JOB NO.: TCS01267/22

CEDD SERVICE CONTRACT NO. WD/07/2022

YUEN LONG SOUTH FIRST PHASE DEVELOPMENT - ENVIRONMENTAL TEAM

MONTHLY ENVIRONMENTAL MONITORING AND AUDIT REPORT – JANUARY 2024

PREPARED FOR

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Date	Reference No.	Prepared By	Certified By
19 February 2024	TCS01267/22/600/R0134v3		
		Nicola Hon (Environmental Consultant)	Tam Tak Wing (Environmental Team Leader)

Version	Date	Remarks
1	8 February 2024	First Submission
2	14 February 2024	Amended according to the IEC's comments
3	19 February 2024	Amended according to the IEC's comments

Ford Business International Ltd.

Our Ref: TCS01267/22/300/L0136

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

Attn: Mr. Alex Chan

19 February 2024
By email

Dear Sir,

Re: Contract No. WD/07/2022
Yuen Long South First Phase Development – Environmental Team
Monthly Environmental Monitoring and Audit Report – January 2024

We would like to certify the captioned report pursuant to Condition 3.4 of the Environmental Permit No. EP-548/2018/A, EP-549/2018, EP-550/2018/A, EP-551/2018/A and EP-553/2018/A for the Yuen Long South First Phase Development.

Should you have any queries or require further information, please feel free to contact us or the undersigned at Tel: 2959-6059 or Fax: 2959-6079.

Yours sincerely,
For and on Behalf of
Ford Business International Limited

Tam Tak Wing
Environmental Team Leader

Encl.

cc	CEDD	Mr. Ng Kam Leung, Julian	By email
	Telemax (IEC)	Mr. Nelson TAM	By email

香港新界葵涌大連排道35-41號金基工業大廈20樓A室
Unit A, 20/F, Gold King Industrial Building
35-41 Tai Lin Pai Road, Kwai Chung, New Territories, Hong Kong
Tel (852) 2959-6059
Fax (852) 2959-6079
Email info@fordbusiness.com

Telemax Environmental and Energy Management Limited
Unit 01, 17/F., Shatin Galleria, No. 18-24 Shan Mei Street, Fo Tan, Shatin, N.T., Hong Kong
Tel.: (852) 3563 7003 Fax: (852) 3563 7018 www.telemaxeem.com

Our Ref. : TEEM/816/24/L/029/JYT
Job No. : TM0816-22
Date : 19 February 2024

By Email

AECOM Asia Co., Ltd.
12/F, Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, Hong Kong

Attn.: Mr. Alex Chan

Dear Alex,

Agreement No. WD/06/2022
Yuen Long South First Phase Development –
Independent Environmental Checker
Verification for Monthly EM&A Report (January 2024)

With reference to the Monthly Environmental Monitoring and Audit (EM&A) Report – January 2024 (Issue 3) as submitted by the Environmental Team in February 2024, we have no adverse comment on this submission which are related to designated projects. We are pleased to inform that we hereby verify the captioned submission in accordance with Condition 3.4 of the Environmental Permit No. EP-548/2018/A, EP-549/2018, EP-550/2018/A, EP-551/2018/A and EP-553/2018/A for the Yuen Long South First Phase Development.

Should you have any queries, please do not hesitate to contact the undersigned at (852) 3610 8701 or our Mr. Michael Fong at (852) 3610 8706 or our Mr. Vince Lo at (852) 3610 8787 or our Mr. Jacky Tsang at (852) 3610 8735.

Yours faithfully,

For and on behalf of
Telemax Environmental and Energy Management Limited

Ir Nelson Tam
Independent Environmental Checker (IEC)

c.c. Ford Business International Ltd. (ET) - Attn: Mr. Tam Tak Wing / Ms. Nicola Hon

EM / NT / MF / VL / JYT

EXECUTIVE SUMMARY

INTRODUCTION

ES.01 This is the Monthly Environmental Monitoring and Audit (EM&A) Report, presenting the monitoring results and inspection findings for the Project for the reporting period from **1st to 31st January 2024** (hereinafter called 'the Reporting Period).

ENVIRONMENTAL MONITORING AND AUDIT ACTIVITIES

ES.02 Environmental monitoring activities under the EM&A programme of the Project in the Reporting Period are summarized in the following table.

Environmental Aspect	Monitoring Parameter	Monitoring Station/ Location	Number of Monitoring
Air Quality	1-hour Total Suspended Particulates (TSP)	DM-1, DM-2	36 sessions
Noise	Leq30mins	CM1a, CM2a, CM3, CM4 and CM8a	25 sessions
Water Quality	Dissolved oxygen, dissolved oxygen saturation (DO%), temperature, turbidity, salinity, pH and suspended solids (SS)	M1a, M2a, M3, M4, U3, U4a, M5a, M6a, D2a, M7a	14 days
		U1b, U2a & EIS-1a	9 days
Site Inspection	Site Audit for implementation of mitigation measures	Contract 1	5 events
		Contract 2	5 events
		Contract 3	5 events

ACTION AND LIMIT (A/L) LEVELS EXCEEDANCE

ES.03 In the Reporting Period, no exceedances of air quality monitoring, construction noise (including Action Level for noise complaint). However. 4 Limit Level exceedance of water quality monitoring were recorded. The summary of exceedances recorded in the Reporting Period is shown table below.

Environmental Aspect	Monitoring Parameters	Action Level	Limit Level	Event & Action		
				NOE Issued	Investigation Result	Corrective Actions
Air Quality	1-hour TSP	0	0	0	--	--
Construction Noise	$L_{eq(30min)}$ Daytime	0	0	0	--	--
Water Quality	DO	0	0	0	Not project related	The Contractor was reminded to implemented water quality mitigation measures
	Turbidity	0	**2**	**2**		
	SS	0	**2**	**2**		

ES.04 Once the exceedances detected by ET, notification were issued to ER, Contractor and IEC with preliminary investigation and on-site observation. The Contractor subsequently carried out detailed investigation and identified the source of impact. The investigation results of exceedances revealed the exceedances on 8 Jan 2024 were likely due to the turbid water from upstream of the project and not project related. For the exceedances on 19 Jan 2024, preparation works for temporary deck was conducted at the respective section of Nullah, in view of the work nature, there was no wastewater generated. With the implementation of water mitigation measures, the exceedances 19 Jan 2024 were unlikely related to Project related. The investigation results have been agreed by the RE via email communication. The Contractor was reminded to fully implement the water quality mitigation measure as far as practicable during the forthcoming construction work in the Nullah.

ES.05 Bi-weekly inspection of landscape and visual impact and mitigation measures were conducted by ET during the weekly site inspection. It was observed that six individual trees under Contract 2 transplanted to the nursery site were in fair condition. For Contract 3, the nursery site for transplanted tree were properly maintained by the Contractor, and the transplanted trees were in fair health condition.

ES.06 The Contractors are advised to implement the waste management plan and minimise the wastes generated through recycling or reusing. All mitigation measures stipulated in the Updated EM&A Manual and waste management plans shall be fully implemented.

SITE INSPECTION

ES.07 In the Reporting Period, weekly joint site inspection to evaluate the site environmental performance had been carried out by the representatives of the Consultants, ET and the respective Contractor of Contract 1, Contract 2 and Contract 3. No non-compliance was noted during the site inspection.

ENVIRONMENTAL COMPLAINT

ES.08 In the Reporting Month, no environmental complaint was received.

NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

ES.09 In the Reporting Month, no environmental summons and prosecutions were recorded.

REPORTING CHANGE

ES.10 There is no reporting change in the Reporting Period.

FUTURE KEY ISSUES

ES.11 During dry season, the Contractor should fully implement the recommended air quality mitigation measures to minimize the impact of construction dust as far as practicable, in particular the contract works located near the village area.

ES.12 Water quality mitigation measures shall be fully implemented in accordance with the Implementation Schedule for Environmental Mitigation Measures of the updated EM&A Manual.

ES.13 Construction noise would be a key environmental issue during construction work of the Project. Noise mitigation measures such as using quiet plants and/ or using movable temporary noise barriers should be implemented as stipulated under EM&A Manual to ensure construction noise impacts at the NSRs comply with the noise criteria.

Table of Contents

LIST OF TABLES

LIST OF APPENDICES

1 INTRODUCTION

1.1 BACKGROUND

1.1.1 Yuen long South (YLS) is located to the immediate south of Yuen Long New Town and is positioned as Yuen Long New Town Extension. It will serve as one of the major sources of land supply to meet the territory's medium to long-term housing needs through comprehensive planning and improvement of infrastructure including the linkage to Yuen Long New Town and the Hung Shui Kui/Ha Tsuen New Development Area (HSK/HT NDA).

1.1.2 Planning Department (PlanD) and Civil Engineering and Development Department (CEDD) of the HKSAR jointly commissioned the Planning and Engineering Study (YLS P&E Study) under Agreement No. CE 35/2012 (CE) in November 2012 to carry out planning, engineering and environmental studies with view to formulating a development proposal for YLS Development. It confirmed the feasibility of implementing the proposal for YLS Development to meet the medium and long-term housing, social, economic and environmental needs, and formulated the implementation strategies and programme for the YLS Development with first population intake by the year of 2028.

1.1.3 YLS P&E Study Project is a Designated Project (DP) under Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO). In November 2017, Environmental Impact Assessment (EIA) report for YLS Development was approved by Director of Environmental Protection pursuant to EIAO. The approved EIA report (AEIAR-215/2017), the approval letter with conditions and recommendations and the relevant Environmental Permit (EPs) issued subsequently. To implement the Project, there are various infrastructure items among some of which are classified as DPs under Schedule 2 of the EIA Ordinance.

1.1.4 Under the YLS P&E Study, YLS Development was tentatively to be implemented in four stages including Stage 1, Stage 2, Stage 3 and Stage 4. Subsequently, the Stage 2 is further split into (i) stage 2A (previously known as stage 2, phase 1) and (i i) stage 2B (previously known as stage 2 remaining works). The design and construction consultancies of YLS Development stage 1 works (under Agreement No. CE 32/2017 (CE)) and stage 2A works (under Agreement No. CE 58/2019 (CE)) commenced in February 2018 and March 2020 respectively. First population intake of YLS Development is expected in 2028.

1.1.5 Currently, YLS Development will be implemented by three phases, namely First Phase, Second Phase and Third Phase Development. The phasing plan of YLS Development is shown in ***Appendix A***. The site formation and engineering infrastructure works to support the First Phase Development, covering stage 1 works and stage 2A works (hereafter referred to as "the Project") is funded under the following PWP items:

1) PWP Item No. 7817CL – Yuen Long South Development – stage 1 works; and
2) PWP Items No. 7872CL – Yuen Long South Development – stage 2 works – site formation and engineering infrastructure and stages 2B and 3 works – detailed design and site investigation.

1.2 PROJECT SCOPE

1.2.1 The scopes of the Project comprise the following principal work elements:
Works under PWP Item No. 7817CL :-

(a) Site formation works and decontamination works, if any, for the Sites VR1.1 , VR2.1 and R2.2
(b) Construction of Road L 1 A and L 18 including widening existing roads and construction of new roads, to provide access to the Site R2.2 and connect to Tai Tong Road and Tai Shu Ha Road West
(c) Construction of Road L2 to provide access to the Site VR2.1 and connect to Lam Tai West Road
(d) Construction of Road L3 to provide access to the Site VR1.1 and connect to Long Hon Road
(e) Construction of slopes and retaining walls associated with Road L 1 A and L 18
(f) Construction of Common Utility Tunnel along part of Lam Tai East Road and Road L 1A

(g) Improvement of Kung Um Road/ Kiu Hing Road between Sham Chung Road and Shap Pat Heung Road and associated road junctions by decking of Yuen Long Nullah and modification of drainage structure at junction of Yuen Long Nullah and Yuen Long bypass Floodway
(h) Provision of other infrastructure to serve the sites as mentioned in (a) above to be formed under the Project
(i) Provision of associated road junction improvement, street lighting, traffic aids, utility diversion, geotechnical, drainage, sewerage, water supply landscaping and environmental mitigation works

Works under PWP Item No. 7872CL :-

(a) Reconstruction of Tong Yan San Tsuen (TYST) Interchange and Associated Works
- Construction of new primary distributor roads with partly depressed roads and underpass
- Construction/ modification of slip roads
- Construction of junction connecting TYST Interchange, Shan Ha Road and Long Hon Road
- Construction of noise mitigation measures
- Construction of associated footpaths, cycle tracks and subways

(b) Construction of New Roads
- Construction of Road 01 (Part) with associated footpaths, pedestrian crossing and refuge island
- Construction of Road 02 (Part) with associated footpaths, pedestrian crossing and refuge island
- Construction of eastbound left-turn lane at the approach road of Shap Pat Heung Interchange heading to Pok Oi Interchange

(c) Site Formation for Multi-storey Building (MSB) Sites
- Site Formation works and decontamination works
- Realignmentl widening/ extension of a section of Tong Tai Road

(d) Construction/ modification of section of Kung Um Road at south of Yuen Long Highway
(e) Construction/ modification of section of Wong Nai Tun Tsuen Road and Kiu Hing Road
(f) Construction/ modification of section of Lam Tai East Road and Lam Yu Road
(g) Provision of associated road junction improvement, street lighting, traffic aids, utility diversion, geotechnical, drainage, sewerage, water supply, landscaping and environmental mitigation works

Works from other proiects to be entrusted

(a) Construction of ON1600 watermains from HSKlHT NOA project

1.2.2 The Project will be delivered under three CEDD works contracts as below:-

(a) CEDD Contract No. YL/2021/03 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 1

(b) CEDD Contract No. YL/2021/04 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2 (the designated works of Contract 2 are governed by EP-549/2018 & EP-553/2018/A)

(c) CEDD Contract No. YL/2022/01 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3 (the designated works of Contract 3 are governed by EP-548/2018/A, EP-549/2018, EP-550/2018/A, EP-551/2018/A)

1.2.3 The general layout of YLS First Phase Development is are shown in ***Appendix A***.

1.3 DESIGNATED WORKS

1.3.1 To implement the Project, there are various infrastructure items among some of which are classified as DPs under *Schedule 2 of the EIA Ordinance.* In general, the designated works of YLS First Phase Development are governed by five Environmental Permits. The relevant EPs under the YLS First Phase Development and the respective Work Contracts are summarized in ***Table 1-1*** and the Schedule 2 Designated Project under YLS First Phase Development are shown in ***Appendix B***.

Table 1-1 Summary of Schedule 2 Designated Project under YLS First Phase Development

DP Reference No.	EP	Designated Project	Contract Works	C2	C3
DP2	EP-548/2018/A	Construction of New Primary Distributor Roads (Tong Yan San Tsuen Interchange) for Housing Sites in YLS.	Reconstruction of Tong Yan San Tsuen Interchange		√
DP3	EP-549/2018	Construction of Two New District Distributor Roads (Road D1 to Road D2) for Housing Sites in YLS	C2: Construction of proposed Road D1, Road D2, Road L1A, Road L1B and slip road at the existing Shap Pat Heung Interchange C3: Improvement to sections of existing Shan Ha Road, Long Hon Road and Tong Tai Road, and other road works	√	√
DP5	EP-550/2018/A	Construction of Slip Roads at Tong Yan San Tsuen Interchange for Housing Sites in YLS	Reconstruction of Tong Yan San Tsuen Interchange		√
DP6	EP-551/2018/A	Construction of Partly Depressed Road / Underpass Located at Tin Shui Wai West Interchange and Full Enclosures at Tong Yan San Tsuen Interchange	Reconstruction of Tong Yan San Tsuen Interchange		√
DP10	EP-553/2018/A	Yuen Long Nullah Revitalisation / Decking along Kung Um Road and Kiu Hing Road for Housing Sites in YLS	Nullah deckings at various locations	√	

NOTE: DP reference no is according to approved EIA report (AEIAR-215/2017) and EM&A Manual (AEIAR-215/2017)

1.4 IMPLEMENTATION OF EM&A PROGRAMME

1.4.1 Ford Business International Limited (hereinafter called "Ford") was awarded the CEDD Agreement Contract No. WD/07/2022 – Yuen Long South First Phase Development - Environmental Team (hereinafter called "the Service Contract") on 26 October 2022. The Contractor period is 78 months which covered the construction period and the first-year operation period for the Works Contracts 1, 2 and 3 under the YLS First Phase Development (hereinafter named as "the Project).

1.4.2 In accordance with relevant EPs condition 2.4, an updated EM&A Manual for YLS First Phase Development (Rev.10) (hereinafter named as "updated EM&A Manual") has been submitted to EPD to include the latest EM&A requirement in accordance with the information and recommendation described in the EIA Report and by taking into account any specific site conditions that may be changed before the construction of the Project. It outlines the monitoring and audit programme for the Project for the construction phase and provided systematic procedures for monitoring, auditing and minimizing environmental impacts ensure compliance with the EIA recommendations.

1.4.3 In accordance with the updated EM&A Manual, baseline monitoring for air quality, noise and water quality monitoring was conducted by the ET of YLS First Phase Development at the agreed monitoring locations from 8 March 2023 to 4 June 2023. The Baseline Monitoring Report (Report ref.: TCS01267/22/600/R0044v4) which was verified by the Independent Environmental Checker (hereinafter referred as "the IEC"), was submitted to EPD on 7 July 2023.

1.4.4 According to the Project's programme, the various infrastructure items, which are classified as DPs under *Schedule 2 of the EIA Ordinance,* are tentatively scheduled to commence in December 2023. Nevertheless, in light of the commencement of construction works at non-EP area of the Project, the EM&A Programme in relevant sections was initiated on 13th July 2023 to fulfill the

contractual and EM&A Manual requirements.

1.4.5 This is the Monthly EM&A Report, presenting the monitoring results and inspection findings for the Project, for the reporting period from **1st to 31st January 2024** (hereinafter called 'the Reporting Period).

1.5 REPORT STRUCTURE

1.5.1 The Monthly EM&A Report is structured into the following sections:-

Section 1 *Introduction*
Section 2 *Project Organization and Construction Progress*
Section 3 *Summary of Impact Monitoring Requirements under the Contract*
Section 4 *Air Quality Monitoring*
Section 5 *Construction Noise Monitoring*
Section 6 *Water Quality Monitoring*
Section 7 *Ecology Monitoring*
Section 8 *Waste Management*
Section 9 *Site Inspections*
Section 10 *Environmental Complaints and Non-Compliances*
Section 11 *Implementation Status of Mitigation Measures*
Section 12 *Conclusions and Recommendations*

2 CONSTRUCTION PROGRESS AND PROJECT ORGANISATION

2.1 CONSTRUCTION CONTRACT PACKAGING

2.1.1 To facilitate the project management and implementation, the site formation and engineering infrastructure works to support First Phase Development will be delivered under CEDD three works contracts as follows: -

- Contract 1 (CEDD Contract no.: YL/2021/03)
- Contract 2 (CEDD Contract no.: YL/2021/04)
- Contract 3 (CEDD Contract no.: YL/2022/01)

CEDD Contract No. YL/2021/03 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 1

2.1.2 The contract was scheduled to commence in September 2022 and will take about 32 months to complete. The scope of works covered in this contract is listing in the following:

- Site clearance and formation (including land decontamination works) for about five hectares of land, together with the provision of associated engineering infrastructure;
- Construction of a single two-lane carriageway of about 130 metres long connecting to Lam Tai West Road;
- Construction of a single two-lane carriageway of about 130 metres long connecting to Long Hon Road;
- Construction of associated works including footpaths, slopes, retaining wall, landscaping works, water supply system, sewerage system and drainage system; and
- Implementation of environmental mitigation measures for the works mentioned above.

CEDD Contract No. YL/2021/04 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2

2.1.3 The contract was scheduled to commence in the 4th Quarter of 2022 and will take about 64 months to complete. The scope of works covered in this contract is listing in the following:

- Site clearance and formation (including land decontamination works);
- Nullah deckings at various locations;
- Construction of proposed Road D1, Road D2, Road L1A, Road L1B and slip road at the existing Shap Pat Heung Interchange;
- Improvement to sections of existing Kung Um Road, Kiu Hing Road, Wong Nai Tun Tsuen Road, Lam Tai East Road, Tai Kei Leng Road, Tai Tong Road, Lam Hi Road, Lam Yu Road, Shap Pat Heung Road and Sham Chung Road;
- Construction of associated works including water mains, drainage works and sewerage systems, cycle tracks, footpaths, common utility tunnel, box culverts, junction improvement works, slope works, retaining walls, landscaping works, electrical and mechanical works and other ancillary works; and
- Implementation of environmental mitigation measures (including noise semi-enclosures, noise barriers and low-noise road surfacing) and environmental monitoring works for the works mentioned above.

CEDD Contract No. YL/2022/01 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

2.1.4 The contract was scheduled to commence in 4th Quarter of 2022 and will take about 64 months to complete. The scope of works covered in this contract is listing in the following:

- Site clearance and formation (including land decontamination works);
- Reconstruction of Tong Yan San Tsuen Interchange;
- Improvement to sections of existing Shan Ha Road, Long Hon Road and Tong Tai Road, and other road works;

- Construction of associated works including water mains, drainage and sewerage works, subways, cycle tracks, footpaths, box culverts, nullah deckings, junction improvement works, slope works, retaining walls, landscaping works, electrical and mechanical works and other ancillary works; and
- Implementation of environmental mitigation measures (including noise enclosures, noise barriers and low-noise road surfacing) and environmental monitoring works for the works mentioned above.

2.2 PROJECT ORGANISATION

2.2.1 The project organization and the key personal contact is shown in ***Appendix C***. The responsibilities of respective parties are:

Civil Engineering and Development Department

2.2.2 CEDD is the Project Proponent and the Permit Holder of the EP of the Project and assume overall responsibility for the project. An Independent Environmental Checker (IEC) shall be employed by CEDD to audit the results of the EM&A works carried out by the ET.

Environmental Protection Department (EPD)

2.2.3 EPD is the statutory enforcement body for environmental protection matters in Hong Kong.

Project Manager

2.2.4 AECOM is the Engineer's Representative (ER) responsible for overseeing the construction works and for ensuring that the works undertaken by the Contractor are in accordance with the specification and contractual requirements. The duties and responsibilities of the Consultants with respect to the EM&A may include:

- Supervise the Contractor's activities and ensure that the requirements in the EM&A Manual are fully complied with;
- Inform the Contractor when action is required to reduce impacts in accordance with the Even and Action Plans;
- Assist the Project Proponent in employing an IEC to audit the results of the EM&A works carried out by the ET;
- Participate in joint site inspection undertaken by the ET and/or IEC;
- Oversee the implementation of the agreed Event / Action Plan in the event of any exceedance; and
- Adhere to the procedures for carrying out complaint investigations.

The Contractor

2.2.5 Tung Lee Engineering Company is Contractor of the Contract 1; CREC Joint Venture is Contractor of the Contract 2; and China Road and Bridge Corporation Company is Contractor of the Contract 3. The duties and responsibilities of the Contractor is:

- Report to the Consultants;
- Implement the EIA recommendations and requirements;
- Provide assistance to ET in carrying out monitoring and auditing;
- Submit proposals on mitigation measures in case of exceedances of Action and Limit levels in accordance with the Event and Action Plans;
- Implement measures to reduce impact where Action and Limit levels are exceeded; and
- Adhere to the agreed procedures for carrying out compliant investigation.

Environmental Team (ET)

2.2.6 ***Ford Business International Limited*** was appointed by CEDD as the ET to undertake the EM&A programme with the associated duties in May 2019. The ET is managed by the ET Leader who has at least 7 years' experience in EM&A and has relevant professional qualifications. Suitably qualified staff should be included in the ET, and resources for the implementation of the EM&A programme should be allocated in time under the Contract, to enable fulfillment of the Project's EM&A

requirements as specified in the EM&A Manual during construction of the Project. The duties of ET shall include:

- Set up all the required environmental monitoring stations;
- Monitor various environmental parameters as required in the EM&A Manual;
- Analyse the environmental monitoring and audit data and review the success of EM&A programme to confirm the adequacy of mitigation measures implemented and the validity of the EIA predictions and to identify any adverse environmental impacts arising;
- Carry out site inspection to investigate and audit the Contractors' site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and take proactive actions to preempt problems;
- Liaison with IEC on all environmental performance matters, and timely submission of all relevant EM&A proforma for IEC's approval;
- Prepare reports on the environmental monitoring data and site environmental conditions;
- Report on the environmental monitoring and audit results to the IEC, Contractor, the Consultants , Project Proponent and EPD;
- Recommend suitable mitigation measures to the Contractor in the case of exceedance of Action and Limit levels in accordance with the Event and Action Plans;
- Give advice to the Contractor on environmental improvement, awareness, enhancement matters, etc. on site;
- Undertake regular on-site audits / inspections and report to the Contractor, the Consultants and IEC of any potential non-compliance;
- Follow up and close out non-compliance actions; and
- Adhere to the procedures for carrying out environmental complaint investigation.

Independent Environmental Checker (IEC)

2.2.7 ***Telemax Environmental and Energy Management Limited*** is employed by the Permit Holder (i.e. CEDD). The IEC has over 7 years' experience in EM&A and environmental management. The duty of IEC should be:

- Review in an independent, objective and professional manner the EM&A works performed by the ET (at not less than monthly intervals);
- Audit the monitoring activities and results (at not less than monthly intervals);
- Validate and confirm the accuracy of monitoring results, monitoring equipment, monitoring locations, monitoring procedures and location of sensitive receivers;
- Report the audit results to the Consultants, the Project Proponent and EPD in parallel;
- Review the EM&A reports submitted by the ET;
- Check and review the proposed mitigation measures submitted by the Contractor in accordance with the Event and Action Plans;
- Check and review the effectiveness of the mitigation measures that have been recommended in the EIA and the EM&A Manual, and ensure they are properly implemented in a timely manner, when necessary;
- Report the findings of site inspections and other environmental performance reviews to Project Manager, Project Proponent and EPD.
- Coordinate the monitoring and auditing works for all the on-going contracts in the area in order to identify possible sources / causes of exceedances and recommend suitable remedial actions where appropriate;
- Coordinate the assessment and response to complaints / enquires from locals, green groups, district councils or the public at large;
- On as-needed basis, verify and certify the environmental acceptability of the Contractor's construction methodology (both temporary and permanent works), relevant design plans and submissions under the EP; and
- Verify investigation results of environmental complaint cases and the effectiveness of corrective measures.

2.3 CONSTRUCTION PROGRESS

2.3.1 According to the Project's programme, the various infrastructure items under Contract 2 and Contract 3, which are classified as DPs under Schedule 2 of the EIA Ordinance, are scheduled to commence in December 2023. The construction activities carried out in the Reporting Period are summarized

Table 2-1 and the 3-month rolling construction programme for Contract 1, Contract 2 and Contract 3 are shown in **Appendix D**.

Table 2-1 Summary of Construction Activities in the Reporting Period

Contract No.	Construction Activities undertaken in the Reporting Period	
	Non-designated work	**Designated work**
YL/2021/03 (Contract 1)	• Decontamination works • Demolition works • Ground Investigation • Site Hoarding • Site Clearance • Site Formation • Construction of drainage system • Piling work	N/A
YL/2021/04 (Contract 2)	Portion 14,6B,3: • Site clearance Portion 11: • Trail TAM Grout Portion 1A,11A: • Soil excavation • ELS construction for CUT	Along Nullah: (EP: EP-553/2018/A) • Pre-drill • Road set back works • Temporary decking installation Portion 5B: (EP: EP-549/2018) • Site clearance
YL/2022/01 (Contract 3)	• Site Clearance • GI Works • Tree Felling • Demolition • Decontamination • Sheet Pile Installation for Box Culvert BC01 • Trial Pile TP1 and TP3 • Trial Pile for Pre-bored H Pile • Site Formation Works in Portion 5B, 5C • Rebar Fixing and Concreting for Retaining Wall RW30 in Portion 6A	EP-548/2018/A • Nil EP-549/2018 • Nil EP-550/2018/A • Nil EP-551/2018/A • Nil

2.4 SUMMARY OF ENVIRONMENTAL LICENSES AND PERMITS

2.4.1 To implement the project works, summary of the relevant permits, licenses, and/or notifications on environmental protection for Contract 1 and Contract 2 are presented in ***Table 2-2 to Table 2-3.***

Table 2-2 Status of Environmental Licenses and Permits of Contract 1

Item	Description	License/Permit Status		
		Ref. no.	**Effective Date**	**Expiry Date**
1	Air pollution Control (Construction Dust) Regulation	Notified EPD on 31/08/2022	N/A	N/A
2	Waste Disposal Regulation - Billing Account for Disposal of Construction Waste	Account No. 7045085	01/09/2022	Valid and till the Contract Works ends
3	Chemical Waste Producer Registration	WPN 5213-518-T1247-01 (Portion 4, 4A and 4B)	23/09/2022	Valid and till the Contract Works ends
		WPN 5213-518-T4069-01 (Portion 1A, 1B and 2A)	23/09/2022	

Item	Description	License/Permit Status		
		Ref. no.	Effective Date	Expiry Date
		WPN 5213-518-T1246-01 (portion3A, 3B and 3C)	23/09/2022	
4	Water Pollution Control Ordinance - Discharge License	WTP00043472-2023 (Portion 1A, 1B and 2A)	12/06/2023	30/06/2028
		WTP00043980-2023 (Portion 4, 4A and 4B)	01/06/2023	30/06/2028
		WT10001331-2023 (Portion 3A, 3B, 3C)	30/10/2023	31/10/2028
		Case ID 494642	Application in progress	
5	Noise Control Ordinance – Construction Noise Permit	GW-RN1276-23	03/12/2023	02/06/2024
		GW-RN1278-23	03/12/2023	02/06/2024

Table 2-3 Status of Environmental Licenses and Permits of Contract 2

Item	Description	License/Permit Status		
		Ref. no.	Effective Date	Expiry Date
1	Air pollution Control (Construction Dust) Regulation	Notified EPD on 04/01/2023	N/A	N/A
2	Waste Disposal Regulation - Billing Account for Disposal of Construction Waste	Account No. 7046574	13/02/2023	Valid and till the Contract Works ends
3	Chemical Waste Producer Registration	Waste Producers Number: No. WPN 5213-518-C4771-01	27/01/2023	Valid and till the Contract Works ends
4	Water Pollution Control Ordinance - Discharge License	WT00044244-2023 (Portion 9A)	16/8/2023	31/8/2028
		WT00044253-2023 (Portion 11)	21/8/2023	31/8/2028
		WT10001774-2023 (Lam Tai East Road: Portion 3,10,11,18,19)	30/11/2023	30/11/2028
5	Noise Control Ordinance – Construction Noise Permit	GW-RN1173-23 (Portion 9A)	27/10/2023	29/3/2024
		GW-RN1249-23 (Portion 11)	19/11/2023	18/02/2024
		GW-RN1281-23 (Portion 1A)	03/12/2023	31/05/2024
		GW-RW1310-23 (Portion 11A)	03/12/2023	02/03/2024
		GW-RN1379-23 (Portion 10)	27/12/2023	26/02/2024

Table 2-3 Status of Environmental Licenses and Permits of Contract 3

Item	Description	License/Permit Status		
		Ref. no.	Effective Date	Expiry Date
1	Air pollution Control (Construction Dust) Regulation	Ref. no. 488406	13 Jan 2023	N/A
2	Waste Disposal Regulation - Billing Account for Disposal of Construction Waste	Account No. 7046323	18/01/2023	Valid and till the Contract Works ends
3	Chemical Waste Producer Registration	Waste Producers Number: No. WPN 5213-529-C4801-01	22/03/2023	Valid and till the Contract Works ends
4	Water Pollution Control Ordinance - Discharge	WT10001097-2023	20/10/2023	20/10/2028
		WT10001099-2023	13/11/2023	30/11/2028

Item	Description	License/Permit Status		
		Ref. no.	Effective Date	Expiry Date
	License	Case ID 493708	Application in progress	
5	Noise Control Ordinance – Construction Noise Permit	GW-RN1162-23	03/11/2023	31/12/2023

3 AIR QUALITY MONITORING

3.1 MONITORING REQUIREMENTS

3.1.1 In accordance with the updated EM&A Manual, the ET shall carry out impact monitoring during the construction period. For regular impact monitoring of 1-hour TSP, the sampling frequency of at least 3 times in every 6 days should be undertaken. Before commencing impact monitoring, the ET shall inform the IEC of the impact monitoring programme such that the IEC can conduct on-site audit to ensure accuracy of the monitoring results.

3.1.2 In case of non-compliance with the air quality criteria, more frequent monitoring, as specified in the Action Plan in the following section, shall be conducted within the specified timeframe after the result is obtained. This additional monitoring shall be continued until the excessive dust emission or the deterioration in air quality is rectified, and agreed with the ER and the IEC.

3.2 MONITORING LOCATIONS

3.2.1 The phasing of the Project has been addressed in the approved EIA report, according to the updated EM&A Manual, DM-1 and DM2 are the monitoring stations for First Phase of YLS Development. The locations of construction dust monitoring stations under YLS First Phase Development are summarized in ***Table 3-1*** and illustrated in ***Appendix E*****.**

Table 3-1 Construction Dust Monitoring Locations

ID	Monitoring Locations	Description of Location
Existing Air Sensitive Receivers		
DM-1	Shan Ha Tsuen House No. 613F	Shan Ha Tsuen House No. 613F
DM-2	Village House along Kung Um Road	No. 118G Kung Um Road - Golden Villa

3.3 MONITORING EQUIPMENT

3.3.1 Portable direct reading dust meters brand named “Sibata LD-3B Laser Dust monitor Particle Mass Profiler & Counter” were used to 1-hour TSP measurement. The portable direct reading dust meters provided a real time 1-hour TSP measurement based on 90^{o} light scattering.

3.3.2 The portable direct reading dust meters were used within the valid period following manufacturer’s Operation and Service Manual. It was calibrated annually and determined periodically by the calibrated High-Volume Sampler to check the validity and accuracy of the results measured by direct reading method. The proposed use of portable direct reading dust meters was submitted to the IEC and obtained agreement and stated in Section 4.3 of the Updated EM&A Manual.

3.3.3 The equipment used for impact air quality monitoring is listed in ***Table 3-2***. The copies of calibration certificates for air quality monitoring equipment are shown in ***Appendix F1***.

Table 3-2 Air Quality Monitoring Equipment

Equipment	Model	Serial No.
1-hour TSP		
Portable Dust Meter	Sibata LD-3 Laser Dust monitor Particle Mass Profiler & Counter	3Y6502
		456658

Wind Data Monitoring Equipment

3.3.4 In consideration of the safety concerns of setting up wind sensor at 10m above ground, the ETL had proposed alternative method to obtain representative wind data in the updated EM&A Manual. Meteorological information at Wetland Park Station collected from the Hong Kong Observatory were used for the Project. It is located nearby the Project site and the meteorological data is considered representative of the Project area. This station can also provide other meteorological information include air temperature, relative humidity, wind direction, wind speed and mean sea level pressure. In additional, adoption of meteorological information from Hong Kong Observatory is a common alternative method for a lot of EM&A projects in Hong Kong. The weather data including wind speed and wing direction in the Reporting Month are summarized in ***Appendix G***.

3.4 MONITORING PROCEDURES

3.4.1 The portable direct reading dust meters brand named "Sibata LD-3 Laser Dust monitor Particle Mass Profiler & Counter" was used for impact monitoring. It is a portable, battery-operated laser photometer and provides a real time 1-hour TSP measurement based on 90^0 light scattering.

3.4.2 The 1-hour TSP meter used is within the valid period, calibrated by the manufacturer prior to purchasing. Zero response of the instrument was checked before and after each monitoring event. Operation of the 1-hour TSP meter was follow manufacturer's Operation and Service Manual.

3.5 ACTION/LIMIT LEVELS FOR AIR QUALITY

3.5.1 The baseline results form the basis for determining the environmental acceptance criteria for the impact monitoring. Following the guidelines for establishing the Action and Limit Levels for air quality monitoring, the Action and Limit Levels are presented in ***Table 3-3***. Should project-related non-compliance of the environmental quality criteria occur, remedial actions will be triggered according to the Event and Action Plan which is presented in ***Appendix H.***

Table 3-3 Action and Limit Levels for Air Quality Monitoring

Monitoring Station	Action Level (μg /m^3)	Limit Level (μg /m^3)
DM-1	268	500
DM-2	268	500

3.6 AIR QUALITY MONITORING RESULTS

3.6.1 In light of the commencement of non-designated works and preparation of designated work of the Project, the EM&A Programme in relevant sections was initiated on 13th July 2023 to fulfill the contractual and EM&A Manual requirements. The monitoring schedule is presented in ***Appendix I*** and the monitoring results are summarized in the following sub-sections.

3.6.2 In the Reporting Period, 1-hour TSP monitoring were carried out at DM-1 and DM-2 and the monitoring results are summarised in ***Tables 3-4***. The detailed 1-hour TSP monitoring results are provided in ***Appendix J*** and graphical plots of monitoring results are shown in ***Appendix K***.

Table 3-4 Summary of 1-hour TSP Monitoring Results

1-hour TSP (μg/m^3)					
Station ID	**Monitoring Location**	**Average (Range)**	**No. of Event**	**Action Level**	**Limit Level**
DM-1	Shan Ha Tsuen House No. 613F	51 (27 – 85)	15	260	500
DM-2	Village House along Kung Um Road	18 (36 – 64)	15	260	500

3.6.3 In the Reporting Period, all the 1-hour TSP monitoring results were below the Action/Limit Levels and no corrective action was therefore required.

4 CONSTRUCTION NOISE MONITORING

4.1 MONITORING REQUIREMENTS

4.1.1 Construction noise monitoring should be carried out at the designated monitoring station when there are Project-related construction activities being undertaken within a 300m from the monitoring stations. The monitoring frequency should depend on the scale of the construction activities. An initial guide on the monitoring is to obtain one set of 30-minutes measurement at each station between 0700 and 1900 hours on normal weekdays at a frequency of once a week when construction activities are underway.

4.1.2 During normal construction working hour (0700-1900 Monday to Saturday), monitoring of Leq, (30min) noise levels (as six consecutive Leq, (5min) readings) shall be carried out at the agreed monitoring locations once every week. If construction works are extended to include works during the hours of 1900 - 0700, applicable permits under NCO shall be obtained by the Contractor and strictly followed. A schedule on the compliance monitoring shall be submitted to the ER and IEC for approval before the monitoring starts.

4.1.3 In case of non-compliance with the construction noise criteria, more frequent monitoring, as specified in the Event and Action Plan in the following section, shall be carried out. This additional monitoring shall be continued until the recorded noise levels are rectified or proved to be irrelevant to the construction activities.

4.2 MONITORING LOCATIONS

4.2.1 The most representative and affected Noise Sensitive Receivers (NSRs) were selected as monitoring stations. Phasing of the Project has been addressed in the approved EIA report, according to the updated EM&A Manual, CM1a, CM2a, CM3, CM4, CM8a and CM9a are monitoring stations for the First Phase of YLS Development. For planned NSRs CM11, CM12, CM13, CM14 and CM15, they are future developments and not yet constructed and construction noise monitoring shall perform after these NSRs being occupied. The locations of construction noise monitoring stations under YLS First Phase Development are summarized in ***Table 4-1*** and illustrated in ***Appendix E.***

Table 4-1 Construction Noise Monitoring Stations

Monitoring Station ID	Monitoring Location	Description of location	Measurement Point
Existing Noise Sensitive Receivers			
CM1a	Village house in Shan Ha Tsuen	Squatter house near Shan Ha Tsuen Village house no. 354	Façade
CM2a	Village house in Tin Lung Yuen	Village house No. 126E in Tin Lung Yuen	Free field
CM3	Village house in Lung Tin Tsuen	Village house at 66 Kiu Hing Road	Façade
CM4	Village house in Tin Liu Tsuen	Village house in Tin Liu Tsuen - Kam Fong Yuen	Façade
CM8a	Village House in Eldorado	Village House in Sha Tseng Tsuen (lot no. DD1211462A)	Free field
CM9a	Village house in Pak Sha Tsuen	Village house No. 12 of Pak Sha Tsuen	Free field
Planned Noise Sensitive Receivers			
CM11	Public housing	No measurement before occupation of planned receivers (by other contract)	No measurement was conducted
CM12	Public housing		
CM13	Village rehousing		
CM14	Public housing		
CM15	Planned primary school (opposite to Pak Sha Tsuen)		

4.3 MONITORING EQUIPMENT

4.3.1 As referred to in the Technical Memorandum (TM) issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and

804: 1985 (Type 1) specifications were used for carrying out the noise monitoring. Sound level meter shall be checked by an acoustic calibrator. Wind speed shall be checked with a portable wind speed meter which is capable of measuring the wind speeds in m/s.

4.3.2 Noise monitoring equipment used for impact monitoring is listed in ***Table 4-2***. The copies of calibration certificates of noise monitoring equipment were shown in ***Appendix F2***.

Table 4-2 Noise Monitoring Equipment

Equipment	Model	Serial No.
Integrating Sound Level Meter	Rion NC-31	00410221
	Rion NL-52A	00620665
	Rion NL-52A	00620666
Calibrator	Rion NC-73	10655561
	Rion NC-75	34680623

4.4 MONITORING PROCEDURES

4.4.1 Immediately prior to and following each noise measurement, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements would be accepted as valid only if the calibration level from before and after the noise measurement agrees to within 1.0 dB.

4.4.2 During the monitoring, the microphone of the sound level meter was normally set at a height of about 1.2m subject to site condition and oriented pointed to the site, with the microphone facing perpendicular to the line of sight. Where there a building façade, monitoring was conducted 1 m from the exterior of the building façade. For free field measurement, the microphone was positioned away from any reflective surface, and a correction of +3 dB(A) has been made for the free field measurements.

4.4.3 Noise measurements were taken in terms of the A-weighted equivalent sound pressure level (L_{eq}) measured in decibels dB(A). All noise measurements were performed with the meter set to FAST response and on the A-weighted equivalent continuous sound pressure level (L_{eq}). $L_{eq(30min)}$ in six consecutive $L_{eq(5min)}$ measurements were used as the monitoring parameter for the time period between 0700-1900 hours on normal weekdays. As supplementary information for data auditing, statistical results such as A-weighted levels L_{10} and L_{90} shall also be obtained for reference.

4.4.4 After the monitoring, all the monitoring data stored in the sound level meter system were downloaded through the computer software, and all these data were checked and reviewed on computer.

4.5 ACTION AND LIMIT LEVELS FOR CONSTRUCTION NOISE

4.5.1 Following the guidelines for establishing the Action and Limit Levels for construction noise monitoring, the Action and Limit Levels are presented in ***Table 4-3***. Should project-related non-compliance of the environmental quality criteria occur, remedial actions will be triggered according to the Event and Action Plan which is presented in ***Appendix H.***

Table 4-3 Action and Limit Levels for Construction Noise

Monitoring Station ID	Time Period(1)	Action Level	Limit Level
CM1a, CM2a, CM3, CM4, CM8a and CM9a, CM11, CM12, CM13, CM14 & CM15	0700 – 1900 hours on normal weekdays	When one documented complaint is received at anytime during the construction period	75 dB(A)(2)

Notes:

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

(2) 70 dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

4.6 NOISE MONITORING RESULTS

4.6.1 In light of the commencement of non-designated works under the Project, the EM&A Programme in relevant sections was initiated on 13th July 2023 to fulfill the contractual and EM&A Manual requirements. Construction noise monitoring was carried out at the designated monitoring station when there are project-related construction activities being undertaken within a 300m from the monitoring stations.

4.6.2 In the Reporting Period, ***4*** sessions of noise measurements were carried out at designated monitoring stations CM1a, CM2a, CM3, CM4 and CM8a, which are within a 300m of the project-related construction activities. The noise monitoring results are summarised in ***Table 4-4.*** The detailed noise monitoring data are presented in ***Appendix J*** and the relevant graphical plots are shown in ***Appendix K***.

Table 4-4 Summary of Construction Noise Monitoring Results

Construction Noise Level ($L_{eq30min}$), dB(A)					
Station ID	**Description of location**	**Range**	**No. of Event**	**Action Level**	**Limit Level**
CM1a	Squatter house near Shan Ha Tsuen Village house no. 354	50 – 66	4	When one documented complaint is received at anytime during the construction period	75
CM2a (*)	Village house No. 126E in Tin Lung Yuen	62 – 75	4		75
CM3	Village house at 66 Kiu Hing Road	66 – 75	4		75
CM4	Village house in Tin Liu Tsuen - Kam Fong Yuen	68 – 75	4		75
CM8a (*)	Village House in Sha Tseng Tsuen (lot no. DD1211462A)	56 – 61	4		75

Remarks

(*) *Noise measurements was conducted at free field condition and façade correction (+3 dB(A) was added according to acoustical principles and EPD guidelines*

4.6.3 As shown in ***Table 4-4***, no construction noise measurement results triggered the Limit Level (75 dB(A)) in the Reporting Month. Moreover, no valid noise complaint (which triggered Action Level exceedance) was recorded in the Reporting Period.

5 WATER QUALITY MONITORING

5.1 MONITORING REQUIREMENTS

5.1.1 The impact monitoring shall be conducted during construction period at the monitoring stations for YLS First Phase Development. The purpose of impact monitoring is to ensure the implementation of the recommended mitigation measures, provide effective control of any malpractices, and provide continuous improvements to the environmental conditions. The interval between two sets of monitoring shall not be less than 36 hours. EPD shall also be notified immediately for any changes in schedule.

5.1.2 In general, where the difference in value between the first and second in-situ measurement of DO or turbidity parameters is more than 25% of the value of the first reading, the reading shall be discarded and further readings should be taken.

5.1.3 In case of project-related exceedances of Action and/or Limit Levels, the impact monitoring frequency shall be increased according to the requirement of Event and Action Plan in the following section.

5.1.4 The monitoring frequency and water quality parameters for impact monitoring is summarized in ***Table 5-1***.

Table 5-1 Water Quality Monitoring Programme for Impact Monitoring

Item	Impact Monitoring
Monitoring Period	During construction period
Monitoring Frequency	3 Days in a Week
Monitoring Locations	All stations under YLS First Phase Development
Monitoring Parameters	Dissolved oxygen (DO), dissolved oxygen saturation (DO%), temperature, turbidity, salinity, pH and suspended solids (SS)
Intervals between 2 Sets of Monitoring	Not less than 36 hours

5.2 MONITORING LOCATIONS

5.2.1 According to the geographic locations of Contract 1, Contract 2 and Contract 3 under the First Phase YLS Development, the water quality monitoring locations with the purpose of monitoring are proposed in the updated EM&A Manual. The selection criterion for monitoring locations is based on the separation distance between work boundary of YLS First Phase Development and the river / stream. The water monitoring stations in respective with Contract 1, Contract 2 and Contract 3 are summarized in ***Table 5-2, Table 5-3*** and ***Table 5-4.*** Monitoring stations with work boundary of Contracts 1, 2 and 3 are illustrated in ***Appendix E.***

Table 5-2 Locations of Water Quality Monitoring Stations for Impact Monitoring for Contract 1

WSR	Monitoring Station ID	Description	Co-ordinates	
			Easting	Northing
S01 (Yuen Long Nullah)	M2a	Upstream station of Contract 1	820133	832282
	M3	Impact monitoring of Contract 1	820688	833127

Table 5-3 Locations of Water Quality Monitoring Stations for Impact Monitoring for Contract 2

WSR	Monitoring Station ID	Description	Co-ordinates	
			Easting	Northing
S01 (Yuen Long Nullah)	U2a	Upstream of Contract 2	820303	830757
	U1(b)	Upstream of Contract 2	820120	831191
	U3	Upstream of Contract 2	820872	832455
	U4a	Upstream of Contract 2	821366	832458
	M1a	Gradient monitoring of Contract 2	820476	832295
	M2a	Gradient monitoring of Contract 2	820133	832282

WSR	Monitoring Station ID	Description	Co-ordinates	
			Easting	Northing
	M3	Impact monitoring of Contract 2	820688	833127
	M4	Impact monitoring of Contract 2	820910	833138
S05 (EIS)	EIS-1a	Impact monitoring of Contract 2	820341	830555

Table 5-4 Locations of Water Quality Monitoring Stations for Impact Monitoring for Contract 3

WSR	Monitoring Station ID	Description	Co-ordinates	
			Easting	Northing
S02 (near TYST)	M5a	Upstream monitoring of Contract 3	819327	832535
S03 (near Windsor Garden)	M6a	Upstream monitoring of Contract 3	819335	832170
S02/S03 (near TYST & Windsor Garden)	D2a	Impact monitoring of Contract 3	819867	833939
S17 (Along Kiu Hung Road)	M7a	Upstream monitoring of Contract 3	818761	832798
	D5a	Impact monitoring of Contract 3	818484	833362

5.2.2 If the water level of a monitoring station is too shallow when sampling, sediment would be disturbed which affecting the accuracy of water quality monitoring. In order to avoid disturbing sediment, depth limits should be set up for the water sampling for the ease of reference. When the measured water depth of the monitoring station (both control and impact stations) is lower than 150mm, water monitoring would not be to perform at that monitoring location. Instead, the monitoring location will be moved to a temporary alternative location monitoring location based on the criteria below:-

(a) the alternative location should be either upstream or downstream of the original location and at the same the river/drain channel
(b) the alternative location should be within 15m far from the original location
(c) if no suitable alternative location could be found within 15m far from the original location, the sampling at that location will be cancelled since sampling at too far from the designated location could not make a representative sample.

5.3 MONITORING EQUIPMENT

Positioning of Monitoring Locations

5.3.1 A digital Global Positioning System (GPS) was used during water monitoring to ensure the monitoring vessel is at the correct location when taking measurement and samples.

Dissolved Oxygen, Dissolved Oxygen Saturation, Temperature, Turbidity, Salinity and pH value

5.3.2 The *YSI Professional DSS Multiparameter Sampling Instrument* was used for water in-situ measures, which automates the measurements and data logging of temperature, dissolved oxygen, dissolved oxygen saturation, turbidity, pH and salinity simultaneously.

Water Depth Detector

5.3.3 Measures tape was used for water depths determination at each designated monitoring station throughout the monitoring programme.

Water Sampling Equipment

5.3.4 Water sample collection was directly from water surface use sampling plastic bottle or sampling bucket to avoid inclusion of bottom sediment or humus. Teflon/stainless steel bailer maybe used for water sampling. The use of water sampling equipment depends on the depths of sampling locations.

Sample Containers and Storage

5.3.5 Water samples for SS should be stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen) and shipment to the testing laboratory. The samples shall be delivered to the laboratory within 24 hours of collection and be analysed as soon as possible after collection.

Calibration

5.3.6 The YSI Professional DSS Multiparameter Sampling Instrument was certified by a laboratory accredited under HOKLAS or any other international accreditation scheme, and subsequently re-calibrated at quarterly basis throughout all stages of the water quality monitoring. Responses of sensors and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring station.

Back-up Equipment

5.3.7 Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, malfunction, etc.

5.3.8 Water quality monitoring equipment used for the impact monitoring are listed in ***Table 5-5***. All in-situ measurement equipment were calibrated by HOKLAS accredited laboratory of three-month interval. Copies of calibration certificates for water quality monitoring equipment are shown in ***Appendix F3***.

Table 5-5 Water Quality Monitoring Equipment

Equipment	Model	Serial No.
Water Depth Detector	Measure tape	N/A
Thermometer & DO meter	YSI Professional DSS Multiparameter Sampling Instrument	[17B102764/17B100758]/ [EQW019]
pH meter		
Turbidimeter		
Salinometer		
Sample Container	High density polythene bottles (provided by laboratory)	N/A
Storage Container	'Willow' 33-litter plastic cool box with Ice pad	N/A

5.4 MONITORING PROCEDURES

5.4.1 Water quality monitoring was conducted at all designated monitoring locations. In-situ of replicate measurements was undertaken during baseline monitoring; where the difference in value between the first and second in-situ measurement of DO or turbidity parameters is more than 25% of the value of the first reading, the reading was discarded then further readings to be take. Moreover, duplicate sample collection was also conducted from each monitoring location. The sampling and in-situ measurement process are below:

Sampling Procedure

5.4.2 A Digital Global Positioning System (GPS) was used to identify the designated monitoring stations. Prior to water sampling, measure tape was used for the determination of water depth at each station.

5.4.3 Where water depth is allowed, sampling should be conducted at three water depths which are 1m below water surface, mid-depth, and 1m above the river bed. If the sampling water depth is less than 6m, the mid-depth may be omitted. If the water depth is less than 3m, only the mid-depth may be omitted.

5.4.4 During the baseline water quality monitoring, the water depths of all stations were less than 3m, therefore, water samples were collected from 0.1m below water surface or water surface to prevent the river bed sediment for stirring.

5.4.5 The sample container was rinsed with a portion of the water sample. The water sample then was transferred to the high-density polythene bottles as provided by the laboratory, labeled with a unique sample number and sealed with a screw cap.

5.4.6 Before commencement of the sampling, general information such as the date and time of sampling and weather condition as well as the personnel responsible for the monitoring were be recorded on the monitoring field data sheet.

5.4.7 A 'Willow' 33-liter plastic cool box packed with ice was used to preserve the collected water samples prior to arrival at the laboratory for chemical determination. The water temperature of the cool box was maintained at a temperature as close to 4℃ as possible without being frozen. Samples collected were delivered to the laboratory upon collection.

In-situ Measurement

5.4.8 YSI Professional DSS Multiparameter Sampling Instrument was used for water in-situ measures, which automates the measurements and data logging of water temperature, dissolved oxygen & dissolved oxygen saturation, pH unit and salinity. Before each round of monitoring, the instrument was checked in accordance with the manufactory manual instruction to sure it is valid.

5.5 LABORATORY MEASUREMENT / ANALYSIS

5.5.1 Two replicate samples from each independent sampling event are required for the SS analysis. Sufficient water samples shall be collected at the monitoring stations for carrying out the laboratory measurement and analysis. The SS analysis were carried out by a local HOKLAS-accredited laboratory - *ALS Technichem (HK) Pty Ltd* and the HOKLAS-accreditation certificate of the testing laboratory is shown in ***Appendix E4***. The laboratory determination work shall start within 24 hours after collection of the water samples. The analysis for suspended solids is presented in ***Table 5-6***.

Table 5-6 Laboratory Analysis

Parameters	Analytical Method	Reporting Limit
Suspended Solid (SS)	APHA 2540-D	0.5mg/L

Action/Limit Levels for Water Quality for YLS First Phase Development

5.5.2 Following the guidelines for establishing the Action and Limit Levels for water quality monitoring, the Action and Limit Levels for of Contract 1, Contract 2 and Contract 3 under YLS First Phase Development are presented in ***Table 5-7*** to ***Table 5-9***. Should project-related non-compliance of the environmental quality criteria occur, remedial actions will be triggered according to the Event and Action Plan which is presented in ***Appendix H.***

Table 5-7 Action and Limit Levels for Water Quality Monitoring for Contract 1

Water Sensitive Receiver (WSR)	Impact Monitoring Location	Parameter						Upstream / Control Station
		DO (mg/L)		Turbidity (NTU)		Suspended Solids (mg/L)		
		Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	
S01	@M2a	6.4	6.3	8.4	8.5	8.7	8.8	N/A
	*M3	3.0	2.9	20.5	22.6	30.2	30.3	N/A
Remarks @ Gradient Monitoring Location * Impact Monitoring Location								

Table 5-8 Action and Limit Levels for Water Quality Monitoring for Contract 2

Water Sensitive Receiver	Gradient / Impact Monitoring	Parameter			Upstream / Control Station as
		DO (mg/L)	Turbidity (NTU)	Suspended Solids (mg/L)	

(WSR)	Location	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	related WSR
S01	@M1a	1.3	1.2	106.9	131.6	242.5	273.5	U1b & U2a
	@M2a	6.4	6.3	8.4	8.5	8.7	8.8	N/A
	*M3	3.0	2.9	20.5	22.6	30.2	30.3	U1b & U2a
	*M4	6.1	6.0	30.9	35.9	18.6	20.1	U3 &U4a
S05	*EIS-1a	5.4	5.4	18.9	19.2	25.8	31.9	N/A
Remarks @ Gradient Monitoring Location * Impact Monitoring Location								

Table 5-9 Action and Limit Levels for Water Quality Monitoring for Contract 3

Water Sensitive Receiver (WSR)	Gradient / Impact Monitoring Location	Parameter						Upstream / Control Station as related WSR
		DO (mg/L)		Turbidity (NTU)		Suspended Solids (mg/L)		
		Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	
S02/S03	*D2a	6.7	6.7	21.7	22.0	96.1	152.9	M5a & M6a
S17	@M7a	6.1	6.1	12.6	12.7	12.0	13.1	None
	*D5a	5.1	4.9	19.1	19.6	57.1	67.5	
Remarks @ Gradient Monitoring Location * Impact Monitoring Location								

5.6 WATER QUALITY MONITORING RESULTS

5.6.1 In the Reporting Period, a total of **fourteen (14)** days water quality monitoring were conducted at various stations, including M1a, M2a, M3, M4, U3, U4a, M5a, M6a, D2a, M7a and D5a. In view of commencement of work at Yuen Long Nullah, water quality monitoring at U1b, U2a and EIS-1a were commenced on 12 January 2024 and total of **nine (9)** days monitoring were conducted.

5.6.2 The key monitoring parameters including DO, Turbidity and SS are summarised in ***Tables 5-10 to 5-12***. Summary of non-project related exceedances are shown in ***Table 5-13***. Detailed water quality monitoring result are shown in ***Appendix J*** and the relevant graphical plot are shown in ***K I***.

Table 5-10 Water Quality Monitoring Results for Dissolved Oxygen

Monitoring Station	DO (mg/L) Average (range)	Action Level (mg/L)	Limited Level (mg/L)
M1a	3.4 (2.0 – 6.2)	1.3	1.2
M2a	6.6 (6.4 – 7.2)	6.4	6.3
M3	4.3 (3.1 – 6.2)	3.0	2.9
M4	6.6 (6.1 – 8.4)	6.1	6.0
U1b	5.2 (4.1 – 6.6)	No applicable for upstream and control station	
U2a	7.6 (6.2 – 9.6)	No applicable for upstream and control station	
U3	4.9 (3.6 – 6.5)	No applicable for upstream and control station	
U4a	5.1 (3.7 – 6.2)	No applicable for upstream and control station	
EIS-1a	8.2 (7.3 – 9.7)	5.4	5.4
M5a	6.1 (5.4 – 7.3)	No applicable for upstream and control station	
M6a	8.5 (7.6 – 9.6)	No applicable for upstream and control station	
D2a	7.7 (6.7 – 8.6)	6.7	6.7
M7a	7.4 (6.8 – 8.1)	6.1	6.1
D5a	6.8 (5.2 – 8.5)	4.9	5.1

Table 5-11 Water Quality Monitoring Results for Turbidity

Monitoring Station	Turbidity (NTU) Average (range)	Action Level (NTU)	Limit Level (NTU)
M1a	33.8 (3.7 – 215.5)	106.9	131.6
M2a	4.5 (1.8 – 8.2)	8.4	8.5
M3	19.7 (2.4 – 161.3)	20.5	22.6
M4	4.7 (2.0 – 8.2)	30.9	35.9
U1b	53.8 (6.2 – 324.2)	No applicable for upstream and control station	
U2a	3.3 (1.2 – 14.6)	No applicable for upstream and control station	
U3	3.6 (1.1 – 7.8)	No applicable for upstream and control station	
U4a	5.7 (2.9 – 12.4)	No applicable for upstream and control station	
EIS-1a	4.7 (0.7 - 18.7)	18.9	19.2
M5a	11.5 (1.4 – 27.2)	No applicable for upstream and control station	
M6a	2.2 (0.2 – 7.8)	No applicable for upstream and control station	
D2a	12.6 (5.6 - 18.7)	21.7	22.0
M7a	2.8 (0.7 – 8.4)	12.6	12.7
D5a	6.8 (2.5 – 18.0)	19.1	19.6

Table 5-12 Water Quality Monitoring Results for Suspended Solids

Monitoring Station	SS (mg/L) Average (range)	Action Level (mg/L)	Limited Level (mg/L)
M1a	56.9 (8.5 – 389.5)	242.5	273.5
M2a	5.8 (3.4 – 8.3)	8.7	8.8
M3	38.7 (3.8 – 357.5)	30.2	30.3
M4	10.5 (5.9 – 17.6)	18.6	20.1
U1b	106.1 (13.8 – 653.5)	No applicable for upstream and control station	
U2a	8.6 (3.2 – 34.3)	No applicable for upstream and control station	
U3	7.2 (5.1 – 13.4)	No applicable for upstream and control station	
U4a	11.5 (6.5 – 15.9)	No applicable for upstream and control station	
EIS-1a	10.8 (2.5 – 25.5)	25.8	31.9
M5a	53.1 (10.5 – 151.5)	No applicable for upstream and control station	
M6a	6.3 (1.2 – 31.9)	No applicable for upstream and control station	
D2a	25.9 (13.0 – 43.3)	96.1	152.9
M7a	5.7 (2.3 – 10.4)	12.0	13.1
D5a	13.8 (3.2 – 35.6)	57.1	67.5

5.6.3 In this Reporting Period, 4 Limit Level exceedance of water quality monitoring were recorded. The summary of water quality monitoring exceedance recorded in the Reporting Period are shown in ***Table 5-13***. Investigation results of the exceedance are shown in ***Table 5-14.***

Table 5-13 Summary of Water Quality Monitoring Exceedance Recorded in the Reporting Period

Location	Dissolved Oxygen		Turbidity		Suspended Solids		Non-project related Exceedance		Project Related Exceedance	
	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
M1a	0	0	0	**1**	0	**1**	0	**2**	0	0
M2a	0	0	0	0	0	0	0	0	0	0
M3	0	0	0	**1**	0	**1**	0	**2**	0	0
M4	0	0	0	0	0	0	0	0	0	0
D2a	0	0	0	0	0	0	0	0	0	0

Location	Dissolved Oxygen		Turbidity		Suspended Solids		Non-project related Exceedance		Project Related Exceedance	
	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
No of Exceedance	0	0	0	**2**	0	**2**	0	**4**	0	0

Table 5-14 Summary of Investigation Result for Water Quality Monitoring Exceedance

Date	Station	Parameter	Exceedance	Investigation	Action
8 Jan 2024	M1a	Turbidity and Suspended Solids	Limit Level	Turbid water was observed flowing from upstream of work area and reaching M1a and there was no construction work carried out in the respective section of nullah, and no discharge made from construction sites associated with the Project. It is concluded that the exceedances were not related to the works under the Project.	Since the exceedances were non-project related, increase monitoring frequency according to the requirement of Event and Action Plan is not required, and corrective action is not required.
19 Jan 2024	M3	Turbidity and Suspended Solids	Limit Level	Contractor of C2 advised that no pre-drill works were conducted between monitoring M1a and M3 on 19 Jan 2024, but preparation works for temporary deck was conducted. Mitigation measures such as the sandbag barrier, steel plate cover along the active work areas were in place and no muddy runoff into the Yuen Long Nullah is observed. It is concluded that the exceedances were not related to the works under the Project.	Repeat measurement of in-situ parameter turbidity was conducted on 20 January 2024 and no exceedance was recorded. As the exceedances were concluded as non-Project related, corrective action is not required.

6 ECOLOGY MONITORING

6.1 REQUIREMENTS

6.1.1 As required under Section 8.3 of the updated EM&A Manual, wherever applicable, the implementation of the mitigation measures applicable to the three Contracts of the First Phase Development of the Project shall be audited regularly during the construction phase, the establishment phase of the mitigation measures and/or the early (the first 12 months of) operation phase of the Project.

Monitoring of Transplantation of Flora Species of Conservation Importance

6.1.2 Prior to commencement of construction works, an updated baseline survey was conducted by a qualified botanist/ plant ecologist within the proposed works area(s) to identify and update the conditions of any flora species of conservation importance. A Baseline Vegetation Survey and Transplantation Proposal would been prepared to confirm the locations, quantities and conditions of any identified flora species of conservation importance within the works area(s), and proposed methodology and receptor site(s) to transplant any of these specimens that are to be affected by the construction works.

6.1.3 Based on the result of the Vegetation Survey, flora species of conservation importance was not recorded within the works area(s). There would be no transplantation of flora species of conservation importance, and relevant monitoring is not required for the Project.

Monitoring of Mitigation Measures on Affected Aquatic Fauna of Conservation Importance

6.1.4 A baseline survey shall be conducted in all affected watercourses by a qualified ecologist of relevant experience to confirm the presence, relative abundance, and distribution of any aquatic species of conservation importance prior to any commencement of works which would lead to watercourse loss. A translocation programme shall be designed and developed with relevant authorities to translocate any affected aquatic fauna species of conservation importance. Capture and translocation of species to suitable permanent receptor site(s) (e.g. the retained natural watercourses in PDA or the recreated watercourse) or a holding area shall be conducted by a suitably qualified ecologist before the commencement of any construction works.

6.1.5 In view of commencement of preparation work at Yuen Long Nullah, baseline survey for the presence of aquatic species of conservation importance was conducted at the affected sections of the Nullah by the qualified ecologist of ET on 24th November 2023. There were no aquatic species of conservation importance found and recorded. The relevant baseline report will be submitted separately. In the Reporting Period, only preparation work was conducted at Yuen Long Nullah and no works would lead to watercourse.

6.1.6 Another baseline survey would be conducted for commencement of works which would lead to watercourse loss for other section of works.

Monitoring of Mitigation Measures to Minimize Disturbance Impacts to Tai Tong (Pak Sha Tsuen) Egretry

6.1.7 Prior to commencement of construction activities, a baseline egretry survey was conducted during the breeding season to confirm the location of egretry, evidence of egretry occupation and number of breeding pairs. Based on the survey result, no egretry was found within 250m of the project boundary. Therefore, the relevant monitoring and flight-line surveys was not required in the Reporting Period.

7 LANDSCAPE AND VISUAL MONITORING

7.1 MONITORING REQUIREMENTS

7.1.1 The EIA has recommended EM&A for landscape and visual mitigation measures to be undertaken during the design, construction and operational stages of the project. The design, implementation and maintenance of landscape mitigation measures is a key aspect and should be checked to ensure that they are fully realised and that potential conflicts between the proposed landscape measures and any other project works and operational requirements are resolved at the earliest possible date and without compromise to the intention of the mitigation measures. In addition, implementation of the mitigation measures recommended by the EIA will be monitored through the site audit programme.

7.2 MITIGATION MEASURES

7.2.1 The Landscape and Visual Assessment of the EIA proposes a number of mitigation measures to ameliorate the landscape and visual impacts of the Project. These measures are listed in table below and implementation is summarised in the EMIS.

Table 7-1 Proposed Mitigation Measures for Landscape and Visual Impacts

Mitigation Measure Code	Summary Description	Mitigate Landscape Impacts	Mitigate Visual Impacts	Related to Contract
Construction Phase				
CM1	Optimisation of Construction Areas and Providing Temporary Landscape on Temporary Construction	√	√	C1, C2, C3
CM2	Minimise Topographical Changes	√	√	C1, C2, C3
CM3	Tree Protection and Preservation	√		C1, C2, C3
CM4	Transplanting of Existing Trees	√		C1, C2, C3
CM5	Screen Hording		√	C1, C2, C3
CM6	Watercourses of higher ecological value / Channels Protection	√		C2, C3
CM7	Construction Light Control		√	C1, C2, C3
CM8	Woodland Conservation	√		Not related to YLS First Phase

7.2.2 Mitigation measures to be implemented during construction should be adopted from the start of construction and be in place throughout the entire construction period. Tree transplantation, preservation of Potentially Registerable Old and Valuable Trees (POVTs), Rare and Protective Vegetation, and compensatory planting should be carried out as early as possible in the Project with transplantation carried out prior to construction starting in any particular area.

7.3 AUDIT REQUIREMENT

7.3.1 Site audits should be undertaken during the construction phase of the Project to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. Site inspections should be undertaken by the ET at least once every two weeks during the construction period. In addition, as the Project contains various Schedule 2 DPs, site inspection program for these DPs shall make reference to the project details and works progress to schedule the inspection works. Particularly audits should be carried out during site clearance when proposed tree retain, tree felling, and transplantation may occur.

7.4 AUDIT RESULT

7.4.1 Bi-weekly inspection of landscape and visual impact and mitigation measures were conducted by ET during the weekly site inspection. It was observed that six individual trees under Contract 2 transplanted to the nursery site were in fair condition. For Contract 3, the nursery site for transplanted tree were properly maintained by the Contractor, and the transplanted trees were in fair health condition.

8 WASTE MANAGEMENT

8.1 GENERAL WASTE MANAGEMENT

8.1.1 Waste management was carried out in accordance with the Waste Management Plan for the Contract.

8.2 RECORDS OF WASTE QUANTITIES

8.2.1 All types of waste arising from the construction work are broadly classified into the following:

- Insert construction & demolition (C&D) Material; and
- C&D waste

8.2.2 The Contractors are advised to minimise the wastes generated through recycling or reusing. All mitigation measures stipulated in the Updated EM&A Manual and waste management plans shall be fully implemented.

8.2.3 The quantities of waste for disposal under Contract 1 and Contract 2 in this Reporting Period are summarized in ***Tables 8-1*** and ***8-2*** and they are made reference to the Waste Flow Table provide by the Contractors which shown in ***Appendix L***.

Table 8-1 Summary of Quantities of Inert C&D Materials

Type of Waste	Contract 1		Contract 2		Contract 3	
	Quantity (tonnes)	Disposal Location	Quantity (tonnes)	Disposal Location	Quantity (in '000m^3)	Disposal Location
Total generated C&D Materials (Inert)	0	--	0	--	0	--
Reused in this Contract (Inert)	0	--	0	--	0	--
Reused in other Projects (Inert)	0	--	0	--	0	--
Disposal as Public Fill (Inert)	TBA	Tuen Mun Area 38	2619.76	Tuen Mun Area 38	1.677	Tuen Mun Area 38

Table 8-2 Summary of Quantities of C&D Wastes

Type of Waste	Contract 1		Contract 2		Contract 3	
	Quantity (tonnes)	Disposal Location	Quantity (tonnes)	Disposal Location	Quantity (in '000kg / '000m^3)	Disposal Location
Recycled Metal	0	--	0	--	0	--
Recycled Paper / Cardboard Packing	0	--	0	--	0	--
Recycled Plastic	0	--	0	--	0	--
Chemical Wastes	0	--	0	--	0	--
General Refuses	TBA	WENT	141.54	WENT	0.481	WENT

9 SITE INSPECTION

9.1 REQUIREMENTS

9.1.1 According to the updated EM&A Manual, the programme of environmental site inspection shall be formulation by ET Leader. Weekly environmental site inspections were carried out to confirm the environmental performance.

9.2 FINDINGS / DEFICIENCIES DURING THE REPORTING PERIOD

Contract 1

9.2.1 In the Reporting Period, joint site inspections to evaluate the site environmental performance for Contract 1 were carried out by the representatives of the RE, ET and the Contractor on **4th, 11th, 19th, 24th and 31st January 2024**. No non-compliance was noted.

9.2.2 The findings / deficiencies observed for ***Contract 1*** during the weekly site inspection are listed in ***Table 9-1***.

Table 9-1 Site Inspection and Observations for Contract 1

Date	Findings / Deficiencies	Follow-Up Status
4th Jan 2024	• The Contractor was reminded to remove stagnant water regularly. • The Contractor was reminded to pay special attention on dust control to reduce dust generation.	• Reminder only. • Reminder only.
11th Jan 2024	• The Contractor should provide acoustic mat for breaker to reduce noise impact. (Portion 1A) • The Contractor was reminded to spray water regularly to reduce dust impact.	• The breaker was wrapped with acoustic mat. • Reminder only.
19th Jan 2024	No environmental issue was observed during site inspection	N/A
24th Jan 2024	• The Contractor was reminded to ensure all wasterwater generated on site is properly treated prior discharge.	• Reminder only.
31st Jan 2024	• The Contractor should remove stagnant water regularly. (Portion 3A) • The Contractor was reminded to spray water at haul road to reduce dust impact. • The Contractor was reminded to provide garbage skip.	• The stangnet waer was removed. • Reminder only. • Reminder only.

Contract 2

9.2.3 In the Reporting Period, joint site inspections to evaluate the site environmental performance for Contract 1 were carried out by the representatives of the RE, ET and the Contractor on **3rd, 10th, 17th, 26th and 31st January 2024**. No non-compliance was noted.

9.2.4 The findings / deficiencies observed for ***Contract 2*** during the weekly site inspection are listed in ***Table 9-2***.

Table 9-2 Site Inspection and Observations for Contract 2

Date	Findings / Deficiencies	Follow-Up Status
3rd Jan 2024	• The Contractor was reminded to spray water at haul road regularly to minimise dust impact.	• Reminder only.
10th Jan 2024	• Broken sand bag barrier along the Nullah was observed, the Contractor should repair the broken sand bags regularly.	• Sand bags have been repaired.

Date	Findings / Deficiencies	Follow-Up Status
	• The Contractor was reminded to implement noise mitigaiton measures to reduce noise impact during sheetpiling work.	• Reminder only.
17th Jan 2024	• The Contractor should provide mitigation measures to reduce dust impact. (WD6)	• Dusty materials are removed properly.
26th Jan 2024	The Contractor should repair the broken sand bags along the edge of the work area of Nullah regularly. (TD02) • The seepage of wastewater along the waterfilled barrier should be cleared. (Portion 11)	• Broken sandbag were removed, and replaced by new geotextile no driectly discharge from site. (TD02) • The seepage has been cleared. (Portion 11)
31st Jan 2024	• The Contractor should replace new NRMM label for air compressor. (DC01) • The Contractor should provide noise acoustic mat for breaker to reduce noise impact. (TD02)	• The NRMM has been replaced. (DC01) • Noise acoustic mat was provided and wrapped the breaker to reduce noise impact.

9.2.5 General housekeeping such as site tidiness and cleanliness should be maintained for all works areas. Furthermore, the Contractor was reminded to implement the Waste Management Plan of the Contracts.

Contract 3

9.2.6 In the Reporting Period, joint site inspections to evaluate the site environmental performance for Contract 1 were carried out by the representatives of the RE, ET and the Contractor on **4th, 11th, 18th, 25th and 30th January 2024**. No non-compliance was noted.

9.2.7 The findings / deficiencies observed for ***Contract 3*** during the weekly site inspection are listed in ***Table 9-3***.

Table 9-3 Site Inspection and Observations for Contract 3

Date	Findings / Deficiencies	Follow-Up Status
4th Jan 2024	• The Contractor should dispose chemical containers properly and clean the oil stain. (Portion 1) • The Contractor should clean muddy water and dead leave in drain to prevent blockage. (Portion 1)	• The chemical containers were stored with drip tray. • Muddy water and dead leave was cleaned.
11th Jan 2024	• The Contractor should remove stagnant water regularly. (Portion 6A) • The Contractor should remove muddy water in drain to prevent run out of site. (Portion 1)	• Stagnant water at Portion 6A was removed. • Muddy water was cleaned and sandbags were placed to prevent muddy water run out of the site.
18th Jan 2024	• The Contractor should remove or place chemical containers inside drip tray. (Portion 7B)	• The chemical containers were removed.
25th Jan 2024	• The Contractor should dispose chemical containers properly. • The Contractor should clean oil stain to enhance house-keeping. (Portion 1A)	• The chemical container was removed. • Regular road clearance

Date	Findings / Deficiencies	Follow-Up Status
		was carried out.
30th Jan 2024	• Wheel washing shoul be carried out within the construction site to prevent wastewater from flowing on adjancet public road. (Portion 6A) • On-site construction waste sorting should carried out properly. (Portion 6A)	• Wheel washing was carried out within site area. • The construction waste was sorted and removed properly.

9.2.8 General housekeeping such as site tidiness and cleanliness should be maintained for all works areas. Furthermore, the Contractor was reminded to implement the Waste Management Plan of the Contracts.

10 ENVIRONMENTAL COMPLAINTS AND NON-COMPLIANCES

10.1 ENVIRONMENTAL COMPLAINTS, SUMMONS AND PROSECUTIONS

10.1.1 There was no environmental complaint, prosecution or notification of summons received in the Reporting Period.

10.1.2 The statistical summary table of the environmental complaints, summons and prosecutions are presented in ***Tables 10-1, 10-2*** and ***10-3***. Detailed complaint log for the Contract is presented in ***Appendix M***.

Table 10-1 Statistical Summary of Environmental Complaints

Reporting Period	Contract No	Environmental Complaint Statistics		
		Frequency	Cumulative	Complaint Nature
13th – 31st December 2023	Contract 1	0	0	NA
January 2024	Contract 1	0		NA
13th – 31st December 2023	Contract 2	0	0	NA
January 2024	Contract 2	0		NA
13th – 31st December 2023	Contract 3	0	0	NA
January 2024	Contract 3	0		NA

Table 10-2 Statistical Summary of Environmental Summons

Reporting Period	Contract No	Environmental Summons Statistics		
		Frequency	Cumulative	Complaint Nature
13th – 31st December 2023	Contract 1	0	0	NA
January 2024	Contract 1	0		NA
13th – 31st December 2023	Contract 2	0	0	NA
January 2024	Contract 2	0		NA
13th – 31st December 2023	Contract 3	0	0	NA
January 2024	Contract 3	0		NA

Table 10-3 Statistical Summary of Environmental Prosecution

Reporting Period	Contract No	Environmental Prosecution Statistics		
		Frequency	Cumulative	Complaint Nature
13th – 31st December 2023	Contract 1	0	0	NA
January 2024	Contract 1	0		NA
13th – 31st December 2023	Contract 2	0	0	NA
January 2024	Contract 2	0		NA
13th – 31st December 2023	Contract 3	0	0	NA
January 2024	Contract 3	0		NA

10.2 OTHER ENVIRONMENTAL NON-COMPLIANCES

10.2.1 In addition, no emergency events related to violation of environmental legislation for illegal dumping and landfilling were received in the Reporting Period.

11 IMPLEMENTATION STATUS OF MITIGATION MEASURES

11.1 GENERAL REQUIREMENTS

11.1.1 The environmental mitigation measures that recommended in the ISEMM in the EM&A Manual covered the issues of dust, noise, water and waste and they are summarised presented in ***Appendix N.***

11.1.2 The Contract Works under the Project shall be implementing the required environmental mitigation measures according to the EM&A Manual as subject to the site condition. Environmental mitigation measures generally implemented by the Contractor and the implementation status are shown in ***Appendix N***.

11.2 TENTATIVE CONSTRUCTION ACTIVITIES IN THE COMING MONTH

11.2.1 According to information provided by the Contractor, the construction works under the Contract in the coming month are listed below:

Table 11-1 Summary of Construction Activities in the next Reporting Period

Contract No.	Construction Activities undertaken in next Reporting Period	
	Non-designated work	**Designated work**
YL/2021/03 (Contract 1)	• Demolition works • Ground Investigation • Site Hoarding • Site Clearance • Site Formation • Construction of drainage system • Piling works	N/A
YL/2021/04 (Contract 2)	Portion 14,15, 5B: • Site clearance Portion 11: • Import rock fill • Trial TAM Grout and TAM grouting Portion 1A,11A: • Soil excavation • ELS construction for CUT	Along Nullah: (EP: EP-553/2018/A) • Road Set back works (including site clearance) • Temporary decking installation • H-pile installation Portion 5B: (EP: EP-549/2018) • Site clearance
YL/2022/01 (Contract 3)	• Site Clearance • GI Works • Tree Felling • Demolition • Decontamination • ELS for Box Culvert BC01 • Trial Pile TP1 and TP3 • Trial Pile for Pre-bored H Pile • Site Formation Works in Portion 5B, 5C • Rebar Fixing and Concreting for Retaining Wall RW30 in Portion 6A • Rockfill for Retaining Wall RW30 in Portion 6A	EP-548/2018/A • Nil EP-549/2018 • Nil EP-550/2018/A • Nil EP-551/2018/A • Nil

11.3 KEY ISSUES FOR THE COMING MONTH

11.3.1 Key issues for the coming month include the following:

- Implementation of control measures for rainstorm;
- Regular clearance of stagnant water;

- Implementation of dust suppression measures at all times;
- Potential wastewater quality impact due to surface runoff;
- Potential fugitive dust quality impact due from the dry/loose/exposure soil surface/dusty material;
- Disposal of empty engine oil containers within site area;
- Ensure dust suppression measures are implemented properly;
- Sediment catch-pits and silt removal facilities should be regularly maintained;
- Management of chemical wastes;
- Discharge of site effluent to the nearby wetland, stockpiling or disposal of materials, and any dredging or construction area at this area are prohibited;
- Follow-up of improvement on general waste management issues; and
- Implementation of construction noise preventative control measures.

12 CONCLUSIONS AND RECOMMENDATIONS

12.1 CONCLUSIONS

12.1.1 This is the Monthly EM&A Report presenting the monitoring results and inspection findings for the Project, for the Reporting Period from **1st to 31st January 2024.**

12.1.2 No 1-hour TSP of air quality monitoring result that triggered the Action or Limit Levels was recorded. No corrective action was required.

12.1.3 In this Reporting Period, no noise complaint (which is an Action Level exceedance) was received and no construction noise measurement result triggered the Limit Level was recorded in this Reporting Month. No corrective action was issued.

12.1.4 In this Reporting Period, 4 Limit Level exceedances recorded for water quality monitoring. Once the exceedances detected by ET, notification were issued to ER, Contractor and IEC with preliminary investigation and on-site observation. The Contractor subsequently carried out detailed investigation and identified the source of impact. The investigation results of exceedances revealed the exceedances on 8 Jan 2024 were likely due to the turbid water from upstream of the project and not project related. For the exceedances on 19 Jan 2024, preparation works for temporary deck was conducted at the respective section of Nullah, in view of the work nature, there was no wastewater generated. With the implementation of water mitigation measures, the exceedances 19 Jan 2024 were unlikely related to Project related. The investigation results have been agreed by the RE via email communication. The Contractor was reminded to fully implement the water quality mitigation measure as far as practicable during the forthcoming construction work in the Nullah.

12.1.5 Bi-weekly inspection of landscape and visual impact and mitigation measures were conducted by ET during the weekly site inspection. It was observed that six individual trees under Contract 2 transplanted to the nursery site were in fair condition. For Contract 3, the nursery site for transplanted tree were properly maintained by the Contractor, and the transplanted trees were in fair health condition.

12.1.6 In the Reporting Month, no environmental complaint, summons and prosecution was received. In addition, no emergency events related to violation of environmental legislation for illegal dumping and landfilling were received.

12.1.7 In the Reporting Period, weekly joint site inspection to evaluate the site environmental performance had been carried out by the representatives of the Consultants, ET and the respective Contractor of Contract 1, Contract 2 and Contract 3. No non-compliance was noted during the site inspection.

12.2 RECOMMENDATIONS

12.2.1 The Contractor should pay special attention on the water quality mitigation measures and fully implement according to the ISEMM of the EM&A Manual, in particular to prevent surface runoff with high SS content and other pollutants from flowing to stream. All effluent discharge shall be ensure to fulfill Technical Memorandum of Effluent Discharged into Drainage and Sewerage Systems, inland and Coastal Waters criteria or discharge permits stipulation.

12.2.2 Construction noise would be a key environmental issue during construction work of the Project. Noise mitigation measures such as using quiet plants and/ or using movable temporary noise barriers should be implemented as stipulated under EM&A Manual to ensure construction noise impacts at the NSRs comply with the noise criteria.

12.2.3 Since the Works Contract located adjacent to villages, potential construction dust impact should be minimised. The Contractor should fully implement the air quality mitigation measures to reduce construction dust emission as far as practicable.

12.2.4 All other mitigation measures recommended in the ISEMM of the EM&A Manual should be properly implemented and maintained as far as practicable.

Appendix A

General layout of YLS First Phase Development

位置圖
LOCATION PLAN

元朗
YUEN LONG

KAI SHAN

CHU WONG LING

Tsing Tsuen Tsing Temple

元朗
YUEN LONG

唐人新村交匯處
TONG YAN SAN TSUEN INTERCHANGE

十八鄉路
SHAP PAT HEUNG ROAD

元朗公路
YUEN LONG HIGHWAY

擬議鄉村遷置區用地一
PROPOSED VILLAGE RESITE 1

擬議鄉村遷置區用地二
PROPOSED VILLAGE RESITE 2

朗達路
LONG HON ROAD

擬議公共休憩用地
PROPOSED PUBLIC OPEN SPACE SITE

擬議公營房屋用地
PROPOSED PUBLIC HOUSING SITE

LAM TAI EAST ROAD

KUNG UM ROAD

KIU HING ROAD

黃泥墩村路
WONG NAI TUN TSUEN ROAD

圖例 LEGEND

Contract No. YL/2021/03 (Contract 1)

Contract No. YL/2021/04 (Contract 2)

Contract No. YL/2022/01 (Contract 3)

CONSTRUCTION CONTRACTS UNDER YUEN LONG SOUTH FIRST PHASE DEVELOPMENT

R:\Drawing-WDOST-Z\WDOST-Z0327\WDOST-Z0327.dgn

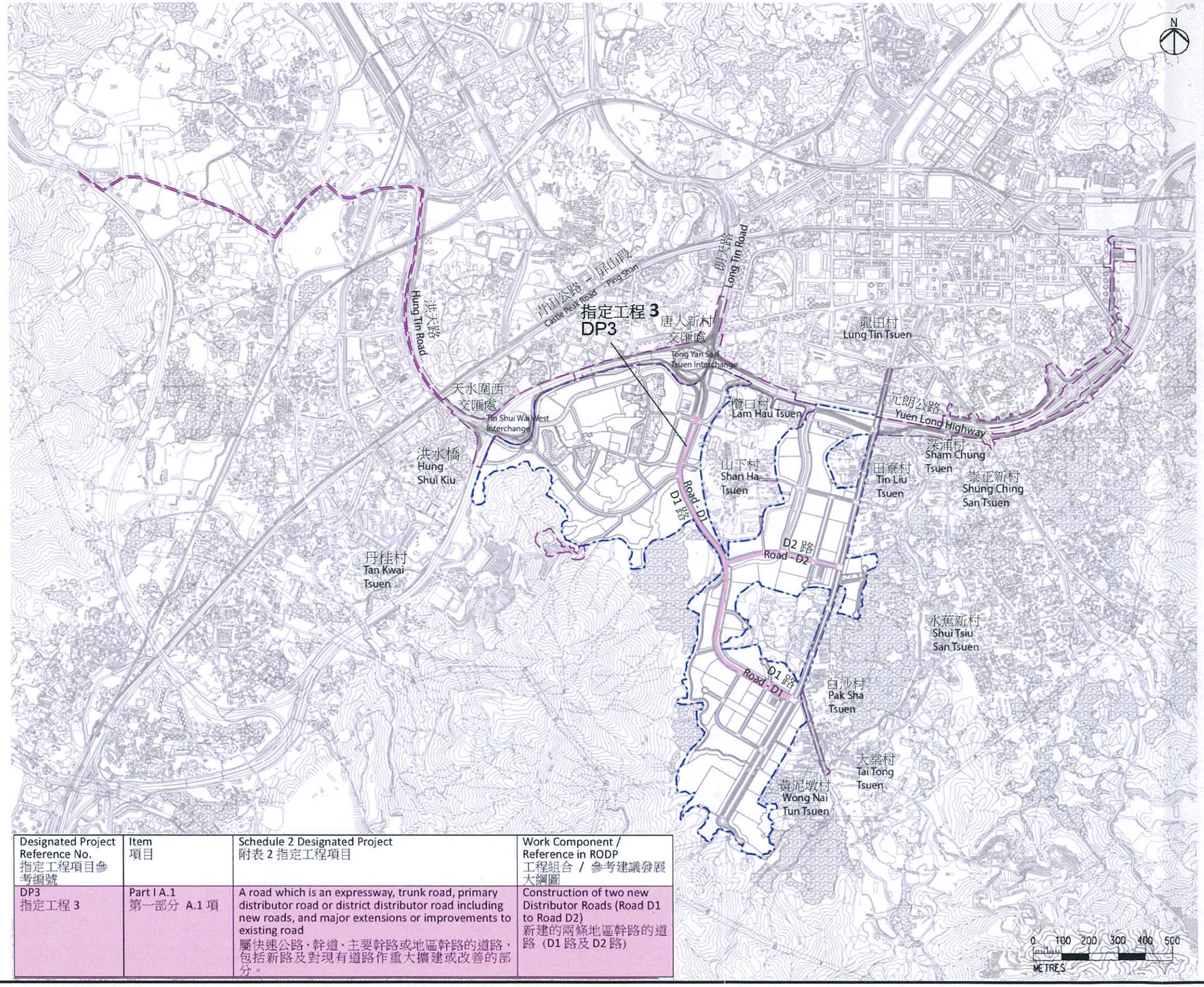
28/04/2022

A3 297mm x 420mm

Appendix B

Schedule 2 Designated Projects

under YLS First Phase Development

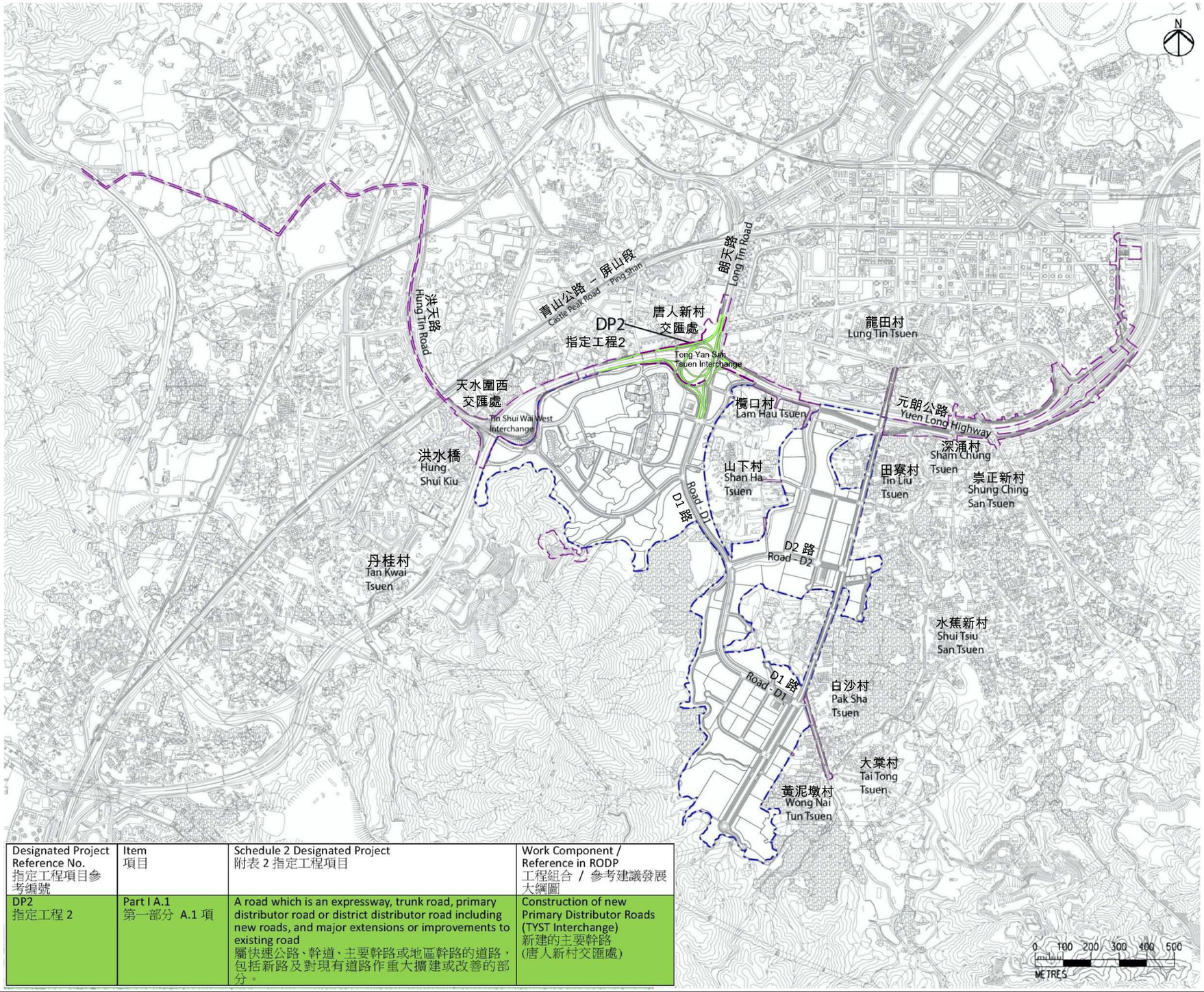


Designated Project Reference No. 指定工程項目參考編號	Item 項目	Schedule 2 Designated Project 附表 2 指定工程項目	Work Component / Reference in RODP 工程組合 / 參考建議發展大綱圖
DP3 指定工程 3	Part I A.1 第一部分 A.1 項	A road which is an expressway, trunk road, primary distributor road or district distributor road including new roads, and major extensions or improvements to existing road 屬快速公路、幹道、主要幹路或地區幹路的道路，包括新路及對現有道路作重大擴建或改善的部分。	Construction of two new Distributor Roads (Road D1 to Road D2) 新建的兩條地區幹路的道路（D1 路及 D2 路）

Project Title: Construction of Two New District Distributor Roads (Road D1 to Road D2) for Housing Sites in Yuen Long South
工程項目名稱：元朗南房屋用地新建的兩條地區幹路（D1 路 - D2 路）

Figure 1: Project Location Plan
圖 1：工程項目位置圖

Environmental Permit No. : EP-549/2018
環境許可證編號 : EP-549/2018



Designated Project Reference No. 指定工程項目參考編號	Item 項目	Schedule 2 Designated Project 附表 2 指定工程項目	Work Component / Reference in RODP 工程組合 / 參考建議發展大綱圖
DP2 指定工程 2	Part I A.1 第一部分 A.1 項	A road which is an expressway, trunk road, primary distributor road or district distributor road including new roads, and major extensions or improvements to existing road 屬快速公路、幹道、主要幹路或地區幹路的道路，包括新路及對現有道路作重大擴建或改善的部分。	Construction of new Primary Distributor Roads (TYST Interchange) 新建的主要幹路 (唐人新村交匯處)

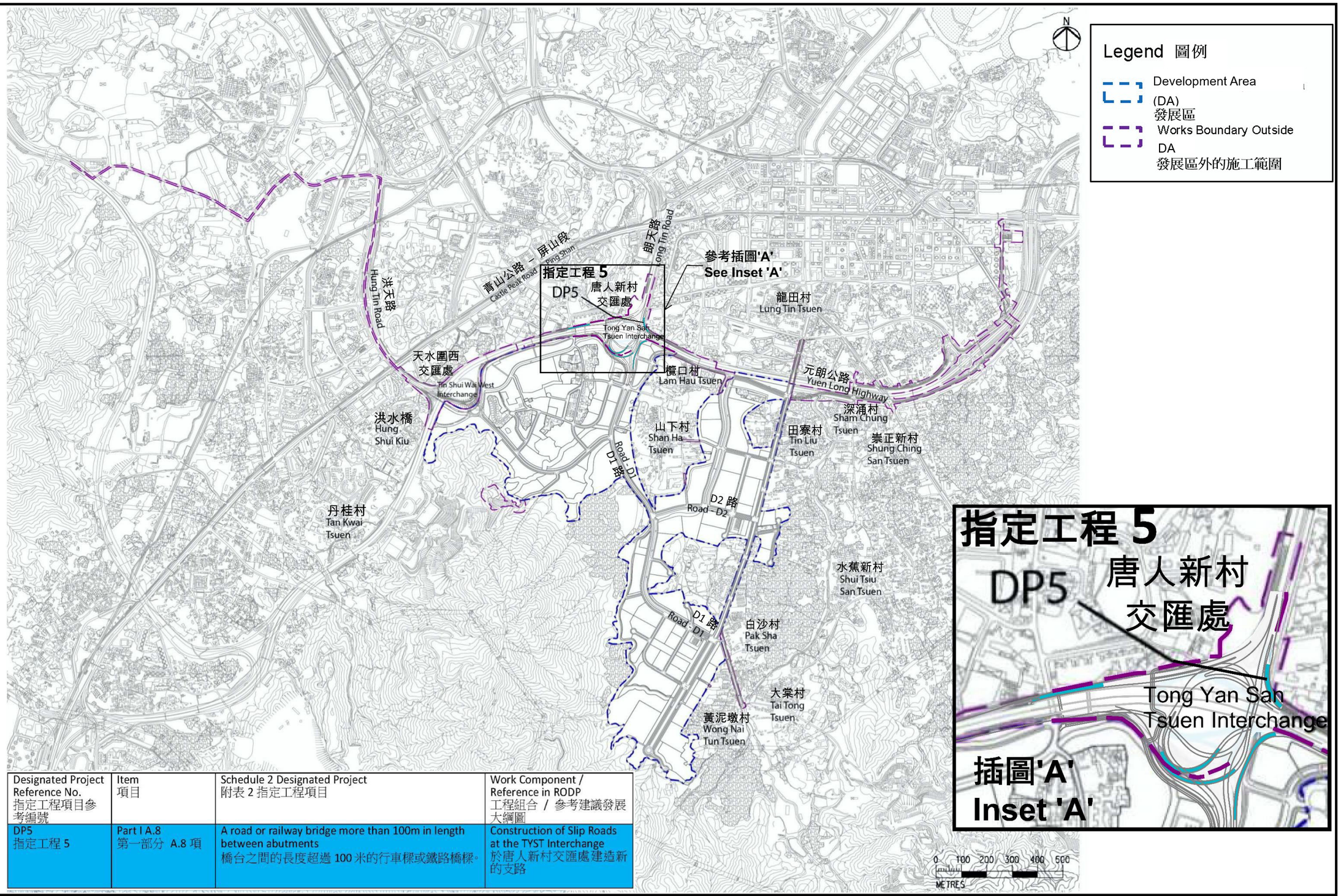
Legend 圖例

- Development Area (DA) 發展區
- Works Boundary Outside DA 發展區外的施工範圍

Project Title: Construction of New Primary Distributor Roads (Tong Yan San Tsuen Interchange) for Housing Sites in Yuen Long South
工程項目名稱：元朗南房屋用地新建的主要幹路（唐人新村交匯處）

Figure 1: Project Location Plan
圖 1：工程項目位置圖

Environmental Permit No. : EP-548/2018/A
環境許可證編號 : EP-548/2018/A

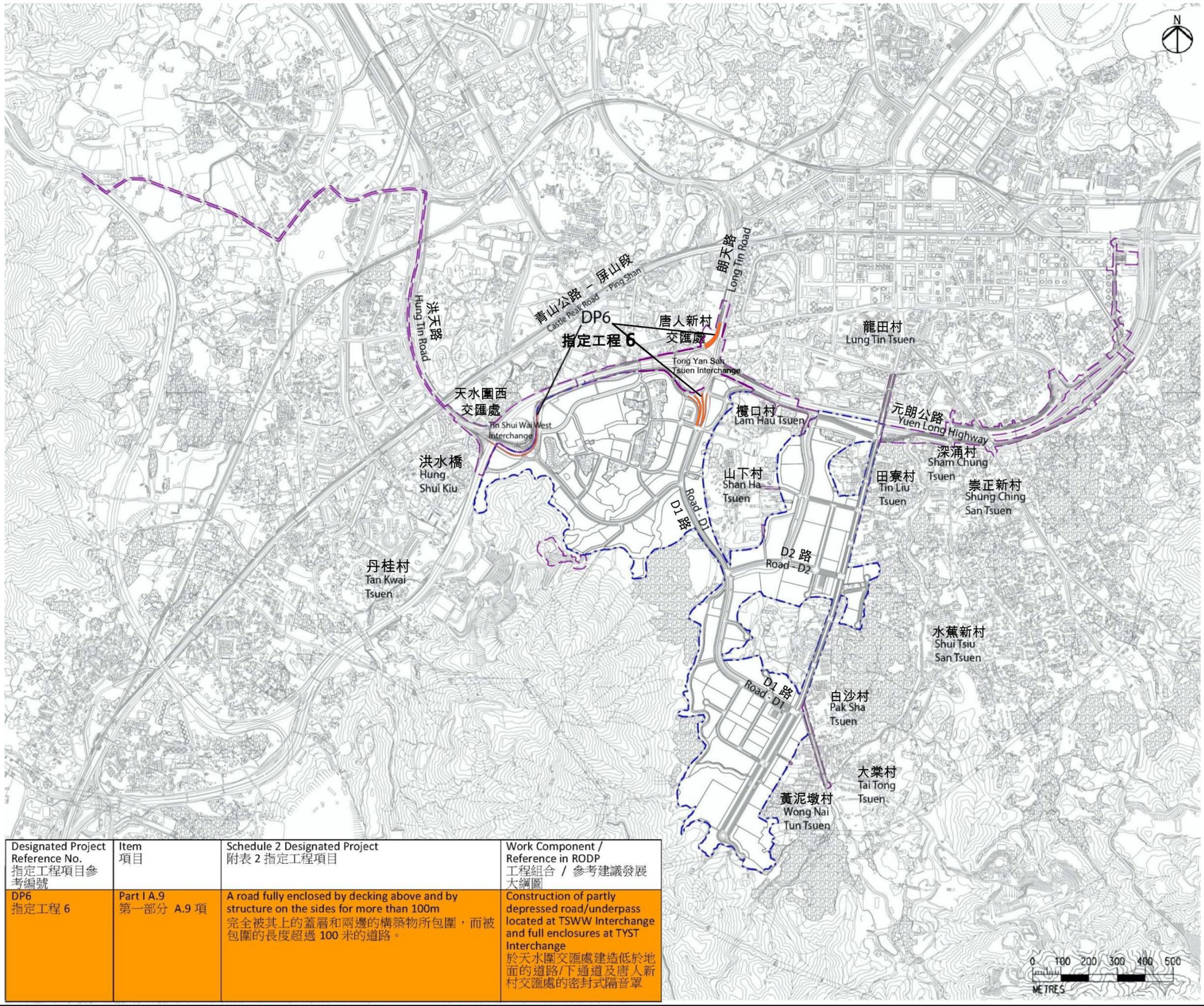


Designated Project Reference No. 指定工程項目參考編號	Item 項目	Schedule 2 Designated Project 附表 2 指定工程項目	Work Component / Reference in RODP 工程組合 / 參考建議發展大綱圖
DP5 指定工程 5	Part I A.8 第一部分 A.8 項	A road or railway bridge more than 100m in length between abutments 橋台之間的長度超過 100 米的行車樑或鐵路橋樑。	Construction of Slip Roads at the TYST Interchange 於唐人新村交匯處建造新的支路

Project Title : Construction of Slip Roads at Tong Yan San Tsuen Interchange for Housing Sites in Yuen Long South
工 程 項 目 名 稱 : 元朗南房屋用地新建在唐人新村交匯處的支路

Figure 1: Project Location Plan
圖 1 : 工程項目位置圖

Environmental Permit No. : EP-550/2018A
環境許可證編號 : EP-550/2018A

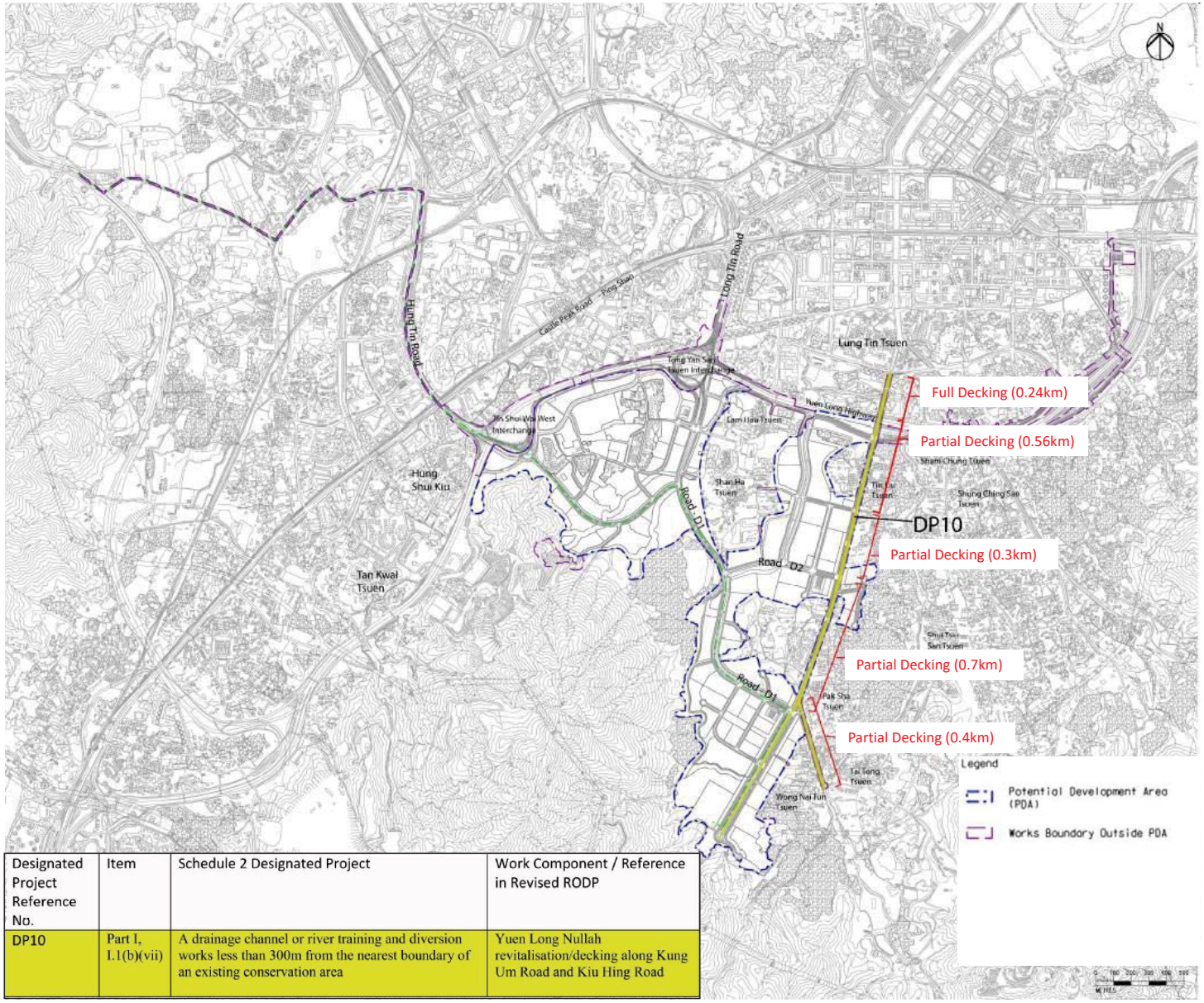


Designated Project Reference No. 指定工程項目參考編號	Item 項目	Schedule 2 Designated Project 附表 2 指定工程項目	Work Component / Reference in RODP 工程組合 / 參考建議發展大綱圖
DP6 指定工程 6	Part I A.9 第一部分 A.9 項	A road fully enclosed by decking above and by structure on the sides for more than 100m 完全被其上的蓋層和兩邊的構築物所包圍，而被包圍的長度超過 100 米的道路。	Construction of partly depressed road/underpass located at TSWW Interchange and full enclosures at TYST Interchange 於天水圍交匯處建造低於地面的道路/下通道及唐人新村交匯處的密封式隔音罩

Project Title : Construction of Partly Depressed Road / Underpass Located at Tin Shui Wai West Interchange and Full Enclosures at Tong Yan San Tsuen Interchange for Housing Sites in Yuen Long South
工程項目名稱 : 元朗南房屋用地建造於天水圍西交匯處的部分沉降道路/隧道及於唐人新村交匯處的密封式隔音罩

Figure 1: Project Location Plan
圖 1 : 工程項目位置圖

Environmental Permit No. : EP-551/2018A
環境許可證編號 : EP-551/2018A



Designated Project Reference No.	Item	Schedule 2 Designated Project	Work Component / Reference in Revised RODP
DP10	Part I, I.1(b)(vii)	A drainage channel or river training and diversion works less than 300m from the nearest boundary of an existing conservation area	Yuen Long Nullah revitalisation/decking along Kung Um Road and Kiu Hing Road

Project Title: Yuen Long Nullah Revitalisation/Decking along Kung Um Road and Kiu Hing Road for Housing Sites in Yuen Long South
工程項目名稱 ： 元朗南房屋用地沿公庵路及僑興路的元朗明渠活化/加建上蓋工程

Figure 1a: Project Location Plan
圖 1a：工程項目位置圖

Environmental Permit No. : EP-553/2018A
環境許可證編號 : EP-553/2018A

Appendix C

Project Organization and the key personal contact

Contact Details of Key Personnel for Contract YL/2021/03 (Contract 1)

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Project Proponent	Mr. NG Kam Leung, Julian	2158 5612	2693 2918
AECOM	Chief Resident Engineer	Mr. Alex Chan	5208 5837	3549 5678
Tung Lee	Construction Manager	Mr. Lam Wai Hong, Eric	6097 5644	2352 6740
Tung Lee	Site Agent	Mr. Chan Tan Kit	9681 8144	2352 6740
Tung Lee	Environmental Officer	Mr. Liu Ho Kan	6900 3526	2352 6740
Tung Lee	Environmental Supervisor	Mr. Kam Yun Sang, Johnny	6178 4786	2352 6740
Telemax	Independent Environmental Checker	Ir. Neslon Tam	9626 1239	3563 7018
Ford	Environmental Team Leader	Mr. Tam Tak Wing	2959 6059	2959 6079
Ford	Deputy Environmental Team Leader	Mr. Ben Tam	2959 6059	2959 6079
Ford	Environmental Consultant	Ms. Nicola Hon	2959 6059	2959 6079

Legend:

CEDD - (Project Proponent) – Civil Engineering and Development Department

AECOM - (Consultant) – AECOM Asia Company Limited

Telemax (IEC) – Telemax Environmental and Energy Management Ltd

Ford (ET) – Ford Business International Limited

Tung Lee - (the Contractor of the Contract YL/2021/04) – Tung Lee Engineering Co.

Contact Details of Key Personnel for Contract YL/2021/04 (Contract 2)

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Project Proponent	Mr. NG Kam Leung, Julian	2158 5612	2693 2918
AECOM	Chief Resident Engineer	Alex Chan	5208 5837	3549 5678
CREC - JV	Project Manager	Albert Yau	6468 7702	3549 5679
CREC - JV	Construction Manager	Stephen Lee	9641 5345	3549 5679
CREC - JV	Site Agent	Jim Ko	9632 9163	3549 5679
CREC - JV	Environmental Officer	Kelvin Cheung	9060 1020	3549 5679
CREC - JV	Environmental Supervisor	Karen Leung	5239 3606	3549 5679
Telemax	Independent Environmental Checker	Ir. Neslon Tam	9626 1239	3563 7018
Ford	Environmental Team Leader	Tam Tak Wing	2959 6059	2959 6079
Ford	Deputy Environmental Team Leader	Ben Tam	2959 6059	2959 6079
Ford	Environmental Consultant	Nicola Hon	2959 6059	2959 6079

Legend:

CEDD - (Project Proponent) – Civil Engineering and Development Department

AECOM - (Consultant) – AECOM Asia Company Limited

Telemax (IEC) – Telemax Environmental and Energy Management Ltd

Ford (ET) – Ford Business International Limited

Contact Details of Key Personnel for Contract YL/2022/01 (Contract 3)

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Project Proponent	Mr. NG Kam Leung, Julian	2158 5612	2693 2918
AECOM	Chief Resident Engineer	Mr. Barry Lee	2349 5665	3549 5678
CRBC	Project Manager	Rayment Suen	9779 8871	3905 8562
CRBC	Deputy Construction Manager	Zheng Lei	5335 0451	3905 8562
CRBC	Site Agent	Danil Wong	53359572	3905 8562
CRBC	Environmental Officer	Calvin So	9724 6254	3905 8562
CRBC	Environmental Supervisor	Elvis Leung	6995 9685	3905 8562
Telemax	Independent Environmental Checker	Ir. Neslon Tam	9626 1239	3563 7018
Ford	Environmental Team Leader	Tam Tak Wing	2959 6059	2959 6079
Ford	Deputy Environmental Team Leader	Ben Tam	2959 6059	2959 6079
Ford	Environmental Consultant	Nicola Hon	2959 6059	2959 6079

Legend:

CEDD - (Project Proponent) – Civil Engineering and Development Department

AECOM - (Consultant) – AECOM Asia Company Limited

Telemax (IEC) – Telemax Environmental and Energy Management Ltd

Ford (ET) – Ford Business International Limited

CRBC - JV (the Contractor of the Contract YL/2022/01) – China Road and Bridge Corporation

Appendix D

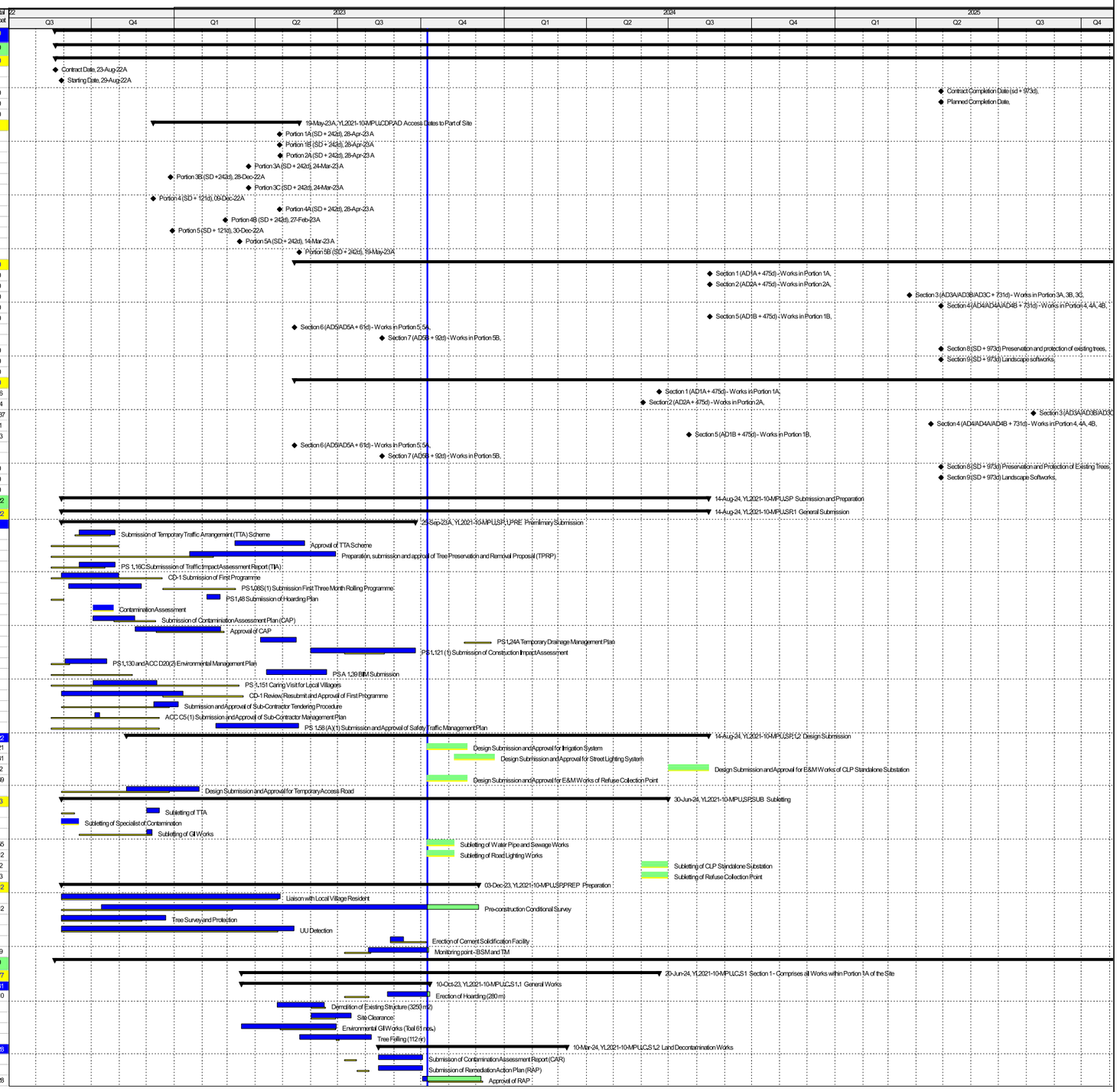
3-month Rolling Construction Programme

(I) Contract 1
(II) Contract 2
(III) Contract 3

3-month Rolling Construction Programme of Contract 1

Contract No. YL/2021/03 - Site Formation and Infrastrcture Works for Yuen Long South First Phase Development - Contract 1
REVISED PROGRAME (REV. 8) (OCT 2023)

#	Activity ID	Activity Name	Original Duration	Actual Duration	Start	Finish	Late Start	Late Finish	Actual Start	Actual Finish	% Complete	Total Float
1	YL2021-10-MPU	Contract No. YL/2021/03	1350	414	22-Aug-22A	28-Apr-26	24-May-23	28-Apr-26	22-Aug-22		30.81%	0
2	YL2021-10-MPU.CDP	Contract Data Part 1	1350	361	23-Aug-22A	28-Apr-26	19-Oct-23	28-Apr-26	23-Aug-22		48.52%	0
3	YL2021-10-MPU.CDRG	General	1350	6	23-Aug-22A	28-Apr-26	19-Oct-23	28-Apr-26	23-Aug-22		72.98%	0
4	G0-CD	Contract Date	0	0	23-Aug-22A		19-Oct-23		23-Aug-22		100%	
5	G1-SD	Starting Date	0	0	29-Aug-22A		19-Oct-23		29-Aug-22		100%	
6	G2-CD1	Contract Completion Date (sd + 973d)	0	0		28-Apr-25*		28-Apr-25			0%	0
7	G2-CD2	Planned Completion Date	0	0		28-Apr-25*		28-Apr-25			0%	0
8	G3-EW	Establishment Works (365d)	0	0		28-Apr-26*		28-Apr-26			0%	0
9	YL2021-10-MPU.CDRAD	Access Dates to Part of Site	211	161	09-Dec-22A	19-May-23A	20-Oct-23	28-Apr-26	09-Dec-22	19-May-23	100%	
10	AD1A	Portion 1A (SD + 242d)	0	0	28-Apr-23A		12-Feb-24		28-Apr-23		100%	
11	AD1B	Portion 1B (SD + 242d)	0	0	28-Apr-23A		31-Oct-23		28-Apr-23		100%	
12	AD2A	Portion 2A (SD + 242d)	0	0	28-Apr-23A		28-Nov-23		28-Apr-23		100%	
13	AD3A	Portion 3A (SD + 242d)	0	0	24-Mar-23A		20-Oct-23		24-Mar-23		100%	
14	AD3B	Portion 3B (SD +242d)	0	0	28-Dec-22A		20-Oct-23		28-Dec-22		100%	
15	AD3C	Portion 3C (SD + 242d)	0	0	24-Mar-23A		20-Oct-23		24-Mar-23		100%	
16	AD4	Portion 4 (SD + 121d)	0	0	09-Dec-22A		15-Sep-24		09-Dec-22		100%	
17	AD4A	Portion 4A (SD + 242d)	0	0	28-Apr-23A		28-Apr-26		28-Apr-23		100%	
18	AD4B	Portion 4B (SD + 242d)	0	0	27-Feb-23A		20-Oct-23		27-Feb-23		100%	
19	AD5	Portion 5 (SD + 121d)	0	0	30-Dec-22A		28-Apr-26		30-Dec-22		100%	
20	AD5A	Portion 5A (SD + 242d)	0	0	14-Mar-23A		28-Apr-26		14-Mar-23		100%	
21	AD5B	Portion 5B (SD + 242d)	0	0	19-May-23A		28-Apr-26		19-May-23		100%	
22	YL2021-10-MPU.CDRCD	Contract Section Completion Date	964	97	14-May-23A	28-Apr-26	15-Aug-24	28-Apr-26	14-May-23		35.28%	0
23	S01	Section 1 (AD1A + 475d) - Works in Portion 1A	0	0		15-Aug-24*		15-Aug-24			0%	0
24	S02	Section 2 (AD2A + 475d) - Works in Portion 2A	0	0		15-Aug-24*		15-Aug-24			0%	0
25	S03	Section 3 (AD3A/AD3B/AD3C + 731d) - Works in Portion 3A, 3B, 3C	0	0		24-Mar-25*		24-Mar-25			0%	0
26	S04	Section 4 (AD4/AD4A/AD4B + 731d) - Works in Portion 4, 4A, 4B	0	0		28-Apr-25*		28-Apr-25			0%	0
27	S05	Section 5 (AD1B + 475d) - Works in Portion 1B	0	0		15-Aug-24*		15-Aug-24			0%	0
28	S06	Section 6 (AD5/AD5A + 61d) - Works in Portion 5, 5A	0	0		14-May-23A		28-Apr-26		14-May-23	100%	
29	S07	Section 7 (AD5B + 92d) - Works in Portion 5B	0	0		19-Aug-23A		28-Apr-26		19-Aug-23	100%	
30	S08	Section 8 (SD + 973d) Preservation and protection of existing trees	0	0		28-Apr-25*		28-Apr-25			0%	0
31	S09	Section 9 (SD + 973d) Landscape softworks	0	0		28-Apr-25*		28-Apr-25			0%	0
32	S10	Section 10 (S9 + 365d) Establishment	0	0		28-Apr-26*		28-Apr-26			0%	0
33	YL2021-10-MPU.CDRPCD	Planned Section Completion Date	964	97	14-May-23A	28-Apr-26	15-Aug-24	28-Apr-26	14-May-23		27.9%	0
34	PS01	Section 1 (AD1A + 475d) - Works in Portion 1A	0	0		20-Jun-24*		15-Aug-24			0%	55
35	PS02	Section 2 (AD2A + 475d) - Works in Portion 2A	0	0		02-Jun-24*		15-Aug-24			0%	74
36	PS03	Section 3 (AD3A/AD3B/AD3C + 731d) - Works in Portion 3A, 3B, 3C	0	0		08-Aug-25*		24-Mar-25			0%	-137
37	PS04	Section 4 (AD4/AD4A/AD4B + 731d) - Works in Portion 4, 4A, 4B	0	0		17-Apr-25*		28-Apr-25			0%	11
38	PS05	Section 5 (AD1B + 475d) - Works in Portion 1B	0	0		23-Jul-24*		15-Aug-24			0%	23
39	PS06	Section 6 (AD5/AD5A + 61d) - Works in Portion 5, 5A	0	0		14-May-23A		28-Apr-26		14-May-23	100%	
40	PS07	Section 7 (AD5B + 92d) - Works in Portion 5B	0	0		19-Aug-23A		28-Apr-26		19-Aug-23	100%	
41	PS08	Section 8 (SD + 973d) Preservation and Protection of Existing Trees	0	0		28-Apr-25*		28-Apr-25			0%	0
42	PS09	Section 9 (SD + 973d) Landscape Softworks	0	0		28-Apr-25*		28-Apr-25			0%	0
43	PS10	Section 10 (S9 + 365d) Establishment	0	0		28-Apr-26*		28-Apr-26			0%	0
44	YL2021-10-MPU.SP	Submission and Preparation	728	405	29-Aug-22A	14-Aug-24	19-Oct-23	28-Apr-26	29-Aug-22		57.14%	622
45	YL2021-10-MPU.SR1	General Submission	728	392	29-Aug-22A	14-Aug-24	19-Oct-23	28-Apr-26	29-Aug-22		57.14%	622
46	YL2021-10-MPU.SR1.PRE	Preliminary Submission	487	392	29-Aug-22A	25-Sep-23A	19-Oct-23	28-Apr-26	29-Aug-22	25-Sep-23	100%	
47	PRE-010	Submission of Temporary Traffic Arrangement (TTA) Scheme	40	40	18-Sep-22A	27-Oct-22A	20-Oct-23	20-Oct-23	18-Sep-22	27-Oct-22	100%	
48	PRE-011	Approval of TTA Scheme	75	78	09-Mar-23A	25-May-23A	20-Oct-23	20-Oct-23	09-Mar-23	25-May-23	100%	
49	PRE-015	Preparation, submission and approval of Tree Preservation and Removal Proposal (TPRP)	180	162	18-Jan-23A	26-Jun-23A	19-Oct-23	19-Oct-23	18-Jan-23	26-Jun-23	100%	
50	PRE-020	PS 1,16C Submission of Traffic Impact Assessment Report (TIA)	60	40	18-Sep-22A	27-Oct-22A	20-Oct-23	20-Oct-23	18-Sep-22	27-Oct-22	100%	
51	PRE-030	CD-1 Submission of First Programme	123	64	29-Aug-22A	31-Oct-22A	28-Apr-25	28-Apr-25	29-Aug-22	31-Oct-22	100%	
52	PRE-040	PS1,08S(1) Submission First Three Month Rolling Programme	81	81	06-Sep-22A	25-Nov-22A	28-Apr-25	28-Apr-25	06-Sep-22	25-Nov-22	100%	
53	PRE-050	PS1,4B Submission of Hoarding Plan	14	15	06-Feb-23A	20-Feb-23A	05-Dec-24	05-Dec-24	06-Feb-23	20-Feb-23	100%	
54	PRE-055	Contamination Assessment	23	23	03-Oct-22A	25-Oct-22A	20-Oct-23	20-Oct-23	03-Oct-22	25-Oct-22	100%	
55	PRE-060	Submission of Contamination Assessment Plan (CAP)	47	47	03-Oct-22A	18-Nov-22A	20-Oct-23	20-Oct-23	03-Oct-22	18-Nov-22	100%	
56	PRE-061	Approval of CAP	76	95	19-Nov-22A	21-Feb-23A	20-Oct-23	20-Oct-23	19-Nov-22	21-Feb-23	100%	
57	PRE-080	PS1,24A Temporary Drainage Management Plan	30	40	06-Apr-23A	16-May-23A	28-Apr-26	28-Apr-26	06-Apr-23	16-May-23	100%	
58	PRE-090	PS1,12(1) Submission of Construction Impact Assessment	45	116	01-Jun-23A	25-Sep-23A	28-Apr-25	28-Apr-25	01-Jun-23	25-Sep-23	100%	
59	PRE-100	PS1,13(0 and ACC D20(2) Environmental Management Plan	21	47	02-Sep-22A	18-Oct-22A	28-Apr-25	28-Apr-25	02-Sep-22	18-Oct-22	100%	
60	PRE-110	PS A 1,39 BIM Submission	90	67	13-Apr-23A	19-Jun-23A	28-Apr-25	28-Apr-25	13-Apr-23	19-Jun-23	100%	
61	PRE-120	PS 1,151 Caring Visit for Local Villagers	208	71	03-Oct-22A	12-Dec-22A	28-Apr-25	28-Apr-25	03-Oct-22	12-Dec-22	100%	
62	PRE-156	CD-1 Review, Resubmit and Approval of First Programme	90	135	29-Aug-22A	10-Jan-23A	28-Apr-25	28-Apr-25	29-Aug-22	10-Jan-23	100%	
63	PRE-157	Submission and Approval of Sub-Contractor Tendering Procedure	120	28	09-Dec-22A	05-Jan-23A	16-Feb-24	16-Feb-24	09-Dec-22	05-Jan-23	100%	
64	PRE-158	ACC C5 (1) Submission and Approval of Sub-Contractor Management Plan	120	6	05-Oct-22A	10-Oct-22A	16-Feb-24	16-Feb-24	05-Oct-22	10-Oct-22	100%	
65	PRE-159	PS 1,58 (A) 1) Submission and Approval of Safety Traffic Management Plan	120	92	16-Feb-23A	18-May-23A	20-Oct-23	20-Oct-23	16-Feb-23	18-May-23	100%	
66	YL2021-10-MPU.SR1.2	Design Submission	717	81	09-Nov-22A	14-Aug-24	05-Feb-24	28-Apr-26	09-Nov-22		55.40%	622
67	PRE-130	Design Submission and Approval for Irrigation System	45	0	08-Oct-23*	21-Nov-23	05-Feb-24	21-Mar-24			0%	121
68	PRE-135	Design Submission and Approval for Street Lighting System	45	0	07-Nov-23*	21-Dec-23	17-Mar-24	30-Apr-24			0%	131
69	PRE-150	Design Submission and Approval for E&M Works of CLP Standalone Substation	45	0	01-Jul-24	14-Aug-24	23-Jul-24	05-Sep-24			0%	22
70	PRE-155	Design Submission and Approval for E&M Works of Refuse Collection Point	45	0	08-Oct-23*	21-Nov-23	11-Oct-24	24-Nov-24			0%	369
71	PRE-170	Design Submission and Approval for Temporary Access Road	120	81	09-Nov-22A	28-Jan-23A	28-Apr-26	28-Apr-26	09-Nov-22	28-Jan-23	100%	
72	YL2021-10-MPU.SPSUB	Subletting	672	109	29-Aug-22A	30-Jun-24	20-Oct-23	22-Aug-24	29-Aug-22		60.27%	53
73	SUB-010	Subletting of TTA	15	15	01-Dec-22A	15-Dec-22A	20-Oct-23	20-Oct-23	01-Dec-22	15-Dec-22	100%	
74	SUB-040	Subletting of Specialist of Contamination	20	20	29-Aug-22A	17-Sep-22A	20-Oct-23	20-Oct-23	29-Aug-22	17-Sep-22	100%	
75	SUB-050	Subletting of GII Works	81	7	01-Dec-22A	07-Dec-22A	20-Oct-23	20-Oct-23	01-Dec-22	07-Dec-22	100%	
76	SUB-060	Subletting of Water Pipe and Sewage Works	30	0	08-Oct-23	06-Nov-23	19-Jun-24	18-Jul-24			0%	255
77	SUB-065	Subletting of Road Lighting Works	30	0	08-Oct-23	06-Nov-23	16-Feb-24	16-Mar-24			0%	212
78	SUB-080	Subletting of CLP Standalone Substation	30	0	01-Jun-24*	30-Jun-24	23-Jun-24	22-Jul-24			0%	22
79	SUB-090	Subletting of Refuse Collection Point	30	0	01-Jun-24	30-Jun-24*	24-Jul-24	22-Aug-24			0%	53
80	YL2021-10-MPU.SPPREP	Preparation	404	405	29-Aug-22A	03-Dec-23	19-Oct-23	28-Apr-25	29-Aug-22		85.89%	512
81	PREP-010	Liaison with Local Village Resident	240	243	29-Aug-22A	28-Apr-23A	28-Apr-25	28-Apr-25	29-Aug-22	28-Apr-23	100%	
82	PREP-020	Pre-construction Conditional Survey	190	361	12-Oct-22A	03-Dec-23	03-Mar-25	28-Apr-25	12-Oct-22		70%	512
83	PREP-030	Tree Survey and Protection	90	116	29-Aug-22A	22-Dec-22A	19-Oct-23	19-Oct-23	29-Aug-22	22-Dec-22	100%	
84	PREP-040	UU Detection	240	258	29-Aug-22A	13-May-23A	28-Apr-25	28-Apr-25	29-Aug-22	13-May-23	100%	
85	PREP-050	Erection of Cement Solidification Facility	40	15	28-Aug-23A	12-Sep-23A	09-Apr-24	09-Apr-24	28-Aug-23	12-Sep-23	100%	
86	PREP-070	Monitoring point - BSM and TM	30	65	04-Aug-23A	09-Oct-23	15-Nov-23	16-Nov-23	04-Aug-23		95%	39
87	YL2021-10-MPU.C	Construction	1339	414	22-Aug-22A	28-Apr-26	24-May-23	28-Apr-26	22-Aug-22		30.25%	0
88	YL2021-10-MPU.C.S1	Section 1 - Comprises all Works within Portion 1A of the Site	420	208	16-Mar-23A	20-Jun-24	03-Dec-23	28-Apr-26	16-Mar-23		35.81%	677
89	YL2021-10-MPU.C.S1.1	General Works	99	206	16-Mar-23A	10-Oct-23	13-Feb-24	28-Apr-26	16-Mar-23		97.17%	931
90	WS1-010	Erection of Hoarding (280 m)	28	44	25-Aug-23A	10-Oct-23	13-Aug-24	15-Aug-24	25-Aug-23		90%	310
91	WS1-020	Demolition of Existing Structure (3250 m2)	17	52	25-Apr-23A	16-Jun-23A	28-Apr-26	28-Apr-26	25-Apr-23	16-Jun-23	100%	
92	WS1-030	Site Clearance	28	45	01-Jun-23A	16-Jul-23A	15-Aug-24	15-Aug-24	01-Jun-23	16-Jul-23	100%	
93	WS1-040	Environmental GII Works (Toal 61 nos.)	62	106	16-Mar-23A	29-Jun-23A	13-Feb-24	13-Feb-24	16-Mar-23	29-Jun-23	100%	
94	WS1-050	Tree Felling (112 nr)	4	79	20-May-23A	07-Aug-23A	13-Apr-24	13-Apr-24	20-May-23	07-Aug-23	100%	
95	YL2021-10-MPU.C.S1.2	Land Decontamination Works	247	54	15-Aug-23A	10-Mar-24	13-Feb-24	16-Jul-24	15-Aug-23		37.25%	128
96	WS1-045	Submission of Contamination Assessment Report (CAR)	14	49	15-Aug-23A	03-Oct-23A	13-Feb-24	13-Feb-24	15-Aug-23	03-Oct-23	100%	
97	WS1-046	Submission of Remediation Action Plan (RAP)	14	49	15-Aug-23A	03-Oct-23A	13-Feb-24	13-Feb-24	15-Aug-23	03-Oct-23	100%	
98	WS1-047	Approval of RAP	60	5	03-Oct-23A	06-Dec-23	13-Feb-24	12-Apr-24	03-Oct-23		0%	128



TUNG LEE ENGINEERING COMPANY

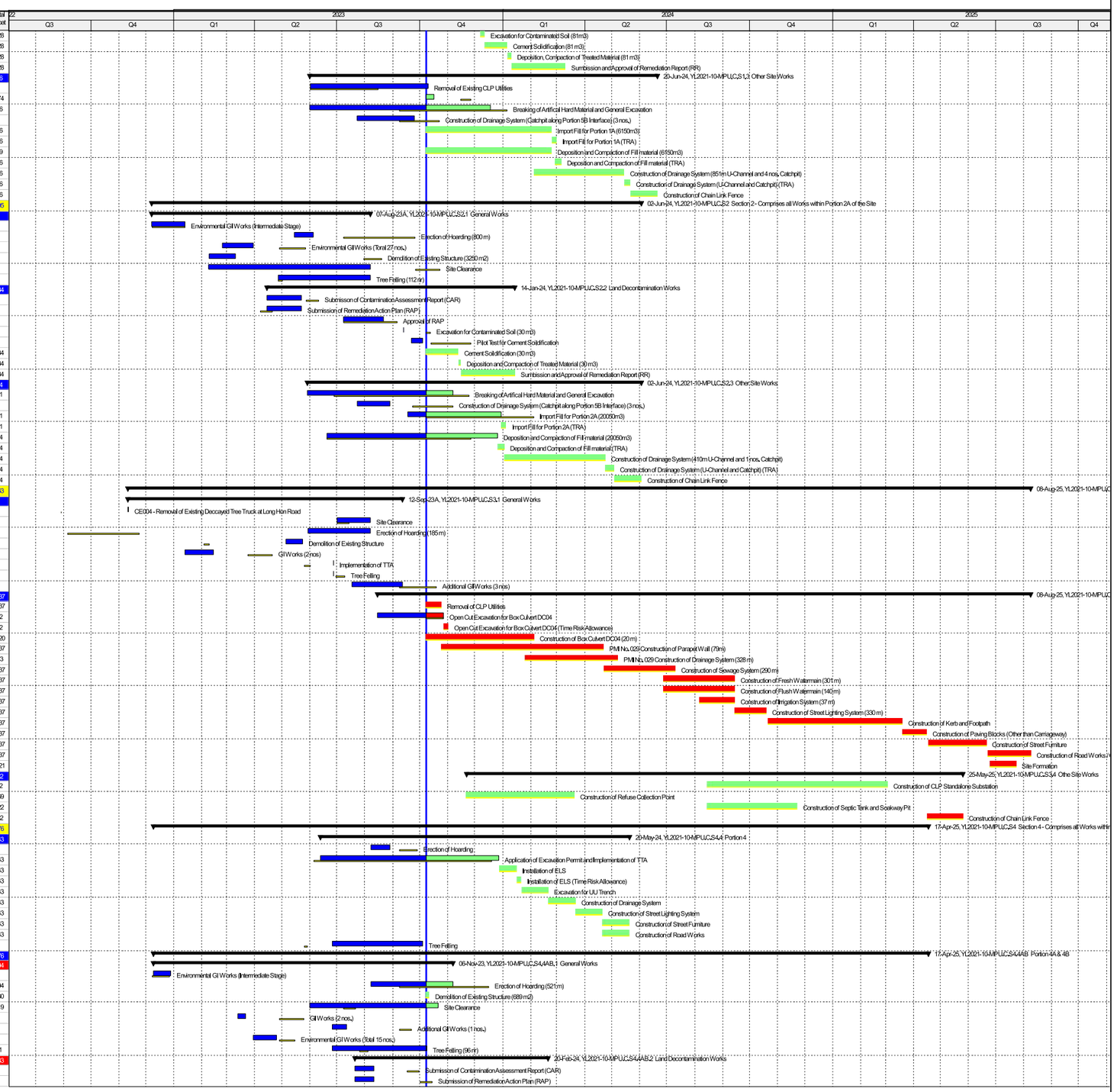
Remaining Level of Effort
Actual Level of Effort
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
summary

Contract No. YL/2021/03 - Site Formation and Infrastrcture Works for Yuen Long South First Phase Development - Contract 1
REVISED PROGRAMME (REV. 8) (OCT 2023)

Date	Revision	Checked	Ap...
15-Aug-23	Rev. 6	WCF	YKC
09-Sep-23	Rev. 7	WCF	YKC
08-Oct-23	Rev. 8	WCF	YKC

Contract No. YL/2021/03 - Site Formation and Infrastrcture Works for Yuen Long South First Phase Development - Contract 1
REVISED PROGRAME (REV. 8) (OCT 2023)

#	Activity ID	Activity Name	Original Duration	Actual Duration	Start	Finish	Late Start	Late Finish	Actual Start	Actual Finish	% Complete	Total Float
99	WS1-060	Excavation for Contaminated Soil (81m3)	5	0	07-Dec-23	11-Dec-23	13-Apr-24	17-Apr-24			0%	128
100	WS1-070	Cement Solidification (81 m3)	25	0	12-Dec-23	05-Jan-24	18-Apr-24	12-May-24			0%	128
101	WS1-080	Deposition, Compaction of Treated Material (81 m3)	5	0	06-Jan-24	10-Jan-24	13-May-24	17-May-24			0%	128
102	WS1-091	Sumbission and Approval of Remediation Report (RR)	60	0	11-Jan-24	10-Mar-24	18-May-24	16-Jul-24			0%	128
103	YL2021-10-MPU.C.S1,3 Other Site Works		399	131	01-Jun-23A	20-Jun-24	03-Dec-23	15-Aug-24	01-Jun-23		33.42%	56
104	WS1-103	Removal of Existing CLP Utilities	76	131	01-Jun-23A	10-Oct-23A	12-Feb-24	12-Feb-24	01-Jun-23	10-Oct-23	100%	
105	WS1-104	Demolition of Existing Structure (P2A-S57 & S58, P1A-S61 & S62)	12	0	18-Oct-23A	16-Oct-23	08-Jul-24	16-Jul-24	18-Oct-23		25%	274
106	WS1-105	Breaking of Artificial Hard Material and General Excavation	120	129	01-Jun-23A	18-Dec-23	03-Dec-23	12-Feb-24	01-Jun-23		40%	56
107	WS1-106	Construction of Drainage System (Catchpit along Portion 5B Interface) (3 nos.)	45	63	24-Jul-23A	25-Sep-23A	01-Apr-24	01-Apr-24	24-Jul-23	25-Sep-23	100%	
108	WS1-107	Import Fill for Portion 1A (6150m3)	140	0	08-Oct-23	24-Feb-24	03-Dec-23	20-Apr-24			0%	56
109	WS1-108	Import Fill for Portion 1A (TRA)	5	0	25-Feb-24	29-Feb-24	21-Apr-24	25-Apr-24			0%	56
110	WS1-109	Deposition and Compaction of Fill material (6150m3)	140	0	08-Oct-23	24-Feb-24	06-Dec-23	23-Apr-24			0%	59
111	WS1-110	Deposition and Compaction of Fill material (TRA)	7	0	28-Feb-24	05-Mar-24	24-Apr-24	30-Apr-24			0%	56
112	WS1-111	Construction of Drainage System (851m U-Channel and 4 nos. Catchpit)	100	0	05-Feb-24	14-May-24	01-Apr-24	09-Jul-24			0%	56
113	WS1-112	Construction of Drainage System (U-Channel and Catchpit) (TRA)	7	0	15-May-24	21-May-24	10-Jul-24	16-Jul-24			0%	56
114	WS1-113	Construction of Chain Link Fence	30	0	22-May-24	20-Jun-24	17-Jul-24	15-Aug-24			0%	55
115	YL2021-10-MPU.C.S2 Section 2 - Comprises all Works within Portion 2A of the Site		543	305	07-Dec-22A	02-Jun-24	28-Nov-23	28-Apr-26	07-Dec-22		55.89%	695
116	YL2021-10-MPU.C.S2.1 General Works		320	243	07-Dec-22A	07-Aug-23A	09-Apr-24	28-Apr-26	07-Dec-22	07-Aug-23	100%	
117	WS2-005	Environmental GI Works (Intermediate Stage)	37	38	07-Dec-22A	13-Jan-23A	09-Apr-24	09-Apr-24	07-Dec-22	13-Jan-23	100%	
118	WS2-010	Erection of Hoarding (800 m)	90	21	15-May-23A	05-Jun-23A	09-Apr-24	09-Apr-24	15-May-23	05-Jun-23	100%	
119	WS2-015	Environmental GI Works (Total 27 nos.)	30	35	24-Feb-23A	30-Mar-23A	09-Apr-24	09-Apr-24	24-Feb-23	30-Mar-23	100%	
120	WS2-020	Demolition of Existing Structure (3250 m2)	20	30	09-Feb-23A	10-Mar-23A	28-Apr-26	28-Apr-26	09-Feb-23	10-Mar-23	100%	
121	WS2-030	Site Clearance	28	179	09-Feb-23A	07-Aug-23A	28-Apr-26	28-Apr-26	09-Feb-23	07-Aug-23	100%	
122	WS2-048	Tree Felling (112 nr)	5	102	27-Apr-23A	07-Aug-23A	09-Apr-24	09-Apr-24	27-Apr-23	07-Aug-23	100%	
123	YL2021-10-MPU.C.S2.2 Land Decontamination Works		283	173	14-Apr-23A	15-Jan-24	09-Apr-24	16-Jul-24	14-Apr-23		65.02%	184
124	WS2-045	Submission of Contamination Assessment Report (CAR)	14	39	14-Apr-23A	22-May-23A	09-Apr-24	09-Apr-24	14-Apr-23	22-May-23	100%	
125	WS2-046	Submission of Remediation Action Plan (RAP)	14	39	14-Apr-23A	22-May-23A	09-Apr-24	09-Apr-24	14-Apr-23	22-May-23	100%	
126	WS2-047	Approval of RAP	60	45	08-Jul-23A	21-Aug-23A	09-Apr-24	09-Apr-24	08-Jul-23	21-Aug-23	100%	
127	WS2-060	Excavation for Contaminated Soil (30 m3)	5	0	13-Sep-23A	13-Sep-23A	09-Apr-24	09-Apr-24	13-Sep-23	13-Sep-23	100%	
128	WS2-065	Pilot Test for Cement Solidification	45	12	22-Sep-23A	04-Oct-23A	09-Apr-24	09-Apr-24	22-Sep-23	04-Oct-23	100%	
129	WS2-070	Cement Solidification (30 m3)	36	0	08-Oct-23	12-Nov-23	09-Apr-24	14-May-24			0%	184
130	WS2-080	Deposition and Compaction of Treated Material (30 m3)	3	0	13-Nov-23	15-Nov-23	15-May-24	17-May-24			0%	184
131	WS2-081	Sumbission and Approval of Remediation Report (RR)	60	0	16-Nov-23	14-Jan-24	18-May-24	16-Jul-24			0%	184
132	YL2021-10-MPU.C.S2.3 Other Site Works		349	132	29-May-23A	02-Jun-24	29-Nov-23	15-Aug-24	29-May-23		31.52%	74
133	WS2-112	Breaking of Artificial Hard Material and General Excavation	150	132	29-May-23A	06-Nov-23	28-Nov-23	27-Dec-23	29-May-23		80%	51
134	WS2-113	Construction of Drainage System (Catchpit along Portion 5B Interface) (3 nos.)	45	36	24-Jul-23A	29-Aug-23A	17-Mar-24	17-Mar-24	24-Jul-23	29-Aug-23	100%	
135	WS2-114	Import Fill for Portion 2A (20050m3)	120	20	18-Sep-23A	30-Dec-23	28-Nov-23	19-Feb-24	18-Sep-23		30%	51
136	WS2-115	Import Fill for Portion 2A (TRA)	5	0	31-Dec-23	04-Jan-24*	20-Feb-24	24-Feb-24			0%	51
137	WS2-116	Deposition and Compaction of Fill material (20050m3)	160	110	20-Jun-23A	26-Dec-23	21-Dec-23	09-Mar-24	20-Jun-23		50%	74
138	WS2-117	Deposition and Compaction of Fill material (TRA)	7	0	27-Dec-23	02-Jan-24	10-Mar-24	16-Mar-24			0%	74
139	WS2-118	Construction of Drainage System (410m U-Channel and 1 nos. Catchpit)	112	0	03-Jan-24	23-Apr-24	17-Mar-24	06-Jul-24			0%	74
140	WS2-119	Construction of Drainage System (U-Channel and Catchpit) (TRA)	10	0	24-Apr-24	03-May-24	07-Jul-24	16-Jul-24			0%	74
141	WS2-120	Construction of Chain Link Fence	30	0	04-May-24	02-Jun-24	17-Jul-24	15-Aug-24			0%	74
142	YL2021-10-MPU.C.S3 Section 3 - Comprises all works Within Portion 3A, 3B 3C		1076	331	11-Nov-22A	08-Aug-25	24-May-23	28-Apr-26	11-Nov-22		37.64%	263
143	YL2021-10-MPU.C.S3.1 General Works		417	305	11-Nov-22A	12-Sep-23A	20-Oct-23	28-Apr-26	11-Nov-22	12-Sep-23	100%	
144	WS3-005	CE004 - Removal of Existing Deccayed Tree Truck at Long Hon Road	1	1	11-Nov-22A	11-Nov-22A	28-Apr-26	28-Apr-26	11-Nov-22	11-Nov-22	100%	
145	WS3-030	Site Clearance	14	37	01-Jul-23A	07-Aug-23A	28-Apr-26	28-Apr-26	01-Jul-23	07-Aug-23	100%	
146	WS3-031	Erection of Hoarding (185 m)	80	69	30-May-23A	07-Aug-23A	24-Mar-25	24-Mar-25	30-May-23	07-Aug-23	100%	
147	WS3-032	Demolition of Existing Structure	7	19	05-May-23A	24-May-23A	20-Oct-23	20-Oct-23	05-May-23	24-May-23	100%	
148	WS3-034	GI Works (2 nos.)	28	32	13-Jan-23A	14-Feb-23A	28-Apr-26	28-Apr-26	13-Jan-23	14-Feb-23	100%	
149	WS3-095	Implementation of TTA	7	1	27-Jun-23A	27-Jun-23A	20-Oct-23	20-Oct-23	27-Jun-23	27-Jun-23	100%	
150	WS3-211	Tree Felling	10	1	27-Jun-23A	27-Jun-23A	20-Oct-23	20-Oct-23	27-Jun-23	27-Jun-23	100%	
151	WS3-216	Additional GI Works (3 nos.)	42	56	18-Jul-23A	12-Sep-23A	28-Apr-26	28-Apr-26	18-Jul-23	12-Sep-23	100%	
152	YL2021-10-MPU.C.S3.3 Drainage, Water and Road Works		671	54	15-Aug-23A	08-Aug-25	24-May-23	24-Mar-25	15-Aug-23		0%	-137
153	WS3-090	Removal of CLP Utilities	17	0	08-Oct-23	24-Oct-23	24-May-23	09-Jun-23			0%	-137
154	WS3-097	Open Cut Excavation for Box Culvert DC04	20	54	15-Aug-23A	27-Oct-23	20-Oct-23	08-Nov-23	15-Aug-23		0%	12
155	WS3-098	Open Cut Excavation for Box Culvert DC04 (Time Risk Allowance)	5	0	28-Oct-23	01-Nov-23	09-Nov-23	13-Nov-23			0%	12
156	WS3-100	Construction of Box Culvert DC04 (20 m)	120	0	08-Oct-23*	04-Feb-24	10-Jun-23	07-Oct-23			0%	-120
157	WS3-105	PM/No. 029 Construction of Parapet Wall (79m)	180	0	25-Oct-23	21-Apr-24	10-Jun-23	06-Dec-23			0%	-137
158	WS3-110	PM/No. 029 Construction of Drainage System (328 m)	103	0	26-Jan-24	07-May-24	14-Nov-23	24-Feb-24			0%	-73
159	WS3-120	Construction of Sewage System (290 m)	80	0	22-Apr-24	10-Jul-24	07-Dec-23	24-Feb-24			0%	-137
160	WS3-130	Construction of Fresh Watermain (301 m)	80	0	27-Jun-24	14-Sep-24	11-Feb-24	30-Apr-24			0%	-137
161	WS3-140	Construction of Flush Watermain (140 m)	80	0	27-Jun-24	14-Sep-24	11-Feb-24	30-Apr-24			0%	-137
162	WS3-150	Construction of Irrigation System (37 m)	40	0	06-Aug-24	14-Sep-24	22-Mar-24	30-Apr-24			0%	-137
163	WS3-155	Construction of Street Lighting System (330 m)	35	0	15-Sep-24	19-Oct-24	01-May-24	04-Jun-24			0%	-137
164	WS3-160	Construction of Kerb and Footpath	150	0	21-Oct-24	19-Mar-25	05-Jun-24	02-Nov-24			0%	-137
165	WS3-161	Construction of Paving Blocks (Other than Carriageway)	28	0	19-Mar-25	15-Apr-25	02-Nov-24	29-Nov-24			0%	-137
166	WS3-170	Construction of Street Furniture	65	0	17-Apr-25	20-Jun-25	01-Dec-24	03-Feb-25			0%	-137
167	WS3-180	Construction of Road Works / Carriageway (4791 m3)	48	0	22-Jun-25	08-Aug-25	05-Feb-25	24-Mar-25			0%	-137
168	WS3-185	Site Formation	30	0	24-Jun-25	23-Jul-25	23-Feb-25	24-Mar-25			0%	-121
169	YL2021-10-MPU.C.S3.4 Othe Site Works		551	0	22-Nov-23	25-May-25	06-Sep-24	24-Mar-25			0%	-62
170	WS3-190	Construction of CLP Standalone Substation	200	0	15-Aug-24*	02-Mar-25	06-Sep-24	24-Mar-25			0%	22
171	WS3-200	Construction of Refuse Collection Point	120	0	22-Nov-23*	20-Mar-24	25-Nov-24	24-Mar-25			0%	369
172	WS3-214	Construction of Septic Tank and Soakway Pit	100	0	15-Aug-24	22-Nov-24	15-Dec-24	24-Mar-25			0%	122
173	WS3-215	Construction of Chain Link Fence	40	0	16-Apr-25*	25-May-25	13-Feb-25	24-Mar-25			0%	-62
174	YL2021-10-MPU.C.S4 Section 4 - Comprises all Works within Portion 4, 4A 4B		862	303	09-Dec-22A	17-Apr-25	19-Oct-23	28-Apr-26	09-Dec-22		35.27%	376
175	YL2021-10-MPU.C.S4.4 Portion 4		361	117	13-Jun-23A	20-May-24	15-Sep-24	28-Apr-25	13-Jun-23		37.4%	343
176	WS4-005	Erection of Hoarding	21	21	08-Aug-23A	29-Aug-23A	05-Dec-24	05-Dec-24	08-Aug-23	29-Aug-23	100%	
177	WS4-010	Application of Excavation Permit and Implementation of TTA	198	117	13-Jun-23A	27-Dec-23	15-Sep-24	04-Dec-24	13-Jun-23		59.09%	343
178	WS4-015	Installation of ELS	20	0	28-Dec-23	16-Jan-24	05-Dec-24	24-Dec-24			0%	343
179	WS4-016	Installation of ELS (Time Risk Allowance)	5	0	17-Jan-24	21-Jan-24	25-Dec-24	29-Dec-24			0%	343
180	WS4-020	Excavation for UU Trench	30	0	22-Jan-24	20-Feb-24	30-Dec-24	28-Jan-25			0%	343
181	WS4-030	Construction of Drainage System	30	0	21-Feb-24	21-Mar-24	29-Jan-25	27-Feb-25			0%	343
182	WS4-040	Construction of Street Lighting System	30	0	22-Mar-24	20-Apr-24	28-Feb-25	29-Mar-25			0%	343
183	WS4-050	Construction of Street Furniture	30	0	21-Apr-24	20-May-24	30-Mar-25	28-Apr-25			0%	343
184	WS4-060	Construction of Road Works	30	0	21-Apr-24	20-May-24	30-Mar-25	28-Apr-25			0%	343
185	WS4-080	Tree Felling	4	100	26-Jun-23A	04-Oct-23A	30-Dec-24	30-Dec-24	26-Jun-23	04-Oct-23	100%	
186	YL2021-10-MPU.C.S4.4AB Portion 4A & 4B		862	303	09-Dec-22A	17-Apr-25	19-Oct-23	28-Apr-26	09-Dec-22		35.27%	376
187	YL2021-10-MPU.C.S4.4AB.1 General Works		374	303	09-Dec-22A	06-Nov-23	19-Oct-23	28-Apr-26	09-Dec-22		91.98%	904
188	WS4A-005	Environmental GI Works (Intermediate Stage)	20	20	09-Dec-22A	28-Dec-22A	20-Oct-23	20-Oct-23	09-Dec-22	28-Dec-22	100%	
189	WS4A-010	Erection of Hoarding (521 m)	100	61	08-Aug-23A	06-Nov-23	30-Mar-26	28-Apr-26	08-Aug-23		70%	904
190	WS4A-020	Demolition of Existing Structure (689 m2)	4	0	08-Oct-23*	11-Oct-23	25-Apr-26	28-Apr-26			0%	930
191	WS4A-030	Site Clearance	14	129	01-Jun-23A	21-Oct-23*	10-Mar-25	23-Mar-25	01-Jun-23		0%	519
192	WS4A-032	GI Works (2 nos.)	28	9	13-Mar-23A	21-Mar-23A	28-Apr-26	28-Apr-26	13-Mar-23	21-Mar-23	100%	
193	WS4A-033	Additional GI Works (1 nos.)	14	16	26-Jun-23A	12-Jul-23A	28-Apr-26	28-Apr-26	26-Jun-23	12-Jul-23	100%	
194	WS4A-040	Environmental GI Works (Total 15 nos.)	18	26	30-Mar-23A	25-Apr-23A	20-Oct-23	20-Oct-23	30-Mar-23	25-Apr-23	100%	
195	WS4A-211	Tree Felling (96 nr)	10	104	26-Jun-23A	08-Oct-23	19-Oct-23	19-Oct-23	26-Jun-23		90%	11
196	YL2021-10-MPU.C.S4.4AB.2 Land Decontamination Works		157	79	21-Jul-23A	20-Feb-24	20-Oct-23	28-Apr-25	21-Jul-23		13.38%	433
197	WS4A-045	Submission of Contamination Assessment Report (CAR)	14	21	21-Jul-23A	11-Aug-23A	20-Oct-23	20-Oct-23	21-Jul-23	11-Aug-23	100%	
198	WS4A-046	Submission of Remediation Action Plan (RAP)	14	21	21-Jul-23A	11-Aug-23A	20-Oct-23	20-Oct-23	21-Jul-23	11-Aug-23	100%	



TUNG LEE ENGINEERING COMPANY

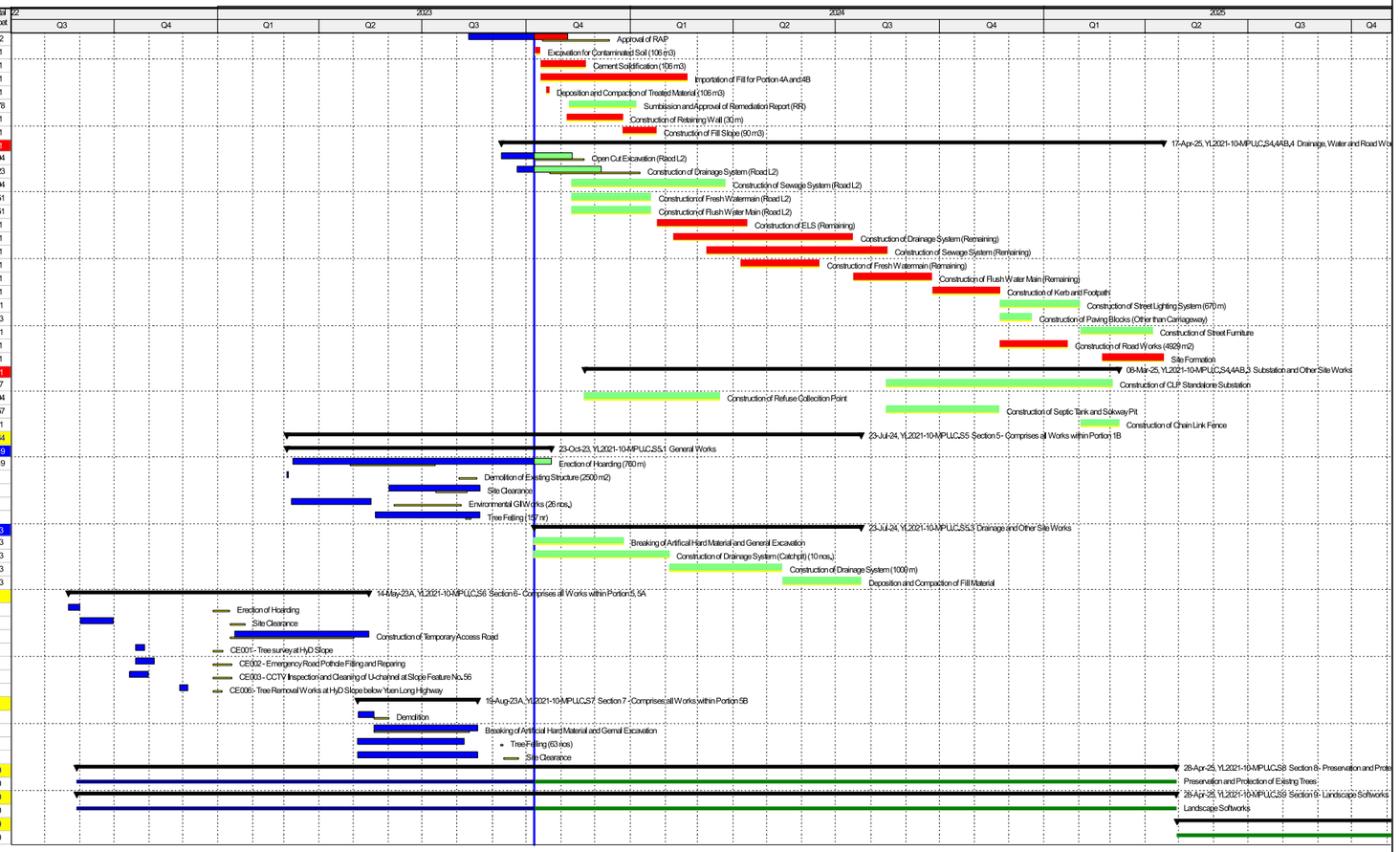
Remaining Level of Effort
Actual Level of Effort
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
summary

Contract No. YL/2021/03 - Site Formation and Infrastrcture Works for Yuen Long South First Phase Development - Contract 1
REVISED PROGRAMME (REV. 8) (OCT 2023)

Date	Revision	Checked	Ap...
15-Aug-23	Rev. 6	WCF	YKC
09-Sep-23	Rev. 7	WCF	YKC
08-Oct-23	Rev. 8	WCF	YKC

Contract No. YL/2021/03 - Site Formation and Infrastrcture Works for Yuen Long South First Phase Development - Contract 1
REVISED PROGRAME (REV. 8) (OCT 2023)

#	Activity ID	Activity Name	Original Duration	Actual Duration	Start	Finish	Late Start	Late Finish	Actual Start	Actual Finish	% Complete	Total Float
199	WS4A-047	Approval of RAP	60	58	11-Aug-23 A	06-Nov-23	20-Oct-23	18-Nov-23	11-Aug-23		50%	12
200	WS4A-060	Excavation for Contaminated Soil (106 m3)	5	0	09-Oct-23	13-Oct-23	20-Oct-23	24-Oct-23			0%	11
201	WS4A-070	Cement Solidification (106 m3)	40	0	14-Oct-23	22-Nov-23	25-Oct-23	03-Dec-23			0%	11
202	WS4A-071	Importation of Fill for Portion 4A and 4B	130	0	14-Oct-23	20-Feb-24	25-Oct-23	02-Mar-24			0%	11
203	WS4A-080	Deposition and Compaction of Treated Material (106 m3)	3	0	19-Oct-23	21-Oct-23	30-Oct-23	01-Nov-23			0%	11
204	WS4A-082	Sumbission and Approval of Remediation Report (RR)	60	0	08-Nov-23	06-Jan-24	28-Feb-25	28-Apr-25			0%	478
205	WS4A-100	Construction of Retaining Wall (30 m)	50	0	06-Nov-23	25-Dec-23	17-Nov-23	05-Jan-24			0%	11
206	WS4A-110	Construction of Fill Slope (30 m3)	30	0	26-Dec-23	24-Jan-24	05-Jan-24	04-Feb-24			0%	11
207	YL2021-10-MPU,CS4,4AB,4	Drainage, Water and Road Workks	558	29	09-Sep-23 A	17-Apr-25	05-Feb-24	28-Apr-25	09-Sep-23		0%	11
208	WS4A-114	Open Cut Excavation (Raod L2)	45	29	09-Sep-23 A	10-Nov-23	19-Apr-24	22-May-24	09-Sep-23		25%	194
209	WS4A-120	Construction of Drainage System (Road L2)	80	15	23-Sep-23 A	06-Dec-23	18-May-24	16-Jul-24	23-Sep-23		25%	223
210	WS4A-130	Construction of Sewage System (Road L2)	136	0	10-Nov-23	25-Mar-24	23-May-24	05-Oct-24			0%	194
211	WS4A-140	Construction of Fresh Watermain (Road L2)	70	0	10-Nov-23	19-Jan-24	19-Jul-24	26-Sep-24			0%	251
212	WS4A-150	Construction of Flush Water Main (Road L2)	70	0	10-Nov-23	19-Jan-24	19-Jul-24	26-Sep-24			0%	251
213	WS4A-152	Construction of ELS (Remaining)	80	0	25-Jan-24	13-Apr-24	05-Feb-24	24-Apr-24			0%	11
214	WS4A-155	Construction of Drainage System (Remaining)	160	0	08-Feb-24	16-Jul-24	19-Feb-24	27-Jul-24			0%	11
215	WS4A-156	Construction of Sewage System (Remaining)	160	0	09-Mar-24	15-Aug-24	20-Mar-24	26-Aug-24			0%	11
216	WS4A-157	Construction of Fresh Watermain (Remaining)	70	0	08-Apr-24	16-Jun-24	19-Apr-24	27-Jun-24			0%	11
217	WS4A-158	Construction of Flush Water Main (Remaining)	70	0	17-Jul-24	24-Sep-24	28-Jul-24	05-Oct-24			0%	11
218	WS4A-169	Construction of Kerb and Footpath	60	0	25-Sep-24	23-Nov-24	06-Oct-24	04-Dec-24			0%	11
219	WS4A-170	Construction of Street Lighting System (670 m)	70	0	24-Nov-24	01-Feb-25	15-Dec-24	22-Feb-25			0%	21
220	WS4A-171	Construction of Paving Blocks (Other than Carriageway)	28	0	24-Nov-24	21-Dec-24	05-Feb-25	04-Mar-25			0%	73
221	WS4A-180	Construction of Street Furniture	65	0	02-Feb-25	07-Apr-25	23-Feb-25	28-Apr-25			0%	21
222	WS4A-190	Construction of Road Works (4929 m2)	60	0	24-Nov-24	22-Jan-25	05-Dec-24	02-Feb-25			0%	11
223	WS4A-216	Site Formation	55	0	22-Feb-25	17-Apr-25	05-Mar-25	28-Apr-25			0%	11
224	YL2021-10-MPU,CS4,4AB,3	Substation and Other Site Works	473	0	22-Nov-23	08-Mar-25	11-Oct-24	28-Apr-25			0%	51
225	WS4A-200	Construction of CLP Standalone Substation	200	0	15-Aug-24*	02-Mar-25	11-Oct-24	28-Apr-25			0%	57
226	WS4A-210	Construction of Refuse Collection Point	120	0	22-Nov-23*	20-Mar-24	30-Dec-24	28-Apr-25			0%	404
227	WS4A-214	Construction of Septic Tank and Sokway Pit	100	0	15-Aug-24	22-Nov-24	19-Jan-25	28-Apr-25			0%	157
228	WS4A-215	Construction of Chain Link Fence	35	0	02-Feb-25	08-Mar-25	25-Mar-25	28-Apr-25			0%	51
229	YL2021-10-MPU,C.S5	Section 5 - Comprises all Works within Portion 1B	453	219	03-Mar-23A	23-Jul-24	31-Oct-23	28-Apr-26	03-Mar-23		35.99%	644
230	YL2021-10-MPU,C.S5.1	General Works	113	219	03-Mar-23A	23-Oct-23	31-Oct-23	28-Apr-26	03-Mar-23		86.55%	919
231	WS5-010	Erection of Hoarding (760 m)	76	214	06-Mar-23A	23-Oct-23	13-Apr-26	28-Apr-26	06-Mar-23		80%	919
232	WS5-020	Demolition of Existing Structure (2500 m2)	17	2	03-Mar-23A	04-Mar-23A	28-Apr-26	28-Apr-26	03-Mar-23	04-Mar-23	100%	
233	WS5-030	Site Clearance	28	81	01-Jun-23A	21-Aug-23A	28-Apr-26	28-Apr-26	01-Jun-23	21-Aug-23	100%	
234	WS5-040	Environmental GI Works (26 nos.)	60	71	07-Mar-23A	17-May-23A	31-Oct-23	31-Oct-23	07-Mar-23	17-May-23	100%	
235	WS5-101	Tree Felling (157 nr)	5	93	20-May-23A	21-Aug-23A	15-Aug-24	15-Aug-24	20-May-23	21-Aug-23	100%	
236	YL2021-10-MPU,C.S5.3	Drainage and Other Site Works	290	0	08-Oct-23	23-Jul-24	31-Oct-23	15-Aug-24			0%	23
237	WS5-045	Breaking of Artifical Hard Material and General Excavation	80	0	08-Oct-23	26-Dec-23	31-Oct-23	18-Jan-24			0%	23
238	WS5-050	Construction of Drainage System (Catchpit) (10 nos.)	120	0	08-Oct-23	04-Feb-24	31-Oct-23	27-Feb-24			0%	23
239	WS5-090	Construction of Drainage System (1000 m)	100	0	05-Feb-24	14-May-24	28-Feb-24	06-Jun-24			0%	23
240	WS5-100	Deposition and Compaction of Fill Material	70	0	15-May-24	23-Jul-24	07-Jun-24	15-Aug-24			0%	23
241	YL2021-10-MPU,C.S6	Section 6 - Comprises all Works within Portion 5, 5A	125	266	22-Aug-22 A	14-May-23A	28-Apr-26	28-Apr-26	22-Aug-22	14-May-23	100%	
242	WS6-009	Erection of Hoarding	15	10	22-Aug-22 A	31-Aug-22 A	28-Apr-26	28-Apr-26	22-Aug-22	31-Aug-22	100%	
243	WS6-010	Site Clearance	14	30	01-Sep-22 A	30-Sep-22 A	28-Apr-26	28-Apr-26	01-Sep-22	30-Sep-22	100%	
244	WS6-020	Construction of Temporary Access Road	110	119	16-Jan-23A	14-May-23A	28-Apr-26	28-Apr-26	16-Jan-23	14-May-23	100%	
245	WS6-030	CE001 - Tree survey at HyD Slope	9	9	20-Oct-22 A	28-Oct-22 A	28-Apr-26	28-Apr-26	20-Oct-22	28-Oct-22	100%	
246	WS6-031	CE002 - Emergency Road Pothole Filling and Repairing	17	17	20-Oct-22 A	05-Nov-22 A	28-Apr-26	28-Apr-26	20-Oct-22	05-Nov-22	100%	
247	WS6-032	CE003 - CCTV Inspection and Cleaning of U-channel at Slope Feature No. 56	17	17	15-Oct-22 A	31-Oct-22 A	28-Apr-26	28-Apr-26	15-Oct-22	31-Oct-22	100%	
248	WS6-033	CE006 - Tree Removal Works at HyD Slope below Yuen Long Highway	8	8	28-Nov-22 A	05-Dec-22 A	28-Apr-26	28-Apr-26	28-Nov-22	05-Dec-22	100%	
249	YL2021-10-MPU,C.S7	Section 7 - Comprises all Works within Portion 5B	129	106	05-May-23A	19-Aug-23A	28-Apr-26	28-Apr-26	05-May-23	19-Aug-23	100%	
250	WS7-010	Demolition	14	14	05-May-23A	19-May-23A	28-Apr-26	28-Apr-26	05-May-23	19-May-23	100%	
251	WS7-10	Breaking of Artifical Hard Material and Gernal Excavation	85	92	19-May-23A	19-Aug-23A	28-Apr-26	28-Apr-26	19-May-23	19-Aug-23	100%	
252	WS7-11	Tree Felling (63 nos)	3	94	05-May-23A	07-Aug-23A	28-Apr-26	28-Apr-26	05-May-23	07-Aug-23	100%	
253	WS7-12	Site Clearance	14	106	05-May-23A	19-Aug-23A	28-Apr-26	28-Apr-26	05-May-23	19-Aug-23	100%	
254	YL2021-10-MPU,C.S8	Section 8 - Preservation and Protection of Existng Trees	974	405	29-Aug-22 A	28-Apr-25	19-Oct-23	28-Apr-25	29-Aug-22		41.58%	0
255	WS8-010	Preservation and Protection of Existing Trees	974	405	29-Aug-22 A	28-Apr-25	19-Oct-23	28-Apr-25	29-Aug-22		41.58%	0
256	YL2021-10-MPU,C.S9	Section 9 - Landscape Softworks	974	405	29-Aug-22 A	28-Apr-25	19-Oct-23	28-Apr-25	29-Aug-22		41.58%	0
257	WS9-010	Landscape Softworks	974	405	29-Aug-22 A	28-Apr-25	19-Oct-23	28-Apr-25	29-Aug-22		41.58%	0
258	YL2021-10-MPU,C.S10	Section 10 - Establishment	365	0	29-Apr-25	28-Apr-26	29-Apr-25	28-Apr-26			0%	0
259	WS10-010	Establishment	365	0	29-Apr-25	28-Apr-26	29-Apr-25	28-Apr-26			0%	0



TUNG LEE ENGINEERING COMPANY

Remaining Level of Effort
Actual Level of Effort
Primary Baseline
Actual Work
Remaining Work
Critical Remaining Work
Milestone
summary

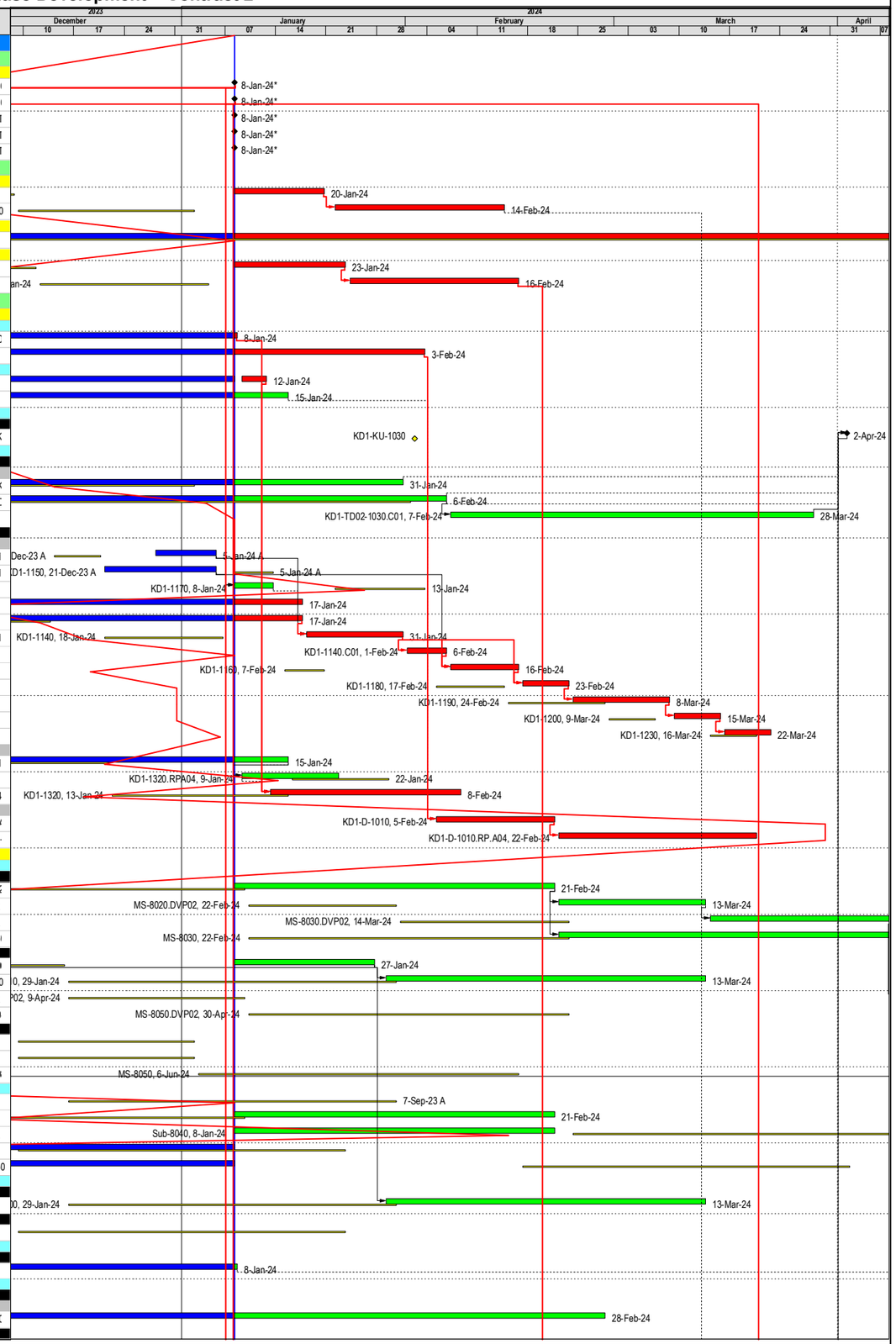
Contract No. YL/2021/03 - Site Formation and Infrastrcture Works for Yuen Long South First Phase Development - Contract 1
REVISED PROGRAMME (REV. 8) (OCT 2023)

Date	Revision	Checked	Ap...
15-Aug-23	Rev. 6	WCF	YKC
09-Sep-23	Rev. 7	WCF	YKC
08-Oct-23	Rev. 8	WCF	YKC

3-month Rolling Construction Programme of Contract 2

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
YL202104 Site Formation and Infrastructure Works for YL South First Phase Development - Contract 2															
Contract Data (CDP1)															
Access Date															
AD-1070	Access to Portion 5A (8-Aug-23)	25-Nov-23		0	100%	8-Jan-24*		0	0	0%	-44	-44	-153	CD-1020	CD-1250, S5-220
AD-1100	Access to Portion 6A (8-Aug-23)	25-Nov-23		0	100%	8-Jan-24*		0	0	0%	-44	-44	-153	CD-1020	CD-1260, S6-201
AD-1210	Access to Portion 10A (8-Aug-23)	25-Nov-23		0	100%	8-Jan-24*		0	0	0%	-44	-44	-153	CD-1020	CD-1300, KD5-T1
AD-1220	Access to Portion 10B (8-Aug-23)	25-Nov-23		0	100%	8-Jan-24*		0	0	0%	-44	-44	-153	CD-1020	CD-1300, KD5-T1
AD-1230	Access to Portion 10C (8-Aug-23)	25-Nov-23		0	100%	8-Jan-24*		0	0	0%	-44	-44	-153	CD-1020	CD-1300, KD5-T1
Preliminaries/General Submission															
Contamination Assessment Report (CAR)/Remediation Action Plan (RAP)															
P-1350	CAR / RAP (if any) - Preparation and Submission	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	-50	CD-1020	P-1360
P-1360	CAR/ RAP (if any) - Review and Approval	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	-50	P-1350	S5-2060, S7-1140
Archaeological Action Plan (AAP)															
P-1510.DVP01	Archaeological Action Plan (AAP) - Review and Approval of AAP by AMO	25-Oct-23	20-Apr-24	144	42.36%	25-Oct-23	20-Apr-24	144	83	15%	0	0	-7	P-1500.DVP01	S5-A-1020
Interface Management Plan															
P-1520.DVP01	Interface Management Plan - Preparation and Submission	25-Nov-23	11-Dec-23	14	100%	8-Jan-24	23-Jan-24	14	14	0%	-34	-34	-40	CD-1020	P-1530.DVP01
P-1530.DVP01	Interface Management Plan - Review and Approval	12-Dec-23	4-Jan-24	18	100%	24-Jan-24	16-Feb-24	18	18	0%	-34	-34	-40	P-1520.DVP01	S5-2090
Construction Works															
KD1 | Section 8 [Portions 11 and 11A] - Road L1A and L1B															
Design															
DD-2040	Design - Approval of ELS design for BC02	26-Jul-23	25-Nov-23	103	100%	26-Jul-23 A	8-Jan-24	18	1	90%	0	-34	0	DD-2030	KD1-1320, MS-20
DD-1030	Design - Approval of Temp Decking - YL bypass at Portion 11	2-Jun-23	25-Nov-23	147	100%	2-Jun-23 A	3-Feb-24	18	24	90%	0	-57	0	DD-1020	KD1-D-1010
Submission															
MS-2020.DVP02	MS - Approval Method statement for construction of BC02	5-Oct-23	27-Nov-23	45	100%	5-Oct-23 A	12-Jan-24	18	4	90%	0	-37	0	MS-2010.DVP02	KD1-1320
MS-1030	MS - Approval of Temp Decking - YL bypass at Portion 11	14-Jul-23	25-Nov-23	113	100%	14-Jul-23 A	15-Jan-24	18	7	90%	0	-40	17	MS-1020	KD1-D-1010
TTA Scheme/XP															
TD related															
KD1-KU-1030	TTA - One way gyratory (KHIR-013a) - one way one lane scheme	2-Feb-24		0	0%	2-Apr-24		0	0	0%	-45	-45	47	KD1-D-1020, P-1	KD1-2010, TTA-K
Construction Works															
Temporary Works															
Temp Decking TD02															
KD1-D-1030.C	Footing / Abutment for TD02 at Portion 11	2-Dec-23	2-Jan-24	24	100%	1-Nov-23 A	31-Jan-24	24	21	20%	27	-25	93	KD1-D-1020.DVF	KD1-2010, KD1-K
KD1-D-1020	Decking for TD02 at Portion 11	1-Nov-23	1-Feb-24	77	71.43%	1-Nov-23 A	6-Feb-24	60	26	20%	0	-4	47	SC-1210	KD1-KU-1030, KD
KD1-TD02-10	Decking for TD02 at Portion 11 (South of Existing Footbridge)			0	0%	7-Feb-24	28-Mar-24	41	41	0%			47	KD1-D-1020	KD1-KU-1030
Box Culvert BC02 East and BC02A															
BC02A (1st Wet season) & sewer construction															
KD1-1130	Lay dia. 450 sewage pipeline for temp. diversion from Existing to FMH1002	14-Dec-23	20-Dec-23	6	100%	28-Dec-23	5-Jan-24 A	6	0	100%	-10	-11		KD1-1030, KD1-1	KD1-1140, KD1-1
KD1-1150	Construction of FMH1002 Bottom Part	8-Jan-24	13-Jan-24	6	0%	21-Dec-23	5-Jan-24 A	6	0	100%	12	7		P-1490.DVP01, K	KD1-1160, KD1-1
KD1-1170	Construction of FMH1004 Bottom Part	22-Jan-24	3-Feb-24	12	0%	8-Jan-24	13-Jan-24	6	6	0%	12	18	3	KD1-1130, KD1-1	KD1-1140
KD1-1070	Excavation to Struct Layer S2	24-Oct-23	29-Nov-23	32	100%	24-Oct-23	17-Jan-24	9	9	50%	0	-39	0	KD1-1050	KD1-1080
KD1-1080	Install waling & Struct (W2 & S2)	30-Nov-23	13-Dec-23	12	100%	13-Nov-23	17-Jan-24	12	9	50%	15	-27	0	KD1-1070, KD1-1	KD1-1140
KD1-1140	Lay dia. 450 sewage pipeline for temp. diversion from FMH1002 to FMH1004	21-Dec-23	6-Jan-24	12	100%	18-Jan-24	31-Jan-24	12	12	0%	-21	-21	0	KD1-1130, KD1-1	KD1-1180, KD1-1
KD1-1140.C01	Construction of FMH1001 Bottom Part			0	0%	1-Feb-24	6-Feb-24	5	5	0%			0	KD1-1140	KD1-1160
KD1-1160	Lay dia. 900 sewage pipeline for temp. diversion from FMH1001 to FMH1004	15-Jan-24	20-Jan-24	6	0%	7-Feb-24	16-Feb-24	6	6	0%	-20	-20	0	KD1-1150, KD1-1	KD1-1180
KD1-1180	Place 500mm thick Grade 200 size aggregate layer for BC02A	5-Feb-24	14-Feb-24	6	0%	17-Feb-24	23-Feb-24	6	6	0%	-8	-8	0	MS-2020, KD1-1	KD1-1190
KD1-1190	Construct 3- cell BC02A to 500mm below strut layer S2	15-Feb-24	28-Feb-24	12	0%	24-Feb-24	8-Mar-24	12	12	0%	-8	-8	0	KD1-1180	KD1-1200
KD1-1200	Construction of FMH1001, FMH1002, FMH1004 to 500mm below Strut Layer S2	29-Feb-24	6-Mar-24	6	0%	9-Mar-24	15-Mar-24	6	6	0%	-8	-8	0	KD1-1190	KD1-1230
KD1-1230	Backfill around BC02A and new FMH to 500mm below Strut Layer S2	14-Mar-24	20-Mar-24	6	0%	16-Mar-24	22-Mar-24	6	6	0%	-2	-2	0	KD1-1200	KD1-1240
BC02 East & BC02A (2nd dry season)															
KD1-1310	Demolition of existing diversion wall	22-Nov-23	21-Dec-23	26	100%	22-Nov-23	15-Jan-24	24	7	80%	0	-18	1	SC-1210	KD1-1320, KD1-1
KD1-1320.RP/	Excavation of nullah base for BC02 East (1st cell)	16-Jan-24	29-Jan-24	12	0%	9-Jan-24	22-Jan-24	12	12	0%	6	6	5	KD1-1310	KD1-1320
KD1-1320	Installation of sheet piling for BC02 East (1st cell)	22-Dec-23	15-Jan-24	18	61.11%	13-Jan-24	8-Feb-24	23	23	0%	-16	-21	0	KD1-1310, KD-R	KD1-1330.RPA04
Temp Decking Yuen Long Floodway Bypass															
KD1-D-1010	Cut Down Existing Floodwall 1m below ground	21-May-24	3-Jun-24	12	0%	5-Feb-24	21-Feb-24	12	12	0%	82	82	0	KD1-D-1000, MS	KD1-D-1010.RP.A
KD1-D-1010.F	Construction of the decking - YL bypass at Portion 11	4-Jun-24	3-Jul-24	24	0%	22-Feb-24	20-Mar-24	24	24	0%	82	82	0	KD1-D-1010	AW-1060, KD1-D-
Section 8 [Portions 11 and 11A] - Road L1A and L1B															
Method statement															
S690															
MS-8020	MS - Method statement for Noise Barrier NB12	25-Nov-23	9-Jan-24	36	94.44%	8-Jan-24	21-Feb-24	36	36	0%	-34	-34	68	DD-8030	MS-8030, MS-80
MS-8020.DVP02	MS - Method statement for Noise Barrier NB13 and NB15	10-Jan-24	30-Jan-24	18	0%	22-Feb-24	13-Mar-24	18	18	0%	-34	-34	68	MS-8030, DD-80	MS-8030.DVP02,
MS-8030.DVP02	MS - Approval of Noise Barrier NB13 and NB15	31-Jan-24	23-Feb-24	18	0%	14-Mar-24	8-Apr-24	18	18	0%	-34	-34	68	MS-8020.DVP02	PO-8060.DVP01,
MS-8030	MS - Approval Method statement for Noise Barrier NB12	10-Jan-24	23-Feb-24	36	0%	22-Feb-24	8-Apr-24	36	36	0%	-34	-34	96	MS-8020, DD-80	S8-4230, PO-806
DC02 & Soldier pile															
MS-8000	MS - Method statement for Soldier pile	25-Nov-23	15-Dec-23	18	100%	8-Jan-24	27-Jan-24	18	18	0%	-34	-34	34	DD-8000, DD-80	MS-8010, Sub-80
MS-8010	MS - Approval of Method statement for Soldier pile	16-Dec-23	30-Jan-24	36	44.44%	29-Jan-24	13-Mar-24	36	36	0%	-34	-34	34	MS-8000	S8-3150, S8-3200
MS-8040.DVP02	MS - Method statement for Precast Beam Installation for Decking DC02	16-Dec-23	9-Jan-24	18	88.89%	9-Apr-24	29-Apr-24	18	18	0%	-88	-88	68	S8-0010, MS-803	MS-8050.DVP02,
MS-8050.DVP02	MS - Approval of MS for Precast Beam Installation for Decking DC02	10-Jan-24	23-Feb-24	36	0%	30-Apr-24	13-Jun-24	36	36	0%	-88	-88	114	MS-8040.DVP02	S8-2040-1, S8-20
Retaining wall & others															
MS-1010	MS - Approval of Method statement for Retaining Wall 01	9-Dec-23	2-Jan-24	18	100%	16-May-24	5-Jun-24	18	18	0%	-124	-124	80	MS-1000	KD1-RW1-1000
MS-8040	MS - Method statement for Construction of Retaining Wall 02	9-Dec-23	2-Jan-24	18	100%	16-May-24	5-Jun-24	18	18	0%	-124	-124	110	MS-1000	MS-8050
MS-8050	MS - Approval of Method statement for Retaining Wall 02	3-Jan-24	16-Feb-24	36	11.11%	6-Jun-24	19-Jul-24	36	36	0%	-124	-124	110	MS-8040	Sub-8020, MS-80
Subletting															
Sub-8000	Subletting - Soldier pile	16-Dec-23	30-Jan-24	36	44.44%	18-Jul-23 A	7-Sep-23 A	36	0	100%	127	118		DD-8000, MS-80	S8-3150
Sub-8010	Subletting - Noise Barrier NB12, NB13, NB15	25-Nov-23	9-Jan-24	36	94.44%	8-Jan-24	21-Feb-24	36	36	0%	-34	-34	42	DD-8020	PO-8010
Sub-8040	Subletting - Precast Beam Installation for Decking DC02	24-Feb-24	10-Apr-24	36	0%	8-Jan-24	21-Feb-24	36	36	0%	38	38	42	CD-1020	PO-8030.DVP01,
Sub-1000	Subletting - RW01	9-Dec-23	23-Jan-24	36	61.11%	8-Sep-23 A	16-May-24	36	1	20%	76	-89	103	MS-1000	KD1-RW1-1010
Sub-8020	Subletting - RW02	17-Feb-24	2-Apr-24	36	0%	27-Sep-23	20-Jul-24	36	1	20%	114	-89	127	MS-8050	PO-8020, S8-1050
Procurement															
DC02 & Soldier pile															
PO-8000	Procurement - Soldier pile	16-Dec-23	30-Jan-24	36	44.44%	29-Jan-24	13-Mar-24	36	36	0%	-34	-34	34	MS-8000	S8-3150
Retaining Wall															
PO-1000.DVP01	Procurement - ELS, Steel & Concrete for RW01	9-Dec-23	23-Jan-24	36	61.11%	16-May-24	27-Jun-24	36	36	0%	-124	-124	68	MS-1000	KD1-RW1-1010
TTA Scheme/XP															
RW01															
AW-1040	TTA and XP - RW01 & diversion of existing footpath	8-Jun-23	25-Nov-23	142	100%	8-Jun-23 A	8-Jan-24	18	1	80%	0	-34	199	KD1-0010, P-110	KD1-RW1-1000
Construction Works															
Preliminary Works															
Portion 11 - Tree, site formation & GI															
S8-1040	Portion 11 (GI) - Ground Investigation (11no; 10d/no, 2wf)	7-Jul-23	25-Nov-23	119	100%	7-Jul-23 A	28-Feb-24	60	42	21%	0	-75	4	S8-1030, KD2D-2	S8-2010, S8-421
UU diversion															



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

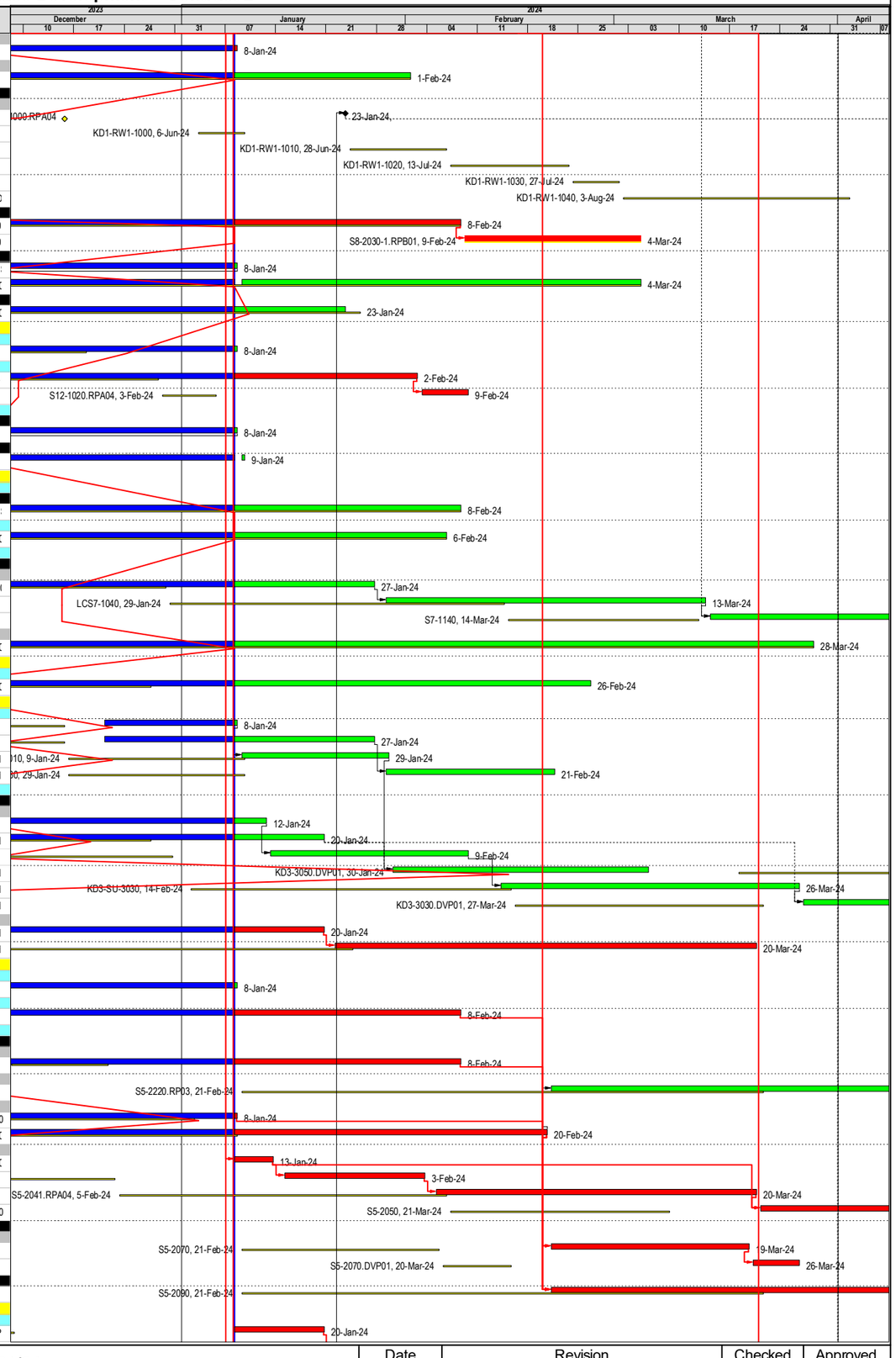
Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29
Page 1 of 7

YL/2021/04
Three Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
CLP															
KD1-1000-1	CLP divert the overhead cable at road L1A & 1B	3-Jul-23	25-Nov-23	123	100%	3-Jul-23 A	8-Jan-24	60	1	70%	0	-34	-70	KD1-1000, MS-S	KD-R-1000
Towngas															
S8-1070	UU diversion works Towngas - High Pressure Gas Pipe diversion works - stage1	2-Aug-23	1-Feb-24	152	85.53%	2-Aug-23 A	1-Feb-24	80	22	80%	0	0	24	S8-1060	S8-2010
Retaining Wall (RW01,RW02,RW03,RW06 & RW07)															
Portion 11 - Retaining Wall 01															
KD1-RW1-100	Complete Road Set Back near BC01 (KD5)		15-Dec-23	0	100%		23-Jan-24	0	0	0%	-30	-30	186	KD5-1010	KD1-RW1-1000
KD1-RW1-1000	Form the Temp. pedestrian walk way under Yuen Long Highway	3-Jan-24	9-Jan-24	6	66.67%	6-Jun-24	13-Jun-24	6	6	0%	-124	-124	80	AW-1040, MS-10	KD1-RW1-1010
KD1-RW1-1010	ELS for RW01	24-Jan-24	6-Feb-24	12	0%	28-Jun-24	12-Jul-24	12	12	0%	-124	-124	68	KD1-RW1-1000,	KD1-RW1-1020
KD1-RW1-1020	Demolish existing slope for RW01	7-Feb-24	23-Feb-24	12	0%	13-Jul-24	26-Jul-24	12	12	0%	-124	-124	68	KD1-RW1-1010	KD1-RW1-1030
KD1-RW1-1030	G200 Rockfill and 75mm blinding for RW01	24-Feb-24	1-Mar-24	6	0%	27-Jul-24	2-Aug-24	6	6	0%	-124	-124	68	KD1-RW1-1020	KD1-RW1-1040
KD1-RW1-1040	Construction of RW01	2-Mar-24	2-Apr-24	24	0%	3-Aug-24	30-Aug-24	24	24	0%	-124	-124	68	KD1-RW1-1030	KD1-RW1-1050.D
Decking DC02															
S8-2030-1	Predrill for Decking DC02	30-Aug-23	8-Feb-24	134	79.1%	30-Aug-23	8-Feb-24	50	28	15%	0	0	0	S8-1060	S8-2030-2, S8-20
S8-2030-1.RPE	Preparation for predrilling test report and submission	9-Feb-24	4-Mar-24	18	0%	9-Feb-24	4-Mar-24	18	18	0%	0	0	0	S8-2030-1	S8-2030-2, S8-20
Soldier Pile Wall at Road L1A															
S8-3120	Erect temporary working platform for Road L1A	11-Aug-23	25-Nov-23	89	100%	11-Aug-23	8-Jan-24	48	1	85%	0	-34	15	S8-3110	S8-3120.RPA04,
S8-3140	Carry out TAM grouting on the retaining side from 2 meter below existing ground to +7.00mPD	14-Nov-23	4-Mar-24	90	48.89%	14-Nov-23	4-Mar-24	90	45	3%	0	0	30	S8-3120, DD-800	S8-3150, S8-314(
Soldier Pile Wall at Road L1B															
S8-1080	UU diversion works Towngas - High Pressure Gas Pipe diversion works - stage2	2-Oct-23	25-Jan-24	95	83.16%	2-Oct-23 A	23-Jan-24	82	14	15%	0	2	2	S8-1060	S8-3150, S8-513(
Section 12 [Portions 15 and 15A] - Junction of Tai Tong Road and Tai Kei Leng Road															
Subletting															
S12-1010	Subletting - S12 - C9 process	22-Feb-23	18-Dec-23	246	100%	22-Feb-23	8-Jan-24	60	1	25%	0	-15	28	S12-1000	S12-2020
TTA Scheme/XP															
S12-1010.RPA04	TTA - Scheme TMLG Coordination/Meeting/Approval	8-Aug-23	28-Dec-23	118	100%	8-Aug-23 A	2-Feb-24	36	23	35%	0	-30	0	S12-1000.RPA04	S12-1020.RPA04
S12-1020.RPA04	TTA - Roadwork Advise (RA)	29-Dec-23	5-Jan-24	6	100%	3-Feb-24	9-Feb-24	6	6	0%	-30	-30	0	S12-1010.RPA04	S12-2020
Construction Works															
Preliminary Works															
S12-2000	Tree Survey, Felling and preservation at Portion 15	29-Jun-23	25-Nov-23	124	100%	29-Jun-23	8-Jan-24	60	1	100%	0	-35	27	S12-1020, CD-10	S12-2010
Site Clearance and Site Formation Works															
S12-2010	Site Clearance & site formation after access Portion 15	7-Oct-23	25-Nov-23	42	100%	7-Oct-23 A	9-Jan-24	54	1	35%	0	-35	27	S12-2000, S12-1(	S12-2020
Section 7 [Portions 9, 9A and 17] - Box Culvert BC03, Common Utility Tunnel															
Design															
E&M Design Submission															
SUS7-1010.B02	Design and Submission - E&M CUT (1st Round)	13-Nov-23	8-Feb-24	73	61.64%	13-Nov-23	8-Feb-24	60	28	53.33%	0	0	5	SUS7-1000.B02	SUS7-1020.B02,
Procurement															
POS7-1020	Procurement - Material of BC03	25-Nov-23	6-Feb-24	60	56.67%	28-Aug-23	6-Feb-24	60	26	25%	74	0	82	DDS7-1020, Sub	S7-1200, S7-123(
Construction Works															
Preliminary Works															
Land Contamination															
LCS7-1030	Submit CAR & RAP (if any)	25-Oct-23	29-Dec-23	55	100%	25-Oct-23	27-Jan-24	12	18	5%	0	-24	31	LCS7-1020	LCS7-1040, S7-6(
LCS7-1040	Approval of CAP & RAP	30-Dec-23	14-Feb-24	36	16.67%	29-Jan-24	13-Mar-24	36	36	0%	-24	-24	31	LCS7-1030	S7-1140
S7-1140	Decontamination at Portion 9A	15-Feb-24	12-Mar-24	23	0%	14-Mar-24	13-Apr-24	23	23	0%	-24	-24	31	LCS7-1040, P-13	S7-1200
Tree															
TRS7-1030	Remaining Tree Felling and preservation at Portion 17	8-Jun-23	28-Mar-24	242	72.31%	8-Jun-23 A	28-Mar-24	48	67	15%	0	0	11	TRS7-1020	S7-2010, S7-139(
Section 16 [Portions 9B, 9C, 20, 21 & 22] - All works															
Method Statement															
S16-1030	MS - Submission and approval of all necessary documents incl. MS, material and remain statutory sub	8-Aug-23	27-Dec-23	117	100%	8-Aug-23 A	26-Feb-24	60	40	100%	0	-48	65	S16-1010, S16-1(	S16-2020, S16-2(
KD3 | Section 5 [Portions 2B, 5A, 5B] & Section 6 [Portion 6,6A,6B,6C] - Road D1 and D2															
Design															
KD3-DD-1000	Design - Temp works design for RW & road and Drainage	25-Nov-23	15-Dec-23	18	100%	21-Dec-23	8-Jan-24	18	1	25%	-22	-17	10	KD3-1610	KD3-DD-1010
KD3-DD-1020	Design - Design for temp. access road 2.2 and associated temp. lighting	25-Nov-23	15-Dec-23	18	100%	21-Dec-23	27-Jan-24	18	18	25%	-22	-34	37	KD3-1610	KD3-DD-1030
KD3-DD-1010	Design - Approval of the Temp works design for RW & road and Drainage	16-Dec-23	9-Jan-24	18	88.89%	9-Jan-24	29-Jan-24	18	18	0%	-17	-17	10	KD3-DD-1000	KD3-3050.DVP01
KD3-DD-1030	Design - Approval for Design for temp. access road 2.2 and associated temp. lighting	16-Dec-23	9-Jan-24	18	88.89%	29-Jan-24	21-Feb-24	18	18	0%	-34	-34	37	KD3-DD-1020	KD3-2060.DVP01
Construction Works (KD3)															
Temporary Access Road No. 2															
Section 5 [Portion 5B] Temp Access Road No. 2															
KD3-3025.B02	Portion 5B - Land contamination survey (11 nos. drillholes, 3 days holes, 1 team)	11-Oct-23	30-Nov-23	43	100%	11-Oct-23	12-Jan-24	6	5	16.67%	0	-34	4	CD-1020, AD-108	KD3-SU-3020
KD3-3025.DVI	Site clearance and site formation after asbestos removal	21-Nov-23	27-Dec-23	30	100%	21-Nov-23	20-Jan-24	30	12	25%	0	-20	17	KD3-2010.DVP01	KD3-3030.DVP01
KD3-SU-3020	Submission of CAR and RAP (Stage 2)	1-Dec-23	30-Dec-23	24	100%	13-Jan-24	9-Feb-24	24	24	0%	-34	-34	4	KD3-SU-3010, KI	KD3-SU-3030
KD3-3050.DVI	ELS & Excavation within Portion 5B (Temp. Access 2.2)	18-Mar-24	23-Apr-24	28	0%	30-Jan-24	5-Mar-24	28	28	0%	38	38	10	KD3-DD-1010, KI	KD3-3060.DVP01
KD3-SU-3030	Approval of CAR and RAP (Stage 2)	2-Jan-24	15-Feb-24	36	13.89%	14-Feb-24	26-Mar-24	36	36	0%	-34	-34	4	KD3-SU-3020	KD3-3030.DVP01
KD3-3030.DVI	Decontamination at Portion 5B	16-Feb-24	21-Mar-24	30	0%	27-Mar-24	6-May-24	30	30	0%	-34	-34	4	KD3-SU-3030, KI	KD3-3070.DVP01
Section 6 [Portion 6,6A,6B&6C] Temp Access Road No. 2															
KD3-2015.DVI	Site clearance and site formation	15-Jul-23	25-Nov-23	112	100%	15-Jul-23 A	20-Jan-24	30	12	100%	0	-45	0	KD3-1030, KD3-1	KD3-2020.DVP01
KD3-2020.DVI	ELS & Excavation of Lam Tai East Road within Portion 6, 6A, 6B, & 6C	27-Nov-23	24-Jan-24	48	68.75%	22-Jan-24	20-Mar-24	48	48	0%	-45	-45	0	KD3-2015.DVP01	KD3-2040.DVP01
Section 5 [Portions 2B, 5A and 5B] - Road D1 and D2															
Method Statement															
S5-1030	MS - Submission and approval of all necessary documents incl. MS, material and remain statutory sub	30-Jun-23	25-Nov-23	124	100%	30-Jun-23	8-Jan-24	36	1	25%	0	-34	159	S5-1010, S5-1020	S5-2120
TTA Scheme/XP															
S5-1040.DVP01	TTA - Scheme Review, TMLG and RA for DC05	25-Aug-23	25-Nov-23	77	100%	25-Aug-23	8-Feb-24	48	28	25%	0	-61	-66	S5-1030.DVP01	S5-2070
Construction Works															
Preliminary Works															
Asbestos															
S5-2020	Portion 5A & 5B - Asbestos removal Portion 5A & 5B (Stage 2)	8-Dec-23	21-Dec-23	12	100%	6-Oct-23 A	8-Feb-24	12	28	60%	53	-39	-36	S5-AS-1020.RP0	S5-2090
Ground Investigation															
S5-2220.RP03	Portion 5A & 5B - Traffic arrangement, temp. lighting, temp road and site formation	9-Jan-24	21-Mar-24	60	0%	21-Feb-24	6-May-24	60	60	0%	-34	-34	29	S5-2210.RP03	S5-2230.RP03
Tree															
S5-2010	Portion 5A & 5B - Tree survey and removal	30-Jun-23	2-Jan-24	153	100%	30-Jun-23	8-Jan-24	60	1	50%	0	-5	-9	S5-1030.DVP01,	S5-2080, S5-2090
S5-2210.RP03	Site formation works & site clearance - Part 2	26-Aug-23	8-Jan-24	110	99.09%	26-Aug-23	20-Feb-24	60	35	10%	0	-34	-73	S5-2200.RP03, C	S5-2070, S5-209(
Land decontamination at Portion 5A (Adjacent Lam Tai West Road)															
S5-2040	Portion 5A - Land contamination survey (7 nos. drillholes, 3 days holes, 1 team)	25-Nov-23	1-Dec-23	6	100%	8-Jan-24	13-Jan-24	6	6	0%	-34	-34	-104	P-1340, CD-1020	S5-2050, S5-204(
S5-2040.RPA(	Submission of CAR and RAP (if any)	2-Dec-23	22-Dec-23	18	100%	15-Jan-24	3-Feb-24	18	18	0%	-34	-34	-104	S5-2040	S5-2041.RPA04
S5-2041.RPA(	Approval of CAR and RAP (if any)	23-Dec-23	6-Feb-24	36	27.78%	5-Feb-24	20-Mar-24	36	36	0%	-34	-34	-104	S5-2040.RPA04	S5-2050
S5-2050	Portion 5A - Set up and operation of decontamination facility	7-Feb-24	8-Mar-24	24	0%	21-Mar-24	22-Apr-24	24	24	0%	-34	-34	-104	S5-2040, S5-204	S5-2100, S5-2060
Demolish existing nullah and construct Decking DC05 & Pipe Bridge within Portion 5A															
2nd Dry Season															
S5-2070	ELS and Construction of Temp Decking	9-Jan-24	5-Feb-24	24	0%	21-Feb-24	19-Mar-24	24	24	0%	-34	-34	-73	SC-1210, S5-104	S5-2070.DVP01
S5-2070.DVP(	Divert Traffic	6-Feb-24	15-Feb-24	6	0%	20-Mar-24	26-Mar-24	6	6	0%	-34	-34	-73	S5-2070	S5-2140
New Road D1 & D2 (within Portion 5A & 5B)															
S5-2090	Portion 5A & 5B - ELS works	9-Jan-24	21-Mar-24	60	0%	21-Feb-24	6-May-24	60	60	0%	-34	-34	-43	S5-2020, S5-221(	S5-2160
Section 6 [Portions 6, 6A, 6B and 6C] - Lam Tai East Road															
Design															
DD-S6-1000.DV	Design - Preparation and Submission of New Direction Sign	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	-20	DD-S9-1020.DVF	DD-S6-1010.DVP



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

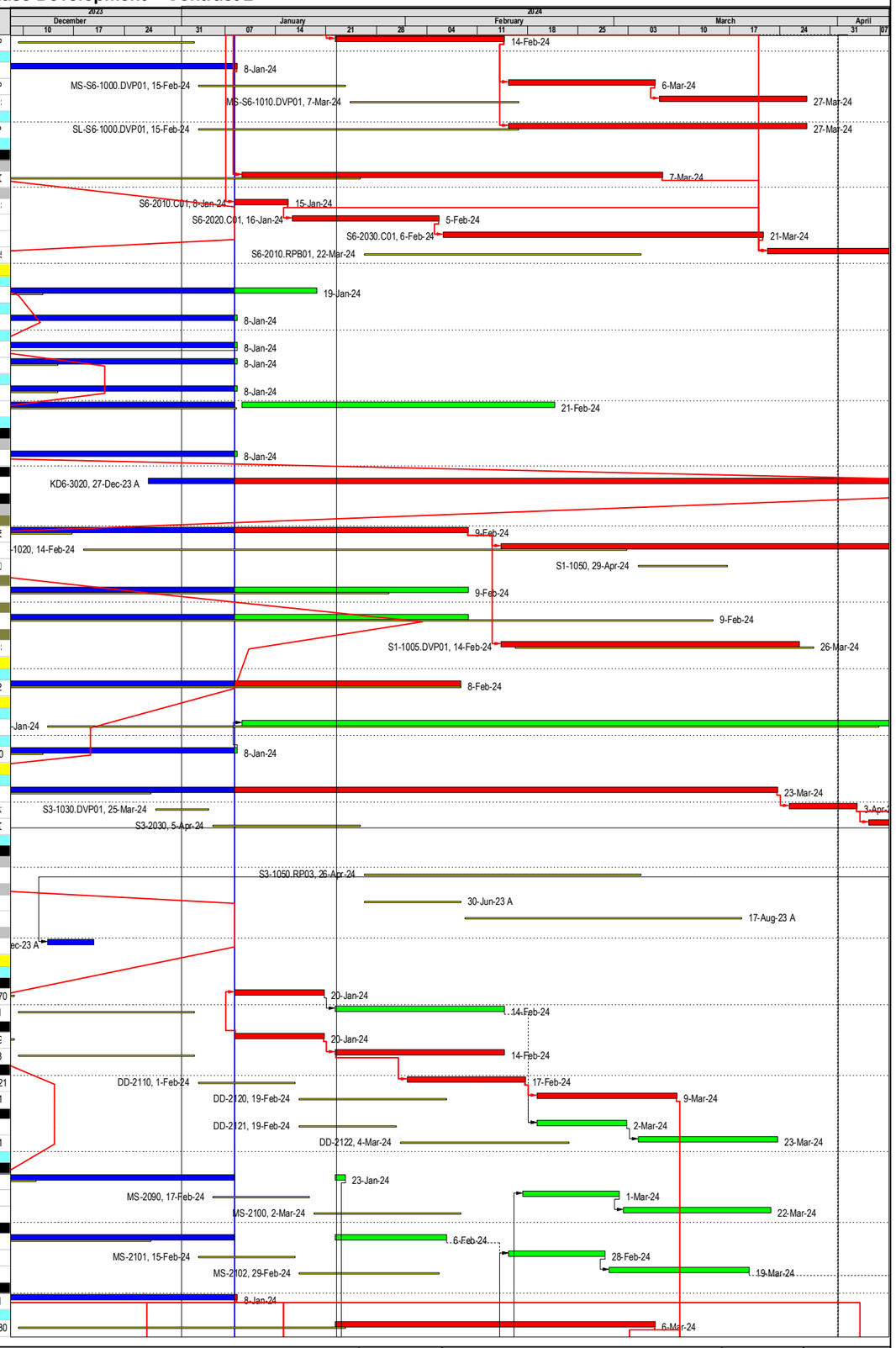
Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29

YL/2021/04
Three Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
DD-S6-1010.DV	Design - Review and Approval of New Direction Sign	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	-20	DD-S6-1000.DVF	MS-S6-1000.DVP
Method statement															
S6-1030	Submission and approval of all necessary documents incl. MS, material and remain statutory submissi	30-Jun-23	25-Nov-23	124	100%	30-Jun-23	8-Jan-24	48	1	25%	0	-34	-33	S6-1010, S6-1020	S6-2010
MS-S6-1000.DV	MS - Preparation and Submission of New Direction Sign	3-Jan-24	23-Jan-24	18	22.22%	15-Feb-24	6-Mar-24	18	18	0%	-34	-34	-20	DD-S6-1010.DVF	MS-S6-1010.DVP
MS-S6-1010.DV	MS - Review and Approval of New Direction Sign	24-Jan-24	16-Feb-24	18	0%	7-Mar-24	27-Mar-24	18	18	0%	-34	-34	-20	MS-S6-1000.DVF	S9-6950.DVP01,
Subletting															
SL-S6-1000.DVI	Subletting - New Direction Sign	3-Jan-24	16-Feb-24	36	11.11%	15-Feb-24	27-Mar-24	36	36	0%	-34	-34	-20	DD-S6-1010.DVF	PO-S6-1000.DVP
Construction Works															
Preliminary Works															
Asbestos															
S6-2010	Portion 6, 6A, 6B & 6C - Asbestos removal and Demolition Works	28-Nov-23	25-Jan-24	48	66.67%	9-Jan-24	7-Mar-24	48	48	0%	-33	-33	-33	S6-1030, S6-200	S6-2020, S6-205
Decontamination Works at Portion 6A															
S6-2010.C01	Portion 6A - Land contamination survey (4 nos. drillholes, 3 days holes, 1 team)			0	0%	8-Jan-24	15-Jan-24	7	7	0%			-45	AD-1100	S6-2010.RPB01,
S6-2020.C01	Submission of CAR and RAP (if any)			0	0%	16-Jan-24	5-Feb-24	18	18	0%			-45	S6-2010.C01	S6-2030.C01
S6-2030.C01	Approval of CAR and RAP (if any)			0	0%	6-Feb-24	21-Mar-24	36	36	0%			-45	S6-2020.C01	S6-2010.RPB01
S6-2010.RPB	Decontamination Works at Portion 6A	26-Jan-24	4-Mar-24	30	0%	22-Mar-24	30-Apr-24	30	30	0%	-45	-45	-45	S6-2010, CD-102	KD3-1660, S6-20
KD6 | Section 1 [Portions 1, 1A, 4 and 7] - Lam Tai East Road															
Design															
DDS1-1010.DVI	Design - Approval of Temp. design DC03	20-Oct-23	12-Dec-23	45	100%	20-Oct-23	19-Jan-24	18	11	25%	0	-30	83	DDS1-1000.DVP	KD6-3060
Method Statement															
MSS1-1030.DVI	MS - Approval of Temp. design DC03	12-Oct-23	4-Dec-23	45	100%	12-Oct-23	8-Jan-24	18	1	25%	0	-27	93	MSS1-1020.DVP	KD6-3060
Subletting															
SUBKD6-1040	Subletting - BC03-KD6	29-Jun-23	25-Nov-23	124	100%	29-Jun-23	8-Jan-24	48	1	100%	0	-35	65	MSKD6-1030, DI	POKD7-1020
SUBS1-1040.D\	Subleting DC03	29-Sep-23	14-Dec-23	63	100%	29-Sep-23	8-Jan-24	36	1	95%	0	-18	93	DDS1-1000.DVP	KD6-3060
Procurement															
PRO-1050.DVP	Procument - DC03	29-Sep-23	14-Dec-23	63	100%	29-Sep-23	8-Jan-24	36	1	100%	0	-18	93	DDS1-1000.DVP	KD6-3060
POKD7-1020	Procurement - Material of BC03	28-Aug-23	8-Jan-24	109	99.54%	28-Aug-23	21-Feb-24	60	35	25%	0	-36	65	SUBKD6-1040, P	DVPKD6-2050
Construction Works															
Preliminary Works															
Tree															
TRKD6-1030	Tree Felling, Preservation at Portion 4 & 7	8-Jun-23	25-Nov-23	142	100%	8-Jun-23 A	8-Jan-24	12	1	25%	0	-34	63	TRKD6-1010	KD6-3030
Modification of Lam Hi Road and DC03															
KD6-3020	Modification of Lam Hi Road and Site Formation works at Portion 7	25-Jun-24	10-Oct-24	90	0%	27-Dec-23	29-Apr-24	90	90	1.5%	144	135	0	GIKD6-1030	KD6-3030
Common Utility Tunnel CUT Bay 1-23															
CUT Bay 1 to 21															
CUT Bay 1 to 2															
S1-1000.DVF	Excavation for CUT bay 1 to 2	13-Nov-23	16-Dec-23	30	100%	13-Nov-23	9-Feb-24	24	29	15%	0	-44	0	S1-1000, DDKD6	S1-1020, S1-100
S1-1020	Construction of CUT bay 1 & 2	18-Dec-23	2-Mar-24	60	25%	14-Feb-24	27-Apr-24	60	60	0%	-44	-44	0	S1-1000.DVP01,	S1-1050
S1-1050	Backfill and Remove Sheetpile of CUT bay 1 & 2	4-Mar-24	16-Mar-24	12	0%	29-Apr-24	13-May-24	12	12	0%	-44	-44	0	S1-1020	DVPKD6-2050, K
CUT Bay 3 to 4															
S1-1002.DVF	Excavation for CUT bay 3 to 4	13-Nov-23	29-Jan-24	64	70.31%	13-Nov-23	9-Feb-24	24	29	15%	0	-10	18	S1-1001.DVP01	S1-1020.DVP01
CUT Bay 5 to 6															
S1-1004.DVF	Excavation for CUT bay 5 to 6	13-Nov-23	14-Mar-24	100	45%	13-Nov-23	9-Feb-24	24	29	15%	0	26	12	S1-1003.DVP01	S1-1030
CUT Bay 7 to 8															
S1-1005.DVF	Sheetpile for CUT bay 7 & 8	16-Feb-24	28-Mar-24	36	0%	14-Feb-24	26-Mar-24	36	36	0%	2	2	0	S1-1003.DVP01,	S1-1006.DVP01,
Section 1 [Portions 1, 1A, 4 and 7] - Lam Tai East Road															
Design															
SUKD6-1066.B(	Design and Submission - E&M CUT (1st Round)	13-Nov-23	8-Feb-24	73	61.64%	13-Nov-23	8-Feb-24	60	28	53.33%	0	0	0	SUKD6-1060.B02	SUKD6-1010.B02
Section 2 [Portion 2A] - Open Space															
Method Statement															
S2-1020	Submission and approval of statutory submission TPRP, UU, DC, BH, HH, etc for S2	13-Dec-23	6-Apr-24	90	21.11%	9-Jan-24	30-Apr-24	90	90	0%	-20	-20	10	S2-1000	S2-1030
TTA Scheme/XP															
S2-1000	Scheme Preparation and Submission	25-Aug-23	12-Dec-23	91	100%	25-Aug-23	8-Jan-24	90	1	100%	0	-20	10	CD-1020, P-1160	S2-1020, S2-2000
Section 3 [Portions 8 and 8A] - Lam Yu Road															
TTA Scheme/XP															
S3-1020.DVP01	TTA - Scheme TMLG Coordination/Meeting/Approval	8-Aug-23	27-Dec-23	117	100%	8-Aug-23 A	23-Mar-24	36	63	25%	0	-71	0	S3-1010.DVP01	S3-1030.DVP01
S3-1030.DVP01	TTA - Roadwork Advise (RA)	28-Dec-23	4-Jan-24	6	100%	25-Mar-24	3-Apr-24	6	6	0%	-71	-71	0	S3-1020.DVP01	S3-1050.RP03, S
S3-2030	Portion 8,8A - Implementation of TTA	5-Jan-24	25-Jan-24	18	11.11%	5-Apr-24	25-Apr-24	18	18	0%	-71	-71	0	S3-1030.DVP01	S3-3010, S3-105
Construction Works															
Preliminary Works															
Tree															
S3-1050.RP03	Portion 8,8A - Tree Survey and Removal-Part 2	26-Jan-24	4-Mar-24	30	0%	26-Apr-24	1-Jun-24	30	30	0%	-71	-71	0	S3-1040, S3-103	S3-2090
Asbestos															
S3-2020	Portion 8,8A - Asbestos survey, building demolition, removal and site clearance	26-Jan-24	8-Feb-24	12	0%	23-Mar-23	30-Jun-23	12	0	100%	251	184		S3-1040, S3-206	S3-2040.RP03
S3-2040.RP03	Portion 8,8A - Abatement plan	9-Feb-24	18-Mar-24	30	0%	3-Jul-23 A	17-Aug-23	30	0	100%	184	174		S3-2020	S3-2070
Demolition and Site Clearance															
S3-2090	Portion 8,8A - Building demolition, removal and site clearance	20-Apr-24	1-Jun-24	35	0%	13-Dec-23	19-Dec-23	35	0	100%	101	130		S3-2070, S3-105	S3-3010
KD4 | Section 9 [Portions 18 and 19] - KU Rd. and KH Rd.															
Design															
Decking DC07															
DD-2090	Design - Preparation and Submission of Decking DC07 Design	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	0	DD-2070	DD-2100, MS-2070
DD-2100	Design - Review and Approval of Decking DC07 Design	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	39	DD-2090	DD-2121, KD4-61
Decking DC06															
DD-2070	Design - Preparation and Submission of Decking DC06 Design	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	0	KD4-1000	DD-2080, DD-205
DD-2080	Design - Review and Approval of Decking DC06 Design	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	0	DD-2070	DD-2110, KD4-68
ELS Design DC06															
DD-2110	Design - Preparation and Submission of DC06 ELS design	3-Jan-24	16-Jan-24	12	33.33%	1-Feb-24	17-Feb-24	12	12	0%	-25	-25	0	KD4-1000, DD-2(	DD-2120, DD-2121
DD-2120	Design - Review and Approval of DC06 ELS Design	17-Jan-24	6-Feb-24	18	0%	19-Feb-24	9-Mar-24	18	18	0%	-25	-25	0	DD-2110	KD4-6640, MS-21
ELS Design DC07															
DD-2121	Design - Preparation and Submission of DC07 ELS Design	17-Jan-24	30-Jan-24	12	0%	19-Feb-24	2-Mar-24	12	12	0%	-25	-25	36	DD-2100, DD-21	DD-2122
DD-2122	Design - Review and Approval of DC07 ELS Design	31-Jan-24	23-Feb-24	18	0%	4-Mar-24	23-Mar-24	18	18	0%	-25	-25	36	DD-2121	KD4-3220, MS-21
Method Statement															
Decking DC06															
MS-2060	MS - Review and Approval of Decking DC06 Design	5-Oct-23	11-Dec-23	57	100%	5-Oct-23 A	23-Jan-24	18	2	60%	0	-34	7	MS-2050	PO-1060
MS-2090	MS - Preparation and Submission for DC06 Construction	5-Jan-24	18-Jan-24	12	16.67%	17-Feb-24	1-Mar-24	12	12	0%	-34	-34	7	MS-2070, PO-10	MS-2100
MS-2100	MS - Review and Approval of DC06 Construction	19-Jan-24	8-Feb-24	18	0%	2-Mar-24	22-Mar-24	18	18	0%	-34	-34	7	MS-2090	KD4-6620
Decking DC07															
MS-2080	MS - Approval of Method Statement for DC07Decking Design Platform	5-Oct-23	27-Dec-23	69	100%	5-Oct-23 A	6-Feb-24	30	14	60%	0	-34	26	MS-2070	MS-2101
MS-2101	MS - Preparation and Submission for DC07 Construction	3-Jan-24	16-Jan-24	12	33.33%	15-Feb-24	28-Feb-24	12	12	0%	-34	-34	22	MS-2080, PO-10	MS-2102
MS-2102	MS - Review and Approval of Method Statement for DC07Construction	17-Jan-24	5-Feb-24	17	0%	29-Feb-24	19-Mar-24	17	17	0%	-34	-34	22	MS-2101	PO-1090
Traffic Deck (TD5,6,9 & 10)															
MS-S9-1070	MS - Review and Approval of Traffic Deck	5-Oct-23	25-Nov-23	44	100%	5-Oct-23 A	8-Jan-24	18	1	60%	0	-34	0	MS-S9-1060	KD4-1060.DVP01
Subletting															
DD-1120	Subletting - DC06 Construction Works (S9)	9-Dec-23	23-Jan-24	36	61.11%	22-Jan-24	6-Mar-24	36	36	0%	-34	-34	0	DD-1100	DD-1140, PO-1080



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

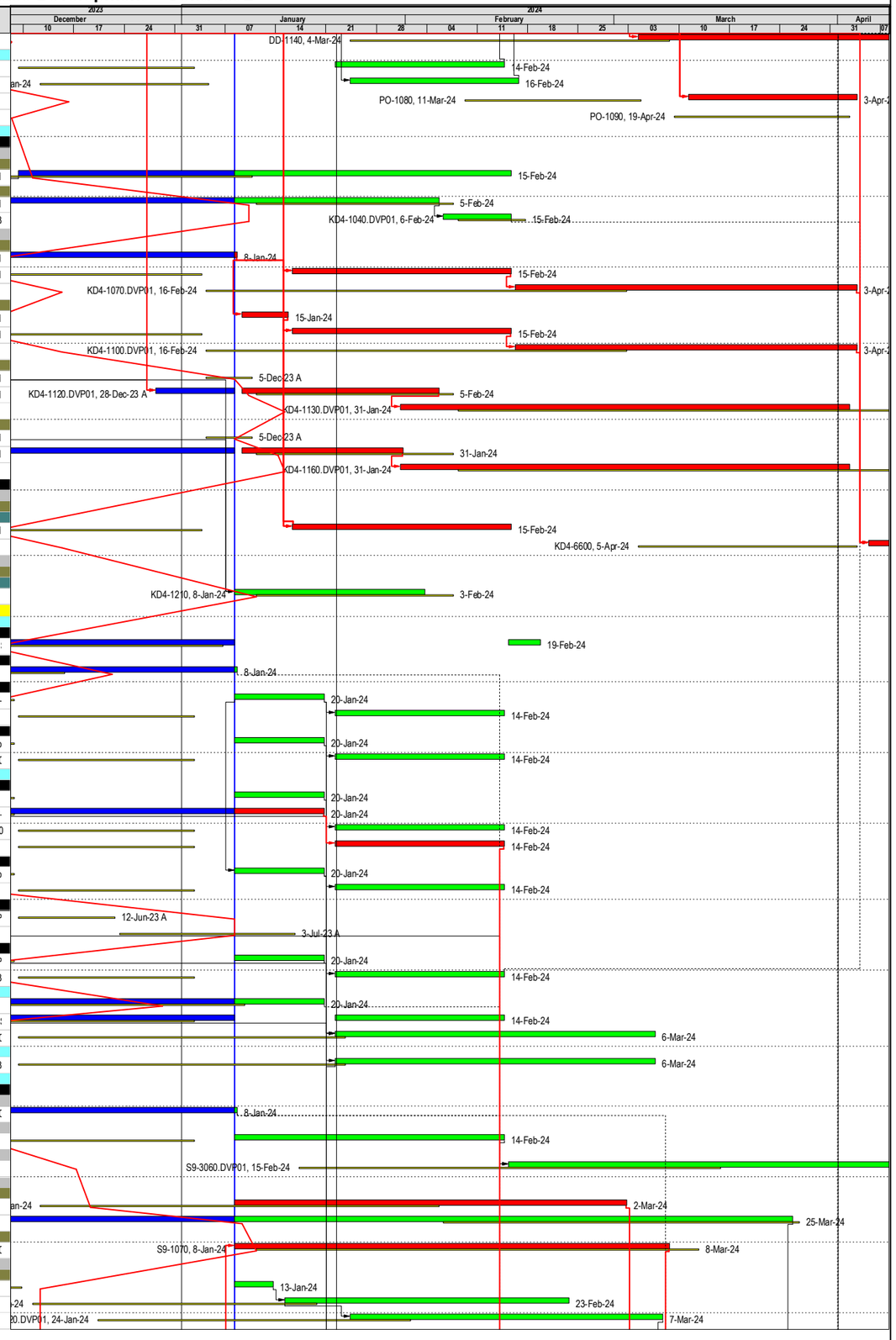
Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29

YL/2021/04
Three Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
DD-1140	Subletting - DC07 Construction Works (S9)	24-Jan-24	8-Mar-24	36	0%	4-Mar-24	18-Apr-24	36	36	0%	-31	-31	0	DD-1120	PO-1090
Procurement															
PO-1070	Procurement - DC07 Material for Decking	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	22	DD-1100	MS-2101
PO-1060	Procurement - DC06 Material for Decking	12-Dec-23	4-Jan-24	18	100%	24-Jan-24	16-Feb-24	18	18	0%	-34	-34	7	MS-2060, DD-10(	MS-2090
PO-1080	Procurement - DC06 Material for Construction	9-Feb-24	4-Mar-24	18	0%	11-Mar-24	3-Apr-24	18	18	0%	-23	-23	0	DD-1120, DD-21(	KD4-6620
PO-1090	Procurement - DC07 Material for Construction	9-Mar-24	2-Apr-24	18	0%	19-Apr-24	10-May-24	18	18	0%	-31	-31	0	MS-2102, DD-11(	KD4-3200
Construction Works (KD4)															
Preliminary Works															
Portion 18 & 19 (KD4) - Working Deck (WD) and Pre-drill Works															
Portion 18 (KD4) - Working Deck (WD) and Pre-drill Works															
KD4-1020.D\	Portion 18 (WD) - Pre-drill (5no; 6d/no, 1wf)	4-Dec-23	10-Jan-24	30	90%	9-Dec-23 A	15-Feb-24	30	31	25%	-5	-28	37	S9-1080.DVP01,	KD4-1030.DVP01
Portion 19 (KD4) - Working Deck (WD) and Pre-drill Works															
KD4-1030.D\	Portion 19 (WD) - Pre-drill (4no; 6d/no, 1wf)	11-Jan-24	7-Feb-24	24	0%	17-Nov-23	5-Feb-24	24	25	25%	44	2	37	KD4-1020.DVP01	KD4-1040.DVP01
KD4-1040.D\	Portion 19 (WD) - Prepare and Submit Report	8-Feb-24	17-Feb-24	6	0%	6-Feb-24	15-Feb-24	6	6	0%	2	2	37	KD4-1030.DVP01	KD4-6620, KD4-3
Portion 3 & 12 (KD4) - TrafficDeck															
Portion 3 (KD4) - Traffic Deck (TD5)															
KD4-1050.D\	Portion 3 (TD5) - Road Setback at KU Rd. and KH Rd.	3-Oct-23	25-Nov-23	46	100%	3-Oct-23 A	8-Jan-24	6	1	25%	0	-34	0	KD4-1000, S9-10	KD4-1060.DVP01
KD4-1060.D\	Portion 3 (TD5) - Footing / Abutment for Traffic Deck	4-Dec-23	3-Jan-24	24	100%	16-Jan-24	15-Feb-24	24	24	0%	-34	-34	0	KD4-1050.DVP01	KD4-1070.DVP01
KD4-1070.D\	Portion 3 (TD5) - Decking for Traffic Deck	4-Jan-24	2-Mar-24	48	6.25%	16-Feb-24	3-Apr-24	38	38	0%	-34	-24	0	KD4-1060.DVP01	KD4-6600
Portion 3 (KD4) - Traffic Deck (TD6)															
KD4-1080.D\	Portion 3 (TD6) - Road Setback at KU Rd. and KH Rd.	27-Nov-23	2-Dec-23	6	100%	9-Jan-24	15-Jan-24	6	6	0%	-34	-34	0	S9-1080.DVP01,	KD4-1090.DVP01
KD4-1090.D\	Portion 3 (TD6) - Footing / Abutment for Traffic Deck	4-Dec-23	3-Jan-24	24	100%	16-Jan-24	15-Feb-24	24	24	0%	-34	-34	0	KD4-1080.DVP01	KD4-1100.DVP01
KD4-1100.D\	Portion 3 (TD6) - Decking for Traffic Deck	4-Jan-24	2-Mar-24	48	6.25%	16-Feb-24	3-Apr-24	38	38	0%	-34	-24	0	KD4-1090.DVP01	KD4-6600
Portion 3 (KD4) - Traffic Deck (TD9)															
KD4-1110.D\	Portion 3 (TD9) - Road Setback at KU Rd. and KH Rd.	4-Jan-24	10-Jan-24	6	50%	29-Nov-23	5-Dec-23 A	6	0	100%	28	28		KD4-1000, S9-10	KD4-1120.DVP01
KD4-1120.D\	Portion 3 (TD9) - Footing / Abutment for Traffic Deck	11-Jan-24	7-Feb-24	24	0%	28-Dec-23	5-Feb-24	24	24	3%	11	2	0	KD4-1110.DVP01	KD4-1130.DVP01
KD4-1130.D\	Portion 3 (TD9) - Decking for Traffic Deck	8-Feb-24	11-Apr-24	48	0%	31-Jan-24	2-Apr-24	48	48	0%	7	7	0	KD4-1120.DVP01	KD4-3100
Portion 12 (KD4) - Traffic Deck (TD 10)															
KD4-1140.D\	Portion 12 (TD10) - Road Setback at KU Rd. and KH Rd.	4-Jan-24	10-Jan-24	6	50%	29-Nov-23	5-Dec-23 A	6	0	100%	28	28		S9-1080.DVP01	KD4-1150.DVP01
KD4-1150.D\	Portion 12 (TD10) - Footing / Abutment for Traffic Deck	11-Jan-24	7-Feb-24	24	0%	6-Dec-23 A	31-Jan-24	24	20	15%	28	6	0	KD4-1140.DVP01	KD4-1160.DVP01
KD4-1160.D\	Portion 12 (TD10) - Decking for Traffic Deck	8-Feb-24	11-Apr-24	48	0%	31-Jan-24	2-Apr-24	48	48	0%	7	7	0	KD4-1150.DVP01	KD4-3100
Box Culvert BC04 and Decking															
Portion 18 (KD4) - BC04 and DC06															
Portion 18 (KD4) - Klu Hing Road															
Portion 18 (KD4) - Piling															
KD4-6020	Portion 18 (BC04/DC06) - Trial pit / trench for DC06	4-Dec-23	3-Jan-24	24	100%	16-Jan-24	15-Feb-24	24	24	0%	-34	-34	0	KD4-1080.DVP01	KD4-1090.DVP01
KD4-6600	Portion 18 (BC04/DC06) - Guide Casing Installation for KH Rd. for Piles along slope (21no.; 2d/no, 2wf)	4-Mar-24	3-Apr-24	24	0%	5-Apr-24	3-May-24	24	24	0%	-24	-24	0	MS-S9-1030.DVF	KD4-6620
Portion 19 (KD4) - BC04 and DC07															
Portion 19 (KD4) - Klu Hing Road															
Portion 19 (KD4) - Piling															
KD4-1210	Portion 19 (BC04/DC07) - Trial pit / trench for DC07	11-Jan-24	7-Feb-24	24	0%	8-Jan-24	3-Feb-24	24	24	0%	3	3	44	S9-1080.DVP01,	KD4-3100
Section 9 [Portions 3, 12, 12A, 12B,12C, 13, 18 & 19] - KU Rd. and KH Rd.															
Design															
Temp.Working Footbridge FB01,FB02,FB03 and FB04															
DD-S9-1090.A(	Design - Review and Approval for FB01,FB02,FB03,FB04 Temp. Footbridge	23-Sep-23	6-Jan-24	85	100%	23-Sep-23	19-Feb-24	18	4	25%	0	-34	17	DD-S9-1080.A01	S9-1005.DVP01,
ELS BC04															
DD-S9-1030	Design - Review and Approval of BC04 ELS	25-Nov-23	15-Dec-23	18	100%	22-Aug-23	8-Jan-24	18	1	25%	79	-17	29	DD-S9-1020	S9-1500.DVP01
ELS UU															
DD-S9-1040	Design - Preparation and Submission of UU ELS (Portion 3, 12, 18 & 19)	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	17	DD-S9-1020	DD-S9-1050, MS-
DD-S9-1050	Design - Review and Approval of UU ELS (Portion 3, 12, 18 & 19)	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	17	DD-S9-1040	DD-S9-1080.A01
Road Lighting System															
DD-S9-1060	Design - Preparation and Submission of Road Lighting System	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	119	CD-1010, DD-S9	DD-S9-1070, Sub
DD-S9-1070	Design - Review and Approval of Road Lighting System	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	167	DD-S9-1060	S9-1700, S9-686(
Method Statement															
Temp.Working PlatformELS BC04															
MS-S9-1000	MS - Preparation and Submission for BC04 Temp. working platform	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	42	DD-S9-1000	MS-S9-1010
MS-S9-1020	MS - Preparation and Submission for BC04 ELS	25-Nov-23	8-Dec-23	12	100%	25-Nov-23	20-Jan-24	12	12	25%	0	-34	0	DD-S9-1020	MS-S9-1030, MS-
MS-S9-1010	MS - Review and Approval for BC04 Temp. working platform	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	42	MS-S9-1000	S9-1270, S9-1510
MS-S9-1030	MS - Review and Approval of BC04 ELS	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	0	MS-S9-1020	S9-1500.DVP01
ELS UU															
MS-S9-1040	MS - Preparation and Submission for UU (Portion 3, 12, 18 & 19) ELS	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	95	DD-S9-1040	MS-S9-1050, Sub
MS-S9-1050	MS - Review and Approval of UU (Portion 3, 12, 18 & 19) ELS	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	95	MS-S9-1040	S9-1610
Demolition															
MS-S9-1100.D	MS - Preparation and Submission for Demolition	9-Dec-23	22-Dec-23	12	100%	25-May-23	12-Jun-23	12	0	100%	164	161		MS-S9-1020	MS-S9-1110.DVP
MS-S9-1110.D	MS - Review and Approval of Demolition	23-Dec-23	16-Jan-24	18	55.56%	13-Jun-23	3-Jul-23 A	18	0	100%	161	163		MS-S9-1100.DVF	S9-3060.DVP01
Piling															
MS-S9-1020.D	MS - Preparation and Submission of Piling	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	21	CD-1020	MS-S9-1030.DVP
MS-S9-1030.D	MS - Review and Approval of Piling	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	38	MS-S9-1020.DVF	KD4-6600, KD4-3
Subletting															
Sub-S9-1010	Subletting - BC04 ELS	25-Nov-23	9-Jan-24	36	94.44%	18-Sep-23	20-Jan-24	36	12	25%	56	-10	18	DD-S9-1020	S9-1500.DVP01
Sub-S9-1030	Subletting - Piling	31-Aug-23	2-Jan-24	101	100%	31-Aug-23	14-Feb-24	36	18	25%	0	-34	21	MS-S9-1020.DVF	PO-S9-1010, SL-(
Sub-S9-1020	Subletting - UU ELS (Portion 3, 12, 18 & 19)	9-Dec-23	23-Jan-24	36	61.11%	22-Jan-24	6-Mar-24	36	36	0%	-34	-34	119	DD-S9-1040, DD-	S9-1690, S9-475(
Procurement															
PO-S9-1010	Procurement - Piling	9-Dec-23	23-Jan-24	36	61.11%	22-Jan-24	6-Mar-24	36	36	0%	-34	-34	21	Sub-S9-1030	KD4-6620, KD4-3
Construction Works															
Preliminary Works															
Tree															
S9-1100	Tree Survey, Felling and preservation for Portion 3, 12 & 13	7-Apr-23	25-Nov-23	190	100%	7-Apr-23 A	8-Jan-24	24	1	50%	0	-34	29	S9-1000, S9-102(	S9-5110, S9-521(
Asbestos															
S9-1110	Asbestos survey, building demolition and removal at Portion 12B	25-Nov-23	2-Jan-24	30	100%	8-Jan-24	14-Feb-24	30	30	0%	-34	-34	47	S9-1017.DVP01	S9-3060.DVP01
Portion 12B - Demolition															
S9-3060.DVP(	Portion 12B - Building demolition, removal and Site clearance	17-Jan-24	15-Mar-24	48	0%	15-Feb-24	15-Apr-24	48	48	0%	-22	-22	47	MS-S9-1110.DVF	S9-1610
Portion 3, 12 & 13 - Ground Investigation (GI)															
Portion 3 & 12 - Ground Investigation (GI)															
S9-1040	Portion 12 (GI) - Ground Investigation along BC04 [After KD2B] (9no; 10d/no, 2wf)	12-Dec-23	5-Feb-24	45	44.44%	8-Jan-24	2-Mar-24	45	45	0%	-20	-20	0	P-1260.DVP01, S	S9-4210
S9-1060	Portion 3 (GI) - Ground Investigation along BC04 [After KD2B] (12no; 10d/no, 3wf)	6-Feb-24	26-Mar-24	40	0%	6-Dec-23 A	25-Mar-24	40	64	2%	50	1	44	S9-1040.DVP01,	S9-1320
Portion 13 - Ground Investigation (GI)															
S9-1070	Portion 13 (GI) - Ground Investigation along BC06 & BC07 [After KD2C] (10no; 10d/no, 2wf)	11-Jan-24	12-Mar-24	50	0%	8-Jan-24	8-Mar-24	50	50	0%	3	3	0	S9-1050, S9-104(	S9-5110, S9-521(
Portion 3, 12 & 13 - Working Deck (WD) and Pre-drill Works															
Portion 3 & 12 - Working Deck (WD) and Pre-drill Works															
S9-1100.DVF	Portion 3 & 12 (WD) - Plant Mobilization for Pre-drill	4-Dec-23	9-Dec-23	6	100%	8-Jan-24	13-Jan-24	6	6	0%	-27	-27	53	S9-1090.DVP01	S9-1110.DVP01
S9-1110.DVF	Portion 3 (WD) - Pre-drill (10no; 6d/no, 2wf)	11-Dec-23	19-Jan-24	32	65.63%	15-Jan-24	23-Feb-24	32	32	0%	-27	-27	53	S9-1040.DVP01,	S9-1120.DVP01
S9-1120.DVF	Portion 12 (WD) - Pre-drill (11no; 6d/no, 2wf)	20-Dec-23	1-Feb-24	35	37.14%	24-Jan-24	7-Mar-24	35	35	0%	-27	-27	53	S9-1110.DVP01	S9-1130.DVP01



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

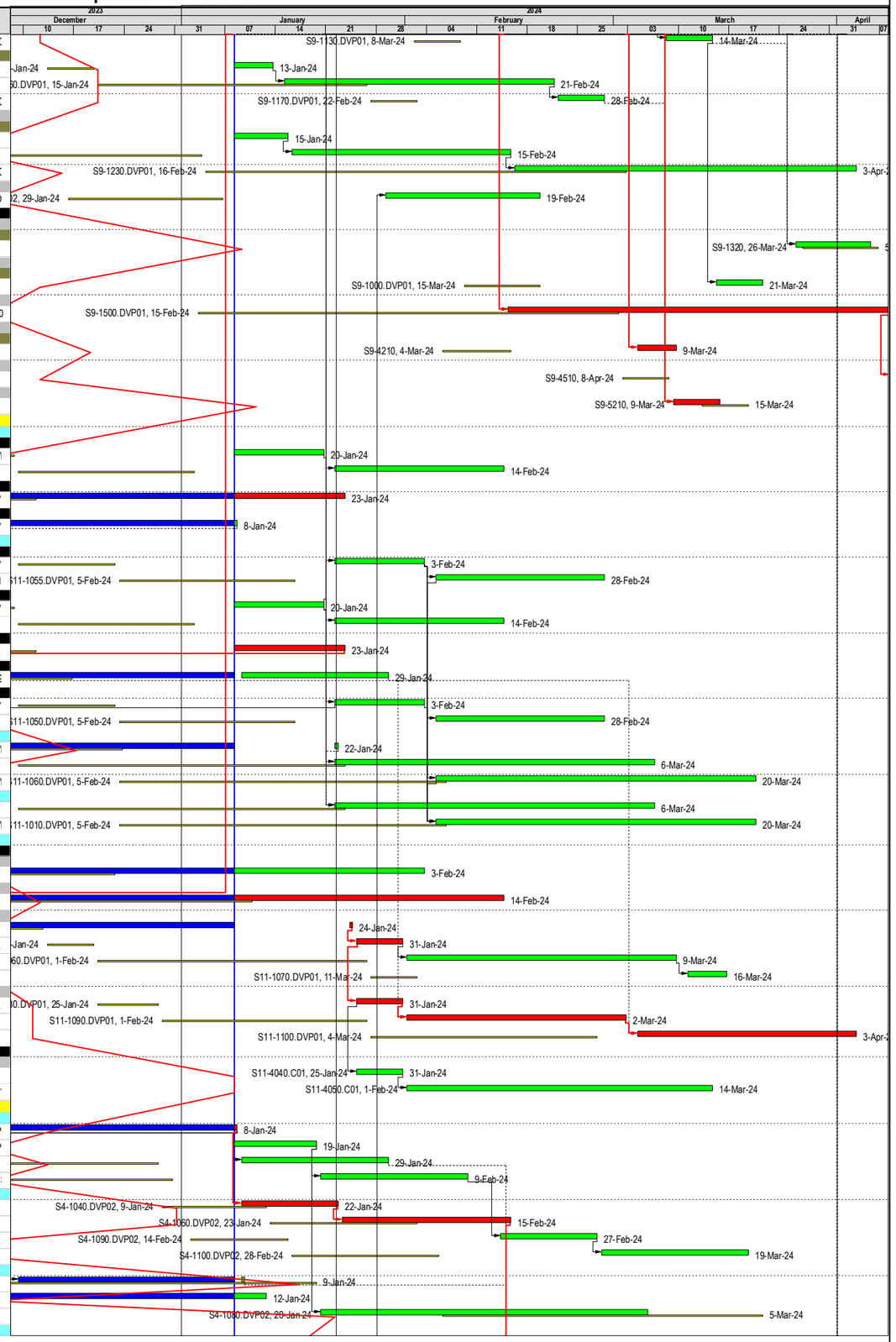
Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29

YL/2021/04
Three Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
S9-1130.DVF	Portion 3 & 12 (WD) - Prepare and Submit Report	2-Feb-24	8-Feb-24	6	0%	8-Mar-24	14-Mar-24	6	6	0%	-27	-27	53	S9-1120.DVP01	S9-4220, S9-1320
	Portion 13 - Working Deck (WD) and Pre-drill Works														
S9-1150.DVF	Portion 13 (WD) - Plant Mobilization for Pre-drill	13-Dec-23	19-Dec-23	6	100%	8-Jan-24	13-Jan-24	6	6	0%	-19	-19	8	S9-1140.DVP01	S9-1160.DVP01
S9-1160.DVF	Portion 13 (WD) - Pre-drill (10no; 6d/no, 2wf)	20-Dec-23	26-Jan-24	30	43.33%	15-Jan-24	21-Feb-24	30	30	0%	-19	-19	8	S9-1040.DVP01,	S9-1170.DVP01
S9-1170.DVF	Portion 13 (WD) - Prepare and Submit Report	27-Jan-24	2-Feb-24	6	0%	22-Feb-24	28-Feb-24	6	6	0%	-19	-19	8	S9-1160.DVP01	S9-5110, S9-5210
	Portion 3 & 13 - Traffic Deck														
	Portion 13 - Traffic Deck (TD11)														
S9-1210.DVF	Portion 13 (TD11) - Road Setback at WNTT Rd. and KH Rd.	25-Nov-23	2-Dec-23	7	100%	8-Jan-24	15-Jan-24	7	7	0%	-34	-34	11	S9-1080.DVP01,	S9-1220.DVP01
S9-1220.DVF	Portion 13 (TD11) - Footing / Abutment for Traffic Deck	4-Dec-23	3-Jan-24	24	100%	16-Jan-24	15-Feb-24	24	24	0%	-34	-34	11	S9-1210.DVP01	S9-1230.DVP01
S9-1230.DVF	Portion 13 (TD11) - Decking for Traffic Deck	4-Jan-24	2-Mar-24	48	6.25%	16-Feb-24	3-Apr-24	38	38	0%	-34	-24	11	S9-1220.DVP01	S9-5110, S9-5130
	Portion 3, 12 & 13 - Concrete Block Platform														
CB-0130.B02	Deck CB05 Portion 19	16-Dec-23	6-Jan-24	16	100%	29-Jan-24	19-Feb-24	16	16	0%	-34	-34	34	KD5-BC-1040.DV	CB-0190.B02, KD
	Box Culvert BC04 and Decking														
	Portion 3 - BC04 and DC02B (CHB 255 - CHB 303)														
	Portion 3 - Piling Works DC02B														
S9-1320	Portion 3 (DC02B) - TTA DC02B	27-Mar-24	6-Apr-24	6	0%	26-Mar-24	5-Apr-24	6	6	0%	1	1	44	P-1450, S9-1130	S9-1350
	Portion 3 - BC04 and DC06B (CHB 625 - CHB 667)														
	Portion 3 - Piling Works DC06B														
S9-1000.DVF	Portion 3 (DC06B) - TTA DC02B and DC06B	9-Feb-24	19-Feb-24	6	0%	15-Mar-24	21-Mar-24	6	6	0%	-27	-27	76	P-1450, S9-1130	S9-1013.DVP01
	Portion 3 - BC04 (CHB 150 - CHB 255)														
S9-1500.DVP(	Portion 3 (BC04) - ELS BC04, stage 1	3-Jan-24	1-Mar-24	48	8.33%	15-Feb-24	15-Apr-24	48	48	0%	-34	-34	0	S9-1100, PO-S9-	S9-1510, S9-4510
	Portion 12 - BC04, DC07A & 7C & Temp. footbridge 03 (CHB 1070 - CHB 1125)														
	Portion 12 - Temp. Footbridge FB03														
S9-4210	Portion 12 (BC04/FB03) - TTA Decking DC07A & DC07C	6-Feb-24	15-Feb-24	6	0%	4-Mar-24	9-Mar-24	6	6	0%	-20	-20	0	S9-1040, P-1450	S9-4213.DVP01
	Portion 12 - BC04 (CHB 1005 - CHB 1070, 1 wf)														
S9-4510	Portion 12 (BC04) - ELS BC04, stage 1 (CHB 1005-1070, 1 wf)	2-Mar-24	8-Mar-24	6	0%	8-Apr-24	13-Apr-24	6	6	0%	-27	-27	0	S9-1500.DVP01	S9-4540
	Portion 13 - BC06, BC07 and DC09 (CHC 373 - CHC 385)														
S9-5210	Portion 13 (BC06/BC07/DC09) - TTA BC06, BC07 & DC09 (pre. beam x 7 nos.)	13-Mar-24	19-Mar-24	6	0%	9-Mar-24	15-Mar-24	6	6	0%	3	3	0	S9-1100, S9-1070	S9-5220
	Section 11 [Portions 16 and 16A] - KH Rd. and Wong Ngai Tun Tsuen Road														
	Design														
	ELS														
DD-S11-1020.[	Design - Preparation and Submission for ELS for BC06 and BC07 for Portion 16	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	39	DD-S11-1000.DV	DD-S11-1030.DV
DD-S11-1030.[	Design - Review and Approval of ELS for BC06 and BC07 for Portion 16	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	39	DD-S11-1020.DV	S11-2010
	Working Deck														
DD-S11-1050.[	Design - Review and Approval of Working Deck Design	25-Nov-23	11-Dec-23	14	100%	25-Nov-23	23-Jan-24	14	14	25%	0	-34	0	DD-S11-1040.DV	MS-S11-1020.DV
	Traffic Deck (TD14)														
DD-S11-1070.[	Design - Review and Approval of Traffic Deck Design	7-Sep-23	25-Nov-23	66	100%	7-Sep-23 A	8-Jan-24	18	1	25%	0	-34	13	DD-S11-1060.DV	MS-S11-1000.DV
	Method Statement														
	Decking DC10														
MS-S11-1045.[	MS - Preparation and Submission of Precast Beam Installation for Decking DC10	9-Dec-23	22-Dec-23	12	100%	22-Jan-24	3-Feb-24	12	12	0%	-34	-34	9	MS-S11-1025.DV	MS-S11-1055.DV
MS-S11-1055.[	MS - Review and Approval of Precast Beam Installation for Decking DC10	23-Dec-23	16-Jan-24	18	55.56%	5-Feb-24	28-Feb-24	18	18	0%	-34	-34	9	MS-S11-1045.DV	S11-2020, PO-S1
	ELS														
MS-S11-1025.[	MS - Preparation and Submission of ELS for BC06 and BC07 for Portion 16	25-Nov-23	8-Dec-23	12	100%	8-Jan-24	20-Jan-24	12	12	0%	-34	-34	9	MS-S11-1005.DV	MS-S11-1035.DV
MS-S11-1035.[	MS - Review and Approval of ELS for BC06 and BC07 for Portion 16	9-Dec-23	2-Jan-24	18	100%	22-Jan-24	14-Feb-24	18	18	0%	-34	-34	39	MS-S11-1025.DV	S11-2010
	Working Deck														
MS-S11-1030.[	MS - Review and Approval of Working Deck	25-Nov-23	11-Dec-23	14	100%	8-Jan-24	23-Jan-24	14	14	0%	-34	-34	0	MS-S11-1020.DV	S11-1040.DVP01
	Traffic Deck (TD14)														
MS-S11-1010.[	MS - Review and Approval of Traffic Deck	5-Oct-23	16-Dec-23	62	100%	5-Oct-23 A	29-Jan-24	18	18	0%	0	-34	20	MS-S11-1000.DV	S9-5110, S11-105
	Piling														
MS-S11-1040.[	MS - Preparation and Submission of Piling	9-Dec-23	22-Dec-23	12	100%	22-Jan-24	3-Feb-24	12	12	0%	-34	-34	27	MS-S9-1020.DVF	MS-S11-1050.DV
MS-S11-1050.[	MS - Review and Approval of Piling	23-Dec-23	16-Jan-24	18	55.56%	5-Feb-24	28-Feb-24	18	18	0%	-34	-34	27	MS-S11-1040.DV	S11-2010
	Subletting														
SL-S11-1050.D\	Subletting - Piling	31-Aug-23	23-Dec-23	96	100%	31-Aug-23	22-Jan-24	36	1	25%	0	-22	35	Sub-S9-1030, MS	PO-S11-1060.DV
SL-S11-1020.D\	Subletting - ELS for BC06 and BC07 for Portion 16	9-Dec-23	23-Jan-24	36	61.11%	22-Jan-24	6-Mar-24	36	36	0%	-34	-34	21	MS-S11-1025.DV	S11-2010
SL-S11-1060.D\	Subletting - Precast Beam for Decking DC10	23-Dec-23	6-Feb-24	36	27.78%	5-Feb-24	20-Mar-24	36	36	0%	-34	-34	9	MS-S11-1045.DV	PO-S11-1010.DV
	Procurement														
PO-S11-1060.D	Procurement - Piling	9-Dec-23	23-Jan-24	36	61.11%	22-Jan-24	6-Mar-24	36	36	0%	-34	-34	21	PO-S9-1010, SL-	S11-2010
PO-S11-1010.D	Procurement - Material for Precast Beam for Decking DC10	23-Dec-23	6-Feb-24	36	27.78%	5-Feb-24	20-Mar-24	36	36	0%	-34	-34	9	SL-S11-1060.DV	PO-S11-1020.DV
	Construction Works														
	Preliminary Works														
	Portion 16 - Tree														
S11-0010	Portion 16 - Tree Survey, Felling and preservation	7-Apr-23	22-Dec-23	213	100%	7-Apr-23 A	3-Feb-24	24	24	25%	0	-34	14	CD-1020, AD-136	S11-1040.DVP01
	Portion 16 - Ground Investigation (GI)														
S9-1050	Portion 16 (GI) - Ground Investigation along BC06 & BC07 [After KD2C] (3no; 10d/no, 1 wf)	9-Aug-23	10-Jan-24	127	97.64%	9-Aug-23 A	14-Feb-24	50	30	33.33%	0	-27	0	S11-1030.DVP01	S9-1070
	Portion 16 - Working Deck (WD) and Pre-drill Works														
S11-1040.DVF	Portion 16 (WD) - Erection of Working Deck WD	3-Oct-23	12-Dec-23	60	100%	3-Oct-23 A	24-Jan-24	18	1	25%	0	-34	0	MS-S11-1030.DV	S11-1050.DVP01
S11-1050.DVF	Portion 16 (WD) - Plant Mobilization for Pre-drill	13-Dec-23	19-Dec-23	6	100%	25-Jan-24	31-Jan-24	6	6	0%	-34	-34	0	S11-1040.DVP01	S11-1060.DVP01
S11-1060.DVF	Portion 16 (WD) - Pre-drill (5no; 6d/no, 1wf)	20-Dec-23	26-Jan-24	30	43.33%	1-Feb-24	9-Mar-24	30	30	0%	-34	-34	12	S11-1030.DVP01	S11-1070.DVP01
S11-1070.DVF	Portion 16 (WD) - Prepare and Submit Report	27-Jan-24	2-Feb-24	6	0%	11-Mar-24	16-Mar-24	6	6	0%	-34	-34	12	S11-1060.DVP01	S11-2010
	Portion 16 - Traffic Deck (TD14)														
S11-1080.DVF	Portion 16 (TD14) - Road Setback at WNTT Rd. and KH Rd.	20-Dec-23	28-Dec-23	6	100%	25-Jan-24	31-Jan-24	6	6	0%	-28	-28	0	S11-1030.DVP01	S11-1090.DVP01
S11-1090.DVF	Portion 16 (TD14) - Footing / Abutment for Traffic Deck	29-Dec-23	26-Jan-24	24	29.17%	1-Feb-24	2-Mar-24	24	24	0%	-28	-28	0	S11-1080.DVP01	S11-1100.DVP01
S11-1100.DVF	Portion 16 (TD14) - Decking for Traffic Deck	27-Jan-24	27-Feb-24	24	0%	4-Mar-24	3-Apr-24	24	24	0%	-28	-28	0	S11-1090.DVP01	S11-2010
	Box Culvert BC06, BC07 and Decking														
	Portion 16/16A - BC06 and BC07 (40m, CHC 395 to CHC 435)														
S11-4040.C01	Portion 16, 16A (BC06/BC07) - Road Setback (CH.400- CH.420)			0	0%	25-Jan-24	31-Jan-24	6	6	0%			4	S11-1080.DVP01	S11-4050.C01
S11-4050.C01	Portion 16, 16A (BC06/BC07) - ELS and Excavation to FEL (CH.400- CH.420)			0	0%	1-Feb-24	14-Mar-24	34	34	0%			4	S11-4040.C01	S11-4060.C01, S1
	Section 4 [Portion 14] - Slip Road S2														
	Design														
DD-S4-1010.Dv	Design - Submission of ELS of Box Structure	20-Nov-23	5-Dec-23	14	100%	20-Nov-23	8-Jan-24	12	1	90%	0	-26	0	S4-1000	DD-S4-1020.DVP
DD-S4-1030.Dv	Design - Submission of Construction of Box Structure	25-Nov-23	7-Dec-23	11	100%	8-Jan-24	19-Jan-24	11	11	0%	-34	-34	48	S4-1000	DD-S4-1040.DVP
DD-S4-1020.DV	Design - Approval of ELS of Box Structure	6-Dec-23	28-Dec-23	18	100%	9-Jan-24	29-Jan-24	18	18	0%	-26	-26	12	DD-S4-1010.DVF	S4-2070.DVP01
DD-S4-1040.DV	Design - Approval of Construction of Box Structure	8-Dec-23	30-Dec-23	18	100%	20-Jan-24	9-Feb-24	18	18	0%	-34	-34	72	DD-S4-1030.DVF	S4-1090.DVP02,
	Method Statement														
S4-1040.DVP02	MS - Submission of ELS of Box Structure	29-Dec-23	12-Jan-24	12	58.33%	9-Jan-24	22-Jan-24	12	12	0%	-8	-8	0	DD-S4-1010.DVF	S4-1060.DVP02
S4-1060.DVP02	MS - Approval of ELS of Box Structure	13-Jan-24	2-Feb-24	18	0%	23-Jan-24	15-Feb-24	18	18	0%	-8	-8	0	S4-1040.DVP02	S4-2070.DVP01
S4-1090.DVP02	MS - Submission of Construction of Box Structure	2-Jan-24	15-Jan-24	12	41.67%	14-Feb-24	27-Feb-24	12	12	0%	-34	-34	72	DD-S4-1040.DVF	S4-1100.DVP02
S4-1100.DVP02	MS - Approval of Construction of Box Structure	16-Jan-24	5-Feb-24	18	0%	28-Feb-24	19-Mar-24	18	18	0%	-34	-34	72	S4-1090.DVP02	S4-2020
	Subletting														
S4-1070.DVP02	Subletting for ELS of Box Structure	6-Dec-23	19-Jan-24	36	69.44%	9-Dec-23 A	9-Jan-24	36	1	25%	-3	9	29	DD-S4-1010.DVF	S4-2070.DVP01
S4-1010	Subletting - S4 - C9 process	22-Feb-23	30-Nov-23	231	100%	22-Feb-23	12-Jan-24	48	5	25%	0	-34	5	S4-1000	S4-2010
S4-1080.DVP02	Subletting for Box Structure	6-Feb-24	21-Mar-24	36	0%	20-Jan-24	5-Mar-24	36	36	0%	14	14	48	DD-S4-1030.DVF	PR-S4-1020
	Procurement														



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

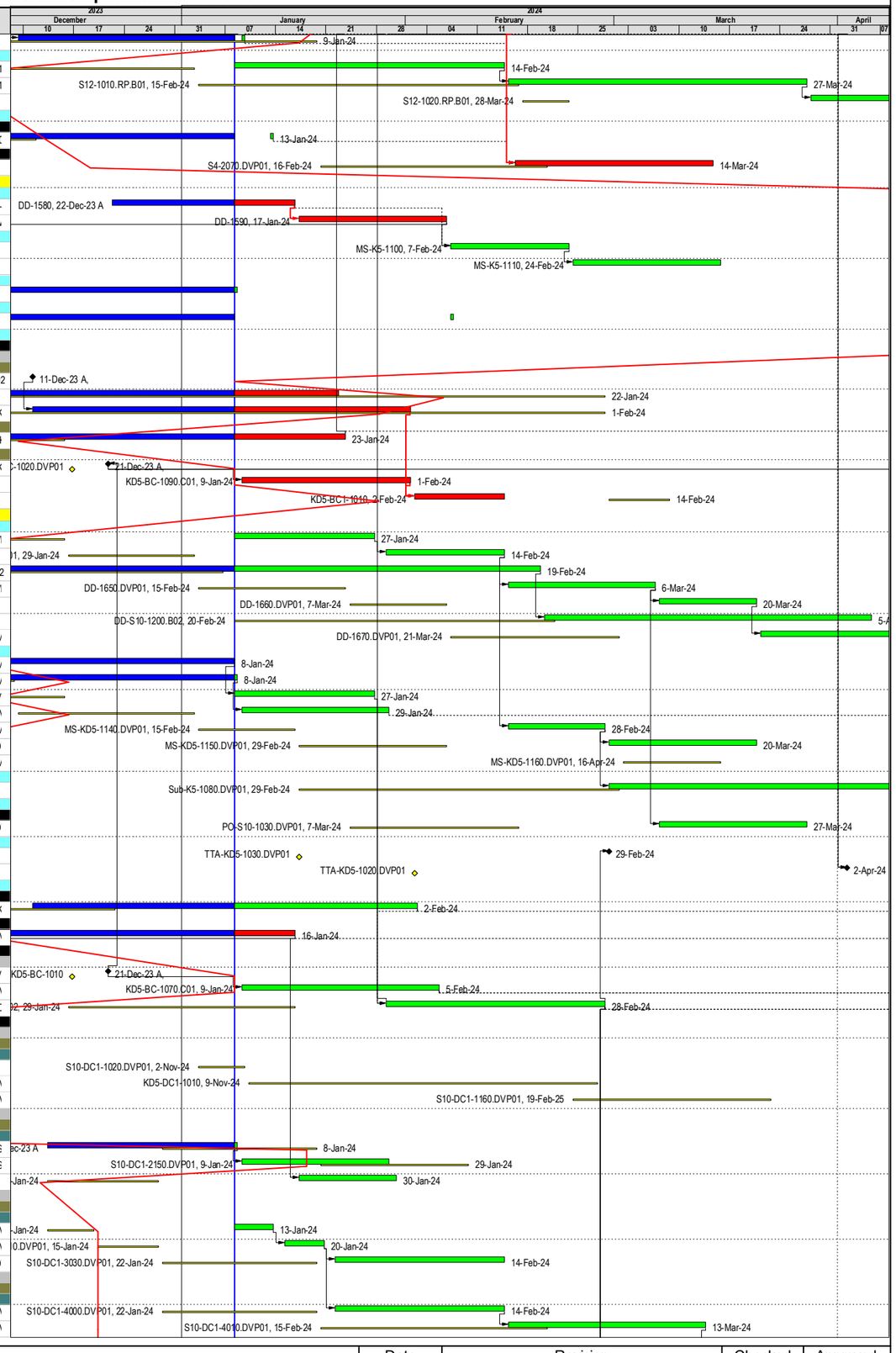
Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29
Page 5 of 7

YL/2021/04
Three Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
PR-S4-1010	Procurement for ELS of Box Structure	6-Dec-23	19-Jan-24	36	69.44%	9-Dec-23 A	9-Jan-24	36	1	25%	-3	9	29	DD-S4-1010.DVF	S4-2070.DVP01
TTA Scheme/XP															
S12-1000.RP.B(	TTA - Scheme Review and Approval	25-Nov-23	2-Jan-24	30	100%	8-Jan-24	14-Feb-24	30	30	0%	-34	-34	59	S4-1020	S12-1010.RP.B01
S12-1010.RP.B(	TTA - Scheme TMLG Coordination/Meeting/Approval	3-Jan-24	16-Feb-24	36	11.11%	15-Feb-24	27-Mar-24	36	36	0%	-34	-34	59	S12-1000.RP.B01	S12-1020.RP.B01
S12-1020.RP.B(	TTA - Roadwork Advise (RA)	17-Feb-24	23-Feb-24	6	0%	28-Mar-24	8-Apr-24	6	6	0%	-34	-34	59	S12-1010.RP.B01	S4-2020
Construction Works															
Site Formation/Fill Replacement															
S4-2050	Portion 14 (SF) - Excavation on slope with Temporary access and haul road formation	16-Oct-23	11-Dec-23	48	100%	16-Oct-23	13-Jan-24	48	1	100%	0	-26	5	S4-2010	S4-2060, S4-207(
Box Structure and Backdrop Manhole															
S4-2070.DVP01	Sheetpiling for Box Structure	20-Jan-24	20-Feb-24	24	0%	16-Feb-24	14-Mar-24	24	24	0%	-20	-20	0	S4-2050, PR-S4-	S4-2110.RP.B01
KD5 | Section 10 [Portions 10, 10A, 10B, 10C, &10D] - Box Culvert BC01															
Design															
DD-1580	Design: Submission of ELS Design including ICE	26-Aug-24	7-Sep-24	12	0%	22-Dec-23	16-Jan-24	12	8	33.33%	198	191	-66	DD-1550	DD-1590, MS-K5-
DD-1590	Design: Approval of ELS Design including ICE	9-Sep-24	30-Sep-24	18	0%	17-Jan-24	6-Feb-24	18	18	0%	191	191	-66	DD-1580	KD5-BC1-1030, M
Method Statement															
MS-K5-1100	Method Statement of Box Construction Submission including CIA	2-Oct-24	16-Oct-24	12	0%	7-Feb-24	23-Feb-24	12	12	0%	191	191	160	DD-1590, DD-15(	MS-K5-1110
MS-K5-1110	Method Statement of Box Construction Approval including CIA	17-Oct-24	6-Nov-24	18	0%	24-Feb-24	15-Mar-24	18	18	0%	191	191	160	MS-K5-1100	KD5-BC1-2010
Subletting															
Sub-K5-1050	Subletting - ELS & structure for BC01	17-Oct-24	27-Nov-24	36	0%	24-Oct-23	8-Jan-24	36	1	25%	291	264	215	KD5-2080, MS-K(	KD5-BC1-2010
Procurement															
PO-K5-1050	Procurement - ELS & structure for BC01	2-Oct-24	23-Oct-24	18	0%	24-Oct-23	7-Feb-24	18	1	25%	279	208	189	KD5-2080, DD-1(	KD5-BC1-2010
Construction Works															
Box Culvert BC01															
2nd Dry Season 23/24															
UU diversion															
UU-KD5-102(	UU diversion - XP Approved for CLP diversion		25-Nov-23	0	100%		11-Dec-23	0	0	100%	-13	-13		UU-KD5-1010	UU-KD5-1040.B02
UU-KD5-103(	UU diversion - Watermain diversion near CLP overhead cables KH Road	7-Sep-23	28-Feb-24	141	70.21%	7-Sep-23 A	22-Jan-24	30	13	56.67%	0	29	-53	KD5-1010	KD5-BC1-1030
UU-KD5-104(	UU diversion - CLP overhead cables (remaining CLP overhead cable)	25-Nov-23	28-Feb-24	76	44.74%	11-Dec-23	1-Feb-24	76	22	71.05%	-13	20	-70	UU-KD5-1020, UI	KD5-BC1-1010, K
Road set back															
KD5-1010	Road set back and reinstatement - Kiu Hing road	7-Sep-23	15-Dec-23	83	100%	7-Sep-23 A	23-Jan-24	18	14	10%	0	-30	-53	AW-K5-1000	KD1-RW1-1000, I
Piling															
KD5-BC-102(	Portion 11 Completion of Ramp 01 (WD6)		16-Dec-23	0	100%		21-Dec-23	0	0	100%	-4	-4		KD5-BC-1010	KD5-BC-1010, K
KD5-BC-109(	Erection of Deck CB09 Portion 10			0	0%	9-Jan-24	1-Feb-24	21	21	0%			-70	KD5-BC-1020.DV	KD5-BC-1010
KD5-BC1-10'	Piling Plant Mobilization to Nullah BC01	29-Feb-24	8-Mar-24	8	0%	2-Feb-24	14-Feb-24	8	8	0%	20	20	-70	SC-1210, KD5-B(	KD5-BC1-1030
Section 10 [Portions 10, 10A, 10B, 10C, &10D] - Decking DC01 & Noise Enclosure															
Design															
DD-1616.DVP01	Design - Approval of Deck CB01 for DC01	25-Nov-23	15-Dec-23	18	100%	8-Jan-24	27-Jan-24	18	18	0%	-34	-34	31	DD-1615.DVP01	PO-S10-1020.DV
DD-1640.DVP01	Design - Submission of ELS & structure for DC01	16-Dec-23	2-Jan-24	12	100%	29-Jan-24	14-Feb-24	12	12	0%	-34	-34	244	DD-1616.DVP01	DD-1650.DVP01,
DD-S10-1090.B	Design - DDA Design for noise enclosure / noise barrier - S690 - AD	26-Sep-23	6-Jan-24	82	100%	26-Sep-23	19-Feb-24	36	34	25%	0	-34	140	DD-S10-1090.DV	DD-S10-1200.B02
DD-1650.DVP01	Design - Approval of ELS & structure for DC01	3-Jan-24	23-Jan-24	18	22.22%	15-Feb-24	6-Mar-24	18	18	0%	-34	-34	244	DD-1640.DVP01	PO-S10-1030.DV
DD-1660.DVP01	Design - Submission of Precast Beam Installation for Decking DC01	24-Jan-24	6-Feb-24	12	0%	7-Mar-24	20-Mar-24	12	12	0%	-34	-34	244	DD-1650.DVP01	DD-1670.DVP01
DD-S10-1200.B	Design - DDA Approval for noise enclosure / noise barrier - S690 - AD	8-Jan-24	21-Feb-24	36	0%	20-Feb-24	5-Apr-24	36	36	0%	-34	-34	140	DD-S10-1090.B02	DD-S10-1020
DD-1670.DVP01	Design - Approval of Precast Beam Installation for Decking DC01	7-Feb-24	1-Mar-24	18	0%	21-Mar-24	15-Apr-24	18	18	0%	-34	-34	244	DD-1660.DVP01	MS-KD5-1160.DV
Method Statement															
MS-KD5-1120.[	MS - Method Statement of Deck CB01 for DC01	13-Nov-23	25-Nov-23	11	100%	13-Nov-23	8-Jan-24	12	0	100%	0	-34	31	DD-1615.DVP01	MS-KD5-1130.DV
MS-KD5-1180.[	MS - Piling Works for Portion 10	25-Nov-23	8-Dec-23	12	100%	25-Nov-23	8-Jan-24	12	1	25%	0	-23	237	CD-1020	MS-KD5-1190.DV
MS-KD5-1130.[	MS - Approval of Method Statement of Deck CB01 for DC01	25-Nov-23	15-Dec-23	18	100%	8-Jan-24	27-Jan-24	18	18	0%	-34	-34	31	MS-KD5-1120.D\	KD5-BC-1040.DV
MS-KD5-1190.[	MS - Approval of MS for Piling Works for Portion 10	9-Dec-23	2-Jan-24	18	100%	9-Jan-24	29-Jan-24	18	18	0%	-23	-23	237	MS-KD5-1180.D\	S10-DC1-1020.D\
MS-KD5-1140.[	MS - Method statement for ELS & structure for DC01	3-Jan-24	16-Jan-24	12	33.33%	15-Feb-24	28-Feb-24	12	12	0%	-34	-34	259	DD-1640.DVP01	MS-KD5-1150.DV
MS-KD5-1150.[	MS - Approval of ELS & structure for DC01	17-Jan-24	6-Feb-24	18	0%	29-Feb-24	20-Mar-24	18	18	0%	-34	-34	259	MS-KD5-1140.D\	KD5-DC1-1020.D
MS-KD5-1160.[	MS - Precast Beam Installation for Decking DC01	2-Mar-24	15-Mar-24	12	0%	16-Apr-24	29-Apr-24	12	12	0%	-34	-34	244	DD-1670.DVP01	MS-KD5-1170.DV
Subletting															
Sub-K5-1080.D\	Subletting - ELS & structure for DC01	17-Jan-24	1-Mar-24	36	0%	29-Feb-24	15-Apr-24	36	36	0%	-34	-34	436	MS-KD5-1140.D\	KD5-DC1-1020
Procurement															
General															
PO-S10-1030.[	Procurement - ELS & structure for DC01	24-Jan-24	16-Feb-24	18	0%	7-Mar-24	27-Mar-24	18	18	0%	-34	-34	253	DD-1650.DVP01	KD5-DC1-1020.D
TTA Scheme/XP															
TTA-KD5-1030.'	TTA Implementation - After TD1a completed	17-Jan-24		0	0%	29-Feb-24		0	0	0%	-34	-34	49	KD5-BC-1040.D\	SC-1230
TTA-KD5-1020.'	TTA Implementation - After TD02	2-Feb-24		0	0%	2-Apr-24		0	0	0%	-45	-45	447	KD1-KU-1030, KI	KD5-DC1-1020
Construction Works															
UU Diversion															
AW-K5-2010	UU diversion planter wall demotion near Shap Pat Heung Road	25-Nov-23	22-Dec-23	24	100%	11-Dec-23	2-Feb-24	24	23	5%	-13	-33	32	AW-K5-1010	KD5-DC1-1010, K
Road Set Back															
KD5-1000	Road set back and reinstatement - Kung Um Road near La Grove	7-Sep-23	4-Dec-23	73	100%	7-Sep-23 A	16-Jan-24	18	8	15%	0	-34	0	AW-K5-1010	S10-DC1-7000.D\
Temporary Works															
2nd Dry Season 23/24															
KD5-BC-1010	Portion 11 Completion of Ramp WD6		16-Dec-23	0	100%		21-Dec-23	0	0	100%	-4	-4		KD-R-1000	KD5-BC-1020.DV
KD5-BC-1070	Erection of Deck CB08 Portion 10			0	0%	9-Jan-24	5-Feb-24	24	24	0%			66	KD5-BC-1010	S10-DC1-5020.D\
KD5-BC-1040	Erection of Deck CB01 Portion 10	16-Dec-23	16-Jan-24	24	66.67%	29-Jan-24	28-Feb-24	24	24	0%	-34	-34	31	PO-S10-1020.DV	SC-1230, TTA-KD
Decking DC01															
Decking DC01 Bay 1															
2nd Dry Season 23/24															
Kiu Hing Road															
S10-DC1-10	Piling Plant Mobilization to Nullah DC01 Bay 1	3-Jan-24	9-Jan-24	6	66.67%	2-Nov-24	8-Nov-24	6	6	0%	-247	-247	13	KD5-BC1-1000.D	KD5-DC1-1010
KD5-DC1-1(	Socket H - DC01 Bay 1 KH Side 13 nos (at nullah) (3d/nr, 1 rigs) - WF1	10-Jan-24	27-Feb-24	39	0%	9-Nov-24	24-Dec-24	39	39	0%	-247	-247	13	S10-DC1-1030.D	S10-DC1-1160.D\
S10-DC1-11	Pile load test - DC01 Bay 1	24-Feb-24	22-Mar-24	24	0%	19-Feb-25	18-Mar-25	24	24	0%	-292	-292	34	KD5-DC1-1010, I	S10-DC1-1190.D\
Decking DC01 Bay 2															
2nd Dry Season 23/24															
Kiu Hing Road															
S10-DC1-20	Obtain contour for DC01 Bay 2	29-Dec-23	19-Jan-24	18	38.89%	13-Dec-23	8-Jan-24	18	1	100%	12	10	72	S10-DC1-2010.D	KD5-DC1-2010, S
S10-DC1-21	Site formation - DC01 B2	20-Jan-24	9-Feb-24	18	0%	9-Jan-24	29-Jan-24	18	18	0%	10	10	72	S10-DC1-2010.D	KD5-DC1-2010, S
S10-DC1-20	Piling Plant Mobilization to Nullah DC01 Bay 2	13-Dec-23	28-Dec-23	12	100%	17-Jan-24	30-Jan-24	12	12	0%	-27	-27	242	S10-DC1-2010.D	KD5-DC1-2010
Decking DC01 Bay 3															
2nd Dry Season 23/24															
Kiu Hing Road															
S10-DC1-30	Predrill Plant Mobilization DC01 Bay 3	13-Dec-23	19-Dec-23	6	100%	8-Jan-24	13-Jan-24	6	6	0%	-19	-19	13	S10-DC1-2010.D	S10-DC1-3010.D\
S10-DC1-30	Predrill for DC01 Bay 3 4nrs (3d/nr, 1rigs) - dry season 2023 - WF2	20-Dec-23	28-Dec-23	6	100%	15-Jan-24	20-Jan-24	6	6	0%	-19	-19	13	S10-DC1-3000.D	S10-DC1-3030.D\
S10-DC1-30	Obtain contour for DC01 Bay 3	29-Dec-23	19-Jan-24	18	38.89%	22-Jan-24	14-Feb-24	18	18	0%	-19	-19	107	S10-DC1-3010.D	KD5-DC1-3010.D
Decking DC01 Bay 4															
2nd Dry Season 23/24															
Predrill															
S10-DC1-40	Predrill Plant Mobilization for DC01 Bay 4	29-Dec-23	19-Jan-24	18	38.89%	22-Jan-24	14-Feb-24	18	18	0%	-19	-19	13	S10-DC1-3010.D	S10-DC1-4010.D\
S10-DC1-40	Predrill DC01 Bay 4 7nrs (3d/nr, 1rigs) - dry season 2023 - WF3	20-Jan-24	20-Feb-24	24	0%	15-Feb-24	13-Mar-24	24	24	0%	-19	-19	13	S10-DC1-4000.D	S10-DC1-4030.D\



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

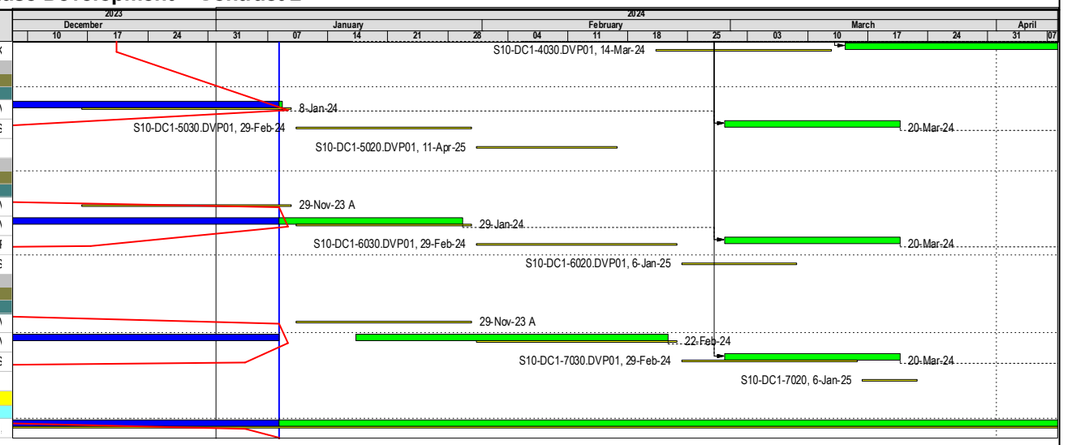
Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29

YL/2021/04
Three Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 2

Activity ID	Activity Name	BL Project Start	BL Project Finish	BL Project Duration	Schedule % Complete	Start	Finish	Duration	Remaining Duration	Activity % Complete	Variance - BL Project Start Date	Variance - BL Project Finish Date	Total Float	Predecessors	Successors
S10-DC1-40	Obtain contour for DC01 Bay 4	21-Feb-24	12-Mar-24	18	0%	14-Mar-24	8-Apr-24	18	18	0%	-19	-19	13	S10-DC1-4010.D	KD5-DC1-4010, K
Decking DC01 Bay 5															
2nd Dry Season 23/24															
Kiu Hing Road															
S10-DC1-50	Predrill for DC01 Bay 5 5nrs (3d/nr, 1rigs)	16-Dec-23	9-Jan-24	18	88.89%	30-Nov-23	8-Jan-24	18	1	15%	14	1	72	S10-DC1-5000.D	S10-DC1-5030.D\
S10-DC1-50	Vertical Coring Dia. 700 Hole (15 nos.) / Obtain Contour	10-Jan-24	30-Jan-24	18	0%	29-Feb-24	20-Mar-24	18	18	0%	-40	-40	31	S10-DC1-5010.D	KD5-DC1-5010, S
S10-DC1-50	Piling Plant Mobilization to Nullah DC01 Bay 5	31-Jan-24	16-Feb-24	12	0%	11-Apr-25	28-Apr-25	12	12	0%	-353	-353	0	SC-1210, S10-D(	KD5-DC1-5010
Decking DC01 Bay 6															
2nd Dry Season 23/24															
Kiu Hing Road															
S10-DC1-60	Predrill Plant Mobilization for DC01 Bay 6	16-Dec-23	9-Jan-24	18	88.89%	23-Nov-23	29-Nov-23	18	0	100%	20	32		PO-K5-1020, Sut	S10-DC1-6010.D\
S10-DC1-60	Predrill for DC01 Bay 6 6nrs (3d/nr, 1rigs)	10-Jan-24	30-Jan-24	18	0%	30-Nov-23	29-Jan-24	18	19	15%	32	1	54	S10-DC1-6000.D	S10-DC1-6030.D\
S10-DC1-60	Vertical Coring Dia. 700 Hole (13 nos.) / Obtain Contour	31-Jan-24	23-Feb-24	18	0%	29-Feb-24	20-Mar-24	18	18	0%	-22	-22	31	S10-DC1-6010.D	S10-DC1-6040.RI
S10-DC1-60	Piling Plant Mobilization to Nullah DC01 Bay 6 - WF4	24-Feb-24	8-Mar-24	12	0%	6-Jan-25	18-Jan-25	12	12	0%	-257	-257	15	KD5-BC-1040.D\	KD5-DC1-6010, S
Decking DC01 Bay 7															
2nd Dry Season 23/24															
Kiu Hing Road															
S10-DC1-70	Predrill Plant Mobilization for DC01 Bay 7	10-Jan-24	30-Jan-24	18	0%	23-Nov-23	29-Nov-23	18	0	100%	38	50		KD5-1000, PO-K:	S10-DC1-7010.D\
S10-DC1-70	Predrill for DC01 Bay 7 3nrs (3d/nr, 1rigs)	31-Jan-24	23-Feb-24	18	0%	30-Nov-23	22-Feb-24	18	29	15%	50	1	36	S10-DC1-7000.D	S10-DC1-7030.D\
S10-DC1-70	Vertical Coring Dia. 700 Hole (8 nos.) / Obtain Contour	24-Feb-24	15-Mar-24	18	0%	29-Feb-24	20-Mar-24	18	18	0%	-4	-4	31	S10-DC1-7010.D	KD5-DC1-7010, S
S10-DC1-70	Piling Plant Mobilization to Nullah DC01 Bay 7 - WF4	16-Mar-24	22-Mar-24	6	0%	6-Jan-25	11-Jan-25	6	6	0%	-239	-239	15	KD5-BC-1040.D\	KD5-DC1-7010
Section 13 - Preservation and protection of extg. tree pursuant to G.S. and P.S. Sec. 26															
Construction Works															
S13-1010	Protection and preservation of existing Tree	26-Apr-23	3-Mar-28	1440	14.58%	26-Apr-23	8-Mar-28	1550	1234	20.39%	0	-4	2	CD-1020	S13-1020.DVP01



Actual Work
Remaining Work
Critical Remaining Work
Project Base...
Milestone
Project Base...

Data Date: 8-Jan-24
Project Start: 8 Dec 2022
Project End: 10-Mar-29

YL/2021/04
Three Months Rolling Programme

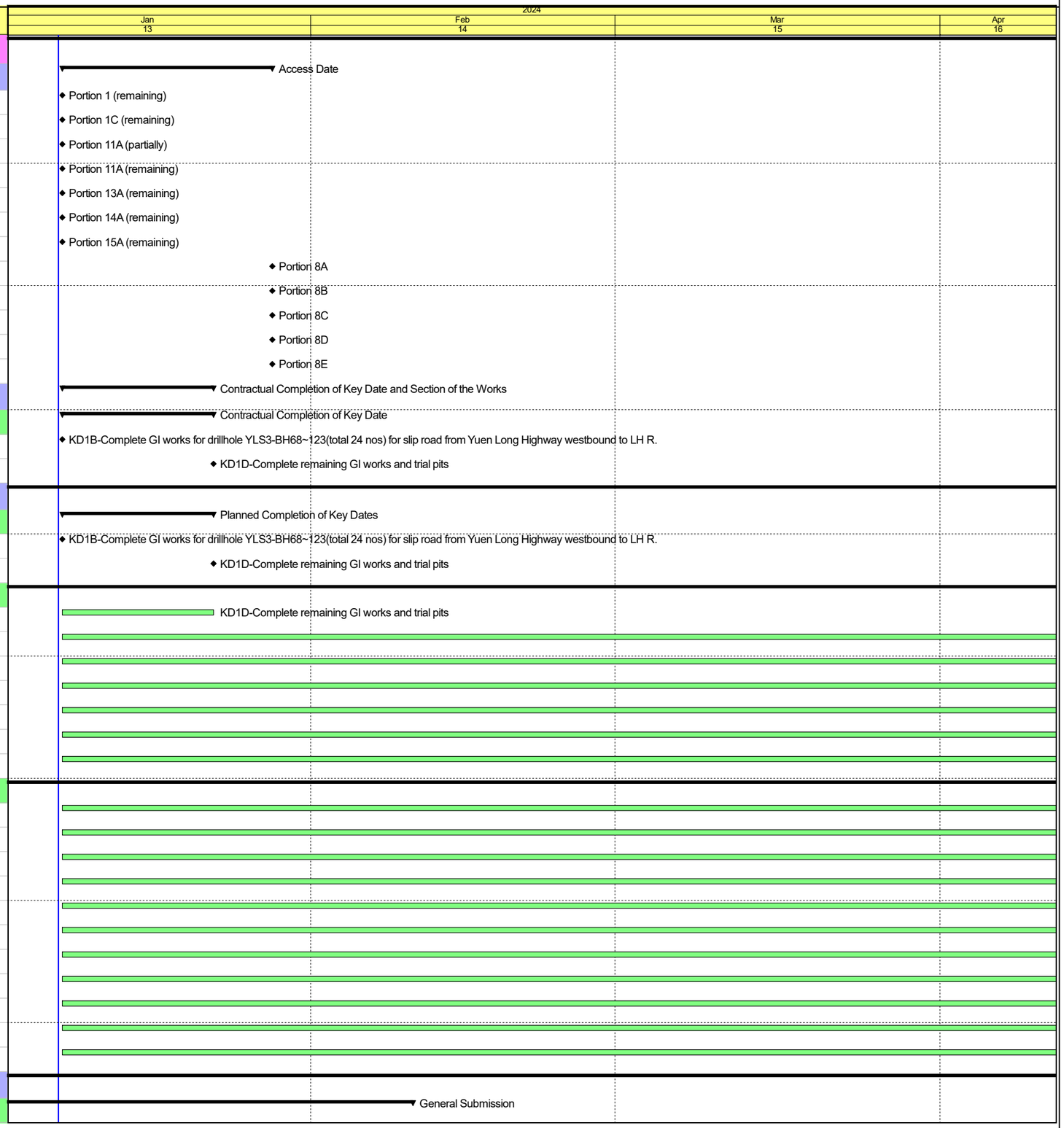
Date	Revision	Checked	Approved
30-Nov-23	RP.B02 - Accepted (3-Jan-24)		
15-Jan-24	202312 MPU		

3-month Rolling Construction Programme of Contract 3

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
Site Formation and Infrastructure Works for Yuen Long Sc		3003	1651	28-Dec-22 A	15-Jul-28
Access Date		20	20	08-Jan-24 A	28-Jan-24
ACD10040.10	Portion 1 (remaining)	0	0	08-Jan-24*	
ACD10260.10	Portion 1C (remaining)	0	0	08-Jan-24*	
ACD10640.50	Portion 11A (partially)	0	0	08-Jan-24 A	
ACD10640.60	Portion 11A (remaining)	0	0	08-Jan-24*	
ACD10680.30	Portion 13A (remaining)	0	0	08-Jan-24*	
ACD10700.20	Portion 14A (remaining)	0	0	08-Jan-24*	
ACD10720.40	Portion 15A (remaining)	0	0	08-Jan-24*	
ACD10740	Portion 8A	0	0	28-Jan-24*	
ACD10760	Portion 8B	0	0	28-Jan-24*	
ACD10780	Portion 8C	0	0	28-Jan-24*	
ACD10800	Portion 8D	0	0	28-Jan-24*	
ACD10820	Portion 8E	0	0	28-Jan-24*	
Contractual Completion of Key Date and Section of the Works		15	15	08-Jan-24	22-Jan-24
Contractual Completion of Key Date		15	15	08-Jan-24	22-Jan-24
KEY10020	KD1B-Complete GI works for drillhole YLS3-BH68~123(total 24 nos) for slip road from Yuen Long Highway westbound to LH R.	0	0		08-Jan-24*
KEY10060	KD1D-Complete remaining GI works and trial pits	0	0		22-Jan-24*
Planned Completion of Key Dates and Section of the Works		2060	1651	13-Feb-23 A	15-Jul-28
Planned Completion of Key Dates		15	15	08-Jan-24	22-Jan-24
KEY10550	KD1B-Complete GI works for drillhole YLS3-BH68~123(total 24 nos) for slip road from Yuen Long Highway westbound to LH R.	0	0		08-Jan-24
KEY10570	KD1D-Complete remaining GI works and trial pits	0	0		22-Jan-24
Planned Completion of Key Dates (Summary)		1836	1471	20-Feb-23 A	17-Jan-28
LOE11110	KD1D-Complete remaining GI works and trial pits	337	15	20-Feb-23 A	22-Jan-24
LOE11160	KD4-Complete all necessary works to facilitate laying of CLP cables from TYST to LH Road via footpath and cycle track	585	478	22-Sep-23 A	29-Apr-25
LOE11180	KD5-Complete all necessary works for opening of road connecting existing YL Highway westbound to existing LH and SH Road	768	815	23-Sep-23 A	01-Apr-26
LOE11200	KD6-Complete all necessary works for opening of road connecting existing LH and SH Road to existing YL Highway westbound	800	824	22-Aug-23 A	10-Apr-26
LOE11220	KD7-Complete all necessary works for opening of road connecting YL Highway eastbound to existing LT Road northbound	1242	1180	06-Sep-23 A	01-Apr-27
LOE11240	KD8-Complete all necessary works for opening of road connecting LT Road southbound to YL highway eastbound	1008	902	28-Mar-23 A	27-Jun-26
LOE11280	KD10-Complete all necessary works for opening of road connecting existing YL Highway eastbound to LH Road	1545	1471	06-Sep-23 A	17-Jan-28
Planned Completion of Section of the Works (Summary)		1799	1651	13-Feb-23 A	15-Jul-28
LOE11340	Section 1-Completion of all works,including piling works within Portions 1,1A,1B,1C,1D,1E,2,3,4A,5A,5B,6A and 6B	1742	1651	24-Apr-23 A	15-Jul-28
LOE11360	Section 2-Completion of all works within Portions 10 and 10A of the Site	492	418	04-Aug-23 A	28-Feb-25
LOE11380	Section 3-Completion of all works within Portions 8A, 9A, 14 and 14A of the Site	920	803	01-Sep-23 A	20-Mar-26
LOE11400	Section 4-Completion of all works within Portions 8E, 15 and 15A of the Site	916	758	07-Jul-23 A	03-Feb-26
LOE11420	Section 5-Completion of all works within Portions 16, 16A, 16B,16C and 16D of the Site	914	644	13-Feb-23 A	12-Oct-25
LOE11440	Section 6-Completion of all works within Portions 8C,8D,11,11A of the Site and the works at TYST Road within Portion 1	1142	1093	14-Aug-23 A	04-Jan-27
LOE11460	Section 7-Completion of all works within Portions 8B, 9B, 13 and 13A of the Site	662	552	05-Oct-23 A	12-Jul-25
LOE11480	Section 8-Completion of all works within Portions 12 and 12A of the Site	422	235	04-Sep-23 A	29-Aug-24
LOE11500	Section 9-Completion of all works within Portions 5C, 7, 7A, 7B, 7C and 7D of the Site	916	759	28-Apr-23 A	04-Feb-26
LOE11560	Section 12-Comprises all preservation and protection of existing trees	1799	1651	26-Feb-23 A	15-Jul-28
LOE11580	Section 13-Comprises all of the landscape softworks	1799	1651	26-Feb-23 A	15-Jul-28
Preliminaries, Constractor's Design, Method Statement Subm		975	180	28-Dec-22 A	05-Jul-24
General Submission		315	34	28-Dec-22 A	10-Feb-24



土木工程拓展署
Civil Engineering and Development Department

中國路橋工程有限責任公司
CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

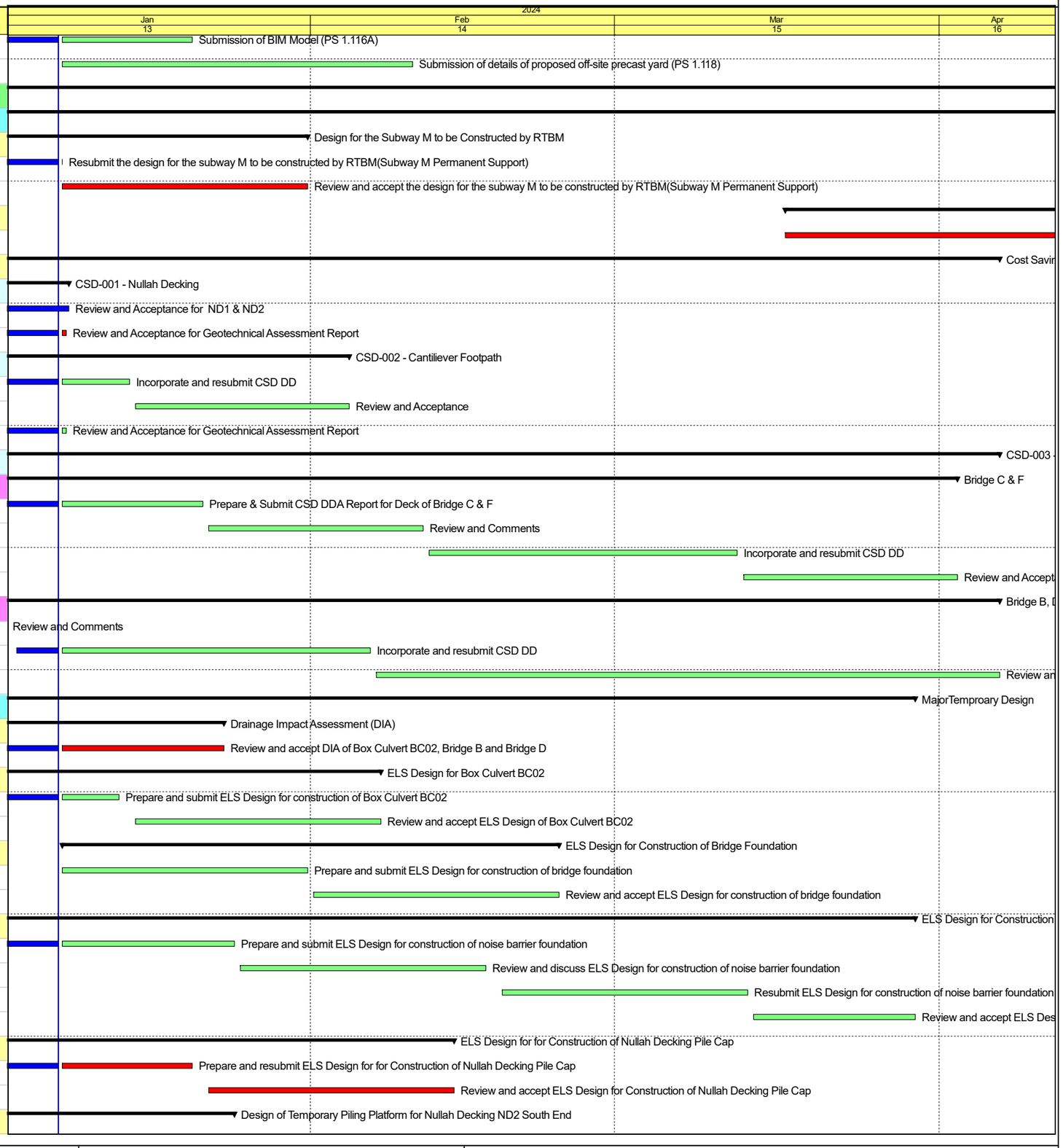
Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

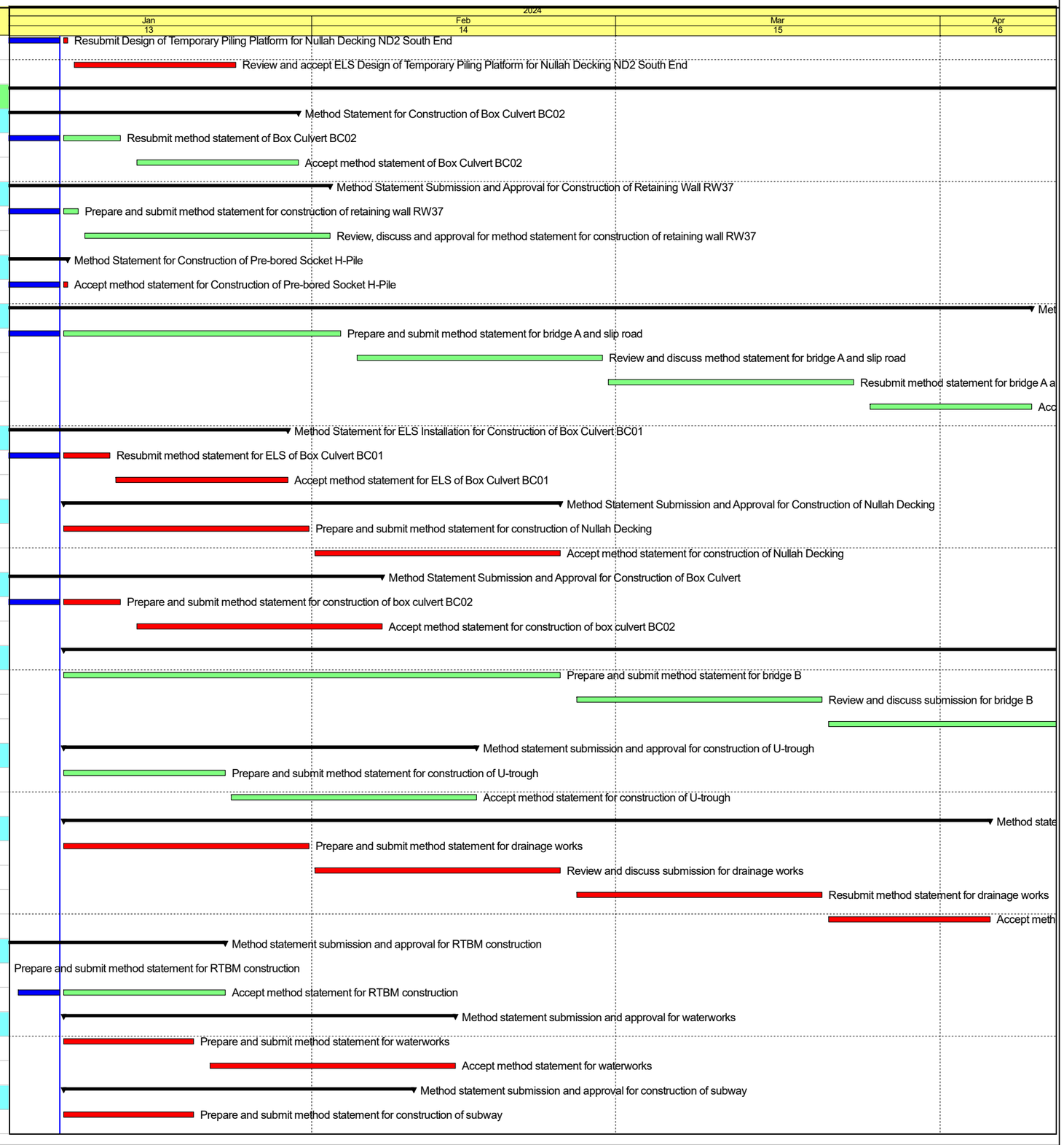
Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
GSS10240	Submission of BIM Model (PS 1.116A)	60	13	28-Dec-22 A	20-Jan-24
GSS10320	Submission of details of proposed off-site precast yard (PS 1.118)	30	30	08-Jan-24	10-Feb-24
Contractor's Design Submission and Approval		457	111	16-Jul-23 A	27-Apr-24
Contractor's Permanent Works Design		457	111	16-Jul-23 A	27-Apr-24
Design for the Subway M to be Constructed by RTBM		317	21	13-Oct-23 A	31-Jan-24
PRE10021	Resubmit the design for the subway M to be constructed by RTBM(Subway M Permanent Support)	44	0	13-Oct-23 A	08-Jan-24
PRE10022	Review and accept the design for the subway M to be constructed by RTBM(Subway M Permanent Support)	21	21	08-Jan-24	31-Jan-24
Design for the Road Lighting System		42	42	17-Mar-24	27-Apr-24
PRE10040	Prepare and submit design for the road lighting system	42	42	17-Mar-24	27-Apr-24
Cost Savings Design (CSD)		246	90	16-Jul-23 A	06-Apr-24
CSD-001 - Nullah Decking		40	1	06-Sep-23 A	09-Jan-24
PRE10420.70	Review and Acceptance for ND1 & ND2	14	0	22-Nov-23 A	09-Jan-24 A
PRE10420.98	Review and Acceptance for Geotechnical Assessment Report	14	1	06-Sep-23 A	08-Jan-24
CSD-002 - Cantiliever Footpath		126	28	06-Sep-23 A	04-Feb-24
PRE10400.50	Incorporate and resubmit CSD DD	30	7	06-Sep-23 A	14-Jan-24
PRE10400.70	Review and Acceptance	21	21	15-Jan-24	04-Feb-24
PRE10400.95	Review and Acceptance for Geotechnical Assessment Report	14	1	07-Nov-23 A	08-Jan-24
CSD-003 - Bridge Decking		246	90	16-Jul-23 A	06-Apr-24
Bridge C & F		242	86	16-Jul-23 A	02-Apr-24
PRE10200.10	Prepare & Submit CSD DDA Report for Deck of Bridge C & F	84	14	16-Jul-23 A	21-Jan-24
PRE10200.20	Review and Comments	21	21	22-Jan-24	11-Feb-24
PRE10200.30	Incorporate and resubmit CSD DD	30	30	12-Feb-24	12-Mar-24
PRE10200.40	Review and Acceptance	21	21	13-Mar-24	02-Apr-24
Bridge B, D, E & G		91	90	10-Nov-23 A	06-Apr-24
PRE10380.30	Review and Comments	60	0	10-Nov-23 A	03-Jan-24 A
PRE10380.50	Incorporate and resubmit CSD DD	30	30	04-Jan-24 A	06-Feb-24
PRE10380.70	Review and Acceptance	60	60	07-Feb-24	06-Apr-24
MajorTemproary Design		201	71	09-Aug-23 A	29-Mar-24
Drainage Impact Assessment (DIA)		21	14	22-Dec-23 A	23-Jan-24
PRE11860	Review and accept DIA of Box Culvert BC02, Bridge B and Bridge D	21	14	22-Dec-23 A	23-Jan-24
ELS Design for Box Culvert BC02		58	27	02-Dec-23 A	07-Feb-24
PRE11720	Prepare and submit ELS Design for construction of Box Culvert BC02	21	6	02-Dec-23 A	13-Jan-24
PRE11780	Review and accept ELS Design of Box Culvert BC02	21	21	15-Jan-24	07-Feb-24
ELS Design for Construction of Bridge Foundation		42	42	08-Jan-24	24-Feb-24
PRE10100	Prepare and submit ELS Design for construction of bridge foundation	21	21	08-Jan-24	31-Jan-24
PRE10110	Review and accept ELS Design for construction of bridge foundation	21	21	01-Feb-24	24-Feb-24
ELS Design for Construction of Noise Barrier Foundation		201	71	09-Aug-23 A	29-Mar-24
PRE10120	Prepare and submit ELS Design for construction of noise barrier foundation	42	15	09-Aug-23 A	24-Jan-24
PRE10122	Review and discuss ELS Design for construction of noise barrier foundation	21	21	25-Jan-24	17-Feb-24
PRE10125	Resubmit ELS Design for construction of noise barrier foundation	21	21	19-Feb-24	13-Mar-24
PRE10130	Review and accept ELS Design for construction of noise barrier foundation	14	14	14-Mar-24	29-Mar-24
ELS Design for for Construction of Nullah Decking Pile Cap		111	33	11-Nov-23 A	14-Feb-24
PRE11570	Prepare and resubmit ELS Design for for Construction of Nullah Decking Pile Cap	12	12	11-Nov-23 A	20-Jan-24
PRE11600	Review and accept ELS Design for Construction of Nullah Decking Pile Cap	21	21	22-Jan-24	14-Feb-24
Design of Temporary Piling Platform for Nullah Decking ND2 South End		53	15	03-Oct-23 A	24-Jan-24



Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
PRE11650	Resubmit Design of Temporary Piling Platform for Nullah Decking ND2 South End	14	1	03-Oct-23 A	08-Jan-24
PRE11660	Review and accept ELS Design of Temporary Piling Platform for Nullah Decking ND2 South End	14	14	09-Jan-24	24-Jan-24
Method Statement Submission and Approval for Major Construction I		345	92	07-Aug-23 A	23-Apr-24
Method Statement for Construction of Box Culvert BC02		98	20	13-Dec-23 A	30-Jan-24
MSS10920	Resubmit method statement of Box Culvert BC02	14	6	13-Dec-23 A	13-Jan-24
MSS10940	Accept method statement of Box Culvert BC02	14	14	15-Jan-24	30-Jan-24
Method Statement Submission and Approval for Construction of Retaining Wa		276	23	07-Aug-23 A	02-Feb-24
MSS10620	Prepare and submit method statement for construction of retaining wall RW37	21	2	07-Aug-23 A	09-Jan-24
MSS10630	Review, discuss and approval for method statement for construction of retaining wall RW37	21	21	10-Jan-24	02-Feb-24
Method Statement for Construction of Pre-bored Socket H-Pile		14	1	13-Dec-23 A	08-Jan-24
MSS10610	Accept method statement for Construction of Pre-bored Socket H-Pile	14	1	13-Dec-23 A	08-Jan-24
Method Statement Submission and Approval for bridge A and Slip Road		158	80	11-Sep-23 A	09-Apr-24
MSS10020	Prepare and submit method statement for bridge A and slip road	48	24	11-Sep-23 A	03-Feb-24
MSS10022	Review and discuss method statement for bridge A and slip road	21	21	05-Feb-24	28-Feb-24
MSS10025	Resubmit method statement for bridge A and slip road	21	21	29-Feb-24	23-Mar-24
MSS10030	Accept method statement for bridge A and slip road	14	14	25-Mar-24	09-Apr-24
Method Statement for ELS Installation for Construction of Box Culvert BC01		34	19	12-Oct-23 A	29-Jan-24
MSS10560	Resubmit method statement for ELS of Box Culvert BC01	21	5	12-Oct-23 A	12-Jan-24
MSS10570	Accept method statement for ELS of Box Culvert BC01	14	14	13-Jan-24	29-Jan-24
Method Statement Submission and Approval for Construction of Nullah Decki		42	42	08-Jan-24	24-Feb-24
MSS10040	Prepare and submit method statement for construction of Nullah Decking	21	21	08-Jan-24	31-Jan-24
MSS10050	Accept method statement for construction of Nullah Decking	21	21	01-Feb-24	24-Feb-24
Method Statement Submission and Approval for Construction of Box Culvert		79	27	21-Dec-23 A	07-Feb-24
MSS10960	Prepare and submit method statement for construction of box culvert BC02	12	6	21-Dec-23 A	13-Jan-24
MSS10980	Accept method statement for construction of box culvert BC02	21	21	15-Jan-24	07-Feb-24
Method statement submission and approval for bridge B		84	84	08-Jan-24	13-Apr-24
MSS10100	Prepare and submit method statement for bridge B	42	42	08-Jan-24	24-Feb-24
MSS10102	Review and discuss submission for bridge B	21	21	26-Feb-24	20-Mar-24
MSS10105	Resubmit submission for bridge B	21	21	21-Mar-24	13-Apr-24
Method statement submission and approval for construction of U-trough		35	35	08-Jan-24	16-Feb-24
MSS10120	Prepare and submit method statement for construction of U-trough	14	14	08-Jan-24	23-Jan-24
MSS10470	Accept method statement for construction of U-trough	21	21	24-Jan-24	16-Feb-24
Method statement submission and approval for drainage works		77	77	08-Jan-24	05-Apr-24
MSS10140	Prepare and submit method statement for drainage works	21	21	08-Jan-24	31-Jan-24
MSS10142	Review and discuss submission for drainage works	21	21	01-Feb-24	24-Feb-24
MSS10145	Resubmit method statement for drainage works	21	21	26-Feb-24	20-Mar-24
MSS10150	Accept method statement for drainage works	14	14	21-Mar-24	05-Apr-24
Method statement submission and approval for RTBM construction		73	14	23-Oct-23 A	23-Jan-24
MSS10160	Prepare and submit method statement for RTBM construction	42	0	23-Oct-23 A	03-Jan-24 A
MSS10170	Accept method statement for RTBM construction	21	14	04-Jan-24 A	23-Jan-24
Method statement submission and approval for waterworks		33	33	08-Jan-24	14-Feb-24
MSS10180	Prepare and submit method statement for waterworks	12	12	08-Jan-24	20-Jan-24
MSS10188	Accept method statement for waterworks	21	21	22-Jan-24	14-Feb-24
Method statement submission and approval for construction of subway		30	30	08-Jan-24	10-Feb-24
MSS10190	Prepare and submit method statement for construction of subway	12	12	08-Jan-24	20-Jan-24



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

RB 中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
MSS10198	Accept method statement for construction of subway	21	21	18-Jan-24	10-Feb-24
Method statement submission and approval for construction of noise barrier		45	45	20-Feb-24	11-Apr-24
MSS10200	Prepare and submit method statement for construction of noise barrier	12	12	20-Feb-24	04-Mar-24
MSS10202	Review and discuss method statement for construction of noise barrier	21	21	05-Mar-24	28-Mar-24
MSS10205	Resubmit method statement for construction of noise barrier	12	12	29-Mar-24	11-Apr-24
Method statement submission and approval for bridge D		77	77	08-Jan-24	05-Apr-24
MSS10220	Prepare and submit method statement for bridge D	21	21	08-Jan-24	31-Jan-24
MSS10222	Review and discuss method statement for bridge D	21	21	01-Feb-24	24-Feb-24
MSS10225	Resubmit method statement for bridge D	21	21	26-Feb-24	20-Mar-24
MSS10230	Accept method statement for bridge D	14	14	21-Mar-24	05-Apr-24
Method statement submission and approval for bridge F		35	35	08-Jan-24	16-Feb-24
MSS10240	Prepare and submit method statement for bridge F	14	14	08-Jan-24	23-Jan-24
MSS10250	Accept method statement for bridge F	21	21	24-Jan-24	16-Feb-24
Method statement submission and approval for bridge G		77	77	25-Jan-24	23-Apr-24
MSS10260	Prepare and submit method statement for bridge G	21	21	25-Jan-24	17-Feb-24
MSS10262	Review and discuss method statement for bridge G	21	21	19-Feb-24	13-Mar-24
MSS10265	Resubmit method statement for bridge G	21	21	14-Mar-24	06-Apr-24
MSS10270	Accept method statement for bridge G	14	14	08-Apr-24	23-Apr-24
Method statement submission and approval for bridge E		63	63	06-Feb-24	18-Apr-24
MSS10280	Prepare and submit method statement for bridge E	21	21	06-Feb-24	29-Feb-24
MSS10282	Review and discuss method statement for bridge E	21	21	01-Mar-24	25-Mar-24
MSS10285	Resubmit method statement for bridge E	21	21	26-Mar-24	18-Apr-24
Method statement submission and approval for construction of Cantilever Foo		63	63	05-Feb-24	17-Apr-24
MSS10300	Prepare and submit method statement for construction of cantilever footpath	21	21	05-Feb-24	28-Feb-24
MSS10302	Review and discuss method statement for construction of cantilever footpath	21	21	29-Feb-24	23-Mar-24
MSS10305	Resubmit method statement for construction of cantilever footpath	21	21	25-Mar-24	17-Apr-24
Method statement submission and approval for road pavement works		63	63	10-Feb-24	23-Apr-24
MSS10320	Prepare and submit method statement for road pavement works	21	21	10-Feb-24	05-Mar-24
MSS10322	Review and discuss method statement for road pavement works	21	21	06-Mar-24	29-Mar-24
MSS10325	Resubmit method statement for road pavement works	21	21	30-Mar-24	23-Apr-24
Method statement submission and approval for slope works		77	77	08-Jan-24	05-Apr-24
MSS10360	Prepare and submit method statement for slope works	21	21	08-Jan-24	31-Jan-24
MSS10362	Review and discuss method statement for slope works	21	21	01-Feb-24	24-Feb-24
MSS10365	Resubmit method statement for slope works	21	21	26-Feb-24	20-Mar-24
MSS10370	Accept method statement for slope works	14	14	21-Mar-24	05-Apr-24
Method statement submission and approval for construction of underpass		125	21	29-Sep-23 A	31-Jan-24
MSS10340	Prepare and submit method statement for construction of underpass	21	10	29-Sep-23 A	18-Jan-24
MSS10350	Accept method statement for construction of underpass	21	21	08-Jan-24	31-Jan-24
Preliminaries		182	60	08-Aug-23 A	07-Mar-24
PRE10230	Set up of the contract webpage	60	60	08-Jan-24	07-Mar-24
PRE10270	Submission of Contamination Assessment Plan and Remediation Action Plan (PS 1.108B(y))	30	2	08-Aug-23 A	09-Jan-24
Traffic Management		334	180	18-Nov-23 A	05-Jul-24
PRE11880	Preparation,submission and approval of TTA scheme (TMLG No.4)	60	0	18-Nov-23 A	08-Jan-24 A
PRE11900	Preparation,submission and approval of TTA scheme (TMLG No.5)	90	90	09-Jan-24 A	06-Apr-24
PRE11920	Preparation,submission and approval of TTA scheme (TMLG No.6)	90	90	07-Apr-24	05-Jul-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
Precasting Works		60	60	03-Apr-24	11-Jun-24
PRE10340	Setup of off-site precast yard	60	60	03-Apr-24	11-Jun-24
Subletting Works		742	60	25-May-23 A	16-Mar-24
PRE11220	Bridge structure for bridges A~G	60	60	08-Jan-24	16-Mar-24
PRE11225	R.C structure other than bridges	60	33	25-May-23 A	14-Feb-24
PRE11240	Waterwork	40	8	24-Jul-23 A	16-Jan-24
PRE11320	Slope works	40	40	08-Jan-24	22-Feb-24
PRE11345	Steel structure and panels for noise barriers and noise closures	40	40	08-Jan-24	22-Feb-24
PRE11360	Road works	40	40	08-Jan-24	22-Feb-24
PRE11400	E&M works	60	60	08-Nov-23 A	16-Mar-24
Section 1 of the Works-Completion of All works Including Pili		932	342	23-Mar-23 A	14-Dec-24
Preparation Works		90	6	23-Mar-23 A	13-Jan-24
SEC011020	Erection of hoarding	90	6	23-Mar-23 A	13-Jan-24
Ground Investigation Works		60	13	20-Oct-23 A	22-Jan-24
SEC011100	Remaining ground investigation works for KD1D - part 2 (remaining 30nos/66 nos)-(5>8rigs)	60	0	20-Oct-23 A	03-Jan-24 A
SEC011110	Remaining ground investigation works for KD1D - part 3 (remaining 26 nos)-(5>8rigs)	30	13	04-Jan-24 A	22-Jan-24
Trial Pile for Prebored H-Pile		62	45	15-Dec-23 A	02-Mar-24
SECA1014	Trial Pile for pre-bored H-piles and Loading Test	48	33	15-Dec-23 A	17-Feb-24
SECA1016	Design Review for Trial Pile	12	12	19-Feb-24	02-Mar-24
Bridge A		227	116	06-Sep-23 A	31-May-24
Preparation Works		73	30	06-Sep-23 A	14-Feb-24
Preparation Works		73	30	06-Sep-23 A	14-Feb-24
SECA10000	Construction of temporary cycle track and implementation of TTA	14	10	06-Sep-23 A	18-Jan-24
SECA10020	Tree felling works and transplanting of existing trees	30	30	12-Sep-23 A	14-Feb-24
SECA10025	Additional UU detection and trial pit (PMI No. 017 and 026)	73	5	16-Oct-23 A	12-Jan-24
Utility Diversion		218	116	27-Oct-23 A	31-May-24
SECA10040	Installation of sheetpile	22	22	13-Jan-24	07-Feb-24
SECA10060	Excavation for diversion of gas main	15	15	08-Feb-24	28-Feb-24
SECA10080	Diversion of gas main	70	70	29-Feb-24	27-May-24
SECA10085	CLP Trench Excavation by CRBC	77	77	08-Feb-24	17-May-24
SECA10090	CLP preparation works incl. budget approval and material procurement by others	218	116	27-Oct-23 A	31-May-24
Pre-drilling Works		24	20	11-Nov-23 A	30-Jan-24
SECA10160	Pre-drilling works (11 nos, 1rig, 4day/rig/hole) (revised to 6 nos)	24	20	11-Nov-23 A	30-Jan-24
Bridge B		494	149	28-Mar-23 A	11-Jul-24
Preparation Works		27	21	28-Mar-23 A	31-Jan-24
SECB10000	Site clearance &tree felling works along Lam Yu Rd (affected by updated site boundary with NCE 016 and TTA full closure)	27	21	28-Mar-23 A	31-Jan-24
Utility Diversion		248	149	05-Sep-23 A	11-Jul-24
SECB10020	UU detection and trial pit (affected by the updated site boundary with NCE No. 016 & full closure of Lam Yu Rd)	15	10	05-Sep-23 A	09-Feb-24
SECB10040	Diversion of existing gas main near Piers B1 (affected by the updated site boundary NCE No. 016)	60	60	29-Feb-24	14-May-24
SECB10065	CLP preparation works incl. budget approval and material procurement by others	218	116	27-Oct-23 A	31-May-24
SECB10080	Diversion of CLP and HKT cables (affected by the updated site boundary NCE No. 016))	120	120	14-Feb-24	11-Jul-24
Demolition Works		58	58	14-Feb-24	25-Apr-24
SECB10120	Demolition of existing structure near Lam Yu Road	30	30	14-Feb-24	19-Mar-24
SECB10140	Demolition of existing footbridge NF36	28	28	20-Mar-24	25-Apr-24
Pre-drilling Works		253	42	01-Nov-23 A	28-Feb-24

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

中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
SECB11020	Pre-drilling works for pier B2 (2nos, 1rig, 4day/rig/hole)	8	8	07-Feb-24	19-Feb-24
SECB11040	Pre-drilling works for pier B1 (2nos, 1rig, 4day/rig/hole)	8	8	20-Feb-24	28-Feb-24
SECB11080	Pre-drilling works for pier B3(4 nos) in the dry season (4 nos, 1rig, 4day/rig/hole) (revised to 3 nos)	16	16	19-Jan-24	06-Feb-24
SECB11100	Pre-drilling works at portal B4(2 nos) (2nos, 1rig, 4day/rig/hole)	8	8	01-Nov-23 A	16-Jan-24
Bridge D		422	95	23-Sep-23 A	06-May-24
Demolition Works		32	20	14-Oct-23 A	30-Jan-24
SECD10000	Demolition of existing buildings (1655m2) and noise barrier	32	20	14-Oct-23 A	30-Jan-24
Land Contamination Works		35	18	23-Sep-23 A	27-Jan-24
SECD10040	Environmental ground investigation	15	6	23-Sep-23 A	13-Jan-24
SECD10060	Land decontamination works (10150m3)	12	12	15-Jan-24	27-Jan-24
Utility Protection / Diversion		75	75	31-Jan-24	06-May-24
SECD10180	Trial Pit to locate UU	15	15	31-Jan-24	20-Feb-24
SECD10200	Utility Protection, Shifting and/or diversion	60	60	21-Feb-24	06-May-24
Pre-drilling Works and Piling Work		10	10	23-Dec-23 A	18-Jan-24
Construction of Bored Piles for Piers D1, D4 and Abutment D1		10	10	23-Dec-23 A	18-Jan-24
SECD11260	Pre-drilling works (4 nos) for Piers D1 & D4	10	10	23-Dec-23 A	18-Jan-24
Bridge F&G		271	145	08-Jun-23 A	31-May-24
Land Contamination Works		0	0	08-Jan-24	08-Jan-24
SECFG1060	Environmental ground investigation (N.A)	0	0	08-Jan-24	08-Jan-24
SECFG1080	Land decontamination works (4836 m3)(N.A)	0	0	08-Jan-24	08-Jan-24
Cycle Track CT02 and Footpath		218	116	27-Oct-23 A	31-May-24
Utilities Works Along Cycle Track CT02 and Footpath		218	116	27-Oct-23 A	31-May-24
SEC9505	CLP preparation works incl. budget approval, material procurement & existing concrete breaking by others	218	116	27-Oct-23 A	31-May-24
Bridge F		165	123	08-Jun-23 A	09-May-24
Pre-drilling Works		32	24	08-Jun-23 A	03-Feb-24
SECF10020	Pre-drilling works for abutment FG1(8 nos) (revised to 12 nos) / 2 rigs	32	24	08-Jun-23 A	03-Feb-24
Piling Works		161	123	07-Dec-23 A	09-May-24
SECF10055	Set-up + Load Testing	30	30	07-Dec-23 A	14-Feb-24
SECF10058	Design Verification by AECOM	14	14	15-Feb-24	28-Feb-24
SECF10060	Installation of bored piles for abutment F2(4 nos)	28	28	06-Apr-24	09-May-24
SECF10080	Installation of bored piles for pier F1 and F2(4 nos)	28	28	29-Feb-24	05-Apr-24
Bridge G		146	85	06-Dec-23 A	01-Apr-24
Construction of Abutment G1 - Pier G3		146	85	06-Dec-23 A	01-Apr-24
Piling Works		146	85	06-Dec-23 A	01-Apr-24
SECG10110	Trial Pile (1.8m dia.) (TP1)	28	28	06-Dec-23 A	08-Feb-24
SECG10115	Set-up + Load Testing	30	30	09-Feb-24	18-Mar-24
SECG10118	Design Verification by AECOM	14	14	19-Mar-24	01-Apr-24
Nullah Decking ND1		216	198	16-Nov-23 A	06-Sep-24
Pre-drilling and Piling Works		216	198	16-Nov-23 A	06-Sep-24
SECND1000	Pre-drilling works (28nos)-4 rigs (per one/4 days) (revised to 17 nos / 4 rigs)	32	30	16-Nov-23 A	14-Feb-24
SECND1020	Installation of pre-bored H-piles (132 nos)-4rigs	150	150	07-Mar-24	06-Sep-24
Cantilever Footpath		361	280	15-Nov-23 A	14-Dec-24
Bay 8 to Bay 31		361	280	15-Nov-23 A	14-Dec-24
SECFP1140	Pre-drilling works (144 nos) (4 days/per one)-4 rigs (revised to 15 nos)	150	140	15-Nov-23 A	29-Jun-24
SECFP1160	Installation of pre-bored H-piles (144 nos) -3rigs	216	216	08-Jan-24	28-Sep-24

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

中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

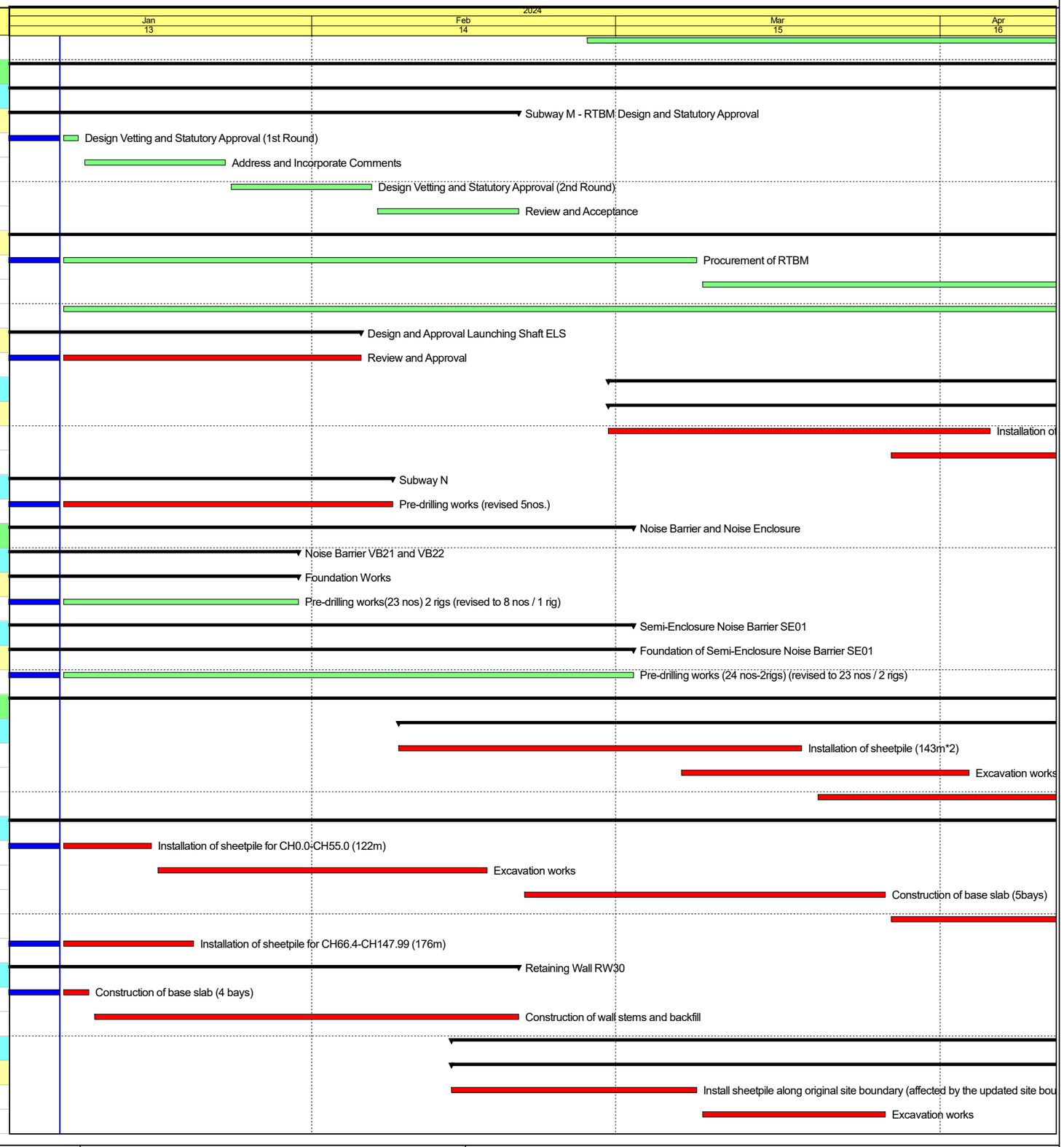
Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
SECFP1180	Installation of sheetpile,excavation,construction of base slab and wall(24 bays)-2 workfronts (20 days/bay)	240	240	27-Feb-24	14-Dec-24
Subway M and Subway N		659	260	07-Jul-23 A	23-Sep-24
Design Acceptance, Procurement, Manufacturing and Delivery		456	260	07-Jul-23 A	23-Sep-24
Subway M - RTBM Design and Statutory Approval		240	44	07-Jul-23 A	20-Feb-24
SECNM0130	Design Vetting and Statutory Approval (1st Round)	60	2	07-Jul-23 A	09-Jan-24
SECNM0150	Address and Incorporate Comments	14	14	10-Jan-24	23-Jan-24
SECNM0170	Design Vetting and Statutory Approval (2nd Round)	14	14	24-Jan-24	06-Feb-24
SECNM0190	Review and Acceptance	14	14	07-Feb-24	20-Feb-24
Procurement, Manufacturing and Delivery		380	260	25-Aug-23 A	23-Sep-24
SECNM0210	Procurement of RTBM	75	61	25-Aug-23 A	08-Mar-24
SECNM0230	Manufacturing and Delivery RTBM and Associated Equipment	180	180	09-Mar-24	04-Sep-24
SECNM0270	Manufacturing and Delivery of Subway Precast Segments	260	260	08-Jan-24	23-Sep-24
Design and Approval Launching Shaft ELS		60	29	18-Jul-23 A	05-Feb-24
SECNM0310	Review and Approval	60	29	18-Jul-23 A	05-Feb-24
Subway M		35	35	29-Feb-24	13-Apr-24
Construction of Launching Shaft		35	35	29-Feb-24	13-Apr-24
SECNM1002	Installation of pipe piles and sheet pile wall	28	28	29-Feb-24	05-Apr-24
SECNM1003	Installation of dewatering well, recharge well and observation well	12	12	27-Mar-24	13-Apr-24
Subway N		14	28	03-Oct-23 A	08-Feb-24
SECNM1120	Pre-drilling works (revised 5nos.)	14	28	03-Oct-23 A	08-Feb-24
Noise Barrier and Noise Enclosure		372	45	12-Jul-23 A	02-Mar-24
Noise Barrier VB21 and VB22		48	20	20-Oct-23 A	30-Jan-24
Foundation Works		48	20	20-Oct-23 A	30-Jan-24
SENB1510	Pre-drilling works(23 nos) 2 rigs (revised to 8 nos / 1 rig)	48	20	20-Oct-23 A	30-Jan-24
Semi-Enclosure Noise Barrier SE01		60	45	12-Jul-23 A	02-Mar-24
Foundation of Semi-Enclosure Noise Barrier SE01		60	45	12-Jul-23 A	02-Mar-24
SENB2030	Pre-drilling works (24 nos-2rigs) (revised to 23 nos / 2 rigs)	60	45	12-Jul-23 A	02-Mar-24
Retaining Wall		142	115	02-Dec-23 A	30-May-24
Retaining Wall RW12		87	87	09-Feb-24	30-May-24
SECRW1260	Installation of sheetpile (143m*2)	30	30	09-Feb-24	18-Mar-24
SECRW1265	Excavation works	21	21	07-Mar-24	03-Apr-24
SECRW1280	Construction of base slab (13 bays)	56	56	20-Mar-24	30-May-24
Retaining Wall RW22		87	95	06-Dec-23 A	06-May-24
SECRW1600	Installation of sheetpile for CH0.0-CH55.0 (122m)	13	8	06-Dec-23 A	16-Jan-24
SECRW1620	Excavation works	25	25	17-Jan-24	17-Feb-24
SECRW1622	Construction of base slab (5bays)	30	30	21-Feb-24	26-Mar-24
SECRW1624	Construction of wall stem (5bays)	30	30	27-Mar-24	06-May-24
SECRW1626	Installation of sheetpile for CH66.4-CH147.99 (176m)	18	12	06-Dec-23 A	20-Jan-24
Retaining Wall RW30		62	35	02-Dec-23 A	20-Feb-24
SECRW1740	Construction of base slab (4 bays)	40	3	02-Dec-23 A	10-Jan-24
SECRW1760	Construction of wall stems and backfill	32	32	11-Jan-24	20-Feb-24
Retaining Wall RW37		50	50	14-Feb-24	16-Apr-24
Construction of Bay 7 - Bay 12		50	50	14-Feb-24	16-Apr-24
SECRW1780	Install sheetpile along original site boundary (affected by the updated site boundary NCE No. 016 and full closure Rd)	21	21	14-Feb-24	08-Mar-24
SECRW1800	Excavation works	15	15	09-Mar-24	26-Mar-24



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

RB 中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

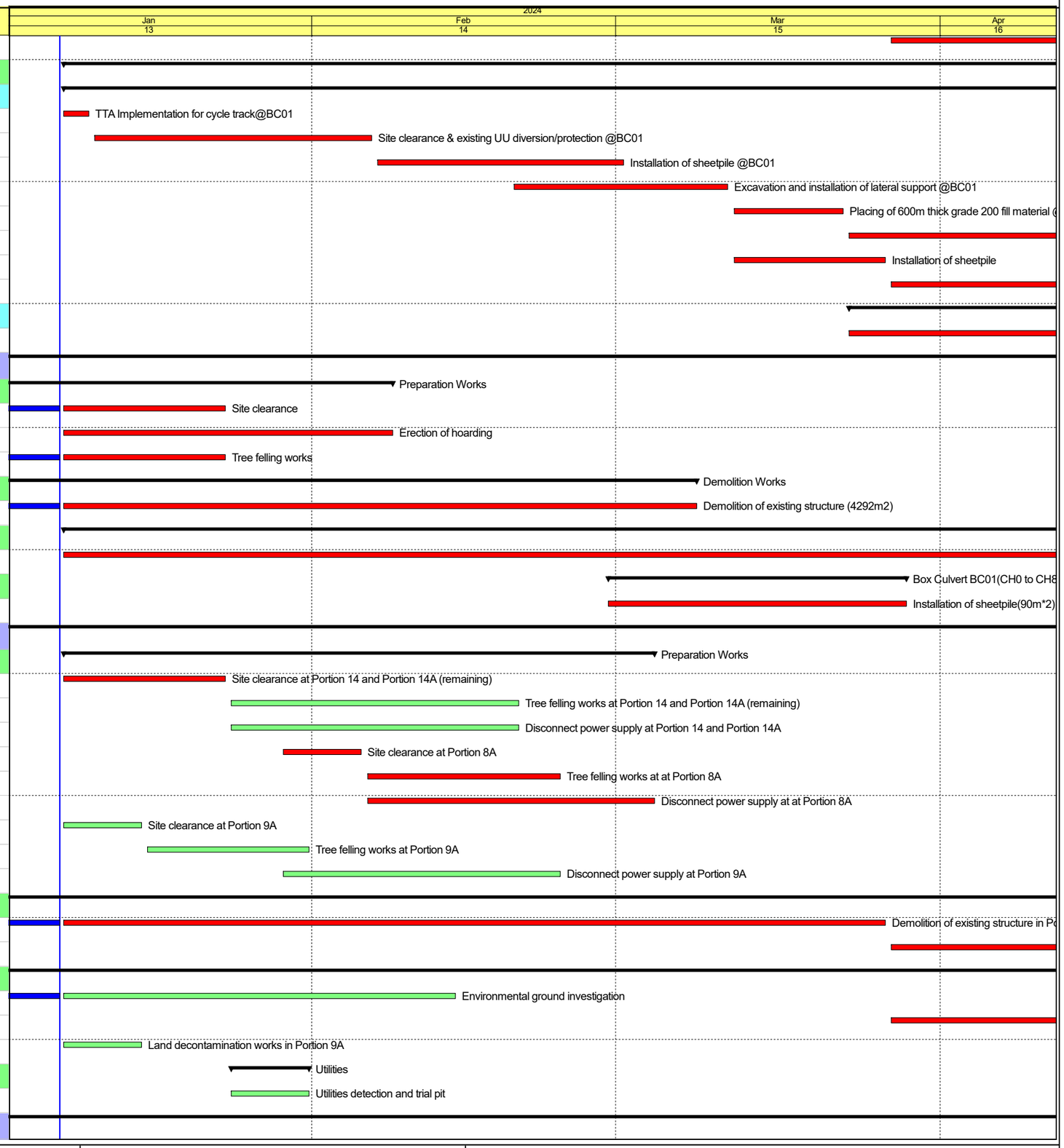
Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
SECRW1820	Temporary protection of gas main	14	14	27-Mar-24	16-Apr-24
Box Culvert BC01(CH730 to CH1202)		107	107	08-Jan-24	21-May-24
CH750 to CH850		107	107	08-Jan-24	21-May-24
SECBC0005	TTA Implementation for cycle track@BC01	3	3	08-Jan-24	10-Jan-24
SECBC0010	Site clearance & existing UU diversion/protection @BC01	23	23	11-Jan-24	06-Feb-24
SECBC1000	Installation of sheetpile @BC01	18	18	07-Feb-24	01-Mar-24
SECBC1002	Excavation and installation of lateral support @BC01	18	18	20-Feb-24	11-Mar-24
SECBC1015	Placing of 600m thick grade 200 fill material @BC01	10	10	12-Mar-24	22-Mar-24
SECBC1018	Construction of box culvert (3 bays CH750-800) @BC01	45	45	23-Mar-24	21-May-24
SECBC1076	Installation of sheetpile	13	13	12-Mar-24	26-Mar-24
SECBC1078	Excavation and installation of struts	28	28	27-Mar-24	03-May-24
CH1113 to CH1202		30	30	23-Mar-24	02-May-24
SECBC1202	Site clearance @BC01	30	30	23-Mar-24	02-May-24
Section 2 of the Works-Completion of all works within Portion		155	81	27-Sep-23 A	18-Apr-24
Preparation Works		102	28	27-Sep-23 A	08-Feb-24
SEC021000	Site clearance	14	14	27-Sep-23 A	23-Jan-24
SEC021020	Erection of hoarding	28	28	08-Jan-24	08-Feb-24
SEC021040	Tree felling works	14	14	27-Sep-23 A	23-Jan-24
Demolition Works		85	50	03-Oct-23 A	08-Mar-24
SEC021060	Demolition of existing structure (4292m2)	85	50	03-Oct-23 A	08-Mar-24
Land Decontamination Works		81	81	08-Jan-24	18-Apr-24
SEC021220	Land decontamination works (40533 m3)	81	81	08-Jan-24	18-Apr-24
Box Culvert BC01(CH0 to CH88.7095)		25	25	29-Feb-24	28-Mar-24
SEC021250	Installation of sheetpile(90m*2) @BC01	25	25	29-Feb-24	28-Mar-24
Section 3 of the Works-Completion of All works within Portion		150	136	11-Aug-23 A	25-Jun-24
Preparation Works		46	46	08-Jan-24	04-Mar-24
SEC031007	Site clearance at Portion 14 and Portion 14A (remaining)	14	14	08-Jan-24	23-Jan-24
SEC031008	Tree felling works at Portion 14 and Portion 14A (remaining)	21	21	24-Jan-24	20-Feb-24
SEC031010	Disconnect power supply at Portion 14 and Portion 14A	21	21	24-Jan-24	20-Feb-24
SEC101030	Site clearance at Portion 8A	7	7	29-Jan-24	05-Feb-24
SEC101035	Tree felling works at at Portion 8A	14	14	06-Feb-24	24-Feb-24
SEC101037	Disconnect power supply at at Portion 8A	21	21	06-Feb-24	04-Mar-24
SEC101050	Site clearance at Portion 9A	7	7	08-Jan-24	15-Jan-24
SEC101052	Tree felling works at Portion 9A	14	14	16-Jan-24	31-Jan-24
SEC101055	Disconnect power supply at Portion 9A	21	21	29-Jan-24	24-Feb-24
Demolition Works		150	136	18-Oct-23 A	25-Jun-24
SEC031082	Demolition of existing structure in Portion 14 and Portion 14A (remaining)	125	65	18-Oct-23 A	26-Mar-24
SEC91660	Demolition of existing structure in Portion 8A (3535 m2)	71	71	27-Mar-24	25-Jun-24
Land Decontamination Works		135	135	11-Aug-23 A	24-Jun-24
SEC031100	Environmental ground investigation	30	30	11-Aug-23 A	14-Feb-24
SEC031120	Land decontamination works in Portion 14 and Portion 14A	70	70	27-Mar-24	24-Jun-24
SEC031130	Land decontamination works in Portion 9A	7	7	08-Jan-24	15-Jan-24
Utilities		7	7	24-Jan-24	31-Jan-24
SEC031320	Utilities detection and trial pit	7	7	24-Jan-24	31-Jan-24
Section 4 of the Works-Completion of All works within Portion		284	150	07-Jul-23 A	12-Jul-24



土木工程拓展署
Civil Engineering and Development Department

中國路橋工程有限責任公司
CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

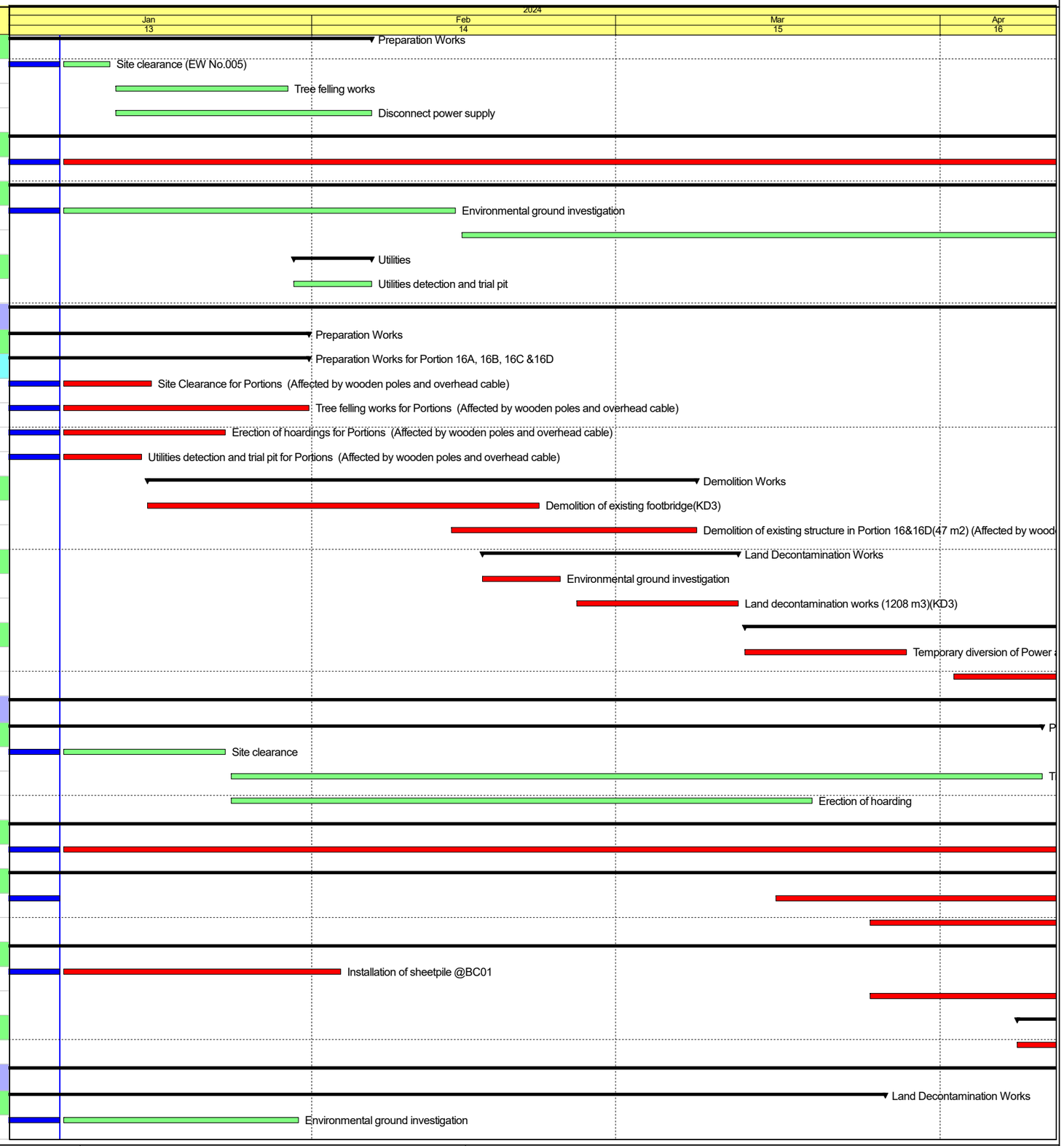
Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
Preparation Works		160	26	07-Jul-23 A	06-Feb-24
SEC041000	Site clearance (EW No.005)	14	5	07-Jul-23 A	12-Jan-24
SEC041020	Tree felling works	14	14	13-Jan-24	29-Jan-24
SEC041040	Disconnect power supply	21	21	13-Jan-24	06-Feb-24
Demolition Works		150	105	18-Oct-23 A	18-May-24
SEC041080	Demolition of existing structure (7513m2)	150	105	18-Oct-23 A	18-May-24
Land Decontamination Works		120	150	03-Oct-23 A	12-Jul-24
SEC041100	Environmental ground investigation	30	30	03-Oct-23 A	14-Feb-24
SEC041120	Land decontamination works (28100 m3)	120	120	15-Feb-24	12-Jul-24
Utilities		7	7	30-Jan-24	06-Feb-24
SEC041220	Utilities detection and trial pit	7	7	30-Jan-24	06-Feb-24
Section 5 of the Works-Completion of All Works within Portio		300	92	07-Jul-23 A	02-May-24
Preparation Works		187	21	07-Jul-23 A	31-Jan-24
Preparation Works for Portion 16A, 16B, 16C &16D		187	21	07-Jul-23 A	31-Jan-24
SEC051100	Site Clearance for Portions (Affected by wooden poles and overhead cable)	18	8	07-Jul-23 A	16-Jan-24
SEC051120	Tree felling works for Portions (Affected by wooden poles and overhead cable)	21	21	18-Oct-23 A	31-Jan-24
SEC051140	Erection of hoardings for Portions (Affected by wooden poles and overhead cable)	15	14	26-Jul-23 A	23-Jan-24
SEC051160	Utilities detection and trial pit for Portions (Affected by wooden poles and overhead cable)	14	7	23-Oct-23 A	15-Jan-24
Demolition Works		43	43	16-Jan-24	08-Mar-24
SEC053000	Demolition of existing footbridge(KD3)	30	30	16-Jan-24	22-Feb-24
SEC053020	Demolition of existing structure in Portion 16&16D(47 m2) (Affected by wooden poles and overhead cable)	21	21	14-Feb-24	08-Mar-24
Land Decontamination Works		21	21	17-Feb-24	12-Mar-24
SEC053040	Environmental ground investigation	7	7	17-Feb-24	24-Feb-24
SEC053060	Land decontamination works (1208 m3)(KD3)	14	14	26-Feb-24	12-Mar-24
Box Culvert BC02		39	39	13-Mar-24	02-May-24
SEC054000	Temporary diversion of Power and existing drainage(KD3) @BC02 (Affected by wooden poles and overhead cable)	14	14	13-Mar-24	28-Mar-24
SEC054020	Demolition of existing channel(KD3) @BC02	25	25	02-Apr-24	02-May-24
Section 6 of the Works-Completion of All works within Portior		353	161	14-Aug-23 A	25-Jul-24
Preparation Works		172	74	14-Aug-23 A	10-Apr-24
SEC061000	Site clearance	14	14	14-Aug-23 A	23-Jan-24
SEC061020	Tree felling works	60	60	24-Jan-24	10-Apr-24
SEC061040	Erection of hoarding	45	45	24-Jan-24	19-Mar-24
Demolition Works		124	80	25-Sep-23 A	17-Apr-24
SEC061060	Demolition of existing structure (6229m2)	124	80	25-Sep-23 A	17-Apr-24
Land Decontamination Works		115	75	22-Sep-23 A	19-Jun-24
SEC061100	Environmental ground investigation	30	30	22-Sep-23 A	24-Apr-24
SEC061120	Land decontamination works (34131 m3)	68	68	25-Mar-24	19-Jun-24
Box Culvert BC01 from CH88.7 to CH164		192	161	22-Sep-23 A	25-Jul-24
SEC061160	Installation of sheetpile @BC01	48	24	22-Sep-23 A	03-Feb-24
SEC061180	Excavation and installation of lateral support @BC01	98	98	25-Mar-24	25-Jul-24
Box Culvert BC01 from CH254 to CH450		21	21	08-Apr-24	02-May-24
SEC061290	Implementation of TTA (temporary road at Section 3) @BC01	21	21	08-Apr-24	02-May-24
Section 7 of the Works-Completion of All Works within Portio		315	101	05-Oct-23 A	13-May-24
Land Decontamination Works		315	65	05-Oct-23 A	26-Mar-24
SEC071140	Environmental ground investigation	30	20	05-Oct-23 A	30-Jan-24



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

中國路橋工程有限責任公司 CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

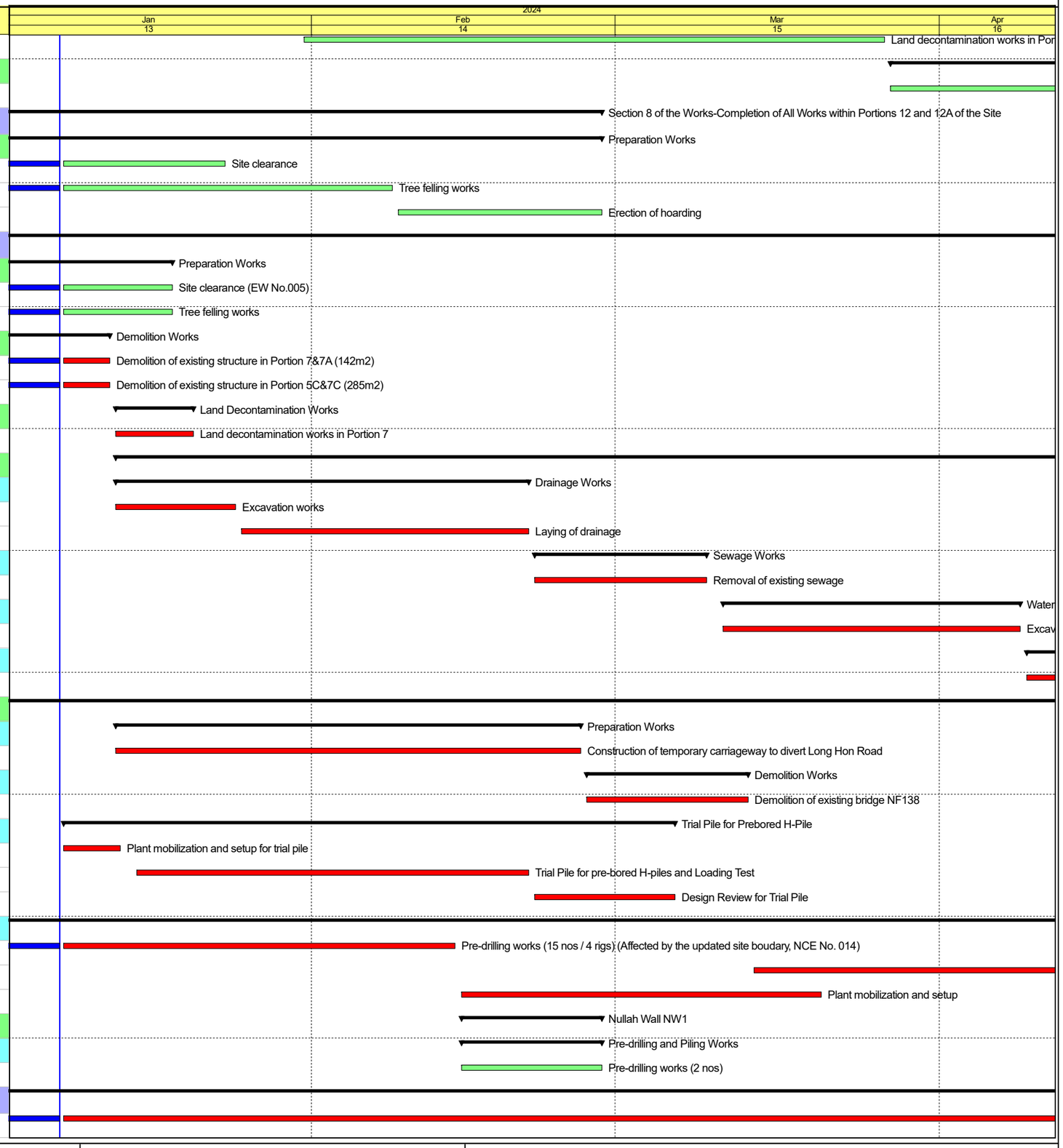
Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
SEC071160	Land decontamination works in Portions 13A and Portion 13 (8100m3)	45	45	31-Jan-24	26-Mar-24
Site Formation Works		36	36	27-Mar-24	13-May-24
SEC071200	Site formation works in Portion 13A and Portion 13	36	36	27-Mar-24	13-May-24
Section 8 of the Works-Completion of All Works within Portio		140	42	04-Sep-23 A	28-Feb-24
Preparation Works		140	42	04-Sep-23 A	28-Feb-24
SEC081000	Site clearance	14	14	04-Sep-23 A	23-Jan-24
SEC081020	Tree felling works	28	28	16-Oct-23 A	08-Feb-24
SEC081040	Erection of hoarding	14	14	09-Feb-24	28-Feb-24
Section 9 of the Works-Completion of All Works within Portio		290	82	28-Apr-23 A	19-Apr-24
Preparation Works		14	10	28-Apr-23 A	18-Jan-24
SEC091000	Site clearance (EW No.005)	14	10	28-Apr-23 A	18-Jan-24
SEC091020	Tree felling works	14	10	05-Jun-23 A	18-Jan-24
Demolition Works		7	5	08-Nov-23 A	12-Jan-24
SEC091060	Demolition of existing structure in Portion 7&7A (142m2)	5	5	08-Nov-23 A	12-Jan-24
SEC091080	Demolition of existing structure in Portion 5C&7C (285m2)	7	5	08-Nov-23 A	12-Jan-24
Land Decontamination Works		7	7	13-Jan-24	20-Jan-24
SEC091100	Land decontamination works in Portion 7	7	7	13-Jan-24	20-Jan-24
Construction of New Shan Ha Road in Portions 5C and 7C		77	77	13-Jan-24	19-Apr-24
Drainage Works		31	31	13-Jan-24	21-Feb-24
SEC091120	Excavation works	10	10	13-Jan-24	24-Jan-24
SEC091125	Laying of drainage	21	21	25-Jan-24	21-Feb-24
Sewage Works		15	15	22-Feb-24	09-Mar-24
SEC091140	Removal of existing sewage	15	15	22-Feb-24	09-Mar-24
Water Works		21	21	11-Mar-24	08-Apr-24
SEC091160	Excavation and laying of water works	21	21	11-Mar-24	08-Apr-24
Road Pavement and Road Marking		10	10	09-Apr-24	19-Apr-24
SEC091175	Cycle track	10	10	09-Apr-24	19-Apr-24
Nullah Decking ND2		218	78	02-Jun-23 A	15-Apr-24
Preparation Works		35	35	13-Jan-24	26-Feb-24
SEC091210	Construction of temporary carriageway to divert Long Hon Road	35	35	13-Jan-24	26-Feb-24
Demolition Works		14	14	27-Feb-24	13-Mar-24
SEC091230	Demolition of existing bridge NF138	14	14	27-Feb-24	13-Mar-24
Trial Pile for Prebored H-Pile		48	48	08-Jan-24	06-Mar-24
SEC091275	Plant mobilization and setup for trial pile	6	6	08-Jan-24	13-Jan-24
SEC091280	Trial Pile for pre-bored H-piles and Loading Test	30	30	15-Jan-24	21-Feb-24
SEC091285	Design Review for Trial Pile	12	12	22-Feb-24	06-Mar-24
Pre-drilling and Piling Works		218	78	02-Jun-23 A	15-Apr-24
SEC091250	Pre-drilling works (15 nos / 4 rigs) (Affected by the updated site boudary, NCE No. 014)	30	30	02-Jun-23 A	14-Feb-24
SEC091260	Road modification and site formation	24	24	14-Mar-24	15-Apr-24
SEC091270	Plant mobilization and setup	30	30	15-Feb-24	20-Mar-24
Nullah Wall NW1		12	12	15-Feb-24	28-Feb-24
Pre-drilling and Piling Works		12	12	15-Feb-24	28-Feb-24
SEC091500	Pre-drilling works (2 nos)	12	12	15-Feb-24	28-Feb-24
Section 12 of the Works-Comprises All Preservation and Prot		1858	1651	26-Feb-23 A	15-Jul-28
SEC12100	Preservation and protection of existing trees	1858	1651	26-Feb-23 A	15-Jul-28



土木工程拓展署
Civil Engineering and Development Department

中國路橋工程有限責任公司
CHINA ROAD AND BRIDGE CORPORATION

Actual Work
Non-Critical Activity
Critical Activity
Milestone
Summary

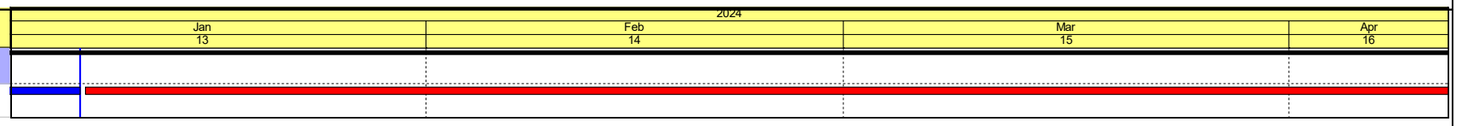
Three Month Rolling Programme (Jan 2024 - Apr 2024)

Data Date: 08-Jan-24

Data Date: 08-Jan-24

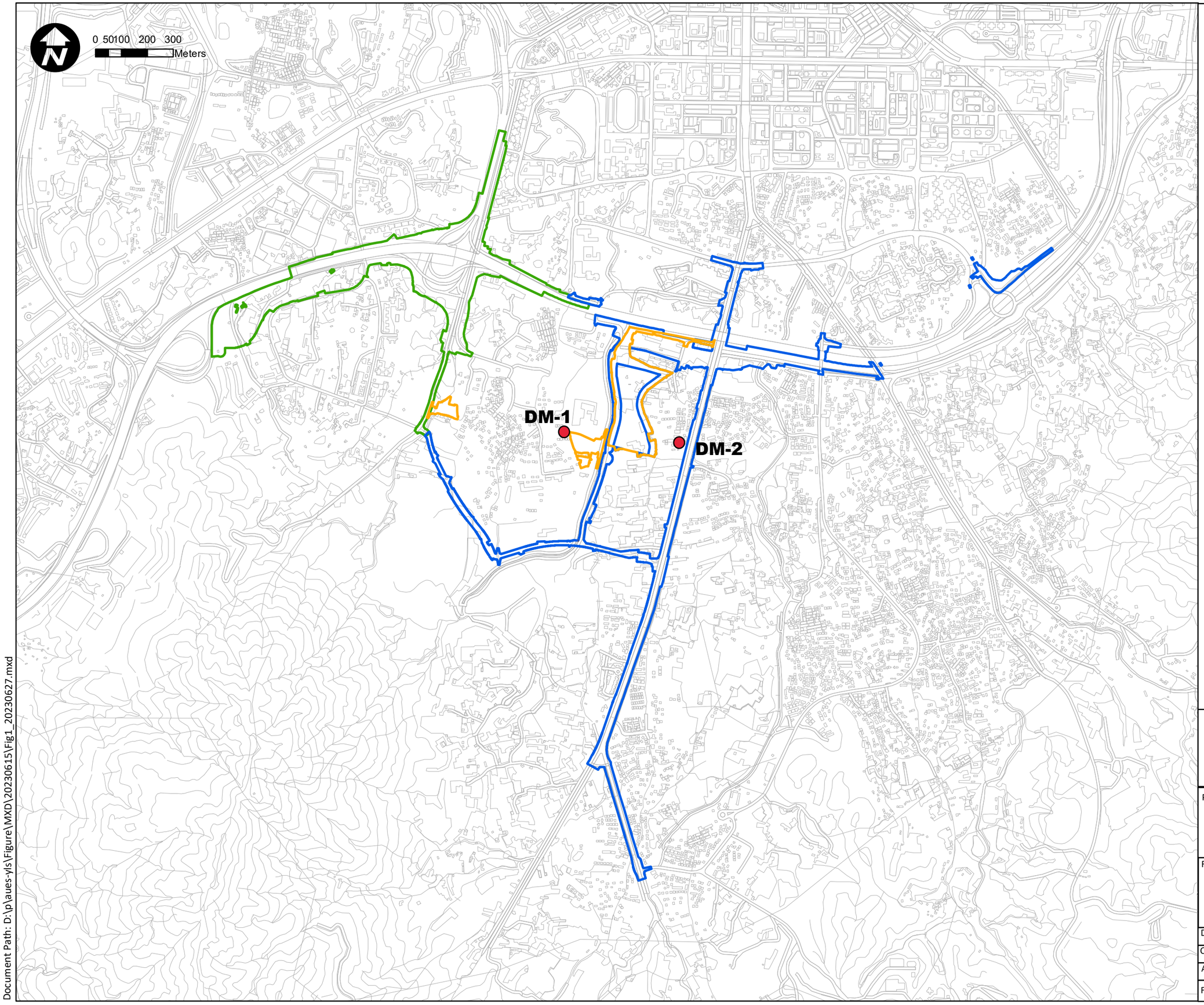
Contract No. YL/2022/01 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 3

Activity ID	Activity Name	Original Dur	Remaining Dur	Early Start	Early Finish
Section 13 of the Works-Comprises All of the Landscape Soft		1858	1651	26-Feb-23 A	15-Jul-28
SEC13100	Landscape softworks	1858	1651	26-Feb-23 A	15-Jul-28



Appendix E

Monitoring Locations



LEGEND

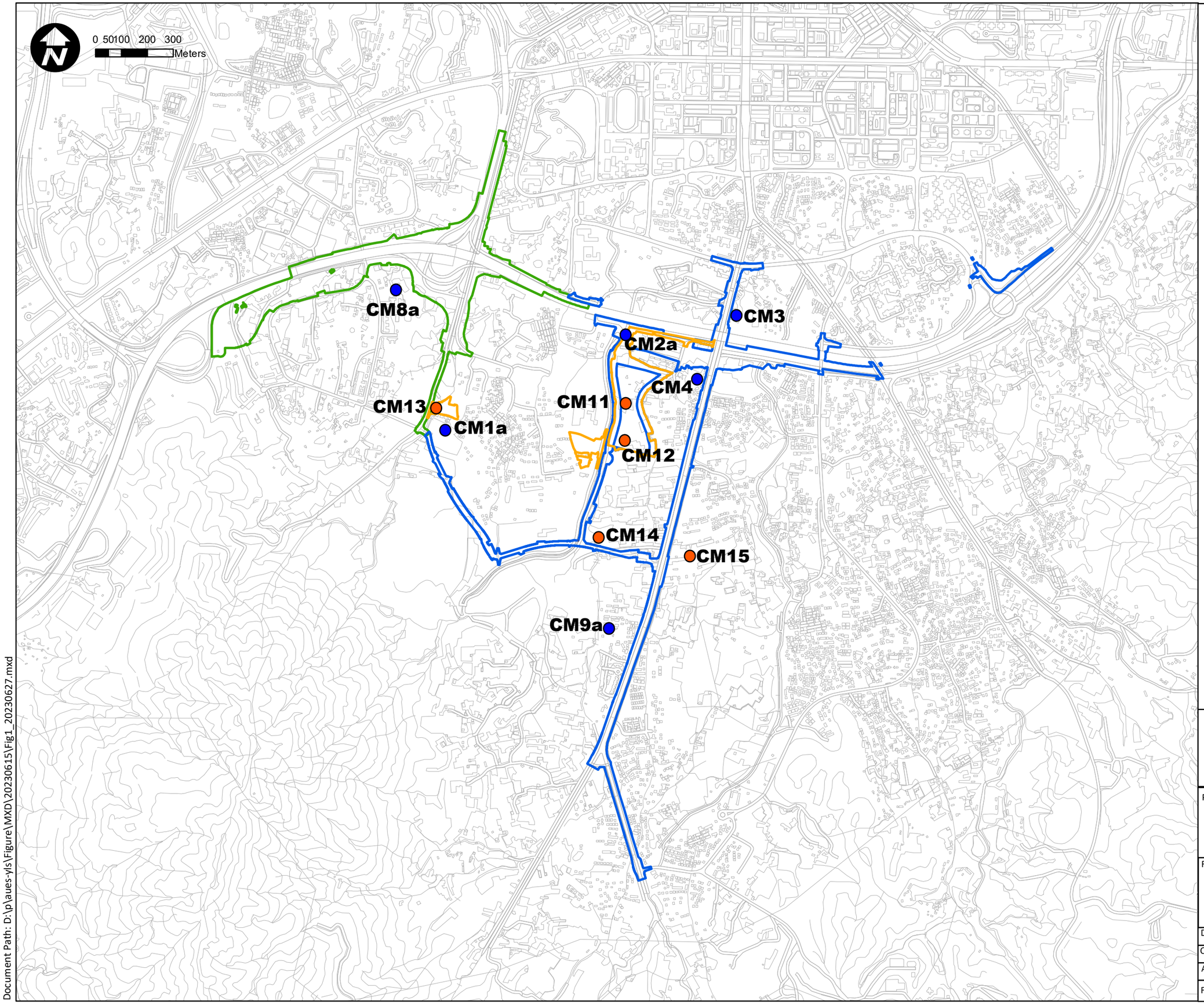
- Boundary of YL/2021/03 (Contract 1)
- Boundary of YL/2021/04 (Contract 2)
- Boundary of YL/2022/01 (Contract 3)
- Construction Dust Monitoring Stations

Project Title:
CEDD Service Contract No. WD/07/2022
Yuen Long South First Phase Development - Environmental Team

Figure Title:
Location of Construction Dust Monitoring Stations for YLS First Phase Development

Drawn by:	Scale: 1:13,745on A3
Checked By:	
Approved by:	
Figure Number:	Revision: 0

Document Path: D:\p\aues-yls\Figure\MXD\20230615\Fig1_20230627.mxd



LEGEND

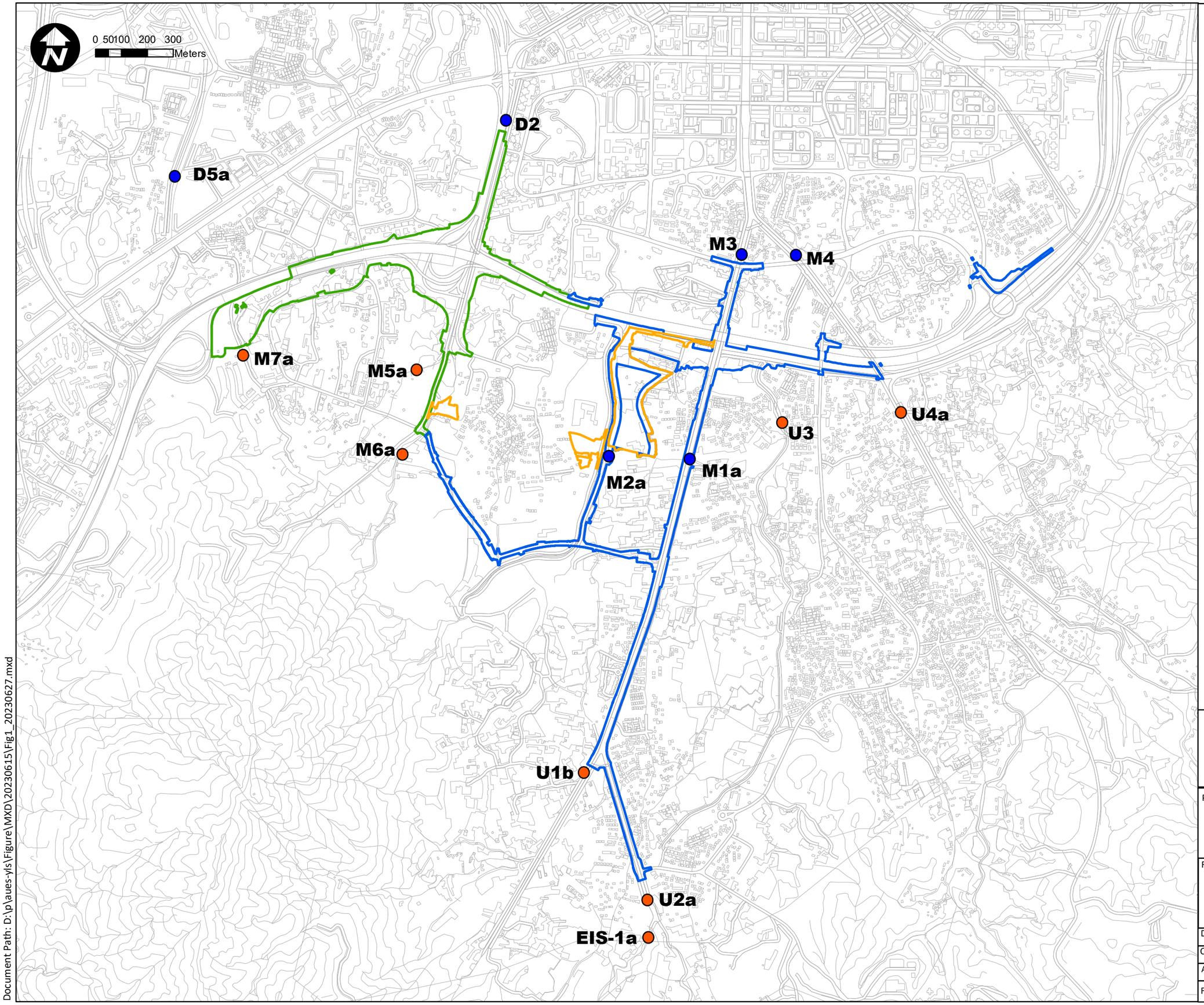
- Boundary of YL/2021/03 (Contract 1)
- Boundary of YL/2021/04 (Contract 2)
- Boundary of YL/2022/01 (Contract 3)
- Construction Noise Monitoring Stations
- Construction Noise Monitoring Stations (Planned NSRs)

Project Title:
CEDD Service Contract No. WD/07/2022
Yuen Long South First Phase Development - Environmental Team

Figure Title:
Location of Construction Noise Monitoring Stations for YLS First Phase Development

Drawn by:	Scale: 1:13,745on A3
Checked By:	
Approved by:	
Figure Number:	Revision: 0

Document Path: D:\p\aues-yls\Figure\MXD\20230615\Fig1_20230627.mxd



LEGEND

- Boundary of YL/2021/03 (Contract 1)
- Boundary of YL/2021/04 (Contract 2)
- Boundary of YL/2022/01 (Contract 3)
- Water Quality Monitoring Impact / Gradient Stations
- Water Quality Monitoring Control Stations

Project Title:
CEDD Service Contract No. WD/07/2022
Yuen Long South First Phase Development - Environmental Team

Figure Title:
Location of Water Quality Monitoring Stations for YLS First Phase Development

Drawn by:	Scale: 1:13,745on A3
Checked By:	
Approved by:	
Figure Number:	Revision: 0

Document Path: D:\p\aues-yls\Figure\MXD\20230615\Fig1_20230627.mxd

0 50100 200 300
Meters

M3

M2a

LEGEND

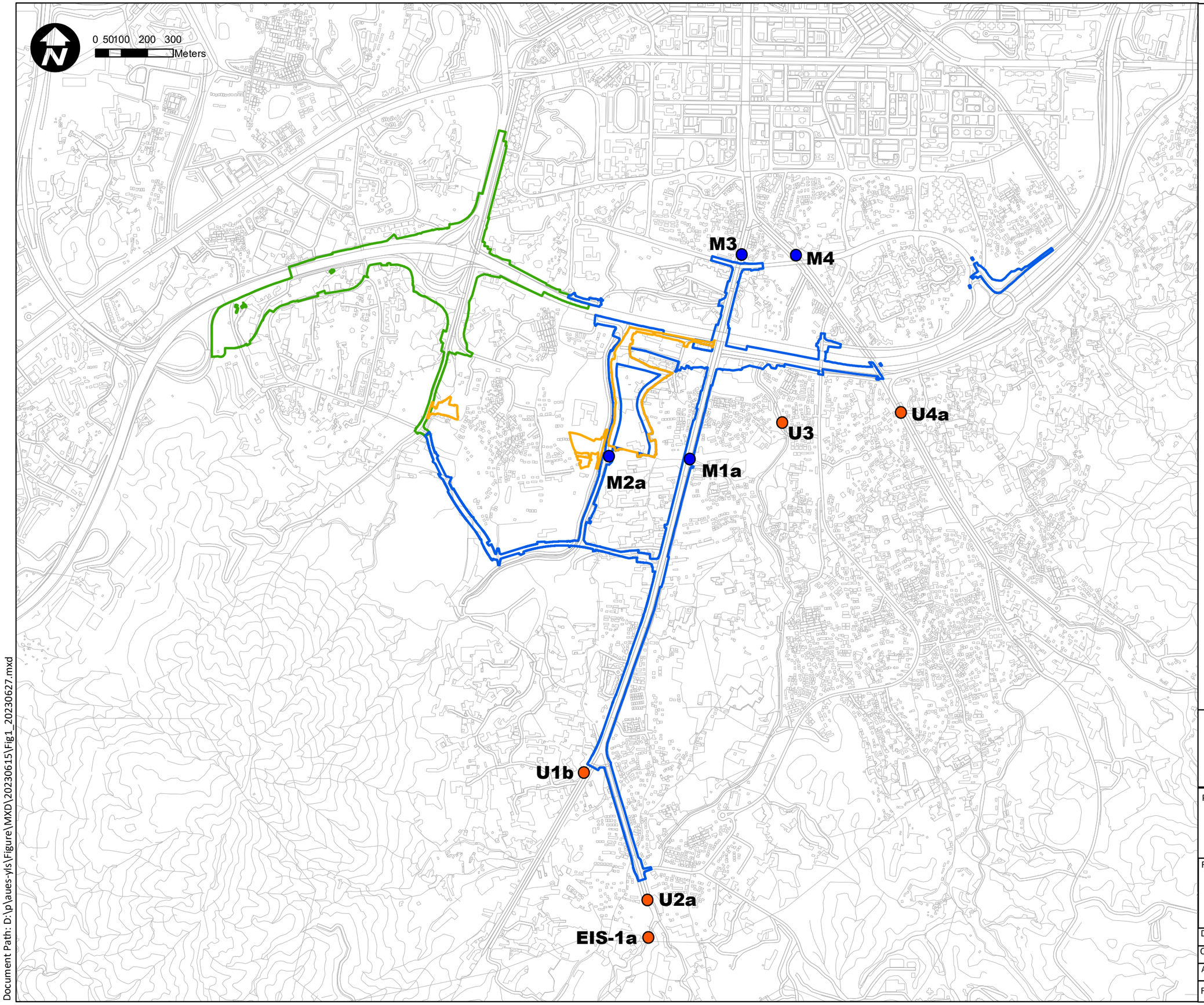
- Boundary of YL/2021/03 (Contract 1)
- Boundary of YL/2021/04 (Contract 2)
- Boundary of YL/2022/01 (Contract 3)
- Water Quality Monitoring Impact / Gradient Stations

Project Title:
CEDD Service Contract No. WD/07/2022
Yuen Long South First Phase Development - Environmental Team

Figure Title:
Location of Water Quality Monitoring Stations for Contract 1

Drawn by:	Scale: 1:13,745on A3
Checked By:	
Approved by:	
Figure Number:	Revision: 0

Document Path: D:\p\aues-yls\Figure\MXD\20230615\Fig1_20230627.mxd



LEGEND

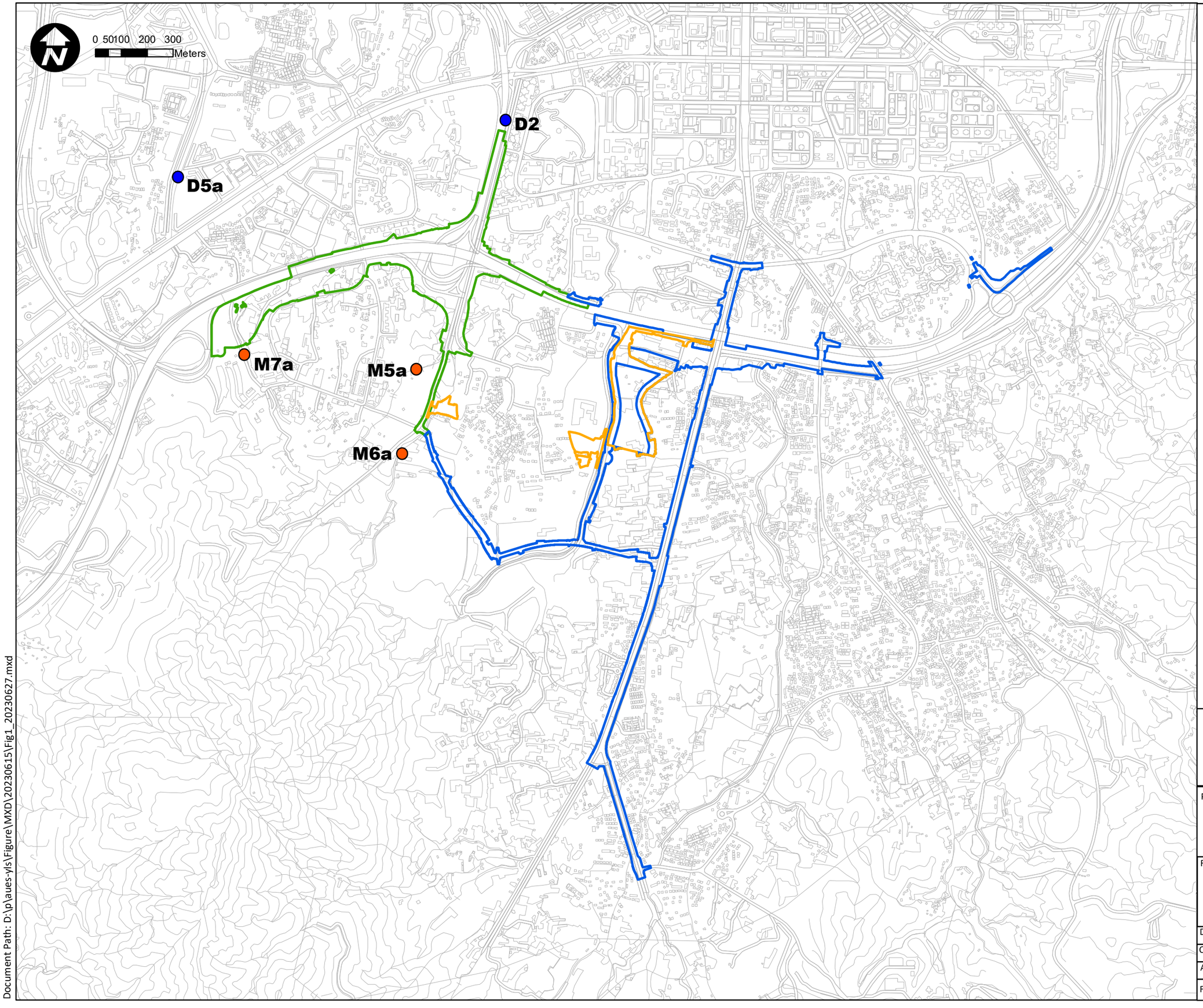
- Boundary of YL/2021/03 (Contract 1)
- Boundary of YL/2021/04 (Contract 2)
- Boundary of YL/2022/01 (Contract 3)
- Water Quality Monitoring Impact / Gradient Stations
- Water Quality Monitoring Control Stations

Project Title:
CEDD Service Contract No. WD/07/2022
Yuen Long South First Phase Development - Environmental Team

Figure Title:
Location of Water Quality Monitoring Stations for Contract 2

Drawn by:	Scale: 1:13,745on A3
Checked By:	
Approved by:	
Figure Number:	Revision: 0

Document Path: D:\p\aues-yls\Figure\MXD\20230615\Fig1_20230627.mxd



LEGEND

- Boundary of YL/2021/03 (Contract 1)
- Boundary of YL/2021/04 (Contract 2)
- Boundary of YL/2022/01 (Contract 3)
- Water Quality Monitoring Impact / Gradient Stations
- Water Quality Monitoring Control Stations

Project Title:
CEDD Service Contract No. WD/07/2022
Yuen Long South First Phase Development - Environmental Team

Figure Title:
Location of Water Quality Monitoring Stations for Contract 3

Drawn by:	Scale: 1:13,745on A3
Checked By:	
Approved by:	
Figure Number:	Revision: 0

Document Path: D:\p\aues-yls\Figure\MXD\20230615\Fig1_20230627.mxd

Appendix F

Calibration Certificates

Appendix F1

Calibration Certificates for

Air Quality Monitoring Equipment

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR BEN TAM	WORK ORDER	: **HK2311530**
CLIENT	: **ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING**		
ADDRESS	: RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T.	SUB-BATCH	: 1
		DATE RECEIVED	: 23-MAR-2023
		DATE OF ISSUE	: 30-MAR-2023
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ---

General Comments

- **Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition. The result(s) related only to the item(s) tested.**
- **Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.**
- **Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified.**
- **Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.**

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	*Position*
Richard Fung	Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 **www.alsglobal.com**

WORK ORDER : HK2311530
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2311530-001	S/N: 3Y6502	AIR	23-Mar-2023	S/N: 3Y6502

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	3Y6502
Equipment Ref:	EQ113

Standard Equipment:

Standard Equipment:	Higher Volume Sampler (TSP)
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018 & HVS 019
Last Calibration Date:	27 February 2023 & 10 January 2023

Equipment Verification Results:

Verification Date: 6 & 9 March 2023

Date	Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
6-Mar-23	2hr01mins	09:35 ~ 11:36	20	1022.4	82.5	4537	37.6
6-Mar-23	2hr01mins	11:43 ~ 13:44	20	1022.4	29.5	2117	17.5
6-Mar-23	2hr11mins	13:45 ~ 15:56	20	1022.4	30.4	2306	17.6
9-Mar-23*	61mins	11:03 ~ 12:04	22.5	1017.7	144	4408	72.7
9-Mar-23*	61mins	12:06 ~ 13:07	22.5	1017.7	116	3761	61.5

(*) Suspended particle was added into calibration room of HVS019 for high concentration test.

Sensitivity Adjustment Scale Setting (Before Calibration) 655 (CPM)

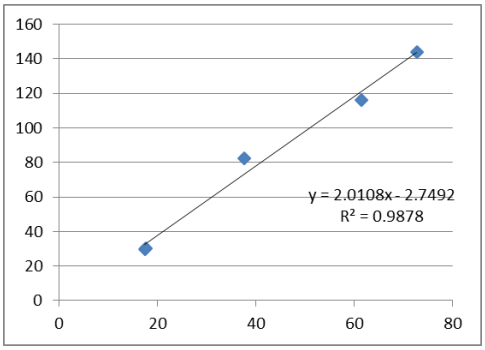
Sensitivity Adjustment Scale Setting (After Calibration) 660 (CPM)

Linear Regression of Y or X

Slope (K-factor): 2.0108 (µg/m^3)/CPM

Correlation Coefficient (R) 0.9939

Date of Issue 20 March 2023



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 2.0108 (µg/m^3)/CPM should be apply for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Fai So Signature : Date : 20 March 2023

QC Reviewer : Ben Tam Signature : Date : 20 March 2023

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	27-Feb-23
Location ID :	Calibration Room(HVS 018)	Next Calibration Date:	27-May-23

CONDITIONS

Sea Level Pressure (hPa)	1024	Corrected Pressure (mm Hg)	768
Temperature (°C)	17.8	Temperature (K)	291

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.10977
Model->	5025A	Qstd Intercept ->	-0.03782
Calibration Date->	15-Dec-22	Expiry Date->	15-Dec-23

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6	6	12.0	1.689	55	55.97	Slope = 32.9819
13	4.8	4.8	9.6	1.512	48	48.85	Intercept = 0.0741
10	3.7	3.7	7.4	1.330	44	44.78	Corr. coeff. = 0.9968
8	2.6	2.6	5.2	1.118	37	37.65	
5	1.6	1.6	3.2	0.881	28	28.49	

Calculations :

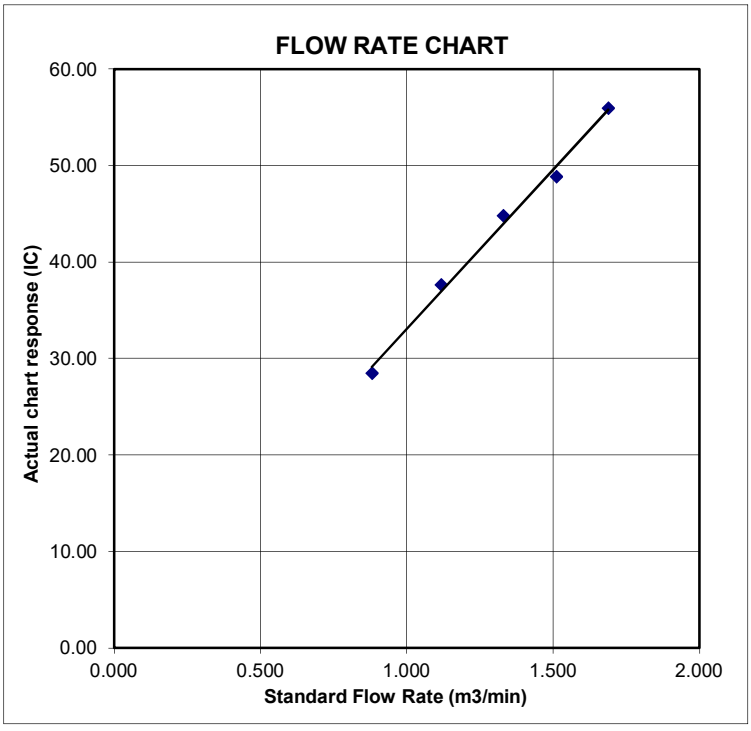
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	10-Jan-23
Location ID :	Calibration Room(HVS 019)	Next Calibration Date:	9-Apr-23

CONDITIONS

Sea Level Pressure (hPa)	1018.8	Corrected Pressure (mm Hg)	764.1
Temperature (°C)	18.2	Temperature (K)	291

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.10977
Model->	5025A	Qstd Intercept ->	-0.03782
Calibration Date->	15-Dec-22	Expiry Date->	15-Dec-23

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6	6	12.0	1.683	55	55.79	Slope = 31.4802
13	4.9	4.9	9.8	1.523	48	48.69	Intercept = 1.9499
10	3.9	3.9	7.8	1.361	44	44.63	Corr. coeff. = 0.9967
8	2.4	2.4	4.8	1.071	36	36.52	
5	1.5	1.5	3.0	0.851	28	28.40	

Calculations :

Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate

IC = corrected chart respones

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

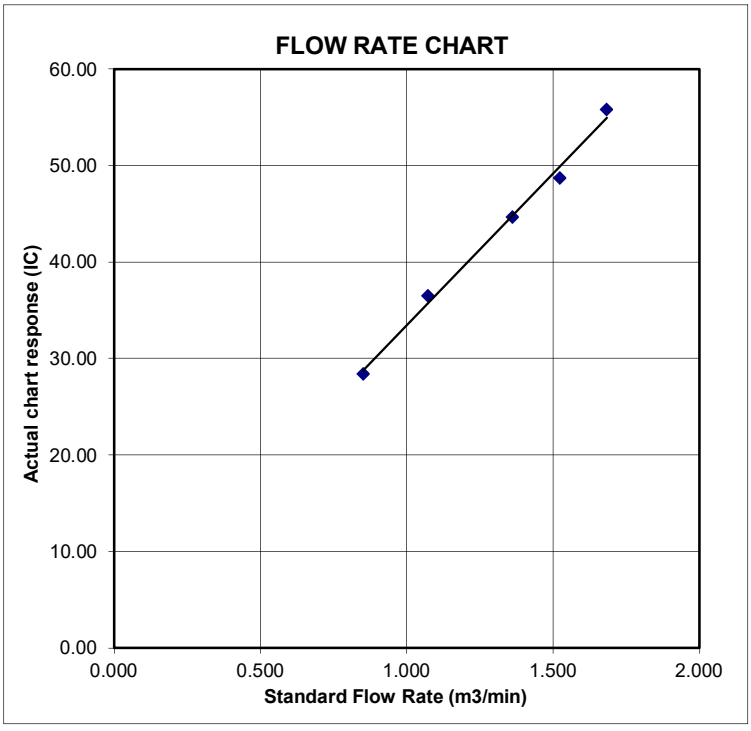
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



TISCH Environmental

RECALIBRATION DUE DATE:
December 15, 2023

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	December 15, 2022	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 748.0	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **4064**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4430	3.2	2.00
2	3	4	1	1.0210	6.4	4.00
3	5	6	1	0.9170	7.9	5.00
4	7	8	1	0.8730	8.8	5.50
5	9	10	1	0.7210	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9900	0.6861	1.4101	0.9957	0.6900	0.8881
0.9858	0.9655	1.9943	0.9914	0.9711	1.2560
0.9838	1.0728	2.2296	0.9894	1.0790	1.4042
0.9826	1.1255	2.3385	0.9882	1.1320	1.4728
0.9772	1.3554	2.8203	0.9829	1.3632	1.7762
QSTD	**m=**	**2.10977**	**QA**	**m=**	**1.32110**
	b=	**-0.03782**		**b=**	**-0.02382**
	r=	**0.99998**		**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= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

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 barometric 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

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR BEN TAM	WORK ORDER	: **HK2311531**
CLIENT	: **ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING**		
ADDRESS	: RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T.	SUB-BATCH	: 1
		DATE RECEIVED	: 23-MAR-2023
		DATE OF ISSUE	: 30-MAR-2023
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ---

General Comments

- **Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition. The result(s) related only to the item(s) tested.**
- **Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.**
- **Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified.**
- **Calibration was subcontracted to and analysed by Action United Environmental Services & Consulting.**

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	*Position*
Richard Fung	Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 **www.alsglobal.com**

WORK ORDER : HK2311531
SUB-BATCH : 1
CLIENT : ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2311531-001	S/N: 456658	AIR	23-Mar-2023	S/N: 456658

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	456658
Equipment Ref:	EQ115

Standard Equipment:

Standard Equipment:	Higher Volume Sampler (TSP)
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018 & HVS 019
Last Calibration Date:	27 February 2023 & 10 January 2023

Equipment Verification Results:

Verification Date: 6 & 9 March 2023

Date	Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
6-Mar-23	2hr01mins	09:35 ~ 11:36	20	1022.4	82.5	4485	37.2
6-Mar-23	2hr01mins	11:43 ~ 13:44	20	1022.4	29.5	2128	17.6
6-Mar-23	2hr11mins	13:45 ~ 15:56	20	1022.4	30.4	2267	17.3
9-Mar-23*	61mins	11:03 ~ 12:04	22.5	1017.7	144	4263	70.3
9-Mar-23*	61mins	12:06 ~ 13:07	22.5	1017.7	116	3667	59.9

(*) Suspended particle was added into calibration room of HVS019 for high concentration test.

Sensitivity Adjustment Scale Setting (Before Calibration) 702 (CPM)

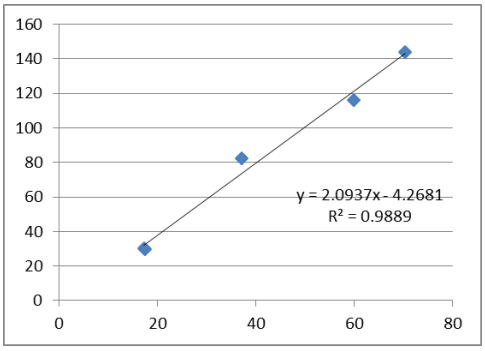
Sensitivity Adjustment Scale Setting (After Calibration) 708 (CPM)

Linear Regression of Y or X

Slope (K-factor): 2.0937 (µg/m^3)/CPM

Correlation Coefficient (R) 0.9944

Date of Issue 20 March 2023



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 2.0937 (µg/m^3)/CPM should be apply for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Fai So Signature : Date : 20 March 2023

QC Reviewer : Ben Tam Signature : Date : 20 March 2023

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	27-Feb-23
Location ID :	Calibration Room(HVS 018)	Next Calibration Date:	27-May-23

CONDITIONS

Sea Level Pressure (hPa)	1024	Corrected Pressure (mm Hg)	768
Temperature (°C)	17.8	Temperature (K)	291

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.10977
Model->	5025A	Qstd Intercept ->	-0.03782
Calibration Date->	15-Dec-22	Expiry Date->	15-Dec-23

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6	6	12.0	1.689	55	55.97	Slope = 32.9819
13	4.8	4.8	9.6	1.512	48	48.85	Intercept = 0.0741
10	3.7	3.7	7.4	1.330	44	44.78	Corr. coeff. = 0.9968
8	2.6	2.6	5.2	1.118	37	37.65	
5	1.6	1.6	3.2	0.881	28	28.49	

Calculations :

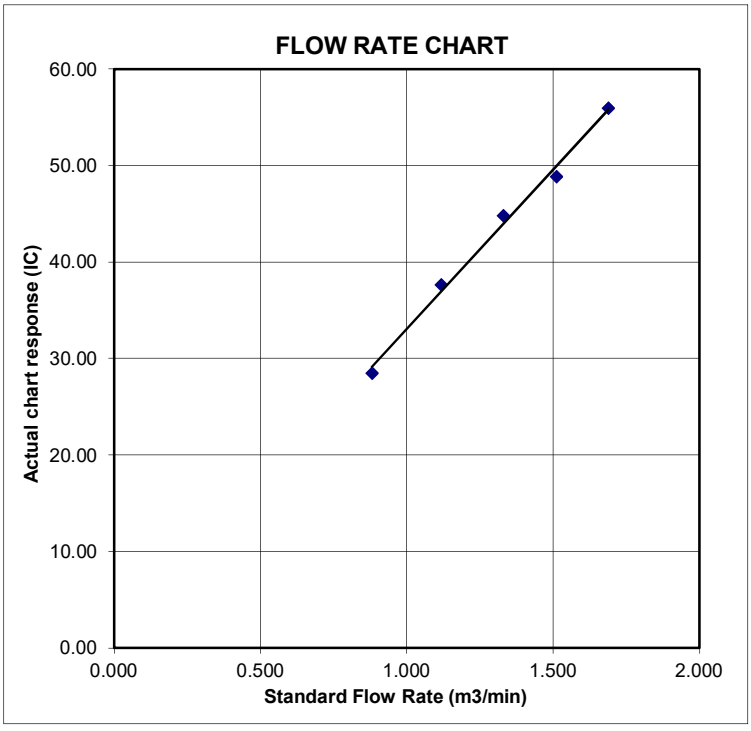
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	10-Jan-23
Location ID :	Calibration Room(HVS 019)	Next Calibration Date:	9-Apr-23

CONDITIONS

Sea Level Pressure (hPa)	1018.8	Corrected Pressure (mm Hg)	764.1
Temperature (°C)	18.2	Temperature (K)	291

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.10977
Model->	5025A	Qstd Intercept ->	-0.03782
Calibration Date->	15-Dec-22	Expiry Date->	15-Dec-23

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6	6	12.0	1.683	55	55.79	Slope = 31.4802
13	4.9	4.9	9.8	1.523	48	48.69	Intercept = 1.9499
10	3.9	3.9	7.8	1.361	44	44.63	Corr. coeff. = 0.9967
8	2.4	2.4	4.8	1.071	36	36.52	
5	1.5	1.5	3.0	0.851	28	28.40	

Calculations :

Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate

IC = corrected chart respones

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

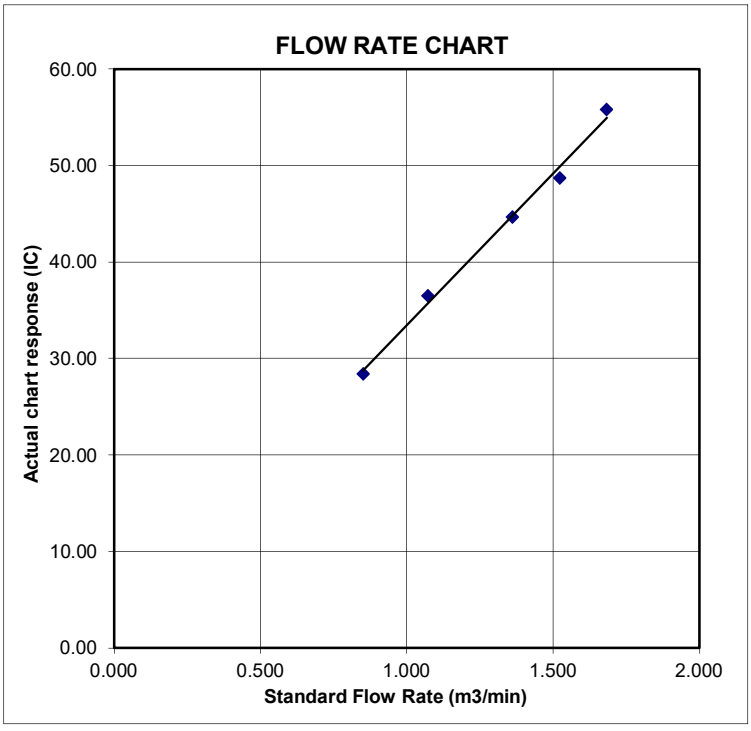
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



TISCH Environmental

RECALIBRATION DUE DATE:
December 15, 2023

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	December 15, 2022	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 748.0	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **4064**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4430	3.2	2.00
2	3	4	1	1.0210	6.4	4.00
3	5	6	1	0.9170	7.9	5.00
4	7	8	1	0.8730	8.8	5.50
5	9	10	1	0.7210	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9900	0.6861	1.4101	0.9957	0.6900	0.8881
0.9858	0.9655	1.9943	0.9914	0.9711	1.2560
0.9838	1.0728	2.2296	0.9894	1.0790	1.4042
0.9826	1.1255	2.3385	0.9882	1.1320	1.4728
0.9772	1.3554	2.8203	0.9829	1.3632	1.7762
QSTD	**m=**	**2.10977**	**QA**	**m=**	**1.32110**
	b=	**-0.03782**		**b=**	**-0.02382**
	r=	**0.99998**		**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= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

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 barometric 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

Appendix F2

Calibration Certificates for

Noise Monitoring Equipment

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C231628
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-0436) Date of Receipt / 收件日期 : 28 February 2023

Description / 儀器名稱 : Sound Level Meter (EQ020)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-52A
Serial No. / 編號 : 00620665
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 21 March 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : K C Lee, Engineer

Certified By 核證 : H C Chan, Engineer

Date of Issue 簽發日期 : 21 March 2023

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231628
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

3. The results presented are the mean of 3 measurements at each calibration point.

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C230306
CL281	Multifunction Acoustic Calibrator	AV210017

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	94.1	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 130	L_A	A	Fast	94.00	1	94.1 (Ref.)
				104.00		104.1
				114.00		114.1

IEC 61672 Class 1 Limit : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	94.1	Ref.
			Slow			94.1	± 0.3

Certificate of Calibration
校正證書

Certificate No. : C231628
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_A	A	Fast	94.00	63 Hz	67.8	-26.2 ± 1.5
					125 Hz	77.9	-16.1 ± 1.5
					250 Hz	85.4	-8.6 ± 1.4
					500 Hz	90.9	-3.2 ± 1.4
					1 kHz	94.1	Ref.
					2 kHz	95.3	+1.2 ± 1.6
					4 kHz	95.1	+1.0 ± 1.6
					8 kHz	93.1	-1.1 (+2.1 ; -3.1)
					16 kHz	86.1	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_C	C	Fast	94.00	63 Hz	93.3	-0.8 ± 1.5
					125 Hz	93.9	-0.2 ± 1.5
					250 Hz	94.1	0.0 ± 1.4
					500 Hz	94.1	0.0 ± 1.4
					1 kHz	94.1	Ref.
					2 kHz	93.9	-0.2 ± 1.6
					4 kHz	93.3	-0.8 ± 1.6
					8 kHz	91.2	-3.0 (+2.1 ; -3.1)
					16 kHz	84.2	-8.5 (+3.5 ; -17.0)

Certificate of Calibration
校正證書

Certificate No. : C231628
證書編號

Remarks : - UUT Microphone Model No. : UC-59 & S/N : 21625

- Mfr's Limit : IEC 61672 Class 1

- Uncertainties of Applied Value :

94 dB	: 63 Hz - 125 Hz	: ± 0.35 dB
	250 Hz - 500 Hz	: ± 0.30 dB
	1 kHz	: ± 0.20 dB
	2 kHz - 4 kHz	: ± 0.35 dB
	8 kHz	: ± 0.45 dB
	16 kHz	: ± 0.70 dB
104 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
114 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C231629
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-0436) Date of Receipt / 收件日期 : 28 February 2023

Description / 儀器名稱 : Sound Level Meter (EQ021)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-52A
Serial No. / 編號 : 00620666
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 21 March 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : K C Lee
Engineer

Certified By 核證 : H C Chan
Engineer

Date of Issue 簽發日期 : 21 March 2023

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231629
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

3. The results presented are the mean of 3 measurements at each calibration point.

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C230306
CL281	Multifunction Acoustic Calibrator	AV210017

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	94.0	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 130	L_A	A	Fast	94.00	1	94.0 (Ref.)
				104.00		104.0
				114.00		114.0

IEC 61672 Class 1 Limit : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	94.0	Ref.
			Slow			94.0	± 0.3

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231629
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_A	A	Fast	94.00	63 Hz	67.8	-26.2 ± 1.5
					125 Hz	77.8	-16.1 ± 1.5
					250 Hz	85.3	-8.6 ± 1.4
					500 Hz	90.8	-3.2 ± 1.4
					1 kHz	94.0	Ref.
					2 kHz	95.2	+1.2 ± 1.6
					4 kHz	95.0	+1.0 ± 1.6
					8 kHz	93.0	-1.1 (+2.1 ; -3.1)
					16 kHz	86.1	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_C	C	Fast	94.00	63 Hz	93.2	-0.8 ± 1.5
					125 Hz	93.8	-0.2 ± 1.5
					250 Hz	94.0	0.0 ± 1.4
					500 Hz	94.0	0.0 ± 1.4
					1 kHz	94.0	Ref.
					2 kHz	93.9	-0.2 ± 1.6
					4 kHz	93.2	-0.8 ± 1.6
					8 kHz	91.1	-3.0 (+2.1 ; -3.1)
					16 kHz	84.1	-8.5 (+3.5 ; -17.0)

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231629
證書編號

Remarks : - UUT Microphone Model No. : UC-59 & S/N : 21627

- Mfr's Limit : IEC 61672 Class 1

- Uncertainties of Applied Value :

94 dB	: 63 Hz - 125 Hz	: ± 0.35 dB
	250 Hz - 500 Hz	: ± 0.30 dB
	1 kHz	: ± 0.20 dB
	2 kHz - 4 kHz	: ± 0.35 dB
	8 kHz	: ± 0.45 dB
	16 kHz	: ± 0.70 dB
104 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
114 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C231631
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-0436) Date of Receipt / 收件日期 : 28 February 2023

Description / 儀器名稱 : Sound Level Meter (EQ067)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-31
Serial No. / 編號 : 00410221
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 21 March 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : K C Lee, Engineer

Certified By 核證 : H C Chan, Engineer

Date of Issue 簽發日期 : 21 March 2023

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231631
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

3. The results presented are the mean of 3 measurements at each calibration point.

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C230360
CL281	Multifunction Acoustic Calibrator	AV210017

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L_A	A	Fast	94.00	1	93.6	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L_A	A	Fast	94.00	1	93.6 (Ref.)
				104.00		103.6
				114.00		113.6

IEC 61672 Class 1 Limit : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L_A	A	Fast	94.00	1	93.6	Ref.
			Slow			93.6	± 0.3

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231631
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L_A	A	Fast	94.00	63 Hz	67.3	-26.2 ± 1.5
					125 Hz	77.4	-16.1 ± 1.5
					250 Hz	84.9	-8.6 ± 1.4
					500 Hz	90.3	-3.2 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	94.8	+1.2 ± 1.6
					4 kHz	94.7	+1.0 ± 1.6
					8 kHz	92.6	-1.1 (+2.1 ; -3.1)
					16 kHz	87.2	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Limit (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L_C	C	Fast	94.00	63 Hz	92.6	-0.8 ± 1.5
					125 Hz	93.3	-0.2 ± 1.5
					250 Hz	93.5	0.0 ± 1.4
					500 Hz	93.6	0.0 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	93.5	-0.2 ± 1.6
					4 kHz	92.9	-0.8 ± 1.6
					8 kHz	90.7	-3.0 (+2.1 ; -3.1)
					16 kHz	85.3	-8.5 (+3.5 ; -17.0)

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C231631
證書編號

Remarks : - UUT Microphone Model No. : UC-53A & S/N : 322551

- Mfr's Limit : IEC 61672 Class 1

- Uncertainties of Applied Value :

94 dB	: 63 Hz - 125 Hz	:	± 0.35 dB
	250 Hz - 500 Hz	:	± 0.30 dB
	1 kHz	:	± 0.20 dB
	2 kHz - 4 kHz	:	± 0.35 dB
	8 kHz	:	± 0.45 dB
	16 kHz	:	± 0.70 dB
104 dB	: 1 kHz	:	± 0.10 dB (Ref. 94 dB)
114 dB	: 1 kHz	:	± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C235367
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-1813) Date of Receipt / 收件日期 : 31 August 2023

Description / 儀器名稱 : Sound Level Calibrator (EQ085)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NC-73
Serial No. / 編號 : 10655561
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 13 September 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published or user's specified tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : K C Lee
Engineer

Certified By 核證 : K K Wong
Engineer

Date of Issue 簽發日期 : 17 September 2023

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C235367
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C233799
CL281	Multifunction Acoustic Calibrator	CDK2302738
TST150A	Measuring Amplifier	C221750

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.00	± 0.5	± 0.20

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	User's Spec.	Uncertainty of Measured Value (Hz)
1	0.951	1 kHz ± 6 %	± 1

Remarks : - The user's specified acceptance criteria (user's spec.) is a customer pre-defined operating tolerance of the UUT, suitable for one's own intended use.

- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C231627
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC23-0436) Date of Receipt / 收件日期 : 28 February 2023

Description / 儀器名稱	:	Sound Calibrator (EQ089)
Manufacturer / 製造商	:	Rion
Model No. / 型號	:	NC-75
Serial No. / 編號	:	34680623
Supplied By / 委託者	:	Action-United Environmental Services and Consulting Unit A, 20/F., Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 21 March 2023

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : K C Lee, Engineer

Certified By 核證 : H C Chan, Engineer

Date of Issue 簽發日期 : 21 March 2023

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C231627
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C223647
CL281	Multifunction Acoustic Calibrator	AV210017
TST150A	Measuring Amplifier	C221750

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Limit (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.1	± 0.25	± 0.2

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Limit	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Appendix F3

Calibration Certificates for

Water Quality Monitoring Equipment

ALS Technichem (HK) Pty Ltd
11/F., Chung Shun Knitting Centre,
1 - 3 Wing Yip Street,
Kwai Chung, N.T., Hong Kong
T: +852 2610 1044
F: +852 2610 2021
www.alsglobal.com

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT:	MR BEN TAM	**WORK ORDER:**	HK2345295
CLIENT:	ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING		
ADDRESS:	RM A 20/F., GOLD KING IND BLDG, NO. 35-41 TAI LIN PAI ROAD, KWAI CHUNG, N.T.	**SUB-BATCH:**	0
		LABORATORY:	HONG KONG
		DATE RECEIVED:	10-Nov-2023
		DATE OF ISSUE:	17-Nov-2023

GENERAL COMMENTS

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the laboratory or quoted from relevant international standards.
The "Next Calibration Date" is recommended according to best practice principle as practised by the laboratory or quoted from relevant international standards.
The validity of equipment/ meter performance only applies to the result(s) stated in the report.
This report superseded any previous report(s) with same work order number.

EQUIPMENT INFORMATION

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client.

Equipment Type:	Multifunctional Meter
Service Nature:	Performance Check
Scope:	Conductivity, Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature
Brand Name/ Model No.:	[YSI]/ [Professional DSS]
Serial No./ Equipment No.:	[17B102764/17B100758]/ [EQW019]
Date of Calibration:	16-November-2023

Ms. Lin Wai Yu, Iris
Assistant Manager - Inorganics

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2345295

SUB-BATCH: 0
DATE OF ISSUE: 17-Nov-2023
CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING

Equipment Type: Multifunctional Meter
Brand Name/ Model No.: [YSI]/ [Professional DSS]
Serial No./ Equipment No.: [17B102764/17B100758]/ [EQW019]
Date of Calibration: 16-November-2023 Date of Next Calibration: 16-February-2024

PARAMETERS:

Conductivity **Method Ref: APHA (23rd edition), 2510B**

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)
146.9	158.0	+7.6
6667	7034	+5.5
12890	13617	+5.6
58670	55565	-5.3
	Tolerance Limit (%)	±10.0

Dissolved Oxygen **Method Ref: APHA (23rd edition), 4500O: G**

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.31	2.38	+0.07
4.09	4.17	+0.08
6.37	6.41	+0.04
	Tolerance Limit (mg/L)	±0.20

pH Value **Method Ref: APHA (23rd edition), 4500H: B**

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	3.87	-0.13
7.0	6.99	-0.01
10.0	9.92	-0.08
	Tolerance Limit (pH unit)	±0.20

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Ms. Lin Wai Yu, Iris
Assistant Manager - Inorganics

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2345295

SUB-BATCH: 0
DATE OF ISSUE: 17-Nov-2023
CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING

Equipment Type: Multifunctional Meter
Brand Name/ Model No.: [YSI]/ [Professional DSS]
Serial No./ Equipment No.: [17B102764/17B100758]/ [EQW019]
Date of Calibration: 16-November-2023 Date of Next Calibration: 16-February-2024

PARAMETERS:

Turbidity **Method Ref: APHA (23rd edition), 2130B**

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	-0.59	--
4	4.06	+1.5
40	36.02	-9.9
80	72.43	-9.5
400	373.02	-6.7
800	731.07	-8.6
	Tolerance Limit (%)	±10.0

Salinity **Method Ref: APHA (23rd edition), 2520B**

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	--
10	10.94	+9.4
20	21.45	+7.3
30	31.45	+4.8
	Tolerance Limit (%)	±10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Ms. Lin Wai Yu, Iris
Assistant Manager - Inorganics

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2345295

SUB-BATCH: 0
DATE OF ISSUE: 17-Nov-2023
CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING

Equipment Type: Multifunctional Meter
Brand Name/ Model No.: [YSI]/ [Professional DSS]
Serial No./ Equipment No.: [17B102764/17B100758]/ [EQW019]
Date of Calibration: 16-November-2023 Date of Next Calibration: 16-February-2024

PARAMETERS:

Temperature **Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.**

Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)
6.5	6.9	+0.4
21.5	21.3	-0.2
43.5	43.3	-0.2
	Tolerance Limit (°C)	±2.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Ms. Lin Wai Yu, Iris
Assistant Manager - Inorganics

Appendix G

Meteorological Data

Date		Weather	Total Rainfall (mm)	Wetland Park Station			
				Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction
1-Jan-24	Mon	Mainly cloudy. Sunny intervals in the afternoon.	0	23.1	6	67.5	E/NE
2-Jan-24	Tue	One or two light rain patches tonight.	0	21.5	4	73.5	E/NE
3-Jan-24	Wed	Mainly fine. Moderate easterly winds.	0	21	5	72	N
4-Jan-24	Thu	Mainly cloudy. Sunny intervals in the afternoon.	0	18.6	4.2	61	E/NE
5-Jan-24	Fri	Mainly fine. Moderate easterly winds.	0	20.4	3.7	76.2	W/NW
6-Jan-24	Sat	It will be fine. Dry during the day.	0	21.7	5	71	E/NE
7-Jan-24	Sun	Mainly fine. Moderate easterly winds.	0	23	6.7	64	E/NE
8-Jan-24	Mon	One or two light rain patches tonight.	Trace	21.9	5	73	E/NE
9-Jan-24	Tue	Mainly cloudy. Sunny intervals in the afternoon.	Trace	23.2	3.7	76.2	W/NW
10-Jan-24	Wed	Mainly fine. Moderate easterly winds.	0	22.1	6.2	71	NE
11-Jan-24	Thu	Dry with sunny periods during the day.	Trace	20.9	3.7	59	E/NE
12-Jan-24	Fri	Dry with sunny periods in the afternoon	0	20.5	5	75.5	E/NE
13-Jan-24	Sat	Mainly cloudy tonight.	0	21.2	4.5	71	NE
14-Jan-24	Sun	Moderate easterly winds.	0	22.9	4	67	W/NW
15-Jan-24	Mon	Mainly cloudy. Sunny intervals in the afternoon.	0	23	7.5	67	E
16-Jan-24	Tue	Dry with sunny periods in the afternoon	0	22.2	8.5	67.5	E/NE
17-Jan-24	Wed	Moderate easterly winds.	0.1	20.4	6	76.5	E/NE
18-Jan-24	Thu	Mainly cloudy tonight.	0	23.8	3.7	73.2	E/NE
19-Jan-24	Fri	Mainly fine. Warm during the day.	0	23.5	6.2	73.7	E/NE
20-Jan-24	Sat	Becoming cloudy later. Moderate easterly winds.	0	23.5	4	78.5	N/NW
21-Jan-24	Sun	Moderate easterly winds.	Trace	19	4	66.5	E/NE
22-Jan-24	Mon	Fresh northerly winds, strong offshore and on high ground.	0.5	16.8	7.5	73.5	N/NE
23-Jan-24	Tue	Very cold, cloudy to overcast with a few rain patches.	2.7	8.6	7.2	80	N
24-Jan-24	Wed	Very cold, cloudy to overcast with a few rain patches.	0	10.5	7.5	53.5	N/NE
25-Jan-24	Thu	Moderate northeasterly winds.	0	15.8	4.5	50	N/NE
26-Jan-24	Fri	Dry with sunny periods.	0	16.0	4	59.5	NE
27-Jan-24	Sat	Moderate northeasterly winds.	1	17.6	6	61	NE
28-Jan-24	Sun	Very cold, cloudy to overcast with a few rain patches.	2.4	16.5	5.2	70	E/NE
29-Jan-24	Mon	Moderate easterly winds.	Trace	17.6	3.5	74.5	E/NE
30-Jan-24	Tue	Mainly cloudy with coastal mist.	Trace	20.5	3.5	84	N/NW
31-Jan-24	Wed	Mainly cloudy with rather low visibility.	Trace	22	6	87.5	NE

Appendix H

Event and Action Plan

Event / Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
Action level exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily	1. Check monitoring data submitted by ET; 2. Check Contractor's working method	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
Action level exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.
Limit level exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.
Limit level exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the IEC, agree with the	2 Take immediate action to avoid further exceedance; 3 Submit proposals for remedial actions to IEC within 3 working days of notification; 4 Implement the agreed proposals;

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
	possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	advise the ER accordingly; 3. Supervise the implementation of remedial measures.	Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	5 Resubmit proposals if problem still not under control; 6 Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Notes:
ET – Environmental Team
IEC – Independent Environmental Checker
ER – Engineer's Representative

Event / Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
Action Level Exceedance	1. Notify the IEC, ER and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the monitoring data submitted by the ET; 2. Review the construction methods and proposed remedial measures by the Contractor, and advise the ET and ER if the proposed remedial measures would be sufficient; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify the Contractor; 3. Require the Contractor to propose remedial measures for the analyzed noise problem; 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to the ER and IEC and copy to the ET; 2. Implement noise mitigation proposals.
Limit Level Exceedance	1. Identify sources. 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase the monitoring frequency; 5. Carry out analysis of the Contractor's working procedures with the ER and Contractor to determine possible mitigations to be implemented; 6. Inform IEC, ER, EPD and Contractor the causes and actions taken for the exceedances; 7. Assess the effectiveness of the Contractor's remedial action with the ER and keep the IEC informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst the ER, ET and Contractor on the potential remedial actions; 2. Review the Contractor's remedial action whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1 Confirm receipt of notification of exceedance in writing; 2 Notify the Contractor. 3 Require the Contractor to propose remedial measures for the analyzed noise problems; 4 Ensure remedial measures are properly implemented; 5 If exceedance continues, consider what portion of work is responsible and instruct the Contractor to stop that portion of works until the exceedance is abated.	1 Take immediate action to avoid further exceedance; 2 Submit proposals for remedial action to the ER and IEC and copy to the ET within 3 working days of notification; 3 Implement the agreed proposals; 4 Resubmit proposals if problems still not under control; stop the relevant portion of works as determined by the ER until the exceedance is abated.

Notes:
ET – Environmental Team
IEC – Independent Environmental Checker
ER – Engineer's Representative

Event / Action Plan for Water Quality

Event	Action			
	ET	IEC	ER	Contractor
Action level exceedance for one sampling day	1. Repeat in-situ measurement on next day of exceedance to confirm findings; 2. Inform IEC, Contractor and ER; 3. Check monitoring data, all plant, equipment and Contractor's working methods; and 4. Discuss remedial measures with IEC and Contractor and ER.	1. Discuss with ET, ER and Contractor on the implemented mitigation measures; 2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, ET and Contractor on the implemented mitigation measures; 2. Make agreement on the remedial measures to be implemented; and 3. Supervise the implementation of agreed remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ER, ET and IEC and purpose remedial measures to IEC and ER; and 7. Implement the agreed mitigation measures.
Action level exceedance for more than one consecutive sampling days	1. Repeat in-situ measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss remedial measures with IEC, contractor and ER; and 5. Ensure remedial measures are implemented.	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the proposed mitigation measures; 2. Make agreement on the remedial measures to be implemented; and 3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed mitigation measures
Limit level exceedance for one sampling day	1. Repeat measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Rectify unacceptable practice; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Consider changes	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and	1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; and	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
	of working methods; 6. Discuss mitigation measures with IEC, ER and Contractor; and 7. Ensure the agreed remedial measures are implemented	advise the ET and ER on the effectiveness of the implemented mitigation measures.	4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.	ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures.
Limit level exceedance for more than one consecutive sampling days	1. Inform IEC, contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; 3. Discuss mitigation measures with IEC, ER and Contractor; 4. Ensure mitigation measures are implemented; and 5. Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days.	1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.	1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; 4. Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level.	1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation 7. measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures. 7. As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level.

Notes:
ET – Environmental Team
IEC – Independent Environmental Checker
ER – Engineer's Representative

Appendix I

Monitoring Schedule

Impact Monitoring Schedule for Reporting Month – January 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Water quality 1-hr TSP X3 Noise	3	4 Water quality	5	6 Water quality
7	8 Water quality 1-hr TSP X3 Noise	9	10 Water quality	11	12 Water quality	13 1-hr TSP X3
14	15 Water quality	16	17 Water quality	18	19 Water quality 1-hr TSP X3 Noise	20
21	22 Water quality	23	24	25 1-hr TSP X3 Noise Water quality	26	27 Water quality
28	29 Water quality	30	31 Water quality 1-hr TSP X3 Noise			

Impact Monitoring Schedule for next Reporting Month – February 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2 Water quality	3
4	5 Water quality	6 1-hr TSP X3 Noise	7 Water quality	8	9 Water quality 1-hr TSP X3	10
11	12	13	14	15 Water quality 1-hr TSP X3 Noise	16	17 Water quality
18	19 Water quality	20	21 Water quality 1-hr TSP X3 Noise	22	23 Water quality	24
25	26 Water quality	27 1-hr TSP X3 Noise	28 Water quality	29		

Appendix J1

Detailed Monitoring Results

Construction Dust Monitoring Results

Location: DM-1

Date	Start Time	1-hour TSP (μg/m³)			Action Level (μg/m³)	Limit Level(μg/m³)
		1st reading	2nd reading	3rd reading		
2-Jan-24	13:05	35	33	37	260	500
8-Jan-24	11:50	63	85	66	260	500
13-Jan-24	9:10	40	38	28	260	500
19-Jan-24	9:00	68	71	73	260	500
25-Jan-24	8:00	27	45	39	260	500
31-Jan-24	9:36	66	45	51	260	500

Location: DM-2

Date	Start Time	1-hour TSP (μg/m³)			Action Level (μg/m³)	Limit Level(μg/m³)
		1st reading	2nd reading	3rd reading		
2-Jan-24	9:05	39	43	40	260	500
8-Jan-24	10:56	47	52	42	260	500
13-Jan-24	9:15	64	12	4	260	500
19-Jan-24	8:00	27	31	21	260	500
25-Jan-24	7:30	27	18	20	260	500
31-Jan-24	9:05	52	44	35	260	500

Construction Noise Monitoring Results

Location: CM1a

Date	Start Time	1st Leq_{5min}	L10	L90	2nd Leq_{5min}	L10	L90	3nd Leq_{5min}	L10	L90	4th Leq_{5min}	L10	L90	5th Leq_{5min}	L10	L90	6th Leq_{5min}	L10	L90	Leq30min	Limit Level
2-Jan-24	13:50	54.8	55.9	52.0	54.0	55.6	51.7	56.5	58.3	53.0	56.9	58.7	53.4	55.1	56.9	52.5	54.8	56.0	52.2	55	75
8-Jan-24	15:25	57.2	53.9	43.9	50.7	47.4	43.9	47.7	48.2	45.1	62.6	67.9	44.7	59.9	57.2	45.1	57.7	56.6	47.4	58	75
19-Jan-24	9:45	50.7	52.2	47.1	54.2	57.4	48.9	51.5	53.5	48.2	49.7	51.3	47.5	53.1	51.2	47.8	53.8	57.0	49.7	52	75
25-Jan-24	10:20	53.5	56.8	50.0	52.5	52.9	49.9	52.4	53.3	48.8	52.3	53.3	51.0	53.8	55.1	51.6	70.2	76.6	51.2	63	75
31-Jan-24	11:22	54.9	57.6	46.2	56.2	58.1	46.5	50.3	52.0	47.6	52.3	55.2	48.1	52.3	56.2	48.0	51.2	53.4	48.6	53	75

Location: CM2a

Date	Start Time	1st Leq_{5min}	L10	L90	2nd Leq_{5min}	L10	L90	3nd Leq_{5min}	L10	L90	4th Leq_{5min}	L10	L90	5th Leq_{5min}	L10	L90	6th Leq_{5min}	L10	L90	Leq30min	Façade Correction	Limit Level
1-Feb-24	9:55	59.8	61.8	57.1	61.1	61.9	56.5	57.3	58.9	55.6	57.7	59.0	56.2	57.3	58.4	55.9	59.0	60.3	56.1	59	62	75
8-Jan-24	14:25	58.1	58.1	54.9	56.4	57.3	54.4	58.1	59.3	55.6	57.3	58.2	55.0	58.9	59.6	55.2	60.3	63.5	55.6	58	61	75
19-Jan-24	9:45	62.3	62.8	58.1	60.2	61.7	58.3	60.2	61.8	58.2	63.5	65.0	58.9	60.6	61.8	56.6	61.6	64.1	58.3	62	65	75
25-Jan-24	13:15	61.0	61.3	58.6	59.5	60.6	58.1	62.4	63.9	59.1	60.2	61.3	59.0	59.8	61.1	57.9	60.8	61.7	59.2	61	64	75
31-Jan-24	10:43	57.2	59.3	54.2	58.3	59.5	55.8	59.2	62.3	57.0	60.3	62.1	56.4	58.6	62.3	57.1	58.5	60.3	54.8	59	62	75

Remark: façade correction (+3 dB(A) was added according to acoustical principles and EPD guidelines

Location: CM3

Date	Start Time	1st Leq_{5min}	L10	L90	2nd Leq_{5min}	L10	L90	3nd Leq_{5min}	L10	L90	4th Leq_{5min}	L10	L90	5th Leq_{5min}	L10	L90	6th Leq_{5min}	L10	L90	Leq30min	Limit Level
1-Jan-24	10:40	73.7	74.9	72.4	74.7	76.6	72.3	74.4	75.9	73.0	74.8	74.9	72.0	74.5	76.1	72.9	74.8	76.0	72.8	74	75
8-Jan-24	13:00	70.0	73.5	60.2	69.8	73.3	61.1	67.7	70.3	60.4	68.5	70.7	61.8	68.2	70.3	60.7	70.9	71.7	61.2	69	75
19-Jan-24	10:40	71.4	73.4	64.8	69.3	72.5	61.3	69.3	72.8	62.9	71.9	72.8	66.8	71.1	73.1	65.0	70.9	71.9	60.5	71	75
25-Jan-24	14:05	65.0	68.0	58.1	67.8	69.8	59.3	68.1	70.0	59.7	67.6	70.3	59.7	67.0	69.2	58.0	74.4	77.8	55.1	70	75
31-Jan-24	9:37	64.3	68.2	59.5	65.2	67.0	59.5	66.7	70.5	60.3	65.8	67.6	59.7	63.2	66.4	59.9	65.6	68.5	59.5	65	75

Location: CM4

Date	Start Time	1st Leq_{5min}	L10	L90	2nd Leq_{5min}	L10	L90	3nd Leq_{5min}	L10	L90	4th Leq_{5min}	L10	L90	5th Leq_{5min}	L10	L90	6th Leq_{5min}	L10	L90	Leq30min	Limit Level
2-Jan-24	9:15	66.7	69.6	61.5	70.5	73.7	63.3	69.3	73.4	61.6	67.4	70.9	61.2	65.6	69.2	61.0	69.0	72.3	61.2	68	75
8-Jan-24	13:45	70.0	73.3	58.7	69.2	72.9	59.0	67.0	70.8	58.3	70.5	74.7	60.4	68.1	70.9	61.3	69.4	72.7	60.5	69	75
19-Jan-24	9:00	68.5	72.4	62.0	69.5	72.8	61.5	68.0	70.4	61.5	67.2	70.5	60.6	69.8	73.1	60.8	68.7	72.5	61.9	69	75

Date	Start Time	1st Leq_{5min}	L10	L90	2nd Leq_{5min}	L10	L90	3rd Leq_{5min}	L10	L90	4th Leq_{5min}	L10	L90	5th Leq_{5min}	L10	L90	6th Leq_{5min}	L10	L90	Leq30min	Limit Level
25-Jan-24	11:30	70.5	72.5	62.1	69.9	74.0	63.2	69.5	72.8	62.6	73.4	79.1	64.5	79.0	83.7	63.9	72.0	75.5	58.4	74	75
31-Jan-24	10:10	67.5	71.5	60.3	67.8	71.4	60.1	66.4	71.0	59.5	67.5	71.1	59.4	67.3	69.9	59.6	68.3	72.5	60.1	68	75

Location: CM8a

Date	Start Time	1st Leq_{5min}	L10	L90	2nd Leq_{5min}	L10	L90	3rd Leq_{5min}	L10	L90	4th Leq_{5min}	L10	L90	5th Leq_{5min}	L10	L90	6th Leq_{5min}	L10	L90	Leq30min	Façade Correction	Limit Level
2-Jan-24	14:35	56.7	58.2	54.4	56.0	57.9	54.2	55.9	57.1	54.0	56.3	58.5	53.8	56.1	58.0	54.5	55.8	57.6	53.2	56	59	75
8-Jan-24	16:10	80.9	80.8	53.8	57.8	59.5	54.7	59	61.7	55.5	56.7	59	53.7	58.6	59.8	54.9	60.3	60.7	54	58	61	75
19-Jan-24	10:30	54.8	56.4	53.6	54.7	55.7	53.2	56.1	57.2	54.7	58.0	59.3	56.6	57.8	58.6	57.0	58.3	59.3	56.8	57	60	75
25-Jan-24	9:30	64.3	63.4	57.9	61.9	64.2	57.9	60.2	61.4	57.5	58.6	60.3	56.5	57.6	58.8	56.2	56.5	57.7	55.0	61	64	75
31-Jan-24	13:00	57.3	59.1	53.2	56.3	58.2	53.7	56.5	58.6	53.2	54.2	56.5	51.0	55.8	57.5	53.6	59.9	61.4	54.5	57	60	75

Remark: façade correction (+3 dB(A) was added according to acoustical principles and EPD guidelines

Water Quality Monitoring Results
Location: M1a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	10:35	0.25	20.4	20.4	3.18	3.0	34.5	33.3	4.3	4.3	7.07	7.1	0.32	0.32	8.8	8.5
			20.4		2.89		32.0		4.3		7.07		0.32		8.2	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	12:25	0.25	19.8	19.8	2.49	2.4	26.8	26.1	9.8	9.8	7.52	7.5	9.83	9.78	18.4	21.6
			19.8		2.35		25.4		9.7		7.52		9.72		24.8	

	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	11:45	0.35	20.5	20.5	2.04	2.0	21.8	21.1	23.8	23.7	7.49	7.5	0.15	0.15	27.1	32.9
			20.5		2.01		20.4		23.7		7.49		0.15		38.6	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	13:10	0.25	21.5	21.5	2.62	2.5	29.5	28.3	217.2	215.5	7.24	7.2	0.35	0.35	376	389.5
			21.5		2.43		27.1		213.8		7.24		0.35		403	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	12:25	0.25	21.5	21.5	3.14	3.145	37.8	36.1	18.6	18.3	7.48	7.5	0.24	0.24	33	32.9
			21.5		3.15		34.3		17.9		7.48		0.24		32.8	
Date	**12 Jan 24**																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	11:45	0.25	20.6	20.6	2.42	2.3	25.6	24.5	10.5	10.3	7.42	7.4	0.23	0.23	19.9	19.5
			20.6		2.16		23.4		10.2		7.42		0.23		19	

Date	15 Jan 13																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	11:40	0.30	21.2	21.2	3.79	3.7	42.5	41.9	10.3	10.6	7.86	7.9	0.07	0.07	39.4	46.4
			21.2		3.68		41.3		10.9		7.86		0.07		53.4	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M1a	10:15	0.25	19.8	19.8	2.84	2.8	30.2	29.8	4.8	4.8	7.60	7.6	0.20	0.20	32.5	31.5
			19.8		2.68		29.3		4.7		7.60		0.20		30.4	

19 Jan 24

Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M1a	11:30	0.25	22.4	22.4	2.71	2.65	30.4	29.8	30.8	30.7	8.12	8.1	0.38	0.38	32.5	31.5
			22.4		2.59		29.2		30.5		8.12		0.38		30.4	

Date	22 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M1a	10:15	0.30	18.7	18.7	3.03	3.0	32.1	31.2	59.8	62.2	6.88	6.9	0.19	0.19	141	81.0
			18.7		2.94		30.3		64.5		6.88		0.19		20.9	

Date	25 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M1a	15:10	0.35	17.3	17.3	5.12	5.0	51.1	50	58.2	57.6	6.59	6.6	0.14	0.14	40	49.0
			17.3		4.8		48.9		57.0		6.59		0.14		58	

Date	27 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M1a	15:45	0.35	17.8	5.94	6.54	6.2	67.5	64.9	4.9	4.8	6.71	6.7	0.13	0.13	7.3	11.7
			17.8		5.94		62.3		4.7		6.71		0.13		16	

29 Jan 24

Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M1a	12:15	0.30	17.2	17.2	5.23	5.2	54.2	53.7	3.9	3.7	6.79	6.8	0.13	0.13	9.1	9.4
			17.2		5.12		53.2		3.5		6.79		0.13		9.6	

Date	31 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M1a	11:15	0.30	21.8	21.8	4.26	4.19	48.6	47.9	17.3	17.0	8.73	8.7	0.31	0.31	36.5	31.3
			21.8		4.12		47.1		16.8		8.75		0.31		26	

Water Quality Monitoring Results
Location: M2a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	10:50	0.15	20.3	20.3	6.45	6.4	71.1	68.1	2.4	2.4	7.45	7.5	0.17	0.17	5.4	5.2
			20.3		6.44		65.1		2.5		7.45		0.17		4.9	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	12:45	0.20	19.5	19.5	6.55	6.5	70.0	69.35	2.7	2.6	7.89	7.9	0.11	0.11	7.4	7.2
			19.5		6.46		68.7		2.6		7.89		0.11		6.9	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	12:00	0.25	21	21	6.04	6.5	66.3	66.1	6.7	6.6	7.85	7.9	0.17	0.17	7.5	7.0
			21		6.99		65.9		6.6		7.85		0.17		6.4	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	13:30	0.15	22	22	6.44	6.4	73.1	72.7	3.8	3.9	7.42	7.4	0.18	0.18	7.8	8.3
			22		6.35		72.3		3.9		7.42		0.18		8.8	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	12:50	0.15	21.9	21.9	6.41	6.4	73.5	73.7	4.8	5.0	7.49	7.5	0.18	0.18	7.8	7.5
			21.9		6.45		73.9		5.1		7.49		0.18		7.2	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	13:00	0.15	21.3	21.3	6.33	6.4	70.6	71.1	4.6	4.4	7.51	7.5	0.18	0.18	4.2	4.4
			21.3		6.44		71.5		4.3		7.51		0.18		4.5	

Date	15 Jan 13																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	12:10	0.15	22.2	22.2	6.61	6.6	73.1	72.8	3.0	2.9	7.34	7.3	0.18	0.18	3.5	3.4
			22.2		6.65		72.5		2.9		7.34		0.18		3.2	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	11:20	0.20	19.7	19.7	6.99	6.7	80.2	79.4	7.5	7.5	7.32	7.3	0.18	0.18	4.2	4.0
			19.7		6.45		78.5		7.5		7.32		0.18		3.8	

Date	19 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	12:30	0.25	23.8	23.8	7.25	7.2	86.7	85.9	1.8	1.8	7.45	7.45	0.17	0.17	6.8	6.6
			23.8		7.16		85.1		1.9		7.45		0.17		6.4	

Date	22 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	11:15	0.20	17.2	17.2	6.44	6.5	65.6	65.2	3.4	3.4	6.85	6.9	0.19	0.19	5.1	5.2
			17.2		6.55		64.8		3.4		6.85		0.19		5.2	

Date	25 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	15:20	0.30	16	16	7.22	7.2	72.9	72.57	3.6	3.49	7.07	7.1	0.19	0.19	4.5	4.5
			16		7.15		72.2		3.4		7.07		0.19		4.4	

Date	27 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	13;05	0.15	16.5	16.5	6.8	6.7	68.6	67.6	6.5	6.7	7.17	7.2	0.19	0.19	5.8	5.9
			16.5		6.58		66.5		6.9		7.17		0.19		5.9	

Date	29 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	13:05	0.15	15.8	15.8	6.47	6.5	66.4	67.1	8.1	8.2	7.14	7.1	0.19	0.19	5.7	6.0
			15.8		6.57		67.8		8.3		7.14		0.19		6.2	

Date	31 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M2a	11:35	0.15	21.3	21.3	6.58	6.6	72.5	71.2	3.5	3.5	7.80	7.8	0.20	0.20	7.1	7.0
			21.3		6.66		69.8		3.4		7.80		0.20		6.8	

Water Quality Monitoring Results
Location: M3

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	10:20	0.20	20.5	20.5	5.02	4.7	51.4	49.6	4.3	4.43	7.48	7.48	0.34	0.34	10.4	10.2
			20.5		4.32		47.7		4.5		7.48		0.34		10	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	12:05	0.25	19.6	19.6	3.67	3.57	39.6	38.6	19.6	19.7	7.68	7.68	0.37	0.37	24.1	25.5
			19.6		3.47		37.5		19.7		7.68		0.37		26.8	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	11:30	0.35	20.7	20.7	3.73	3.65	40.6	40.3	19.1	19.3	8.01	8.01	0.17	0.17	21	23.1
			20.7		3.57		39.9		19.5		8.01		0.17		25.1	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	12:50	0.25	21.9	21.9	4.03	3.93	45.2	43.8	5.8	5.9	7.80	7.8	0.17	0.17	11.2	11.5
			21.9		3.83		42.4		5.9		7.80		0.17		11.7	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	12:15	0.25	21.4	21.4	2.86	3.22	42.5	41.1	15.8	15.3	7.79	7.8	0.36	0.36	16.3	17.2
			21.4		3.58		39.7		14.7		7.79		0.36		18	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	11:10	0.15	23.6	23.6	6.19	6.17	73.4	73.15	2.4	2.4	7.19	7.2	0.56	0.56	3.7	3.8
			23.6		6.15		72.9		2.4		7.19		0.56		3.8	

Date	15 Jan 13																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	11:20	0.25	21.5	21.5	4.28	4.25	48.2	47.85	6.3	6.4	8.31	8.3	0.18	0.18	16.3	17.6
			21.5		4.22		47.5		6.4		8.31		0.18		18.8	

Date	17 Jan 00																	
Location		**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	

M3	10:00	0.25	19.8 19.8	19.8	4.63 3.89	4.26	46.2 42.0	44.1	6.3 4.3	5.3	7.89 7.89	7.9	0.22 0.22	0.22	10 10.8	10.4

Date	**19 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	11:15	0.25	23.2 23.2	23.2	3.1 3	3.05	35.0 33.5	34.25	164.2 158.3	161.3	8.43 8.43	8.4	0.51 0.51	0.51	313 402	357.5

Date	**22 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	10:00	0.25	18.6 18.6	18.6	3.75 3.73	3.74	40.2 39.8	40	4.1 4.0	4.1	7.04 7.04	7.0	0.21 0.21	0.21	6.7 7.7	7.2

Date	**25 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	14:10	0.30	17.7 17.7	17.7	5.22 5.14	5.18	54.3 53.5	53.9	12.9 13.0	13.0	7.49 7.49	7.5	0.25 0.25	0.25	28.6 24	26.3

Date	**27 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	15:30	0.25	17.8 17.8	17.8	6.3 5.93	6.12	65.0 59.2	62.1	5.1 5.0	5.1	7.76 7.76	7.8	0.15 0.15	0.15	7.2 7	7.1

Date	**29 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	11:55	0.25	17.1 17.1	17.1	4.99 4.84	4.92	52.0 51.4	51.7	6.6 6.6	6.6	7.54 7.54	7.5	0.15 0.15	0.15	8.8 6	7.4

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M3	10:10	0.20	21.2 21.2	21.2	4.05 4.28	4.17	45.7 46.2	46.0	7.8 7.2	7.5	7.86 7.86	7.9	0.30 0.30	0.30	16.7 17.3	17.0

Water Quality Monitoring Results
Location: M4

Date	2 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	10:05	0.15	22	22	6.52	6.6	77.6	77.1	3.3	3.3	7.26	7.3	0.50	0.50	5.8	5.9
			22		6.71		76.5		3.3		7.26		0.50		6	

Date	4 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	11:45	0.15	22.2	22.2	6.24	6.2	69.2	68.8	7.8	7.9	7.64	7.6	0.45	0.45	8.2	8.6
			22.2		6.15		68.4		8.1		7.64		0.45		8.9	

Date	6 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	11:15	0.10	24.3	24.3	6.21	6.2	73.3	73.1	5.6	5.61	7.68	7.7	0.57	0.57	7.6	7.8
			24.3		6.15		72.9		5.6		7.68		0.57		8	

Date	8 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	12:30	0.15	25.2	25.2	6.53	6.5	79.1	78.9	3.2	3.2	7.53	7.5	0.26	0.26	16.3	13.3
			25.2		6.49		78.6		3.2		7.53		0.26		10.2	

Date	10 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	12:00	0.15	24.2	24.2	6.22	6.2	72.9	71.9	4.7	4.6	7.52	7.5	0.66	0.66	14.2	12.2
			24.2		6.25		70.9		4.5		7.52		0.66		10.2	

Date	12 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	10:50	0.20	21.5	21.5	6.25	6.2	62.4	64.6	4.9	4.9	7.47	7.5	0.20	0.20	7.8	6.5
			21.5		6.08		66.7		4.8		7.47		0.20		5.2	

Date	15 Jan 13															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M4	11:05	0.15	24.7	24.7	6.21	6.3	74.2	74.3	4.4	4.3	7.41	7.4	0.48	0.48	7.7	8.4
			24.7		6.35		74.3		4.2		7.41		0.48		9	

Date	17 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	

M4	9:45	0.15	22.1 22.1	22.1	6.53 6.44	6.5	74.4 73.0	73.7	2.5 2.4	2.4	7.50 7.50	7.5	0.39 0.39	0.39	6.6 7	6.8

Date	**19 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M4	11:00	0.10	25.6 25.6	25.6	6.3 6.31	6.3	77.2 75.3	76.3	4.2 4.0	4.1	7.55 7.55	7.6	0.52 0.52	0.52	11.3 18.3	14.8

Date	**22 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M4	9:45	0.15	19.1 19.1	19.1	6.14 6.22	6.2	66.2 66.9	66.6	2.2 2.2	2.2	7.12 7.12	7.12	0.04 0.44	0.24	8.8 8	8.4

Date	**25 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M4	14:00	0.10	19.5 19.5	19.5	8.42 8.32	8.4	91.2 90.6	90.9	9.0 8.6	8.8	0.34 0.34	0.3	7.39 7.39	7.39	12.2 13.1	12.7

Date	**27 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M4	15:10	0.15	19.9 19.9	19.9	7.48 7.41	7.4	81.7 81.1	81.4	8.2 8.2	8.2	7.64 7.64	7.6	0.40 0.40	0.40	18 17.1	17.6

Date	**29 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M4	11:45	0.15	18.6 18.6	18.6	7.42 7.26	7.3	80.3 79.1	79.7	5.0 4.8	4.9	7.51 7.51	7.5	0.40 0.40	0.40	14.1 16.2	15.2

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M4	9:55	0.15	23.4 23.4	23.4	6.31 5.89	6.1	74.3 71.4	72.9	2.1 1.9	2.0	7.44 7.44	7.4	0.44 0.44	0.44	9 8.8	8.9

Water Quality Monitoring Results
Location: U1b

Date	12 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	12:00	0.18	20.7 20.7	20.7	4.53 4.5	4.5	50.2 50.1	50.2	14.2 14.1	14.1	7.40 7.40	7.4	0.30 0.30	0.3	24.7 22.3	23.5

Date	15 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	11:55	0.20	20.6 20.6	20.6	4.56 4.2	4.4	47.8 46.3	47.1	330.2 318.3	324.2	8.40 8.40	8.4	1.33 1.33	1.3	595 712	653.5

Date	17 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	10:30	0.15	19.5 19.5	19.5	4.95 4.86	4.9	53.3 52.9	53.1	36.9 35.8	36.3	7.16 7.16	7.2	0.10 0.10	0.1	75.2 81.6	78.4

Date	19 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	11:45	0.10	21.7 21.7	21.7	5.7 5.65	5.7	64.2 63.4	63.8	61.9 61.1	61.5	8.07 8.07	8.1	0.68 0.68	0.7	84.2 83.4	83.8

Date	22 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	10:30	0.20	18.2 18.2	18.2	5.34 5.14	5.2	55.9 54.1	55.0	12.8 11.7	12.3	7.01 7.01	7.0	0.12 0.12	0.1	42.2 37.6	39.9

Date	25 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	14:30	0.10	16.9 16.9	16.9	6.64 6.58	6.6	68.1 67.7	67.9	6.5 6.5	6.5	6.80 6.80	6.8	0.15 0.15	0.2	23.3 21.3	22.3

Date	27 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	

U1b	16:15	0.15	17.6 17.6	17.6	6.01 5.92	6.0	62.7 62.1	62.4	6.1 6.3	6.2	7.35 7.35	7.4	0.14 0.14	0.1	13.4 14.1	13.8

Date	**29 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	12:20	0.15	16.5 16.5	16.5	5.74 5.72	5.7	60.4 60.1	60.3	8.7 7.8	8.3	7.19 7.19	7.2	0.14 0.14	0.1	33 17.9	25.5

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U1b	10:30	0.15	21 21	21	4.12 4.02	4.1	46.4 45.2	45.8	15.1 14.2	14.6	7.39 7.39	7.4	0.70 0.70	0.7	14.4 14.6	14.5

Water Quality Monitoring Results
Location: U2a

Date	12 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	12:20	0.25	19.7	19.7	7.26	7.3	79.2	79.1	1.8	1.7	7.33	7.3	0.08	0.1	5.2	7.4
			19.7		7.24		79.0		1.6		7.33		0.08		9.5	

Date	15 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	12:10	0.25	20.1	20.1	6.71	6.7	73.2	72.8	1.9	2.0	7.51	7.5	0.08	0.1	7.9	8.5
			20.1		6.6		72.4		2.1		7.51		0.08		9.1	

Date	17 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	10:45	0.20	19.7	19.7	6.2	6.2	67.5	67.4	14.5	14.6	7.12	7.1	0.05	0.1	32.2	34.3
			19.7		6.15		67.2		14.8		7.12		0.05		36.4	

Date	19 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	11:55	0.25	22.6	22.6	6.78	6.8	77.3	77.1	2.6	3.0	7.30	7.3	0.08	0.1	6.8	6.6
			22.6		6.72		76.8		3.5		7.30		0.08		6.4	

Date	22 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	10:40	0.30	17.9	17.9	6.74	6.7	70.3	69.9	1.8	1.8	7.02	7.0	0.08	0.1	3	3.2
			17.9		6.64		69.4		1.8		7.02		0.08		3.3	

Date	25 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	14:45	0.25	16.5	16.5	9.54	9.5	97.8	97.7	1.8	1.8	6.98	7.0	0.08	0.1	4.6	3.9
			16.5		9.51		97.5		1.8		6.98		0.08		3.2	

Date	27 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	16:30	0.30	17.2	17.2	9.645	9.6	89.5	89.3	1.2	1.2	7.05	7.1	0.09	0.1	4	3.5
			17.2		9.63		89.1		1.2		7.05		0.09		2.9	

Date	29 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	

U2a	12:35	0.30	16.3 16.3	16.3	8.64 8.61	8.6	89.9 89.2	89.6	2.0 2.1	2.1	7.00 7.00	7.0	0.09 0.09	0.1	8.2 2.8	5.5

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U2a	10:45	0.25	21.8 21.8	21.8	7.33 7.21	7.3	83.6 82.1	82.9	1.6 1.4	1.5	7.39 7.39	7.4	0.09 0.09	0.1	4.8 4.2	4.5

Water Quality Monitoring Results
Location: U3

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	9:50	0.20	21	21	3.95	3.8	42.5	42.1	0.2	1.1	7.40	7.4	0.19	0.19	6.3	6.1
			21		3.74		41.6		2.0		7.40		0.19		5.8	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	11:30	0.20	20.9	20.9	4.77	4.8	53.3	53.2	4.4	4.3	7.72	7.7	0.19	0.19	5.3	6.4
			20.9		4.74		53.0		4.2		7.72		0.19		7.5	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	11:00	0.25	21.7	21.7	4.59	4.5	51.8	51.4	2.6	2.6	7.87	7.9	0.20	0.20	7.1	7.4
			21.7		4.46		50.9		2.6		7.87		0.20		7.7	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	12:15	0.20	23.2	23.2	5.19	5.2	60.8	60.2	2.1	2.1	7.85	7.9	0.19	0.19	5.4	5.1
			23.2		5.14		59.6		2.2		7.85		0.19		4.8	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	11:40	0.20	22.2	22.2	5.73	5.6	65.2	63.9	2.3	2.3	7.77	7.8	0.19	0.19	5.8	6.1
			22.2		5.52		62.5		2.2		7.77		0.19		6.3	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	10:50	0.20	21.5	21.5	5.25	5.2	58.4	57.55	4.9	4.865	7.50	7.5	0.20	0.20	6.7	7.0
			21.5		5.08		56.7		4.8		7.50		0.20		7.3	

Date	15 Jan 13																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	10.:47	0.20	21.9	21.9	4.58	4.4	48.2	47.5	2.0	2.1	7.63	7.6	0.19	0.19	7.8	7.4
			21.9		4.13		46.7		2.2		7.63		0.19		7	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	9:35	0.25	20.3	20.3	3.67	3.6	40.2	39.7	4.3	4.3	7.79	7.8	0.18	0.18	7.3	7.5
			20.3		3.58		39.2		4.3		7.79		0.18		7.6	

Date	19 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	10:45	0.25	22.5	22.5	4.23	4.2	48.7	48.5	2.6	2.5	7.72	7.7	0.18	0.18	7.3	7.2
			22.5		4.19		48.2		2.5		7.72		0.18		7	

Date	22 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	9:30	0.25	18.7		4.46	4.3	46.2	44.6	7.8	7.8	7.25	7.3	0.18	0.18	6.7	7.2
			18.7		4.08		43.0		7.8		7.25		0.18		7.7	

Date	25 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	13:45	0.25	18.2	18.2	6.01	6.0	63.5	62.9	2.8	2.8	7.48	7.5	0.18	0.18	4.2	6.1
			18.2		5.94		62.2		2.7		7.48		0.18		8	

Date	27 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	14:55	0.25	18.5	18.5	6.77	6.5	71.2	69.0	6.9	7.2	7.63	7.6	0.18	0.18	11.3	8.7
			18.5		6.29		66.8		7.5		7.63		0.18		6.1	

Date	29 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	11:30	0.30	17.2	17.2	5.85	5.8	62.2	61.2	3.0	3.0	7.55	7.6	0.18	0.18	5.6	5.5
			17.2		5.72		60.1		2.9		7.55		0.18		5.3	

Date	31 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U3	9:40	0.20	20.8	20.8	4.21	4.1	47.0	46.4	2.9	2.865	7.69	7.7	0.20	0.20	16.9	13.4
			20.8		4.08		45.8		2.8		7.69		0.20		9.9	

Water Quality Monitoring Results
Location: U4a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	9:30	0.25	20.3	20.3	6.02	5.7	62.4	60.8	5.3	5.2	7.40	7.4	0.23	0.23	11.3	12.0
			20.3		5.45		59.1		5.1		7.40		0.23		12.6	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	11:15	0.25	19.2	19.2	5.34	5.3	57.6	57.1	4.7	4.7	8.01	8.0	0.26	0.26	6.2	7.3
			19.2		5.29		56.6		4.6		8.01		0.26		8.3	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	10:45	0.30	20.3	20.3	5.36	5.3	58.7	57.6	12.4	12.4	8.25	8.3	0.28	0.28	10.5	10.9
			20.3		5.22		56.4		12.3		8.25		0.28		11.3	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	12:00	0.25	21.6	21.6	5.43	5.3	60.2	59.5	4.7	4.8	8.33	8.3	0.23	0.23	8.5	9.7
			21.6		5.25		58.7		5.0		8.33		0.23		10.9	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	11:20	0.25	20.8	20.8	6.75	6.2	64.2	63.5	4.1	4.0	8.20	8.2	0.20	0.20	6.2	6.5
			20.8		5.67		62.8		4.0		8.20		0.20		6.8	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	10:30	0.25	20.3	20.3	5.15	4.9	53.2	52.2	6.5	6.5	7.72	7.7	0.25	0.25	12.7	12.0
			20.3		4.63		51.2		6.6		7.72		0.25		11.2	

Date	15 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	10:30	0.30	20.5	20.5	4.65	4.6	51.5	51.0	7.0	7.1	7.79	7.8	0.21	0.21	12.8	12.8
			20.5		4.57		50.4		7.2		7.79		0.21		12.7	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	9:20	0.25	19.5	19.5	4.9	4.9	53.1	52.7	4.2	4.3	8.04	8.0	0.26	0.26	11.8	12.0
			19.5		4.81		52.2		4.3		8.04		0.26		12.2	

Date	19 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	10:30	0.30	21.3	21.3	4.56	4.5	50.6	49.7	4.3	4.4	8.29	8.3	0.27	0.27	13.5	13.5
			21.3		4.37		48.8		4.5		8.29		0.27		13.5	

Date	22 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	9:15	0.30	19	19	4.85	4.6	48.5	47.6	3.1	3.1	7.48	7.5	0.15	0.15	10.7	9.9
			19		4.42		46.7		3.1		7.48		0.15		9.1	

Date	25 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	13:30	0.30	16.4	16.4	6.16	6.1	62.7	62.1	7.7	7.6	7.38	7.4	0.31	0.31	10.2	12.0
			16.4		6.05		61.4		7.4		7.38		0.31		13.8	

Date	27 Jan 00																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	14:40	0.30	17.6	17.6	3.69	3.7	38.7	38.5	2.9	2.9	7.54	7.5	0.17	0.17	12.6	13.1
			17.6		3.66		38.3		3.0		7.54		0.17		13.5	

Date	29 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	11:15	0.25	16.4	16.4	7.75	5.7	39.5	39.3	4.7	4.8	7.44	7.4	0.17	0.17	14.7	14.2
			16.4		3.72		39.1		4.8		7.44		0.17		13.6	

Date	31 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
U4a	9:25	0.30	20.8	20.8	4.69	4.6	52.5	51.9	8.8	8.7	7.63	7.6	0.27	0.27	16.4	15.9
			20.8		4.49		51.2		8.7		7.63		0.27		15.4	

Water Quality Monitoring Results
Location: EIS-1a

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	12:35	0.15	19.5	19.5	7.72	7.7	83.6	83.0	1.4	1.3	7.35	7.4	0.05	0.1	2.2	2.9
			19.5		7.61		82.4		1.2		7.35		0.05		3.5	

Date	15 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	12:25	0.20	22.6	22.6	7.96	8.0	92.1	92.3	2.1	2.1	6.73	6.7	0.05	0.1	3	3.1
			22.6		7.95		92.4		2.1		6.73		0.05		3.2	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	11:00	0.25	18.8	18.8	7.52	7.4	79.6	79.1	18.9	18.7	7.16	7.2	0.05	0.1	24.3	23.2
			18.8		7.37		78.6		18.5		7.16		0.05		22	

Date	19 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	12:10	0.20	22.4	22.4	7.38	7.3	87.6	87.4	2.0	2.1	7.74	7.7	0.06	0.1	8.6	8.0
			22.4		7.31		87.1		2.1		7.74		0.06		7.3	

Date	22 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	10:55	0.25	17.8	17.8	7.28	7.3	76.4	76.3	2.8	2.8	0.82	0.8	0.05	0.1	11.2	15.2
			17.8		7.25		76.1		2.8		0.82		0.05		19.2	

Date	25 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	14:55	0.30	16.4	16.4	9.74	9.7	99.6	99.6	2.8	2.9	6.66	6.7	0.05	0.1	35	25.5
			16.4		9.73		99.5		2.9		6.66		0.05		16	

Date	27 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	16:40	0.25	17.2	17.2	9.35	9.3	97.2	97.2	0.7	0.7	6.95	7.0	0.05	0.1	2.2	2.5
			17.2		9.33		96.8.		0.7		6.95		0.05		2.7	

Date	29 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	12:45	0.25	16.8	16.8	9.23	9.2	96.2	96.1	2.8	2.8	6.78	6.8	0.05	0.1	2.3	2.8
			16.8		9.24		96.0		2.9		6.78		0.05		3.2	

Date	31 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
EIS-1a	11:00	0.25	20.9	20.9	7.46	7.4	83.5	82.9	9.4	9.3	7.29	7.3	0.04	0.0	14.4	14.5
			20.9		7.38		82.2		9.2		7.29		0.04		14.6	

Water Quality Monitoring Results
Location: M5a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	11:50	0.10	19.9	19.9	5.62	5.6	61.7	61.4	5.3	5.2	7.09	7.1	0.15	0.15	31.9	27.4
			19.9		5.59		61.1		5.0		7.09		0.15		22.9	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:30	0.10	18.7	18.7	6.4	6.4	68.4	67.8	10.4	10.1	7.74	7.7	0.15	0.15	43	42.9
			18.7		6.35		67.2		9.7		7.74		0.15		42.8	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	12:35	0.10	20.2	20.2	6.25	6.2	67.5	67.0	7.6	7.6	7.90	7.9	0.15	0.15	72.1	58.9
			20.2		6.2		66.4		7.6		7.90		0.15		45.7	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	14:15	0.10	20.7	20.7	5.63	5.6	62.3	60.8	24.6	27.2	7.61	7.6	0.16	0.16	79	82.6
			20.7		5.47		59.2		29.8		7.61		0.16		86.2	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:40	0.10	21	21	5.76	6.2	64.3	63.8	22.8	22.1	7.38	7.4	0.15	0.15	86.5	88.5
			21		6.67		63.2		21.4		7.38		0.15		90.5	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:45	0.10	20.3	20.3	6.6	6.5	72.1	70.8	12.3	12.0	7.27	7.3	0.15	0.15	43.2	57.2
			20.3		6.36		69.4		11.6		7.27		0.15		71.1	

Date	15 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:30	0.10	20.8	20.8	5.83	5.8	64.3	63.8	10.3	10.0	7.13	7.1	0.15	0.15	41.1	47.5
			20.8		5.73		63.2		9.6		7.13		0.15		53.8	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	

M5a	12:10	0.10	19.6 19.6	19.6	6.06 5.91	6.0	65.1 63.9	64.5	10.9 10.7	10.8	7.21 7.21	7.2	0.15 0.15	0.15	36.1 38.3	37.2

Date	**19 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:10	0.10	21.8 21.8	21.8	5.77 5.51	5.6	64.1 62.3	63.2	11.8 11.6	11.7	8.40 8.40	8.4	0.15 0.15	0.15	35.4 41.2	38.3

Date	**22 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	11:55	0.10	17.2 17.2	17.2	6.17 6.12	6.1	64.0 63.5	63.8	18.8 19.2	19.0	7.12 7.13	7.1	0.15 0.15	0.15	46 40	43.0

Date	**25 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	16:15	0.15	15.3 15.3	15.3	7.35 7.27	7.3	73.1 72.3	72.7	1.3 1.4	1.4	7.28 7.28	7.3	0.15 0.15	0.15	13 8.8	10.9

Date	**27 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:40	0.15	17.5 17.5	17.5	6.31 6.33	6.3	64.4 65.6	65.0	2.0 2.0	2.0	6.74 6.74	6.7	0.15 0.15	0.15	10 11	10.5

Date	**29 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	13:40	0.15	16.3 16.3	16.3	6.47 6.49	6.5	65.8 66.2	66.0	2.8 3.0	2.9	6.72 6.72	6.7	0.15 0.15	0.15	9.8 84.6	47.2

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M5a	12:10	0.15	21 21	21	5.66 5.12	5.4	63.6 61.5	62.6	19.0 18.1	18.6	7.62 7.62	7.6	0.16 0.16	0.16	202 101	151.5

Water Quality Monitoring Results
Location: M6a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	11:20	0.15	19.7	19.7	8.14	8.1	88.7	88.6	1.8	1.8	7.10	7.1	7.66	7.66	1.6	5.0
			19.7		8.12		88.4		1.8		7.10		7.66		8.3	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:05	0.15	18.2	18.2	8.01	8.0	91.4	91.1	1.0	0.9	7.78	7.8	0.04	0.04	6.7	8.0
			18.2		7.93		90.7		0.8		7.78		0.04		9.2	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	12:15	0.15	19.8	19.8	7.82	7.8	92.2	92.3	0.9	0.9	7.43	7.4	0.03	0.03	7.5	7.0
			19.8		7.81		92.3		0.9		7.43		0.03		6.4	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:50	0.15	21.1	21.1	8.62	8.6	96.8	96.5	1.8	1.8	7.86	7.9	0.04	0.04	8.6	7.0
			21.1		8.59		96.2		1.8		7.86		0.04		5.4	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:15	0.15	20.8	20.8	7.82	7.9	92.1	92.3	1.8	1.8	7.51	7.5	0.04	0.04	2.1	2.3
			20.8		7.89		92.4		1.8		7.51		0.04		2.4	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:20	0.15	20.9	20.9	8.19	8.2	93.5	93.9	1.7	1.7	7.26	7.3	0.04	0.04	3.3	3.6
			20.9		8.23		94.2		1.6		7.26		0.04		3.8	

Date	15 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:05	0.15	20.8	20.8	8.67	8.7	96.9	96.85	3.6	3.7	7.57	7.6	0.04	0.04	6.8	6.8
			20.8		8.65		96.8		3.8		7.57		0.04		6.7	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	

M6a	11:40	0.20	19.1 19.1	19.1	8.52 8.51	8.5	92.4 92.0	92.2	0.8 0.7	0.7	7.22 7.22	7.2	0.04 0.04	0.04	2.1 2.5	2.3

Date	**19 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	12:45	0.15	22.8 22.8	22.8	7.37 7.87	7.6	93.4 94.6	94	7.8 7.7	7.8	7.60 7.60	7.6	0.04 0.04	0.04	1.3 1.1	1.2

Date	**22 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	11:30	0.15	17.3 17.3	17.3	8.15 8.16	8.2	93.2 93.5	93.35	0.2 0.2	0.2	7.18 7.18	7.2	0.04 0.04	0.04	1.6 1.9	1.8

Date	**25 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	15:50	0.15	15.9 15.9	15.9	9.412 9.41	9.4	93.3 93.1	93.2	1.9 1.9	1.9	7.63 7.63	7.6	0.22 0.22	0.22	2.9 2.8	2.9

Date	**27 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:25	0.15	17.3 17.3	17.3	9.66 9.63	9.6	98.3 97.9	98.1	1.5 1.5	1.5	7.73 7.73	7.7	0.05 0.05	0.05	3.2 4.8	4.0

Date	**29 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	13:25	0.15	16.2 16.2	16.2	9.52 9.67	9.6	96.8 98.3	97.55	2.0 2.1	2.0	7.24 7.24	7.2	0.03 0.03	0.03	7.2 3.5	5.4

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M6a	11:50	0.15	22 22	22	8.86 8.85	8.9	101.2 101.0	101.1	4.2 4.2	4.2	8.16 8.16	8.2	0.05 0.05	0.05	38.6 25.2	31.9

Water Quality Monitoring Results
Location: D2a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	12:45	0.30	21.7	21.7	6.99	7.0	80.4	80.3	15.4	16.1	7.63	7.6	2.40	2.40	28.8	24.4
			21.7		6.97		80.1		16.8		7.63		2.40		20	

Date	4 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:20	0.35	21	21	7.54	7.5	87.1	86.4	11.0	11.0	8.93	8.9	2.44	2.44	34	43.3
			21		7.47		85.6		11.1		8.93		2.44		52.6	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	13:15	0.30	22.1	22.1	7.48	7.5	87.0	86.8	12.4	12.4	8.07	8.1	2.43	2.43	21.4	29.0
			22.1		7.45		86.6		12.4		8.07		2.43		36.6	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	15:10	0.35	23.6	23.6	6.71	6.7	80.4	79.8	8.4	8.4	7.67	7.7	2.55	2.55	45.8	36.2
			23.6		6.75		79.2		8.4		7.67		2.55		26.6	

Date	10 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:30	0.30	22.7	22.7	7.46	7.5	87.7	87.5	10.6	10.3	8.17	8.2	2.55	2.55	18.4	16.8
			22.7		7.44		87.3		10.0		8.17		2.55		15.2	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:35	0.30	21.6	21.6	7.42	7.4	86.6	86.0	5.5	5.6	7.86	7.9	2.71	2.71	13.5	13.0
			21.6		7.41		85.3		5.7		7.86		2.71		12.5	

Date	15 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:20	0.35	22.8	22.8	7.62	7.6	89.2	89.1	8.1	7.9	9.06	9.1	2.64	2.64	20	19.6
			22.8		7.59		89.0		7.6		9.06		2.64		19.1	

Date	17 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	13:05	0.30	21.1	21.1	7.69	7.7	87.5	87.3	9.8	9.9	7.97	8.0	2.67	2.67	36.2	32.4
			21.1		7.67		87.1		10.0		7.97		2.67		28.6	

Date	19 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:00	0.30	23.7	23.7	7.02	7.0	84.3	83.7	14.4	14.3	8.40	8.4	2.76	2.76	34.2	30.8
			23.7		6.96		83.1		14.1		8.40		2.76		27.3	

Date	22 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	12:30	0.30	19.1	19.1	8.16	8.1	88.6	87.9	13.0	13.1	7.76	7.8	2.62	2.62	34.2	30.8
			19.1		8.03		87.2		13.2		7.76		2.62		27.3	

Date	25 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	17:00	0.30	17.7	17.7	8.65	8.6	92.1	91.7	19.0	18.7	7.63	7.6	3.60	3.60	14.6	15.3
			17.7		8.57		91.2		18.4		7.63		3.60		15.9	

Date	27 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:25	0.40	18.8	18.8	8.67	8.6	94.2	93.7	17.2	16.8	8.64	8.6	2.84	2.84	28.1	28.0
			18.8		8.57		93.2		16.4		8.64		2.84		27.9	

Date	29 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	14:25	0.35	18.7	18.7	8.42	8.4	91.3	91.2	15.7	15.2	8.84	8.8	2.80	2.80	25.6	23.5
			18.7		8.37		91.1		14.6		8.84		2.80		21.3	

Date	31 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D2a	12:55	0.30	22.1	22.1	7.95	7.9	92.5	91.9	17.8	17.4	8.68	8.7	2.50	2.50	20.5	19.4
			22.1		7.84		91.2		16.9		8.68		2.50		18.2	

Water Quality Monitoring Results
Location: M7a

Date	2 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	12:05	0.15	21.1	21.1	7.12	7.0	79.4	78.8	1.2	1.2	7.46	7.5	0.11	0.1	4.2	4.0
			21.1		6.95		78.2		1.2		7.46		0.11		3.8	

Date	4 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	13:45	0.20	21.6	21.6	7.48	7.4	84.2	83.3	0.9	0.8	7.73	7.7	0.11	0.1	2.4	2.3
			21.6		7.31		82.4		0.8		7.73		0.11		2.2	

Date	6 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	12:45	0.25	22.9	22.9	7.3	7.3	84.3	83.9	2.0	2.0	7.72	7.7	0.13	0.1	6.5	6.3
			22.9		7.24		83.5		2.0		7.72		0.13		6.1	

Date	8 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	14:35	0.20	21.6	21.6	7.32	7.3	83.2	83	1.1	1.1	7.46	7.5	0.11	0.1	4.3	4.4
			21.6		7.32		82.8		1.1		7.46		0.11		4.5	

Date	10 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	13:55	0.20	22.3	22.3	7.44	7.4	84.2	83.65	5.9	5.9	7.69	7.7	0.11	0.1	4.5	5.2
			22.3		7.3		83.1		5.9		7.69		0.11		5.9	

Date	12 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	14:00	0.25	21.6	21.6	7.44	7.4	84.2	83.65	7.4	7.3	7.36	7.4	0.12	0.1	6	6.2
			21.6		7.36		83.1		7.2		7.36		0.12		6.4	

Date	15 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	
M7a	13:45	0.25	22.7	22.7	7.24	7.2	83.1	82.8	1.7	1.6	7.37	7.4	0.12	0.1	2.4	2.7
			22.7		7.14		82.5		1.6		7.37		0.12		2.9	

Date	17 Jan 24															
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DO (%)		Turbidity (NTU)		pH		Salinity		SS(mg/L)	

M7a	12:25	0.30	21.3	21.3	7.28	7.2	81.6	81	0.8	0.8	7.44	7.4	0.13	0.1	8.8	8.6
			21.3		7.19		80.4		0.8		7.44		0.13		8.3	

Date	**19 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M7a	13:25	0.25	23.5	23.5	6.87	6.8	80.4	79.8	1.9	1.9	8.01	8.0	0.12	0.1	8.2	7.2
			23.5		6.74		79.2		1.8		8.01		0.12		6.2	

Date	**22 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M7a	12:10	0.30	19.4	19.4	7.27	7.2	78.4	77.95	8.9	8.4	7.10	7.1	0.12	0.1	8.5	8.6
			19.4		7.18		77.5		7.9		7.10		0.12		8.6	

Date	**25 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M7a	16:30	0.30	17.4	17.4	7.85	7.8	81.6	81.15	1.0	1.0	7.21	7.2	0.06	0.1	6.3	4.9
			17.4		7.74		80.7		1.0		7.21		0.06		3.5	

Date	**27 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M7a	13:55	0.30	18.2	18.2	8.07	8.1	85.5	85.35	2.0	2.0	6.98	7.0	0.11	0.1	3.4	3.1
			18.2		8.03		85.2		2.0		6.98		0.11		2.7	

Date	**29 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M7a	13:55	0.30	17.8	17.8	7.94	7.9	84.5	84.35	0.7	0.7	6.98	7.0	0.12	0.1	5.3	5.7
			17.8		7.93		84.2		0.8		6.98		0.12		6	

Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
M7a	12:25	0.30	21.3	21.3	7.4	7.3	83.6	82.5	3.9	3.8	7.64	7.6	0.14	0.1	9.5	10.4
			21.3		7.28		81.4		3.7		7.64		0.14		11.3	

Water Quality Monitoring Results
Location: D5a

Date	2 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	12:25	0.40	22.1	22.1	7.42	7.4	86.3	85.6	5.9	5.9	7.48	7.5	2.23	2.2	5.3	4.6
			22.1		7.32		84.8		6.0		7.48		2.23		3.8	
Date	**4 Jan 24**																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:00	0.20	21.56	21.6	7.44	7.4	85.2	84.9	2.6	2.7	7.67	7.7	2.85	2.9	3.1	3.2
			21.6		7.34		84.6		2.7		7.67		2.85		3.2	

Date	6 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	13:00	0.15	22.9	22.9	6.94	6.9	81.7	81.5	5.3	5.3	7.89	7.9	3.02	3.0	4.8	5.0
			22.9		6.89		81.2		5.3		7.89		3.02		5.1	

Date	8 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:50	0.20	22.9	22.9	7.24	7.2	85.4	84.9	2.5	2.5	8.16	8.2	2.98	3.0	5.2	5.5
			22.9		7.17		84.3		2.6		8.16		2.98		5.8	
Date	**10 Jan 24**																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:10	0.30	22	22.0	6.84	6.8	79.3	78.4	4.6	4.6	7.86	7.9	2.78	2.8	15.8	13.2
			22		6.68		77.4		4.6		7.86		2.78		10.6	

Date	12 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:20	0.20	22.1	22.1	5.66	5.6	66.3	65.1	8.7	8.8	7.43	7.4	3.51	3.5	12.6	12.4
			22.1		5.45		63.8		8.9		7.43		3.51		12.1	

Date	15 Jan 24																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:00	0.30	22.5	22.5	6.07	6.0	71.2	70.1	3.7	3.7	7.35	7.4	4.50	4.5	5.1	4.9
			22.5		5.85		69.0		3.6		7.35		4.50		4.7	
Date	**17 Jan 24**																	
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	12:40	0.25	20.6	20.6	6.34	6.3	71.5	70.7	6.1	6.0	7.49	7.5	3.27	3.3	5.8	6.6
			20.6		6.25		69.8		6.0		7.49		3.27		7.4	

Date	19 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	13:40	0.20	24.1	24.1	5.16	5.2	62.9	62.3	12.5	12.7	8.15	8.2	5.15	5.2	35.1	34.0
			24.1		5.15		61.7		12.9		8.15		5.15		32.9	

Date	22 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	12:25	0.20	18.9	18.9	5.86	5.8	64.9	64.2	18.1	18.0	6.99	7.0	5.83	5.8	35.1	34.0
			18.9		5.75		63.5		17.9		6.99		5.83		32.9	
Date	**25 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	16:45	0.10	17	17.0	7.48	7.4	81.2	441.0	5.0	5.0	7.11	7.1	8.40	8.4	8.3	8.6
			17		7.41		800.7		5.0		7.11		8.40		8.8	

Date	27 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:20	0.35	18.4	18.4	8.51	8.5	94.5	94.3	4.1	4.1	6.95	7.0	7.74	7.7	39.5	35.6
			18.4		8.44		94.0		4.1		6.95		7.74		31.6	

Date	29 Jan 24															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	14:10	0.35	18.2	18.2	8.37	8.4	93.5	93.3	3.5	3.6	7.24	7.2	0.12	0.1	9.3	9.5
			18.2		8.34		93.1		3.8		7.24		0.12		9.7	
Date	**31 Jan 24**															
Location	**Time**	**Depth (m)**	**Temp (oC)**		**DO (mg/L)**		**DO (%)**		**Turbidity (NTU)**		**pH**		**Salinity**		**SS(mg/L)**	
D5a	12:40	0.20	21.8	21.8	7.01	6.9	83.4	82.5	12.6	12.2	7.74	7.7	7.50	7.5	17.3	16.8
			21.8		6.74		81.5		11.8		7.74		7.50		16.3	

Appendix J2

Summary of Exceedance Records

Summary of Investigation results of Exceedance of A/L Level for Water Quality Monitoring

Date	Station	Parameter	Exceedance	Investigation	Action
10 Oct 2023	D2a	Turbidity and Suspended Solids	Limit Level	There was heavy rainstorm on 9 and 10 Oct after typhoon. The water quality in the channel was deteriorated by runoff from the surrounding environment. It was concluded that the exceedances were not project related.	Since the exceedances were non-project related, increase monitoring frequency according to the requirement of Event and Action Plan is not required.
8 Jan 2024	M1a	Turbidity and Suspended Solids	Limit Level	Turbid water was observed flowing from upstream of work area and reaching M1a and there was no construction work carried out in the respective section of nullah, and no discharge made from construction sites associated with the Project. It is concluded that the exceedances were not related to the works under the Project.	Since the exceedances were non-project related, increase monitoring frequency according to the requirement of Event and Action Plan is not required, and corrective action is not required.
19 Jan 2024	M3	Turbidity and Suspended Solids	Limit Level	Contractor of C2 advised that no pre-drill works were conducted between monitoring M1a and M3 on 19 Jan 2024, but preparation works for temporary deck was conducted. Mitigation measures such as the sandbag barrier, steel plate cover along the active work areas were in place and no muddy runoff into the Yuen Long Nullah is observed. It is concluded that the exceedances were not related to the works under the Project.	Repeat measurement of in-situ parameter turbidity was conducted on 20 January 2024 and no exceedance was recorded. As the exceedances were concluded as non-Project related, corrective action is not required.

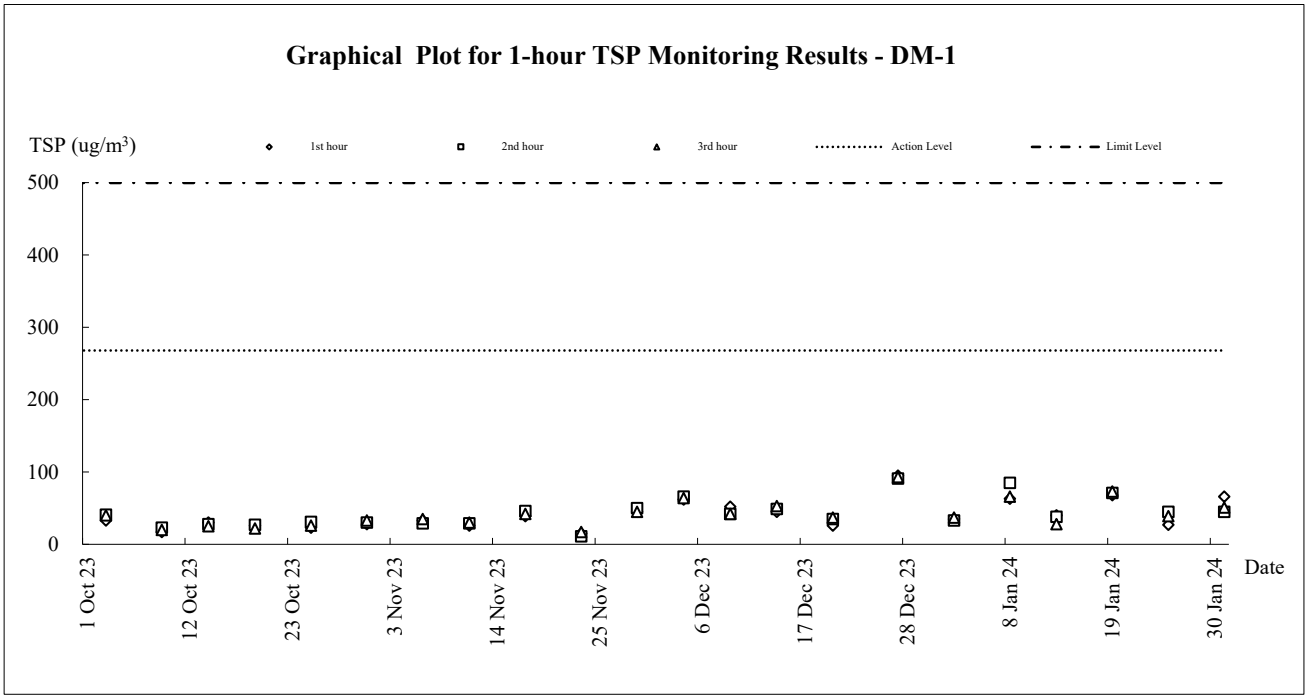
Cumulative Action/ Limit Level Exceedance for Water Quality

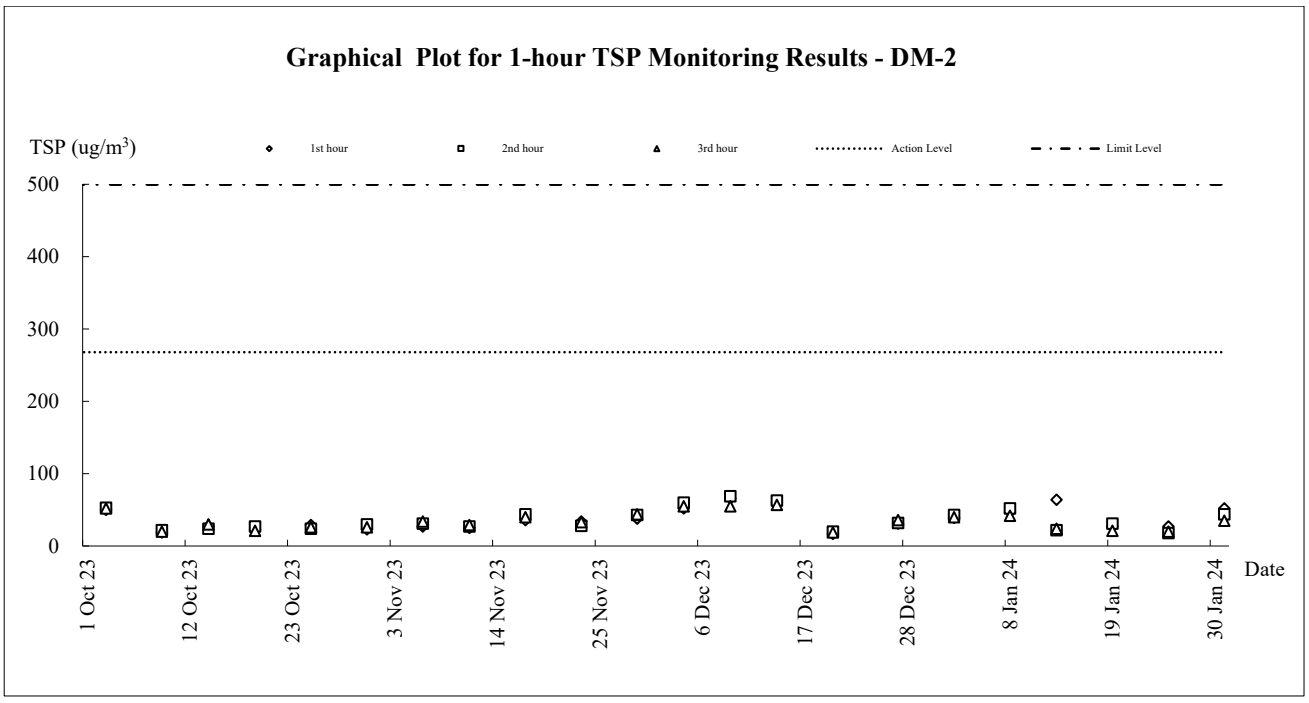
Location	Dissolved Oxygen		Turbidity		Suspended Solids		Non-project related Exceedance		Project Related Exceedance	
	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
M1a	0	0	0	**1**	0	**1**	0	**2**	0	0
M2a	0	0	0	0	0	0	0	0	0	0
M3	0	0	0	**1**	0	**1**	0	**2**	0	0
M4	0	0	0	0	0	0	0	0	0	0
D2a	0	0	0	0	0	0	0	0	0	0
No of Exceedance	0	0	0	**2**	0	**2**	0	**4**	0	0

Appendix K

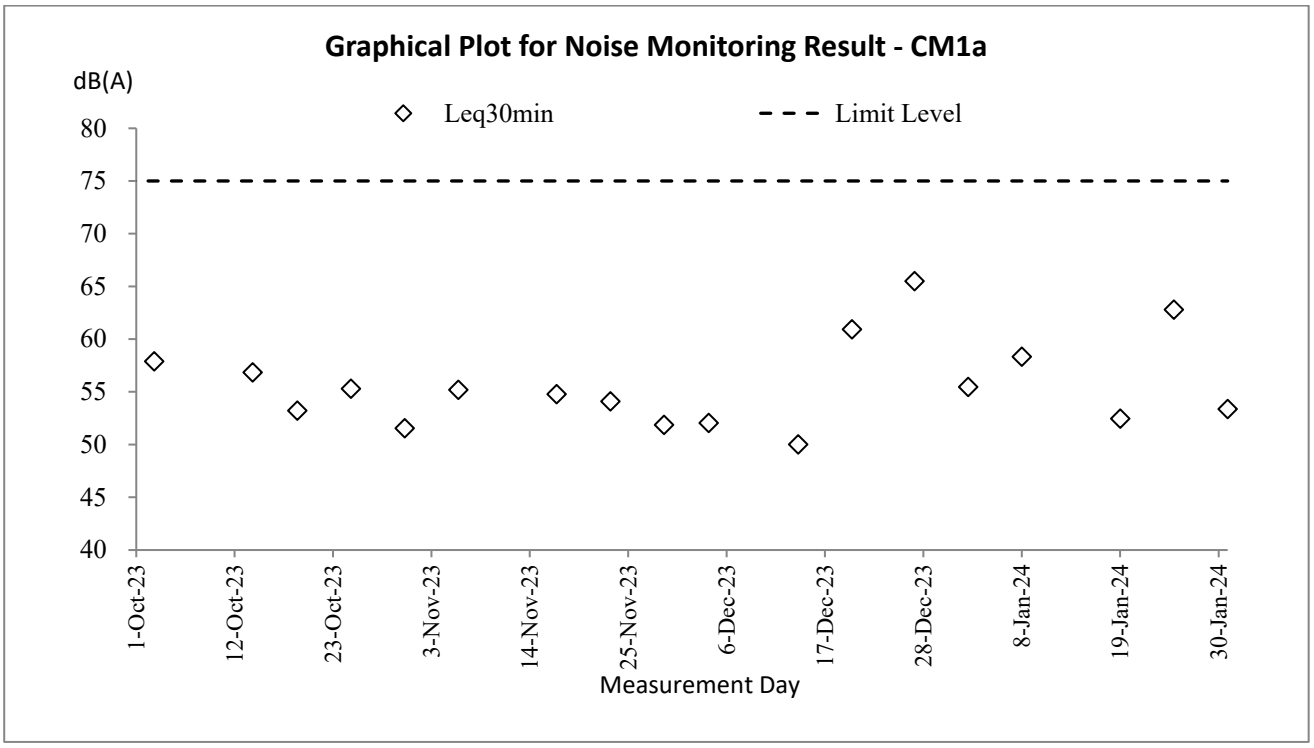
Graphical Plots for Monitoring Result

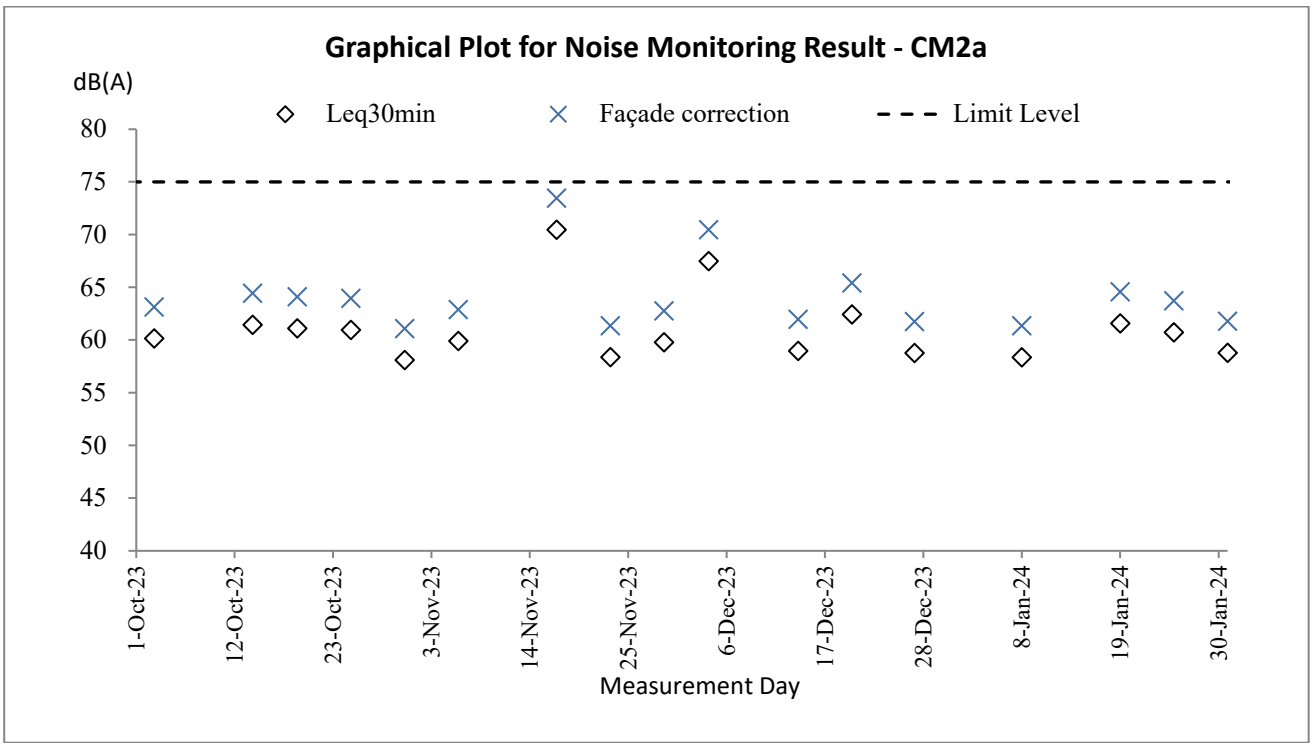
Air Quality – 1-hour TSP

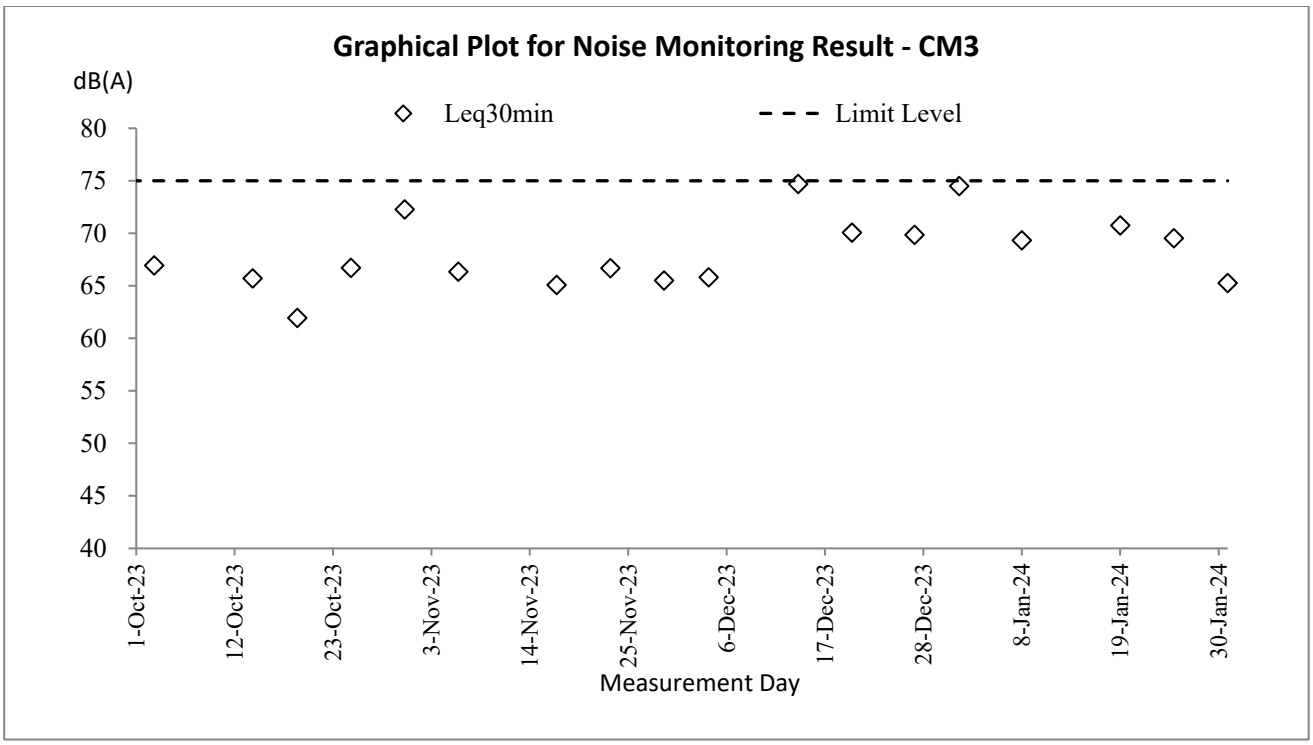


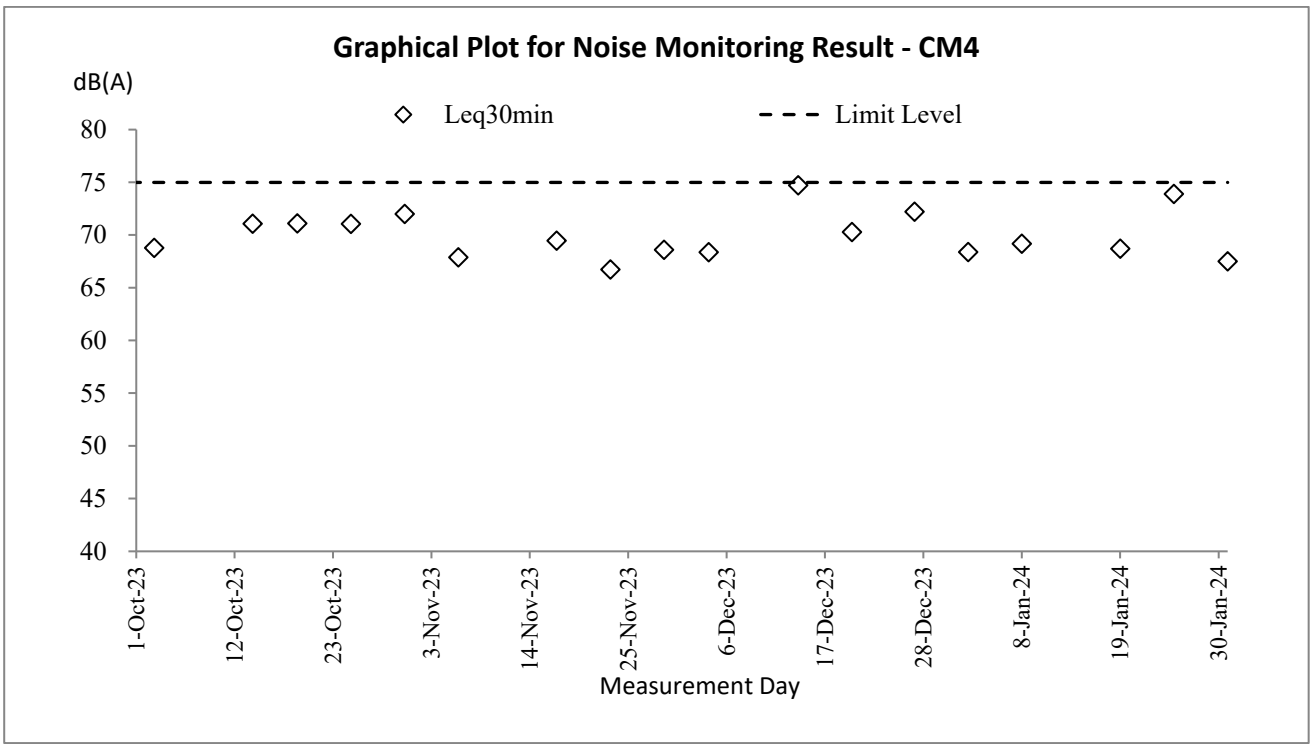


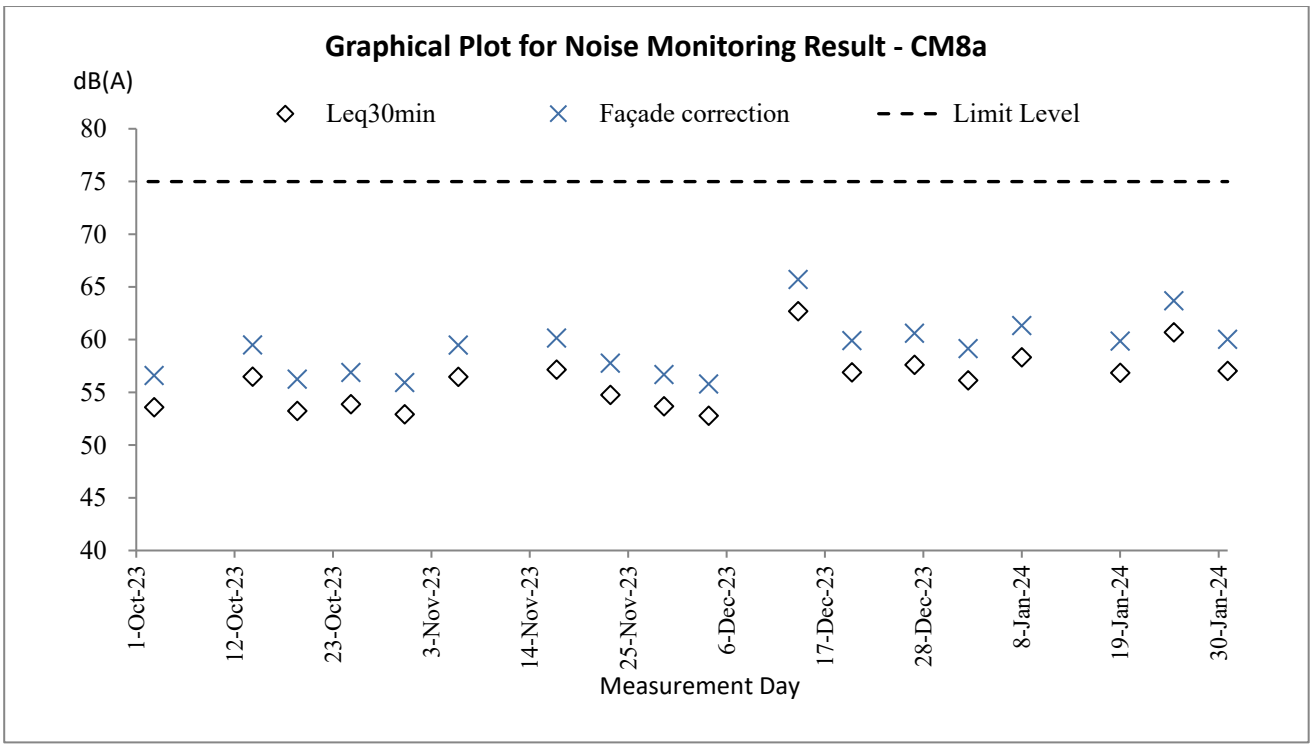
Construction Noise



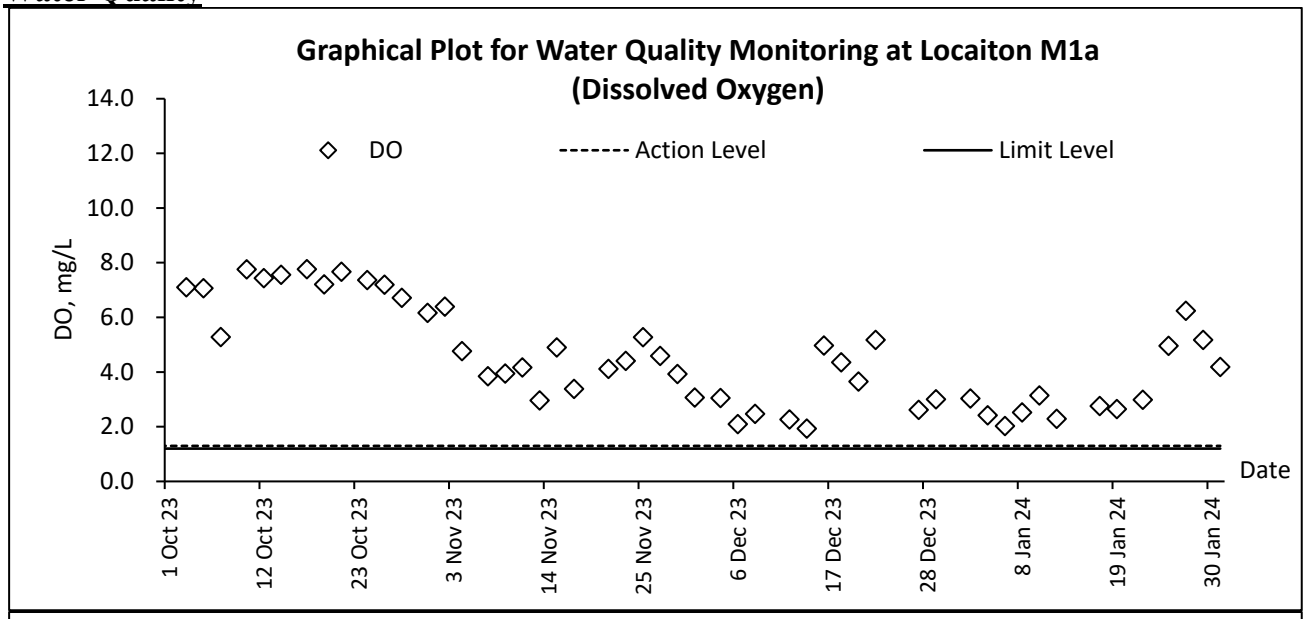


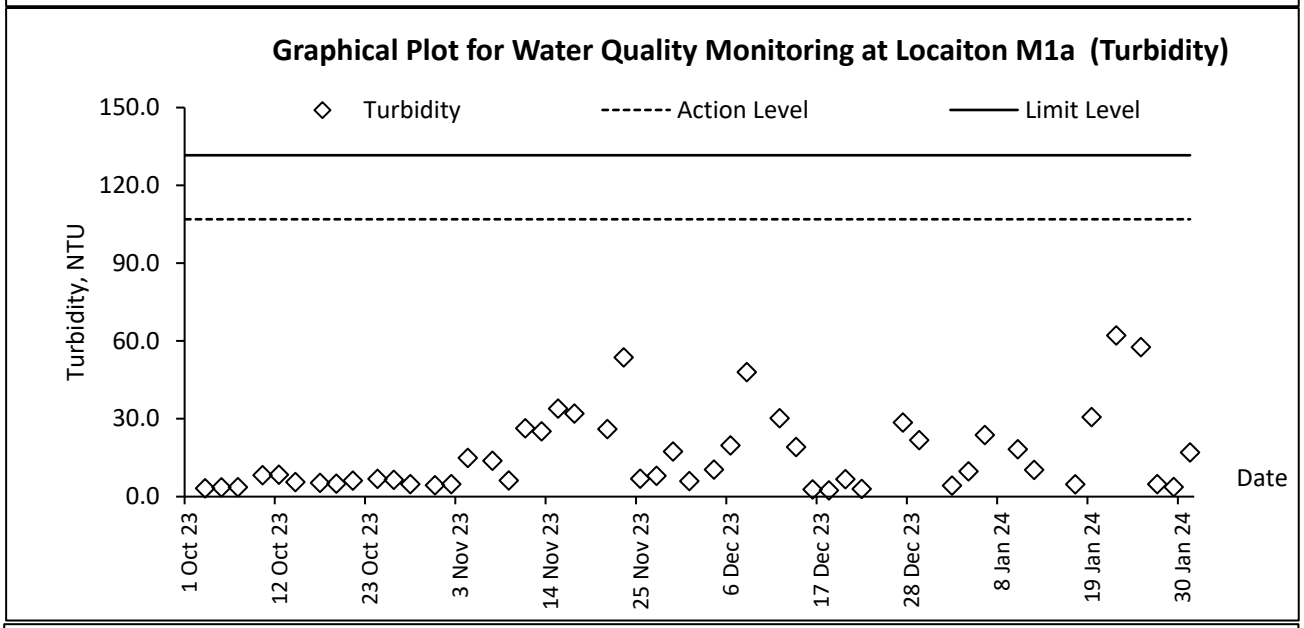

Graphical Plot for Noise Monitoring Result - CM3
dB(A)
Leq30min
Limit Level
80
75
70
65
60
55
50
45
40
1-Oct-23
12-Oct-23
23-Oct-23
3-Nov-23
14-Nov-23
25-Nov-23
6-Dec-23
17-Dec-23
28-Dec-23
8-Jan-24
19-Jan-24
30-Jan-24
Measurement Day

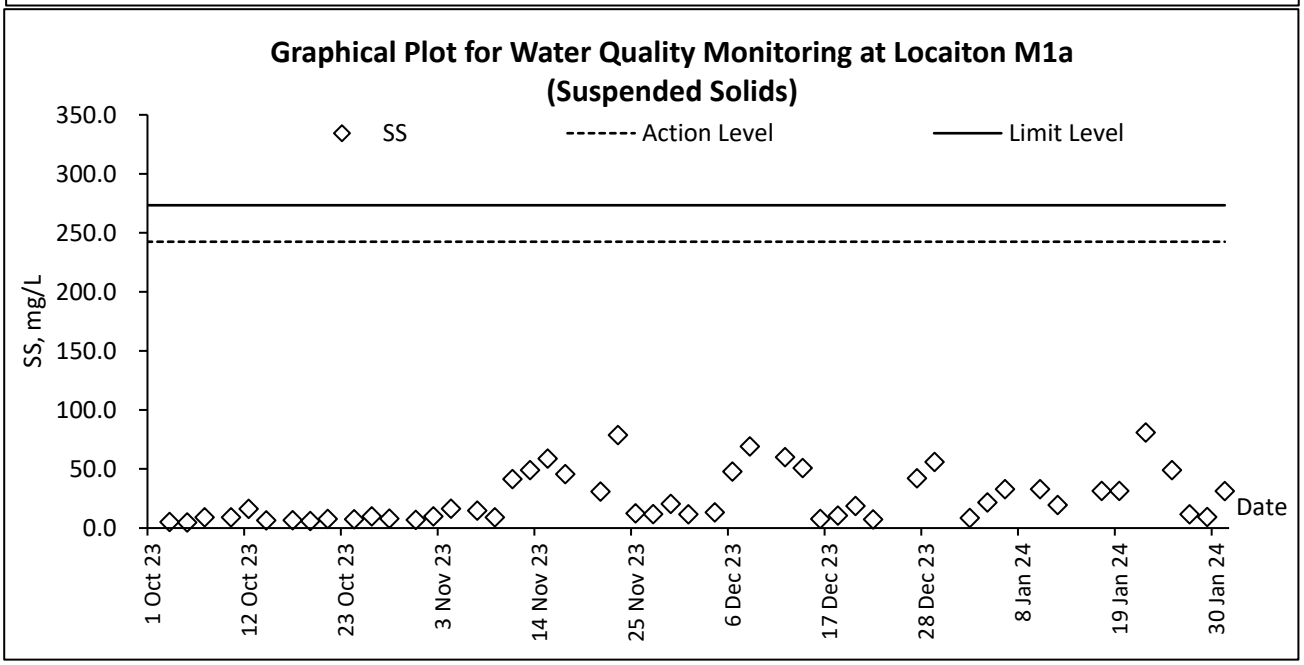

Graphical Plot for Noise Monitoring Result - CM4
dB(A)
Leq30min
Limit Level
80
75
70
65
60
55
50
45
40
1-Oct-23
12-Oct-23
23-Oct-23
3-Nov-23
14-Nov-23
25-Nov-23
6-Dec-23
17-Dec-23
28-Dec-23
8-Jan-24
19-Jan-24
30-Jan-24
Measurement Day

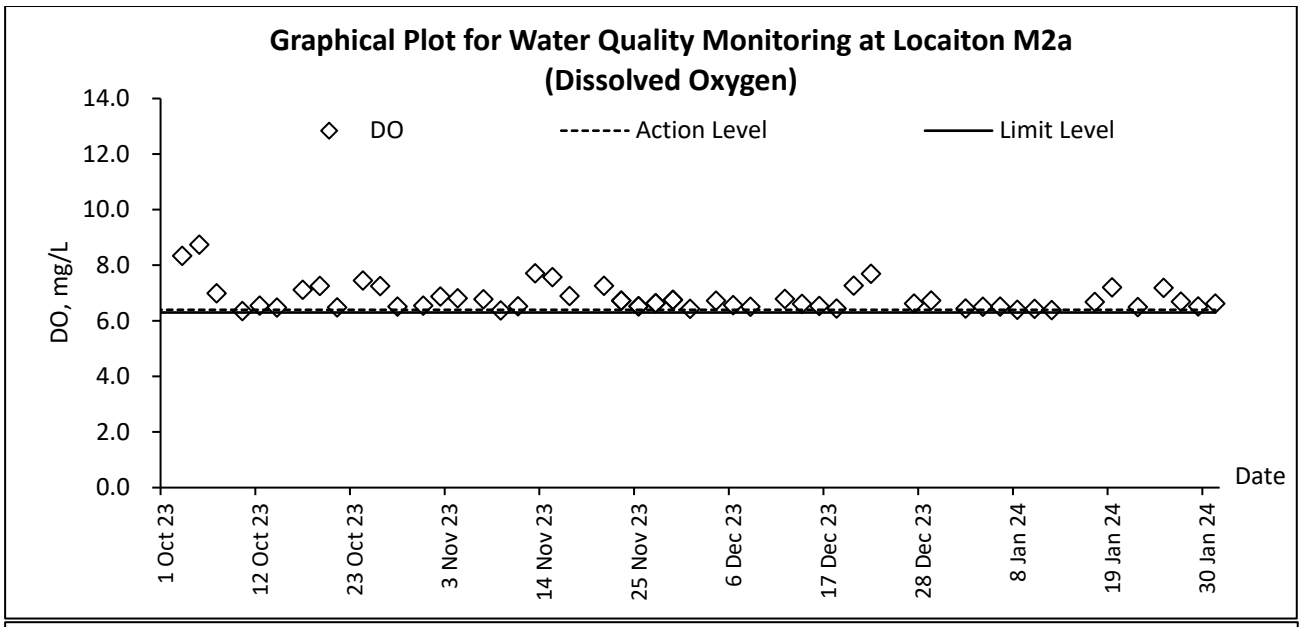

Graphical Plot for Noise Monitoring Result - CM8a
dB(A)
Leq30min
Façade correction
Limit Level
80
75
70
65
60
55
50
45
40
1-Oct-23
12-Oct-23
23-Oct-23
3-Nov-23
14-Nov-23
25-Nov-23
6-Dec-23
17-Dec-23
28-Dec-23
8-Jan-24
19-Jan-24
30-Jan-24
Measurement Day

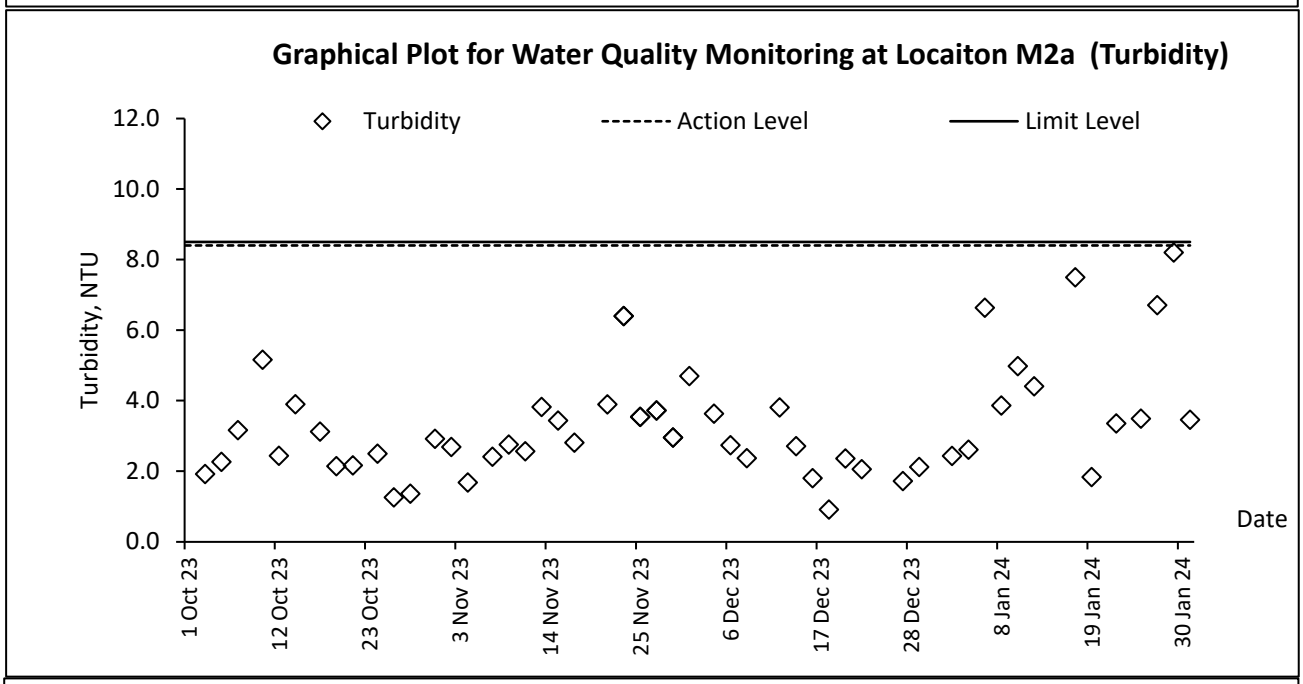
Water Quality

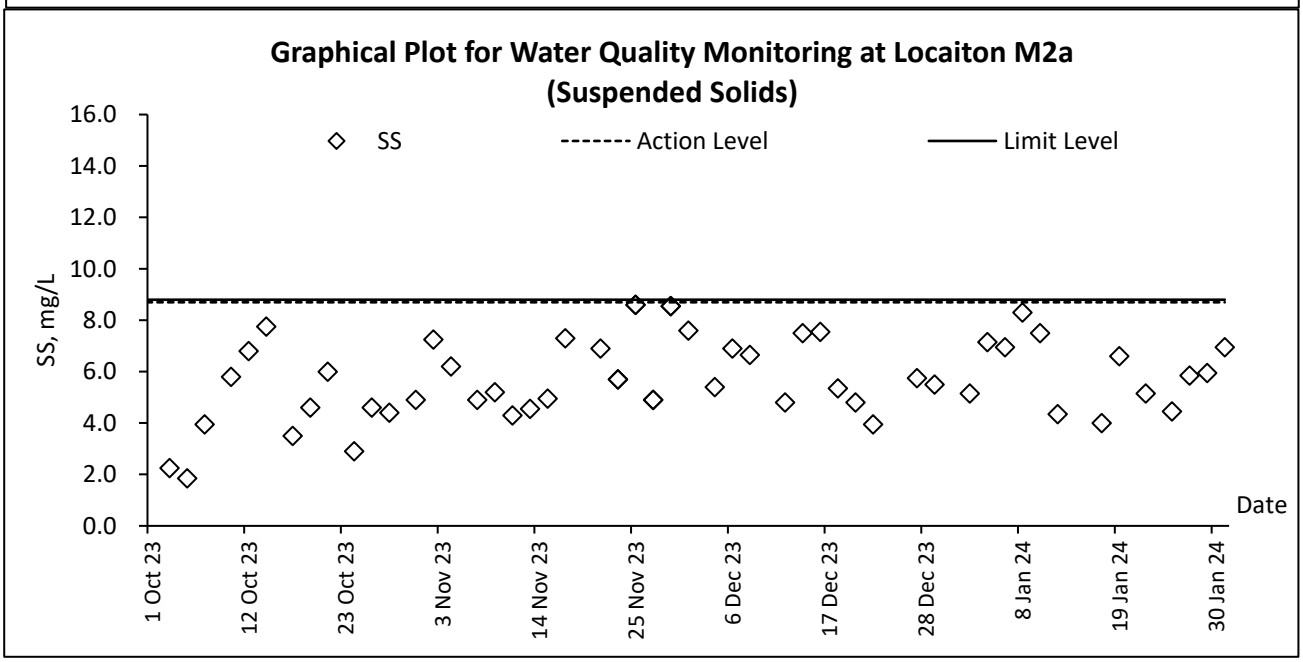


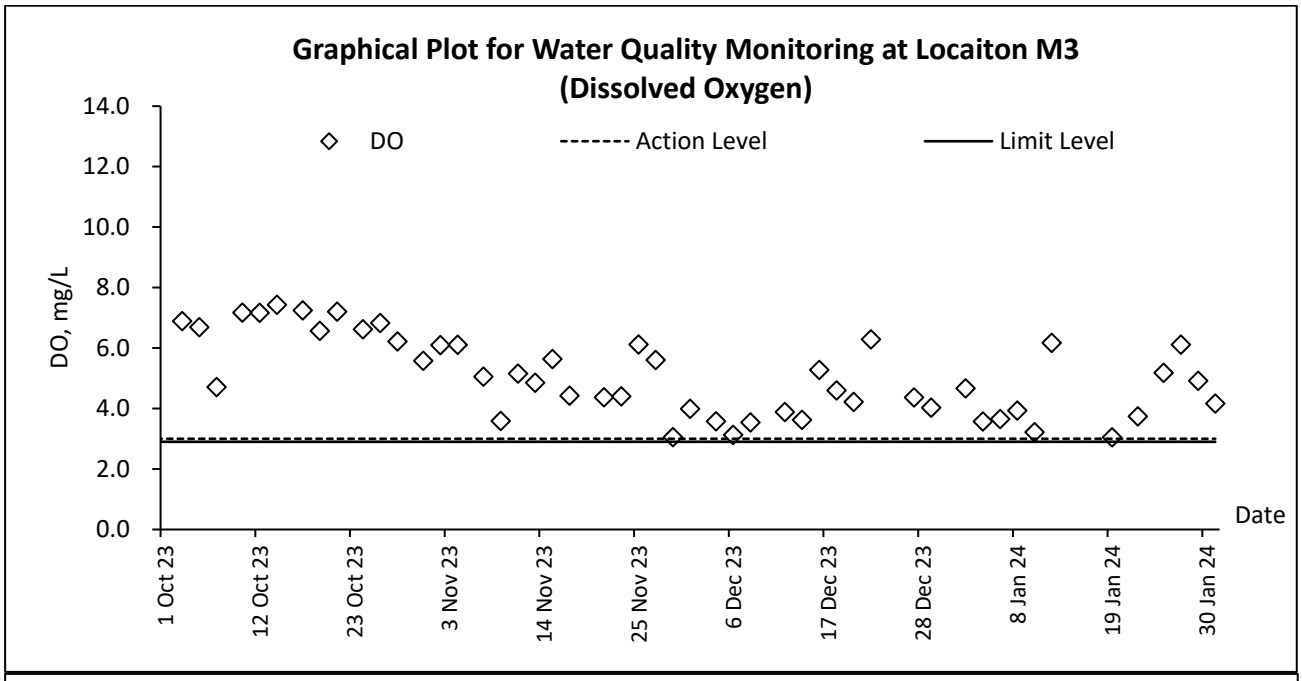


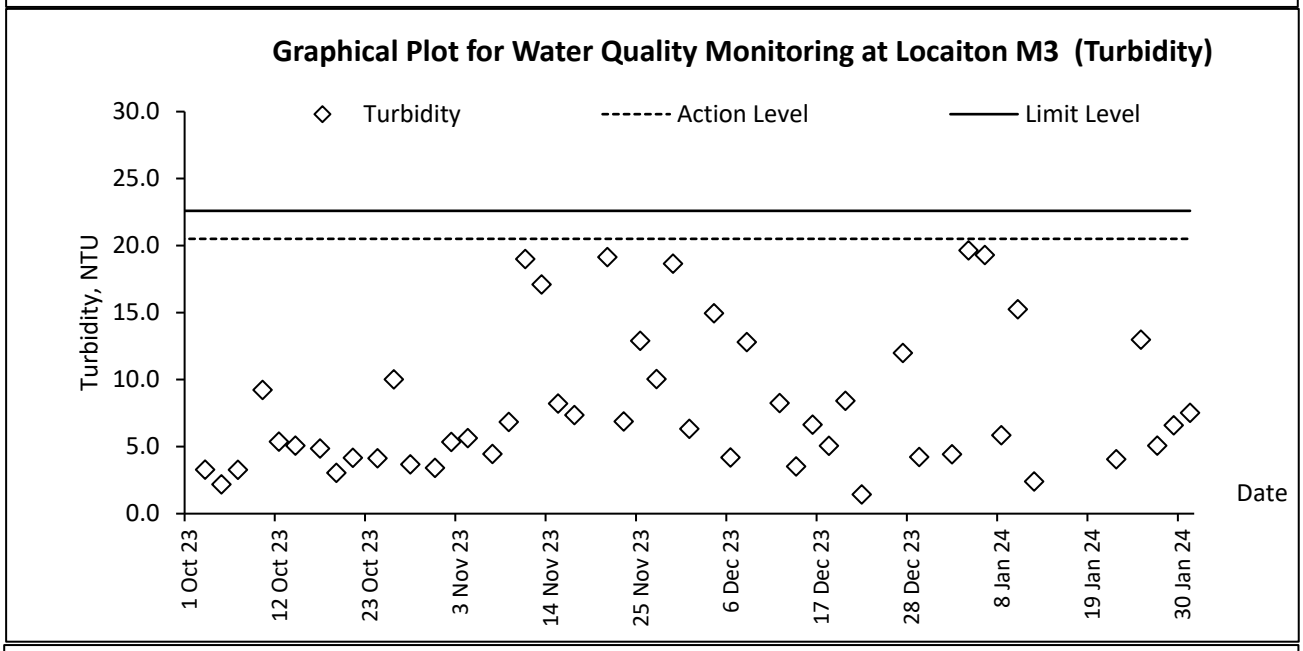


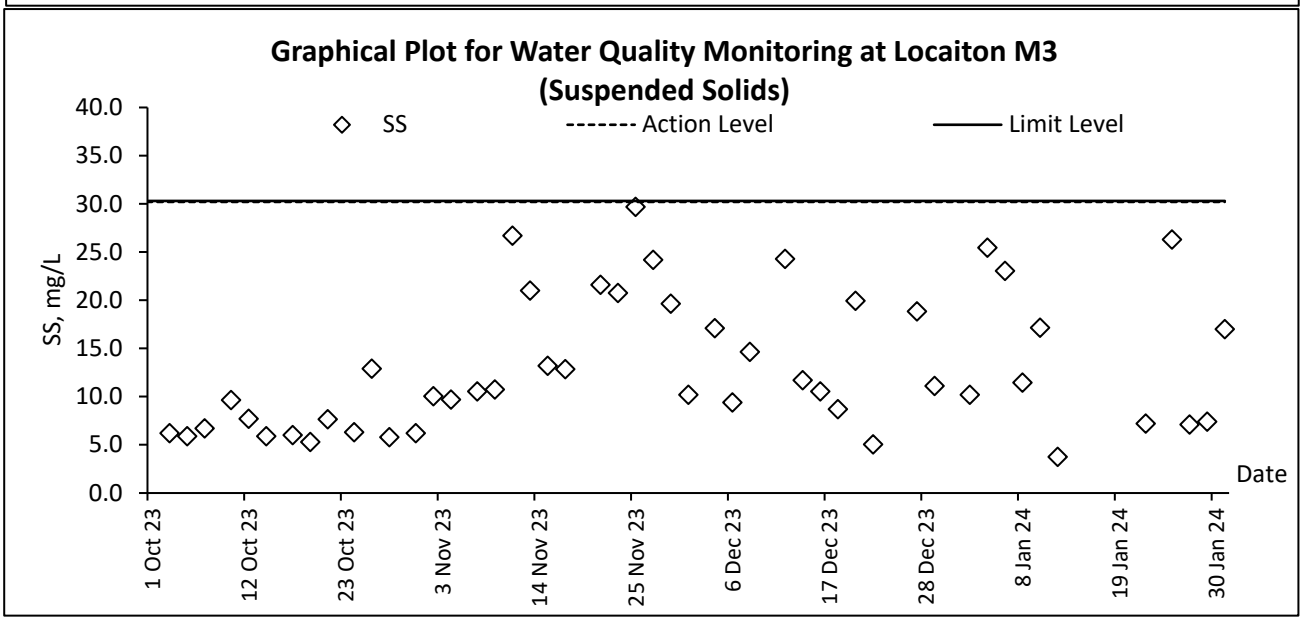

Graphical Plot for Water Quality Monitoring at Locaiton M2a
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

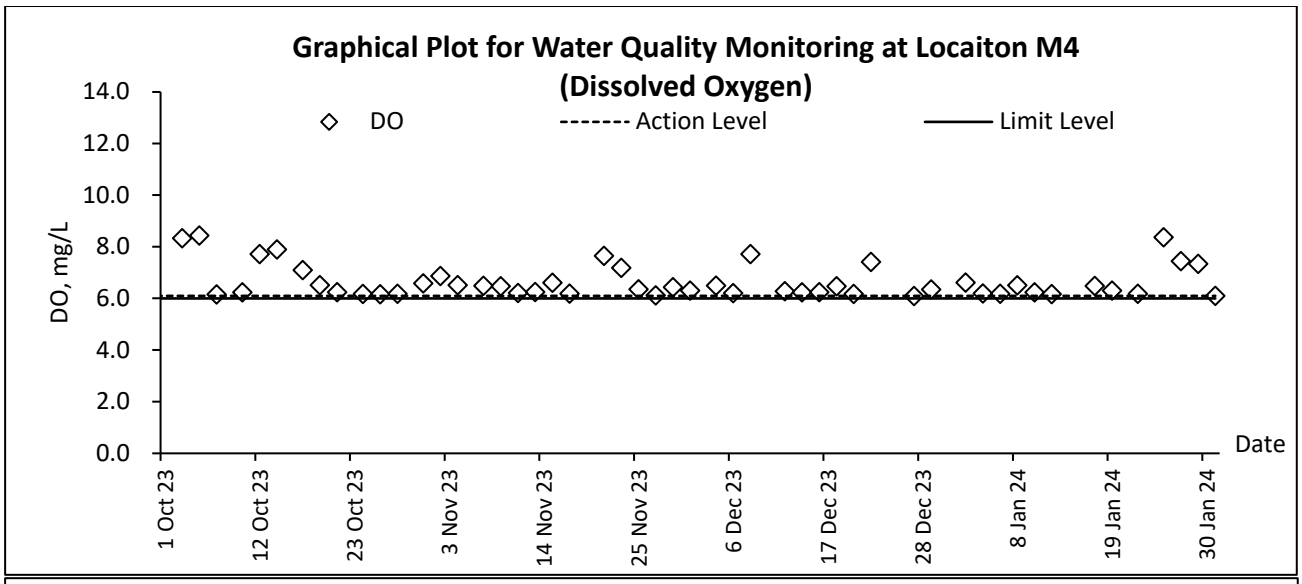

Graphical Plot for Water Quality Monitoring at Locaiton M2a (Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

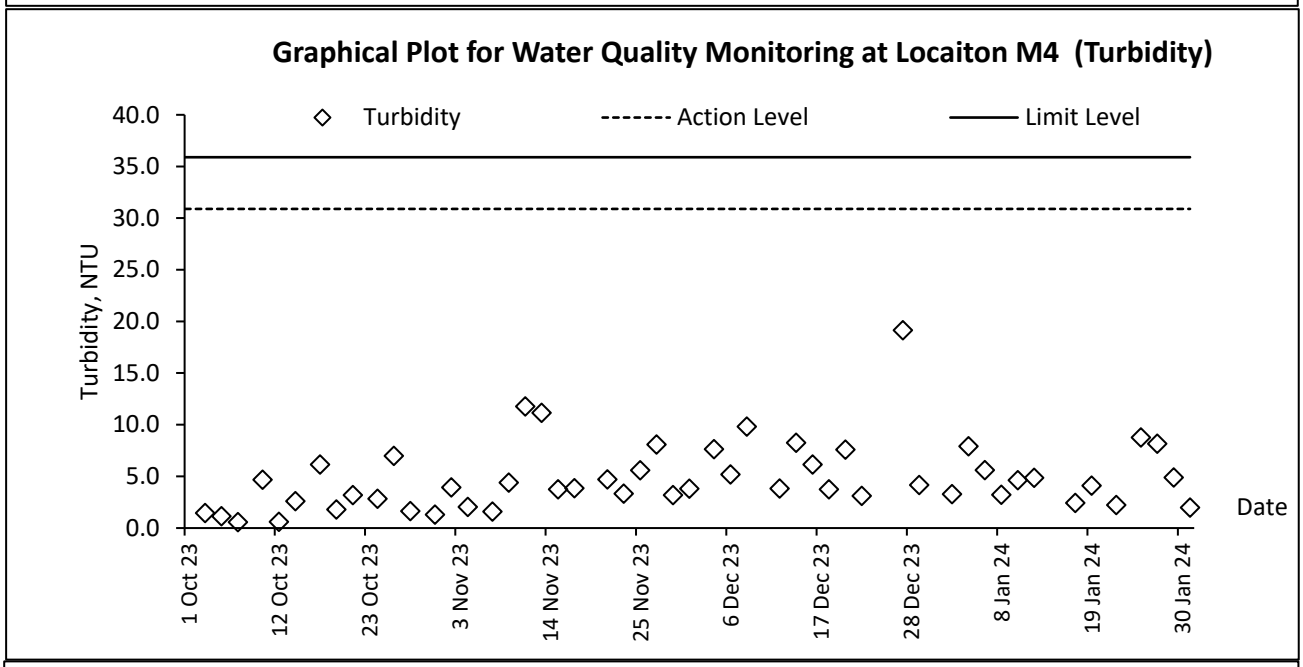

Graphical Plot for Water Quality Monitoring at Locaiton M2a
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

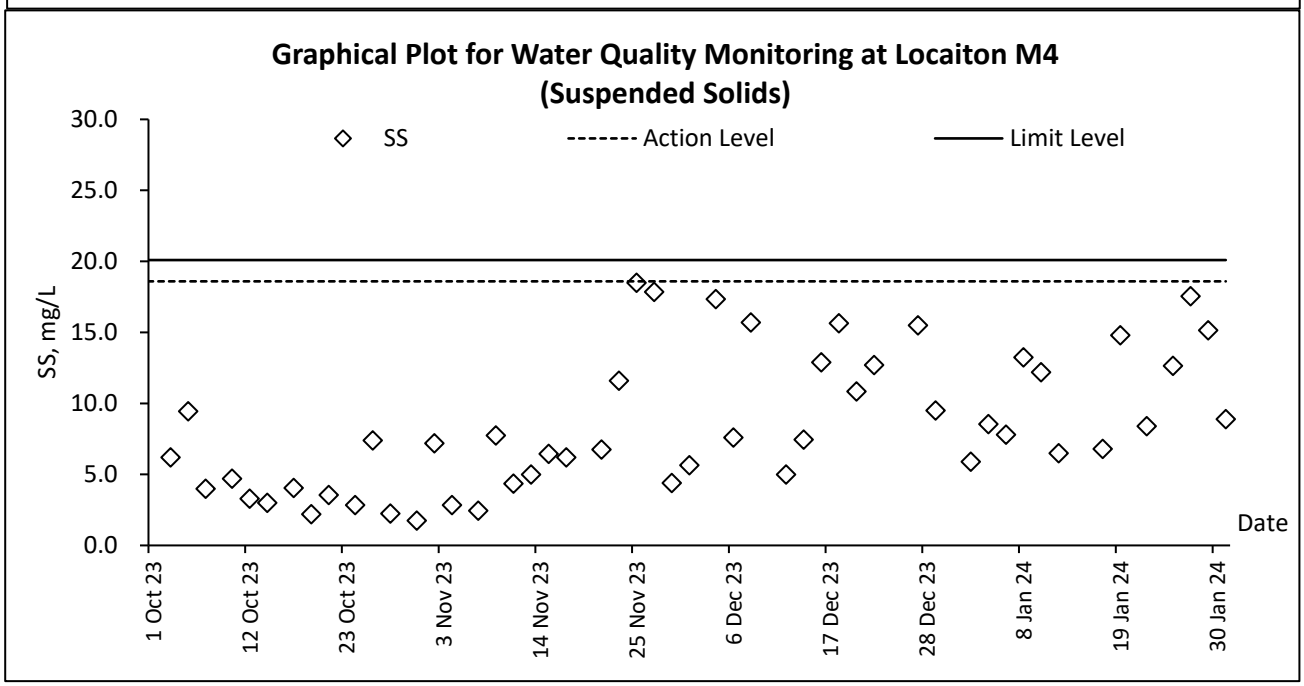

Graphical Plot for Water Quality Monitoring at Locaiton M3
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

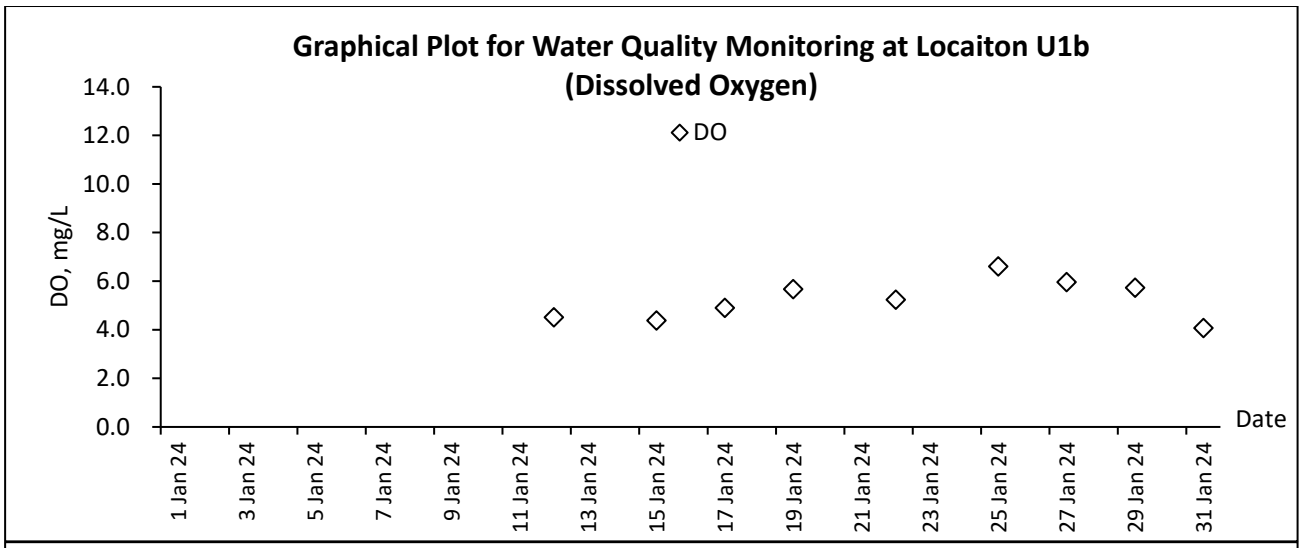

Graphical Plot for Water Quality Monitoring at Locaiton M3 (Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

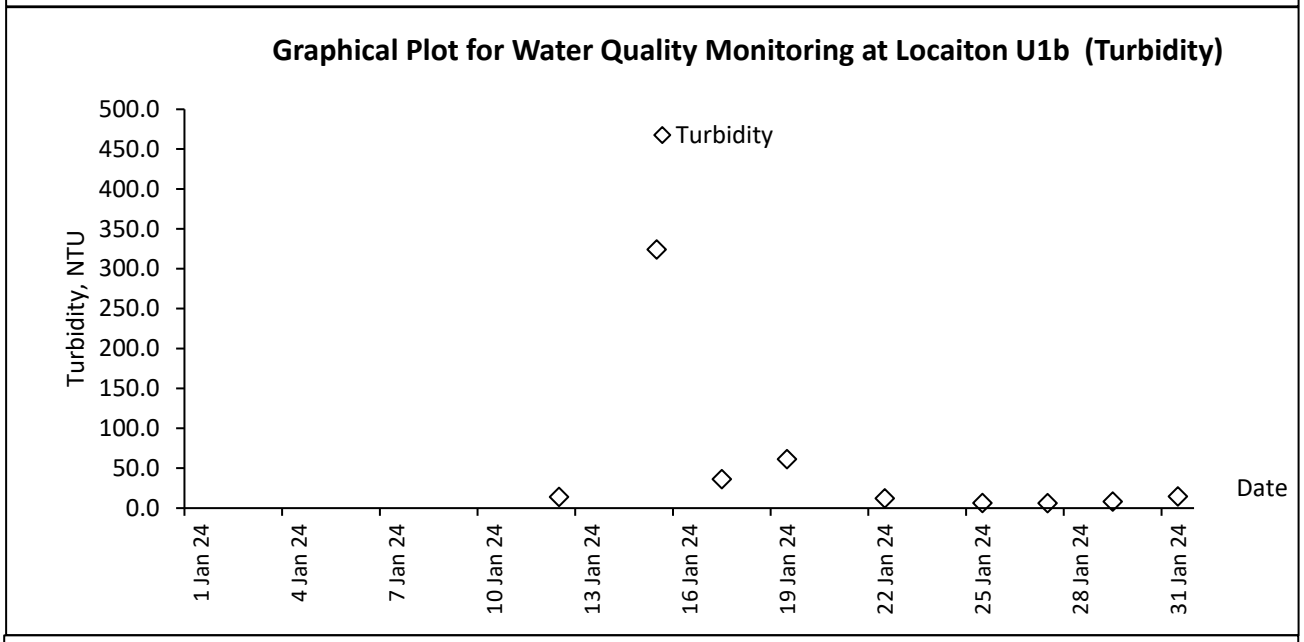

Graphical Plot for Water Quality Monitoring at Locaiton M3
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

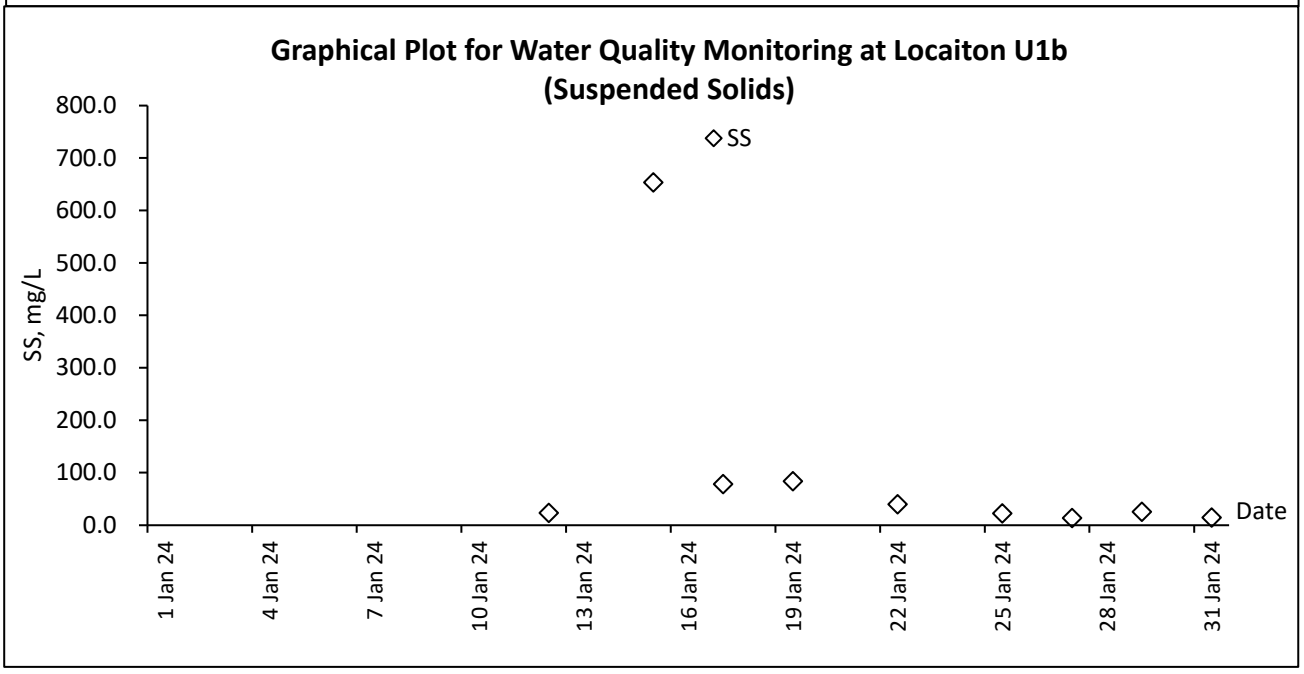

Graphical Plot for Water Quality Monitoring at Locaiton M4
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

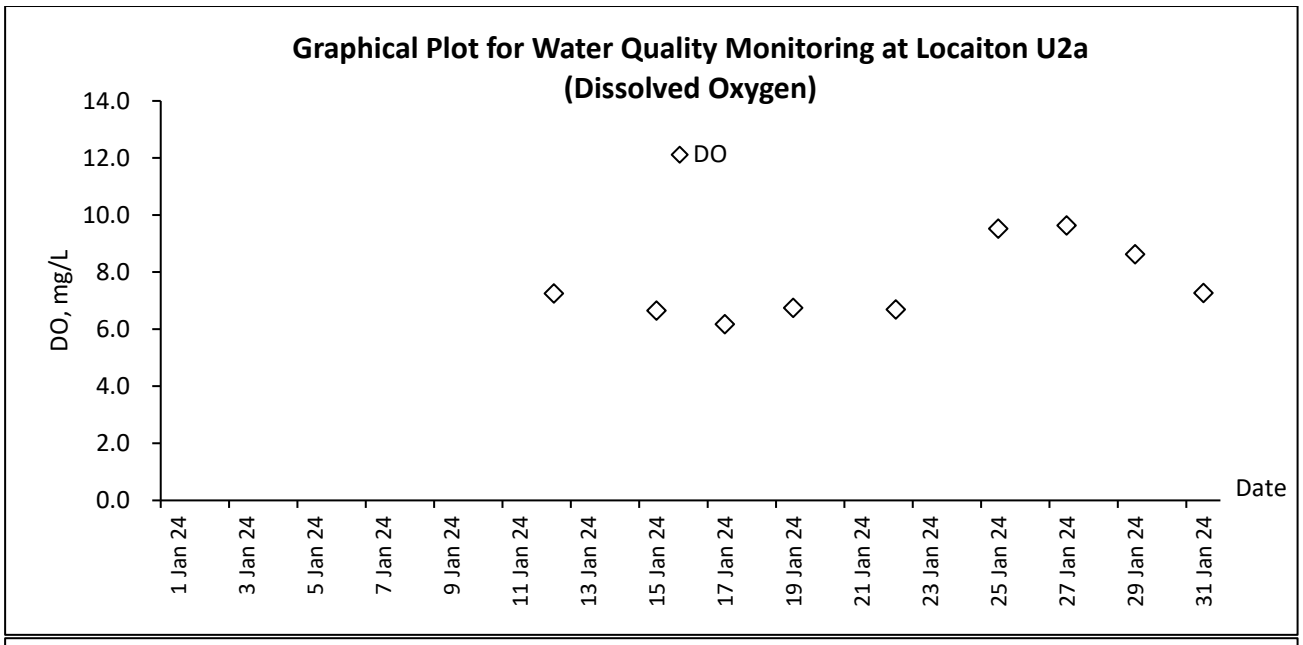

Graphical Plot for Water Quality Monitoring at Locaiton M4 (Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

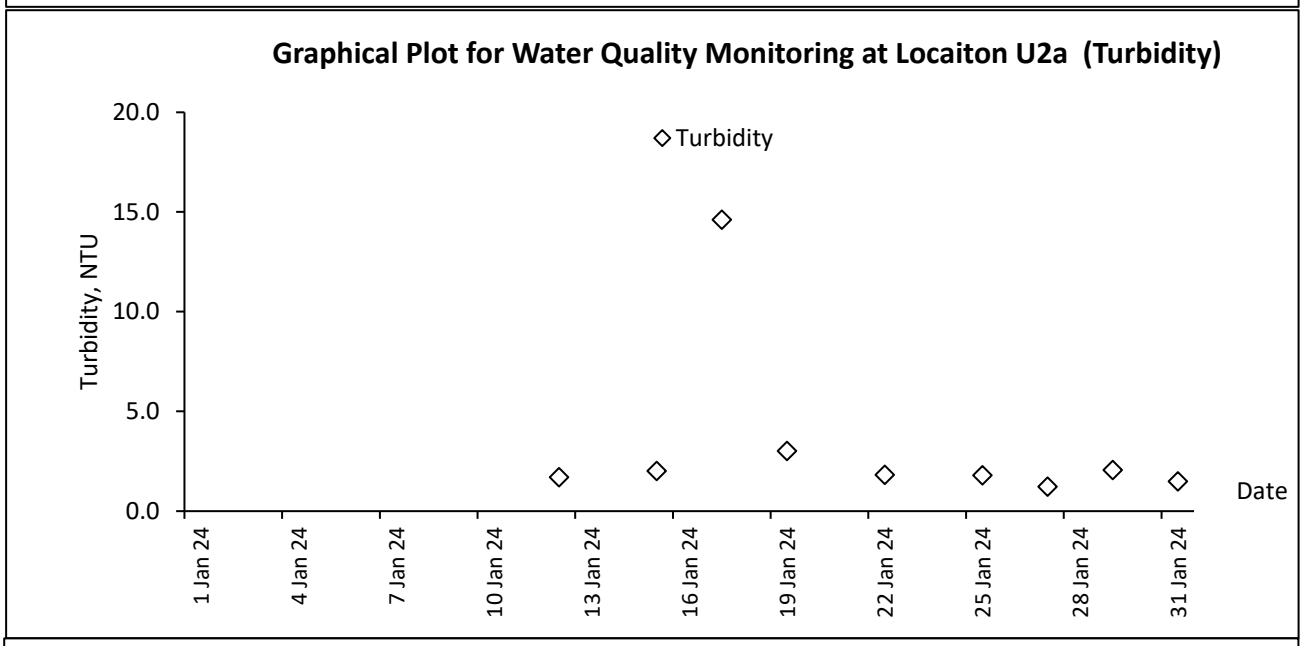

Graphical Plot for Water Quality Monitoring at Locaiton M4
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

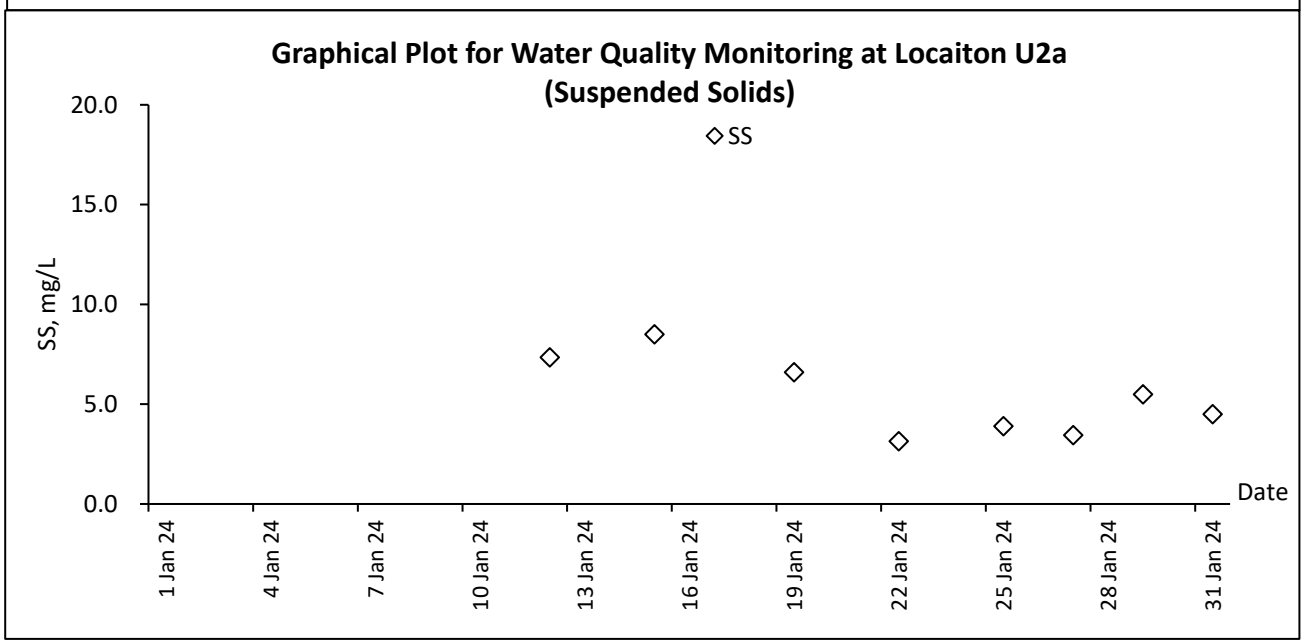

Graphical Plot for Water Quality Monitoring at Locaiton U1b
(Dissolved Oxygen)
DO
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Jan 24
3 Jan 24
5 Jan 24
7 Jan 24
9 Jan 24
11 Jan 24
13 Jan 24
15 Jan 24
17 Jan 24
19 Jan 24
21 Jan 24
23 Jan 24
25 Jan 24
27 Jan 24
29 Jan 24
31 Jan 24

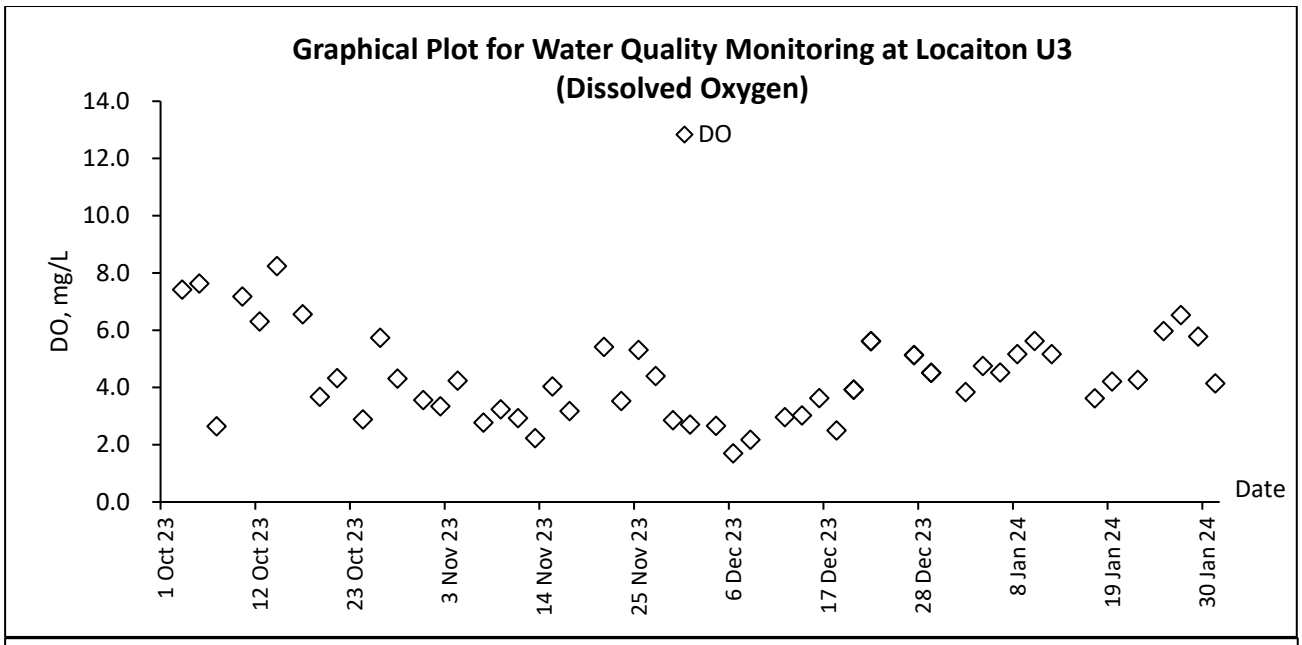

Graphical Plot for Water Quality Monitoring at Locaiton U1b (Turbidity)
Turbidity
Turbidity, NTU
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
Date
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24

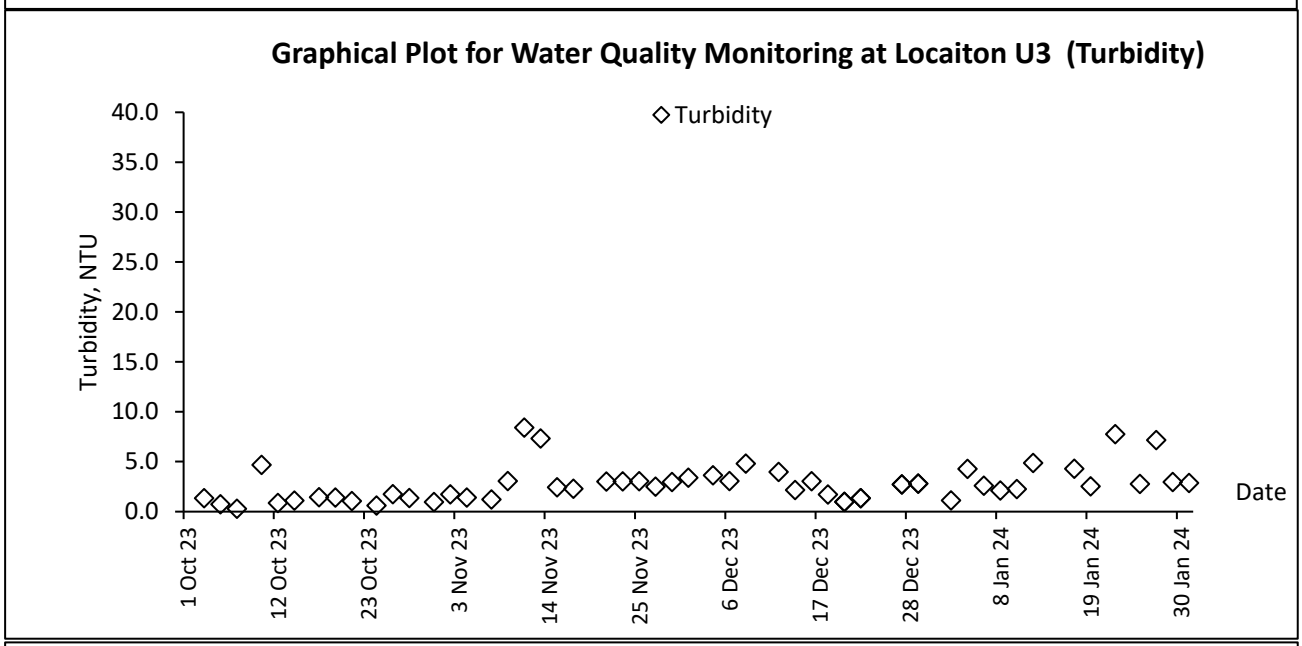

Graphical Plot for Water Quality Monitoring at Locaiton U1b
(Suspended Solids)
SS
SS, mg/L
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
Date
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24

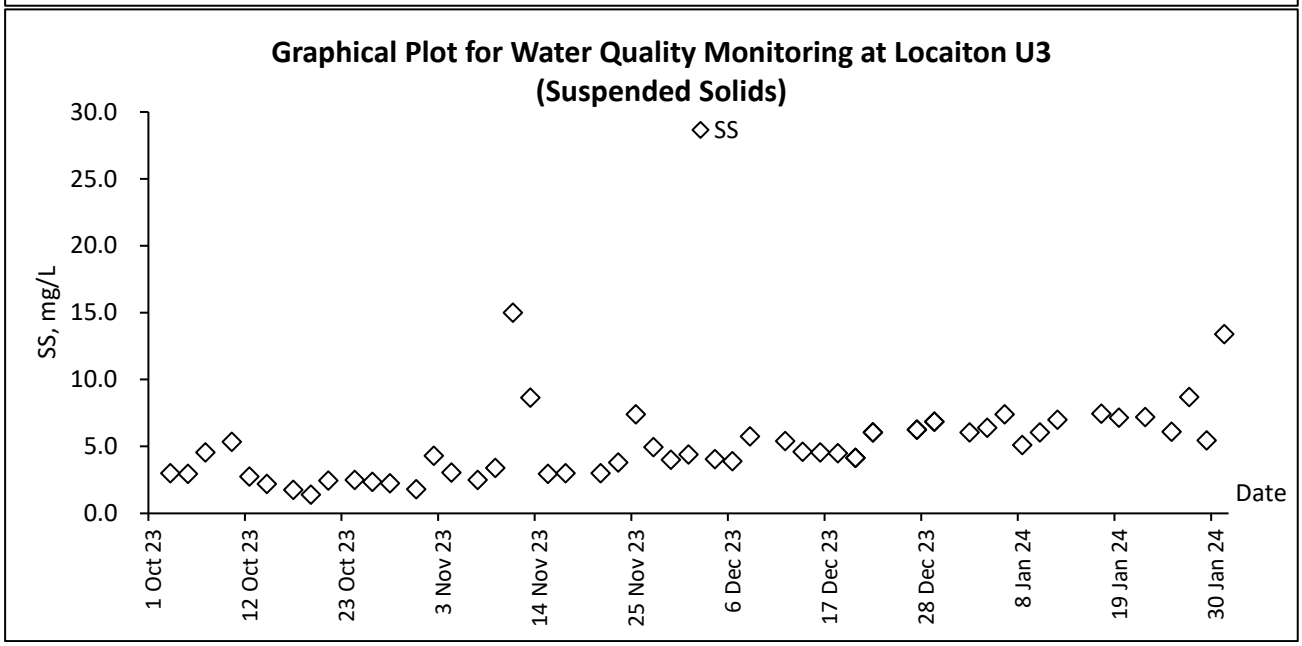

Graphical Plot for Water Quality Monitoring at Locaiton U2a
(Dissolved Oxygen)
DO
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Jan 24
3 Jan 24
5 Jan 24
7 Jan 24
9 Jan 24
11 Jan 24
13 Jan 24
15 Jan 24
17 Jan 24
19 Jan 24
21 Jan 24
23 Jan 24
25 Jan 24
27 Jan 24
29 Jan 24
31 Jan 24

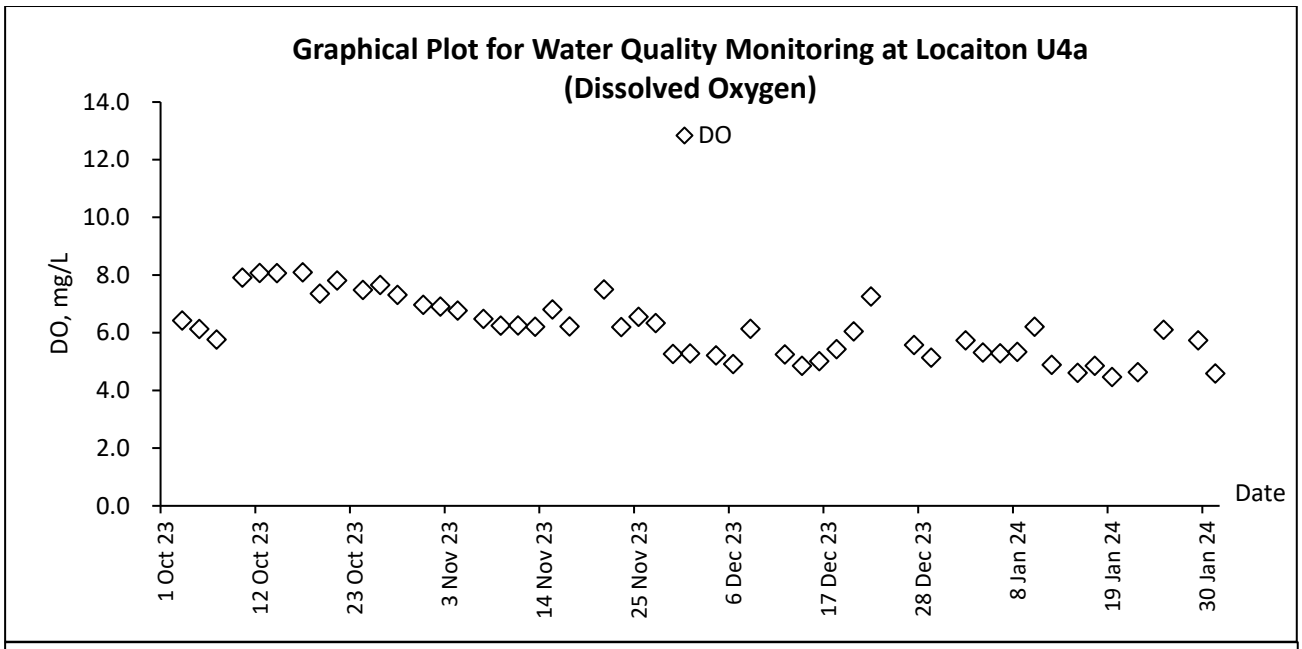

Graphical Plot for Water Quality Monitoring at Locaiton U2a (Turbidity)
Turbidity
Turbidity, NTU
20.0
15.0
10.0
5.0
0.0
Date
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24

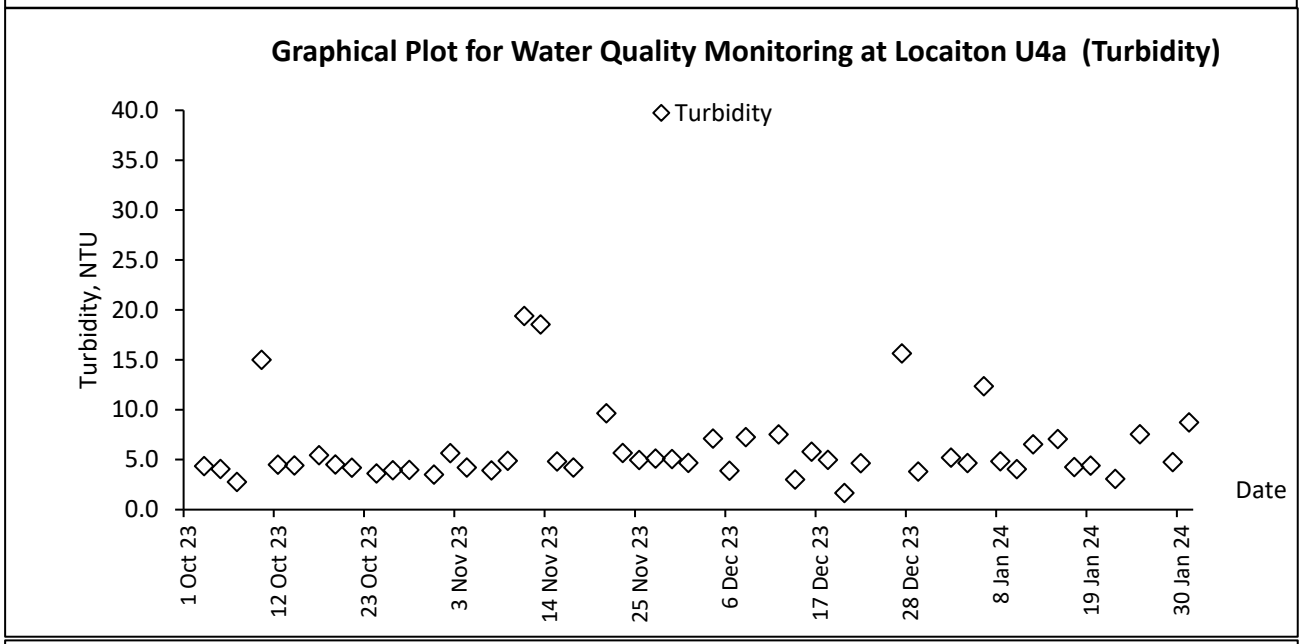

Graphical Plot for Water Quality Monitoring at Locaiton U2a
(Suspended Solids)
SS
SS, mg/L
20.0
15.0
10.0
5.0
0.0
Date
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24

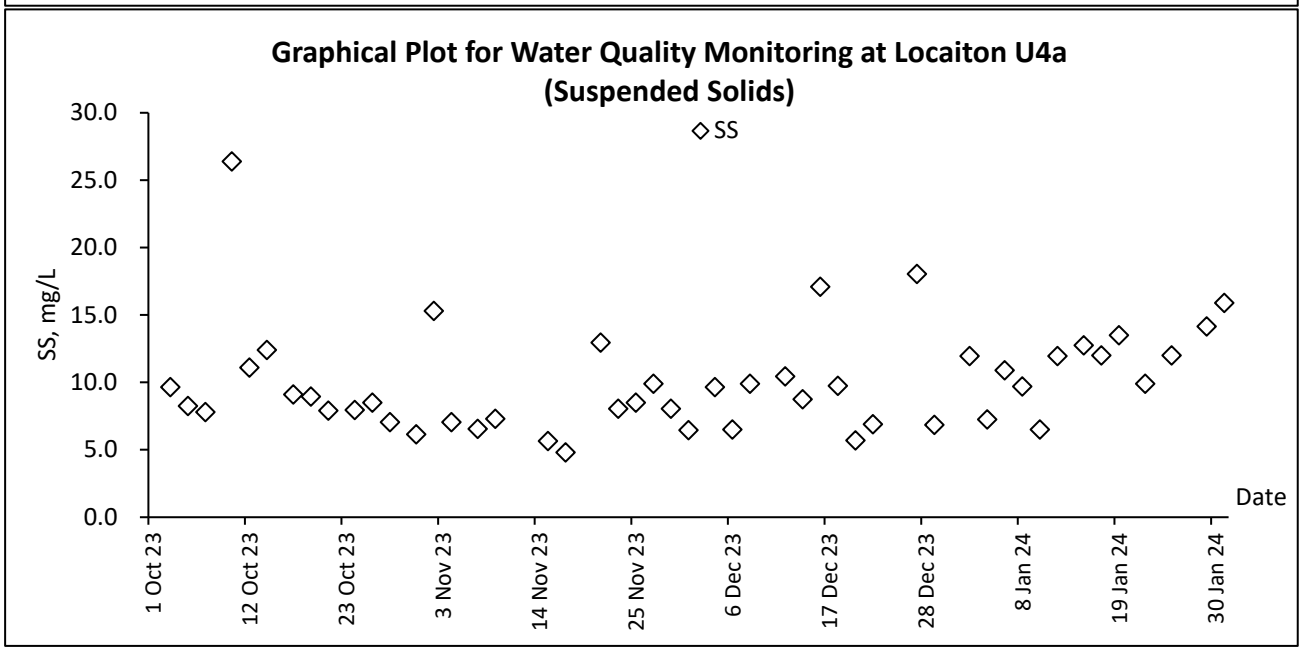

Graphical Plot for Water Quality Monitoring at Locaiton U3
(Dissolved Oxygen)
DO
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

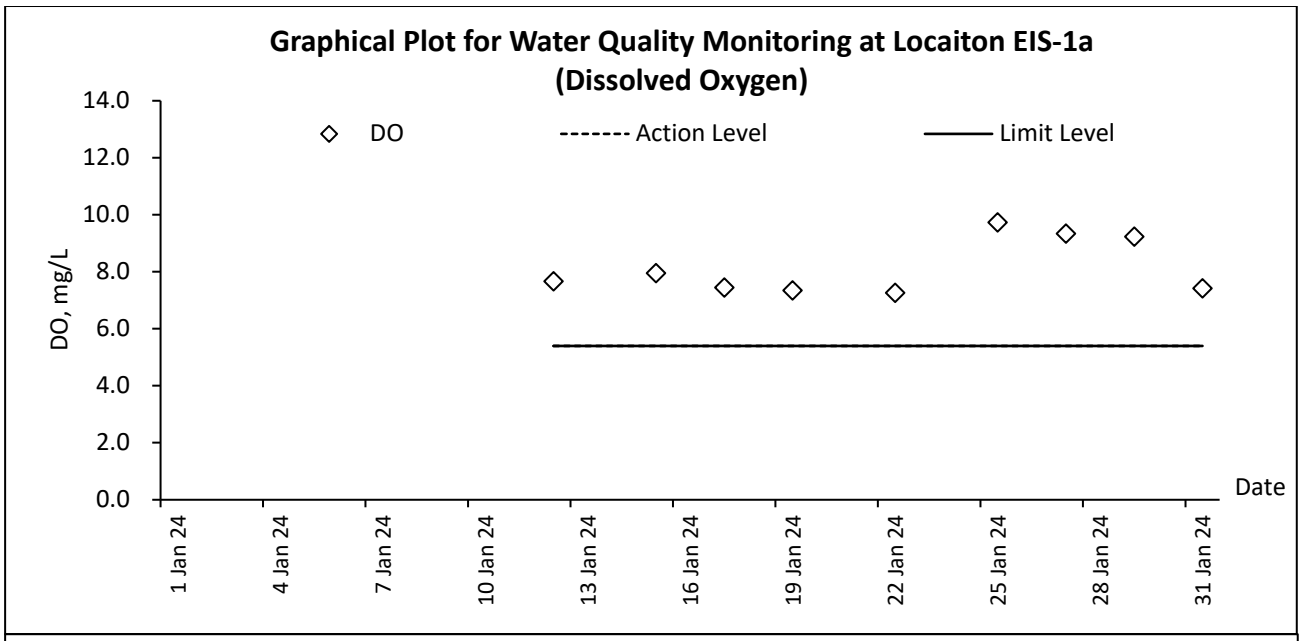

Graphical Plot for Water Quality Monitoring at Locaiton U3 (Turbidity)
Turbidity
Turbidity, NTU
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

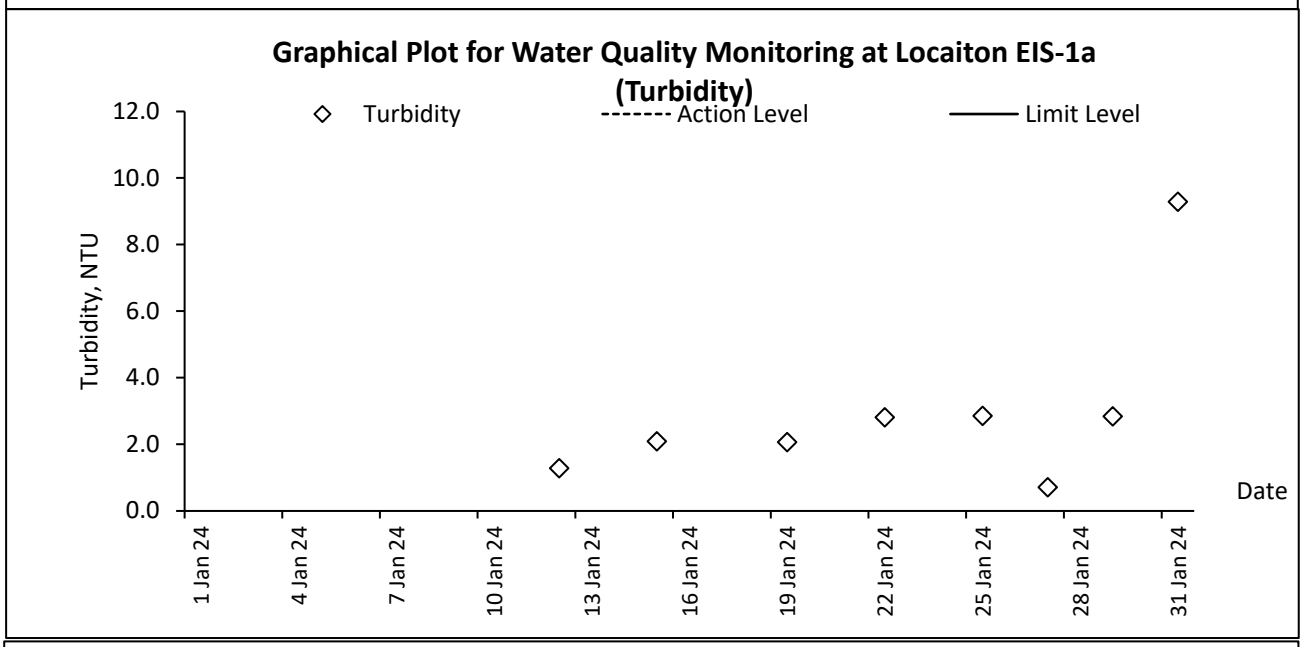

Graphical Plot for Water Quality Monitoring at Locaiton U3
(Suspended Solids)
SS
SS, mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

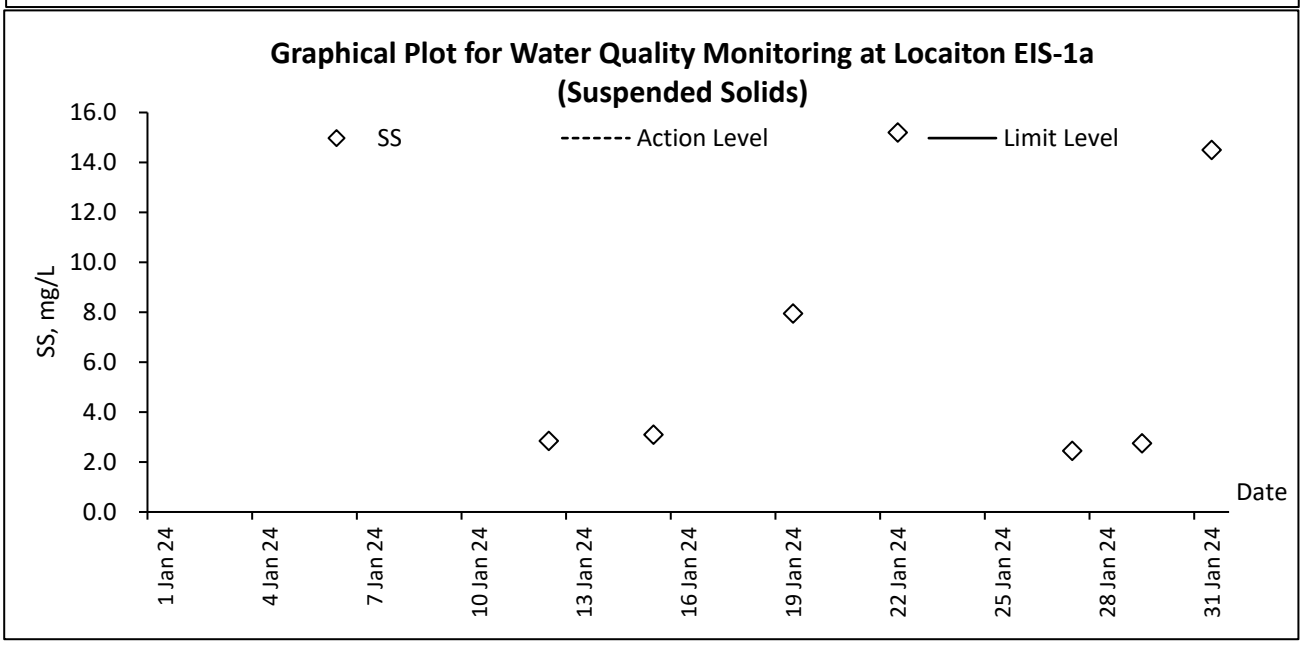

Graphical Plot for Water Quality Monitoring at Locaiton U4a
(Dissolved Oxygen)
DO
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

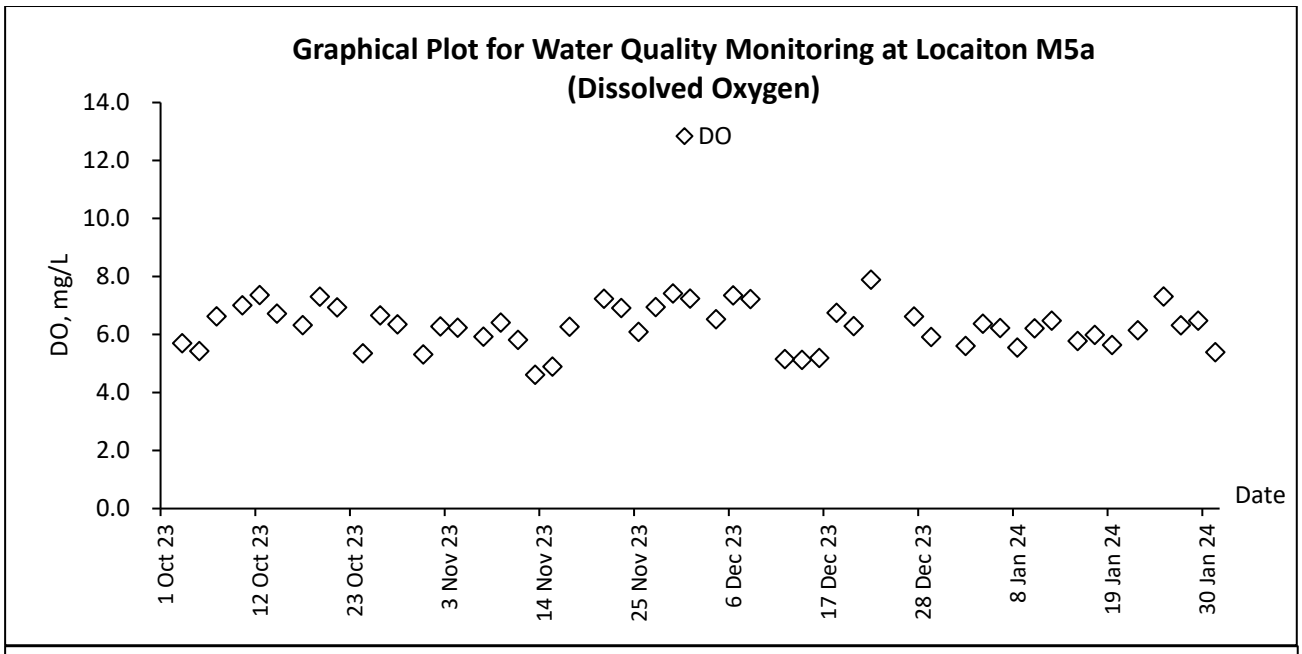

Graphical Plot for Water Quality Monitoring at Locaiton U4a (Turbidity)
Turbidity
Turbidity, NTU
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

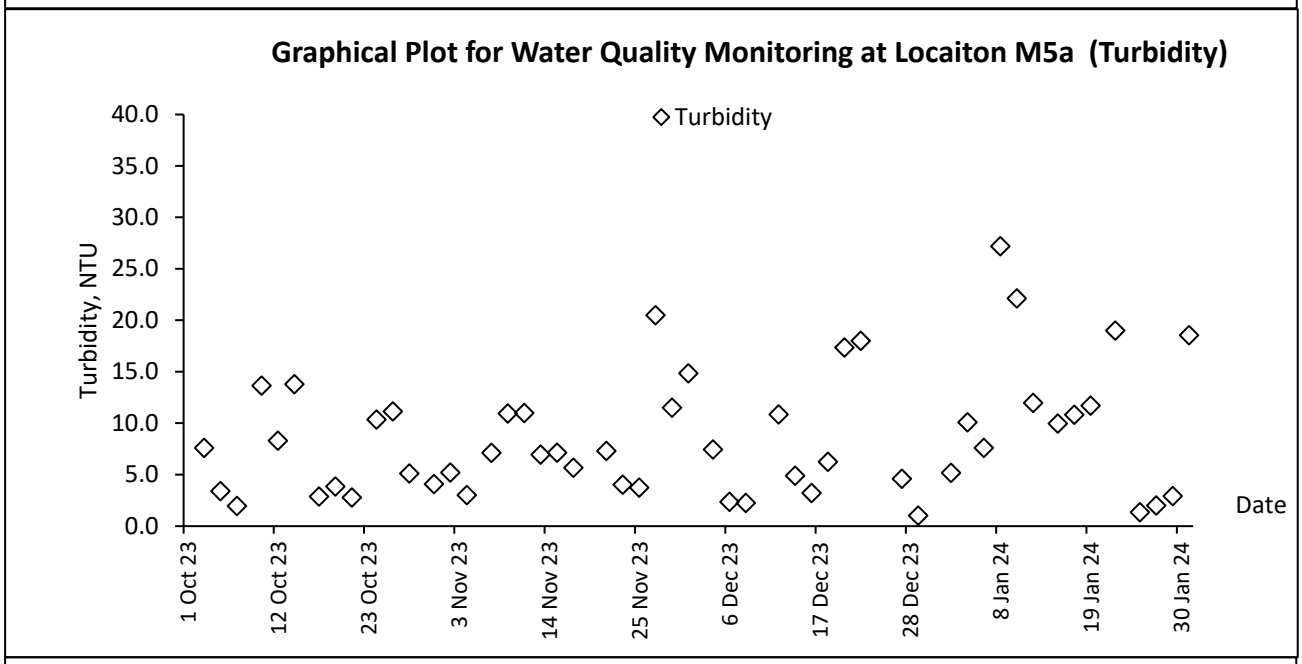

Graphical Plot for Water Quality Monitoring at Locaiton U4a
(Suspended Solids)
SS
SS, mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

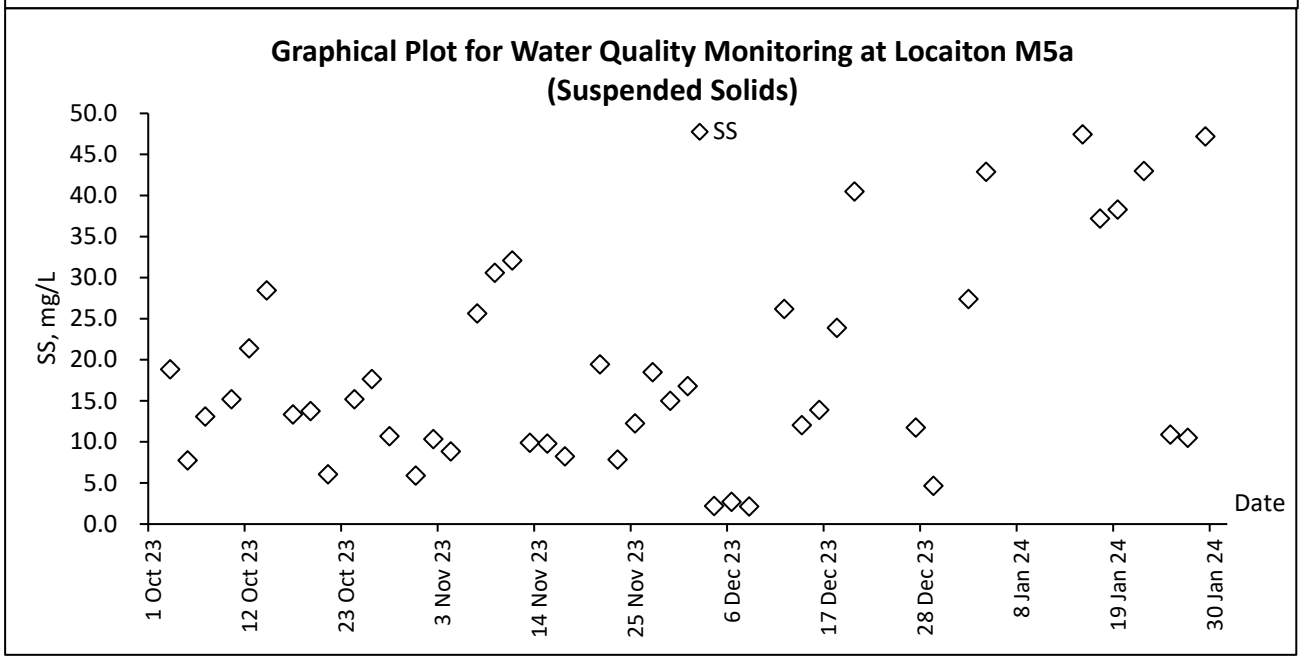

Graphical Plot for Water Quality Monitoring at Locaiton EIS-1a
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24
Date

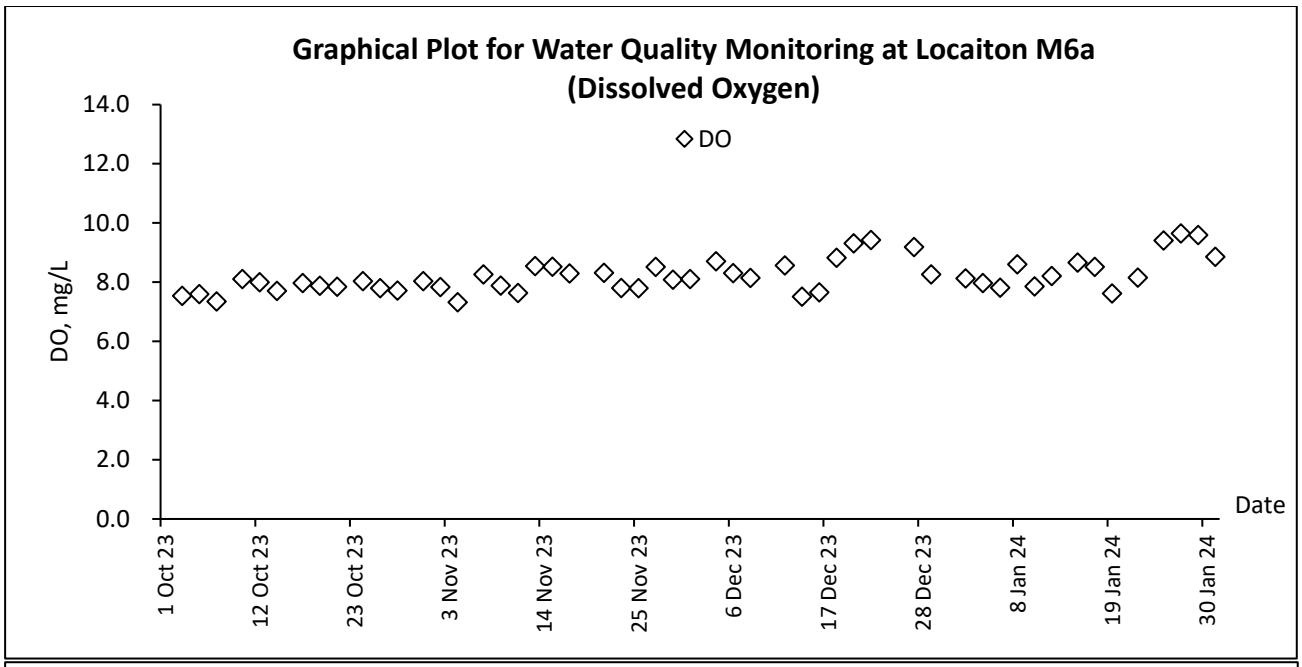

Graphical Plot for Water Quality Monitoring at Locaiton EIS-1a
(Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24
Date

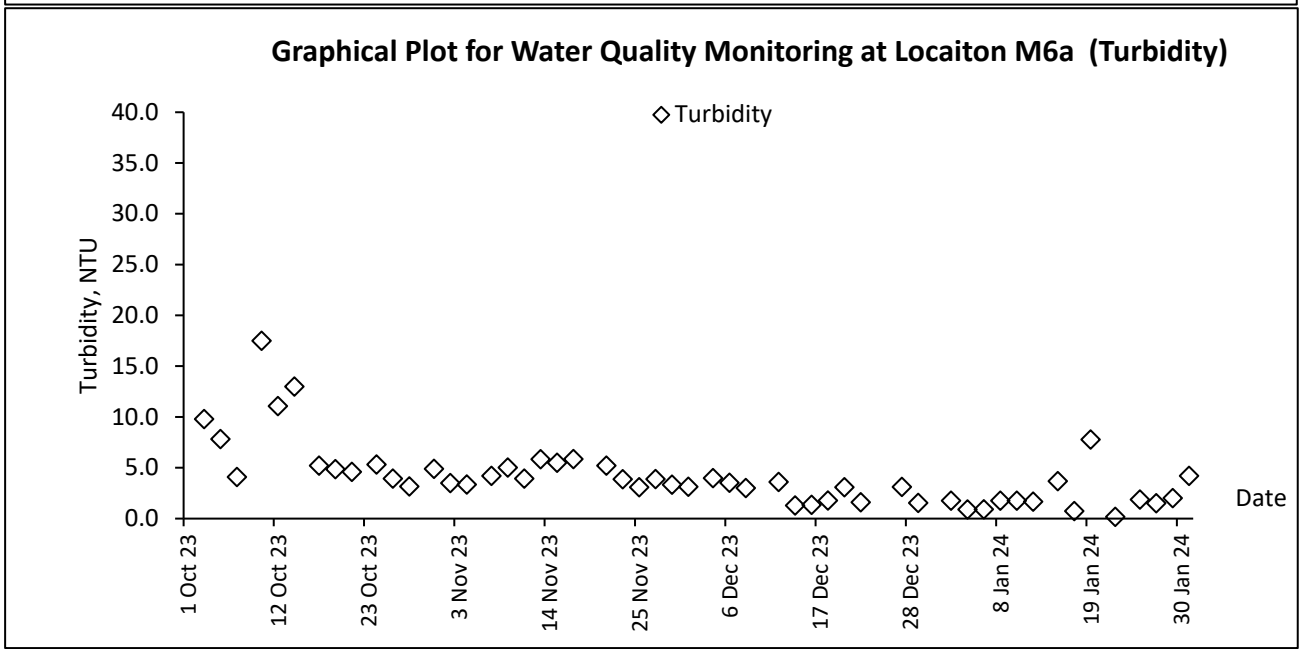

Graphical Plot for Water Quality Monitoring at Locaiton EIS-1a
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1 Jan 24
4 Jan 24
7 Jan 24
10 Jan 24
13 Jan 24
16 Jan 24
19 Jan 24
22 Jan 24
25 Jan 24
28 Jan 24
31 Jan 24
Date

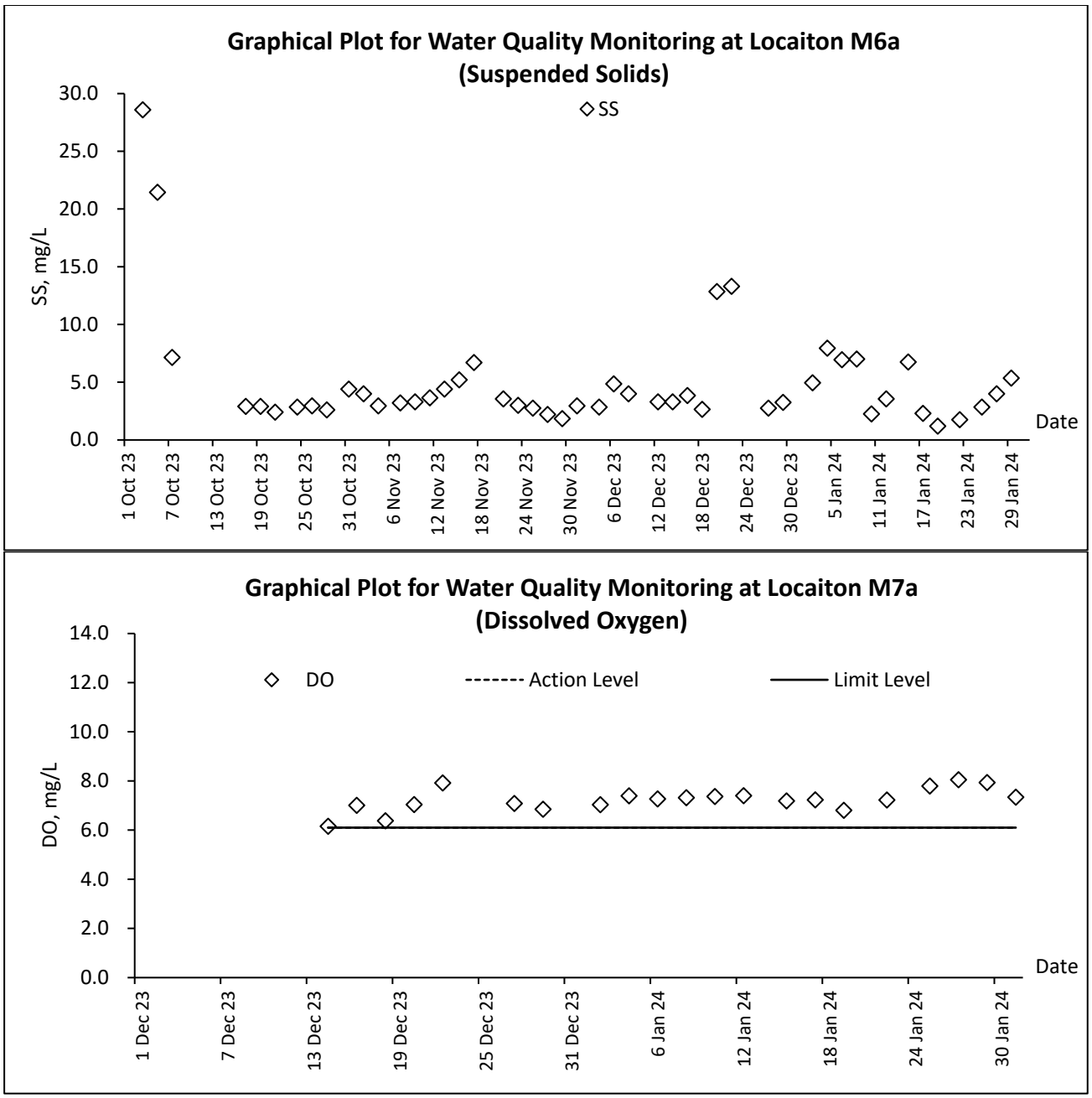

Graphical Plot for Water Quality Monitoring at Locaiton M5a
(Dissolved Oxygen)
DO
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

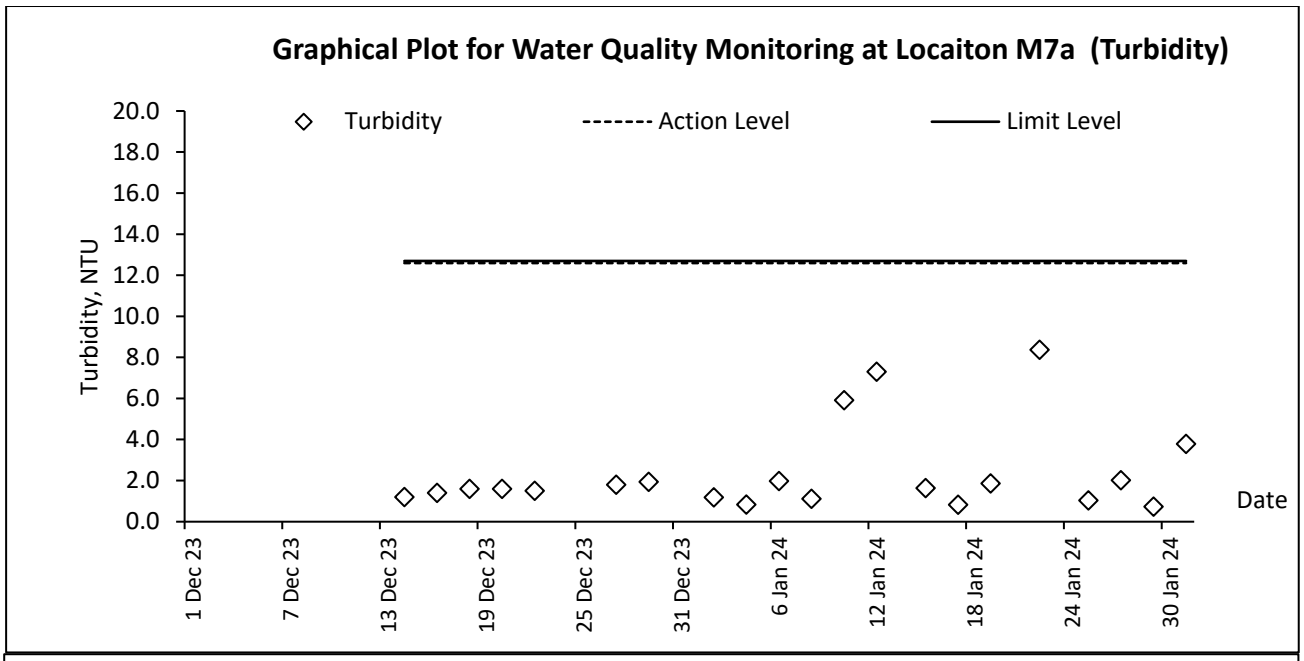

Graphical Plot for Water Quality Monitoring at Locaiton M5a (Turbidity)
Turbidity
Turbidity, NTU
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

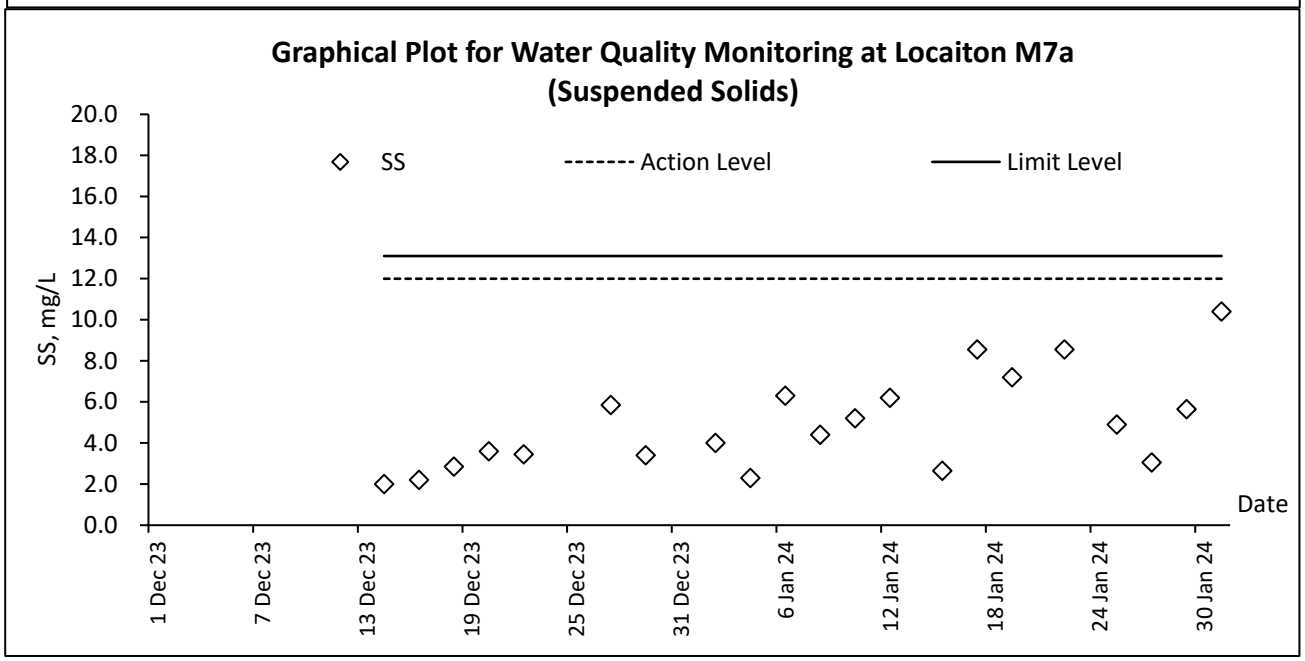

Graphical Plot for Water Quality Monitoring at Locaiton M5a
(Suspended Solids)
SS
SS, mg/L
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

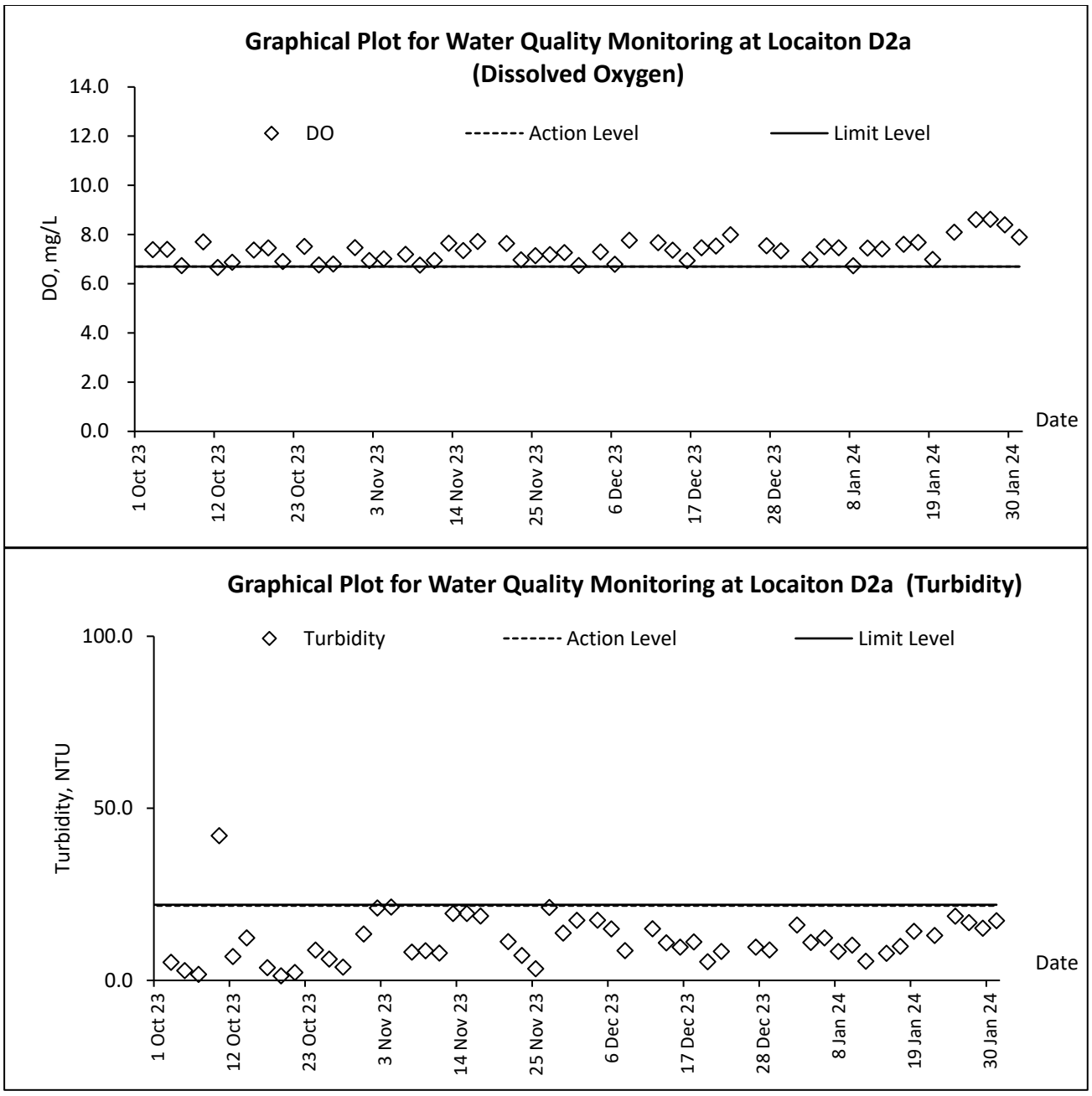

Graphical Plot for Water Quality Monitoring at Locaiton M6a
(Dissolved Oxygen)
DO
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

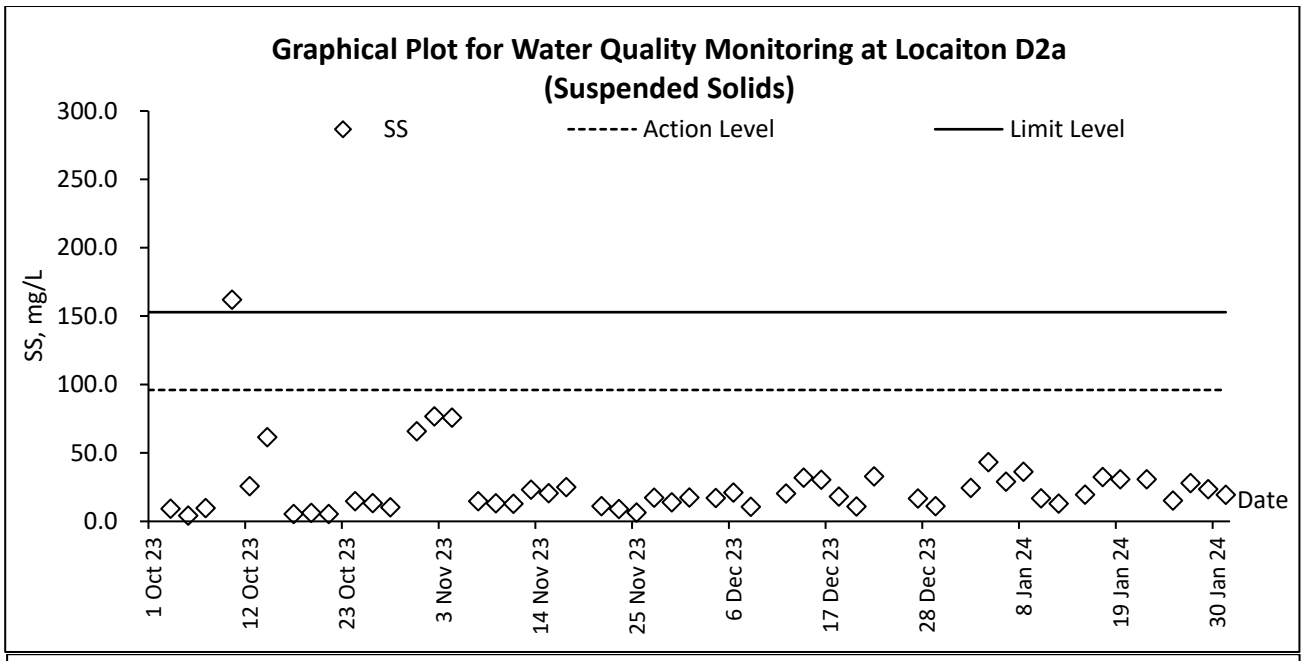

Graphical Plot for Water Quality Monitoring at Locaiton M6a (Turbidity)
Turbidity
Turbidity, NTU
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24

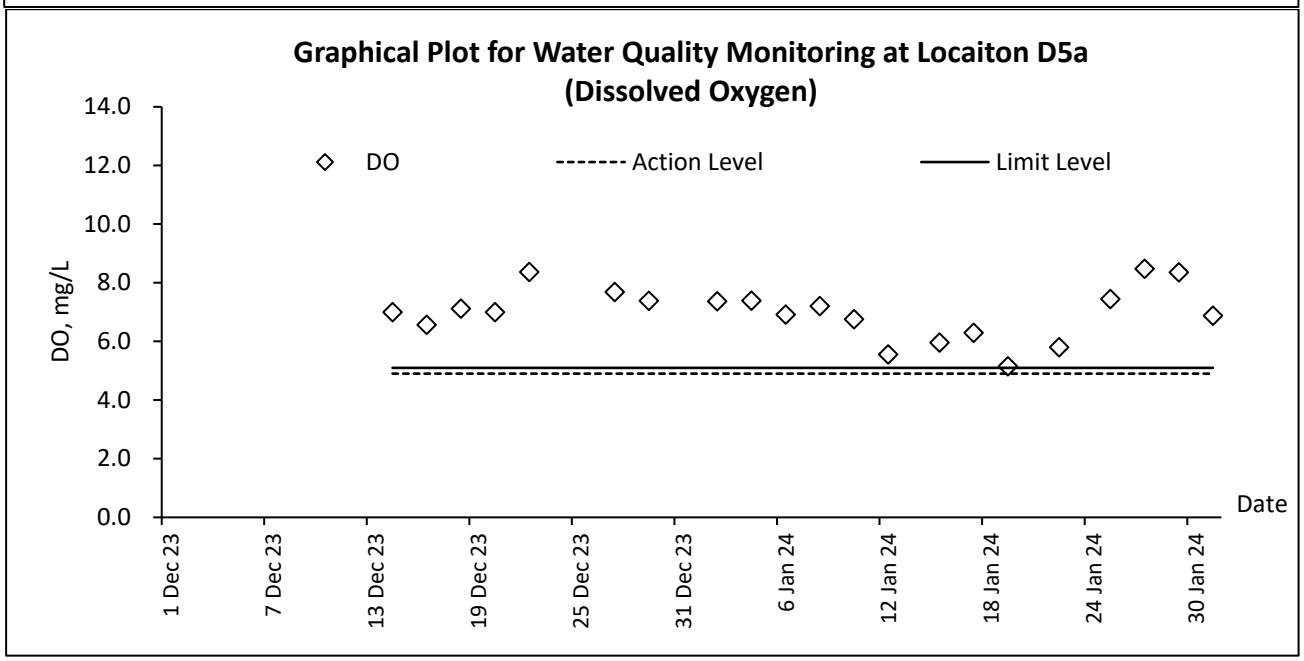

Graphical Plot for Water Quality Monitoring at Locaiton M6a
(Suspended Solids)
SS
SS, mg/L
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Date
1 Oct 23
7 Oct 23
13 Oct 23
19 Oct 23
25 Oct 23
31 Oct 23
6 Nov 23
12 Nov 23
18 Nov 23
24 Nov 23
30 Nov 23
6 Dec 23
12 Dec 23
18 Dec 23
24 Dec 23
30 Dec 23
5 Jan 24
11 Jan 24
17 Jan 24
23 Jan 24
29 Jan 24
Graphical Plot for Water Quality Monitoring at Locaiton M7a
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Dec 23
7 Dec 23
13 Dec 23
19 Dec 23
25 Dec 23
31 Dec 23
6 Jan 24
12 Jan 24
18 Jan 24
24 Jan 24
30 Jan 24

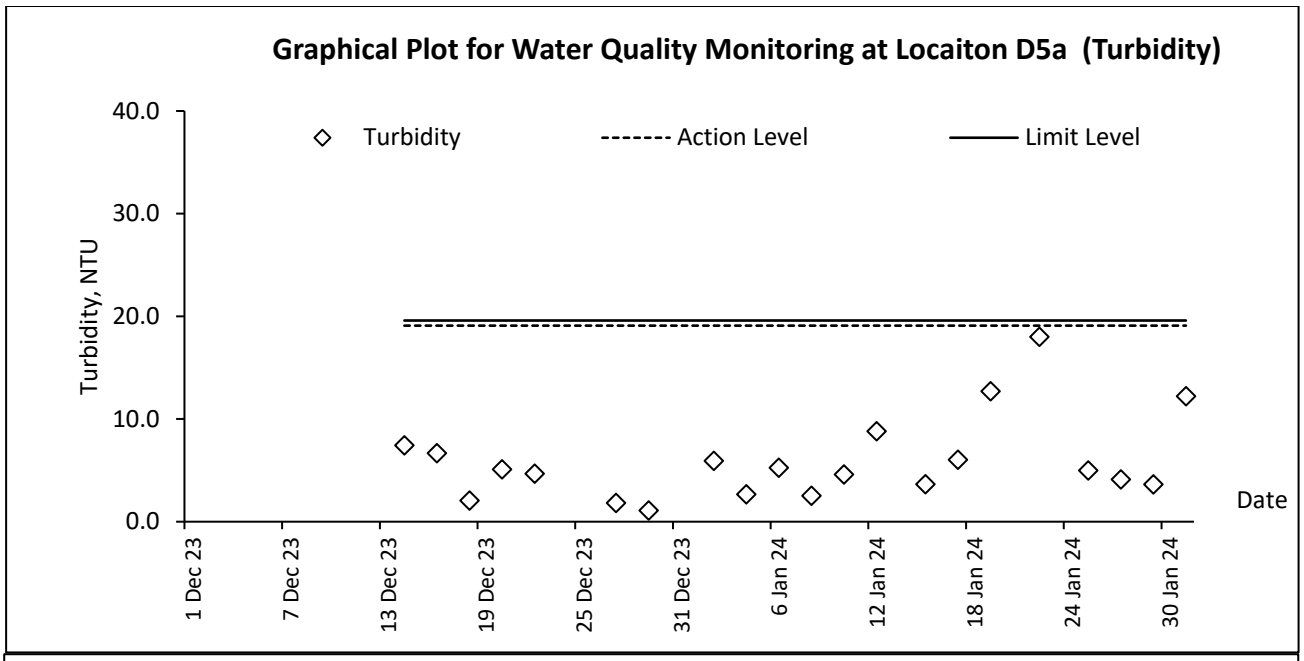

Graphical Plot for Water Quality Monitoring at Locaiton M7a (Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1 Dec 23
7 Dec 23
13 Dec 23
19 Dec 23
25 Dec 23
31 Dec 23
6 Jan 24
12 Jan 24
18 Jan 24
24 Jan 24
30 Jan 24
Date

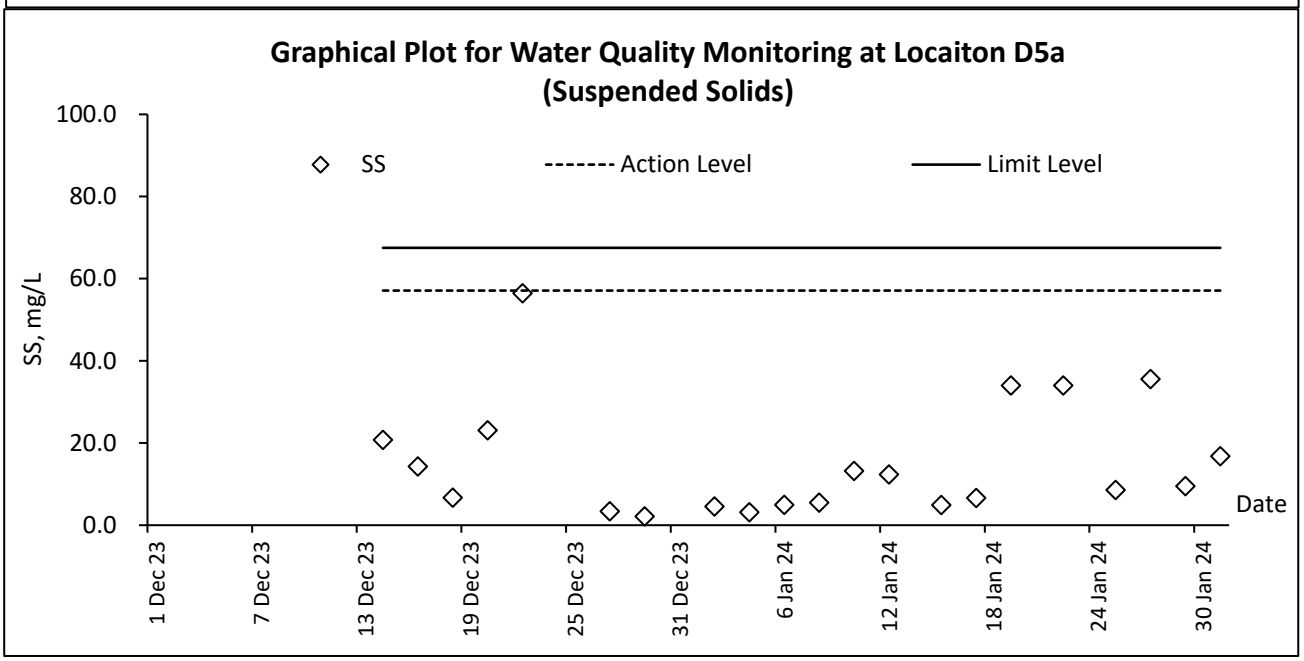

Graphical Plot for Water Quality Monitoring at Locaiton M7a
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1 Dec 23
7 Dec 23
13 Dec 23
19 Dec 23
25 Dec 23
31 Dec 23
6 Jan 24
12 Jan 24
18 Jan 24
24 Jan 24
30 Jan 24
Date


Graphical Plot for Water Quality Monitoring at Locaiton D2a
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24
Graphical Plot for Water Quality Monitoring at Locaiton D2a (Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
100.0
50.0
0.0
Date
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24


Graphical Plot for Water Quality Monitoring at Locaiton D2a
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
300.0
250.0
200.0
150.0
100.0
50.0
0.0
1 Oct 23
12 Oct 23
23 Oct 23
3 Nov 23
14 Nov 23
25 Nov 23
6 Dec 23
17 Dec 23
28 Dec 23
8 Jan 24
19 Jan 24
30 Jan 24
Date


Graphical Plot for Water Quality Monitoring at Locaiton D5a
(Dissolved Oxygen)
DO
Action Level
Limit Level
DO, mg/L
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1 Dec 23
7 Dec 23
13 Dec 23
19 Dec 23
25 Dec 23
31 Dec 23
6 Jan 24
12 Jan 24
18 Jan 24
24 Jan 24
30 Jan 24
Date


Graphical Plot for Water Quality Monitoring at Locaiton D5a (Turbidity)
Turbidity
Action Level
Limit Level
Turbidity, NTU
40.0
30.0
20.0
10.0
0.0
1 Dec 23
7 Dec 23
13 Dec 23
19 Dec 23
25 Dec 23
31 Dec 23
6 Jan 24
12 Jan 24
18 Jan 24
24 Jan 24
30 Jan 24
Date


Graphical Plot for Water Quality Monitoring at Locaiton D5a
(Suspended Solids)
SS
Action Level
Limit Level
SS, mg/L
100.0
80.0
60.0
40.0
20.0
0.0
1 Dec 23
7 Dec 23
13 Dec 23
19 Dec 23
25 Dec 23
31 Dec 23
6 Jan 24
12 Jan 24
18 Jan 24
24 Jan 24
30 Jan 24
Date

Appendix L

Waste Flow Table

Name of Department: CEDD **Contract No.:** YL/2021/04

Waste Flow Table for 2024 (Year)

Month	Total Quantity Generated	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of Non-Inert C&D Wastes Generated Monthly					
		Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse	Yard waste
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Jan	4,082.87	0.00	0.00	0.00	2,619.76	1,463.11	0.00	0.00	0.00	0.00	141.54	0.00
Feb												
Mar												
Apr												
May												
June												
Sub-total	4,082.87	0.00	0.00	0.00	2,619.76	1,463.11	0.00	0.00	0.00	0.00	141.54	0.00
July												
Aug												
Sept												
Oct												
Nov												
Dec												
Sub-total	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.000	0.00	0.00	0.00
Total	4,082.87	0.00	0.00	0.00	2,619.76	1,463.11	0.000	0.00	0.000	0.00	141.54	0.00

Notes:

(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
(3) Broken concrete for recycling into aggregates.
(4) Assume 1 liter of lubircant oil is equivalent 0.88 kilogram
(5) The disposal record is as of 21/01/2024

Monthly Summary Waste Flow Table for 2024 (year)

Name of Person completing the record: Calvin So (EO)

Project : Site Formation and Infrastructure Works for Yuen Long South First Phase Development – Contract 3 Contract No.: YL/2022/01

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m^3)
Jan	0.000	0.000	0.000	0.000	1.677	0.000	0.000	0.000	0.000	0.000	0.481
Feb											
Mar											
Apr											
May											
Jun											
Sub-total	0.000	0.000	0.000	0.000	1.677	0.000	0.000	0.000	0.000	0.000	0.481
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	0.000	0.000	0.000	0.000	1.677	0.000	0.000	0.000	0.000	0.000	0.481

Note:

1. For non-inert portion of C&D material, assume the density of 1 m^3 general refuse is equal to 200 kg.
2. For inert portion of C&D material, assume 6 m^3 per each full-filled dump truck.
3. All values are round off to the third decimal places.

Appendix N

Environmental Complaints Log

Environmental Complaint Log

Log ref.	Date of Complaint	Complaint Route	Complaint Nature	Investigation fining	Status

Appendix M

Implementation Schedule for Environmental Mitigation Measures

Environmental Mitigation Implementation Schedule

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Common Mitigation Measures (Applicable to ALL Project Components, including DPs and Non-DPs)									
Construction Dust Impact							C1	C2	C3
S4.4.6	D1	Water spraying every hour on exposed worksites and haul road.	Minimise dust impact at the nearby sensitive receivers	Contractor	All construction sites	• APCO To control the dust impact to meet HKAQO and EIAO-TM criteria	√	√	√
S4.4.6	D2	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.	Minimise dust impact at the nearby sensitive receivers	Contractor	All construction sites	• APCO To control the dust impact to meet HKAQO and EIAO-TM criteria	√	√	√
S4.4.6	D3	The following dust suppression measures should be incorporated to control the dust nuisance throughout the construction phase: • Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; • Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; • A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones;	Minimise dust impact at the nearby sensitive receivers	Contractor	All construction sites	• APCO To control the dust impact to meet HKAQO and EIAO-TM criteria	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Common Mitigation Measures (Applicable to ALL Project Components, including DPs and Non-DPs)									
Construction Dust Impact							C1	C2	C3
		• The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; • Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; • When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; • The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; • Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; • Any area that involves demolition activities should be								

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Common Mitigation Measures (Applicable to ALL Project Components, including DPs and Non-DPs)									
Construction Dust Impact							C1	C2	C3
		sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; • Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; • Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and • Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen,							

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Common Mitigation Measures (Applicable to ALL Project Components, including DPs and Non-DPs)									
Construction Dust Impact							C1	C2	C3
		shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.							
S4.4.6	D4	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected dust monitoring stations	EIAO-TM	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Construction Noise							C1	C2	C3
S5.5.3	N1	Implement construction noise mitigation measures, including, but not limited to, good site management practices, use of quiet plant, installation of movable temporary noise barrier and setup up of liaison group to ensure construction noise impacts at the NSRs comply with the construction noise criteria. 1. Good site management practices • only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; • machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; • silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; • mobile plant should be sited as far away from NSRs as possible and practicable; and • material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. 2. Use of quiet plant	Control construction noise impacts	Contractor	All construction sites	EIAO-TM	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Construction Noise							C1	C2	C3
		Use of quiet plant listed in the Quality Powered Mechanical Equipment (QPME) / other commonly used PME listed in Environmental Protection Department (EPD) web pages. 3. Installation of movable temporary noise barrier • Install movable temporary noise barriers (typical design is wooden framed barrier with a small-cantilevered upper portion of superficial density no less than 7kg/m^2 on a skid footing with 25mm thick internal sound absorptive lining), and full enclosure, screen the noisy plants including air compressors, generators etc. 4. Setup of liaison group • Setup a liaison group among CEDD, relevant government departments, contractors of the work contracts, etc. during construction phase to ensure proper implementation of the proposed noise mitigation measures.							
S5.5.3	N2	Carry out construction noise monitoring in accordance with the EM&A Manual.	Monitor the construction noise impacts	Contractor	Selected noise monitoring stations	EIAO-TM	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
S6.8.1.2	W1	<u>*General Construction Activities*</u> In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN1/94), best management practices should be implemented on site as far as practicable. The best practices are detailed below: • At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities; • Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimise polluted runoff. Sedimentation tanks with sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m^3 capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped; The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an	To minimise water quality impact from construction site runoff and general construction activities	Contractor	All construction sites where applicable	• Water Pollution Control Ordinance • ProPECC PN1/94 • EIAO-TM • TM-DSS	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		appropriate watercourse, through a silt/sediment trap. The silt/sediment traps should be incorporated in the permanent drainage channels 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. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction; • Construction works should be programmed to minimise surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed. 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; • All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas; • If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal							

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		facilities; • All open stockpiles of construction materials (for example, aggregates, sand and fill material) 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; • 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; • Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events; • All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction site exit where practicable. 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							

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains; • Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain; Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts; • All fuel tanks and storage areas should be provided with locks and sited 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 water sensitive receivers nearby;and • Regular environmental audit on the construction site should be carried out in order to prevent any malpractices. Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the water bodies, mangroves and open sea.							
S6.8.1.4	W2	<u>*Prevention of Accidental Spillage of Chemicals*</u> • The chemicals used during construction, such as fuel, oil, solvents and lubricants shall be properly stored and contained in designated area with secondary containment to prevent spillage and contamination of the nearby water environment.	To prevent water quality impact due to chemical spillage	Contractor	All construction sites where practicable	• Water Pollution Control Ordinance • Waste Disposal (Chemical Waste)	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		• Any maintenance activities and workshops with chemicals use shall be located away from watercourses on hard standings within a bunded area. Sumps and oil interceptors should be provided as appropriate. • The Contractor shall register as a chemical waste producer and employ licensed collector for collection of chemical waste from the construction site. Any chemical waste generated shall be managed in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.				(General) Regulation			
S6.8.1.7	W3	*Sewage from workforce* • Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance; • Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project; • Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site.	To minimise water quality impact from sewage effluent in construction phase	Contractor	All construction sites where practicable	Water Pollution Control Ordinance TM-DSS	√	√	√
S6.8.1.9	W4	*Contaminated Groundwater and Site Runoff*	To minimise water quality impact	Contractor	All construction	TM-DSS	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		To prevent the water quality due to the contaminated water from the area with contamination, the following mitigation measures should be adopted. • Cover the contaminated soil and surface to prevent the generation of contaminated water. • No open stockpiling of contaminated soil should be allowed to prevent generation of contaminated water due to precipitation. • Contaminated water, either from groundwater or runoff, should be treated by wastewater treatment facility (WTF) to an acceptable level as indicated in TM-DSS before disposal if the deployment of such WTF is feasible. • Recharging the contaminated groundwater back to the aquifer should be sought if treatment of the contaminated groundwater by WTF is not feasible, subject to the agreement with EPD.	from contaminated groundwater in construction phase		sites where practicable				
S6.8.1.10	W5	<u>*Construction Works of near/ within Watercourses*</u> • Cofferdams and impermeable sheet piles should be installed as appropriate to isolate the flow of the nullah from the construction works area. The detailed design of the cofferdams will be conducted by the Contractor during the construction phase to fulfil the requirements in DSD Technical Circular No. 1/2017 "Temporary Flow Diversions and Temporary Works Affecting Capacity in Stormwater Drainage System" for DSD approval, in order to formulate feasible options of these temporary structure.	To avoid any direct water quality impact to existing watercourses	Contractor	All construction sites where practicable	• ETWB TC (Works) No. 5/2005	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		• Stockpiling of construction materials and dusty materials should be located from any watercourses, contained in bunded areas and covered with tarpaulin. • Construction debris and spoil should be covered with tarpaulin during storage. Timely removal of materials away from the site for disposal should be arranged to avoid being washed into the nearby watercourses. • Water pumps should be used to collect any wastewater and construction site surface runoff within the cofferdam/ temporary works platform. The collected wastewater shall be properly treated before discharge. • Toe-board and bunds shall be provided along the edge of the works area/ temporary platform to prevent wastewater/ debris from falling into the watercourses. Any temporary works site inside the watercourses 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 water quality. • Proper shoring may need to be erected in order to prevent soil / mud from slipping into the inland water bodies. • Construction effluent, site run-off and sewage should be properly collected and/or treated.							

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
S6.8.1.11	W6	*Removal/ Diversion of watercourses* • Cofferdams and impermeable sheet piles should be installed as appropriate to isolate the water flow from the construction works area. • Dewatering or flow diversion shall be conducted prior to the construction works to prevent water overflow to the surrounding area. • Watercourse removal and flow diversion should be conducted in dry season as far as practicable when the water flow is low. • Water drained from the watercourse shall be diverted to new/ temporary drainage for watercourse diversion. For watercourse removal, the water drained shall be collected and treated to meet the requirements of WPCO and TM- DSS before discharge. • Any excavated land-based sediment from the removal/ diversion of watercourse shall be properly stored at bunded areas away from any watercourse and covered with tarpaulin before transporting out of the site.	To avoid water quality impact on existing watercourses to be retained	Contractor	All construction sites where practicable	• Water Pollution Control Ordinance • TM-DSS • ETWB TC • (Works) No. 5/2005 • ProPECC PN1/94	√	√	√
S6.8.1.12	W7	*Removal/ Filing of ponds* • Dewatering shall be conducted prior to the construction works to prevent water overflow to the surrounding area. Water drained from the ponds shall be collected in appropriate temporary storage tank and reuse on-site as far as practicable. Surplus drained water shall be properly disposal at STW. No direct	To avoid water quality impact on existing watercourses to be retained	Contractor	All construction sites where practicable	ProPECC PN1/94	NA	NA	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Water Quality (Construction Phase)							C1	C2	C3
		discharge to stormwater drainage system or marine water should be allow. • Any excavated land-based sediment from the ponds shall be properly stored at bunded areas away from any watercourse and covered with tarpaulin before transporting out of the site.							

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Ecology (Construction Phase)							C1	C2	C3
S8.6.6	EC7	Precautionary surveys to check for presence of any aquatic fauna species of conservation importance in the watercourses to be directly impacted before commencement of works; affected aquatic fauna of conservation importance shall be captured and translocated to suitable receptor site(s)	To minimise direct impacts on aquatic species of conservation importance	CEDD/ Contractor	All affected watercourses Before commencement of construction works	EIAO-TM	√	√	√
S8.6.5	EC8	To conduct a baseline plant survey within all proposed works areas to ascertain the presence and update the quantities and conditions of any flora species of conservation importance; to transplant all affected plant species of conservation importance to suitable receptor site(s) before commencement of construction works	To minimise direct impacts on plant species of conservation importance	CEDD/ Contractor	All potential works areas Before commencement of construction works	EIAO-TM	√	√	√
S8.6.2	EC9	To designate 15m wide buffer on both sides of the retained watercourses; the protected zones will be maintained and properly protected by solid barriers throughout the construction phase Aquatic faunal monitoring on monthly basis shall be conducted when there are construction activities within 100m of the three retained watercourses in Area 1 and Area 3 and the new watercourse along the hillside of the western boundary of Area 3.	To minimise direct construction phase impacts on retained watercourses	CEDD/ Contractor	Retained watercourses and their buffer zones, and the new hillside river Construction phase	EIAO-TM	NA	NA	NA
S8.8	EC10	Egretry location shall be checked for any evidence of occupation during the ardeid breeding season by a qualified ecologist of the ET prior to the commencement of any works activity within 250m of the egretry; to monitor regularly the conditions of the egretry and potential impacts to egretry flight-lines.	To minimise disturbance impacts to egretry	CEDD/ Contractor	Existing and all potential egretry location(s) within 250m from any works activity Before commencement of the construction	EIAO-TM	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Ecology (Construction Phase)							C1	C2	C3
					works and monitoring throughout the construction phase				
S8.6.6	EC11	Checking and clearance for nesting birds (buildings and vegetation) shall be conducted/ supervised by a qualitied ecologist with relevant experience	To minimise direct impacts on nesting birds	CEDD/ Contractor	All works areas Before commencement of construction work	EIAO-TM	√	√	√
S8.6.6	EC12	Checking and clearance of bat roosts shall be conducted/ supervised by a qualitied ecologist with relevant experienced	To minimise direct impacts on bat roost(s)	CEDD/ Contractor	All works areas Before commencement of construction work	EIAO-TM	√	√	√
S8.6.6	EC13	Good site practices to control construction phase water quality impacts	To minimise induced water quality impacts on nearby water bodies	CEDD/ Contractor	All works areas Construction Phase	EIAO-TM	√	√	√
S8.6.6	EC14	To provide woodland mix planting of at least 1:1 compensation area ratio for the cumulative loss of approximately 2.42ha hillside woodland; the proposed woodland planting will be conducted in the proposed hillside site (~12ha) to the west of PDA. Details of woodland planting and monitoring programme will be specified in a Woodland Compensation Plan.	To adequately compensate for cumulative loss of hillside woodlands in PDA	CEDD/ Contractor	The proposed planting site (~12ha) within CA zone at the hillside site to the west of PDA	EIAO-TM	NA	NA	NA

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Fisheries							C1	C2	C3
S9.5.2	F1	• To adopt the mitigation measures for the control of water quality impacts	To protect fisheries resources from potential direct impacts arising from deterioration of water quality	CEDD/ Contractor	All works areas	EIAO-TM	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Landscape and Visual (Construction Phase)							C1	C2	C3
S10.12 – Table 10.12.1, CM1	LV1	Optimisation of Construction Areas and Providing Temporary Landscape on Temporary Construction • Construction areas' control shall be enforced, where possible, to ensure that the landscape and visual impacts arising from the construction activities are minimised. It includes reduction of the extent of working areas and temporary works areas, management on storing and using the construction equipment and materials, and consideration of detailed schedules to shorten the construction period. Temporary landscape treatments are considered to be adopted such as applying hydro-seeding on temporary stockpiles and reclamation areas to alleviate the potential impacts.	Minimise impacts from construction activities on adjacent landscape and visual sensitive receivers	CEDD (via Contractor)	All construction areas and temporary works areas		√	√	√
S10.12 – Table 10.12.1, CM2	LV2	Minimise Topographical Changes To minimise landscape and visual impacts, the vertical and horizontal alignment of the at-grade road construction works should be optimised to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain and reduce overall earth movements. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimise landform changes and land resumption, whilst also considering visual amenity. Earthworks and engineered slopes should be designed to provide a structurally stable and visually interesting landform, which is compatible with surrounding landscape and mimics the natural contouring and terrain (e.g. introduction and continuation of natural features such as spurs and ridges where appropriate) to support	Minimise landscape and visual impacts from topographical/ landform changes	CEDD (via Contractor)	All construction areas		√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Landscape and Visual (Construction Phase)							C1	C2	C3
		landscape and visual assimilation with the surrounding terrain.							
S10.12 – Table 10.12.1, CM3	LV3	Existing trees to be retained within the Project Site should be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained		Contractor)		• DEVB TCW No.7/2015; • ETWB TCW No.29/2004	√	√	√
S10.12 – Table 10.12.1, CM4	LV4	<u>Transplanting of Existing Trees</u> Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with DEVB TCW No.6/2015 and DEVB TCW 7/2015 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected	Transplant Trees where suitable for transplantation	CEDD (via Contractor)	On site where possible	• DEVB TCW No.6/2015; • DEVB TCW 7/2015; • HyD Guidelines HQ/GN/13	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Landscape and Visual (Construction Phase)							C1	C2	C3
		and should be transplanted, following HyD Guidelines HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit'.							
S10.12 – Table 10.12.1, CM5	LV5	<u>Screen Hoarding</u> Screen hoarding shall be erected along areas of the construction boundary where the works site borders with publicly accessible routes and/or is close to visually sensitive receivers (VSRs), to screen undesirable views of the works site. It is proposed that the screening be compatible with the surrounding environment in terms of material choice and colour.	Screen undesirable views of the construction sites	CEDD (via Contractor)	All construction areas and temporary works areas		√	√	√
S10.12 – Table 10.12.1, CM6	LV6	<u>Watercourses of higher ecological value/ Channels Protection</u> For all the watercourses of higher ecological value inside the development area, in accordance with ETWB TCW 5/2005, consideration of protection measures should be made to minimise any impacts from the construction works. Precast structures or other similar approaches will be used to prevent any construction works in river and thus to avoid any direct water quality impact. Good site management as stipulated in ProPECC PN1/94 will be fully implemented to avoid polluted liquid or solid wastes from falling into the river waters.	Avoid direct impacts to watercourses	CEDD (via Contractor)	All watercourses of higher ecological value inside the development area	• ETWB TCW 5/2005; • ProPECC PN1/94	√	√	√
S10.12 – Table 10.12.1,	LV7	<u>Construction Light Control</u> All security floodlights for construction sites should be carefully controlled to minimise light pollution and	Minimise impact of night-time lighting and glare	CEDD (via Contractor)	All construction areas and		√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Landscape and Visual (Construction Phase)							C1	C2	C3
CM7		night- time glare to nearby users.			temporary works areas				
S10.12 – Table 10.12.1, CM8	LV8	<u>Woodland Conservation</u> Woodland conservation is proposed to avoid large scale of potential loss of the existing secondary woodland within the PDA	Avoid the loss of natural woodland areas	CEDD (via Contractor)	On site	• DEVB TCW No.7/2015; • ETWB TCW No.29/2004	NA	NA	NA

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
S11.2.7	WM1	<u>Comments on C&DMMP given by PFC</u> • To ensure good quality rock is put to full use. Where necessary, the Project Proponent should consult the Mines Division, GEO for advice on the appropriate arrangement to put to full use the good quality rock. The Project Proponent should also maintain close liaison with the quarry operators for the necessary disposal arrangements; • To on-site reuse all surplus inert C&D hard material generated within the Project for balanced cut-and-fill designs. The Project Proponent is reminded that surplus fill might be generated by others in the subsequent building development works within the Project's area. The detailed site formation design should reserve sufficient capacity to absorb all such fill materials so that no disposal would be required outside the Project area; • To carry out on-site temporary storage in case of any programme mismatch between fill generation and demand, the Project Proponent should carry out on-site temporary storage. Where necessary, the Project Proponent shall ensure suitable environmental mitigation measures such as provision of covers ad water spraying system are duly implemented. The Project Proponent shall also carry out necessary measures to ensure the stability of the temporary stockpiles; • To adopt in-situ remedial measures for the contaminated soil in accordance with the EPD's Practice Guide for Investigation and Remediation of	Enhance the management of C&D materials and to minimize their generation at source	Contractor	All construction sites	Section 4.1.3 of the Project Administrative Handbook for Civil Engineering Works (2014 Edition)	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
		Contaminated Land. The remedial soil shall be completely reused within the development site; • To set up effective control procedures to ensure the traceability of disposal and reuse of the C&D materials; and • To adopt re-usable non-timber formwork and precast concrete construction as far as practicable.							
S11.5.1	WM2	<u>Good Site Practices</u> The following good site practices are recommended throughout the construction activities: • nomination of an approved personnel, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; • training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling; • provision of sufficient waste disposal points and regular collection for disposal; • appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;	Minimise waste Generation during construction	Contractor	All construction sites	Waste Disposal Ordinance	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
		a Waste Management Plan (WMP) should be prepared by the contractor and submitted to the Engineer for approval.							
S11.5.1	WM3	<u>Waste Reduction Measures</u> Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction: • segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal; • proper storage and site practices to minimise the potential for damage and contamination of construction materials; • plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste; • sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.); and • provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.	Reduce waste generation	Contractor	All construction sites	Waste Disposal Ordinance	√	√	√
S11.5.1	WM4	<u>Storage, Collection and Transportation of Waste</u> The following recommendation should be implemented to minimise the impacts:	Good site practice to minimise the waste generation and recycle the	Contractor	All construction sites	• Land (Miscellaneous Provisions)			

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
		• waste such as soil should be handled and stored well to ensure secure containment; and • depends on actual site activities, certain locations within the site area would be used for storage of waste to enhance reuse. However, there would not be any designated location for storage of waste, and the storage locations would need to be adjusted to suite actual site conditions.	C&D materials as far as practicable so as to reduce the amount for final disposal			Ordinance • Waste Disposal Ordinance ETWBTCW No. 19/2005			
S11.5.1	WM5	<u>Excavated Sediment</u> The anticipated minor amount excavated sediment is proposed to be stabilised / solidified by mixing with cement so that the mixture is suitable to be reused on-site as backfill in construction of road base.	Handle excavated sediment	Contractor	All construction sites where applicable	ETWB-TCW 34/2002	√	√	√
S11.5.1	WM6	<u>Collection and Transportation of Waste</u> The following recommendation should be implemented to minimise the impacts: • waste such as soil should be handled and stored well to ensure secure containment; • stockpiling area should be provided with covers and water spraying system to prevent materials from wind- blown or being washed away; and • different locations should be designated to stockpile each material to enhance reuse.	Minimise waste impacts from storage	Contractor	All construction sites	Waste Disposal Ordinance	√	√	√
S11.5.1	WM7	<u>Site Formation and C&D Materials</u> Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at public fill reception facilities or reclamation sites. The following mitigation measures should be implemented in handling the excavated and	Minimise waste impacts from excavated and C&D materials	Contractor	All construction	• Land (Miscellaneous Provisions) Ordinance • Waste Disposal			

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
		C&D materials: • maintain temporary stockpiles and reuse excavated fill material for backfilling; • carry out on-site sorting; • make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; and implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.				Ordinance • ETWB TCW No. 19/2005 • Project Administrative Handbook for Civil Engineering Works, 2012 Edition			
S11.5.1	WM8	<u>Chemical Waste</u> If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producer. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Control the chemical waste and ensure proper storage, handling and disposal.	Contractor	All construction sites	• Waste Disposal (Chemical Waste) General) Regulation • Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	√	√	√
S11.5.1	WM9	<u>Asbestos Containing Materials</u> Some key precautionary measures related to the handling and disposal of asbestos are listed as below. • Adoption of protection, such as full containment, mini containment, or segregation of work area; • Provision of decontamination facilities for cleaning of workings, equipment and bagged	Precautionary measures to handle and disposal of asbestos	Contractor	All construction sites	• Handling of Asbestos Containing Materials in Buildings (ProPECC PN 2/97)	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
		waste before leaving the work area; • Adoption of engineering control techniques to prevent fibre release from work area, such as use of negative pressure equipment with high efficiency particulate air (HEPA) filters to control air flow between the work area and the outside environment; • Wetting of asbestos containing materials before and during disturbance, minimizing the breakage and dropping of asbestos containing materials, and packing of debris and waste immediately after it is produced; • Cleaning of work area by wet wiping and vacuuming with HEPA filtered vacuum cleaner; • Coating on any surfaces previously in contact with or contained by asbestos with a sealant; • Proper bagging, safe storage and disposal of asbestos and asbestos contaminated waste; • Pre-treatment of all effluent from the work area before discharged; and • Air monitoring strategy to check the leakage and clearance of the work area during and after the asbestos work.							
S11.5.1	WM10	<u>General Refuse</u> • General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage	Minimise production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	• Waste Disposal Ordinance	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Waste Management (Construction Waste)							C1	C2	C3
		recycling. • Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean. • A reputable waste collector should be employed to remove general refuse on a daily basis.							

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Land Contamination							C1	C2	C3
S12.6	LC1	• Undertaking environmental Site Inspection (SI) for all potentially contaminated sites as listed in the Contamination Assessment Plan (CAP).	Verify the land contamination potential before the commencement of construction	Project Proponent / Detailed Design Consultant / Private developer	All potentially contaminate d sites as listed in the CAP	• Annex 19 of the EIAO-TM, Guidelines for Assessment of Impact On Sites of Cultural Heritage and Other Impacts (Section 3: Potential Contaminated Land Issues); • Guidance Manual for Use of Risk-Based Remediation Goals (RBRGs) for Contaminated Land Management; • Guidance Notes for Contaminated Land Assessment and Remediation; and • Practice Guide for Investigation and	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Land Contamination							C1	C2	C3
						Remediation of Contaminated Land • Recommendations in Health Risk Assessment			
S12.7	LC2	Re-appraisal would be required for the 'potentially contaminated landuses', 'industrial site with no potential for land contamination' and 'Non-Industrial landuses' within the land contamination assessment area as the development of these sites/ areas would only commence a number of years later, which may allow changes in the land usage of these sites and may give rise to potential land contamination issues. The Project Proponent's appointed consultant would prepare a supplementary CAP presenting the findings of the re- appraisal and strategy of the recommended SI, if required, and submit to EPD for review and approval.	To assess the latest site situation and identify any potential additional hot spots and contaminated sites.	Project Proponent / Detailed Design Consultant / Private developer	Al the surveyed sites as listed in the CAP, other remaining areas of the PDAs and works areas for the associated infrastructures	Ditto	√	√	√
S12.7	LC3	After approval of the supplementary CAP and upon completion of the SI works, the Project Proponent should prepare and submit a supplementary Contamination Assessment Report (CAR) for all potentially contaminated sites listed in the CAP to EPD for agreement.	Present the findings of SI and evaluate the level and extent of potential contamination	Project Proponent / Detailed Design Consultant / Private developer	All the surveyed sites as listed in the CAP, other remaining areas of the PDAs and works areas for the associated infrastructures	Ditto	√	√	√

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Land Contamination							C1	C2	C3
S.12.8	LC4	Preparation and submission of Remediation Action Plan (RAP) to EPD for agreement if land contamination is confirmed.	Recommend appropriate mitigation measures for the contaminated soil and groundwater identified in the assessment if remediation is required	Project Proponent / Detailed Design Consultant / Private developer	All the surveyed sites as listed in the CAP, other remaining areas of the PDAs and works areas for the associated infrastructures	Ditto	NA	NA	NA
S.12.8	LC5	Preparation and submission of Remediation Report (RR) to EPD for agreement.	Demonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed CAR and RAP	Project Proponent / Detailed Design Consultant / Private developer	All the surveyed sites as listed in the CAP, other remaining areas of the PDAs and works areas for the associated infrastructures		NA	NA	NA

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Cultural Heritage Impact (Construction and Operational Phase)							C1	C2	C3
S.13.7	CH1	• Further archaeological surveys will be conducted upon land resumption prior to the commencement of any construction works within areas of moderate archaeological potential at three locations: area near Tin Shui Wai West Interchange, area near Tong Yan San Tsuen and area near Shan Ha Tsuen. • The scope and programme of the proposed archaeological work shall be agreed with AMO. Subject to the findings of the archaeological work, appropriate mitigation measures would be proposed by the project proponent in prior agreement with AMO. • For the areas with low-moderate archaeological potential, • AMO should be informed immediately in case of discovery of antiquities or supposed antiquities in the course of the construction works. Agreement from AMO would be sought on the follow-up actions if required	To assess further archaeological potential and development impacts on private land for the purpose of protecting and managing cultural heritage. Control EM&A Performance.	Project Proponent	Area near Tin Shui Wai West Interchange, area near Tong Yan San Tsuen and area near Shan Ha Tsuen to be surveyed upon land resumption and prior to construction	AMO Ordinance (Cap 53) Guidance notes on assessment of impact on sites of CH in EIA studies. EIAO (Cap 499). EIAO-TM Annexes 10 and 19. HKPSG. Guidelines for Cultural Heritage Impact Assessment	NA	NA	NA
S.13.7	CH2	• The Grade 3 historic building of Yeung Hau temple at Tong Yan San Tsuen should be preserved via a 5m non-construction buffer with screening to prevent visitor and worker access and minimise dust during the construction phase. A site audit should be conducted at 6 month intervals during the construction phase to monitor potential direct impacts as well as indirect impacts from noise, dust, visual and vibration effects from adjacent construction works.	Protect and manage cultural heritage. To assess further heritage impacts for the purpose of protecting built heritage and mitigating development impacts.	Project Proponent	Yeung Hau Temple (Tong Yan San Tsuen), Tang Ancestral Hall (Ha Tsuen) and 33 graves located within 100m		NA	NA	NA

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Cultural Heritage Impact (Construction and Operational Phase)							C1	C2	C3
		• Built heritage in forms of temples, ancestral halls and buildings throughout the area also offers the opportunity for incorporation of historic buildings into heritage trails or visitor areas. • The planned sewer works to the north-west of the PDA near Ha Tsuen Shi are expected to impact a narrow disturbed footprint along Tin Ha Road south of the village. The impact of these works on the declared monument, i.e. Tang Ancestral Hall locates 90m away, are expected to be nil. Thus no mitigation measures are needed. • A total of 33 graves, which none of these graves yielded dates older than 100 years (no earlier than 1930), were recorded within the 100m assessment area. The potential management measures on these graves are either retain or relocate within the development.	Control EM&A Performance.		assessment (A 5m non-construction buffer and a 6-month- interval site audit to Yeung Hau Temple will be applied during construction. A further study to design heritage trails or visitor Areas incorporating heritage buildings in the area is recommended to be conducted during detailed design stage. Once the idea of heritage trails is pursued, the implementation and anagement agencies shall				

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
Cultural Heritage Impact (Construction and Operational Phase)							C1	C2	C3
					also be identified before operation. Some of the 33 graves within 100m buffer could potentially be negotiated to relocate before the construction stage)				

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objective of the Recommended Measures & Main Concerns to Address	Implementation Agent	Location / Timing	Requirements and / or standards to be achieved	Implementation Status		
EM&A Project							C1	C2	C3
S14.2	EM1	• An Independent Environmental Checker needs to be employed as per the EM&A Manual.	Control EM&A Performance	Project Proponent	All constructi on sites	• EIA Ordinance Guidance Note No.4/2010 EIAO-TM	√	√	√
S14.2 –14.4	EM2	1) An Environmental Team needs to be employed as per the EM&A Manual. 2) Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures. An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with.	Perform environmental monitoring & auditing	Project Proponent	All constructi on sites	• EIA Ordinance Guidance Note No.4/2010 EIAO-TM	√	√	√