	in as P	TIPLIC I '	ported Fill	Metal	s	Paper / cardboard packaging	Plastics (see Note 3)	Chemical Wa		Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000r			(in 00m³)	(in '000	kg)	(in '000kg)	(in '000kg)	(in '000kg))	(in '000m ³)
Jan	2.291	0.111			2.2	291								0.184
Feb	2.232	0.177			2.2	232								0.168
Mar														
Apr														
May														
Jun														
Sub-total	4.523	0.288			4.5	523								0.352
July														
Aug														
Sep														
Oct														
Nov														
Dec														
Total	4.523	0.288				523								0.352
			Foreca	st of Total (Quantities o	of C&D Mate	rials to	be Gener	ated fro	om the Contra	ict*			
Total Quantity Generate		oken Heuse			isposed as Public Fill	Imported F	ill	Metals	car	Paper / rdboard ckaging	Plastics (see Note 3)	Chemical Waste		ners, e.g. eral refuse
(in '000m	3) (in '000	m ³) (in '00	00m ³) (in '	000m ³) (in '000m³)	(in '000m ³	(in	'000 kg)	(in	'000kg)	(in '000kg)	(in '000kg)	(in	'000m³)
207.384	2.103	3 10	.2	140	27.415	25	ı	200		0.8	0.1			3.891

Notes: (1)

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

Appendix P – Environmental Mitigation Implementation Schedule(EMIS)

EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.2		8 times daily watering of the work site with active dust emitting	^
		activities.	
S3.2	S4.8	Implementation of dust suppression measures stipulated in Air	^
		Pollution Control (Construction Dust) Regulation. The following	
		mitigation measures, good site practices and a comprehensive dust	
		monitoring and audit programme are recommended to minimize	
		cumulative dust impacts.	
		- Stockpiling site(s) should be lined with impermeable sheeting	^
		and bunded. Stockpiles should be fully covered by	
		impermeable sheeting to reduce dust emission.	
		- Misting for the dusty material should be carried out before	^
		being loaded into the vehicle.	
		- Any vehicle with an open load carrying area should have	٨
		properly fitted side and tail boards.	
		- Material having the potential to create dust should not be loaded	٨
		from a level higher than the side and tail boards and should be	
		dampened and covered by a clean tarpaulin.	
		- The tarpaulin should be properly secured and should extent at	^
		least 300 mm over the edges of the sides and tailboards. The	
		material should also be dampened if necessary, before	
		transportation.	
		- The vehicles should be restricted to maximum speed of 10 km	^
		per hour and confined haulage and delivery vehicle to	
		designated roadways insider the site. On- site unpaved roads	
		should be compacted and kept free of lose materials.	
		- Vehicle washing facilities should be provided at every vehicle	^
		exit point.	
		- The area where vehicle washing takes place and the section of	٨
		the road between the washing facilities and the exit point should	
		be paved with concrete, bituminous materials or hardcores.	
		- Every main haul road should be scaled with concrete and kept	٨
		clear of dusty materials or sprayed with water so as to	
		maintain the entire road surface wet.	
		- Every stock of more than 20 bags of cement should be covered	٨
		entirely by impervious sheeting placed in an area sheltered on	
		the top and the three sides.	
		- Every vehicle should be washed to remove any dusty materials	٨
		from its body and wheels before leaving the construction sites.	

Implementatio	n Schedule for I	Noise Measures	
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.3		Use of quiet PME, movable barriers for Asphalt Paver, Breaker,	^
		Excavator and Hand-held breaker and full enclosure for Air	
		Compressor, Bar Bender, Concrete Pump, Generator and Water	
		Pump.	
S3.3		Good Site Practice:	
S3.3		- Only well-maintained plant should be operated on-site and	۸
		plant should be serviced regularly during the construction	
		program.	
		- Silencers or mufflers on construction equipment should be	٨
		utilized and should be properly maintained during the	
		construction program.	
		- Mobile plant, if any, should be sited as far away from NSRs as	^
		possible.	
		- Machines and plant (such as trucks) that may be in intermittent	٨
		use should be shut down between works periods or should be	
		throttled down to a minimum.	
		- Plant known to emit noise strongly in one direction should,	٨
		wherever possible, be orientated so that the noise is directed	
		away from the nearby NSRs.	
		- Material stockpiles and other structures should be effectively	^
		utilized, wherever practicable, in screening noise from on-site	
		construction activities.	
		- Scheduling of Construction Works during School	N/A
		Examination Period	

Implementatio	n Schedule for \	Water Quality Measures	
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.4		Construction Runoff	^
		Exposed soil areas should be minimised to reduce the potential for	
		increased siltation, contamination of runoff, and erosion.	
		Construction runoff related impacts associated with the above	
		ground construction activities can be readily controlled through the	
		use of appropriate mitigation measures which include:	
S3.4		- use of sediment traps.	٨
S3.4		- adequate maintenance of drainage systems to prevent flooding	٨
		and overflow.	

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

EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		sewerage system.	
	S5.8	- Good site practices should be adopted to remove rubbish and	٨
		litter from construction sites so as to prevent the rubbish and	
		litter from spreading from the site area. It is recommended to	
		clean the construction sites on a regular basis.	
S3.4		Construction site should be provided with adequately designed	٨
		perimeter channel and pre-treatment facilities and proper	
		maintenance. The boundaries of critical areas of earthworks should	
		be marked and surrounded by dykes or embankments for flood	
		protection. Temporary ditches should be provided to facilitate runoff	
		discharge into the appropriate watercourses, via a silt retention pond.	
		Permanent drainage channels should incorporate sediment basins or	
		traps and baffles to enhance deposition rates. The design of efficient	
		silt removal facilities should be based on the guidelines in Appendix	
		A1 of ProPECC PN 1/94.	
S3.4	S5.8	Ideally, construction works should be programmed to minimise	^
		surface excavation works during the rainy season (April to	
		September). All exposed earth areas should be completed as soon as	
		possible after earthworks have been completed, or alternatively,	
		within 14 days of the cessation of earthworks where practicable.	
		If excavation of soil cannot be avoided during the rainy season, or at	
		any time of year when rainstorms are likely, exposed slope surfaces	
		should be covered by tarpaulin or other means.	
		If excavation in soil cannot be avoided in these months or at any	
		time of year when rainstorms are likely, for the purpose of	
		preventing soil erosion, temporary exposed slope surfaces should be	
		covered e.g. by tarpaulin, and temporary access roads should be	
		protected by crushed stone or gravel, as excavation proceeds.	
		Intercepting channels should be provided (e.g. along the crest / edge	
		of excavation) to prevent storm runoff from washing across exposed	
		soil surfaces. Arrangements should always be in place in such a way	
		that adequate surface protection measures can be safely carried out	
		well before the arrival of a rainstorm.	
S3.4		Sediment tanks of sufficient capacity, constructed from pre-formed	٨
		individual cells of approximately 6 to 8 m ³ capacity, are	
		recommended as a general mitigation measure which can be used	
		for settling surface runoff prior to disposal. The system capacity is	
		flexible and able to handle multiple inputs from a variety of sources	

	Implementation Schedule for Water Quality Measures				
EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status		
		and particularly suited to applications where the influent is pumped.			
S3.4		Open stockpiles of construction materials (for examples, aggregates,	^		
		sand and fill material) of more than 50 m ³ should be covered with			
		tarpaulin or similar fabric during rainstorms. Measures should be			
		taken to prevent the washing away of construction materials, soil,			
		silt or debris into any drainage system.			
S3.4		Manholes (including newly constructed ones) should always be	^		
		adequately covered and temporarily sealed so as to prevent silt,			
		construction materials or debris being washed into the drainage			
		system and storm runoff being directed into foul sewers.			
S3.4		Precautions to be taken at any time of year when rainstorms are	٨		
		likely, actions to be taken when a rainstorm is imminent or forecast,			
		and actions to be taken during or after rainstorms are summarised in			
		Appendix A2 of ProPECC PN 1/94. Particular attention should be			
		paid to the control of silty surface runoff during storm events.			
S3.4		Oil interceptors should be provided in the drainage system and	NA		
55.1		regularly cleaned to prevent the release of oils and grease into the			
		storm water drainage system after accidental spillages. The			
		interceptor should have a bypass to prevent flushing during periods			
		of heavy rain.			
S3.4	S5.8	Wheel Washing Water	^		
		All vehicles and plant should be cleaned before leaving a			
		construction site to ensure no earth, mud, debris and the like is			
		deposited by them on roads. An adequately designed and located			
		wheel washing bay should be provided at every site exit, and			
		wash-water should have sand and silt settled out and removed at			
		least on a weekly basis to ensure the continued efficiency of the			
		process. The section of access road leading to, and exiting from, the			
		wheel-wash bay to the public road should be paved with sufficient			
		backfall toward the wheel-wash bay to prevent vehicle tracking of			
		soil and silty water to public roads and drains.			
S3.4		Drainage	٨		
		It is recommended that on-site drainage system should be installed			
		prior to the commencement of other construction activities.			
		Sediment traps should be installed in order to minimise the sediment			
		loading of the effluent prior to discharge into foul sewers. There			
		should be no direct discharge of effluent from the site into the sea.			
S3.4		All temporary and permanent drainage pipes and culverts provided	^		

Implementation	Implementation Schedule for Water Quality Measures			
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status	
		to facilitate runoff discharge should be adequately designed for the		
		controlled release of storm flows. All sediment control measures		
		should be regularly inspected and maintained to ensure proper and		
		efficient operation at all times and particularly following rain		
		storms. The temporarily diverted drainage should be reinstated to its		
		original condition when the construction work has finished or the		
		temporary diversion is no longer required.		
S3.4		All fuel tanks and storage areas should be provided with locks and	٨	
		be located on sealed areas, within bunds of a capacity equal to 110%		
		of the storage capacity of the largest tank, to prevent spilled fuel oils		
		from reaching the coastal waters of the Victoria Harbour WCZ.		
S3.4	S5.8	Sewage Effluent	٨	
		Construction work force sewage discharges on site are expected to		
		be connected to the existing trunk sewer or sewage treatment		
		facilities. The construction sewage may need to be handled by		
		portable chemical toilets prior to the commission of the on-site		
		sewer system. Appropriate numbers of portable toilets should be		
		provided by a licensed contractor to serve the large number of		
		construction workers over the construction site. The Contractor		
		should also be responsible for waste disposal and maintenance		
		practices.		
		Notices should be posted at conspicuous locations to remind the		
		workers not to discharge any sewage or wastewater into the		
		surrounding environment. Regular environmental audit of the		
		construction site will provide an effective control of any		
		malpractices and can encourage continual improvement of		
		environmental performance on site. It is anticipated that sewage		
		generation during the construction phase of the project would not		
		cause water pollution problem after undertaking all required		
		measures.		
S3.4		Stormwater Discharges	^	
		Minimum distances of 100 m should be maintained between the		
		existing or planned stormwater discharges and the existing or		
		planned seawater intakes		
S3.4		Debris and Litter	٨	
-		In order to maintain water quality in acceptable conditions with		
		regard to aesthetic quality, contractors should be required, under		
		conditions of contract, to ensure that site management is optimised		

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

Implementation Schedule for Water Quality Measures				
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status	
		hard standings within a bunded area, and sumps and oil interceptors		
		should be provided. Maintenance of vehicles and equipment		
		involving activities with potential for leakage and spillage should		
		only be undertaken within the areas appropriately equipped to		
		control these discharges.		
	S5.8	Disposal of chemical wastes should be carried out in compliance	٨	
		with the Waste Disposal Ordinance. The Code of Practice on the		
		Packaging, Labelling and Storage of Chemical Wastes published		
		under the Waste Disposal Ordinance details the requirements to deal		
		with chemical wastes. General requirements are given as follows:		
		- Suitable containers should be used to hold the chemical wastes		
		to avoid leakage or spillage during storage, handling and		
		transport.		
	S5.8	- Chemical waste containers should be suitably labelled, to notify	٨	
		and warn the personnel who are handling the wastes, to avoid		
		accidents.		
	S5.8	- Storage area should be selected at a safe location on site and	٨	
		adequate space should be allocated to the storage area.		

Implementation Schedule for Waste Management Measures				
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status	
S3.5		Good Site Practices		
		It is not anticipated that adverse waste management related impacts		
		would arise, provided that good site practices are adhered to.		
		Recommendations for good site practices during construction		
		activities include:		
S3.5		- Nomination of an approved person, such as a site manager, to	٨	
		be responsible for good site practices, arrangements for		
		collection and effective disposal to an appropriate facility, of all		
		wastes generated at the site.		
	S6.7	- Prepare a Waste Management Plan, which becomes a part of the	٨	
		Environmental Management Plan, in accordance with the		
		requirements stipulated in ETWB TC(W) No. 19/2005,		
		approved by the Engineer/Supervising Officer of the Project		
		based on current practices on construction sites.		
S3.5	S6.7	- Training of site personnel in proper waste management and	٨	
		chemical waste handling procedures.		

EIA for KTD	EIA for KTD	Environmental Protection Measures / Mitigation Measures	Status
Development - Roads D3A Ref. & D4A Ref.			
S3.5	S6.7 - Provision of sufficient waste disposal points and regular		^*
		collection for disposal.	
S3.5	S6.7	- Appropriate measures to minimise windblown litter and dust	^
		during transportation of waste by either covering trucks or by	
		transporting wastes in enclosed containers.	
S3.5		- A recording system for the amount of wastes generated,	^
		recycled and disposed of (including the disposal sites).	
	S6.7	- Regular cleaning and maintenance programme for drainage	^
		systems, sumps and oil interceptors.	
	S6.7	- Training should be provided to workers about the concepts of	^
		site cleanliness and appropriate waste management procedures,	
		including waste reduction, reuse and recycle.	
S3.5		Waste Reduction Measures	
		Good management and control can prevent the generation of a	
		significant amount of waste. Waste reduction is best achieved at the	
		planning and design stage, as well as by ensuring the	
		implementation of good site practices. Recommendations to achieve	
		waste reduction include:	
S3.5	S6.7	- Sort C&D waste from demolition of the remaining structures to	NA
		recover recyclable portions such as metals.	
S3.5	S6.7	- Segregation and storage of different types of waste in different	^
		containers, skips or stockpiles to enhance reuse or recycling of	
		materials and their proper disposal.	
S3.5	S6.7	- Encourage collection of aluminium cans, PET bottles and paper	^
		by providing separate labelled bins to enable these wastes to be	
		segregated from other general refuse generated by the work	
		force.	
S3.5		- Any unused chemicals or those with remaining functional	^
		capacity should be recycled.	
S3.5	S6.7	- Proper storage and site practices to minimise the potential for	^
		damage or contamination of construction materials.	
S3.5		Construction and Demolition Materials	
		Mitigation measures and good site practices should be incorporated	
		in the contract document to control potential environmental impact	
		from handling and transportation of C&D material. The mitigation	
		measures include:	
S3.5		- Where it is unavoidable to have transient stockpiles of C&D	^
		material within the Project work site pending collection for	

EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status	
		disposal, the transient stockpiles shall be located away from		
		waterfront or storm drains as far as possible.		
S3.5		- Open stockpiles of construction materials or construction	^	
		wastes on-site should be covered with tarpaulin or similar		
		fabric.		
S3.5		- Skip hoist for material transport should be totally enclosed by	^	
		impervious sheeting.		
S3.5		- Every vehicle should be washed to remove any dusty materials	^	
		from its body and wheels before leaving a construction site.		
S3.5		- The area where vehicle washing takes place and the section of	^	
		the road between the washing facilities and the exit point should		
		be paved with concrete, bituminous materials or hardcores.		
S3.5		- The load of dusty materials carried by vehicle leaving a	٨	
		construction site should be covered entirely by clean		
		impervious sheeting to ensure dust materials do not leak from		
		the vehicle.		
S3.5		- All dusty materials should be sprayed with water prior to any	^	
		loading, unloading or transfer operation so as to maintain the		
		dusty materials wet.		
S3.5		- The height from which excavated materials are dropped should	^	
		be controlled to a minimum practical height to limit fugitive		
		dust generation from unloading.		
S3.5		- When delivering inert C&D material to public fill reception	^	
		facilities, the material should consist entirely of inert		
		construction waste and of size less than 250mm or other sizes		
		as agreed with the Secretary of the Public Fill Committee. In		
		order to monitor the disposal of the surplus C&D material at		
		the designed public fill reception facility and to control fly		
		tipping, a trip-ticket system as stipulated in the ETWB TCW		
		No. 31/2004 "Trip Ticket System for Disposal of Construction		
		and Demolition Materials" should be included as one of the		
		contractual requirements and implemented by an		
		Environmental Team undertaking the Environmental		
		Monitoring and Audit work. An Independent Environmental		
		Checker should be responsible for auditing the results of the		
		system.		
	S6.7	- Plan and stock construction materials carefully to minimize	٨	
		amount of waste generated and avoid unnecessary generation		

Implementation	Implementation Schedule for Waste Management Measures				
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status		
		of waste.			
S3.5		Chemical Waste	^*		
		After use, chemical wastes (for example, cleaning fluids, solvents,			
		lubrication oil and fuel) should be handled according to the Code of			
		Practice on the Packaging, Labelling and Storage of Chemical			
		Wastes. Spent chemicals should be collected by a licensed collector			
		for disposal at the CWTF or other licensed facility, in accordance			
		with the Waste Disposal (Chemical Waste) (General) Regulation.			
	S6.7	Separation of chemical wastes for special handling and appropriate	^		
		treatment.			
S3.5		General Refuse	^		
		General refuse should be stored in enclosed bins or compaction units			
		separate from C&D material. A licensed waste collector should be			
		employed by the contractor to remove general refuse from the site,			
		separately from C&D material. Effective collection and storage			
		methods (including enclosed and covered area) of site wastes would			
		be required to prevent waste materials from being blown around by			
		wind, wastewater discharge by flushing or leaching into the marine			
		environment, or creating odour nuisance or pest and vermin			
		problem.			

Implementatio	Implementation Schedule for Landscape and Visual Measures				
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status		
S3.8.12		All existing trees should be carefully protected during construction.	٨		
S3.8.12		Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work.	NA		
S3.8.12		Control of night-time lighting.	٨		
S3.8.12		Erection of decorative screen hoarding.	٨		
	S7.9	Construction Site Control - CM1 - Minimized construction area and contractor's temporary works areas.	^		
		- CM2- Control of night-time lighting and glare by hooding all lights.	^		
L		- CM3 - Erection of decorative mesh screens or construction	^		

Implementatio	Implementation Schedule for Landscape and Visual Measures					
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status			
		hoardings around works areas in visually unobtrusive colours.				
		- CM4 - Reduction of construction period to practical minimum.	٨			
		- CM5 - Limitation of / Ensuring no run-off into surrounding landscape and adjacent seawater areas.				
	- CM6 - Temporary or advance landscape should be provided along the temporary access roads to the Cruise Terminal until such time as road D3 is open.		NA			

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

Mitigation Measures undertaken by the Contractor for site inspections





Date:	15 February 2024	Date:	15 February 2024
Mitigation Measures:	Equipment	Mitigation Measures:	Haul road was sprayed with water to maintain the entire road surface
			wet.



		The state of the s	
Date:	22 February 2024	Date:	29 February 2024
Mitigation Measures:	The open stockpiles of construction materials on sites were covered.	Mitigation Measures:	The silt curtains were deployed around the Harbour step.

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

Reporting Month: February 2024

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

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions up to reporting month

Contract No.	Record of Complaint	Record of Warning	Notification of Summons and Successful Prosecutions
ED/2018/01	15	0	0

Complaint	Log for ED/2018/01			
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
C0001	A dust complaint was referred from the Contractor on 21 Oct 2020 regarding a public complaint via 1823 hotline (Case no. 3-6518939602) on 20 Oct 2020.	 The water spraying system was not operated in proper time. Stockpile was not covered properly. Haul road was not wetted. Materials transported on trucks were not provided with mechanical covers. 	Investigation	- Closed-out on 5 Nov 2020 No further complaint was received.

Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
			process.		
C0002	A dust complaint was referred from the Contractor on 8 Sep 2021 through E-Mail regarding a complaint received by EPD (EPD ref.: K19/RE/00021205-21) on 7 Sep 2021.	Complaint of dust problem at the pavement of Muk Tai Street near Sports Park.	Investigation As per contractor, part of the complaint area was within the site boundary of the project. 1. Manual water spraying was provided. 2. The exposed surface and stockpile areas were covered by the impermeable tarpaulin sheet. Action taken The exposed surface and stockpile area was covered by the impermeable tarpaulin sheet. Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however the contractor is recommended to implement the following measures to minimize the impact for air quality: 1. Ensure stockpiling sites should be lined with impermeable sheeting and bunded. 2. Stockpiles should be fully covered by impermeable sheeting at all time except during working process. 3. Ensure the work fulfill the relevant statutory requirements on control of air pollution. 4. Take necessary measures to minimize the environmental nuisance arising from the construction site.	- Closed-out on 4 Oct 2021 No further complaint was received.	
C0003	A water discharge complaint was referred from the Contractor on 10 Dec 2021 through E-Mail regarding a complaint received by	Complaint of muddy water being discharged into the sea of To Kwa Wan Typhoon Shelter via a DSD outfall near the roundabout of Shing Fung Road.	Investigation Joint site inspection was conducted by ER, IEC, ET and the contractor on 14 Dec 2021, no adverse observation against the water impact was recorded. 1. There was no muddy water discharge to DSD outfall near the roundabout of Shing Fung Road.	- Closed-out on 5 Jan 2022. - No further complaint was	

Complaint Log for ED/2018/01				
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
	EPD (ref.: K19/RE/00029046-21) on 9 Dec 2021.		 The sandbag with layers and filter were provided at the manholes. Action taken Sandbags and filter were used to block the manholes. Manholes had been adequately covered and replace the filter frequently. Recommendations There was no direct evidence showing that the water nuisance was caused by the contractor at the complaint area. Some of muddy water generated from wheel washing might be flow to the outfall inside the site boundary, however the contractor had taken the mitigation measure by using sandbag and filter to ease the nuisance. The contractor is recommended to implement the following measures to minimize the impact for waste water: 	received.
C0004	A dust complaint was received by EPD on 16 Dec 2022. Contractor received Notification of Environmental Complaints from EPD	Complaint of mud/ silt being brought out by vehicles from the project site casing mud/silt accumulation on Shing Fung Road.	 Investigation Regular site inspection was conducted by ET on 29 Dec 2022. 1. As per the Contractor, mud / slit generated from nearby construction sites might be brought to Shing Fung Road roundabout. 2. No adverse observation against the dust impact was recorded during site inspection. 	 Closed-out on 13 Jan 2023. No further complaint was received.

Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
KCI. IVO.	(ref.: K19/RE/00029136-22) by E-Mail on 22 Dec 2021.		 Action taken Watering manually frequently. Haul Road surfaces were wetted by water truck. Wheel washing for the trucks and vehicles before leaving the project site. Recommendations minimize the impact for air quality, mitigation measures should be enhanced specially in dry seasons are recommended: Increase the frequency and duration for automatic water spraying system. Main haul road and the area that water sprinklers system was not covered in the construction site should be wetted by water trucks or manually in regular basis. Regular wash and clean the share haul road and roundabout in Shing Fung Road. Wheel washing for the trucks and vehicles before leaving the project site. The muddy water after the wheel washing should be directed to sedimentation tank and wastewater treatment facility before discharging to gully. Ensure stockpiling sites should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting at all time except during working	Date / Status	
			process. 6. Dusty materials transported on truck shall be covered.		
C0005	A noise complaint was received by EPD on 21 Dec 2022. Contractor received Notification of Environmental	Complaint of construction noise arising from the project site near Shing Kai Toad and Muk Tai Street continued to 01:30 am on 21 Dec 2022.	 Investigation Regular site inspection was conducted by ET and the Contractor on 29 Dec 2022 1. As per the Contractor, the complaint was still under investigation and could not conclude the complaint related to the project site or not. 2. Status of CNPs in the works area near Shing Kai Road and 	- During the SSMEC meeting on 10 Jan 2023, the Contractor explained	

Complaint	Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / A	ctions taken / Recor	nmendations	Close-Out Date / Status
	Complaints from EPD		Muk Tai Street were	checked and all of	them were valid.	that the
	(EPD ref.: K19/RE/00029422-22)		Construction Noise Permit	Valid Form	Valid Till	noise complaint
	on 22 Dec 2022.		GW-RE1297-22	10 Dec 2022	08 Jun 2023	case has
	me i i i		GW-RE1299-22	17 Dec 2022	15 Jun 2023	already
	IEC received the notification on 22 Dec 2022 from EPD and forwarded the notification to CEDD, Contractor, ER and ET on same day.		Action taken 1. Trainings for CNP v 2022. 2. No construction ac hours for those areas Recommendations To minimize the impartments are recommended.	tivities were allowers without valid CNP.	ed in the restricted	passed to head office and waiting for the Legal opinion. No further information could be
Coooc			Training to new state for CNP and other expressions. Regularly check to environmental permits.	ff and regular enhar nvironmental issues he status of ALI		provided for Incident Report on Complaint Investigati on at that moment. - Under investigati on in the reporting month.
C0006	A dust complaint was received by EPD on 6 Dec 2022.	Complaint of construction dust arising from construction sites along Shing Fung Road.	Investigation Site inspections were co site inspection was cond IEC on 8 Feb 2023.	ucted by Contractor	(POC), ER, ET and	- Closed-out on 16 Mar 2023.
	Contractor (POC)		1. The concerned area	(roundabout) is th	e common road for	

Date of Complaint received Notification of	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out
		In congestion / Hostonic anton / Recommendations	Date / Statu
Environmental Complaints from EPD (ref.: K19/RE/00027862-22) by E-Mail on 7 Dec 2022. IEC received the notification on 19 Jan 2023 and forwarded the notification to CEDD,		 public vehicles. In addition, construction vehicles from several nearby construction sites also use the concerned road, especially a lots of dump trucks. 2. Construction vehicles from Contractor (POC) project site are not allowed leaving the site to Shing Fung Road directly as the exit was blocked by barriers since 21 Jan 2023. 3. Worker of sub-contractor from Contractor (POC) wetted the part of the concerned road surface during the site inspection on 8 Feb 2023 to suppress dust emission. 4. No construction works was observed on 26 Jan 2023 and no adverse observation against the dust impact were found during the site inspection on both dates. 	
ER and E1 on same day.		 Action taken Haul Road surfaces were wetted manually and washed the dusty water barrier regularly. Wheel washing for the trucks and vehicles before leaving the project site directly through Shing Fung Road exit. Construction vehicles from Contractor (POC) are not allowed leaving the site to Shing Fung Road directly as the exit was blocked by barriers since 21 Jan 2023. 	
		Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air quality: 1. Main haul road and the area that water sprinklers system was not covered in the construction site should be wetted manually in regular basis. 2. Regular wash the share haul road and roundabout in Shing	
t 1	by E-Mail on 7 Dec 2022. EC received the notification on 19 Jan 2023 and forwarded the	by E-Mail on 7 Dec 2022. EC received the notification on 19 Jan 2023 and forwarded the notification to CEDD,	as the exit was blocked by barriers since 21 Jan 2023. 3. Worker of sub-contractor from Contractor (POC) wetted the part of the concerned road surface during the site inspection on 8 Feb 2023 to suppress dust emission. 4. No construction works was observed on 26 Jan 2023 and no adverse observation against the dust impact were found during the site inspection on both dates. Action taken 1. Haul Road surfaces were wetted manually and washed the dusty water barrier regularly. 2. Wheel washing for the trucks and vehicles before leaving the project site directly through Shing Fung Road exit. 3. Construction vehicles from Contractor (POC) are not allowed leaving the site to Shing Fung Road directly as the exit was blocked by barriers since 21 Jan 2023. Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air quality: 1. Main haul road and the area that water sprinklers system was not covered in the construction site should be wetted manually in regular basis.

Complaint	g for ED/2018/01 Date of Complaint			
Kel. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
C0007	duct construct on	Complaint of ductor environment at the	the project site. The muddy water after the wheel washing should be directed to sedimentation tank and wastewater treatment facility before discharging to gully. 4. Dusty materials transported on truck shall be covered.	
reced Jan Conference Env Conference K19 by 202 IEC noti 202 noti	ontractor (POC) ceived Notification of nvironmental complaints from EPD ef.: 19/RE/00001988-23) F.E-Mail on 2 Feb ed. C. received the otification on 2 Feb ed. and forwarded the otification to CEDD, R. and ET on the same	Complaint of dusty environment at the new road connecting Shing Fung Road and Shing Kai Road caused by vehicles from construction sites nearby.	 Investigation Joint site inspection was conducted by Contractor (POC), ER, ET and IEC on 8 Feb 2023. 1. The concerned area (new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 Dec 2022. 2. Construction vehicles from POC are not allowed leaving the site to Shing Fung Road directly with barriers blocked since 21 Jan 2023. 3. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. 4. Worker of sub-contractor from Contractor (POC) wetted the part of the concerned road surface during the site inspection on 8 Feb 2023 to suppress dust emission. 5. No adverse observation against the dust impact were found during the site inspection along the new road. Action taken 1. Haul Road surfaces were wetted manually and washed the dusty water barrier regularly. 2. Wheel washing for the trucks and vehicles before leaving the project site. 3. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. Recommendations 	- Closed-out on 16 Mar 2023.

Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
			There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air quality: 1. Main haul road and the area that water sprinklers system was not covered in the construction site should be wetted by water trucks or manually in regular basis. 2. Regular wash the share haul road in Shing Fung Road. 3. Wheel washing for the trucks and vehicles before leaving the project site. The muddy water after the wheel washing should be directed to sedimentation tank and wastewater treatment facility before discharging to gully. 4. Dusty materials transported on truck shall be covered.		
C0008	A dust complaint was received by EPD on 13 Feb 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00003909-23) by E-Mail on 17 Feb 2023 and forwarded the E-mail to ER, ET and IEC on same day.	Complaint of silt / mud accumulation on the new road connecting Shing Fung Road and Shing Kai Road caused by vehicles from construction sites nearby.	 Investigation Joint site inspection was conducted by Contractor (POC), ER, ET and IEC on 23 Feb 2023 and regular site inspection was conducted by Contractor (POC), ER and ET on 2 Mar 2023. 1. The concerned area (new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 Dec 2022. Vehicles from nearby construction sites also used the concerned road. Those are the possible sources of dust nuisance. 2. Construction vehicles from POC are not allowed leaving the site to Shing Fung Road directly with barriers blocked since 21 Jan 2023. 3. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. 4. As per Contractor (POC), EPD conducted site visit on 16 Feb 2023. 5. No adverse observation against the dust / muddy water impact were found during the site inspection on both dates. 	- Closed-out on 29 Mar 2023.	

Complaint I	Log for ED/2018/01			
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
			 Action taken Construction vehicles from Contractor (POC) are not allowed leaving the site to Shing Fung Road directly as the exit was blocked by barriers since 21 Jan 2023. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. Haul Road surfaces were wetted manually and washed the dusty water barrier regularly. Wheel washing for the trucks and vehicles before leaving the project site. As per instruction from CEDD and AECOM, road washing along the new road (connecting Shing Fung Road and Shing Kai Road) and Shing Fung Road by water truck was conducted once a week as follow: Date Road Washing by 8 Mar 2023 Sweeper truck with water spraying truck 14 Mar 2023 Sweeper truck with water spraying truck During the two site inspections, mitigation measures implemented by the Contractor (POC) were found properly based on existing site condition and resources. 	
			Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air quality: 1. Main haul road and the area that water sprinklers system was not covered in the construction site should be wetted by water trucks or manually in regular basis.	

	Log for ED/2018/01	T	T	G1 G :
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
			 Regular wash the share haul road in Shing Fung Road. Dusty materials transported on truck shall be covered. 	
C0009	A dust complaint was received by EPD on 15 Feb 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00004280-23) by E-Mail on 22 Feb 2023 and forwarded the E-mail to ER, ET and IEC on same day.	Complaint of mud / silt being brought out by vehicles from construction site at Shing Fung Road roundabout (near Lamp Post DF4831) causing mud / silt accumulation along Shing Fung Road.	 Investigation Joint site inspection was conducted by Contractor (POC), ER, ET and IEC on 23 Feb 2023 and regular site inspection was conducted by Contractor (POC), ER and ET on 2 Mar 2023. 1. The concerned area (new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 Dec 2022. Vehicles from nearby construction sites also used the concerned road. Those are the possible sources of dust nuisance. 2. Construction vehicles from POC are not allowed leaving the site to Shing Fung Road directly with barriers blocked since 21 Jan 2023. 3. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. 4. As per Contractor (POC), EPD conducted site visit on 16 Feb 2023. 5. No adverse observation against the dust impact were found during the site inspection on both dates. 	- Closed-out on 29 Mar 2023.
			 Action taken Construction vehicles from Contractor (POC) are not allowed leaving the site to Shing Fung Road directly as the exit was blocked by barriers since 21 Jan 2023. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. Haul Road surfaces were wetted manually and washed the dusty water barrier regularly. Wheel washing for the trucks and vehicles before leaving 	

Complaint Log for ED/2018/01				
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
			the project site. 5. As per instruction from CEDD and AECOM, road washing along the new road (connecting Shing Fung Road and Shing Kai Road) and Shing Fung Road by water truck was conducted once a week as follow: Date	
			Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air quality: 1. Main haul road and the area that water sprinklers system was not covered in the construction site should be wetted by water trucks or manually in regular basis. 2. Regular wash the share haul road in Shing Fung Road. 3. Dusty materials transported on truck shall be covered.	
C0010	A dust and muddy water complaint was received by Hotline 1823 on 9 Mar 2023. ER received the transfer from the Hotline 1823 on 9 Mar 2023 and forwarded the E-mail to	Complaint of dusty environment at the new road (connecting Shing Fung Road and Shing Kai Road) and Shing Fung Road roundabout. Worker wetted the road surface and might cause mud / silt problem.	 Investigation Joint site inspection was conducted by Contractor (POC), ER, and ET on 16 Mar 2023 and 23 Mar 2023. The concerned area (new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 Dec 2022. Vehicles from nearby construction sites also used the concerned road. Those are the possible sources of dust nuisance. Construction vehicles from POC are not allowed leaving the 	- Closed-out on 6 Apr 2023.

Complaint	Log for ED/2018/01			
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
	Date of Complaint Contractor (POC), ET and IEC on same day.	Description of Complaint	 Investigation / Actions taken / Recommendations site to Shing Fung Road directly with barriers blocked since 21 Jan 2023. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. The sandbags were provided around the manholes. No adverse observation against the dust / muddy water impact were found during the site inspection on both dates. Action taken Construction vehicles from Contractor (POC) are not allowed leaving the site to Shing Fung Road directly as the exit was blocked by barriers since 21 Jan 2023. Contractor (POC) has restricted the construction vehicles from nearby construction site (Gammon site) using this site entrance for any construction activities since 4 Feb 2023. Haul Road surfaces were wetted manually and washed the dusty water barrier regularly. Wheel washing for the trucks and vehicles before leaving the project site. As per instruction from CEDD and AECOM, road washing 	
			along the new road (connecting Shing Fung Road and Shing Kai Road) and Shing Fung Road by water truck was conducted once a week as follow: Date	

Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
			Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air and water quality: 1. Dusty materials transported on truck shall be covered. 2. Enhance the sandbags with several layers of filters and replace the filter frequently.		
C0011	A muddy water complaint was received by EPD on 9 Mar 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00004280-23) by E-Mail on 22 Feb 2023 and forwarded the E-mail to ER, ET and IEC on same day.	Complaint of water being sprayed onto vehicles passing by and mud / silt being washed into roadside gully near Shing Fung Road roundabout.	Investigation Joint site inspection was conducted by Contractor (POC), ER and ET on 23 Mar 2023. 1. The concerned area (new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 Dec 2022. Vehicles from nearby construction sites also used the concerned road. Those are the possible sources of dust / mud / silt nuisance. 2. The sandbags were provided around the manholes. 3. No adverse observation against the muddy water impact were found during the site inspection on both dates. Action taken 1. As per Contractor (POC), no manually road surfaces watering on Shing Fung Road after receiving complaint (16 Mar 2023). 2. As per instruction from CEDD and AECOM, road washing along the new road (connecting Shing Fung Road and Shing Kai Road) and Shing Fung Road by water truck was conducted once a week as follow: Date Road Washing by 8 Mar 2023 Sweeper truck with water spraying truck 9 Mar 2023 Sweeper truck with water spraying truck	- Closed-out on 6 Apr 2023.	

Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
			14 Mar 2023 Sweeper truck with water spraying truck 22 Mar 2023 Sweeper truck with water spraying truck 3. The sandbags were provided around the manholes. Recommendations There was no direct evidence showing that the muddy water nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air and water quality: 1. Enhance the sandbags with several layers of filters and replace the filter frequently.		
C0012	A dust complaint was received by EPD on 31 May 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00013488-23) by E-Mail on 6 June 2023 and forwarded the E-mail to ER, ET and IEC on same day.	Complaint of silt / mud accumulation on the new road connecting Shing Fung Road and Shing Kai Road caused by vehicles from construction site nearby.	 Investigation Joint site inspection was conducted by Contractor (POC), ER and ET on 8 June 2023. 1. As per Mr. Tony Tang from POC, the concerned area was the section of Shing Fung Road at the entrance of Gammon site accommodation. 2. The new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 December 2022. Vehicles from nearby construction sites also used the concerned road. Those are the possible sources of dust / silt nuisance. 3. As per Mr. Tony Tang from POC, recycled water was used in wheel washing machine near the entrance of Gammon site. Those are the possible sources of mud nuisance. 4. No adverse observation against the dust impact were found during the site inspection. Action taken 1. As per instruction from CEDD and AECOM, road washing 	- Closed-out on 19 June 2023.	
			1. As per instruction from CEDD and AECOM, road washing along the new road (connecting Shing Fung Road and		

Complaint Log for ED/2018/01				
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status
			Shing Kai Road) and Shing Fung Road by water truck was conducted twice a week start from 11 May 2023. Date Road Washing by 19 May 2023 Sweeper truck with water spraying truck 23 May 2023 Sweeper truck with water spraying truck 25 May 2023 Sweeper truck with water spraying truck 30 May 2023 Sweeper truck with water spraying truck 2 June 2023 Sweeper truck with water spraying truck 6 June 2023 Sweeper truck with water spraying truck 9 June 2023 Sweeper truck with water spraying truck 13 June 2023 Sweeper truck with water spraying truck 2. Wheel washing for the vehicles before leaving the construction site. Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for air quality: 1. Regular wash the share haul road in Shing Fung Road and Shing Kai Road. 2. Dusty materials transported on truck should be covered.	
C0013	A water complaint was received by EPD on 19 June 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00014944-23)	 Complaint of muddy water being discharged into Kai Tak Approach Channel on 18 Jun 2023. Complaint of construction work being conducted on the Sunday of 18 Jun 2023. 	Joint site inspection was conducted by Contractor (POC), ER and ET on 6 Jul 2023.	- Closed-out on 2 Aug 2023.

Complaint	Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status		
	by E-Mail on 29 June 2023 and forwarded the E-mail to ER, ET and IEC on 4 July 2023.		might wash across the exposed soil surfaces which was direct muddy water discharge. This is the possible source of water nuisance. 3. As per Mr. Tony Tang from POC, no construction work was conducted on 18 Jun 2023. Based on the attendance record, 6 employees including 4 watchman, labourer and driver, were on site on 18 Jun 2023 and they were not involved in the construction work. In the joint site inspection, no construction work was conducted on the nearby channel. 4. No adverse observation against the muddy water impact were found during the site inspection on 14 and 20 June 2023, and 6 July 2023. The sedimentation tank and wastewater treatment plant are operating efficiently during the site inspection.			
			 Action taken The ditch is maintained regularly and excavated deeper by workers. Pumps are placed at the ditch to prevent flooding and overflow. Enhanced training for site workers to prevent flushing during heavy rain by placing pumps in the ditch to prevent flooding and overflow during periods of heavy rain during Tool- Box-Talk training. 			
			Recommendations There was no direct evidence showing that the muddy water nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for water quality: 1. Regular cleaning and maintenance drainage systems at the nearby Kai Tak Approach Channel.			

	Complaint Log for ED/2018/01						
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status			
C0014	A polluting discharge complaint was received by EPD on 16 October 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00024581-23) by E-Mail on 19 October 2023 and forwarded the E-mail to ER, ET and IEC on 21 October 2023.	- Complaint of polluting discharge from the construction site of Stage 4 Infrastructure at the Former Runway and South Apron, Kowloon City ("illegal discharge from kai tak 6577 construction site the main contractor should be hip hing)	 Investigation Joint site inspection was conducted by Contractor (POC), ER and ET on 26 October 2023. 1. The concerned area is near at Former Runway and South Apron, Kowloon City. Those are the possible sources should be illegal discharge from Kai Tak 6577 construction site which the main contractor should be hip hing. The possible source of polluting discharge does not come from the Contractor (POC). 2. No adverse observation against the muddy water impact were found during the site inspection on dates. No surface runoff is observed, and the sedimentation tank and wastewater treatment plant were implemented normally. 	- Closed-out on 15 November 2023.			
			Action taken 1. As per Contractor (POC), no wastewater generated at concerned area and ensure fulfil the conditions stipulated in the valid WPCO licence after receiving complaint (16 October 2023). The effluent discharge has been implemented properly. 2. The silt curtain has been installed around the construction activities at the concerned area. (referring to Photo 2) The sedimentation tank and wastewater treatment has been implemented properly. 3. The pump has been installed and collected sewage				

Complaint Log for ED/2018/01					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
			at the channel which can minimize water quality impacts and prevent overload the foul sewage system. (referring to Photo 3) The channel and ditches have been clear after receiving complaint. Recommendations There was no direct evidence showing that the muddy water nuisance was caused by the contractor at the complaint area, however Contractor (POC) is recommended to implement the following measures to minimize the impact for water quality: 1. The silt removal facilities, channels and manholes should be maintained regularly. 2. The silt curtain and equipment should be properly maintained.		

Complaint	Complaint Log for ED/2018/01				
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations	Close-Out Date / Status	
C0015	A dust complaint was received by EPD on 12 December 2023. Contractor (POC) received the Notification of Environmental Complaints from EPD (ref.: K19/RE/00030287-23) by E-Mail on 19 December 2023 and forwarded the E-mail to ER, ET and IEC on 20 December 2023.	- Complaint of construction dust nuisance on Shing Fung Road.	Investigation Joint site inspection was conducted by Contractor (POC), ER, and ET on 21 December 2023. 1. As per the email clarified by Mr. Tony Tang from POC on 20 December 2023, the concerned area (section of Shing Fung Road) was the junction of Road D3 and gate 2A& 2B. 2. The new road connecting Shing Fung Road & Shing Kai Road) has been open for public vehicles (not only project related vehicles) since 31 December 2022. Vehicles from nearby construction sites also used the concerned road. Those are the possible sources of dust / silt nuisance. The non-project of stockpiles is founded near the concerned road during the site inspection. 3. 3. As per Mr. Tony Tang from POC, recycled water was used in wheel washing machine near the entrance of Gammon site. The washing facilities and regular road watering are implemented. 4. No adverse observation against the dust impact were found during the site inspection. The washing facilities and dust control measures are implemented properly. Action taken 1. As per instruction from CEDD and AECOM, road washing along the new road (connecting Shing Fung	- 17 January 2024	

	Complaint Log for ED/2018/01 Complaint D					
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Actions taken / Recommendations			
			Road and Shing Kai Road) and Shing Fung Road b	у		
			water truck was conducted once per week in			
			December 2023.			
			Date Road Washing by			
			07 December Sweeper truck with water spraying truc	k		
			2023			
			16 December Sweeper truck with water spraying truc	k		
			2023			
			21 December Sweeper truck with water spraying truc	k		
			2023			
			29 December Sweeper truck with water spraying truc	k		
			2023			
			2. Wheel washing for the vehicles before leaving the			
			construction site.			
			Recommendations			
			There was no direct evidence showing that the dust nuisa			
			was caused by the contractor at the complaint area, however			
			Contractor (POC) is recommended to implement the following			
			measures to minimize the impact for air quality:			
			1. Regular wash the share haul road in Shing Fung Road and			
			Shing Kai Road.			
			2. Dusty materials transported on truck should be covered.			

Appendix C

Monthly EM&A Report For Contract No. ED/2018/05 Kai Tak Development

- Stage 5B infrastructure works at the former north apron area



Environmental Monitoring and Audit Report for

Contract No. ED/2018/05 – Kai Tak Development – Stage 5B infrastructure works at the former north apron area

Contract No.: EDO 2/2020

February 2024

(Version 1.0)

Certified By:

(Environmental Team Leader)





Date: 14 March 2024

Your ref:

Our ref: PL-202403022

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

Attn.: Ms. Mavis Law, SRE

Dear Ms. Law,

Re: Agreement No. EDO 6/2019 Independent Environmental Checker for Contract No. ED/2018/05 Kai Tak Development -Stage 5B Infrastructure Works at the Former North Apron Area Verification of Monthly EM&A Report (February 2024)

Reference is made to the Monthly EM&A Report (February 2024) (Version 1.0) issued by the Environmental Team on 13 March 2024.

Please be informed that we have no adverse comment on the captioned submission. We hereby verify the Monthly EM&A Report (February 2024) in accordance with Condition 3.3 of Environmental Permit No. EP-337/2009.

Thank you for your attention.

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

Kevin Li

Independent Environmental Checker

CEDD Attn.: Mr. Mr. Michael So By email c.c. Ka Shing By email Attn.: Mr. Chan Pang (ETL)

Tabl	le of Content	Page	
EXE	CUTIVE SUMMARY	5	
	Breaches of Action and Limit Levels	5	
	Complaint log	5	
	Notifications of summons and successful prosecutions	6	
	Report changes	6	
	Key construction works in the reporting month	6	
	Future key issues	7	
1.	INTRODUCTION	8	
	Project Background	8	
	Project Organization	9	
	Works Area and Construction Programme	9	
	Construction works undertaken during reporting month	10	
	Submission Status under the Environmental Permits	10	
2.	AIR QUALITY MONITORING	11	
	Monitoring Requirements	11	
	Monitoring Locations	11	
	Monitoring Parameters, Frequency and Duration	11	
	Monitoring Equipment	12	
	Monitoring Methodology and QA/QC Procedure	13	
	Wind Data Monitoring	15	
	Action and Limit Levels	15	
	Impact Air Quality Monitoring results	16	
3.	NOISE MONITORING	17	
	Monitoring Requirements	17	
	Monitoring Locations	17	

	Monitoring Parameters, Frequency and Duration	17
	Monitoring Equipment	18
	Monitoring Methodology and QA/QC Procedure	18
	Maintenance and Calibration	19
	Action and Limit Levels	19
	Impact Noise Monitoring results	20
4.	COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS	21
5.	LANDSCAPE AND VISUAL MONITORING	23
	Results and Observations	23
6.	ENVIRONMENTAL SITE INSPECTION AND AUDIT	24
	Site Inspection	24
	Status of Waste Management	26
	Status of Environmental Licenses, Notification and Permits	26
	Implementation Status of Environmental Mitigation Measures	26
	Environmental Complaint and Non-compliance	27
	Notifications of summons and successful prosecutions	27
7.	FUTURE KEY ISSUES	28
	Construction Programme in the coming month	28
	Environmental Site Inspection and Monitoring Schedule for next month	29
8.	CONCLUSIONS	30
List of Ta	ables	
Table I	Non-compliance Record in the Reporting Month	
Table II	Summary of complaints in the Reporting Month	
Table III	Summary of summons and successful prosecutions in the Reporting Month	
Table IV	Summary of future key issues and potential impact in the coming month	
Table 1.1	Contact Information of Key Personnel	

Table 1.2	Major activities of the Project during reporting month
Table 1.3	Summary of Status of Required Submission of EPs
Table 2.1	Locations of Air Quality Monitoring Stations
Table 2.2	Air Quality Monitoring Parameters, Frequency and Duration
Table 2.3	Air Quality Monitoring Equipment
Table 2.4	Action and Limit Levels of 24-hour average TSP for Construction Dust Monitoring
Table 2.5	Action and Limit Levels of 1-hour average TSP for Construction Dust Monitoring
Table 2.6	Summary of 24-hour average TSP Monitoring Data during the reporting month
Table 2.7	Summary of 1-hour average TSP Monitoring Data during the reporting month
Table 3.1	Locations of Noise Monitoring Stations
Table 3.2	Noise Monitoring Parameters, Frequency and Duration
Table 3.3	Noise Monitoring Equipment
Table 3.4	Baseline Noise Level and Action and Limit Levels for Construction Noise Monitoring
Table 3.5	Summary of Noise Monitoring Data during the reporting month
Table 4.1	Comparison of 24-hour average TSP Monitoring Data with EIA predictions
Table 4.2	Comparison of 1-hour average TSP Monitoring Data with EIA predictions
Table 4.3	Comparison of Noise Monitoring Data with EIA predictions
Table 5.1	Summary of observations of Landscape and Visual impact during the reporting month
Table 6.1	Summary of site inspections observations during the reporting month
Table 6.2	Summary of Environmental Licenses, Notifications and Permits
Table 6.3	Summary of complaints in the Reporting Month
Table 6.4	Summary of summons and successful prosecutions in the Reporting Month
Table 7.1	Summary of future key issues and potential impact in the coming month

List of Figure

- Figure 1 Proposed works of Contract No. ED/2018/05
- Figure 2 Proposed works of Contract No. ED/2018/05
- $Figure \ 3-D1 \ Road \ Site \ Layout \ Plan$

Figure 4 – Site Layout Plan

Figure 5 – Air Quality Monitoring Stations

Figure 6 – Noise Monitoring Stations

List of Appendices

Appendix A – Organization Chart of EM&A Team

Appendix B – Construction Programme

Appendix C – Environmental monitoring schedules

Appendix D – Photographic records

Appendix E – Calibration certificates, catalogue of air quality monitoring equipment

Appendix F – Weather information

Appendix G – 24-hr TSP monitoring results and graphical presentation

Appendix H – 1-hr TSP monitoring results and graphical presentation

Appendix I – Event and Action Plan for air quality

Appendix J – Calibration certificates, catalogue of noise monitoring equipment

Appendix K – Noise monitoring results and graphical presentation

Appendix L – Event and Action Plan for noise

Appendix M – Event and Action Plan for Landscape and Visual Impact

Appendix N – Waste Flow Table

Appendix O – Environmental Mitigation Implementation Schedule (EMIS)

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

EXECUTIVE SUMMARY

1. This is the 37th Monthly Environmental Monitoring & Audit (EM&A) report which summarises the findings of the EM&A Programme during the reporting period from 1 to 29 February 2024.

Breaches of Action and Limit Levels

- 2. 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 3. 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 4. Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 5. Summary of the non-compliance in the reporting month for the Project is tabulated in Table I.

Table I Non-compliance Record in the Reporting Month

Domonacton	No. of Exceedance		A -4: T-1
Parameter	Action Level	Limit Level	Action Taken
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Construction noise	0	0	N/A

Complaint log

6. No complaint was received in the reporting month. Summary of complaints in the reporting month is tabulated in Table II.

Table II Summary of complaints in the Reporting Month

	<i>,</i>	<u>p</u>		
Date of complaint received	Date of compliant	Description of complaint	Recommendations / Action taken	Close-out date / Status
No complaint was received in the reporting month.	NA	NA	NA	NA

Notifications of summons and successful prosecutions

7. No notification of summons and successful prosecutions was received in the reporting month. Summary of summons and successful prosecutions in the reporting month is tabulated in Table III.

Table III Summary of summons and successful prosecutions in the Reporting Month

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

Report changes

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

Key construction works in the reporting month

- 9. Major construction activities undertake during the reporting month included:
 - Erect falsework and working platform for Decking of Elevated Walkway LW-02
 - Dismantling Falsework and Portal Frame at LW-02
 - RC Construction for Decking of Elevated Walkway LW-02
 - RC Construction of LW02 Lift and Staircase
 - Installation of post tensioning anchorage system at LW-02
 - Construction of LW02 Pile cap PC-1
 - Construction of LW02 structural steel roof

- Construction of Permanent Shaft Structure of SB-01
- Backfilling of SB01 zone B
- Demolition of Pile Cap of additional staircase at SB01
- Road and Drain Construction works for Road L16, Commercial Street and Road D1
- Construction works for DCS 2A5B and 2A10
- Road and drain construction works at Olympic Avenue
- Renovation works for Subway KS10 Lift and Staircase
- Renovation works for existing subways KS10
- Construction of Retaining Wall Type 1 for S14
- Construction of Pile Cap for S14
- Construction works for SMH404 and SMH505

Future key issues

10. The future key issues and potential impact in the coming month are given in Table IV.

Table IV Summary of future key issues and potential impact in the coming month

Future key issues in the coming month	Potential impact
Dismantling Falsework and Portal Frame at LW-02	Noise and Air Quality
RC Construction for Decking of Elevated Walkway LW-02	Noise and Air Quality
RC construction of LW02 lift and staircase	Noise and Air Quality
Installation of post tensioning anchorage system at LW-02	Noise and Air Quality
Construction of LW02 Pile Cap PC-1	Noise and Air Quality
Construction of LW02 structural steel roof	Noise and Air Quality
Construction of Permanent Shaft Structure of SB-01	Noise and Air Quality
Backfilling of SB01 Zone B	Noise and Air Quality
Demolition of Pile Cap of additional staircase at SB01	Noise and Air Quality
Renovation works for existing subway KS10	Noise and Air Quality
Road and drain construction works of Road L16, Commercial Street and Road D1	Noise and Air Quality
Construction Works for DCS 2A5B and 2A10	Noise and Air Quality
Road and Drain Construction works at Olympic Avenue	Noise and Air Quality
Renovation works for Subway KS10 Lift and Staircase	Noise and Air Quality
Construction of Retaining Wall Type 1 for S14	Noise and Air Quality
Construction of Parapet for S14	Noise and Air Quality
Construction works for SMH404 and SMH505	Noise and Air Quality

1. INTRODUCTION

Project Background

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

Project Organization

1.6 The project organization chart and with respect to the EM&A programme is shown in AppendixA. Information of key personnel contact names and telephone numbers are summarized in Table1.1.

Table 1.1 Contact Information of Key Personnel

Party	Role	Contact Person	Position	Phone No.	E-mail
Civil Engineering and Development Department (CEDD)	Project Proponent	Mr. Stephen Lo	Permit Holder	3579 2470	cclo@cedd.gov.hk
AECOM Asia Co. Ltd. (AECOM)	Supervisor (act as Engineers' Representative (ER) listed in EM&A Manual)	Mr. Vincent Lee	Supervisor's Delegate	2798 0771	sre2@ktd- stage5.com
Acuity Sustainability Consulting Limited (Acuity)	Independent Environmental Checker (IEC)	Mr. Kevin Li	IEC	9779 2247	kevin.li@aurecong roup.com
Ka Shing Management Consultant Limited (Ka Shing)	Environmental Team (ET)	Mr. Pang Chan	ET Leader	6082 2973	stage5b@ka- shing.net
Build King – STEC Joint Venture (BK- STEC)	Contractor	Mr. Rex Lau	Contractor's Representative	6282 5154	rex.lau@buildking .hk

Works Area and Construction Programme

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

Construction works undertaken during reporting month

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

Table 1.2 Major activities of the Project during reporting month

Erect falsework and working platform for	Road and Drain Construction works at Olympic	
Decking of Elevated Walkway LW-02	Avenue	
Dismantling Falsework and Portal Frame at	Renovation works for Subway KS10 Lift and	
LW-02	Staircase	
RC Construction for Decking of Elevated Walkway LW-02	Renovation works for existing subways KS10	
RC Construction of LW02 Lift and Staircase	Construction of Retaining Wall Type 1 for S14	
Installation of post tensioning anchorage system at LW-02	Construction of Pile Cap for S14	
Construction of LW02 Pile cap PC-1	Backfilling of SB01 zone B	
Construction of LW02 structural steel roof	Demolition of Pile Cap of additional staircase at SB01	
Construction of Permanent Shaft Structure of	Construction works for SMH404 and SMH505	
SB-01		
Road and Drain Construction works for Road	Construction works for DCS 2A5B and 2A10	
L16, Commercial Street and Road D1		

Submission Status under the Environmental Permits

1.9 The status of required submission under Environmental Permit (EP) conditions under EP-337/2009 are summarized in Table 1.3.

Table 1.3 Summary of Status of Required Submission of EPs

EP Condition EP-337/2009	Submission	Submission Date
Condition 1.11	Notification of Commencement Date of Construction of the Project	12 Jan 2021
Condition 2.3	Management Organization of Main Construction Companies	21 Sep 2020
Condition 2.3	Updated Management Organization of Main Construction Companies	4 July 2022
Condition 2.4	Design Drawings	12 Jan 2021
Condition 2.11	Landscape Mitigation Plans	17 Dec 2020
Condition 3.2	Baseline Monitoring Report	12 Jan 2021

EP Condition EP-337/2009	Submission	Submission Date
Condition 3.3	Monthly EM&A Report (Jan 2023)	19 Feb 2024

2. AIR QUALITY MONITORING

Monitoring Requirements

2.1 In accordance with EM&A Manual (EIA Register No. AEIAR-130/2009), impact air quality monitoring shall be carried out during the construction phase of the Project. For regular impact monitoring, a sampling frequency of at least once in every six days will be strictly observed at all of the monitoring stations for 24-hour TSP. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six days will be undertaken when the highest dust impact occurs.

Monitoring Locations

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

Table 2.1 Locations of Air Quality Monitoring Stations

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

Monitoring Parameters, Frequency and Duration

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

Table 2.2 Air Quality Monitoring Parameters, Frequency and Duration

Air Monitoring Station	Location for Measurement		Parameter		Duration		Frequency
AM2(A) – Ng Wah Catholic Secondary School	Rooftop	-	24-hour average TSP	-	24 hours	-	Once every 6 days
AM3 – Sky Tower	Podium Floor near Tower 7	-	1-hour average TSP	-	1 hour	-	Three times every 6 days

- 2.4 The monitoring schedule for reporting month and next month is presented in Appendix C.
- 2.5 Photographic records of the impact monitoring setup are shown in Appendix D.

Monitoring Equipment

2.6 24-hour average TSP and 1-hour average TSP levels were measured for impact monitoring. 24-hour average TSP levels were measured by the High Volume Samplers (HVS) and 1-hour average TSP levels were measured by direct reading method to indicate short-term impacts. Wind data monitoring equipment was set up at conspicuous locations for logging wind speed and wind direction near to the dust monitoring locations. Table 2.3 summarizes the equipment to be used in the air quality monitoring.

Table 2.3 Air Quality Monitoring Equipment

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

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

Monitoring Methodology and QA/QC Procedure

24-hour TSP Monitoring

Operating/Analytical Procedures

- 2.9 Setup criteria of HVS are shown as follows:
 - A horizontal platform with appropriate support to secure the samplers against gusty wind was provided.
 - No two samplers were placed less than 2m apart.
 - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
 - A minimum of 2m of separation from walls, parapets and penthouses was set for the rooftop samples.
 - A minimum of 2m separation from any supporting structure, measured horizontally was set.
 - No furnaces or incineration flues was nearby.
 - Airflow around the sampler was unrestricted.
 - Any wire fence and gate, to protect the samplers, was not caused any obstruction during monitoring.
 - Permission were obtained to setup the samplers and to obtain access to the monitoring stations.
 - A secured supply of electricity was provided to operate the samplers.
- 2.10 Prior to the commencement of the dust sampling, the flow rate of the HVS was properly set (between 1.1 m³/min. and 1.7 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- 2.11 For TSP sampling, Glass Fiber Filter Media 8" x 10" having a collection efficiency of > 99 % for particles of 0.3 μ m diameter were used.
- 2.12 The power supply was checked to ensure the sampler worked properly and then placed any filter media at the designated air quality monitoring station.
- 2.13 The filter holding frame was removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.

- 2.14 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure was sufficient to avoid air leakage at the edges.
- 2.15 The shelter lid was closed and secured with the aluminium strip.
- 2.16 The timer was programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.17 After sampling, the filter was removed from the HVS and put into a clean and labeled seal plastic bag to avoid cross contamination. The elapsed time was also be recorded. The sampled filters were sent to the HOKLAS accredited or other internationally accredited laboratory for weighting.

Maintenance/Calibration

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

1-hour TSP Monitoring

Measurement Procedures

- 2.19 The measurement procedures of the 1-hour TSP were conducted in accordance with the Manufacturer's Instruction Manual as follows:
 - Set up the dust meter on a tripod at 1.2m level.
 - Turned on the dust meter and check the battery, if too low, change new ones. Pointed the meter to the source area or the planned measurement area.
 - The zero calibration of the instrument was conducted before and after each sampling.
 - TSP levels were recorded for 1-hour with 5-minute data logging interval.
 - Recorded down the general meteorological conditions, Test ID no., start/end time, spot check reading at each sampling location for data processing.

• Recorded any activities that may generate dust during measurement period.

Maintenance/Calibration

- 2.20 The following maintenance/calibration are required for the direct dust meters:
 - To validate the accuracy of dust meter, compare the results measured by dust meter and HVS every 12 months throughout all stages of the air quality monitoring.

Wind Data Monitoring

- 2.21 Wind Anemometer was installed at the roof-top of AM2(A) Ng Wah Catholic Secondary School with 10m above ground and clear of constructions or turbulence caused by the buildings.
- 2.22 The wind data was captured by a data logger and the data was downloaded at least once per month for analysis.
- 2.23 The wind data monitoring equipment will be re-calibrated at least once every six months.
- 2.24 Wind direction is divided into 16 sectors of 22.5 degrees each.
- 2.25 Details of weather information during the monitoring period are shown in Appendix F.

Action and Limit Levels

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

Table 2.4 Action and Limit Levels of 24-hour average TSP for Construction Dust Monitoring

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

Table 2.5 Action and Limit Levels of 1-hour average TSP for Construction Dust Monitoring

Parameter	Air Monitoring Station	Action Level, μg/m ³	Limit Level, µg/m³
1 hours arranged TCD	AM2(A)	302	500
1-hour average TSP	AM3	301	500

Impact Air Quality Monitoring results

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

Table 2.6 Summary of 24-hour average TSP Monitoring Data during the reporting month

Air Quality Monitoring Station	Average TSP Concentration, µg/m ³	Range, µg/m ³	Action Level, μg/m ³	Limit Level, µg/m³
AM2(A)	45	24 - 68	175	260
AM3	41	31 – 51	172	260

Table 2.7 Summary of 1-hour average TSP Monitoring Data during the reporting month

Air Quality Monitoring Station	Average TSP Concentration, µg/m ³	Range, μg/m ³	Action Level, μg/m ³	Limit Level, μg/m ³
AM2(A)	51	35 – 72	302	500
AM3	44	28 - 64	301	500

- 2.28 There was no Action and Limit Level exceedance of 24-hour average TSP and 1-hour average TSP levels recorded during the reporting month.
- 2.29 Graphical presentation and detailed monitoring results of 24-hour average TSP and 1-hour average TSP levels are shown in Appendix G and Appendix H respectively.
- 2.30 The Event and Action Plan is provided in Appendix I.
- 2.31 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 2.32 Weather conditions during the monitoring periods were generally fine and did not affect the monitoring results.

3. NOISE MONITORING

Monitoring Requirements

- 3.1 In accordance with EM&A Manual (EIA Register No. AEIAR-130/2009), impact noise monitoring shall be carried out during the construction phase of the Project.
- 3.2 Regular monitoring, $L_{Aeq, 30-minute}$, for each station will be on a weekly basis and conduct one set of measurements between 0700 1900 hrs on normal weekdays.
- 3.3 If construction works are extended to include works during 1900 0700 hrs as well as public holidays and Sundays, additional weekly impact monitoring will be carried out during the respective restricted hours periods.

Monitoring Locations

3.4 Two designated monitoring stations were selected for noise monitoring programme. Impact noise monitoring was conducted at two noise monitoring stations in the reporting month. Table 3.1 describes the noise monitoring locations, which are also depicted in Figure 6.

Table 3.1 Locations of Noise Monitoring Stations

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

Monitoring Parameters, Frequency and Duration

3.5 The noise monitoring locations and monitoring frequency are listed in Table 3.2.

Table 3.2 Noise Monitoring Parameters, Frequency and Duration

Noise Monitoring Station	Location for Measurement	Parameter	Frequency and Duration
M4(A) – Le Billionnaire	Podium (Façade)	I I and	30-minute measurement at each monitoring station between 0700
M5(A) – Prince Ritz	Podium (Façade)	$L_{ m Aeq}, L_{ m A10}$ and $L_{ m A90}$	- 1900 hrs on normal weekdays (Monday to Saturday) at frequency of once per week.

- 3.6 The monitoring schedule for reporting month and next month is presented in Appendix C.
- 3.7 Photographic records of the monitoring setup are shown in Appendix D.

Monitoring Equipment

3.8 As referred to the Technical Memorandum (TM) issued under the Noise Control Ordinance (NCO), sound level meters in compliance with the IEC 61672-1 (Class 1) standard [this standard replaced the International Electrotechnical Commission Publications 60651:1979 (Type 1) and 60804:1985 (Type 1)] were used for noise monitoring. Table 3.3 summarizes the equipment to be used in the noise monitoring.

Table 3.3 Noise Monitoring Equipment

Equipment	Model	Quantity	Calibration Interval
Sound Level Meter	RION NL52	1	1 year
Sound Level Calibrator	RION NC74	1	1 year
Air Flowmeter	TSI TA440 Air Velocity	1	1 year

3.9 Calibration certificates, catalogue of equipment are given in Appendix J.

Monitoring Methodology and QA/QC Procedure

3.10 The noise level measurement was conducted at 1m from the exterior of the nearby noise sensitive receivers building façade and at 1.2m above the ground and facing to the source area or the planned measurement area.

- 3.11 No noise measurement was conducted in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. Air flow was measured by air flow meter.
- 3.12 Turned on the sound level meter and check the battery, if too low, change new ones.
- 3.13 Calibration was conducted immediately prior to and after each noise measurement, the accuracy of the sound level meters was checked by using sound calibrator generating 1,000 Hz with 94dB. Measurement data was found to be valid only if the calibration levels from before and after the noise measurement agreed to within 1.0 dB.
- 3.14 Noise level was recorded.
- 3.15 Recorded any activities that may generate noise during measurement period.

Maintenance and Calibration

- 3.16 The microphone of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- 3.17 The sound level meter and sound calibrator were calibrated annually by HOKLAS accredited laboratory or equivalent.

Action and Limit Levels

3.18 The Baseline Noise Levels and Action and Limit Levels for construction noise is presented in Table 3.4.

Table 3.4 Baseline Noise Level and Action and Limit Levels for Construction Noise Monitoring

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

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

Impact Noise Monitoring results

3.19 Impact noise monitoring results at the designated noise monitoring stations are summarized in Table 3.5 respectively.

Table 3.5 Summary of Noise Monitoring Data during the reporting month

Noise Monitoring Station	Measured L _{Aeq, 30-} min, Average, dB(A)	Measured L _{Aeq, 30} - min, Range, dB(A)	Action Level	Limit Level ^
M4(A)	72.3	72.0 – 72.5	When one documented	75
M5(A)	74.4	74.2 – 74.6	complaint is received	dB(A)

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

- 3.20 There was no Action and Limit Level exceedance of L_{Aeq, 30-min} recorded during the reporting month.
- 3.21 Graphical presentation and detailed monitoring results are shown in Appendix K.
- 3.22 The Event and Action Plan is provided in Appendix L.
- 3.23 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 3.24 Weather conditions during the monitoring periods were generally fine and did not affect the monitoring results.

4. COMPARISON OF EM&A RESULTS WITH EIA PREDICTIONS

4.1 The environmental impacts predictions were given in Agreement No. CE 35/2006(CE) Kai Tak Development Engineering Study cum Design and Construction of Advance Works - Investigation, Design and Construction - Kai Tak Development Environmental Impact Assessment Report, EIA Register No. AEIAR-130/2009 for Kai Tak Development (The EIA Report). The EM&A data was compared with the EIA predictions as summarized in Table 4.1 to Table 4.3.

Table 4.1 Comparison of 24-hour average TSP Monitoring Data with EIA predictions

Air Quality Monitoring Station	ASR No. in EIA report	Maximum 24-h	Cumulative our average TSP stration Scenario 2 (Mid 2013 to Late 2016), µg/m³	Measured 24-hr average TSP in Reporting Month (Feb 2024) µg/m ³
AM2(A) - Ng Wah Catholic Secondary School	NA	NA	NA	24 – 68
AM3 - Sky Tower	A40^	106^	138^	31 - 51

Note:

Table 4.2 Comparison of 1-hour average TSP Monitoring Data with EIA predictions

Air Quality Monitoring Station	ASR No. in EIA report	Maximum 1-ho	Cumulative our average TSP extration Scenario 2 (Mid 2013 to Late 2016), µg/m³	Measured 1-hr average TSP in Reporting Month (Feb 2024) µg/m³
AM2(A) - Ng Wah Catholic Secondary School	NA	NA	NA	35 – 72
AM3 - Sky Tower	A40^	217^	247^	28 - 64

Note:

[^] Prediction results are given in the Table 3.13 of the EIA Report (EIAO Register No. AEIAR-130/2009) for Kai Tak Development.

[^] Prediction results are given in the Table 3.13 of the EIA Report (EIAO Register No. AEIAR-130/2009) for Kai Tak Development.

Table 4.3 Comparison of Noise Monitoring Data with EIA predictions

Noise Monitoring Station	NSR No. in EIA report	Predicted Mitigated Construction Noise Levels during Normal Daytime Working Hour LAeq, 30min, dB(A)	Measured Noise Level in Reporting Month (Feb 2024) L _{Aeq, 30min} , dB(A)
M4(A) – Le Billionnaire	NA	NA	72.0 - 72.5
M5(A) – Prince Ritz	NA	NA	74.2 – 74.6

- 4.2 No prediction in the EIA Report for 24-hour TSP monitoring results at AM2(A).
- 4.3 24-hour TSP monitoring results at AM3 was recorded lower than the prediction in the EIA Report.

 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 4.4 No prediction in the EIA Report for 1-hour TSP monitoring results at AM2(A).
- 4.5 1-hour TSP monitoring results at AM3 was recorded lower than the prediction in the EIA Report.

 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 4.6 No prediction in the EIA Report for noise monitoring results at M4(A) and M5(A).

5. LANDSCAPE AND VISUAL MONITORING

5.1 In accordance with EM&A Manual (EIA Register No. AEIAR-130/2009), Landscape and Visual Monitoring shall be carried out during the construction phase of the Project. Regular impact monitoring will be conducted at least once per week.

Results and Observations

- 5.2 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.3 Site inspections were conducted on 1, 8, 15, 22 and 29 February 2024 in the reporting month.
- 5.4 The summary of site audits is attached in Table 5.1.

Table 5.1 Summary of observations of Landscape and Visual impact during the reporting month

Inspection Date	Key Observations	Recommendations / Actions	Close- out Date / Status
1 Feb 2024	NA	NA	NA
8 Feb 2024	NA	NA	NA
15 Feb 2024	NA	NA	NA
22 Feb 2024	NA	NA	NA
29 Feb 2024	NA	NA	NA

- 5.5 No non-compliance of the landscape and visual impact was recorded in the reporting month.
- 5.6 Should non-compliance of the landscape and visual impact occur, action in accordance with the action plan presented in Appendix M shall be performed.

6. ENVIRONMENTAL SITE INSPECTION AND AUDIT

Site Inspection

- 6.1 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 6.2 Site inspections were conducted 1, 8, 15, 22 and 29 February 2024 in the reporting month.
- 6.3 The summaries of site audits are attached in Table 6.1.

Table 6.1 Summary of site inspections observations during the reporting month

Inspectio n Date	Key Observations	Recommendations / Actions	Close-out Date / Status
1 Feb 2024	Observation: The vehicles should be restricted to maximum speed of 10 km per hour.	Action Taken: The vehicles has been restricted to maximum speed of 10 km per hour.	Closed out on 8 Feb 2024
8 Feb 2024	Observation: Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.	Action Taken: Stockpiles has been fully covered by impermeable sheeting to reduce dust emission.	Closed out on 15 Feb 2024

Inspectio n Date	Key Observations	Recommendations / Actions	Close-out Date / Status
15 Feb 2024	Observation: Secondary container shall be provided for the plastic diesel engine oil to prevent soil contamination.	Action taken: The plastic diesel engine oil has been removed.	Closed out on 22 Feb 2024
22 Feb 2024	Observation: The vehicles should be restricted to maximum speed of 10 km per hour.	Action Taken: The vehicles has been restricted to maximum speed of 10 km per hour.	Closed out on 29 Feb 2024
29 Feb 2024	Observation: Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top ant the three sides.	Action Taken: The cement has been removed.	Closed out on 7 Mar 2024

Status of Waste Management

- 6.4 The amount of wastes generated by the major site activities of the work contracts within the Project during the reporting month is shown in Appendix N.
- 6.5 The Contractor was registered as a chemical waste producer for the Project. The Contractor was reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

Status of Environmental Licenses, Notification and Permits

6.6 A summary of the relevant permits, licenses and/or notifications on environmental protection for the Project is shown in Table 6.2.

Table 6.2 Summary of Environmental Licenses, Notifications and Permits

Environmental Licenses, Notifications and Permits	Ref. No.	Valid Form	Valid Till
Environmental Permit under EIAO	EP-337/2009	23 Apr 2009	N/A
Construction Dust Notification under APCO	HA/1826/1	29 Dec 2020	N/A
Waste Disposal Billing Account	7038086	21 Aug 2020	N/A
Registration as a Chemical Waste Producer	5111-286-B2596-01	15 Sep 2020	N/A
Wastewater Discharge License under WPCO	WT00037618-2021 WT00037370-2021	29 Mar 2021	31 Mar 2026
	WT00038562-2021	15 Jul 2021	31 Jul 2026
Construction Noise Permit	GW-RE1585-23	11 Dec 2023	10 Jun 2024

Implementation Status of Environmental Mitigation Measures

6.7 The Contractor has implemented environmental mitigation measures as stated in the EIA report, the EP and the EM&A Manual. The implementation status of the mitigation measures is summarized in Appendix O.

Environmental Complaint and Non-compliance

6.8 No complaint was received in the reporting month. Summary of complaints in the reporting month is tabulated in Table 6.3.

Table 6.3 Summary of complaints in the Reporting Month

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

6.9 Complaint log is shown in Appendix P.

Notifications of summons and successful prosecutions

6.10 No notification of summons and successful prosecutions was received in the reporting month. Summary of summons and successful prosecutions in the reporting month is tabulated in Table 6.4.

Table 6.4 Summary of summons and successful prosecutions in the Reporting Month

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

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

7. FUTURE KEY ISSUES

Construction Programme in the coming month

7.1 The major construction activities and potential impacts in the next reporting month are as follows:

Table 7.1 Summary of future key issues and potential impact in the coming month

Future key issues in the coming month	Potential impact	
Dismantling Falsework and Portal Frame at LW-02	Noise and Air Quality	
RC Construction for Decking of Elevated Walkway LW-02	Noise and Air Quality	
RC Construction of LW02 Lift and Staircase	Noise and Air Quality	
Installation of post tensioning anchorage system at LW-02	Noise and Air Quality	
Construction of LW02 Pile Cap PC-1	Noise and Air Quality	
Construction of LW02 structural steel roof	Noise and Air Quality	
Construction of Permanent Shaft Structure of SB-01	Noise and Air Quality	
Backfilling of SB01 Zone B	Noise and Air Quality	
Demolition of Pile Cap of additional staircase at SB01	Noise and Air Quality	
Road and Drain Construction Works for Road L16,	Noise and Air Quality	
Commercial Street and Road D1		
Construction Works for DCS 2A5B and 2A10	Noise and Air Quality	
Road and Drain Construction Works at Olympic Avenue	Noise and Air Quality	
Renovation Works for Subway KS10 Lift and Staircase	Noise and Air Quality	
Renovation works for existing subway KS10	Noise and Air Quality	
Construction of Retaining Wall Type 1 for S14	Noise and Air Quality	
Construction of Parapet for S14	Noise and Air Quality	
Construction Works for SMH404 and SMH505	Noise and Air Quality	

- 7.2 The mitigation measures for environmental impact including Air Quality, Construction Noise, Water Quality, Chemical and Waste Management, Landscape and Visual shall be implemented:
 - Sufficient watering of the works site with the active dust emitting activities,
 - Limitation of the speed for vehicles on unpaved site roads,
 - Properly cover the stockpiles,
 - Good maintenance to the plant and equipment,
 - Use of quieter plant and Quality Powered Mechanical Equipment (QPME),
 - Provide movable noise barriers,
 - Appropriate desilting/ sedimentation devices provided on site for treatment before discharge,
 - Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall,
 - Onsite waste sorting and implementation of trip ticket system,
 - Good management and control on construction waste reduction,
 - Erection of decorative screen hoarding,

- Strictly following the Environmental Permits and Licenses, and
- Provide sufficient mitigation measures as recommended in Approved EIA Report.
- 7.3 The recommended environmental measures proposed in the EM&A Manual (EIA Register No. AEIAR-130/2009) shall be effectively implemented to minimize the potential environmental impacts. The Contractor is reminded to implement the mitigation measures properly.

Environmental Site Inspection and Monitoring Schedule for next month

7.4 The tentative schedule for weekly site inspection and air quality and noise monitoring in the next month is provided in Appendix C.

8. CONCLUSIONS

- 8.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 8.2 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 8.3 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 8.4 Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 8.5 No complaint was received in the reporting month.
- 8.6 No notification of summons and successful prosecutions was received in the reporting month.
- 8.7 Based on the site inspection and audits, impact air quality and noise monitoring results, it was considered that the mitigation measures were effective to control the potential environmental impacts from the Project during the reporting period.

Figure

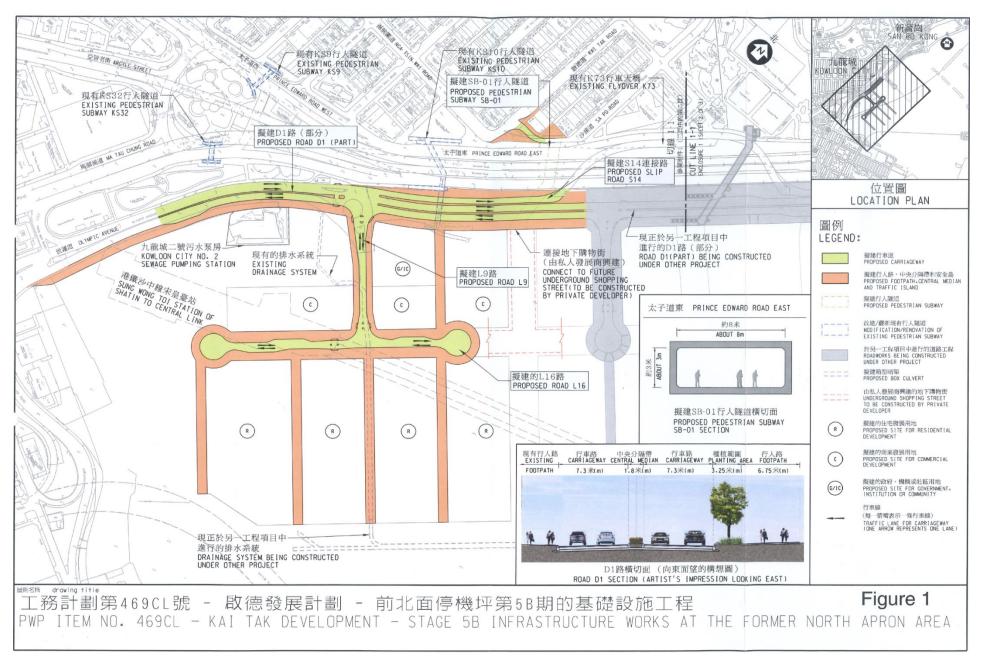


Figure 1 – Proposed works of Contract No. ED/2018/05

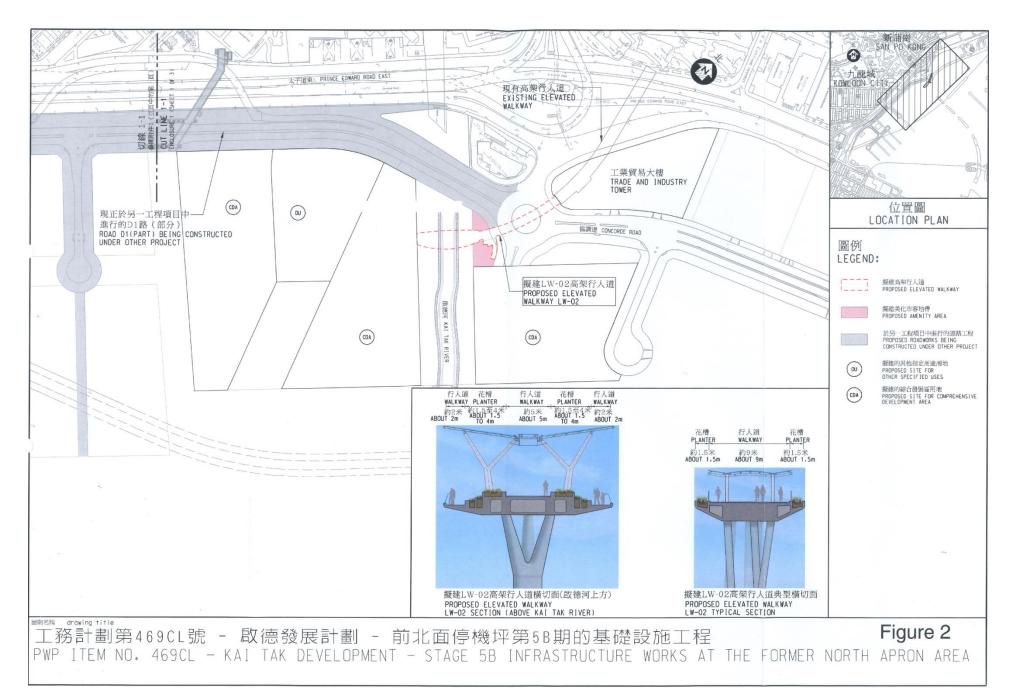
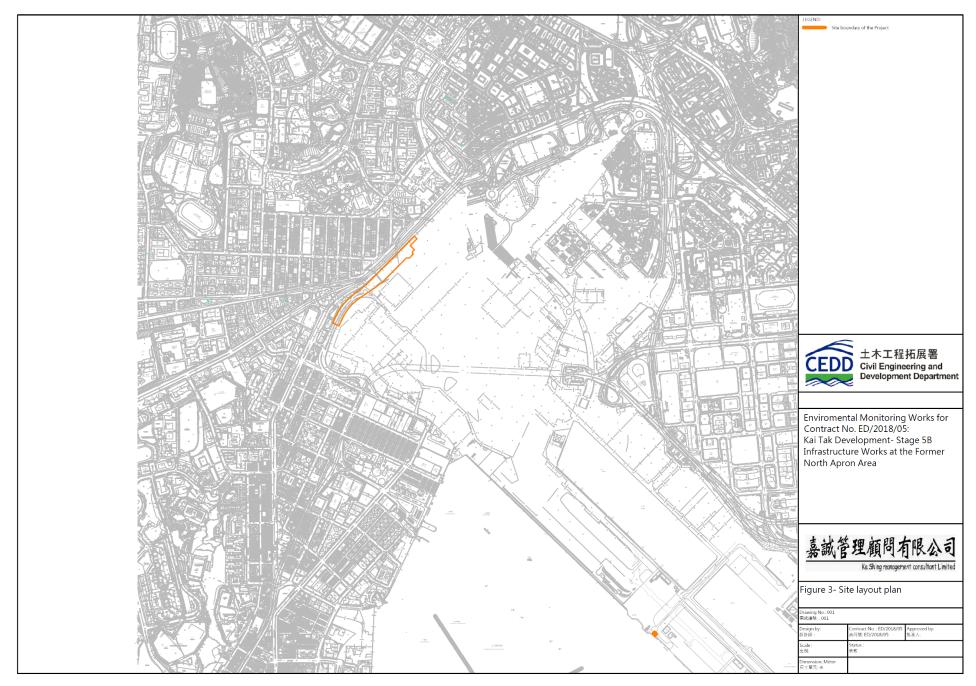


Figure 2 – Proposed works of Contract No. ED/2018/05



 $Figure \ 3-D1 \ Road \ Site \ Layout \ Plan$

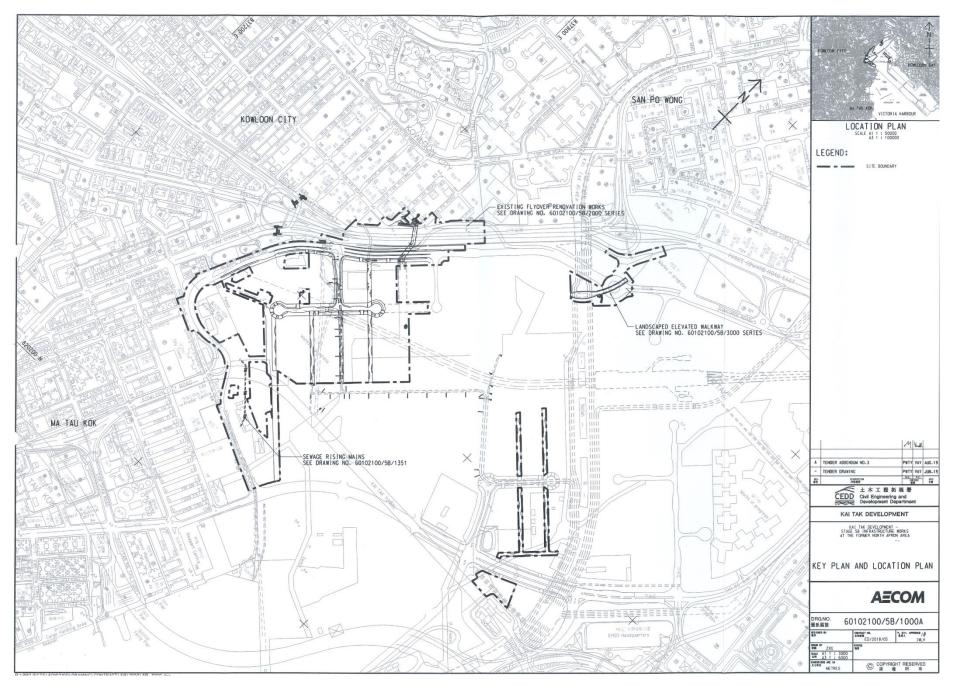


Figure 4 – Site Layout Plan

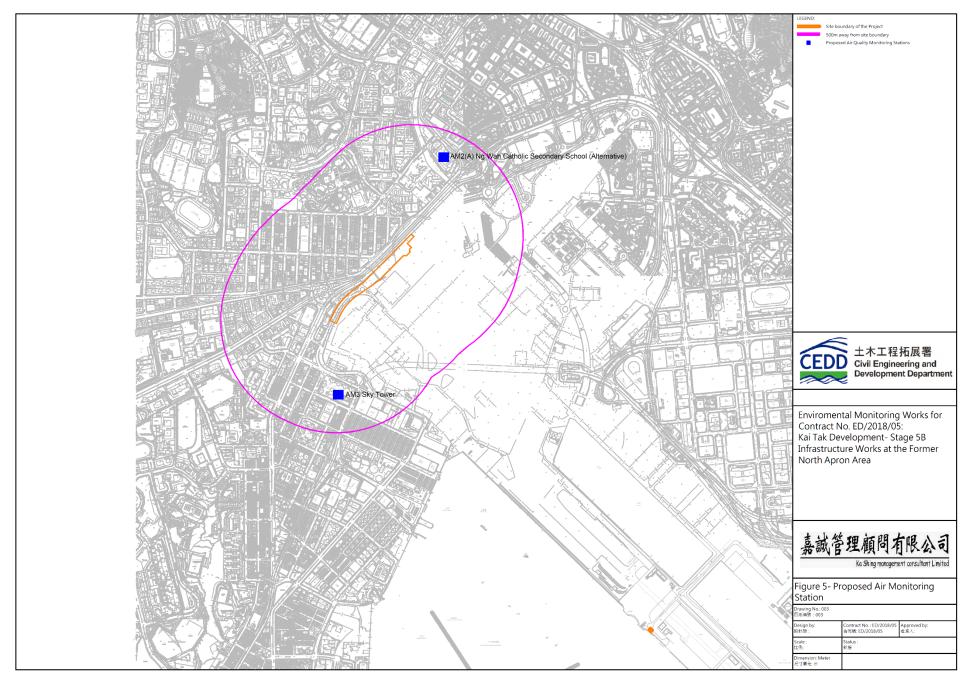
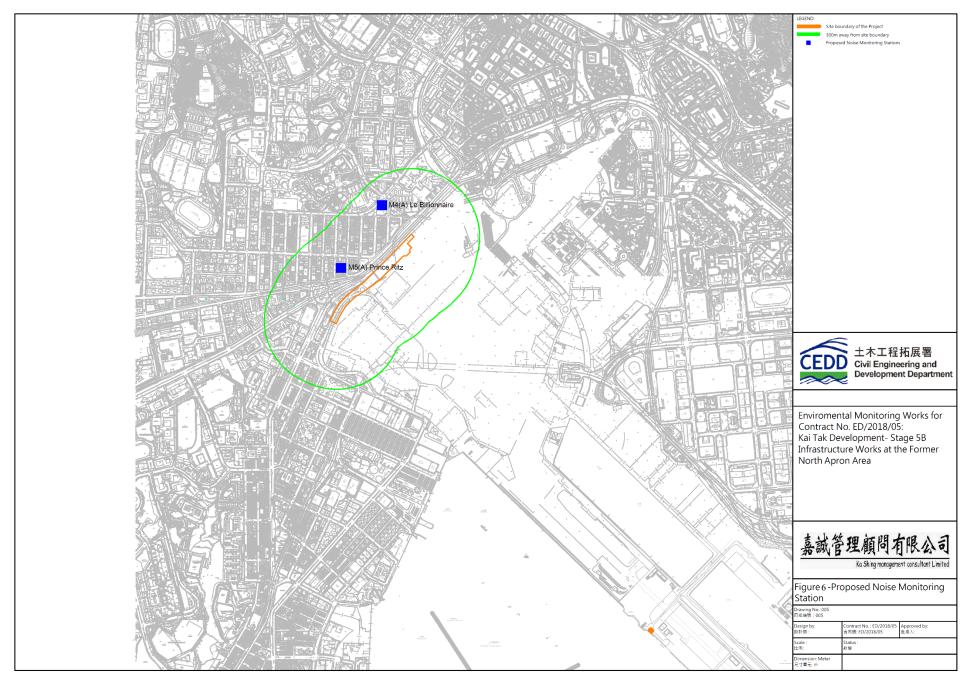
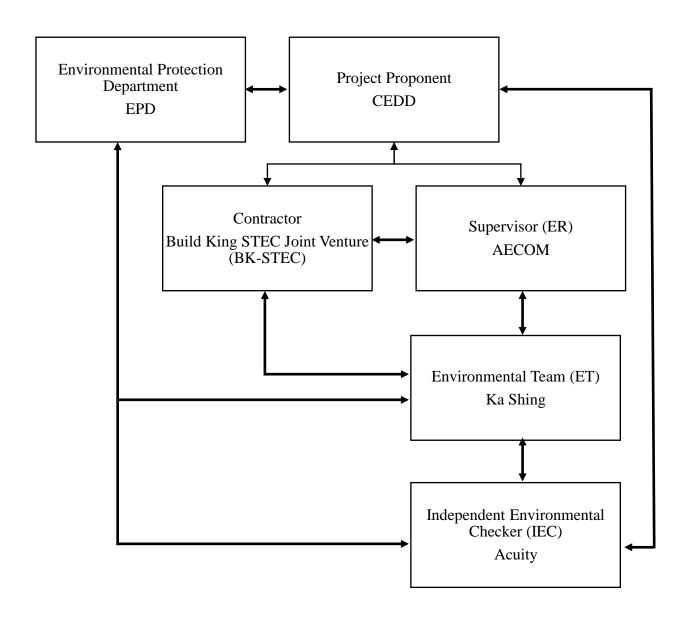


Figure 5 – Air Quality Monitoring Stations

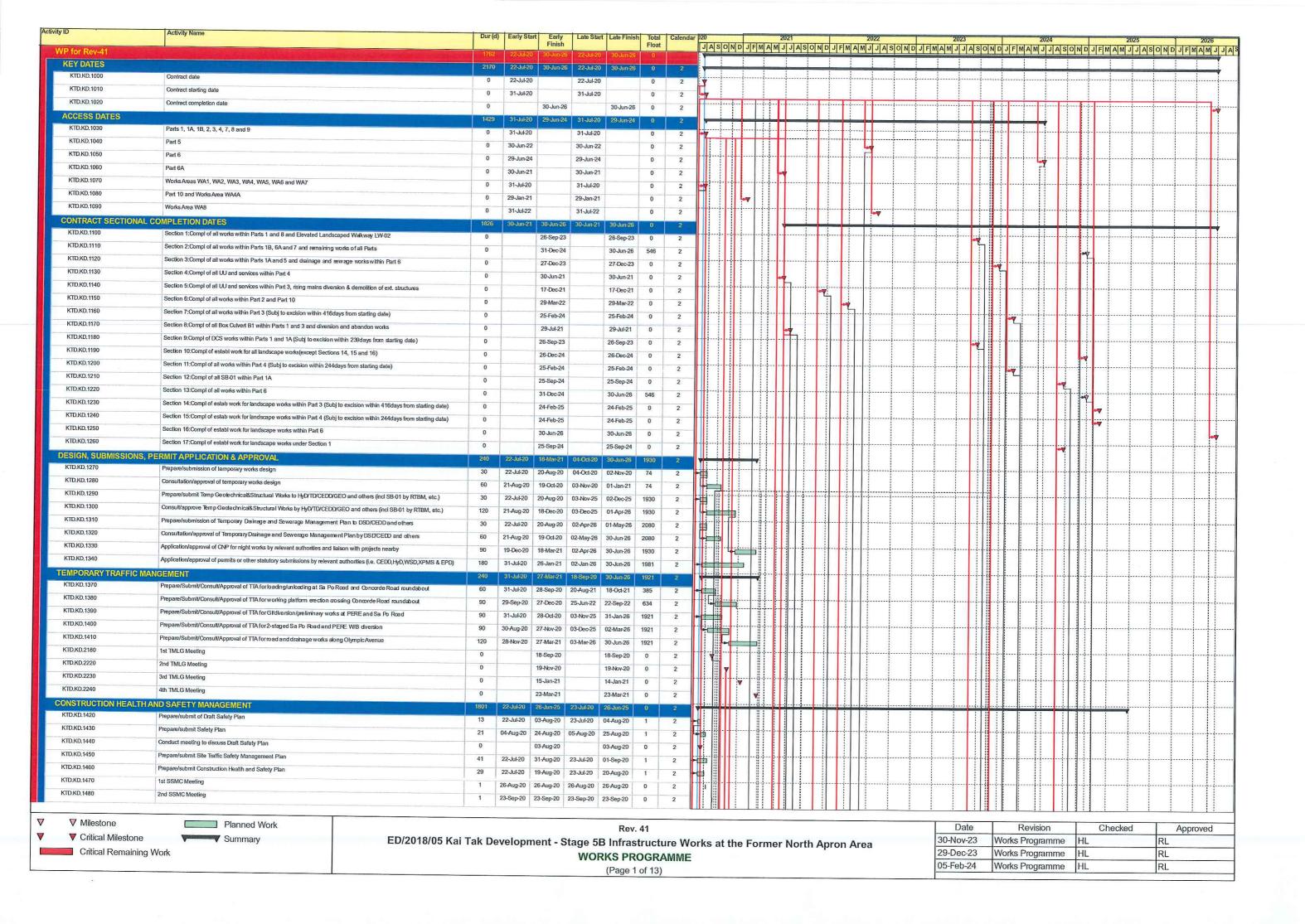


 $Figure\ 6-Noise\ Monitoring\ Stations$

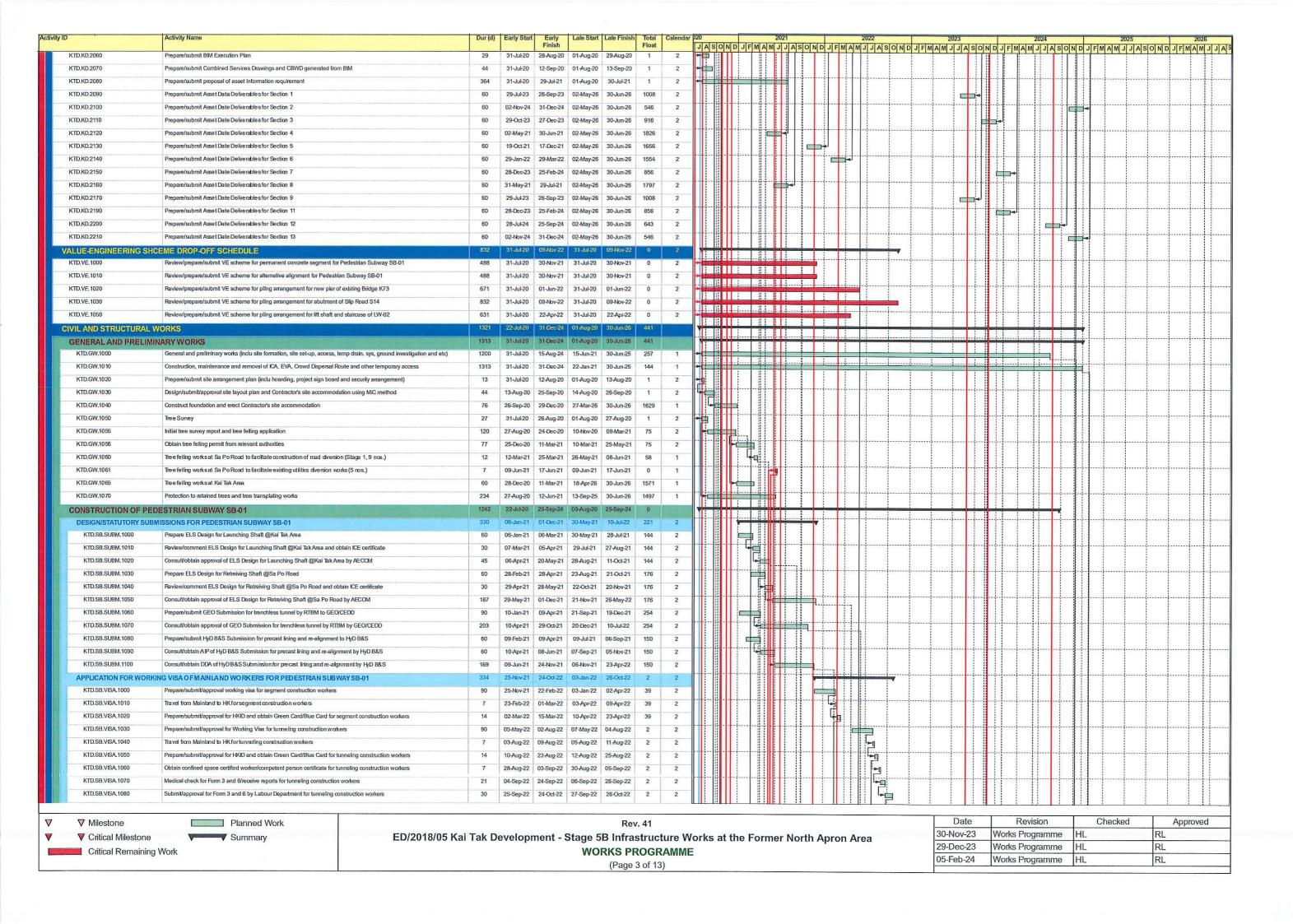
Appendix A – Organization Chart of EM&A Team

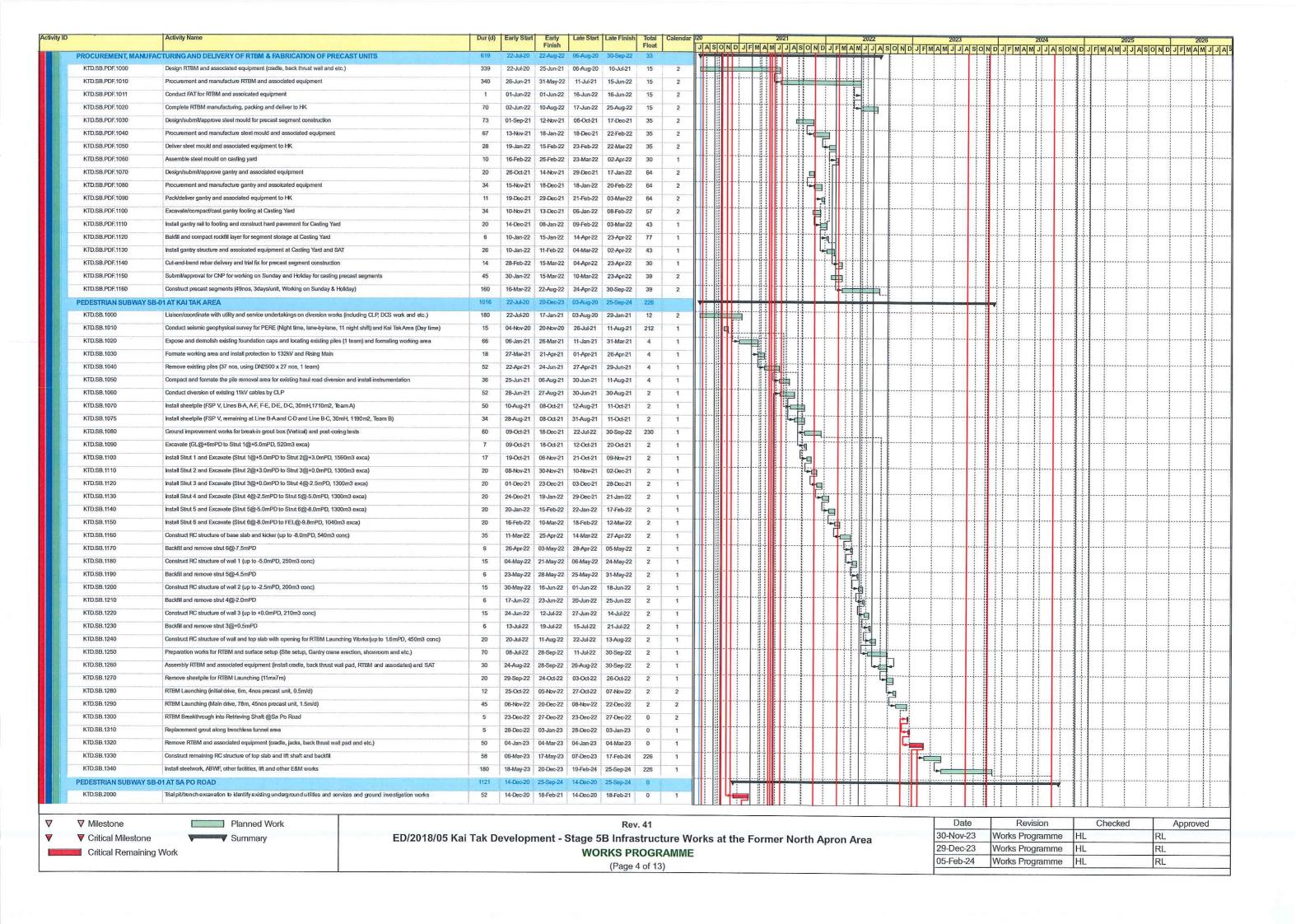


Appendix B – Construction Programme

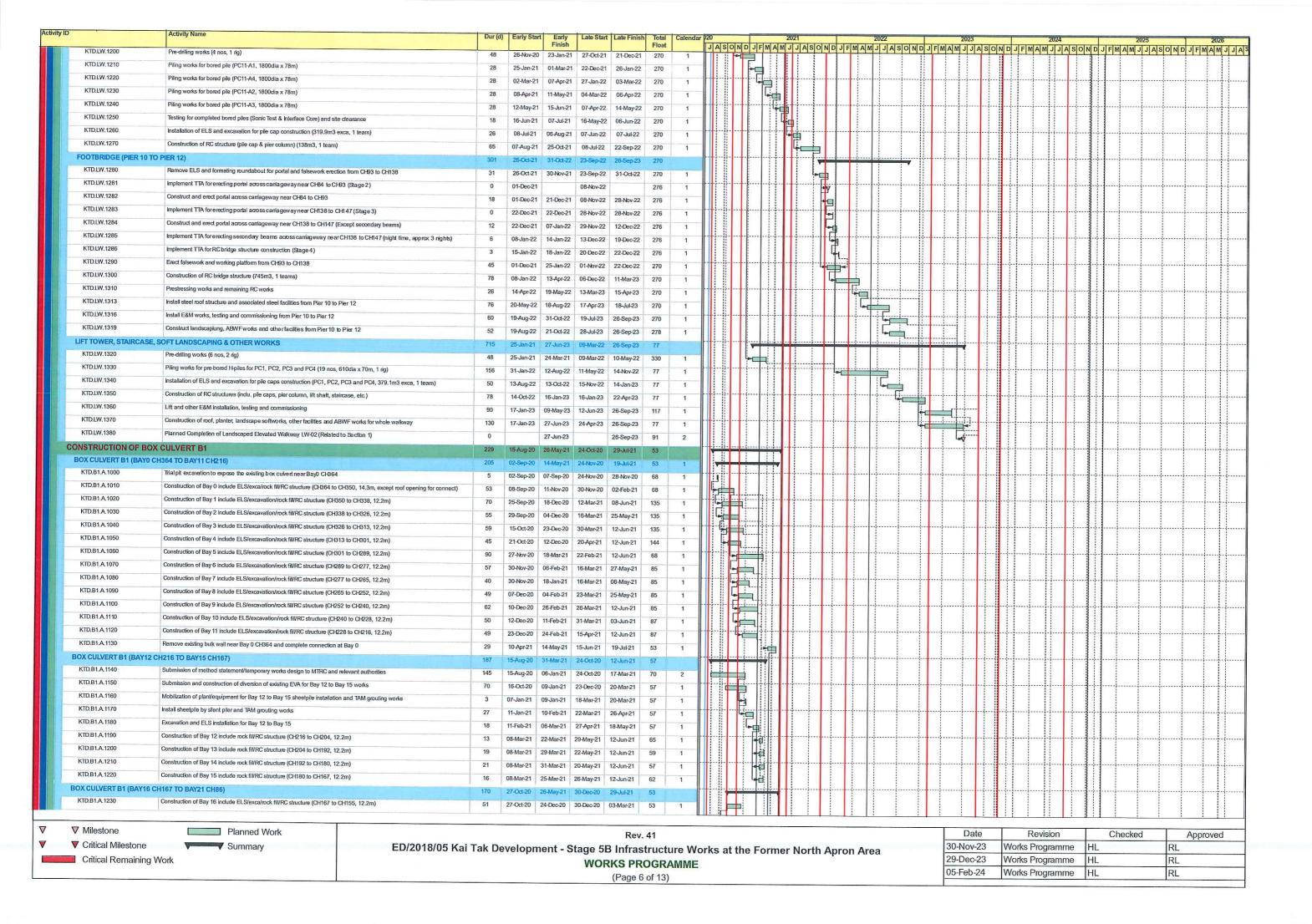


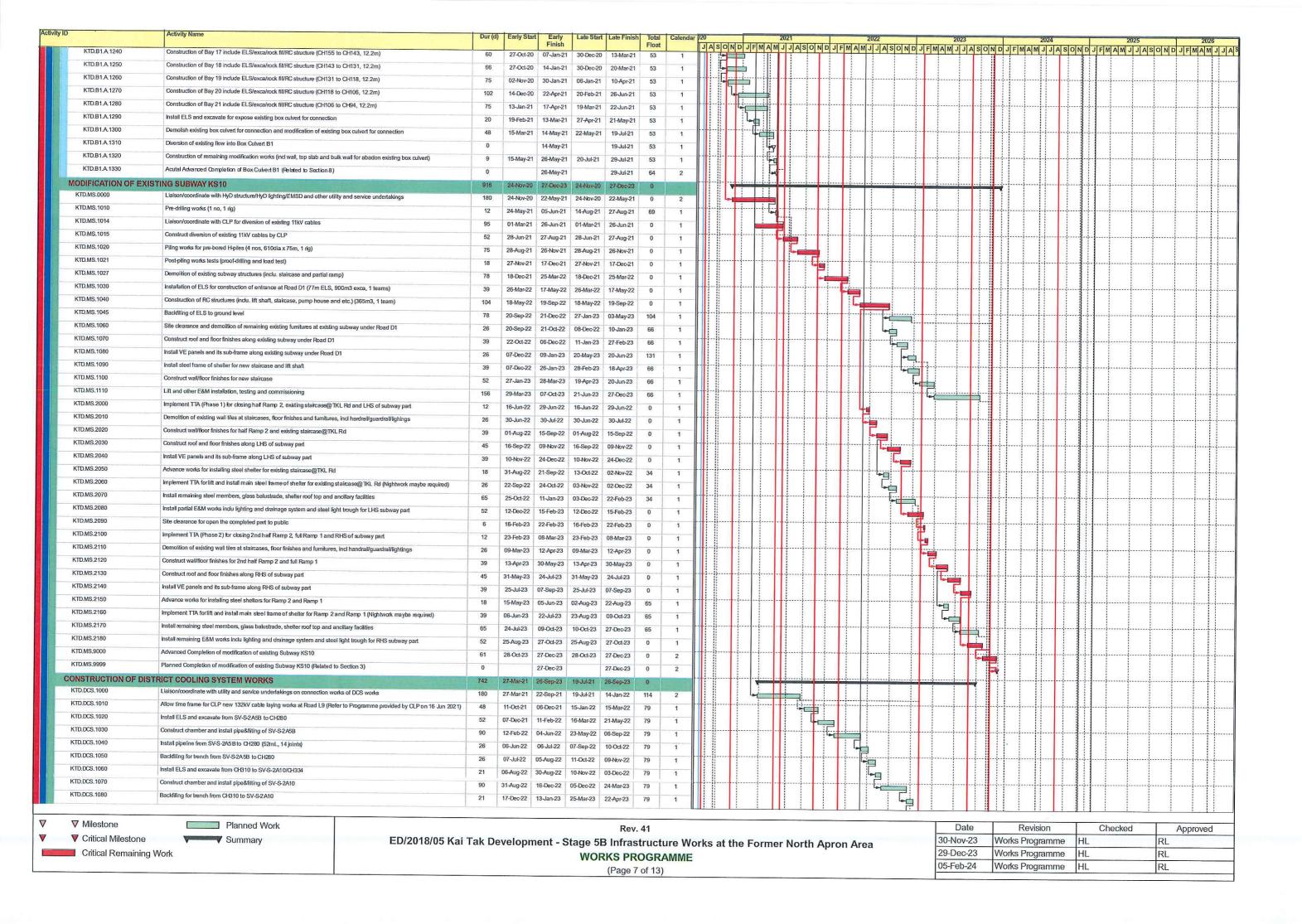
ity ID	Activity Name	Dur (d)	Early Start		Late Start	Late Finish		Calendar				2021		T		2022		202	3			2024			2025	5	-	202
KTD.KD.1490	3rd SSMC Meeting	1	29-Oct-20	Finish	20 Oct 20		Float	2	JAS	OND.	FMA	MJJ	ASO	DJF	MAM	JJASO	NDJF	MAMJ.	JASO	NDJ	FMAN	A J J A	SONI	JFM	AMJJ	ASON	DJFM	AM
KTD.KD.1500	4th SSMC Meeting					29-Oct-20		2																				
KTD.KD.1510	5th SSMC Meeting	1	26-Nov-20			100000000000000000000000000000000000000	0	2					ļ.i			.j												
KTD.KD.1520	and the polytoper continuous de spare 4.— >	1	31-Dec-20		.50.000.000.000		0	2						1														1
21 A STATE OF THE	6th SSMC Meeting	1	28-Jan-21	28-Jan-21	28-Jan-21	28-Jan-21	0	2			1															į		
KTD.KD.1530	7th SSMC Meeting	1	25-Feb-21	25-Feb-21	25-Feb-21	25-Feb-21	0	2										7						11				1
KTD.KD.1540	8th SSMC Meeting	1	24-Mar-21	24-Mar-21	24-Mar-21	24-Mar-21	0	2																				1 /
KTD.KD.1550	9th SSMC Meeting	1	29-Apr-21	29-Apr-21	29-Apr-21	29-Apr-21	0	2					1		+++	·		† <u> </u>						+				
KTD.KD.1560	10th SSMC Meeting	1	27-May-21	27-May-21	27-May-21	27-May-21	0	2													į							1 /
KTD.KD.1570	11th SSMC Meeting	1	24-Jun-21	24-Jun-21	24-Jun-21	24-Jun-21	0	2										. -						₩				ļ
KTD.KD.1580	12th SSMC Meeting	1			29-Jul-21		0	2									i								l	į		
KTD.KD.1590	13th SSMC Meeting	1		26-Aug-21			0	2					ļ					ļļ.						<u> </u>				
KTD.KD.1600	14th SSMC Meeting			1000																	i							
KTD.KD.1610	15th SSMC Meeting	1		30-Sep-21			0	2					1			.]		Jl.										
III SA HERONING AND	The state of the s	1					0	2																				-
KTD.KD.1620	16th SSMC Meeting	1	25-Nov-21	25-Nov-21	25-Nov-21	25-Nov-21	0	2						1												į		
KTD,KD,1630	17th SSMC Meeting	1	30-Dec-21	30-Dec-21	30-Dec-21	30-Dec-21	0	2						il		1	·	1 1				11-1		11-1				ļ
KTD.KD.1640	18th SSMC Meeting	1	27-Jan-22	27-Jan-22	27-Jan-22	27-Jan-22	0	2						i i											į			ĺ
KTD.KD.1650	19th SSMC Meeting	1	24-Feb-22	24-Feb-22	24-Feb-22	24-Feb-22	0	2			111		1		7	+		╁┉╌┼				+		+ + +				
KTD.KD.1660	20th SSMC Meeting	1	31-Mar-22	31-Mar-22	31-Mar-22	31-Mar-22	0	2							ill													
KTD.KD.1670	21st SSMC Meeting	1	28-Apr-22	28-Apr-22	28-Apr-22	28-Apr-22	0	2	# -	1-1						- 		 -		#				-				ļ
KTD.KD.1680	22nd SSMC Meeting	1	26-May-22				0	2																				1
KTD.KD.1690	23rd SSMC Meeting		30-Jun-22		2	8		2		- -	.		ļ					ļļ.										
KTD.KD.1700	24th SSMC Meeting	1					0	- 3																				1
		1	28-Jul-22				0	2					1			1												
KTD.KD.1710	25th SSMC Meeting	1	25-Aug-22	25-Aug-22	25-Aug-22	25-Aug-22	0	2								1]											
KTD.KD.1720	26th SSMC Meeting	1	29-Sep-22	29-Sep-22	29-Sep-22	29-Sep-22	0	2																				1
KTD.KD.1730	27th SSMC Meeting	1	27-Oct-22	27-Oct-22	27-Oct-22	27-Oct-22	0	2								1	***	†****†					##	 - -				
KTD.KD.1740	28th SSMC Meeting	1	24-Nov-22	24-Nov-22	24-Nov-22	24-Nov-22	0	2									r											
KTD.KD.1750	29th SSMC Meeting	1	29-Dec-22	29-Dec-22	29-Dec-22	29-Dec-22	0	2	#						++++	†	-	·					+++	-				
KTD.KD.1760	30th SSMC Meeting	1	26-Jan-23	26-Jan-23	26-Jan-23	26-Jan-23	0	2									1,											
KTD.KD.1770	31st SSMC Meeting	1	23-Feb-23				0	2					-					ļļ				- -		ļ				ļ
KTD.KD.1780	32nd SSMC Meeting	1	30-Mar-23				0	2									')										
KTD.KD.1790	33rd SSMC Meeting	1							4.4							ļļ		ļļ										
KTD.KD.1800	34th SSMC Meeting		27-Apr-23				0	2		Ш								11 1										
KTD.KD.1810	35th SSMC Meeting	1	25-May-23				0	2								<u> </u>												
Prost Drawn Set Provide all Deposits May	_	1	29-Jun-23	29-Jun-23	29-Jun-23	29-Jun-23	0	2																		1		
KTD.KD.1820	36th SSMC Meeting	1	27-Jul-23	27-Jul-23	27-Jul-23	27-Jul-23	0	2																		i		1
KTD.KD.1830	37th SSMC Meeting	1	31-Aug-23	31-Aug-23	31-Aug-23	31-Aug-23	0	2								1 1	1		111				***				1	[
KTD.KD.1840	38th SSMC Meeting	1	28-Sep-23	28-Sep-23	28-Sep-23	28-Sep-23	0	2		Ш									Ė									
KTD.KD.1850	39th SSMC Meeting	1	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	0	2							+++	†***** <u>†***</u>		ł				1	+++					
KTD.KD.1860	40th SSMC Meeting	1	30-Nov-23	30-Nov-23	30-Nov-23	30-Nov-23	0	2																				i
KTD.KD.1870	41st SSMC Meeting	1	28-Dec-23	28-Dec-23	28-Dec-23	28-Dec-23	0	2	#						·÷	 		}				- -						ļ
KTD.KD.1880	42nd SSMC Meeting	1	25-Jan-24	25-Jan-24	25-Jan-24	25-Jan-24	0	2																				
KTD.KD.1890	43rd SSMC Meeting	1		29-Feb-24			0	2								ļļ		ļļ				44	44.					
KTD.KD.1900	44th SSMC Meeting	1																			1					1		
KTD.KD.1910	45th SSMC Meeting					000000000000000000000000000000000000000	0	2																				
Strategy to be apply a company of a property		1		25-Apr-24	25-Apr-24	25-Apr-24	0	2													T							
KTD.KD.1920	46th SSMC Meeting	1	30-May-24	30-May-24	30-May-24	30-May-24	0	2													1							
KTD.KD.1930	47th SSMC Meeting	1	27-Jun-24	27-Jun-24	27-Jun-24	27-Jun-24	0	2							111	1 1	1						111	-		-		
KTD.KD.1940	48th SSMC Meeting	1	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24	0	2																				
KTD.KD.1950	49th SSMC Meeting	1	29-Aug-24	29-Aug-24 2	29-Aug-24 2	29-Aug-24	0	2			11				+++	 		·				-	++-+-				·i	
KTD.KD.1960	50th SSMC Meeting	1	26-Sep-24 2	26-Sep-24 2	26-Sep-24	26-Sep-24	0	2																	İ			í
KTD.KD.1970	51st SSMC Meeting			31-Oct-24			0	2			+#+	$\left\{ \left\{ \left\{ \cdot\right\} \right\} \right\}$			+	} 		}				-	4.4.	- -				·
KTD.KD.1980	52nd SSMC Meeting	1					0	2																				Á
KTD.KD.1990	53rd SSMC Meeting	1					0	2				.[.]		[ļļ		ļ										
KTD.KD.2000	54th SSMC Meeting							===																				
KTD.KD.2010	55th SSMC Meeting		30-Jan-25			2.5.100536365	0	2								ļ <u>i</u>												į
DESCRIPTION OF THE PROPERTY OF			27-Feb-25				0	2					1											I		1		
KTD.KD.2020	56th SSMC Meeting	1	27-Mar-25	27-Mar-25 2	27-Mar-25	27-Mar-25	0	2										i							į			Á
KTD.KD.2030	57th SSMC Meeting	1	24-Apr-25	24-Apr-25	24-Apr-25	24-Apr-25	0	2								T						11-1-	1111	11	(1	1	
KTD.KD.2040	58th SSMC Meeting	1	29-May-25 2	29-May-25 2	9-May-25 2	29-May-25	0	2																	1 !			
KTD.KD.2050	59th SSMC Meeting	1	26-Jun-25 2	26-Jun-25 2	26-Jun-25 2	26-Jun-25	0	2		11:1:	Tit		1		+++	†		·				-	+		<u>i</u>		- 	ļ.
BIM RELATED DELIVERA	ABLES	1615	31-Jul-20	31-Dec-24 0	1-Aug-20	30-Jun-26	546	2		₩	111		-		-									,	1			
										Ш			3			: !					i			1 !			<u> </u>	_
▼ Milestone	Planned Work					ъ.	14											Г	ate	Т	Revi	icion		Ch	ecked		Ann-	FO1 15
		ED/0040/05 17 1 = 1				Rev. 4		1	-6	(2)/(02)		(20)	587	20	320				-	10/-		gramm	0 11		SUNCU		Appr	ove
▼ Critical Milestone	V 1000000000000000000000000000000000000	ED/2018/05 Kai Tak De	velopm	ent - St					rks a	at the	Forn	ier N	orth	Apro	n Are	ea		30-No		_				L		RI		
Critical Remainir	ng Work				WOR	KS PRO	CDA	MME										29-De	U-23	VVO	KS Prog	gramm	ie [H	L		RL	4	
					WOI	NOTING	GIVA	TIALIAL										05-Fel	0.			gramm				RL		



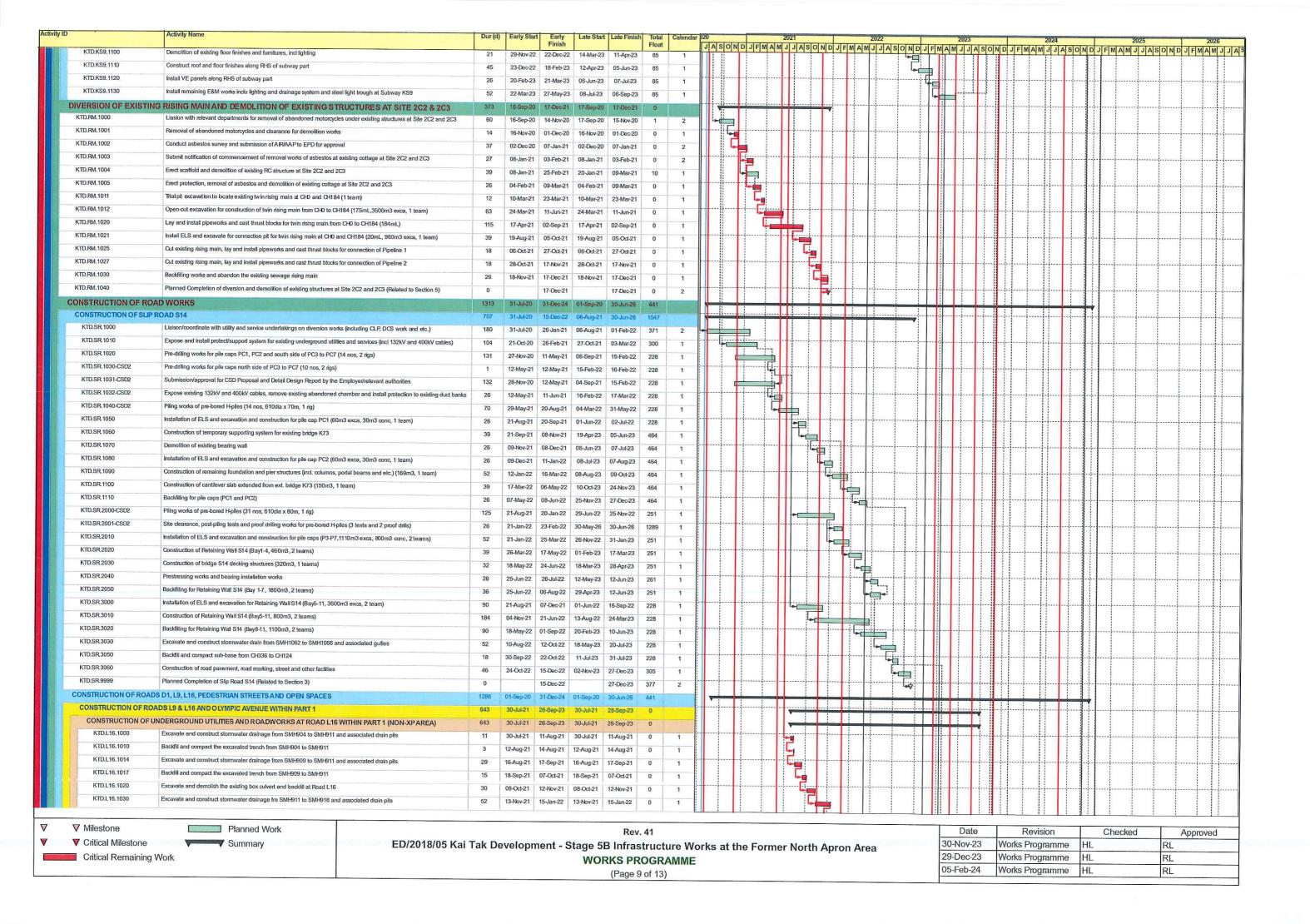


	Activity Name	Dur (d)	Early Start		Late Star	t Late Finis						202				2022		202				2024			2025		
KTD.SB.2010	Construct road diversion for Sa Po Road (Stage 1, incl carriageway and footpath)	46	19-Feb-21	Finish 17-Apr-21	19-Feb-21	1 17-Apr-2	Float 1 0	1	J A	SON	DJF	MAMJ	JASO	NDJF	MAM.	JJASO	NDJF	MAMJ	JASO	NDJI	FMAM	JJAS	SOND	JFMA	MJJA	SONDJ	FMA
KTD.SB.2011	Exposed existing shallow covered watermain and conducting diversion works (NCE032/CE025)	44	15-Apr-21	28-May-2	1 15-Apr-21	28-May-2	1 0	2	-																		į
KTD.SB.2012	Construction of remaining works after watermain diversion works for implement road diversion of Sa Po Road (CE032/CE025)	11	29-May-21	08-Jun-21	29-May-2	1 08-Jun-2	0	2					- 			- 				4		<u> </u>		 		ļļ	
KTD.SB.2020	Implement TTA for Sa Po Road diversion (Stage 1)	0		08-Jun-21		08-Jun-2	0	1	-			4															
KTD.SB.2030	Site clearance and excavation for trial pits to identify existing UU along Sa Po Road	7	09-Jun-21	17-Jun-21	09-Jun-21			1			 -		ļ}				- -	4				<u>.</u>		ļ. .		<u> </u>	
KTD.SB.2040	Diversion of existing DN1800 stormwater drain pipe and underground utifities/services	130	18-Jun-21					1	-]													
KTD.SB.2050	Install sheetpile for Retrieving Shaft (Stage 1, FSP V, 88nos, 24m-H, 1 team)	26		21-Dec-21				1				.#- T		1	444	ļ		ļļ						IJ <u>.</u>		<u> </u>	
KTD.SB.2060	Construct road diversion for Sa Po Road (Stage 2, incl traffic deck, carriageway and footpath)	45	22-Dec-21					1	-																		
KTD.SB.2070	Implement TTA for Sa Po Road diversion (Stage 2)	0	LE BOOL!	18-Feb-22		18-Feb-22		1			ļ		ļļ			ļļ		ļļ								ll	
KTD.SB.2080	Install sheetpile for Retrieving Shaft (Stage 2A, FSP V, 46 nos, 24m-H, 1 team)	22	40 5-1-00	100000000000000000000000000000000000000		18-90-98-10	2022	1																			
KTD.SB.2090	Diversion to existing underground utilities/services for remaining sheetpil installation	23	19-Feb-22	7.580.7.500.000.000				1	1				ļļ			<u> </u>		1									
KTD.SB.2100		45	18-Mar-22	35555555 6 2555	18-Mar-22			1						1				T							1	1	
KTD.SB.2110	Install remaining sheetpile for Retrieving Shaft (Stage 2B, FSP V, 20 nos, 24m-H, 1 team)	9	17-May-22	26-May-22	2 17-May-22	26-May-2	2 0	1																			
	Excavate and install ELS (GL@+6.0mPD to Strut 1@+5.0mPD, 270m3 exca)	7	27-May-22	04-Jun-22	27-May-22	2 04-Jun-22	0	1																		1	
KTD.SB.2120	Excavate and install ELS (Strut 1@+5.0mPD to Strut 2@+2.0mPD, 810m3 exca)	20	06-Jun-22	28-Jun-22	06-Jun-22	28-Jun-22	0	1							L.												
KTD.SB.2130	Excavate and install ELS (Strut 2@+2.0mPD to Strut 3@-0.5mPD, 675m3 exca)	20	29-Jun-22	22-Jul-22	29-Jun-22	22-Jul-22	0	1							•	•		11								 	
KTD.SB.2140	Excavate and install ELS (Strut 3@-0.5mPD to Strut 4@-3.0mPD, 675m3 exca)	20	23-Jul-22	15-Aug-22	23-Jul-22	15-Aug-22	0	1								-											
KTD.SB.2150	Excavate and install ELS (Strut 4@-3.0mPD to Strut 5@-5.5mPD, 675m3 exca)	20	16-Aug-22	07-Sep-22	16-Aug-22	07-Sep-22	2 0	1			11-1-		11	†***** <u>†</u>	11	<u>_</u>	++	† 								 	
KTD.SB.2160	Excavate and install ELS (Strut 5@-5.5mPD to Strut 6@-8.3mPD, 756m3 exca)	20	08-Sep-22	03-Oct-22	08-Sep-22	03-Oct-22	0	1																			
KTD.SB.2170	Excavate and install ELS (Strut 6@-8.3mPD to FEL@-10.3mPD, 540m3 exca)	20	05-Oct-22	27-Oct-22	05-Oct-22	27-Oct-22	0	1					†	 -	+	<u>_</u>		 -					⊹} -¦		 	 	
KTD.SB.2180	Ground improvement works for breakthrough (Horizontal) and post-coring tests	26	28-Oct-22	26-Nov-22	28-Oct-22	26-Nov-22	. 0	1																	ŀ		
KTD.SB.2190	Construct tunnel portal for RTBM breakthrough	22	28-Nov-22	22-Dec-22	28-Nov-22	22-Dec-22	. 0	1		-		#	 	 -	·			 -				-				ļ	
KTD.SB.2200	Remove tunnel portal and RTBM shield for RC structure connection works	60		25-Apr-23				1									٦	L							į		
KTD.SB.2210	Construct RC structure of base slab (xxx m3 conc)	25		25-May-23				1					 	 -	ļļ.	ļļ		<u></u>				. .				<u> </u>	
KTD.SB.2220	Construct RC structure of walls (xxx m3 conc)	52	27-May-23	28-Jul-23			0	1										7									
KTD.SB.2230	Construct RC structure of roof slab and lift shaft (xxx m3 conc)	48		22-Sep-23				- '		- :			ļļ	ļļ <u>ļ</u> .	ļl	ļļ		F									
KTD.SB.2240	Backfill Retrieving Shaft up to ground level								_									-	7								
KTD.SB.2250	Install ELS and excavate for remaining staircase and escalator trough structure	39	- 22		23-Sep-23			1					ļļ			<u> </u>											
KTD.SB.2260		40		29-Dec-23	1			1											ļ.								
KTD.SB.2270	Construct RC structure of remaining stancase and escalator trough structure and backfill	60		12-Mar-24	246/25/26/20		0	1													9						
Notes to the second of the sec	Install steelwork, ABWF, other facilities and other E&M works	160	13-Mar-24	25-Sep-24	13-Mar-24	25-Sep-24	0	1												ι,				1			
KTD.SB,2280	Planned Completion of Pedestrian Subway SB-01 (Related to Section 12)	0		25-Sep-24		25-Sep-24	0	2														-	,				į
	ELEVATED WALKWAY LW-02	861	31-Jul-20	27-Jun-23	08-Feb-21	26-Sep-23	77											_				1					
PIER 9 KTD.LW.1000	Do 437 1. (0 41)	300	20-Oct-20	25-Oct-21	08-Feb-21	26-Jan-22	77																				
	Pre-drilling works (2 nos, 1 rig)	45	20-Oct-20	11-Dec-20	08-Feb-21	08-Apr-21	91	1										i i									
KTD.LW.1010	Piling works for bored pile (PC9-A2, 2200dia x 67m)	40	31-Dec-20	19-Feb-21	09-Apr-21	27-May-21	77	1			-																
KTD.LW.1020	Piling works for bored pile (PC9-A1, 2200dia x 67m)	40	20-Feb-21	12-Apr-21	28-May-21	15-Jul-21	77	1			LÞ(† <u>†</u>						-			
KTD.LW.1030	Testing for completed bored piles (Sonic Test & Interface Core) and site dearance	18	13-Apr-21	04-May-21	16-Jul-21	05-Aug-21	77	1			L	9															
KTD.LW.1040	Installation of ELS and excavation for pile cap construction (520.5m3 exca, 1 team)	29	05-May-21	08-Jun-21	06-Aug-21	08-Sep-21	77	1									1	ll									
KTD.LW.1050	Construction of RC structure (pile cap & pier column) (184m3, 1 team)	114	09-Jun-21	25-Oct-21	09-Sep-21	26-Jan-22	77	1				l later															
PIER 10		285	07-Nov-20	25-Oct-21	09-Feb-21	26-Jan-22	77		##	V	:				†	·		···									
KTD,LW.1060	Pre-drilling works (2 nos, 1 rig)	44	07-Nov-20	30-Dec-20	09-Feb-21	08-Apr-21	77	1		-	=																İ
KTD.LW.1070	Piling works for bored pile (PC10-A2, 2200dia x 67m)	40	31-Dec-20	19-Feb-21	09-Apr-21	27-May-21	77	1	╂╬┅		-							·				ļļļ					
KTD.LW.1080	Piling works for bored pile (PC10-A1, 2200dia x 67m)	40	20-Feb-21	12-Apr-21	28-May-21	15-Jul-21	77	1																			
KTD.LW.1090	Testing for completed bored piles (Sonic Test & Interface Core) and site clearance	18	13-Apr-21	04-May-21		05-Aug-21	77	1		-	1.									.							
KTD.LW.1100	Installation of ELS and excavation for pile cap construction (273.5m3 exca, 1 (earn)	29		08-Jun-21	06-Aug-21		77	1																			
KTD.LW.1110	Construction of RC structure (pile cap & pier column) (149m3, 1 team)	114		25-Oct-21	09-Sep-21	8	77	-										ļļ									
FOOTBRIDGE (PIER 9 TO	Min Control Approximate Control Contro	433	05-May-21	18-Oct-22																							
KTD.LW.1120	Formation and placing concrete blocks in Kai Tak River (66 nos in Kai Tak River and 44 nos at both land side)	26		04-Jun-21		07-Sep-21	79	1	₩						ļļ.;			ļļ								i	
KTD.LW.1130	Erect mid tower in Kai Tak River (Quadshore system)	26		07-Jul-21			79	1																			
KTD.LW.1140	Install decking system to deck over Kai Tak River				08-Sep-21	09-Oct-21	-	1	##																		
KTD.LW.1150	Installation and erecting falsework and working platform for constructing RC bridge structure	26		06-Aug-21	11-Oct-21	10-Nov-21	79	1				3	9														
KTD.LW.1160	Construction of RC bridge structure (1079m3, 4 teams)	63		22-Oct-21	11-Nov-21	26-Jan-22	79	1				١											2000				
KTD.LW.1170		80		29-Jan-22	27-Jan-22	10-May-22	77	1					-	7													
	Prestressing works and remaining RC works	26		04-Mar-22	13-Jan-23	14-Feb-23	281	1						-	ļļ.ļ		,						1				į
KTD.LW.1173	Install steel roof structure and associated steel facilities from Pier 9 to Pier 10	120	05-Mar-22	01-Aug-22	15-Feb-23	13-Jul-23	281	1										·			177			1			
KTD.LW.1176	Install E&M works, testing and commissioning from Pier 9 to Pier 10	90	02-Jul-22	18-Oct-22	12-Jun-23	26-Sep-23	281	1							-								3				
KTD.LW.1179	Construct landscaping, ABWF works and other facilities from Pier 9 to Pier 10	50	02-Jul-22	29-Aug-22	31-Jul-23	26-Sep-23	321	1						1-1-	H	=		<u></u>			·			-			
PIER 11		367	31-Jul-20	25-Oct-21	29-Jul-21	22-Sep-22	270		1		;		-														
KTD.LW.1180	Liaison/coordinate with adjacent project for TTA arrangement	90	31-Jul-20	28-Oct-20	29-Jul-21	26-Oct-21	363	2			111	111					 										
KTD.LW.1190	Implementation of TTA	7	18-Nov-20	25-Nov-20	19-Oct-21	26-Oct-21	270	1		М																	
▼ Milostana	Discoulty :								4.11:			. 1: 1	,		- 11			- 1.3	1 ' '		. !!	. 11	1:	1 ;	1 1		- 3
▼ Milestone	Planned Work						v. 41											1000	ate	20000	Revisi		_	Che	cked		pprov
— • • • • • • • • • • • • • • • • • • •																		LOO MI.								I DI	
▼ Critical Milestone		Tak De	velopm	nent - S	Stage 5	B Infra	struc	ture V	orks/	at th	he Fo	rmer	North	Apron	1 Are	a		30-No				ramme	_			RL	
▼ Critical Milestone■ Critical Remainin		Гаk De	velopm	nent - S		B Infra				at tl	he Fo	rmer	North	Apron	n Are	a		29-De 05-Fel	c-23	Work	s Progr s Progr s Progr	ramme	HL			RL RL	





	tivity Name	Dur (d)	Early Start	Early Finish	Late Start	Late Finish	Total Float	Calendar		DND JFMA	2021 M J J A	SONE	JEMA	2022 M J J A S	OND JE	MAMJJAS	OND	JEMAM	2024	ONDUE	2025	SOND	E M A
	nstruct ducting and drawpits from SV-S-2A5B/SV-S-2A10 to CH280	26	14-Jan-23	15-Feb-2	3 24-Apr-23	24-May-23	79	1				T			الماحة المادة	,		1.		10001		A A INI D	I I I M
	all ELS and excavate from SV-S-2A5A/CH190 to CH220	52	20-Sep-22	21-Nov-2	2 20-Sep-22	21-Nov-22	0	1							9								
	nstruct chamber and install pipe&fitting of SV-S-2A5A	90	22-Nov-22	11-Mar-23	3 22-Nov-22	11-Mar-23	0	1			777	+-+-	1-11		-			1	╁┼╌┼┼		· ···· ····		
KTD.DCS.1120 Inst	all pipeline from SV-S-2A5A to CH220	26	13-Mar-23	15-Apr-23	3 13-Mar-23	15-Apr-23	0	1							[,								
KTD.DCS.1130 Imp	ementation of TTA for existing roundabout at Olympic Avenue	7	22-Nov-22	29-Nov-2	2 03-Dec-22	10-Dec-22	10	1	 						<u>-</u>	-Fi		ļļ	 -		·		
KTD.DCS.1140 Site	clearance, cable detection and trial pit excavation at existing public road at Olympic Avenue	21	30-Nov-22	23-Dec-2	2 12-Dec-22	07-Jan-23	10	1															
KTD.DCS.1150 Insta	all ELS and excavate from CH220 to CH280	52	24-Dec-22	28-Feb-23	3 09-Jan-23	11-Mar-23	10	1	 			.ļ				- - - - - - - - - - - - - - - - 		ļļ	 -				
KTD.DCS.1160 Insta	all pipeline from CH220 to CH280	26	01-Mar-23		- 1000000000000000000000000000000000000		10	1															
KTD.DCS.1170 Bac	khilling for trench from SV-S-2A5A to CH280	32	200000	303000000		New State Control		1				.j	ļļ.			1							
	nstruct ducting and drawpits from CHV-S2A5A to CH100	100	NAME OF THE OWNER OWNER O	24-May-2	300,000,000,000,000		0	1															
		52	25-May-23	27-Jul-23	25-May-23	27-Jul-23	0	1															
ANY STANLEY COLUMN TO STANLEY	all ELS and excavate from SV-S-2A4/CH100 to CH190	52	06-Mar-23	10-May-2	3 06-Mar-23	10-May-23	0	1							•			1 1			†	†	
	struct chamber and install pipe&fitting of SV-S-2A4	90	06-Apr-23	27-Jul-23	06-Apr-23	27-Jul-23	0	1								4							
KTD.DCS.1210 Insta	all pipeline from SV-S-2A4 to CH190	65	27-Jun-23	11-Sep-23	3 27-Jun-23	11-Sep-23	0	1			11:	1	† 					 	 - -		· 	+	
KTD.DCS.1220 Back	kfilling for trench from SV-S-2A4 to CH190	26	28-Aug-23	26-Sep-23	3 28-Aug-23	26-Sep-23	0	1															
KTD.DCS.1230 Insta	all ELS and excavate from CH0 to CH100	52	06-Mar-23	10-May-23	3 06-Mar-23	10-May-23	0	1	 				ļ <u>.</u>					ļļ	ļ.ļļ.				
KTD.DCS.1240 Insta	all pipeline from CHO to CH100	26	11-May-23	10-Jun-23	11-May-23		0	1															
KTD.DCS.1250 Back	kfill for trench from CH0 to CH100	38	12-Jun-23	27-Jul-23		1	- 5		ļļļ			ļ .	ļ <mark>.</mark> .ļ								<u> </u>		
	struct ducting and drawpits from CH100 to CH0 and existing drawpit					100000000000000000000000000000000000000	0	1								4							
		26	28-Jul-23	26-Aug-23			0	1								-							
	of the installed DCS pipes before connection to existing DCS system	26	28-Aug-23	26-Sep-23	3 28-Aug-23	26-Sep-23	0	1								L			11 11		1		
KTD.DCS.1280 Plan	nned Completion of DCS works within Parts 1 and 1A (Related to Section 9)	0		26-Sep-23	3	26-Sep-23	0	2															į
ENOVATION OF EXISTING SI	UBWAYS KS9 AND KS32	938	31-Jul-20	26-Sep-23	03-Nov-20	26-Sep-23	0		1	-	+++							 	H		·}		
KTD.RS.1000 Liasi	ion with UAP project and relevant departments for possession approval/consent	366	31-Jul-20	31-Jul-21	03-Nov-20	03-Nov-21	95	2	-														1
KTD.RS.1001 Prep	pare/submisstion of TTA for KS9 and KS32	45	01-Aug-21	14-Sep-21			95	2				ļ <mark> </mark>				.		ļļ	 -		ļļ		
KTD.RS.1002 Subi	mission for MS/Shop Drawings/Material for shelter for KS9 and KS32	63	16-Aug-21	17-Oct-21			95				E.	<u> </u>											
	site fabrication of sheller for KS9 and KS32							2	I III									Ll					
	lication of XP for renovation works of existing subway KS9 and KS32	90	18-Oct-21	15-Jan-22			146	2				-	٠										
a5nt		153	18-Aug-21	17-Jan-22	18-Aug-21	17-Jan-22	0	2			=		3										ļ
RENOVATION OF EXISTING SUBV		502	18-Jan-22	26-Sep-23	18-Jan-22	26-Sep-23	0						V							111-	† <u> </u>	†	
KTD.KS32.1000 Imple	ement TTA (Phase 1) for closing staircases at both sides and one side of Subway KS32	3	18-Jan-22	20-Jan-22	18-Jan-22	20-Jan-22	0	1					1										
KTD.KS32.1010 Site	clearance and erect temporary partition along Subway KS9 for working area	26	21-Jan-22	23-Feb-22	21-Jan-22	23-Feb-22	0	1	 					H-+		 					·	·	
KTD.KS32.1020 Dem	notition of existing wall tiles at both side staircases, floor finishes and fumitures, incl handrail/guardrail/lights	60	24-Feb-22	11-May-22	24-Feb-22	11-May-22	0	1															
KTD.KS32.1025 Cons	struct wall and floor finishes at both staircases	26	25-Apr-22	26-May-22			0	1	 - - 					<u>L</u>		ļļļi					.j	ļļ	
KTD.KS32.1030 Cons	struct roof and floor finishes along LHS of subway part						-																į
	IVE panel and its sub-frame along LHS of subway part	65	27-May-22	12-Aug-22			7	1															
	20 20 20	39	13-Aug-22	28-Sep-22	22-Aug-22	08-Oct-22	7	1						Land									
	ance works for installing steel shelters for both sides staircases	12	27-May-22	10-Jun-22	27-May-22	10-Jun-22	0	1						•									
	ement TTA for lifting and install main steet frame of shelters for both sides staircases (Nightwork maybe required)	21	11-Jun-22	06-Jul-22	11-Jun-22	06-Jul-22	0	1						-						111	† <u>†</u>	†	
	Il remaining steel members, glass balustrade, shelter roof top and ancillary facilities for both sides staircases	78	07-Jul-22	08-Oct-22	07-Jul-22	08-Oct-22	0	1															
KTD.KS32.1080 Instal	Il partial E&M works inclu lighting and drainage system and steel light trough for LHS of subway part	65	10-Oct-22	23-Dec-22	10-Oct-22	23-Dec-22	0	1			·			---		 			- 		 	ł	
KTD.KS32.1090 Imple	ement TTA (Phase 2) for closing RHS of subway part	12	24-Dec-22	10-Jan-23	24-Dec-22	10-Jan-23	0	1															
KTD.KS32,1100 Site of	clearance and erect temporary partition along subway part for working area	13	11-Jan-23	27-Jan-23	11-Jan-23	27-Jan-23	0	1		··· ···	- <mark> </mark>			-	C.				ļļ		ļ	ļ	
KTD.KS32.1110 Demo	olition of existing floor finishes and fumitures, incl lighting	26	28-Jan-23	5-0.00-0.00.00 00000		27-Feb-23	0	-															
	struct roof and floor finishes along RHS of subway part			20023400000				1															
STATE OF ACTION CONSTRUCTORY	IVE panels along RHS of subway part	65		19-May-23		19-May-23	0	1							└								
		39		07-Jul-23		07-Jul-23	0	1															
	Il remaining E&M works inclu lighting and drainage system and steel light trough at Subway KS9	52	08-Jul-23	06-Sep-23	08-Jul-23	06-Sep-23	0	1								L			1-1-1-			†****	
	ned Completion of renovation of existing Subways KS9 and KS32 (Related to Section 1)	0		06-Sep-23		06-Sep-23	0	2								I I							
KTD.RS.1040 Advan	nce Completion of renovation of existing Subways KS9 and KS32 to Specific Contract Completion Date (Section 1)	20	07-Sep-23	26-Sep-23	07-Sep-23	26-Sep-23	0	2	# -	++	 			- -							ļļ	÷	
RENOVATION OF EXISTING SUBW	VAY KS9	400	18-Jan-22	27-May-23	18-Jan-22	06-Sep-23	85	1															
KTD.KS9.1000 Imple	ment TTA (Phase 1) for closing staircases at both sides and LHS of subway part	3		20-Jan-22	100000000	20-Jan-22	0	1											ļļi		ļļ	ļļ	
	dearance and erect temporary partition along subway part for working area	26		23-Feb-22		5320/2010/2010	0	-				I	4			1							
	olition of existing wall tiles at both side staircases, floor finishes and furnitures, incl handrail/guardrail/lights		-		100000000000000000000000000000000000000	23-Feb-22	0	1					7			20000							
		39		11-Apr-22		11-Apr-22	0	1														1 1	
	fruct wall and floor finishes at both staticases	26	26-Mar-22	29-Apr-22	26-Mar-22	29-Apr-22	0	1								1							
	truct roof and floor finishes along LHS of subway part	45	30-Apr-22	24-Jun-22	14-Sep-22	07-Nov-22	112	1		Timir				 					 - -	111		† 	
	VE panels and its sub-frame along LHS of subway part	26	25-Jun-22	26-Jul-22	08-Nov-22	07-Dec-22	112	1						-		-							
KTD.KS9.1050 Advar	nce works for installing steel shellers for both sides staircases	12	30-Apr-22	16-May-22	30-Apr-22	16-May-22	0	1	#	+									- -		ļ	ļļ	
KTD.KS9.1055 Impler	ment TTA for lifting and install main steel frame of shelters for both sides staircases (Nightwork maybe required)	21		10-Jun-22		10-Jun-22	0	1															
	remaining steel members, glass balustrade, shelter roof top and ancillary facilities	65				07-Dec-22	85	-		+				<u> </u>								ļļ	
	partial E&M works inclu lighting and drainage system and steel light trough for LHS of subway part																						
	ment TTA (Phase 2) for closing RHS of subway part		572		08-Dec-22	11-Feb-23	85	1						 									
				12-Nov-22	500 000000	25-Feb-23	85	1						1								† <u> </u>	
Site d	learance and erect temporary partition along subway part for working area	13	14-Nov-22	28-Nov-22	27-Feb-23	13-Mar-23	85	1						ا	9								
7 Milestone	Planned Work					Rev										Date		Revis	sion	С	hecked	A	pprov
▼ Critical Milestone	Summary ED/2018/05 Kai	Tak De	velopm	ent - S	Stage 51	B Infras	tructi	ure Wa	orks at	the Forn	er Nor	rth Ar	oron A	rea		30-Nov-23	Wo	orks Prog	ramme	HL		RL	
Critical Remaining Work						RKS PR			ис				, JII /			29-Dec-23	Wo	orks Prog	ramme	HL		RL	
., 5110					VVOI	WO LK	UUKA	TIVIIVIE								05-Feb-24						RL	
	I I					(Page 8										100-160-74	lvvr	orks Prog	IMMMe	HL		IRI	



ity ID	Activity Name	Dur (d)) Early Star	rt Early Finish	Late Start	Late Finis	h Total Float	Calenda		olula d	202			2022			2023		20	024		2025		2028
KTD.L16.1040	Backfill and compact the excavated trench from SMH911 to SMH916	18	17-Jan-22	- Ettassic	17-Jan-22	09-Feb-22	- Oliverno	1	JAS	ONDJF	MAMJ	JASO	NDJFM	AMJJ	ASOND	JFMA	MJJAS	ONDJ	FMAMJ	JASOI	NDJFM	AMJJA	ASONDJ	FMAM
KTD.L16.1050	Excavate and construct sewerage from SWTP1_1 to FMH10_40 (182mL pipeline and manhdes)	78	10-Feb-22	2 18-May-22	2 10-Feb-22	18-May-22	2 0	1	-															
KTD,L16,1060	Excavate and install fresh watermain from CHC0 to CHC180 and associated tees with chambers	60	19-May-22	2 29-Jul-22	19-May-22	29-Jul-22	0	1			 		ļ <u>.</u>						ļ		4			
KTD.L16.1070	Excavate and install salt watermain from CHC0 to CHC180 and associated tees with chambers	39	30-Jul-22	14-Sep-22	30-Jul-22	14-Sep-22	. 0	1	-					TC	_									
KTD.L16.1080	Excavate and install irregation pipeline at Road L16 within Part 1	26	15-Sep-22	2 17-Oct-22	15-Sep-22	17-Oct-22	0	1											,	ļļ	444		ļļ	
KTD.L16.1090	Install and construct gully and associated drain pipes at Road L16 within Part 1	26	18-Oct-22	2 16-Nov-22	18-Oct-22	16-Nov-22	0	1							L									
KTD.L16.1100	Install and construct road lighting and drawpits civil provisions at Road L16 within Part 1	26	17-Nov-22	2 16-Dec-22	17-Nov-22	16-Dec-22	0	1												ļļ		ļ		
KTD.L16.1110	Allowable time frame for UU undertakings to install their ducts/pits/chambers at Road L16 within Part 1	26	17-Nov-22		17-Nov-22	120000000000000000000000000000000000000		1	-						泪									
KTD.L16.1120	Backfill and compact to roadwork formation level at Road L16 within Part 1	12	17-Dec-22		17-Dec-22	0.5000000000000000000000000000000000000	902	-	ļ						F					<u> </u>		<u> </u>		
KTD.L16.1130	Construct road kerb and planter at Road L16 within Part 1	39	04-Jan-23	1 1000	2/4/24/24/24/24/24	20-Feb-23	700	1							7									
KTD.L16.1140	Backfill and compact sub-base material for road work at Road L16 within Part 1	52	.,552.55.55.55.55.55.55		0.0000000000000000000000000000000000000	-5.00			ļ		4				اها آ									
KTD.L16.1150	Construct carriagway pavement (Bitumen and concrete pavement) at Road L16 within Part 1	3857	28-Jan-23			100000000000000000000000000000000000000		1														[
KTD.L16.1160	Lay paving blocks for pedestrian access at Road L16 within Part 1	40	30-Mar-23			20-May-23		1																
KTD.L16.1170		78	22-May-23		27-Jun-23	26-Sep-23	29	1								•								
KTD.L16.1180	TTA diversion for MTR SWT Station EVA (Stage 3, divert to newly constructed L16 as EVA)	7	22-May-23	30-May-23	22-May-23	30-May-23	0	1				:					•							
	Excavate and construct remaining stormwater drainage and watermain connection	18	31-May-23	20-Jun-23	31-May-23	20-Jun-23	0	1							1							/		
KTD.L16,1190	Construct remaining road kerb/planter at Road L16 within Part 1	12	21-Jun-23	06-Jul-23	21-Jun-23	06-Jul-23	0	1									-							
KTD.L16.1200	Allowable time frame for UU undertakings to install remaining ducts/pits/chambers at Road L16 within Part 1	18	07-Jul-23	27-Jul-23	07-Jul-23	27-Jul-23	0	1			1											·		
KTD.L16.1210	Lay paving blocks for remaining pedestrian access at Road L16 within Part 1	26	28-Jul-23	26-Aug-23	28-Jul-23	26-Aug-23	0	1														. 1		
KTD.L16.1220	Install road furnitures, road markings and landscaping works at Road L16 within Part 1	52	28-Jul-23	26-Sep-23	28-Jul-23	26-Sep-23	0	1	11		- 										4-1	 		
KTD.L16.1230	Planned completion of underground utilities and roadworks at Road L16 within Part 1 (related to Section 1)	0		26-Sep-23		26-Sep-23	0	2									E					/ I		
CONSTRUCTIO	N OF UNDERGROUND UTILITIES AND ROADWORKS AT ROAD L9 WITHIN PART 1 (NON-XP AREA)	444	29-Mar-22	26-Sep-23	29-Mar-22	26-Sep-23	0		<u> </u>		+						P			<u>-</u>	111	,		
KTD.L9.1000	TTA diversion for MTRC SWT Station EVA (Stage 2, divert to Sung Wong Tol Road and Crowd Dispersal Route)	0		29-Mar-22		29-Mar-22	0	1																
KTD.L9.1010	Excavate and demolish the existing box culvert and backfill at Road L9	35	30-Mar-22	16-May-22	30-Mar-22	16-May-22	0	1	ļ. 							- .								
KTD.L9.1020	Excavate and construct stormwater drainage from SMH1026 to SMH454 and associated drain pits	48	17-May-22			-	0	1																
KTD.L9.1030	Excavate and install fresh watermain from CHB126 to CHB50 at Road L9 within Part 1	30	14-Jul-22				0	'	ļ. 															
KTD.L9.1040	Excavate and install salt watermain from CHB125 to CHB50 at Road L9 within Part 1	30				17-Aug-22	U	1																
KTD.L9.1050	Excavate and install irregation pipeline at Road L9 within Part 1		18-Aug-22		- 2	1 10 1000	0	1			.]			احا	7									
KTD.L9.1060	Install and construct gully and associated drain pipes at Road L9 within Part 1	26	23-Sep-22		23-Sep-22	25-Od-22	0	1							-								1	
KTD.L9.1070		18	26-Oct-22	100000000000000000000000000000000000000	26-Oct-22	15-Nov-22	0	1							-									
	Install and construct road lighting and drawpits civil provisions at Road L9 within Part 1	18	16-Nov-22	06-Dec-22	16-Nov-22	06-Dec-22	0	1						11	t-g	†- † #						/ 	++-	
KTD.L9.1080	Allowable time frame for UU undertakings to install ducts/pits/chambers at Road L9 within Part 1 (non-XP area)	26	07-Dec-22	09-Jan-23	07-Dec-22	09-Jan-23	0	1							L.									
KTD.L9.1090	Backfill and compact to roadwork formation level at Road L9 within Part 1	18	10-Jan-23	01-Feb-23	10-Jan-23	01-Feb-23	0	1							L	1-11					-		+	
KTD.L9.1100	Construct road kerb and planter at Road L9 within Part 1	26	02-Feb-23	03-Mar-23	02-Feb-23	03-Mar-23	0	1							Į,									
KTD.L9.1110	Backfill and compact sub-base material for road work at Road L9 within Part 1	39	04-Mar-23	22-Apr-23	04-Mar-23	22-Apr-23	0	1			· 										 			
KTD.L9.1120	Construct carriageway pavement (Biturnen pavement) at Road L9 within Part 1	52	24-Apr-23	26-Jun-23	24-Apr-23	26-Jun-23	0	1		i						d'_								
KTD.L9.1130	Lay paving blocks for pedestrian access at Road L9 within Part 1	78	27-Jun-23	26-Sep-23	27-Jun-23	26-Sep-23	0	1			 										4-1			
KTD.L9.1140	Planned completion of underground utilities and roadworks at Road L9 within Part 1 (non-XP area, related to Section 1)	0		26-Sep-23		26-Sep-23	0	2									E							
CONSTRUCTION	N OF UNDERGROUND UTILITIES AND ROADWORKS AT JUNCTION OF L9 & OLYMPIC AVENUE W/IN PART	1 265	04-Feb-22	22-Dec-22	24-Feb-22	22-Dec-22	0	1	 -							<mark></mark> }}			-					
KTD.L9.2000	Implement TTA for construct preliminary works for Olympic Avenue roundabout closure	3	04-Feb-22	07-Feb-22	24-Feb-22	26-Feb-22	17	1							1									
KTD.L9.2010	Preliminary works for Olympic Avenue roundabout closure (incl demolish central divider, construct pavement and marking)	26		09-Mar-22	200000000000000000000000000000000000000		17	1	ļ. 		ļļ					ļ <mark>.</mark> }}							ii	
KTD,L9,2020	TTA diversion for MTR SWT Station EVA (Stage 2, divert to Sung Wong Toi Road and Crowd Dispersal Route)	0		29-Mar-22		29-Mar-22	0	1																
KTD.L9.2030	Setup and implement TTA for Clympic Avenue roundabout closure	3	30-Mar-22		30-Mar-22		0	1			ļļ.i		F		44									
KTD.L9.2040	UU detection and trial pit excavation	3					0						F											
KTD.L9.2050	Excavate and construct stormwater drainage from SMH1026 to SMH1042	39						1			ļļ.		1		<u>.ll</u>									
KTD.L9.2060	Excavate and construct sewerage from 2A8_1 to FMH23_2			27-May-22			0	1					L-1	7									1	
KTD.L9.2070	Excavate and construct FWM/SWM from CHB50 to CHB0 and CHA450 to CHA360 and associated tees with chambers	26	28-May-22		28-May-22	28-Jun-22	0	1														1		
KTD.L9.2080	Excavate and install irregation pipeline at Junction of Road L9 & Olympic Avenue within Part 1	26	29-Jun-22		29-Jun-22	29-Jul-22	0	1						-									1	111
KTD.L9.2090		12	30-Jul-22	12-Aug-22	30-Jul-22	12-Aug-22	0	1																
KTD.L9.2100	Install and construct gully and associated drain pipes at Junction of Road L9 & Olypmic Avenue within Part 1	18	13-Aug-22	02-Sep-22	13-Aug-22	02-Sep-22	0	1						<u>-</u>							t		†	
	Install and construct road lighting and drawpits civil provisions at Junction of Road L9 & Olympic Avenue within Part 1	18	13-Aug-22	02-Sep-22	13-Aug-22	02-Sep-22	0	1						وحا										
KTD.L9.2110	Allowable time frame for UU undertakings to install ducts/pits/chambers at Junction of L9 & Olympic Avenue w/in Part 1	26	03-Sep-22	06-Oct-22	03-Sep-22	06-Oct-22	0	1					1 1	<u> </u>	<u> </u>	† †					/		· 	
KTD.L9.2120	Backfill and compact to formation level for roadworks at Junction of Road L9 & Olympic Avenue within Part 1	18	07-Oct-22	27-Oct-22	07-Oct-22	27-Oct-22	0	1							-									
KTD.L9.2130	Construct road kerb, central divider and planter at Junction of Road L9 & Olympic Avenue within Part 1	18	28-Oct-22	17-Nov-22	28-Oct-22	17-Nov-22	0	1	+							 					₋			
	Backfill and compact sub-base material for road work at Junction of Road L9 & Olympic Avenue within Part 1	12	18-Nov-22	01-Dec-22	18-Nov-22	01-Dec-22	0	1							C,			1						
KTD.L9.2140		18	02-Dec-22	22-Dec-22	02-Dec-22	22-Dec-22	0	1	+		<mark> </mark>				- C	 			- -					
KTD.L9.2140 KTD.L9.2150	Construct carriageway pavement (Bitumen pavement) at Junction of Road L9 & Olympic Avenue within Part 1		23-Dec-22	26-Sep-23	23-Dec-22	26-Sep-23	0								r_									
		225										j <u>.</u>			1						.11			2 8
KTD.L9.2150		225		24-Dec-22	23-Dec-22	24-Dec-22	0	1	3	1 4		1		1	-1	1313		11			'		ļļ	
KTD.L9.2150 CONSTRUCTION	I OF UNDERGROUND UTILITIES AND ROADWORKS AT OLYMPIC AVENUE WITHIN PART 1 (XP AREA) Implement TTA for stormwater drainage works at Oly Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drainage.	2		24-Dec-22 18-Jan-23		24-Dec-22 18-Jan-23	0	1							7									-
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000	OF UNDERGROUND UTILITIES AND ROADWORKS AT OLYMPIC AVENUE WITHIN PART 1 (XP AREA) Implement TTA forstormwater drainage works at Oly Ave E/B and W/B (Phase 1) and U/U detection	2	23-Dec-22 28-Dec-22	18-Jan-23	28-Dec-22	18-Jan-23	0	1																
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000 KTD.OLY.2010	I OF UNDERGROUND UTILITIES AND ROADWORKS AT OLYMPIC AVENUE WITHIN PART 1 (XP AREA) Implement TIA for stormwater drainage works at Oly Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drainage from SMH1035 to SMH1031.	2 ain 18	23-Dec-22 28-Dec-22 19-Jan-23	18-Jan-23 30-Jan-23	28-Dec-22 19-Jan-23	18-Jan-23 30-Jan-23	0	1 1 1																
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000 KTD.OLY.2010 KTD.OLY.2020	I OF UNDERGROUND UTILITIES AND ROADWORKS AT OLYMPIC AVENUE WITHIN PART 1 (XP AREA) Implement TTA for stormwater drainage works at Oly Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drain piles Install and construct gully and associated drain pipes at Oly Ave E/B and W/B (Phase 1)	2 ain 18	23-Dec-22 28-Dec-22 19-Jan-23	18-Jan-23	28-Dec-22 19-Jan-23	18-Jan-23	0 0 0	1 1 1																
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000 KTD.OLY.2010 KTD.OLY.2020 KTD.OLY.2030	I OF UNDERGROUND UTILITIES AND ROADWORKS AT OLYMPIC AVENUE WITHIN PART 1 (XP AREA) Implement TTA for stormwater drainage works at Oly Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drains in Install and construct gully and associated drain pipes at Oly Ave E/B and W/B (Phase 1) Construct road kerb and central divider at Oly Ave E/B and W/B (Phase 1)	2 ain 18	23-Dec-22 28-Dec-22 19-Jan-23	18-Jan-23 30-Jan-23	28-Dec-22 19-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	0 0	1 1 1																
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000 KTD.OLY.2010 KTD.OLY.2020 KTD.OLY.2030	Implement TTA for stormwater drainage works at Oty Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drains install and construct gully and associated drain pipes at Oty Ave E/B and W/B (Phase 1) Construct road kerb and central divider at Oty Ave E/B and W/B (Phase 1) Planned Work	2 ain 18 8 10	23-Dec-22 28-Dec-22 19-Jan-23 31-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	28-Dec-22 19-Jan-23 31-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	0 0 0	1 1 1									Date		Revision			necked	Ap	pproved
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000 KTD.OLY.2020 KTD.OLY.2030 ▼ Milestone ▼ Critical Milesto	Implement TTA for stormwater drainage works at Oly Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drains list install and construct gully and associated drain pipes at Oly Ave E/B and W/B (Phase 1) Construct road kerb and central divider at Oly Ave E/B and W/B (Phase 1) Planned Work Summary ED/2018/05 Ka	2 ain 18 8 10	23-Dec-22 28-Dec-22 19-Jan-23 31-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	28-Dec-22 19-Jan-23 31-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	0 0 0	1 1 1	orks at	t the Fo	ormer N	North	Apron	Area		-	-Nov-23		ks Prograr	mme H	HL	ecked	RL	proved
KTD.L9.2150 CONSTRUCTION KTD.OLY.2000 KTD.OLY.2010 KTD.OLY.2020 KTD.OLY.2030	Implement TTA for stormwater drainage works at Oly Ave E/B and W/B (Phase 1) and UU detection Excavate and construct stormwater drainage from SMH1035 to SMH1031 and SMH1042 to SMH100B and associated drains list install and construct gully and associated drain pipes at Oly Ave E/B and W/B (Phase 1) Construct road kerb and central divider at Oly Ave E/B and W/B (Phase 1) Planned Work Summary ED/2018/05 Ka	2 ain 18 8 10	23-Dec-22 28-Dec-22 19-Jan-23 31-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	28-Dec-22 19-Jan-23 31-Jan-23	18-Jan-23 30-Jan-23 10-Feb-23	o o v. 41	1 1 1 ure Wo		t the Fo	ormer N	North A	Apron	Area		29		Work		mme H		ecked		proved

KTD,OLY,2040	Construct carrienness payerness (Rituman payerness) at Ch. Aug E/D and M/C (Ch.	Dur (d)		Finish		t Late Finis	Float			SOND	JFMAN	MJJA	ONDJ		JJASON	DJFM	2023 A M J J A S	ONDJ	FMAN	2024 VI J J A S	SOND	J F M A M J .	JASON	JFM
KTD.OLY.2040 KTD.OLY.2050	Construct carriageway pavement (Bitumen pavement) at Oly Ave E/B and W/B (Phase 1) Berrove TTA and (molyment TTA for stormwater discisses weeks at Olympus TTA and (molyment TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA and (molympus) TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses weeks at Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwater discisses were discissed with the Olympus TTA for stormwa	18	11-Feb-23			03-Mar-23		1								6						T		
KTD.OLY.2050 KTD.OLY.2060	Remove TTA and implement TTA for stormwater drainage works at Oly Ave E/B and W/B (Phase 2) and UU detection	3			23 04-Mar-23		0	1			<u> </u>												į	
	Excavate and cosntruct stormwater drainage from SMH1031 to SMH1030A and SMH100B to SMH100 and associated drain pits	18	08-Mar-23	28-Mar-2	23 08-Mar-23	28-Mar-23	0	1								7								1
KTD.OLY.2070	Install and construct gully and associated drain pipes at Oly Ave E/B and W/B (Phase 2)	8	29-Mar-23	11-Apr-2	3 29-Mar-23	11-Apr-23	0	1								4								
KTD.OLY.2080	Construct road kerb and central divider at Oly Ave E/B and W/B (Phase 2)	10	12-Apr-23	22-Apr-2	3 12-Apr-23	22-Apr-23	0	1			1 1			1	1						111			1
KTD.OLY,2090	Construct carriageway pavement (Bitumen pavement) at Oty Ave E/B and W/B (Phase 2)	18	24-Apr-23	15-May-2	23 24-Apr-23	15-May-23	0	1								i i i							į	
KTD.OLY.2100	Remove TTA and implement TTA for FWW/SWM at Oly Ave W/B (Phase 3) and UU detection	3	16-May-23	18-May-2	23 16-May-23	18-May-23	0	1		1		***************************************	11	++	† † †			1	l		†**† †	1		
KTD.OLY.2110	Excavate and construct FWM/SWM from CHA360 to CHA300 and associated tees with chambers	12	19-May-23	02-Jun-2	3 19-May-23	02-Jun-23	0	1															ļ	
KTD.OLY.2120	Backfill and construct carriageway pavement (Bitumen pavement) at Oly Ave W/B (Phase 3)	10	03-Jun-23	14-Jun-2	3 03-Jun-23	14-Jun-23	0	1					 				E					 -		·}
KTD.OLY.2130	Remove TTA and implement TTA for FWM/SWM at Oly Ave W/B and E/B (Phase 4) and UU detection	3	15-Jun-23	17-Jun-23	3 15-Jun-23	17-Jun-23	0	1									L						į	
KTD.OLY.2140	Excavate and construct FWM/SWM from CHA300 to CHA100 and associated tees with chambers	18	19-Jun-23	11-Jul-23	3 19-Jun-23	11-Jul-23	0	1					ļļ		}				ļļ		 - -	ļļ.		ļļ.
KTD.OLY.2150	Backfill and construct carriageway pavement (Bitumen pavement) at Oly Ave W/B and E/B (Phase 4)	16	12-Jul-23	29-Jul-23	3 12-Jul-23	29-Jul-23	0	1	-			İ												
KTD.OLY.2160	Remove TTA and implement TTA for FWW/SWM at Sung Wong Toi Road S/B (Phase 5) and UU detection	3	31-Jul-23		3 31-Jul-23			1					ļ ļ	. <mark>.</mark>	ļļ					44		ļļļ.	-	
KTD.OLY.2170	Excavate and construct FWM/SWM from CHA100 to CHA0 and associated tees with chambers	18			3 03-Aug-23			1	-								7							
KTD.OLY.2180	FWWSWM pipeline washing and testing for connection	8						1	<u> </u>				ļ .		ļ <u>.</u>		7							<u> </u>
KTD.OLY.2190	Backfill and construct carriageway pavement (Bitumen pavement) at Sung Wong Toi Road S/B (Phase 5)			-	3 24-Aug-23		-	1									H							
KTD.OLY.2200		18	-		3 02-Sep-23	-	0	1									6							
50.V-2.W-2.W-2.W-2.W-2.W-2.W-2.W-2.W-2.W-2.W	Site clearance and remove TTA to resume traffic	3	23-Sep-23	26-Sep-23	3 23-Sep-23	26-Sep-23	0	1									1						1	
KTD.OLY.2210	Planned completion of underground utilities and roadworks at Olympic Avenue within Part 1 (related to Section 1)	0		26-Sep-23	3	26-Sep-23	0	2									3	7						
	PEDESTRIAN ACCESS FROM L9 TO OLYMPIC AVENUE WITHIN PART 1 (XP AREA)	291	07-Oct-22	26-Sep-23	3 07-Oct-22	26-Sep-23	0								-	· · · · · · · · · · · · · · · · · · ·								†
KTD.OLY.2220	Demolish and remove site hoarding from Road L9 to Olympic Avenue within Part 1	12	07-Oct-22	20-Oct-22	2 07-Oct-22	20-Oct-22	0	1							الما									
KTD.OLY.2230	Site clearance and relocate construction material stockpile at Storage Yard	12	21-Oct-22	03-Nov-22	2 21-Oct-22	03-Nov-22	0	1	1	1	·····	1		1	-					+				 -
KTD.OLY.2240	Excavate and construct u-channels and connect to stormwater drainage system	26	04-Nov-22	03-Dec-22	2 04-Nov-22	03-Dec-22	0	1							C.									
KTD.OLY.2250	Install and construct road lighting and drawpits civil provisions from Road L9 to Olympic Avenue within Part 1	18	05-Dec-22	24-Dec-22	2 05-Dec-22	24-Dec-22	0	1		+			····	+						- -		 -		ļļ.
KTD.OLY.2260	Allowable time frame for UU undertakings to install ducts/pits/chambers from Road L9 to OlympicAvenue within Part 1	26	28-Dec-22	30-Jan-23	3 28-Dec-22	30-Jan-23	0	1																
KTD.OLY.2270	Backfill and compact to formation level for road works	26	31-Jan-23	01-Mar-23	3 31-Jan-23	01-Mar-23	0	1					ļļ	·	ļ					. .				ļļ
KTD.OLY.2280	Backfill and compact sub-base material for road works	26	02-Mar-23		3 02-Mar-23		0	1	-															
KTD.OLY.2290	Lay paving blocks for pedestrian access from Road L9 to Olympic Avenue within Part 1	39				STATE OF STATE OF	1			4			ļ	<u> </u>	ļl									l
KTD.OLY.2300	Implement TTA for closing existing pedestrian access from Road L9 to Cly Ave w/in Part 1 and divert to new access	39	01-Apr-23		3 01-Apr-23		1	1								4]							
KTD.OLY.2310					3 23-May-23		0	1							l		2							
KTD.OLY.2320	Remove existing paving blocks, excavate and install irregation pipeline from Road L9 to Olympic Avenue within Part 1	18	24-May-23	14-Jun-23	3 24-May-23	14-Jun-23	0	1									7							
-51/C0060-0-02301500-05/C	Construct road kerb and planter fm Road L9 to Olympic Avenue within Part 1	26	15-Jun-23	17-Jul-23	15-Jun-23	17-Jul-23	0	1									<u>▶</u>							
KTD.OLY.2330	Laying paving blocks for pedestrian access fm Road L9 to Olympic Avenue within Part 1	26	18-Jul-23	16-Aug-23	3 18-Jul-23	16-Aug-23	0	1							1		L-							tt
KTD.OLY.2340	Install road furnitures, road markings and landscaping works from Road L9 to Olympic Avenue within Part 1	35	17-Aug-23	26-Sep-23	3 17-Aug-23	26-Sep-23	0	1									L_							
KTD.OLY.2350	Planned completion of pedestrian access from Road L9 to Olympic Avenue within Part 1 (XP area, related to Section 1)	0		26-Sep-23	3	26-Sep-23	0	2						11-1	·		-			-	/ 			} <u> </u> -
NSTRUCTION OF ROA	AD D1 WITHIN PART 1A	242	06-Mar-23	27-Dec-23	17-Apr-23	27-Dec-23	0									V		—						
CONSTRUCTION OF P	PORTION 1 (ROAD D1 E/B & W/B CH170 TO CH230)	156	17-Apr-23	21-Oct-23	17-Apr-23	21-Oct-23	0	1						 	····			~		-		 		·····
KTD.D1.1000	Site clearance, haul road diversion, formation and fence off working area	4	17-Apr-23	20-Apr-23	17-Apr-23	20-Apr-23	0	1																
KTD.D1.1010	Excavate and construct stormwater drain from SMH1023 to SMH1021 and associated gullies	35	21-Apr-23	02-Jun-23	21-Apr-23	02-Jun-23	0	1	⊹ #	+-+				╂╌┼╌╌┼╴	} <u> </u>						/ 	·····		ļļ-
KTD.D1.1020	Excavate and construct stormwater drain from SMH1054 to SMH1051 and associated gullies	35	03-Jun-23	15-Jul-23	03-Jun-23	15-Jul-23	0	1																
KTD.D1.1030	Excavate and construct sewerage from FMH25_1 to FMH25_2a	20	17-Jul-23	08-Aug-23	17-Jul-23	08-Aug-23	0	1	ļ	·}						44-4	7			-		ļļ		ļļ.
KTD.D1.1040	Excavate and construct FWM/SWM from CH450 to CH500	20	09-Aug-23	31-Aug-23			0	1	$\ \ $. 11			
KTD.D1.1050	Backfill and construct road kerb/central divider from Road D1 E/B & W/B CH170 to CH230 for road works	18	01-Sep-23	21-Sep-23					ļ							41								[
KTD.D1.1060	Backfill and compact sub-base from Road D1 E/B & W/B CH170 to CH230 for road works	330807				21-Sep-23	0	1									7							
	PORTION 2 (ROAD D1 E/B CH230 TO CH396)	24	22-Sep-23	21-Oct-23		21-Oct-23	0	1	<u> </u>									3						
KTD.D1.2000	Site clearance, haul road diversion, formation and fence off working area	111	06-Mar-23	21-Jul-23			79	1								V								
KTD.D1.2010		4	06-Mar-23	09-Mar-23	120	22-May-23	58	1																
100000	Excavate and construct stormwater drain from SMH1101B to SMH1201C	48	10-Mar-23	10-May-23	23-May-23	20-Jul-23	58	1								-								-
KTD.D1.2020	Backfill and construct road kerb/central divider from Road D1 E/B CH230 to CH396	35	11-May-23	21-Jun-23	21-Jul-23	30-Aug-23	58	1																
KTD.D1.2030	Backfill and compact sub-base from Road D1 E/B CH230 to CH396	24	23-Jun-23	21-Jul-23	25-Sep-23	25-Oct-23	79	1				1				$\dagger \dagger \dagger \dagger$				H		/ 		
	PORTION 3 (ROAD D1 W/B CH230 TO CH300)	142	06-Mar-23	26-Aug-23	04-May-23	21-Oct-23	46	1								V-								
KTD.D1.3000	Site clearance, haul road diversion, formation and fence off working area	4	06-Mar-23	09-Mar-23	04-May-23	08-May-23	46	1	+	 - -					·	- 0				╟╌╟┽		 		-
KTD.D1.3010	Excavate and construct stormwater drain from SMH1120 to SMH1123 and associated gullies	26	10-Mar-23	13-Apr-23	09-May-23	08-Jun-23	46	1							1	: - :1:							į	
KTD.D1.3020	Excavate and construct stormwater drain from SMH1001 to SMH1107 and assoicated gullies	37	01-Apr-23		01-Jun-23		46	1	H			- 			·····i	- -								
KTD.D1.3030	Excavate and construct sewerage from FMH25_2a to FMH25_4	12		03-Jun-23		29-Jul-23	46	1																
KTD.D1.3040	Excavate and construct FMW/SWM from CH500 to CH570	26	05-Jun-23	06-Jul-23		29-Aug-23	46	1	ļ. 	- -						ļļ						ļļ <u>ļ.</u> .		
KTD.D1.3050	Backfill and construct road kerb/central divider from Road D1 W/B CH230 to CH300	26	07-Jul-23			250																		
	Backfill and compact sub-base from Road D1 W/B CH230 to CH300			05-Aug-23		28-Sep-23	46	1		<u> </u>						ļ	理		İ					
KTD.D1.3060		18		26-Aug-23	29-Sep-23	21-Oct-23	46	1 .									'-C							
	ORTION 4 (ROAD D1 W/B CH300 TO CH396)	125	11-May-23	09-Oct-23	17-Jul-23	12-Dec-23	54	1							į				-					
CONSTRUCTION OF PO	Sita deamage had read disprise femalia.	4	11-May-23	15-May-23	17-Jul-23	20-Jul-23	54	1									3						1	
CONSTRUCTION OF PC	Site clearance, haul road diversion, formation and fence off working area		227				54			1 1	8 1			1) I i		1 11		11	8 1		2 1 1			
ONSTRUCTION OF PO	Site clearance, haul road diversion, formation and fence off working area Excavate and construct stormwater drain from SMH1108 to SMH1108A	12	16-May-23	30-May-23	21-Jul-23	03-Aug-23	34	1	: :						1	1 19	9		1			\		
ONSTRUCTION OF PO				30-May-23	21-Jul-23	03-Aug-23	54	1		i i									İ					
ONSTRUCTION OF PO KTD.D1.4000 KTD.D1.4010				30-May-23	21-Jul-23						_								Revi	ision		Checked	<u> </u>	Appro
DNSTRUCTION OF PO	Excavate and construct stormwater drain from SMH1108 to SMH1108A Planned Work	12	16-May-23			Rev	ı. 41	611PA \8/	lorls-	of the		Au M	41- 2			, ,,	Date	Wo	= 0.04 E203	ision		Checked	RI	Appro
ONSTRUCTION OF PO	Excavate and construct stormwater drain from SMH1108 to SMH1108A Planned Work Summary ED/2018/05 Kai 7	12	16-May-23		Stage 5	Rev B Infras	v. 41 struct			at the	e Form	er Nor	th Apro	on Are	a		Date 30-Nov-23	-	rks Pro	gramme		Checked	RL	Appro
CONSTRUCTION OF PO	Excavate and construct stormwater drain from SMH1108 to SMH1108A Planned Work Summary ED/2018/05 Kai 7	12	16-May-23		Stage 5	Rev	v. 41 struct	AMME		at the	e Form	er Nor	th Apro	on Are	a		Date	Wo	orks Proj orks Proj	2020/05/10	HL	Checked	RL RL RL	Appr

KTD.D1.4020	Everyate and conclude formulate data for CANIMOTA 4074		Early Star	Finish		Late Finis	Float	Calendar		NDJFM	2021 A M J J /	SON	JFMAM	JJASOND	J F M A M J	JASO	NDJF	2024 VI A M J J	ASON	DJFM	2025	ASOND.	J F M A	A
KTD.D1.4020 KTD.D1.4030	Excavate and construct stormwater drain from SMH1107 to 1271 and associated gullies	26		30-Jun-23				1							Lea									ſ
	Excavate and construct FWM/SWM from CH570 to CH570	35			3 29-Aug-23	10-Oct-23	54	1																1
KTD.D1.4040	Backfill and construct road kerb/central divider from Road D1 W/B CH300 to CH396	26	07-Aug-23	05-Sep-23	3 11-Oct-23	10-Nov-23	3 54	1								43					l			
KTD.D1.4050	Backfill and construct sub-base from Road D1 W/B CH300 to CH396	35	28-Aug-23		01-Nov-23			1								4								-
	PORTION 5 (PEDESTRIAN ACCESS AND CARRIAGEWAY PAVEMENTAT ROAD D1)	181	22-May-23	27-Dec-23	3 01-Aug-23	27-Dec-23	3 0								٧		-		1		ll			2000
KTD.D1.5000	Demolition and removal of existing site hoarding or boundary fence at Road D1 E/B Pedestrian Access	26	22-May-23	21-Jun-23	01-Aug-23	30-Aug-23	58	1							-	ا له								(B) Schin-
KTD.D1.5010	Construct u-channel/lighting duct and drawpits at Road D1 E/B Pedestrian Access	26	23-Jun-23	24-Jul-23	31-Aug-23	29-Sep-23	58	1							4	<u> </u>		 - -		1	} <u> </u>			1
KTD.D1.5020	Construct planter kerb at Road D1 E/B Pedestrian Access	18	25-Jul-23	14-Aug-23	03-Oct-23	24-Od-23	58	1																The same
KTD.D1.5030	Allowable time frame for UU undertakings to install ducts/pits/chambers at Road D1 E/B Pedestrian Access	18	15-Aug-23	04-Sep-23	25-Oct-23	14-Nov-23	58	1					 	}		Ę .		├		}	}			
KTD.D1.5040	Lay paving blocks and install street furnitures/facilities for Road D1 E/B Pedestrian Access	35	05-Sep-23	17-Od-23	15-Nov-23	27-Dec-23	58	1																PROStrue
KTD.D1.6000	Construct u-channel/lightling duct and drawpits at Road D1 W/B Pedestrian Access from CH170 to CH300	26	17-Jul-23	15-Aug-23	19-Aug-23	18-Sep-23	29	1		+			ļļ.	}			1	- -]	ļ			
KTD.D1.6010	Construct planter kerb at Road D1 W/B Pedestrian Access from CH170 to CH300	18	16-Aug-23	_				1																Physical
KTD.D1.6020	Allowable time frame for UU undertakings to install ducts/pits/chambers at Road D1 W/B Pedestrian Access CH170 to CH300	18	06-Sep-23			02-Nov-23		1	ļ- 				ļļ	ļļļ							ļ			
KTD.D1.6030	Lay paving blocks and install street furnitures/facilities for Road D1 W/B Pedestrian Access CH170 to CH300	35	27-Sep-23													Ħ								
KTD.D1.6040	Construct landscaping softworks for Road D1 W/B Pedestrian Access CH170 to CH300		-	-				!								1	3	1			<u> </u>			
KTD.D1.7000	Construct u-channel/lighting duct and drawpits at Road D1 W/B Pedestrian Access CH300 to CH396	18	01-Nov-23	21-Nov-23		- 11.500	0.000	1								-								
KTD.D1.7010		18	03-Jul-23	22-Jul-23		5.00 0000000	1	1							حا									
	Construct planter kerb at Road D1 W/B Pedestrian Access CH300 to CH396	18	24-Jul-23	12-Aug-23	29-Sep-23	21-Oct-23	58	1							1	19								-
KTD.D1.7020	Allable time frame for UU undertakings to install ducts/pits/chambers at Road D1 W/B Pedestrian Access CH300 to CH396	18	14-Aug-23	02-Sep-23	24-Oct-23	13-Nov-23	58	1								ا وحا								
KTD.D1.7030	Lay paving blocks and install street furnitures/facilities for Road D1 W/B Pedestrian Access CH800 to CH396	26	04-Sep-23	05-Oct-23	14-Nov-23	13-Dec-23	58	1						1		4								-
KTD.D1.7040	Construct landscaping softworks for Road D1 W/B Pedestrian Access CH300 to CH396	18	25-Sep-23	17-Oct-23	05-Dec-23	27-Dec-23	58	1								-								
KTD.D1.8000	Construct carriageway pavement for Road D1 W/B CH170 to CH230 (12d for each layer test result, exclu wearing layer)	40	24-Oct-23	08-Dec-23	07-Nov-23	22-Dec-23	12	1	 	† † † † †				 		→ [- -						
KTD.D1.8010	Construct carriageway pavement and road marking for Road D1 E/B (12d for each layer test result, 3 layers)	52	22-Sep-23	24-Nov-23	26-Oct-23	27-Dec-23	26	1																
KTD.D1.8020	Construct carriageway pavement and road marking for Road D1 W/B (12d for each layer test result, 3 layers)	52	24-Oct-23	22-Dec-23	24-Oct-23	22-Dec-23	D	1	·	 - -		· 		 				 - -						
KTD.D1.9000	Advanced Completion of Road D1 within Part 1A	5	23-Dec-23	27-Dec-23				2								1	E.						i	
KTD.D1.9999	Planned Completion of Road D1 within Part 1A (Related to Section 3)	0		27-Dec-23		27-Dec-23		2		<u>-</u>				J		i		ļ						
CONSTRUCTION OF CE	ROWD DISPERSAL ROUTE (CDR) WITHIN PARTS 2 AND 10	467	01 500 20	1		100000																		
KTD.CDR.1000	Liaison/coordinate with CLP for new 132kV and 11kV cable laying at Road L16, Part 3 and Crowd Dispersal Route		01-Sep-20		01-Sep-20									<u>[]</u>										
KTD.CDR.1010	The state of the s	123	01-Sep-20				-	2		P														
Contract of the Contract of th	Excavate and construct storm drain pipework (40mL/catchpit fm CH0 to CH20	48	02-Jan-21	02-Mar-21	02-Jan-21	02-Mar-21	0	1															i	
KTD.CDR.1020	Backfill pipeline area fm CH0 to CH20 and excavate and construct u-channel fm CH0 to CH180	66	03-Mar-21	25-May-21	03-Mar-21	25-May-21	0	1		-	7			î i î										383
KTD.CDR 1030	Excavate and construct lighting drawpits and lay cable ducts fm CH0 to CH180	78	07-Apr-21	10-Jul-21	25-Jun-21	25-Sep-21	65	1		إحا													ĺ	
KTD.CDR.1040	Backfill and compact sub-base and construct road pavement fm CH0 to CH180	78	08-May-21	10-Aug-21	18-Aug-21	19-Nov-21	84	1		111				<u> </u>			#++	 - -						
KTD.CDR 1050	Excavate and construct u-channel fm CH180 to CH292	43	26-May-21	16-Jul-21	26-May-21	16-Jul-21	0	1			L-													
KTD.CDR 1060	Excavate and construct lighting drawpits and lay cable ducts fm CH180 to CH292	45	12-Jul-21	01-Sep-21	27-Sep-21	19-Nov-21	65	1		+		 		} 			╟╌┼╌├╌╌	 - 						
KTD.CDR.1070	Backfill and compact sub-base and construct road pavement fm CH180 to CH292	65	02-Sep-21	19-Nov-21	20-Nov-21	10-Feb-22	65	1			_													
KTD.CDR.1080	Excavate and construct storm drain pipework/manhole SMH119	40	17-Jul-21	01-Sep-21	17-Jul-21	01-Sep-21	0	1					ļ	}			⊪-⊦	-						
KTD.CDR.1090	Backfill pipeline area to SMH119 and construct u-channel fm CH292 to CH455	70	02-Sep-21	25-Nov-21	02-Sep-21	25-Nov-21	0	1																
KTD,CDR.1100	Excavate and construct lighting drawpits and lay cable ducts fm CH292 to CH455	52	05-Oct-21	04-Dec-21		04-Dec-21	0	1	<mark></mark>				ļļ				⊪.↓. 	ļļ.ļ						
KTD,CDR.1110	Excavate and construct watermain pipework and install fire hydrants from CH316 to CH455	52	05-Oct-21	04-Dec-21		04-Dec-21		1																
KTD.CDR.1120	Backfill and compact sub-base and construct road pavement fm CH292 to CH455	78		C-0.00-0.00-0.00			1000		ļ												i	ll		
KTD.CDR.1130	Install chain-link fence from CH0 to CH455 and install lighting poles and cabling by HyD sub-contractor	2.00			250700000000000000000000000000000000000	10-Feb-22		1					71: 1											
KTD.CDR.1140	38 50°4 80 80°4 D	40	11-Feb-22		11-Feb-22	29-Mar-22	0	1		<u>. j j.</u>														
	Planned Completion of Roadworks and Utilities/Services within Parts 2 and 10 (Related to Section 6)	0		29-Mar-22		29-Mar-22	0	2					<u> </u>								1			
	DESTRIAN STREETS NO.1, 3 & 4 WITHIN PART 3	632	02-Jan-21	20-Feb-23	02-Jan-21	24-Feb-24	301			1					7									
KTD.RW.2060	Liaison/coordinate with adjacent projects (incl Station Square, Housing Sites and etc.) for interfacing issues	60	02-Jan-21	02-Mar-21	02-Jan-21	02-Mar-21	0	2		-			1											52
	ROADWORK/LANDSCAPE WORKS AT PEDESTRIAN STREETS NO.1, 3 & 4	346	18-Dec-21	20-Feb-23	24-Dec-22	24-Feb-24	301	1							-									
KTD.RW.2070	Construct roadwork and landscape softworks within Part 3 (incl pedestrian streets)	346	18-Dec-21	20-Feb-23	24-Dec-22	24-Feb-24	301	1				>(_			-	++-1					
CONSTRUCTION OF U	UNDERGROUND UTILITIES AT PEDESTRIAN STREET NO.1	169	03-Mar-21	25-Sep-21	03-Mar-21	17-Dec-21	69	1		V-	+	→												
KTD.PS1.1000	Excavate and construct storm drain pipework (120mL)/catchpit/manholes fm SMH905A to SMH905B	68	03-Mar-21	27-May-21	03-Mar-21	27-May-21	0	1						 			 	 -						
KTD.PS1.1010	Backfill fm SMH905A to SMH906B	20	28-May-21	21-Jun-21	19-Aug-21	10-Sep-21	69	1			-9													
KTD.PS1.1020	Construct fresh/salt watermain pipework (150mL)/chambers along CHC9	39		06-Aug-21		29-Oct-21	69	1]		111					
KTD.PS1.1030	Construct road lighting drawpits and lay cable ducts for Pedestrian Street No.1	39	200000000000000000000000000000000000000			15-Nov-21	69				Γ:								1 3					
KTD.PS1.1040	Backfill up to formation level for Pedestrian Street No.1	28						- 1	ļļ	-														
	UNDERGROUND UTILITIES AT PEDESTRIAN STREET NO.3			25-Sep-21		17-Dec-21	69	1			-	ţ												
KTD.PS3.1000	Excavate and construct storm drain pipework (33mL) to Box Culvert B1	170	28-May-21			17-Dec-21	0	1	1			1							3		l			
KTD.PS3.1010	600 mg or mga constant of the	48	28-May-21			24-Jul-21	0	1			F													-
	Backfill pipework area and construct catchpits	29	26-Jul-21	27-Aug-21	26-Jul-21	27-Aug-21	0	1																
KTD.PS3.1020	Construct sewer drain pipework (171mL)/manholes fm FMH10_40 to FMH10_65b	39	28-Aug-21	15-Oct-21	28-Aug-21	15-Oct-21	0	1			وحا	-								+++				
KTD.PS3.1030	Construct salt watermain pipework (150mL)/chambers along CHC10/Construct road lighting drawpits and lay cable ducts	48	14-Sep-21	11-Nov-21	14-Sep-21	11-Nov-21	0	1			L													
KTD.PS3.1040	Backfill up to formation level for Pedestrian Street No.3	31	12-Nov-21	17-Dec-21	12-Nov-21	17-Dec-21	0	1	†	- <u> </u> -		<u> </u>							1	++				-
CONSTRUCTION OF U	NDERGROUND UTILITIES AT PEDESTRIAN STREET NO.4	170	28-May-21	17-Dec-21	28-May-21	17-Dec-21	0				1													
Milestone	Planned Work					Rev	v. 41									Date		Revision	Ī	Cł	necked		Approv	
Critical Milestone	Summary ED/2018/05 Kai T	ak De	velopn	nent - C	Stano El			uro M.	orks of	the Fa-	mer M.	ret A	DEO		30-N			Program		HL .		RI	1 7.01	_
	EDIZOTO/OS Kat I	an De	verobu	ieiir . S	raye of	ning:	อแนตใ	ure WC	nks at	uie ror	mer No	orth A	pron Are	a			_		_					_
Critical Remaining	Work					RKS PF							•		129-D	ec-23	Works	Program	nme li	HL		IRL		

	Activity Name	Dur (d)	Early Start	Early Finish	Late Start	Luic i illisi	Total Float	Calendar		SOND JFMAMJ		DJFM	2022 AMJJASI	ND JEM	2023 AM J J	ASOND	JEMAL	2024 VI.II.II.AI.S	OND	I E M A M	2025	ND IE	E AAL A
KTD.PS4.1000	Excavate and construct storm drain pipework (192mL)/catchpil/manhole fm SMH505 to SMH1005A	48	28-May-21	24-Jul-21	28-May-21	24-Jul-21	0	1		L				1.75		I O IN D	- I m A	- O O A	TAIND	4 MAM	ANIMA	MARK	Tul
KTD.PS4.1010	Excavate and construct sewer drain pipework (165mL)/manhole fm FMH25_30 to FMH25_10	51	22-Jun-21	20-Aug-21	22-Jun-21	20-Aug-21	0	1		\												į	
KTD.PS4.1020	Backfill pipework area and construct fresh watermain pipework (170mL)/chambers along CHC11	39	21-Aug-21	07-Oct-21	21-Aug-21	07-Oct-21	0	1				1							 	 			
KTD.PS4.1030	Construct road lighting drawpits and lay cable ducts	29	08-Oct-21	11-Nov-21	08-Oct-21	11-Nov-21	0	1			L												
KTD.PS4.1040	Backfill up to formation level for Pedestrian Street No.4	31	12-Nov-21	17-Dec-21	12-Nov-21	17-Dec-21	0	1								1-1-1-1			┉╁				
KTD.PS4.1050	Planned Completion of Underground Utilities/Services within Part 3 (Related to Section 5)	0		17-Dec-21		17-Dec-21	0	2			E	→											
CONSTRUCTION OF F	PEDESTRIAN STREET NO.2 WITHIN PART 4	336	23-Nov-20	11-Jan-22	23-Nov-20	24-Feb-24	629					-				1			┼╌╂┼				
KTD.PS2.1000	Liaison/coordinate with adjacent projects (incl Station Square, Housing Sites and etc.) for interfacing issues	60	23-Nov-20	21-Jan-21	23-Nov-20	21-Jan-21	0	2															
KTD.PS2.1010	Excavate and construct storm drain pipework (59mL) /catchpil/manholes from SMH404 to SMH402	28	22-Jan-21	26-Feb-21	22-Jan-21	26-Feb-21	0	1	-							 			⊹} ⊹	 			
KTD.PS2.1020	Backfill fm SMH404 to SMH402/Excavate and construct storm drain pipework (59mL)/catchpit/manhole fm SMH402 to SMH401	29	19-Feb-21	24-Mar-21	19-Feb-21	24-Mar-21	0	1		<u>_</u>													
KTD.PS2.1030	Backfill fm SMH402 to SMH401/Excavate and construct storm drain pipework (59mL)/catchpit/manhole fm SMH401 to SMH400	26	17-Mar-21	20-Apr-21	17-Mar-21	20-Apr-21	0	1	ļ						<u>-</u>				ļ ļ				
KTD.PS2.1040	Backfill within Part 4 and construct fresh watermain pipework (164mL)/chambers from CH179 to CH15	39	13-Apr-21	29-May-21	13-Apr-21	29-May-21	0	1														İ	į
KTD.PS2.1050	Construct road lighting drawpits and lay cable ducts/Backfill upto formation level for Pedestrian Street No.2	26			31-May-21		0	1	ļ			- -						<mark>.</mark> <mark>.</mark>		ļi			
KTD.PS2.1060	Planned Completion of Underground Utilities/Services within Part 4 (Related to Section 4)	0	-	30-Jun-21		30-Jun-21	0	2		6 ,													
KTD.PS2.1070	Construct roadwork and landscape softworks within Part 4 (incl pedestrian street)	160	02-Jul-21	11-Jan-22		24-Feb-24	630	1	ļ			<u>.</u> jj.					J						
CONSTRUCTION OF R	ROAD L16 WITHIN PART 6	303			-	-11000000000	500000	-			1	7											
KTD.RW.2090	Liasion with developer of the sites 2A4, 2A5(B) and 2A10 and construction of drainage and sewage works within Part 6	156			100000000000000000000000000000000000000	30-Jun-25		1	ļ.,			<u> </u>				V							
KTD.RW.2100	Construct roadwork, remaining Uus/services and landscape softworks within Part 6 (incl remaining Road L16)		23-Dec-23			23-Sep-24	66	1										7					
West (1) 10 10 10 10 10 10 10 10 10 10 10 10 10	ROAD D1 WITHIN PART 5	147	08-Jul-24		28-Dec-24			1				<u>lii</u> .											
KTD.RW.2080		312	30-Jun-22			27-Dec-23		1					1										
	Construct roadwork, underground utilities/services within Part 5	312	30-Jun-22	18-Jul-23		27-Dec-23		1															
	INDERGROUND UTILITIES WITHIN PARTS 1B, 6A AND 7 AND REMAINING AT ALL PARTS	312	13-Dec-23	31-Dec-24	13-Jun-25	30-Jun-26	441									V			-		1		
KTD.RW.2110	Construct underground utilities/services within remaining works of all Parts	312	13-Dec-23	31-Dec-24	13-Jun-25	30-Jun-26	441	1								i i							
	F UNDERGROUND UTILITIES WITHIN PARTS 6A AND 7	187	28-Dec-23	14-Aug-24	11-Nov-25	30-Jun-26	555									+					+		-
KTD.P67.1000	Excavate/install FWM and SWM from CH400 to CH350 (50mL) and fittings	62	28-Dec-23	12-Mar-24	11-Nov-25	24-Jan-26	555	1								l.							
KTD.P67.1010	Backfill FWM and SWM from CH400 to CH350	21	13-Mar-24	10-Apr-24	26-Jan-26	21-Feb-26	555	1		1-1-1-1		1									· 		
KTD.P67.1020	Excavate/install FWM and SWM from CH350 to CH300 (50mL) and fittings and chambers	83	11-Apr-24	20-Jul-24	23-Feb-26	04-Jun-26	555	1										<u> </u>					
KTD.P67.1030	Backfill FWM and SWM from CH350 to CH300	21	22-Jul-24	14-Aug-24	05-Jun-26	30-Jun-26	555	1		-		 -									- 		j-
KTD.P67.1040	Planned Completion of Underground Utilities/Services within Parts 6A and 7 (Related to Section 2)	0		14-Aug-24	1	30-Jun-26	685	2															
NSTRUCTION OF AD	DITIONAL COVER WALKWAY FP3 UNDER PMI 006	115	30-Nov-20	23-Apr-21	30-Nov-20	23-Apr-21	0				····	·									·		
TD.FP3.1000	Land allocation/taking over from MTRC/LandsD for construction of additional footpath and cover walkway FP3	0	30-Nov-20		30-Nov-20		0	2		7					i							l	- 1
TD.FP3.1010	Site clearence and formation works (1 team)	18	30-Nov-20	19-Dec-20	30-Nov-20	19-Dec-20	0	1				·}}-					•••••				- 		
TD.FP3.1020	Construction of storm drain system (incl. u-channel and catch pits, 15m3 conc., 1 team)	18	07-Dec-20	29-Dec-20	07-Dec-20	29-Dec-20	0	1															į
TD.FP3.1030	Implement TTA for come ction of storm drain system to existing manhole	1	30-Dec-20	30-Dec-20		07-Apr-21	76	1				ļļ.									4		
D.FP3.1040	Remove pavement, excavate for drain pipe laying and cast concrete surround (10m-L, 5.4m3 exca, 2m3 conc, 1 team)	8	31-Dec-20	09-Jan-21		16-Apr-21	76	1															
TD.FP3.1050	Backfilling and reinstalement of existing pavement (5m2, 1 team)	5	11-Jan-21	15-Jan-21	17-Apr-21	22-Apr-21	76	-	ļ			.ļ								<u> </u>			
TD.FP3.1060	Site clearenc and remove TTA to resume traffic	1	16-Jan-21	16-Jan-21		23-Apr-21	76	1															
TD.FP3.1070	Placing concrete blocks foundation and erection of site hoarding (45m-L, 1 team)	6		5200000000000				1	ļ	.		<u> </u>								L	<u>.ll.</u>		
TD.FP3.1080	Construction of foundation for footpath cover (230m3 conc, 1 team)				21-Dec-20		0	1	1	E													1
D.FP3.1090	Installation of steel frame of footpath cover, site hoarding and lighting system	12			21-Dec-20		0	1	<u> </u>			ļļ.											
D.FP3.1100	Placing sub-base and construction of footpath pavement (45m3 sub-base, 35m3 conc, 1 team)	15			30-Dec-20		0	1															T
D.FP3.1104	Construction/Installation for additional works for FP3 under CE028	15		16-Jan-21			0	1		4													1
D.FP3.1105	Provision of power supply by CLP for lighting system at FP3 (CE028)	76	18-Jan-21			23-Apr-21	0	1															
ID.FP3.1110	77	76	18-Jan-21		18-Jan-21	23-Apr-21	0	1		-												İ	
	Planned Completion of Additional Footpath and Cover Walkway FP3 under PMI 006	0		23-Apr-21		23-Apr-21	0	2		-7										i	1		-1-
ECT ESTABLISHME		1450	12-Jan-22	31-Dec-25	27-Sep-23	30-Jun-26	181	2				-			- -					-	++	\rightarrow	
EW.1000	Establishment works for all landscape softworks (except Parts 3, 4 and 6)	365	19-Jul-23	17-Jul-24	28-Dec-23	26-Dec-24	162	2				1 1				······································				/ 	1		
EW.1010	Establishment works for landscape softworks within Part 3 (Subj to excision within 416 days)	365	21-Feb-23	20-Feb-24	26-Feb-24	24-Feb-25	370	2						L-									
EW.1020	Establishment works for landscape softworks within Part 4 (Subj to excision within 244 days)	365	12-Jan-22	11-Jan-23	26-Feb-24	24-Feb-25	775	2		1-1-1-1									-++		 		
EW.1030	Establishment works for landscape softworks within Part 6	365	01-Jan-25	31-Dec-25	01-Jul-25	30-Jun-26	181	2	1								1						
EW.1040	Establishment works for landscape softworks under Section 1	365	27-Sep-23	25-Sep-24	27-Sep-23	25-Sep-24	0	2		 		 					<u></u>		-		ļ		
	Planned Contract Completion Date	0		31-Dec-25		30-Jun-26	181		1	1 1 1 1		1 1	1 1	1 1		1 1		1		8	1 1		- 1

▼ Milestone
Planned Work

▼ Critical Milestone
Summary

Rev. 41
ED/2018/05 Kai Tak Development - Stage 5B Infrastructure Works at the Former North Apron Area
WORKS PROGRAMME
(Page 13 of 13)

Date	Revision	Checked	Approved
30-Nov-23	Works Programme	HL	RL
29-Dec-23	Works Programme	HL	RL
05-Feb-24	Works Programme	HL	RL

Appendix C – Environmental monitoring schedules

Contract No. EDO 2/2020 Environmental Monitoring at Kai Tak Development – Stage 5B infrastructure works at the former north apron area Environmental Monitoring and Weekly Site Inspection Schedule for February 2024

February 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Weekly Site Inspection	2 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	3
4	5	6	7	8 Weekly Site Inspection 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	9	10
11	12	13	14 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	15 Weekly Site Inspection	16	17
18	19	20 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	21	Weekly Site Inspection	23	24
25	26 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	27	28	29 Weekly Site Inspection + SSMC meeting		

Air Quality Monitoring Station

AM2(A) Ng Wah Catholic Secondary School AM3 - Sky Tower

Noise Quality Monitoring Station

M4(A) - Le Billionnaire M5(A) - Prince Ritz

Contract No. EDO 2/2020 Environmental Monitoring at Kai Tak Development – Stage 5B infrastructure works at the former north apron area Tentative Environmental Monitoring and Weekly Site Inspection Schedule for March 2024

March 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3
3	4	5	6	7 Weekly Site Inspection	8 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	9
10	11	12	13	14 Weekly Site Inspection 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	15	16
17	18	19	20 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	21 Weekly Site Inspection	22	23
24	25 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	26	27	28 Weekly Site Inspection + SSMC meeting 24-hr TSP and 1-hrX3 TSP: AM2(A), AM3 30-min Noise: M4(A), M5(A)	29	30
31						

NOTE:

1) Site inspection schedule and Impact monitoring schedule may be changed due to unforeseen circumstance (e.g. adverse weather).

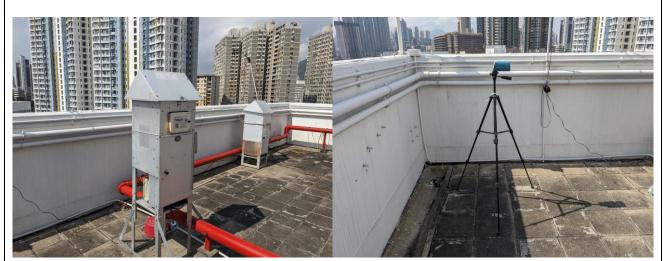
Air Quality Monitoring Station

AM2(A) Ng Wah Catholic Secondary School AM3 - Sky Tower Noise Quality Monitoring Station

M4(A) - Le Billionnaire M5(A) - Prince Ritz

Appendix D – Photographic records

Impact Air Quality Monitoring



Measurement setup at AM2(A)

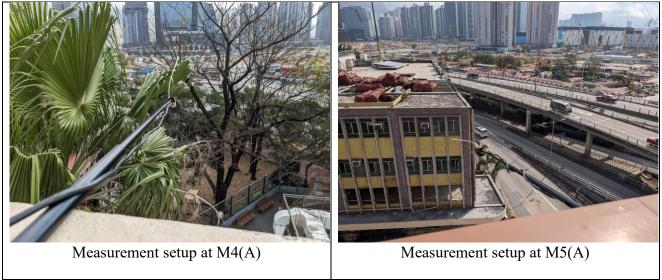


Measurement setup at AM3



Weather Station at the rooftop of Ng Wah Catholic Secondary School

Impact Noise Monitoring



Appendix E – Calibration certificates, catalogue of air quality monitoring equipment

Catalogue of High Volume Sampler (HVS)



The TE-5170 is a high volume ambient Total Suspended Particulate (TSP) air sampler featuring a mass flow controller (MFC) for accurate and consistent particulate sampling. The mass flow controller adjust the motor speed as the filter media collects particulate to maintain a constant flow rate throughout the entire sample duration. The system utilizes a stainless steel filter holder for use with standard 8" x 10" filter paper. The anodized aluminum shelter and robust electrical components allow the system to operate a continuous 24 hour sample.

ABOUT US: Tisch Environmental Inc. Tisch Environmental is the benchmark for high volume air sampling particulate company's inception in 1953 as General Metal Works, our product line has expanded from the first high volume air sampler to include high-tech and custom samplers. Our clients are professionals from every sector of the regulatory and industrial markets.

metals, volatiles, and specialty monitoring equipment. Since the

TISCH 🕡

www.tisch-env.com

36-60 CFM

Made In USA

Total Suspended Particulate(TSP)

Mass Flow Controlled

7-Day Mechanical Timer

Flapsed Time Indicator

Brush Style Motor

Aluminum Outdoor Shelter

Dickson Chart Recorder, 24 Hour

Stainless Steel Filter Holder



TSP MFC

MFC TSP Ambient Air Sampler

Particulate Size: Total Suspended Particulate (TSP) EPA Designation: CFR 40 Part 50 Appendix B

Flow Controller: Mass Flow Controller

Motor Style: Brush Style Motor Assembly

Pressure Recorder: Dickson Chart Recorder, 24 hour

Timer: 7 Day Mechanical

Elapsed Time Indicator: Mechanical, Hours and Tenths

Flow Range: 39-60CFM, 1.09M³M-1.68M³M

Housing: Anodized Aluminum Filter Holder: Stainless Steel, 8" x 10"

4" Recorder Charts: Box of 100 Filter Holder: 8" x 10" Stainless Steel with hold down frame Construction Sites Bridge and Water Tower Painting Sites

Fence Line Monitoring Industrial Monitoring

Landfill Monitoring

Institutional Studies

Public Health Applications

TE-3000 Filter Holder Cartridge

TE-G653 8" x 10" Glass Fiber Filter Media TE-33384 Motor Brush Set (110volt)

US EPA Reference Method Sampling, CFR

Appendix J Part 50 Regulatory Compliance

TE-33378 Motor Brush Set (220volt)

TE-116311 Replacement Motor (110volt)

TE-116312 Replacement Motor (220volt)

TE-106 Recorder Charts

TE-160 Recorder Pen Points

TE-5018 Gasket 8" x 10"

Available Models

TE-5170 TSP MFC, 110 Volt 60 Hertz, 8 Amps TE-5170X TSP MFC, 220 Volt 50 Hertz 4 Amps TE-5170XZ TSP MFC, 220 Volts 60 Hertz, 4 Amps

TE-5028 -Variable Flow Calibration Kit TE-HVC-V Xcalibrator HiVol Calibrator

Weight: 75lbs, Shelter

Shipping Dimensions: 46"W x 23"L x 20" H, Shelter

19"W x 19"L x 20"H, Lid

Assembled Dimensions: 28"W x 28"L x 61"H



Calibration Certificate of HVS

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

(Dickson recorder)

Calibration curve ref. No. :	ATSPC-01-2023042001	Date of calibration :	12/12/2023	
Model no :	Sky Tower	Sampler:	TE-5170X	
		Serial Number :	4687	

Calibration Data

Ambient barometric pressure, Pa = 762.1 (mmHg) Ambient temperature, Ta = 297.85 (deg K)

Calibration Orifice

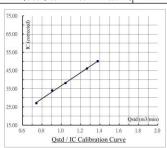
Model = TE-5025A	Qstd Slope, m = 2.0	1424
Serial No. = 0006	Qstd Intercept, b =	0.02085
Calibration Due Date: 17/05/2024	Ostd Corr. coeff., r =	0.99999

Calibration Curve

Plate No.	H ₂ O (in)	Qstd (m ³ /min)	I (chart)	IC (corrected)
18	7.80	1.378	50.0	50.08
13	6.60	1.267	46.0	46.07
10	4.50	1.045	38.0	38.06
7	3.40	0.907	34.0	34.06
5	2.30	0.744	27.0	27.04

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [(1)(Sqrt((Pav/760)(298/Tav)))-b1]	35.690	0.9383	0.9988



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3/min).

Remark : Qstd (m^3 / min) = 1/m [Sqrt (H_2O (Pa / 760) (298 / Ta)) - b]. IC (corrected) = I [Sqrt ((Pa / 760) (298 / Ta))].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

		02					
Calibrated	by :		12/12/2023	Checked by:)	12/12/2023	
Name:	(Ben Poon)	Name: (Chris Choy)	

Form No. INS-HVS-CAL dd 16 01 2020

Air Sampler Calibration Curve Plotting & Calculation

(Dickson recorder)

Calibration cur	rve ref. No. :	ATSPC-01-2023042004	Date of calibration :	12/12/2023	
Model no : Ng Wah C		Catholic Secondary School	Sampler:	TE-5170X	
			Serial Number :	4360	

Calibration Data

Ambient barometric pressure, Pa = 762.1 (mmHg) Ambient temperature, Ta = 297.85 (deg K)

Calibration Orifice

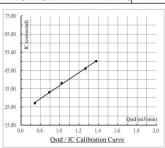
Model = TE-5025A	Qstd Slope, m = 2.014	24
Serial No. = 0006	Qstd Intercept, b =	0.02085
Calibration Due Date: 17/05/2024	Ostd Corr. coeff., r =	0.99999

Calibration Curve

Plate No.	H ₂ O	Qstd	I	IC
riate No.	(in)	(m ³ / min)	(chart)	(corrected)
18	7.80	1.378	50.0	50.08
13	6.60	1.267	46.0	46.07
10	4.30	1.021	38.0	38.06
7	3.30	0.893	33.0	33.05
5	2.30	0.744	27.0	27.04

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [(1) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	35,855	0.8318	0.9990



 $Calibration \ curve \ requirements: \quad (A). \ \ r \geq 0.990 \ ; \ \ (B). \ \ At \ least \ 3 \ Qstd \ numbers \ are \ in the \ TSP \ range \ (\ 1.1 - 1.7 \ m3 \ / \ min \).$

 $\begin{array}{lll} Remark: & & Qstd \ (m^3/\min) = 1/m \left[\ Sqrt \ (H_2O \ (Pa/760) \ (298/Ta)) \ -b \]. \\ & & & IC \ (\ corrected) = I \left[\ Sqrt \ (\ (Pa/760) \ (298/Ta)) \]. \\ & & & & FLOW \ (\ corrected) = \ Sqrt \ (FLOW \ (\ mano) \ (\ Pa/760) \ (298/Ta)). \end{array}$

Calibrated by 12/12/2022 Charled by 1

 Calibrated by:
 12/12/2023
 Checked by:
 12/12/2023

 Name:
 (
 Ben Poon
)
 Name:
 (
 Chris Choy
)

Form No. INS-HVS-CAL dd 16 01 2020

Calibration Certificate of HVS

Air Sampler Calibration Curve Plotting & Calculation

(Dickson recorder)

Calibration curve ref. No. :	ATSPC-01-2024020901	Date of calibration :	09/02/2023	
Model no :	Sky Tower	Sampler :	TE-5170X	
		Serial Number :	4687	

Calibration Data

Ambient barometric pressure, Pa = 767.4 (mmHg) Ambient temperature, Ta = 288.55 (deg K)

Calibration Orifice

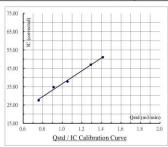
Model =	TE-5025A	Qstd Slope, m = 2.	01424	
Serial No. = 0006		Qstd Intercept, b = 0.0		
Calibration Due Date: 17/05/2024		Octd Corr coeff r=	0 00000	

Calibration Curve

Plate No.	H ₂ O (in)	Qstd (m ³ / min)	I (chart)	IC (corrected)
18	7.90	1.415	50.0	51.06
13	6.60	1.292	46.0	46.97
10	4.40	1.053	37.0	37.78
7	3.30	0.911	34.0	34.72
5	2.30	0.758	27.0	27.57

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r	
Dickson recorder	Qstd = 1 / m1 [(1) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	34.998	1.6194	0.9968	



Calibration curve requirements: (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $Remark: \qquad \qquad Qstd \ (\ m^3 \ / \ min \) = 1/m \ [\ Sqrt \ (\ H_2O \ (\ Pa \ / \ 760 \) \ (\ 298 \ / \ Ta \) \) - b \].$

IC (corrected) = I [Sqrt ((Pa / 760) (298 / Ta))].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

Calibrated	by:	4	09/02/2024	Checked b	y:)	09/02/2024
Name:	(Ben Poon)	Name:	(Chris Choy)
Form No. INS-HV	(S.CAL 48160)		,	Name .		Chris Choy	2

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

Calibration cur	ve ref. No. :	ATSPC-01-2024020904	Date of calibration :	09/02/2024	
Model no :	Ng Wah Ca	tholic Secondary School	Sampler :	TE-5170X	
		•	Serial Number :	4360	

Calibration Data

Ambient barometric pressure, Pa = 767.4 (mmHg) Ambient temperature, Ta = 288.55 (deg K)

Calibration Orifice

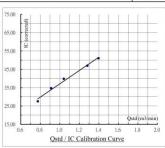
Model = TE-5025A	Qstd Slope, m = 2.01424
Serial No. = 0006	Qstd Intercept, b = 0.02085
Calibration Due Date: 17/05/2024	Ostd Corr. coeff., r = 0.99999

Calibration Curve

Plate No.	H ₂ O (in)	Qstd (m ³ /min)	I (chart)	IC (corrected)
18	7.70	1.396	50.0	51.06
13	6.50	1.282	46.0	46.97
10	4.30	1.041	39.0	39.82
7	3.30	0.911	34.0	34.72
5	2.40	0.775	27.0	27.57

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r	l
Dickson recorder	Qstd = 1 / m1 [(1) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	36.371	0.7111	0.9938	l



Calibration curve requirements: (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

Remark : Qstd (m^3 / min) = 1/m [Sqrt (H_2O (Pa / 760) (298 / Ta)) - b]. IC (corrected) = I [Sqrt ((Pa / 760) (298 / Ta))].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

 Calibrated by :
 09/02/2024
 Checked by :
 09/02/2024

 Name :
 (
 Ben Poon
)
 Name :
 (
 Chris Choy
)

Calibration Certificate of HVS used for performance check of Dust Meter

Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

Calibration curve ref. No. :	ATSPC-01-2022061301	Date of calibration :	19/06/2023	
Model no ·	GS2310	Serial number :	10346	

Calibration Data

Ambient barometric pressure, Pa = 755.3 (mmHg) Ambient temperature, Ta = 305.25 (deg K)

Calibration Orifice

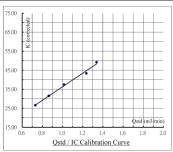
Model = TE-5025A	Qstd Slope, m = 2.01	424
Serial No. = 0006	Qstd Intercept, b =	0.02085
Calibration Due Date: 17/05/2024	Ostd Corr. coeff., r =	0.99999

Calibration Curve

Plate No.	H ₂ O	Qstd	I	IC
Flate No.	(in)	(m ³ / min)	(chart)	(corrected)
18	7.60	1.338	50.0	49.25
13	6.50	1.236	44.0	43.34
10	4.40	1.015	38.0	37.43
7	3.20	0.864	32.0	31.52
5	2.30	0.731	27.0	26.60

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [(I) (Sqrt ((Pav / 760) (298 / Tav))) - b1]	35.675	0.6397	0.9953



Calibration curve requirements: (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

 Calibrated by :
 19/06/2023
 Checked by :
 19/06/2023

 Name :
 (
 Ben Poon
)
 Name :
 (
 Tommy Wong
)

Form No. INS-HVS-CAL dd 16 01 2020

Orifice Transfer Standard Certification Worksheet TE-5025A

ISCH (A)

AAST-TSPC-01, Cal: 17 May 2023

RECALIBRATION
DUE DATE:
May 17, 2024

Environmental

Certificate of Calibration

Calibration Certification Information						
Cal. Date: May 17, 2023	Rootsmeter S/N: 438320	Ta: 297	°K			
Operator: Jim Tisch		Pa: 745.0	mm Hg			
Calibration Model #: TE-50	25A Calibrator S/N: 0006					

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4270	3.2	2.00
2	3	4	1	1.0000	6.4	4.00
3	5	6	1	0.8940	7.9	5.00
4	7	8	1	0.8490	8.8	5.50
5	9	10	1	0.6990	12.8	8.00

		Data Tabulat	tion		
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	√∆H(Ta/Pa)
0.9793	0.6863	1.4025	0.9957	0.6978	0.8929
0.9751	0.9751	1.9835	0.9914	0.9914	1.2628
0.9731	1.0885	2.2176	0.9894	1.1067	1.4119
0.9719	1.1448	2.3258	0.9882	1.1639	1.4808
0.9666	1.3829	2.8051	0.9828	1.4060	1.7859
	m=	2.01424		m=	1.26128
QSTD	b=	0.02085	QA	b=	0.01328
	r=	0.99999		r=	0.99999

Calculation	ns		
Vstd= ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va= ΔVol((Pa-ΔP)/Pa)		
Qstd= Vstd/ΔTime	Qa= Va/ΔTime		
For subsequent flow ra	nte calculations:		
Qstd= $1/m \left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} - b \right)$	Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b$		

70572	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrator	manometer reading (in H2O)
ΔP: rootsmete	er manometer reading (mm Hg)
Ta: actual abs	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

REGREDITATION
US EPA recommends annual recalibration per 1998
40 Code of Federal Regulations Part 50 to 51,
Appendix B to Part 50, Reference Method for the
Determination of Suspended Particulate Matter in
the Atmosphere, 9.2.17, page 30

RECALIBRATION

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002 www.tisch-env.com

TOLL FREE: (877)263-7610 FAX: (513)467-9009

Catalogue of Dust Meter (TSI Sidepak AM510)

The SidePak AM510 monitor's easy-to-read display shows your data as both real-time aerosol mass-concentration and 8-hour time-weighted average (TWA). With its convenient data logging and long battery life, the AM510 is also ideal for extended sampling. The easy-to-use TrakPro Data Analysis Software lets you create effective graphs and reports.

User Friendly

- + Small, lightweight and quiet to maximize worker acceptance
- + Rugged design with secure belt clip
- + Easy-to-understand user interface with only four keys
- + Lockable keypad prevents tampering while sampling
- + User-adjustable sample flow rate
- + Define, label and store multiple calibration constants
- + Easy-to-read LCD display
- + Convenient, threaded tripod socket accommodates area sampling

Advanced Features

- Smart Battery Management System provides precise run time information, maximizes battery capacity and speeds charging
- Integrated pump allows use of size-selective aerosol inlet conditioners
- + Built-in impactors let you choose "none," 1.0, 2.5 or 10-micron cut off
- + 10-mm Dorr-Oliver cyclone for respirable sampling
- + Display shows real-time concentrations (mg/m3) and "on-the-fly" TWA as you data log
- + Display statistics: max, min and average readings, elapsed time and 8-hour TWA

Quick and Easy Reports

- + Convenient preprogramming for occupational exposure sampling
- + Data log for long periods and store multiple tests
- + Analyze data, print graphs and create reports with TrakPro Data Analysis Software
- + USB port lets you conveniently connect to your computer

Power to Spare

- + Long-lasting NiMH rechargeable battery packs eliminate
- + Choice of rechargeable NiMH smart battery packs or AA-cell pack

Model AM510 SidePak Personal Aerosol Monitor

Sensitivity

90° light scattering, Sensor Type 670 nm laser diode 0.001 to 20 mg/m³ Aerosol Concentration Range (calibrated to respirable fraction of ISO 12103-1,

A1 test dust)

Particle Size Range 0.1 to 10 micrometer (µm)

Minimum Resolution 0.001 mg/m³ Zero stability

±0.001 mg/m3 over 24 hours using 10-second time-constant

Temperature Coefficient Approximately +0.0005 mg/m³ per °C (for variations from temperature

at which instrument was last zeroed)

Flow Rate

User-adjustable, 0.7 to 1.8 Range liters/min (L/min)

Temperature Range

Operating Range 32 to 120°F (0 to 50°C) Storage Range -4 to 140°F (-20 to 60°C)

Operational Humidity

0 to 95% RH, non-condensing

Time Constant (LCD display)

Jser-adjustable, 1 to 60 seconds

Data Logging

Approx. 31.000 Data Points Logging Interval

User-adjustable, 1 second to 1 hour

User-Select Calibration Factors

Factory Setting 1.0 (non-adjustable) User-defined Settings 3, with user-defined labels Range 0.1 to 10.0, user-adjustable

Physical

Weight

4.2 x 3.7 x 2.8 in. (106 x 92 x 70 mm) with 801723, 801724, 801729 or External Dimensions

801743 battery

5.1 x 3.7 x 2.8 in. (130 x 92 x 70 mm)

with 801708, 801722, 801728, 801735, or 801736 battery 16 oz (0.46 kg) with 801723, 801724,

801729 or 801743 battery 19 oz (0.54 kg) with 801708, 01722, 801728, 801735, or 801736 battery

Display Tripod Socket 2 line x 12 character LCD 1/4-20 female thread

Power Supply/Charger (P/N 2613210) Input Voltage Range 100 to 240 VAC. 50 to 60 Hz

Input Voltage Range

Output Voltage 9 VDC @ 1.0 A

Maintenance

Recommended annually Factory Clean/Calibrate User Zero Calibration Before each use User Flow Calibration As needed

Communications Interface

USB 1.1

Type Connector, Instrument USB Mini-B (socket)

Minimum Computer Requirements for

TrakPro™ Data Analysis Software Communications Port Universal Serial Bus (USB) v 1.1 or higher Operating System

Microsoft Windows® XP, or 7

(32-bit or 64-bit) operating systems

Battery Performance

Battery Options	Charge Time (hrs)*	Intrinsic Safety Rating	Run Time (hrs @ 1.7 L/min)
1600 mAH NiMH Pack, 4.8 V (P/N 801723)	3.0	No	7.1
1650 mAH NiMH Pack, 4.8V (P/N 801724, 801729 or 801743)	3.5	CSA**	7.5
2700 mAH NiMH Pack, 4.8 V (P/N 801722 or 801728)	5.5	No	12.0
2700 mAH NiMH Pack, 4.8 V (P/N 801735)	5.5	No	12.0
6-Cell AA-size Alkaline Pack*** (P/N 801708 or 801736 with six user-supplied AA cells)	N/A	No	22.5

*Of a fully depleted battery

**All dust plugs and dust gaskets must be installed.

***Using Energizer AA-size, E91 alkaline batteries.

Battery Level Indicator

The Smart Battery Management System™ technology utilizes a built-in "gauge" in the SidePak™ battery packs. The gauge monitors battery capacity and calculates run time information by dividing capacity of the battery (mAH) by the instantaneous current consumed by the instrument (mA). This calculation is correct for current operating conditions and can change due to current (mA) consumption or changes in battery capacity.



CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com Environment Conditions Model AM510 74.14 (23.4) °F (°C) Temperature Relative Humidity 47.6 %RH Serial Number 11208032 28.96 (980.7) inHg (hPa) ☐As Left ⊠ As Found Out of Tolerance Concentration Linearity Plot o = In Tolerance • = Out of Tolerance System ID: DTII01-02 Aerosol Concentration (mg/m3) CONCENTRATION Unit: mg/m3 ALLOWABLE RANGE ALLOWABLE RANGE 1.205 1,108 1.084~1.326 0.041 * 0.059 11.824 TSI Incorporated does hereby certify that all materials, components, and workmanship used in the manufacture of this equipment are in strict accordance with the applicable specifications agreed upon by TSI and the customer and with all published specifications. All performance and acceptance tests required under this contract were successfully conducted according to required specifications. There is no NIST standard for optical mass measurements. Calibration of this instrument performed by TSI has been done using emery oil and has been nominally adjusted to respirable mass per standard ISO 12103-1, A1 test dust (Arizona dust). Our calibration ratio is greater than 4:1 Measurement Variable DC Voltage System ID Last Cal Cal Due DC Voltage E010539 12-05-22 06-30-24 Microbalance M001324 01-09-23 01-31-25 Flowmeter E002471 05-22-23 05-31-24 System ID Last Cal. Cal. Due E003433 03-21-23 09-30-23 E003511 10-25-22 10-31-23 E003315 01-09-23 01-31-24 System ID E003433 E003511 August 8, 2023 FWU

Personal Aerosol Monitor Performance check with High Volume Sampler

Preformance Check ref. No	AS0220602-1	Report Issue Date	02/06/2023	
Date of performance check	02/06/2023			

Objective:

Calibration Certificate of Dust Meter (TSI Sidepak AM510)

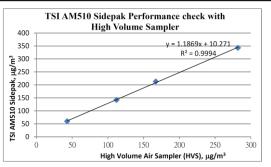
A dust meter and a Total Suspended Particulate High Volume Air Sampler (HVS) were placed together to measure the Total Suspended Particulate (TSP) concentrations simultaneously to check the performance.

Equipment Used:

Equipment	Manufacturer and Model	Serial Number
Personal Aerosol Monitor	TSI AM510 Sidepak	11208032
Total Suspended Particulate High Volume Air Sampler	GS2310	10346

Resustt:

Equipment	Measurement Result, μg/m ³				
TSI AM510 Sidepak	60	142	213	343	
High Volume Air Sampler (HVS)	43	112	167	282	



		07	\sim			1		
Tested by:		¥		Checked by:				
Name:	(Poon Tsz Wing)	Name :	(Wong Yin Tong)	

Form No. ENV CAL SAMPLER CC1 dd12/12/2003

Calibration Certificate of Dust Meter (TSI Sidepak AM510) CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com AM510 Model 73.99 (23.3) °F (°C) emperature Relative Humidity 51.8 %RH 11411017 Serial Number Barometric Pressure 28.83 (976.3) inHg (hPa) Out of Tolerance Concentration Linearity Plot o = In Tolerance o = Out of Tolerance System ID: DTII01-01 CONCENTRATION Unit: mg/m3 ALLOWABLE RANGE # STANDARD MEASURED ALLOWABLE RANGE # STANDARD MEASURED 1.451~1.773 0.074 TSI Incorporated does hereby certify that all materials, components, and workmanship used in the manufacture of this equipment are in strict accordance with the applicable specifications agreed upon by TSI and the customer and with all published specifications. All performance and acceptance tests required under this contract were successfully conducted according to required specifications. There is no NIST standard for optical mass measurements. Calibration of this instrument performed by TSI has been done using emery oil and has been nominally adjusted to respirable mass per standard ISO 12103-1, AI test dust (Arizona dust). Our calibration ratio is greater than 4:1 Measurement Variable Photometer System ID E003319 Last Cal D-17-23 Cal Due O9-30-23 Measurement Variable Followmeter System ID E004570 Last Cal O6-5-23 Cal Due O6-5-23 Col Joe O6-30-24 DC Voltage(Keithley) E00255 06-13-23 06-30-24 Microbalance M001324 02-09-23 02-28-25 Pressure E005651 07-24-23 07-31-24 < August 9, 2023

Personal Aerosol Monitor Performance check with High Volume Sampler

Preformance Check ref. No	AS0220602-5	Report Issue Date	02/06/2023	
Date of performance check	02/06/2023			

Objective:

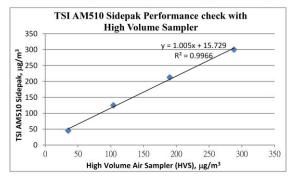
A dust meter and a Total Suspended Particulate High Volume Air Sampler (HVS) were placed together to measure the Total Suspended Particulate (TSP) concentrations simultaneously to check the performance.

Equipment Used:

Equipment	Manufacturer and Model	Serial Number	
Personal Aerosol Monitor	TSI AM510 Sidepak	11411017	
Total Suspended Particulate High Volume Air Sampler	GS2310	10346	

Resustt:

Equipment	Measurement Result, μg/m ³				
TSI AM510 Sidepak	45	125	213	300	
High Volume Air Sampler (HVS)	35	104	190	288	



		03			1	\sim	
Tested by:			02/06/2023	Checked by:		02/06/2023	
Name:	(Ben Poon)	Name:	(Tommy Wong	
Form No. ENV CAL SAM	IPLER CCI dd1	12/12/2003					

Catalogue of Weather Station

Cabled Vantage Pro2™ & Vantage Pro2 Plus™ Stations



6152C 6162C

Vantage Pro2

The Vantage Pro2[™] (# 6152C) and Vantage Pro2[™] Plus (# 6162C) cabled weather stations include two components: the Integrated Sensor Suite (ISS) and the console. The ISS contains the sensor interface module (SIM), rain collector, an anemometer, and a passive radiation shield. The Vantage Pro2 console provides the user interface, data display, and calculations. The Vantage Pro2 Plus weather station includes two additional sensors that are optional on the Vantage Pro2 and purchased separately: the UV Sensor and the Solar Radiation Sensor. The console and ISS are powered by an AC-power adapter connected to the console. Batteries can be installed in the console to provide a backup power supply. Use WeatherLink® to let your weather station interface with a computer, log data, and upload weather information to the Internet. The 6152C and 6162C models rely on passive shielding to reduce solar-radiation induced temperature errors in the outside temperature sensor readings.

Integrated Sensor Suite (ISS)

Operating Temperature	-40° to +150°F (-40° to +65°C)
Non-operating Temperature	-40° to +158°F (-40° to +70°C)
Current Draw	5 mA (average) at 4 to 6 VDC for ISS only. 10 mA average for both console and ISS $$
Connectors, Sensor	Modular RJ-11
Cable Type	4-conductor, 26 AWG
Cable Length, Anemometer	40' (12 m) (included); 240' (73 m) (maximum recommended)

Maximum displayable wind decreases as the length of cable increases. at 140' (42 m) of cable, the maximum wind speed displayed is 135 mph (60 m/s): at 240' (73 m), the maximum wind speed displayed is 100 mph (34 m/s).

Wind Speed Sensor Solid state magnetic sensor Wind Direction Sensor Wind vane with potentiometer (214 cm2) collection area Temperature Sensor Type...... PN Junction Silicon Diode Relative Humidity Sensor Type Film capacitor element Sensor Inputs RF Filtering RC low-pass filter on each signal line

ISS Dimensions(not including anemometer or bird spikes):

Vantage Pro2 with Fan-Asprated Rad Shield.......... 20.8" x 9.4" x 16.0" (528 mm x 239 mm x 406 mm) Vantage Pro2 Plus with Standard Rad Shield 14.3" x 9.7" x 14.5" (363 mm x 246 mm x 368 mm) Vantage Pro2 Plus with Fan-Aspirated Rad Shield 21.1" x 9.7" x 16.0" (536 mm x 246 mm x 406 mm)

Davis Instruments 3465 Diablo Ave., Hayward, CA 94545-2778 USA (510) 732-9229 FAX (510) 670-0589 - sales@davisInstruments.com - www.davisInstruments.com

DS6152C, 6162C Rev. W 12/7/18

Vantage Pro2

Ultra Violet (UV) Radiatio	n Index (requires UV sensor)
----------------------------	------------------------------

Resolution and Units	0.1 Index
Range	0 to 16 Index
Accuracy	$\pm5\%$ of full scale (Reference: Yankee UVB-1 at UV index 10 (Extremely High))
Cosine Response	±4% FS (0° to 90° zenith angle)
Update Interval	50 seconds to 1 minute (5 minutes when dark)
Current Graph Data	Instant Reading and Hourly Average; Daily, Monthly High
Historical Graph Data	Hourly Average, Daily, Monthly Highs
Alarm	High Threshold from Instant Calculation

Wind

Wind Chill (Calculated)

Resolution and Units	1°F or 1°C (user-selectable); °C is converted from °F and rounded to	į
	the nearest 1°C	

Source...... United States National Weather Service (NWS)/NOAA Equation Used Osczevski (1995) (adopted by US NWS in 2001)

Variables Used Instant Outside Temperature and 10-min. Avg. Wind Speed

Current Display Data Instant Calculation

Current Graph Data Instant Calculation; Hourly, Daily and Monthly Low

Historical Graph Data. Hourly, Daily and Monthly Lows

Alarm..... Low Threshold from Instant Calculation

Wind Direction

Monthly Dominant

Monthly Dominants

Wind Speed

other units are converted from mph and rounded to nearest 1 km/hr, 0.1

m/s or 1 knot

length of cable from anemometer to ISS increases.)

Current Display Data Instant

Current Graph Data Instant Reading; 10-minute and Hourly Average; Hourly High; Daily,

Monthly and Yearly High with Direction of High

Highs with Direction of Highs

Calibration Certificate of Weather Station



Cal Lab Limited 校正實驗室有限公司

Room 2103, Technology Plaza, 29-35 Sha Tsui Road,

Tsuen Wan, NT, Hong Kong

Tel: +852 25680106 Email: info@callab.com.hk Fax: +852 30116194 Website: www.callab.com.hk

Calibration Certificate No.: CC0072308

Information provided by customer

Customer: Castco Testing Centre Limited 33, On Kui Street, Fanling, N.T. Address:

Equipment identification provided by customer

Equipment Description Manufacturer Model No. Serial No. Assigned equipment No.: Weather Station Davis Vantage PRO 2 6152CUK BD181101023 AAST-WS-04

Certificate Information

Calibration Procedure:

Date of Receipt: 4 August 2023 Date of Calibration: Due Date of Calibration:

14 August 2023 N/A JJF 1183-2007, JJF 1076-2020. Calibration Condition: Adjustment: Appearance: Remark:

SOP-116 Reference Equipment Identification

Equipment Description Model Serial No. **Expiration Date** Platinum resistance thermometer KPPRHT-A-1 KCI I-1095, KCI P-1095 9 November 2024 Humidity sensor KPPRHT-A-1 KCI I-1095, KCI P-1095 9 November 2024 Hot Wire Anemometer 9535 T95351316004 11 August 2024

Note1: The estimated expanded uncertainties have been calculated in "Evaluation and expression of uncertainty in measurement" and give an internal estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

Note2: The standard (s) and instrument used in the calibration are traceable to national or international recognized standard and are calibrated on a schedule to maintain the

instrument.

Noted: The result shows in this calibration certificate relate only to the item calibrated, and the result only applies to the calibration item as received.

Company Chop:



24.3°C, 52%RH, 1002hPa

N/A

N/A

Good

Warren Yeung

Certificate Issue Date: 17 August 2023

CT-BEG-04

1. The certificate shall not be reproduced except in full, without written approval of Cal Lab Limited 2. The certificate is issued subject to the latest Terms and Conditions, available at our web site

Page 1 of 2

CC0072308



Cal Lab Limited 校正實驗室有限公司

Room 2103, Technology Plaza, 29-35 Sha Tsui Road,

Tsuen Wan, NT, Hong Kong

Tel: +852 25680106 Email: info@callab.com.hk Fax: +852 30116194 Website: www.callab.com.hk

Result of Calibration

Reference reading (°C)	Reading (°C)	Error (°C)	Uncertainty (°C		
15.0	15	0	2		
20.0	20	0	2		
25.0	25	0	2		
30.0	30	0	2		

Reference reading (%RH)	Reading (%RH)	Error (%RH)	Uncertainty (%RH)			
40.0	39	010	2			
50.0	51	1	2			
70.0	72	2	2			

Wind Speed

Reference reading (m/s)	Measured reading (m/s)	Error (%)	Uncertainty (%)
0.0	0.0	N/A	3.6
2.0	2.0	0.0	3.6
5.0	4.9	-2.0	3.6
8.0	7.7	-3.8	3.6

Wind Direction

Reference reading	Measured reading	Error	Uncertainty		
0°	0%	0°	· 5º		
45°	45°	0°	5°		
90°	90°	0°	50		
135°	135°	0°	5°		
180°	180°	0°	5°		
225°	225°	0°	5° 5°		
270°	270°	0°			
315°	315°	00			

*** End of Certificate ***

1. The certificate shall not be reproduced except in full, without written approval of Cal Lab Limited 2. The certificate is issued subject to the latest Terms and Conditions, available at our web site

CC0072308

Page 2 of 2

Appendix F – Weather information

General Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)	Mean Relative Humidity (%)	
01/02/2024	19.8	23.9	0.2	92	
02/02/2024	18.6	25.7	Trace	88	
03/02/2024	17.7	22.5	Trace	85	
04/02/2024	19.3	20.5	Trace	92	
05/02/2024	19.6	21.7	Trace	86	
06/02/2024	18.0	20.3	0.6	86	
07/02/2024	14.7	18.4	Trace	90	
08/02/2024	11.6	14.8	2.2	84	
09/02/2024	11.0	14.2	0.6	77	
10/02/2024	11.3	18.6	0.5	72	
11/02/2024	13.6	22.8	0	60	
12/02/2024	15.5	21.2	0	55	
13/02/2024	16.8	22.8	0	71	
14/02/2024	18.3	25.1	0	78	
15/02/2024	19.7	26.0	0	70	
16/02/2024	19.4	22.0	Trace	77	
17/02/2024	17.8	21.2	Trace	82	
18/02/2024	19.9	23.6	0	87	
19/02/2024	21.1	25.1	0	88	
20/02/2024	22.0	26.0	0	87	
21/02/2024	22.5	27.8	0	82	
22/02/2024	22.4	25.2	0	87	
23/02/2024	19.3	22.9	Trace	85	
24/02/2024	17.5	21.6	Trace	73	
25/02/2024	15.6	19.2	0	71	
26/02/2024	16.8	21.1	Trace	76	
27/02/2024	15.9	19.5	Trace	73	
28/02/2024	17.5	19.3	Trace	85	
29/02/2024	16.2	22.0	Trace	85	

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

NOTE2: Trace means rainfall less than 0.12 mm

https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2024&m=2

Kai Tak Runway Park Information

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)
01/02/2024	19.2	23.0
02/02/2024	18.3	23.4
03/02/2024	17.5	21.8
04/02/2024	19.1	20.3
05/02/2024	19.4	22.2
06/02/2024	17.8	20.0
07/02/2024	14.2	18.3
08/02/2024	11.3	14.6
09/02/2024	11.0	15.4
10/02/2024	11.2	18.0
11/02/2024	12.4	23.6
12/02/2024	15.7	21.2
13/02/2024	16.6	22.9
14/02/2024	18.7	25.3
15/02/2024	19.2	26.8
16/02/2024	19.2	23.2
17/02/2024	17.8	21.1
18/02/2024	19.6	23.9
19/02/2024	20.3	23.4
20/02/2024	21.4	25.7
21/02/2024	20.9	26.9
22/02/2024	21.3	26.2
23/02/2024	18.9	22.9
24/02/2024	17.1	22.4
25/02/2024	15.8	21.1
26/02/2024	16.4	21.2
27/02/2024	16.0	19.3
28/02/2024	17.5	19.1
29/02/2024	15.8	22.2

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

 $https://i-lens.hk/hkweather/history_chart.php?date=2024-02-01\&chart_type=DG_TEMP$

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
01/02/2024	0:00	0.4	90	02/02/2024	0:00	0.4	112.5	03/02/2024	0:00	0.9	90	04/02/2024	0:00	0.4	135
01/02/2024	1:00	0.4	90	02/02/2024	1:00	0.9	45	03/02/2024	1:00	0.4	247.5	04/02/2024	1:00	0.4	157.5
01/02/2024	2:00	0.4	90	02/02/2024	2:00	0.9	270	03/02/2024	2:00	0.4	180	04/02/2024	2:00	0.4	135
01/02/2024	3:00	0.4	45	02/02/2024	3:00	0.9	45	03/02/2024	3:00	0.4	22.5	04/02/2024	3:00	0.4	135
01/02/2024	4:00	0	67.5	02/02/2024	4:00	0.4	90	03/02/2024	4:00	0.4	247.5	04/02/2024	4:00	0.9	112.5
01/02/2024	5:00	0.9	67.5	02/02/2024	5:00	0.9	112.5	03/02/2024	5:00	0.4	247.5	04/02/2024	5:00	0.9	112.5
01/02/2024	6:00	1.3	67.5	02/02/2024	6:00	0.4	112.5	03/02/2024	6:00	0	270	04/02/2024	6:00	0.9	157.5
01/02/2024	7:00	0.9	67.5	02/02/2024	7:00	0.4	112.5	03/02/2024	7:00	0.4	22.5	04/02/2024	7:00	1.3	135
01/02/2024	8:00	0.4	135	02/02/2024	8:00	0.4	112.5	03/02/2024	8:00	0.4	22.5	04/02/2024	8:00	1.3	112.5
01/02/2024	9:00	0.9	90	02/02/2024	9:00	0.4	157.5	03/02/2024	9:00	0.4	247.5	04/02/2024	9:00	0.4	112.5
01/02/2024	10:00	0.4	45	02/02/2024	10:00	0	112.5	03/02/2024	10:00	0.4	247.5	04/02/2024	10:00	0.9	112.5
01/02/2024	11:00	0	67.5	02/02/2024	11:00	0.4	45	03/02/2024	11:00	0	202.5	04/02/2024	11:00	0.4	90
01/02/2024	12:00	0.9	67.5	02/02/2024	12:00	0.4	90	03/02/2024	12:00	0.4	157.5	04/02/2024	12:00	0.4	90
01/02/2024	13:00	1.3	67.5	02/02/2024	13:00	0.9	90	03/02/2024	13:00	0.4	225	04/02/2024	13:00	0.4	90
01/02/2024	14:00	0.9	67.5	02/02/2024	14:00	0.4	45	03/02/2024	14:00	0.4	112.5	04/02/2024	14:00	1.8	112.5
01/02/2024	15:00	0.4	135	02/02/2024	15:00	0	67.5	03/02/2024	15:00	0.4	112.5	04/02/2024	15:00	0.9	90
01/02/2024	16:00	0.9	90	02/02/2024	16:00	0.9	67.5	03/02/2024	16:00	0.4	112.5	04/02/2024	16:00	0.9	135
01/02/2024	17:00	1.3	90	02/02/2024	17:00	1.3	67.5	03/02/2024	17:00	0.4	157.5	04/02/2024	17:00	0.9	135
01/02/2024	18:00	0.9	90	02/02/2024	18:00	0.9	67.5	03/02/2024	18:00	0	112.5	04/02/2024	18:00	0.9	112.5
01/02/2024	19:00	0.4	90	02/02/2024	19:00	0.4	135	03/02/2024	19:00	0.4	45	04/02/2024	19:00	1.3	135
01/02/2024	20:00	0.4	112.5	02/02/2024	20:00	0.9	90	03/02/2024	20:00	0.4	90	04/02/2024	20:00	1.3	90
01/02/2024	21:00	0.4	315	02/02/2024	21:00	0.4	90	03/02/2024	21:00	0.9	90	04/02/2024	21:00	1.3	112.5
01/02/2024	22:00	0.4	67.5	02/02/2024	22:00	0.9	112.5	03/02/2024	22:00	0.4	45	04/02/2024	22:00	1.3	45
01/02/2024	23:00	0.4	67.5	02/02/2024	23:00	0.4	112.5	03/02/2024	23:00	1.3	67.5	04/02/2024	23:00	0.9	90

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
05/02/2024	0:00	0.4	67.5	06/02/2024	0:00	1.3	112.5	07/02/2024	0:00	0.4	135	08/02/2024	0:00	0.4	135
05/02/2024	1:00	1.3	67.5	06/02/2024	1:00	0.9	90	07/02/2024	1:00	0.4	112.5	08/02/2024	1:00	0.4	112.5
05/02/2024	2:00	0.9	67.5	06/02/2024	2:00	0.9	247.5	07/02/2024	2:00	0.4	45	08/02/2024	2:00	0.4	90
05/02/2024	3:00	0.4	90	06/02/2024	3:00	0.9	247.5	07/02/2024	3:00	0	90	08/02/2024	3:00	0.4	112.5
05/02/2024	4:00	0.4	22.5	06/02/2024	4:00	0.4	247.5	07/02/2024	4:00	0	112.5	08/02/2024	4:00	1.3	112.5
05/02/2024	5:00	1.3	90	06/02/2024	5:00	1.3	247.5	07/02/2024	5:00	0.4	135	08/02/2024	5:00	0.9	90
05/02/2024	6:00	0.9	67.5	06/02/2024	6:00	0.4	247.5	07/02/2024	6:00	0.9	135	08/02/2024	6:00	0.9	247.5
05/02/2024	7:00	1.3	45	06/02/2024	7:00	0.4	247.5	07/02/2024	7:00	0.9	135	08/02/2024	7:00	0.9	247.5
05/02/2024	8:00	1.3	45	06/02/2024	8:00	0.4	247.5	07/02/2024	8:00	0.9	135	08/02/2024	8:00	0.4	247.5
05/02/2024	9:00	1.3	67.5	06/02/2024	9:00	0	225	07/02/2024	9:00	0.4	135	08/02/2024	9:00	1.3	247.5
05/02/2024	10:00	0.9	67.5	06/02/2024	10:00	0	202.5	07/02/2024	10:00	0.4	135	08/02/2024	10:00	0.4	247.5
05/02/2024	11:00	0.4	247.5	06/02/2024	11:00	1.3	112.5	07/02/2024	11:00	1.3	112.5	08/02/2024	11:00	1.3	67.5
05/02/2024	12:00	0.4	247.5	06/02/2024	12:00	0.9	90	07/02/2024	12:00	1.8	112.5	08/02/2024	12:00	0.9	67.5
05/02/2024	13:00	1.3	67.5	06/02/2024	13:00	0.9	247.5	07/02/2024	13:00	1.8	112.5	08/02/2024	13:00	0.4	90
05/02/2024	14:00	1.3	90	06/02/2024	14:00	0.9	247.5	07/02/2024	14:00	0.4	112.5	08/02/2024	14:00	0.9	90
05/02/2024	15:00	0.9	112.5	06/02/2024	15:00	0.4	247.5	07/02/2024	15:00	0.4	112.5	08/02/2024	15:00	0.4	90
05/02/2024	16:00	1.3	90	06/02/2024	16:00	1.3	247.5	07/02/2024	16:00	0.9	90	08/02/2024	16:00	0.4	90
05/02/2024	17:00	1.3	90	06/02/2024	17:00	0.4	247.5	07/02/2024	17:00	1.3	67.5	08/02/2024	17:00	0.9	112.5
05/02/2024	18:00	0.9	67.5	06/02/2024	18:00	0.4	247.5	07/02/2024	18:00	0.9	67.5	08/02/2024	18:00	1.3	135
05/02/2024	19:00	1.3	45	06/02/2024	19:00	0.4	247.5	07/02/2024	19:00	0.9	90	08/02/2024	19:00	0.9	135
05/02/2024	20:00	1.3	45	06/02/2024	20:00	0.4	225	07/02/2024	20:00	0.9	22.5	08/02/2024	20:00	0.9	112.5
05/02/2024	21:00	1.3	67.5	06/02/2024	21:00	0	202.5	07/02/2024	21:00	0.9	112.5	08/02/2024	21:00	0.9	90
05/02/2024	22:00	0.9	67.5	06/02/2024	22:00	0.4	180	07/02/2024	22:00	0.4	247.5	08/02/2024	22:00	0.9	337.5
05/02/2024	23:00	0.4	180	06/02/2024	23:00	0.9	225	07/02/2024	23:00	0.4	247.5	08/02/2024	23:00	0.9	270

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
09/02/2024	0:00	0.9	45	10/02/2024	0:00	0.4	45	11/02/2024	0:00	0.9	67.5	12/02/2024	0:00	1.8	67.5
09/02/2024	1:00	0.9	315	10/02/2024	1:00	0.4	45	11/02/2024	1:00	0.4	90	12/02/2024	1:00	1.8	67.5
09/02/2024	2:00	0.4	292.5	10/02/2024	2:00	0.9	22.5	11/02/2024	2:00	0.9	22.5	12/02/2024	2:00	1.3	67.5
09/02/2024	3:00	0.9	22.5	10/02/2024	3:00	0.4	112.5	11/02/2024	3:00	0.9	90	12/02/2024	3:00	0.4	45
09/02/2024	4:00	0.9	270	10/02/2024	4:00	0.4	90	11/02/2024	4:00	0.9	45	12/02/2024	4:00	0.4	90
09/02/2024	5:00	0.9	45	10/02/2024	5:00	0.9	90	11/02/2024	5:00	1.3	90	12/02/2024	5:00	0.4	45
09/02/2024	6:00	1.3	270	10/02/2024	6:00	0.9	90	11/02/2024	6:00	0.9	22.5	12/02/2024	6:00	0.9	270
09/02/2024	7:00	0.9	90	10/02/2024	7:00	0.9	22.5	11/02/2024	7:00	1.3	225	12/02/2024	7:00	1.8	270
09/02/2024	8:00	0.4	90	10/02/2024	8:00	0.9	45	11/02/2024	8:00	1.3	135	12/02/2024	8:00	1.8	90
09/02/2024	9:00	0.9	180	10/02/2024	9:00	0.9	45	11/02/2024	9:00	0.4	315	12/02/2024	9:00	1.3	22.5
09/02/2024	10:00	1.3	90	10/02/2024	10:00	0.9	315	11/02/2024	10:00	0.4	292.5	12/02/2024	10:00	0.4	67.5
09/02/2024	11:00	1.3	45	10/02/2024	11:00	0.4	292.5	11/02/2024	11:00	0.4	22.5	12/02/2024	11:00	0.4	112.5
09/02/2024	12:00	0.9	45	10/02/2024	12:00	0.9	22.5	11/02/2024	12:00	0.9	45	12/02/2024	12:00	0.4	225
09/02/2024	13:00	0.9	270	10/02/2024	13:00	0.9	270	11/02/2024	13:00	0.4	45	12/02/2024	13:00	0.9	135
09/02/2024	14:00	0.9	337.5	10/02/2024	14:00	0.9	45	11/02/2024	14:00	0.4	315	12/02/2024	14:00	0.4	90
09/02/2024	15:00	0.9	270	10/02/2024	15:00	1.3	90	11/02/2024	15:00	0.9	45	12/02/2024	15:00	0.4	157.5
09/02/2024	16:00	0.9	90	10/02/2024	16:00	0.4	90	11/02/2024	16:00	1.3	247.5	12/02/2024	16:00	1.8	90
09/02/2024	17:00	1.3	22.5	10/02/2024	17:00	1.3	112.5	11/02/2024	17:00	0.4	292.5	12/02/2024	17:00	0.9	45
09/02/2024	18:00	0.4	67.5	10/02/2024	18:00	1.3	112.5	11/02/2024	18:00	0.4	270	12/02/2024	18:00	0.4	45
09/02/2024	19:00	0.9	225	10/02/2024	19:00	1.3	112.5	11/02/2024	19:00	0.4	45	12/02/2024	19:00	0.4	315
09/02/2024	20:00	0.4	270	10/02/2024	20:00	1.3	112.5	11/02/2024	20:00	0.9	67.5	12/02/2024	20:00	0.9	45
09/02/2024	21:00	1.3	337.5	10/02/2024	21:00	1.3	112.5	11/02/2024	21:00	0.4	22.5	12/02/2024	21:00	0.9	45
09/02/2024	22:00	0.9	112.5	10/02/2024	22:00	1.8	22.5	11/02/2024	22:00	0.4	90	12/02/2024	22:00	0.9	180
09/02/2024	23:00	0.4	112.5	10/02/2024	23:00	0.9	22.5	11/02/2024	23:00	0.9	180	12/02/2024	23:00	0.9	112.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
13/02/2024	0:00	0.9	90	14/02/2024	0:00	0.9	112.5	15/02/2024	0:00	1.3	22.5	16/02/2024	0:00	0.4	225
13/02/2024	1:00	1.3	135	14/02/2024	1:00	0.4	112.5	15/02/2024	1:00	1.3	337.5	16/02/2024	1:00	0.9	292.5
13/02/2024	2:00	1.3	22.5	14/02/2024	2:00	0.9	112.5	15/02/2024	2:00	1.3	112.5	16/02/2024	2:00	0.9	292.5
13/02/2024	3:00	1.3	180	14/02/2024	3:00	0.9	90	15/02/2024	3:00	0.9	180	16/02/2024	3:00	0.9	292.5
13/02/2024	4:00	0.9	112.5	14/02/2024	4:00	0.4	270	15/02/2024	4:00	0.4	247.5	16/02/2024	4:00	0.9	292.5
13/02/2024	5:00	1.3	135	14/02/2024	5:00	0.4	112.5	15/02/2024	5:00	1.3	90	16/02/2024	5:00	0.4	270
13/02/2024	6:00	1.3	112.5	14/02/2024	6:00	0.4	112.5	15/02/2024	6:00	0.9	247.5	16/02/2024	6:00	1.3	315
13/02/2024	7:00	1.3	90	14/02/2024	7:00	0.9	112.5	15/02/2024	7:00	1.8	225	16/02/2024	7:00	1.3	247.5
13/02/2024	8:00	0.9	112.5	14/02/2024	8:00	1.8	225	15/02/2024	8:00	1.3	292.5	16/02/2024	8:00	1.3	270
13/02/2024	9:00	1.8	90	14/02/2024	9:00	0.9	112.5	15/02/2024	9:00	1.3	292.5	16/02/2024	9:00	0.9	0
13/02/2024	10:00	1.8	112.5	14/02/2024	10:00	1.3	270	15/02/2024	10:00	0.9	292.5	16/02/2024	10:00	1.3	292.5
13/02/2024	11:00	0.9	180	14/02/2024	11:00	0.9	112.5	15/02/2024	11:00	0.4	22.5	16/02/2024	11:00	0.9	292.5
13/02/2024	12:00	0.4	247.5	14/02/2024	12:00	0.9	90	15/02/2024	12:00	1.3	22.5	16/02/2024	12:00	1.8	292.5
13/02/2024	13:00	1.3	90	14/02/2024	13:00	0.4	157.5	15/02/2024	13:00	0.9	22.5	16/02/2024	13:00	0.4	270
13/02/2024	14:00	1.3	247.5	14/02/2024	14:00	0.9	157.5	15/02/2024	14:00	1.3	67.5	16/02/2024	14:00	0.4	270
13/02/2024	15:00	1.3	225	14/02/2024	15:00	0.9	157.5	15/02/2024	15:00	1.3	45	16/02/2024	15:00	0.9	270
13/02/2024	16:00	0.9	292.5	14/02/2024	16:00	0.4	135	15/02/2024	16:00	1.3	90	16/02/2024	16:00	0.4	90
13/02/2024	17:00	0.4	292.5	14/02/2024	17:00	0.4	112.5	15/02/2024	17:00	0.9	292.5	16/02/2024	17:00	0.9	90
13/02/2024	18:00	0.9	292.5	14/02/2024	18:00	0.4	90	15/02/2024	18:00	1.3	22.5	16/02/2024	18:00	0.4	337.5
13/02/2024	19:00	1.3	112.5	14/02/2024	19:00	0.9	90	15/02/2024	19:00	0.9	22.5	16/02/2024	19:00	0.9	22.5
13/02/2024	20:00	1.3	90	14/02/2024	20:00	0.4	337.5	15/02/2024	20:00	0.9	22.5	16/02/2024	20:00	0.9	337.5
13/02/2024	21:00	1.3	112.5	14/02/2024	21:00	0.9	22.5	15/02/2024	21:00	0.4	67.5	16/02/2024	21:00	0.9	112.5
13/02/2024	22:00	0.9	135	14/02/2024	22:00	1.3	135	15/02/2024	22:00	0.4	45	16/02/2024	22:00	0.9	0
13/02/2024	23:00	1.3	135	14/02/2024	23:00	1.3	112.5	15/02/2024	23:00	1.3	90	16/02/2024	23:00	0.4	247.5

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
17/02/2024	0:00	1.3	90	18/02/2024	0:00	0.9	90	19/02/2024	0:00	0.9	135	20/02/2024	0:00	0.9	270
17/02/2024	1:00	0.4	90	18/02/2024	1:00	0.9	45	19/02/2024	1:00	0.9	135	20/02/2024	1:00	1.3	225
17/02/2024	2:00	0.9	45	18/02/2024	2:00	0.9	90	19/02/2024	2:00	0.9	135	20/02/2024	2:00	1.8	67.5
17/02/2024	3:00	0.9	112.5	18/02/2024	3:00	0.9	90	19/02/2024	3:00	0.4	135	20/02/2024	3:00	0.9	157.5
17/02/2024	4:00	1.3	90	18/02/2024	4:00	1.3	90	19/02/2024	4:00	1.3	90	20/02/2024	4:00	1.3	315
17/02/2024	5:00	1.3	90	18/02/2024	5:00	0.4	67.5	19/02/2024	5:00	1.3	90	20/02/2024	5:00	1.3	90
17/02/2024	6:00	1.3	90	18/02/2024	6:00	0.9	90	19/02/2024	6:00	0.9	112.5	20/02/2024	6:00	0.9	45
17/02/2024	7:00	0.9	135	18/02/2024	7:00	0.9	45	19/02/2024	7:00	0.9	90	20/02/2024	7:00	0.9	90
17/02/2024	8:00	0.9	135	18/02/2024	8:00	1.3	202.5	19/02/2024	8:00	0.9	45	20/02/2024	8:00	0.9	90
17/02/2024	9:00	0.9	112.5	18/02/2024	9:00	1.3	67.5	19/02/2024	9:00	0.9	90	20/02/2024	9:00	0.9	90
17/02/2024	10:00	0.4	90	18/02/2024	10:00	1.3	90	19/02/2024	10:00	0.9	90	20/02/2024	10:00	0.9	67.5
17/02/2024	11:00	0.4	135	18/02/2024	11:00	0.9	135	19/02/2024	11:00	0.9	90	20/02/2024	11:00	0.9	45
17/02/2024	12:00	0.9	135	18/02/2024	12:00	0.9	90	19/02/2024	12:00	0.4	67.5	20/02/2024	12:00	0.9	112.5
17/02/2024	13:00	0.4	135	18/02/2024	13:00	0.9	90	19/02/2024	13:00	0.9	90	20/02/2024	13:00	0.4	45
17/02/2024	14:00	0.4	90	18/02/2024	14:00	0.9	112.5	19/02/2024	14:00	1.3	45	20/02/2024	14:00	1.3	112.5
17/02/2024	15:00	1.3	90	18/02/2024	15:00	1.8	135	19/02/2024	15:00	2.2	90	20/02/2024	15:00	0.4	90
17/02/2024	16:00	0.4	112.5	18/02/2024	16:00	1.3	90	19/02/2024	16:00	2.2	45	20/02/2024	16:00	0.4	67.5
17/02/2024	17:00	0.9	90	18/02/2024	17:00	1.3	90	19/02/2024	17:00	2.2	112.5	20/02/2024	17:00	0.4	90
17/02/2024	18:00	0.9	90	18/02/2024	18:00	0.9	67.5	19/02/2024	18:00	0.4	90	20/02/2024	18:00	0.9	90
17/02/2024	19:00	1.3	45	18/02/2024	19:00	0.4	45	19/02/2024	19:00	0.9	67.5	20/02/2024	19:00	0.9	67.5
17/02/2024	20:00	1.3	112.5	18/02/2024	20:00	0.9	90	19/02/2024	20:00	0.9	90	20/02/2024	20:00	0.9	90
17/02/2024	21:00	1.3	90	18/02/2024	21:00	0.9	90	19/02/2024	21:00	1.3	135	20/02/2024	21:00	0.9	135
17/02/2024	22:00	0.9	90	18/02/2024	22:00	0.4	247.5	19/02/2024	22:00	1.3	112.5	20/02/2024	22:00	0.9	112.5
17/02/2024	23:00	0.9	90	18/02/2024	23:00	0.4	247.5	19/02/2024	23:00	1.3	90	20/02/2024	23:00	0.9	90

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

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
21/02/2024	0:00	1.8	90	22/02/2024	0:00	0.4	90	23/02/2024	0:00	0.4	112.5	24/02/2024	0:00	0.4	315
21/02/2024	1:00	0.9	112.5	22/02/2024	1:00	0.4	112.5	23/02/2024	1:00	0.9	225	24/02/2024	1:00	0.9	90
21/02/2024	2:00	1.3	90	22/02/2024	2:00	0.9	90	23/02/2024	2:00	0.4	270	24/02/2024	2:00	0.4	45
21/02/2024	3:00	1.3	112.5	22/02/2024	3:00	0.4	90	23/02/2024	3:00	0.4	247.5	24/02/2024	3:00	0.4	90
21/02/2024	4:00	0.9	112.5	22/02/2024	4:00	0.4	45	23/02/2024	4:00	0.4	270	24/02/2024	4:00	0.4	90
21/02/2024	5:00	0.9	45	22/02/2024	5:00	1.3	112.5	23/02/2024	5:00	0.4	67.5	24/02/2024	5:00	1.3	90
21/02/2024	6:00	0.9	112.5	22/02/2024	6:00	0.4	90	23/02/2024	6:00	0.4	112.5	24/02/2024	6:00	0.9	67.5
21/02/2024	7:00	0.9	90	22/02/2024	7:00	0.9	90	23/02/2024	7:00	0.4	90	24/02/2024	7:00	0.9	90
21/02/2024	8:00	1.3	90	22/02/2024	8:00	0.9	90	23/02/2024	8:00	0.9	337.5	24/02/2024	8:00	0.4	45
21/02/2024	9:00	0.9	90	22/02/2024	9:00	0.9	135	23/02/2024	9:00	0.9	112.5	24/02/2024	9:00	0.4	202.5
21/02/2024	10:00	1.8	135	22/02/2024	10:00	0.9	135	23/02/2024	10:00	0.4	90	24/02/2024	10:00	0.9	67.5
21/02/2024	11:00	1.8	135	22/02/2024	11:00	0.9	112.5	23/02/2024	11:00	0.4	112.5	24/02/2024	11:00	1.3	90
21/02/2024	12:00	1.8	112.5	22/02/2024	12:00	0.9	90	23/02/2024	12:00	0.4	90	24/02/2024	12:00	0.9	90
21/02/2024	13:00	0.9	90	22/02/2024	13:00	1.8	90	23/02/2024	13:00	0.9	90	24/02/2024	13:00	1.3	90
21/02/2024	14:00	0.9	90	22/02/2024	14:00	0.4	135	23/02/2024	14:00	0.9	90	24/02/2024	14:00	1.8	90
21/02/2024	15:00	0.9	135	22/02/2024	15:00	0.4	112.5	23/02/2024	15:00	1.3	112.5	24/02/2024	15:00	0.9	90
21/02/2024	16:00	0.4	90	22/02/2024	16:00	0.9	270	23/02/2024	16:00	0.9	90	24/02/2024	16:00	1.3	67.5
21/02/2024	17:00	1.3	112.5	22/02/2024	17:00	0.9	112.5	23/02/2024	17:00	0.9	112.5	24/02/2024	17:00	1.3	90
21/02/2024	18:00	1.3	67.5	22/02/2024	18:00	0.4	90	23/02/2024	18:00	0.9	90	24/02/2024	18:00	1.8	45
21/02/2024	19:00	0.9	67.5	22/02/2024	19:00	0.4	157.5	23/02/2024	19:00	0.9	112.5	24/02/2024	19:00	1.3	135
21/02/2024	20:00	0.9	67.5	22/02/2024	20:00	0.4	157.5	23/02/2024	20:00	1.8	90	24/02/2024	20:00	0.9	90
21/02/2024	21:00	0.9	67.5	22/02/2024	21:00	0.9	157.5	23/02/2024	21:00	1.3	90	24/02/2024	21:00	0.9	90
21/02/2024	22:00	0.9	90	22/02/2024	22:00	0.9	135	23/02/2024	22:00	0.9	112.5	24/02/2024	22:00	0.9	112.5
21/02/2024	23:00	0.9	90	22/02/2024	23:00	0.4	112.5	23/02/2024	23:00	0.9	225	24/02/2024	23:00	0.9	112.5

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

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
25/02/2024	0:00	1.3	112.5	26/02/2024	0:00	0.9	112.5	27/02/2024	0:00	1.8	112.5	28/02/2024	0:00	1.8	45
25/02/2024	1:00	0.9	45	26/02/2024	1:00	0.9	112.5	27/02/2024	1:00	1.3	135	28/02/2024	1:00	1.3	90
25/02/2024	2:00	1.3	112.5	26/02/2024	2:00	0.9	90	27/02/2024	2:00	1.3	112.5	28/02/2024	2:00	1.3	112.5
25/02/2024	3:00	1.3	90	26/02/2024	3:00	0.9	135	27/02/2024	3:00	0.9	247.5	28/02/2024	3:00	0.9	90
25/02/2024	4:00	0.9	90	26/02/2024	4:00	0.9	247.5	27/02/2024	4:00	0.9	112.5	28/02/2024	4:00	0.9	202.5
25/02/2024	5:00	0.9	90	26/02/2024	5:00	1.3	180	27/02/2024	5:00	1.3	112.5	28/02/2024	5:00	1.3	67.5
25/02/2024	6:00	1.3	135	26/02/2024	6:00	0.9	135	27/02/2024	6:00	1.3	135	28/02/2024	6:00	1.3	90
25/02/2024	7:00	1.3	135	26/02/2024	7:00	0.9	45	27/02/2024	7:00	0.9	112.5	28/02/2024	7:00	0.9	90
25/02/2024	8:00	0.9	112.5	26/02/2024	8:00	0.9	90	27/02/2024	8:00	0.9	112.5	28/02/2024	8:00	0.9	90
25/02/2024	9:00	1.3	90	26/02/2024	9:00	0.4	112.5	27/02/2024	9:00	0.4	90	28/02/2024	9:00	0.4	90
25/02/2024	10:00	0.9	90	26/02/2024	10:00	0.4	90	27/02/2024	10:00	0.4	90	28/02/2024	10:00	0.4	90
25/02/2024	11:00	0.4	270	26/02/2024	11:00	0.9	67.5	27/02/2024	11:00	0.9	45	28/02/2024	11:00	0.4	67.5
25/02/2024	12:00	0.9	112.5	26/02/2024	12:00	0.9	135	27/02/2024	12:00	0.9	247.5	28/02/2024	12:00	0.9	90
25/02/2024	13:00	1.3	90	26/02/2024	13:00	0.9	112.5	27/02/2024	13:00	0.9	270	28/02/2024	13:00	0.9	45
25/02/2024	14:00	0.9	90	26/02/2024	14:00	1.3	90	27/02/2024	14:00	0.4	112.5	28/02/2024	14:00	0.9	45
25/02/2024	15:00	0.9	45	26/02/2024	15:00	0.9	90	27/02/2024	15:00	1.3	90	28/02/2024	15:00	0.9	45
25/02/2024	16:00	1.3	22.5	26/02/2024	16:00	0.9	337.5	27/02/2024	16:00	1.3	337.5	28/02/2024	16:00	0.4	45
25/02/2024	17:00	1.3	22.5	26/02/2024	17:00	0.9	22.5	27/02/2024	17:00	1.3	135	28/02/2024	17:00	1.3	45
25/02/2024	18:00	1.3	90	26/02/2024	18:00	0.4	337.5	27/02/2024	18:00	0.9	67.5	28/02/2024	18:00	1.3	45
25/02/2024	19:00	0.9	112.5	26/02/2024	19:00	0.4	112.5	27/02/2024	19:00	1.8	135	28/02/2024	19:00	1.3	45
25/02/2024	20:00	1.3	45	26/02/2024	20:00	0.9	90	27/02/2024	20:00	0.9	292.5	28/02/2024	20:00	0.9	67.5
25/02/2024	21:00	1.3	67.5	26/02/2024	21:00	0.9	90	27/02/2024	21:00	0.9	247.5	28/02/2024	21:00	1.3	67.5
25/02/2024	22:00	1.3	90	26/02/2024	22:00	0.9	45	27/02/2024	22:00	0.9	45	28/02/2024	22:00	1.8	90
25/02/2024	23:00	0.9	90	26/02/2024	23:00	0.9	22.5	27/02/2024	23:00	0.9	112.5	28/02/2024	23:00	2.2	90

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

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/02/2024	0:00	0.4	45												
29/02/2024	1:00	0.9	90												
29/02/2024	2:00	0.9	45												
29/02/2024	3:00	0.9	45												
29/02/2024	4:00	0.9	67.5												
29/02/2024	5:00	0.4	45												
29/02/2024	6:00	1.3	90												
29/02/2024	7:00	0.9	135												
29/02/2024	8:00	0.9	90												
29/02/2024	9:00	0.4	270												
29/02/2024	10:00	0.4	112.5												
29/02/2024	11:00	0	45												
29/02/2024	12:00	0	90												
29/02/2024	13:00	0	90												
29/02/2024	14:00	0.9	67.5												
29/02/2024	15:00	0.4	90												
29/02/2024	16:00	0.4	225												
29/02/2024	17:00	0.9	67.5												
29/02/2024	18:00	1.3	225												
29/02/2024	19:00	0.9	180												
29/02/2024	20:00	0.9	135												
29/02/2024	21:00	0.9	22.5												
29/02/2024	22:00	1.3	315												
29/02/2024	23:00	0.9	112.5			_									

Mean Wind Speed and Wind Direction record	led by the weather station setup	o at the rooftop of Ng Wah Ca	atholic Secondary School

Appendix G-24-hr TSP monitoring results and graphical presentation

Location: AM2(A) – Ng Wah Catholic Secondary School

Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter w	eight (g)	Particulate	Elapse	e Time	Sampling Time	Flow (cf		Av. Flow	Total vol.	Conc.
		(℃)	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m ³ /min)	(m^3)	$(\mu g/m^3)$
02/02/2024	Cloudy	23.4	1017.6	15.1401	15.1875	0.0474	2024/2/2 13:30	2024/2/3 13:30	1440	50	50	1.38	1984	24
08/02/2024	Cloudy	14.6	1018.8	18.3686	18.4589	0.0903	2024/2/8 9:15	2024/2/9 9:15	1440	52	52	1.46	2098	43
14/02/2024	Sunny	25.3	1020.2	15.2816	15.3652	0.0836	2024/2/14 13:25	2024/2/15 13:25	1440	50	50	1.38	1985	42
20/02/2024	Sunny	22.8	1014.7	15.2276	15.3617	0.1341	2024/2/20 9:10	2024/2/21 9:10	1440	50	50	1.36	1960	68
26/02/2024	Cloudy	17.6	1021.1	15.1998	15.3024	0.1026	2024/2/26 13:10	2024/2/27 13:10	1440	52	52	1.43	2065	50

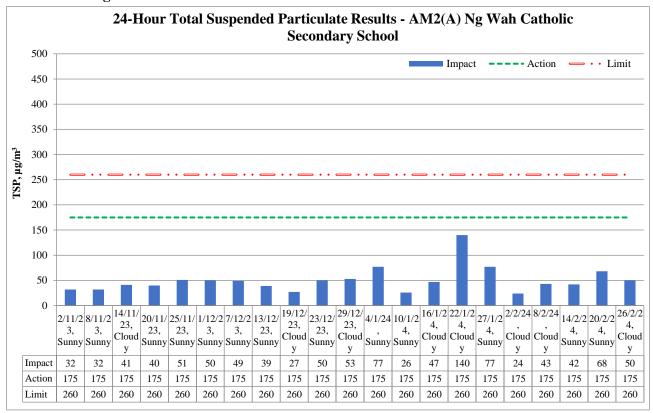
Maximum	68
Minimum	24
Average	45
Action Level	175
Limit Level	260

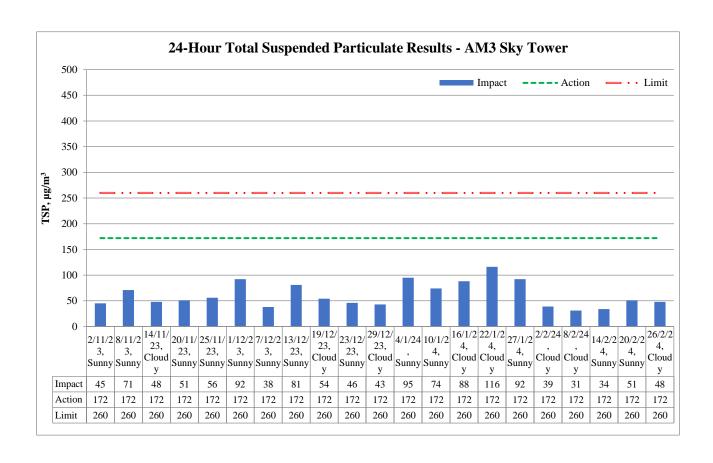
Location: AM3 – Sky Tower

Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter weight (g)		Particulate	Elapse Time		Sampling Flow Rat Time (cfm)			Av. Flow	Total vol.	Conc.
		(°C)	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m ³ /min)	(m^3)	$(\mu g/m^3)$
02/02/2024	Cloudy	23.4	1017.6	18.1774	18.2552	0.0778	2024/2/2 9:24	2024/2/3 9:24	1440	50	50	1.38	1989	39
08/02/2024	Cloudy	14.6	1018.8	18.3547	18.4165	0.0618	2024/2/8 13:32	2024/2/9 13:32	1440	50	50	1.40	2021	31
14/02/2024	Sunny	25.3	1020.2	18.1914	18.2583	0.0669	2024/2/14 9:28	2024/2/15 9:28	1440	50	50	1.36	1958	34
20/02/2024	Sunny	22.8	1014.7	15.1999	15.3024	0.1025	2024/2/20 13:37	2024/2/21 13:37	1440	50	50	1.39	2000	51
26/02/2024	Cloudy	17.6	1021.1	14.3179	14.4151	0.0972	2024/2/26 9:36	2024/2/27 9:36	1440	50	50	1.41	2025	48
												3.4.		<i>E</i> 1

Maximum	51
Minimum	31
Average	41
Action Level	172
Limit Level	260

24-hour average TSP





		Reportin	g Period	
Major Construction Activities	Nov	Dec	Jan	Feb
	2023	2023	2024	2024
Backfilling of SB01 zone B				✓
Construction works for DCS	✓	✓		
Construction Works for DCS 2A5B and 2A10			✓	✓
Construction of Retaining Wall Type 1 for S14	✓	✓	✓	✓
Construction of Pile Cap for S14	✓	✓	✓	✓
Construction works for SMH404 and SMH505	✓	✓	✓	✓
Construction of Permanent Shaft Structure of SB-01	✓	✓	✓	✓
Construction of LW02 Pile cap PC-1				√
Construction of LW02 structural steel roof				√
Demolition of bearing wall of S14	✓			
Dismantling Falsework and Portal Frame at LW-02		✓	✓	✓
Demolition of Pile Cap of additional staircase at SB01				✓
Modification works for Rising Main chamber WOC1, AVC2 and K1	✓			
Modification Works for Rising Main chamber K1		✓		
Installation of post tensioning anchorage system at LW-02	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
RC construction for decking of Elevated Walkway LW-02	✓	✓	✓	✓
RC construction works for lift and staircase of LW-02	✓	✓	✓	✓
Renovation works for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓		
Renovation works for existing subways KS10			✓	✓
Road and Drain Construction works for Road L16, Commercial Street and	√	√	√	1
Road D1	•	•	•	•
Road and drain construction works for Olympic Avenue	✓	✓	✓	✓

	Reporting Period						
Factors might affect the monitoring results	Nov	Dec	Jan	Feb			
	2023	2023	2024	2024			
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	✓			

Appendix H – 1-hr TSP monitoring results and grap	phical presentation

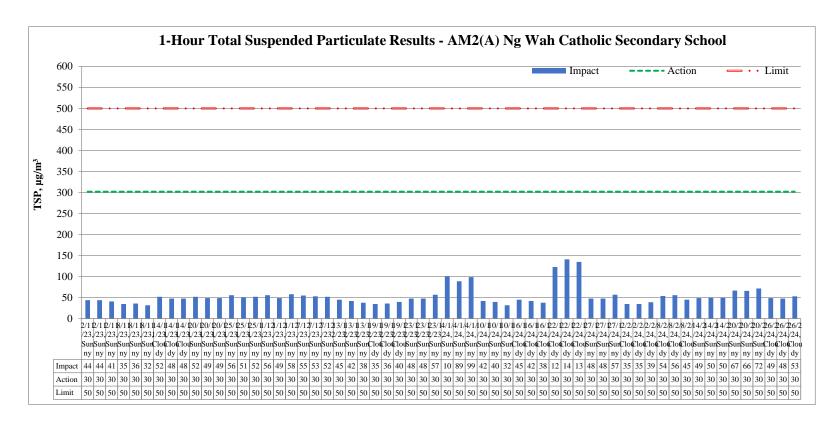
Location:
AM2(A) Ng Wah Catholic
Secondary School

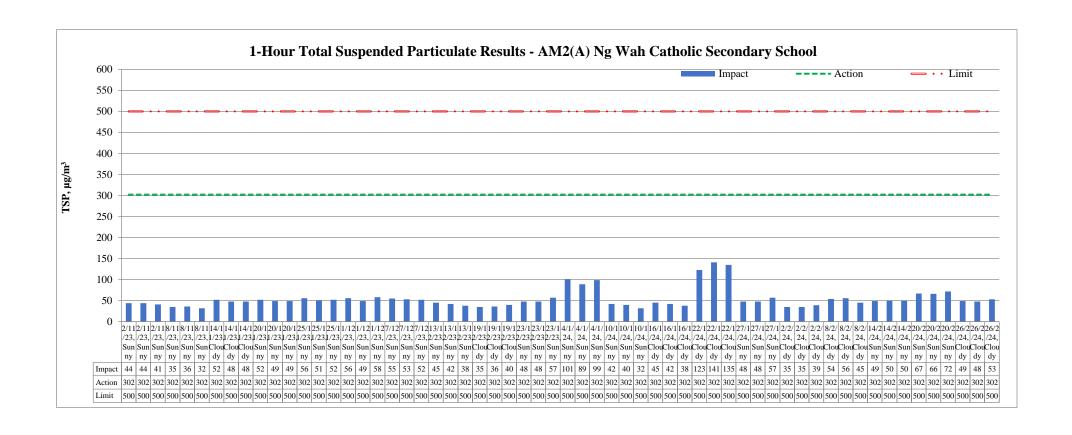
Date	Measure	emei	nt Period	1-hr TSP concentration, μg/m ³	Weather		
	13:00	-	14:00	35			
02/02/2024	14:00	-	15:00	35	Cloudy		
	15:00	-	16:00	39			
	9:00	-	10:00	54			
08/02/2024	10:00	-	11:00	56	Cloudy		
	11:00	-	12:00	45			
	13:00	-	14:00	49			
14/02/2024	14:00	-	15:00	50	Sunny		
	15:00	-	16:00	50			
	9:00	-	10:00	67			
20/02/2024	10:00	-	11:00	66	Sunny		
	11:00	-	12:00	72			
	13:00	-	14:00	49			
26/02/2024	14:00	-	15:00	48	Cloudy		
	15:00	-	16:00	53			
M	Iaximum			72			
N	Iinimum			35			
	Average			51			
	tion Level			302			
Li	mit Level			500			

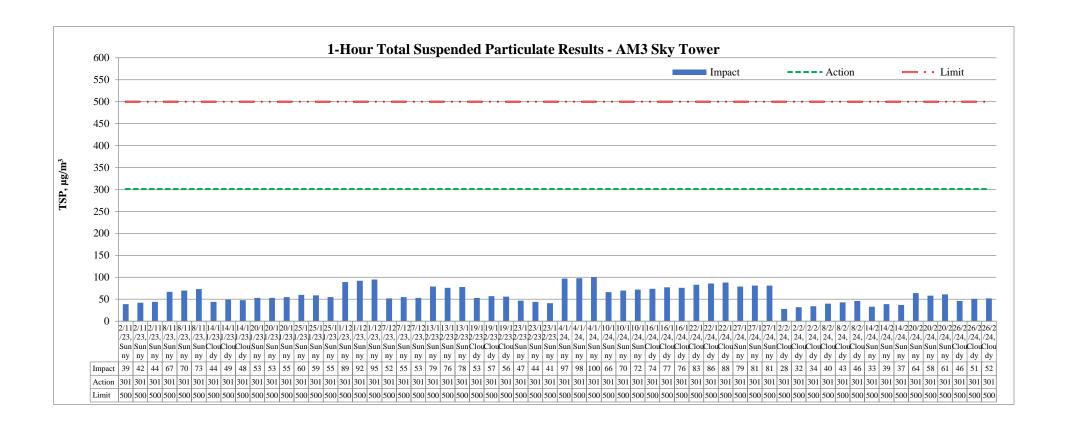
Location:
AM3 Sky Tower

Date	Measure	emei	nt Period	1-hr TSP concentration, μg/m ³	Weather
	9:00	-	10:00	28	
02/02/2024	10:00	-	11:00	32	Cloudy
	11:00	-	12:00	34	
	13:00	-	14:00	40	
08/02/2024	14:00	-	15:00	43	Cloudy
	15:00	-	16:00	46	
	9:00	-	10:00	33	
14/02/2024	10:00	1	11:00	39	Sunny
	11:00	-	12:00	37	
	13:00	-	14:00	64	
20/02/2024	14:00	-	15:00	58	Sunny
	15:00	-	16:00	61	
	9:00	1	10:00	46	
26/02/2024	10:00	-	11:00	51	Cloudy
	11:00	1	12:00	52	
Maximum				64	_
Minimum				28	
	Average			44	
Action Level				301	
Limit Level		500			

1-hour average TSP







		Reportin	g Period	
Major Construction Activities	Nov	Dec	Jan	Feb
	2023	2023	2024	2024
Backfilling of SB01 zone B				✓
Construction works for DCS	✓	✓		
Construction Works for DCS 2A5B and 2A10			✓	✓
Construction of Retaining Wall Type 1 for S14	✓	✓	✓	✓
Construction of Pile Cap for S14	✓	✓	✓	✓
Construction works for SMH404 and SMH505	✓	✓	✓	✓
Construction of Permanent Shaft Structure of SB-01	✓	✓	✓	✓
Construction of LW02 Pile cap PC-1				✓
Construction of LW02 structural steel roof				✓
Demolition of bearing wall of S14	✓			
Dismantling Falsework and Portal Frame at LW-02		✓	✓	✓
Demolition of Pile Cap of additional staircase at SB01				✓
Modification works for Rising Main chamber WOC1, AVC2 and K1	✓			
Modification Works for Rising Main chamber K1		✓		
Installation of post tensioning anchorage system at LW-02	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	√	✓	√	✓
RC construction for decking of Elevated Walkway LW-02	✓	✓	✓	✓
RC construction works for lift and staircase of LW-02	✓	✓	✓	✓
Renovation works for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓		
Renovation works for existing subways KS10			✓	✓
Road and Drain Construction works for Road L16, Commercial Street and Road D1	✓	✓	✓	✓
Road and drain construction works for Olympic Avenue	✓	✓	✓	✓

	Reporting Period			
Factors might affect the monitoring results	Nov	Dec	Jan	Feb
	2023	2023	2024	2024
Non-project related construction activities in the adjacent construction sites were observed.	✓	✓	✓	√

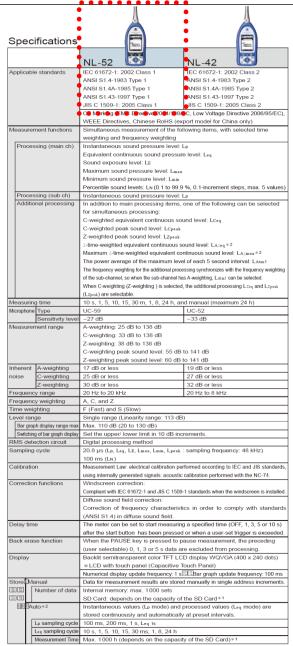
Appendix I – Event and Action Plan for air quality

F 4	Action					
Event	ET	IEC	Supervisor / ER	Contractor		
Action Level being exceeded by one sampling	 Identify source and investigate the causes of exceedance; Inform Contractor, IEC and Supervisor /ER; Repeat measurement to confirm finding. 	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	 Rectify any unacceptable practice; Amend working methods if appropriate. 		
Action Level being exceeded by two or more consecutive sampling	1. Identify source and investigate the causes of exceedance; 2. Inform Contractor, IEC and Supervisor /ER; 3. Increase monitoring frequency to daily; 4. Discuss with IEC and Contractor on remedial actions required; 5. Assess the effectiveness of Contractor's remedial actions; 6. If exceedance continues, arrange meeting with IEC and Supervisor /ER; 7. If exceedance stops, cease	on the effectiveness of the proposed remedial	 Confirm receipt of notification of exceedance in writing; Notify Contractor; In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; Supervise implementation of remedial measures; Conduct meeting with ET and IEC if exceedance continues. 	 Discuss with ET and IEC on proper remedial actions; Submit proposals for remedial actions to Supervisor /ER and IEC within three working day of notification; Implement the agreed proposals; Amend proposal if appropriate. 		
Limit Level being exceeded by one sampling	additional monitoring. 1. Identify source and investigate the causes of exceedance; 2. Inform Contractor, IEC, Supervisor /ER, and EPD; 3. Repeat measurement to confirm finding; 4. Assess effectiveness of	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss possible remedial measures with ET and Contractor; Advise the Supervisor /ER 	notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial	Take immediate action to avoid further exceedance; Discuss with ET and IEC on proper remedial actions; Submit proposal for remedial actions to Supervisor /ER and IEC		

E4		on			
Event	ET	IEC	Supervisor / ER	Contractor	
	Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results.	measures.	implemented; 4. Supervise implementation of remedial measures; 5. Conduct meeting with ET and IEC if exceedance continues.	within three working days of notification; 4. Implement the agreed proposals.	
Limit Level being exceeded by two or more consecutive sampling	 Notify IEC, Supervisor /ER, Contractor and EPD; Repeat measurement to confirm findings; Carry out analysis of Contractor's working procedures to identify source and investigate the causes of exceedance; Increase monitoring frequency to daily; Arrange meeting with IEC, Supervisor /ER and Contractor to discuss the remedial action to be taken; Assess effectiveness of Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results; 	submitted by ET; 2. Check Contractor's working method; 3. Discuss with Supervisor /ER, ET, and Contractor on the potential remedial actions; 4. Review Contractor's remedial actions whenever necessary to assure their	notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of	 Take immediate action to avoid further exceedance; Discuss with ET and IEC on proper remedial actions; Submit proposal for remedial actions to Supervisor /ER and IEC within three working days of notification; Implement the agreed proposals; Submit further remedial actions if problem still not under control; Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated. 	
	7. If exceedance stop, cease additional monitoring.				

Appendix J – Calibration certificates, catalogue of noise monitoring equipment

Catalogue of Sound Level Meter



Data recall		Allows viewing of stored data			
Setup memory		Up to five setup configurations can be saved in internal memory, for later recall			
Cottap momory		Start up via file settings previously stored on SD card possible			
Wavefr	orm recording *3	otart up via line settings previously stored on ob card possible			
	format	Uncompressed waveform WAVE file			
	npling frequency	Select 48 kHz, 24 kHz or 12 kHz			
	ta length	Select 24 bit or 16 bit			
_	DC output	Output DC signals using a frequency weighting characteristic selected by processing			
Outputs	Output voltage	2.5 V, 25 mV / dB at bar graph display full scale			
		Output AC signals using a frequency weighting characteristic selected by			
	AC output	processing or by A, C, Z-weighting.			
	Output voltage				
		1 V (rms values) at bar graph display full scale			
	Comparator	Turns on when the open-collector output exceeds the set value			
	output*2	(max. applied voltage 24 V, max. current 60 mA, allowable dissipation 300 mW).			
USBEELE		Allows USB to be connected to a computer and recognized as a removable dis			
12 10 10		Allows USB to be controlled via communication commands			
	32C communication	Allows for RS-232C communication via use of a dedicated cable			
	ontinuous output*2				
1	oe of Instantaneous value	Lp			
data Processed value		Leq, Lmax, Lmin, Lpeak			
Ou	tput interval	100 ms			
Print c		Printing of measurement results on dedicated printer DPU-414			
Power	requirements	Four IEC R6 (size AA) batteries (alkaline or rechargeable batteries) or external power supply			
Bat	ttery life (23 ℃)	Alkaline battery LR6 (AA): 26 h Ni-MH secondary battery: 25 h			
		At the maximum *Depends on the setting			
AC	adapter	NC-98C (NC-34 for previous models cannot be used)			
Ext	ernal power voltage	5 to 7 V (rated voltage: 6 V)			
Cui	rrent consumption	Approximately 90 mA (normal operation, rated voltage)			
Ambie	nt Temperature	-10 to +50 °C			
conditi	ions Humidity	10 to 90 % RH (non-condensing)			
Dustpr	oof / water-resistant	IP code: IP54 (except for microphone)			
perforr	mance * 4	See precautions regarding waterproofing			
Dimen	nsions, weight	Approx. 250 (H) x 76 (W) x 33 mm(D), approx. 400 g (with batteries)			
Suppli	ied accessories	Storage case x 1, Windscreen WS-10 x 1, Windscreen fall prevention rubber x 1,			
		Hand strap x 1, LR6 (AA) alkaline batteries x 4, SD card 512 MB×1 (NX-42EX			
		preinstalled model only)			

Product name	Product number
Extended function program (Inst.on 512 MB SD card)	NX-42EX
Waveform recording program *2 (Inst.on 2 GB SD card)	NX-42WR
Octave, 1/3 octave real-time analysis program*2 (Inst.on 512 MB SD card)	NX-42RT
FFT analysis program *2 (Inst.on 512 MB SD card)	NX-42FT
Data management software for environmental measurement	AS-60
Data management software for environmental measurement (Includes the octave and 1/3 octave data management software)	AS-60RT
Data management software for environmental measurement (Includes the vibration level data management software)	AS-60∨M
Waveform analysis software	CAT-WAVE
SD Card 512 MB	SD-512M
SD Card 2 GB	SD-2G
AC adapter (100 V to 240 V)	NC-98C
Battery pack	BP-21
Microphone extension cables	EC-04 (from 2 m)
BNC-Pin output code	CC-24
Comparator output cable	CC-42C
Printer	DPU-414
Printer cable	CC-42P
RS 232C serial I/O cable	CC-42R
USB cable	_
Sound calibrator	NC-74
All-weather windscreen	WS-15
Windscreen mounting adapter	WS-15006
Rain-protection windscreen	WS-16
Sound level meter tripod	ST-80
All-weather windscreen tripod	ST-81

*1 Use Rion fully guaranteed products. *2 NX-42EX required (sold separately). *3 NX-42WR required (sold separately). *4 Protection against harmful dust and water splashing from any direction.

Precautions regarding waterproofing Before use, verify that the rubber bottom cover and the battery compartment lid are firmly closed. To maintain the water and dust proof rating, internal packing replacement is required every two years (at cost)

ISO 14001 RION CO., LTD. ISO 9001 RION CO., LTD.

Windows is a trademark of Microsoft Corporation.
 Specifications subject to change without notice.

RION CO., LTD.

3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442

This product is environment-friendly. It does not include toxic chemicals on our policy.

This product is certified to an International Protection rating of IP54 (dust protected and resistant to splashing water).
This leaflet is printed with environmentally friendly vegetable-based ink on recycled paper.

1011-4 E 212.P.D

Calibration Certificate of Sound Level Meter



中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CEPREI CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE

CALIBRATION CERTIFICATE

证书编号: 2HB23001488-0003 Certificate No.





Castco Testing Centre Limited 委托单位: Client Sound Level Meter 仪器名称: Description NL-52 型号规格: Model/Type RION 制造商: Manufacturer 00976204 机身号: Serial No. AAST-SLM-11 管理号: Asset No. 2023-08-07 2023-07-28 校准日期: 接收日期: Rec. Date Cal. Date 12个月(12 months) 2023-08-08 建议校准周期: 签发日期: App. Date Reference Cal. Period 所校准项目符合技术要求(The calibrated items meet the technical requirements) 结论:

校准: Calibrated by

Conclusion

赵文钰

Inspected by

印章:

Stamp

Website: www.ceprei-cal.com



签发: Approved by

阅址: www.ceprei-cal.com

郑术力

赛宝计量检测中心 总部地址:广州市增城区朱村街朱村大道西78号 实验室地址:广州市增城区朱村街朱村大道西78号 客腦电话: 020-87237633 传真: 020-87236189 投诉电话: 020:87236896 邮件: cal@ceprei.com

CEPREI Calibration and Testing Centre HO Addr: No.78.Zhucun Avenue West, Zengcheng District.Guangzhou.China Add, of the Lab: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Service Tel: 020-87237633 Fax: 020-87236189 Complaint Tel: 020-87236896 Email: cal@ceprei.com

第1页,共9页 Page of

电压:(1×10⁻⁵~30)V 31.5Hz~16kHz

DIRECTIONS

1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS) 认可, 认可证书号为: CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

- 2. 本机构出具的数据均可溯源到国际单位制(SI)单位和社会公用计量标准。 The data issued by this laboratory is traceable to International system of Units (SI) and national primary standards.
- 3. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes): ■ JJG 188-2017 声级计检定规程: Sound pressure level: (20~130)dB; Frequency Weighting: (20~130)dB, (10
- HZ~20kHZ)。 · 详细用答请查看CNAS网络中注册编号为L13344的证书辨件,超出范围的内容未被认可,其结果结论所保護的合格评定活动不在认可 范围内。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the result/sconclusions are based are outside the scope of accreditation.)
- 4. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration): 证书号/有效期/溯源单位 技术指标

(Description)	(Certificate No./Due Date/Traceability to)	(Specification)	(Measuring Range)
	GFJGJL1001230304187/2024-04-13/航空 304所	U=(0.05~0.20)dB (k=2)	10Hz~20kHz
	4GC22000542-0057/2023-10-26/賽宝(广州)	f: ±lmHz; 失真度 Distortion: <-70dB	f: 0.001Hz~200kHz; <i>l</i> : 100μV~5Vrms
前置放大器(3194482)	4GC22000429-0039/2023-08-29/赛宝(广州)	±0.1dB	10Hz~50kHz
數字多用表(MY5300648 3)	4GC22000447-0003/2023-09-26/賽宝(广州)	0.06%: DCI: ±0.05%; ACI	DCV:(0~1000)V; ACV :(0.001~750)V@(3Hz~ 300kHz); DCI:(0~3)A ; ACI:(0~3)A@(3Hz~ 5kHz); R:(0~100)MΩ ; f:3Hz~300kHz
功率放大器(2536312)	4GC22000600-0093/2023-11-30/賽宝(广州)	頻率响应: ±1dB, 失真度 : ≤0.2%	20Hz~50kHz
PULSE分析系统(3160-1	4GC23000001-0137/2024-01-03/赛宝(广州)	频率:Urel=0.001%,k=2;电压:	频率:0.001Hz~51.2kHz,

5. 校准地点(The calibration place): 广州市增城区朱村街朱村大道西78号9栋110室

06540) 声校准器(2272351) 4GC22000600-0073/2023-11-29/賽宝(广州) 1级 First Level

- 6. 环境条件(Environmental conditions): 温度(Temperature): 25.3℃ 相对湿度(Relative Humidity): 65%
- 7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标
- 准不确定度乘以包含概率约为95%时对应的包含因子k得到。 The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.
- 8. 证书中"P"、"合格"代表"测量结果在允许范围内", "F"、"不合格"代表"测量结果不在允许范围内", "N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应 结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。
- "P" and "Pass" in this certificate stand for "Low Limit≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value < Low Limit or the measured value > High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc". The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement

第 3 页,共 9 页 Page of

Calibration Certificate of Sound Level Meter CEPREI 证书编号(Certificate No.): 2HB23001488-0003 证书编号(Certificate No.): 2HB23001488-0003 3.2 其它级量程 (Other Range) 频率(Frequency): 1000Hz 1 外观与工作正常性检查 (Appearance and Function Check) 标准声级 指示声级 误差 允许误差 无影响证书中测量结果准确度的因素和缺陷。 (Standard) (Indication) (Error) (Limit) (Pass/Fail) (k=2)There are no factor and defect that affect the measurement result accuracy of the certificate. (dB) (dB) (dB) (dB) (P/F) (dB) 130.0 129.9 -0.1 ±0.8 0.3 频率(Frequency)=1000Hz 2 指示声级调整 (Indication SPL Calibration) 129.0 128 9 -0.1 ±0.8 0.3 放大器编号 传声器型号 传声器编号 放大器型号 128.0 127.9 -0.1 ±0.8 0.3 (Preamplifier Type) (Preamplifier SN.) (Microphone Type) (Microphone SN.) 127.0 -0.1 0.3 ±0.8 126.0 125.9 -0.1 ±0.8 0.3 125.0 124.9 -0.1 ±0.8 0.3 标准声压级 校准后示值 U校准前示值 声校准器型号 120.0 120.0 0.0 0.3 ±0.8 (Before Calibration) (After Calibration) (k=2)(Calibrator Type) (Reference SPL) 110.0 110.0 0.0 ±0.8 0.3 (dB) (dB) (dB) 100.0 100.0 0.0 ±0.8 0.3 4226 94.0 93.8 93.8 0.2 90.0 90.0 0.0 ±0.8 0.3 80.0 80.0 0.0 +0.8 0.3 3 级线性 (Level Linearity) 70.0 70.0 0.0 ±0.8 0.3 频率(Frequency): 8000Hz 3.1 参考级量程 (Reference Range) 60.0 60.0 0.0 ±0.8 0.3 允许误差 标准声级 指示声级 误差 50.0 50.0 0.0 ±0.8 0.3 (Limit) (Pass/Fail) (k=2)(Indication) (Error) (Standard) 40.0 0.0 ±0.8 0.3 (dB) (dB) (dB) (dB) (dB) (P/F) 35.0 34.9 -0.1 0.3 ±0.8 129.8 -0.2 ±0.8 0.3 130.0 34.0 33.9 -0.1 0.3 ±0.8 ±0.8 0.3 128.8 -0.2 129.0 33.0 32.9 -0.1 ±0.8 0.3 128.0 -0.2 ±0.8 0.3 32.0 31.9 -0.1 ±0.8 0.3 -0.2 ±0.8 127.0 126.8 31.0 30.9 -0.1 ±0.8 0.3 125.9 -0.1 ±0.8 0.3 126.0 30.0 -0.1 29.9 ±0.8 0.3 -0.1 +0.8 0.3 124.9 125.0 0.3 120.0 119.9 -0.1 ±0.8 ±0.8 0.3 110.0 110.0 0.0 100.0 100.0 0.0 ±0.8 0.3 90.0 0.0 ±0.8 0.3 90.0 -0.1 ±0.8 0.3 80.0 79.9 0.3 ± 0.8 70.0 69.9 -0.1 0.3 60.0 60.0 ±0.8 50.0 49.9 -0.1 ±0.8 0.3 39.9 -0.1 ±0.8 0.3 40.0 0.3 ±0.8 34.8 -0.2 35.0 0.3 ±0.8 34.0 33.8 -0.2 0.3 33.0 32.9 -0.1 ±0.8 32.0 31.8 -0.2 ±0.8 0.3 ±0.8 0.3 30.8 -0.2 31.0 0.3 29.8 -0.2 ±0.8 30.0 第 6 页,共 9 页 Page of 数据页(Data sheet) ID: 071288 数据页(Data sheet) ID: 071288 第 5 页,共 9 页 Page of

Calibration Certificate of Sound Level Meter CEPREI 证书编号(Certificate No.): 2HB23001488-0003 5 C计权特性(C-Weighting Characteristic) 频率 实测值 理论值 误差 允许误差 (Frequency) (Actual) (Theoretical value) (Error) (Limit) (k=2) (Pass/Fail) (Hz) (dB) (dB) (dB) (dB) (dB) 20 -6.6 -6.2 -0.4 ±2.0 0.5 25 -4.7 -4.4 +2.0 ~ -1.5 31.5 -3.0 -3.0 ±1.5 0.5 -2.0 -2.0 0.0 0.5 ±1.0 -1.3 -1.3 0.0 ±1.0 0.5 63 -0.8 -0.8 0.0 ±1.0 0.5 80 -0.4 -0.5 0.1 ±1.0 0.5 100 -0.2 -0.3 0.1 ±1.0 0.5 125 -0.2 0.1 ±1.0 0.5 160 0.0 -0.1 0.1 ±1.0 0.5 200 0.0 0.0 0.0 ±1.0 0.0 0.0 250 ±1.0 ±1.0 0.4 0.0 0.0 ±1.0 0.4 630 0.0 0.0 0.0 ±1.0 0.4 800 0.0 0.0 0.0 ±1.0 0.4 1000(Ref.) 0.0 0.0 0.0 ±0.7 0.4 -0.1 0.0 -0.1 ±1.0 0.6 1600 -0.2 -0.1 -0.1 ±1.0 0.6 -0.3 -0.2 -0.1 2000 ±1.0 0.6 -0.5 -0.3 2500 -0.2 3150 -0.8 -0.5 -0.8 4000 ±1.0 0.6 5000 -1.5 -1.3 -0.2 ±1.5 0.6 6300 -2.1 -2.0 -0.1 +1.5 ~ -2.0 0.6 +1.5 ~ -2.5 8000 -3.0 -3.0 0.0 0.6 10000 -4.3 -4.4 0.1 +2.0 ~ -3.0 0.6 12500 -6.2 -6.2 0.0 +2.0 ~ -5.0 1.0 16000 -10.4 -8.5 -1.9 +2.5 ~ -16.0 1.0 20000 -11.2 -9.1 +3.0 ~ -∞ 第 8 页,共 9 页 Page of 数据页(Data sheet) ID: 071288

Catalogue of Sound Calibrator

For microphone calibration NC-74

How to us

Carefully insert the microphone all the way into the coupler of the NC-74. Then simply turn the power on to apply a constant sound pressure level to the diaphragm of the microphone.



The performance of the NC-74 is suitable for calibration of high-precision sound level meters. The unit is compact, lightweight, and easy to use. Two IEC LR6 (size AA) alkaline batteries will power the unit for more than 30 hours of continuous use at room temperature.

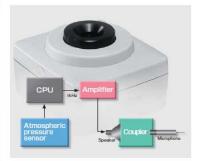
Using the 1/2-inch adapter

To allow calibration of sound level meter microphones with 1 inch diameter, the 1/2-inch microphone adapter can be removed. 1/2-inch microphones are calibrated with the adapter in place.



Atmospheric pressure compensation principle

The NC-74 incorporates a sensor that detects atmospheric pressure. Based on the information provided by the sensor, the CPU controls the signal amplitude. This allows the unit to always provide the correct output for achieving constant sound pressure level, regardless of fluctuations in atmospheric pressure.



Specifications

Applicable standards	JEC 60942:2003 Class 1 JIS C1515:2004 Class 1		
Suitable microphones	1-inch microphones	IEC 61094-1 Type LS1P UC-27 UC-25 UC-34	
	1/2-inch microphones	IEC 61094-1 Type I.SZaP UC-99 UC-93A UC-93A UC-92 UC-92 UC-93 UC-93 UC-93 UC-93 UC-93	
Nominal sound pressure level	94 dB		
Sound pressure level tolerance	±0.3 dB		
Nominal frequency	1 kHz		
Frequency tolerance	±1.0 % or less	Contractor access	
Power requirements	IEC LR6 (size AA) alkal	ine battery × 2	
Dimensions, mass	Approx. 49 (H) × 80 (W) × 74 (D) mm Approx. 200 g (including batteries)		
Supplied accessories	Case X 1 IEC LR6 (size AA) alkaline battery X 2 1/2-inch microphone adapter NC-74-002 X 1		

* Specification subject to change without notice.



3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442 http://www.rion.co.jp/english/



Calibration Certificate of Sound Calibrator

AAST-SLC-06 Cal 5 sep 2023



中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE

校准证书 CALIBRATION CERTIFICATE

证书编号: 2HB23001715-0001 Certificate No.





Castco Testing Centre Limited 委托单位: Sound Level Calibrator 仪器名称: Description 型号规格: NC-74 Model/Type RION 制造商: Manufacturer 34678556 机身号: Serial No. AAST-SLC-06 管理号: Asset No. 2023-08-23 2023-09-05 接收日期: 校准日期: Cal. Date Rec. Date 2023-09-05 12个月(12 months) 签发日期: 建议校准周期: App. Date Reference Cal. Period 所校准项目符合技术要求(The calibrated items meet the technical requirements) 结论:

CEPRE

校准: Calibrated by

Conclusion

起文红

赵文钰

Inspected by 印章: Stamp **瀬**

Approved by 賽宝计量检测中心

总那地址:广州市增城区朱村街朱村大道西78号 实验室地址:广州市增城区朱村街朱村大道西78号 客服电话: 020-87237633 传真: 020-87236189 经证由法: 020-87236896

邮件: cal@ceprei.com 岡址: www.ceprei-cal.com CEPREI Calibration and Testing Centre

HQ Addr: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Add. of the Lab: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Service Tel: 020-87237633 Fax: 020-87236189

Complaint Tel: 020-87236896 Email: cal@ceprei.com

Website: www.ceprei-cal.com

第 1 页,共 5 页 Page of

Calibration Certificate of Sound Calibrator

江土地是FC anti-Gray No. 3, 2HP23001715.0001

说 明 DIRECTIONS

1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS)认可,认可证书号为: CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

- 2. 本机构出具的数据均可溯源到国际单位制(SI)单位和社会公用计量标准。 The data issued by this laboratory is traceable to International system of Units (SI) and national primary standards.
- 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):
 JJG 176-2022 声校准器检定规程: Sound Pressure Level: 94dB、104dB、114dB、124dB(63H2~8kHz): 94dB 、104dB、114dB,(31.5Hz~16kHz): Frequency: 31.5Hz~16kHz; Harmonic Distortion: 0.1%~10% (20Hz~20kHz)
- 。 · 採用內容等查查CNAS网站中往前線与为L13344的证书附件,超出范围的內容未被认可,其结果结论所依据的合格评定活动不在认可 范围内。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the result/brouchtsuors are based are outside the scope of accreditation.)
- 4. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration): 证书号/有效期/溯源单位 技术指标 测量范围 名 称 (Measuring Range) (Certificate No./Due Date/Traceability to) (Specification) (Description) 前置放大器(2239843) GFJGJL1001230304185/2024-03-22/航空 頻率响应: ±0.1dB (10~50000) Hz 数字多用表(MY4505167 GFJGJL1004230400378/2024-04-02/航天 DCV: ±8×10-6; DCI: ±2× DCV: 10nV~1000V; 10⁵; ACV: ±0.02%,ACI: DCI: 1pA~1A; ACV: ±0.03%,R: ±1×10⁵; f: ± : (10nV~700V) @ 1Hz~2MHz) : ACI: (100pA~1A) @ (10 Ω~1GΩ; F: 1Hz~10 PULSE分析系统(3160-1 4GC23000528-0009/2024-08-16/賽宝(广州) 頻率: Uret=0.001% k=2;电压: 频率:0.001Hz~51.2kHz, vo3-40) 実验室标准传声器(2246 GFJGJL1001230304187/2024-04-13/航空 LS級 20456 电压:(1×10-5~30)V
- 5. 校准地点(The calibration place):
- 广州市增城区朱村街朱村大道西78号9栋110室
- 6. 环境条件(Environmental conditions): 温度(Temperature): 21.2℃ 相对湿度(Relative Humidity): 60%
- 7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标准不确定度乘以包含概率约为95%时对应的包含因子k得到。

The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 55%.

- 8. 证书中"P"、"合格"代表"测量结果在允许范围内","F"、"不合格"代表"测量结果不在允许范围内","N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。
- "P" and "Pass" in this certificate stand for "Low Limit'≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value <Low Limit or the measured value >High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc." The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement measurement specification.
- 9. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

第 3 页,共 5 页 Page of



Catalogue of Air Flow Meter (TSI TA440)

SPECIFICATIONS

Velocity

Range (TA410) Range (TA430, TA440) 0 to 30 m/s (0 to 6,000 ft/min) Accuracy (TA410)162

±5% of reading or ±0.025 m/s (±5 ft/min), whichever is greater ±3% of reading or ±0.015 m/s (±3 ft/min), whichever is greater Accuracy (TA430, TA440)1562 0.01 m/s (1 ft/min)

0 to 20 m/s (0 to 4,000 ft/min)

Resolution

Duct Size (TA430, TA440)

1 to 635 cm in increments of 0.1 cm (1 to 250 inches in increments of 0.1 in.) Dimensions

Volumetric Flow Rate (TA430, TA440)

Actual range is a function of velocity, and duct size Range

Temperature

Range (TA410, TA430) -18 to 93°C (0 to 200°F) -10 to 60°C (14 to 140°F) Range (TA440) Accuracy³

Relative Humidity (TA440 only)

5 to 95% RH Range Accuracy4 Resolution 0.1% RH

Wet Bulb Temperature (TA440 only)

Range Resolution 0.1°C (0.1°F)

Dew Point (TA440 only)

-15 to 49°C (5 to 120°F) Range Resolution 0.1°C (0.1°F)

Instrument Temperature Range Operating (Electronics)

Model TA410, TA430 Operating (Probe) Model TA440 -10 to 60°C (14 to 140°F)

-20 to 60°C (-4 to 140°F) Storage

Data Storage Capabilities (TA430, TA440) 12,700+ samples and 100 test IDs

Logging Interval (TA430, TA440)



Visit our website at www.airflowinstruments.co.uk for more information

UK Tel: +44 149 4 459200 Germany Tel: +49 241 523030 France Tel: +33 49111 87 64

P/N 2980S48 Rev D (A4) ©2014 TSI Incorporated

Time Constant (TA430, TA440) User selectable

External Meter Dimensions

8.4 cm x 17.8 cm x 4.4 cm (3.3 in. x 7.0 in. x 1.8 in.)

Meter Weight with Batteries

0.27 kg (0.6 lbs.)

Meter Probe Dimensions

101.6 cm (40 in.) Probe Length Probe Diameter of Tip 7.0 mm (0.28 in.) Probe Diameter of Base 13.0 mm (0.51 in.)

Articulating Probe Dimensions

19.7 cm (7.8 in.) Articulating Section Length Diameter of Articulating Knuckle

Power Requirements

Four AA-size batteries or AC adapter

	TA410	TA430, TA430-A	TA440, TA440-A
Velocity range 0 to 20.00 m/s (0 to 4000 ft/min)	+		
Velocity range 0 to 30.00 m/s (0 to 6000 ft/min)		(#)	+
Temperature		(+)	+
Flow		+	+
Humidity, wet bulb, dew point			+
Probe	Straight	Straight or -A articulated	Straight or -A articulated
Variable time constant		+	+
Manual data logging		(*)	+
Auto save data logging			+
Statistics		+	+
Review data		+	+
LogDat2 downloading software		141	+
Free Certificate of Calibration	*	*	+

* nempensuré compensate over an air temperature range of \$ 1065°C (40 to 150°F).

**The accuracy statement begins at 30 Third Introduy 6.000 Cifrus (10.15 m/s through) 20 m/s) for the Model TA4L0, and 30 Thirm through 5.000 Chris (10.15 m/s through) 30 m/s) for the Model TA4L0, and 30 Thirm through 5.000 Chris (10.15 m/s) for the Model TA4L0, and 30 Thirm through 5.000 Chris (10.15 m/s) for the Model TA4L0, and 30 Thirm through 5.000 Chris (10.15 m/s) for the Model TA4L0, and 30 Thirm through 5.000 Chris (10.15 m/s) for the Model TA4L0, and 5.000 Chris (10.15 m/s) for t

Calibration Certificate of Air Flow Meter



Cal Lab Limited 校正實驗室有限公司

Room 2103, Technology Plaza, 29-35 Sha Tsui Road, Tsuen Wan, NT, Hong Kong

Tel: +852 25680106 Email: info@callab.com.hk Fax: +852 30116194 Website: www.callab.com.hk



Calibration Certificate No.: CC0242312

Castco Testing Centre Limited

33, On Kui Street, Fanling, N.T.

Equipment Description	Manufacturer	Model No.	Serial No.	Assigned equipment No.
Air Volocity Monitor	TSI	AIRELOW TAAAO	TA4401232005	AAST-FLOW-02

Certificate Information

15 December 2023 Date of Receipt: Date of Calibration: 18 December 2023 Due Date of Calibration:

N/A SOP-112 Calibration Condition: Adjustment: Appearance: Remark:

21.3°C, 56%RH, 1014hPa N/A Good

N/A

Reference Equipment Identification

Equipment Description	Model	Serial No.	Expiration Date
Hot Wire Anemometer	9535	T95351316004	11 August 2024

Result of Calibration

Calibration Procedure:

ference Measured Error (m/s) Reading (m/s)		Uncertainty (%)	Technical Requirement	Technical Reference Doc	
0.99	0.00	3.6	±5%	Mfr's Spec.	
2.03	0.01	3.6	±5%	Mfr's Spec.	
4.98	-0.03	3.6	±5%	Mfr's Spec.	
8.07	0.11	3.6	±5%	Mfr's Spec.	
	Reading (m/s) 0.99 2.03 4.98	Reading (m/s)	Reading (m/s) Error (m/s) Uncertainty (%) 0.99 0.00 3.6 2.03 0.01 3.6 4.98 -0.03 3.6	Reading (m/s) Error (m/s) Uncertainty (%) Requirement 0.99 0.00 3.6 ±5% 2.03 0.01 3.6 ±5% 4.98 -0.03 3.6 ±5%	

Note1: The estimated expanded uncertainties have been calculated in "Evaluation and expression of uncertainty in measurement" and give an internal estimated to have a level of confidence of 95% A coverage factor of 25 assured unitsee specificly latestic.

Note2: The standard (s) and instrument used in the calibration are traceable to national or international recognized standard and are calibrated on a schedule to maintain the accuracy and good condition.

The result reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long term stability of the

instrument.

Note4: The result shows in this calibration certificate relate only to the item calibrated, and the result only applies to the calibration item as received.

Checked and Approved By: Company Chop:

Calibrated By:

Top Wing Cheng Kowen Ye Warren Yeung

Certificate Issue Date: 19 December 2023 CT-REG-04

*** End of Certificate ***

1. The certificate shall not be reproduced except in full, without written approval of Cal Lab Limited

CC0242312

2. The certificate is issued subject to the latest Terms and Conditions, available at our web site Page 1 of 1

Appendix K – Noise	monitoring	results and	d graphical	presentation

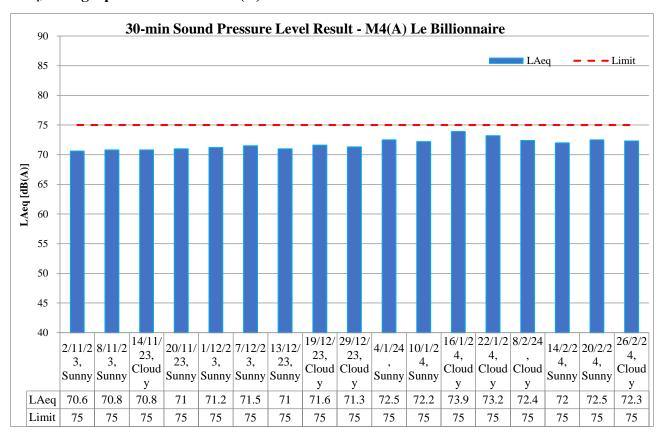
M4(A) – Le Billionnaire

	Temp	Wind	Weathe		Measured Noise Level at M4(A), dB(A)							
Date	(°C)	Speed m/s	r	Time		Baseline	L_{Aeq}	L_{A10}	L_{A90}	Limit		
08/02/2024	14.6	0.9	Cloudy	9:30	-	10:00	69.5	72.4	74.1	71.1	75	
14/02/2024	25.3	0.4	Sunny	13:10	-	13:40	69.5	72.0	74.0	70.9	75	
20/02/2024	22.8	0.9	Sunny	9:20	-	9:50	69.5	72.5	73.6	71.3	75	
26/02/2024	17.6	1.3	Cloudy	13:10	-	13:40	69.5	72.3	73.4	71.2	75	
Maximum					-	72.5			_			
				Minimum			72.0					
						Average		72.3				

M5(A) – Prince Ritz

_	Temn	Wind	Weathe			Measured	Noise Lev	vel at M5(A	A), dB(A)		
Date	(°C)	Speed m/s	r	Time		Baseline	\mathcal{L}_{Aeq}	L_{A10}	L_{A90}	Limit	
08/02/2024	14.6	2.3	Cloudy	10:40	-	11:10	72.5	74.5	76.5	72.1	75
14/02/2024	25.3	1.7	Sunny	14:40	1	15:10	72.5	74.6	76.6	72.0	75
20/02/2024	22.8	2.7	Sunny	10:10	- 1	10:40	72.5	74.3	75.7	72.5	75
26/02/2024	17.6	2.7	Cloudy	14:50	1	15:20	72.5	74.2	75.9	72.3	75
Maximum						74.6					
				Minimum			74.2				
				Average				74.4			

L_{Aeq}, 30-min graphical results of M4(A) – Le Billionnaire



L_{Aeq}, 30-min graphical results of M5(A) – Prince Ritz



		Reportin	ng Period	
Major Construction Activities	Nov	Dec	Jan	Feb
	2023	2023	2024	2024
Backfilling of SB01 zone B				✓
Construction works for DCS	✓	✓		
Construction Works for DCS 2A5B and 2A10			✓	✓
Construction of Retaining Wall Type 1 for S14	✓	✓	✓	√
Construction of Pile Cap for S14	✓	✓	✓	√
Construction works for SMH404 and SMH505	✓	✓	✓	✓
Construction of Permanent Shaft Structure of SB-01	✓	✓	✓	✓
Construction of LW02 Pile cap PC-1				✓
Construction of LW02 structural steel roof				✓
Demolition of bearing wall of S14	✓			
Dismantling Falsework and Portal Frame at LW-02		✓	✓	✓
Demolition of Pile Cap of additional staircase at SB01				✓
Modification works for Rising Main chamber WOC1, AVC2 and K1	✓			
Modification Works for Rising Main chamber K1		✓		
Installation of post tensioning anchorage system at LW-02	✓	✓	✓	✓
Erection of falseworks and working platform for decking of Elevated Walkway LW-02	✓	✓	✓	✓
RC construction for decking of Elevated Walkway LW-02	✓	✓	✓	✓
RC construction works for lift and staircase of LW-02	✓	✓	✓	✓
Renovation works for Subway KS10 Lift and Staircase	✓	✓	✓	✓
Renovation works for existing subways KS9, KS32 and KS10	✓	✓		
Renovation works for existing subways KS10			✓	✓
Road and Drain Construction works for Road L16, Commercial Street and Road D1	✓	✓	✓	✓
Road and drain construction works for Olympic Avenue	✓	✓	✓	✓

	Reporting Period						
Factors might affect the monitoring results	Nov 2023	Dec 2023	Jan 2024	Feb 2024			
Non-project related construction activities in the adjacent construction sites were observed.	✓	√	✓	✓			

Appendix L – Event and Action Plan for noise

E4		Act	tion	
Event	ET	IEC	Supervisor / ER	Contractor
Action Level being exceeded	 Notify Supervisor / ER, IEC and Contractor; Carry out investigation; Report the results of investigation to the IEC, Supervisor / ER and Contractor; Discuss with the IEC and Contractor on remedial measures required; Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working days after the exceedance is 	 Review the investigation results submitted by the ET; Review the proposed remedial measures submitted by the Contractor and advise the ER accordingly; Advise the Supervisor / ER on the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified.) 	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified.)	Submit noise mitigation proposal to IEC and Supervisor / ER; Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified.)
Limit Level being exceeded	identified.) 1. Inform IEC, Supervisor /ER, Contractor and EPD; 2. Repeat measurement to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contract's working procedure; 6. Discuss remedial measures required with the IEC, Contractor and Supervisor /ER; 7. Assess effectiveness of	1. Discuss the potential remedial actions with Supervisor /ER, ET and Contractor; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the Supervisor /ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified.)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the	avoid further exceedance; 2. Submit proposals for remedial actions to IEC and Supervisor /ER within 3 working days of notification; 3. Implement the agreed proposal; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated.

Event		Action											
Event	ET	IEC	Supervisor / ER	Contractor									
	Contractor's remedial		exceedance until the	taken within 2 working days									
	actions and keep IEC,		exceedance is abated.	after the exceedance is									
	EPD, and Supervisor /ER		(The above actions should be	identified.)									
	informed of the results;		taken within 2 working days after	·									
	8. If exceedance stops, cease		the exceedance is identified.)										
	additional monitoring.		ŕ										
	(The above actions should be												
	taken within 2 working days												
	after the exceedance is												
	identified.)												

Appendix M – Event and Action P	lan for Landscape and Visual Impact

E-von4		Act	ion	
Event	ET	IEC	Supervisor / ER	Contractor
Design Check	1. Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	
Non-conformity on one occasion	 Identify Source. Inform IEC and Supervisor /ER. Discuss remedial actions with IEC, Supervisor /ER and Contractor. Monitor remedial actions until rectification has been completed. 	 Check report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise Supervisor /ER on effectiveness of proposed remedial measures. Check implementation of remedial measures. 	 Notify Contractor. Ensure remedial measures are properly implemented. 	Amend working methods. Rectify damage and undertake any necessary replacement.
Repeated Non-conformity	 Identify Source. Inform IEC and Supervisor /ER. Increase monitoring frequency. Discuss remedial actions with IEC, Supervisor /ER and Contractor. Monitor remedial actions until rectification has been completed. If non-conformity stops, cease additional monitoring. 	 Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise Supervisor /ER on effectiveness of proposed remedial measures. Supervise implementation of remedial measures. 	 Notify Contractor. Ensure remedial measures are properly implemented. 	Amend working methods. Rectify damage and undertake any necessary replacement.

Appendix N – Waste Flow Table

MONTHLY SUMMARY WASTE FLOW TABLE FOR <u>2024</u> (YEAR)

		A	ctual Quantitio	es of Inert C&I) Materials Ger	nerated Monthl	ly		Actual Quantities of C&D Wastes Generated Monthly				
Month	Total Quantity Generated A + B	Broken Concrete Generated A	General fill Generated B	Broken Concrete Reused in the Contract	General Fill Reused in the Contract	Reused in other Projects	Disposal as Public Fill	Import Fill	Metals	Paper / Cardboard Packaging	Plastics (3)	Chemical Waste	Other, e.g. general refuse
	[in '000m ³]	[in '000m ³]	[in '000m ³]	[in '000m ³]	[in '000m ³]	[in '000m ³]	[in '000m ³]	[in '000m ³]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000m ³]
JAN	2.16	0.00	2.16	0.00	0.05	0.00	2.11	0.00	0.00	0.00	0.00	0.00	0.01
FEB	2.67	0.00	2.67	0.00	0.05	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.01
MAR													
APR													
MAY													
JUNE													
SUB- TOTAL	4.83	0.00	4.83	0.00	0.10	0.00	4.73	0.00	0.00	0.00	0.00	0.00	0.02
JULY													
AUG													
SEPT													
OCT													
NOV													
DEC													
TOTAL	4.83	0.00	4.83	0.00	0.10	0.00	4.73	0.00	0.00	0.00	0.00	0.00	0.02

Appendix O – Environmental Mitigation Implementation Schedule (EMIS)

EIA Ref	Recommended Mitigation Measures	In	npleme	entatio	n
	Water Quality	Not Observed	Yes	No	Remark
S8.8	Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion. Construction runoff related impacts associated with the above ground-construction activities can be readily controlled through the use of appropriate mitigation measures which include use of sediment traps and adequate maintenance of drainage systems to prevent flooding and overflow				
S8.8	Construction site should be provided with adequately designed perimeter channel and pretreatment facilities and proper maintenance. The boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pend. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94.	V			
S8.8	Construction works should be programmed to minimise surface excavation works during the rainy season (April to September). All exposed earth areas should be completed as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.				
S8.8	Sediment tanks of sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m³ capacity, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity is flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped.	V			
S8.8	Open stockpiles of construction materials (for examples, aggregates, sand and fill material) of more than 50 m3 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.	7			
S8.8	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.	V			
S8.8	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events.	\square			
S8.8	Oil interceptors should be provided in the drainage system and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor should have a bypass to prevent flushing during periods of heavy rain.				
S8.8	All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and located wheel washing bay should be provided at every site exit, and wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road loading 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.		V		
S8.8	Drainage On-site drainage system should be installed prior to the commencement of other construction activities. Sediment traps should be installed in order to minimise the sediment loading of the effluent prior to discharge into foul sewers. There should be no direct discharge of effluent from the site into the sea.	V			
S8.8	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage should be reinstated to its original condition when the construction work has finished or the temporary diversion is no longer required.	Ø			
S8.8	All fuel tanks and storage areas should be provided with locks and be located on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank, to prevent spilled fuel oils from reaching the coastal waters of the Victoria Harbour WCZ	\square			
S8.8	Sewage Effluent Construction work force sewage discharges on site are expected to be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage may need to be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets should be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor should also be responsible for waste disposal and maintenance practices.	V			
S8.8	Stormwater Discharges Minimum distances of 100 m should be maintained between the existing or planned stormwater discharges and the existing or planned seawater intakes	V			
S8.8	Debris and Litter In order to maintain water quality in acceptable conditions with regard to aesthetic quality, contractors should be required, under conditions of contract, to ensure that site management				

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

EIA Ref	Recommended Mitigation Measures	Implementation			
S9.5	Waste Reduction Measures 1) Sort C&D waste from demolition of the remaining structures to recover recyclable portions such as metals 2) Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal 3) Encourage collection of aluminum cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force 4) Any unused chemicals or those with remaining functional capacity should be recycled 5) Proper storage and site practices to minimize the potential for damage or contamination of construction materials	Ø			
\$9.5	Construction and Demolition Material Mitigation measures and good site practices should be incorporated into contract document to control potential environmental impact from handling and transportation of C&D material. The mitigation measures include: 1) Where it is unavoidable to have transient stockpiles of C&D material within the Project work site pending collection for disposal, the transient stockpiles should be located away from waterfront or storm drains as far as possible 2) Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric 3) Skip hoist for material transport should be totally enclosed by impervious sheeting 4) Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site 5) The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores 6) The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle 7) All duety materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet When delivering inert C&D material to public fill reception facilities, the material should consist				
	entirely of inert construction waste and of size less than 250mm or other sizes as agreed with the Secretary of the Public Fill Committee. In order to monitor the disposal of the surplus C&D material at the designed public fill reception facility and to control fly tipping, a trip-ticket system as stipulated in the ETWB TCW No. 31/2004 "Trip Ticket System for Disposal of Construction	☑			
S9.5	Chemical Waste After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals should be collected by a licensed collector for disposal at the CWTF or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation	V			
Part E L	andscape & Visual	Not Observed	Yes	No	Remark
S13.9	CM1 - All existing trees should be carefully protected during construction. CM2 - Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work. CM3 - Control of night-time lighting. CM4 - Erection of decorative screen hoarding.		V		
Part F Air Quality			Yes	No	Remark
S6.8	Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be fully covered by impermeable sheeting to reduce dust emission.		V		
S6.8	Misting for the dusty material should be carried out before being loaded into the vehicle.	$\overline{\square}$			
S6.8	Material having the potential to create dust should not be loaded from a level higher than the side and tail boards and should be dampened and covered by a clean tarpaulin.	V			
S6.8	The tarpaulin should be properly secured and should extent at least 300 mm over the edges of the sides and tailboards. The material should also be dampened if necessary before transportation	V			
S6.8	The vehicles should be restricted to maximum speed of 10 km per hour and confined haulage and delivery vehicle to designated roadways insider the site. On-site unpaved roads should be compacted and kept free of lose materials		V		
S6.8	Vehicle washing facilities should be provided at every vehicle exit point				
S6.8	The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores.		V		
S6.8	Every main haul road should be-scaled with concrete and kept clear of dusty materials or sprayed with water so as to maintain the entire road surface wet.		$\overline{\checkmark}$		

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

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

Reporting Month: February 2024

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

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

upto reporting month

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