Contract No. SPW 02/2023 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1

Quarterly EM&A Report

(October 2024 - December 2024)

Drainage Services Department

2025-01-15

aurecon

Bringing ideas to life

aurecon

MOTT MACDONALD

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

Attn: Mr. Simon H.M. YEUNG – CRE(C)

Your Reference

Our Reference
EC/TC/BW/T601100483/
02/02/L075

Mott MacDonald
3/F Manulife Place
348 Kwun Tong Road
Kwun Tong
Kowloon
Hong Kong

T +852 2828 5757
F +852 2827 1823
mottmac.hk

Contract No. SPW 04/2024

Independent Environmental Checker for Construction of Yuen Long Effluent Polishing Plant Stage 1 (2024-2025)

Environmental Permit No. EP-565/2019/A

Quarterly EM&A Summary Report for October 2024 to December 2024

15 January 2025

By Hand and By Email

Dear Sir,

I refer to the captioned Quarterly EM&A Summary Report for October 2024 to December 2024 (Revision 1) which was received via e-mail on 15 January 2025 and duly certified by the Environmental Team (ET) Leader on 15 January 2025 (ref.: PL-202501036).

I have no comment on the captioned report and hereby verify that this submission has in general fulfilled the requirements set out in the EM&A Manual (in particular Section 12.4.5) for the captioned project.

Should you have any queries regarding the captioned or require any further information, please contact the undersigned at 2828 5875.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED

Brandon WONG
Independent Environmental Checker
T +852 2828 5875
Brandon.Wong@mottmac.com

cc	DSD	Mr. Wallace CHENG – E/SP 16 (by e-mail)
	Aurecon Hong Kong Limited	Mr. Vincent LU – ET Leader (by e-mail)
	Paul Y – CREC Joint Venture	Mr. Gabriel WONG – Environmental Specialist (by e-mail)

Aurecon Hong Kong Limited
Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
223 – 231 Wai Yip Street, Kwun Tong
Hong Kong

T +852 3664 6888
F +852 3664 6999
E hongkong@aurecongroup.com
w aurecongroup.com

Ref: PL-202501036

By Email

15 January 2025

Mott MacDonald
3/F Manulife Tower,
348 Kwun Tong Road,
Kwun Tong, Kowloon,
Hong Kong

Attn: Mr. Brandon Wong, IEC

Dear Sir,

Contract No. SPW 02/2023
Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1
Environmental Permit No. EP-565/2019/A
EP Condition 3.5 – Quarterly EM&A Report for October to December 2024

Pursuant to Clause 3.5 of Environmental Permit No. EP-565/2019/A for the captioned project, we are pleased to submit the certified Quarterly EM&A Report for October to December 2024 (Rev.1) for your verification.

Should you have any queries regarding the captioned or require any further information, please contact the undersigned at 2531 0243.

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

Vincent M. J. Lu
Environmental Team Leader

Encl.

cc. AECOM – Mr. Patrick Leung (patrick.leung@ylepp-aecom.com)
Paul Y. - CREC Joint Venture – Mr. Gabriel Wong (gabriel.wong@crec.com.hk)

Document control record

Document prepared by:

Aurecon Hong Kong Limited
Unit 1608, 16/F, Tower B, Manulife Financial Centre,
223 – 231 Wai Yip Street, Kwun Tong, Kowloon
Hong Kong S. A. R.
T +852 3664 6888
F +852 3664 6999
E hongkong@aurecongroup.com
W aurecongroup.com

A person using Aurecon documents or data accepts the risk of:

a) Using the documents or data in electronic form without requesting and checking them for accuracy against the original hard copy version.

b) Using the documents or data for any purpose not agreed to in writing by Aurecon.

Document control						aurecon
Report title		Quarterly EM&A Report (October 2024 - December 2024)				
Document ID		QR	**Project number**		P525161	
File path		P525161-0000-PD-QR-0006[1]				
Client		Drainage Services Department				
Client contact			**Client reference**			
Rev	**Date**	**Revision details/status**	**Author**	**Reviewer**	**Verifier** (if required)	**Approver**
0	10 January 2025	Submitted to IEC	VL	JH		VL
1	15 January 2025	Respond to IEC comments	VL	JH		VL
Current revision		**1**				

Approval			
Reviewer's signature		Approver's signature	
Name	Joe Ho	Name	Vincent Lu
Title	Senior Environmental Consultant	Title	Environmental Team Leader

Contents

Tables

Figures

Appendix

EXECUTIVE SUMMARY

This Quarterly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract No. SPW 02/2023 “Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1”. Drainage Services Department (DSD) has appointed Aurecon Hong Kong Limited (Aurecon) to undertake the Environmental Team services for the project and implement the EM&A works.

This is the 15th Quarterly EM&A Report for the construction phase which summaries findings of the EM&A programme during the reporting period from 1 October 2024 to 31 December 2024. As informed by the Contractor, major activities in the reporting period were shown in section 1.4.1.

Breaches of Environmental Quality Performance Limits (AL levels)

No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting period.

No Action and Limit Level exceedance was recorded for water quality monitoring in the reporting period.

No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the active ardeid night roosts during the reporting period.

No Action / Limit exceedance for the ecological monitoring of birds in the reporting period

No corrective actions were required according to the Event and Action Plans for the Monitoring Parameters.

Land Contamination

Regular site inspection was carried out to ensure the recommended mitigation measures are properly implemented. The signed final Contamination Assessment Report (CAR) for “Main Storeroom & Workshops”, “Mechanical Workshop”, “Waste Storage Area”, “SAS Thickener House-1”, “SAS Thickener House-2”and “Screening Press House” were submitted to EPD respectively on 1st November 2021, 23rd November 2021, 29th April 2022, 6th July 2022, 19th June 2023 and 29th October 2024. No contaminated soil and ground water was found within the Main Storeroom & Workshop, Mechanical Workshop, Waste Storage Area, SAS Thickener House-1, SAS Thickener House-2 and Screening Press House, and no remedial action is required for these locations.

Complaint Log

No complaints were received in the reporting period.

Notifications of Summons and Successful Prosecutions

No notifications of summons and successful prosecutions were received in the reporting period.

Reporting Change

There were no reporting changes during the reporting period.

1 INTRODUCTION

1.1 Background

1.1.1 The existing Yuen Long Sewage Treatment Works (YLSTW) is a secondary sewage treatment works, located at Yuen Long Industrial Estate serves Yuen Long Town, Yuen Long Industrial Estate and Kam Tin areas with a design capacity of 70,000 m^3 per day. Based on the latest planning data, the volume of sewage generation from the YLSTW catchment is estimated to increase to 150,000 m^3 per day after 20 years. In addition, since YLSTW has been operating for over 30 years and most of its facilities are of out-dated design and reaching the end of their design life, the environmental facilities of the plant will also be upgraded and hence improving the adjacent environment through upgrading the YLSTW to Yuen Long Effluent Polishing Plant (YLEPP). The Location of Proposed Yuen Long Effluent Polishing Plant is given in **Figure 1**.

1.1.2 YLSTW will be reconstructed in two stages to increase its capacity to 150,000 m^3 per day. The proposed works, as Stage 1 of the project, will firstly increase the treatment capacity to 100,000 m^3 per day. In the course of Stage 1 construction, about half of the existing facilities of YLSTW would be demolished, while the other half would be kept in operation to maintain the sewage treatment service for Yuen Long area. This 72-month works contract commenced on 9 November 2020. Demolition of existing YLSTW for construction of new treatment facilities are in progress.

1.1.3 The Project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) for which Environmental Impact Assessment (EIA) report and Environmental Monitoring and Audit (EM&A) Manual was approved by EPD (Register No.: AEIAR-220/2019) on 25 April 2019. The Environmental Permit (EP) (EP No. EP-565/2019) was issued by EPD on 26 April 2019. Variation of the Environmental Permit (EP) (EP No. EP-565/2019/A) was issued by EPD on 26 November 2024.

1.1.4 Fugro Technical Services Limited was appointed as the Environmental Team (ET) by Drainage Services Department (DSD) to undertake the Environmental Team services for the Project and implement the EM&A works under the Contract No. DC/2019/10 Yuen Long Effluent Polishing Plant -Main Works for Stage 1 (hereinafter referred as “the Contract”) for the period from July 2020 to 6 July 2023.

1.1.5 Aurecon Hong Kong Limited (Aurecon) has been appointed as the Environmental Team (ET) by Drainage Services Department (DSD) to undertake the Environmental Team services for the Project and implement the EM&A works under the Contract from July 2023. Air quality, noise, water quality and ecological monitoring, site inspections and auditing (as scheduled) under EM&A programme with effect from 7 July 2023 was conducted by Aurecon. Aurecon is undertaking the preparation (including reporting of monitoring results), certification by ET Leader and submission of this report to EPD.

1.1.6 All ET roles and responsibilities under the EP for this Project were undertaken by Fugro up to 6 July 2023 and by Aurecon with effect from 7 July 2023. Air quality, noise, water quality and ecological monitoring, site inspections and auditing (as scheduled) under EM&A programme up to 6 July 2023 was conducted by Fugro, and the corresponding monitoring results were shared with Aurecon for the purposes of reporting in this report.

1.1.7 This is the 15th Quarterly EM&A Summary Report to document the findings of site inspection activities and EM&A programme for this project from 1 October 2024 to 31 December 2024 (reporting period) and is submitted to fulfil Condition 3.5 of the EP and

Section 12.4.5 of the EM&A Manual. According to Condition 4 of the EP, electronic reporting is provided on the internet website to facilitate public inspection of the report.

1.2 Project Organization

1.2.1 The Project Organization structure is shown in **Appendix B**. The key personnel contact names and numbers are summarized in **Table 1**.

Table 1 Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Proponent (Drainage Services Department)	Engineer	Mr. Wallace Cheng	2594 7473
Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Resident Engineer	Mr. Simon Yeung	9075 7172
	Senior Resident Engineer	Mr. Patrick Leung	6124 8838
Independent Environmental Checker (Mott MacDonald Hong Kong Limited)	Independent Environmental Checker (IEC)	Mr. Brandon Wong	2828 5875
Contractor (Paul Y. - CREC Joint Venture)	Environmental Specialist	Mr. Gabriel Wong	5269 5723
	Environmental Officer	Mr. Henry Lau	5490 5271
Environmental Team (Aurecon Hong Kong Limited)	Environmental Team Leader (ETL)	Mr. Vincent Lu	6346 5908

1.3 Construction Programme and Activities

1.3.1 The construction programme of this project is shown in **Appendix A**.

1.4 Works undertaken during the Period

1.4.1 The main construction works carried out in the reporting period were summarized in **Table 2**:

Table 2 Main Construction Works carried out in the Reporting Period

October 2024	November 2024	December 2024
• E&M works and fixing GRC panel at CLP Substation • ELS works and pipeworks at emergency bypass chamber • ABWF, E&M work and RC structure at IW • ABWF and E&M works at PST • Piling at SDB • External works at site-wide of predrilling at walkway • ELS work at AGS • ELS work at TTS • RC Structure at STB • ELS work at Sludge Digester no. 1-3 • E&M work at Biogas Holder no. 1 • ELS works at emergency bypass chamber • Disposal of construction waste as indicated in **Appendix F**.	• E&M works and fixing GRC panel at CLP Substation • ELS works and pipeworks at emergency bypass chamber • ABWF, E&M work and RC structure at IW • ABWF and E&M works at PST • External works at site-wide of predrilling at walkway • ELS work at AGS • ELS work at TTS • RC Structure at STB • ELS work at Sludge Digester no. 1-3 • E&M work at Biogas Holder no. 1 • Disposal of construction waste as indicated in **Appendix F**.	• Fixing GRC panel at CLP Substation • ELS works and pipeworks at emergency bypass chamber • ABWF, E&M work and RC structure at IW • ABWF and E&M works at PST • ELS work at SDB • External works at site-wide of predrilling at walkway and water meter cabinet • ELS work at AGS • ELS work at TTS • RC Structure at STB • Demolish Existing SDT 1-4 • ELS work at Sludge Digester no. 1-3 • E&M work at Biogas Holder no. 1 • Disposal of construction waste as indicated in **Appendix F**.

1.4.2 The environmental mitigation measures corresponding to the main construction works implemented in the reporting period can be referred to **Appendix G**.

2 SUMMARY OF EM&A REQUIREMENTS AND MONITORING RESULTS

2.1 Monitoring Requirement

2.1.1 The EM&A programme was undertaken in accordance with the EM&A Manual. It should be noted that the air quality, noise, water quality and ecology monitoring works are covered by this contract.

Air quality Monitoring

2.1.2 1-hour Total Suspended Particulates (TSP) levels should be measured at the designated air quality monitoring stations to ensure that any deteriorating air quality could be readily detected and timely action shall be undertaken to rectify such situation. Impact 1-hour TSP monitoring was conducted for at least three times every 6 days when the highest dust impact occurs.

Noise Monitoring

2.1.3 Leq (30min) monitoring is conducted at least once a week when there are Project-related construction activities being undertaken within a radius of 300 m from the monitoring stations. The monitoring is conducted during the construction phase between 0700 and 1900 on normal weekdays at the designated monitoring locations.

Water quality Monitoring

2.1.4 Turbidity (in NTU), pH, DO (in mg/L and % of saturation), Temperature (in °C), Salinity (in ppt) and Suspended Solids are conducted for three days per week at mid-flood and mid-ebb with sampling and measurement at the designated monitoring stations.

Ecology Monitoring

2.1.5 Ardeid night roost monitoring was conducted once a month in areas within 100 m from the Project boundary to monitor the effectiveness of proposed mitigation measures and detect any unpredicted indirect ecological impacts arising from the Project.

2.1.6 Ecological monitoring of birds was conducted monthly during the quarter at point count sites and transect routes along the wetland habitats in Fung Lok Wai and Nam Sang Wai as well as along Shan Pui River and Kam Tin River within 500 m from the Project boundary.

2.2 Monitoring Locations

2.2.1 The air quality and noise monitoring are summarized in **Table 3**. The locations of the air quality and noise monitoring stations shown in **Figure 2** and **Figure 3**, respectively.

Table 3 Air Quality and Noise Monitoring Locations

Environmental Monitoring	Monitoring Station	Location
Air Quality	AM1	Topfine Machinery (China) Co. Ltd
	AM2	Squatter house at the west of YLSTW
Noise	CM1	Squatter house at the north of Yuen Long STW
	CM2	Squatter house at the west of Yuen Long STW
	CM3	Squatter house at the east of Yuen Long STW

2.2.2 The coordinates of water quality monitoring locations are summarized in **Table 4**. The locations of the water quality monitoring stations shown in **Figure 4**.

Table 4 Coordinates of Water Quality Monitoring Locations

Sampling Location		Easting	Northing
M1	Serve as the control station at upstream location of construction site (Flood Tide) / Serve as the impact station at downstream location of construction site (Ebb Tide)	821 086	836 656
M2	Serve as the impact station at downstream location of construction site (Flood Tide)/ Serve as the control station at upstream location of construction site (Ebb Tide)	820 996	836 246
M3	Serve as the impact station at downstream location of construction site (Flood Tide) / Serve as the control station at upstream location of construction site (Ebb Tide)	820 645	820 335

2.3 Results & Observations

2.3.1 Graphical presentation of the environmental monitoring data in the reporting period is presented in **Appendix D**.

Air quality Monitoring

2.3.2 1-hour TSP impact monitoring at AM1 and AM2 were carried out in the reporting period, the air quality monitoring results are reported in the monthly EM&A Report prepared for this Contract.

2.3.3 No Action and Limit Level exceedance was recorded for air quality monitoring in the reporting period.

Noise Monitoring

2.3.4 Construction noise monitoring were carried out in the reporting period, the construction noise monitoring results for CM1, CM2 and CM3 are reported in the monthly EM&A Reports prepared for this Contract.

2.3.5 No Action and Limit Level exceedance was recorded for construction noise monitoring in the reporting period.

2.3.6 No raining and wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.

2.3.7 During the noise monitoring period, at CM2, road traffic from the squatter house at the west of Yuen Long STW was observed, at CM3, road traffic from the Nam Sang Wai Road was observed. No effect that arose from the other special phenomena and work progress of the concerned site for CM1 was noted during the current monitoring period.

Water quality Monitoring

2.3.8 Water quality monitoring were carried out in the reporting period, the monitoring results for M1, M2 and M3 are reported in the monthly EM&A Reports prepared for this Contract.

2.3.9 Typhoon Signal No. 3 was hoisted on 26 October 2024. Due to safety concerns, the water quality monitoring on 26 October 2024 has been cancelled.

2.3.10 Typhoon Signal No. 3 was hoisted on 9 November 2024. Due to safety concerns, the water quality monitoring for Mid-flood on 9 November 2024 has been cancelled.

2.3.11 Typhoon Signal No. 3 was hoisted on 14 November 2024. Due to safety concerns, the water quality monitoring on 14 November 2024 has been cancelled.

2.3.12 No Action and Limit Level exceedance was recorded for Dissolved Oxygen, Turbidity and Suspended Solids. Number of water quality exceedance recorded in the reporting period at each impact stations is summarized in **Table 5**.

Table 5 Summary of Water Quality Exceedance

Sampling Location	Exceedance Level	DO		Turbidity		Suspended Solids		Total	
		Flood	Ebb	Flood	Ebb	Flood	Ebb	Flood	Ebb
M1	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
M2	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
M3	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0
Total	Action	0	0	0	0	0	0	0	
	Limit	0	0	0	0	0	0	0	

Ecology Monitoring

2.3.13 Ardeid night roost monitoring and ecological bird monitoring were carried out in the reporting period. The monitoring results are reported in the monthly EM&A Reports prepared for this Contract.

2.3.14 Results of the ardeid night roost monitoring showed that the two confirmed ardeid night roosts (ANR 1 and ANR 2) during the pre-construction survey were still observed to be active from October 2024 to December 2024. No Action / Limit Level exceedance at NMS1 and NMS2 was recorded during the reporting period.

2.3.15 Results of the ecological bird monitoring recorded no exceedance in Action / Limit Level during the reporting period.

2.4 Action and Limit Levels

2.4.1 The Action and Limit Levels for air quality, noise, water quality and ecology monitoring have been set and are presented in **Appendix C**.

2.5 Event and Action Plans

2.5.1 The event and action plans for air quality, noise, water quality and ecology monitoring are presented in **Appendix E**.

2.6 Mitigation Measures

2.6.1 The Contractor had implemented environmental mitigation measures and requirements as stated in the EIA Report, the EP and EM&A Manual. The implementation status of the environmental mitigation measures during the reporting period is summarized in **Appendix G**.

3 LANDSCAPE AND VISUAL

3.1 Audit Requirements

3.1.1 According to the EM&A Manual, a Landscape Architect or related professional shall be employed to audit the implementation of landscape construction works particularly during site clearance operations when the proposed tree felling and transplanting will take place and subsequent maintenance operations. Site audits should be undertaken every week during the construction phase to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. The mitigation measure recommended in the EIA Report as the audit requirements for landscape and visual, including: preservation of existing vegetation, transplanting of affected trees, compensatory tree planning, control of night-time lighting glare, erection of decorative screen hoarding and management of construction activities and facilities are summarized in **Appendix G**.

3.2 Results and Observations

3.2.1 According to the EM&A Manual, site audits should be undertaken every week during the construction phase to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives.

3.2.2 To monitor and audit the implementation of landscape and visual mitigation measures, 13 weekly landscape and visual site audits were carried out in the reporting period. No outstanding issues were reported during the reporting period. Observations and recommendations during site audits are summarized in **Table 6**.

4 LAND CONTAMINATION

4.1 Contamination Assessment Report

4.1.1 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “Main Storeroom & Workshops” and the laboratory results for the sampling works (conducted between 30 June 2021 to 16 July 2021) show that there are no exceedances of the adopted RBRGs for the “Main Storeroom & Workshops”. As no contaminated soil and groundwater was found within the “Main Storeroom & Workshops”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “Main Storeroom & Workshops”. Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 1 November 2021.

4.1.2 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “Mechanical Workshop” and the laboratory results for the sampling works (conducted between 23 July 2021 to 4 August 2021) show that there are no exceedances of the adopted RBRGs for the “Mechanical Workshop”. As no contaminated soil and groundwater was found within the “Mechanical Workshop”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “Mechanical Workshop”. Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 23 November 2021.

4.1.3 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “Waste Storage Area” and the laboratory results for the sampling works (conducted between 24 November 2021 to 6 January 2022) show that there are no exceedances of the adopted RBRGs for the “Waste Storage Area”. As no contaminated soil and groundwater was found within the “Waste Storage Area”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “Waste Storage Area”. Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 29 April 2022.

4.1.4 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “SAS Thickener House-1” and the laboratory results for the sampling works (conducted between 13 April 2022 to 16 May 2022) show that there are no exceedances of the adopted RBRGs for the “SAS Thickener House-1”. As no contaminated soil and groundwater was found within the “SAS Thickener House-1”, no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the “SAS Thickener House-1” . Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 6 July 2022.

4.1.5 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the “SAS Thickener House-2” and the laboratory results for the sampling works (conducted between 15 February 2023 to 23 February 2023) show that there are no exceedances of the adopted RBRGs for the “SAS Thickener House-2”. The laboratory results are compared against the adopted RBRGs and soil saturation limit (Csat) for soil samples and the adopted RBRGs and the solubility limits for groundwater samples. No exceedance of RBRG are recorded for both soil samples and groundwater samples. Furthermore, no exceedance of the soil saturation limit are recorded for soil samples. However, the exceedances of solubility limits for PCRs (C9-C16) are recorded for groundwater samples collected at BH-18, BH-19, BH-20 and BH-21; and also PCRs (C17-C35) for BH-21. As no non-aqueous phase liquid (NAPL) was observed during sampling, no further sampling and remediation are required. As no contaminated soil and groundwater is found within the

"SAS Thickener House-2", no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the "SAS Thickener House-2". Their findings are summarized in Contamination Assessment Report (CAR) which was certified by ET Leader and verified by IEC on 31 May 2023 and submitted to EPD on 19 June 2023.

4.1.6 Risk-Based Remediation Goals (RBRGs) for Industrial have been adopted for the "Screening Press House" and the laboratory results for the sampling works (conducted between 19 August 2024 to 20 August 2024) show that there are no exceedances of the adopted RBRGs for the "Screening Press House". As no contaminated soil and groundwater was found within the "Screening Press House", no remediation actions are required for contaminated soil and groundwater for the scheduled land use of the "Screening Press House". Their findings are summarized in Contamination Assessment Report (CAR) and submitted to EPD on 29 October 2024.

5 SITE INSPECTION AND AUDIT

5.1 Site Inspection

5.1.1 Site audits were carried out by ET on weekly basis at least once per week to monitor the implementation of proper environmental management practices and mitigation measures in the Project site.

5.1.2 In the reporting period, 13 site inspections were carried out. No outstanding issues were reported during the reporting period. Details of observations recorded during the site inspections are presented in **Table 6**.

Table 6 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	02102024	Reminder 1: The contractor should increase watering for the haul road.	Watering was increased.
	27112024	Observation 1: The contractor should increase watering for the haul road.	Watering was increased.
Noise	21112024	Reminder 1: The Contractor was remaindered to enclose the Silentup at northwest of the Site.	The silentup was enclosed.
	18122024	Reminder 1: The Silentup at west of the Site should be enclosed.	The silentup was enclosed.
Water Quality	NA		
Chemical and Construction Waste Management	NA		
Land Contamination	NA		
Ecological Impact	NA		
Landscape and Visual Impact	NA		
Permit / Licenses	08102024	Observation 1: The colour of NRMM label for the forklift at SD should be green.	A new NRMM label was provided
	12112024	Observation 1: The color of NRMM label for the excavator at TTS should be green.	A new NRMM label was provided
	10122024	Observation 1: NRMM label should be provided for the road roller at TTS.	NRMM label was provided
Other	23102024	Reminder 1: The domestic waste should be removed from the site timely.	The removal frequency was increased.
	30102024	Reminder 1: The domestic waste should be stored inside an enclosed rubbish bin.	An enclosed rubbish bin was provided.
	12112024	Reminder 1: The Contractor was reminded to remove the stagnant water at AGS.	The stagnant water at AGS was removed.
	18122024	Reminder 1: The domestic waste should be stored in an enclosed rubbish bin and disposed of timely.	Enclosed rubbish bin was provided.

5.2 Advice on the Solid and Liquid Waste Management Status

5.2.1 The Contractor registered as a chemical waste producer for the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

5.2.2 The management of waste generated by the construction is presented in **Table 7**.

Table 7 Waste Generated by the Construction and Disposal Ground

Types of Waste	Disposal Ground
Inert C&D Waste (Excluding slurry and bentonite)	Tuen Mun Area 38
Inert C&D Waste (For slurry and bentonite)	Tseung Kwan O Area 137
Non-inert C&D Materials	North East New Territories Landfill (NENT)
Sludge	West New Territories Landfill (WENT)
Marine Sediment	Type 1 – Open Sea Disposal: South Cheung Chau Open Sea Sediment Disposal Area Type 1 – Open Sea Disposal (Dedicate Site) and Type 2 – Confined Marine Disposal: Contaminated Mud Pit Vb of the Confined Marine Disposal Facilities to the East of Sha Chau

5.2.3 The amount of wastes generated by the site activities in the reporting period is shown in **Appendix F**.

5.2.4 If off-site disposal is required, the excavated marine mud from the land-based works shall be disposed of at the designated disposal sites within Hong Kong as allocated by the Marine Fill Committee or other locations as agreed by the Director. The Contractor shall ensure no spilling and overflowing of materials during loading / unloading / transportation is allowed.

5.2.5 The Contractor was reminded that chemical waste should be properly handled temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packing, Labelling and Storage of Chemical Waste.

6 NON-COMPLIANCE, COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

6.1 Non-compliance (Exceedances of AL levels)

6.1.1 No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting period.

6.1.2 No Action and Limit Level exceedance was recorded was recorded for water quality in the reporting period.

6.1.3 No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the active ardeid night roosts in the reporting period.

6.1.4 No Action / Limit exceedance for the ecological monitoring of birds in the reporting month.

6.1.5 No corrective actions were required according to the Event and Action Plans.

6.2 Complaints, Notification of Summons and Successful Prosecutions

6.2.1 No environmental complaints, notification of summons and successful prosecutions was recorded in the reporting period.

6.2.2 Cumulative complaint log, summaries of complaints, notification of summons and successful prosecutions are presented in **Appendix H**.

6.2.3 No corrective actions were required.

7 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURE

7.1 Implementation Status of Environmental Protection and Pollution Control / Mitigation Measures

The Contractor had implemented environmental protection and pollution control / mitigation measures as stated in the EIA Report, the EP and EM&A Manual. The implementation status of the recommended mitigation measures during the reporting period is summarized in **Appendix G**.

The status of required submissions under the EP as of the reporting period are summarized in **Table 8**.

Table 8 Status of submissions required under the EP

EP Condition (EP-565/2019)	Submission Title	Submission Status
Condition 2.9	Construction Phase Emergency Response Plan	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.11	Pre-construction Ardeid Night Roost Survey Report	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
EM&A Manual Sec. 7.3.3 & 7.3.4	Baseline Bird Survey Report	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.12	Noise Mitigation Measures Plan	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.13	Proposal for Minimization of Overspill Light to Ecological Sensitive Areas	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Supplementary Contamination Assessment Plan	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Main Storeroom & Workshops	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Mechanical Workshop	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Waste Storage Area	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for SAS Thickener House-1	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.

EP Condition (EP-565/2019)	Submission Title	Submission Status
Condition 2.14	Contamination Assessment Report for SAS Thickener House-2	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 2.14	Contamination Assessment Report for Screening Press House	Certified by ET Leader and verified by IEC on 14 Oct 2024 and submitted to EPD on 29 Oct 2024, to be finalised and made available for public inspection via the dedicated website.
Condition 2.15	Landscape and Visual Mitigation Plan	Submitted to EPD with ET certification and IEC verification, to be finalised and made available for public inspection via the dedicated website.
Condition 3.3	Baseline Monitoring Report	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 3.4	Monthly EM&A Report (from April 2021 to November 2024)	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 3.5	Quarterly EM&A Report (from April 2021 to September 2024)	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.
Condition 4.2	Environmental Monitoring Data from April 2021 to November 2024	Submitted to EPD with ET certification and IEC verification, finalised and available for public inspection via the dedicated website.

8 CONCLUSION AND RECOMMENDATION

8.1 Conclusions

8.1.1 No Action and Limit Level exceedance was recorded for air quality monitoring and construction noise monitoring in the reporting period.

8.1.2 No Action and Limit Level exceedance was recorded for water quality in the reporting period.

8.1.3 No Action / Limit exceedance was recorded for noise levels at stations (NMS1 and NMS2) in close proximity to the active ardeid night roosts in the monitoring period.

6.1.6 No Action / Limit exceedance for the ecological monitoring of birds in the reporting month.

8.1.4 13 environmental site inspections and 13 landscape and visual site audits were carried out in the reporting period. Recommendations on mitigation measures were given to the Contractor for remediating the deficiencies identified during the site inspections.

8.1.5 No environmental complaints, notification of summons and successful prosecutions were recorded in the reporting period.

8.1.6 The EM&A methodology has been effective in monitoring the environmental impacts of the Project and the effectiveness of the mitigation measures. The data collected were useful in determining whether the Project had caused unacceptable impacts on the sensitive receivers. Analysis of all EM&A data collected throughout the baseline and the impact monitoring periods demonstrated the environmental acceptability of the Project.

8.2 Comment and Recommendations

8.2.1 The recommended environmental mitigation measures, as proposed in the EIA report and EM&A Manual shall be effectively implemented to minimize the potential environmental impacts from the Project. The EM&A programme would effectively monitor the environmental impacts generated from the construction activities and ensure the proper implementation of mitigation measures.

8.2.2 According to the environmental site inspections performed in the reporting period, the following recommendations were provided:

Air Quality Impact

- The contractor should increase watering for the haul road.

Construction Noise Impact

- The silentup at west of the Site should be enclosed.
- The Contractor was remaindered to enclose the Silentup at northwest of the Site.

Water Quality Impact

- No specific observation was identified in the reporting month.

Chemical Waste and Construction Waste Management

- The domestic waste should be removed from the site timely.
- The domestic waste should be stored inside an enclosed rubbish bin.

Land Contamination

- No specific observation was identified in the reporting month.

Ecological Impact

- No specific observation was identified in the reporting month.

Landscape and Visual Impact

- No specific observation was identified in the reporting month.

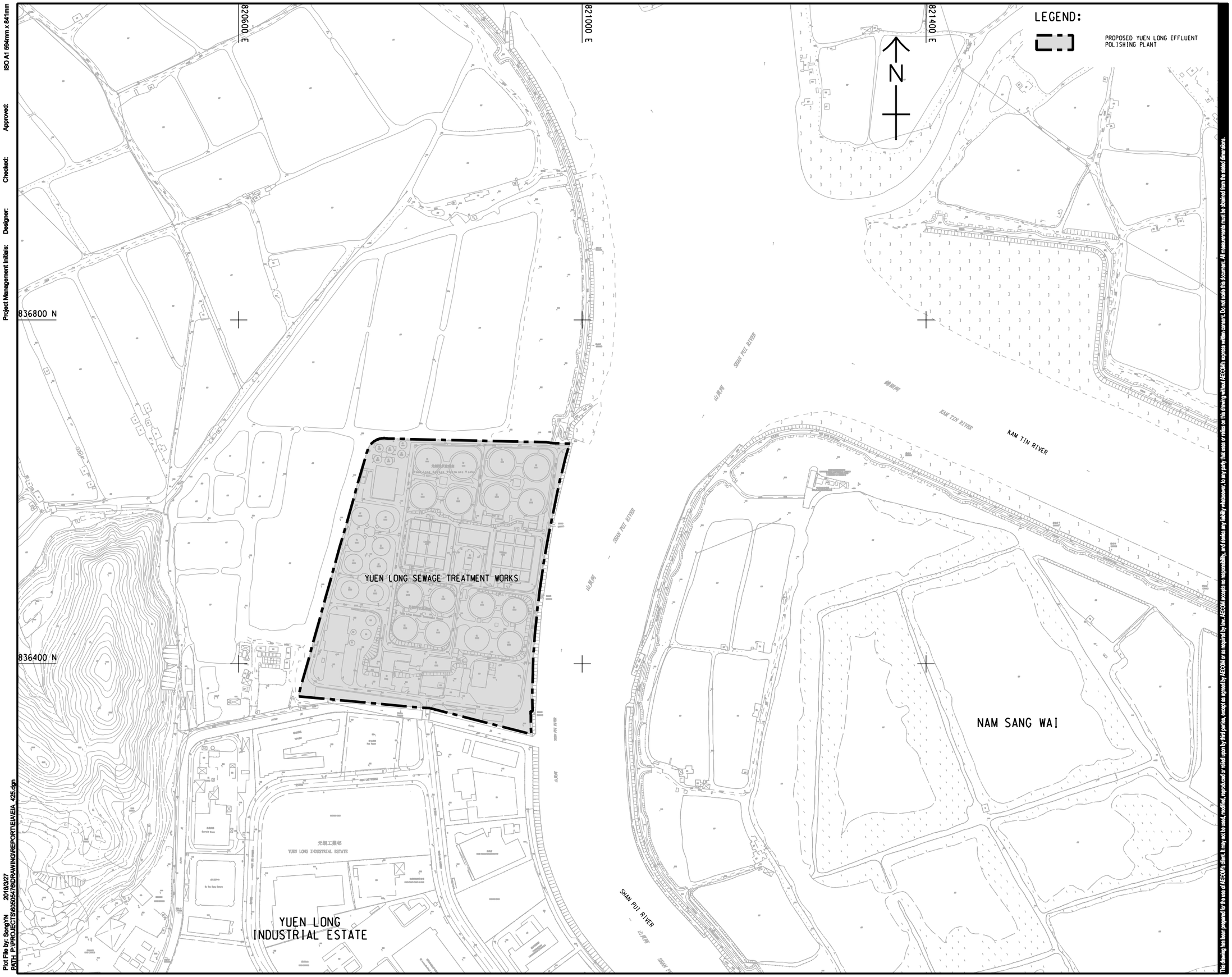
Hazard to Life

- The domestic waste should be stored in an enclosed rubbish bin and disposed of timely.
- The Contractor was reminded to remove the stagnant water at AGS.

Permit/ Licenses

- The colour of NRMM label for the forklift at SD should be green.
- NRMM label should be provided for the road roller at TTS.
- The colour of NRMM label for the excavator at TTS should be green.

Figure 1 Location of Proposed Yuen Long Effluent Polishing Plant



Project Management Initials: Designer: Checked: Approved: ISO A1 594mm x 841mm

Plot File by: SongYN 2016/3/27
PATH: P:\PROJECTS\60505476\DRAWING\REPORT\EIA\EIA_425.dgn

AECOM

PROJECT 項目

YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT 業主

渠務署
Drainage Services Department

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS 階段

SCALE 比例
A1 1 : 2000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖

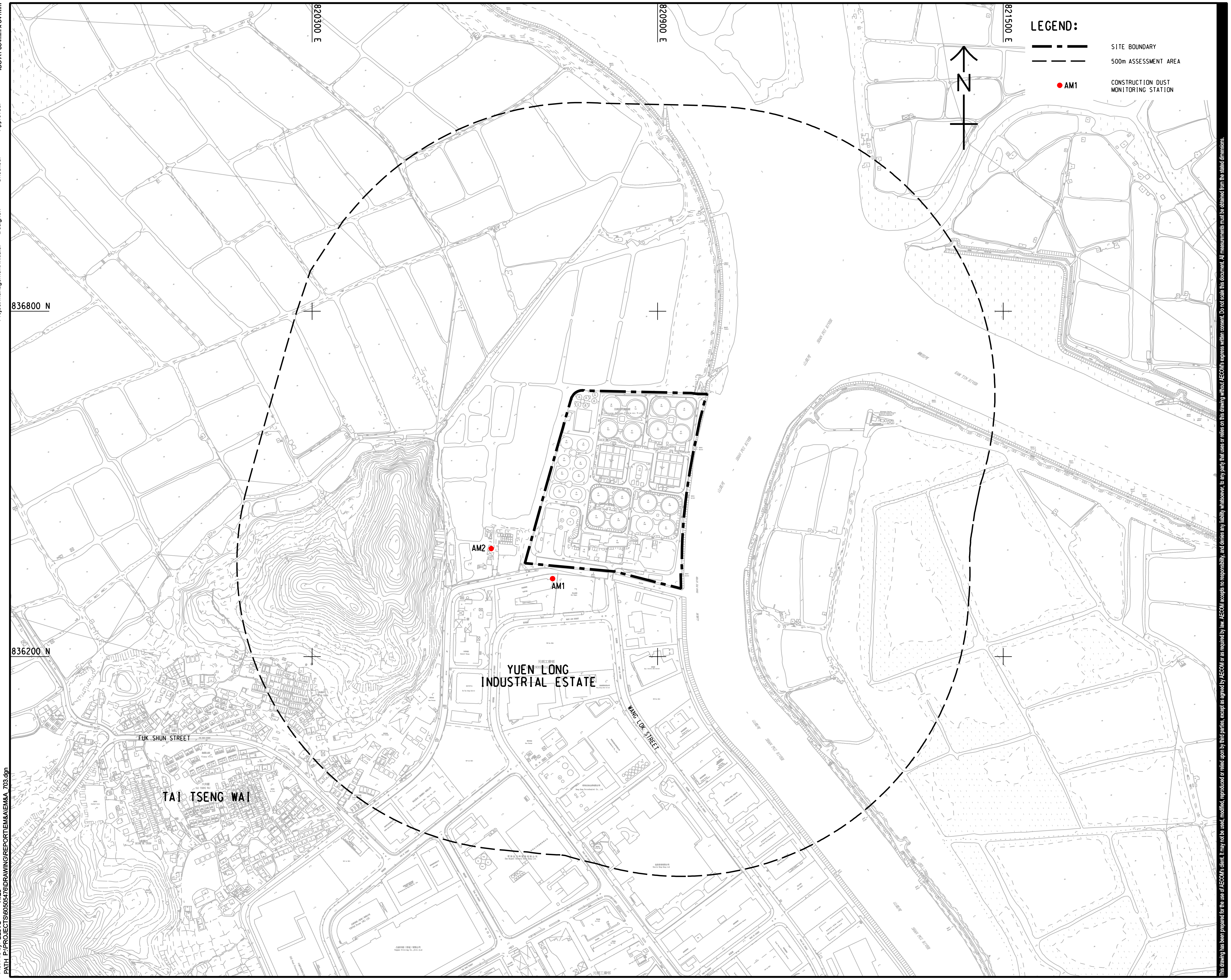
PROJECT NO. 項目編號
60505476

CONTRACT NO. 合約編號
CE 3/2015 (DS)

SHEET TITLE 圖紙名稱
LOCATION OF PROPOSED YUEN LONG EFFLUENT POLISHING PLANT

SHEET NUMBER 圖紙編號

Figure 2 Location of Construction Dust Monitoring Stations



ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:

Plot File by: GaoYU 11/29
PATH P:\PROJECTS\60505476\DRAWING\REPORT\EM&A\EM&A_703.dgn

AECOM

PROJECT
項目

YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT
業主

渠務署
Drainage Services Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核

STATUS
階段

SCALE **比例**: A1 1 : 3000

DIMENSION UNIT **尺寸單位**: METRES

KEY PLAN
索引圖

PROJECT NO. **項目編號**: 60505476

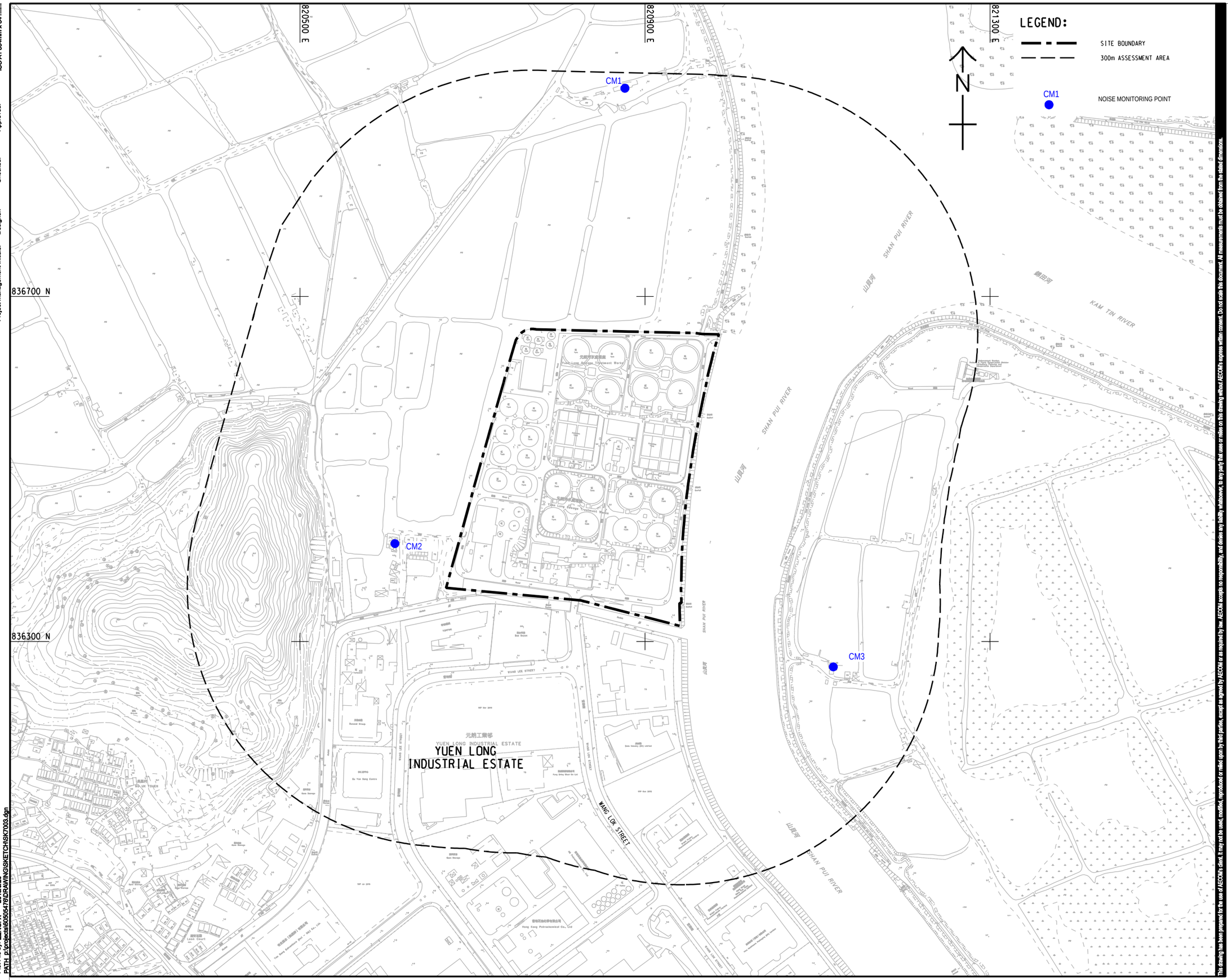
CONTRACT NO. **合約編號**: CE 3/2015 (DS)

SHEET TITLE
圖紙名稱

LOCATION OF CONSTRUCTION DUST MONITOING STATIONS

SHEET NUMBER
圖紙編號

Figure 3 Noise Monitoring Locations



Project Management Initials: Designer: Checked: Approved: ISO A1 594mm x 841mm

Plot File by: ZENGFX 2019/2/26
PATH: P:\Projects\60505476\DRAWING\SKETCH\SK7003.dgn

AECOM

PROJECT
項目

YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT
業主

渠務署
Drainage Services Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS
狀況

SCALE 比例
A1 1 : 2000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號
60505476

CONTRACT NO. 合約編號
CE 3/2015 (DS)

SHEET TITLE
圖紙名稱

LOCATIONS OF NOISE MONITORING POINTS

SHEET NUMBER
圖紙編號

Figure 4 Water Quality Monitoring Locations

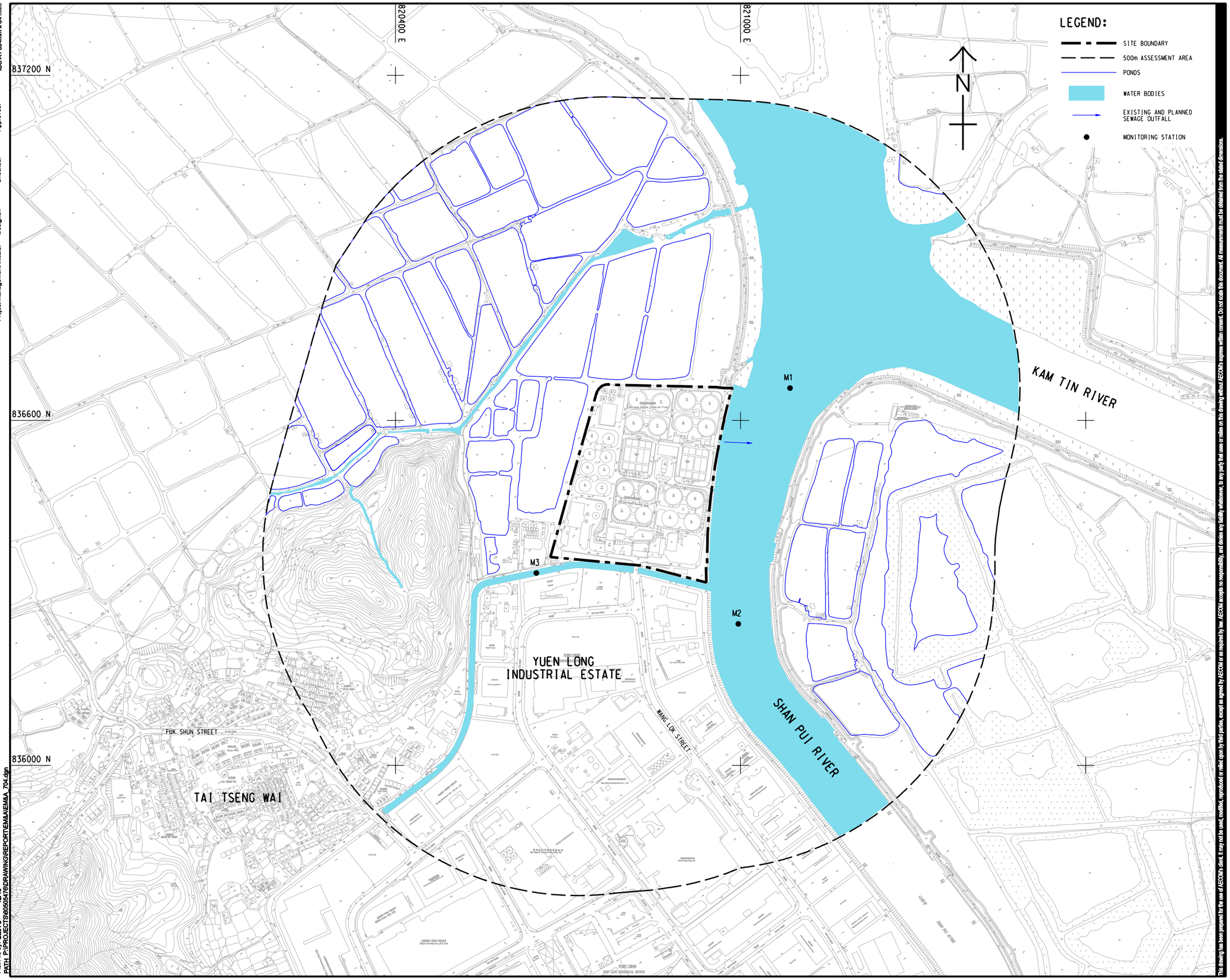
ISO A1 594mm x 841mm

Approved:

Checked:

Designer:

Project Management Initials:



Plot File by: GaoYU 12/18
PATH: F:\PROJECTS\60505476\DRAWING\REPORT\EIA\EIA\EIA_704.dgn

AECOM

PROJECT
項目

YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT
業主

渠務署
Drainage Services Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

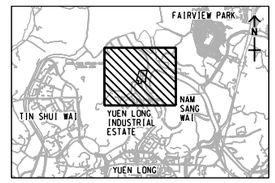
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核

STATUS
狀況

SCALE 比例
A3 1 : 6000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A3 1 : 180000



PROJECT NO. 項目編號
60505476

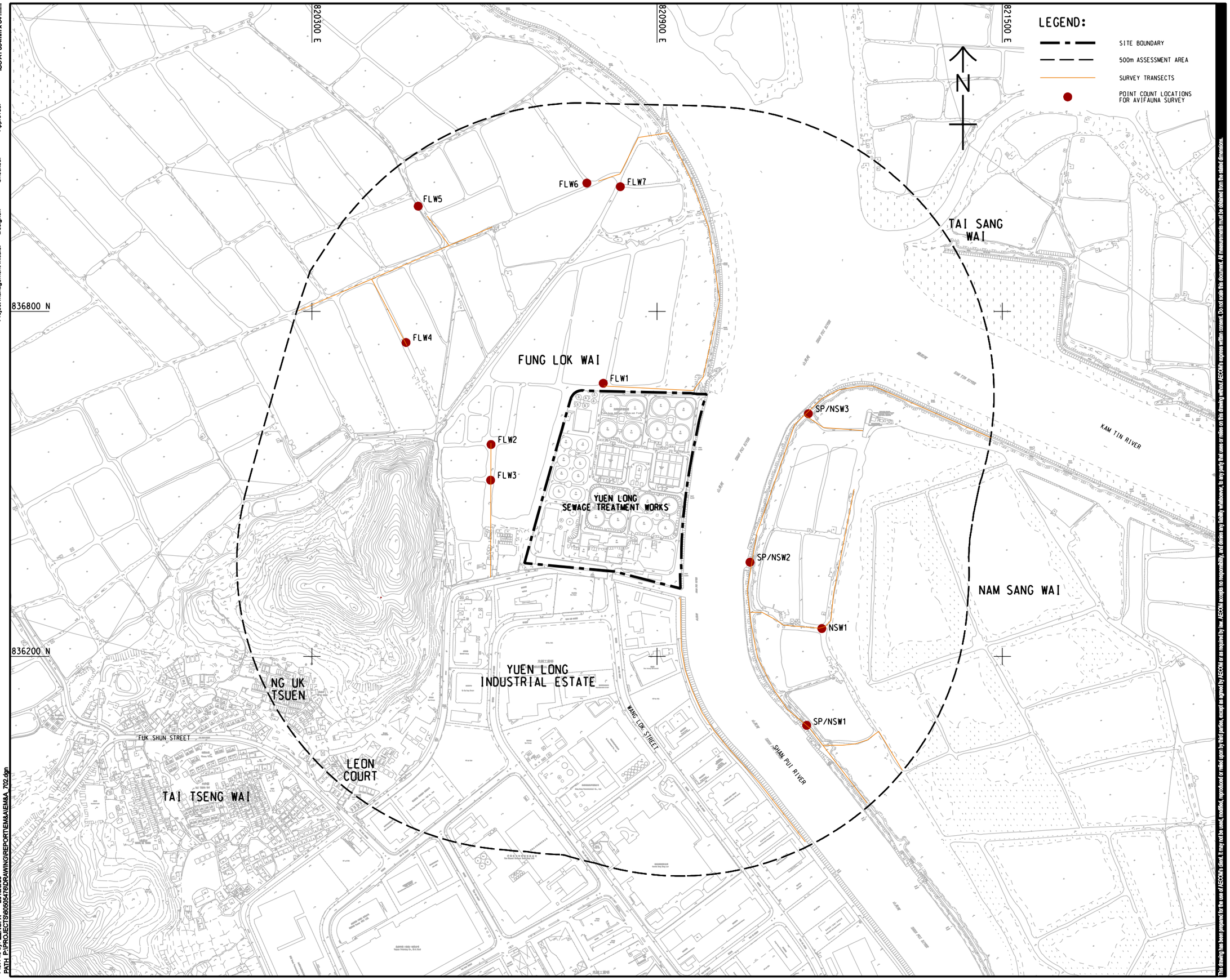
CONTRACT NO. 合約編號
CE 3/2015 (DS)

SHEET TITLE
圖紙名稱

LOCATIONS OF WATER QUALITY MONITORING STATIONS FOR CONSTRUCTION PHASE

SHEET NUMBER
圖紙編號

Figure 5 Ecology Monitoring Locations



ISO A1 594mm x 841mm

Project Management Initials: Designer: Checked: Approved:

Plot File by: ZENGFX 2018/8/30
PATH: P:\PROJECTS\60505476\DRAWING\REPORT\EM&A\EM&A_702.dgn

AECOM

PROJECT 項目

YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT 業主

渠務署
Drainage Services Department

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核查

STATUS 狀況

SCALE 比例
A1 1 : 3000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖

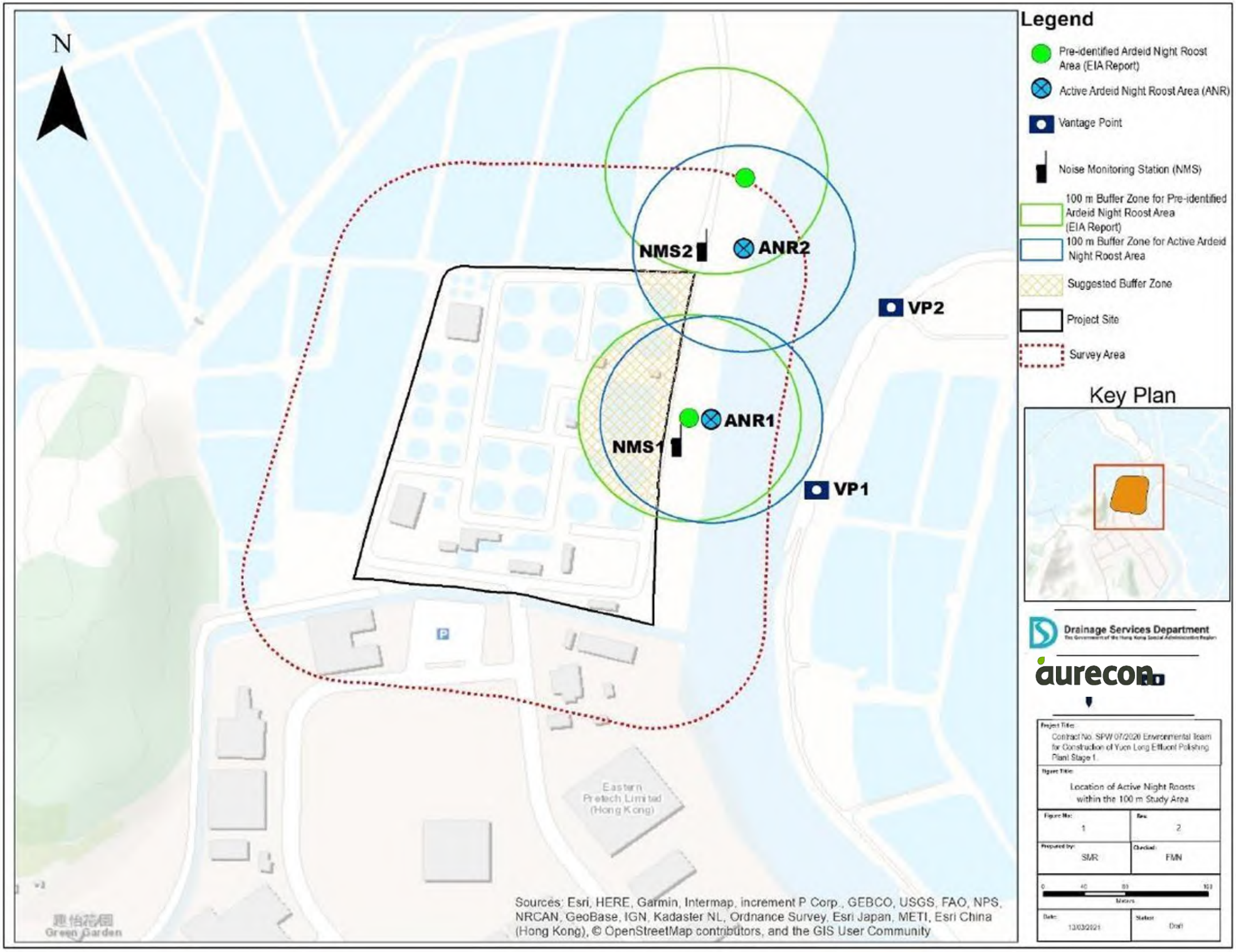
PROJECT NO. 項目編號
60505476

CONTRACT NO. 合約編號
CE 3/2015 (DS)

SHEET TITLE 圖紙名稱
ECOLOGICAL MONITORING LOCATIONS

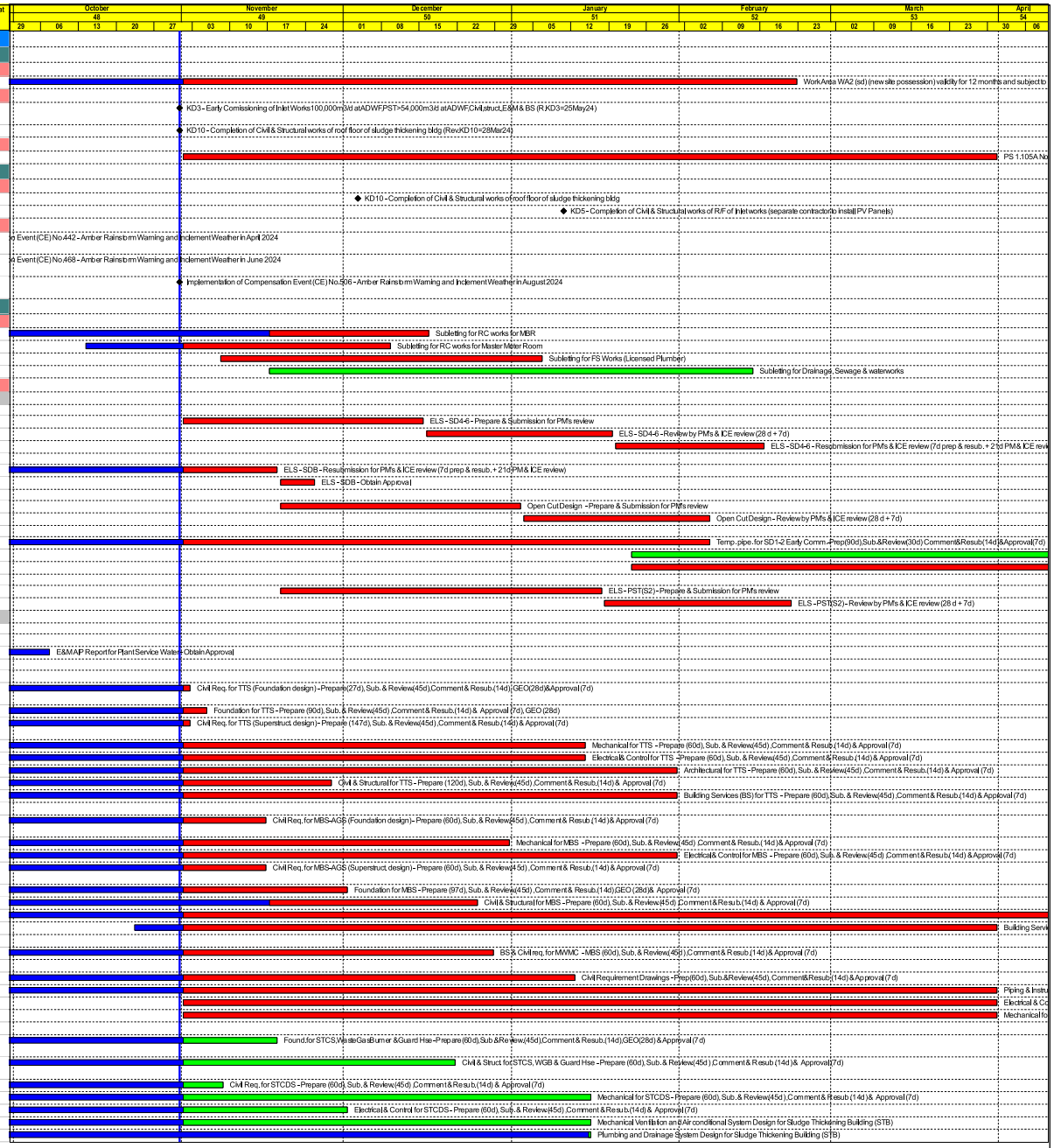
SHEET NUMBER 圖紙編號

Figure 6 Active Night Roost Monitoring Area and Vantage Points; And Noise Monitoring Stations


N
NMS2
ANR2
VP2
ANR1
NMS1
VP1
Eastern Pretech Limited (Hong Kong)
Green Garden
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), © OpenStreetMap contributors, and the GIS User Community
Legend
Pre-identified Ardeid Night Roost Area (EIA Report)
Active Ardeid Night Roost Area (ANR)
Vantage Point
Noise Monitoring Station (NMS)
100 m Buffer Zone for Pre-identified Ardeid Night Roost Area (EIA Report)
100 m Buffer Zone for Active Ardeid Night Roost Area
Suggested Buffer Zone
Project Site
Survey Area
Key Plan
Drainage Services Department
aurecon
Project Title:
Contract No. SPW 07/2020 Environmental Team for Construction of Yuen Long Effluent Polishing Plant Stage 1
Figure Title:
Location of Active Night Roosts within the 100 m Study Area
Figure No: 1
Rev: 2
Prepared by: SMR
Checked: FMN
0 40 80 160
Meters
Date: 13/03/2021
Status: Draft

Appendix A
Construction Programme

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
YL Effluent Polishing Plant - Main Works Stage 1 - Detailed Works Programme DPv43_241118					
Contract Data Part 1					
Access Dates					
ADWA2	WorkArea WA2 (sd) (new site possession) validity for 12 months and subject to renewal	757	05-Mar-21 A	22-Feb-25*	0
Contract Key Dates					
CKD3	KD3 - Early Comissioning of Inlet Works 100,000m3/d at ADWF,PST>54,000m3/d at ADWF,Civil,struct,E&M & BS (R.KD3=25May24)	0		31-Oct-24*	-147
CKD10	KD10 - Completion of Civil & Structural works of roof floor of sludge thickening bldg (RevKD10=28Mar24)	0		31-Oct-24*	-194
Environmental Constraints					
NMM-2175	PS 1.105A Noise Mitigation Measures 2024-2025	151	01-Nov-24*	31-Mar-25	0
Planned Completion					
Planned Key Dates					
PKD10	KD10 - Completion of Civil & Structural works of roof floor of sludge thickening bldg	0		03-Dec-24*	-227
PKD5	KD5 - Completion of Civil & Structural works of R/F of Inlet works (separate contractor to install PV Panels)	0		10-Jan-25*	83
Compensation Events					
CE442	Implementation of Compensation Event (CE) No.442 - Amber Rainstorm Warning and Inclement Weather In April 2024	0		10-Sep-24 A	
CE468	Implementation of Compensation Event (CE) No.468 - Amber Rainstorm Warning and Inclement Weather In June 2024	0		10-Sep-24 A	
CE506	Implementation of Compensation Event (CE) No.506 - Amber Rainstorm Warning and Inclement Weather In August 2024	0		31-Oct-24 A	
Preliminary and Preparation Works					
Subletting					
SUB-300	Subletting for RC works for MBR	90	15-Apr-24 A	16-Dec-24	-321
SUB-400	Subletting for RC works for Master Meter Room	60	14-Oct-24 A	09-Dec-24	-330
SUB-410	Subletting for FS Works (Licensed Plumber)	60	08-Nov-24	06-Jan-25	-288
SUB-340	Subletting for Drainage, Sewage & waterworks	90	17-Nov-24	14-Feb-25	9
Design Submission					
Temporary Works Design					
Sludge Digester 4-6					
TWD-460	ELS - SD4-6 - Prepare & Submission for PMs review	45	01-Nov-24	15-Dec-24	-184
TWD-470	ELS - SD4-6 - Review by PMs & ICE review (28 d + 7d)	35	16-Dec-24	19-Jan-25	-184
TWD-480	ELS - SD4-6 - Resubmission for PMs & ICE review (7d prep & resub. + 21d PM & ICE review)	28	20-Jan-25	16-Feb-25	-184
Sludge Dewatering and Underpass					
TWD-280	ELS - SDB - Resubmission for PMs & ICE review (7d prep & resub. + 21d PM & ICE review)	28	10-Sep-24 A	18-Nov-24	-236
TWD-290	ELS - SDB - Obtain Approval	7	19-Nov-24	25-Nov-24	-8
Administration Building					
TWD-300	Open Cut Design - Prepare & Submission for PMs review	45	19-Nov-24	02-Jan-25	-236
TWD-310	Open Cut Design - Review by PMs & ICE review (28 d + 7d)	35	03-Jan-25	06-Feb-25	-39
Temporary diversion scheme for Early commissioning of SD, BH1, H2S and STB					
TWD-1010	Temp. pipe. for SD1-2 Early Comm.-Prep(90d),Sub.&Review(30d) Comment&Resub(14d)&Approval(7d)	141	29-Dec-23 A	06-Feb-25	-18
TWD-990	Temp. pipe. SD1&2 and BH1 to H2S for T&C-Prep(90d),Sub.&Review(30d) Comment&Resub(14d)&Approval(7d)	141	23-Jan-25	12-Jun-25	157
TWD-1000	Temp. pipe. SD1&2 for T&C of STB -Prep(90d),Sub.&Review(30d) Comment&Resub(14d)&Approval(7d)	141	23-Jan-25	12-Jun-25	-18
PST Stage 2					
TWD-1060	ELS - PST(S2) - Prepare & Submission for PMs review	60	19-Nov-24*	17-Jan-25	-236
TWD-1070	ELS - PST(S2) - Review by PMs & ICE review (28 d + 7d)	35	18-Jan-25	21-Feb-25	-236
Contractor's Permanent Works Design (Include ATAL)					
AIP					
Package 3A - Plant Service Water					
AIP-530	E&M AP Report for Plant Service Water - Obtain Approval	7	12-Sep-24 A	07-Oct-24 A	
DDA					
Package 2 - Tertiary Treatment System					
DDA-170	Civil Req. for TTS (Foundation design) - Prepare(27d), Sub. & Review(45d),Comment & Resub.(14d), GEO(28d)&Approval (7d)	121	13-Jun-21 A	02-Nov-24	-305
DDA-150	Foundation for TTS - Prepare (90d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d), GEO (28d)	213	08-Oct-21 A	05-Nov-24	-308
DDA-180	Civil Req. for TTS (Superstruct. design) - Prepare (147d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	213	11-Oct-21 A	02-Nov-24	-303
DDA-200	Mechanical for TTS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	213	31-Dec-21 A	14-Jan-25	-127
DDA-210	Electrical& Control for TTS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	213	31-Dec-21 A	14-Jan-25	-127
DDA-140	Architectural for TTS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	126	17-Nov-22 A	31-Jan-25	-303
DDA-160	Civil & Structural for TTS - Prepare (120d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	177	17-Nov-22 A	28-Nov-24	-303
DDA-220	Building Services (BS) for TTS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	199	30-Oct-23 A	31-Jan-25	-144
Package 3 - Mainstream Bio-Reactor System					
DDA-260	Civil Req. for MBS-AGS (Foundation design) - Prepare (60d), Sub. & Review(45d), Comment & Resub.(14d) & Approval (7d)	126	09-Jun-21 A	16-Nov-24	-321
DDA-290	Mechanical for MBS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	126	08-Oct-21 A	31-Dec-24	-26
DDA-300	Electrical& Control for MBS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	405	08-Oct-21 A	31-Jan-25	-57
DDA-270	Civil Req. for MBS-AGS (Superstruct. design) - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	126	01-Mar-22 A	16-Nov-24	-321
DDA-240	Foundation for MBS - Prepare (97d), Sub. & Review(45d) ,Comment & Resub.(14d) ,GEO (28d) & Approval (7d)	230	18-Mar-22 A	01-Dec-24	-306
DDA-250	Civil & Structural for MBS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	170	20-Jan-23 A	25-Dec-24	-321
DDA-1530	VCAB for AGS & TTS - Prepare (30d), Sub. & Review (30d)	204	16-Jun-23 A	20-Apr-25	-164
DDA-310	Building Services (BS) for MBS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	151	23-Oct-24 A	31-Mar-25	-81
Package 5A - Master Water Meter Room					
DDA-390	BS & Civil req. for MWMC - MBS (60d), Sub. & Review(45d) ,Comment & Resub (14d) & Approval (7d)	64	16-Dec-22 A	28-Dec-24	-300
Package 5B - Plant Service Water (PSW)					
DDA-1050	Civil Requirement Drawings - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	126	12-Jun-21 A	12-Jan-25	-203
DDA-1040	Piping & Instrumentation Diagram (P&ID) - Prep(30d), Sub.&Review(28d), Comment&Resub (14d) & Approval (7d)	220	26-Jun-23 A	31-Mar-25	-203
DDA-1060	Electrical & Control for PSW - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	151	01-Nov-24	31-Mar-25	-203
DDA-1070	Mechanical for PSW - Prep(60d), Sub.&Review(45d), Comment&Resub (14d) & Approval (7d)	151	01-Nov-24	31-Mar-25	-203
Package 6 - Sludge Thickening Chemical and Dosing System					
DDA-430	Found.for STCS,WasteGasBurner &Guard Hse - Prepare (60d),Sub.&Review(45d),Comment & Resub.(14d),GEO(28d) & Approval (7d)	96	09-Nov-21 A	18-Nov-24	488
DDA-440	Civil & Struct.for STCS, WGB & Guard Hse - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	250	09-Nov-21 A	21-Dec-24	455
DDA-440B	Civil Req. for STCDS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	300	15-Nov-21 A	08-Nov-24	124
DDA-1130	Mechanical for STCDS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	340	16-Nov-21 A	15-Jan-25	463
DDA-1140	Electrical & Control for STCDS - Prepare (60d), Sub. & Review(45d) ,Comment & Resub.(14d) & Approval (7d)	315	30-Nov-21 A	01-Dec-24	516
DDA-1520	Mechanical Ventilation and Air conditional System Design for Sludge Thickening Building (STB)	320	16-Jun-22 A	15-Jan-25	90
DDA-1510	Plumbing and Drainage System Design for Sludge Thickening Building (STB)	320	07-Jul-22 A	15-Jan-25	90



保華-中國中鐵聯營體
PAUL Y.-CREC JOINT VENTURE

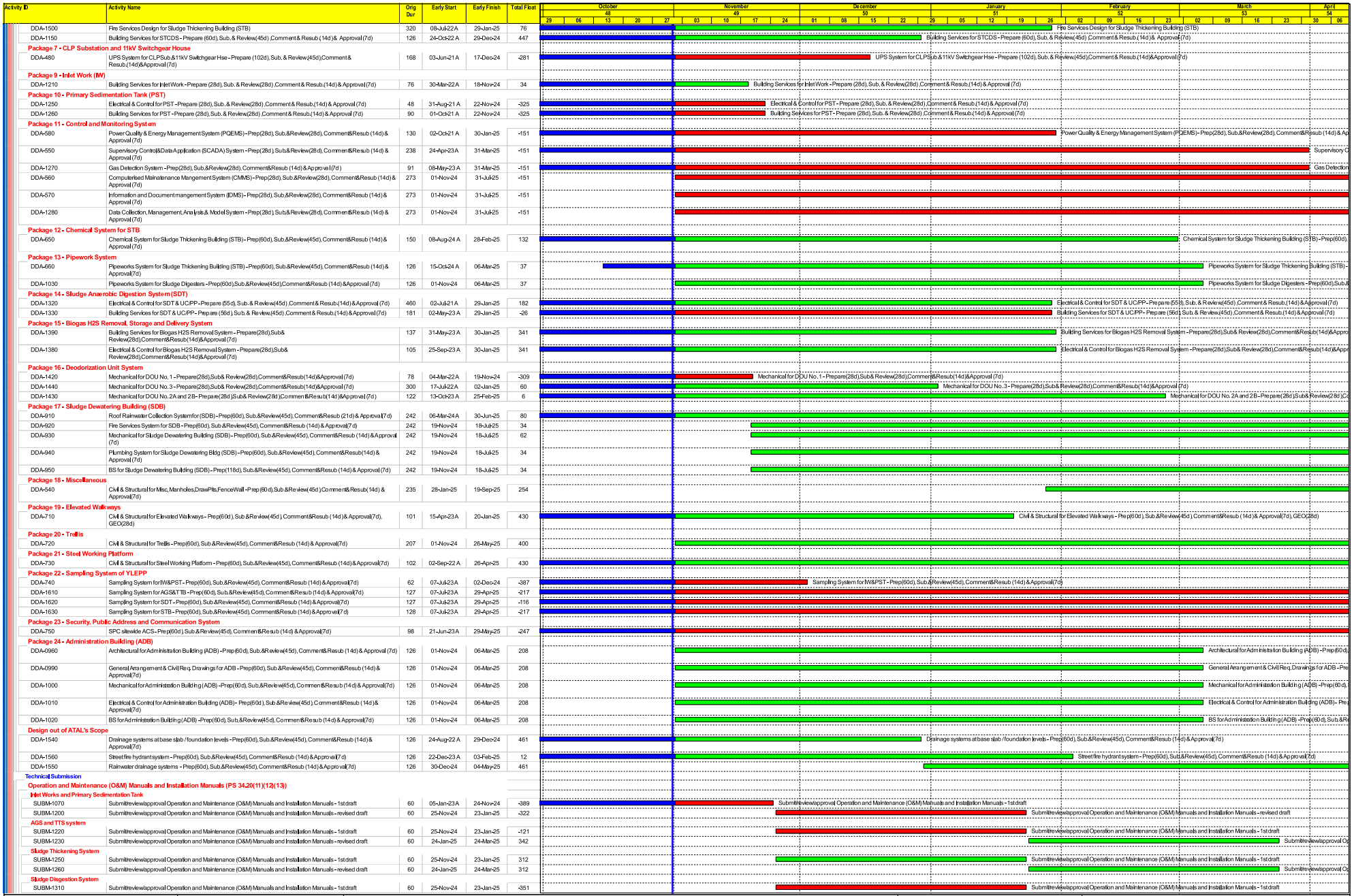
Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		



保華-中國中鐵聯營體
PAUL Y.-CREC JOINT VENTURE

Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

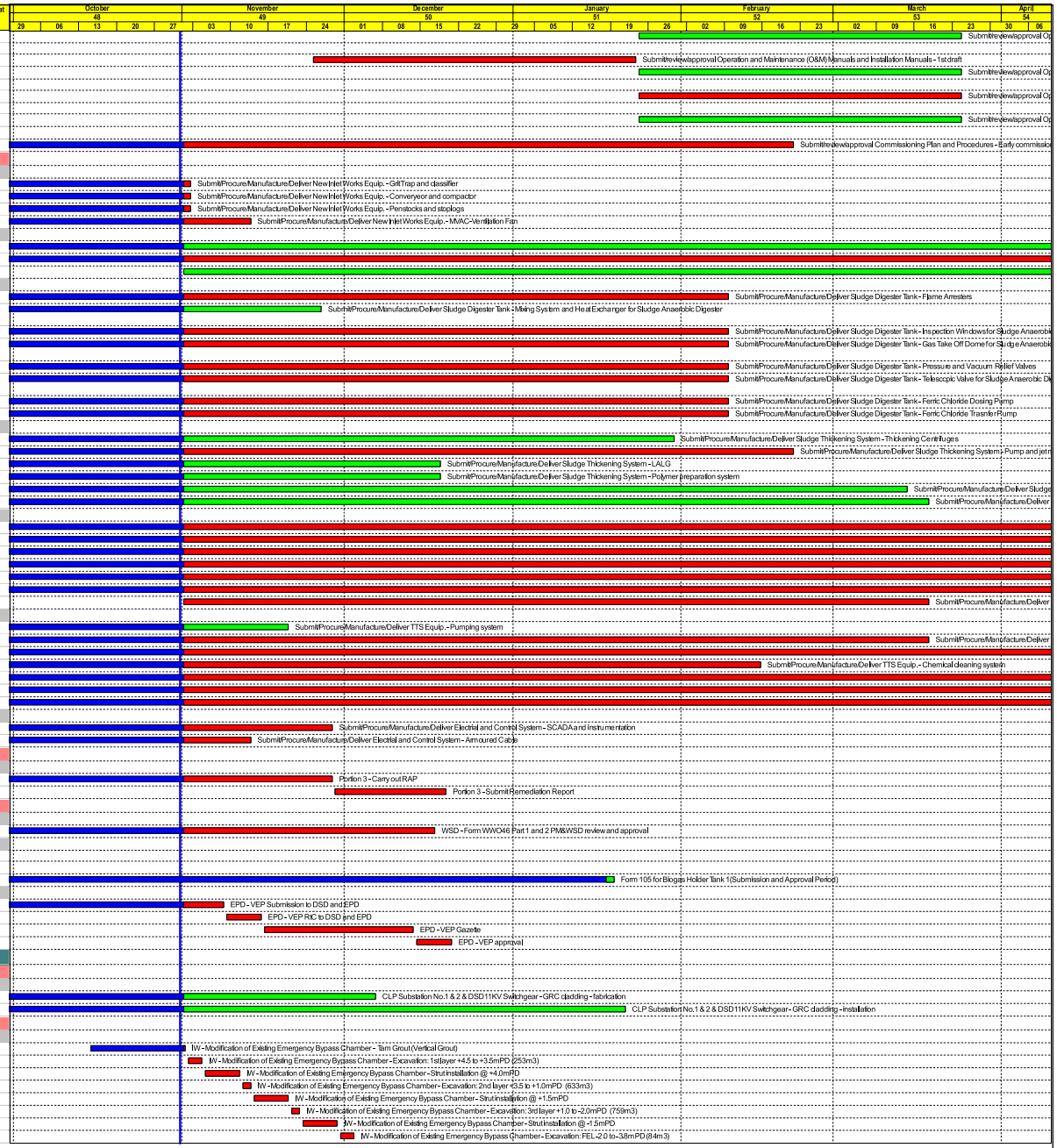
Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

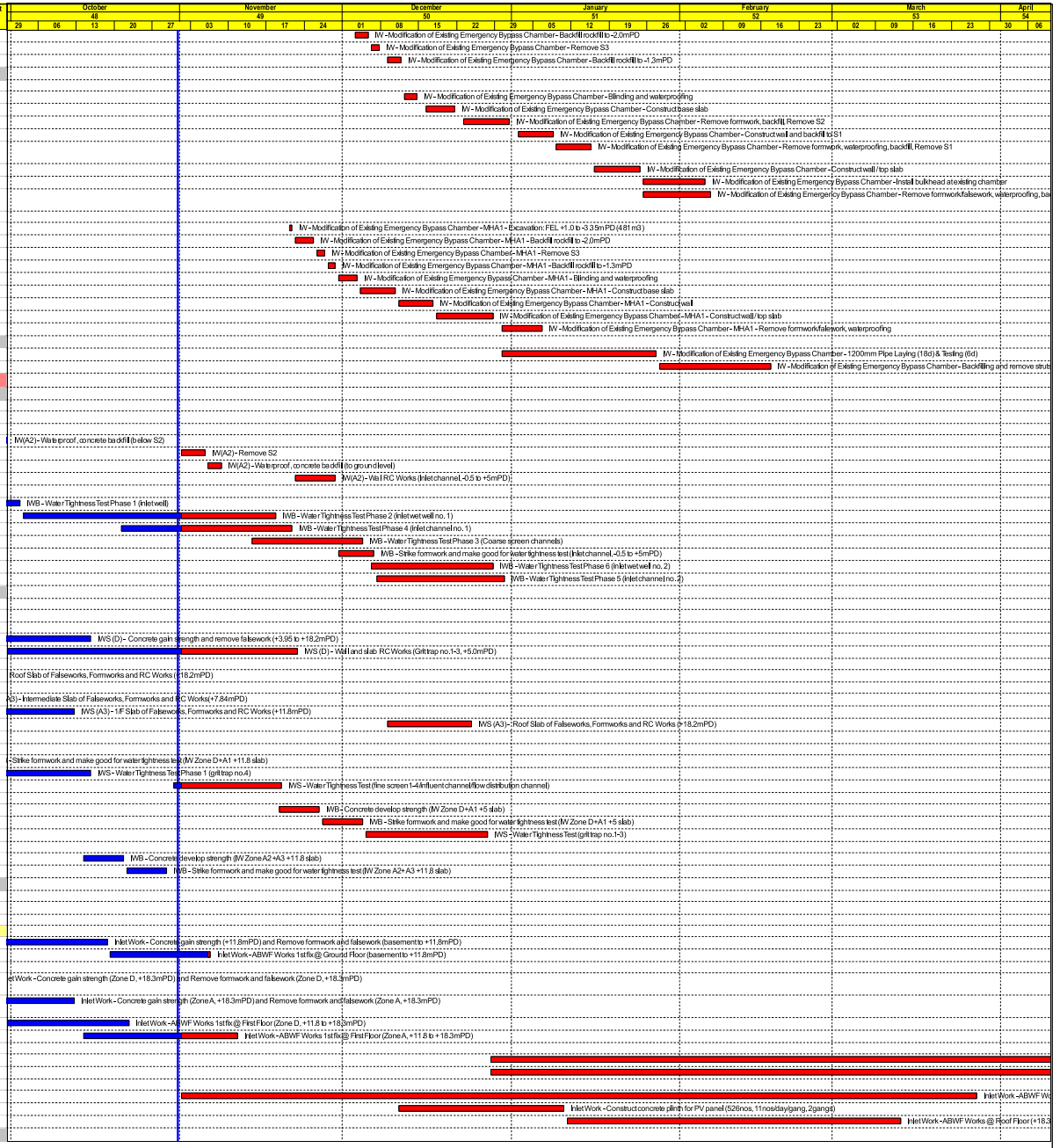
Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
SUBM-1320	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60	24-Jan-25	24-Mar-25	318
Biogas H2S Removal System					
SUBM-1280	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	25-Nov-24	23-Jan-25	-351
SUBM-1290	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - revised draft	60	24-Jan-25	24-Mar-25	566
Deodourization System					
SUBM-1340	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	24-Jan-25	24-Mar-25	-351
Plant Service Water System					
SUBM-1370	Submit/review/approval Operation and Maintenance (O&M) Manuals and Installation Manuals - 1st draft	60	24-Jan-25	24-Mar-25	508
Commissioning Plan and Procedures (PS34.20(10))					
SUBM-1000	Submit/review/approval Commissioning Plan and Procedures - Early commissioning of M&PST (KD3)	120	21-Feb-24 A	21-Feb-25	-290
Material Submission, Procurement, Manufacturing and Delivery					
Inlet Works					
PRE-290	Submit/Procure/Manufacture/Deliver New Inlet Works Equip. - Grit Trap and classifier	270	18-Feb-22 A	02-Nov-24	-311
PRE-280	Submit/Procure/Manufacture/Deliver New Inlet Works Equip. - Conveyeor and compactor	270	12-Apr-22 A	02-Nov-24	-335
PRE-310	Submit/Procure/Manufacture/Deliver New Inlet Works Equip. - Penstocks and stoplogs	270	13-Sep-22 A	02-Nov-24	-354
PRE-320	Submit/Procure/Manufacture/Deliver New Inlet Works Equip. - MVAC-Ventillation Fan	211	10-Jan-23 A	13-Nov-24	-303
Biogas Holder					
PRE-410	Submit/Procure/Manufacture/Deliver Waster Gas Burner	300	19-Aug-21 A	31-May-26	127
PRE-420	Submit/Procure/Manufacture/Deliver H2S Removal System	510	25-Feb-22 A	11-Feb-26	-37
PRE-430	Submit/Procure/Manufacture/Deliver Biogas booster and transfer pumps	513	01-Nov-24	28-Mar-26	128
Sludge Digestor Tank					
PRE-750	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Flame Arresters	100	31-Oct-22 A	09-Feb-25	-37
PRE-780	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Mixing System and Heat Exchanger for Sludge Anaerobic Digester	420	22-Dec-22 A	26-Nov-24	39
PRE-720	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Inspection Windows for Sludge Anaerobic System	365	18-Jan-23 A	09-Feb-25	-37
PRE-730	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Gas Take Off Dome for Sludge Anaerobic Digestion System	365	18-Jan-23 A	09-Feb-25	-37
PRE-710	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Pressure and Vacuum Relief Valves	300	01-Mar-23 A	09-Feb-25	-37
PRE-740	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Telescopic Valve for Sludge Anaerobic Digestion System	179	10-Jul-23 A	09-Feb-25	-37
PRE-760	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Ferric Chloride Dosing Pump	148	29-Aug-23 A	09-Feb-25	-37
PRE-770	Submit/Procure/Manufacture/Deliver Sludge Digester Tank - Ferric Chloride Trasnfer Pump	148	29-Aug-23 A	09-Feb-25	-37
Sludge Thickening Building					
PRE-250	Submit/Procure/Manufacture/Deliver Sludge Thickening System - Thickening Centrifuges	360	12-Nov-21 A	30-Jan-25	72
PRE-500	Submit/Procure/Manufacture/Deliver Sludge Thickening System - Pump and jet mixer	300	07-Jan-22 A	21-Feb-25	-63
PRE-510	Submit/Procure/Manufacture/Deliver Sludge Thickening System - LALG	256	28-Mar-23 A	18-Dec-24	29
PRE-480	Submit/Procure/Manufacture/Deliver Sludge Thickening System - Polymer preparation system	388	12-Apr-23 A	18-Dec-24	84
PRE-490	Submit/Procure/Manufacture/Deliver Sludge Thickening System - DOU-03	264	07-Jul-23 A	14-Mar-25	29
PRE-520	Submit/Procure/Manufacture/Deliver Sludge Thickening System - MVAC	212	27-Apr-24 A	18-Mar-25	25
Mainstream Bio-Reactor					
PRE-230	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - AGS system	480	09-Sep-22 A	23-Apr-25	-104
PRE-530	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - Penstocks and stoplogs	345	31-Oct-22 A	17-Jul-25	-116
PRE-550	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - Sludge pre-thickening system	510	31-Oct-22 A	23-Apr-25	-125
PRE-540	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - Chemical storage and dosing system	270	18-Nov-22 A	03-May-25	-114
PRE-570	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - Instrumentation	481	03-Apr-24 A	18-Dec-25	-283
PRE-560	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - LALG	349	16-Jul-24 A	15-Oct-25	-279
PRE-580	Submit/Procure/Manufacture/Deliver Main Stream Bio-Reactor E&M Equip. - MVAC	138	01-Nov-24	18-Mar-25	-68
Tertiary Treatment System					
PRE-610	Submit/Procure/Manufacture/Deliver TTS Equip. - Pumping system	495	19-Jul-22 A	20-Nov-24	32
PRE-600	Submit/Procure/Manufacture/Deliver TTS Equip. - UV disinfection system	510	08-Sep-22 A	18-Mar-25	-86
PRE-240	Submit/Procure/Manufacture/Deliver TTS Equip. - Disc Filter	600	27-Sep-22 A	17-Apr-25	-116
PRE-590	Submit/Procure/Manufacture/Deliver TTS Equip. - Chemical cleaning system	480	18-Nov-22 A	15-Feb-25	-55
PRE-630	Submit/Procure/Manufacture/Deliver TTS Equip. - Penstocks and stoplogs	435	30-Nov-22 A	08-Jun-25	-168
PRE-620	Submit/Procure/Manufacture/Deliver TTS Equip. - LALG	151	27-Mar-23 A	08-Aug-25	-229
PRE-690	Submit/Procure/Manufacture/Deliver TTS Equip. - DOU-02	506	07-Sep-23 A	28-Aug-25	-249
Electrical and Control System					
PRE-680	Submit/Procure/Manufacture/Deliver Electrial and Control System - SCADA and Instrumentation	420	30-Apr-22 A	28-Nov-24	-252
PRE-670	Submit/Procure/Manufacture/Deliver Electrial and Control System - Armoured Cable	203	21-Dec-22 A	13-Nov-24	-282
Site Establishment Works					
Portion 3 - PST, SDB, Admin. Bldg					
P3-140	Portion 3 - Carry out RAP	24	21-Aug-24 A	28-Nov-24	-50
P3-150	Portion 3 - Submit Remediation Report	18	29-Nov-24	19-Dec-24	-50
Statutory Submission & Approval					
WSD Submission & Approval					
WSD-1030	WSD - Form WWO46 Part 1 and 2 PM&WSD review and approval	90	26-Jun-24 A	17-Dec-24	-291
EMSD Submission & Approval					
Biogas System (ATAL)					
Phase 1					
ATAL-FS-0020	Form 105 for Biogas Holder Tank 1 (Submission and Approval Period)	184	03-Jun-24 A	19-Jan-25	257
EPD Submission & Approval for VEP					
EPD-1020	EPD - VEP Submission to DSD and EPD	28	21-Jun-24 A	08-Nov-24	-122
EPD-1030	EPD - VEP RIC to DSD and EPD	7	09-Nov-24	15-Nov-24	-122
EPD-1060	EPD - VEP Gazette	28	16-Nov-24	13-Dec-24	-122
EPD-1070	EPD - VEP approval	7	14-Dec-24	20-Dec-24	-122
Zone 1 Construction					
CLP Substations No. 1 & 2					
CLP Substation No. 1 & 2 & DSD 11kV Switchgear - GRC Cladding					
CLP-1590	CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - fabrication	60	21-Feb-24 A	06-Dec-24	620
CLP-1600	CLP Substation No.1 & 2 & DSD11KV Switchgear - GRC cladding - Installation	75	18-Sep-24 A	21-Jan-25	606
Modification of Existing Emergency Bypass Chamber					
Emergency Bypass Chamber - Foundation and ELS					
IW-3650	IW - Modification of Existing Emergency Bypass Chamber - Tam Grout (Vertical Grout)	13	15-Oct-24 A	01-Nov-24	-315
IW-1270	IW - Modification of Existing Emergency Bypass Chamber - Excavation: 1st layer +4.5 to +3.5mPD (253m3)	2	02-Nov-24	04-Nov-24	-315
IW-3070	IW - Modification of Existing Emergency Bypass Chamber - Strut installation @ +4.0mPD	6	05-Nov-24	11-Nov-24	-315
IW-3080	IW - Modification of Existing Emergency Bypass Chamber - Excavation: 2nd layer +3.5 to +1.0mPD (633m3)	2	12-Nov-24	13-Nov-24	-315
IW-3090	IW - Modification of Existing Emergency Bypass Chamber - Strut installation @ +1.5mPD	6	14-Nov-24	20-Nov-24	-315
IW-3340	IW - Modification of Existing Emergency Bypass Chamber - Excavation: 3rd layer +1.0 to -2.0mPD (759m3)	2	21-Nov-24	22-Nov-24	-315
IW-3350	IW - Modification of Existing Emergency Bypass Chamber - Strut installation @ -1.5mPD	6	23-Nov-24	29-Nov-24	-315
IW-3360	IW - Modification of Existing Emergency Bypass Chamber - Excavation: FEL -2.0 to -3.8mPD (84m3)	2	30-Nov-24	02-Dec-24	-315



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
IW-3370	IW - Modification of Existing Emergency Bypass Chamber - Backfill /rockfill to -2.0mPD	3	03-Dec-24	05-Dec-24	-315
IW-3380	IW - Modification of Existing Emergency Bypass Chamber - Remove S3	2	06-Dec-24	07-Dec-24	-315
IW-3390	IW - Modification of Existing Emergency Bypass Chamber - Backfill /rockfill to -1.3mPD	3	09-Dec-24	11-Dec-24	-315
Emergency Bypass Chamber - Structural Works					
Emergency Bypass Chamber - Structural modification at Existing EBC					
IW-3530	IW - Modification of Existing Emergency Bypass Chamber - Blinding and waterproofing	3	12-Dec-24	14-Dec-24	-315
IW-3110	IW - Modification of Existing Emergency Bypass Chamber - Construct base slab	6	16-Dec-24	21-Dec-24	-315
IW-3160	IW - Modification of Existing Emergency Bypass Chamber - Remove formwork, backfill, Remove S2	6	23-Dec-24	31-Dec-24	-315
IW-3120	IW - Modification of Existing Emergency Bypass Chamber - Construct wall and backfill to S1	6	02-Jan-25	08-Jan-25	-315
IW-3170	IW - Modification of Existing Emergency Bypass Chamber - Remove formwork, waterproofing, backfill, Remove S1	6	09-Jan-25	15-Jan-25	-315
IW-3180	IW - Modification of Existing Emergency Bypass Chamber - Construct wall / top slab	8	16-Jan-25	24-Jan-25	-315
IW-3140	IW - Modification of Existing Emergency Bypass Chamber - Install bulkhead at existing chamber	7	25-Jan-25	05-Feb-25	-296
IW-3540	IW - Modification of Existing Emergency Bypass Chamber - Remove formwork/falsework, waterproofing, backfill to GL	8	25-Jan-25	06-Feb-25	-315
Emergency Bypass Chamber - Manhole MHA1					
IW-3100	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Excavation: FEL +1.0 to -3.35mPD (4481 m3)	1	21-Nov-24	21-Nov-24	-292
IW-3620	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Backfill /rockfill to -2.0mPD	3	22-Nov-24	25-Nov-24	-292
IW-3630	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Remove S3	2	26-Nov-24	27-Nov-24	-292
IW-3640	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Backfill /rockfill to -1.3mPD	2	28-Nov-24	29-Nov-24	-292
IW-3550	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Blinding and waterproofing	3	30-Nov-24	03-Dec-24	-292
IW-3560	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct base slab	6	04-Dec-24	10-Dec-24	-292
IW-3580	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct wall	6	11-Dec-24	17-Dec-24	-292
IW-3600	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Construct wall / top slab	8	18-Dec-24	28-Dec-24	-292
IW-3590	IW - Modification of Existing Emergency Bypass Chamber - MHA1 - Remove formwork/falsework, waterproofing	6	30-Dec-24	06-Jan-25	-259
Emergency Bypass Chamber - Pipe laying					
IW-1280	IW - Modification of Existing Emergency Bypass Chamber - 1200mm Pipe Laying (18d) & Testing (6d)	24	30-Dec-24	27-Jan-25	-292
IW-3610	IW - Modification of Existing Emergency Bypass Chamber - Backfilling and remove struts (-0.9 to +5mPD)	15	28-Jan-25	17-Feb-25	-292
Inlet Works (IW)					
IW Foundation & ELS Works					
IW Basement					
IW Basement RC Works					
IW Zone A/D					
Z1-IW-6780	IW(A2) - Waterproof, concrete backfill (below S2)	8	16-Sep-24 A	30-Sep-24 A	
Z1-IW-6900	IW(A2) - Remove S2	4	01-Nov-24*	05-Nov-24	-296
Z1-IW-6910	IW(A2) - Waterproof, concrete backfill (to ground level)	3	06-Nov-24	08-Nov-24	-296
Z1-IW-6915	IW(A2) - Wall RC Works (Inlet channel, -0.5 to +5mPD)	7	22-Nov-24	29-Nov-24	-309
Water Tightness Test for IW Basement					
Z1-IW-4120	IWB - Water Tightness Test Phase 1 (Inlet well)	15	05-Sep-24 A	02-Oct-24 A	
Z1-IW-6930	IWB - Water Tightness Test Phase 2 (Inlet wet well no. 1)	21	03-Oct-24 A	18-Nov-24	-326
Z1-IW-4100	IWB - Water Tightness Test Phase 4 (Inlet channel no. 1)	15	21-Oct-24 A	21-Nov-24	-327
Z1-IW-6920	IWB - Water Tightness Test Phase 3 (Coarse screen channels)	18	14-Nov-24	04-Dec-24	-326
Z1-IW-7090	IWB - Strike formwork and make good for water tightness test (Inlet channel, -0.5 to +5mPD)	6	30-Nov-24	06-Dec-24	-309
Z1-IW-6940	IWB - Water Tightness Test Phase 6 (Inlet wet well no. 2)	18	06-Dec-24	28-Dec-24	-327
Z1-IW-4110	IWB - Water Tightness Test Phase 5 (Inlet channel no. 2)	18	07-Dec-24	30-Dec-24	-309
IW Civil and Structural Works					
IW Superstructure					
RC Works					
Zone D					
Z1-IW-7040	IWS (D) - Concrete gain strength and remove falsework (+3.95 to +18.2mPD)	14	31-Aug-24 A	15-Oct-24 A	
Z1-IW-7030	IWS (D) - Wall and slab RC Works (Grit trap no.1-3, +5.0mPD)	29	30-Sep-24 A	22-Nov-24	-309
Zone A1 +A2					
Z1-IW-4215	IWS (A1+A2) - Roof Slab of Falseworks, Formworks and RC Works (+18.2mPD)	14	04-Sep-24 A	20-Sep-24 A	
Zone A3					
Z1-IW-7065	IWS (A3) - Intermediate Slab of Falseworks, Formworks and RC Works(+7.84mPD)	10	12-Sep-24 A	25-Sep-24 A	
Z1-IW-7070	IWS (A3) - 1/F Slab of Falseworks, Formworks and RC Works (+11.8mPD)	9	26-Sep-24 A	12-Oct-24 A	
Z1-IW-7080	IWS (A3) - Roof Slab of Falseworks, Formworks and RC Works (+18.2mPD)	14	09-Dec-24	24-Dec-24	-229
Water Tightness Test for IW Superstructure					
Zone D+A1 (+7.835)					
Z1-IW-6580	IWB - Strike formwork and make good for water tightness test (IW Zone D+A1 +11.8 slab)	7	16-Sep-24 A	26-Sep-24 A	
Z1-IW-4240	IWS - Water Tightness Test Phase 1 (grit trap no.4)	18	27-Sep-24 A	15-Oct-24 A	
Z1-IW-4250	IWS - Water Tightness Test (fine screen 1-4/influent channel/flow distribution channel)	18	31-Oct-24 A	19-Nov-24	-289
Zone D+A1 (+5.0)					
Z1-IW-7000	IWB - Concrete develop strength (IW Zone D+A1 +5 slab)	7	19-Nov-24	26-Nov-24	-309
Z1-IW-7010	IWB - Strike formwork and make good for water tightness test (IW Zone D+A1 +5 slab)	7	27-Nov-24	04-Dec-24	-309
Z1-IW-6970	IWS - Water Tightness Test (grit trap no.1-3)	18	05-Dec-24	27-Dec-24	-309
Zone A2 +A3 (+7.835)					
Z1-IW-6980	IWB - Concrete develop strength (IW Zone A2 +A3 +11.8 slab)	7	14-Oct-24 A	21-Oct-24 A	
Z1-IW-6990	IWB - Strike formwork and make good for water tightness test (IW Zone A2+ A3 +11.8 slab)	7	22-Oct-24 A	29-Oct-24 A	
IW ABWF Works					
IW ABWF Works 1st fix for E&M handover					
IW ABWF Works - Zone A/D					
Bellow +11.8mPD					
Dry Area					
IW-3310	Inlet Work - Concrete gain strength (+11.8mPD) and Remove formwork and falsework (basement to +11.8mPD)	14	10-Sep-24 A	18-Oct-24 A	
IW-2780	Inlet Work - ABWF Works 1st fix @ Ground Floor (basement to +11.8mPD)	12	19-Oct-24 A	06-Nov-24	-296
Above +11.8mPD					
IW-3480	Inlet Work - Concrete gain strength (Zone D, +18.3mPD) and Remove formwork and falsework (Zone D, +18.3mPD)	12	31-Aug-24 A	28-Sep-24 A	
IW-3320	Inlet Work - Concrete gain strength (Zone A, +18.3mPD) and Remove formwork and falsework (Zone A, +18.3mPD)	14	21-Sep-24 A	12-Oct-24 A	
IW-3500	Inlet Work - ABWF Works 1st fix @ First Floor (Zone D, +11.8 to +18.3mPD)	10	30-Sep-24 A	22-Oct-24 A	
IW-3010	Inlet Work - ABWF Works 1st fix @ First Floor (Zone A, +11.8 to +18.3mPD)	12	14-Oct-24 A	11-Nov-24	-330
IW ABWF Works final fix					
IW-3250	Inlet Work - ABWF Works final fix above +11.8mPD	90	28-Dec-24	22-Apr-25	-292
IW-3260	Inlet Work - ABWF Works final fix below +11.8mPD	90	28-Dec-24	22-Apr-25	-292
IW ABWF Works - Roof					
IW-3030	Inlet Work - ABWF Works @ External Wall	120	01-Nov-24	27-Mar-25	-241
IW-2990	Inlet Work - Construct concrete plinth for PV panel (526nos, 11nos/day/gang, 2gangs)	24	11-Dec-24	10-Jan-25	-229
IW-3000	Inlet Work - ABWF Works @ Roof Floor (+18.3mPD)	50	11-Jan-25	13-Mar-25	-229
IW BS Works					



PAUL Y. - CREC JOINT VENTURE
保華-中國中鐵聯營體

Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

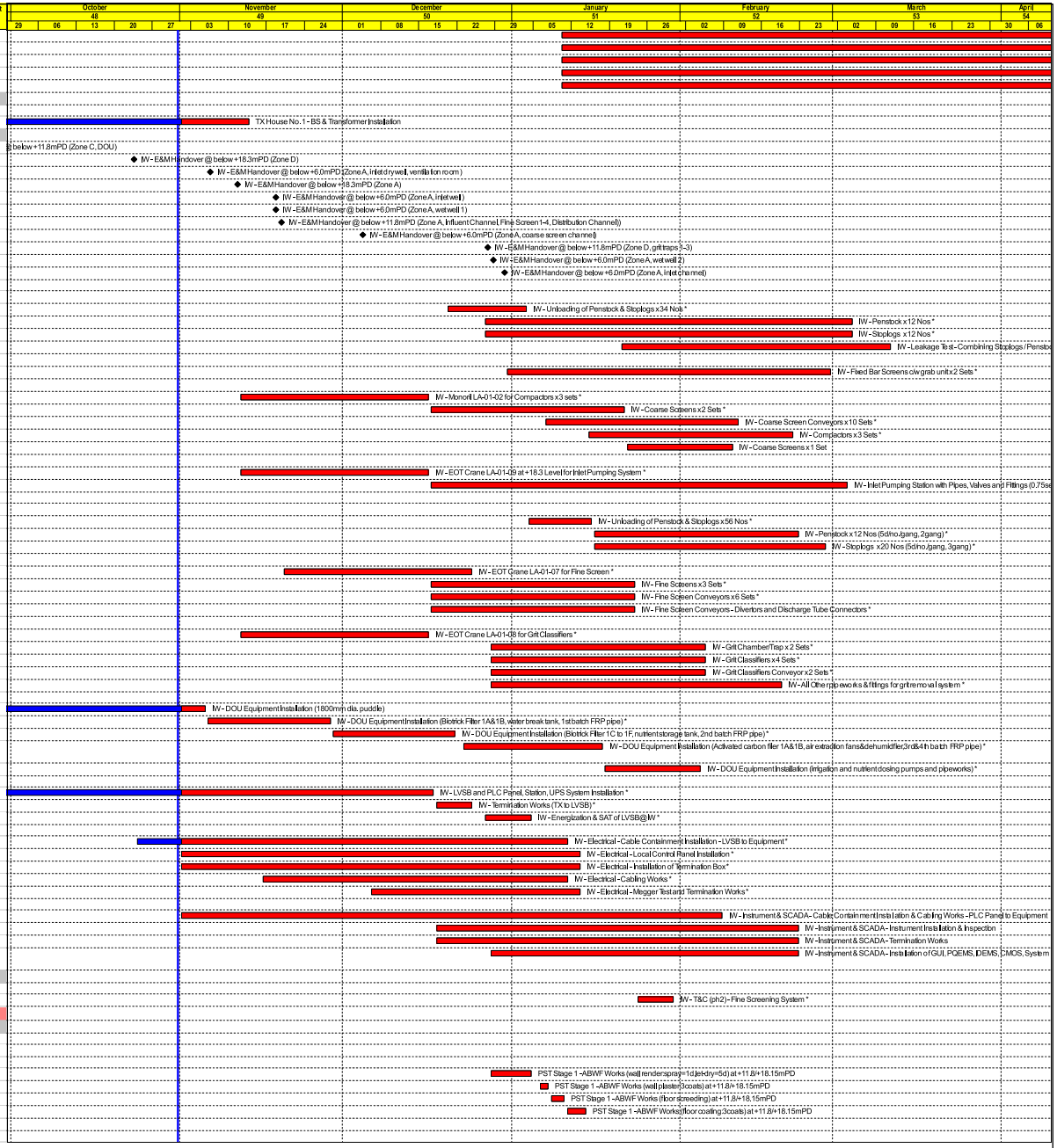
Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
ATAL-1520	IW - MVAC Works	80	10-Jan-25	22-Apr-25	-292
ATAL-1530	IW - ELV Works	80	10-Jan-25	22-Apr-25	-312
ATAL-1540	IW - P&D Works	80	10-Jan-25	22-Apr-25	-304
ATAL-1550	IW - EL Works	80	10-Jan-25	22-Apr-25	-312
ATAL-1560	IW - FS. Works	80	10-Jan-25	22-Apr-25	-304
IW Transformer House No. 1					
IW Tx1 E&M Works					
IW-2840	TX House No. 1 - BS & Transformer Installation	32	25-Mar-24 A	13-Nov-24	-238
IW E&M Works					
ATAL-1760	IW - E&M Handover @ below +11.8mPD (Zone C, DOU)	0		16-Sep-24 A	
ATAL-1780	IW - E&M Handover @ below +18.3mPD (Zone D)	0		23-Oct-24 A	
ATAL-1838	IW - E&M Handover @ below +6.0mPD (Zone A, inlet drywell, ventilation room)	0		06-Nov-24	-296
ATAL-1140	IW - E&M Handover @ below +18.3mPD (Zone A)	0		11-Nov-24	-330
ATAL-1820	IW - E&M Handover @ below +6.0mPD (Zone A, inlet well)	0		18-Nov-24*	-300
ATAL-1832	IW - E&M Handover @ below +6.0mPD (Zone A, wetwell 1)	0		18-Nov-24	-300
ATAL-2050	IW - E&M Handover @ below +11.8mPD (Zone A, Influent Channel, Fine Screen1-4, Distribution Channel))	0		19-Nov-24	-289
ATAL-1836	IW - E&M Handover @ below +6.0mPD (Zone A, coarse screen channel)	0		04-Dec-24	-320
ATAL-0000	IW - E&M Handover @ below +11.8mPD (Zone D, grittraps 1-3)	0		27-Dec-24	-309
ATAL-1834	IW - E&M Handover @ below +6.0mPD (Zone A, wetwell 2)	0		28-Dec-24	-327
ATAL-1830	IW - E&M Handover @ below +6.0mPD (Zone A, inlet channel)	0		30-Dec-24	-309
Pre-treatment Zone (Below 11.8 mPD)					
Penstock & Stoplogs x 34 sets at inlet, Coarse Screen Channels					
ATAL-1150	IW - Unloading of Penstock & Stoplogs x 34 Nos *	10	20-Dec-24	03-Jan-25	-327
ATAL-1152	IW - Penstock x 12 Nos *	54	27-Dec-24	04-Mar-25	-327
ATAL-1154	IW - Stoplogs x 12 Nos *	54	27-Dec-24	04-Mar-25	-327
ATAL-1156	IW - Leakage Test - Combining Stoplogs / Penstocks (24nos.) *	40	21-Jan-25	11-Mar-25	-327
Fixed Bar Screens c/w grab unit x 2 Sets					
ATAL-1180	IW - Fixed Bar Screens c/w grab unit x 2 Sets *	48	31-Dec-24	28-Feb-25	-309
Coarse Screening System					
ATAL-1210	IW - Monorail LA-01-02 for Compactors x 3 sets *	30	12-Nov-24	16-Dec-24	-330
ATAL-1190	IW - Coarse Screens x 2 Sets *	28	17-Dec-24	21-Jan-25	-330
ATAL-1192	IW - Coarse Screen Conveyors x 10 Sets *	28	07-Jan-25	11-Feb-25	-321
ATAL-1194	IW - Compactors x 3 Sets *	30	15-Jan-25	21-Feb-25	-330
ATAL-1960	IW - Coarse Screens x 1 Set	14	22-Jan-25	10-Feb-25	-302
Inlet Pumping Station with Pipes, Valves and Fittings					
ATAL-1860	IW - EOT Crane LA-01-09 at +18.3 Level for Inlet Pumping System *	30	12-Nov-24	16-Dec-24	-330
ATAL-1200	IW - Inlet Pumping Station with Pipes, Valves and Fittings (0.75set) *	60	17-Dec-24	03-Mar-25	-330
Pre-treatment Zone (Above 11.8 mPD)					
Penstock & Stoplogs X 56 Sets at Fine Screen, Grit Removal channels					
ATAL-1160	IW - Unloading of Penstock & Stoplogs x 56 Nos *	10	04-Jan-25	15-Jan-25	-323
ATAL-1162	IW - Penstock x 12 Nos (5d/no./gang, 2gang) *	30	16-Jan-25	22-Feb-25	-312
ATAL-1164	IW - Stoplogs x 20 Nos (5d/no./gang, 3gang) *	34	16-Jan-25	27-Feb-25	-323
Fine Screening System					
ATAL-1840	IW - EOT Crane LA-01-07 for Fine Screen *	30	20-Nov-24	24-Dec-24	-289
ATAL-1220	IW - Fine Screens x 3 Sets *	30	17-Dec-24	23-Jan-25	-289
ATAL-1222	IW - Fine Screen Conveyors x 6 Sets *	30	17-Dec-24	23-Jan-25	-289
ATAL-1224	IW - Fine Screen Conveyors - Divertors and Discharge Tube Connectors *	30	17-Dec-24	23-Jan-25	-289
Grit Removal System					
ATAL-1850	IW - EOT Crane LA-01-08 for Grit Classifiers *	30	12-Nov-24	16-Dec-24	-289
ATAL-1230	IW - Grit Chamber/Trap x 2 Sets *	30	28-Dec-24	05-Feb-25	-297
ATAL-1232	IW - Grit Classifiers x 4 Sets *	30	28-Dec-24	05-Feb-25	-297
ATAL-1234	IW - Grit Classifiers Conveyor x 2 Sets *	30	28-Dec-24	05-Feb-25	-297
ATAL-1236	IW - All Other pipeworks & fittings for grit removal system *	42	28-Dec-24	19-Feb-25	-309
DOU-01 System - 01					
ATAL-2040	IW - DOU Equipment Installation (1800mm dia. puddle)	25	17-Sep-24 A	05-Nov-24	-329
ATAL-1250	IW - DOU Equipment Installation (Biotrick Filter 1A&1B, water break tank, 1st batch FRP pipe) *	20	06-Nov-24	28-Nov-24	-329
ATAL-1980	IW - DOU Equipment Installation (Biotrick Filter 1C to 1F, nutrient storage tank, 2nd batch FRP pipe) *	20	29-Nov-24	21-Dec-24	-329
ATAL-1990	IW - DOU Equipment Installation (Activated carbon filter 1A&1B, air extraction fans&dehumidifier,3rd&4th batch FRP pipe) *	20	23-Dec-24	17-Jan-25	-329
ATAL-2000	IW - DOU Equipment Installation (irrigation and nutrient dosing pumps and pipeworks) *	12	18-Jan-25	04-Feb-25	-329
LV Switch Room (IW + PST)					
ATAL-1270	IW - LVSB and PLC Panel, Station, UPS System Installation *	36	09-Sep-24 A	17-Dec-24	-273
ATAL-1290	IW - Termination Works (TX to LVSB) *	6	18-Dec-24	24-Dec-24	-273
ATAL-1330	IW - Energization & SAT of LVSB@IW *	7	27-Dec-24	04-Jan-25	-273
Electrical Works					
ATAL-1340	IW - Electrical - Cable Containment Installation - LVSB to Equipment *	60	24-Oct-24 A	11-Jan-25	-305
ATAL-1350	IW - Electrical - Local Control Panel Installation *	60	01-Nov-24	13-Jan-25	-280
ATAL-1380	IW - Electrical - Installation of Termination Box *	60	01-Nov-24	13-Jan-25	-280
ATAL-1370	IW - Electrical - Cabling Works *	45	16-Nov-24	11-Jan-25	-278
ATAL-1390	IW - Electrical - Megger Test and Termination Works *	30	06-Dec-24	13-Jan-25	-280
Instrumentation & SCADA Works					
ATAL-1420	IW - Instrument & SCADA - Cable Containment Installation & Cabling Works - PLC Panel to Equipment	80	01-Nov-24	08-Feb-25	-305
ATAL-1400	IW - Instrument & SCADA - Instrument Installation & Inspection	52	18-Dec-24	22-Feb-25	-305
ATAL-1440	IW - Instrument & SCADA - Termination Works	52	18-Dec-24	22-Feb-25	-305
ATAL-1450	IW - Instrument & SCADA - Installation of GUI, PQEMS, DEMS, CMOS, System Integration&Mapping , Network Configuration	45	28-Dec-24	22-Feb-25	-305
IW E&M T&C Works					
Phase 2 - IW Sub-System Dry Function Test (Function, Protection, Interlock)					
ATAL-1620	IW - T&C (ph2) - Fine Screening System *	4	24-Jan-25	30-Jan-25	-287
Primary Sedimentation Tank (PST)					
PST ABWF, E&M & T&C					
PST Stage 1					
PST Stage 1 - ABWF Works					
GLA-H above +11.8mPD					
PST-3135	PST Stage 1 - ABWF Works (wall renderspray=1d,let-dry=5d) at +11.8/+18.15mPD	6	28-Dec-24	04-Jan-25	-182
PST-3165	PST Stage 1 - ABWF Works (wall plaster3coats) at +11.8/+18.15mPD	2	06-Jan-25	07-Jan-25	-182
PST-3175	PST Stage 1 - ABWF Works (floor screeding) at +11.8/+18.15mPD	3	08-Jan-25	10-Jan-25	-182
PST-3185	PST Stage 1 - ABWF Works (floor coating3coats) at +11.8/+18.15mPD	3	11-Jan-25	14-Jan-25	-182
PST Stage 1 - E&M Installation Works					
Phase 1 (GLA-H, PST 1-3, Outlet Channel)					



PaulY REC
保華-中國中鐵聯營體
PAUL Y.-CREC JOINT VENTURE

Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

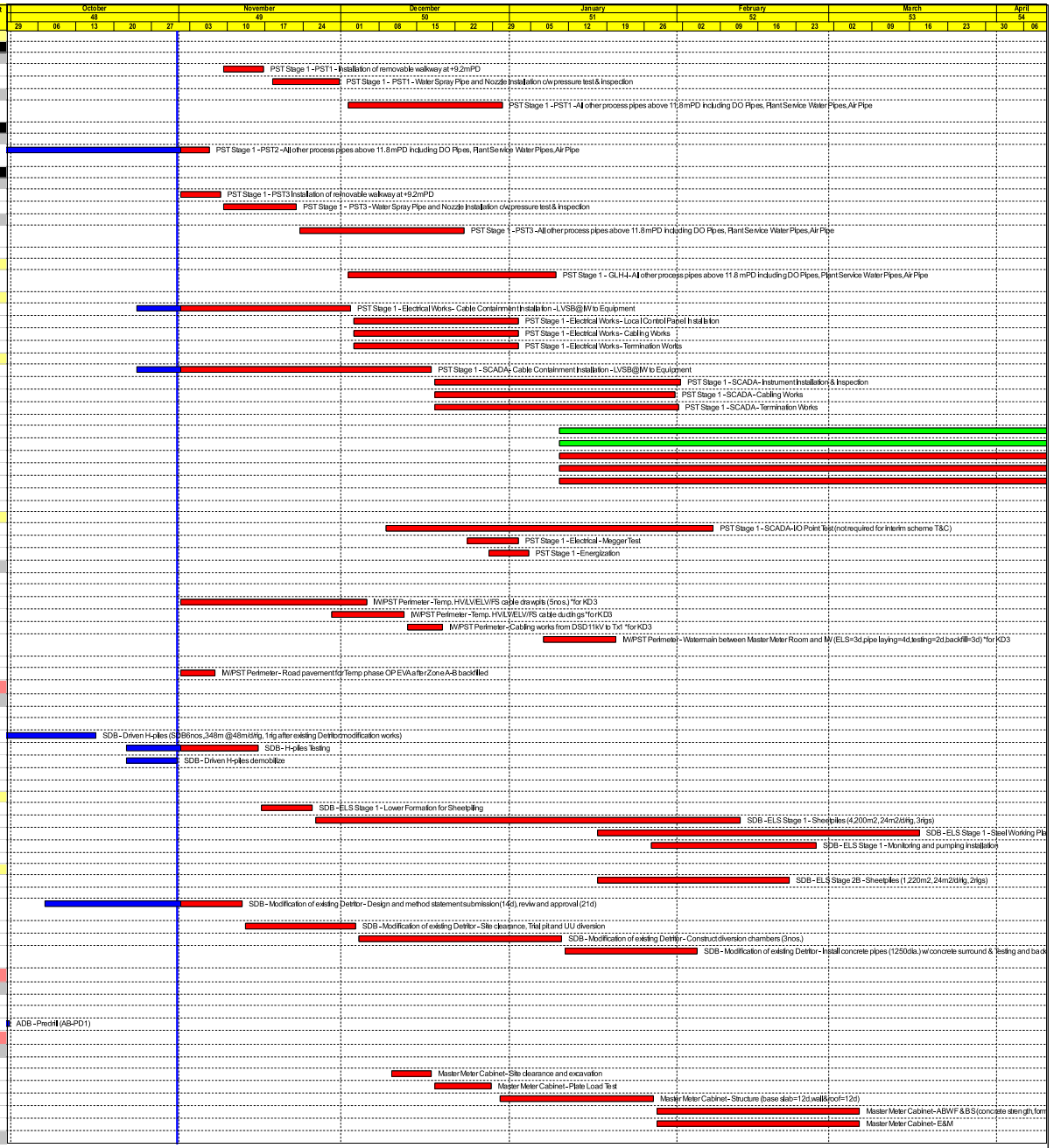
Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
	PST Stage 1 - E&M Installation Works at Setting Zone (PST 1~3)				
	PST 1				
	PST 1 - Inclined Plate Setting System				
PST-3325	PST Stage 1 - PST1 - Installation of removable walkway at +9.2mPD	7	09-Nov-24*	16-Nov-24	-250
ATALPST-5410	PST Stage 1 - PST1 - Water Spray Pipe and Nozzle Installation c/w pressure test & Inspection	12	18-Nov-24	30-Nov-24	-250
	PST 1 - Compressors , Air blowers c/w associated fittings				
ATALPST-5470	PST Stage 1 - PST1 - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	23	02-Dec-24	30-Dec-24	-251
	PST 2				
	PST 2 - Compressors , Air blowers c/w associated fittings				
ATALPST-6850	PST Stage 1 - PST2 - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	24	02-Aug-24 A	06-Nov-24	-224
	PST 3				
	PST 3 - Inclined Plate Setting System				
PST-3335	PST Stage 1 - PST3 Installation of removable walkway at +9.2mPD	7	01-Nov-24*	08-Nov-24	-250
ATALPST-6710	PST Stage 1 - PST3 - Water Spray Pipe and Nozzle Installation c/w pressure test & Inspection	12	09-Nov-24	22-Nov-24	-243
	PST 3 - Compressors , Air blowers c/w associated fittings				
ATALPST-6740	PST Stage 1 - PST3 - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	26	23-Nov-24	23-Dec-24	-246
	Phase 2 (GL H-I & Inlet Channel, Pump Room) Handover for PST early commissioning *				
	PST Stage 1 - Compressors , Air blowers c/w associate dfittings				
ATALPST-6770	PST Stage 1 - GLH-I - All other process pipes above 11.8 mPD including DO Pipes, Plant Service Water Pipes, Air Pipe	31	02-Dec-24	09-Jan-25	-250
	PST Stage 1 - Electrical Works (PST 1~3, Inlet/Outlet Channel & Pump Room)				
ATALPST-5660	PST Stage 1 - Electrical Works - Cable Containment Installation - LVSB@IW to Equipment	27	24-Oct-24 A	02-Dec-24	-244
ATALPST-5670	PST Stage 1 - Electrical Works - Local Control Panel Installation	24	03-Dec-24	02-Jan-25	-244
ATALPST-5680	PST Stage 1 - Electrical Works - Cabling Works	24	03-Dec-24	02-Jan-25	-244
ATALPST-5690	PST Stage 1 - Electrical Works - Termination Works	24	03-Dec-24	02-Jan-25	-244
	PST Stage 1 - Instrumentation & SCADA Works (PST 1~3, Inlet/Outlet Channel & Pump Room)				
ATALPST-5720	PST Stage 1 - SCADA - Cable Containment Installation - LVSB@IW to Equipment	38	24-Oct-24 A	17-Dec-24	-275
ATALPST-5700	PST Stage 1 - SCADA - Instrument Installation & Inspection	34	18-Dec-24	01-Feb-25	-220
ATALPST-5730	PST Stage 1 - SCADA - Cabling Works	33	18-Dec-24	31-Jan-25	-272
ATALPST-5740	PST Stage 1 - SCADA - Termination Works	33	18-Dec-24	01-Feb-25	-272
	PST Stage 1 - BS Works (PST 1~3, Inlet/Outlet Channel & Pump Room)				
ATALPST-5750	PST Stage 1 - MVAC Works	80	10-Jan-25	19-Apr-25	283
ATALPST-5760	PST Stage 1 - ELV Works	80	10-Jan-25	19-Apr-25	283
ATALPST-5770	PST Stage 1 - P&D Works	80	10-Jan-25	19-Apr-25	-304
ATALPST-5780	PST Stage 1 - EL Works	80	10-Jan-25	19-Apr-25	-304
ATALPST-5790	PST Stage 1 - FS. Works	80	10-Jan-25	19-Apr-25	-304
	PST Stage 1 - T&C Works				
	PST Stage 1 - T&C Works (PST 1~3, Inlet / Outlet Channel & Pump Room)				
	Phase 1 - PST 1~3 Sub-System Physical Dry Check				
ATALPST-5820	PST Stage 1 - SCADA - IO Point Test (not required for interim scheme T&C)	47	09-Dec-24	07-Feb-25	-272
ATALPST-5810	PST Stage 1 - Electrical - Megger Test	6	24-Dec-24	02-Jan-25	-244
ATALPST-5830	PST Stage 1 - Energization	6	28-Dec-24	04-Jan-25	-246
	External Works - Inlet Work and Primary Sedimentation Tank Perimeter				
	IWPST External Works - Zone A (Transformer House No.1)				
	Stage 1 (KD3)				
EW-1715	IWPST Perimeter - Temp. HV/LV/ELV/FS cable drawpits (5nos.) *for KD3	30	01-Nov-24*	05-Dec-24	-269
EW-2280	IWPST Perimeter - Temp. HV/LV/ELV/FS cable ductings *for KD3	12	29-Nov-24	12-Dec-24	-269
EW-1710	IWPST Perimeter - Cabling works from DSD11kV to Tx1 *for KD3	6	13-Dec-24	19-Dec-24	-269
EW-2270	IWPST Perimeter - Watermain between Master Meter Room and IW (ELS=3d,pipe laying=4d,testing=2d,backfill=3d) *for KD3	12	07-Jan-25	20-Jan-25	-233
	IWPST External Works - Roadworks				
EW-1550	IWPST Perimeter - Road pavement for Temp phase OP EVA after Zone A-B backfilled	6	01-Nov-24	07-Nov-24	-161
	Sludge Dewatering Building (SDB)				
	SDB Foundation & ELS				
	SDB Foundation - PST 1~4 Footprint				
	SDB Foundation - Driven H-Pile				
SDB-2060	SDB - Driven H-piles (SDB6nos.,348m @48m/d/rig, 1rig after existing Detritor modification works)	8	20-Sep-24 A	16-Oct-24 A	
SDB-1180	SDB - H-piles Testing	14	22-Oct-24 A	15-Nov-24	-81
SDB-1910	SDB - Driven H-piles demobilize	5	22-Oct-24 A	31-Oct-24 A	
	SDB Foundation - ELS				
	SDB Foundation - ELS Stage 1				
	SDB Foundation - ELS Stage 1 (S1 to S2)				
SDB-1185	SDB - ELS Stage 1 - Lower Formation for Sheetpiling	8	16-Nov-24	25-Nov-24	-81
SDB-1190	SDB - ELS Stage 1 - Sheetpiles (4,200m2, 24m2/d/rig, 3rigs)	62	26-Nov-24	12-Feb-25	-81
SDB-1195	SDB - ELS Stage 1 - Steel Working Platform	48	17-Jan-25	17-Mar-25	-81
SDB-1610	SDB - ELS Stage 1 - Monitoring and pumping installation	24	27-Jan-25	26-Feb-25	-81
	SDB Foundation - ELS Stage 2				
	ELS Stage 2B West (Pump Room)				
SDB-2330	SDB - ELS Stage 2B - Sheetpiles (1,220m2, 24m2/d/rig, 2rigs)	28	17-Jan-25	21-Feb-25	-64
	Modification of existing Detritor				
SDB-6450	SDB - Modification of existing Detritor - Design and method statement submission (14d), review and approval (21d)	35	07-Oct-24 A	12-Nov-24	-84
SDB-6360	SDB - Modification of existing Detritor - Site clearance, Trial pit and UU diversion	18	13-Nov-24	03-Dec-24	-84
SDB-6370	SDB - Modification of existing Detritor - Construct diversion chambers (3nos.)	30	04-Dec-24	10-Jan-25	-84
SDB-6380	SDB - Modification of existing Detritor - Install concrete pipes (1250dia.) w/ concrete surround & Testing and backfill	18	11-Jan-25	04-Feb-25	-84
	Administration Building (ADB)				
	ADB Foundation Works				
	ADB Predrilling and Piling after Demolition				
	ADB Predrilling				
ADB-1390	ADB - Predrill (AB-PD1)	8	11-Sep-24 A	30-Sep-24 A	
	External Works				
	Water Meter Cabinet				
	Water Meter Cabinet - Structure				
CLP-1740	Master Meter Cabinet - Site clearance and excavation	7	10-Dec-24	17-Dec-24	-269
CLP-1750	Master Meter Cabinet - Plate Load Test	8	18-Dec-24	28-Dec-24	-269
CLP-1130	Master Meter Cabinet - Structure (base slab=12d,wall&roof=12d)	24	30-Dec-24	27-Jan-25	-269
CLP-1360	Master Meter Cabinet - ABWF & BS (concrete strength,formwork defect=14d, ABWF=10d,BS=6d)	30	28-Jan-25	06-Mar-25	-269
CLP-1370	Master Meter Cabinet - E&M	30	28-Jan-25	06-Mar-25	-269
	Walkway Across Tai Tseng Wai Nullah				



保華-中國中鐵聯營體
PAUL Y.-CREC JOINT VENTURE

Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

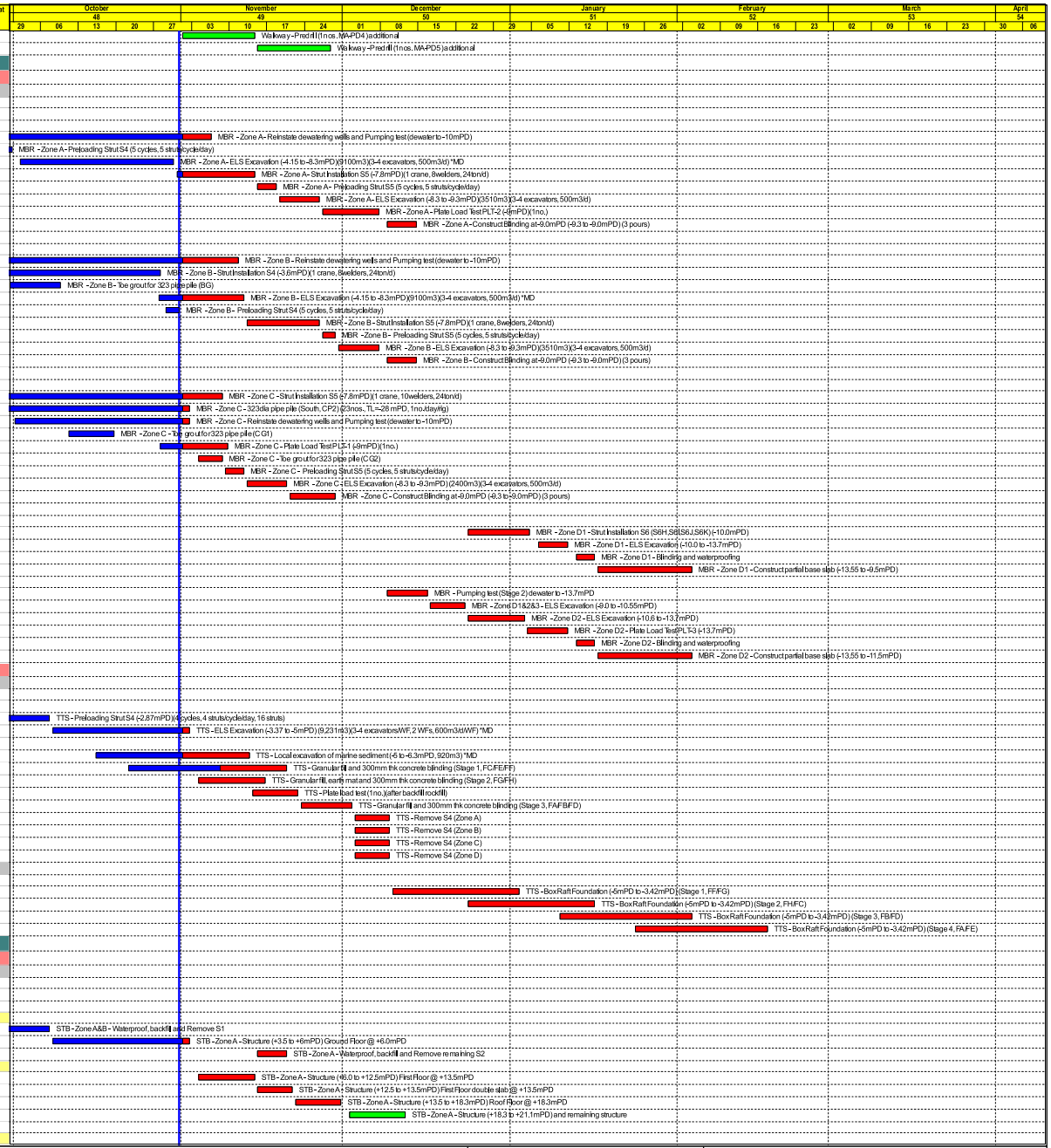
Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
CLP-1720	Walkway - Predrill (1nos. MA-PD4) additional	12	01-Nov-24	14-Nov-24	459
CLP-1730	Walkway - Predrill (1nos. MA-PD5) additional	12	15-Nov-24	28-Nov-24	459
Zone 2 Construction					
Mainstream Bio-Reactor & Auxiliary Facility (MBR and AF)					
MBR and AF Structure					
MBR - ELS Excavation & Demolition stage 2					
MBR - ELS Zone A					
Excavation and Demolition					
MBRAF-3940	MBR - Zone A - Reinstate dewatering wells and Pumping test (dewater to -10mPD)	14	23-Sep-24 A	06-Nov-24	-265
MBRAF-3500	MBR - Zone A - Preloading Strut S4 (5 cycles, 5 struts/cycle/day)	5	25-Sep-24 A	30-Sep-24 A	
MBRAF-1690	MBR - Zone A - ELS Excavation (-4.15 to -8.3mPD)(9100m3)(3-4 excavators, 500m3/d) *MD	17	02-Oct-24 A	30-Oct-24 A	
MBRAF-1700	MBR - Zone A - Strut Installation S5 (-7.8mPD)(1 crane, 8welders, 24ton/d)	12	31-Oct-24 A	14-Nov-24	-275
MBRAF-3510	MBR - Zone A - Preloading Strut S5 (5 cycles, 5 struts/cycle/day)	3	15-Nov-24	18-Nov-24	-275
MBRAF-1710	MBR - Zone A - ELS Excavation (-8.3 to -9.3mPD)(3510m3)(3-4 excavators, 500m3/d)	7	19-Nov-24	26-Nov-24	-275
MBRAF-4070	MBR - Zone A - Plate Load Test PLT-2 (-9mPD)(1no.)	10	27-Nov-24	07-Dec-24	-207
MBRAF-4150	MBR - Zone A - Construct Blinding at -9.0mPD (-9.3 to -9.0mPD) (3 pours)	6	09-Dec-24	14-Dec-24	-207
MBR - ELS Zone B					
Excavation					
MBRAF-3920	MBR - Zone B - Reinstate dewatering wells and Pumping test (dewater to -10mPD)	14	23-Aug-24 A	11-Nov-24	-269
MBRAF-3300	MBR - Zone B - Strut Installation S4 (-3.6mPD)(1 crane, 8welders, 24ton/d)	12	03-Sep-24 A	28-Oct-24 A	
MBRAF-3700	MBR - Zone B - Toe grout for 323 pipe pile (BG)	10	30-Sep-24 A	09-Oct-24 A	
MBRAF-3310	MBR - Zone B - ELS Excavation (-4.15 to -8.3mPD)(9100m3)(3-4 excavators, 500m3/d) *MD	13	28-Oct-24 A	12-Nov-24	-285
MBRAF-3590	MBR - Zone B - Preloading Strut S4 (5 cycles, 5 struts/cycle/day)	3	29-Oct-24 A	31-Oct-24 A	
MBRAF-3320	MBR - Zone B - Strut Installation S5 (-7.8mPD)(1 crane, 8welders, 24ton/d)	12	13-Nov-24	26-Nov-24	-285
MBRAF-3600	MBR - Zone B - Preloading Strut S5 (5 cycles, 5 struts/cycle/day)	3	27-Nov-24	29-Nov-24	-285
MBRAF-3330	MBR - Zone B - ELS Excavation (-8.3 to -9.3mPD)(3510m3)(3-4 excavators, 500m3/d)	7	30-Nov-24	07-Dec-24	-285
MBRAF-4180	MBR - Zone B - Construct Blinding at -9.0mPD (-9.3 to -9.0mPD) (3 pours)	6	09-Dec-24	14-Dec-24	-201
MBR - ELS Zone C					
Excavation					
MBRAF-3220	MBR - Zone C - Strut Installation S5 (-7.8mPD)(1 crane, 10welders, 24ton/d)	12	05-Aug-24 A	08-Nov-24	-270
MBRAF-3680	MBR - Zone C - 323dia pipe pile (South, CP2) (23nos., TL=-28 mPD, 1no./day/rig)	23	11-Sep-24 A	02-Nov-24	-260
MBRAF-3900	MBR - Zone C - Reinstate dewatering wells and Pumping test (dewater to -10mPD)	14	01-Oct-24 A	02-Nov-24	-262
MBRAF-3690	MBR - Zone C - Toe grout for 323 pipe pile (CG1)	16	11-Oct-24 A	19-Oct-24 A	
MBRAF-4030	MBR - Zone C - Plate Load Test PLT-1 (-9mPD)(1no.)	10	28-Oct-24 A	09-Nov-24	-179
MBRAF-4040	MBR - Zone C - Toe grout for 323 pipe pile (CG2)	5	04-Nov-24	08-Nov-24	-260
MBRAF-3640	MBR - Zone C - Preloading Strut S5 (5 cycles, 5 struts/cycle/day)	3	09-Nov-24	12-Nov-24	-270
MBRAF-3230	MBR - Zone C - ELS Excavation (-8.3 to -9.3mPD) (2400m3)(3-4 excavators, 500m3/d)	7	13-Nov-24	20-Nov-24	-270
MBRAF-4140	MBR - Zone C - Construct Blinding at -9.0mPD (-9.3 to -9.0mPD) (3 pours)	8	21-Nov-24	29-Nov-24	-188
MBR - ELS of Central Corridor (Zone D)					
MBR - ELS of Central Corridor (North)					
MBRAF-1740	MBR - Zone D1 - Strut Installation S6 (S6H,S6I,S6J,S6K) (-10.0mPD)	8	24-Dec-24	04-Jan-25	-254
MBRAF-1750	MBR - Zone D1 - ELS Excavation (-10.0 to -13.7mPD)	6	06-Jan-25	11-Jan-25	-254
MBRAF-4160	MBR - Zone D1 - Blinding and waterproofing	4	13-Jan-25	16-Jan-25	-254
MBRAF-3760	MBR - Zone D1 - Construct partial base slab (-13.55 to -9.5mPD)	12	17-Jan-25	03-Feb-25	-254
MBR - ELS of Central Corridor (Middle)					
MBRAF-2370	MBR - Pumping test (Stage 2) dewater to -13.7mPD	7	09-Dec-24	16-Dec-24	-285
MBRAF-1730	MBR - Zone D1&2&3 - ELS Excavation (-9.0 to -10.55mPD)	6	17-Dec-24	23-Dec-24	-285
MBRAF-3720	MBR - Zone D2 - ELS Excavation (-10.6 to -13.7mPD)	7	24-Dec-24	03-Jan-25	-285
MBRAF-3970	MBR - Zone D2 - Plate Load Test PLT-3 (-13.7mPD)	7	04-Jan-25	11-Jan-25	-285
MBRAF-4100	MBR - Zone D2 - Blinding and waterproofing	4	13-Jan-25	16-Jan-25	-285
MBRAF-3730	MBR - Zone D2 - Construct partial base slab (-13.55 to -11.5mPD)	12	17-Jan-25	03-Feb-25	-285
Tertiary Treatment System (TTS)					
TTS Foundation and ELS					
TTS Foundation and ELS Stage 2					
TTS ELS					
TTS-2070	TTS - Preloading Strut S4 (-2.87mPD)(4 cycles, 4 struts/cycle/day, 16 struts)	4	26-Sep-24 A	07-Oct-24 A	
TTS-1300	TTS - ELS Excavation (-3.37 to -5mPD) (9,231m3)(3-4 excavators/WF, 2 WFs, 600m3/d/WF) *MD	8	08-Oct-24 A	02-Nov-24	-266
TTS Formation Level					
TTS-1810	TTS - Local excavation of marine sediment (-5 to -6.3mPD, 920m3) *MD	6	16-Oct-24 A	13-Nov-24	-279
TTS-2210	TTS - Granular fill and 300mm thk concrete blinding (Stage 1, FC/FE/FF)	8	22-Oct-24 A	20-Nov-24	-269
TTS-2220	TTS - Granular fill, earth mat and 300mm thk concrete blinding (Stage 2, FG/FH)	12	04-Nov-24	16-Nov-24	-266
TTS-2090	TTS - Plate load test (1no.)(after backfill rockfill)	8	14-Nov-24	22-Nov-24	-279
TTS-2230	TTS - Granular fill and 300mm thk concrete blinding (Stage 3, FA/FB/FD)	8	23-Nov-24	02-Dec-24	-279
TTS-1440	TTS - Remove S4 (Zone A)	6	03-Dec-24	09-Dec-24	-255
TTS-2260	TTS - Remove S4 (Zone B)	6	03-Dec-24	09-Dec-24	-279
TTS-2270	TTS - Remove S4 (Zone C)	6	03-Dec-24	09-Dec-24	-279
TTS-2280	TTS - Remove S4 (Zone D)	6	03-Dec-24	09-Dec-24	-279
TTS Structure					
TTS Substructure					
TTS-1380	TTS - Box Raft Foundation (-5mPD to -3.42mPD) (Stage 1, FF/FG)	18	10-Dec-24	02-Jan-25	-279
TTS-2240	TTS - Box Raft Foundation (-5mPD to -3.42mPD) (Stage 2, FH/FC)	18	24-Dec-24	16-Jan-25	-279
TTS-2250	TTS - Box Raft Foundation (-5mPD to -3.42mPD) (Stage 3, FB/FD)	18	10-Jan-25	03-Feb-25	-279
TTS-2255	TTS - Box Raft Foundation (-5mPD to -3.42mPD) (Stage 4, FA/FE)	18	24-Jan-25	17-Feb-25	-279
Zone 3 Construction					
Zone 3 North Portion (Z3N)					
New Sudge Thickening Building (STB)					
STB : Civil and Structural Works					
STB : Structure					
STB : Structure Zone A					
STB : Substructure Zone A					
Z3S3-6100	STB - Zone A&B - Waterproof, backfill and Remove S1	10	16-Sep-24 A	07-Oct-24 A	
Z3S3-6060	STB - Zone A - Structure (+3.5 to +6mPD) Ground Floor @ +6.0mPD	12	08-Oct-24 A	02-Nov-24	-187
Z3S3-6150	STB - Zone A - Waterproof, backfill and Remove remaining S2	5	15-Nov-24	20-Nov-24	-16
STB : Superstructure Zone A					
Z3S3-6090	STB - Zone A - Structure (+6.0 to +12.5mPD) First Floor @ +13.5mPD	10	04-Nov-24	14-Nov-24	-187
Z3S3-6190	STB - Zone A - Structure (+12.5 to +13.5mPD) First Floor double slab @ +13.5mPD	6	15-Nov-24	21-Nov-24	-187
Z3S3-6180	STB - Zone A - Structure (+13.5 to +18.3mPD) Roof Floor @ +18.3mPD	8	22-Nov-24	30-Nov-24	-187
Z3S3-3000	STB - Zone A - Structure (+18.3 to +21.1mPD) and remaining structure	10	02-Dec-24	12-Dec-24	285
STB : Structure Zone B					
STB : Substructure Zone B					



保華-中國中鐵聯營體
PAUL Y.-CREC JOINT VENTURE

Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

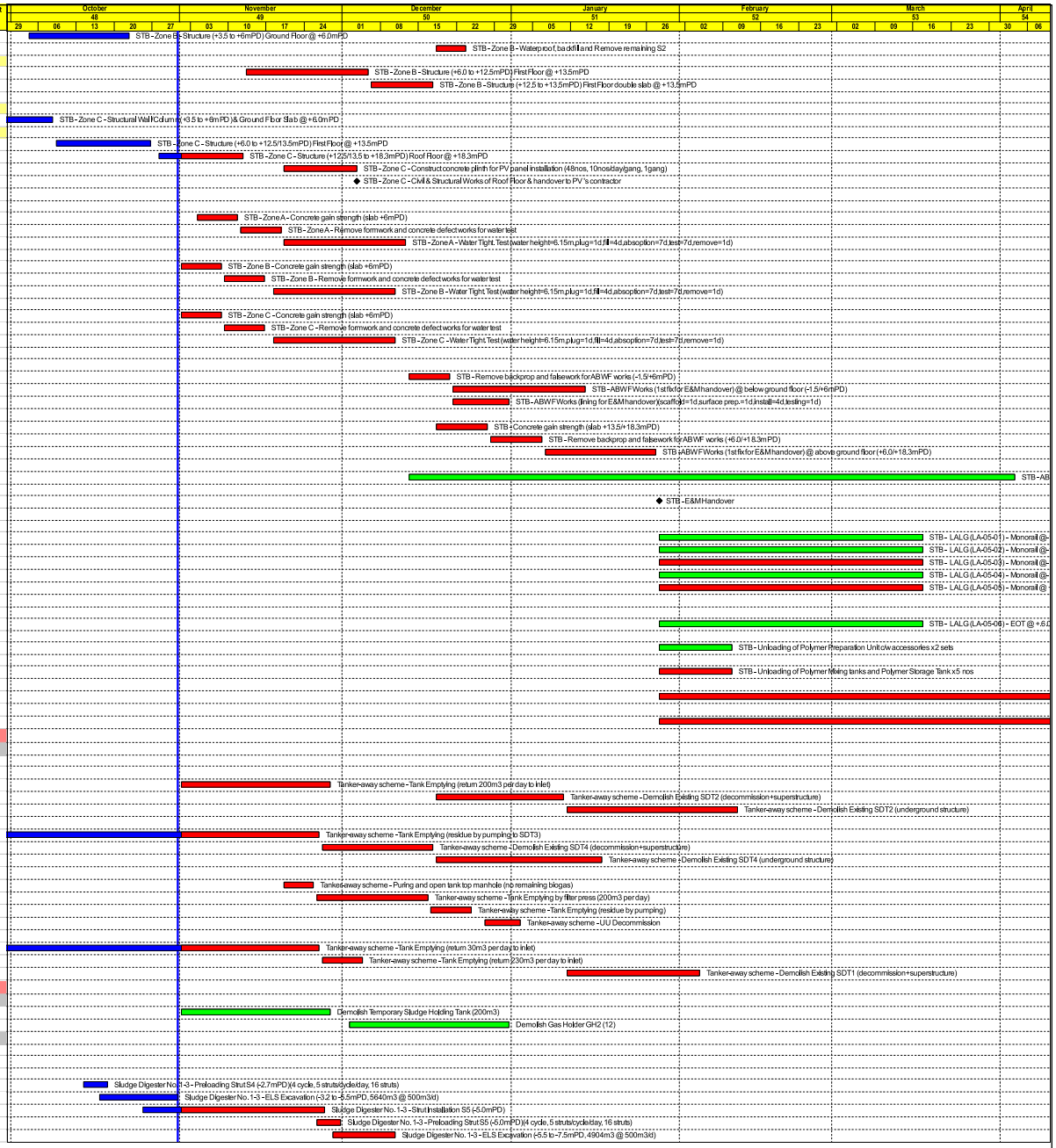
Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
Z3S3-6290	STB - Zone B - Structure (+3.5 to +6mPD) Ground Floor @ +6.0mPD	12	04-Oct-24 A	22-Oct-24 A	
Z3S3-6300	STB - Zone B - Waterproof, backfill and Remove remaining S2	5	18-Dec-24	23-Dec-24	-44
STB : Superstructure Zone B					
Z3S3-6250	STB - Zone B - Structure (+6.0 to +12.5mPD) First Floor @ +13.5mPD	20	13-Nov-24	05-Dec-24	-71
Z3S3-6260	STB - Zone B - Structure (+12.5 to +13.5mPD) First Floor double slab @ +13.5mPD	10	06-Dec-24	17-Dec-24	-71
STB : Structure Zone C (KD10)					
STB : Substructure Zone C					
Z3S3-2630	STB - Zone C - Structural Wall/Column (+3.5 to +6mPD) & Ground Floor Slab @ +6.0mPD	10	16-Sep-24 A	08-Oct-24 A	
STB : Superstructure Zone C					
Z3S3-2710	STB - Zone C - Structure (+6.0 to +12.5/13.5mPD) First Floor @ +13.5mPD	10	09-Oct-24 A	26-Oct-24 A	
Z3S3-2740	STB - Zone C - Structure (+12.5/13.5 to +18.3mPD) Roof Floor @ +18.3mPD	10	28-Oct-24 A	12-Nov-24	-181
Z3S3-2720	STB - Zone C - Construct concrete plinth for PV panel installation (48nos, 10nos/day/gang, 1gang)	12	20-Nov-24	03-Dec-24	-187
Z3S3-2780	STB - Zone C - Civil & Structural Works of Roof Floor & handover to PV's contractor	0		03-Dec-24	-187
STB : Water Tightness Test					
STB : Water Tightness Test Zone A					
Z3S3-6310	STB - Zone A - Concrete gain strength (slab +6mPD)	7	04-Nov-24	11-Nov-24	-60
Z3S3-6320	STB - Zone A - Remove formwork and concrete defect works for water test	7	12-Nov-24	19-Nov-24	-60
Z3S3-6330	STB - Zone A - Water Tight Test (water height=6.15m,plug=1d,fill=4d,absoption=7d,test=7d,remove=1d)	20	20-Nov-24	12-Dec-24	-60
STB : Water Tightness Test Zone B					
Z3S3-6340	STB - Zone B - Concrete gain strength (slab +6mPD)	7	01-Nov-24	08-Nov-24	-58
Z3S3-6350	STB - Zone B - Remove formwork and concrete defect works for water test	7	09-Nov-24	16-Nov-24	-58
Z3S3-6360	STB - Zone B - Water Tight Test (water height=6.15m,plug=1d,fill=4d,absoption=7d,test=7d,remove=1d)	20	18-Nov-24	10-Dec-24	-58
STB : Water Tightness Test Zone C					
Z3S3-5990	STB - Zone C - Concrete gain strength (slab +6mPD)	7	01-Nov-24	08-Nov-24	-58
Z3S3-6000	STB - Zone C - Remove formwork and concrete defect works for water test	7	09-Nov-24	16-Nov-24	-58
Z3S3-5200	STB - Zone C - Water Tight Test (water height=6.15m,plug=1d,fill=4d,absoption=7d,test=7d,remove=1d)	20	18-Nov-24	10-Dec-24	-58
STB : ABWF					
STB : ABWF (-1.5 to +6.0mPD)					
Z3S3-5980	STB - Remove backprop and falsework for ABWF works (-1.5/+6mPD)	7	13-Dec-24	20-Dec-24	-60
Z3S3-2790	STB - ABWF Works (1st fix for E&M handover) @ below ground floor (-1.5/+6mPD)	18	21-Dec-24	14-Jan-25	-60
Z3S3-5210	STB - ABWF Works (lining for E&M handover)(scaffold=1d,surface prep.=1d,install=4d,testing=1d)	7	21-Dec-24	31-Dec-24	-49
STB : ABWF (+6.0 to +18.3mPD)					
Z3S3-6020	STB - Concrete gain strength (slab +13.5/+18.3mPD)	7	18-Dec-24	27-Dec-24	-71
Z3S3-6010	STB - Remove backprop and falsework for ABWF works (+6.0/+18.3mPD)	7	28-Dec-24	06-Jan-25	-71
Z3S3-4540	STB - ABWF Works (1st fix for E&M handover) @ above ground floor (+6.0/+18.3mPD)	18	07-Jan-25	27-Jan-25	-71
STB : ABWF (above +18.3mPD roof)					
Z3S3-4560	STB - ABWF Works @ roof (+18.0/+21.1mPD)	90	13-Dec-24	03-Apr-25	285
STB : E&M Installation					
Z3S3-2799	STB - E&M Handover	0	28-Jan-25		-71
STB E&M : Pump Room Floor @ +1.5mPD					
Lifting Appliance x 6 sets					
Z3S3-4010	STB - LALG (LA-05-01) - Monorail @ -1.5mPD - Thickening Centrifuge Feed Pump	39	28-Jan-25	17-Mar-25	52
Z3S3-4020	STB - LALG (LA-05-02) - Monorail @ -1.5mPD - Digester Feed Pump	39	28-Jan-25	17-Mar-25	52
Z3S3-4030	STB - LALG (LA-05-03) - Monorail @ -1.5mPD - Jet Mixer for Thickening Sludge Holding Tank No.1	39	28-Jan-25	17-Mar-25	-27
Z3S3-4040	STB - LALG (LA-05-04) - Monorail @ -1.5mPD - Digester Feed Pump	39	28-Jan-25	17-Mar-25	52
Z3S3-4050	STB - LALG (LA-05-05) - Monorail @ +6.0mPD - For Pump Room Floor	39	28-Jan-25	17-Mar-25	-68
STB E&M : Thickening Centrifuge Hall and Polymer Area @ +6.0mPD					
Lifting Appliance x 1 Set					
Z3S3-4190	STB - LALG (LA-05-06) - EOT @ +6.0mPD - Centrifuge	39	28-Jan-25	17-Mar-25	2
Polymer Preparation and Dosing System					
Z3S3-4200	STB - Unloading of Polymer Preparation Unit c/w accessories x2 sets	9	28-Jan-25	10-Feb-25	26
Sludge Thickening and Discharge System					
Z3S3-4210	STB - Unloading of Polymer Mixing tanks and Polymer Storage Tank x5 nos	9	28-Jan-25	10-Feb-25	-1
STB E&M : Transformer Room @ +6.0mPD					
Z3S3-4300	STB - Installation of Transformer	140	28-Jan-25	22-Jul-25	-18
STB E&M : LV Switch Room and VFD Room @ +13.5mPD					
Z3S3-4310	STB - LVSB Installation	60	28-Jan-25	11-Apr-25	-47
Zone 3 Middle Portion (Z3M)					
Demolition					
Existing SDT 1-4					
SDT No.2 (Water)					
Z3S7-2130	Tanker-away scheme - Tank Emptying (return 200m3 per day to inlet)	24	01-Nov-24	28-Nov-24	-171
Z3S7-2135	Tanker-away scheme - Demolish Existing SDT2 (decommission+superstructure)	18	18-Dec-24	10-Jan-25	-187
Z3S7-2030	Tanker-away scheme - Demolish Existing SDT2 (underground structure)	24	11-Jan-25	11-Feb-25	-187
SDT No.4 (Sludge)					
Z3S7-2170	Tanker-away scheme - Tank Emptying (residue by pumping to SDT3)	60	12-Sep-24 A	26-Nov-24	-187
Z3S7-2175	Tanker-away scheme - Demolish Existing SDT4 (decommission+superstructure)	18	27-Nov-24	17-Dec-24	-187
Z3S7-2180	Tanker-away scheme - Demolish Existing SDT4 (underground structure)	24	18-Dec-24	17-Jan-25	-187
SDT No.3 (Sludge) + Compressor House					
Z3S7-2190	Tanker-away scheme - Puring and open tank top manhole (no remaining biogas)	5	20-Nov-24*	25-Nov-24	-168
Z3S7-2200	Tanker-away scheme - Tank Emptying by filter press (200m3 per day)	18	26-Nov-24	16-Dec-24	-161
Z3S7-2210	Tanker-away scheme - Tank Emptying (residue by pumping)	7	17-Dec-24	24-Dec-24	-161
Z3S7-2220	Tanker-away scheme - UU Decommission	5	27-Dec-24	02-Jan-25	-161
SDT No.1 (Water)					
Z3S7-2240	Tanker-away scheme - Tank Emptying (return 30m3 per day to inlet)	60	12-Sep-24 A	26-Nov-24	-158
Z3S7-2250	Tanker-away scheme - Tank Emptying (return 230m3 per day to inlet)	7	27-Nov-24	04-Dec-24	-158
Z3S7-2255	Tanker-away scheme - Demolish Existing SDT1 (decommission+superstructure)	18	11-Jan-25	04-Feb-25	-187
Zone 3 South Portion (Z3S)					
Demolition					
Z3S4-2010	Demolish Temporary Sludge Holding Tank (200m3)	24	01-Nov-24	28-Nov-24	302
Z3S4-2000	Demolish Gas Holder GH2 (12)	24	02-Dec-24*	31-Dec-24	264
Sludge Digestor No. 1-3 (SD1-3)					
SD1-3 : Foundation and ELS					
SD1-3 : Excavation and Strut Installation					
SD1-3 : ELS					
Z3S3-5750	Sludge Digester No. 1-3 - Preloading Strut S4 (-2.7mPD)(4 cycle, 5 struts/cycle/day, 16 struts)	5	14-Oct-24 A	18-Oct-24 A	
Z3S3-2240	Sludge Digester No. 1-3 - ELS Excavation (-3.2 to -5.5mPD, 5640m3 @ 500m3/d)	12	17-Oct-24 A	31-Oct-24 A	
Z3S3-3600	Sludge Digester No. 1-3 - Strut Installation S5 (-5.0mPD)	18	25-Oct-24 A	27-Nov-24	-141
Z3S3-5760	Sludge Digester No. 1-3 - Preloading Strut S5 (-5.0mPD)(4 cycle, 5 struts/cycle/day, 16 struts)	5	26-Nov-24	30-Nov-24	-141
Z3S3-3610	Sludge Digester No. 1-3 - ELS Excavation (-5.5 to -7.5mPD, 4904m3 @ 500m3/d)	10	29-Nov-24	10-Dec-24	-141



保華-中國中鐵聯營體
PAUL Y.-CREC JOINT VENTURE

Remaining Level of Ef...
Actual Work
Remaining Work
Critical Remaining Work
Milestone

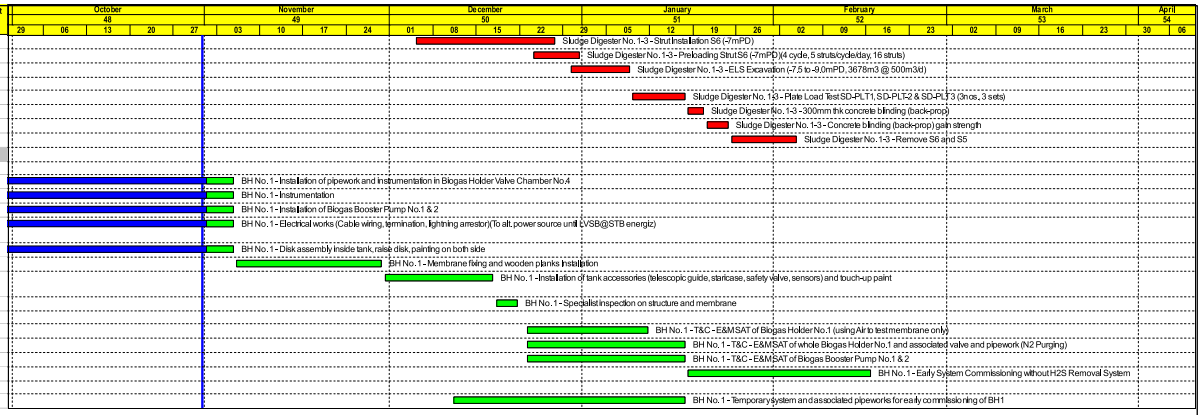
Contract DC/2019/10 - YLEPP - Main Works for Stage 1
Monthly Progress Report No. 48- 3MRP (Oct 24)

Project ID : DWPr43_241118r1
Layout : DC201910 MPR48-3MRP

Monthly Progress Report - 3MRP

Date	Revision	Checked	Approved
31-Oct-24	Rev. 0		

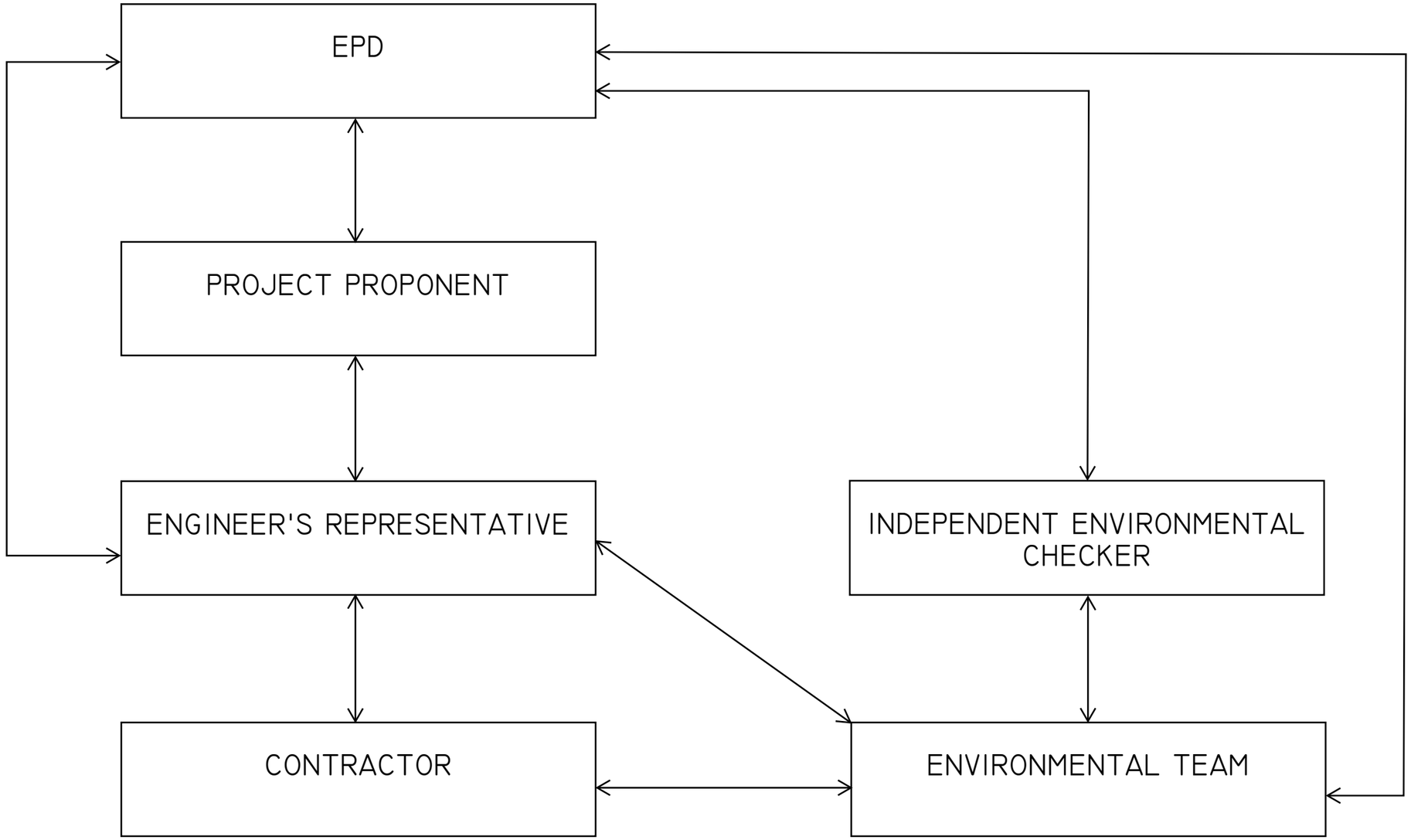
Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	Total Float
Z3S3-3620	Sludge Digester No. 1-3 - Strut Installation S6 (-7mPD)	18	05-Dec-24	27-Dec-24	-141
Z3S3-5770	Sludge Digester No. 1-3 - Preloading Strut S6 (-7mPD)(4 cycle, 5 struts/cycle/day, 16 struts)	5	24-Dec-24	31-Dec-24	-141
Z3S3-3630	Sludge Digester No. 1-3 - ELS Excavation (-7.5 to -9.0mPD, 3676m3 @ 500m3/d)	8	30-Dec-24	08-Jan-25	-141
SD1+3 : Formation Level					
Z3S3-5070	Sludge Digester No. 1-3 - Plate Load Test SD-PLT1, SD-PLT-2 & SD-PLT3 (3nos., 3 sets)	8	09-Jan-25	17-Jan-25	-141
Z3S3-5570	Sludge Digester No. 1-3 - 300mm thk concrete blinding (back-prop)	2	18-Jan-25	20-Jan-25	-141
Z3S3-5580	Sludge Digester No. 1-3 - Concrete blinding (back-prop) gain strength	4	21-Jan-25	24-Jan-25	-141
Z3S3-5590	Sludge Digester No. 1-3 - Remove S6 and S5	6	25-Jan-25	04-Feb-25	-141
Biogas Holder No. 1 (BH1)					
BH1 : E&M Installation					
ATALZ3BH-1010	BH No. 1 - Installation of pipework and instrumentation in Biogas Holder Valve Chamber No.4	52	26-Jun-24 A	05-Nov-24	248
ATALZ3BH-1020	BH No. 1 - Instrumentation	30	08-Jul-24 A	05-Nov-24	248
ATALZ3BH-1030	BH No. 1 - Installation of Biogas Booster Pump No.1 & 2	30	08-Jul-24 A	05-Nov-24	248
ATALZ3BH-1040	BH No. 1 - Electrical works (Cable wiring, termination, lightning arrestor)(To alt. power source until LVSB@STB energiz)	18	08-Jul-24 A	05-Nov-24	248
ATALZ3BH-2485	BH No. 1 - Disk assembly inside tank, raise disk, painting on both side	18	15-Jul-24 A	05-Nov-24	208
ATALZ3BH-2495	BH No. 1 - Membrane fixing and wooden planks installation	21	06-Nov-24	29-Nov-24	208
ATALZ3BH-2505	BH No. 1 - Installation of tank accessories (telescopic guide, staricase, safety valve, sensors) and touch-up paint	15	30-Nov-24	17-Dec-24	208
ATALZ3BH-2515	BH No. 1 - Specialist inspection on structure and membrane	4	18-Dec-24	21-Dec-24	208
BH1 : Testing & Commissioning					
ATALZ3BH-2070	BH No. 1 - T&C - E&M SAT of Biogas Holder No.1 (using Air to test membrane only)	15	23-Dec-24	11-Jan-25	208
ATALZ3BH-2090	BH No. 1 - T&C - E&M SAT of whole Biogas Holder No.1 and associated valve and pipework (N2 Purging)	20	23-Dec-24	17-Jan-25	208
ATALZ3BH-2100	BH No. 1 - T&C - E&M SAT of Biogas Booster Pump No.1 & 2	20	23-Dec-24	17-Jan-25	208
ATALZ3BH-1050	BH No. 1 - Early System Commissioning without H2S Removal System	30	18-Jan-25	16-Feb-25	257
BH1 : Diversion Works					
Z3S7-2070	BH No. 1 - Temporary system and associated pipeworks for early commissioning of BH1	30	11-Dec-24	17-Jan-25	208



Appendix B
Project Organization Chart

LEGEND:

LINE OF COMMUNICATION



Project Management Initials: Designer: Checked: Approved: ISO A1 594mm x 841mm

Plot File by: Chanws 5/28/2018
PATH: p:\projects\60505476\drawing\report\EM&A\EM&A_702.dgn

AECOM

PROJECT
項目

YUEN LONG EFFLUENT POLISHING PLANT - INVESTIGATION, DESIGN AND CONSTRUCTION

CLIENT
業主

渠務署
Drainage Services Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核對

STATUS
階段

SCALE
比例

A3 1 : 40000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

60505476

CONTRACT NO.
合約編號

CE 3/2015 (DS)

SHEET TITLE
圖紙名稱

PROJECT ORGANISATION

SHEET NUMBER
圖紙編號

Appendix C
Action and Limit Levels

Action and Limit Levels for Air Quality

Parameters	Action Level	Limit Level
1-hour TSP Level in µg/m^3	[1]For baseline level ⩽ 384 µg/m^3, Action level = (baseline level * 1.3 + Limit level)/2; For baseline level > 384 µg/m^3, Action level = Limit level	500 µg/m^3

Notes:
1. The Action Level for 1-hour TSP Level:
a) AM1 = (63*1.3 + 500) / 2 = 291 µg/m^3;
b) AM2 = (70*1.3 + 500) / 2 = 296 µg/m^3.

Action and Limit Levels for Construction Noise

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

Notes:
1. If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.
2. Correction of +3 dB(A) shall be made to the free field measurements.

Action and Limit Levels for Water Quality

Parameters	Action Levels	Limit Levels
Construction Phase Water Quality Monitoring		
DO in mg/L (Surface, Middle & Bottom) [2]	Surface & Middle 5%-ile of baseline data for surface and middle layer. Bottom 5%-ile of baseline data for bottom layer.	Surface & Middle 4 mg/L or 1%-ile of baseline data for surface and middle layer. Bottom 2 mg/L or 1%-ile of baseline data for bottom layer.
SS in mg/L (depth-averaged [1]) [3]	95%-ile of baseline data or 120% of upstream control station's SS recorded on the same day	99%-ile of baseline data or 130% of upstream control station's SS recorded on the same day
Turbidity in NTU (depth-averaged [1]) [3]	95%-ile of baseline data or 120% of upstream control station's turbidity recorded on the same day	99%-ile of baseline data or 130% of upstream control station's turbidity recorded on the same day

Notes:
1. "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths;
2. For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits;
3. For SS and turbidity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits

Action and Limit Levels for Ecology

Active Ardeid Night Roost Survey

As there are no specific guidelines on noise thresholds for roosting ardeids, the Action and Limit levels specified in below table were based on study conducted on exploring behavioural responses of shorebirds to impulsive noise (Wright et al. 2010).

Time Period	Action Level	Limit Level
after 17:30 during dry season after 18:00 during wet season	65.5 dB(A)[1]	72.2 dB(A)[2]

Notes:
1. Behavioural response of some kind more likely to occur
2. Flight with abandonment of the site becomes the most likely outcome of the disturbance

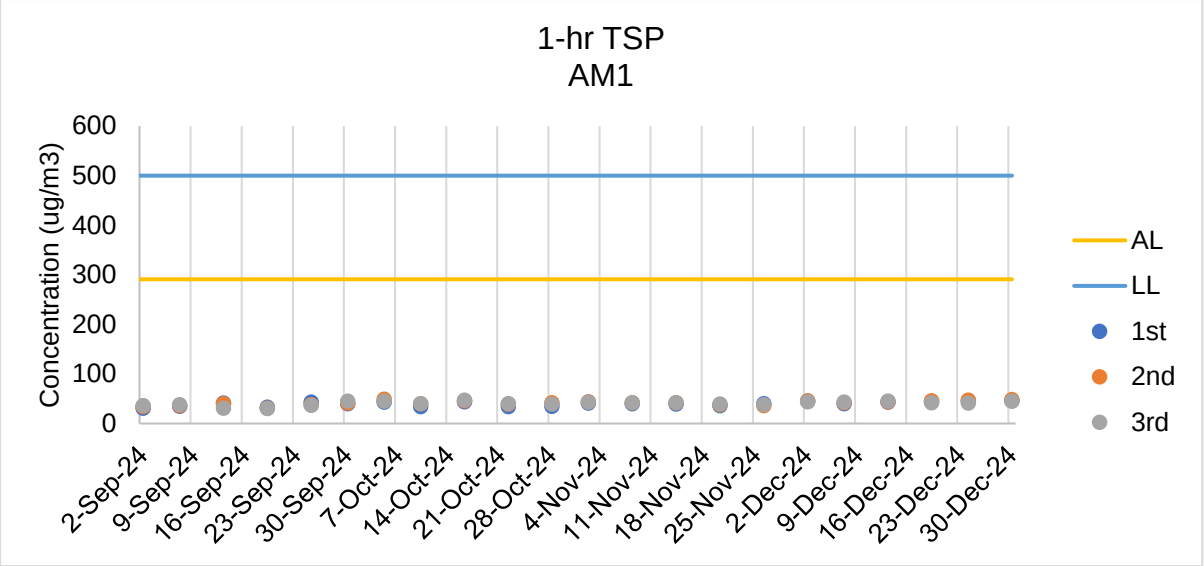
Ecological Monitoring of Birds

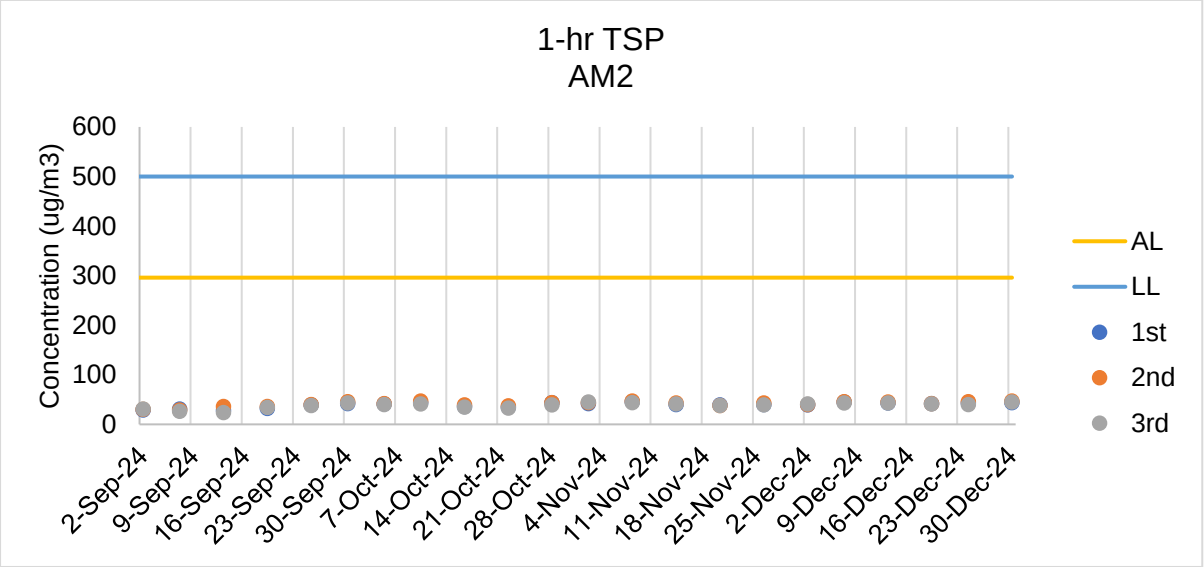
Method	Parameters	Action Level[3]	Limit Level[3]
Transect	Abundance of all avifauna species (including but not only limited to overwintering waterbirds) in the community	Significant decline[1,2] in any of these parameters during the current monitoring month relative to the corresponding month during the baseline survey.	Significant decline in any of these parameters for three consecutive months.
	Species diversity of all avifauna species (including but not only limited to overwintering waterbirds) in the community		
	Abundance of species with conservation importance only		
	Species diversity of species with conservation importance only		
Point Count	Abundance of all avifauna species (including but not only limited to overwintering waterbirds) in the community		
	Species diversity of all avifauna species (including but not only limited to overwintering waterbirds) in the community		
	Abundance of species with conservation importance only		
	Species diversity of species with conservation importance only		

Notes:
1. Significant decline in abundance will be determined using two-tailed t-test, $\alpha = 0.05$.
2. Significant decline in species diversity will be determined using the Hutcheson t-test, two tailed.
3. Response will be triggered if any of the above level is reached for each parameter

Appendix D
Graphical Presentation of Monitoring Data

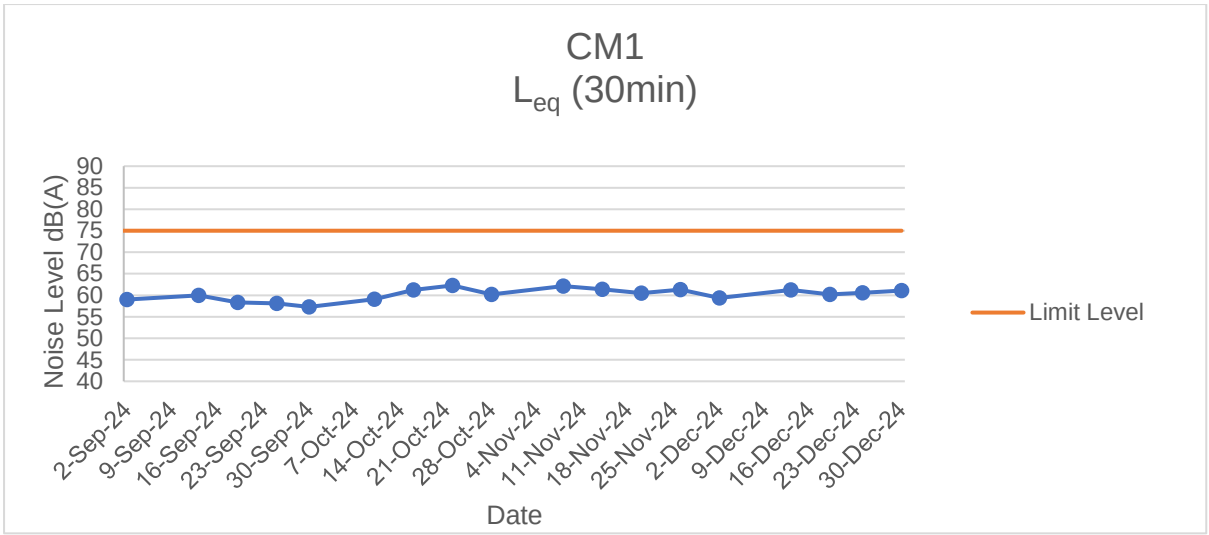
Air Quality Monitoring Results

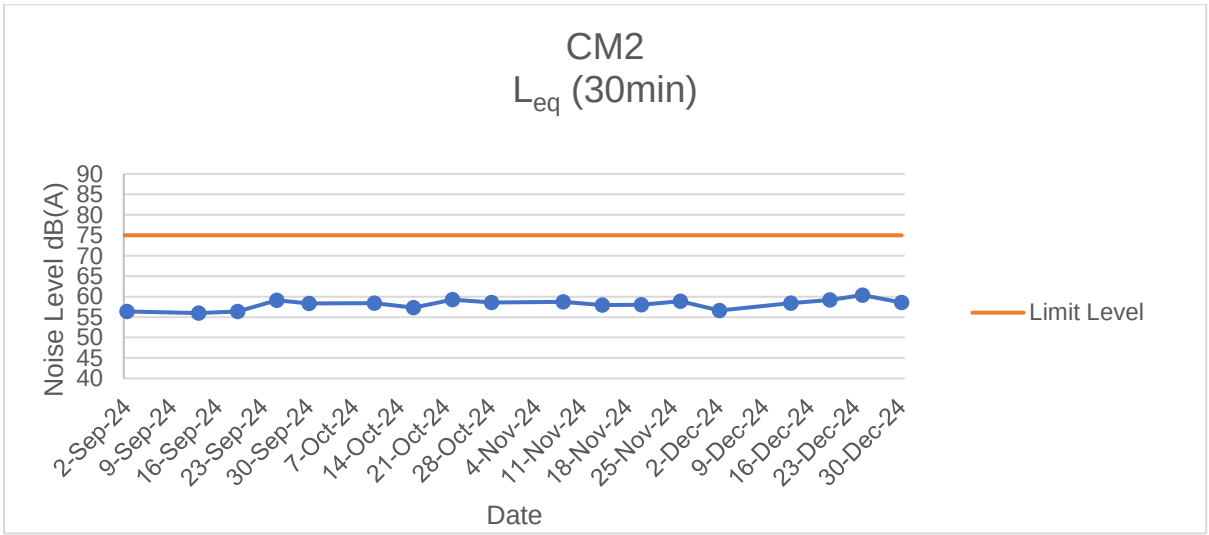


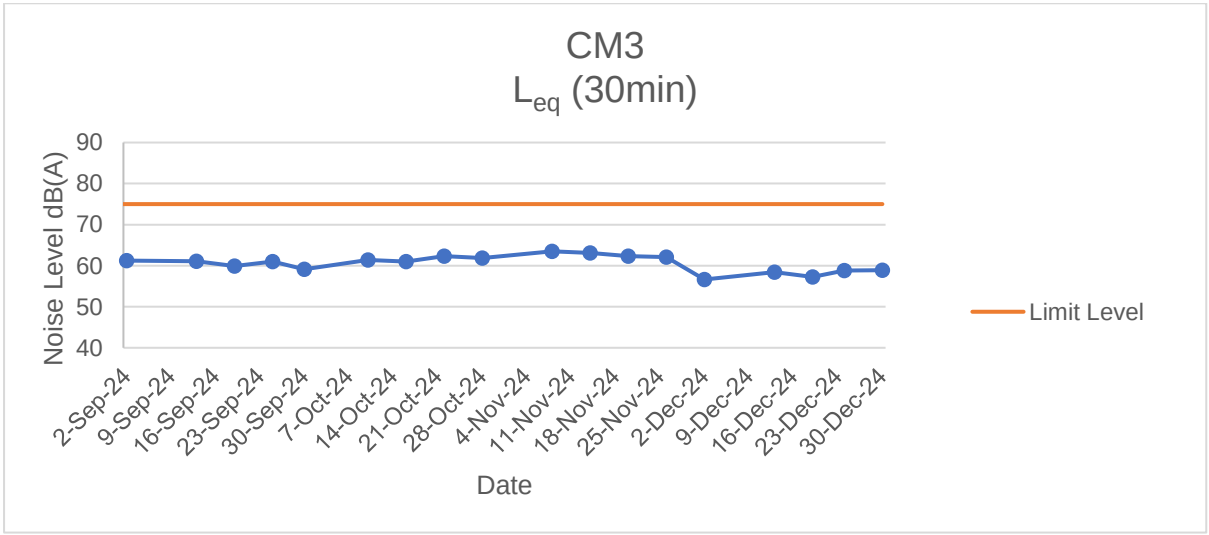


Air Quality Monitoring Results

Noise Monitoring Results

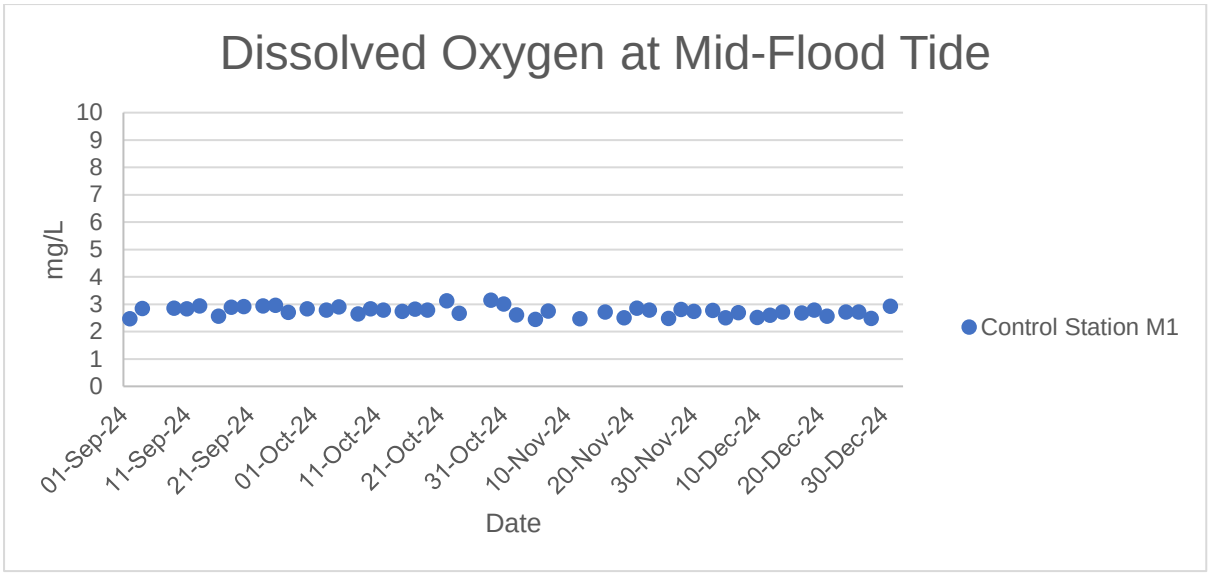


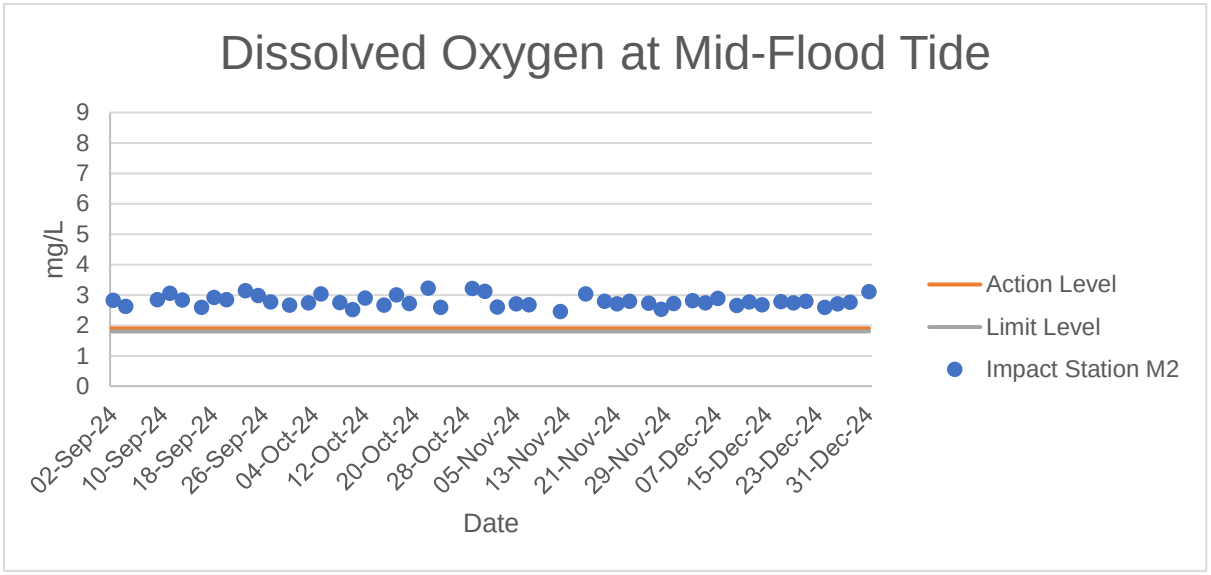


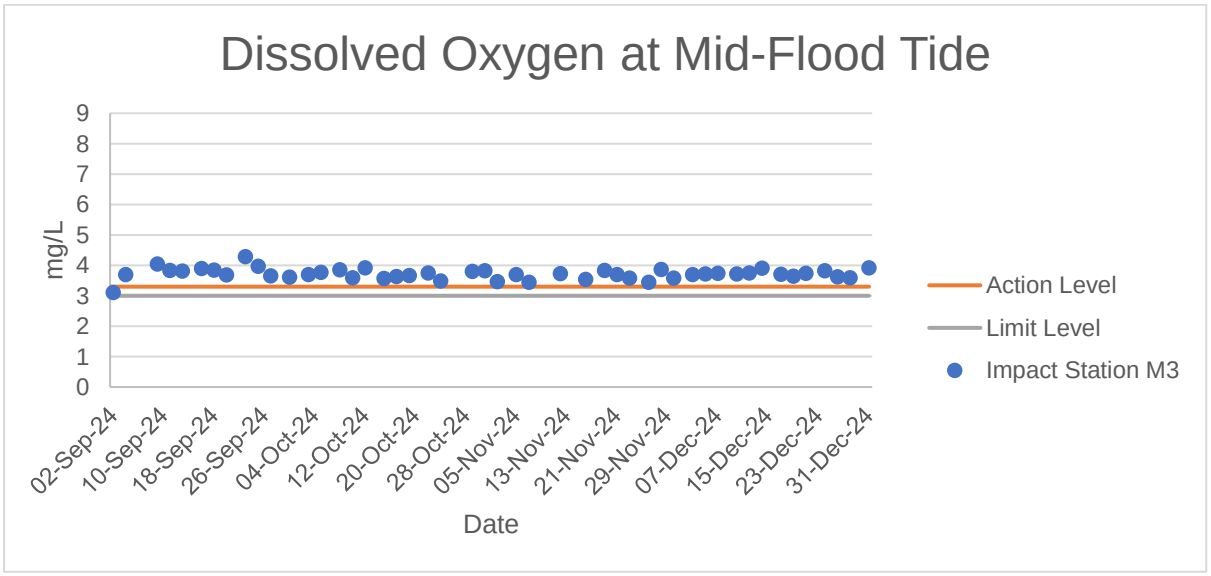


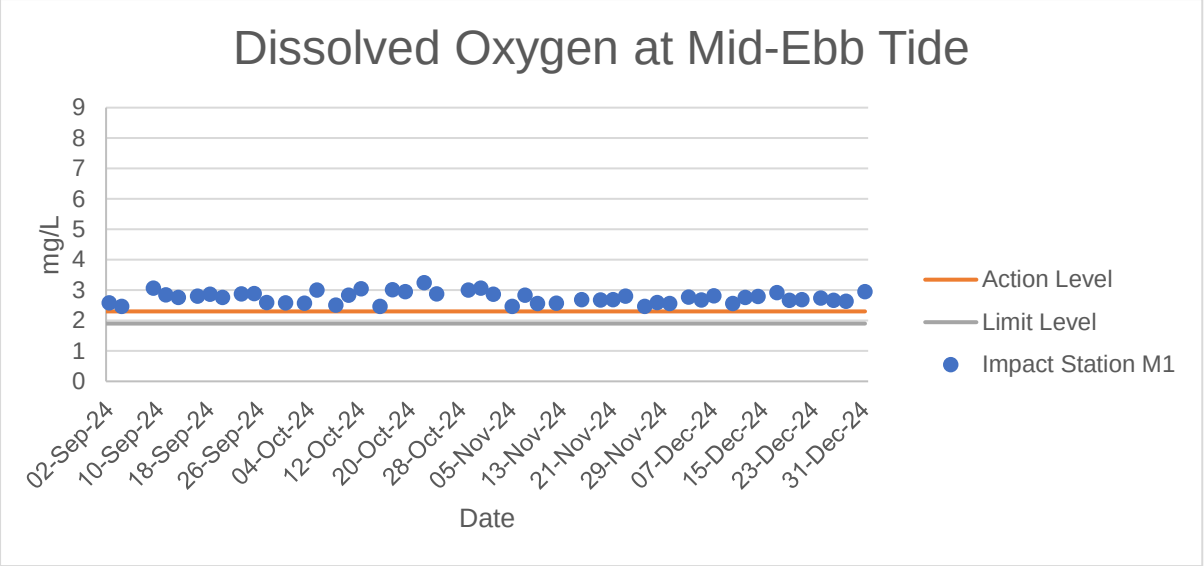
Noise Monitoring Results

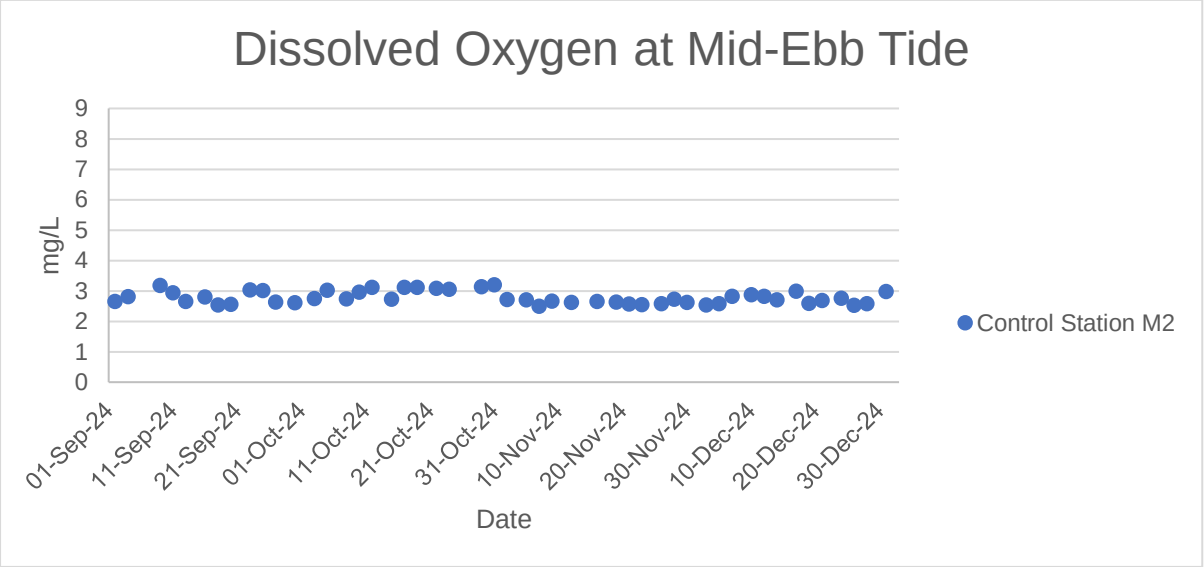
Water Quality Monitoring Results

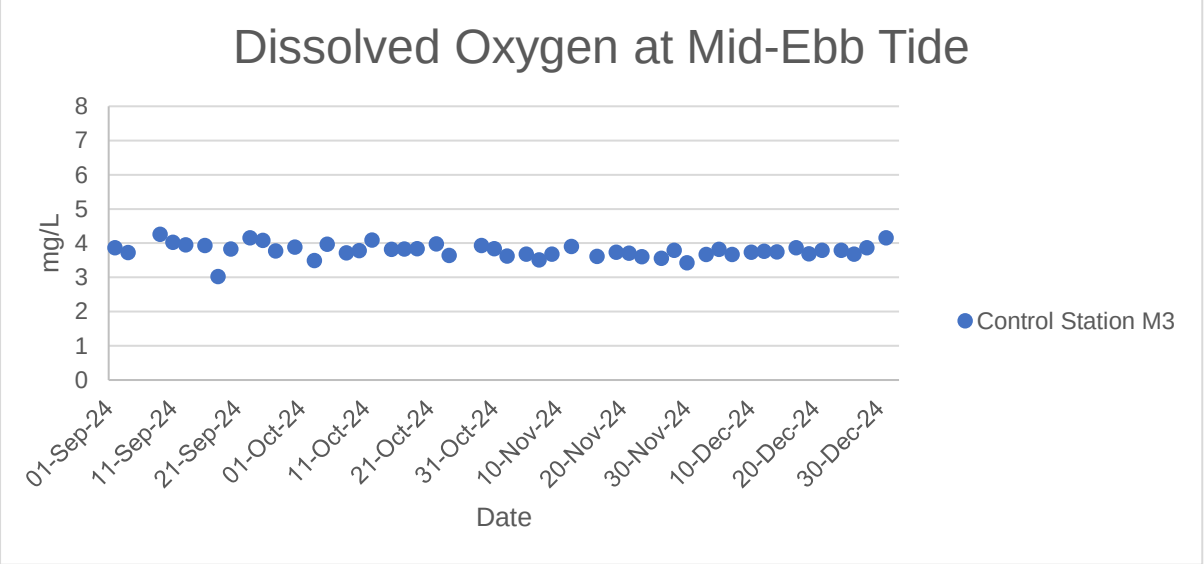

Dissolved Oxygen at Mid-Flood Tide
mg/L
10
9
8
7
6
5
4
3
2
1
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M1

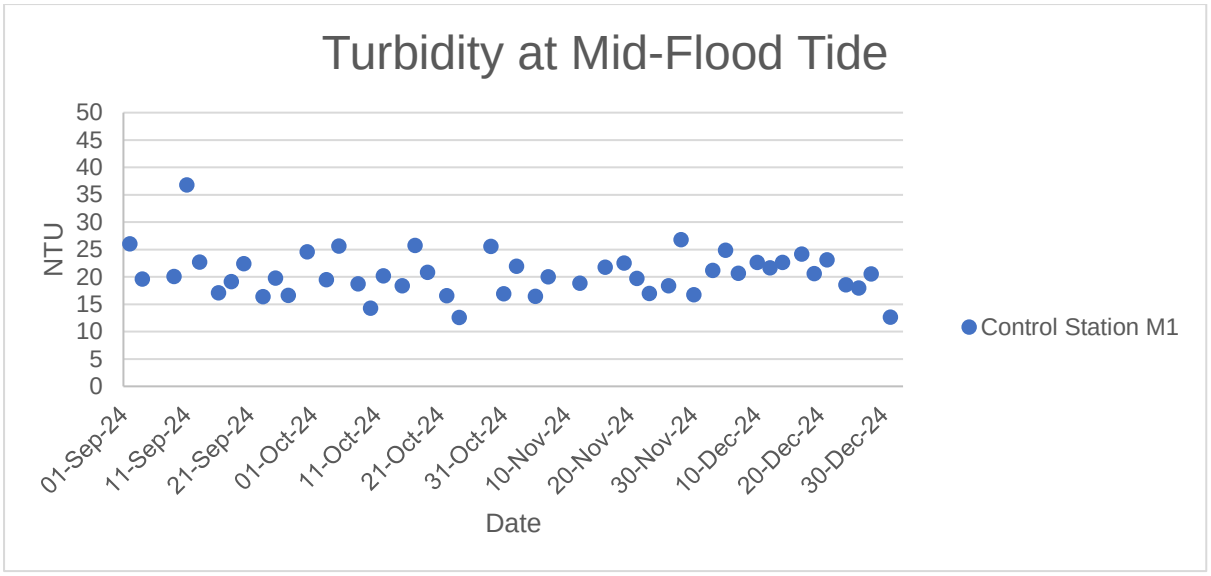

Dissolved Oxygen at Mid-Flood Tide
mg/L
9
8
7
6
5
4
3
2
1
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M2

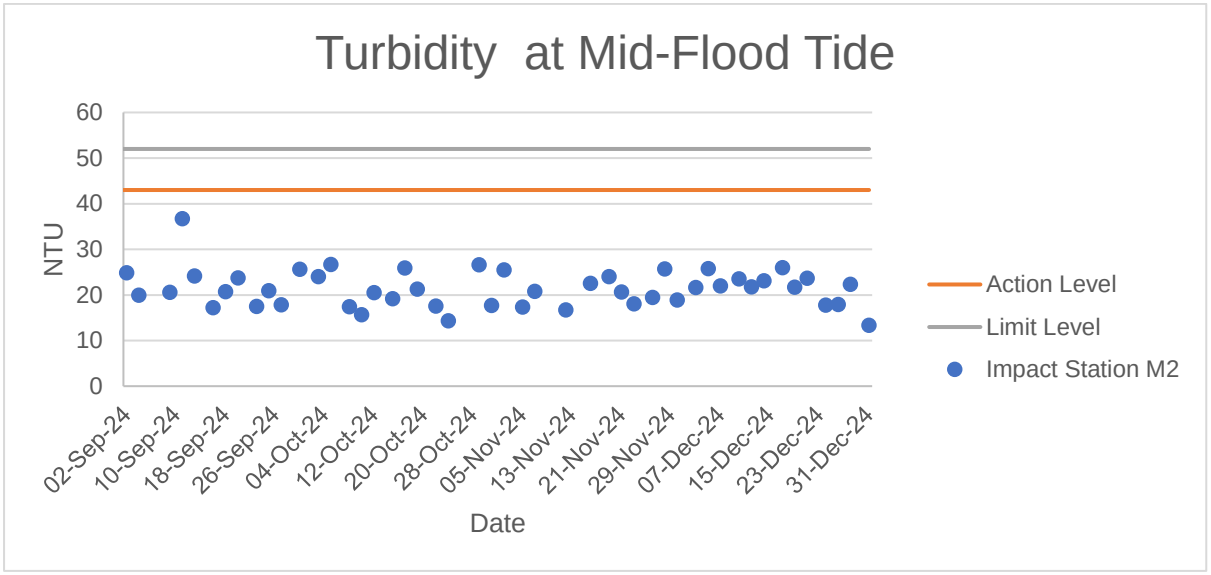

Dissolved Oxygen at Mid-Flood Tide
mg/L
9
8
7
6
5
4
3
2
1
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M3

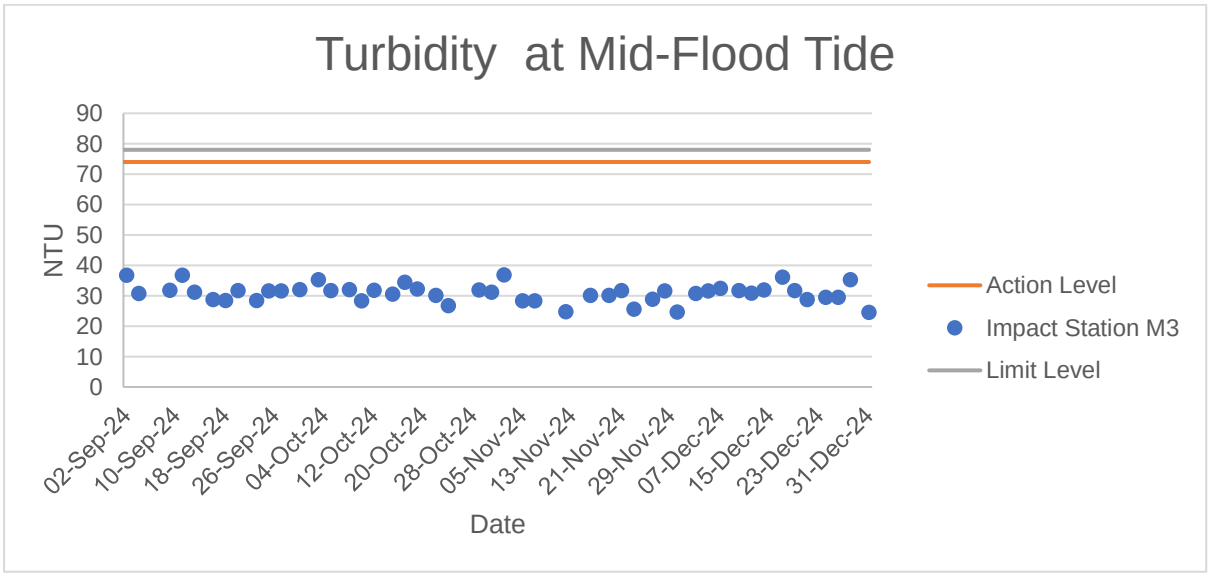

Dissolved Oxygen at Mid-Ebb Tide
mg/L
9
8
7
6
5
4
3
2
1
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M1

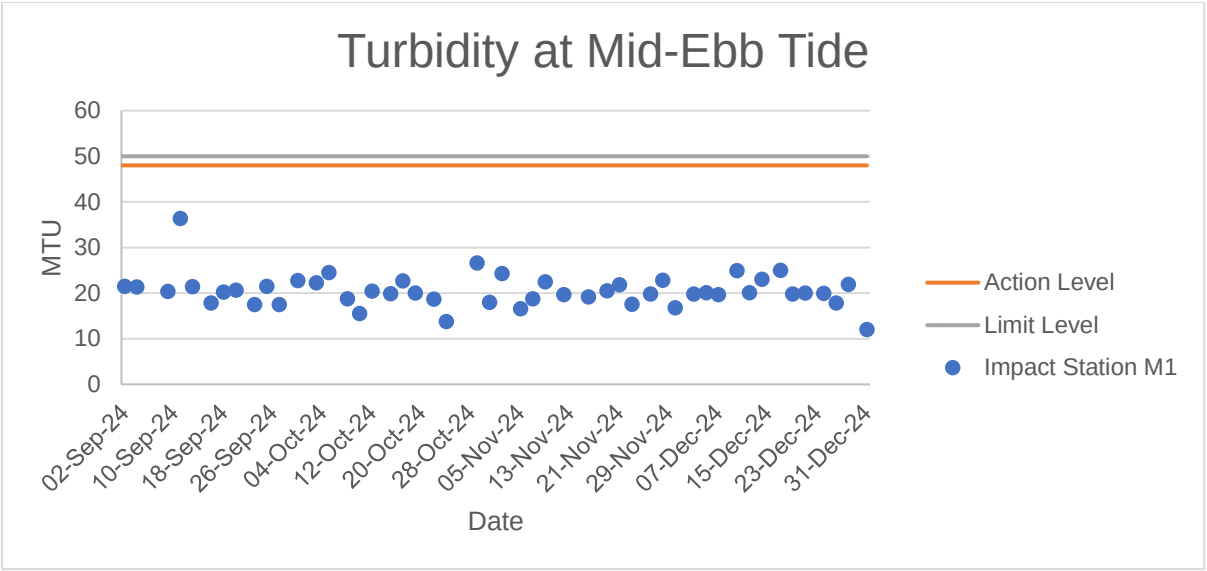

Dissolved Oxygen at Mid-Ebb Tide
mg/L
9
8
7
6
5
4
3
2
1
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M2

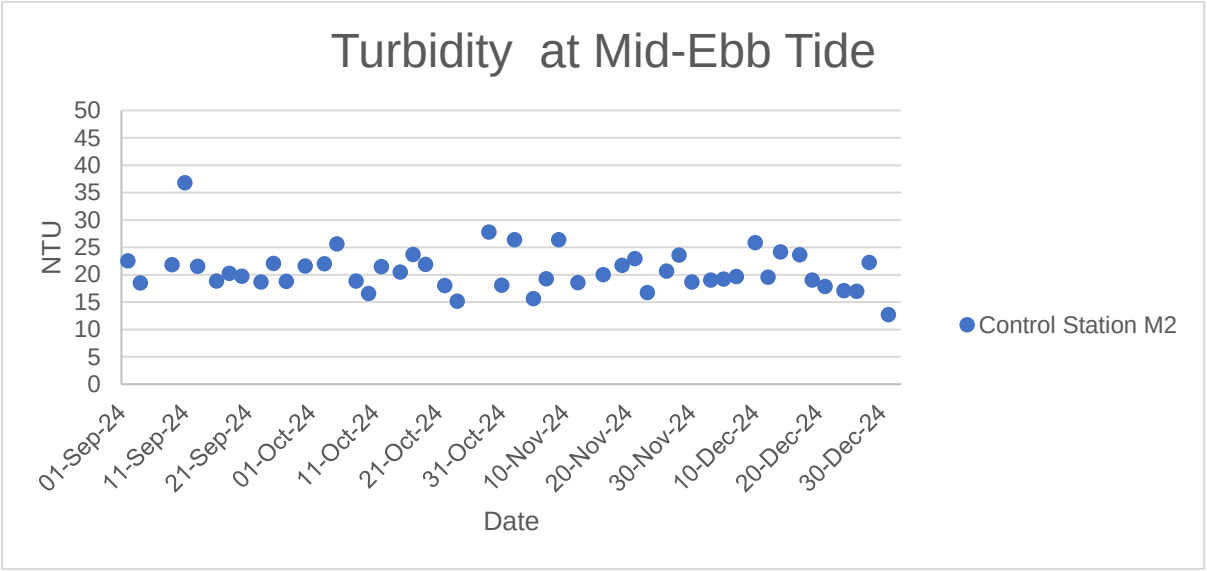

Dissolved Oxygen at Mid-Ebb Tide
mg/L
8
7
6
5
4
3
2
1
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M3

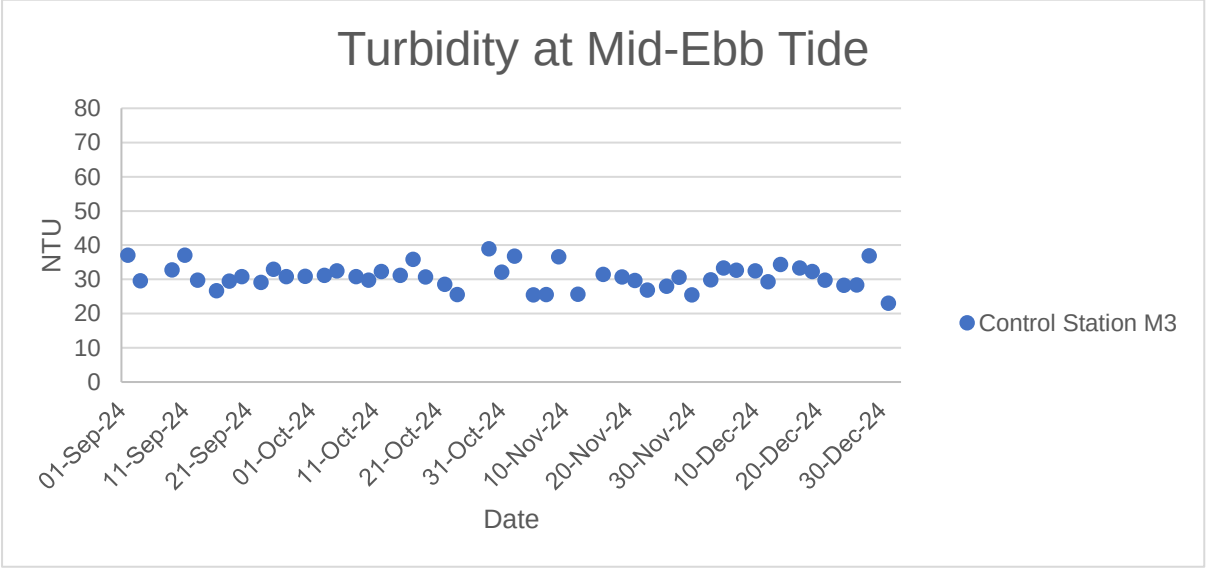

Turbidity at Mid-Flood Tide
NTU
50
45
40
35
30
25
20
15
10
5
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M1

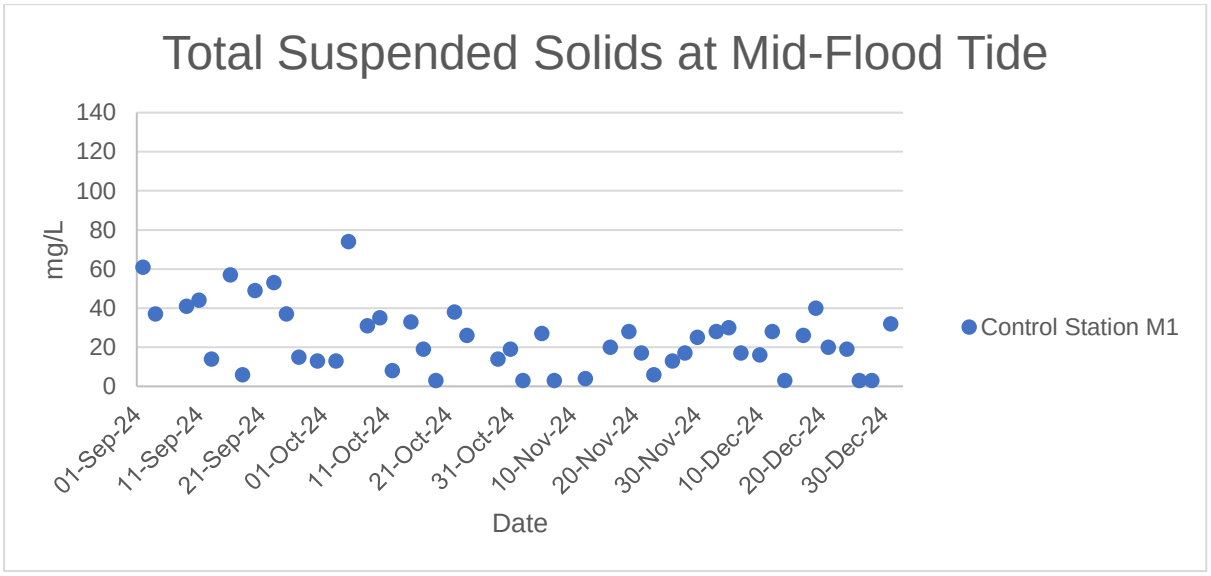

Turbidity at Mid-Flood Tide
NTU
60
50
40
30
20
10
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M2

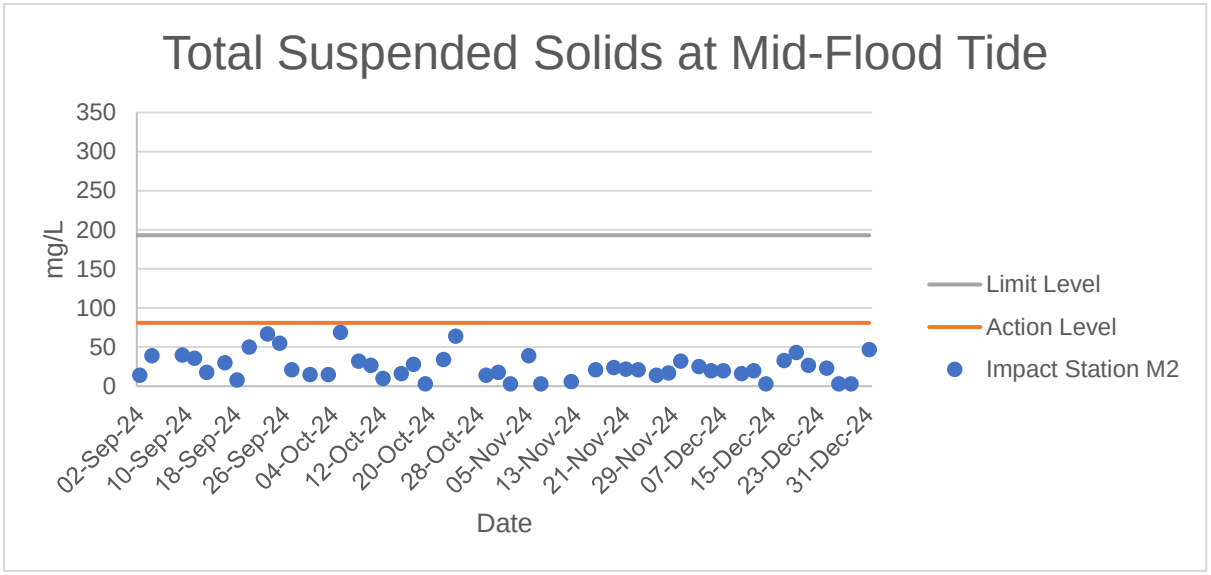

Turbidity at Mid-Flood Tide
NTU
90
80
70
60
50
40
30
20
10
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Impact Station M3
Limit Level

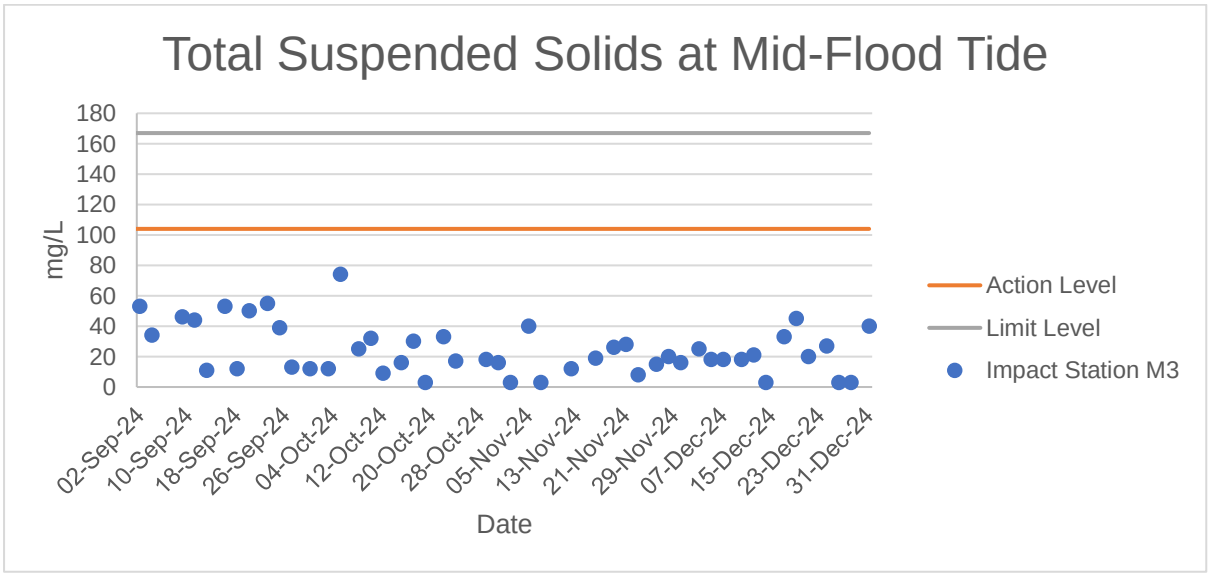

Turbidity at Mid-Ebb Tide
MTU
60
50
40
30
20
10
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M1

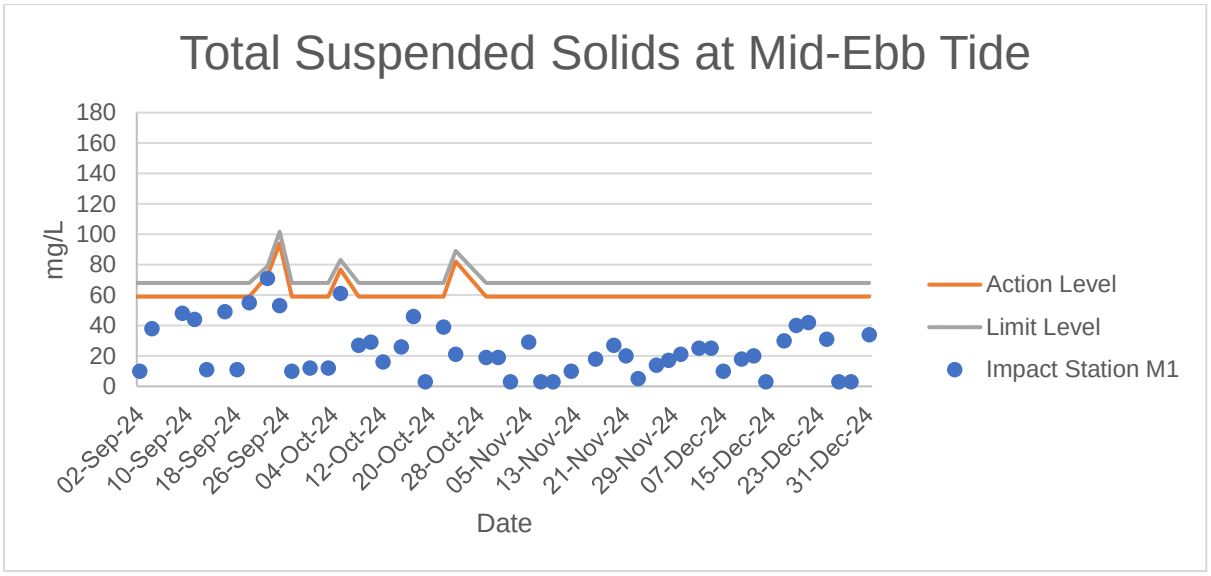

Turbidity at Mid-Ebb Tide
NTU
50
45
40
35
30
25
20
15
10
5
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M2

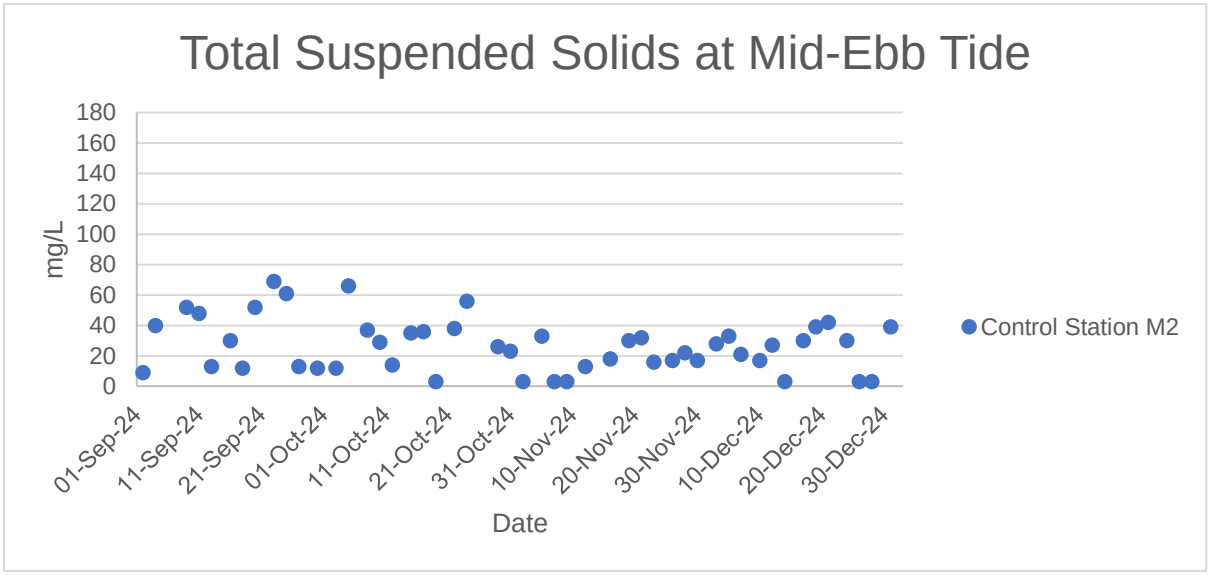

Turbidity at Mid-Ebb Tide
NTU
80
70
60
50
40
30
20
10
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M3

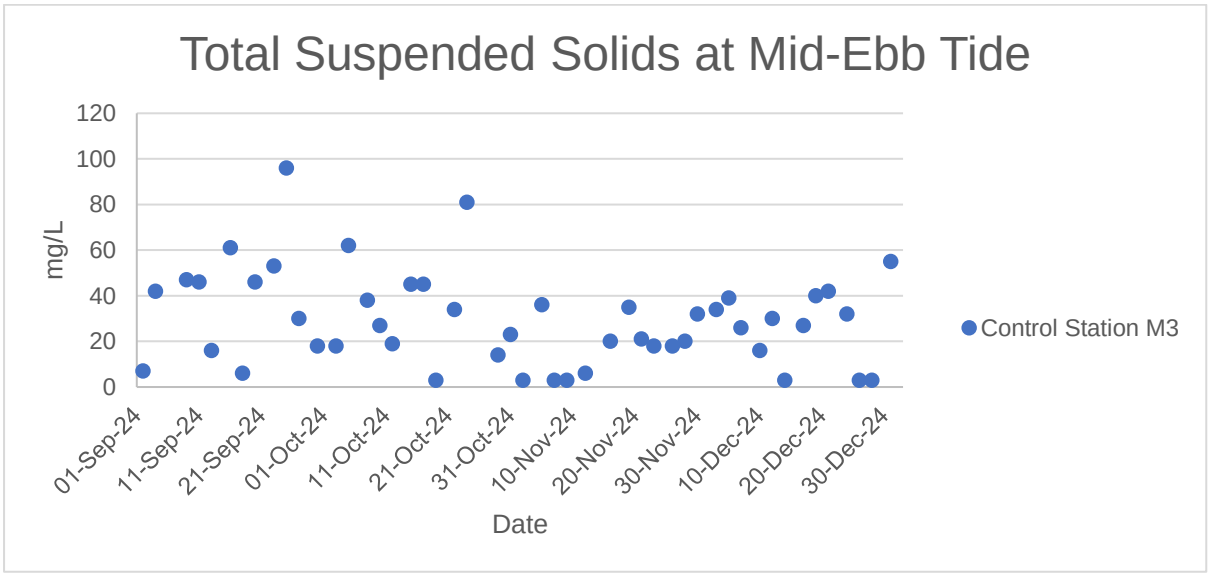

Total Suspended Solids at Mid-Flood Tide
mg/L
140
120
100
80
60
40
20
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M1


Total Suspended Solids at Mid-Flood Tide
mg/L
350
300
250
200
150
100
50
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Limit Level
Action Level
Impact Station M2


Total Suspended Solids at Mid-Flood Tide
mg/L
180
160
140
120
100
80
60
40
20
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M3

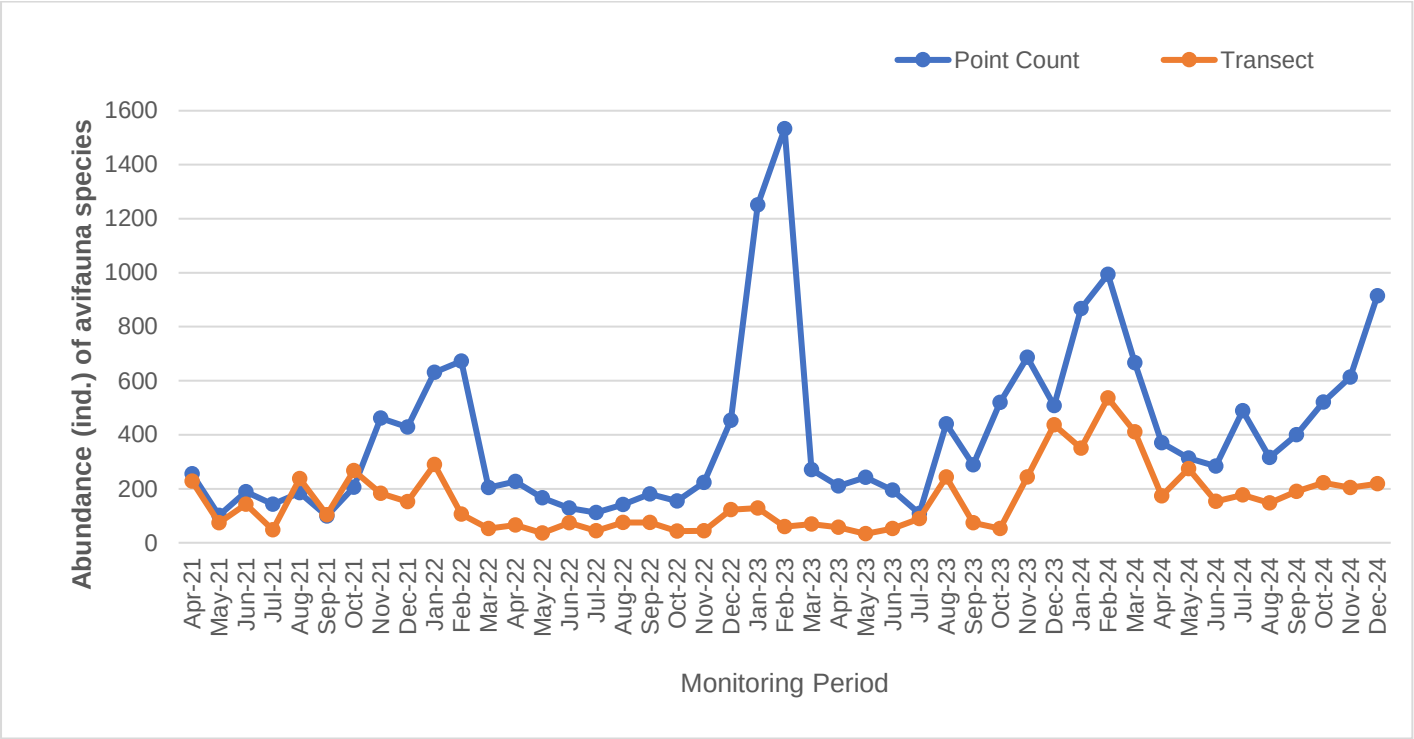

Total Suspended Solids at Mid-Ebb Tide
mg/L
180
160
140
120
100
80
60
40
20
0
02-Sep-24
10-Sep-24
18-Sep-24
26-Sep-24
04-Oct-24
12-Oct-24
20-Oct-24
28-Oct-24
05-Nov-24
13-Nov-24
21-Nov-24
29-Nov-24
07-Dec-24
15-Dec-24
23-Dec-24
31-Dec-24
Date
Action Level
Limit Level
Impact Station M1


Total Suspended Solids at Mid-Ebb Tide
mg/L
180
160
140
120
100
80
60
40
20
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M2

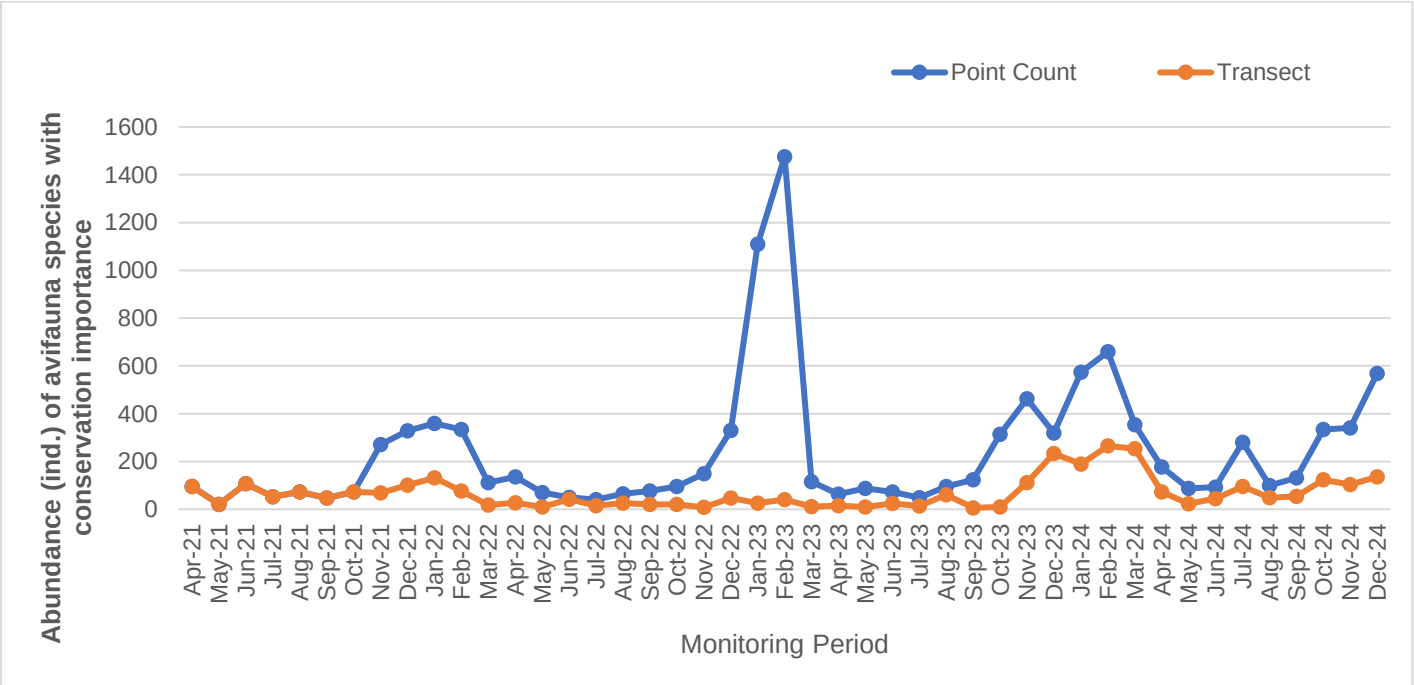

Total Suspended Solids at Mid-Ebb Tide
mg/L
120
100
80
60
40
20
0
01-Sep-24
11-Sep-24
21-Sep-24
01-Oct-24
11-Oct-24
21-Oct-24
31-Oct-24
10-Nov-24
20-Nov-24
30-Nov-24
10-Dec-24
20-Dec-24
30-Dec-24
Date
Control Station M3

Ecology Monitoring Results for
Contract No. SPW 02/2023
Environmental Team for Construction of Yuen long Effluent Polishing Plant Stage 1

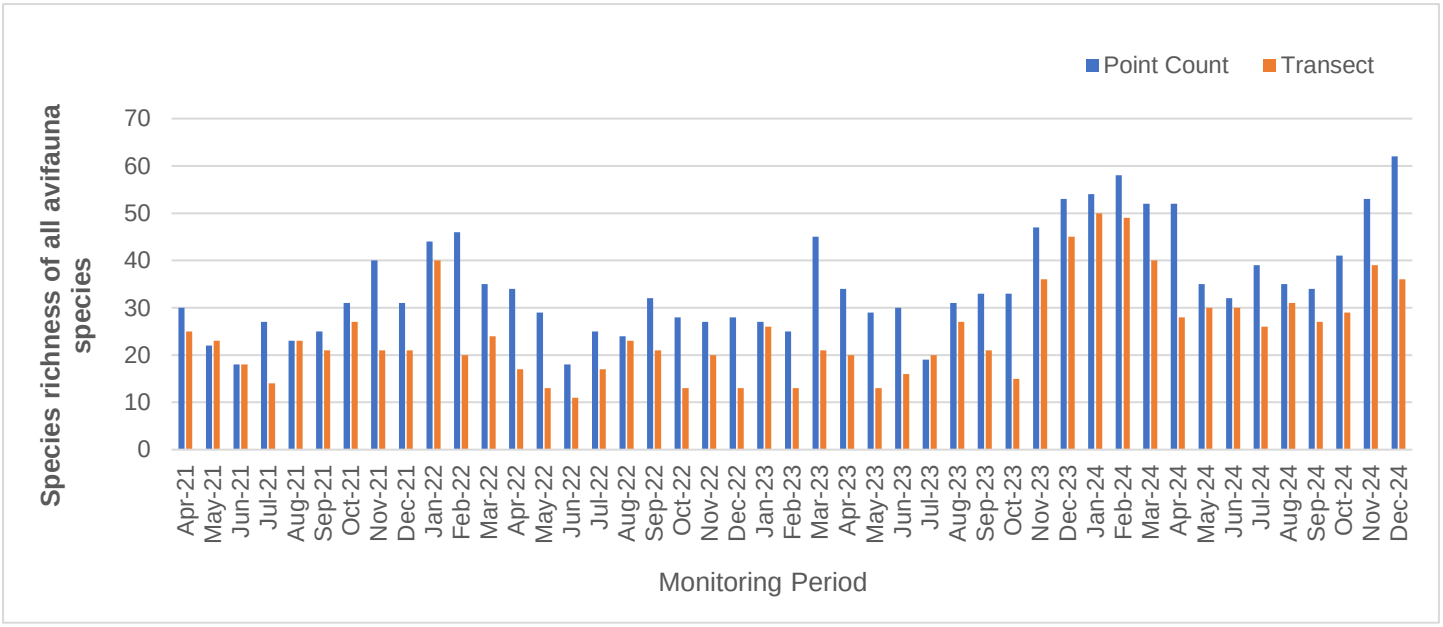
Appendix F.3.1 Abundance of all avifauna species throughout the monitoring period



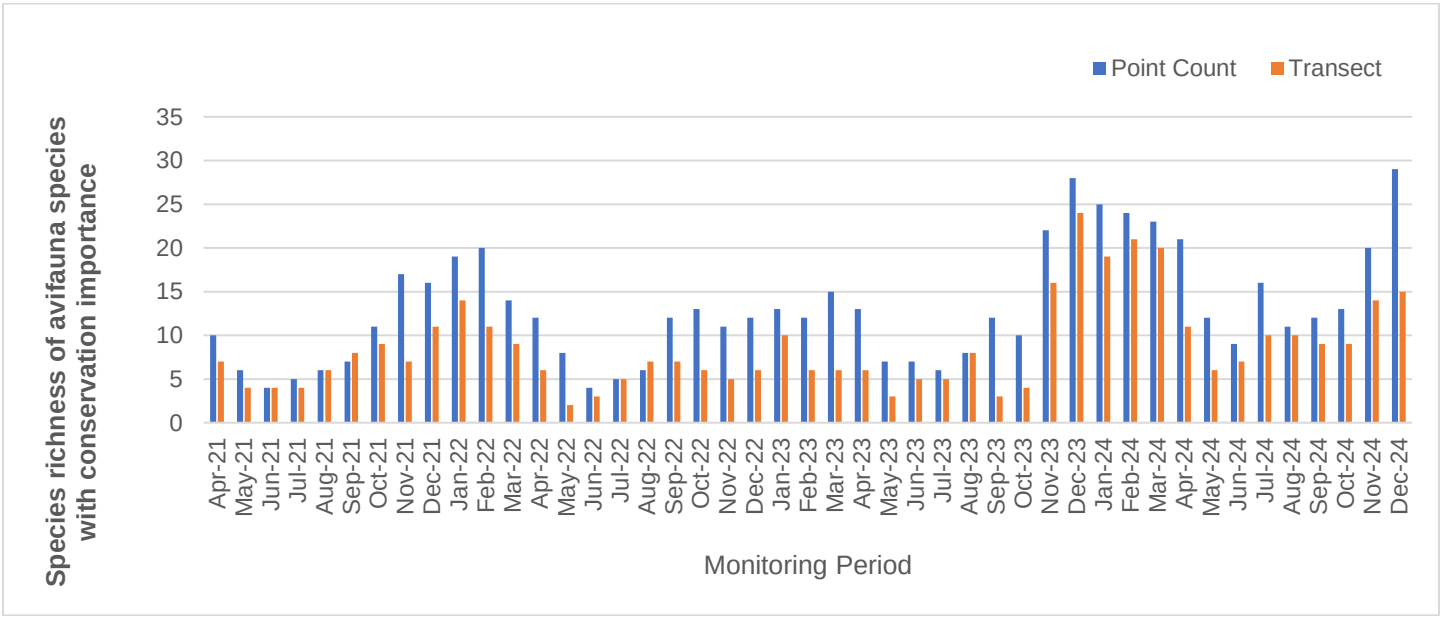
Appendix F.3.2 Abundance of avifauna species with conservation importance throughout the monitoring period



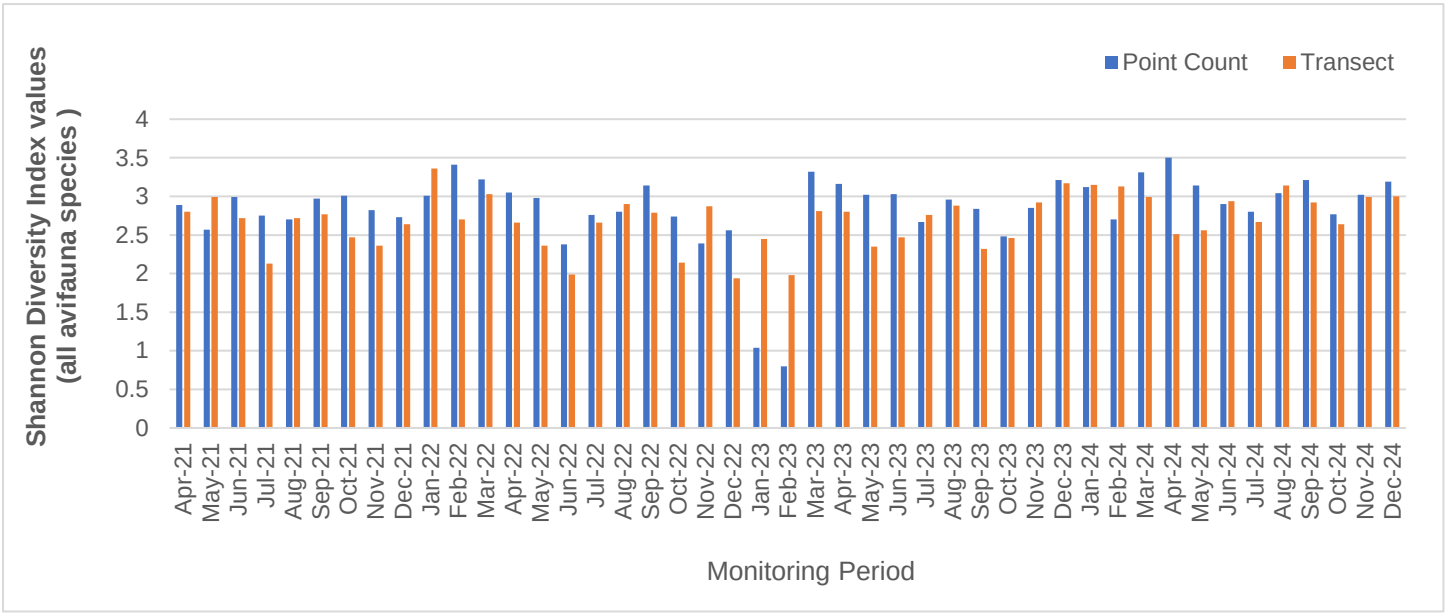
Appendix F.4.1 Species richness of all avifauna species throughout the monitoring period



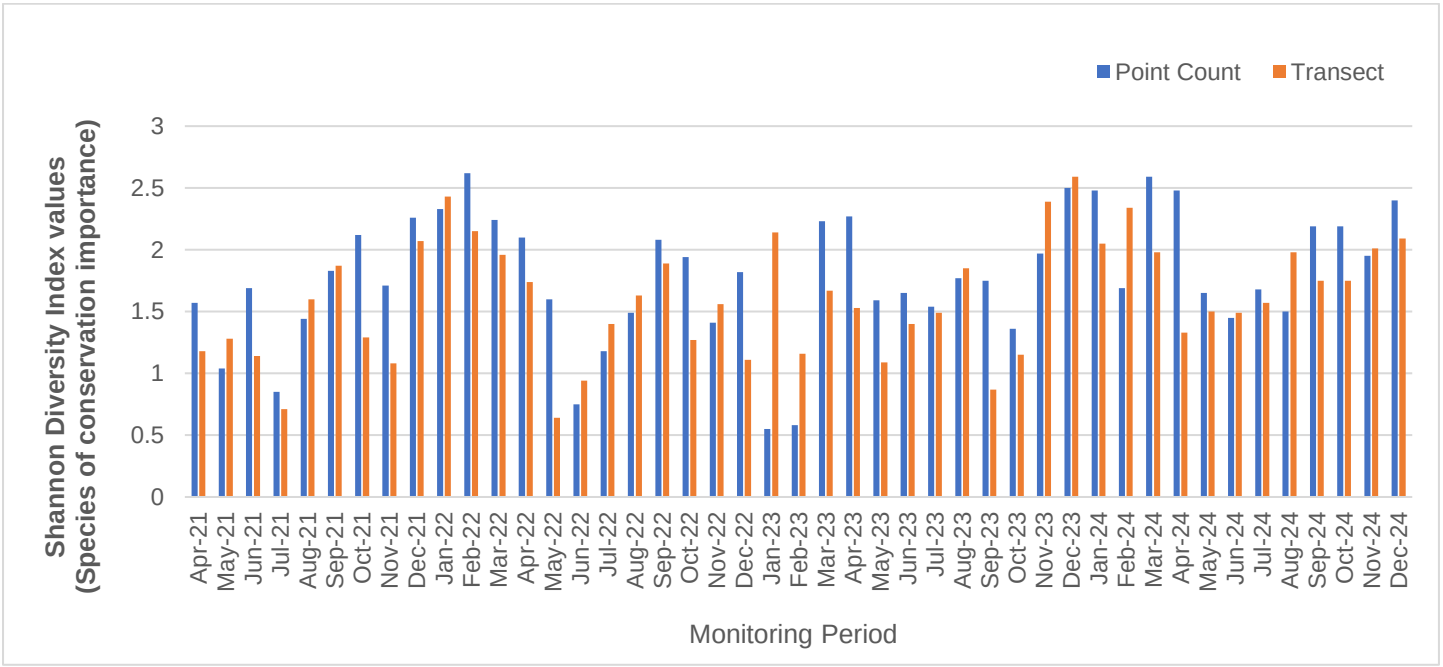
Appendix F.4.2 Species richness of avifauna species with conservation importance throughout the monitoring period



Appendix F.5.1 Shannon Diversity Index values of all avifauna species throughout the monitoring period



Appendix F.5.2 Shannon Diversity Index values of avifauna species with conservation importance throughout the monitoring period



Appendix E
Event and Action Plans

Event and Action Plan for Air Quality (Construction Dust)

Event	Action			
	ET	IEC	ER	Contractor
Action level being exceeded by	1. Identify source, investigate the causes of complaint and propose remedial measures; 2. Inform Contractor, IEC and ER; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1. Notify Contractor.	1. Identify source(s), investigate the causes of exceedance and propose remedial measures; 2. Implement remedial measures; and 3. Amend working methods agreed with the ER as appropriate.
Action level being exceeded by two or more consecutive sampling	1. Identify source; 2. Inform Contractor, IEC and ER; 3. Advise the Contractor and 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 Contractor, IEC and ER; and 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Identify source and investigate the causes of exceedance; 2. Submit proposals for remedial measures to the ER with a copy to ET and IEC within three working days of notification; 3. Implement the agreed proposals; and 4. Amend proposal as appropriate.
Limit level being exceeded by one sampling	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform Contractor, IEC, ER, and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; and 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; and 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Identify source(s) and investigate the causes of exceedance; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial measures to ER with a copy to ET and IEC within three working days of notification; 4. Implement the agreed proposals; and 5. Amend proposal if appropriate.
Limit level being exceeded by two or more consecutive sampling	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 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; and 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET; 2. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 3. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and 4. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; 3. Supervise the implementation of remedial measures; and 4. 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.	1. Identify source(s) and investigate the causes of exceedance; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial measures to the ER with a copy to the IEC and ET within three working days of notification; 4. Implement the agreed proposals; 5. Revise and resubmit proposals if problem still not under control; and 6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Noise (Construction)

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
Action Level	1. Notify IEC 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; and 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analyzed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; and 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analyzed noise problem; and 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC; and 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analyzed noise problem; 4. Ensure remedial measures properly implemented; and 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.	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. Resubmit proposals if problem still not under control; and 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Water Quality Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action level being exceeded by one sampling	1. Repeat in situ measurement on the next day of exceedance to confirm findings; 2. Check monitoring data, plant, equipment and Contractor(s)'s working methods; 3. Identify source(s) of impact and record in notification of exceedance; 4. Inform IEC, Contractor(s) and ER	1. Check monitoring data submitted by ET and Contractor(s)'s working methods; 2. Inform EPD and AFCD.	1. Confirm receipt of notification of exceedance in writing	1. Confirm receipt of notification of exceedance in writing; 2. Check plant and equipment and rectify unacceptable practice
Action level being exceeded by two or more consecutive sampling	1. Repeat in situ measurement on the next day of exceedance to confirm findings; 2. Check monitoring data, plant, equipment and Contractor(s)'s working methods; 3. Identify source(s) of impact and record in notification of exceedance; 4. Inform IEC, Contractor(s) and ER; 5. Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.	1. Check monitoring data submitted by ET and Contractor(s)'s working methods; 2. Inform EPD and AFCD; 3. Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly; 4. Assess the effectiveness of the implemented mitigation measures.	1. Confirm receipt of notification of exceedance in writing; 2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. 3. Ensure additional mitigation measures are properly implemented.	1. Confirm receipt of notification of exceedance in writing; 2. Check plant and equipment and rectify unacceptable practice; 3. Consider changes of working methods; 4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days; 5. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling	1. Repeat in situ measurement on the next day of exceedance to confirm findings; 2. Check monitoring data, plant, equipment and Contractor(s)'s working methods; 3. Identify source(s) of impact and record in notification of exceedance; 4. Inform IEC, Contractor(s) and ER; 5. Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.	1. Check monitoring data submitted by ET and Contractor(s)'s working methods; 2. Inform EPD and AFCD; 3. Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly; 4. Assess the effectiveness of the implemented mitigation measures.	1. Confirm receipt of notification of exceedance in writing; 2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. 3. Ensure additional mitigation measures are properly implemented. 4. Request Contractor(s) to critically review the working methods.	1. Confirm receipt of notification of exceedance in writing; 2. Check plant and equipment and rectify unacceptable practice; 3. Critically review the need to change working methods; 4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days; 5. Implement the agreed mitigation measures.
Limit level being exceeded by two or more consecutive sampling	1. Repeat in situ measurement on the next day of exceedance to confirm findings; 2. Check monitoring data, plant, equipment and Contractor(s)'s working methods; 3. Identify source(s) of impact and record in notification of exceedance; 4. Inform IEC, Contractor(s) and ER; 5. Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented.	1. Check monitoring data submitted by ET and Contractor(s)'s working methods; 2. Inform EPD and AFCD; 3. Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly; 4. Assess the effectiveness of the implemented mitigation measures.	1. Confirm receipt of notification of exceedance in writing; 2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. 3. Ensure additional mitigation measures are properly implemented. 4. Request Contractor(s) to critically review the working methods.	1. Confirm receipt of notification of exceedance in writing; 2. Check plant and equipment and rectify unacceptable practice; 3. Critically review the need to change working methods; 4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days; 5. Implement the agreed mitigation measures.

Event and Action Plan for Ecology Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level	1. Notify IEC 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; and 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analyzed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; and 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analyzed noise problem; and 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC; and 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and 8. If exceedance stops, cease additional monitoring.	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 advise the ER accordingly; and 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented; and 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.	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. Resubmit proposals if problem still not under control; and 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix F
Waste Flow Table

Waste Flow Table for Year 2024

Monthly Ending	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	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
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
2024 Jan	11,180.54	Nil	Nil	Nil	11,103.51	Nil	Nil	0.25	Nil	Nil	76.86
2024 Feb	39,622.50	Nil	Nil	Nil	39,511.96	Nil	10.78	0.01	Nil	Nil	99.74
2024 Mar	28,642.82	Nil	Nil	Nil	28,422.00	Nil	94.04	0.10	Nil	Nil	126.76
2024 Apr	36,811.58	Nil	Nil	Nil	36,608.65	Nil	75.49	0.10	Nil	Nil	127.33
2024 May	3,275.68	Nil	Nil	Nil	3,161.67	Nil	Nil	0.15	Nil	Nil	113.86
2024 Jun	2,331.53	Nil	Nil	Nil	2,241.60	Nil	Nil	0.11	Nil	Nil	89.82
2024 Jul	149.30	Nil	Nil	Nil	Nil	Nil	52.39	0.22	0.01	Nil	96.68
2024 Aug	6,992.94	Nil	Nil	Nil	6,861.16	Nil	Nil	0.1	0.01	Nil	131.67
2024 Sep	1,661.21	Nil	Nil	Nil	1,552.32	Nil	85.87	0.14	Nil	Nil	108.75
2024 Oct	11,122.61	Nil	Nil	Nil	10,888.25	Nil	36.52	0.10	0.03	Nil	197.71
2024 Nov	5,680.71	Nil	Nil	Nil	5,498.98	Nil	Nil	0.14	Nil	1.00	190.59
2024 Dec	8,151.40	Nil	Nil	Nil	8,017.09	2,125.45	Nil	0.10	0.10	Nil	134.11
Total	155,622.82	Nil	Nil	Nil	153,867.19	2,125.45	355.09	1.52	0.15	1.00	1,493.88

Note:
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 materials.
3) Updated figures are presented during the reporting month.

Sources/ reference of the waste flow data; From the Contractor

Appendix G
Implementation Status of Environmental Mitigation Measures

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Air Quality Impact (Construction Phase)		
3.6.1.6	Watering once per every two hours on active works areas to reduce dust emission.	All active works areas during construction phase	Implemented
3.8.1.1	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices listed below shall be carried out to further minimize construction dust impact:		
	• Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.	Construction Sites	Implemented
	• Use of frequent watering for particularly dusty construction areas and areas close to ASRs.		Implemented
	• Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.		Implemented
	• Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.		Implemented
	• Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.		Implemented
	• Establishment and use of vehicle wheel and body washing facilities at the exit points of the site.		Implemented
	• Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading area of barging point, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods.		N/A
	• Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit.		Implemented
	• Imposition of speed controls for vehicles on site haul roads.		Implemented
	• Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.		Implemented
	• Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.		Implemented

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Noise Impact (Construction Phase)		
4.8.1	Movable noise barriers are recommended for hydraulic breakers mounted on excavators to be adopted during construction.	Construction Sites	N/A
	Good site practices listed below and the noise control requirements stated in EPD's "Recommended Pollution Control Clauses for Construction Contracts" should be included in the Contract Specification for the Contractors to follow and should be implemented to further minimize the potential noise impacts during the construction phase of the Project.		Implemented
	• Quiet PME, such that those listed in EPD's Quality Powered Mechanical Equipment, should be considered for construction works to further minimize the potential construction noise impact.		Implemented
	• Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.		Implemented
	• Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction programme.		Implemented
	• Mobile plant, if any, should be sited as far away from noise sensitive receivers (NSRs) as possible.		N/A
	• Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.		Implemented
	• Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs		N/A
	• Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities.		N/A
	Water Quality Impact (Construction Phase)		
5.8.1.2	Water used in ground boring and drilling for site investigation or rock / soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities	Construction Sites / Construction Phase	Implemented
5.8.1.3	All vehicles and plant should be cleaned before they leave a construction site to minimise the deposition of earth, mud, debris on roads. A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	Construction Sites / Construction Phase	Implemented
5.8.1.4	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	Construction Sites / Construction Phase	Implemented
5.8.1.5 - 5.8.1.6	The site practices outlined in ProPECC PN 1/94 "Construction Site Drainage" should be followed where applicable to minimise surface run-off and the chance of erosion. Surface run-off from construction sites should be discharged into storm drains via adequately designed sand / silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided as necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	Construction Sites / Construction Phase	Implemented

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
5.8.1.7	Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly (as well as at the onset of and after each rainstorm) to prevent overflows and localised flooding.	Construction Sites / Construction Phase	Implemented
5.8.1.8	Construction works should be programmed to minimise soil excavation in the wet season (i.e. April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, temporarily exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm run-off from washing across exposed soil surfaces.	Construction Sites / Construction Phase	Implemented
5.8.1.9	Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary	Construction Sites / Construction Phase	Implemented
5.8.1.10	Measures should be taken to minimise the ingress of rainwater into trenches. If excavation of trenches in the wet season is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	Construction Sites / Construction Phase	Implemented
5.8.1.11	Construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms	Construction Sites / Construction Phase	Implemented
5.8.1.12	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	Construction Sites / Construction Phase	Implemented
5.8.1.13	The practices outlined in Environment, Transport and Works Bureau (ETWB) TC (Works) No. 5/2005 Protection of natural streams/rivers from adverse impacts arising from construction works" should also be adopted where applicable to minimise the water quality impacts upon any natural streams or surface water systems.	Construction Sites / Construction Phase	Implemented
5.8.1.14	Sufficient chemical toilets should be provided in the works areas. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis.	Construction Sites / Construction Phase	Implemented
5.8.1.15	Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment.	Construction Sites / Construction Phase	Implemented
5.8.1.16	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The WDO (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied with for control of chemical wastes.	Construction Sites / Construction Phase	Implemented
5.8.1.17	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	Construction Sites /Construction Phase	N/A
5.8.1.18	Disposal of chemical wastes should be carried out in compliance with the WDO. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the WDO should be followed to avoid leakage or spillage of chemicals.	Construction Sites / Construction Phase	Implemented
5.8.1.19	All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS).	Construction Sites / Construction Phase	Implemented
5.8.2.11	Chemical should be stored on site at bunded area and separate drainage system as appropriate should be provided to avoid any spilled chemicals from entering the storm drain in case of accidental spillage. Also, adequate tools for cleanup of spilled chemicals should be stored on site and appropriate training shall be provided to staffs to further prevent potential adverse water quality impacts from happening.	Project site / Design and Operation Phase	Implemented

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
Waste Management Implication (Construction Phase)			
6.6.1.3	Good Site Practices Recommendations for good site practices during the construction phase include:		
	• Nomination of approved personnel, such as a site manager, to be responsible for good site practices, and making arrangements for collection of all wastes generated at the site and effective disposal to an appropriate facility;	Construction Sites	Implemented
	• Training of site personnel in proper waste management and chemical waste handling procedures;		Implemented
	• Provision of sufficient waste reception/ disposal points, of a suitable vermin-proof design that minimises windblown litter;		N/A
	• Arrangement for regular collection of waste for transport off-site and final disposal;		Implemented
	• Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;		Implemented
	• Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;		Implemented
	• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed; and		Implemented
	• A WMP should be prepared and should be submitted to the Engineer for approval. One may make reference to ETWB TCW No. 19/2005 for details.		Implemented
6.6.1.5	Waste Reduction Measures Recommendations to achieve waste reduction include:		
	• Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Construction Sites	Implemented
	• Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors;		Implemented
	• Any unused chemicals or those with remaining functional capacity shall be recycled;		N/A
	• Maximising the use of reusable steel formwork to reduce the amount of C&D material;		Implemented
	• Prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill;		Implemented
	• Adopt proper storage and site practices to minimise the potential for damage to, or contamination of, construction materials;		Implemented
	• Plan the delivery and stock of construction materials carefully to minimise the amount of surplus waste generated;		N/A
	• Adopt pre-cast construction method instead of cast-in-situ method for construction of concrete structures as much as possible; and		N/A
	• Minimise over ordering of concrete, mortars and cement grout by doing careful check before ordering.		N/A

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.7	Storage of Waste Recommendations to minimise the impacts include:		
	• Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimising the potential of pollution;	Construction Sites	Implemented
	• Maintain and clean storage areas routinely;		Implemented
	• Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and		Implemented
	• Different locations should be designated to stockpile each material to enhance reuse.		Implemented
6.6.1.8	Collection of Waste Licensed waste haulers should be employed for the collection and transportation of waste generated. The following measures should be enforced to minimise the potential adverse impacts:		
	• Remove waste in timely manner;	Construction Sites	Implemented
	• Waste collectors should only collect wastes prescribed by their permits;		Implemented
	• Impacts during transportation, such as dust and odour, should be mitigated by the use of covered trucks or in enclosed containers;		Implemented
	• Obtain relevant waste disposal permits from the appropriate authorities, in accordance with the WDO (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28);		Implemented
	• Waste should be disposed of at licensed waste disposal facilities; and		Implemented
	• Maintain records of quantities of waste generated, recycled and disposed.		Implemented
6.6.1.10	Transportation of Waste In order to monitor the disposal of C&D materials at PFRFs and landfills and to control fly-tipping, a trip-ticket system should be established in accordance with DEVB TCW No. 6/2010. A recording system for the amount of waste generated, recycled and disposed, including the disposal sites, should also be set up. Warning signs should be put up to remind the designated disposal sites. CCTV should be installed at the vehicular entrance and exit of the site as additional measures to prevent fly-tipping.	Transportation Route of Waste / Construction Phase	Implemented
6.6.1.12	Construction and Demolition Material Careful design, planning together with good site management can reduce over-ordering and generation of C&D materials such as concrete, mortar and cement grouts. Formwork should be designed to maximize the use of standard wooden panels, so that high reuse levels can be achieved. Alternatives such as steel formwork or plastic facing should be considered to increase the potential for reuse	Construction Sites	N/A
6.6.1.13	The excavated material arising from site formation and foundation works should be reused on-site as backfilling material and for landscaping works as far as practicable. Other mitigation requirements are listed below:		
	• A WMP, which becomes part of the EMP, should be prepared in accordance with ETWB TCW No.19/2005;	Construction Sites	Implemented
	• A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be adopted for easy tracking; and		Implemented
	• In order to monitor the disposal of C&D materials at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be adopted (refer to DEVB TCW 06/2010).		Implemented

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.14	It is recommended that specific areas should be provided by the Contractors for sorting and to provide temporary storage areas (if required) for the sorted materials. Control measures for temporary stockpiles on-site should be taken in order to minimise the noise, generation of dust and pollution of water. These measures include:		
	• Surface of stockpiled soil should be regularly wetted with water especially during dry season;	Construction Sites	Implemented
	• Disturbance of stockpile soil should be minimised;		Implemented
	• Stockpiled soil should be properly covered with tarpaulin especially when heavy storms are predicted; and		Implemented
	• Stockpiling areas should be enclosed where space is available.		Implemented
6.6.1.15	The Contactor should prepare and implement an EMP in accordance with ETWB TCW No.19/2005, which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from construction activities. Such a management plan should incorporate site-specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The Contractor should implement waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor, preferably on a monthly basis.	Construction Sites	Implemented
6.6.1.16	The Contractor would be responsible for devising a system to work for on-site sorting of C&D materials and promptly removing all sorted and process materials arising from the construction activities to minimise temporary stockpiling on-site. The system should be included in the EMP identifying the source of generation, estimated quantity, arrangement for on-site sorting, collection, temporary storage areas and frequency of collection by recycling Contractors or frequency of removal off-site.	Construction Sites	Implemented
6.6.1.17 – 6.6.1.18	The sediment should be excavated, handled, transported and disposed of in a manner that would minimise adverse environmental impacts. To minimise sediment disposal, it is proposed to reuse the Type 1 sediment generated (e.g. as backfilling materials) as far as possible. Requirements of the Air Pollution Control (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, transportation and disposal of the sediment.	Construction Sites	N/A
6.6.1.19	Workers shall, if necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	Construction Sites	Implemented
6.6.1.20	For off-site disposal, the basic requirements and procedures specified under ETWB TC(W) No. 34/2002 shall be followed.	Transportation Route of Waste / Construction Phase	Implemented
6.6.1.24	Stockpiling of contaminated sediments should be avoided as far as possible. If temporary stockpiling of contaminated sediments is necessary, the excavated sediment should be covered by tarpaulin and the area should be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and surrounding water bodies. The stockpiles should be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas should be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, should be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	Construction Sites	Implemented
6.6.1.25	In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	Construction sites & transportation route of waste / Construction phase	N/A
6.6.1.26	The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.	Transportation route of waste / Construction phase	N/A

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
6.6.1.27	Suitable containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall employ a licensed collector to transport and dispose of the chemical wastes, to the licensed CWTC, or other licensed facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Construction and Operation Phases	Implemented
6.6.1.28	It is recommended to place clearly labelled recycling bins at designated locations with convenient access. Other general refuse should be separated from chemical and industrial waste by providing separated bins or skips for storage to maximise the recyclable volume. A reputable licensed waste collector should be employed to remove general refuse on a daily basis to minimise odour, pest and litter impacts.	Construction and Operation Phases	Implemented
6.6.1.29	Should buildings be found with potential ACM, sufficient and reasonable lead time shall be allowed for preparation, vetting and implementation of Asbestos Investigation Report and Asbestos Abatement Plan in accordance with Air Pollution Control Ordinance before commencement of any demolition or site clearance work.	Demolition	N/A
Land Contamination			
7.8.1.2 - 7.8.1.3;7.8.2.1	Prior to the commencement of the SI works, a review of the Contamination Assessment Plan (CAP) should be conducted to confirm whether the proposed SI works (e.g. sampling locations, testing parameters etc.) are still valid. Supplementary CAP(s), presenting findings of the review, the latest site conditions and updated sampling strategy and testing protocol, should be submitted to EPD for endorsement. The SI works should be carried out according to EPD's agreed supplementary CAP(s).SI works should be carried out according to the supplementary CAP endorsed by EPD. Following completion of SI works and receipt of laboratory test results, Contamination Assessment Report(s) ((CAR)(s)) should be prepared to present the findings of the SI works and to discuss the presence, nature and extent of contamination. If contamination is identified, Remedial Action Plan(s) ((RAP)(s)) which provides details of the remedial actions for the identified contaminated soil and / or groundwater should be endorsed by EPD. The possible remediation methods are detailed in Section 5.2 of the CAP provided in Appendix 7.1 of the EIA Report, Remediation action, if necessary, will be carried out according to EPD endorsed RAP(s) and Remediation Report(s) (RR(s)) will be submitted after completion of the remediation action. The RR(s) should be endorsed by EPD prior to the commencement of construction works at the respective identified contaminated areas (if any).	Existing YLSTW /Construction Phase (after decommissioning of the concerned facilities / areas but prior to the construction works at the concerned facilities / areas)	Implemented
7.8.3.1	The mitigation measures will be recommended in the RAP and would typically include the following:		
	• Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety;	Project Site / Construction Phase	Implemented
	• Excavation shall be carried out during dry season as far as possible to minimise contaminated runoff from contaminated soils; Supply of suitable clean backfill material (or treated soil) after excavation;		N/A
	• Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise contaminated runoff.		Implemented
	• Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions;		Implemented
	• Speed control for the trucks carrying contaminated materials shall be enforced;		Implemented
	• Vehicle wheel and body washing facilities at the site's exist points shall be established and used; and		Implemented
	• Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines.		Implemented

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
Ecological Impact (Terrestrial and Aquatic) (Construction Phase)			
8.10.2.1	Avoidance of Recognised Site of Conservation Importance Construction works are designed to be confined to the boundary of the existing YLSTW that direct impacts on all other sites of conservation importance within the assessment area, including the Ramsar Site, Priority Site, WCA, WBA, SSSI and CA would be avoided.	Project site / Construction Phase	Implemented
8.10.2.3 – 8.10.2.4	Avoidance of Demolition Works Using Breakers Mounted on Excavators and Percussive Piling during Dry Season In order to minimise the construction noise disturbance on overwintering waterbirds, the noisy construction works, i.e. all percussive piling works and demolition using breakers mounted on excavators, would therefore be scheduled outside the dry season (i.e. November to March, which is the peak overwintering period of waterbirds).	Construction sites /Construction Phase	Implemented
8.10.2.5	Restriction of Construction Hours No construction activities with the use of PME should be conducted within 100m from any night roost confirmed by the pre-construction survey after 18:00 during wet season and 17:30 during dry season to avoid disturbance to the nearby ardeids night roosts.	Construction sites / Construction Phase	Implemented
8.10.3.2 – 8.10.3.3	Minimising Construction Noise Disturbance Impacts through Consideration of Alternative Construction Methods Demolition using concrete crusher is quieter than demolition using breaker that its construction noise level is comparable to other general construction activities and concrete crusher would be used for demolition works to be undertaken during dry season months. The quieter foundation methods, including bored piling, raft foundation and shallow foundation, would be adopted as far as possible.	Construction sites / Construction Phase	Implemented
8.10.3.4 – 8.10.3.5	Minimising Construction Noise Disturbance Impacts Through Careful Phasing of Construction Activities Percussive piling works and demolition using breakers mounted on excavators would typically be completed over two wet seasons and not be undertaken in the same construction zone at the same time to localise the construction disturbance and to reduce the duration of high level of disturbances on sensitive wetland habitats and associated waterbirds nearby each construction zone. Facilities in the eastern side of the Project site (i.e. Phase 1A and Phase 1B) are scheduled to be developed first that the new structures could screen the works in the middle and western parts of the site in later stage of the construction phase after the structures in Phase 1A and Phase 1B are completed, hence minimising the construction noise and human disturbance on sensitive wetland habitats adjacent to the Project site in Shan Pui River, including the confluence of Shan Pui River and Kam Tin River and ardeid night roost to the immediate east of the Project site.	Project site / Construction Phase	Implemented
8.10.3.6 – 8.10.3.8	Minimising Construction Noise Disturbance Impacts through Use of Noise Barriers Noise barriers with absorptive materials of about 4m high will be erected along the northern, eastern and western sides of the site, throughout the construction phase to screen the construction noise and human disturbance to the waterbirds foraging in ponds in Fung Lok Wai and Shan Pui River during construction phase. Adequate noise barriers should also be provided for demolition works using breakers mounted on excavators and percussive piling works, to further minimise the construction noise disturbance from these construction activities. Movable noise barriers should be provided to breaker mounted on excavator used for demolition works as discussed in Section 4.8 and acoustic mat should be provided to the piling plants around the rig. The contractor should provide enclosure for construction equipment, especially static plants, as appropriate to minimise the noise disturbance as far as practicable.	Construction sites / Construction Phase	Implemented
8.10.3.9	Use of Quality Powered Mechanical Equipment The contractor should source QPMEs for construction as far as practicable to further minimise the overall construction noise and other disturbance to the nearby wetland habitats and associated waterbirds to the maximum practical extent.	Construction sites / Construction Phase	Implemented
Ecology & Fisheries Impact			
8.12.1.4, 9.7	Groundwater observation wells and recharge wells will be provided at the northern and western side of the site. Groundwater table will be closely monitored at the observation well. In case of any unlikely events of abnormal drawdown of groundwater table near the excavation area, groundwater dewatering will stop and water will be pumped into the recharge wells to recover the normal groundwater table as necessary.	Construction Phase	N/A

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
	Fisheries Impact		
9.7	The implementation of good site practices during construction could minimise the potential water quality impacts from the land-based construction works. Mitigation measures recommended in the Water Quality Impact Assessment (Section 5) for controlling water quality impact would also serve to protect fisheries resources and activities from indirect impacts.	Construction and Operation Phase	N/A
	Landscape and Visual Impact		
Table 10.11	<u>Preservation of Existing Vegetation (CM1)</u> All the existing Trees to be retained and not to be affected by the Project shall be carefully protected during construction accordance with DEVB TCW No. 7/2015 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DevB. Any existing vegetation in landscaped areas and natural terrain not to be affected by the Project shall be carefully preserved.	Project site / Construction Phase	Implemented
	<u>Transplanting of Affected Trees (CM2)</u> Trees unavoidably affected by the works shall be transplanted as far as possible in accordance with DEVB TCW No. 7/2015 - Tree Preservation and the latest Guidelines on Tree Transplanting issued by GLTM Section of DevB.	Project site / Construction Phase	Implemented
	<u>Compensatory Tree Planting (CM3)</u> Any trees to be felled under the Project shall be compensated in accordance with DEVB TCW No. 7/2015 - Tree Preservation. For trees to be compensated on slopes, the guidelines for tree planting stipulated in GEO Publication No. 1/2011 will be followed.	Project site / Construction Phase	N/A
	<u>Control of Night-time Lighting Glare (CM4)</u> All the night time lighting shall be avoided except for safety purpose. No light glare shall illuminate directly outside the site.	Project site / Construction Phase	Implemented
	<u>Erection of Decorative Screen Hoarding (CM5)</u> Site hoardings, if any, shall be painted in dull green colour	Project site / Construction Phase	Implemented
	<u>Management of Construction Activities and Facilities (CM6)</u> Construction activities shall be well scheduled and avoid powered mechanical equipment's operating simultaneously. All stockpiling areas and idled area shall be covered by tarpaulin sheet or hydroseeded as far as possible.	Project site / Construction Phase	Implemented
	Hazard to Life (Construction Phase)		
11.5.6.9-11.5.6.12	• Implementation of those major construction works and movement of plants and vehicles would be stringently controlled to have a setback of at least 15m clear distance, or physical barrier with an empty digester / gas holder from the digesters / gas holders in operation;	Project site / Construction Phase	N/A
	• For those construction works to be carried out in close proximity to the 15m zone from digesters / gas holders in operation, the height of plants for those major construction shall be limited to 15m such that the plants would not damage digesters /gas holders in such incident as plant collapse or overturning;		N/A
	• Whenever practicable, the construction sequence shall be arranged with empty unit(s) for separating the major construction works from these digesters / gas holders in use; and		N/A
	• Physical barriers such as concrete blocks shall be set up at the 15m zone in order to avoid those construction plants or vehicles from colliding to the digester / gas holder units in use.		N/A

EIA Ref.	Environmental Protection Measures	Location / Duration of Measures / Timing of Completion of Measures	Implementation Status
11.5.8	• Method statements and risk assessments shall be prepared and safety control measures shall be in place before commencement of work	Project site / Construction Phase	Implemented
	• All work procedures shall be complied with the operating plant procedures or guidelines and regulatory requirements;		Implemented
	• Work permit system, on-site pre-work risk assessment and emergency response procedure shall be in place before commencement of work;		Implemented
	• All construction workers shall equip with appropriate personal protective equipment (PPE) when working at the Project Site;		Implemented
	• Safety training and briefings shall be provided to all construction workers;		Implemented
	• Regular site safety inspections shall be conducted during the construction phase of the Project;		Implemented
11.9.1.2	• Ensure speed limit enforcement is specified in the contractor's method statement to limit the speed of construction vehicles onsite;	Project site / Construction Phase	Implemented
	• Conduct speed checks to ensure enforcement of speed limits and to ensure adequate site access control;		N/A
	• A lifting plan, with detailed risk assessment, should be prepared and endorsed for heavy lifting of large equipment;		Implemented
	• Vehicle crash barriers should be provided between the construction site and the operating biogas facilities;		N/A
	• Ensure that a hazardous are classification study is conducted and hazardous area maps are updated before the start of the construction activities to ensure ignition sources are controlled during both construction and operation phases;		Implemented
	• Ensure work permit system for hot work activities within the Project Site is specified in the contractor's method statement to minimize and control the ignition sources during the construction phase;		Implemented
	• Ensure effective communication system / protocol is in place between the contractors and the operation staff;		Implemented
	• Ensure the Project Construction Emergency Response Plan is integrated with the Emergency Response Plan for the YLEPP during construction phase. The plan should address stop work instructions to be promptly communicated to all construction workers performing hot works in case a confirmed biogas detection at the Project Site;		Implemented
	• Ensure that the construction activities do not impede the functions of fire and gas detection system, fire protection system, muster areas, fire-fighting vehicle access and escape routes;		Implemented
	• Ensure a Job Safety Analysis is conducted for construction activities of the Project during the construction phase, to identify and analyze hazards associated with the construction activities (e.g. lifting operations by cranes) onto the operating biogas facilities.		Implemented
	• Potential risks of the construction activities shall be assessed, and risk precautionary measures shall be implemented in Contractor's works procedures.		Implemented

Note:

Implementation status: Implemented / Partially Implemented / Not Implemented / Not Applicable (N/A)

Sources / reference of the Implementation Status: Appendix B of EIA Report, AEIAR-220/2019

Appendix H
Cumulative statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

Environmental Complaints Log

Reference	Date of Complaint	Received From	Received By	Nature of Complaint	Date of Investigation	Outcome	Date of Reply

Cumulative Statistics on Complaints

Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	0	0	0

Cumulative Statistics on Notification of Summons and Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Notification of Summons and Prosecutions This Month	Cumulative Project-to-Date
Air	0	0	0
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	0	0	0

Prepared by:

Aurecon Hong Kong Limited

Unit 1608, 16/F, Tower B, Manulife Financial Centre,

223 – 231 Wai Yip Street, Kwun Tong,

Kowloon Hong Kong S. A. R.

T: +852 3664 6888

F: +852 3664 6999

E: **hongkong@aurecongroup.com**

aurecon

Bringing ideas to life