CONTRACT NO. SPW 12/2021

SHEK WU HUI EFFLUENT POLISHING PLANT – MAIN WORKS

UNDER FURTHER ENVIRONMENTAL PERMIT NO. FEP-02/474/2013

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

SEPTEMBER 2023

CLIENTS:

Drainage Services Department

PREPARED BY:

Lam Environmental Services Limited

19/F Remex Centre,
42 Wong Chuk Hang Road,
Hong Kong

Telephone: (852) 2882-3939
Facsimile: (852) 2882-3331
E-mail: info@lamenviro.com
Website: http://www.lamenviro.com

CERTIFIED BY:

Raymond Dai
Environmental Team Leader

DATE:

18 October 2023

Meinhardt Infrastructure and Environment Limited

10/F Genesis
33-35 Wong Chuk Hang Road
Hong Kong

Contract No. SPW 12/2021

Shek Wu Hui Effluent Polishing Plant – Main Work

Monthly Environmental Monitoring & Audit Report

September 2023

(October 2023)

Verified by:	Claudine Lee
Position:	Independent Environmental Checker
Date:	19 October 2023

TABLE OF CONTENTS

1 INTRODUCTION 8
1.1 Scope of the Report 8
1.2 Structure of the Report 8
2 PROJECT BACKGROUND 10
2.1 Background 10
2.2 Project Organization and Contact Personnel 10
2.3 Construction Activities 12
3 STATUS OF REGULATORY COMPLIANCE 16
3.1 Status of Environmental Licensing and Permitting under the Project 16
3.2 Summary of submission status under FEP-02/474/2013 18
4 MONITORING REQUIREMENTS 19
4.1 Noise Monitoring 19
4.2 Air Monitoring 22
4.3 Ecological Monitoring 26
5 MONITORING RESULTS 29
5.1 Noise Monitoring Results 29
5.2 Air Quality Monitoring Results 30
5.3 Ecology Monitoring Results 31
5.4 Waste Management 34
6 COMPLIANCE AUDIT 37
6.1 Noise Monitoring 37
6.2 Air Quality Monitoring 37
6.3 Ecological Monitoring 37
6.4 Review of the Reasons for and the Implications of Non-compliance 37
6.5 Summary of action taken in the event of and follow-up on non-compliance 37
7 ENVIRONMENTAL SITE AUDIT 38
8 COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION 40
9 CONCLUSION 41

LIST OF TABLES

Table 2.1 Contact Details of Key Personnel
Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/06
Table 3.2 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/07
Table 3.3 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/03
Table 3.4 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/04
Table 4.1 Noise Monitoring Station
Table 4.3 Noise Monitoring Equipment
Table 4.4 Action and Limit Level for Noise Monitoring
Table 4.5 Air Monitoring Station
Table 4.6 Air Quality Monitoring Equipment
Table 4.7 Action and Limit Level for Air Quality Monitoring
Table 5.1 Summary Table of Noise Monitoring Results
Table 5.2 Summary Table of 1-hour TSP Monitoring Results
Table 5.3 Summary Table of 24-hour TSP Monitoring Results
Table 5.4 Total Bird Species and Abundance in the Reporting Month
Table 5.5 Abundance of Representative Waterbirds in the Reporting Month
Table 5.6 T-test Result for All Waterbirds in the Reporting Month
Table 5.7 T-test Result for Representative Waterbirds in the Reporting Month
Table 5.8 Observations during Ecological Monitoring in the Reporting Month
Table 5.9 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/06
Table 5.10 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/07
Table 5.11 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/03
Table 5.12 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/04
Table 8.1 Cumulative Statistics on Complaints in the Reporting Month
Table 8.2 Cumulative Statistics on Successful Prosecutions
Table 9.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

LIST OF FIGURES

Figure 2.1 Project Layout
Figure 2.2 Project Organization Chart
Figure 4.1 Locations of Noise Monitoring Station
Figure 4.2 Locations of Air Quality Monitoring Stations
Figure 4.3 Locations of Ecological Monitoring Stations

LIST OF APPENDICES

Appendix 2.1 Layout Plans of Construction Activities and Site Record Photos
Appendix 3.1 Environmental Mitigation Implementation Schedule
Appendix 4.1 Action and Limit Level
Appendix 4.2 Copies of Calibration Certificates
Appendix 4.3 Wind data
Appendix 5.1 Monitoring Schedule for Reporting Month and Next Reporting Month
Appendix 5.2 Noise Monitoring Results and Graphical Presentations
Appendix 5.3 Air Quality Monitoring Results and Graphical Presentations
Appendix 5.4 Details of Ecological Monitoring Results in the Reporting Month
Appendix 5.5 Photo Record of Ecological Monitoring
Appendix 5.9 Monthly Summary Waste Flow Table
Appendix 6.1 Event and Action Plans
Appendix 6.2 Summary for Notification of Exceedance
Appendix 8.1 Complaint Log
Appendix 9.1 Construction Programme of Individual Contracts

EXECUTIVE SUMMARY

i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – September 2023 of Shek Wu Hui Effluent Polishing Plant – Main Work under Further Environmental Permit no. FEP-02/474/2013 (Hereafter as "the Project"). This is the 25th EM&A report prepared by Environmental Team under Contract No. SPW 12/2021, presenting the environmental monitoring findings and information recorded during the period of 1 September 2023 to 30 September 2023. The cut-off date of reporting is at the end of each reporting month.

ii. In the reporting month, the principal work activities of individual contracts are conducted as follows:

Contract No. DC/2018/06 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sludge Treatment Facilities and 132 kV Primary Substation

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

Contract No. DC/2018/07 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sewage Treatment Facilities

- RC works
- ABWF works
- Pipe laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&M Works for Sludge Treatment Facilities

- Construction of Superstructure
- Electrical Installation
- MVAC Installation
- Plumbing System Installation
- MFA and AFA installation
- SPR Installation
- EOT and Monorail Installation
- Bio-Gas Holding Tank Installation
- Genset Installation
- Transportation and Installation of THP System
- Penstock and Stoplog Installation
- Pipework Installation

- Draft Tube Mixer Installation

Contract No. DE/2018/04 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – E&M Works for Sewage Teatment Facilities

- Improvement Works for Temporary Primary Sludge Thickener and its accessories
- E&M works for Leachate Pre-treatment Plant at existing compressor house, BR No 3&4 and MFB1
- E&M works at Portion B-5, MFB2.
- E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System

Air Quality Monitoring

iii. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring was conducted at two monitoring station. 24-hour TSP shall be sampled at least once in every 6 days, while sampling for 1-hour TSP shall be at least 3 times in every 6 day in the reporting month.

iv. No action or limit level exceedance was recorded in this reporting period.

v. Due to power supply issue, 24 hr TSP AQM at AM2a were suspended during the whole reporting month.

Noise Monitoring

vi. Noise monitoring was conducted at three noise monitoring stations once per week in the reporting month.

vii. No action or limit level exceedance was recorded in this reporting period.

viii. Noise monitoring scheduled on 8th September 2023 was cancelled due to rainfall on 8th and 9th September 2023.

Ecological Monitoring

ix. Ecological monitoring conducted on a weekly basis at both high and low tides (it is considered high tide when tidal levels are above 1.5m and low tide when tidal level are below 1.5m at Tsim Bei Tsui Station). The magnitude of how much above or below 1.5m was subject to tidal conditions of that week as it varied throughout different times of the year. Nonetheless, the high and low tide relative to that week's tidal condition were taken into consideration.

x. No Action or Limit level was triggered in the reporting month.

Site Inspections and Audit

xi. The Environmental Team (ET) conducted weekly site inspections on 5, 12(DE/2018/03 and DE/2018/04), 19, and 26 September 2023 and biweekly landscape inspection on 5 and 19 September 2023. IEC attended the joint site inspection on 26 September 2023. Site inspection scheduled on 14th September 2023 for DC/2018/06 and DC/2018/07 was cancelled due to Red Rainstorm Signal. No non-compliance was found during the site inspection while reminders on environmental measures were recommended.

Complaints, Notifications of Summons and Successful Prosecutions

xii. No environmental complaint, notification of summons and successful prosecution regarding the construction works was recorded in the reporting period.

Reporting Changes

xiii. There are no particular reporting changes.

Future Key Issues

xiv. In coming reporting month, the principal work activities of individual contracts are anticipated as follows:

Contract No. DC/2018/06 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sludge Treatment Facilities and 132 kV Primary Substation

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

Contract No. DC/2018/07 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sewage Treatment Facilities

- RC works
- ABWF works
- Pile laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&M Works for Sludge Treatment Facilities

- Construction of Superstructure
- Electrical Installation

- MVAC Installation
- Plumbing System Installation
- MFA and AFA installation
- SPR Installation
- EOT and Monorail Installation
- Bio-Gas Holding Tank Installation
- Transportation and Installation of Steam Boiler System
- Transportation and Installation of THP System
- Penstock and Stoplog Installation
- Pipework Installation
- Draft Tube Mixer Installation

Contract No. DE/2018/04 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – E&M Works for Sewage Teatment Facilities

- Improvement works for Temporary Primary Sludge Thickener and its accessories.
- E&M & civil works for Leachate Pre-treatment Plant at existing compressor house, BR No 3&4 and MFB1
- E&M works at Portion B-5, MFB2.
- E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System.
- E&M works at Portion B-4, BR 2A & 2B.
- E&M works at Portion B-2, Inlet Works.

1 Introduction

1.1 Scope of the Report

1.1.1. Lam Environmental Services Limited (LES) has been appointed to work as the Environmental Team (ET) under Environmental Permit (EP) No. FEP-02/474/2013 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for North East New Territories New Development Areas (Register No.: AEIAR-175/2013).

1.1.2. In accordance with Clause 3.4 stated in FEP-02/474/2013, 3 hard copies and 2 electronic copies of Monthly EM&A Report shall be submitted to the Director within 10 working days after the end of each reporting month throughout the entire construction period.

1.1.3. According to Section 9.4.1.1 of the Project EM&A Manual, the Monthly EM&A Report should be submitted within 10 working days at the end of each reporting month, with the first report due in the month after construction commences.

1.2 Structure of the Report

Section 1 ***Introduction*** – details the scope and structure of the report.

Section 2 ***Project Background*** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.

Section 3 ***Status of Regulatory Compliance*** – summarizes the status of valid Environmental Permits / Licenses during the reporting period.

Section 4 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.

Section 5 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 6 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

Section 7 **Environmental Site Audit** – summarizes the findings of weekly site inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.

Section 8 ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 9 ***Conclusion***

2 Project Background

2.1 Background

2.1.1. The existing Shek Wu Hui Sewage Treatment Works (SWHSTW) has been operating and maintaining for 30 years by the Drainage Services Department (DSD). It provides secondary level treatment to sewage collected from Sheung Shui, Fanling and adjacent areas. SWHSTW was completed in two stages and expanded progressively in the past years. In 1984, Stage I of SWHSTW was commissioned with design capacity of 60,000 cubic meters per day (m^3 /day) at Average Dry Weather Flow (ADWF). In 2001, Stage II of SWHSTW was completed with design capacity enhanced to 80,000 m^3 /day at ADWF. In 2009, the expansion of SWHSTW was completed and its design capacity was increased to 93,000m^3 /day at ADWF.

2.1.2. Further expansion of SWHSTW has been planned to be carried out in order to cope with the forecast increase in flow from Fanling North and Kwu Tong North New Development Area (NDA) and other NDAs and developments in three phases, namely Phase 1A, 1B and 2, which are later revised to Main Works Stage 1, Stage 2 and Stage 3 respectively. The EIA study report (Register No.: AEIAR-175/2013) for the NENT NDAs Study covered the assessment for the Further Expansion of SWHSTW, which is a designated project under item F.1 and F.2 of Part 1, Schedule 2 of the EIA Ordinance. The location of the project site is shown in ***Figure 2.1.***

A Further EP was applied on 18 January 2018 to assume the responsibility for constructing and operating the SWHEPP Project up to a capacity of 190,000 m^3/day. The Further EP No. FEP-02/474/2013 was issued to DSD as permit holder on 15 February 2018. Due to overlapping of scope with the Further EP currently in force, the Further EP No. FEP-01/474/2013 was subsequently surrendered on 15 August 2018.

2.2 Project Organization and Contact Personnel

2.2.1 Drainage Service Department (DSD) is the overall project controllers for the Project. For the construction phase of the Project, Engineer's Representative, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.

2.2.2 The project organization and lines of communication with respect to environmental protection works are shown in ***Figure 2.2***. Key personnel and contact particulars are summarized in ***Table 2.1***.

Table 2.1 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.
Drainage Services Department (DSD)	Permit Holder	Engineer	Ms. Li Lin	2594 7463
AECOM	Supervisor Representative	Resident Engineer	Ms. Ada Chan	3907 1134
Kwan Lee - Chun Wo Joint Venture	Contractor (DC/2018/06)	Environmental Manager	Mr. Clarence Yeung	3758 8551
		Environmental Engineer	Ms. Barbara Yiu	9758 2034
	Contractor (DC/2018/07)	Environmental Engineer	Ms. Barbara Yiu	9758 2034
JEC	Contractor (DE/2018/03)	Environmental Officer	Ms. Juliet Ting	6826 7319
Bestwise	Contractor (DE/2018/04)	Environmental Officer	Mr. Albus Cheung	9731 0831
Meinhardt Infrastructure and Environment Ltd.	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Ms. Claudine Lee	9612 9229
Lam Environmental Services Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939

2.3 Construction Activities

2.3.1 In the reporting month, the principal work activities conducted of individual contracts are as follow. The layout plans showing the locations of reported construction activities, key PME used for the works contracts and site record photos are shown in ***Appendix 2.1***.

Contract No. DC/2018/06 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sludge Treatment Facilities and 132 kV Primary Substation

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

Contract No. DC/2018/07 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sewage Treatment Facilities

- RC works
- ABWF works
- Pile laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&M Works for Sludge Treatment Facilities

- Construction of Superstructure
- Electrical Installation
- MVAC Installation
- Plumbing System Installation
- MFA and AFA installation
- SPR Installation
- EOT and Monorail Installation
- Bio-Gas Holding Tank Installation
- Genset Installation
- Transportation and Installation of THP System
- Penstock and Stoplog Installation
- Pipework Installation
- Draft Tube Mixer Installation

Contract No. DE/2018/04 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – E&M Works for Sewage Treatment Facilities

- Improvement Works for Temporary Primary Sludge Thickener and its accessories

- E&M works for Leachate Pre-treatment Plant at existing compressor house, BR No 3&4 and MFB1
- E&M works at Portion B-5, MFB2.
  E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System

2.3.2 The number of key PME and their working locations are shown in ***Table 2.2***.

Table 2.2 Summary of key PME and working locations of works contracts

Works Contract	Key PME	Number	Working locations
DC/2018/06	Excavator	1	Section 4
	Scissor lift platform	4	SDB and CHP
	Roller	1	Section 4
DC/2018/07	Excavator	7	Area C, Area D, Inlet, SAS, MFB
	Generator	3	PST, MFB
	Mobile Crane	1	PST
	Tower crane	2	Inlet, MFB
	Enertainer	1	Inlet
DE/2018/03	Generator	7	Sidestream, THP and Bio-gas Tank
	Tower Crane	1	Sidestream
DE/2018/04	-	-	-

2.3.3 In coming reporting month, the scheduled construction activities of individual contracts are listed as follows:

Contract No. DC/2018/06 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sludge Treatment Facilities and 132 kV Primary Substation

- RC works
- Pipe jacking
- Sewage, utility and pipe works
- Road works
- ABWF works
- ELS

Contract No. DC/2018/07 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Civil Works for Sewage Treatment Facilities

- RC works
- ABWF works
- Pile Laying

Contract No. DE/2018/03 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – Sidestream Treatment Facilities and EM&M Works for Sludge Treatment Facilities

- Construction of Superstructure
- Electrical Installation
- MVAC Installation
- Plumbing System Installation
- MFA and AFA installation
- SPR Installation
- EOT and Monorail Installation
- Bio-Gas Holding Tank Installation
- Transportation and Installation of Steam Boiler System
- Transportation and Installation of THP System
- Penstock and Stoplog Installation
- Pipework Installation
- Draft Tube Mixer Installation

Contract No. DE/2018/04 – Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1 – E&M Works for Sewage Treatment Facilities

- Improvement works for Temporary Primary Sludge Thickener and its accessories.
- E&M & civil works for Leachate Pre-treatment Plant at existing compressor house, BR No 3&4 and MFB1
- E&M works at Portion B-5, MFB2.

- E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System.
- E&M works at Portion B-4, BR 2A & 2B.
- E&M works at Portion B-2, Inlet Works.

3 Status of Regulatory Compliance

3.1 Status of Environmental Licensing and Permitting under the Project

3.1.1. A summary of the current status on licences and/or permits on environmental protection pertinent to the Project is shown in ***Table 3.1 to 3.4***.

Table 3.1 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/06

Permits and/or Licences	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	449210 (Portion A & C)	23 Sep 2019	N/A	Valid
	449211 (WM1)	23 Sep 2019	N/A	Valid
Water Pollution Ordinance Licence	WT00035431-2019 (Portion C)	27 Jul 2020	31 Jan 2025	Valid
	WT00035718-2020 (Portion A)	02 Apr 2020	30 Apr 2025	Valid
Billing Account for Disposal of Construction Waste	7035390	11 Oct 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-K3371-01	14 Nov 2019	N/A	Valid
Construction Noise Permit	GW-RN0715-23	9 Jul 2023	8 Oct 2023	Valid

Table 3.2 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DC/2018/07

Permits and/or Licences	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	449210	23 Sep 2019	N/A	Valid
Water Pollution Ordinance Licence	WT00035727-2020	1 Apr 2020	30 Apr 2025	Valid
Billing Account for Disposal of Construction Waste	7035985	9 Dec 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-K3371-02	6 Jan 2020	N/A	Valid
Construction Noise Permit	GW-RN0715-23	9 Jul 2023	8 Oct 2023	Valid

Table 3.3 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/03

Permits and/or Licences	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	455843 (WA3)	6 May 2020	N/A	Valid
	457212 (WA1-B)	15 Jun 2020	N/A	Valid
	460065 (Sidestream)	16 Sep 2020	N/A	Valid
Water Pollution Ordinance Licence	WT00037220-2020	16 Mar 2021	31 Jan 2026	Valid
Billing Account for Disposal of Construction Waste	7035700	6 Nov 2019	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-T3861-01	14 Apr 2020	N/A	Valid
Construction Noise Permit	GW-RN0758-23	21 July 2023	20 Oct 2023	Valid

Table 3.4 Summary of the current status on licences and/or permits on environmental protection pertinent to the Project under Contract No. DE/2018/04

Permits and/or Licences	Permit. No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	460181	17 Sep 2020	N/A	Valid
Billing Account for Disposal of Construction Waste	703621912	2 Jan 2020	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-B2592-01	7 Jul 2020	N/A	Valid

3.1.2. Implementation status of the recommended mitigation measures during this report month is presented in ***Appendix 3.1***.

3.2 Summary of submission status under FEP-02/474/2013

3.2.1 A summary of the current status on submission under FEP-02/474/2013 is shown in ***Table 3.5***.

Table 3.5 Summary of submission status under FEP-02/474/2013

EP Condition	Submission	Status
Condition 1.12	Commencement date of construction of the Project	Notified EPD on 8 Oct 2019
Condition 2.3 & 3.1	Updated EM&A Manual	The Manual was confirmed of no further comments by EPD on 17 Jan 2020
Condition 2.4	Management Organization of Main Construction Companies for Contract No.DC/2018/06	Informed EPD on 19 Nov 2019
Condition 2.4	Management Organization of Main Construction Companies for Contract No. DC/2018/07	Informed EPD on 20 Dec 2019
Condition 2.4	Management Organization of Main Construction Companies for Contract No. DE/2018/03	Informed EPD on 19 Feb 2020
Condition 2.4	Management Organization of Main Construction Companies for Contract No. DE/2018/04	Informed EPD on 15 Feb 2020
Condition 2.4	Replacement of Environmental Team Leader	Informed EPD on 13 Sep 2021
Condition 2.4	Replacement of Independent Environmental Checker	Informed EPD on 13 Sep 2021
Condition 2.5	Location Plans for Contract No. DC/2018/06	Deposited to EPD on 19 Nov 2019
Condition 2.5	Location Plans for Contract No. DC/2018/07	Deposited to EPD on 20 Dec 2019
Condition 2.5	Location Plans for Contract No. DE/2018/03	Deposited to EPD on 15 Feb 2020
Condition 2.5	Location Plans for Contract No. DE/2018/04	Deposited to EPD on 18 Sep 2020
Condition 2.6	Submission of Landscape Plan	Received comments by EPD on 29 Aug 2023, revised report sent to ET and IEC for review on 22 Sept 2023
Condition 3.3	Baseline Monitoring Report (Ecology)	The Report was first submitted to IEC for review on 22 Nov 2019, and verified on 29 Nov 2019
Condition 3.3	Baseline Monitoring Report	The Report will be submitted to EPD at least 6 weeks before the commencement of Corresponding parts of landscape and visual mitigation measures of the Project

4 Monitoring Requirements

4.1 Noise Monitoring

NOISE MONITORING STATIONS

4.1.1. The noise monitoring stations for the Project are listed and shown in ***Table 4.1*** and ***Figure 4.1***. ***Appendix 4.1*** shows the established Action/Limit Levels for the monitoring works.

Table 4.1 Noise Monitoring Station

Monitoring Station ID	Location
NM1	Wai Loi Tsuen
NM2	Fu Tei Au
NM3	Man Kok Village

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

4.1.2. The monitoring parameters, frequency and duration of noise monitoring are summarized in ***Table 4.2***.

Table 4.2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Period	Duration	Sampling Parameter	Sampling Period(1)	Frequency
Impact Monitoring	Throughout the construction phase	1 set of Leq (30 min)	between 0700-1900 hours on normal weekdays;	on a per week basis when noise generating activities are underway

Remark (1): Additional weekly impact monitoring shall be carried out during evening and night-time works if construction works are extended to include works during the hours of 1900-0700

MONITORING EQUIPMENT

4.1.3. Noise monitoring was performed using sound level meter at the designated monitoring locations. The sound level meters shall comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator shall be deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment is given in ***Table 4.3***.

Table 4.3 Noise Monitoring Equipment

Equipment	Brand and Model	Series Number	Expiry Date
Integrated Sound Level Meter	Nti XL2 Larson Davis LxT1	A2A-15269-EO 0004797	9-Mar-2024 4-Nov-2023
Acoustic Calibrator	LD CAL200	13098	20-Mar-2024

4.1.4. The calibration certificates of the noise monitoring equipment are attached in ***Appendix 4.2***.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

4.1.5. Monitoring Procedure

(a) Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s

(b) The monitoring station shall normally be at a point 1 m from the exterior of the sensitive receiver building facade and be at a position 1.2 m above the ground. If there is problem with access to the normal monitoring position, an alternative position may be chosen, and a correction to the measurements shall be made. For reference, a correction of +3 dB(A) shall be made to the free field measurements.

(c) The battery condition was checked to ensure the correct functioning of the meter.

(d) Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:

- Frequency weighting: A
- Time weighting: Fast
- Time measurement: Leq (30min) for noise monitoring

(e) Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after recalibration or repair of the equipment.

(f) The wind speed was checked with the portable wind meter before noise monitoring.

(g) At the end of the monitoring period, the Leq, L90 and L10 were recorded. In addition, site conditions and noise sources were recorded on a record sheet.

4.1.6. Maintenance and Calibration

(a) The microphone head of the sound level and calibrator would be cleaned with soft cloth regularly.

(b) The noise monitoring equipment shall be calibrated annually.

CONSTRUCTION NOISE LEVEL

4.1.7. The construction noise level refers the corrected noise level based on the calculated difference between SPL of the Measured Noise Level and the SPL of the Baseline Noise Level. In the event of the Baseline Noise Level exceeds the Measured Noise Level, no correction would be applied and the Construction Noise Level would be indicated as below baseline noise level (<BL).

EVENT AND ACTION PLAN

4.1.8. Noise Standards for Daytime Construction Activities are specified under EIAO-TM. The Action and Limit levels for construction noise are defined in ***Table 4.4*** and ***Appendix 4.1.*** Should non-compliance of the criteria occurs, action in accordance with the Event and Action Plan in ***Appendix 6.1*** shall be carried out.

Table 4.4 Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB

4.2 Air Monitoring

AIR QUALITY MONITORING STATIONS

4.2.1. The air monitoring stations for the Project are listed and shown in ***Table 4.5*** and ***Figure 4.2***.

Table 4.5 Air Monitoring Station

Monitoring Station ID	Location	Measurement
AM1	House No. 15, Wai Loi Tsuen	1-hour TSP
AM2	Fu Tei Au	1-hour TSP
AM1a* (1)	Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW	24-hour TSP
AM2a	Site boundary of the Shek Wu Hui STW (North)	24-hour TSP

(1) Due to close proximity to construction works and heavy machines, presence of physical barrier and safety concerns, find adjustment for the location of AM1a was proposed in accordance to Section 2.2.4.6 of the EM&A Manual. It was adjusted from the ground level near the control room of SWHSTW to the roof floor of that control room. The proposal has sought approval from ER and IEC, and agreement from EPD in May 2022.

AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

4.2.2. 24-hour TSP shall be sampled at least once in every 6 days, while sampling for 1-hour TSP shall be at least 3 times in every 6 days when the highest dust impact takes place.

4.2.3. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

4.2.4. 24-hour TSP Measuring Installation (HVS)

(a) 0.6 – 1.7 m^3 per minute adjustable flow range

(b) Equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;

(c) Installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;

(d) Capable of providing a minimum exposed area of 406 cm2;

(e) Flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;

(f) Equipped with a shelter to protect the filter and sampler;

(g) Incorporated with an electronic mass flow rate controller or other equivalent devices;

(h) Equipped with a flow recorder for continuous monitoring;

(i) Provided with a peaked roof inlet;

(j) Incorporated with a manometer;

(k) Able to hold and seal the filter paper to the sampler housing at horizontal position;

(l) Easily changeable filter; and

(m) Capable of operating continuously for a 24-hour period

Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. All the data should be converted into standard temperature and pressure condition.

24-hour Measuring Procedures

(a) Check the power supply to ensure the sampler works properly.

(b) Remove the filter hold down by loosening the four nuts and carefully centre a new filter, with stamped number upward, on a supporting screen.

(c) Properly align the filter on the screen so that the gasket will form an airtight seal on the outer edges of the filter.

(d) Fasten the filter hold down frame to the filter holder with swing bolts. The pressure applied should be sufficient to avoid air leakage at the edges.

(e) Close shelter lid and secure catch with the aluminum strip.

(f) Record the flow indicator reading and determine the sampler flow rate. If it is outside the acceptable range, adjust the sampler flow rate.

(g) Set the programmable timer and record the starting sampling time, weather condition and the filter identification number.

(h) At the end of sampling, the filter was transferred from the filter holder of the HVS to a filter bag and sent to the accredited laboratory for weighing. The elapsed time was also recorded.

4.2.5. 1-hour Measuring Procedures

Portable dust meter will be proposed and sufficient information will be submitted to IC (E) to prove that the instrument is capable of achieving a comparable result as that of the HVS and used for 1-hour sampling

(a) Slide the power switch to turn the power on

(b) Select the period of measurement to 60mins

(c) Check and set the correct time

(d) Select the appropriate unit display for the equipment

(e) Collected the sampled data for analysis

The portable dust meter is calibrated at 2-years interval and checked with HVS yearly to determine the accuracy and validity of the results measured. The checking of portable dust meter will be carried out in order to determine the conversion factor between the portable dust meter and the standard equipment, HVS.

The calibration check is to be considered valid if the calculated correlation coefficient is >0.90.

4.2.6. Maintenance and Calibration

(a) The direct reading dust meter was calibrated at 2-years interval and checked with High Volume Sampler (HVS) yearly to determine the accuracy and validity of the results measured.

(b) Checking of direct reading dust meter will be carried out in order to determine the conversion factor between the direct reading dust meter and the standard equipment, HVS. The comparison check is to be considered valid based on correlation coefficient checked by HOKLAS laboratory

4.2.7. Laboratory measurement / analysis

(a) A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

(b) Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24 hours and be pre-weighed before use for the sampling.

(c) After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity-controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.

4.2.8. High Volume Sampler (HVS – Model TE-5025A) completed with the appropriate sampling inlets were installed for the 24-hour TSP sampling. 1-hour TSP air quality monitoring was performed by using portable direct reading dust meters at each designated monitoring station. The brand and model of the equipment are given in ***Table 4.6***.

Table 4.6 Air Quality Monitoring Equipment

Equipment	Brand and model	Series Number	Expiry Date
Portable direct reading dust meter	Met One BT- 645 / Met One AEROCET831	C15622 Y23153	3-Feb-2024
Calibration Kit	Tisch Environmental (Calibration Model: TE-5025A)	3166	31-Mar-2024

High Volume Sampler	Tisch Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler (Model no. G3101)	2036	11-Nov-2023
		774	9-Sep-2023(1)
Wind Anemometer	YGY-FSXY1	YG 21071630T0924	17-Mar-2024

(1) Remarks: Due to power supply issue, the high volume sampler at AM2a (Serial Number 774) cannot be calibrated, calibration will be provided once the power supply has resumed.

4.2.9. The calibration certificates of the air quality monitoring equipment are attached in ***Appendix 4.2***.

WIND DATA

4.2.10. Wind data monitoring equipment was set up at roof floor (about 4/F) of the SWHSTW control room for logging wind speed and wind direction such that the wind sensors were clear of obstructions or turbulence caused by building. The wind data monitoring equipment was re-calibrated at least once every six months and the wind directions were divided into 16 sections of 22.5 degrees each. The wind data obtained from the on-site wind station during the reporting period is provided in ***Appendix 4.3.***

EVENT AND ACTION PLAN

4.2.11. The Action and Limit Levels for construction air quality are defined in ***Table 4.7*** and ***Appendix 4.1***. Should non-compliance of the air quality criteria occur, action in accordance with the Event and Action Plan in Appendix 6.1 shall be carried out.

Table 4.7 Action and Limit Level for Air Quality Monitoring

Parameter	**Monitoring Station**	**Action Level** (µgm-3)	**Limit Level** (µgm-3)
24-hour TSP Level	Site boundary of the Shek Wu Hui STW (East), Root Floor	189	260.0
	Site boundary of the Shek Wu Hui STW (North)	187	
1-hour TSP Level	House No. 15, Wai Loi Tsuen	320	500.0
	Fu Tei Au	322	

4.3 Ecological Monitoring

4.3.1. According to the Updated EM&A Manual, weekly transect at both high and low tides shall be undertaken to identify and enumerate all bird species utilising the river channels and identify any sources of actual or potential disturbance to birds due to construction activities throughout the construction period. ***Appendix 4.1*** shows the established Action/Limit Levels for ecological monitoring works.

4.3.2. The monitoring should be conducted by the ET and supervised by a qualified ecologist who will be a member of the ET.

MONITORING LOCATIONS

4.3.3. Transect and point count surveys were proposed within the 500m boundary of Ng Tung River, Sheung Yue River and Shek Sheung River of the assessment area. Three transects and seven-point count locations during high and low tides were applied. These locations are shown in ***Figure 4.3*** and summarized in ***Table 4.8*** The photo of each transect is provided in ***Appendix 5.5***.

Table 4.8 Ecological Monitoring Stations

Monitoring Stations	Descriptions	Influenced by Tidal Action
Transect T1	Along Ng Tung River	No
Point Count Location P1		
Point Count Location P2		
Transect T2		Yes
Point Count Location P3		
Point Count Location P4		
Point Count Location P5	At Shek Sheung River (Low-flow Channel)	No
Transect T3	Along Shek Sheung River & Sheung Yue River	Yes
Point Count Location P6	At Shek Sheung River	Yes

Point Count Location P7	At Intersection between Sheung Yue River and Shek Sheung River	Yes

MONITORING PARAMETERS, FREQUENCY AND DURATION

4.3.4. Monitoring surveys were conducted on a weekly basis at both high and low tides (it is considered high tide when tidal levels are above 1.5m and low tide when tidal level are below 1.5m at Tsim Bei Tsui Station). The magnitude of how much above or below 1.5m was subject to tidal conditions of that week as it varied throughout different times of the year. Nonetheless, the high and low tide relative to that week's tidal condition were taken into consideration. The ecological monitoring schedule is shown in ***Appendix 5.1***.

MONITORING METHODOLOGY

4.3.5. Transect survey was undertaken along the concerned rivers (Ng Tung River, Sheung Yue River and Shek Sheung River) adjacent to proposed construction activities. As the sensitive receivers (large waterbirds) are easily visible and the surveyor has used auxiliary equipment such as camera(s) and binoculars (magnification 7-10x). The transect route only follows one bank of these rivers.

4.3.6. At point count locations, surveyors identified and recorded bird species which were seen or heard along the river channel. For each point count, surveyors quantitatively recorded all species seen and heard for the duration of five minutes up to the distance where birds were still detectable. All avifauna along the walk transect were recorded. Noticeable behaviours (e.g. breeding behaviours such as nesting and presence of recently fledged juveniles, roosting and feeding activities, etc.) were recorded as well.

4.3.7. Ornithological nomenclature used in report should follow *The Avifauna of Hong Kong* (*Carey et al. (2001)*, *The Birds of Hong Kong and South China (Viney et al. (2005))* and the most recent updated list from other sources (e.g. Hong Kong Bird Watching Society).

4.3.8. Weather conditions, tidal information at the time of the survey and other noticeable activities occurring within or in the vicinity of the survey areas (e.g. ongoing routine drainage channel maintenance works and other human activities that could create disturbances to birds) were recorded.

ANALYTICAL METHODOLOGY

4.3.9. The number and species of waterbirds utilizing the rivers fluctuate every day naturally. Therefore, the survey data were collectively analyzed on a monthly basis to increase the sample size and to reduce random error on one survey day. Since occurrence of waterbirds has distinctive seasonal pattern, the construction phase data for all waterbirds and

representative waterbirds were compared with the baseline data for the respective month and season. The representatives of waterbirds are listed in ***Table 4.9***.

Table 4.9 Representative Waterbirds

Species Name	Common Name	Chinese Name
Egretta garzetta	Little Egret	小白鷺
Ardea cinerea	Grey Heron	蒼鷺
Ardeola bacchus	Chinese Pond Heron	池鷺
Phalacrocorax carbo	Great Cormorant	普通鸕鷀
Ardea alba	Great Egret	大白鷺
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺

4.3.10. When a decline in abundance of all or representative waterbird is identified, one-tailed Student t-test was adopted to statistically analyse whether the drop is significant. If the collected data for the reporting month fails to show no significant difference from that in the baseline phase at 95% confidence level, the action level will be triggered. Likewise, the limit level is set at 99% confidence level.

4.3.11. In addition, if important behaviours such as breeding, brooding, nesting and presence of recently fledged juveniles of species of conservation importance are observed, the Resident Engineer, Contractor and IEC should be notified immediately after the survey. The Contractor should review current construction programme and minimize disturbance due to construction activities

5 Monitoring Results

5.0.1 The environmental monitoring will be implemented based on the division of works areas of each designed projects. Overall layout showing work areas and monitoring stations is shown in ***Figure 2.1*** and ***Figure 4.1 – 4.4*** respectively**.**

5.0.2 The environmental monitoring schedules for reporting month and coming month are presented in ***Appendix 5.1*****.**

5.1 Noise Monitoring Results

5.1.1 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation are shown in **Table 5.1** and ***Appendix 5.2***.

Table 5.1 Summary Table of Noise Monitoring Results

Monitoring Location	Range, Leq (30min) dB(A)	Limit Level
NM1	54.4 – 60.7	75 dB
NM2	60.8 – 64.9	
NM3	60.8 – 62.7	

Remark: +3dB(A) façade correction included

5.1.2 No action or limit level exceedance was recorded in this reporting month.

5.1.3 According to our field observations, the major noise source identified were nearby road traffic and human activities.

5.1.4 The noise monitoring result measured in reporting month was similar to previous months. The noise monitoring result was slightly variated in the reporting month, and no increasing trend was identified due to the construction works conducted in the reporting month. No correlation between the project's construction work and the monitoring data was identified.

5.1.5 Noise monitoring scheduled on 8th September 2023 was cancelled due to rainfall on 8th and 9th September 2023.

5.2 Air Quality Monitoring Results

5.2.1 Air quality monitoring results measured in this reporting period are reviewed and summarized. Details of air monitoring results and graphical presentation can be referred in **Table 5.2**, **Table 5.3** and ***Appendix 5.3***.

Table 5.2 Summary Table of 1-hour TSP Monitoring Results

Monitoring Station	Concentration (µg/m3)		Action Level, (µg/m3)	Limit Level, (µg/m3)
	Average	Range		
AM1	17	7 – 52	320	500
AM2	20	8 – 59	322	500

Table 5.3 Summary Table of 24-hour TSP Monitoring Results

Monitoring Station	Concentration (µg/m3)		Action Level, (µg/m3)	Limit Level, (µg/m3)
	Average	Range		
AM1a*	28	19 - 41	189	500
AM2a	N/A	N/A	187	500

5.2.2 No action or limit level exceedance was recorded in this reporting period.

5.2.3 According to our field observations, the major dust source identified were nearby road traffic.

5.2.4 The air quality monitoring result measured in reporting month was similar to previous months. The air quality monitoring result was slightly variated in the reporting month, and no increasing trend was identified due to the construction works conducted in the reporting month. No correlation between the project's construction work and the monitoring data was identified.

5.2.5 Due to power supply issue, 24 hr TSP AQM at AM2a were suspended during the whole reporting month.

5.3 Ecology Monitoring Results

5.3.1 For this reporting month, the numbers of species and individuals recorded were provided in **Table 5.4** and the abundance of representative species were shown in **Table 5.5**.

Table 5.4 Total Bird Species and Abundance in the Reporting Month

	Number of Species	Abundance
All Avifauna	34	1128
Waterbirds	11	283

Table 5.5 Abundance of Representative Waterbirds in the Reporting Month

Species Name	Common Name	Chinese Name	Abundance
Egretta garzetta	Little Egret	小白鷺	104
Ardea cinerea	Grey Heron	蒼鷺	40
Ardeola bacchus	Chinese Pond Heron	池鷺	56
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0
Ardea alba	Great Egret	大白鷺	18
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	25
		Total	**243**

Ecological Analysis

5.3.2 The result of student t-tests for all waterbirds and representative waterbirds are compiled in **Table 5.6** and **Table 5.7** respectively. Further details are provided in **Appendix 5.4**.

Table 5.6 T-test Result for All Waterbirds in the Reporting Month

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95%	99%
Abundance	**Monthly**	**1.528**	✓	✓
	Seasonal	**1.503**	✓	✓

Remarks:
✓ = T-value falls within the confidence level; the impact monitoring data shows no significant difference to the baseline data.
✗ = T-value falls outside the confidence level; the impact monitoring data shows significant difference to the baseline data.

Table 5.7 T-test Result for Representative Waterbirds in the Reporting Month

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall**
	Monthly	95% (-2.353)	99% (-4.541)	**Seasonal**	95% (-2.353)	99% (-4.541)	
Little Egret	1.213	✓	✓	0.728	✓	✓	✓
Grey Heron	NA*						
Chinese Pond Heron	0.000	✓	✓	-0.623	✓	✓	✓
Great Cormorant	NA*						
Great Egret	-0.304	✓	✓	0.913	✓	✓	✓
Eastern Cattle Egret	2.988	✓	✓	1.554	✓	✓	✓

Remarks:
✓ = T-value falls within the confidence level; the impact monitoring data shows no significant difference to the baseline data.
✗ = T-value falls outside the confidence level; the impact monitoring data shows significant difference to the baseline data.
* Great Cormorant (*Phalacrocorax carbo*) and Grey Heron (*Ardea cinerea*) were not recognised as representative waterbird species during wet season.
**According to section 7.2 of the approved ecological baseline report, action/Limit level shall be triggered if reduction in bird abundance is found in both the respective month and season.

5.3.3 No Action Level and Limit Level was triggered for ecological monitoring in the reporting month.

5.3.4 Site observation in the reporting month shows that construction activities are similar to previous months. The photos are provided in **Appendix 5.5**.

5.3.5 In recent months, it is found that there are different construction sites for example construction of footbridge, excavation and sheet-piling, and human activities including cycling, fishing and landscape planting around the project site. The photos are provided in **Appendix 5.5**. These construction and human activities may affect activities of the waterbird. Although, there is no significant impact reduction in number of waterbirds, but it is recommended that construction site should continue keeping the good site practice to minimize disturbance caused to waterbirds.

Observations

5.3.6 Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting
- Fighting

5.3.7 The anthropogenic activities observed during ecological monitoring are listed in **Table 5.8**.

Table 5.8 Observations during Ecological Monitoring in the Reporting Month

Location(s)	Observations	
	Project Related	**Non-project Related**
T1 (PC1, PC2)	N/A	Human Activities such as Cycling and Fishing Construction activities such as excavation, and breaking works
T2 (PC3, PC4)	Construction activities such as generator & welding works, Scaffolding, sedimentation tank, Excavation and crane	Human Activities such as Fishing, Cycling, and Landscape Planting Construction activities such as Sheet-piling, generator & welding works, Scaffolding, sedimentation tank, Excavation, crane and breaking works
PC5	Construction activities such as Excavation and crane	N/A
T3 (PC6, PC7)	Construction activities such as Sheet-piling	Human Activities such as Cycling, Grazing and Fishing Construction activities such as Excavation, Sheet-piling, generator & wielding works, Scaffolding, lifting works

5.4 Waste Management

5.4.1 The quantities of waste for disposal in the Reporting Period are summarized in ***Table 5.9*** to ***5.12***. The Monthly Summary Waste Flow Table is shown in ***Appendix 5.9***. Whenever possible, materials were reused on-site as far as practicable.

Table 5.9 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/06

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2023)
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in other Projects (Inert) (in '000m^3)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	1.114	0.683	12.170
Metals (in '000kg)	0.000	0.000	0.000
Paper / Cardboard Packing (in '000kg)	0.000	0.000	0.000
Plastics (in '000kg)	0.000	0.000	0.000
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000m^3)	0.091	0.098	0.713

Table 5.10 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DC/2018/07

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2023)
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0.000	0.000	0.000

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2023)
Reused in this Contract (Inert) (in '000m^3)	0.000	0.000	0.000
Reused in other Projects (Inert) (in '000m^3	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	3.369	0.897	23.167
Metals (in '000kg)	0.000	0.000	0.000
Paper / Cardboard Packing (in '000kg)	0.000	0.000	0.000
Plastics (in '000kg)	0.000	0.000	0.000
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000m^3)	0.061	0.067	0.574

Table 5.11 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/03

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2023)
Hard Rock and Large Broken Concrete (Inert) (in '000kg)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000kg)	0.000	0.000	0.000
Reused in other Projects (Inert) (in '000kg)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	576.05	0.000	638.380
Metals (in '000kg)	12.520	0.000	142.120

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2023)
Paper / Cardboard Packing (in '000kg)	0.251	0.000	1.001
Plastics (in '000kg)	0.040	0.000	0.060
Chemical Wastes (in '000kg)	0.000	0.000	0.000
General Refuses (in '000kg)	21.410	49.610	189.650

Table 5.12 Summary of Quantities of Inert C&D Materials and C&D Wastes for Contract No. DE/2018/04

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Annual Cumulative Quantity (2023)
Hard Rock and Large Broken Concrete (Inert) (in '000kg)	0.000	0.000	0.000
Reused in this Contract (Inert) (in '000kg)	0.000	0.000	0.000
Reused in other Projects (Inert) (in '000m^3)	0.000	0.000	0.000
Disposal as Public Fill (Inert) (in '000m^3)	9.260	0.000	119.590
Metals (in '000kg)	0.000	0.000	36.230
Paper / Cardboard Packing (in '000kg)	0.000	0.200	0.200
Plastics (in '000kg)	0.000	0.000	0.000
Chemical Wastes (in '000kg)	0.000	0.000	0.800
General Refuses (in '000kg)	7.970	0.929	13.970

6 Compliance Audit

6.0.1 The Event Action Plan for construction noise, air quality and ecological monitoring are presented in ***Appendix 6.1.***

6.0.2 The summary of exceedance is presented in ***Appendix 6.2.***

6.1 Noise Monitoring

6.1.1 No action or limit level exceedance was recorded in this reporting period.

6.1.2 Noise monitoring scheduled on 8th September 2023 was cancelled due to rainfall on 8th and 9th September 2023.

6.2 Air Quality Monitoring

6.2.1 No action or limit level exceedance was recorded in this reporting period.

6.2.2 Due to power supply issue, 24 hr TSP AQM at AM2a were suspended during the whole reporting month.

6.3 Ecological Monitoring

6.3.1 No action Level or Limit level was triggered for ecological monitoring in the reporting month.

6.4 Review of the Reasons for and the Implications of Non-compliance

6.4.1 No environmental non-compliance was recorded in the reporting month

6.5 Summary of action taken in the event of and follow-up on non-compliance

6.5.1 There was no particular action taken since no non-compliance was recorded in the reporting period.

7 Environmental Site Audit

7.1.1. Within this reporting month, weekly environmental site audits were conducted on 5, 12(DE/2018/03 and DE/2018/04), 19, and 26 September 2023 and biweekly landscape inspection on 5 and 19 September 2023. IEC attended the joint site inspection on 26 September 2023. Site inspection scheduled on 14th September 2023 for DC/2018/06 and DC/2018/07 was cancelled due to Red Rainstorm Signal.

7.1.2. No non-compliance was found during the environmental site inspection while reminders on environmental measures were recommended. Results and findings of these inspections in this reporting month are listed below in ***Table 7.1 to 7.4***.

Table 7.1 Summary of Environmental Inspections of Contract No. DC/2018/06

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
20230905_1	5-Sep-2023	Protection should be provided to the U-channel to prevent discharge of muddy water.	Protection has been provided to the U-channel to prevent discharge of muddy water.	Rectified on 26-Sep-2023.
20230905_2	5-Sep-2023	Contractor was reminded to maintain the effectiveness of the concrete bund to prevent discharge of site runoff.	N/A	N/A
20230919_1	19-Sep-2023	The dull green barrier should be kept intact.	The dull green barrier has been reinstated.	Rectified on 26-Sep-2023.
20230919_2	19-Sep-2023	Contractor should clean up the oil spillage of the cherry picker, the cleanup materials should be dispose as chemical waste.	The oil spillage has been cleaned.	Rectified on 26-Sep-2023.
20230919_3	19-Sep-2023	Dust suppression measures should be provided to the idled stockpile.	The stockpile has been removed.	Rectified on 26-Sep-2023.
20230926_1	26-Sep-2023	Dust suppression measures should be provided to the idled stockpile.	The stockpile has been removed.	Rectified on 3-Oct-2023.
20230926_2	26-Sep-2023	The Contractor was reminded to prevent discharge of site runoff to the U-channel.	N/A	N/A

Table 7.2 Summary of Environmental Inspections of Contract No. DC/2018/07

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
-	-	-	-	-

Table 7.3 Summary of Environmental Inspections of Contract No. DE/2018/03

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
-	-	-	-	-

Table 7.4 Summary of Environmental Inspections of Contract No. DE/2018/04

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
-	-	-	-	-

8 Complaints, Notification of Summons and Prosecution

8.1.1. No environmental complaint, notification of summons and successful prosecution regarding construction works was recorded in the reporting period.

8.1.2. The details environmental complaints for the Project are summarized by complaint log in ***Appendix 8.1.***

8.1.3. Cumulative statistics on complaints and successful prosecutions are summarized in ***Table 8.1*** and ***Table 8.2*** respectively.

Table 8.1 Cumulative Statistics on Complaints in the Reporting Month

Reporting Period	No. of Complaints
Commencement works (Feb 2018) to last reporting month	4
September 2023	0
Total	**4**

Table 8.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative no. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Water	-	0	0
Waste	-	0	0
Total	**-**	**0**	**0**

9 Conclusion

9.1.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.

9.1.2. Mitigation measures according to the environmental mitigation implementation schedule and the EIA were generally implemented by the Contractor. Hence, the EM&A programme was considered effective and shall be maintained.

9.1.3. The scheduled construction activities and the recommended mitigation measures for the coming 3 months are listed in ***Table 9.1***. The construction programmes of individual activities are provided in ***Appendix 9.1.***

Table 9.1 Construction Activities and Recommended Mitigation Measures in Coming Reporting Month

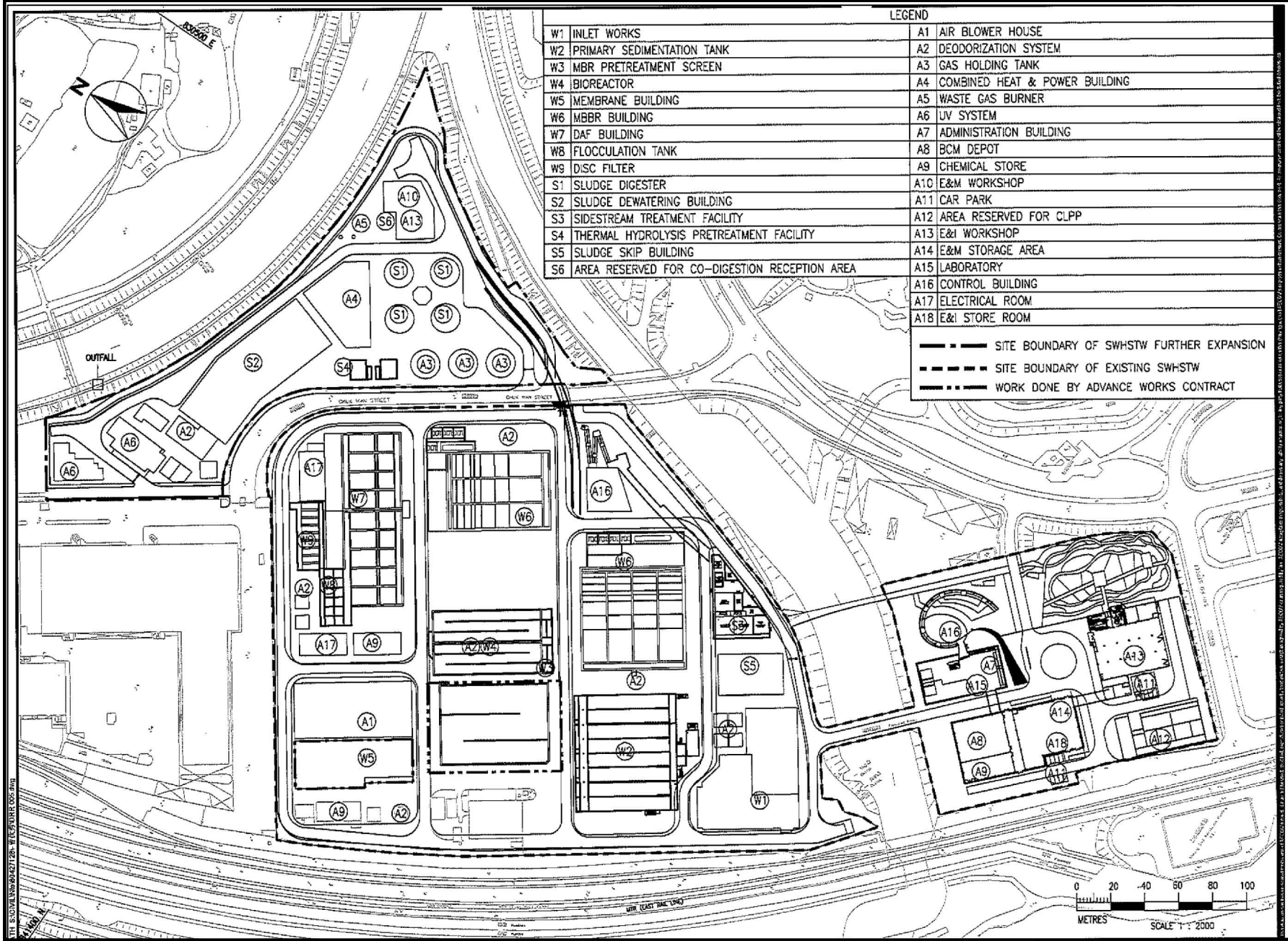
Contract No.	Key Construction Works	Recommended Mitigation Measures
DC/2018/06	• RC works • Pipe jacking • Sewage, utility and pipe works • Road works • ABWF works • ELS	• Implement proper dust mitigation measures on dusty surface, stockpiles and related dusty works • Implement proper measures to prevent excavated material, silt or debris being deposited or washed into existing drainage systems and waterbodies • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers • Proper maintenance of the on-site drainage system • Provision of protection to ensure no runoff out of site area or direct discharge into public drainage system • Good site practices should be adopted to check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.
DC/2018/07	• RC works • ABWF works	• Implement proper dust mitigation measures on dusty surface and stockpiles

Contract No.	Key Construction Works	Recommended Mitigation Measures
	• Pile laying	• Implement proper measures to prevent excavated material, silt or debris being deposited or washed into existing drainage systems and waterbodies • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers, especially screening noise during piling related activities • Proper maintenance of the on-site drainage system • Provision of protection to ensure no runoff out of site area or direct discharge into public drainage system • Good site practices should be adopted to check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal. • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.
DE/2018/03	• Construction of Superstructure • Electrical Installation • MVAC Installation • Plumbing System Installation • MFA and AFA installation • SPR Installation • EOT and Monorail Installation • Bio-Gas Holding Tank Installation • Transportation and Installation of Steam Boiler System • Transportation and	• Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers • Implement proper waste mitigation measures to prevent accidental leakage of chemical • Good site practices should be adopted to check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Proper maintenance of the on-site drainage system • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal. • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.

Contract No.	Key Construction Works	Recommended Mitigation Measures
	Installation of THP System • Penstock and Stoplog Installation • Pipework Installation • Draft Tube Mixer Installation	
DE/2018/04	• Improvement works for Temporary Primary Sludge Thickener and its accessories. • E&M & civil works for Leachate Pre-treatment Plant at existing compressor house, BR No 3&4 and MFB1 • E&M works at Portion B-5, MFB2. • E&M works at Portion B-7, including DOU No.3A, Emergency Generator House and FS & Sprinkler Pumping Room, Chemical System No.1, Street Fire Hydrant & Booster Pump Room and Temporary Chemical System. • E&M works at Portion B-4, BR 2A & 2B. • E&M works at Portion B-2, Inlet Works.	• Good site practices should be adopted to check for any accumulation of waste materials on site and dispose waste materials at designated areas. • Segregate and store different types of waste to enhance reuse or recycling of materials and their proper disposal. • Implement proper dust mitigation measures during the demolition of existing compressor house. • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers. • Ensure all on-site regulated machines have displayed valid NRMM labels and the application of ULSD as fuel for diesel-powered machinery.

Figure 2.1

Project Layout



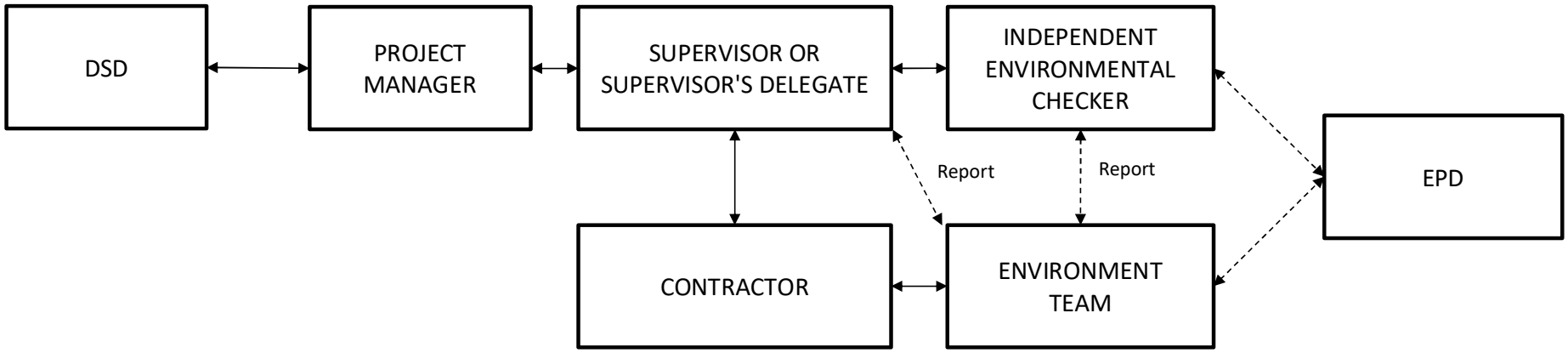
Shek Wu Hui E□luent Polishing Plant

General Site Layout O□SWHEPP

SCALE	As Shown	DATE	SEP 2019
CHECK	JM	DRAWN	SY
JOB No.		FIGURE NO. 1.1	RE□ -

Figure 2.2

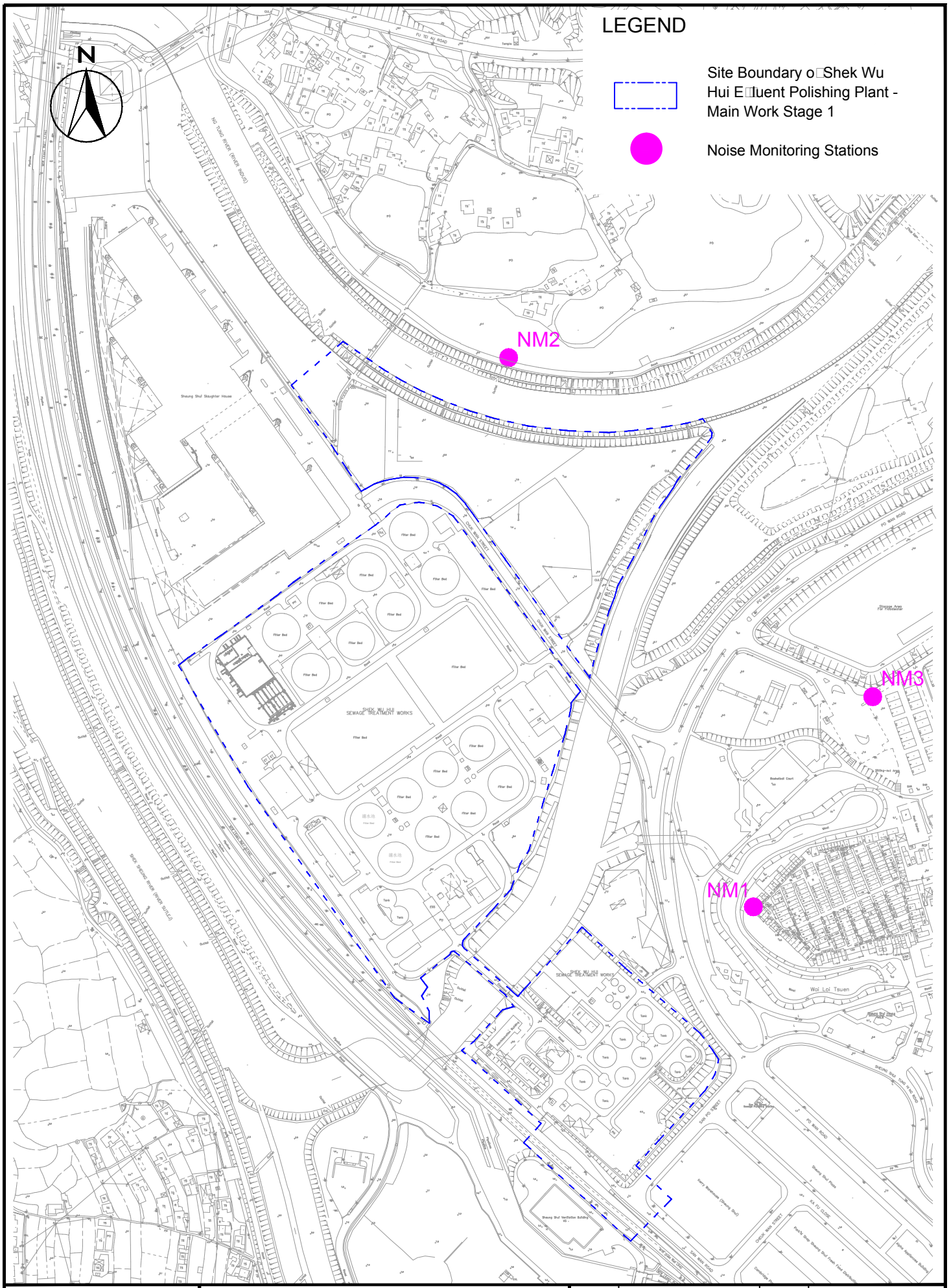
Project Organization Chart



	Shek Wu Hui Effluent Polishing Plant -	**SCALE**	N.T.S.	**DATE**	Sep 2019
		CHECK	JW	**DRAWN**	SY
	Project Organisation For Environmental Monitoring and Audit	**JOB NO.**		**FIGURE NO.**	1.2

Figure 4.1

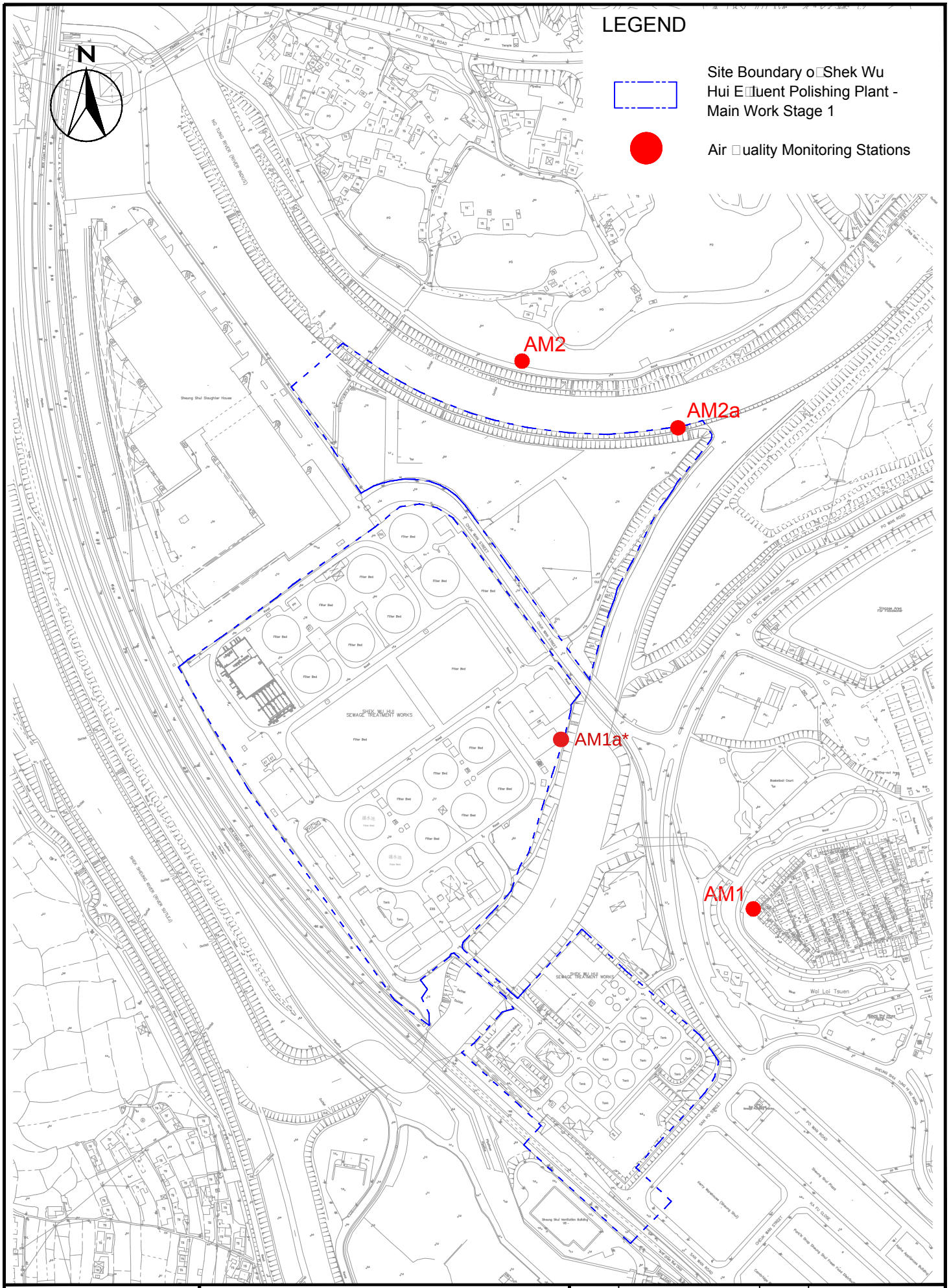
Locations of Noise Monitoring Stations



	Shek Wu Hui E luent Polishing Plant	SCALE	1:4000 A4	DATE SEP 2019
		CHECK	JM	DRAWN SY
	Location o Noise Monitoring Stations	JOB No.	MA19019	FIGURE NO. 3 RE -

Figure 4.2

Locations of Air Quality Monitoring Stations

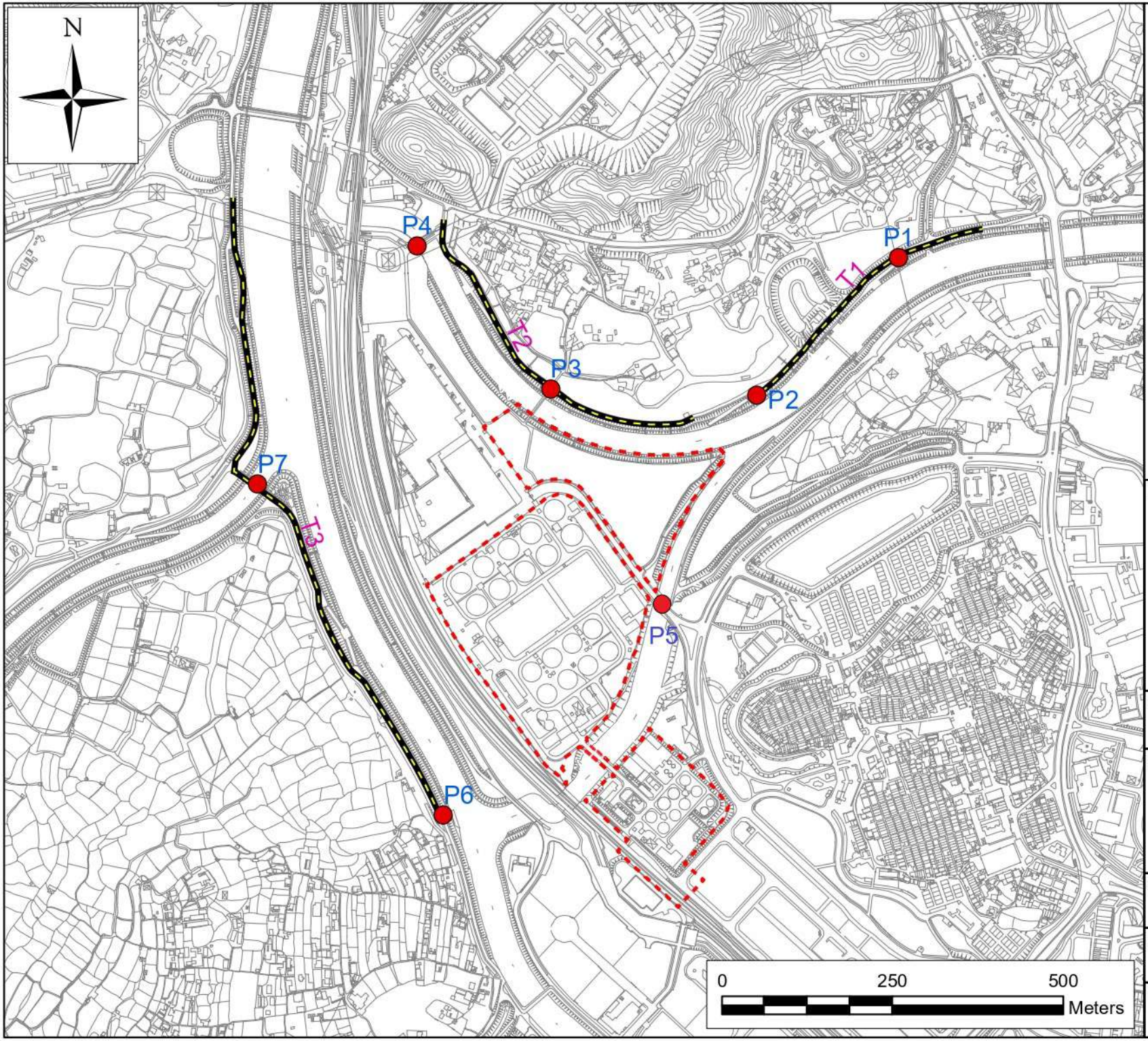


	Shek Wu Hui E□luent Polishing Plant - Location o□Air □uality Monitoring Stations	SCALE	1:400□ A4	DATE	SEP 2019
		CHECK	JM	DRAWN	SY
		JOB No.		FIGURE NO. 2	RE□ -

F:/Project_drawings

Figure 4.3

Locations of Ecological Monitoring Stations



Legend

- Project Site Boundary
- Walk Transects
- Point Count Locations

PREPARED BY

Lam Environmental Services Limited

19/F Remex Centre
42 Wong Chuk Hang Road,
Hong Kong

Telephone: (852) 2882-3939
Facsimile: (852) 2882-3331
E-mail: info@lamenviro.com
Website: http://www.lamenviro.com

CONTRACT NO.

SPW 12/2021

PROJECT TITLE

Shek Wu Hui Effluent Polishing Plant - Main Works Survey Location for Ecological Monitoring

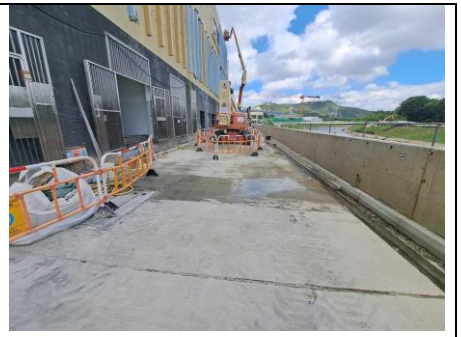
SCALE	DATE
1:7500@A4	***Sept 2021***
DRAWN BY ***AL***	CHECK BY ***MC***
FIGURE NO. ***1***	REVISION NO. ***-***

Appendix 2.1

Layout Plan of Construction Activities and Site Record Photos

Site Record Photos

DC/2018/06

		
SD&THP	CHP	SDB

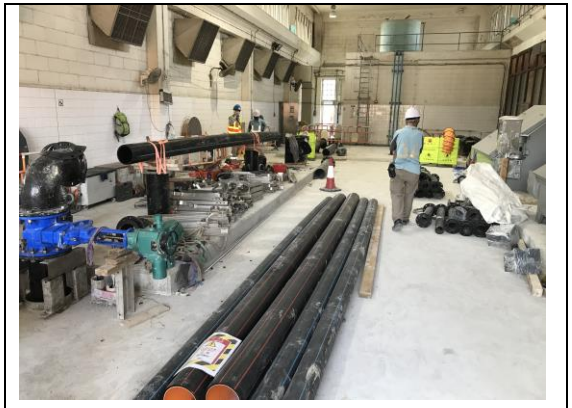
DC/2018/07

BR2	MFB	PST	Inlet

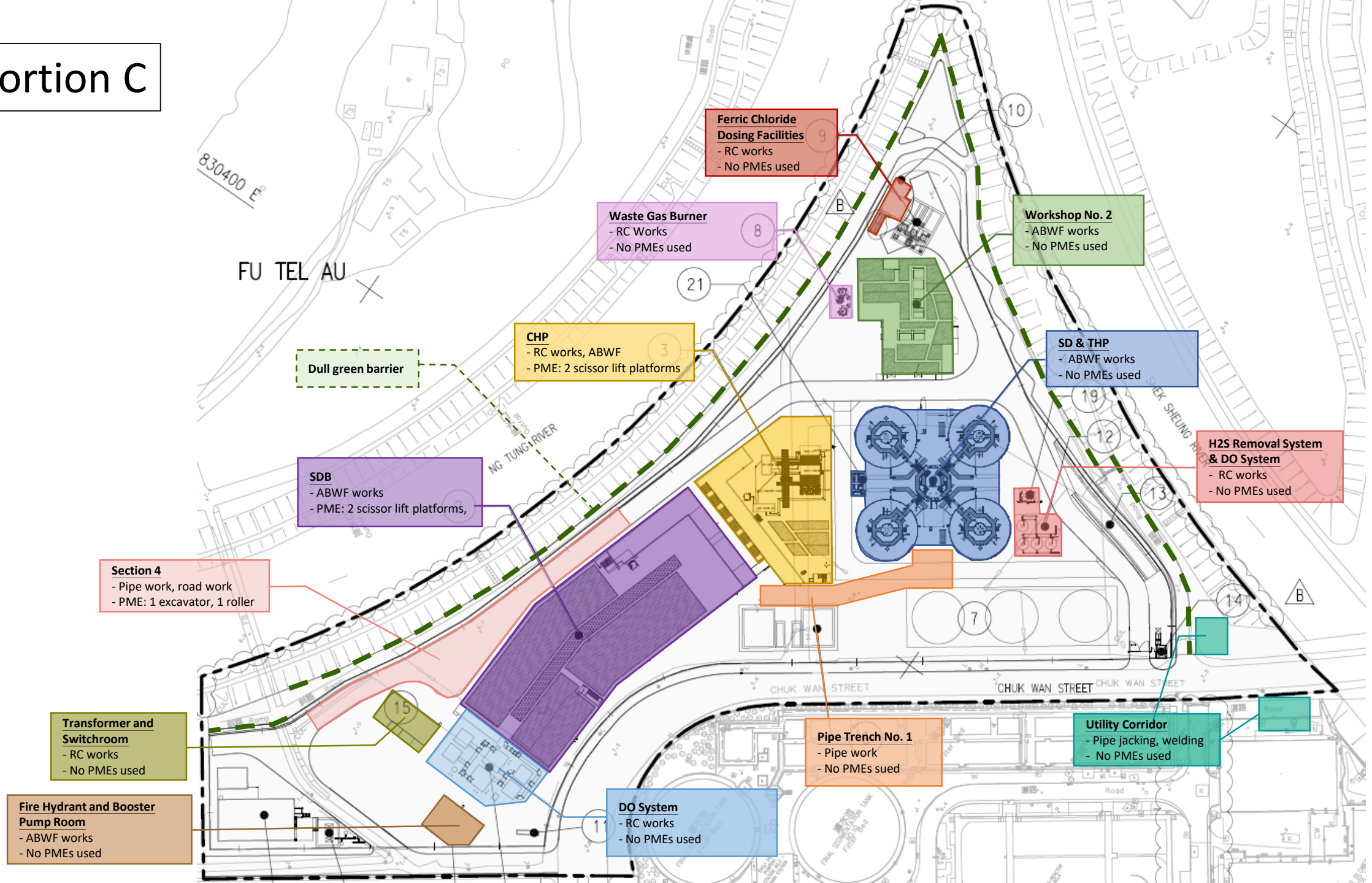
DE/2018/03

Sidestream	Bio Gas Tank

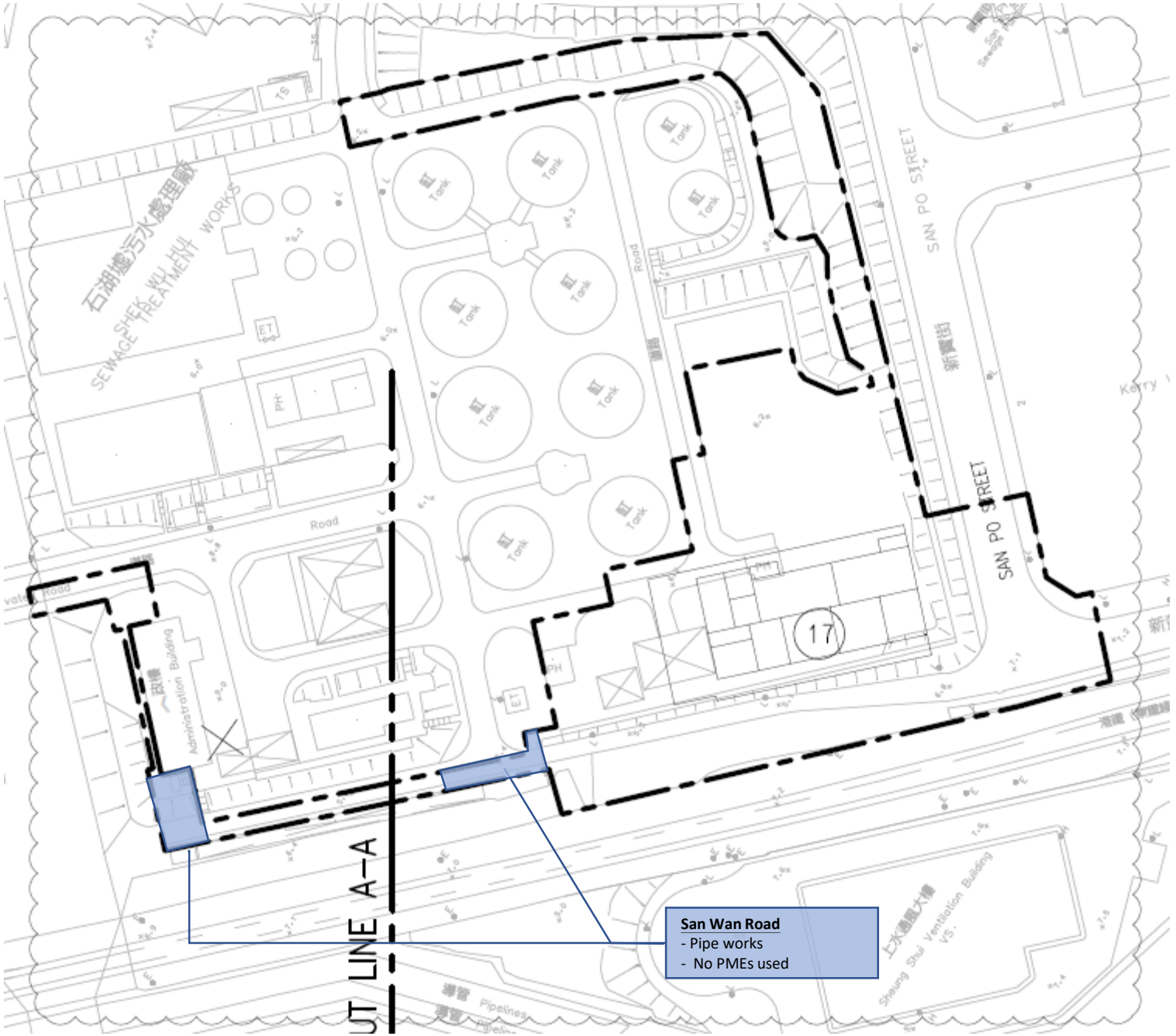
DE/2018/04


Compressor House

Portion C

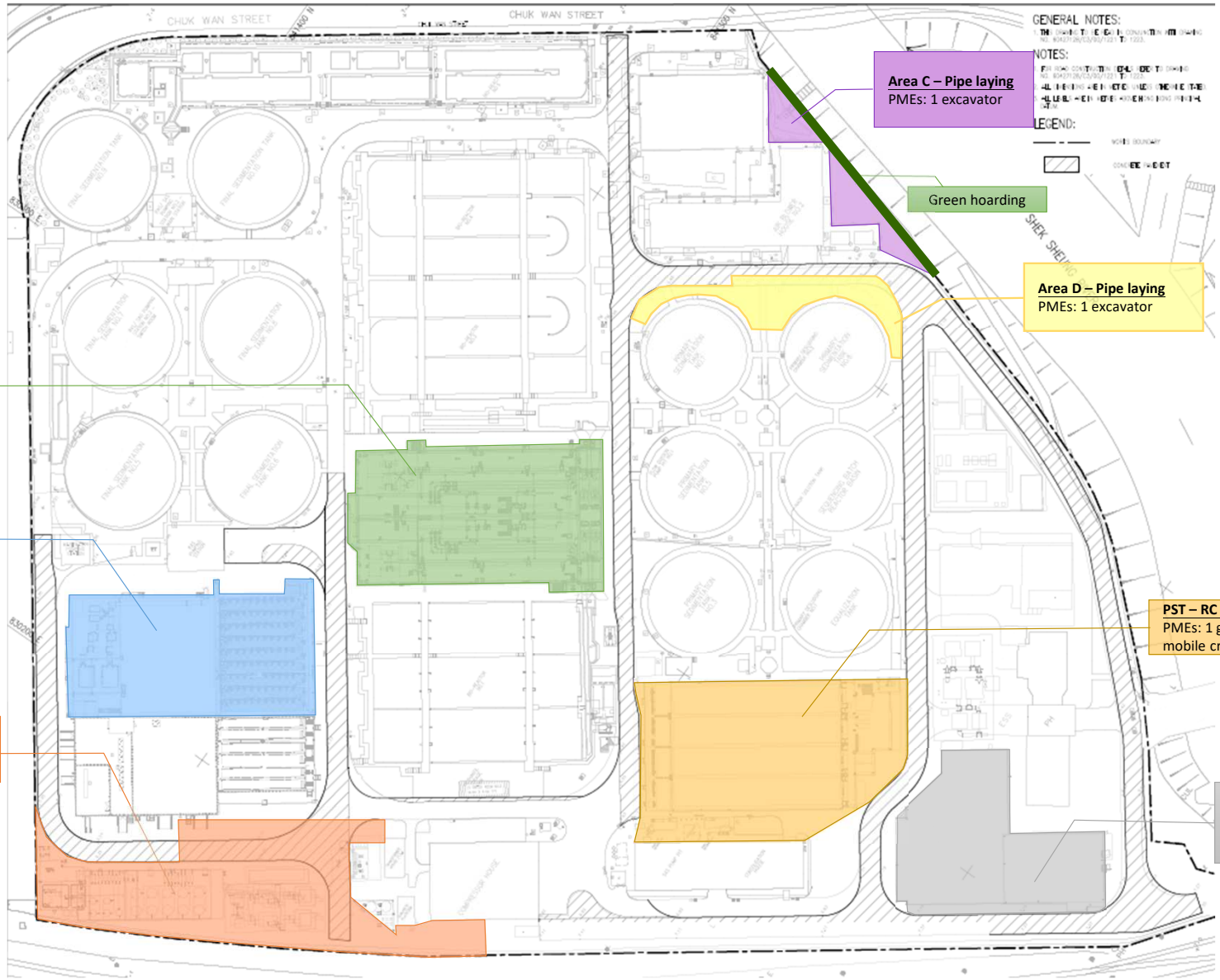

Ferric Chloride Dosing Facilities
- RC works
- No PMEs used
Waste Gas Burner
- RC Works
- No PMEs used
Workshop No. 2
- ABWF works
- No PMEs used
CHP
- RC works, ABWF
- PME: 2 scissor lift platforms
Dull green barrier
SD & THP
- ABWF works
- No PMEs used
SDB
- ABWF works
- PME: 2 scissor lift platforms,
H2S Removal System & DO System
- RC works
- No PMEs used
Section 4
- Pipe work, road work
- PME: 1 excavator, 1 roller
Transformer and Switchroom
- RC works
- No PMEs used
Pipe Trench No. 1
- Pipe work
- No PMEs sued
Utility Corridor
- Pipe jacking, welding
- No PMEs used
Fire Hydrant and Booster Pump Room
- ABWF works
- No PMEs used
DO System
- RC works
- No PMEs used
830400 E
FU TEL AU
NG TUNG RIVER
SHEK SHEUNG RIVER
CHUK WAN STREET
CHUK WAN STREET
CHUK WAN STREET

Portion A



San Wan Road
- Pipe works
- No PMEs used
SAN PO STREET
SAN PO STREET
UT LINE A–A
17
Tank
Road
Administration Building

Portion B



Area C – Pipe laying
PMEs: 1 excavator

Green hoarding

Area D – Pipe laying
PMEs: 1 excavator

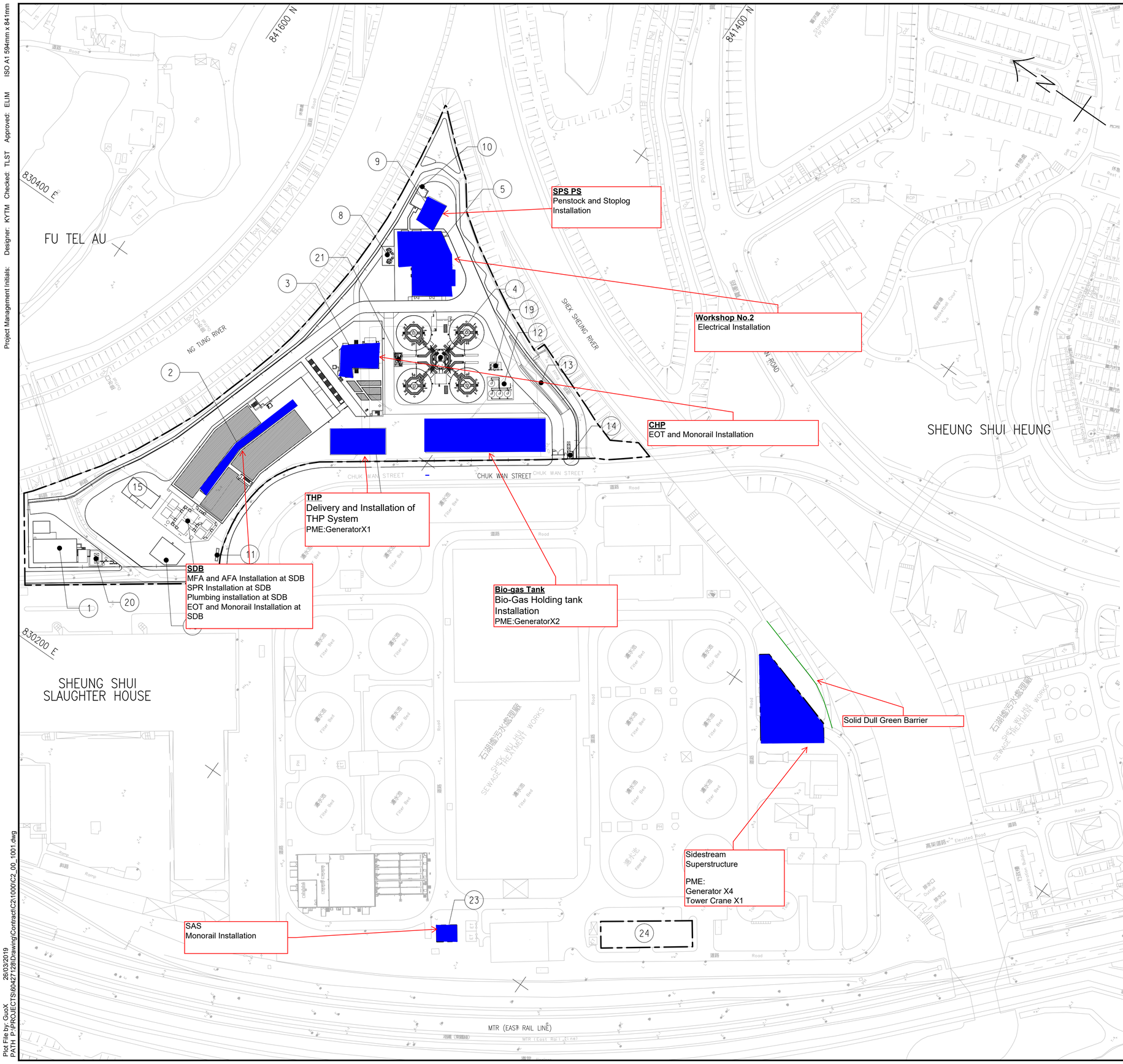
BR2 – RC works
No PME used

MFB – RC works
PMEs: 2 generators,
2 excavators, 1 tower crane

PST – RC works
PMEs: 1 generator, 1 mobile crane

SAS - ABWF works / Pipe laying
PMEs: 2 excavators

Inlet – RC works
PMEs: 1 excavator, 1 tower crane, 1 enertainer



NOTES:

1. DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCRION
2. ALL LEVELS SHOWN ARE IN METERS AND REFER TO THE PRINCIPAL DATAM.
3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH H.K. (1980) GEODETIC DATAM.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
5. ALL DETAILS SHOWING THE EXISTING CONDITIONS OF THE SITE INCLUDING ALL GROUND, STRUCTURES, ROAD, SERVICES, ETC. ARE INDICATIVE ONLY.
6. THE LOCATION, ORIENTATIONS, ALIGNMENT, SIZES, LEVELS AND DETAILS OF THE SEWAGE AND DRAINAGE WORKS, INCLUDING THE PIPES CONNECTION, MANHOLES, EXISTING PIPES TO BE CONNECTED, EXISTING MANHOLES TO BE MODIFIED, THE CONSTRUCTION METHOD SHOWN ON THIS SET OF DRAWINGS ARE INDICATIVE AND FOR TENDER PURPOSE ONLY
7. EXACT TIE-IN WITH EXISTING FEATURES SHALL BE AGREED WITH THE SUPERVISOR.

LEGEND:

— — —	SITE BOUNDARY
1	UV SYSTEM NO. 1 & EFFLUENT PUMPING STATION NO. 1
2	SLUDGE DEWATERING BUILDING
3	COMBINED HEAT & POWER BUILDING
4	SLUDGE DIGESTER
5	WORKSHOP NO. 2
6	THERMAL HYDROLYSIS PRETREATMENT FACILITIES
7	BIOGAS HOLDING TANKS
8	WASTE GAS BURNER
9	SEWAGE PUMPING STATION
10	FERRIC CHLORIDE DOSING FACILITIES
11	WATER METER CABINET
12	H2S REMOVAL SYSTEM
13	UNDERPASS (PART)
14	GUARD HOUSE
15	TRANSFORMER AND SWITCHROOM
16	FIRE HYDRANT AND BOOSTER PUMP ROOM
18	DEODORIZATION SYSTEM NO. 11
19	DEODORIZATION SYSTEM NO. 12
20	PLANT SERVICES WATER SYSTEM
21	THP COOLERS PUMPING STATION
22	SIDESTREAM TREATMENT FACILITIES
23	SURPLUS ACTIVATED SLUDGE PUMPING STATION
24	EXISTING CONSOLIDATION HOUSE

AECOM

PROJECT 項目

SHEK WU HUI EFFLUENT POLISHING PLANT

CONTRACT TITLE
SHEK WU HUI EFFLUENT POLISHING PLANT - MAIN WORKS STAGE 1 - SIDESTREAM TREATMENT FACILITIES AND E&M WORKS FOR SLUDGE TREATMENT FACILITIES

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
-	MAR. 19	TENDER DRAWING	TLST

STATUS 階段

SCALE 比例: A1 1 : 1000

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號: 60427128

CONTRACT NO. 合約編號: DE/2018/03

SHEET TITLE 圖紙名稱

SHEK WU HUI EFFLUENT POLISHING PLANT GENERAL LAYOUT PLAN

SHEET NUMBER 圖紙編號

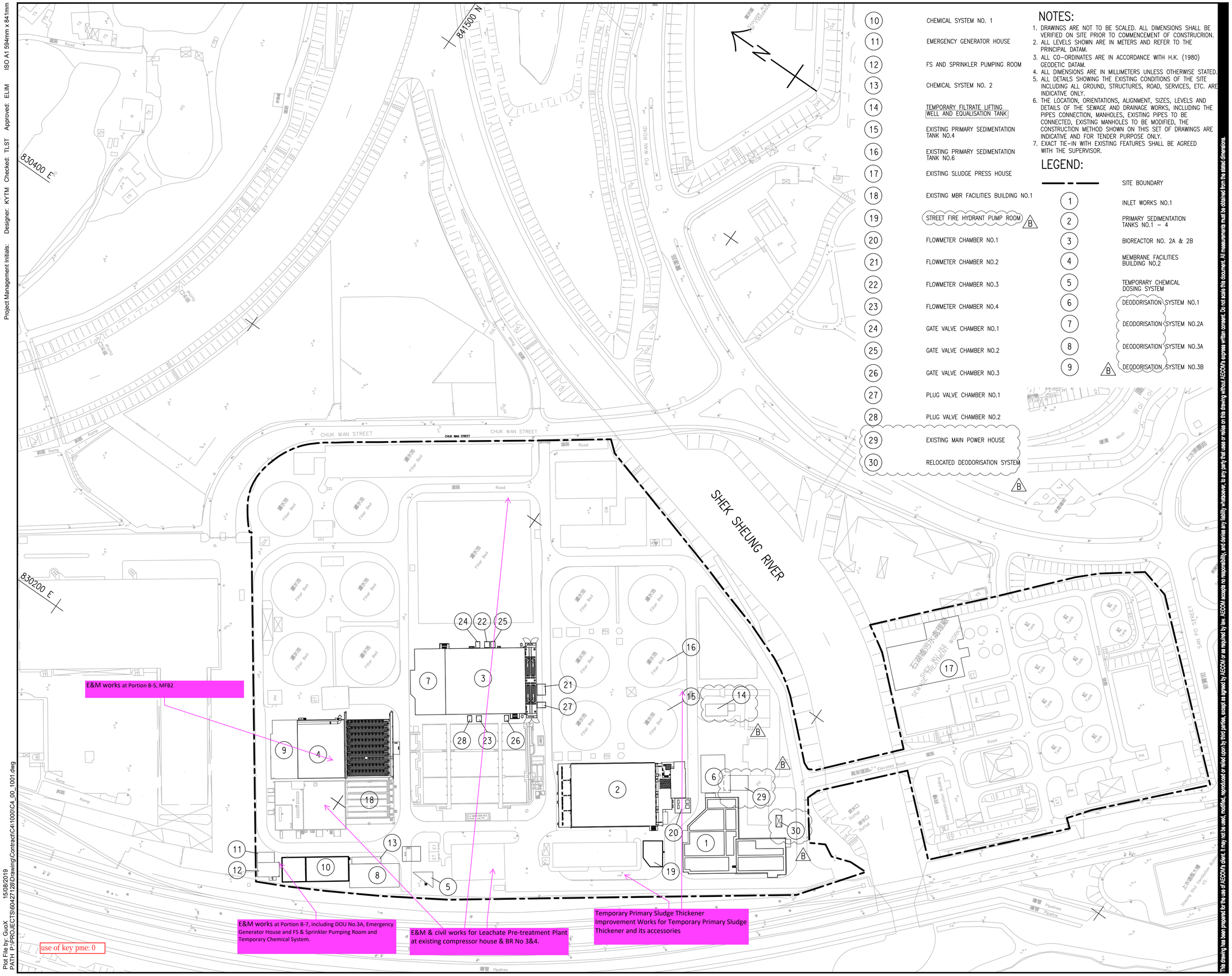
60427128/C2/00/1001

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

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

Plot File by: GuoX 26/03/2019
PATH P:\PROJECTS\60427128\Drawing\Contract\C2\1000\C2_00_1001.dwg

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



10 CHEMICAL SYSTEM NO. 1
11 EMERGENCY GENERATOR HOUSE
12 FS AND SPRINKLER PUMPING ROOM
13 CHEMICAL SYSTEM NO. 2
14 TEMPORARY FILTRATE LIFTING WELL AND EQUALISATION TANK
15 EXISTING PRIMARY SEDIMENTATION TANK NO.4
16 EXISTING PRIMARY SEDIMENTATION TANK NO.6
17 EXISTING SLUDGE PRESS HOUSE
18 EXISTING MBR FACILITIES BUILDING NO.1
19 STREET FIRE HYDRANT PUMP ROOM B
20 FLOWMETER CHAMBER NO.1
21 FLOWMETER CHAMBER NO.2
22 FLOWMETER CHAMBER NO.3
23 FLOWMETER CHAMBER NO.4
24 GATE VALVE CHAMBER NO.1
25 GATE VALVE CHAMBER NO.2
26 GATE VALVE CHAMBER NO.3
27 PLUG VALVE CHAMBER NO.1
28 PLUG VALVE CHAMBER NO.2
29 EXISTING MAIN POWER HOUSE
30 RELOCATED DEODORISATION SYSTEM

NOTES:

1. DRAWINGS ARE NOT TO BE SCALED. ALL DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCRION.
2. ALL LEVELS SHOWN ARE IN METERS AND REFER TO THE PRINCIPAL DATAM.
3. ALL CO-ORDINATES ARE IN ACCORDANCE WITH H.K. (1980) GEODETIC DATAM.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
5. ALL DETAILS SHOWING THE EXISTING CONDITIONS OF THE SITE INCLUDING ALL GROUND, STRUCTURES, ROAD, SERVICES, ETC. ARE INDICATIVE ONLY.
6. THE LOCATION, ORIENTATIONS, ALIGNMENT, SIZES, LEVELS AND DETAILS OF THE SEWAGE AND DRAINAGE WORKS, INCLUDING THE PIPES CONNECTION, MANHOLES, EXISTING PIPES TO BE CONNECTED, EXISTING MANHOLES TO BE MODIFIED, THE CONSTRUCTION METHOD SHOWN ON THIS SET OF DRAWINGS ARE INDICATIVE AND FOR TENDER PURPOSE ONLY.
7. EXACT TIE-IN WITH EXISTING FEATURES SHALL BE AGREED WITH THE SUPERVISOR.

LEGEND:

SITE BOUNDARY
1 INLET WORKS NO.1
2 PRIMARY SEDIMENTATION TANKS NO.1 – 4
3 BIOREACTOR NO. 2A & 2B
4 MEMBRANE FACILITIES BUILDING NO.2
5 TEMPORARY CHEMICAL DOSING SYSTEM
6 DEODORISATION SYSTEM NO.1
7 DEODORISATION SYSTEM NO.2A
8 DEODORISATION SYSTEM NO.3A
9 B DEODORISATION SYSTEM NO.3B

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimension.

AECOM

PROJECT 項目

SHEK WU HUI EFFLUENT POLISHING PLANT

CONTRACT TITLE
SHEK WU HUI EFFLUENT POLISHING PLANT - MAIN WORKS STAGE 1 - E&M WORKS FOR SEWAGE TREATMENT FACILITIES

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. 檢核
B	AUG. 19	TENDER ADDENDUM NO. 3	TLST
A	JUL. 19	TENDER ADDENDUM NO. 2	TLST
-	APR. 19	TENDER DRAWING	TLST

STATUS 用途

SCALE 比例
A1 1 : 1000

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖

PROJECT NO. 項目編號
60427128

CONTRACT NO. 合約編號
DE/2018/04

SHEET TITLE 圖紙名稱
GENERAL LAYOUT PLAN

SHEET NUMBER 圖紙編號
60427128/C4/00/1001B

Plot File by: GuoX 15/08/2019
PATH: P:\PROJECTS\60427128\Drawing\Contract\C4\1000\C4_00_1001.dwg

use of key pme: 0

Appendix 3.1

Environmental Mitigation Implementation Schedule

Appendix 3.1 Environmental Mitigation Implementation Schedule

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
Air Quality Monitoring							
S2.4.1.3	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices:						
	• Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;	To minimize the dust impact	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Air Pollution Control Ordinance (APCO) and Air Pollution Control (Construction Dust)	*
	• Any dusty material remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads;						^
	• A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones;						^
	• The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle;						^
	• Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
	• When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.						^
	• The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials;						^
	• Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously;						^
	• Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet;						^
	• Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding;						^
	• Any skip hoist for material transport should be totally enclosed by impervious sheeting;						^
	• Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides;						^
	• Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed;						^

	• Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and						^
	• Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
Noise Impact							
S3.4.1.1	Use of movable barrier, enclosure, acoustic mat and quiet plant. Use of wooden frames barrier with a small-cantilevered upper portion of superficial density not less than 14kg/m² on a skid footing with 25mm thick internal sound absorptive lining.	To minimize construction noise impact arising from the Project at the affected noise sensitive receivers (NSRs)	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, Noise Control Ordinance (NCO)	^
S3.4.1.2	Good Site Practice:						
	• Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program.	To minimize construction noise impact arising from the Project at the affected NSRs	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, NCO	^
	• Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program.						^
	• Mobile plant, if any, should be sited as far away from NSRs as possible.						^
	• Machines and plant (such as trucks) that may be in intermittent use should be shut down between works periods or should be throttled down to a minimum.						^
	• Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.						^
	• Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
Ecological Impact							
S4.2.1.1	Solid dull green noise/visual barriers of at least 2m high shall be erected and maintained between active works area and all areas of ecological importance.	Minimize noise and human disturbances during construction phase.	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
S4.2.1.2	Avoid unnecessary lighting.	Minimize mortality impacts on birds.	Design / Contractor/ Plant Operator	Work Sites	Construction and operation phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
S4.2.1.3	Good construction site practice to minimise dust generation should be followed on all construction sites. Measures to avoid, minimise and mitigate impacts on air quality are detailed in this schedule.	Minimize dust generation from construction sites.	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
S4.2.1.4	The following measures to avoid, minimise and mitigate impact on water quality during construction phase shall be implemented						
	• Temporary sewerage and drainage to be designed and installed to collect wastewater and prevent it from entering water bodies;	Avoid, minimise and mitigate impact on water quality	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM	^
	• Proper locations well away from nearby water bodies should be used for temporary storage of materials (i.e. equipment, filling materials, chemicals and fuel) and temporary stockpiles of construction debris and spoil, and these should be identified before commencement of works;						^
	• To prevent muddy water entering nearby water bodies, work sites close to nearby water bodies should be isolated, using such items as sandbags or silt curtains with lead edge at bottom and properly supported props. Other protective measures should also be taken to ensure that no pollution or siltation occurs to the water gathering grounds of the work sites;						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
	• Construction debris and spoil should be covered and/or properly disposed of as soon as possible to avoid these being washed into nearby water bodies;						^
	• Proper locations for discharge outlets of temporary wastewater treatment facilities well away from sensitive receivers should be identified;						^
	• Adequate lateral support should be erected where necessary in order to prevent soil/mud from slipping into water bodies;						^
	• Site boundaries should be clearly marked and any works beyond the boundary strictly prohibited;						^
	• Regular water monitoring and site audit should be carried out at adequate points along any watercourses where construction works are underway upstream within their catchments and also on the Ng Tung, Sheung Yue and Shek Sheung Rivers. If the monitoring and audit results show that pollution occurs, adequate measures including temporarily cessation of works should be considered;						^
	• Excavation profiles should be properly designed and executed with attention to the relevant requirements for environment, health and safety;						^
	• Where soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; Stockpiling sites should be lined with impermeable sheeting and bunded. Stockpiles should be properly covered by impermeable sheeting to reduce dust emission during dry season or contaminated run-off during rainy season. Watering should be avoided on stockpiles of						^
	• contaminated soil to minimize contaminated runoff and construction materials should be properly covered and located away from nearby water bodies; and						^
	• Supply of suitable clean backfill material after excavation, if required.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
	• Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or contaminated run-off, and truck bodies and tailgates should be sealed to prevent discharge during transport or during wet season;						^
	• Speed control for the trucks carrying contaminated materials should be enforced;						^
	• Vehicle wheel washing facilities at construction sites' exit points should be established and used, where necessary; and						^
	• Other measures as detailed in this schedule.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
Water Quality Impact							
S5.2.2.1	<u>Construction Site Runoff</u> Practices and measures provided in the Practice Note for Professional Persons on Construction Site Drainage, (PROPECC PN1/94) should be followed where applicable.	Control construction runoff	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, WPCO, EIAO	^
S5.2.2.2 – S5.2.2.3	Sewage from Workforce						
	• Portable chemical toilets and sewage holding tanks should be provided for handling the construction sewage generated by the workforce. A licensed Contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance;	Handling of site sewage	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	EIAO-TM, WPCO, EIAO	^
	• Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the Project would not cause water quality impact after undertaking all required measures						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
Waste Management							
S6.2.2.1	Good Site Practices and Waste Reduction Measures						
	• Nomination of an approved person, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;	Minimize waste generation during construction	Contractors	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal Ordinance (WDO)	^
	• Training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling;						^
	• Provision of sufficient waste disposal points and regular collection for disposal;						^
	• Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;						^
	• Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;						^
	• An Environmental Management Plan (EMP) should be prepared by the contractor and submitted to the Supervisor for approval.						^
S6.2.3.1	Waste Reduction Measures						
	• Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Reduce waste generation	Contractors	Work Sites	Prior to the commencement of construction of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	• Proper storage and site practices to minimize the potential for damage and contamination of construction materials;						^
	• Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste;						^
	• Sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.); and						^
	• Provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
S6.2.4.1	Storage, Collection and Transportation of Waste Should any temporary storage or stockpiling of waste is required, recommendations to minimize the impacts include:	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	• Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing the potential of pollution;						^
	• Stockpiling area should be provided with covers and water spraying system to prevent materials from windblown or being washed away; and						^
	• Different locations should be designated to stockpile each material to enhance reuse.						^
S6.2.4.2	Storage, Collection and Transportation of Waste (con't)						
	• Remove waste in timely manner;	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	• Employ the trucks with cover or enclosed containers for waste transportation;						^
	• Obtain relevant waste disposal permits from the appropriate authorities; and						^
	• Disposal of waste should be done at licensed waste disposal facilities						^
S6.2.5.2	C&D Materials from Site Formation						
	• Maintain temporary stockpiles and reuse excavated fill material for backfilling;	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Land (Miscellaneous Provisions) Ordinance, WDO, ETWB TCW No. 19/2005	^
	• Carry out on-site sorting;						^
	• Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate;						^
	• Adopt "selective demolition" technique to demolish the existing structure and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; and						^
	• Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified.						^
S6.2.5.3	C&D Material from Buildings Demolition and New Building Construction						

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
	• The Contractor should recycle as much as possible of the C&DM on-site. Public fill and C&DM waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. For example, concrete and masonry can be crushed and used as fill, and steel reinforcing bar can be used by scrap steel mills. Different areas of the work sites should be designated for such segregation and storage.	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Land (Miscellaneous Provisions) Ordinance, WDO, ETWB TCW No. 19/2005	^
	• The use of wooden hoardings shall not be allowed. An alternative material, such as metal, aluminium or alloy etc, could be used.						^
	• Government has developed a charging policy for the disposal of waste to landfill at present. It will provide additional incentive to reduce the volume of generated waste and ensure proper segregation to allow reuse of the inert material on site when implemented.						^
	• In order to minimize the impacts of the demolition works, the generated wastes must be cleared as quickly as possible after demolition. Therefore, the demolition and clearance works should be undertaken simultaneously. To facilitate proper segregation of inert and non-inert C&D material arising from demolition works, selective demolition method should be adopted.						^
S6.2.5.4	Chemical Waste						
	• If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers.	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal (Chemical Waste General) Regulation, Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	^
	• Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.						^
S6.2.5.5	General Refuse						

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
	• General refuse should be stored in enclosed bins separately from construction and chemical wastes.	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	Waste Disposal (Chemical Waste General) Regulation	^
	• Recycling bins should also be placed to encourage recycling.						^
	• Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean.						^
	• A reputable waste collector should be employed to remove general refuse on a daily basis.						^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
Landscape and Visual							
S7.3.1.1	Good Site Practices Measures						
	• For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to.	Minimize the impact to the landscape and visual	Contractor	Work Sites	Prior to construction and construction phase		N/A
	• With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites.						N/A
S7.3.2.1	MM4 - Tree Protection & Preservation • Existing trees to be retained within the Project Site should be carefully protected during construction. In particular Old and Valuable Trees (OVTs) will be preserved according to ETWB TC (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.	Protect and Preserve Trees	Designer / Contractor	Work Sites	Prior to construction and construction phase	ETWB TCW No. 29/2004 and DEVB TC(W) No.7/2015	^

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
S7.3.2.1	MM5 - Tree Transplantation • Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC No. 2/2004 and DEVB TC(W) No. 7/2015 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be referred to.	Transplant Trees where suitable for transplantation	Designer / Contractor	Work Sites where possible. Otherwise consider offsite locations	Prior to construction, construction phase and operation phase	DEVB TC(W) No. 7/2015 and ETWB TCW No.2/2004 HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit	N/A
S7.3.2.1	MM6 - Slope Landscaping						
	• Site formation should be reduced as far as possible. Hydroseeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape recourses and charter. Woodland tree seedings and/or shrubs should be planted where slope gradient and site conditions allow.	To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure manmade slopes are as visually amenable as possible.	Designer / Contractor	Work Sites	Prior to construction, construction phase and operation phase	GEO Publication (1999) - Use of Vegetation as Surface Protection on Slope; GEO Publication No. 1/2011- Technical Guidelines on Landscape Treatment for Slopes	N/A
	• In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping						N/A
S7.3.2.1	MM7 - Compensatory Planting						

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
	• Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under DEVB TC(W) No. 7/2015.	Compensate for trees and shrubs lost due to the Project	Designer / Contractor	Work Sites where possible. Otherwise consider offsite locations	Prior to construction, construction phase and operation phase	DEVB TC(W) No. 7/2015 and ETWB TCW No. 2/2004	N/A
	• Compensatory planting is proposed at the potential open areas such as open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots.						N/A
	• Compensatory planting for shrubs should be considered in suitable locations. Native species such as *Melastoma malabathricum, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii are suggested.*						N/A
S7.3.2.1	MM9 - Vertical Greening • Planting of climbers to grow up vertical surfaces were appropriate.	Soften hard surfaces and facilities	Designer / Contractor	On appropriate structures	Prior to construction, construction phase and operation phase	ETWB TCW No.11/2004 – Cyber Manual for Greening	N/A
S7.3.2.1	MM10 - Green Roof • Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable.	Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to visually sensitive receivers (VSRs) at high levels. Provide greening	Designer / Contractor	On appropriate buildings	Prior to construction, construction phase and operation phase	CIBSE HK Branch, Technical Guidelines for Green Roof Systems in Hong Kong (2011); ArchSD/Urbis Study on Green Roof Application in HK (2007)	N/A

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	What requirements or standards for the measure to achieve	Remark
S7.3.2.1	MM11 - Screen Planting • Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting.	To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment	Designer / Contractor	Along roads, around suitable built structures, or around VSRs to contain their view out to the structures.	Prior to construction, construction phase and operation phase	ETWB TCW No. 10/2013 and 3/2006	N/A
S7.3.2.1	MM16 - Screen Hoarding • Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment. [Chapter 13 of the EIA Report of NENT NDAs (Register No. AEIAR-175- 2013)]	To screen undesirable views of the works site.	Designer	Work Sites	Construction phase		N/A
S7.3.2.1	MM17 - Light Control • Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase.	To minimize glare impact to adjacent VSRs.	Designer / Contractor	Work Sites and/or the Plant	Construction phase and operation phase		N/A

Remarks:
^ Implemented
* To be followed-up by Contractor
# Not Implemented
N/A Not Applicable

Appendix 4.1

Action and Limit Level

Action and Limit Levels

Air Quality Monitoring

Monitoring Station	1-hour TSP Level in μg/m^3		24-hour TSP Level in μg/m^3	
	Action Level	Limit Level	Action Level	Limit Level
AM1	320	500	189	260
AM2	322	500	187	260

Noise Monitoring

Monitoring Stations	Leq(30min),dB(A)	
	Action Level (dB(A))	Limit Level (dB(A))
NM1	When one documented complaint is received	75*
NM2		
NM3		

*Notes: (1) If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) used by the Noise Control Authority should be followed.

(2) The limit level shall be 70 dB(A) and 65 dB(A) for educational institute during normal teaching periods and school examination periods, respectively.

Ecological Monitoring of Waterbirds using Ng Tung, Sheung Yue and Shek Sheung Rivers during Construction Phase

Action Level	Limit Level
Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that Action Level response is triggered.	Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Limit Level response is triggered.
Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Action Level Response is triggered.	Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Limit Level response is triggered.

*Note: Whether numbers are significant depend on species and season after collection and evaluation of baseline data.

Appendix 4.2

Copies of Calibration Certificates

TISCH Environmental

RECALIBRATION DUE DATE:
March 31, 2024

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	March 31, 2023	**Rootsmeter S/N:** 438320	**Ta:** 294	°K
Operator:	Jim Tisch		**Pa:** 749.0	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3166**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4500	3.2	2.00
2	3	4	1	1.0210	6.4	4.00
3	5	6	1	0.9120	8.0	5.00
4	7	8	1	0.8710	8.8	5.50
5	9	10	1	0.7170	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9947	0.6860	1.4135	0.9957	0.6867	0.8860
0.9905	0.9701	1.9990	0.9915	0.9711	1.2530
0.9883	1.0837	2.2349	0.9893	1.0848	1.4009
0.9873	1.1335	2.3440	0.9883	1.1346	1.4693
0.9819	1.3695	2.8270	0.9829	1.3709	1.7720
QSTD	**m=**	**2.07036**	**QA**	**m=**	**1.29643**
	b=	**-0.00719**		**b=**	**-0.00451**
	r=	**0.99999**		**r=**	**0.99999**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

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

RECALIBRATION

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

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

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

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM1a*	**Calbration Date**	:	10-Jul-23
Equipment no.	:	2036	**Calbration Due Date**	:	9-Sep-23

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	304	Kelvin	**Pressure, P_a**	1009	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3166**	**Slope, m_c**	2.07036	**Intercept, bc**	-0.00719
Last Calibration Date	31-Mar-23	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Mar-24	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.8	1.8	3.6	0.9089	29	28.6514
2	2.7	2.7	5.4	1.1124	36	35.5673
3	3.9	3.9	7.8	1.3362	44	43.4711
4	5.5	5.5	11.0	1.5862	55	54.3389
5	6.5	6.5	13.0	1.7240	60	59.2788

By Linear Regression of Y on X

Slope, m = 38.0639 Intercept, b = -6.4985

Correlation Coefficient* = 0.9989

Calibration Accepted = Yes/~~No~~**

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:2036

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	10-Jul-23	**Date**	:	10-Jul-23

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM1a*	**Calbration Date**	:	11-Sep-23
Equipment no.	:	2036	**Calbration Due Date**	:	11-Nov-23

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	300	Kelvin	**Pressure, P_a**	1007	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3166**	**Slope, m_c**	2.07036	**Intercept, bc**	-0.00719
Last Calibration Date	31-Mar-23	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Mar-24	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** $(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.5	1.5	3.0	0.8347	28	27.8196
2	2.4	2.4	4.8	1.0549	34	33.7810
3	3.8	3.8	7.6	1.3265	43	42.7230
4	5.1	5.1	10.2	1.5361	50	49.6779
5	6.5	6.5	13.0	1.7338	56	55.6392

By Linear Regression of Y on X

Slope, m	=	31.3910	Intercept, b	=	1.2083
Correlation Coefficient*	=	0.9995			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:2036

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	11-Sep-23	**Date**	:	11-Sep-23

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM2a	**Calbration Date**	:	10-Jul-23
Equipment no.	:	774	**Calbration Due Date**	:	9-Sep-23

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	304	Kelvin	**Pressure, P_a**	1009	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3166**	**Slope, m_c**	2.07036	**Intercept, bc**	-0.00719
Last Calibration Date	31-Mar-23	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	30-Mar-24	$= m_c \times Q_{std} + b_c$			

Calibration of TSP						
Calibration Point	**Manometer Reading H (inches of water)**			**Q_{std}** (m^3 / min.)	**Continuous Flow Recorder, W**	**IC** ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$)
	(up)	(down)	(difference)	**X-axis**	(CFM)	**Y-axis**
1	1.6	1.6	3.2	0.8571	24	23.7115
2	2.0	2.0	4.0	0.9579	30	29.6394
3	2.9	2.9	5.8	1.1527	38	37.5432
4	4.0	4.0	8.0	1.3532	44	43.4711
5	5.0	5.0	10.0	1.5125	50	49.3990

By Linear Regression of Y on X

Slope, m	=	37.8822	Intercept, b	=	-7.4439
Correlation Coefficient*	=	0.9948			
Calibration Accepted	=	Yes/~~No~~**			

* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : Serial No.:774

Calibrated by	:	William Cheung	**Checked by**	:	Derek Lo
Date	:	10-Jul-23	**Date**	:	10-Jul-23

Met One Instruments, Inc.
1600 NW Washington Blvd, Grants Pass, OR
TEL (541) 471-7111 Fax (541) 471-7116

Certificate of Calibration

BT-645

Particulate Monitor

Recommended calibration interval is 24 months from first day of use.

Unit Info

Model:	*BT-645*	**81865 Firmware Rev:**	*1.3.0*
Serial Number:	*C15622*	**81113**	*0.2.4*
Calibrated By:	*J. Walker AT28*	**Cal. Date:**	*07/07/2022*
Quality Inspector:	*Joni Chuckel*	**Date:**	*07/07/2022*
Calibration Hz/µg/m³:	*7.10*		

Final Test

Flow (2.0 L/M): Pass

Ambient T (C) *23.8*

RH, % *38.7*

Serial Communication: Pass

BT-645 Conc.: *425.64* Standard Conc: *420.49*

Calibration Standards

Standards	Manufacturer	Model	SN	Cal Due
RMS Multimeter	Fluke	189 Multimeter	94060816	11/08/2022
RH &TEMPERATURE	Met One Instruments	083E-1-35	GP-679	05/17/2023
Primary Flow Meter	TSI	4040	40401945009	01/31/2023
Digital Dust Indicator	SIBATA	LD-3	476795	08/23/2022

The standards used for this calibration have accuracy equal to or greater than the instrument tested. These standards are on record and traceable to NIST to the extent allowed by the institute's calibration facility. Unless otherwise stated, all instruments are calibrated to meet the manufacturer's published specifications.

Hong Kong Calibration Ltd.
香 港 校 正 有限公司

Calibration Certificate

Certificate No. 211036 Page 1 of 2 Pages

Customer : Lam Environmental Services Limited

Address : 19/F, Remex Centre, 42 Wong Chuk Hang Road, Hong Kong

Order No. : Q24331 **Date of receipt :** 24-Nov-22

Item Tested

Description : Aerosol Mass Monitor

Manufacturer : Met One **I.D.** : --

Model : Aerocet 831 **Serial No.** : Y23153

Test Conditions

Date of Test : 13-Dec-22 **Supply Voltage** : --

Ambient Temperature : (23 ± 3)°C **Relative Humidity :** (50 ± 25) %

Test Specifications

Calibration check.

Calibration procedure : Manufacturer recommended method (gravimetric), Z28.

Test Results

All results were within the tolerance(s).

The results are shown in the attached page(s).

Main Test equipment used:

Equipment No.	Description	Cert. No.	Traceable to
S136B	Stop Watch	201879	SCL-HKSAR
S238	Micro Balance	108228	NIM-PRC
S201	Std. Test Dust	61291	NIST
S207B	Std. Flowmeter	LL-2104002489	NIM-PRC

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

The test equipment used for calibration are traceable to International System of Units (SI), or by reference to a natural constant.
The test results apply to the above Unit-Under-Test only

Calibrated by : Kin Wong

Approved by : Steve Kwan

Date: 13-Dec-22

This Certificate is issued by:
Hong Kong Calibration Ltd.
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong.
Tel: 2425 8801 Fax: 2425 8646

The copyright of this certificate is owned by Hong Kong Calibration Ltd.. It may not be reproduced except in full.

O

Calibration Certificate

Results :

1. General

Internal Filters : checked and found clean.

2. Flow Meter

UUT Nominal Value (LPM)	Measured Value (LPM)	Tolerance (LPM)	Uncertainty
2.83	2.80	± 0.15	± 0.05

3. Timer

Reference Value	UUT Reading	Tolerance	Uncertainty
10′ 00″ 40	10 min	± 2 sec/hr	± 0.5 sec/hr

4. Dust Particle (PM_{10})

Applied Value ($\mu g/m^3$)	UUT Reading ($\mu g/m^3$) K Factor : 1.26	Tolerance	Uncertainty
350	364	± 20 %	± 10 %

Remark : 1. UUT: Unit-Under-Test
2. The uncertainty claimed is for a confidence probability of not less than 95%.
3. ISO 12103-1 A1 respirable standard test dust was used for the calibration.
4. The K Factor had been adjusted from 3.00 to 1.26.

---------- END ----------

The copyright of this certificate is owned by Hong Kong Calibration Ltd., It may not be reproduced except in full.

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

Calibration Data for High Volume Sampler (TSP Sampler)

Equipment no.	2493
Calbration Date	3/2/2023
Calbration Due Date	3/4/2023
Location	G/FL;No.20,Pak Kung Street,Hung Hom ,Kowloon.

Ambient Condition					
Temperature, T_a	292	Kelvin	**Pressure, P_a**	1018	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3880**	**Slope, m_c**	2.07013	**Intercept, bc**	-0.00727
Last Calibration Date	28/6/2022	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	28/6/2023	$= m_c \times Q_{std} + b_c$			

Calibration of TSP

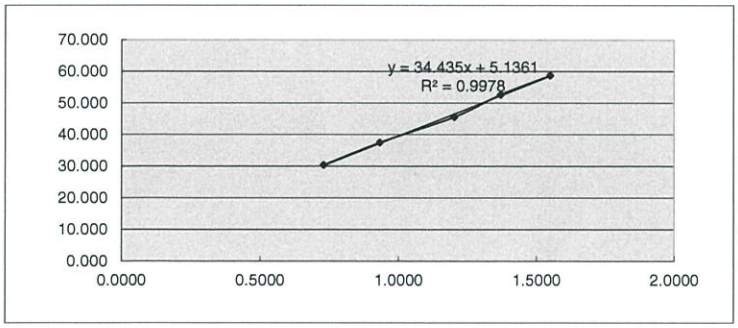
Calibration Point	Manometer Reading H (inches of water) (up)	(down)	(difference)	Q_{std} (m^3 / min.) X-axis	Continuous Flow Recorder, W (CFM)	IC $(W(P_a/1013.3x298/T_a)^{1/2}/35.31)$ Y-axis
1	1.1	1.1	2.2	0.7290	30	30.3769
2	1.8	1.8	3.6	0.9316	37	37.4648
3	3.0	3.0	6.0	1.2016	45	45.5653
4	3.9	3.9	7.8	1.3696	52	52.6532
5	5.0	5.0	10.0	1.5503	58	58.7286

By Linear Regression of Y on X

Slope, m = 34.4355 Intercept, b = 5.1361

Correlation Coefficient* = 0.9989

Calibration Accepted = Yes/~~No~~**



* if Correlation Coefficient < 0.990, check and recalibration again.

** Delete as appropriate.

Remarks : _____

Calibrated by : Poon Wai Hung

Date : 3/4/2023

Checked by : Lo Kam Chuen

Date : 3/4/2023

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

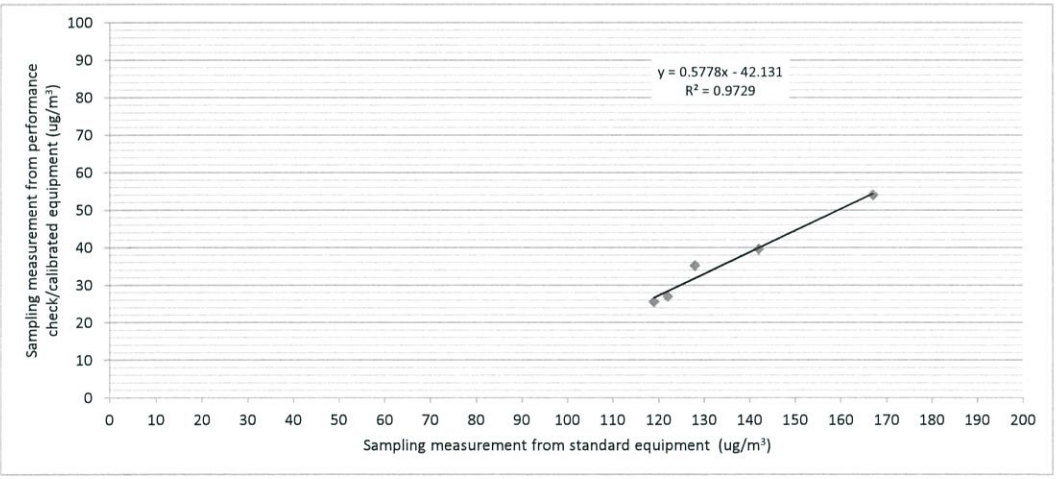
Equipment	Portable Dust Meter	Standard Equipment (High Volume Sampler)
Manufacturer	MET ONE INSTRUMENTS	TISCH
Model Number	BT-645	TE-5170
Serial Number	C15622	2493
Date	3/2/2023	3/2/2023
Location	GCE laboratory - G/FL; No.20, Pak Kung Street, Hung Hom,Kowloon.	

Portable Dust Meter Performance Check Results

Check Point	Date & Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard equipment) (X - Axis)	Concentration in ug/m^3 (Performance Check / Calibrated equipment) (Y - Axis)
1	3/2/2023 9:30 -10:30	18	1019	167	54
2	3/2/2023 11:32 -12:32	18	1019	142	40
3	3/2/2023 12:34 - 13:34	18	1019	128	35
4	3/2/2023 13:36 - 14:36	18	1019	122	27
5	3/2/2023 14:38 - 15:38	18	1019	119	25

Linear Regression of Y on X

Slope (K- factor) : 1.7000
Correlation Coefficient : 0.9863
Validity of Performance Check / Calibration Record : 3/2/2024



Operator: Poon Wai Hung Date: 9/2/2023

Checked by: Ko Kam Chuen Date: 9/2/2023

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

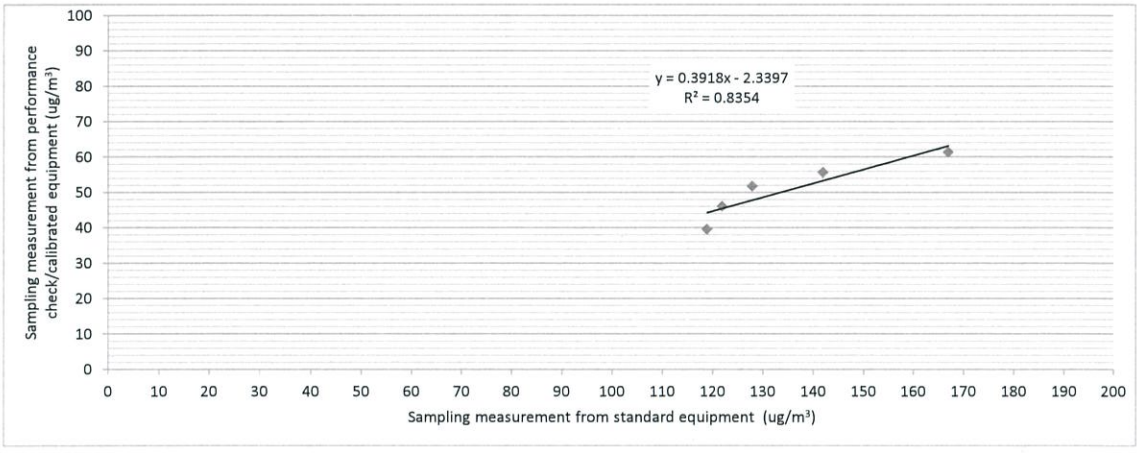
Equipment	Portable Dust Meter	Standard Equipment (High Volume Sampler)
Manufacturer	MET ONE INSTRUMENTS	TISCH
Model Number	AEROCET831	TE-5170
Serial Number	Y23153	2493
Date	3/2/2023	3/2/2023
Location	GCE laboratory-G/FL;No.20 Pak Kung Street., Hung Hom, Kowloon	

Portable Dust Meter Performance Check Results

Check Point	Date & Time	Mean Temp (°C)	Mean Pressure (hPa)	Concentration in ug/m^3 (Standard equipment) (X - Axis)	Concentration in ug/m^3 (Performance Check / Calibrated equipment) (Y - Axis)
1	3/2/2023 9:30 -10:30	18	1019	167	61
2	3/2/2023 11:32 -12:32	18	1019	142	56
3	3/2/2023 12:34 - 13:34	18	1019	128	52
4	3/2/2023 13:36 - 14:36	18	1019	122	46
5	3/2/2023 14:38 - 15:38	18	1019	119	40

Linear Regression of Y on X

Slope (K- factor) : 2.2000
Correlation Coefficient : 0.9140
Validity of Performance Check / Calibration Record : 3/2/2024



Operator: Poon Wai Hung Date: 9/2/2023

Checked by: Lo Kam Chuen Date: 9/2/2023

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 23CA0308 01 **Page** 1 **of** 2

Item tested

Description:	Sound Level Meter (Type 1)	,	Microphone	Preamp
Manufacturer:	Nti	,	Nti Andio	Nti Andio
Type/Model No.:	XL2	,	MC230A	MA220
Serial/Equipment No.:	A2A-15269-EO	,	A16673	8034
Adaptors used:	-	,		

Item submitted by

Customer Name:	Lam Environmental Services Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	08-Mar-2023

Date of test: 09-Mar-2023

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	23-Aug-2023	CIGISMEC
Signal generator	DS 360	61227	08-Jun-2023	CEPREI

Ambient conditions

Temperature:	22 ± 1 °C
Relative humidity:	55 ± 10 %
Air pressure:	1010 ± 5 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory: Feng Junqi **Date:** 13-Mar-2023 **Company Chop:** SOILS AND MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 23CA0308 01 **Page** 2 **of** 2

1, Electrical Tests

The electrical tests were perfomed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	2.1
	Lin	Pass	1.6	2.2
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100μs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor $1/10^3$ at 4kHz	Pass	0.3	
	1 ms burst duty factor $1/10^4$ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertainty (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Date:** 09-Mar-2023

Checked by: Chan Yuk Yiu **Date:** 13-Mar-2023

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2023

Microphone type: MC230A Serial No. A16673

Report: 23CA0308 01

SELF GENERATED NOISE TEST

The noise test is performed in the most sensitive range of the SLM with the microphone replaced by an equivalent impedance.

Noise level in A weighting	11.5	dB
Noise level in C weighting	15.4	dB
Noise level in Lin	20.4	dB

LINEARITY TEST

The linearity is tested relative to the reference sound pressure level using a continuous sinusoidal signal of frequency 4 kHz. The measurement is made on the reference range for indications at 5 dB intervals starting from the 94 dB reference sound pressure level. And until within 5 dB of the upper and lower limits of the reference range, the measurements shall be made at 1 dB intervals.(SLM set to LEQ/SPL)

Reference/Expected level	Actual level		Tolerance	Deviation	
	non-integrated	integrated		non-integrated	integrated
dB	dB	dB	+/- dB	dB	dB
94.0	94.0	94.0	0.7	0.0	0.0
99.0	99.0	99.0	0.7	0.0	0.0
104.0	104.0	104.0	0.7	0.0	0.0
109.0	109.0	109.0	0.7	0.0	0.0
114.0	114.0	114.0	0.7	0.0	0.0
115.0	115.0	115.0	0.7	0.0	0.0
116.0	116.0	116.0	0.7	0.0	0.0
117.0	117.0	117.0	0.7	0.0	0.0
118.0	118.0	118.0	0.7	0.0	0.0
119.0	119.0	119.0	0.7	0.0	0.0
120.0	120.0	120.0	0.7	0.0	0.0
89.0	89.0	89.0	0.7	0.0	0.0
84.0	84.0	84.0	0.7	0.0	0.0
79.0	79.0	79.0	0.7	0.0	0.0
74.0	74.0	74.0	0.7	0.0	0.0
69.0	69.0	69.0	0.7	0.0	0.0
64.0	64.0	64.0	0.7	0.0	0.0
59.0	59.0	59.0	0.7	0.0	0.0
54.0	54.0	54.0	0.7	0.0	0.0
49.0	49.0	49.0	0.7	0.0	0.0
44.0	44.0	44.0	0.7	0.0	0.0
39.0	39.0	39.0	0.7	0.0	0.0
34.0	34.1	34.1	0.7	0.1	0.1
33.0	33.1	33.1	0.7	0.1	0.1

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

Test Data for Sound Level Meter

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2023
Microphone type: MC230A Serial No. A16673
Report: 23CA0308 01

32.0	32.2	32.2	0.7	0.2	0.2
31.0	31.2	31.2	0.7	0.2	0.2
30.0	30.3	30.3	0.7	0.3	0.3

Measurements for an indication of the reference SPL on all other ranges which include it

Other ranges	Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
40-140	94.0	94.0	0.7	0.0
20-120	94.0	94.0	0.7	0.0
0-100	94.0	94.0	0.7	0.0

Measurements on all level ranges for indications 2 dB below the upper limit and 2 dB above the lower limit

Ranges	Reference/Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
40-140	51.0	51.7	0.7	0.7
	138.0	138.0	0.7	0.0
20-120	30.0	30.3	0.7	0.3
	118.0	118.0	0.7	0.0
0-100	30.0	30.0	0.7	0.0
	98.0	98.0	0.7	0.0

FREQUENCY WEIGHTING TEST

The frequency response of the weighting netwoks are tested at octave intervals over the frequency ranges 31.5 Hz to 12500 Hz. The signal level at 1000 Hz is set to give an indication of the reference SPL.

Frequency weighting A:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	54.6	54.4	1.5	1.5	-0.2
63.1	94.0	67.8	67.7	1.5	1.5	-0.1
125.9	94.0	77.9	77.8	1.0	1.0	-0.1
251.2	94.0	85.4	85.3	1.0	1.0	-0.1
501.2	94.0	90.8	90.7	1.0	1.0	-0.1
1995.0	94.0	95.2	95.2	1.0	1.0	0.0
3981.0	94.0	95.0	95.0	1.0	1.0	0.0
7943.0	94.0	92.9	92.9	1.5	3.0	0.0
12590.0	94.0	89.7	89.5	3.0	6.0	-0.2

Frequency weighting C:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2023

Microphone type: MC230A Serial No. A16673

Report: 23CA0308 01

1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	91.0	90.8	1.5	1.5	-0.2
63.1	94.0	93.2	93.1	1.5	1.5	-0.1
125.9	94.0	93.8	93.8	1.0	1.0	0.0
251.2	94.0	94.0	93.9	1.0	1.0	-0.1
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	93.8	93.8	1.0	1.0	0.0
3981.0	94.0	93.2	93.2	1.0	1.0	0.0
7943.0	94.0	91.0	91.0	1.5	3.0	0.0
12590.0	94.0	87.8	87.6	3.0	6.0	-0.2

Frequency weighting Lin:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	94.0	93.8	1.5	1.5	-0.2
63.1	94.0	94.0	93.9	1.5	1.5	-0.1
125.9	94.0	94.0	93.9	1.0	1.0	-0.1
251.2	94.0	94.0	93.9	1.0	1.0	-0.1
501.2	94.0	94.0	93.9	1.0	1.0	-0.1
1995.0	94.0	94.0	93.9	1.0	1.0	-0.1
3981.0	94.0	94.0	94.0	1.0	1.0	0.0
7943.0	94.0	94.0	94.0	1.5	3.0	0.0
12590.0	94.0	94.0	93.9	3.0	6.0	-0.1

Note: No corrections for the frequency response of the microphone, instrument case and windshield are made to the sound level meter.

TIME WEIGHTING FAST TEST

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
116.0	115.0	114.9	1.0	1.0	-0.1

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
116.0	111.9	111.9	1.0	1.0	0.0

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2023
Microphone type: MC230A Serial No. A16673
Report: 23CA0308 01

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities: (Weighting Z, set the generator signal to single, Lzpeak)

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
119.0	119.0	119.5	2.0	0.5

Negative polarities:

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
119.0	119.0	119.5	2.0	0.5

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)

	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation
Time wighting	dB	dB	indication(dB)	+/- dB	dB
Slow	118.0+6.6	118.0	117.9	0.5	-0.1

TIME WEIGHTING IMPULSE TEST

Time weighting I is tested on the reference range (Set the SLM to LAImax)
Test frequency: 2000 Hz
Amplitude: The upper limit of the primary indicator range.

Single sinusoidal burst of duration 5 ms:

Ref. Level	Single burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
120.0	111.2	111.1	2.0	-0.1

Repeated at 100 Hz

Ref. Level	Repeated burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
120.0	117.3	117.1	1.0	-0.2

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst: 4000 Hz
Duration of tone burst: 1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2023

Microphone type: MC230A Serial No. A16673

Report: 23CA0308 01

msec	dB	dB	dB	+/- dB	dB	
1000	90.0	90.0	90.0	1.0	0.0	60s integ.
10000	80.0	80.0	80.0	1.0	0.0	6min. integ.

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz

Integration time: 10 sec

The integrating sound level meter set to Leq:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10	88.0	58.0	58.0	1.7	0.0

The integrating sound level meter set to SEL:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10.0	88.0	68.0	68.0	1.7	0.0

OVERLOAD INDICATION TEST

For SLM capable of operating in a non-integrating mode.

Test frequency: 2000 Hz

Amplitude: 2 dB below the upper limit of the primary indicator range.

Burst repetition frequency: 40 Hz

Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
121.5	120.5	117.5	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following:

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz

Integration time: 10 sec

Single burst duration: 1 msec

Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
127.5	126.5	86.5	86.5	2.2	0.0

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency	Expected level	Actual level	Tolerance (dB)		Deviation
Hz	dB	Measured (dB)	+	-	dB

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Test Data for Sound Level Meter

Sound level meter type: XL2 Serial No. A2A-15269-EO Date 09-Mar-2023
Microphone type: MC230A Serial No. A16673
Report: 23CA0308 01

1000	94.0	94.0	0.0	0.0	0.0
125	77.9	77.9	1.0	1.0	0.0
8000	92.9	92.6	1.5	3.0	-0.3

----------END---------

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

CERTIFICATE OF CALIBRATION

Certificate No.: 22CA1101 02-01 **Page** 1 **of** 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone	Preamp
Manufacturer:	Larson Davis	PCB	PCB
Type/Model No.:	LxT1	377B02	PRMLxT1L
Serial/Equipment No.:	0004797	340739	042622
Adaptors used:	-	-	-

Item submitted by

Customer Name:	Lam Environmental Services Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	01-Nov-2022

Date of test: 04-Nov-2022

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	23-Aug-2023	CIGISMEC
Signal generator	DS 360	33873	21-Jan-2023	CEPREI

Ambient conditions

Temperature:	22 ± 1 °C
Relative humidity:	55 ± 10 %
Air pressure:	1005 ± 5 hPa

Test specifications

1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.

2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of ±20%.

3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

This is to certify that the Sound Level Meter conforms to BS 7580: Part 1: 1997 for the conditions under which the test was performed.

Details of the performed measurements are presented on page 2 of this certificate.

Actual Measurement data are documented on worksheets.

Approved Signatory: Feng Junqi **Date:** 05-Nov-2022 **Company Chop:** SOILS & MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 22CA1101 02-01 **Page** 2 **of** 2

1, Electrical Tests

The electrical tests were perfomed using an equivalent capacitance substituted for the microphone. The results are given in below with test status and the estimated uncertainties. The "Pass" means the result of the test is inside the tolerances stated in the test specifications. The "-" means the result of test is outside these tolerances.

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	2.1
	Lin	Pass	1.6	2.2
Linearity range for Leq	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range , Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100μs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor $1/10^3$ at 4kHz	Pass	0.3	
	1 ms burst duty factor $1/10^4$ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

The complete sound level meter was calibrated on the reference range using a B&K 4226 acoustic calibrator with 1000Hz and SPL 94 dB. The sensitivity of the sound level meter was adjusted. The test result at 125 Hz and 8000 Hz are given in below with test status and the estimated uncertainties.

Test:	Subtest	Status	Expanded Uncertainty (dB)	Coverage Factor
Acoustic response	Weighting A at 125 Hz	Pass	0.3	
	Weighting A at 8000 Hz	Pass	0.5	

3, Response to associated sound calibrator

N/A

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Date:** 04-Nov-2022

Checked by: Chan Yuk Yiu **Date:** 05-Nov-2022

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type:	LxT1	Serial No.	0004797	Date	04-Nov-2022
Microphone type:	377B02	Serial No.	340739		
Preamp type:	PRMLxT1L	Serial No.	042622	Report:	22CA1101 02-01

SELF GENERATED NOISE TEST

The noise test is performed in the most sensitive range of the SLM with the microphone replaced by an equivalent impedance.

Noise level in A weighting	8.7	dB
Noise level in C weighting	12.1	dB
Noise level in Lin	20.4	dB

LINEARITY TEST

The linearity is tested relative to the reference sound pressure level using a continuous sinusoidal signal of frequency 4 kHz. The measurement is made on the reference range for indications at 5 dB intervals starting from the 94 dB reference sound pressure level. And until within 5 dB of the upper and lower limits of the reference range, the measurements shall be made at 1 dB intervals.(SLM set to LEQ/SPL)

Reference/Expected level	Actual level		Tolerance	Deviation	
	non-integrated	integrated		non-integrated	integrated
dB	dB	dB	+/- dB	dB	dB
94.0	94.0	94.0	0.7	0.0	0.0
99.0	99.0	99.0	0.7	0.0	0.0
104.0	104.0	104.0	0.7	0.0	0.0
109.0	109.0	109.0	0.7	0.0	0.0
114.0	114.0	114.0	0.7	0.0	0.0
115.0	115.0	115.0	0.7	0.0	0.0
116.0	116.0	116.0	0.7	0.0	0.0
117.0	117.0	117.0	0.7	0.0	0.0
118.0	118.0	118.0	0.7	0.0	0.0
119.0	119.0	119.0	0.7	0.0	0.0
120.0	120.0	120.0	0.7	0.0	0.0
89.0	89.0	89.0	0.7	0.0	0.0
84.0	84.0	84.0	0.7	0.0	0.0
79.0	79.0	79.0	0.7	0.0	0.0
74.0	74.0	74.0	0.7	0.0	0.0
69.0	69.0	69.0	0.7	0.0	0.0
64.0	64.0	64.0	0.7	0.0	0.0
59.0	59.0	59.0	0.7	0.0	0.0
54.0	54.0	54.0	0.7	0.0	0.0
49.0	49.0	49.0	0.7	0.0	0.0
44.0	44.0	44.0	0.7	0.0	0.0
39.0	38.9	38.9	0.7	-0.1	-0.1
34.0	34.0	34.0	0.7	0.0	0.0
33.0	33.0	33.0	0.7	0.0	0.0

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

Test Data for Sound Level Meter

Sound level meter type:	LxT1	Serial No.	0004797	Date	04-Nov-2022
Microphone type:	377B02	Serial No.	340739		
Preamp type:	PRMLxT1L	Serial No.	042622	Report:	22CA1101 02-01

32.0	32.0	32.0	0.7	0.0	0.0
31.0	30.9	30.9	0.7	-0.1	-0.1
30.0	30.0	30.0	0.7	0.0	0.0

Measurements for an indication of the reference SPL on all other ranges which include it

Other ranges	Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
20-120	94.0	94.0	0.7	0.0

Measurements on all level ranges for indications 2 dB below the upper limit and 2 dB above the lower limit

Ranges	Reference/Expected level	Actual level	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
20-120	30.0	30.0	0.7	0.0
	118.0	118.0	0.7	0.0

FREQUENCY WEIGHTING TEST

The frequency response of the weighting netwoks are tested at octave intervals over the frequency ranges 31.5 Hz to 12500 Hz. The signal level at 1000 Hz is set to give an indication of the reference SPL.

Frequency weighting A:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	54.6	54.6	1.5	1.5	0.0
63.1	94.0	67.8	67.8	1.5	1.5	0.0
125.9	94.0	77.9	77.9	1.0	1.0	0.0
251.2	94.0	85.4	85.4	1.0	1.0	0.0
501.2	94.0	90.8	90.7	1.0	1.0	-0.1
1995.0	94.0	95.2	95.2	1.0	1.0	0.0
3981.0	94.0	95.0	95.0	1.0	1.0	0.0
7943.0	94.0	92.9	92.9	1.5	3.0	0.0
12590.0	94.0	89.7	89.7	3.0	6.0	0.0

Frequency weighting C:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	91.0	91.0	1.5	1.5	0.0
63.1	94.0	93.2	93.1	1.5	1.5	-0.1
125.9	94.0	93.8	93.8	1.0	1.0	0.0
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.0	1.0	1.0	0.0

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type: LxT1 Serial No. 0004797 Date 04-Nov-2022
Microphone type: 377B02 Serial No. 340739
Preamp type: PRMLxT1L Serial No. 042622 Report: 22CA1101 02-01

1995.0	94.0	93.8	93.8	1.0	1.0	0.0
3981.0	94.0	93.2	93.2	1.0	1.0	0.0
7943.0	94.0	91.0	91.0	1.5	3.0	0.0
12590.0	94.0	87.8	87.7	3.0	6.0	-0.1

Frequency weighting Lin:

Frequency	Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
Hz	dB	dB	dB	+	-	dB
1000.0	94.0	94.0	94.0	0.0	0.0	0.0
31.6	94.0	94.0	93.9	1.5	1.5	-0.1
63.1	94.0	94.0	94.0	1.5	1.5	0.0
125.9	94.0	94.0	94.0	1.0	1.0	0.0
251.2	94.0	94.0	94.0	1.0	1.0	0.0
501.2	94.0	94.0	94.0	1.0	1.0	0.0
1995.0	94.0	94.0	94.0	1.0	1.0	0.0
3981.0	94.0	94.0	94.0	1.0	1.0	0.0
7943.0	94.0	94.0	94.0	1.5	3.0	0.0
12590.0	94.0	94.0	94.0	3.0	6.0	0.0

TIME WEIGHTING FAST TEST

Time weighting F is tested on the reference range with a single sinusoidal burst of duration 200 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
116.0	115.0	114.9	1.0	1.0	-0.1

TIME WEIGHTING SLOW TEST

Time weighting S is tested on the reference range with a single sinusoidal burst of duration 500 ms at a frequency 2000 Hz and an amplitude which produces an indication 4 dB below the upper limit of the primary indicator range when the signal is continuous. (Weight A, Maximum hold)

Ref. level	Expected level	Actual level	Tolerance(dB)		Deviation
dB	dB	dB	+	-	dB
116.0	111.9	111.8	1.0	1.0	-0.1

PEAK RESPONSE TEST

The onset time of the peak detector is tested on the reference range by comparing the response to a 100 us rectangular test pulse with the response to a 10 ms reference pulse of the same amplitude. The amplitude of the 10 ms reference pulse is such as to produce an indication 1 dB below the upper limit of the primary indicator range.

Positive polarities: (Weighting Z, set the generator signal to single, Lzpeak)

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
119.0	119.0	118.5	2.0	-0.5

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type:	LxT1	Serial No.	0004797	Date	04-Nov-2022
Microphone type:	377B02	Serial No.	340739		
Preamp type:	PRMLxT1L	Serial No.	042622	Report:	22CA1101 02-01

Negative polarities:

Ref. level	Response to 10 ms	Response to 100 us	Tolerance	Deviation
dB	dB	dB	+/- dB	dB
119.0	119.0	118.5	2.0	-0.5

RMS ACCURACY TEST

The RMS detector accuracy is tested on the reference range for a crest factor of 3.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz. (Set to INT)

Time wighting	Ref. Level	Expected level	Tone burst signal	Tolerance	Deviation
	dB	dB	indication(dB)	+/- dB	dB
Slow	114.0+6.6	114.0	113.9	0.5	-0.1

TIME WEIGHTING IMPULSE TEST

Time weighting I is tested on the reference range (Set the SLM to LAImax)
Test frequency: 2000 Hz
Amplitude: The upper limit of the primary indicator range.

Single sinusoidal burst of duration 5 ms:

Ref. Level	Single burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
120.0	111.2	111.1	2.0	-0.1

Repeated at 100 Hz

Ref. Level	Repeated burst indication		Tolerance	Deviation
dB	Expected (dB)	Actual (dB)	+/- dB	dB
120.0	117.3	117.1	1.0	-0.2

TIME AVERAGING TEST

This test compares the SLM reading for continuous sine signals with readings obtained from a sine tone burst sequence having the same RMS level. The test level is 30 dB below the upper limit of the linearity range and repeated for Type 1 SLM with 40 dB below the upper limit of the linearity.

Frequency of tone burst: 4000 Hz
Duration of tone burst: 1 ms

Repetition Time	Level of tone burst	Expected Leq	Actual Leq	Tolerance	Deviation	Remarks
msec	dB	dB	dB	+/- dB	dB	
1000	90.0	90.0	89.9	1.0	-0.1	60s integ.
10000	80.0	80.0	79.9	1.0	-0.1	6min. integ.

PULSE RANGE AND SOUND EXPOSURE LEVEL TEST

The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz
Integration time: 10 sec

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

SMECLab

Sound level meter type:	LxT1	Serial No.	0004797	Date	04-Nov-2022
Microphone type:	377B02	Serial No.	340739		
Preamp type:	PRMLxT1L	Serial No.	042622	Report:	22CA1101 02-01

The integrating sound level meter set to Leq:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10	90.0	60.0	60.0	1.7	0.0

The integrating sound level meter set to SEL:

Duration	Rms level of	Expected	Actual	Tolerance	Deviation
msec	tone burst (dB)	dB	dB	+/- dB	dB
10.0	90.0	70.0	70.0	1.7	0.0

OVERLOAD INDICATION TEST

For SLM capable of operating in a non-integrating mode.

Test frequency: 2000 Hz
Amplitude: 2 dB below the upper limit of the primary indicator range.
Burst repetition frequency: 40 Hz
Tone burst signal: 11 cycles of a sine wave of frequency 2000 Hz.

Level	Level reduced by	Further reduced	Difference	Tolerance	Deviation
at overload (dB)	1 dB	3 dB	dB	dB	dB
113.2	112.2	109.2	3.0	1.0	0.0

For integrating SLM, with the instrument indicating Leq.

For integrating SLM, with the instrument indicating Leq and set to the reference range. The test signal as following:
The test tone burst signal is superimposed on a baseline signal corresponding to the lower limit of reference range

Test frequency: 4000 Hz
Integration time: 10 sec
Single burst duration: 1 msec

Rms level	Level reduced by	Expected level	Actual level	Tolerance	Deviation
at overload (dB)	1 dB	dB	dB	dB	dB
119.9	118.9	78.9	78.9	2.2	0.0

ACOUSTIC TEST

The acoustic test of the complete SLM is tested at the frequency 125 Hz and 8000 Hz using a B&K type 4226 Multifunction Acoustic Calibrator. The test is performed in A weighting.

Frequency	Expected level	Actual level	Tolerance (dB)		Deviation
Hz	dB	Measured (dB)	+	-	dB
1000	94.0	94.0	0.0	0.0	0.0
125	77.9	77.9	1.0	1.0	0.0
8000	92.9	93.9	1.5	3.0	1.0

---------END---------

The copyright of this report is owned by the Soils & Materials Engineering Co., Ltd. It shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 23CA0317 02-04 **Page:** 1 **of** 2

Item tested

Description:	Acoustical Calibrator (Class 1)
Manufacturer:	Larson Davis
Type/Model No.:	CAL200
Serial/Equipment No.:	13098
Adaptors used:	-

Item submitted by

Curstomer:	Lam Environmental Services Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	17-Mar-2023

Date of test: 20-Mar-2023

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2412857	23-May-2023	SCL
Preamplifier	B&K 2673	2743150	28-Jun-2023	CEPREI
Measuring amplifier	B&K 2610	2346941	30-Jun-2023	CEPREI
Signal generator	DS 360	61227	08-Jun-2023	CEPREI
Digital multi-meter	34401A	US36087050	30-May-2023	CEPREI
Audio analyzer	8903B	GB41300350	06-Jul-2023	CEPREI
Universal counter	53132A	MY40003662	13-Jun-2023	CEPREI

Ambient conditions

Temperature:	22 ± 1 °C
Relative humidity:	55 ± 10 %
Air pressure:	1010 ± 5 hPa

Test specifications

1, The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.

2, The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.

3, The results are rounded to the nearest 0.01 dB and 0.1 Hz and have not been corrected for variations from a reference pressure of 1013.25 hectoPascals as the maker's information indicates that the instrument is insensitive to pressure changes.

Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

Details of the performed measurements are presented on **page 2** of this certificate.

Approved Signatory: Feng Junqi **Date:** 21-Mar-2023 **Company Chop:** SOILS & MATERIALS ENGINEERING COMPANY LTD. 綜合試驗有限公司

Comments: The results reported in this certificate refer to the conditon of the instrument on the date of calibration and carry no implication regarding the long-term stability of the instrument. The results apply to the item as received.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

綜合試驗有限公司
SOILS & MATERIALS ENGINEERING CO., LTD.
香港新界葵涌永基路22-24號好爸爸創科大廈
Good Ba Ba Hitech Building, Nos. 22-24 Wing Kei Road, Kwai Chung, New Territories, Hong Kong
Tel: (852) 2873 6860 Fax: (852) 2555 7533 E-mail: smec@cigismec.com Website: www.cigismec.com

HOKLAS 028
CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 23CA0317 02-04 **Page:** 2 of 2

1, Measured Sound Pressure Level

The output Sound Pressure Level in the calibrator head was measured at the setting and frequency shown using a calibrated laboratory standard microphone and insert voltage technique. The results are given in below with the estimated uncertainties.

(Output level in dB re 20 μPa)

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	Estimated Expanded Uncertainty dB
1000	94.00	93.82	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

The Short Term Fluctuations was determined by measuring the maximum and minimum of the fast weighted DC output of the B&K 2610 measuring amplifier over a 20 second time interval as required in the standard. The Short Term Fluctuation was found to be:

At 1000 Hz **STF = 0.011 dB**

Estimated expanded uncertainty 0.005 dB

3, Actual Output Frequency

The determination of actual output frequency was made using a B&K 4180 microphone together with a B&K 2673 preamplifier connected to a B&K 2610 measuring amplifier. The AC output of the B&K 2610 was taken to an universal counter which was used to determine the frequency averaged over 20 second of operation as required by the standard. The actual output frequency at 1 KHz was:

At 1000 Hz **Actual Frequency = 999.9 Hz**

Estimated expanded uncertainty 0.1 Hz Coverage factor k = 2.2

4, Total Noise and Distortion

For the Total Noise and Distortion measurement, the unfiltered AC output of the B&K 2610 measuring amplifier was connected to an Agilent Type 8903 B distortion analyser. The TND result at 1 KHz was:

At 1000 Hz **TND = 0.7 %**

Estimated expanded uncertainty 0.7 %

The expanded uncertainties have been calculated in accordance with the ISO Publication "Guide to the expression of uncertainty in measurement", and gives an interval estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

- End -

Calibrated by: Fung Chi Yip **Date:** 20-Mar-2023

Checked by: Chan Yuk Yiu **Date:** 21-Mar-2023

The standard(s) and equipment used in the calibration are traceable to national or international recognised standards and are calibrated on a schedule to maintain the required accuracy level.

© Soils & Materials Engineering Co., Ltd.

HKAS has accredited this laboratory (Reg. No. HOKLAS 028) under HOKLAS for specific calibration activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. The results relate only to the item(s) calibrated. This certificate shall not be reproduced except in full without approval of the laboratory.

Lam Environmental Services Limited

Wind Station Performance Check Record

Type : Weather Station

Manufacturer : 武汉辰云科技有限公司

Model Number : YGY-FSXY1

Serial Number : YG 21071630T0924

Performance Check Date : 22-Mar-2023

Performance Check Results

Wind Speed Range (m/s)	Reading Value (V1, m/s)	Anemometer Value (V2, m/s)	Difference (V1 - V2, m/s)
Zero Check	0.0	0.0	0.0
1 - 2	1.5	1.8	-0.3
3 - 4	4.1	4.0	0.1
5 - 6	5.8	5.1	0.7
7 - 8	7.4	7.3	0.2

Wind Direction (^{o})	Reading Value (W1, ^{o})	Compass Value (W2, ^{o})	Difference (W1 - W2, ^{o})
0	0	0	0
90	89	90	-1
180	181	180	1
270	270	270	0

Test Reference:
1. Wind Speed Check - Speed reading checked on-site against anemometer logged value.
2. Wind Direction Check - Direction reading checked on on-site against compass marked reading.

Conducted by: William Cheung Checked by: Raymond Dai

Lam Environmental Services Limited

Wind Station Performance Check Record

Type : Weather Station

Manufacturer : 武汉辰云科技有限公司

Model Number : YGY-FSXY1

Serial Number : YG 21071630T0924

Performance Check Date : 18-Sep-2023

Performance Check Results

Wind Speed Range (m/s)	Reading Value (V1, m/s)	Anemometer Value (V2, m/s)	Difference (V1 - V2, m/s)
Zero Check	0.0	0.0	0.0
1 - 2	1.5	1.8	-0.3
3 - 4	4.2	4.4	-0.2
5 - 6	5.5	5.3	0.2
7 - 8	7.7	7.5	0.2

Wind Direction (^{o})	Reading Value (W1, ^{o})	Compass Value (W2, ^{o})	Difference (W1 - W2, ^{o})
0	0	0	0
90	90	90	0
180	183	180	3
270	268	270	-2

Test Reference:
1. Wind Speed Check - Speed reading checked on-site against anemometer logged value.
2. Wind Direction Check - Direction reading checked on on-site against compass marked reading.

Conducted by: Harry Po

Checked by: William Cheung

Appendix 4.3

Wind Data

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
1-Sep-23	00:00	0.0	170(S)
	01:00	0.0	87(E)
	02:00	0.0	151(SSE)
	03:00	0.9	162(SSE)
	04:00	0.0	154(SSE)
	05:00	0.9	175(S)
	06:00	0.0	278(W)
	07:00	0.7	291(WNW)
	08:00	0.0	58(ENE)
	09:00	1.1	154(SSE)
	10:00	0.0	200(SSW)
	11:00	1.3	122(ESE)
	12:00	0.0	217(SW)
	13:00	1.1	112(ESE)
	14:00	0.0	205(SSW)
	15:00	1.3	48(NE)
	16:00	1.9	204(SSW)
	17:00	2.9	238(WSW)
	18:00	1.7	220(SW)
	19:00	4.3	89(E)
	20:00	1.9	163(SSE)
	21:00	3.7	83(E)
	22:00	8.9	126(SE)
	23:00	4.5	272(W)
2-Sep-23	00:00	7.7	229(SW)
	01:00	7.7	241(WSW)
	02:00	7.1	217(SW)
	03:00	6.1	187(S)
	04:00	4.5	187(S)
	05:00	4.9	220(SW)
	06:00	2.5	212(SSW)
	07:00	3.5	256(WSW)
	08:00	5.5	223(SW)
	09:00	3.1	208(SSW)
	10:00	5.9	214(SW)
	11:00	4.1	194(SSW)
	12:00	6.7	233(SW)
	13:00	1.3	207(SSW)
	14:00	2.1	252(WSW)
	15:00	4.1	155(SSE)
	16:00	0.9	189(S)
	17:00	3.9	206(SSW)
	18:00	1.7	242(WSW)
	19:00	1.5	206(SSW)
	20:00	3.7	232(SW)
	21:00	4.1	212(SSW)
	22:00	3.1	243(WSW)
	23:00	3.7	255(WSW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
3-Sep-23	00:00	2.9	233(SW)
	01:00	1.7	235(SW)
	02:00	1.9	214(SW)
	03:00	2.9	207(SSW)
	04:00	2.7	235(SW)
	05:00	2.9	252(WSW)
	06:00	2.5	220(SW)
	07:00	1.1	235(SW)
	08:00	2.7	222(SW)
	09:00	1.5	231(SW)
	10:00	3.9	136(SE)
	11:00	0.0	67(ENE)
	12:00	0.5	135(SE)
	13:00	0.0	329(NNW)
	14:00	0.9	161(SSE)
	15:00	0.0	203(SSW)
	16:00	1.1	51(NE)
	17:00	0.9	113(ESE)
	18:00	0.0	269(W)
	19:00	0.0	152(SSE)
	20:00	0.0	100(E)
	21:00	0.0	142(SE)
	22:00	0.0	182(S)
	23:00	0.0	9(N)
4-Sep-23	00:00	0.0	172(S)
	01:00	0.0	159(SSE)
	02:00	0.0	295(WNW)
	03:00	0.0	168(SSE)
	04:00	0.0	204(SSW)
	05:00	0.0	226(SW)
	06:00	0.0	142(SE)
	07:00	0.0	1(N)
	08:00	0.0	286(WNW)
	09:00	0.0	157(SSE)
	10:00	0.0	339(NNW)
	11:00	1.1	297(WNW)
	12:00	0.7	154(SSE)
	13:00	0.9	343(NNW)
	14:00	0.9	182(S)
	15:00	0.0	304(NW)
	16:00	1.5	302(WNW)
	17:00	1.5	255(WSW)
	18:00	1.7	333(NNW)
	19:00	0.5	180(S)
	20:00	0.7	266(W)
	21:00	1.7	281(W)
	22:00	1.7	69(ENE)
	23:00	0.0	271(W)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
5-Sep-23	00:00	1.1	303(WNW)
	01:00	0.7	277(W)
	02:00	0.7	269(W)
	03:00	0.0	274(W)
	04:00	0.9	257(WSW)
	05:00	0.7	265(W)
	06:00	0.0	257(WSW)
	07:00	0.0	290(WNW)
	08:00	0.0	280(W)
	09:00	1.1	287(WNW)
	10:00	2.1	276(W)
	11:00	1.3	257(WSW)
	12:00	1.3	271(W)
	13:00	1.5	245(WSW)
	14:00	1.7	286(WNW)
	15:00	1.3	292(WNW)
	16:00	1.3	338(NNW)
	17:00	2.1	201(SSW)
	18:00	0.0	154(SSE)
	19:00	0.0	289(WNW)
	20:00	0.0	272(W)
	21:00	0.0	272(W)
	22:00	0.0	124(SE)
	23:00	0.0	319(NW)
6-Sep-23	00:00	0.0	267(W)
	01:00	0.0	77(ENE)
	02:00	0.0	289(WNW)
	03:00	0.0	202(SSW)
	04:00	0.0	260(W)
	05:00	0.0	163(SSE)
	06:00	0.7	295(WNW)
	07:00	0.0	287(WNW)
	08:00	0.9	298(WNW)
	09:00	0.9	287(WNW)
	10:00	1.9	266(W)
	11:00	1.7	274(W)
	12:00	0.9	320(NW)
	13:00	2.3	227(SW)
	14:00	1.5	290(WNW)
	15:00	2.1	271(W)
	16:00	1.1	72(ENE)
	17:00	1.3	64(ENE)
	18:00	1.7	132(SE)
	19:00	1.3	86(E)
	20:00	0.0	34(NE)
	21:00	0.7	47(NE)
	22:00	0.0	118(ESE)
	23:00	0.0	105(ESE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
7-Sep-23	00:00	0.0	217(SW)
	01:00	0.0	226(SW)
	02:00	0.7	261(W)
	03:00	0.0	175(S)
	04:00	0.0	106(ESE)
	05:00	0.0	113(ESE)
	06:00	0.0	262(W)
	07:00	0.9	83(E)
	08:00	0.0	237(WSW)
	09:00	0.7	153(SSE)
	10:00	0.7	116(ESE)
	11:00	0.0	217(SW)
	12:00	0.0	200(SSW)
	13:00	1.3	164(SSE)
	14:00	1.3	160(SSE)
	15:00	2.3	97(E)
	16:00	1.3	104(ESE)
	17:00	2.5	68(ENE)
	18:00	0.5	246(WSW)
	19:00	1.7	53(NE)
	20:00	1.5	104(ESE)
	21:00	1.7	105(ESE)
	22:00	2.5	122(ESE)
	23:00	1.5	274(W)
8-Sep-23	00:00	2.1	275(W)
	01:00	1.1	213(SSW)
	02:00	0.7	252(WSW)
	03:00	0.0	66(ENE)
	04:00	1.3	41(NE)
	05:00	1.9	140(SE)
	06:00	0.9	177(S)
	07:00	2.5	101(E)
	08:00	0.5	162(SSE)
	09:00	0.9	285(WNW)
	10:00	4.7	102(ESE)
	11:00	1.5	120(ESE)
	12:00	0.0	0(N)
	13:00	0.0	125(SE)
	14:00	0.0	171(S)
	15:00	0.5	111(ESE)
	16:00	0.0	96(E)
	17:00	0.0	123(ESE)
	18:00	0.0	104(ESE)
	19:00	0.0	106(ESE)
	20:00	0.0	152(SSE)
	21:00	0.0	141(SE)
	22:00	0.0	111(ESE)
	23:00	0.7	99(E)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
9-Sep-23	00:00	2.9	74(ENE)
	01:00	0.0	117(ESE)
	02:00	2.1	94(E)
	03:00	0.0	88(E)
	04:00	1.9	74(ENE)
	05:00	1.7	154(SSE)
	06:00	1.5	85(E)
	07:00	1.5	83(E)
	08:00	1.3	137(SE)
	09:00	1.3	52(NE)
	10:00	1.1	117(ESE)
	11:00	3.3	110(ESE)
	12:00	2.3	130(SE)
	13:00	1.5	98(E)
	14:00	1.9	142(SE)
	15:00	1.7	98(E)
	16:00	1.9	73(ENE)
	17:00	1.5	107(ESE)
	18:00	1.3	44(NE)
	19:00	1.7	123(ESE)
	20:00	1.3	102(ESE)
	21:00	1.9	85(E)
	22:00	1.1	179(S)
	23:00	1.1	60(ENE)
10-Sep-23	00:00	0.9	91(E)
	01:00	1.7	73(ENE)
	02:00	1.1	114(ESE)
	03:00	1.5	123(ESE)
	04:00	1.1	40(NE)
	05:00	1.5	66(ENE)
	06:00	1.5	74(ENE)
	07:00	1.1	125(SE)
	08:00	0.9	269(W)
	09:00	0.9	125(SE)
	10:00	0.0	29(NNE)
	11:00	2.3	183(S)
	12:00	1.3	186(S)
	13:00	3.7	82(E)
	14:00	1.1	115(ESE)
	15:00	0.9	127(SE)
	16:00	1.5	117(ESE)
	17:00	1.3	121(ESE)
	18:00	0.0	161(SSE)
	19:00	0.0	143(SE)
	20:00	0.9	96(E)
	21:00	0.9	110(ESE)
	22:00	0.0	51(NE)
	23:00	2.3	92(E)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
11-Sep-23	00:00	2.1	119(ESE)
	01:00	0.0	29(NNE)
	02:00	0.0	99(E)
	03:00	0.9	87(E)
	04:00	0.0	45(NE)
	05:00	0.0	82(E)
	06:00	1.1	83(E)
	07:00	0.0	112(ESE)
	08:00	0.0	168(SSE)
	09:00	1.5	59(ENE)
	10:00	2.1	108(ESE)
	11:00	2.9	122(ESE)
	12:00	2.9	124(SE)
	13:00	1.5	122(ESE)
	14:00	2.3	102(ESE)
	15:00	3.1	78(ENE)
	16:00	1.5	133(SE)
	17:00	1.9	131(SE)
	18:00	1.3	86(E)
	19:00	1.7	62(ENE)
	20:00	1.1	128(SE)
	21:00	0.9	93(E)
	22:00	1.3	173(S)
	23:00	1.7	34(NE)
12-Sep-23	00:00	1.7	101(E)
	01:00	2.9	136(SE)
	02:00	1.3	118(ESE)
	03:00	1.7	86(E)
	04:00	1.3	59(ENE)
	05:00	1.3	64(ENE)
	06:00	0.7	58(ENE)
	07:00	0.7	67(ENE)
	08:00	1.5	70(ENE)
	09:00	0.0	112(ESE)
	10:00	3.7	92(E)
	11:00	1.1	220(SW)
	12:00	1.3	220(SW)
	13:00	2.5	85(E)
	14:00	1.3	72(ENE)
	15:00	2.3	79(E)
	16:00	1.7	143(SE)
	17:00	1.7	34(NE)
	18:00	1.7	120(ESE)
	19:00	1.1	133(SE)
	20:00	0.7	113(ESE)
	21:00	0.9	1(N)
	22:00	1.3	162(SSE)
	23:00	2.7	166(SSE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
13-Sep-23	00:00	1.5	87(E)
	01:00	0.9	118(ESE)
	02:00	0.9	110(ESE)
	03:00	1.5	138(SE)
	04:00	1.3	60(ENE)
	05:00	0.7	240(WSW)
	06:00	0.0	168(SSE)
	07:00	1.1	53(NE)
	08:00	2.1	81(E)
	09:00	1.9	88(E)
	10:00	1.5	72(ENE)
	11:00	0.7	108(ESE)
	12:00	2.3	95(E)
	13:00	1.3	72(ENE)
	14:00	3.5	99(E)
	15:00	0.7	38(NE)
	16:00	0.9	64(ENE)
	17:00	2.3	79(E)
	18:00	2.3	105(ESE)
	19:00	0.9	31(NNE)
	20:00	0.7	142(SE)
	21:00	1.7	49(NE)
	22:00	1.7	52(NE)
	23:00	1.5	137(SE)
14-Sep-23	00:00	1.5	106(ESE)
	01:00	0.7	119(ESE)
	02:00	1.7	96(E)
	03:00	1.3	111(ESE)
	04:00	1.5	67(ENE)
	05:00	1.3	157(SSE)
	06:00	0.0	134(SE)
	07:00	0.0	222(SW)
	08:00	1.3	110(ESE)
	09:00	1.1	81(E)
	10:00	2.5	73(ENE)
	11:00	1.1	164(SSE)
	12:00	0.0	20(NNE)
	13:00	0.9	84(E)
	14:00	0.9	156(SSE)
	15:00	1.3	160(SSE)
	16:00	1.5	203(SSW)
	17:00	2.1	73(ENE)
	18:00	2.1	80(E)
	19:00	1.1	93(E)
	20:00	0.7	130(SE)
	21:00	0.7	58(ENE)
	22:00	1.5	80(E)
	23:00	0.9	221(SW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
15-Sep-23	00:00	0.9	133(SE)
	01:00	0.5	77(ENE)
	02:00	1.1	96(E)
	03:00	1.1	163(SSE)
	04:00	1.3	60(ENE)
	05:00	1.1	67(ENE)
	06:00	0.5	157(SSE)
	07:00	0.9	70(ENE)
	08:00	1.1	94(E)
	09:00	1.3	163(SSE)
	10:00	2.1	135(SE)
	11:00	2.1	65(ENE)
	12:00	1.1	201(SSW)
	13:00	2.1	146(SE)
	14:00	1.5	54(NE)
	15:00	1.9	151(SSE)
	16:00	0.0	128(SE)
	17:00	0.9	55(NE)
	18:00	0.0	140(SE)
	19:00	2.1	88(E)
	20:00	1.9	124(SE)
	21:00	0.9	82(E)
	22:00	1.9	34(NE)
	23:00	0.0	158(SSE)
16-Sep-23	00:00	0.0	81(E)
	01:00	2.3	82(E)
	02:00	0.0	88(E)
	03:00	0.0	73(ENE)
	04:00	0.0	234(SW)
	05:00	0.0	241(WSW)
	06:00	0.0	99(E)
	07:00	0.0	118(ESE)
	08:00	0.0	314(NW)
	09:00	1.7	104(ESE)
	10:00	1.3	77(ENE)
	11:00	1.7	145(SE)
	12:00	0.9	105(ESE)
	13:00	2.5	142(SE)
	14:00	0.0	89(E)
	15:00	1.5	83(E)
	16:00	1.9	72(ENE)
	17:00	1.1	78(ENE)
	18:00	1.7	70(ENE)
	19:00	2.7	144(SE)
	20:00	1.7	93(E)
	21:00	0.7	91(E)
	22:00	1.5	76(ENE)
	23:00	1.9	63(ENE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
17-Sep-23	00:00	2.1	60(ENE)
	01:00	1.9	116(ESE)
	02:00	1.1	109(ESE)
	03:00	1.7	94(E)
	04:00	1.1	132(SE)
	05:00	1.1	79(E)
	06:00	1.5	74(ENE)
	07:00	0.7	7(N)
	08:00	0.5	20(NNE)
	09:00	2.1	82(E)
	10:00	1.7	97(E)
	11:00	3.7	117(ESE)
	12:00	2.1	143(SE)
	13:00	1.3	111(ESE)
	14:00	1.7	74(ENE)
	15:00	2.7	98(E)
	16:00	1.9	118(ESE)
	17:00	0.9	196(SSW)
	18:00	0.9	184(S)
	19:00	1.1	80(E)
	20:00	1.5	69(ENE)
	21:00	1.1	49(NE)
	22:00	1.5	66(ENE)
	23:00	0.0	203(SSW)
18-Sep-23	00:00	0.9	66(ENE)
	01:00	0.9	75(ENE)
	02:00	0.0	65(ENE)
	03:00	0.0	104(ESE)
	04:00	0.9	51(NE)
	05:00	0.0	54(NE)
	06:00	0.0	261(W)
	07:00	0.0	123(ESE)
	08:00	0.9	62(ENE)
	09:00	2.1	65(ENE)
	10:00	0.9	221(SW)
	11:00	1.9	99(E)
	12:00	1.1	215(SW)
	13:00	1.1	84(E)
	14:00	2.1	197(SSW)
	15:00	1.1	210(SSW)
	16:00	0.9	230(SW)
	17:00	3.3	257(WSW)
	18:00	1.3	130(SE)
	19:00	1.5	27(NNE)
	20:00	1.7	85(E)
	21:00	0.7	86(E)
	22:00	1.1	168(SSE)
	23:00	1.1	129(SE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
19-Sep-23	00:00	0.9	104(ESE)
	01:00	0.9	121(ESE)
	02:00	0.7	327(NNW)
	03:00	0.9	70(ENE)
	04:00	0.9	103(ESE)
	05:00	0.7	259(W)
	06:00	0.0	188(S)
	07:00	0.0	255(WSW)
	08:00	0.7	285(WNW)
	09:00	0.7	255(WSW)
	10:00	0.9	268(W)
	11:00	0.5	275(W)
	12:00	1.7	99(E)
	13:00	2.7	179(S)
	14:00	0.9	51(NE)
	15:00	3.3	75(ENE)
	16:00	0.5	201(SSW)
	17:00	0.9	173(S)
	18:00	0.7	96(E)
	19:00	1.3	69(ENE)
	20:00	1.5	124(SE)
	21:00	0.9	127(SE)
	22:00	1.1	110(ESE)
	23:00	1.3	91(E)
20-Sep-23	00:00	1.1	133(SE)
	01:00	0.0	243(WSW)
	02:00	1.1	43(NE)
	03:00	0.0	256(WSW)
	04:00	0.7	266(W)
	05:00	0.0	232(SW)
	06:00	0.0	264(W)
	07:00	0.9	269(W)
	08:00	1.7	44(NE)
	09:00	0.9	150(SSE)
	10:00	1.1	113(ESE)
	11:00	2.3	298(WNW)
	12:00	0.0	131(SE)
	13:00	2.5	119(ESE)
	14:00	1.1	210(SSW)
	15:00	0.7	252(WSW)
	16:00	0.9	231(SW)
	17:00	1.5	278(W)
	18:00	0.7	226(SW)
	19:00	0.9	262(W)
	20:00	1.3	253(WSW)
	21:00	0.9	53(NE)
	22:00	0.7	167(SSE)
	23:00	0.0	214(SW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
21-Sep-23	00:00	0.9	246(WSW)
	01:00	1.1	286(WNW)
	02:00	0.0	191(S)
	03:00	1.3	273(W)
	04:00	0.0	180(S)
	05:00	0.0	215(SW)
	06:00	0.0	44(NE)
	07:00	0.5	41(NE)
	08:00	0.5	92(E)
	09:00	1.1	291(WNW)
	10:00	0.7	313(NW)
	11:00	1.7	279(W)
	12:00	0.5	209(SSW)
	13:00	1.5	272(W)
	14:00	1.1	273(W)
	15:00	1.3	207(SSW)
	16:00	1.3	275(W)
	17:00	1.5	271(W)
	18:00	1.1	272(W)
	19:00	0.7	263(W)
	20:00	1.3	44(NE)
	21:00	0.9	158(SSE)
	22:00	1.1	29(NNE)
	23:00	0.9	66(ENE)
22-Sep-23	00:00	0.9	134(SE)
	01:00	0.0	260(W)
	02:00	0.0	256(WSW)
	03:00	0.0	270(W)
	04:00	0.9	161(SSE)
	05:00	1.1	265(W)
	06:00	0.9	285(WNW)
	07:00	0.0	72(ENE)
	08:00	1.1	112(ESE)
	09:00	0.7	204(SSW)
	10:00	1.7	141(SE)
	11:00	0.9	103(ESE)
	12:00	0.7	149(SSE)
	13:00	1.3	182(S)
	14:00	2.3	306(NW)
	15:00	1.7	285(WNW)
	16:00	1.1	164(SSE)
	17:00	1.9	108(ESE)
	18:00	0.9	94(E)
	19:00	1.5	112(ESE)
	20:00	1.9	99(E)
	21:00	1.7	127(SE)
	22:00	0.7	246(WSW)
	23:00	0.7	97(E)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
23-Sep-23	00:00	1.1	157(SSE)
	01:00	0.9	88(E)
	02:00	1.1	112(ESE)
	03:00	0.9	117(ESE)
	04:00	0.9	144(SE)
	05:00	0.0	116(ESE)
	06:00	1.3	109(ESE)
	07:00	1.5	104(ESE)
	08:00	1.9	156(SSE)
	09:00	2.1	119(ESE)
	10:00	2.5	141(SE)
	11:00	3.7	101(E)
	12:00	3.7	70(ENE)
	13:00	2.1	111(ESE)
	14:00	1.7	102(ESE)
	15:00	2.3	98(E)
	16:00	1.9	162(SSE)
	17:00	1.5	197(SSW)
	18:00	2.1	168(SSE)
	19:00	1.3	136(SE)
	20:00	2.9	104(ESE)
	21:00	2.1	97(E)
	22:00	1.5	88(E)
	23:00	2.1	113(ESE)
24-Sep-23	00:00	1.3	57(ENE)
	01:00	1.5	40(NE)
	02:00	1.9	96(E)
	03:00	1.1	107(ESE)
	04:00	1.9	95(E)
	05:00	1.3	77(ENE)
	06:00	1.1	97(E)
	07:00	2.3	105(ESE)
	08:00	1.3	159(SSE)
	09:00	3.5	120(ESE)
	10:00	1.7	132(SE)
	11:00	5.9	112(ESE)
	12:00	1.3	193(SSW)
	13:00	1.5	91(E)
	14:00	1.5	17(NNE)
	15:00	2.9	92(E)
	16:00	1.5	192(SSW)
	17:00	1.9	80(E)
	18:00	2.7	84(E)
	19:00	0.9	199(SSW)
	20:00	1.9	55(NE)
	21:00	0.9	100(E)
	22:00	1.9	120(ESE)
	23:00	0.7	181(S)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
25-Sep-23	00:00	1.9	89(E)
	01:00	2.1	64(ENE)
	02:00	2.7	53(NE)
	03:00	2.3	128(SE)
	04:00	1.9	15(NNE)
	05:00	2.7	91(E)
	06:00	1.5	77(ENE)
	07:00	0.9	43(NE)
	08:00	1.3	124(SE)
	09:00	1.7	54(NE)
	10:00	1.1	100(E)
	11:00	3.1	70(ENE)
	12:00	1.3	297(WNW)
	13:00	1.7	69(ENE)
	14:00	2.5	87(E)
	15:00	2.9	184(S)
	16:00	2.7	147(SSE)
	17:00	1.5	86(E)
	18:00	2.1	97(E)
	19:00	1.9	54(NE)
	20:00	1.7	69(ENE)
	21:00	3.1	79(E)
	22:00	1.5	79(E)
	23:00	1.1	118(ESE)
26-Sep-23	00:00	3.3	125(SE)
	01:00	0.9	96(E)
	02:00	3.1	64(ENE)
	03:00	1.9	85(E)
	04:00	3.5	92(E)
	05:00	2.7	102(ESE)
	06:00	1.1	146(SE)
	07:00	2.9	56(NE)
	08:00	1.9	62(ENE)
	09:00	2.1	65(ENE)
	10:00	2.3	136(SE)
	11:00	3.5	92(E)
	12:00	2.7	64(ENE)
	13:00	1.9	87(E)
	14:00	1.5	154(SSE)
	15:00	2.3	79(E)
	16:00	1.5	273(W)
	17:00	2.9	60(ENE)
	18:00	1.7	89(E)
	19:00	1.1	34(NE)
	20:00	2.1	96(E)
	21:00	0.9	107(ESE)
	22:00	1.5	39(NE)
	23:00	1.1	70(ENE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
27-Sep-23	00:00	1.1	204(SSW)
	01:00	1.9	85(E)
	02:00	1.1	109(ESE)
	03:00	2.1	68(ENE)
	04:00	1.3	110(ESE)
	05:00	1.9	138(SE)
	06:00	1.1	142(SE)
	07:00	1.7	63(ENE)
	08:00	0.7	81(E)
	09:00	3.3	87(E)
	10:00	3.5	116(ESE)
	11:00	3.5	123(ESE)
	12:00	1.7	108(ESE)
	13:00	2.1	103(ESE)
	14:00	1.5	130(SE)
	15:00	1.5	90(E)
	16:00	1.5	121(ESE)
	17:00	2.3	219(SW)
	18:00	1.3	248(WSW)
	19:00	2.5	118(ESE)
	20:00	0.9	116(ESE)
	21:00	1.3	74(ENE)
	22:00	0.5	214(SW)
	23:00	1.9	73(ENE)
28-Sep-23	00:00	1.1	99(E)
	01:00	1.9	77(ENE)
	02:00	0.5	277(W)
	03:00	1.3	75(ENE)
	04:00	1.5	55(NE)
	05:00	0.9	140(SE)
	06:00	1.3	140(SE)
	07:00	1.7	121(ESE)
	08:00	2.3	101(E)
	09:00	1.3	103(ESE)
	10:00	5.5	106(ESE)
	11:00	3.7	138(SE)
	12:00	3.5	101(E)
	13:00	2.5	86(E)
	14:00	1.1	187(S)
	15:00	3.1	221(SW)
	16:00	0.9	264(W)
	17:00	1.7	284(WNW)
	18:00	4.1	119(ESE)
	19:00	1.3	89(E)
	20:00	0.9	55(NE)
	21:00	1.5	102(ESE)
	22:00	1.5	123(ESE)
	23:00	1.1	98(E)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
29-Sep-23	00:00	2.3	77(ENE)
	01:00	1.5	103(ESE)
	02:00	2.5	70(ENE)
	03:00	1.3	7(N)
	04:00	1.3	102(ESE)
	05:00	1.3	14(NNE)
	06:00	2.9	98(E)
	07:00	0.9	72(ENE)
	08:00	1.5	94(E)
	09:00	2.1	66(ENE)
	10:00	3.7	49(NE)
	11:00	1.1	79(E)
	12:00	1.1	278(W)
	13:00	1.1	206(SSW)
	14:00	1.5	118(ESE)
	15:00	0.7	222(SW)
	16:00	1.7	97(E)
	17:00	1.3	177(S)
	18:00	2.1	145(SE)
	19:00	0.0	29(NNE)
	20:00	1.3	95(E)
	21:00	0.5	137(SE)
	22:00	1.9	94(E)
	23:00	1.5	101(E)
30-Sep-23	00:00	1.1	89(E)
	01:00	1.1	62(ENE)
	02:00	0.9	120(ESE)
	03:00	0.5	109(ESE)
	04:00	0.0	109(ESE)
	05:00	0.7	45(NE)
	06:00	0.0	154(SSE)
	07:00	0.0	248(WSW)
	08:00	0.9	159(SSE)
	09:00	1.3	75(ENE)
	10:00	0.9	189(S)
	11:00	0.9	106(ESE)
	12:00	1.7	89(E)
	13:00	2.1	308(NW)
	14:00	2.1	197(SSW)
	15:00	1.3	290(WNW)
	16:00	0.0	256(WSW)
	17:00	1.1	292(WNW)
	18:00	0.0	254(WSW)
	19:00	1.1	11(N)
	20:00	0.0	181(S)
	21:00	0.7	349(N)
	22:00	0.0	250(WSW)
	23:00	0.9	277(W)

Appendix 5.1

Monitoring Schedule for Reporting Month and Next Reporting Month

Contract No. SPW 12/2021
Environmental Team (2021-2024)
for Shek Wui Effluent Polishing Plant - Main Works
Impact Monitoring Schedule
Sep 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Sep AQM+24hr TSP	2-Sep
3-Sep	4-Sep AQM + 1hr TSP	5-Sep	6-Sep Ecological Monitoring	7-Sep AQM+24hr TSP	8-Sep	9-Sep AQM + 1hr TSP
10-Sep	11-Sep	12-Sep	13-Sep AQM+24hr TSP	14-Sep AQM + 1hr TSP	15-Sep NM Ecological Monitoring	16-Sep
17-Sep	18-Sep	19-Sep AQM+24hr TSP	20-Sep AQM + 1hr TSP NM	21-Sep Ecological Monitoring	22-Sep	23-Sep
24-Sep	25-Sep AQM+24hr TSP	26-Sep AQM + 1hr TSP NM	27-Sep	28-Sep AQM+24hr TSP	29-Sep AQM + 1hr TSP Ecological Monitoring	30-Sep

Remarks

- AQM: Air Quality Monitoring
- NM: Noise Monitoring, the monitoring dates are tentative and subject to change
- Ecological Monitoring dates are tentative and subject to change based on real-time tide.
- 1-hr TSP AQM scheduled on 2nd September 2023 was rescheduled to 4th September 2023 due to typhoon signal no. 8
- 1-hr TSP AQM scheduled on 8th September 2023 was rescheduled to 9th September 2023 due to black rainstorm signal.
- Noise monitoring scheduled on 8th September 2023 was cancelled due to rainfall on 8th and 9th September 2023.

Contract No. SPW 12/2021
Environmental Team (2021-2024)
for Shek Wui Effluent Polishing Plant - Main Works
Tentative Impact Monitoring Schedule
Oct 2023

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

Remarks

- AQM: Air Quality Monitoring
- NM: Noise Monitoring, the monitoring dates are tentative and subject to change
- Ecological Monitoring dates are tentative and subject to change based on real-time tide.

Contract No. SPW 12/2021
Environmental Team (2021-2024)
for Shek Wui Effluent Polishing Plant - Main Works
Tentative Impact Monitoring Schedule
Nov 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Nov AQM+24hr TSP	2-Nov AQM + 1hr TSP NM	3-Nov Ecological Monitoring	4-Nov
5-Nov	6-Nov	7-Nov AQM+24hr TSP	8-Nov AQM + 1hr TSP NM	9-Nov	10-Nov Ecological Monitoring	11-Nov
12-Nov	13-Nov AQM+24hr TSP	14-Nov AQM + 1hr TSP NM	15-Nov	16-Nov	17-Nov Ecological Monitoring	18-Nov AQM+24hr TSP
19-Nov	20-Nov AQM + 1hr TSP NM	21-Nov Ecological Monitoring	22-Nov	23-Nov	24-Nov AQM+24hr TSP	25-Nov AQM + 1hr TSP
26-Nov	27-Nov	28-Nov	29-Nov Ecological Monitoring	30-Nov AQM+24hr TSP		

Remarks

- AQM: Air Quality Monitoring
- NM: Noise Monitoring, the monitoring dates are tentative and subject to change
- Ecological Monitoring dates are tentative and subject to change based on real-time tide.

Appendix 5.2

Noise Monitoring Results and Graphical Presentations

Noise Monitoring Result

Location: NM1 - G/F, Wai Loi Tsuen

Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level Leq	L10	L90	Baseline Level Leq	Construction Noise Level Leq	Limit Level Leq
				Unit: dB(A), (30min)					
15/09/2023	16:00	Cloudy	0.0	60.7	63.6	54.5	63.4	60.7	75
20/09/2023	10:45	Fine	0.0	54.4	57.5	50.7	63.4	54.4	75
26/09/2023	9:15	Fine	0.2	54.6	56.8	51.2	63.4	54.6	75

Location: NM2 - G/F, Fu Tei Au

Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level Leq	L10	L90	Baseline Level Leq	Construction Noise Level Leq	Limit Level Leq
				Unit: dB(A), (30-min)					
15/09/2023	15:20	Cloudy	0.0	62.6	64.4	57.1	58.0	60.8	75
20/09/2023	8:50	Fine	0.0	65.7	70.0	52.2	58.0	64.9	75
26/09/2023	10:55	Fine	0.0	65.1	67.9	62.0	58.0	64.2	75

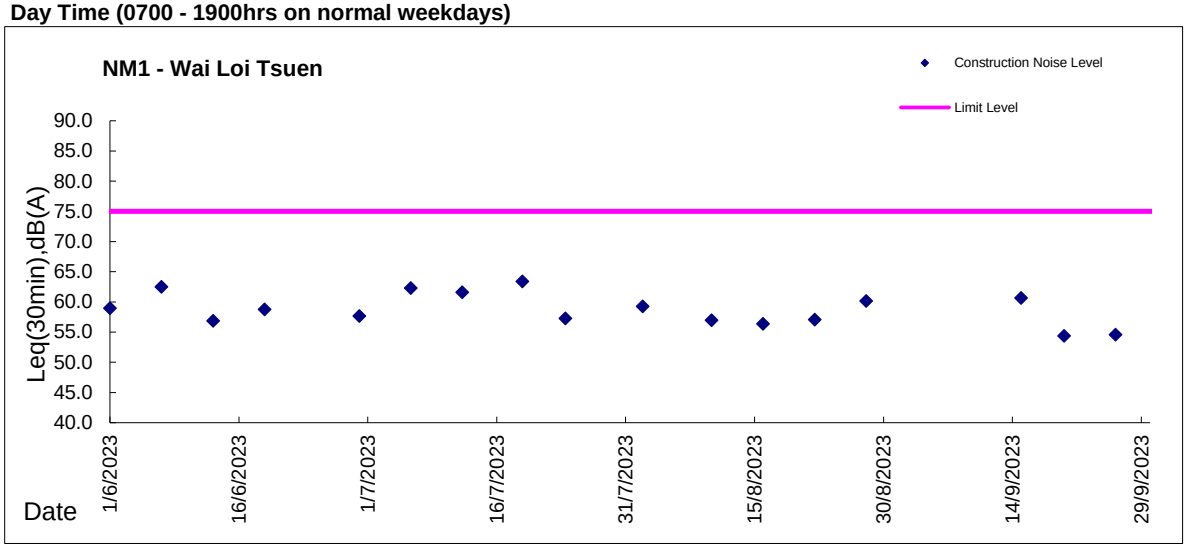
Location: NM3 - G/F, Man kok Village

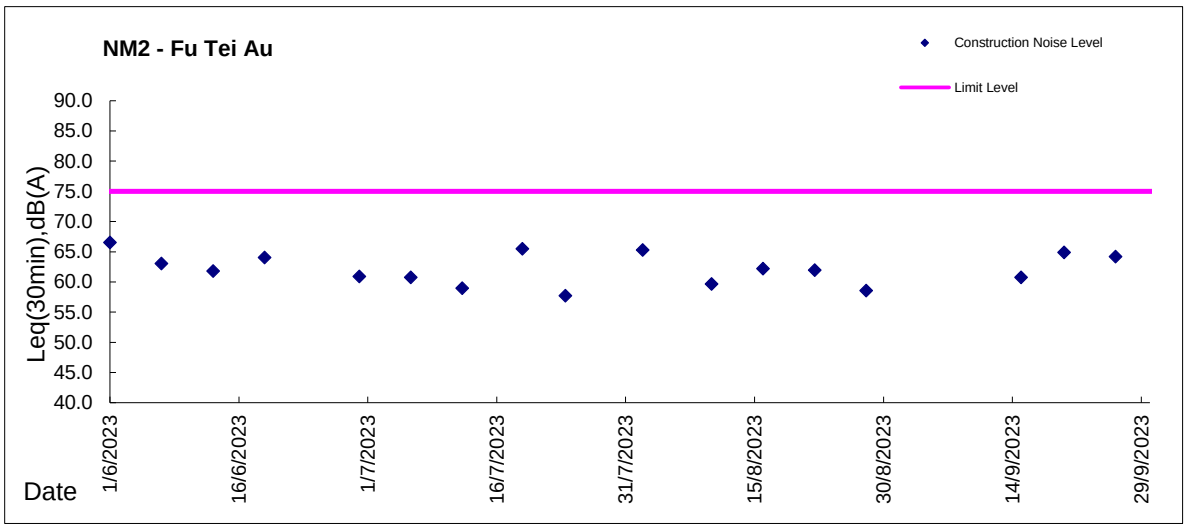
Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level Leq	L10	L90	Baseline Level Leq	Construction Noise Level Leq	Limit Level Leq
				Unit: dB(A), (30min)					
15/09/2023	14:10	Cloudy	0.4	61.3	67.6	54.2	63.4	61.3	75
20/09/2023	9:30	Fine	0.0	62.7	65.4	58.6	63.4	62.7	75
26/09/2023	10:00	Fine	0.0	60.8	62.4	57.2	63.4	60.8	75

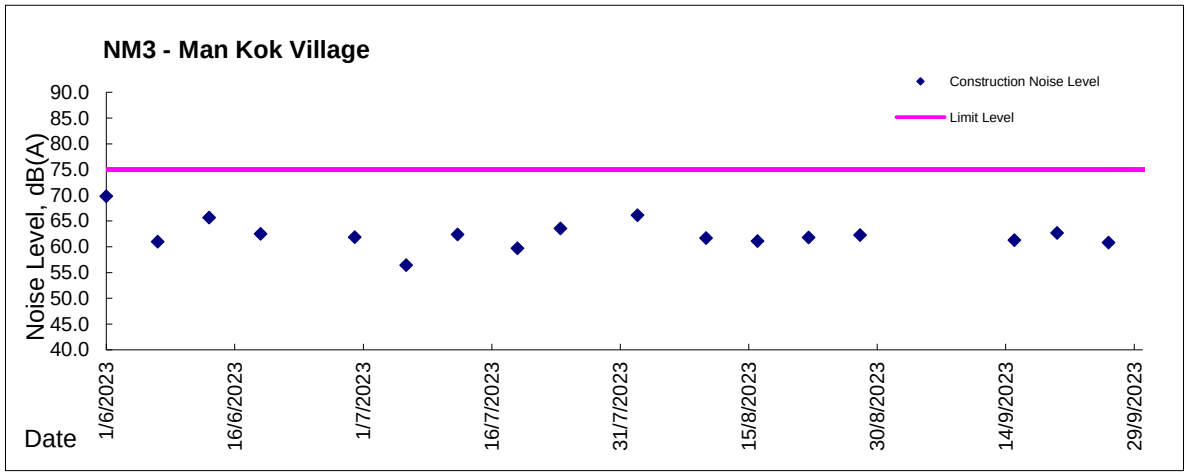
* Free field correction (Additional 3dB(A)) was made on NM1, NM2, and NM3 measurement result

Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)







Appendix 5.3

Air Quality Monitoring Results and Graphical Presentations

Report on 1-hour TSP monitoring at AM1 - Wai Loi Tsuen
Action Level (μg/m3) - 320
Limit Level (μg/m3) - 500

Date	Weather Condition	Time	Mass Concentration (μg/m3)	Model No.	Serial No.
4-Sep-23	Fine	8:50	30	AEROCET 831	C15622
4-Sep-23	Fine	9:51	28		
4-Sep-23	Fine	10:52	29		
9-Sep-23	Rainy	8:54	15		
9-Sep-23	Rainy	9:55	11		
9-Sep-23	Rainy	10:56	8		
14-Sep-23	Rainy	8:24	24		
14-Sep-23	Rainy	9:25	52		
14-Sep-23	Rainy	10:26	7		
20-Sep-23	Fine	8:22	10		
20-Sep-23	Fine	9:23	9		
20-Sep-23	Fine	10:24	7		
26-Sep-23	Fine	8:30	15		
26-Sep-23	Fine	9:31	14		
26-Sep-23	Fine	10:32	15		
29-Sep-23	Fine	8:25	13		
29-Sep-23	Fine	9:26	13		
29-Sep-23	Fine	10:27	14		

Report on 1-hour TSP monitoring at AM2 - Fu Tei Au

Action Level (μg/m3) - 322
Limit Level (μg/m3) - 500

Date	Weather Condition	Time	Mass Concentration (μg/m3)	Model No.	Serial No.
4-Sep-23	Fine	9:04	34	AEROCET 831	Y23153
4-Sep-23	Fine	10:05	31		
4-Sep-23	Fine	11:06	31		
9-Sep-23	Rainy	9:09	22		
9-Sep-23	Rainy	10:10	12		
9-Sep-23	Rainy	11:11	9		
14-Sep-23	Rainy	8:35	29		
14-Sep-23	Rainy	9:36	59		
14-Sep-23	Rainy	10:37	9		
20-Sep-23	Fine	8:36	14		
20-Sep-23	Fine	9:36	10		
20-Sep-23	Fine	10:37	8		
26-Sep-23	Fine	8:57	16		
26-Sep-23	Fine	9:58	16		
26-Sep-23	Fine	10:59	17		
29-Sep-23	Fine	8:45	15		
29-Sep-23	Fine	9:46	17		
29-Sep-23	Fine	10:47	20		

Location: AM1a* - Site boundary of the Shek Wu Hui STW (East), Roof floor of the control room of SWHSTW
Impact Monitoring Result on 24-hour TSP monitoring

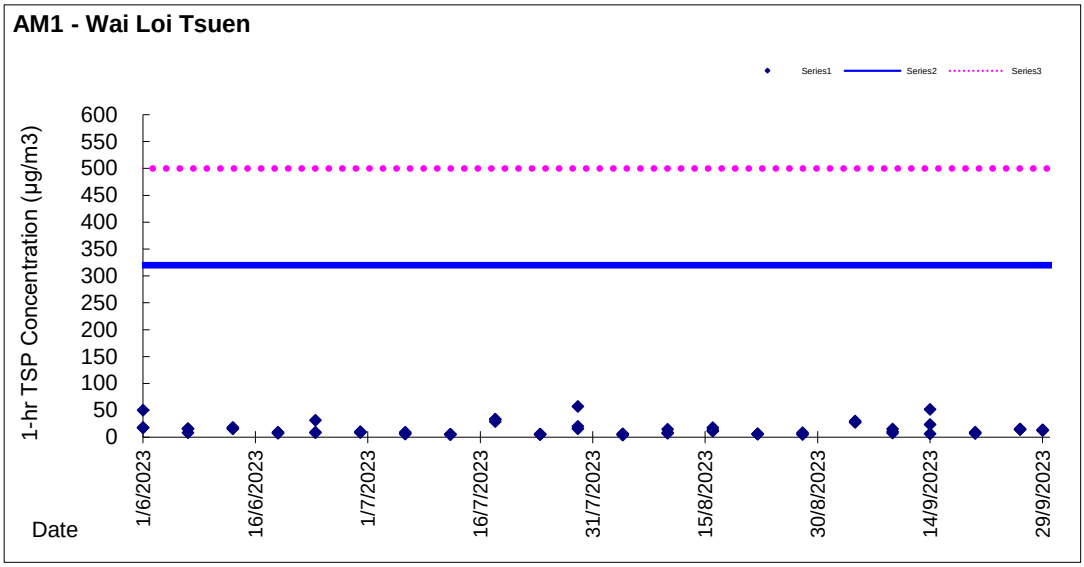
Date	Sampling Time	Weather Condition	Pressure, hPa		Temp. , °C		Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, ug/m^3	Model No.	Serial No.
			Initial	Final	Initial	Final		Initial	Final	Initial	Final		Initial, Qsi	Final, Qsf	Average				
01-Sep-23	8:00	Storm	996.3	1000.1	26.9	26.2	AM1a_24hr_011222	2.7653	2.8115	17343.05	17367.05	24.00	1.53	1.56	1.55	2225	21	G3101	2036
07-Sep-23	8:00	Rain	1006.3	1007.9	27.7	25.7	AM1a_24hr_011223	2.7662	2.8045	17367.05	17391.05	24.00	1.36	1.28	1.32	1900	20		
13-Sep-23	8:00	Cloudy	1006.6	1007.7	27.9	26.9	AM1a_24hr_011224	2.7778	2.8141	17391.05	17415.05	24.00	1.32	1.28	1.30	1867	19		
19-Sep-23	8:00	Fine	1011.9	1011.0	29.5	29.6	AM1a_24hr_011225	2.7827	2.8418	17415.05	17439.05	24.00	1.27	1.27	1.27	1833	32		
25-Sep-23	8:00	Fine	1010.1	1010.7	29.8	30.0	AM1a_24hr_011228	2.7710	2.8496	17439.05	17463.05	24.00	1.34	1.34	1.34	1927	41		
28-Sep-23	8:00	Fine	1011.6	1012.0	30.3	29.8	AM1a_24hr_011301	2.7806	2.8446	17463.05	17487.05	24.00	1.34	1.34	1.34	1927	33		

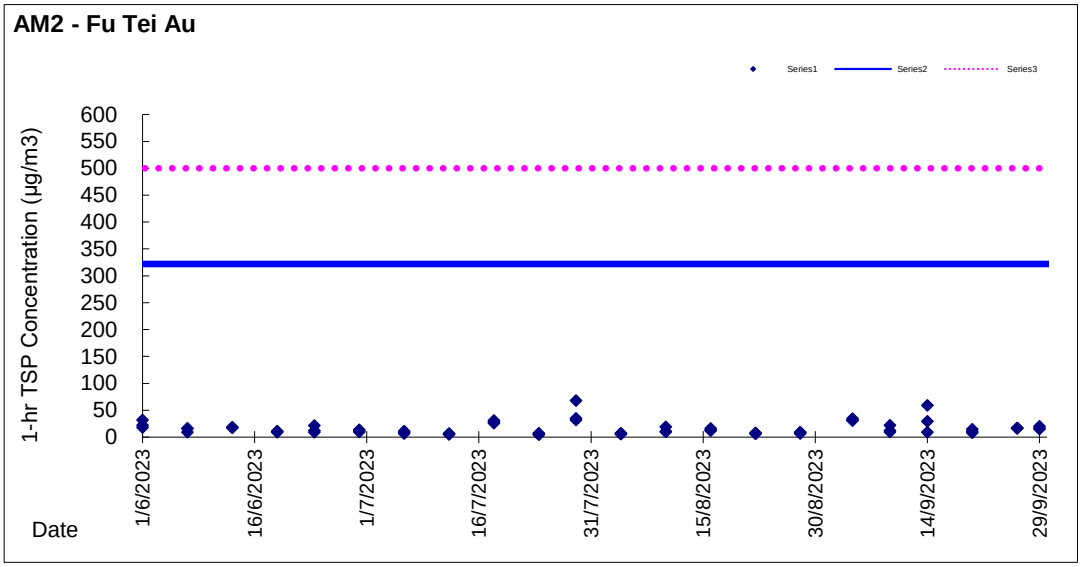
Service Contract No. SPW 12/2021
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1

Location: AM2a - Site Boundary of the Shek Wu Hui STW (North)
Impact Monitoring Result on 24-hour TSP monitoring

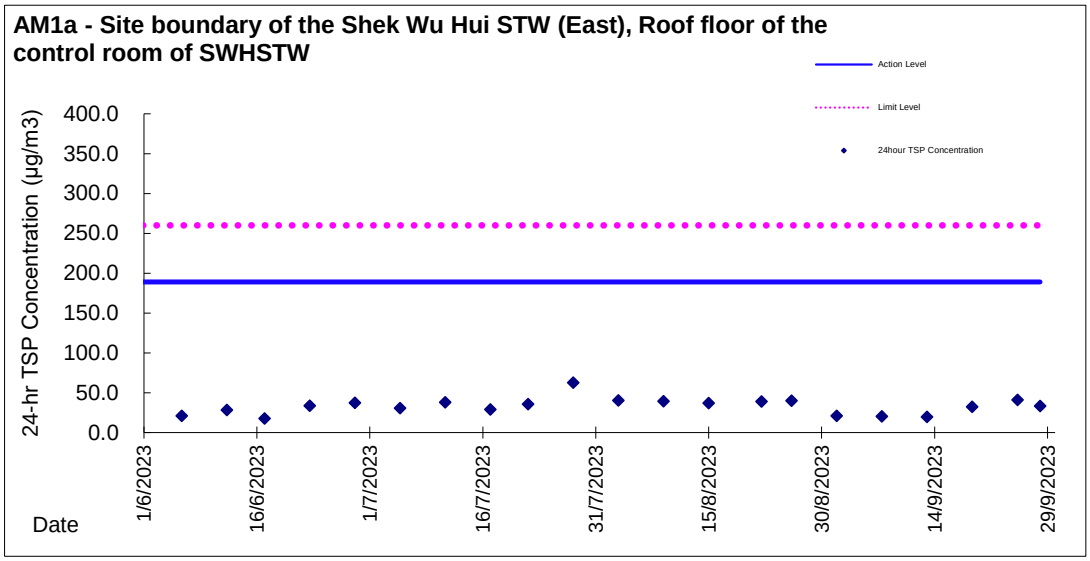
Date	Sampling Time	Weather Condition	Pressure, hPa		Temp. , °C		Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, ug/m^3	Model No.	Serial No.
			Initial	Final	Initial	Final		Initial	Final	Initial	Final		Initial, Qsi	Final, Qsf	Average				
01-Sep-23	24hr-TSP monitoring was suspended due to power failure																	G3101	774
07-Sep-23																			
13-Sep-23																			
19-Sep-23																			
28-Sep-23																			

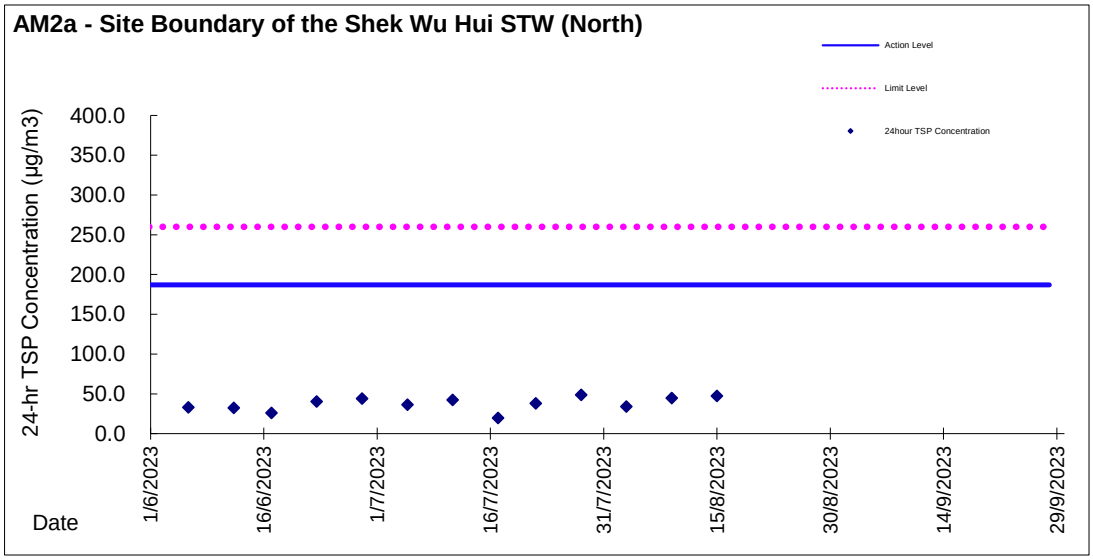
Graphic Presentation of TSP Result





Graphic Presentation of TSP Result





Appendix 5.4

Details of Ecological Monitoring Results in the Reporting Month

Summary data of the Ecological Monitoring

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Ardeola bacchus	Chinese Pond Heron	池鷺	X	56	+++++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	X	25	++
Ardea cinerea	Grey Heron	蒼鷺	X	40	+++++
Ardea alba	Great Egret	大白鷺	X	18	++
Egretta garzetta	Little Egret	小白鷺	X	104	+++++
Milvus migrans	Black Kite	黑鳶	X	1	+
Himantopus himantopus	Black-winged Stilt	黑翅長腳鷸	X	8	++
Actitis hypoleucos	Common Sandpiper	磯鷸	X	24	++++
Spilopelia chinensis	Spotted Dove	珠頸斑鳩		56	+++++
Centropus sinensis	Greater Coucal	褐翅鴉鵑		2	+
Eudynamys scolopaceus	Asian Koel	噪鵑		1	N/A
Halcyon smyrnensis	White-throated Kingfisher	白胸翡翠	X	4	+
Alcedo atthis	Common Kingfisher	普通翠鳥	X	1	+
Dicrurus macrocercus	Black Drongo	黑卷尾		0	+
Urocissa erythroryncha	Red-billed Blue Magpie	紅嘴藍鵲		1	+
Pica pica	Eurasian Magpie	喜鵲		2	+
Corvus torquatus	Collared Crow	白頸鴉	X	2	+

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Parus cinereus	Cinereous Tit	蒼背山雀		5	+
Pycnonotus jocosus	Red-whiskered Bulbul	紅耳鵯		64	+++++
Pycnonotus sinensis	Chinese Bulbul	白頭鵯		27	++++
Hirundo rustica	Barn Swallow	家燕		8	+
Phylloscopus fuscatus	Dusky Warbler	褐柳鶯		0	+
Phylloscopus inornatus	Yellow-browed Warbler	黃眉柳鶯		2	+
Prinia flaviventris	Yellow-bellied Prinia	黃腹鷦鶯		5	+
Prinia inornata	Plain Prinia	純色鷦鶯		5	+
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		20	+++
Garrulax perspicillatus	Masked Laughingthrush	黑臉噪鸝		29	+++++
Zosterops japonicus	Japanese White-eye	暗綠繡眼鳥		27	+++
Acridotheres cristatellus	Crested Myna	八哥		213	+++++
Gracupica nigricollis	Black-collared Starling	黑領椋鳥		47	+++++
Sturnia sinensis	White-shouldered Starling	灰背椋鳥		12	N/A
Copsychus saularis	Oriental Magpie Robin	鵲鴝		2	+

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Passer montanus	Eurasian Tree Sparrow	樹麻雀		34	+++++
Motacilla alba	White Wagtail	白鶺鴒		27	++++

Remarks:

X: Waterbird ;

Transect abundance, +: <10, ++: 11-20, +++: 21-30, ++++: 31-40, +++++: >40

According to S4.7 of the approved Baseline Monitoring Report (Ecology), "waterbirds" was defined as "waterbirds and wetland-dependent species", which was referenced to Monthly Waterbird Monitoring Biannual Reports prepared by the Hong Kong Bird Watching Society (Anon, 2020).

Also, S.13.11.3.2 of NENT NDA EIA Study requires "Monitoring of Measures to Mitigate for Impacts of the Project on Wetland-dependent Fauna using the Ng Tung, Sheung Yue and Shek Sheung Rivers". Therefore, "wetland-dependent birds" should be considered as "waterbirds". As raptors and Collared Crow are "wetland-dependent species", they should be taken into consideration in data analysis and impact assessment on waterbirds.

Waterbird Ecological Monitoring Result

Total Bird Abundance from Point Count						
Survey Information				Total Bird Abundance from Point Count		
No.	Date	Time	Tide Level	Individuals Recorded	Total	Species Recorded
1	6/9/2023	14:30	H	107	217	17
		11:15	L	110		20
2	15/9/2023	12:45	H	90	227	19
		14:45	L	137		20
3	21/9/2023	14:15	H	96	214	20
		10:30	L	118		23
4	29/9/2023	12:15	H	93	214	19
		14:30	L	121		20

Remarks: H: High Tide; L: Low Tide

Total Waterbird Abundance from Point Count					
Survey Information				Total Waterbird Abundance from Point Count	
No.	Date	Time	Tide Level	Individuals Recorded	Total
1	6/9/2023	12:15	H	12	69
		10:00	L	57	
2	15/9/2023	12:45	H	22	97
		14:45	L	75	
3	21/9/2023	14:15	H	21	59
		10:30	L	38	
4	29/9/2023	12:15	H	23	58
		14:30	L	35	

Remarks: H: High Tide; L: Low Tide

T-Test Analysis for All Waterbirds

Baseline Data

Monthly Average Abundance (September)	43.75
Seasonal Average Abundance (Summer season)	44.18

T-Test

The following hypothesis was made and a one-tail t-test will be used to test the data collected from the monitoring:

H_0: The data collected in the reporting month falls within the normal distribution when compared to the baseline monitoring data;

H_1: The data collected does not falls within the normal distribution when compared to the baseline monitoring data.

If t-test value is **smaller** than the critical value, then rejects H_0.

For the data in the reporting month, the critical values are:

Crit. Value = -2.353 (95% Confidence Level)

Crit. Value = -4.541 (99% Confidence Level)

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95% (-2.353)	99% (-4.541)
Abundance	Monthly	1.528	✓	✓
	Seasonal	1.503	✓	✓

Remarks:

✓ = T-value falls within the confidence level; the impact monitoring data shows no significant difference to the baseline data.

✗ = T-value falls outside the confidence level; the impact monitoring data shows significant difference to the baseline dat

Abundance of Representative Waterbirds from Point Count										
Representative Species			**Recorded Abundance**					**Average**	**Baseline Data**	
Species Name	**Common Name**	**Chinese Name**	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Total**		**Average (Sep)**	**Avg (Summer)**
Egretta garzetta	Little Egret	小白鷺	17	46	22	19	104	26	16	20
Ardea cinerea	Grey Heron	蒼鷺	15	16	4	5	40	10	5	1
Ardeola bacchus	Chinese Pond Heron	池鷺	12	14	16	14	56	14	14	16
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0	0	0	0	0	0	0	0
Ardea alba	Great Egret	大白鷺	3	9	3	3	18	5	5	3
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	11	7	3	4	25	6	0	3

T-test Analysis for Representative Waterbirds from Point Count

The following hypothesis was made and a one-tail t-test will be used to test the data collected from the monitoring:

H_0: The data collected in the reporting month falls within the normal distribution when compared to the baseline monitoring data;

H_1: The data collected does not falls within the normal distribution when compared to the baseline monitoring data.

If t-test value is **smaller** than the critical value, then rejects H_0.

For the data in the reporting month, the critical values are:

Crit. Value = -2.353 (95% Confidence Level)

Crit. Value = -4.541 (99% Confidence Level)

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall
	Monthly	95% (-2.353)	99% (-4.541)	Seasonal	95% (-2.353)	99% (-4.541)	
Little Egret	1.213	✓	✓	0.728	✓	✓	✓
Grey Heron	NA*						
Chinese Pond Heron	0.000	✓	✓	-0.623	✓	✓	✓
Great Cormorant	NA*						
Great Egret	-0.304	✓	✓	0.913	✓	✓	✓
Eastern Cattle Egret	2.988	✓	✓	1.554	✓	✓	✓

Remarks:

✓ = T-value falls within the confidence level; the impact monitoring data shows no significant difference to the baseline data.

✗ = T-value falls outside the confidence level; the impact monitoring data shows significant difference to the baseline data.

* Great Cormorant (*Phalacrocorax carbo*) and Grey Heron (*Ardea cinerea*) were not recognised as representative waterbird species during wet season.

Appendix 5.5
Photo Record of Ecological Monitoring

Conditions of Rivers

Sheung Yue River – Survey Point 7 (Taken on 29 Sep 2023)	**Shek Sheung River – Survey Point 6 (Taken on 6 Sep 2023)**
Shek Sheung River - Survey Point 5 (Taken on 15 Sep 2023)	**Ng Tung River - Survey Point 4 (Taken on 21 Sep 2023)**

Human Activities & Site Conditions

Construction Activities (Ng Tung River) **(Project-related, taken on 15 Sep 2023)**	**Construction Activities (Shek Sheung River)** **(Project-related, taken on 15 Sep 2023)**
Construction Activities (Sheung Yue River) **(Non-project-related, taken on 29 Sep 2023)**	**Construction Activities (Ng Tung River)** **(Non-Project-related, taken on 6 Sep 2023)**

Human Activities (Sheung Yue River) **(Non-project-related, taken on 21 Sep 023)**	**Human Activities (Sheung Yue River)** **(Non-project-related, taken on 15 Sep 2023)**	**Human Activities (Sheung Yue River** **(Non-project-related, taken on 29 Sep 2023)**
Construction Activities (Ng Tung River) **(Non-Project-related, taken on 15 Sep 2023)**	**Construction Activities (Sheung Yue River)** **(Non-project-related, taken on 21 Sep 2023)**	**Construction Activities (Sheung Yue River)** **(Non-project-related, taken on 6 Sep 2023)**

Waterbird Species

Great Egret	**White-throated Kingfisher**	**Grey Heron**
Little Egret	**Eastern Cattle Egret**	**Waterbird in Shek Sheung River**

Appendix 5.9

Monthly Summary Waste Flow Table

Name of Department: DSD

Contract No. DC/2018/06

Monthly Summary Waste Flow Table for 2023

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)
Jan	0.442	0.000	0.000	0.000	0.442	3.796	0.000	0.000	0.000	0.000	0.061
Feb	1.381	0.000	0.000	0.000	1.381	2.962	0.000	0.000	0.000	0.000	0.078
Mar	2.528	0.000	0.000	0.000	2.528	3.530	0.000	0.000	0.000	0.000	0.090
Apr	1.633	0.000	0.000	0.000	1.633	0.280	0.000	0.000	0.000	0.000	0.083
May	2.067	0.000	0.000	0.000	2.067	0.791	0.000	0.000	0.000	0.000	0.073
Jun	1.013	0.000	0.000	0.000	1.013	0.250	0.000	0.000	0.000	0.000	0.084
Sub-total	9.064	0.000	0.000	0.000	9.064	11.609	0.000	0.000	0.000	0.000	0.469
Jul	1.310	0.000	0.000	0.000	1.310	0.111	0.000	0.000	0.000	0.000	0.054
Aug	1.114	0.000	0.000	0.000	1.114	0.112	0.000	0.000	0.000	0.000	0.091
Sep	0.683	0.000	0.000	0.000	0.683		0.000	0.000	0.000	0.000	0.098
Oct											
Nov											
Dec											
Total	12.170	0.000	0.000	0.000	12.170	11.832	0.000	0.000	0.000	0.000	0.713

Notes:

1. Assume the density of soil fill is 2 ton/m3.
2. Assume the density of rock and broken concrete is 2.5 ton/m3.
3. Assume the density of general refuse is 0.9 ton/m3.
4. Assume density of waste oil is assued to be 0.8 kg/L.
5. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38.
6. The non-inert C&D wastes are disposed at NENT.
7. The quantities of C&D material disposed at Public Fill Facilities and Landfill was until 24/9/2023.

Name of Department: DSD

Contract No. DC/2018/07

Monthly Summary Waste Flow Table for 2023

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)
Jan	8.960	0.000	0.000	0.000	8.960	0.089	0.00	0.000	0.000	0.000	0.025
Feb	3.950	0.000	0.000	0.000	3.950	0.043	0.00	0.000	0.000	0.000	0.070
Mar	0.341	0.000	0.000	0.000	0.341	0.000	0.00	0.000	0.000	0.000	0.074
Apr	0.213	0.000	0.000	0.000	0.213	0.000	0.00	0.000	0.000	0.000	0.047
May	1.877	0.000	0.000	0.000	1.877	0.000	0.00	0.000	0.000	0.000	0.072
Jun	1.004	0.000	0.000	0.000	1.004	0.093	0.00	0.000	0.000	0.000	0.065
Sub-total	16.346	0.000	0.000	0.000	16.346	0.225	0.000	0.000	0.000	0.000	0.352
Jul	2.555	0.000	0.000	0.000	2.555	0.070	0.00	0.000	0.000	0.000	0.093
Aug	3.369	0.000	0.000	0.000	3.369	0.134	0.00	0.000	0.000	0.000	0.061
Sep	0.897	0.000	0.000	0.000	0.897		0.00	0.000	0.000	0.000	0.067
Oct											
Nov											
Dec											
Total	23.167	0.000	0.000	0.000	23.167	0.428	0.000	0.000	0.000	0.000	0.574

Notes:

1. Assume the density of soil fill and special waste (i.e. sediment from DSD sedimentation tank) is 2 ton/m3.
2. Assume the density of rock and broken concrete is 2.5 ton/m3
3. Assume the density of general refuse is 0.9 ton/m3
4. Density of waste oil is assued to be 0.8 kg/L. Chemical waste includes waste oil.
5. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
6. The slurry and bentonite are disposed at Tseung Kwun O 137
7. The non-inert C&D wastes, including general refuse & special waste (i.e. sediment from DSD sedimentation tank) are disposed at NENT

Name of Department: ~~ArchSD/CEDD~~/DSD/~~EMSD/HyD/WSD~~ Contract No.: DE/2018/03

Monthly Summary Waste Flow Table for 2023 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	0	0	0	0	0	0	0	0.13	0	0	10.51T
Feb	0	0	0	0	0	0	0	0	0	0	17.33T
Mar	0	0	0	0	0	0	0	0.155	0.01	0	18.31T
Apr	0	0	0	0	0	0	4.81	0	0	0	12.62T
May	0	0	0	0	0	0	8.66	0.154	0	0	15.69T
June	0	0	0	0	0	0	75.09	0.155	0.01	0	19.34T
Sub-total	0	0	0	0	0	0	88.56	0.594	0.02	0	93.8T
July	62.33	0	0	0	62.33	0	41.04	0.156	0	0	24.83T
Aug	576.05	0	0	0	576.05	0	12.52	0.251	0.04	0	21.41T
Sept	0	0	0	0	0	0	0	0	0	0	49.61T
Oct											
Nov											
Dec											
Total	638.38	0	0	0	638.38	0	129.6	1.001	0.06	0	189.65T

Name of Department: DSD Contract No.: DE/2018/04

Monthly Summary Waste Flow Table for 2023 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 kg)
Jan	7.26	0	0	0	7.26	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	1.97
Mar	0	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	36.23	0	0	0.8	0
May	0	0	0	0	0	0	0	0	0	0	1.06
June	74.73	0	0	0	74.73	0	0	0	0	0	2.05
Sub-total	81.99	0	0	0	81.99	0	36.23	0	0	0.8	5.08
July	28.34	0	0	0	28.34	0	0	0	0	0	0
Aug	9.26	0	0	0	9.26	0	0	0	0	0	7.97
Sept	0	0	0	0	0	0	0	0.2	0	0	0.92
Oct											
Nov											
Dec											
Total	119.59	0	0	0	119.59	0	36.23	0.2	0	0.8	13.97

Appendix 6.1

Event and Action Plans

Event and Action Plan

Event and Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
Action Level exceeded	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; 5. Increase monitoring frequency to check mitigation effectiveness;	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures.	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level exceeded	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; 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; 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 properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	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; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Construction Dust Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level				
Action level being exceeded by one sampling	1. Identify source, investigate the causes of complaint and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method.	1. Notify the Contractor.	1. Rectify any unacceptable practices. 2. Amend working methods agreed with the ER as appropriate.
Action level being exceeded by two or more consecutive sampling	1. Identify sources. 2. Inform the IEC and ER. 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings. 5. Increase monitoring frequency to daily. 6. Discuss with the IEC, ER and Contractor on remedial action required. 7. If exceedance continues, arrange meeting with the IEC, Contractor and ER. 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within three working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.
Limit Level				
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; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within three working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.

Event	Action			
	ET	IEC	ER	Contractor
	ER informed of the results.			
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; 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; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within three working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Ecological Monitoring

Action level	Response	Limit Level	Response
Construction Phase			
Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Action Level response is triggered.	Investigate cause and if cause identified as related to the Project instigate remedial action to remove or reduce source of disturbance.	Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Limit Level response is triggered.	Investigate cause and if caused identified as related to the Project instigate remedial action.
Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Action Level response is triggered	Investigate cause and if cause identified as related to the Project instigate remedial action to remove or reduce source of disturbance.	Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Limit Level response is triggered.	Investigate cause and if caused identified as related to the Project instigate remedial action.

Event and Action Plan for Landscape and Visual

Event	Action			
	ET	IEC	ER	Contractor
Non-conformity on one occasion	1. Inform the Contractor, IEC and ER; 2. Discuss remedial actions with IEC, ER and Contractor 3. Monitor remedial actions until rectification has been completed.	1. Check inspection report; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise ER on effectiveness of proposed remedial measures..	1. Confirm receipt of notification of failure in writing; 2. Review and agree on the remedial measures proposed by the Contractor; 3. Supervise implementation of remedial measures.	1. Identify source and investigate the non-conformity; 2. Implement remedial measures; 3. Amend working methods agreed with ER as appropriate; 4. Rectify damage and undertake any necessary replacement.
Repeated Non-conformity	1. Identify source; 2. Inform IEC, ER, EPD; 3. Discuss inspection frequency; 4. Discuss remedial actions with IEC, ER and Contractor; 5. Monitor remedial actions until rectification has been completed; 6. If non-conformity stops, cease additional monitoring	1. Check inspection report; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise ER on effectiveness of proposed remedial measures.	1. Notify the Contractor; 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; 3. Supervise implementation of remedial measures.	1. Identify source and investigate the non-conformity; 2. Implement remedial measures; 3. Amend working methods agreed with ER as appropriate; 4. Rectify damage and undertake any necessary replacement. Stop relevant portion of works as determined by ER until the non-conformity is abated.

Appendix 6.2

Summary of Notification of Exceedance

Summary for Notification of Exceedance

Reporting Period: September 2023

Ref No.	Date	Location	Parameters (Unit)	Measured	Action Level	Limit Level	Follow-up Action
-	-	-	-	-	-	-	-

Ref. No.	Date	Time	Location	Construction Noise Level	Parameter	Action Level	Limit Level	Follow-up action
-	-	-	-	-	-	-	-	-

Appendix 8.1

Complaint Log

Summary of Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
1	18 March 2020	EPD	Expansion Site of SWHSTP (Portion C)	Water contamination	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby The investigation and mitigation measures included - Employed suction truck and dump truck to clear the silt and mud at Shek Sheung River - Arranged to repair the wastewater treatment system - Installed additional sedimentation tanks and wastewater treatment system to increase the on-site treatment capacity - Clean the slurry sediment released from the outlet regularly by suction trucks - Avoid damage of underground drains and pipes caused by existing construction works - Avoid illegal discharge from the Site into foul drains and manholes	Closed
2	19 February 2021	EPD	SWHEPP	Odour nuisance	Significant odour nuisance was suspected to be emitted from the construction activities of SWHEPP The investigation and mitigation measures included - Ensured only PMEs with valid NRMM label were used on-site - Conducted regular visual checking against emission quality of exhaust pipe of equipment by using the Ringlemann Chart - Used ULSD for diesel-powered equipment - Provided water spraying and water sprinklers system for haul road access and demolition works - Used battery powered solution to provide power to the tower crane - Provided cover for all rubbish bins on-site - Separated general refuse from construction waste	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
3	9 August 2021	EPD	SWHEPP	Air Quality	Air nuisance was suspected to be originated from the construction activities of SWHEPP The investigation and mitigation measures included - Ensured only PMEs with valid NRMM label were used on-site - Conducted regular visual checking against emission quality of exhaust pipe of equipment by using the Ringlemann Chart - Used ULSD for diesel-powered equipment - Used battery powered solution to provide power to the tower crane - Carried out plant maintenance in a timely manner	Closed
20220304	4 March 2022	EPD	SWHEPP	Odour nuisance	The complainant alleged the odour nuisance was sourced from the construction site of Shek Wu Hui Effluent Polishing Plant on 4 March 2022. Thus, all four contracts (Contract Nos. DC/2018/06, DC/2018/07, DE/2018/03 and DE/2018/04) were involved in the complaint investigation. After investigation, no construction activities undertaken by all four contracts was associated with the odour nuisance received on 4 March 2022. Nevertheless, the contractors were reminded and recommended to: • Ensure only equipment with valid NRMM label is allowed to be used at site and regular maintenance of equipment • Provide regular visual checking against emission quality of exhaust pipe of equipment by using the Ringlemann Chart • Use ULSD as fuel for diesel-powered equipment • Maintain proper segregation and storage of general refuse	Closed on 22 April 2022 as confirmed with EPD.

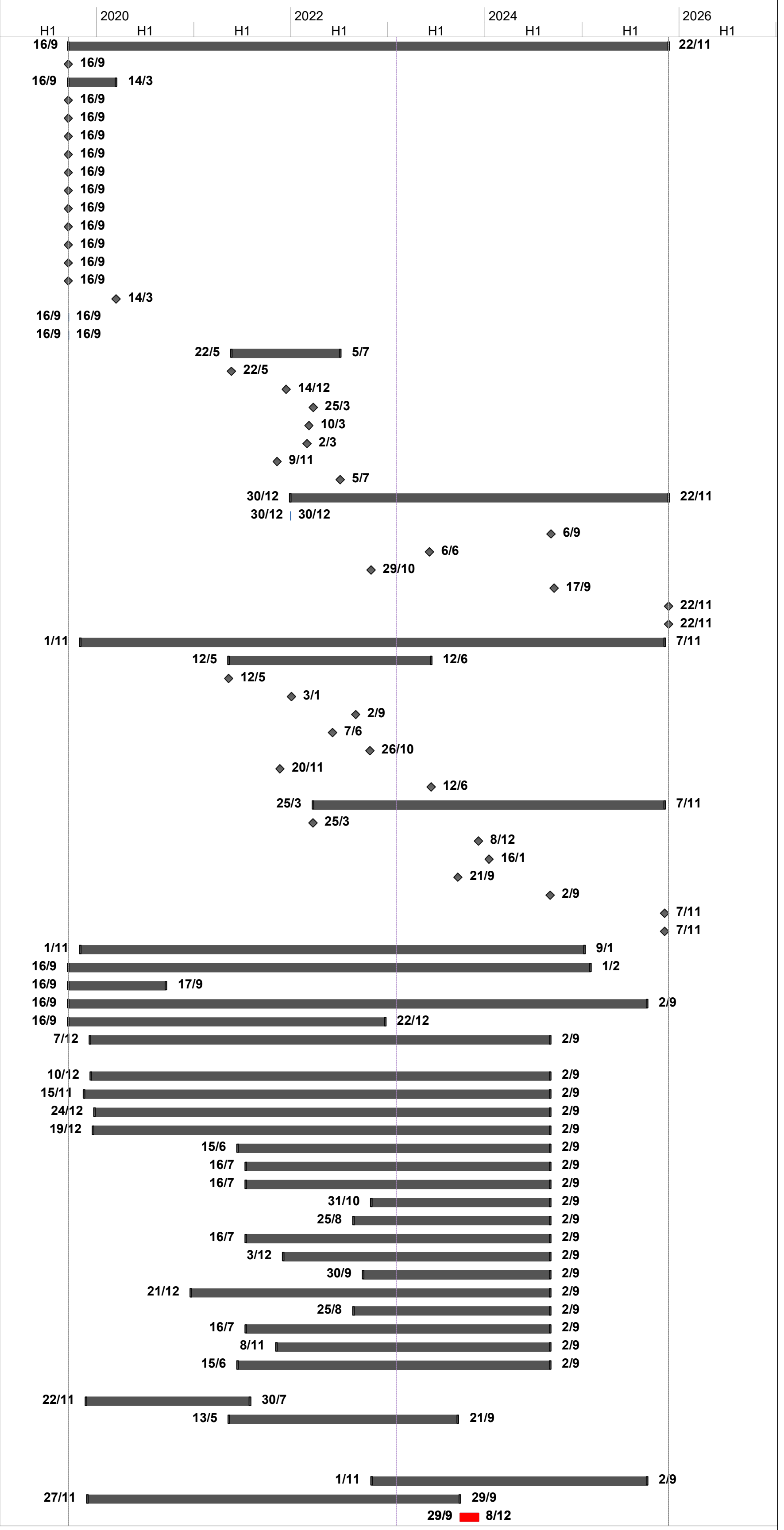
Appendix 9.1

Construction Programme of Individual Contracts

Revised Programme (Status Date:31/03/2023)

群利 – 俊和聯營體
KL – CW JV

ID	Activity ID	KD	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	% Complete	Time Risk Allowa
1	**CD-00000**		**Contract Dates**			**1842.8 day**	**Mon 16 Sep '**	**Sat 22 Nov '25**	**Mon 16 Sep '19**	**NA**			**0%**	
2	CD-01000		Starting Date			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19		4,5FS+181 days,6,7,8,9,11,12	100%	
3	**CAD-00000**		**Access Date (cal. day)**			**147 days**	**Mon 16 Sep '**	**Sat 14 Mar '20**	**Mon 16 Sep '19**	**Sat 14 Mar '20**			**100%**	
4	CAD-01000		Portion A-1			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
5	CAD-02000		Portion A-2			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2FS+181 days		100%	
6	CAD-03000		Portion C-1A			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
7	CAD-04000		Portion C-1B			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
8	CAD-05000		Portion C-2A			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
9	CAD-06000		Portion C-2B			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
10	CAD-07000		Portion C-2C			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
11	CAD-08000		Portion C-2D			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
12	CAD-09000		Portion C-3			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
13	CAD-10000		Portion C-4			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
14	CAD-11000		Portion C-5			0 days	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
15	CAD-12000		Portion C-6			0 days	Sat 14 Mar '20	Sat 14 Mar '20	Sat 14 Mar '20	Sat 14 Mar '20	2FS+181 days	581	100%	
16	CAD-13000		Works Area WA1			1 day	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
17	CAD-14000		Works Area WA2-A			1 day	Mon 16 Sep '1	Mon 16 Sep '19	Mon 16 Sep '19	Mon 16 Sep '19	2		100%	
18	**CKD-00000**		**Key Date (cal. day)**			**332 days**	**Sat 22 May '2**	**Tue 5 Jul '22**	**Sat 22 May '21**	**NA**			**0%**	
19	CKD-01000		KD1A (613.5days after starting date)			0 days	Sat 22 May '2	Sat 22 May '21	Sat 22 May '21	Sat 22 May '21	2FS+614.5 days,36FF	53	100%	
20	CKD-02000		KD2A (820 days after starting date)			0 days	Tue 14 Dec '2	Tue 14 Dec '21	Tue 14 Dec '21	Tue 14 Dec '21	2FS+821 days,37FF	61	100%	
21	CKD-03000		KD3A (921 days after starting date)			0 days	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	2FS+922 days,38FF	69	100%	
22	CKD-04000		KD3B (906 days after starting date)			0 days	Thu 10 Mar '2	Thu 10 Mar '22	Thu 10 Mar '22	Thu 10 Mar '22	2FS+907 days,39FF	78	100%	
23	CKD-05000		KD3C (898 days after starting date)			0 days	Wed 2 Mar '22	Wed 2 Mar '22	Wed 2 Mar '22	Wed 2 Mar '22	2FS+899 days,40FF	86	100%	
24	CKD-06000		KD3D (785 days after starting date)			0 days	Tue 9 Nov '21	Tue 9 Nov '21	Tue 9 Nov '21	Tue 9 Nov '21	2FS+786 days,41FF	94	100%	
25	CKD-07000		KD3E (1022.5days after starting date)			0 days	Tue 5 Jul '22	Tue 5 Jul '22	NA	NA	2FS+1023.5 days,42FF	101	0%	
26	**CCD-00000**		**Completion Date (cal. day)**			**1163.8 day**	**Thu 30 Dec '2**	**Sat 22 Nov '25**	**Thu 30 Dec '21**	**NA**			**0%**	
27	CCD-01000		Section 1 of Works (836 days after starting date)			1 day	Thu 30 Dec '2	Thu 30 Dec '21	Thu 30 Dec '21	Thu 30 Dec '21	2FS+837 days,44FF	109	100%	
28	CCD-02000		Section 2 of Works (1,467 days after starting date)			0 days	Fri 6 Sep '24	Fri 6 Sep '24	NA	NA	2FS+1468 days,45FF	118	0%	
29	CCD-03000		Section 3 of Works (1,358.5 days after starting date)			0 days	Tue 6 Jun '23	Tue 6 Jun '23	NA	NA	2FS+1359.5 days,46FF	127	0%	
30	CCD-04000		Section 4 of Works (1,138.5 days after starting date)			0 days	Sat 29 Oct '22	Sat 29 Oct '22	NA	NA	2FS+1139.5 days,47FF	136	0%	
31	CCD-05000		Section 5 of Works (1,827.5 days after starting date)			0 days	Tue 17 Sep '2	Tue 17 Sep '24	NA	NA	2FS+1828.5 days,48FF	32,33,145	0%	
32	CCD-06000		Defect Liability Period			365 days	Thu 19 Sep '2	Sat 22 Nov '25	NA	NA	31		0%	
33	CCD-07000		Soft Landscape Establishment Works			365 days	Thu 19 Sep '2	Sat 22 Nov '25	NA	NA	31		0%	
34	**PD-00000**	*	**Planned Completion - Key Date (cal. day)**			**1791.8 day**	**Fri 1 Nov '19**	**Fri 7 Nov '25**	**Fri 1 Nov '19**	**NA**			**26%**	
35	**PKD-00000**	*	**Planned Completion - Key Dates**			**618.8 days**	**Wed 12 May '**	**Mon 12 Jun '23**	**Wed 12 May '21**	**NA**			**0%**	
36	PKD-01000	KD1A	KD1A			0 days	Wed 12 May '	Wed 12 May '21	Wed 12 May '21	Wed 12 May '21	306FF	19FF	100%	
37	PKD-02000	KD2A	KD2A			0 days	Mon 3 Jan '22	Mon 3 Jan '22	Mon 3 Jan '22	Mon 3 Jan '22	686FF	20FF	100%	
38	PKD-03000	KD3A	KD3A			0 days	Fri 2 Sep '22	Fri 2 Sep '22	Fri 2 Sep '22	Fri 2 Sep '22	338FF	21FF	100%	
39	PKD-04000	KD3B	KD3B			0 days	Tue 7 Jun '22	Tue 7 Jun '22	Tue 7 Jun '22	Tue 7 Jun '22	376FF	22FF	100%	
40	PKD-05000	KD3C	KD3C			0 days	Wed 26 Oct '2	Wed 26 Oct '22	Wed 26 Oct '22	Wed 26 Oct '22	401FF	23FF	100%	
41	PKD-06000	KD3D	KD3D			0 days	Sat 20 Nov '21	Sat 20 Nov '21	Sat 20 Nov '21	Sat 20 Nov '21	434FF	24FF	100%	
42	PKD-07000	KD3E	KD3E			0 days	Mon 12 Jun '2	Mon 12 Jun '23	NA	NA	450FF,460FF,470FF,480FF,5	25FF	0%	
43	**PCD-00000**	*	**Planned Completion - Section of the Works (cal. day)**			**1081.8 day**	**Fri 25 Mar '22**	**Fri 7 Nov '25**	**Fri 25 Mar '22**	**NA**			**0%**	
44	PCD-01000	SW1	Section 1 of Works			0 days	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	Fri 25 Mar '22	578FF,609FF,610FF,611FF,6	27FF	100%	
45	PCD-02000	SW2	Section 2 of Works			0 days	Fri 8 Dec '23	Fri 8 Dec '23	NA	NA	715FF,727FF,699FF	28FF	0%	
46	PCD-03000	SW3	Section 3 of Works			0 days	Tue 16 Jan '2	Tue 16 Jan '24	NA	NA	205FF,403FF,418FF,436FF,4	648,29FF	0%	
47	PCD-04000	SW4	Section 4 of Works			0 days	Thu 21 Sep '2	Thu 21 Sep '23	NA	NA	579FF,355FF,381FF,405FF,4	30FF	0%	
48	PCD-05000	SW5	Section 5 of Works			0 days	Mon 2 Sep '24	Mon 2 Sep '24	NA	NA	313FF,356FF,382FF,406FF,4	49,50,31FF	0%	
49	PCD-06000	DLP	Defect Liability Period			365 days	Tue 3 Sep '24	Fri 7 Nov '25	NA	NA	48,649FF		0%	
50	PCD-07000		Soft Landscape Establishment Works			365 days	Tue 3 Sep '24	Fri 7 Nov '25	NA	NA	48,641,642,643		0%	
51	**DE-00000**		**Delaying Events Other than Change of Works Information to be considered**			**1532.8 day**	**Fri 1 Nov '19**	**Thu 9 Jan '25**	**Fri 1 Nov '19**	**NA**			**43%**	
153	**SUB-00000**		**Submissions (cal. day)**			**1590 days**	**Mon 16 Sep '**	**Sat 1 Feb '25**	**Mon 16 Sep '19**	**NA**			**93%**	
264	**CPW-00000**		**Site Preliminary Works**			**300 days**	**Mon 16 Sep '**	**Thu 17 Sep '20**	**Mon 16 Sep '19**	**Thu 17 Sep '20**			**100%**	
270	**CWPC-00000**	*	**Construction Works of Portion C of the Site**			**1772.8 day**	**Mon 16 Sep '**	**Tue 2 Sep '25**	**Mon 16 Sep '19**	**NA**			**57%**	
271	**CUV1-00000**	*	**UV System No. 1 & Effluent Pumping Station No. 1 (1)**			**971 days?**	**Mon 16 Sep '**	**Thu 22 Dec '22**	**Mon 16 Sep '19**	**Thu 22 Dec '22**			**100%**	
314	**CSDC-00000**	*	**Sludge Digesters and Distribution Chamber (4)**			**1395.8 day**	**Sat 7 Dec '19**	**Mon 2 Sep '24**	**Sat 7 Dec '19**	**NA**			**67%**	
357	**CSDB-00000**	*	**Sludge Dewatering Building (2)**			**875.8 days**	**Tue 26 Nov '1**	**Wed 9 Nov '22**	**Tue 26 Nov '19**	**NA**			**65%**	
383	**CHPB-00000**	*	**Combined Heat Power Building (3)**			**1393.8 day**	**Tue 10 Dec '1**	**Mon 2 Sep '24**	**Tue 10 Dec '19**	**NA**			**51%**	
407	**CSPS-00000**	*	**Sewage Pumping Station (9)**			**1414.8 day**	**Fri 15 Nov '19**	**Mon 2 Sep '24**	**Fri 15 Nov '19**	**NA**			**79%**	
421	**CWS2-00000**	*	**Workshop No. 2 (5)**			**1381.8 day**	**Tue 24 Dec '1**	**Mon 2 Sep '24**	**Tue 24 Dec '19**	**NA**			**74%**	
440	**CTHP-00000**	*	**Thermal Hydrolysis Pretreatment (6)**			**1385.8 day**	**Thu 19 Dec '1**	**Mon 2 Sep '24**	**Thu 19 Dec '19**	**NA**			**35%**	
454	**CFCD-00000**	*	**Ferric Chloride Dosing Facilities (10)**			**949.8 days**	**Tue 15 Jun '2**	**Mon 2 Sep '24**	**Tue 15 Jun '21**	**NA**			**42%**	
464	**CFHB-00000**	*	**Fire Hydrant and Booster Pump Room (16)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**28%**	
475	**CTFS-00000**	*	**Transformer and Switchroom (15)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**43%**	
484	**CUC-00000**	*	**Utility Corridor (13)**		**204**	**539 days**	**Mon 31 Oct '2**	**Mon 2 Sep '24**	**Mon 31 Oct '22**	**NA**			**13%**	
497	**CWMC-00000**	*	**Water Meter Cabinet (11)**		**204**	**593.8 days**	**Thu 25 Aug '2**	**Mon 2 Sep '24**	**Thu 25 Aug '22**	**NA**			**21%**	
504	**CGH-00000**	*	**Guard House (14)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**0%**	
511	**CCPS-00000**	*	**THP Coolers Pumping Station (21)**			**806.8 days**	**Fri 3 Dec '21**	**Mon 2 Sep '24**	**Fri 3 Dec '21**	**NA**			**52%**	
518	**CWGB-00000**	*	**Waste Gas Burner (8)**			**563 days**	**Fri 30 Sep '22**	**Mon 2 Sep '24**	**Fri 30 Sep '22**	**NA**			**27%**	
527	**CPSW-00000**	*	**Plant Services Water System (20)**			**1087.8 day**	**Mon 21 Dec '**	**Mon 2 Sep '24**	**Mon 21 Dec '20**	**NA**			**48%**	
535	**CDS11-00000**	*	**Deodorization System No. 11 (18)**			**593.8 days**	**Thu 25 Aug '2**	**Mon 2 Sep '24**	**Thu 25 Aug '22**	**NA**			**39%**	
545	**CBGH-00000**	*	**Biogas Holder (7)**			**923.8 days**	**Fri 16 Jul '21**	**Mon 2 Sep '24**	**Fri 16 Jul '21**	**NA**			**44%**	
553	**CH2S-00000**	*	**H2S Removal System (12)**			**828.8 days**	**Mon 8 Nov '2**	**Mon 2 Sep '24**	**Mon 8 Nov '21**	**NA**			**16%**	
562	**CDS12-00000**	*	**Deodorization System No. 12 (19)**			**949.8 days**	**Tue 15 Jun '2**	**Mon 2 Sep '24**	**Tue 15 Jun '21**	**NA**			**9%**	
570	CUPH-00000	SW5	Underpass & Pump House			711 days	Thu 20 Feb '2	Sat 16 Jul '22	NA	NA		47FF	0%	
571	**CPWU-00000**	*	**Pipe Works and Utility Installation**			**498 days**	**Fri 22 Nov '19**	**Fri 30 Jul '21**	**Fri 22 Nov '19**	**Fri 30 Jul '21**			**100%**	
602	**CPWU-02160**	**SW4**	Cable & Other Underground Utility Pipeworks	**17, 21, 22, 33, 45, 46, 257, 333, 258, 268, 338, (92), (112), (204), (228)**	**(283)**	**702.8 days**	**Thu 13 May '21**	**Thu 21 Sep '23**	**Thu 13 May '21**	**NA**	**171,367,428**	**47FF**	**74%**	
640	**CRWL-00000**	*	**Remaining Works & Landscape Works**			**846 days**	**Tue 1 Nov '22**	**Tue 2 Sep '25**	**Tue 1 Nov '22**	**NA**			**15%**	
650	**CWPA-00000**	*	**Construction of Portion A of the Site**			**1138 days**	**Wed 27 Nov '**	**Fri 29 Sep '23**	**Wed 27 Nov '19**	**NA**			**90%**	
727	C132SE-06000		Inspection and Handover to DSD			57 days	Fri 29 Sep '23	Fri 8 Dec '23	NA	NA	688,714,715,723	48FF,45FF	0%	



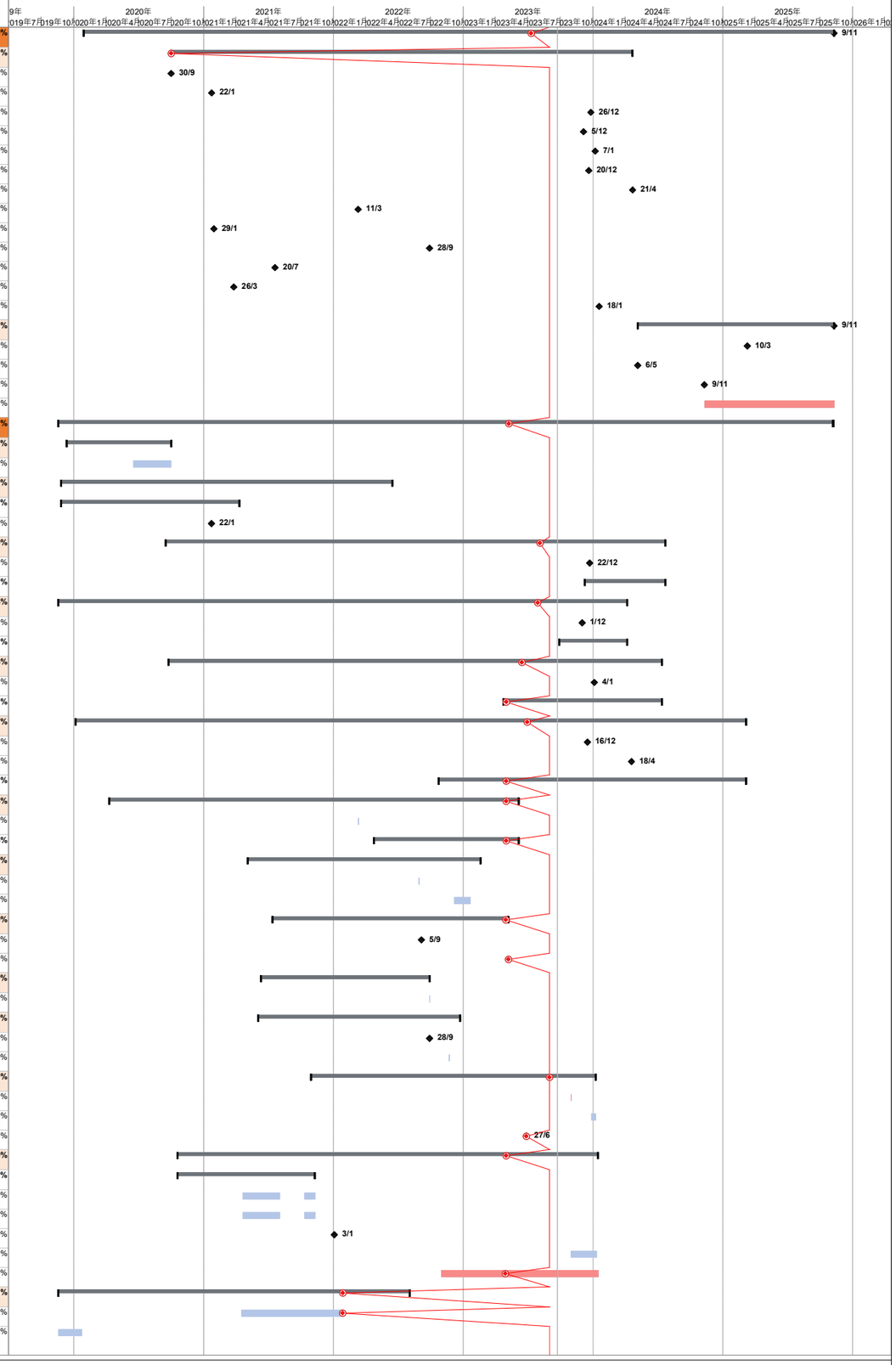
Critical Split · Task · Milestone · Summary · Critical

Contract No. DC/2018/07
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Civil Works for Sewage Treatment Facilities

Revised Master Programme (Status Date: 31/08/2023)

群利－俊和聯營體 KL－CW JV

識別碼	Activity ID	Key Date	NCE/(EW	PMI/(CE)	Task Name	工期	開始時間	完成時間	實際開始時間	實際完成時間	前置任務	後續任務	總寬限時間	Risk Allowa	完成百分比
40	**PD-1000**	*			**Planned Completion**	**2113 days**	**2020年1月28日星期**	**2025年11月9日,**	**年1月28日星期二2020**	**NA**			**0 days**		**49%**
41	**PCD-1000**	*			**Planned Completion - Key Dates (cal. day)**	**1298.79 days**	**2020年9月30日星期三**	**2024年4月21日星期日**	**年9月30日星期三2020**	**NA**			**-96.79 days**		**0%**
42	PKD-1010	KD1A			KD1A completion of AR3 in Portion B-1	0 days	2020年9月30日星	2020年9月30日	年9月30日星期三2020	年9月30日星期三2020	281FF	21FF,56FF+3.39 day	0 days		100%
43	PCD-1020	KD1B			KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2	0 days	2021年1月22日星期五	2021年1月22日星期五	年1月22日星期五2021	年1月22日星期五2021	364FF,346FF	22FF,56FF+3.39 days,2176	0 days		100%
44	PCD-1030	KD1C			KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2	0 days	2023年12月26日	2023年12月26日	NA	NA	466FF+3.19 days,1081	23FF,56FF+3.39 day	-287.19 days		0%
45	PCD-1040	KD1D			KD1D completion of civil and structural works of Primary Sedimentation Tanks in Portion B-3	0 days	2023年12月5日星期二	2023年12月5日星期二	NA	NA	571FF+3.33 days	24FF,56FF+3.39 days	-216.33 days		0%
46	PCD-1050	KD1E			KD1E completion of civil and structural works of Bioreactor in Portion B-4	0 days	2024年1月7日星期	2024年1月7日星	NA	NA	676FF+2.97 days	25FF,56FF+3.39 day	-213.97 days		0%
47	PCD-1060	KD1F			KD1F completion of civil and structural works of MFB from B2 floor to 1st floor level in Portion B-5	0 days	2023年12月20日星期三	2023年12月20日星期三	NA	NA	858FF+3.33 days	26FF,56FF+3.39 days	-540.39 days		0%
48	PCD-1070	KD1G			KD1G completion of civil and structural works of MFB in Portion B-5	0 days	2024年4月21日星	2024年4月21日	NA	NA	859FF+3.39 days	27FF,56FF+3.39 day	-471.79 days		0%
49	PCD-1080	KD1H			KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6	0 days	2022年3月11日星期五	2022年3月11日星期五	年3月11日星期五2022	年3月11日星期五2022	905FF,902FF	28FF,56FF+3.39 days	0 days		100%
50	PCD-1090	KD1I			KD1I completion alternation works for existing Power House in Portion B-7A	0 days	2021年1月29日星	2021年1月29日	年1月29日星期五2021	年1月29日星期五2021	1106FF	29FF,56FF+3.39 day	0 days		100%
51	PCD-1100	KD1J			KD1J completion of auxiliary facilities in Portion B-7	0 days	2022年9月28日星	2022年9月28日	年9月28日星期二2022	年9月28日星期二2022	1039FF,1063FF,1046F	30FF,56FF+3.39 day	0 days		100%
52	PCD-1110	KD2A			KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9	0 days	2021年7月20日星期二	2021年7月20日星期二	年7月20日星期二2021	年7月20日星期二2021	1112FF,1110FF	31FF,57FF+2.33 days	0 days		100%
53	PCD-1120	KD2B			KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A	0 days	2021年3月26日星期五	2021年3月26日星期五	年3月26日星期五2021	年3月26日星期五2021	1099FF,1103FF,1104F	32FF,57FF+2.33 days	0 days		100%
54	PCD-1130	KD3A			KD3A completion of all utilities and road works in Portion B-9A	0 days	2024年1月18日星	2024年1月18日	NA	NA	1108FF+2.33 days,110	33FF	-2.33 days		0%
55	**PCD-1000**	*			**Planned Completion Date (cal. Day)**	**552.67 days**	**2024年5月6日星期**	**2025年11月9日,**	**NA**	**NA**			**-513.33 da...**		**0%**
56	PCD-1010	SW1			Section 1 of the Works	0 days	2025年3月10日星	2025年3月10日	NA	NA	1097FF+3.39 days,908	35FF	-235.79 days		0%
57	PCD-1020	SW2			Section 2 of the Works	0 days	2024年5月6日星期	2024年5月6日星	NA	NA	671FF+2.33 days,672F	36FF	-513.33 days		0%
58	PCD-1030	SW3			Section 3 of the Works	0 days	2024年11月9日星	2024年11月9日	NA	NA	2204FF+2.33 days,220	37FF,59	0 days		0%
59	PCD-1040	DLP			Defects Liability Period	365 days	2024年11月10日	2025年11月9日	NA	NA	58	38FF	0 days		0%
266	**C-1000**	*			**Construction Works (Working day)**	**2181.67 days**	**2019年11月18日**	**2025年11月7日,**	**年11月18日星期一2019**	**NA**			**2.33 days**		**67%**
272	**CAR-0000**	*			**Access Road (AR3), B-1**	**238 days**	**2019年12月12日**	**2020年9月30日,**	**年12月12日星期四2019**	**年9月30日星期三2020**	**4,221**	**1199SS**	**0 days**		**100%**
281	CAR-3000	KD1A			Roadworks	133 days	2020年4月24日星	2020年9月30日	年4月24日星期五2020	年9月30日星期三2020	191,280,279	42FF	0 days		100%
282	**CIW-0000**	*			**Inlet Works No.1, B-2**	**754 days**	**2019年11月26日**	**2022年6月15日,**	**年11月26日星期二2019**	**年6月15日星期三2022**			**0 days**		**100%**
323	**CIW-1510**	**KD1B**			**Diversion of Tank Drain MHD9.5 (approx. 70m CHES1 & CHES2)**	**405 days**	**2019年11月26日**	**2021年4月10日,**	**年11月26日星期二2019**	**年4月10日星期六2021**	**351**	**384**	**0 days**		**100%**
382	CIW-2500	KD1B			Conditions to be met for KD1B	0 days	2021年1月22日星	2021年1月22日	年1月22日星期五2021	年1月22日星期五2021	380	381	0 days		100%
383	**CIW-3000**	*			**Inlet Works No.1 Building (1)**	**1139 days**	**2020年9月15日星**	**2024年7月22日,**	**年9月15日星期二2020**	**NA**	**6**		**402 days**		**60%**
466	CIW-3700	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	2023年12月22日	2023年12月22日	NA	NA	402,453,436	44FF+3.19 days	-235.19 days		0%
480	**CIW-4000**	SW1			**ABWF Works**	**180 days**	**2023年12月9日星**	**2024年7月22日,**	**NA**	**NA**	**256,206**	**56FF+3.39 days**	**-7 days**		**0%**
488	**CPS-0000**	*			**Primary Sedimentation Tanks, B-3 (2)**	**1297 days**	**2019年11月18日**	**2024年4月6日星**	**年11月18日星期一2019**	**NA**	**8**		**489 days**		**74%**
571	CPS-9000	KD1D			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	2023年12月1日星	2023年12月1日	NA	NA	522	45FF+3.33 days	-183.25 days		0%
576	**CPS-10000**	**SW1**			**ABWF works + BS works**	**152 days**	**2023年9月28日星**	**2024年4月6日星**	**NA**	**NA**	**256,206**	**56FF+3.39 days**	**80 days**		**0%**
584	**CBR-0000**	*			**Bioreactors No.2A & 2B, B-4 (3)**	**1125 days**	**2020年9月23日星**	**2024年7月13日,**	**年9月23日星期三2020**	**NA**	**9**		**409 days**		**64%**
676	CBR-18000	KD1E			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	2024年1月4日星	2024年1月4日星	NA	NA	668,673,674,675,641	46FF+2.97 days	-175.97 days		0%
680	**CBR-21000**	**SW1**			**ABWF Works + BS Works**	**362 days**	**2023年4月25日星**	**2024年7月13日,**	**年4月25日星期二2023**	**NA**	**256,206**	**56FF+3.39 days**	**0 days**		**1%**
686	**CMF-0000**	*			**Membrane Facilities Building No.2 , B-5 (4)**	**1535.4 days**	**2020年1月6日星**	**2025年3月7日星**	**年1月6日星期一2020**	**NA**	**2**		**211.6 days**		**57%**
858	CMF-8000	KD1F			Allow access to Contractor DE/2018/04 for E&M installation and T&C works (from B1 to 1/F)	0 days	2023年12月16日星期六	2023年12月16日星期六	NA	NA	836,808,828	47FF+3.39 days	-441 days		0%
859	CMF-8100	KD1G			Allow access to Contractor DE/2018/04 for E&M installation and T&C works (from 1/F to Roof)	0 days	2024年4月18日星期四	2024年4月18日星期四	NA	NA	830,811	48FF+3.39 days	-378.65 days		0%
860	**CMF-9000**	**SW1**			**ABWF works + BS works**	**706.4 days**	**2022年10月24日**	**2025年3月7日星**	**年10月24日星期一2022**	**NA**	**256,206**	**56FF+3.39 days**	**-197.4 days**		**2%**
878	**CSA-0000**	*			**SAS Pumping Station, B-6 (12)**	**934 days**	**2020年4月9日星**	**2023年6月6日星**	**年4月9日星期四2020**	**NA**	**11**		**327 days**		**98%**
905	CSA-8000	KD1H			Allow access to Contractor DE/2018/03 for E&M installation and T&C works	1 day	2022年3月11日星	2022年3月11日	年3月11日星期五2022	年3月11日星期五2022	904	49FF,906SS-1 day	0 days		100%
908	**CSA-9000**	**SW1**			**ABWF works + BS works**	**331 days**	**2022年4月25日星**	**2023年6月6日星**	**年4月25日星期一2022**	**NA**	**907**	**56FF+3.39 days**	**327 days**		**93%**
920	**CFS-1000**	*		301	**Fire Services Sprinkler Pumping Room & Emergency Generator House (9)+(10)****	**534 days**	**2021年5月4日星期二**	**2023年2月18日星期六**	**年5月4日星期二2021**	**年2月18日星期六2023**			**0 days**		**100%**
963	CFS-5000	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	1 day	2022年8月29日星	2022年8月29日	年8月29日星期一2022	年8月29日星期一2022	938	51FF,964SS-1 day	0 days		100%
977	CFS-6100	SW1			Inspection and Handover	37 days	2022年12月6日星	2023年1月20日	年12月6日星期二2022	年1月20日星期五2023	975,976	56FF+3.39 days	0 days		100%
978	**CCS-1000**	*	295,297		**Chemical System No.1 (8)***	**539 days**	**2021年7月13日星**	**2023年5月8日星**	**年7月13日星期二2021**	**NA**			**351 days**		**99%**
1013	CCS-1900	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	2022年9月5日星	2022年9月5日星	年9月5日星期一2022	年9月5日星期一2022	1015	51FF,1020,1019	0 days		100%
1025	CCS-2050	SW1			Inspection and Handover	1 day	2023年5月8日星	2023年5月8日星	NA	NA	1024	56FF+3.39 days	347.75 days		0%
1026	**CDS-0000**	*			**Deodorization System No.3A (7)***	**387 days**	**2021年6月11日星**	**2022年9月28日,**	**年6月11日星期五2021**	**年9月28日星期三2022**			**0 days**		**100%**
1039	CDS-7000	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	1 day	2022年9月28日星	2022年9月28日	年9月28日星期三2022	年9月28日星期三2022	1038	51FF,1043	0 days		100%
1040	**CTC-0000**	*			**Temporary Chemical Dosing System (5)**	**466 days**	**2021年6月3日星**	**2022年12月23日**	**年6月3日星期四2021**	**年12月23日星期五2022**			**0 days**		**100%**
1063	CTC-11000	KD1J			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	2022年9月28日星	2022年9月28日	年9月28日星期三2022	年9月28日星期三2022	1061FS+1 day	51FF,1065	0 days		100%
1068	CTC-13000	SW1			Inspection and Handover	1 day	2022年11月22日	2022年11月22日	年11月22日星期二2022	年11月22日星期二2022	1067	56FF+3.39 days	0 days		100%
1069	**CFB-0000**	*			**Fire Hydrant and Booster Pump Room (13)***	**650 days**	**2021年10月29日**	**2024年1月8日星**	**年10月29日星期五2021**	**NA**			**150 days**		**9%**
1081	CFB-4000	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	1 day	2023年10月31日	2023年10月31日	NA	NA	1080FF	1082SF,44FF+3.19 d	-190.19 days		0%
1088	CFB-5100	SW1			Inspection and Handover	10 days	2023年12月27日	2024年1月8日星	NA	NA	1084,1085,1086,1087	56FF+3.39 days	150 days		0%
1097	CDS1-4000	KD1C			Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	2023年6月27日星	2023年6月27日	NA	NA	1096	56FF+3.39 days,44F	-88.25 days		0%
1098	**CAA-0000**	*			**Additional and Alternation Works for Existing Facilities (B-7A, B-8, B-8A)**	**961 days**	**2020年10月19日**	**2024年1月15日,**	**年10月19日星期一2020**	**NA**			**0 days**		**79%**
1099	**CAA-1000**	**KD2B**			**B-8A Alternation works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)**	**315 days**	**2020年10月19日星期一**	**2021年11月9日星期二**	**年10月19日星期一2020**	**年11月9日星期二2021**	**15,207,251**	**53FF**	**0 days**		**100%**
1104	CAA-1500	KD2B		064	Re-alignment of DN800 Temporary Air Main (CHTA) and Provision of FRP Staircases	168 days	2021年4月20日星期二	2021年11月9日星期二	年4月20日星期二2021	年11月9日星期二2021	1100,1101,1102	53FF	0 days		100%
1105	CAA-1600	KD2B	017	062	Elevated Section of DN800 Temporary Air Main (CHTA) across existing Bioreactor's Distribution Chamber No. 2	168 days	2021年4月20日星期二	2021年11月9日星期二	年4月20日星期二2021	年11月9日星期二2021	1100,1101,1102	53FF,1106	0 days		100%
1106	CAA-2000	KD1I			B7-A Alternation works for existing Power House	0 days	2022年1月3日星期	2022年1月3日星	年1月3日星期一2022	年1月3日星期一2022	13FS-1 day,187,225,22	50FF,1107FS+540 d	0 days		100%
1107	CAA-2100	SW3		224	Additional works for Power House	60 days	2023年10月31日	2024年1月11日	NA	NA	1106FS+540 days	58FF+2.33 days,54F	1.67 days		0%
1108	CAA-3000	SW3			Alternation works for existing Membrane Facilities Building No.1	359 days	2022年10月31日	2024年1月15日	年10月31日星期一2022	NA	14FS-1 day,240FS+160	58FF+2.33 days,54F	-1.33 days		41%
1109	**C2AUU-0000**	*			**External Underground Service, Utilities, Road/Drain (KD2A)**	**802 days**	**2019年11月18日**	**2022年8月3日星**	**年11月18日星期一2019**	**NA**	**16**		**984 days**		**81%**
1110	C2AUU-1000	KD2A		33, 222, 255	Process Pipes CHR and CHS (approx. 93m twin DN900 D.I.)	530 days	2020年10月19日星期一	2022年8月3日星期三	年10月19日星期一2020	NA	251,207	52FF	986.33 days		72%
1111	C2AUU-1000a	KD2A	029	33	Special Treatment for Removing the Existing Abandoned DN1800 By-pass Pipe and the Concrete Mass in Conflict with the Proposed Sheetpile wall for trenching work of Process Pipeline CHR and CHS	54 days	2019年11月18日星期一	2020年1月22日星期三	年11月18日星期一2019	年1月22日星期三2020			0 days		100%

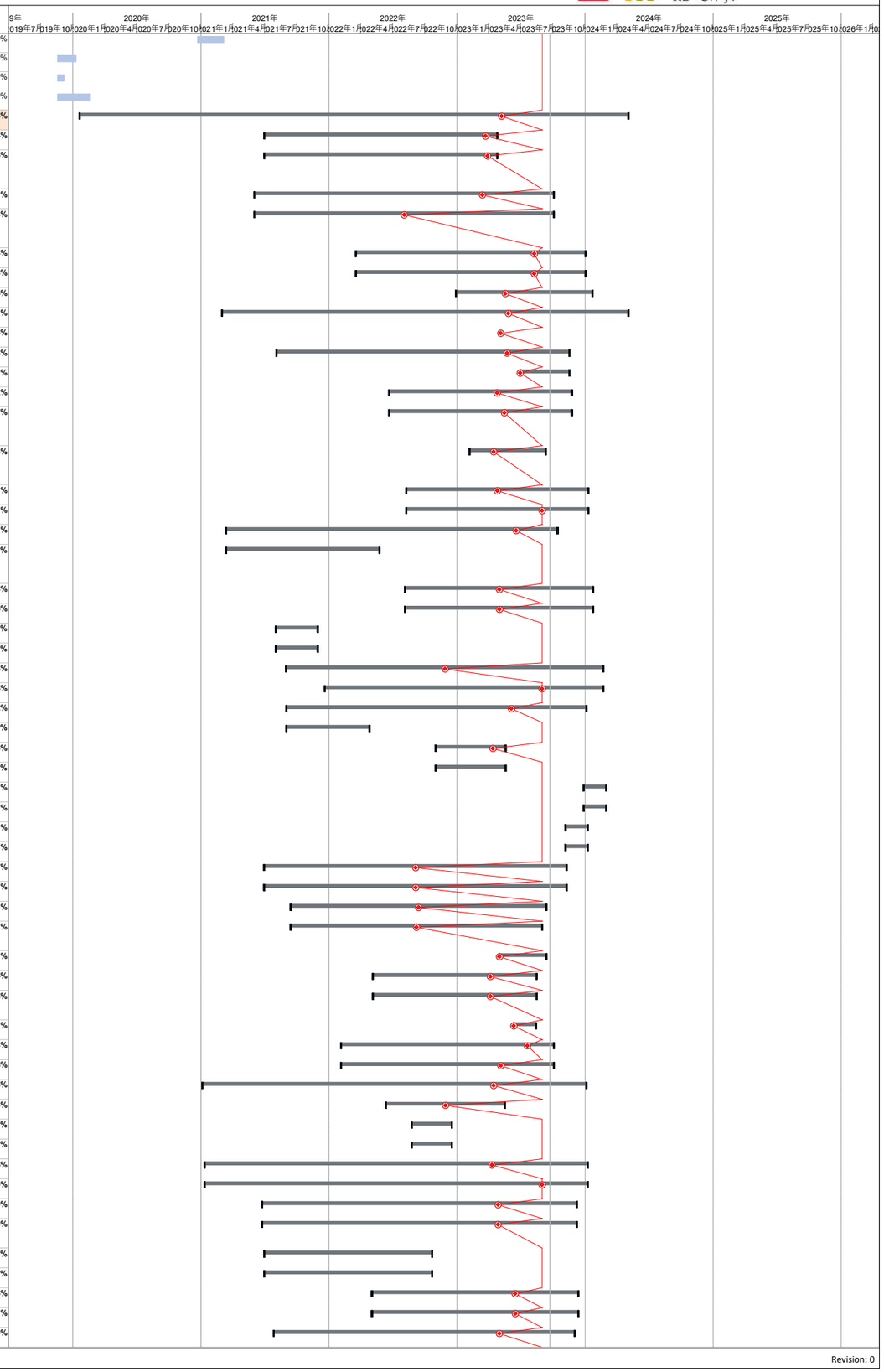


Contract No. DC/2018/07
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Civil Works for Sewage Treatment Facilities

Revised Master Programme (Status Date: 31/08/2023)

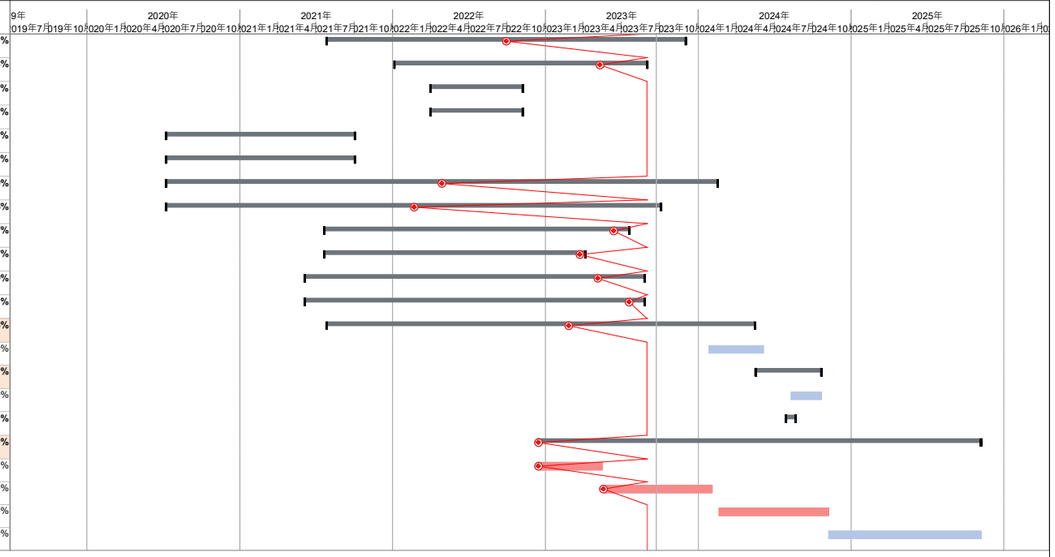
群利－俊和聯營體 KL－CW JV

識別碼	Activity ID	Key Date	NCE/(EW	PMI/(CE)	Task Name	工期	開始時間	完成時間	實際開始時間	實際完成時間	前置任務	後續任務	總寬限時間	Risk Allowa	完成百分比
1112	C2AUU-1000b	KD2A		255	Trenchless work for Process Pipes CHR and CHS (approx. 7m twin DN900 D.I.)	60 days	2020年12月21日	2021年3月6日星	年12月21日星期一2020	年3月6日星期六2021		52FF	0 days		100%
1113	C2AUU-1001	KD2A		033	Removal of Abandoned DN1800 Concrete Pipe and Concrete Mass near Existing UV Disinfection Channel at CHR & CHS Process Pipe Works Area	43 days	2019年11月18日 星期一	2020年1月9日 星期四	年11月18日星期一2019	年1月9日星期四2020			0 days		100%
1114	C2AUU-1002	KD2A		222	Grouting for Sheung Shui Slaughter House Boundary Walls along CHR & CHS Pipes Works Area	16.83 days	2019年11月18日 星期一	2019年12月6日 星期五	年11月18日星期一2019	年12月6日星期五2019			0 days		100%
1115	C2AUU-1004	KD2A		(076)	Delay Delivery of DI pipes due to COVID-19	75 days	2019年11月18日	2020年2月19日	年11月18日星期一2019	年2月19日星期三2020			0 days		100%
1116	**CS2-0000**	**SW2**			**External Underground Service, Utilities, Road/Drain (Section 2)**	**1268 days**	**2020年1月20日星**	**2024年5月3日星**	**年1月20日星期一2020**	**NA**		**57FF+2.33 days**	**-135 days**		**66%**
1144	**CS2-1000**	**SW2**			**Sewerage and utilities in Workfront A2**	**539 days**	**2021年6月30日星**	**2023年4月25日,**	**年6月30日星期三2021**	**NA**			**-20 days**		**94%**
1162	**CS2-1100**	**SW2**			**Workfront A2b : Construction of 2 nos. of DN250 DI sludge pipe (CHPS1,CHPS2 CH157-190), 2 nos. of DN350 DI sewage pipe (CHT CH62-91, CHY CH62-91) and 3 nos. of DN150 DI pipe (CHW, CHX, CHZ CH62-91)**	**539 days**	**2021年6月30日 星期三**	**2023年4月25日 星期二**	**年6月30日星期三2021**	**NA**		**1145**	**-20 days**		**85%**
1172	**CS2-2000**	**SW2**			**Sewerage and utilities in Workfront A3**	**695 days**	**2021年6月2日星**	**2023年10月4日,**	**年6月2日星期三2021**	**NA**			**-150 days**		**61%**
1189	**CS2-2100**	**SW2**			**Workfront A3b: Construction of 2 nos. of DN250 DI sludge pipe (CHPS1, CHPS2 CH133-146), 2 nos. of DN350 DI sewage pipe (CHT CH100-114, CHY CH100-114) and 3 nos. of DN150 DI pipe (CHW CH100-114, CHX&CHZ CH100-114); Watermains**	**695 days**	**2021年6月2日星 期三**	**2023年10月4日 星期三**	**年6月2日星期三2021**	**NA**	**1934**		**-242.33 days**		**64%**
1200	**CS2-3000a**	**SW2**			**Sewerage and utilities in Workfront A5a**	**531 days**	**2022年3月18日星**	**2024年1月2日星**	**年3月18日星期五2022**	**NA**		**1991,1984**	**-80 days**		**64%**
1202	**CS2-3100a**	**SW2**			**Construction of DN825 concrete pipe (CHU CH9.81-67.72) and manhole MHS01-MHS03**	**531 days**	**2022年3月18日 星期五**	**2024年1月2日 星期二**	**年3月18日星期五2022**	**NA**			**-80 days**		**63%**
1230	**CS2-3000b**	**SW2**			**Sewerage and utilities in Workfront A5b**	**316 days**	**2022年12月29日,**	**2024年1月22日,**	**年12月29日星期四2022**	**NA**		**1991,1984**	**-149 days**		**34%**
1240	**CS2-3300**	**SW2**			**Sewerage and utilities in Workfront A6**	**940 days**	**2021年3月1日星**	**2024年5月3日星**	**年3月1日星期一2021**	**NA**			**-135 days**		**61%**
1242	**CS2-3310**	**SW2**			**Construction of CHPS1 CH274.233 - 355.037 ; CHPSW1 CH0-7**	**171 days**	**2022年10月6日星**	**2023年5月5日星**	**年10月6日星期四2022**	**NA**			**58 days**		**76%**
1289	**CS2-4000**	**SW2**			**Sewerage and utilities in Workfront B1**	**680 days**	**2021年8月4日星**	**2023年11月17日**	**年8月4日星期三2021**	**NA**			**-117 days**		**43%**
1302	**CS2-4100**	**SW2**			**Workfront B1b: DN600 concrete pipe (CHU CH0-9.81)**	**117 days**	**2023年6月30日星**	**2023年11月17日**	**NA**	**NA**			**-279.33 da...**		**0%**
1318	**CS2-5000**	**SW2**			**Sewerage and utilities in Workfront C1**	**427 days**	**2022年6月21日星**	**2023年11月24日**	**年6月21日星期二2022**	**NA**		**2008**	**-65 days**		**42%**
1319	**CS2-5100**	**SW2**			**Workfront C1a: Construction of 2 nos. of DN250 DI sludge pipe (CHPS1,CHPS2 CH50-133), 2 nos. of DN350 DI sewage pipe (CHT&CHY CH114-189) and 3 nos. of DN150 DI pipe (CHW CH114-140, CHX&CHZ CH114-140), MHFB64B-MHFB64C**	**427 days**	**2022年6月21日 星期二**	**2023年11月 24日星期五**	**年6月21日星期二2022**	**NA**	**1482**		**-73 days**		**57%**
1346	**CS2-5100**	**SW2**			**Workfront C1b: Construction of 2 nos. of DN250 DI sludge pipe (CHPS1,CHPS2 CH50-133), 2 nos. of DN350 DI sewage pipe (CHT&CHY CH114-189) and 3 nos. of DN150 DI pipe (CHW CH114-140, CHX&CHZ CH114-140), MHFB64B-MHFB64C, CHPSW-5**	**179 days**	**2023年2月6日星 期一**	**2023年9月11日 星期一**	**年2月6日星期一2023**	**NA**		**1364**	**-4 days**		**24%**
1363	**CS2-6000**	**SW2**			**Sewerage and utilities in Workfront C2**	**423 days**	**2022年8月9日星**	**2024年1月10日,**	**年8月9日星期二2022**	**NA**		**2018,1456**	**-422 days**		**1%**
1364	**CS2-6100**	**SW2**			**Construction of 2 nos. of DN250 DI sludge pipe(CHPS1, CHPS2 CH25-50), CH PSW-7**	**423 days**	**2022年8月9日星 期二**	**2024年1月10日 星期三**	**年8月9日星期二2022**	**NA**	**1346**		**-422 days**		**1%**
1381	**CS2-7000**	**SW2**			**Sewerage and utilities in Workfront C3**	**768 days**	**2021年3月13日星**	**2023年10月14日**	**年3月13日星期六2021**	**NA**		**2026**	**-191 days**		**71%**
1382	**CS2-7100**	**SW2**			**Construction of DN1000 HDPE odour pipe (CHDO2), DN250 DI sludge pipe (CHPS1, CHPS2; CH0-25), DN250 DI pipe (CHPSW-6), DN300 DI pipe(CHTFT2), manhole MHD5A and its associated backdrop manhole**	**353 days**	**2021年3月13日 星期六**	**2022年5月24日 星期二**	**年3月13日星期六2021**	**年5月24日星期二2022**	**1476**		**0 days**		**100%**
1416	**CS2-8000**	**SW2**			**Sewerage and utilities in Workfront D1**	**438 days**	**2022年8月5日星**	**2024年1月24日,**	**年8月5日星期五2022**	**NA**			**-260 days**		**33%**
1417	**CS2-8100**	**SW2**			**Construction of DN250 DI pipe (CHTFT-2), DN800 MS pipe (CHTA) and watermains**	**438 days**	**2022年8月5日星 期五**	**2024年1月24日 星期三**	**年8月5日星期五2022**	**NA**	**1334,1355**		**-260 days**		**36%**
1443	**CS2-9000**	**SW2**			**Sewerage and utilities in Workfront D2**	**100 days**	**2021年8月2日星**	**2021年11月29日**	**年8月2日星期一2021**	**年11月29日星期一2021**			**0 days**		**100%**
1444	**CS2-9100**	**SW2**			**Construction of DN350 DI temporary flow diversion pipe (CHTE(A), CHTE(B))**	**100 days**	**2021年8月2日星 期一**	**2021年11月 29日星期一**	**年8月2日星期一2021**	**年11月29日星期一2021**			**0 days**		**100%**
1454	**CS2-10000**	**SW2**			**Sewerage and utilities in Workfront D3**	**734 days**	**2021年8月31日星**	**2024年2月22日,**	**年8月31日星期二2021**	**NA**			**-356.33 da...**		**84%**
1456	**CS2-10100**	**SW2**			**Construction of DN100 DI pretreatment screen pipe (CHPT2)**	**642 days**	**2021年12月20日,**	**2024年2月22日,**	**年12月20日星期一2021**	**NA**	**1363**		**-356.33 da...**		**66%**
1470	**CS2-11000**	**SW2**			**Sewerage and utilities in Portion D4**	**695 days**	**2021年9月1日星**	**2024年1月5日星**	**年9月1日星期三2021**	**NA**			**-70 days**		**72%**
1471	**CS2-11100**	**SW2**			**Construction of DN350 DI pipe (CHPSW-1)**	**191 days**	**2021年9月1日星**	**2022年4月26日,**	**年9月1日星期三2021**	**年4月26日星期二2022**			**0 days**		**100%**
1500	**CS2-12000**	**SW2**			**Sewerage and utilities in Portion E1**	**162 days**	**2022年11月1日星**	**2023年5月20日,**	**年11月1日星期二2022**	**NA**			**0 days**		**88%**
1501	**CS2-12100**	**SW2**			**Construction of watermains**	**162 days**	**2022年11月1日星**	**2023年5月20日,**	**年11月1日星期二2022**	**年5月20日星期六2023**			**0 days**		**100%**
1521	**CS2-13000**	**SW2**			**Sewerage and utilities in Portion E2**	**52 days**	**2023年12月28日,**	**2024年3月1日星**	**NA**	**NA**		**2064**	**-363.33 da...**		**0%**
1522	**CS2-13100**	**SW2**			**Construction of DN1600 DI sewage pipe (CHI CH75-95)**	**52 days**	**2023年12月28日,**	**2024年3月1日星**	**NA**	**NA**			**-363.33 da...**		**0%**
1537	**CS2-14000**	**SW2**			**Sewerage and utilities in Portion E3**	**52 days**	**2023年11月7日星**	**2024年1月9日星**	**NA**	**NA**		**2072**	**-321.33 da...**		**0%**
1538	**CS2-14100**	**SW2**			**Construction of DN1600 DI sewage pipe (CHI CH35-75), CHJ**	**52 days**	**2023年11月7日星**	**2024年1月9日星**	**NA**	**NA**	**1554FS-3 days**		**-321.33 da...**		**0%**
1554	**CS2-15000**	**SW2**			**Sewerage and utilities in Portion E4**	**703 days**	**2021年6月29日星**	**2023年11月9日,**	**年6月29日星期二2021**	**NA**		**1538FS-3 days**	**-321.33 da...**		**67%**
1557	**CS2-15100**	**SW2**			**Construction of DN1600 DI sewage pipe CHH, CHG**	**703 days**	**2021年6月29日星**	**2023年11月9日,**	**年6月29日星期二2021**	**NA**			**-321.33 da...**		**1%**
1573	**CS2-16000**	**SW2**			**Sewerage and utilities in Workfront E5**	**593 days**	**2021年9月13日星**	**2023年9月13日,**	**年9月13日星期一2021**	**NA**		**2086**	**-226.33 da...**		**4%**
1574	**CS2-16100a**	**SW2**			**Workfront E5a: Process Pipe CHG chainage 0-50, CHH chainage 0-80, CHJ chainage 0-40, CHPSW-4, CHPT1, CHPT2 diversion pipe, manhole MHSA4A, MHSA4R**	**582 days**	**2021年9月13日 星期一**	**2023年8月31日 星期四**	**年9月13日星期一2021**	**NA**	**1771**		**-215.33 days**		**8%**
1585	**CS2-16100b**	**SW2**			**Workfront E5b: Process Pipe CHI chainage 0-35**	**113 days**	**2023年5月2日星**	**2023年9月13日,**	**NA**	**NA**			**-226.33 da...**		**0%**
1612	**CS2-17000**	**SW2**			**Sewerage and utilities in Workfront F1**	**381 days**	**2022年5月5日星**	**2023年8月15日,**	**年5月5日星期四2022**	**NA**			**-16 days**		**45%**
1613	**CS2-17100a**	**SW2**			**Workfront F1a: Process Pipe CHPSW-1 CH100-108 , DN150 DI SAS pipe CHZB, Bioreactor Tank Drain CHTD1, watermains of CHPSW-1 and chemical trench**	**381 days**	**2022年5月5日星 期四**	**2023年8月15日 星期二**	**年5月5日星期四2022**	**NA**			**-16 days**		**55%**
1630	**CS2-17100b**	**SW2**			**Workfront F1b: Bioreactor Tank Drain CHTD1, cable ducts laying**	**53 days**	**2023年6月12日星**	**2023年8月14日,**	**NA**	**NA**			**-200.33 da...**		**0%**
1640	**CS2-18000**	**SW2**			**Sewerage and utilities in Workfront F2**	**494 days**	**2022年2月4日星**	**2023年10月4日,**	**年2月4日星期五2022**	**NA**			**-114 days**		**63%**
1641	**CS2-18100**	**SW2**			**Workfront F2a: Construction of Process Pipe CHPSW-4**	**494 days**	**2022年2月4日星**	**2023年10月4日,**	**年2月4日星期五2022**	**NA**			**-220 days**		**76%**
1666	**CS2-19000**	**SW2**			**Sewerage and utilities in Workfront F3**	**890 days**	**2021年1月5日星**	**2024年1月5日星**	**年1月5日星期二2021**	**NA**			**-120 days**		**75%**
1685	**CS2-19300**	**SW2**			**Construction of DN350 DI process pipe CHPSW-1**	**276 days**	**2022年6月12日星**	**2023年5月17日,**	**年6月12日星期日2022**	**NA**			**-127.33 da...**		**63%**
1710	**CS2-20000**	**SW2**			**Sewerage and utilities in Workfront G1**	**96 days**	**2022年8月25日星**	**2022年12月17日**	**年8月25日星期四2022**	**年12月17日星期六2022**			**0 days**		**100%**
1711	**CS2-20100**	**SW2**			**Process Pipe DN900 DI RAS pipe (CHP) and 2 nos. of DN250 DI sludge pipe (CHSS1 CH140-183, CHSS2 CH140-182)**	**96 days**	**2022年8月25日 星期四**	**2022年12月 17日星期六**	**年8月25日星期四2022**	**年12月17日星期六2022**	**1866**		**0 days**		**100%**
1725	**CS2-21000**	**SW2**			**Sewerage and utilities in Workfront G2**	**887 days**	**2021年1月11日星**	**2024年1月8日星**	**年1月11日星期一2021**	**NA**			**-233 days**		**85%**
1727	**CS2-21100**	**SW2**			**Process Pipe DN1400 DI sewage pipe (CHK CH0-6), 2 nos. of DN250 DI sludge pipe (CHSS1, CHSS2 CH100-140)**	**887 days**	**2021年1月11日 星期一**	**2024年1月8日 星期一**	**年1月11日星期一2021**	**NA**			**-233 days**		**79%**
1754	**CS2-22000**	**SW2**			**Sewerage and utilities in Workfront G3**	**732 days**	**2021年6月24日星**	**2023年12月8日,**	**年6月24日星期四2021**	**NA**		**2128**	**-210 days**		**80%**
1757	**CS2-22100**	**SW2**			**Process Pipe DN1400 DI sewage pipe of CHK CH6-43.5, CHL CH0-31, DN300 CHN CH54-70, 2x DN250 CHSS1, CHSS2 (CH80-100), SAS gravity system and watermains**	**732 days**	**2021年6月24日 星期四**	**2023年12月8日 星期五**	**年6月24日星期四2021**	**NA**			**-210 days**		**70%**
1788	**CS2-23000**	**SW2**			**Sewerage and utilities in Workfront G4**	**390 days**	**2021年6月30日星**	**2022年10月21日**	**年6月30日星期三2021**	**年10月21日星期五2022**			**0 days**		**100%**
1789	**CS2-23100**	**SW2**			**DN700 CHER CH0-38**	**390 days**	**2021年6月30日星**	**2022年10月21日**	**年6月30日星期三2021**	**年10月21日星期五2022**			**0 days**		**100%**
1801	**CS2-24000**	**SW2**			**Sewerage and utilities in Workfront G5**	**483 days**	**2022年5月3日星**	**2023年12月13日**	**年5月3日星期二2022**	**NA**		**1856SS+21 days**	**-150 days**		**56%**
1802	**CS2-24100**	**SW2**	310	489	**Process Pipe CHM, CHN, CHO, CHP, CHQ, CHV**	**483 days**	**2022年5月3日星**	**2023年12月13日**	**年5月3日星期二2022**	**NA**			**-150 days**		**61%**
1827	**CS2-25000**	**SW2**			**Sewerage and utilities in Workfront G6**	**700 days**	**2021年7月27日星**	**2023年12月2日,**	**年7月27日星期二2021**	**NA**		**2136**	**-181 days**		**30%**

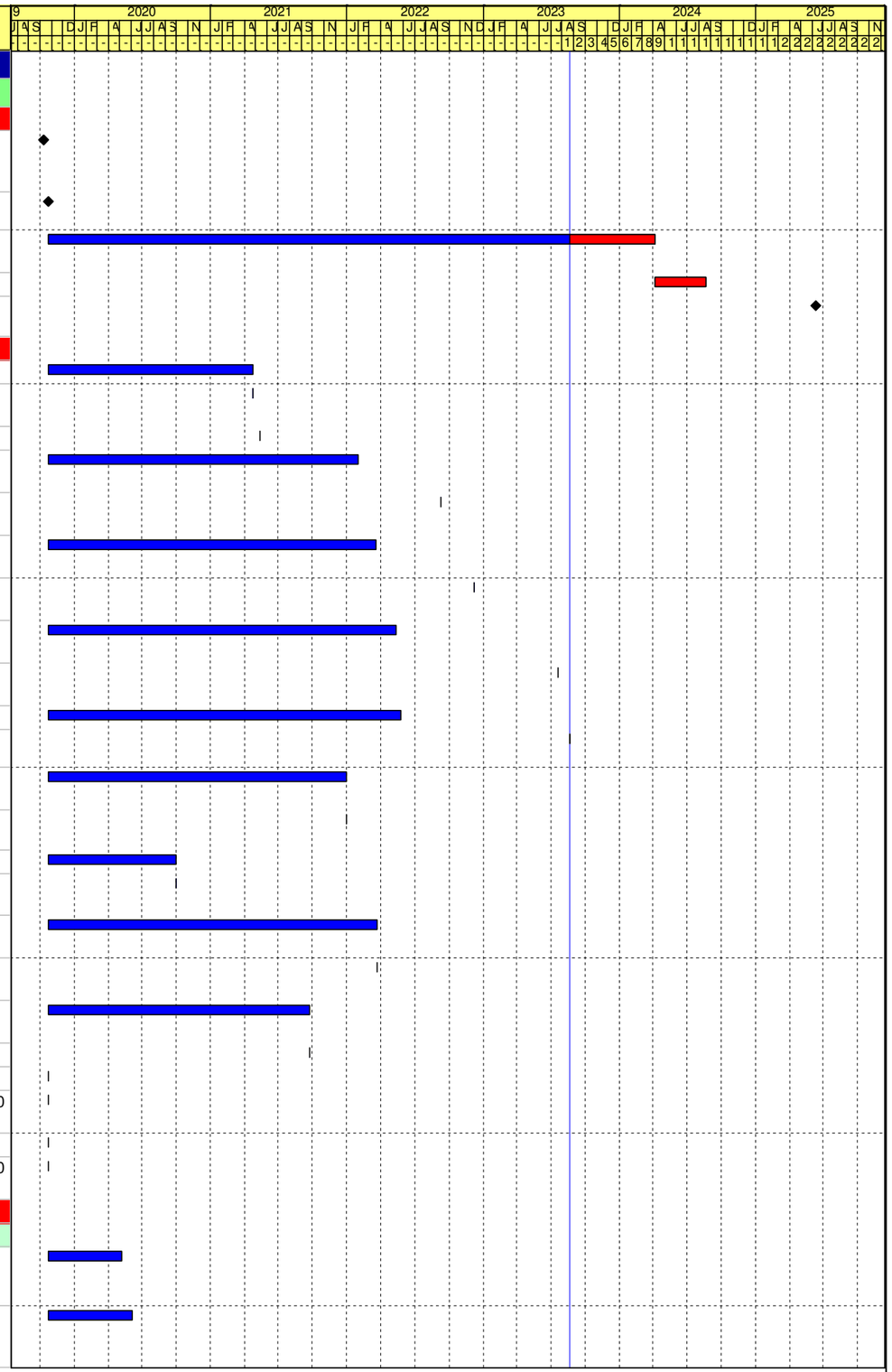


Revised Master Programme (Status Date: 31/08/2023)

識別碼	Activity ID	Key Date	NCE/(EW	PMI/(CE)	Task Name	工期	開始時間	完成時間	實際開始時間	實際完成時間	前置任務	後續任務	總寬限時間	Risk Allowa	完成百分比
1829	**CS2-25100a**	**SW2**			**Workfront G6a: Process Pipe CHN, CHPSW-1, CHSS1, CHSS2**	**700 days**	**2021年7月27日星**	**2023年12月2日,**	**年7月27日星期二2021**	**NA**	**1851**	**1891**	**-351.33 da...**		**5%**
1840	**CS2-25100b**	**SW2**			**Workfront G6b: Process Pipe CHN, CHPSW-1, CHSS1, CHSS2**	**491 days**	**2022年1月5日星**	**2023年9月1日星**	**年1月5日星期三2022**	**NA**	**1737SS+36 days**		**-105 days**		**38%**
1855	**CS2-26000**	**SW2**			**Sewerage and utilities in Workfront H1**	**178 days**	**2022年4月1日星**	**2022年11月7日,**	**年4月1日星期五2022**	**年11月7日星期一2022**			**0 days**		**100%**
1856	**CS2-26100**	**SW2**			**Process Pipe CHSS1, CHSS2 CH181-254**	**178 days**	**2022年4月1日星**	**2022年11月7日,**	**年4月1日星期五2022**	**年11月7日星期一2022**	**1801SS+21 days**		**0 days**		**100%**
1867	**CS2-27000**	**SW2**			**Sewerage and utilities in Workfront I1**	**370 days**	**2020年7月8日星**	**2021年10月2日,**	**年7月8日星期三2020**	**年10月2日星期六2021**			**0 days**		**100%**
1868	**CS2-27100**	**SW2**			**Process Pipe CHS CH0-72 , CHR CH 57-132**	**370 days**	**2020年7月8日星**	**2021年10月2日,**	**年7月8日星期三2020**	**年10月2日星期六2021**			**0 days**		**100%**
1879	**CS2-28000**	**SW2**			**Sewerage and utilities in Workfront I2**	**1072 days**	**2020年7月8日星**	**2024年2月16日,**	**年7月8日星期三2020**	**NA**			**-351.33 da...**		**40%**
1880	**CS2-28100**	**SW2**			**Process Pipe CHR CH0-26**	**963 days**	**2020年7月8日星**	**2023年10月4日,**	**年7月8日星期三2020**	**NA**			**-242.33 da...**		**55%**
1896	**CS2-29000**	**SW2**			**Sewerage and utilities in Workfront I3**	**592 days**	**2021年7月21日星**	**2023年7月20日,**	**年7月21日星期三2021**	**NA**		**2164**	**-13 days**		**97%**
1897	**CS2-29100**	**SW2**	**294,286,**		**Construction of manhole MHFB51A, MHFB51, MHFB52, PSW3**	**509 days**	**2021年7月21日星**	**2023年4月6日星**	**年7月21日星期三2021**	**NA**			**0 days**		**97%**
1934	**CS2-30000**	**SW2**			**Sewerage and utilities in Workfront I4**	**661 days**	**2021年6月5日星**	**2023年8月26日,**	**年6月5日星期六2021**	**NA**		**2153,1189,2175,2176**	**-30 days**		**69%**
1937	**CS2-30100**	**SW2**	**230,238,**		**Construction of Process Pipes CHPSW3; CHDO1, chemical trench**	**661 days**	**2021年6月5日星**	**2023年8月26日,**	**年6月5日星期六2021**	**NA**			**-33 days**		**91%**
1971	**CS3-0000**	*			**Remaining drainage and utilities (Section 3)**	**830 days**	**2021年7月27日星**	**2024年5月16日,**	**年7月27日星期二2021**	**NA**		**2188,58FF+2.33 days**	**14.67 days**		**28%**
2186	CS3CK-PMI-496g	SW3		496	ABWF works + BS works	90 days	2024年1月26日星	2024年6月5日星	NA	NA	2185	58FF+2.33 days	106.57 days		0%
2187	**CRW-0000**	*			**Road Works (Section 3)**	**130 days**	**2024年5月17日星**	**2024年10月21日**	**NA**	**NA**		**58FF+2.33 days**	**14.67 days**		**0%**
2198	CRW-2000	SW3			Footpath Road Pavement	60 days	2024年8月9日星期	2024年10月21日	NA	NA	2197SS+5 days	58FF+2.33 days	14.67 days		0%
2199	CRW-2100	**SW3**			**Signages**	**20 days**	**2024年7月29日星**	**2024年8月20日,**	**NA**	**NA**	**2196SS**	**58FF+2.33 days**	**64.67 days**		**0%**
2202	**CLW-0000**	*			**Landscaping Works (Section 3)**	**871.67 days**	**2022年12月15日,**	**2025年11月7日,**	**年12月15日星期四2022**	**NA**	**16**		**1.33 days**		**0%**
2203	CLW-1000	SW3			Irrigation System	120 days	2022年12月15日	2023年5月16日	年12月15日星期四2022	NA		2204,58FF+2.33 days	0 days		0%
2204	CLW-2000	SW3			Hard Landscaping Works	214 days	2023年5月19日星	2024年2月3日星	NA	NA	2203	58FF+2.33 days,220	0 days	5	0%
2205	CLW-3000	SW3			Soft Landscaping Works	214 days	2024年2月19日星	2024年11月7日	NA	NA	2204FS+10 days	2206,58FF+2.33 days	0 days	5	0%
2206	CLW-4000	DLP			Establishment Works (365 days)	365 days	2024年11月7日星	2025年11月7日	NA	NA	2205,208	60FF	2.33 days	5	0%



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&M V		2071	11-Oct-19 A	11-Jun-25	31-Oct-21	11-Jun-25	0		
Contract Data		2071	11-Oct-19 A	11-Jun-25	24-May-22	11-Jun-25	0		
Starting Date & Completion Date		2071	11-Oct-19 A	11-Jun-25	24-May-22	11-Jun-25	0		
CD1000	Contract Date (LOA)	0	11-Oct-19 A		24-May-22				CD1010, S1P1000, PL1460
CD1010	Starting Date	0	23-Oct-19 A		24-May-22			CD1000	S1D1040, AD1050,
CD1020	Whole Contract Period (1626 days from starting date)	1626	23-Oct-19 A	04-Apr-24	21-Aug-23	04-Apr-24	0	CD1010	CD1040, CD1030
CD1030	Extension of Time Granted (Total 139days)	139	05-Apr-24	21-Aug-24*	05-Apr-24	21-Aug-24	0	CD1020	CD1040
CD1040	Completion Date for the whole of the Works	0		11-Jun-25		11-Jun-25	0	CD1020, CD1010,	
Access Date		1434	23-Oct-19 A	21-Aug-23	24-May-22	11-Jun-25	660		
AD1000	Portion C-1A (within 480 to 550 days from starting date)	550	23-Oct-19 A	24-Apr-21 A	08-Dec-22	08-Dec-22		CD1010	AD1010
AD1010	Planned Access Date for Portion C-1A (Partial Access)	1	24-Apr-21 A	24-Apr-21 A	08-Dec-22	08-Dec-22		CD1010, AD1000	PL1470, S4C1010
AD1020	Planned Access Date for Portion C-1A (Access for Remaining Area)	1	12-May-21 A	12-May-21 A	08-Dec-22	08-Dec-22			S4C1010
AD1030	Portion C-2A (within 705 to 795 days from starting date) (SS by NCE-NCE-288, within 705 to 831 days from starting date)	831	23-Oct-19 A	30-Jan-22 A	11-Jun-25	11-Jun-25		CD1010	AD1040
AD1040	Planned Access Date for Portion C-2A	1	09-Sep-22 A	09-Sep-22 A	11-Jun-25	11-Jun-25		CD1010, AD1030	
AD1050	Portion C-2B (within 765 to 855 days from starting date) (SS by NCE-NCE-286, within 765 to 880 days from starting date)	880	23-Oct-19 A	20-Mar-22 A	18-Feb-23	18-Feb-23		CD1010	AD1060
AD1060	Planned Access Date for Portion C-2B	1	07-Dec-22 A	07-Dec-22 A	18-Feb-23	18-Feb-23		CD1010, AD1050	S5CHPC1020
AD1070	Portion C-2C (within 715 to 805 days from starting date) (SS by NCE-NCE-287, within 715 to 934 days from starting date)	934	23-Oct-19 A	13-May-22 A	11-Oct-22	11-Oct-22		CD1010	AD1080
AD1080	Planned Access Date for Portion C2-C	1	20-Jul-23 A	20-Jul-23 A	11-Oct-22	11-Oct-22		CD1010, AD1070	S5DIGC1040, S5DIGC1210
AD1090	Portion C-2D (within 825 to 945 days from starting date)	945	23-Oct-19 A	24-May-22 A	24-May-22	24-May-22		CD1010	AD1100
AD1100	Planned Access Date for Portion C-2D	1	21-Aug-23	21-Aug-23*	24-May-22	24-May-22	-454	AD1090	S5BIOC1020, S5BIOC1030,
AD1110	Portion C-3 (within 615 to 705 days from starting date) (SS by NCE-NCE-273, within 615 to 815 days from starting date)	815	23-Oct-19 A	31-Dec-21 A	11-Jan-23	11-Jan-23		CD1010	AD1120
AD1120	Planned Access Date for Portion C-3 (SS by NCE-NCE-273)	1	31-Dec-21 A	31-Dec-21 A	11-Jan-23	11-Jan-23		AD1110, S2D1110	KD1060, S5WS2C1000,
AD1130	Portion B-1 (within 285 to 345 days from starting date)	345	23-Oct-19 A	30-Sep-20 A	16-Aug-23	16-Aug-23		CD1010	AD1140
AD1140	Planned Access Date for Portion B-1	1	30-Sep-20 A	30-Sep-20 A	16-Aug-23	16-Aug-23		AD1130	KD1030, S3C1020,
AD1150	Portion B-2a (within 615 to 705 days from starting date) (SS by NCE-NCE-219, within 771 to 891 days from starting date)	891	23-Oct-19 A	23-Mar-22 A	23-May-23	23-May-23		CD1010	AD1160
AD1160	Planned Access Date for Portion B-2a (SS by NCE-NCE-219)	1	23-Mar-22 A	23-Mar-22 A	23-May-23	23-May-23		AD1150	S5SASC1010, S5SASC1000
AD1170	Portion B-2b (within 615 to 705 days from starting date) (SS by NCE-NCE-219)	705	23-Oct-19 A	24-Sep-21 A	11-Jun-25	11-Jun-25			
AD1180	Planned Access Date for Portion B-2b (SS by NCE-NCE-219)	1	24-Sep-21 A	24-Sep-21 A	11-Jun-25	11-Jun-25			
AD1190	Works Area WA1-B (starting date)	1	23-Oct-19 A	23-Oct-19 A	03-Jan-23	03-Jan-23		CD1010	AD1200
AD1200	Planned Access Date for Works Area WA1-B	1	23-Oct-19 A	23-Oct-19 A	03-Jan-23	03-Jan-23		CD1010, AD1190	PL1000, PL1020
AD1210	Works Area WA3 (starting date)	1	23-Oct-19 A	23-Oct-19 A	25-Jul-24	25-Jul-24		CD1010	AD1220
AD1220	Planned Access Date for Works Area WA3	1	23-Oct-19 A	23-Oct-19 A	25-Jul-24	25-Jul-24		CD1010, AD1210	PL1000, PL1030
Key Dates		1842	23-Oct-19 A	06-Nov-24	08-May-23	11-Jun-25	217		
Contractual Completion (Include Implemented CE)		1628	23-Oct-19 A	06-Apr-24	08-May-23	11-Jun-25	431		
KD1000	KD1A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of UV System No.1 and Effluent Pumping Station No.1	196	23-Oct-19 A	05-May-20 A	08-May-23	08-May-23		CD1010, S1D1040, S1D1100	CD1040, S4P1040
KD1010	KD2A Submission of Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, Workshop No.2, etc.	226	23-Oct-19 A	04-Jun-20 A	11-Jun-25	11-Jun-25		CD1010, S2D1080, S2D1160	KD1020

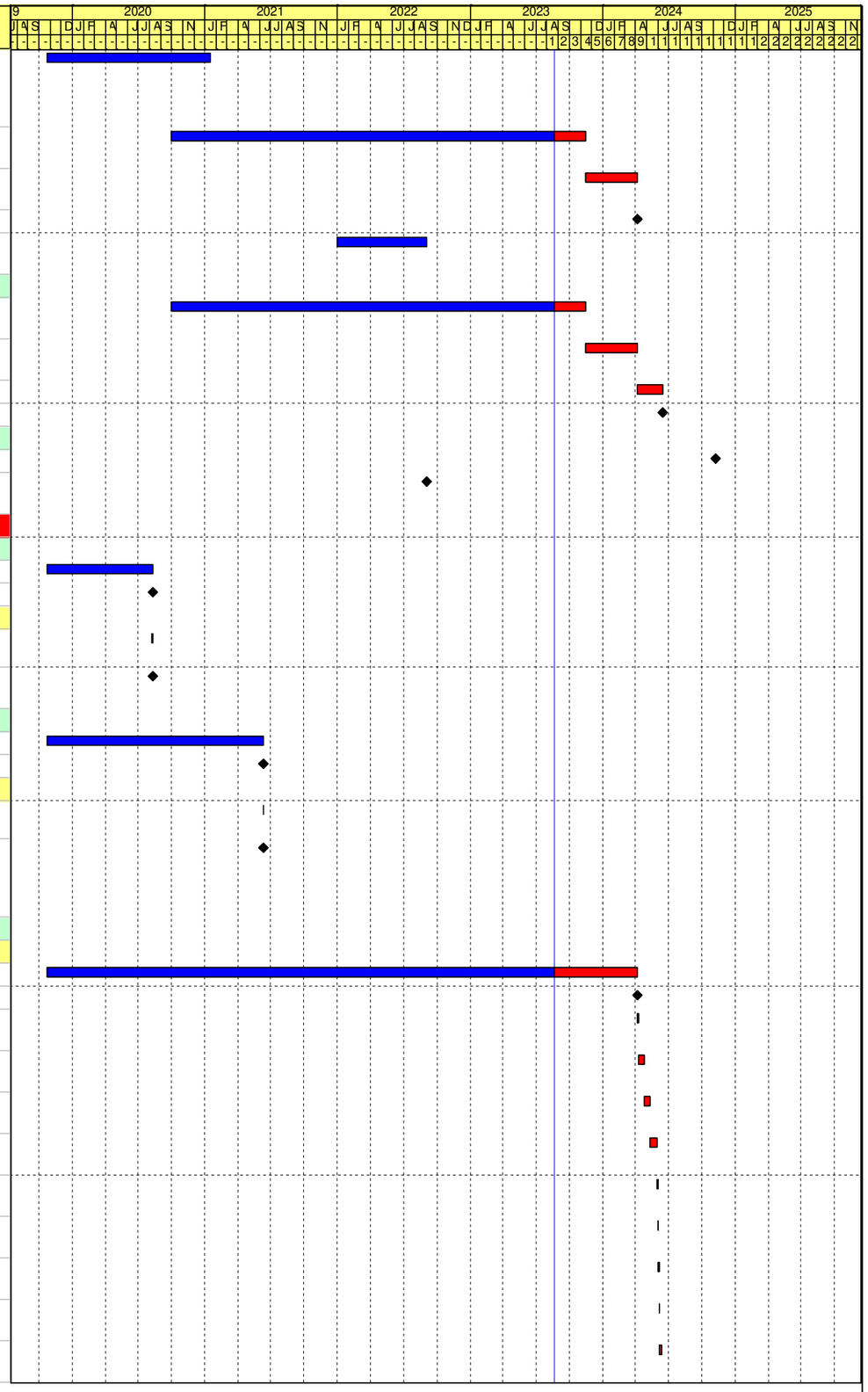


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
KD1020	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	461	23-Oct-19 A	16-Jan-21 A	11-Jun-25	11-Jun-25		CD1010, S2D1120, S2D1220, KD1010	SC21110
KD1030	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	1141	30-Sep-20 A	14-Nov-23*	21-Aug-23	14-Nov-23	0	AD1140	KD1040
KD1040	Extension of Time Granted for KD3A (Total 144days)	144	15-Nov-23	06-Apr-24	15-Nov-23	06-Apr-24	0	KD1030	SC31110, KD1050
KD1050	Revised Completion Date for KD3A	0		06-Apr-24*		06-Apr-24	0	KD1040	
KD1060	KD5A - Completion of BS Fitting at CLP Sub-Station at Workshop No.2 (245d after Portion C-3 Access)(Impacted by NCE-273)	246	31-Dec-21 A	02-Sep-22 A	11-Jun-25	11-Jun-25		AD1120, S5WS2C1010	
Expected Completion (Include Non-implemented CE)		1303	30-Sep-20 A	15-Jun-24	21-Aug-23	15-Jun-24	0		
KD1030-1	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	1141	30-Sep-20 A	14-Nov-23*	21-Aug-23	14-Nov-23	0	AD1140	KD1040-1
KD1040-1	Extension of Time Granted for KD3A (Total 144 days)	144	15-Nov-23	06-Apr-24	15-Nov-23	06-Apr-24	0	KD1030-1	SC31110, KD1045
KD1045	Extension of Time for KD3A - Non-implemented (Total 70days)	70	07-Apr-24	15-Jun-24	07-Apr-24	15-Jun-24	0	KD1040-1	KD1050-1
KD1050-1	Expected Completion Date for KD3A	0		15-Jun-24*		15-Jun-24	0	KD1045	
Planned Completion		765	02-Sep-22 A	06-Nov-24	06-Apr-24	11-Jun-25	217		
KD1050-2	Planned Completion Date for KD3A	0		06-Nov-24*		06-Apr-24	-214	S3T1230	SC31110
KD1060-1	Planned Completion Date for KD5A	0		02-Sep-22 A		11-Jun-25		AD1120, S5WS2C1010	
Completion Date		2059	23-Oct-19 A	11-Jun-25	21-Aug-23	11-Jun-25	0		
Section 1 - Complete All Design at UV System No.1 & EP Station No. 1		312	23-Oct-19 A	08-Aug-20 A	11-Jun-25	11-Jun-25			
SC11000	Contract Duration of Section 1	291	23-Oct-19 A	08-Aug-20 A	11-Jun-25	11-Jun-25		CD1010	SC11100
SC11100	Completion date - Section 1 (290 days after starting date)	0		08-Aug-20 A		11-Jun-25		SC11000	SC11120
Time Risk Allowance and Planned Completion		1	08-Aug-20 A	08-Aug-20 A	11-Jun-25	11-Jun-25			
SC11110	Time Risk Allowance for Section 1	1	08-Aug-20 A	08-Aug-20 A	11-Jun-25	11-Jun-25		S1P1000, S1P1040,	SC11120
SC11120	Planned Completion for Section 1	0		08-Aug-20 A		11-Jun-25		SC11110, SC11100	CD1040
Section 2 - Complete All Designs (exclude Sec. 1 & 3)		632	23-Oct-19 A	11-Jun-21 A	11-Jun-25	11-Jun-25			
SC21000	Contract Duration of Section 2	601	23-Oct-19 A	11-Jun-21 A	11-Jun-25	11-Jun-25		CD1010	SC21100
SC21100	Completion date - Section 2 (600 days after starting date)	0		11-Jun-21 A		11-Jun-25		SC21000	SC21120
Time Risk Allowance and Planned Completion		9	11-Jun-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25			
SC21110	Time Risk Allowance for Section 2	6	11-Jun-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2P1000, S2P1010,	SC21120
SC21120	Planned Completion for Section 2	0		11-Jun-21 A		11-Jun-25		SC21110, SC21100, PL1490, PL1530	CD1040
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities		2059	23-Oct-19 A	11-Jun-25	21-Aug-23	11-Jun-25	0		
Contractual Completion (Include Implemented CE)		1765	23-Oct-19 A	21-Aug-24	21-Aug-23	21-Aug-24	0		
SC31000	Contract Duration of Section 3	1626	23-Oct-19 A	04-Apr-24	21-Aug-23	04-Apr-24	0		SC31001
SC31001	Completion date - Section 3 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC31000	SC31002
SC31002	NICE-CNE-0248 - Inclement Weather (May 2021) - 5days (Implemented)	5	05-Apr-24	09-Apr-24	05-Apr-24	09-Apr-24	0	SC31001	SC31003
SC31003	NICE-CNE-0256 Inclement Weather (June 2021) - 14.5days (Implemented)	15	10-Apr-24	24-Apr-24	10-Apr-24	24-Apr-24	0	SC31002	SC31005
SC31005	NICE-CNE-0264 Inclement Weather (July 2021) - 15days (Implemented)	15	24-Apr-24	09-May-24	24-Apr-24	09-May-24	0	SC31003	SC31006
SC31006	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	09-May-24	28-May-24	09-May-24	28-May-24	0	SC31005	SC31007
SC31007	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	28-May-24	31-May-24	28-May-24	31-May-24	0	SC31006	SC31010
SC31010	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	01-Jun-24	01-Jun-24	01-Jun-24	01-Jun-24	0	SC31007	SC31011
SC31011	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	4	01-Jun-24	05-Jun-24	01-Jun-24	05-Jun-24	0	SC31010	SC31012
SC31012	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	05-Jun-24	05-Jun-24	05-Jun-24	05-Jun-24	0	SC31011	SC31013
SC31013	NICE-CNE-0345 Inclement Weather (February 2022) - 6.5days (Implemented)	7	06-Jun-24	12-Jun-24	06-Jun-24	12-Jun-24	0	SC31012	SC31014

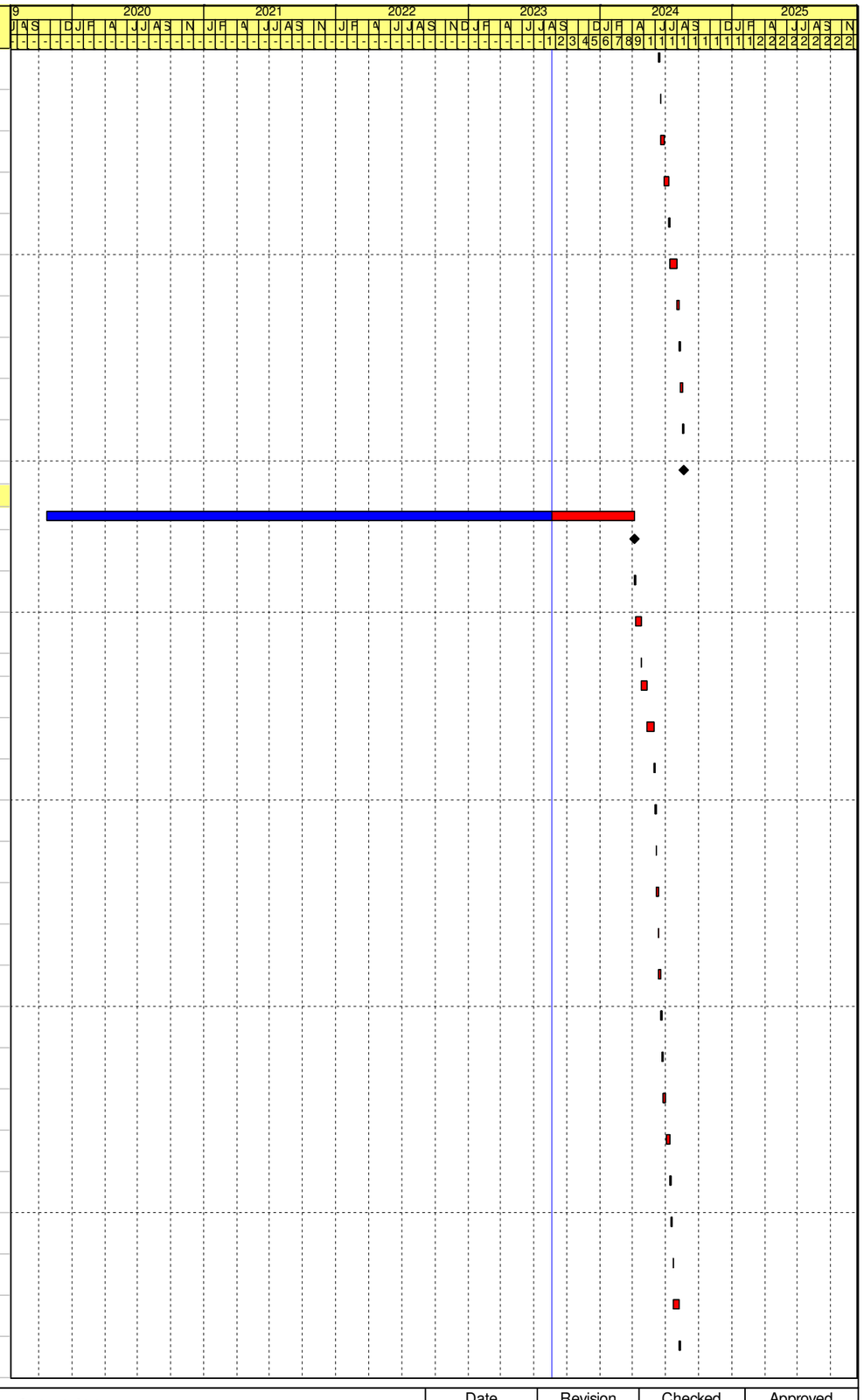


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
SC31014	NICE-CNE-0386 Inclement Weather (March 2022) - 3.5days (Implemented)	4	12-Jun-24	15-Jun-24	12-Jun-24	15-Jun-24	0	SC31013	SC31015
SC31015	NICE-CNE-0387 Inclement Weather (April 2022) - 2.5days (Implemented)	3	16-Jun-24	18-Jun-24	16-Jun-24	18-Jun-24	0	SC31014	SC31016
SC31016	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	18-Jun-24	26-Jun-24	18-Jun-24	26-Jun-24	0	SC31015	SC31026
SC31026	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5days (Implemented)	12	27-Jun-24	08-Jul-24	27-Jun-24	08-Jul-24	0	SC31016	SC31027
SC31027	NICE-CNE-0405 Inclement Weather (July 2022) - 5.5days (Implemented)	6	08-Jul-24	13-Jul-24	08-Jul-24	13-Jul-24	0	SC31026	SC31028
SC31028	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	14-Jul-24	31-Jul-24	14-Jul-24	31-Jul-24	0	SC31027	SC31029
SC31029	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	31-Jul-24	07-Aug-24	31-Jul-24	07-Aug-24	0	SC31028	SC31030
SC31030	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	07-Aug-24	09-Aug-24	07-Aug-24	09-Aug-24	0	SC31029	SC31031
SC31031	NICE-CNE-0433 Inclement Weather (November 2022) - 7.5days (Implemented)	8	09-Aug-24	16-Aug-24	09-Aug-24	16-Aug-24	0	SC31030	SC31032
SC31032	NICE-CNE-0441 Inclement Weather (December 2022) - 5days (Implemented)	5	17-Aug-24	21-Aug-24	17-Aug-24	21-Aug-24	0	SC31031	SC31100
SC31100	Revised Completion for Section 3	0		21-Aug-24*		21-Aug-24	0	SC31032	
Expected Completion (Include Non-implemented CE)		2059	23-Oct-19 A	11-Jun-25	21-Aug-23	11-Jun-25	0		
SC31000-1	Contract Duration of Section 3	1626	23-Oct-19 A	04-Apr-24	21-Aug-23	04-Apr-24	0	CD1010	SC31001-1
SC31001-1	Completion date - Section 3 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC31000-1	SC31110, SC31002-1
SC31002-1	NICE-CNE-0248 - Inclement Weather (May 2021) - 5days (Implemented)	5	05-Apr-24	09-Apr-24	05-Apr-24	09-Apr-24	0	SC31001-1	SC31003-1
SC31003-1	NICE-CNE-0256 Inclement Weather (June 2021) - 14.5days (Implemented)	15	10-Apr-24	24-Apr-24	10-Apr-24	24-Apr-24	0	SC31002-1	SC31004-1
SC31004-1	CNE-007 Black and Red Rainstorm Warning (June 2021) - 1day	1	24-Apr-24	25-Apr-24	24-Apr-24	25-Apr-24	0	SC31003-1	SC31005-1
SC31005-1	NICE-CNE-0264 Inclement Weather (July 2021) - 15days (Implemented)	15	25-Apr-24	10-May-24	25-Apr-24	10-May-24	0	SC31004-1	SC31006-1
SC31006-1	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	10-May-24	29-May-24	10-May-24	29-May-24	0	SC31005-1	SC31007-1
SC31007-1	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	29-May-24	01-Jun-24	29-May-24	01-Jun-24	0	SC31006-1	SC31009-1
SC31009-1	CNE-020 Inclement Weather (October 2021) (Time and Cost Implication) - 4days	4	02-Jun-24	05-Jun-24	02-Jun-24	05-Jun-24	0	SC31007-1	SC31010-1
SC31010-1	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	06-Jun-24	06-Jun-24	06-Jun-24	06-Jun-24	0	SC31009-1	SC31011-1
SC31011-1	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	4	06-Jun-24	10-Jun-24	06-Jun-24	10-Jun-24	0	SC31010-1	SC31012-1
SC31012-1	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	10-Jun-24	10-Jun-24	10-Jun-24	10-Jun-24	0	SC31011-1	SC31013-1
SC31013-1	NICE-CNE-0345 Inclement Weather (February 2022) - 6.5days (Implemented)	7	11-Jun-24	17-Jun-24	11-Jun-24	17-Jun-24	0	SC31012-1	SC31014-1
SC31014-1	NICE-CNE-0386 Inclement Weather (March 2022) - 3.5days (Implemented)	4	17-Jun-24	20-Jun-24	17-Jun-24	20-Jun-24	0	SC31013-1	SC31015-1
SC31015-1	NICE-CNE-0387 Inclement Weather (April 2022) - 2.5days (Implemented)	3	21-Jun-24	23-Jun-24	21-Jun-24	23-Jun-24	0	SC31014-1	SC31016-1
SC31016-1	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	23-Jun-24	01-Jul-24	23-Jun-24	01-Jul-24	0	SC31015-1	SC31017-1
SC31017-1	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5days (Implemented)	12	02-Jul-24	13-Jul-24	02-Jul-24	13-Jul-24	0	SC31016-1	SC31018-1
SC31018-1	CNE-053 Inclement Weather (June 2022) (Time and Cost Implication) - 2days	2	13-Jul-24	15-Jul-24	13-Jul-24	15-Jul-24	0	SC31017-1	SC31019-1
SC31019-1	NICE-CNE-0405 Inclement Weather (July 2022) - 5.5days (Implemented)	6	15-Jul-24	20-Jul-24	15-Jul-24	20-Jul-24	0	SC31018-1	SC31020-1
SC31020-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	1	21-Jul-24	21-Jul-24	21-Jul-24	21-Jul-24	0	SC31019-1	SC31021-1
SC31021-1	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	22-Jul-24	08-Aug-24	22-Jul-24	08-Aug-24	0	SC31020-1	SC31022-1
SC31022-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	1	08-Aug-24	09-Aug-24	08-Aug-24	09-Aug-24	0	SC31021-1	SC31023-1

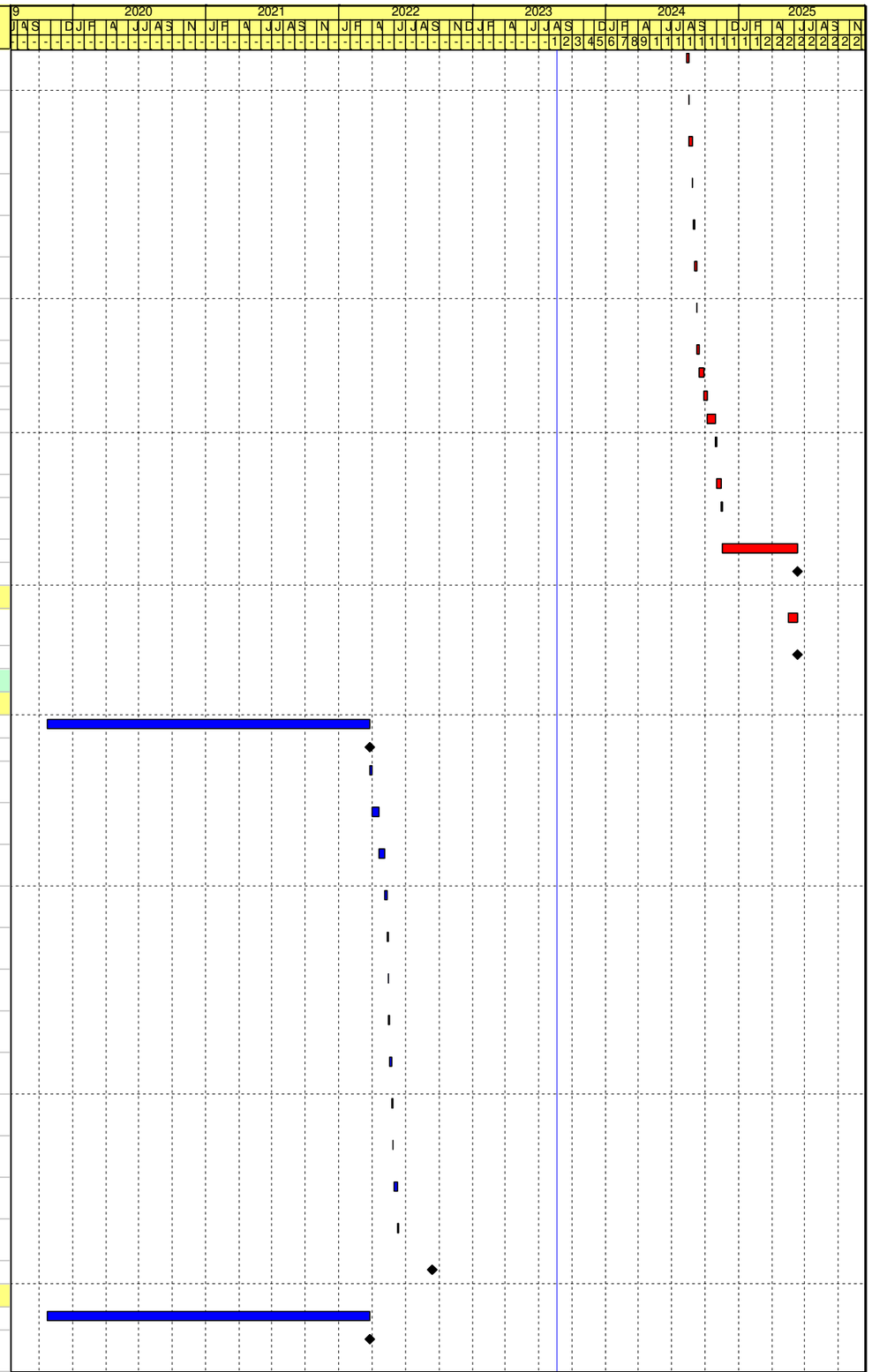


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
SC31023-1	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	09-Aug-24	16-Aug-24	09-Aug-24	16-Aug-24	0	SC31022-1	SC31024-1
SC31024-1	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	16-Aug-24	18-Aug-24	16-Aug-24	18-Aug-24	0	SC31023-1	SC31025-1
SC31025-1	NICE-CNE-0433 Inclement Weather (November 2022) - 7.5days (Implemented)	8	18-Aug-24	25-Aug-24	18-Aug-24	25-Aug-24	0	SC31024-1	SC31026-1
SC31026-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	2	26-Aug-24	27-Aug-24	26-Aug-24	27-Aug-24	0	SC31025-1	SC31027-1
SC31027-1	NICE-CNE-0441 Inclement Weather (December 2022) - 5days (Implemented)	5	28-Aug-24	01-Sep-24	28-Aug-24	01-Sep-24	0	SC31026-1	SC31028-1
SC31028-1	CNE-068 Inclement Weather (January 2023) (Time Implication) - 5days	5	02-Sep-24	06-Sep-24	02-Sep-24	06-Sep-24	0	SC31027-1	SC31029-1
SC31029-1	CNE-070 Inclement Weather (February 2023) (Time Implication) - 2days	2	07-Sep-24	08-Sep-24	07-Sep-24	08-Sep-24	0	SC31028-1	SC31030-1
SC31030-1	CNE-071 Inclement Weather (March 2023) (Time Implication) - 5days	5	09-Sep-24	13-Sep-24	09-Sep-24	13-Sep-24	0	SC31029-1	SC31031-1
SC31031-1	CNE-072 Inclement Weather (April 2023) (Time Implication) - 14days	14	14-Sep-24	27-Sep-24	14-Sep-24	27-Sep-24	0	SC31030-1	SC31032-1
SC31032-1	CNE-073 Inclement Weather (May 2023) (Time Implication) - 10days	10	28-Sep-24	07-Oct-24	28-Sep-24	07-Oct-24	0	SC31031-1	SC31033-1
SC31033-1	CNE-076 Inclement Weather (June 2023) (Time Implication) - 22days	22	08-Oct-24	29-Oct-24	08-Oct-24	29-Oct-24	0	SC31032-1	SC31034-1
SC31034-1	CNE-077 Inclement Weather (June 2023) (Time and Cost Implication) - 1day	1	30-Oct-24	30-Oct-24	30-Oct-24	30-Oct-24	0	SC31033-1	SC31035-1
SC31035-1	CNE-078 Inclement Weather (July 2023) (Time Implication) - 14days	14	31-Oct-24	13-Nov-24	31-Oct-24	13-Nov-24	0	SC31034-1	SC31036-1
SC31036-1	CNE-079 Inclement Weather (July 2023) (Time and Cost Implication) - 2days	2	14-Nov-24	15-Nov-24	14-Nov-24	15-Nov-24	0	SC31035-1	SC31099-1
SC31099-1	EWN-0314 Extention of Time for change of access date	208	16-Nov-24	11-Jun-25	16-Nov-24	11-Jun-25	0	SC31036-1	SC31100-1
SC31100-1	Expected Completion for Section 3	0		11-Jun-25*		11-Jun-25	0	SC31099-1	
Time Risk Allowance and Planned Completion		26	17-May-25	11-Jun-25	27-Jul-24	21-Aug-24	-294		
SC31110	Time Risk Allowance for Section 3	26	17-May-25	11-Jun-25	27-Jul-24	21-Aug-24	-294	SC31001-1, S3C1160,	SC31120
SC31120	Planned Completion for Section 3	0		11-Jun-25*		21-Aug-24	-294	SC31110	CD1040
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1		1309	23-Oct-19 A	14-Sep-22 A	11-Jun-25	11-Jun-25			
Contractual Completion (Include Implemented CE)		1309	23-Oct-19 A	14-Sep-22 A	11-Jun-25	11-Jun-25			
SC41000	Contract Duration of Section 4	886	23-Oct-19 A	26-Mar-22 A	11-Jun-25	11-Jun-25			SC41001
SC41001	Completion date - Section 4 (885 days after starting date)	0		26-Mar-22 A		11-Jun-25		SC41000	SC41002
SC41002	NICE-CNE-0256 Inclement Weather (June 2021) - 6.5days (Implemented)	7	27-Mar-22 A	02-Apr-22 A	11-Jun-25	11-Jun-25		SC41001	SC41004
SC41004	NICE-CNE-0264 Inclement Weather (July 2021) - 19days (Implemented)	19	02-Apr-22 A	21-Apr-22 A	11-Jun-25	11-Jun-25		SC41002	SC41005
SC41005	NICE-CNE-0292 Inclement Weather (August 2021) - 16days (Implemented)	16	21-Apr-22 A	07-May-22 A	11-Jun-25	11-Jun-25		SC41004	SC41006
SC41006	NICE-CNE-0293 Inclement Weather (September 2021) - 4.5days (Implemented)	5	07-May-22 A	11-May-22 A	11-Jun-25	11-Jun-25		SC41005	SC41007
SC41007	NICE-CNE-0309 Inclement Weather (October 2021) - 3days (Implemented)	3	12-May-22 A	14-May-22 A	11-Jun-25	11-Jun-25		SC41006	SC41009
SC41009	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	15-May-22 A	15-May-22 A	11-Jun-25	11-Jun-25		SC41007	SC41010
SC41010	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	4	15-May-22 A	19-May-22 A	11-Jun-25	11-Jun-25		SC41009	SC41012
SC41012	NICE-CNE-0345 Inclement Weather (February 2022) - 4.5days (Implemented)	5	19-May-22 A	23-May-22 A	11-Jun-25	11-Jun-25		SC41010	SC41013
SC41013	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	5	24-May-22 A	28-May-22 A	11-Jun-25	11-Jun-25		SC41012	SC41014
SC41014	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	2	28-May-22 A	29-May-22 A	11-Jun-25	11-Jun-25		SC41013	SC41015
SC41015	NICE-CNE-0391 Inclement Weather (May 2022) - 10.5days (Implemented)	11	30-May-22 A	09-Jun-22 A	11-Jun-25	11-Jun-25		SC41014	SC41016
SC41016	NICE-CNE-0397 Inclement Weather (June 2022) - 4.5days (Implemented)	5	09-Jun-22 A	13-Jun-22 A	11-Jun-25	11-Jun-25		SC41015	SC41100
SC41100	Revised Completion for Section 4	0		14-Sep-22 A		11-Jun-25		SC41016	
Expected Completion (Include Non-implemented CE)		1170	23-Oct-19 A	14-Sep-22 A	11-Jun-25	11-Jun-25			
SC41000-1	Contract Duration of Section 4	886	23-Oct-19 A	26-Mar-22 A	11-Jun-25	11-Jun-25		CD1010	SC41001-1
SC41001-1	Completion date - Section 4 (885 days after starting date)	0		26-Mar-22 A		11-Jun-25		SC41000-1	SC41110, SC41002-1

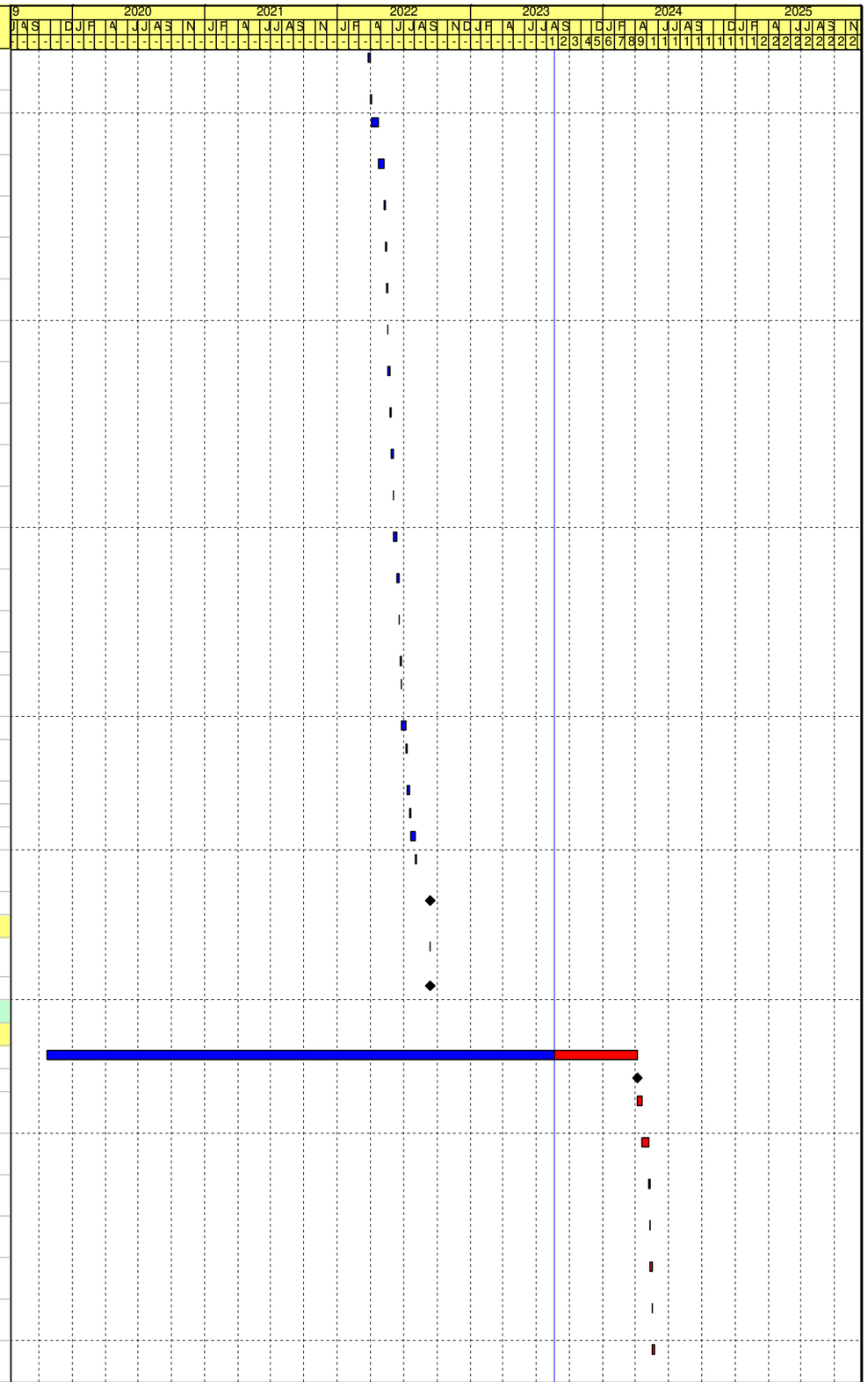


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
SC41002-1	NICE-CNE-0256 Inclement Weather (June 2021) - 6.5days (Implemented)	7	27-Mar-22 A	02-Apr-22 A	11-Jun-25	11-Jun-25		SC41001-1	SC41004-1, SC41003-1
SC41003-1	CNE-007 Black and Red Rainstorm Warning (June 2021) - 1day	1	02-Apr-22 A	03-Apr-22 A	11-Jun-25	11-Jun-25		SC41002-1	SC41004-1
SC41004-1	NICE-CNE-0264 Inclement Weather (July 2021) - 19days (Implemented)	19	03-Apr-22 A	22-Apr-22 A	11-Jun-25	11-Jun-25		SC41002-1, SC41003-1	SC41005-1
SC41005-1	NICE-CNE-0292 Inclement Weather (August 2021) - 16days (Implemented)	16	22-Apr-22 A	08-May-22 A	11-Jun-25	11-Jun-25		SC41004-1	SC41006-1
SC41006-1	NICE-CNE-0293 Inclement Weather (September 2021) - 4.5days (Implemented)	5	08-May-22 A	12-May-22 A	11-Jun-25	11-Jun-25		SC41005-1	SC41007-1
SC41007-1	NICE-CNE-0309 Inclement Weather (October 2021) - 3days (Implemented)	3	13-May-22 A	15-May-22 A	11-Jun-25	11-Jun-25		SC41006-1	SC41008-1
SC41008-1	CNE-020 Inclement Weather (October 2021) (Time and Cost Implication) - 4days	4	16-May-22 A	19-May-22 A	11-Jun-25	11-Jun-25		SC41007-1	SC41009-1
SC41009-1	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	20-May-22 A	20-May-22 A	11-Jun-25	11-Jun-25		SC41008-1	SC41010-1
SC41010-1	NICE-CNE-0343 Inclement Weather (December 2021) - 4days (Implemented)	4	20-May-22 A	24-May-22 A	11-Jun-25	11-Jun-25		SC41009-1	SC41012-1
SC41012-1	NICE-CNE-0345 Inclement Weather (February 2022) - 4.5days (Implemented)	5	24-May-22 A	28-May-22 A	11-Jun-25	11-Jun-25		SC41010-1	SC41013-1
SC41013-1	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	5	29-May-22 A	02-Jun-22 A	11-Jun-25	11-Jun-25		SC41012-1	SC41014-1
SC41014-1	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	2	02-Jun-22 A	03-Jun-22 A	11-Jun-25	11-Jun-25		SC41013-1	SC41015-1
SC41015-1	NICE-CNE-0391 Inclement Weather (May 2022) - 10.5days (Implemented)	11	04-Jun-22 A	14-Jun-22 A	11-Jun-25	11-Jun-25		SC41014-1	SC41016-1
SC41016-1	NICE-CNE-0397 Inclement Weather (June 2022) - 4.5days (Implemented)	5	14-Jun-22 A	18-Jun-22 A	11-Jun-25	11-Jun-25		SC41015-1	SC41017-1
SC41017-1	CNE-053 Inclement Weather (June 2022) (Time and Cost Implication) - 2day	2	19-Jun-22 A	20-Jun-22 A	11-Jun-25	11-Jun-25		SC41016-1	SC41018-1
SC41018-1	CNE-054 Inclement Weather (July 2022) - 4days	4	21-Jun-22 A	24-Jun-22 A	11-Jun-25	11-Jun-25		SC41017-1	SC41019-1
SC41019-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	1	25-Jun-22 A	25-Jun-22 A	11-Jun-25	11-Jun-25		SC41018-1	SC41020-1
SC41020-1	CNE-056 Inclement Weather (August 2022) - 13.5days	14	26-Jun-22 A	09-Jul-22 A	11-Jun-25	11-Jun-25		SC41019-1	SC41021-1
SC41021-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	1	09-Jul-22 A	10-Jul-22 A	11-Jun-25	11-Jun-25		SC41020-1	SC41022-1
SC41022-1	CNE-058 Inclement Weather (September 2022) - 8days	8	10-Jul-22 A	18-Jul-22 A	11-Jun-25	11-Jun-25		SC41021-1	SC41023-1
SC41023-1	CNE-059 Inclement Weather (October 2022) - 4days	4	18-Jul-22 A	22-Jul-22 A	11-Jun-25	11-Jun-25		SC41022-1	SC41024-1
SC41024-1	CNE-061 Inclement Weather (November 2022) - 13days	13	22-Jul-22 A	04-Aug-22 A	11-Jun-25	11-Jun-25		SC41023-1	SC41025-1
SC41025-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	2	04-Aug-22 A	06-Aug-22 A	11-Jun-25	11-Jun-25		SC41024-1	SC41100-1
SC41100-1	Expected Completion for Section 4	0		14-Sep-22 A		11-Jun-25		SC41025-1	
Time Risk Allowance and Planned Completion		7	14-Sep-22 A	14-Sep-22 A	11-Jun-25	11-Jun-25			
SC41110	Time Risk Allowance for Section 4	7	14-Sep-22 A	14-Sep-22 A	11-Jun-25	11-Jun-25		SC41001-1, S4C1100,	SC41120
SC41120	Planned Completion for Section 4	0		14-Sep-22 A		11-Jun-25		SC41110	CD1040
Section 5 - Complete all remaining Works (incl. T&C)		2059	23-Oct-19 A	11-Jun-25	21-Aug-23	11-Jun-25	0		
Contractual Completion (Include Implemented CE)		1746	23-Oct-19 A	02-Aug-24	21-Aug-23	02-Aug-24	0		
SC51000	Contract Duration of Section 5	1626	23-Oct-19 A	04-Apr-24	21-Aug-23	04-Apr-24	0		SC51001
SC51001	Completion date - Section 5 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC51000	SC51002
SC51002	NICE-CNE-0264 Inclement Weather (July 2021) - 14days (Implemented)	14	05-Apr-24	18-Apr-24	05-Apr-24	18-Apr-24	0	SC51001	SC51003
SC51003	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	19-Apr-24	07-May-24	19-Apr-24	07-May-24	0	SC51002	SC51004
SC51004	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	08-May-24	11-May-24	08-May-24	11-May-24	0	SC51003	SC51007
SC51007	NICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	11-May-24	11-May-24	11-May-24	11-May-24	0	SC51004	SC51008
SC51008	NICE-CNE-0343 Inclement Weather (December 2021) - 5days (Implemented)	5	12-May-24	16-May-24	12-May-24	16-May-24	0	SC51007	SC51009
SC51009	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	17-May-24	17-May-24	17-May-24	17-May-24	0	SC51008	SC51010
SC51010	NICE-CNE-0345 Inclement Weather (February 2022) - 5.5days (Implemented)	6	17-May-24	22-May-24	17-May-24	22-May-24	0	SC51009	SC51011

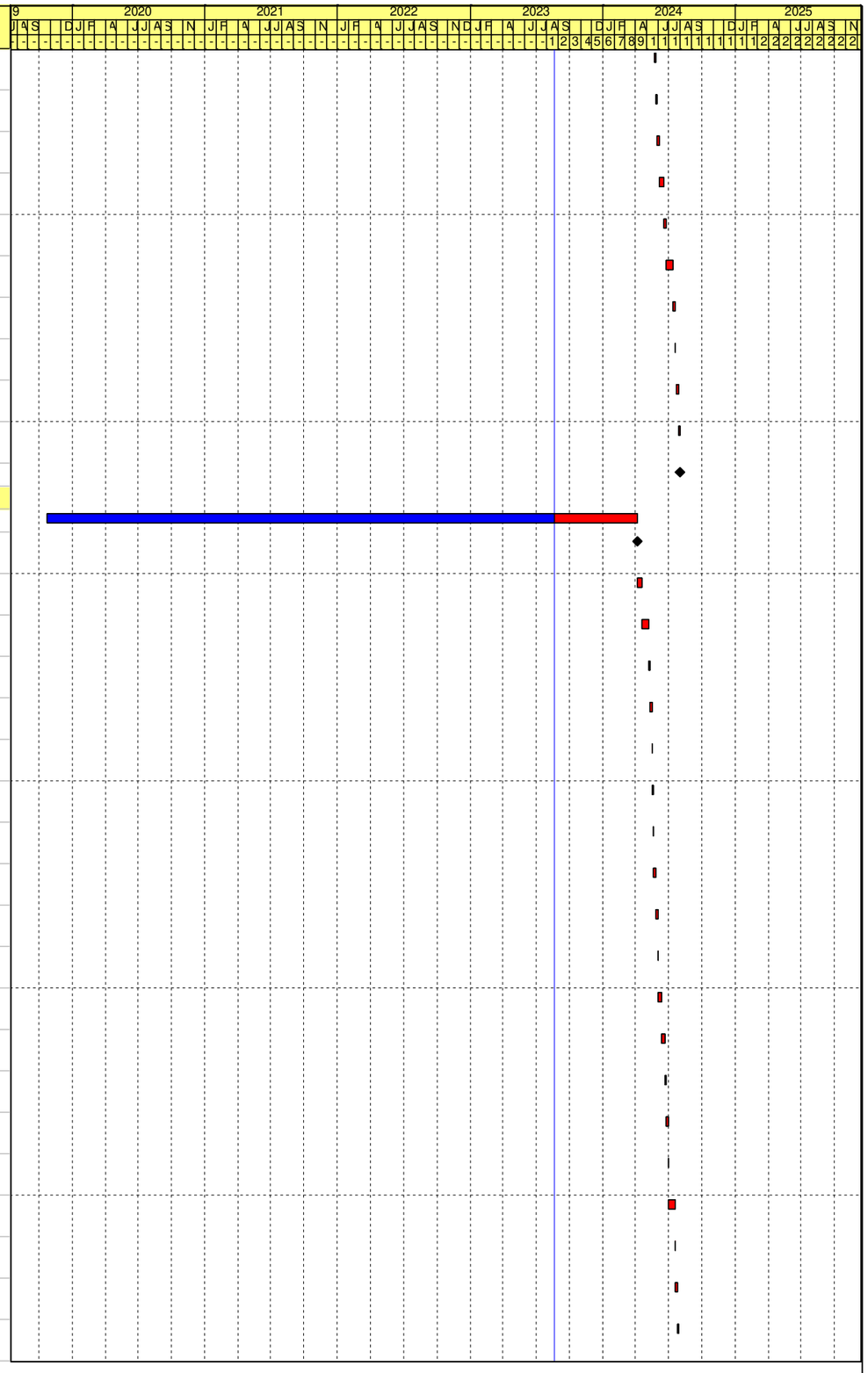


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
SC51011	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	5	23-May-24	27-May-24	23-May-24	27-May-24	0	SC51010	SC51012
SC51012	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	2	27-May-24	28-May-24	27-May-24	28-May-24	0	SC51011	SC51013
SC51013	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	29-May-24	06-Jun-24	29-May-24	06-Jun-24	0	SC51012	SC51014
SC51014	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5ays (Implemented)	12	06-Jun-24	17-Jun-24	06-Jun-24	17-Jun-24	0	SC51013	SC51015
SC51015	NICE-CNE-0405 Inclement Weather (July 2022) - 6.5days (Implemented)	7	18-Jun-24	24-Jun-24	18-Jun-24	24-Jun-24	0	SC51014	SC51016
SC51016	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	24-Jun-24	11-Jul-24	24-Jun-24	11-Jul-24	0	SC51015	SC51017
SC51017	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	12-Jul-24	18-Jul-24	12-Jul-24	18-Jul-24	0	SC51016	SC51018
SC51018	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	19-Jul-24	20-Jul-24	19-Jul-24	20-Jul-24	0	SC51017	SC51019
SC51019	NICE-CNE-0433 Inclement Weather (November 2022) - 8.5days (Implemented)	9	21-Jul-24	29-Jul-24	21-Jul-24	29-Jul-24	0	SC51018	SC51020
SC51020	NICE-CNE-0441 Inclement Weather (December 2022) - 4days (Implemented)	4	29-Jul-24	02-Aug-24	29-Jul-24	02-Aug-24	0	SC51019	SC51100
SC51100	Revised Completion for Section 5	0		02-Aug-24*		02-Aug-24	0	SC51020	
Expected Completion (Include Non-implemented CE)		2059	23-Oct-19 A	11-Jun-25	21-Aug-23	11-Jun-25	0		
SC51000-1	Contract Duration of Section 5	1626	23-Oct-19 A	04-Apr-24	21-Aug-23	04-Apr-24	0	CD1010	SC51001-1
SC51001-1	Completion date - Section 5 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0	SC51000-1	SC51110, SC51002-1
SC51002-1	NICE-CNE-0264 Inclement Weather (July 2021) - 14days (Implemented)	14	05-Apr-24	18-Apr-24	05-Apr-24	18-Apr-24	0	SC51001-1	SC51003-1
SC51003-1	NICE-CNE-0292 Inclement Weather (August 2021) - 19days (Implemented)	19	19-Apr-24	07-May-24	19-Apr-24	07-May-24	0	SC51002-1	SC51004-1
SC51004-1	NICE-CNE-0293 Inclement Weather (September 2021) - 3.5days (Implemented)	4	08-May-24	11-May-24	08-May-24	11-May-24	0	SC51003-1	SC51006-1
SC51006-1	CNE-020 Inclement Weather (October 2021) (Time and Cost Implication) - 4days	4	11-May-24	15-May-24	11-May-24	15-May-24	0	SC51004-1	SC51007-1
SC51007-1	ICE-CNE-0313 Inclement Weather (November 2021) - 0.5days (Implemented)	1	15-May-24	15-May-24	15-May-24	15-May-24	0	SC51006-1	SC51008-1
SC51008-1	NICE-CNE-0343 Inclement Weather (December 2021) - 5days (Implemented)	5	16-May-24	20-May-24	16-May-24	20-May-24	0	SC51007-1	SC51009-1
SC51009-1	NICE-CNE-0344 Inclement Weather (January 2022) - 0.5days (Implemented)	1	21-May-24	21-May-24	21-May-24	21-May-24	0	SC51008-1	SC51010-1
SC51010-1	NICE-CNE-0345 Inclement Weather (February 2022) - 5.5days (Implemented)	6	21-May-24	26-May-24	21-May-24	26-May-24	0	SC51009-1	SC51011-1
SC51011-1	NICE-CNE-0386 Inclement Weather (March 2022) - 4.5days (Implemented)	5	27-May-24	31-May-24	27-May-24	31-May-24	0	SC51010-1	SC51012-1
SC51012-1	NICE-CNE-0387 Inclement Weather (April 2022) - 1.5days (Implemented)	2	31-May-24	01-Jun-24	31-May-24	01-Jun-24	0	SC51011-1	SC51013-1
SC51013-1	NICE-CNE-0391 Inclement Weather (May 2022) - 8.5days (Implemented)	9	02-Jun-24	10-Jun-24	02-Jun-24	10-Jun-24	0	SC51012-1	SC51014-1
SC51014-1	NICE-CNE-0397 Inclement Weather (June 2022) - 11.5ays (Implemented)	12	10-Jun-24	21-Jun-24	10-Jun-24	21-Jun-24	0	SC51013-1	SC51015-1
SC51015-1	CNE-053 Inclement Weather (June 2022) (Time and Cost Implication) - 2days	2	22-Jun-24	23-Jun-24	22-Jun-24	23-Jun-24	0	SC51014-1	SC51016-1
SC51016-1	NICE-CNE-0405 Inclement Weather (July 2022) - 6.5days (Implemented)	7	24-Jun-24	30-Jun-24	24-Jun-24	30-Jun-24	0	SC51015-1	SC51017-1
SC51017-1	CNE-055 Inclement Weather (July 2022) (Time and Cost Implication) - 1day	1	30-Jun-24	01-Jul-24	30-Jun-24	01-Jul-24	0	SC51016-1	SC51018-1
SC51018-1	NICE-CNE-0409 Inclement Weather (August 2022) - 17.5days (Implemented)	18	01-Jul-24	18-Jul-24	01-Jul-24	18-Jul-24	0	SC51017-1	SC51019-1
SC51019-1	CNE-057 Inclement Weather (August 2022) (Time and Cost Implication) - 1day	1	19-Jul-24	19-Jul-24	19-Jul-24	19-Jul-24	0	SC51018-1	SC51020-1
SC51020-1	NICE-CNE-0427 Inclement Weather (September 2022) - 7days (Implemented)	7	20-Jul-24	26-Jul-24	20-Jul-24	26-Jul-24	0	SC51019-1	SC51021-1
SC51021-1	NICE-CNE-0428 Inclement Weather (October 2022) - 2days (Implemented)	2	27-Jul-24	28-Jul-24	27-Jul-24	28-Jul-24	0	SC51020-1	SC51022-1

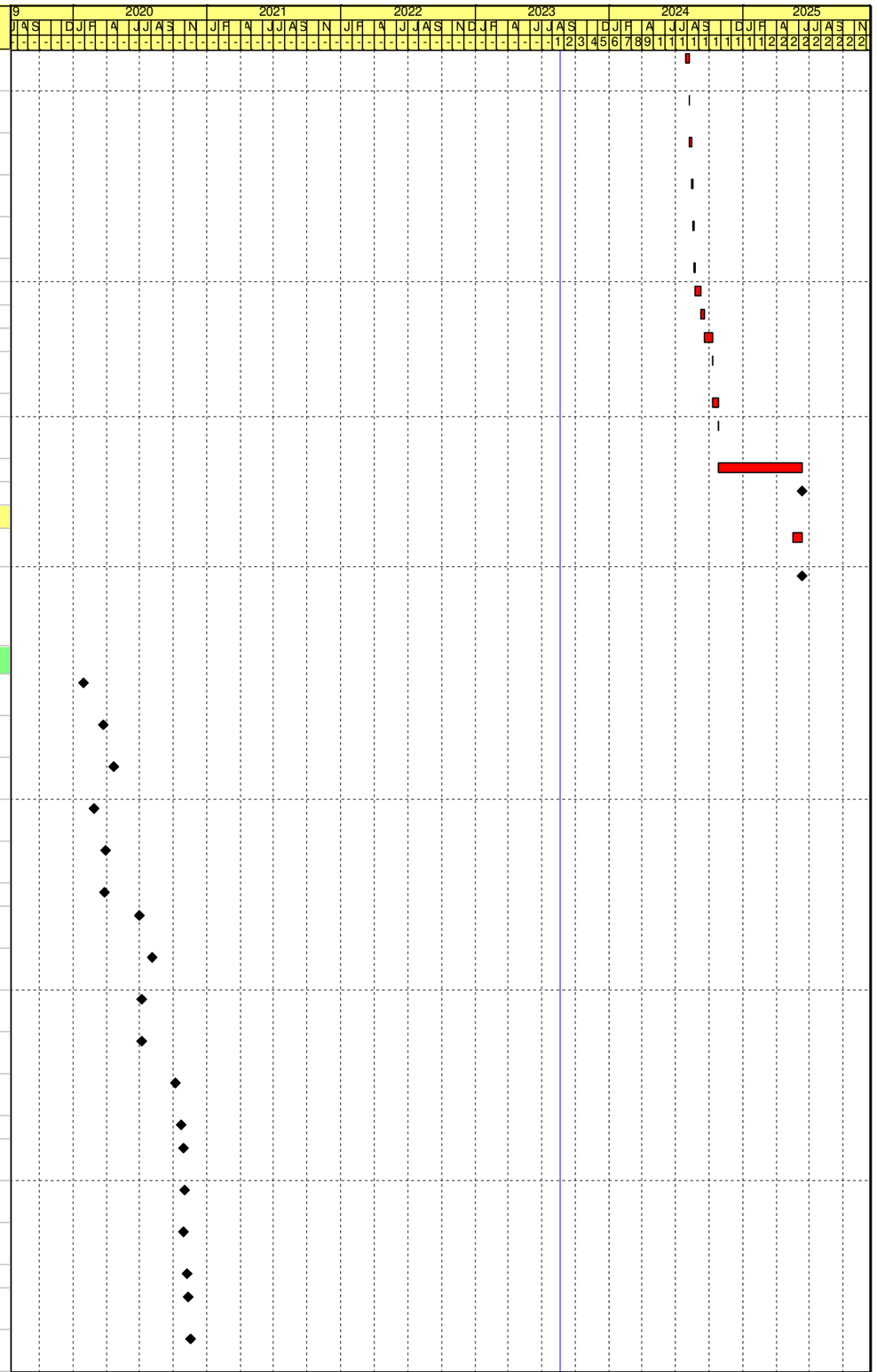


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
SC51022-1	NICE-CNE-0433 Inclement Weather (November 2022) - 8.5days (Implemented)	9	29-Jul-24	06-Aug-24	29-Jul-24	06-Aug-24	0	SC51021-1	SC51023-1
SC51023-1	CNE-062 Inclement Weather (November 2022) (Time and Cost Implication) - 2days	2	06-Aug-24	08-Aug-24	06-Aug-24	08-Aug-24	0	SC51022-1	SC51024-1
SC51024-1	NICE-CNE-0441 Inclement Weather (December 2022) - 4days (Implemented)	4	08-Aug-24	12-Aug-24	08-Aug-24	12-Aug-24	0	SC51023-1	SC51025-1
SC51025-1	CNE-068 Inclement Weather (January 2023) (Time Implication) - 5days	5	12-Aug-24	17-Aug-24	12-Aug-24	17-Aug-24	0	SC51024-1	SC51026-1
SC51026-1	CNE-070 Inclement Weather (February 2023) (Time Implication) - 2days	2	17-Aug-24	19-Aug-24	17-Aug-24	19-Aug-24	0	SC51025-1	SC51027-1
SC51027-1	CNE-071 Inclement Weather (March 2023) (Time Implication) - 5days	5	19-Aug-24	24-Aug-24	19-Aug-24	24-Aug-24	0	SC51026-1	SC51028-1
SC51028-1	CNE-072 Inclement Weather (April 2023) (Time Implication) - 14days	14	24-Aug-24	07-Sep-24	24-Aug-24	07-Sep-24	0	SC51027-1	SC51029-1
SC51029-1	CNE-073 Inclement Weather (May 2023) (Time Implication) - 10days	10	07-Sep-24	17-Sep-24	07-Sep-24	17-Sep-24	0	SC51028-1	SC51030-1
SC51030-1	CNE-076 Inclement Weather (June 2023) (TIme Implication) - 22days	22	17-Sep-24	09-Oct-24	17-Sep-24	09-Oct-24	0	SC51029-1	SC51031-1
SC51031-1	CNE-077 Inclement Weather (June 2023) (Time and Cost Implication) - 1day	1	09-Oct-24	10-Oct-24	09-Oct-24	10-Oct-24	0	SC51030-1	SC51032-1
SC51032-1	CNE-078 Inclement Weather (July 2023) (Time Implication) - 14days	14	10-Oct-24	24-Oct-24	10-Oct-24	24-Oct-24	0	SC51031-1	SC51033-1
SC51033-1	CNE-079 Inclement Weather (July 2023) (Time and Cost Implication) - 2days	2	24-Oct-24	26-Oct-24	24-Oct-24	26-Oct-24	0	SC51032-1	SC51099-1
SC51099-1	EWN-0314 Extention of Time for change of access date	229	26-Oct-24	11-Jun-25	26-Oct-24	11-Jun-25	0	SC51033-1	SC51100-1
SC51100-1	Expected Completion for Section 5	0		11-Jun-25*		11-Jun-25	0	SC51099-1	
Time Risk Allowance and Planned Completion		26	17-May-25	11-Jun-25	07-Jul-24	02-Aug-24	-314		
SC51110	Time Risk Allowance for Section 5	26	17-May-25	11-Jun-25	07-Jul-24	02-Aug-24	-314	SC51001-1, S5S1250,	SC51120
SC51120	Planned Completion for Section 5	0		11-Jun-25*		02-Aug-24	-314	SC51110, PL1520, PL1560, S5S1040	CD1040
Compensation Event		1621	23-Oct-19 A	21-Aug-23	30-Jan-22	11-Jun-25	660		
CE0001	CE No.001 - Special Work Arrangement in Reducing the Risk of the Spread of Novel Coronavirus	0		30-Jan-20 A		11-Jun-25			
CE0002	CE No.002 - The Contractor's Site Accomodation by Modular Integrated Construction (MIC) Method	0		23-Mar-20 A		11-Jun-25			
CE0003	CE No.003 - Flowmeter Relocation & Pipework Rearrangement at Effluent Transfer Pumping Station	0		20-Apr-20 A		11-Jun-25			
CE0004	CE No.004 - Designated Area for the Contractor's Site Accommodation in Works Area WA1	0		26-Feb-20 A		11-Jun-25			
CE0005	CE No.005 - Revised Size of Penstock at UV System No.1 & Effluent Pumping Station No.1 for Ex. Outfall	0		30-Mar-20 A		11-Jun-25			
CE0006	CE No.006 - Additional Duty Point for Effluent Transfer Pumps	0		27-Mar-20 A		11-Jun-25			
CE0007	CE No.007 - Additional Adjustable Weir at UV System No.1 & Effluent Pumping Station No.1	0		30-Jun-20 A		11-Jun-25			
CE0008	CE No.008 - Provision of Additional 2nd Temp. Power Supply for UV System No.1 & Effluent Pumping Station No.1	0		03-Aug-20 A		11-Jun-25			
CE0009	CE No.009 - Employment of Temporary Staff under Anti-Epidemic Fund	0		07-Jul-20 A		11-Jun-25			
CE0010	CE No.010 - Revised Setting Out Plan for Sidestream Treatment Facilities	0		07-Jul-20 A		11-Jun-25			
CE0012	CE No.012 - Provision of Touchscreen Display System for the Project Manager's Office	0		06-Oct-20 A		11-Jun-25			
CE0013	CE No.013 - Feasibility Study for Adopting emMiC & DfMA	0		22-Oct-20 A		11-Jun-25			
CE0014	CE No.014 - Revised FS Water Supply Arrangement for CHP, Guard House, Workshop No.2, SludgeDigester&DistributionChamber	0		28-Oct-20 A		11-Jun-25			
CE0015	CE No.015 - Revised Plumbing Arranagement for Workshop No.2, UV & Effluent No.1, CHP, SPS&FCDF, DOU No.11&12, H2S, SDDC	0		30-Oct-20 A		11-Jun-25			
CE0016	CE No.016 - Elect. Provisions for Addit. 800A ACB w/ CMPD as Standby Supply for MBBR for UV No.2 for Future Expansion	0		28-Oct-20 A		11-Jun-25			
CE0018	CE No.018 - MVAC Layout for Plant Service Water System	0		05-Nov-20 A		11-Jun-25			
CE0020	CE No.020 - Addit. set of 11kV power feeder panel at 11kV SB in CHP for future connection to Zone B in Stage 2	0		09-Nov-20 A		11-Jun-25			
CE0201	NCE-PMI-0201 - Provision of Access Platform for EOT cranes in UV System No.1 & Effluent Pumping Station No.1	0		16-Nov-20 A		11-Jun-25			

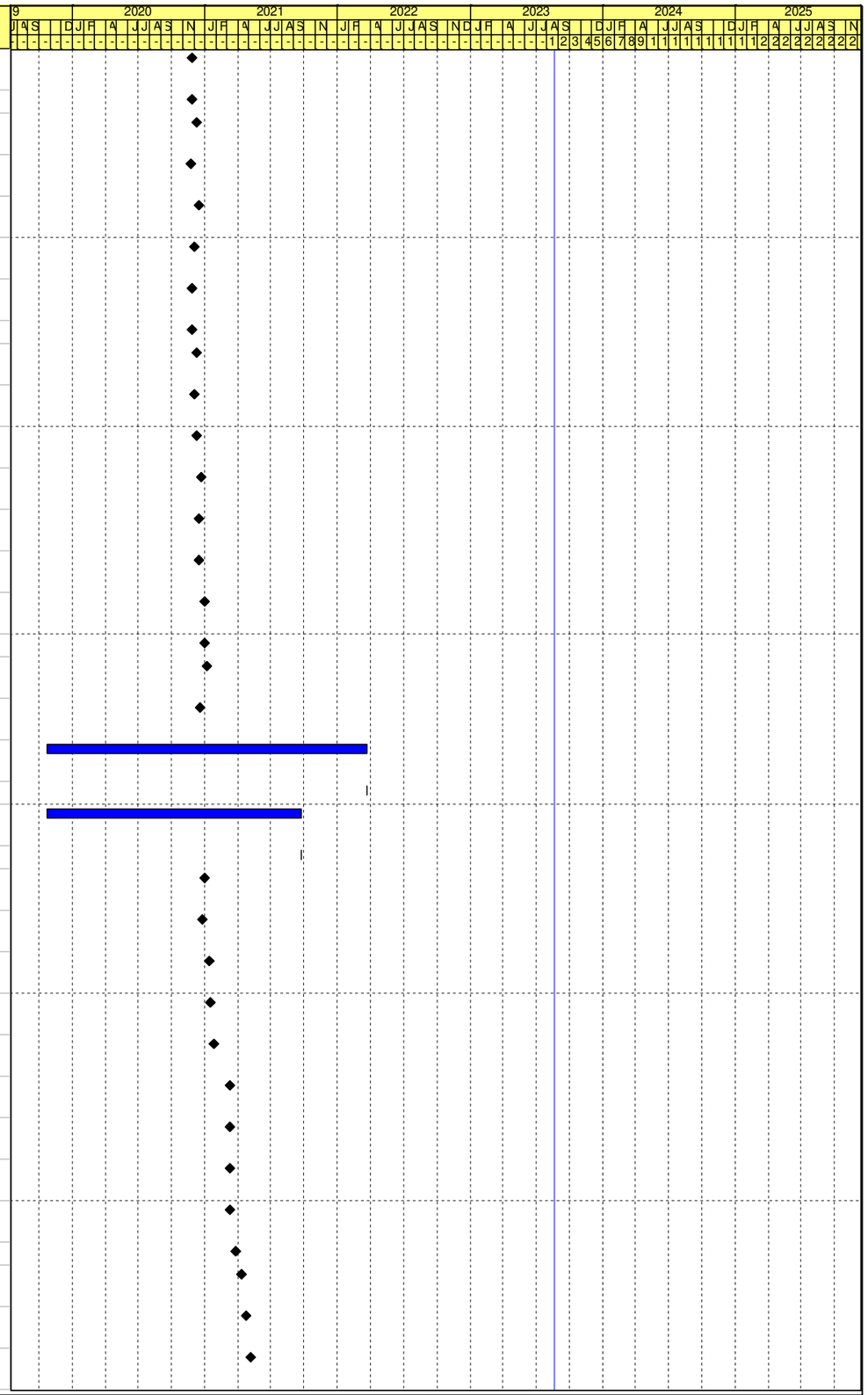


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CE0202	NCE-PMI-0202 - Revised Plumbing Arrangement for Sludge Dewatering Building	0		26-Nov-20 A		11-Jun-25			
CE0203	NCE-PPMI-0203 - MVAC Layout for SAS Pumping Station	0		25-Nov-20 A		11-Jun-25			
CE0204	NCE-PMI-0204 - CHP - Provisional of Additional ATS for Power Supply for UPS	0		08-Dec-20 A		11-Jun-25			
CE0205	NCE-PPMI-0205 - Fibre Optics Network Connection for SCADA Systems between Zone B & Zone C	0		23-Nov-20 A		11-Jun-25			
CE0206	NCE-PMI-0206 - SDB - Provisional of Additional ATS for Power Supply for UPS	0		15-Dec-20 A		11-Jun-25			
CE0207	NCE-PMI-0207 - TX Rm & Switch Rm - Provision of ATS for Power Supply for UPS	0		01-Dec-20 A		11-Jun-25			
CE0208	NCE-PPMI-0208 - Provision of Drainage service Layout for SAS Pumping Station	0		26-Nov-20 A		11-Jun-25			
CE0209	NCE-PPMI-0209 - Drainage System for Plant Service Water System	0		26-Nov-20 A		11-Jun-25			
CE0210	NCE-PPMI-0210 - Electrical provisions for MVAC & Drainage Systems in SAS Pumping Station	0		08-Dec-20 A		11-Jun-25			
CE0211	NCE-PMI-0211 - Revised MVAC Layout & Electrical Provisions for MVAC in TX and Switch Rm	0		02-Dec-20 A		11-Jun-25			
CE0212	NCE-PMI-0212 - Provision of Louvre Panel for Outdoor AC Units at Contractor's Site Accomodation	0		07-Dec-20 A		11-Jun-25			
CE0213	NCE-PPMI-0213 - Electrical provisions for MVAC & Drainage System in UV System No.1 & Effluent Pumping Station No.1	0		21-Dec-20 A		11-Jun-25			
CE0214	NCE-PPMI-0214 - Additional Sump Pump & Drain Pipes at UV System No.1 & Effluent Pumping Station	0		14-Dec-20 A		11-Jun-25			
CE0215	NCE-PPMI-0215 - Revised MVAC Layout for UV System No.1 & Effluent Pumping Station No.1	0		14-Dec-20 A		11-Jun-25			
CE0216	NCE-PPMI-0216 - Electrical Provisions for MVAC & drainage Sytems in Plant Service Water System	0		31-Dec-20 A		11-Jun-25			
CE0217	NCE-PMI-0217 - Revised Duty Points for Effluent Transfer Pumps	0		29-Dec-20 A		11-Jun-25			
CE0218	NCE-PMI-0218 - Scoping Study for Application of Digital Twin & IoT in Zone B & Zone C of SWHEPP	0		04-Jan-21 A		11-Jun-25			
CE0219	NCE-NCE-0219 - Change of Site Access Date to SAS Pumping Station Forming Part of Portion B-2 of the Site	0		19-Dec-20 A		11-Jun-25			
CE0219a	NCE-NCE-0219 - Portion B-2a (within 771 to 891 days from starting date)	891	23-Oct-19 A	23-Mar-22 A	23-May-23	23-May-23		CD1010	CE0219b
CE0219b	NCE-NCE-0219 - Revised Access Date for Portion B-2a	1	23-Mar-22 A	23-Mar-22 A	23-May-23	23-May-23		CE0219a	S5SASC1010
CE0219c	NCE-NCE-0219 - Portion B-2b (within 615 to 705 days from starting date)	705	23-Oct-19 A	24-Sep-21 A	03-Feb-23	03-Feb-23			CE0219d
CE0219d	NCE-NCE-0219 - Revised Access Date for Portion B-2b	1	24-Sep-21 A	24-Sep-21 A	03-Feb-23	03-Feb-23		CE0219c	S5ECHC1000
CE0220	NCE-PMI-0220 - Supply of Puddle Pipes for Effluent to Shek Sheung River	0		30-Dec-20 A		11-Jun-25			
CE0221	NCE-PPMI-0221 - General Arrangement for Fire Hydrant & Booster Pump Room	0		24-Dec-20 A		11-Jun-25			
CE0222	NCE-PMI-0222 - Revised Water Supply Arrangement (FS Water) to Sludge Dewatering Building	0		12-Jan-21 A		11-Jun-25			
CE0223	NCE-PMI-0223 - Construction of Trial Pits for Sidestream Treatment Facilities	0		15-Jan-21 A		11-Jun-25			
CE0224	NCE-PMI-0224 - Independent Inspection Body (IIB) for the Factory Acceptance Test (FAT) for UV Disinfeciton System	0		25-Jan-21 A		11-Jun-25			
CE0225	NCE-PMI-0225 - Supply of Ductile Iron Puddle Pipes at the Basement of Sludge Dewatering Building	0		09-Mar-21 A		11-Jun-25			
CE0226	NCE-PMI-0226 - Provision of Solar Water Heating System at the Contractor's Site Accomodation	0		09-Mar-21 A		11-Jun-25			
CE0227	NCE-PMI-0227 - Dual Power Fedder for LV Switch Panel at Sewage Pumping Station	0		11-Mar-21 A		11-Jun-25			
CE0228	NCE-PMI-0228 - Provision of Effluent Pipes and Associated Valve and Supply of Supports for Effluent to Shek Sheung River	0		11-Mar-21 A		11-Jun-25			
CE0230	NCE-PMI-0230 - Provision of Project Jackets with Fleece Vests	0		26-Mar-21 A		11-Jun-25			
CE0231	NCE-PMI-0231 - Extension of Sampling Pipe From Low Level on Sludge Digesters	0		12-Apr-21 A		11-Jun-25			
CE0232	NCE-PMI-0232 - Dual Power Fedder for LV Switch Panel at 1/F LV Switch Room of Combined Heat and Power (CHP) Building	0		22-Apr-21 A		11-Jun-25			
CE0233	NCE-PMI-0233 - Sampling, Simulating and Testing of Existing Sludge for Obtaining the Viscosity of the Mixed Sludge	0		06-May-21 A		11-Jun-25			

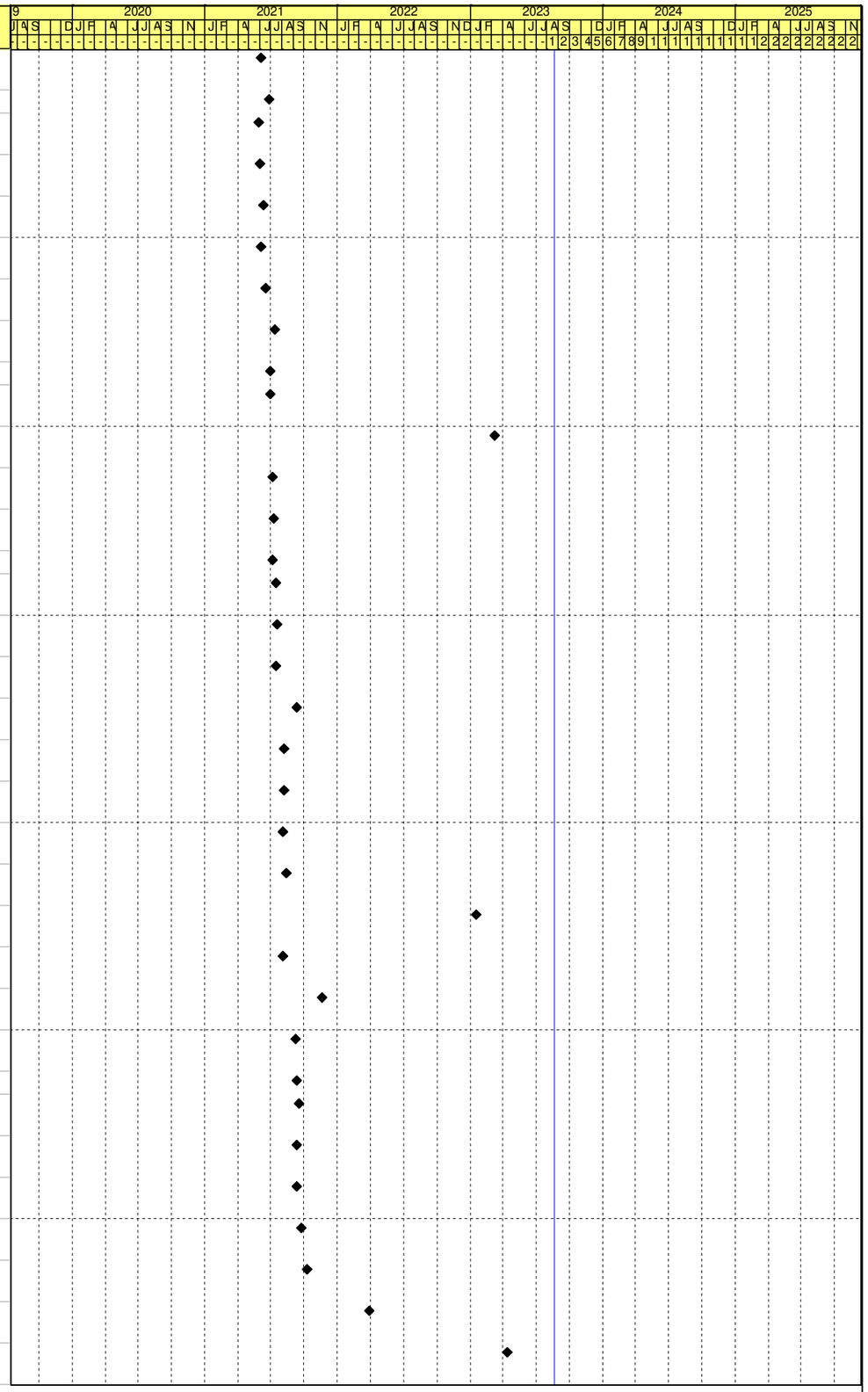


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CE0234	NCE-PMI-0234 - Provision of FRP Walkway, Access Platform & Handrailing for Sludge Digester No. 2	0		02-Jun-21 A		11-Jun-25			
CE0237	NCE-CNE-0237 - Provision of Inspectin Windows for Sludge Digester	0		25-Jun-21 A		11-Jun-25			
CE0238	NCE-PMI-0238 - Supply of Stainless Steel Puddle Pipes for Surplus Activated Sludge (SAS) Pumping Station	0		27-May-21 A		11-Jun-25			
CE0239	NCE-PMI-0239 - Revised the Arrangement for Process Water Supply and Plant Services Water System	0		01-Jun-21 A		11-Jun-25			
CE0240	NCE-PMI-0240 - Revised Coping and Invert Levels for Penstock and Stoplog of SAS Pumping Station	0		09-Jun-21 A		11-Jun-25			
CE0241	NCE-PMI-0241 - Revised Diesel Fuel Tank at Combined Heat and Power (CHP) Building	0		04-Jun-21 A		11-Jun-25			
CE0242	NCE-PMI-0242 - Revised Fire Services Provision of UV System No. 1 and Effluent Pumping Station No. 1	0		15-Jun-21 A		11-Jun-25			
CE0243	NCE-PMI-0243 - Provision of Flow Signal Inputs for UV Disinfection System	0		12-Jul-21 A		11-Jun-25			
CE0244	RCNE-CNE-0244 - Access to and use of portion C-1A	0		29-Jun-21 A		11-Jun-25			
CE0245	NCE-PMI-0245 - Provision of Augmented Reality (AR) Mobile Application	0		30-Jun-21 A		11-Jun-25			
CE0245-1	NCE-PMI-0245-1 - Provision of Augmented Reality (AR) Mobile Application	0		08-Mar-23 A		11-Jun-25			
CE0246	NCE-PMI-0246 - Revised HV Remote Control Panels at CHP & Workshop No. 2	0		06-Jul-21 A		11-Jun-25			
CE0247	NCE-PMI-0247 - Temporary 4G System for SCADA System Monitoring	0		07-Jul-21 A		11-Jun-25			
CE0248	NCE-PMI-0248 - Inclement Weather - May 2021 (Time Implication)	0		05-Jul-21 A		11-Jun-25			
CE0250	NCE-PMI-0250 - Provision of Front Access LV Switch Panel in the LV Switch Room on G/F Workshop No. 2	0		14-Jul-21 A		11-Jun-25			
CE0252	NCE-PMI-0252 - Provision of Neutral Earthing Resistor (NER) at Workshop No. 2	0		19-Jul-21 A		11-Jun-25			
CE0253	NCE-PMI-0253 - Provision of Building Services Systems in New LV Switch Room on the G/F Workshop No. 2	0		16-Jul-21 A		11-Jun-25			
CE0254	NCE-CNE-0254 - Removal of Obstructions at Trail Pit No. 3 at Sidestreamt Facilities	0		10-Sep-21 A		11-Jun-25			
CE0256	RCNE-CNE-0256 - Amber Rainstrom Warning and Inclement Weather - June 2021 (Time Implication)	0		05-Aug-21 A		11-Jun-25			
CE0257	RCNE-CNE-0257 - Black and Red Rainstrom Warning - June 2021 (Time & Cost Implication)	0		05-Aug-21 A		11-Jun-25			
CE0258	NCE-PMI-0258 - Provision of FRP Cover for Overflow Chambers of Sludge Digesters	0		04-Aug-21 A		11-Jun-25			
CE0259	NCE-PMI-0259 - Provision of Virtual Reality (VR) Safety Training Platform	0		13-Aug-21 A		11-Jun-25			
CE0259-1	NCE-PMI-0259-1 - Provision of Virtual Reality (VR) Safety Training Platform (Another 1 year subscription)	0		17-Jan-23 A		11-Jun-25			
CE0260	NCE-PMI-0260 - Provision of Chequer Plates at UV System No. 1 & Effluent Pumping Station No. 1	0		04-Aug-21 A		11-Jun-25			
CE0262	NCE-PMI-0262 - Emergency Access Door for Lift at Sludge Dewatering Building	0		18-Nov-21 A		11-Jun-25			
CE0263	NCE-PMI-0263 - Upgrade of the Supporting Frame of 1st and 2nd Stage Heat Exchangers for Future Expansion of THP System	0		07-Sep-21 A		11-Jun-25			
CE0264	RCNE-CNE-0264 - Inclement Weather - July 2021 (Time Implication)	0		10-Sep-21 A		11-Jun-25			
CE0265	NCE-PMI-0265 - Water Supply to Emergency Drench Shower and Eye Fountain at Deodorization System No. 11	0		16-Sep-21 A		11-Jun-25			
CE0269	NCE-PMI-0269 - Additional Cleansing Points at Sludge Skip Area of Sludge Dewatering Building	0		10-Sep-21 A		11-Jun-25			
CE0270	NCE-CNE-0270 - Extra sampling, simulating & testing of exiting sludge for obtaining the viscosity of the existing sludge	0		10-Sep-21 A		11-Jun-25			
CE0271	NCE-PMI-0271 - Provision of Access Platform for the EOT Crane (LA-01-02) in Sludge Dewatering Building	0		23-Sep-21 A		11-Jun-25			
CE0272	NCE-PMI-0272 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		08-Oct-21 A		11-Jun-25			
CE0272-1	NCE-PMI-0272-1 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		28-Mar-22 A		11-Jun-25			
CE0272-2	NCE-PMI-0272-2 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		14-Apr-23 A		11-Jun-25			

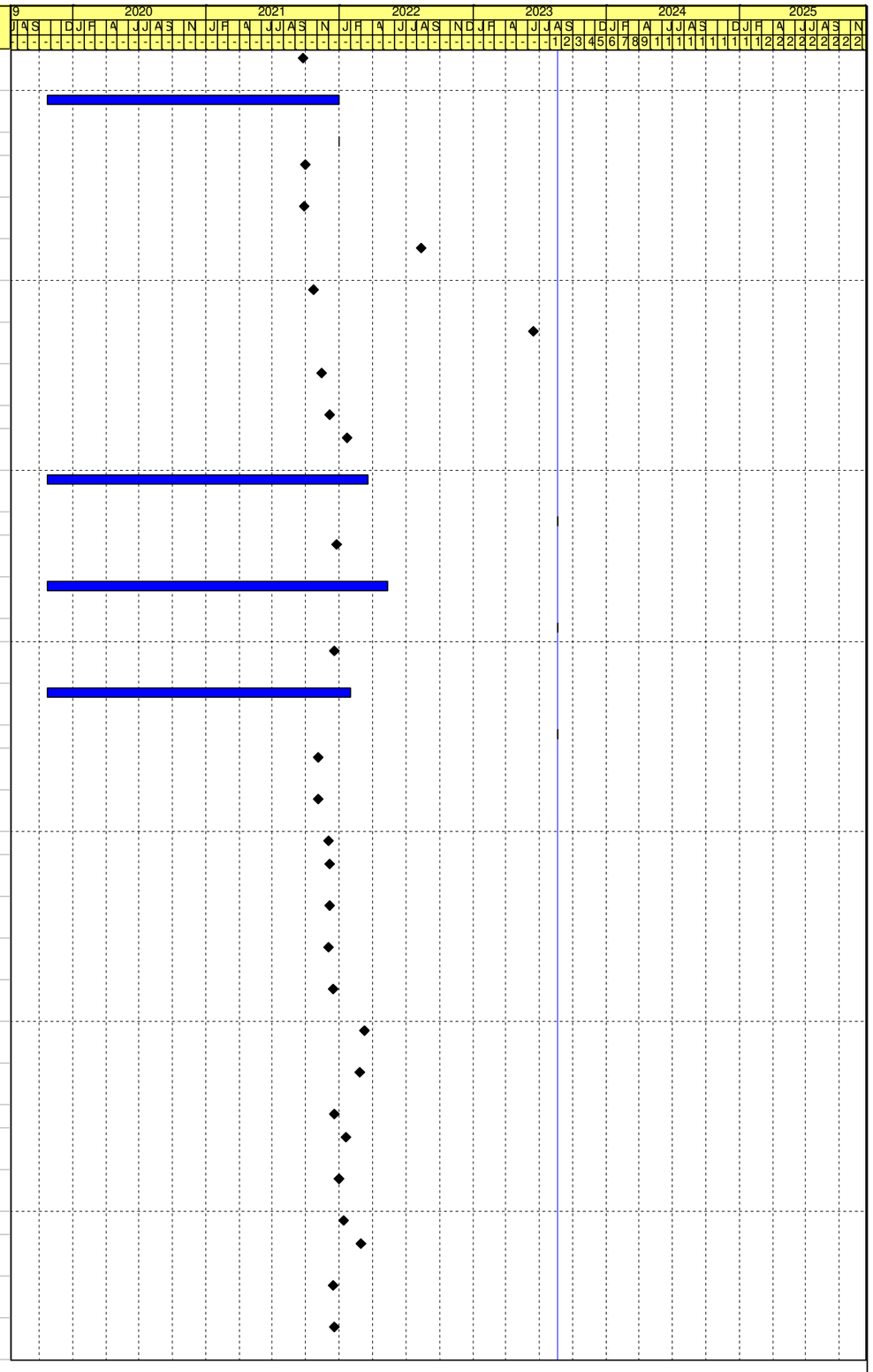


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CE0273	NCE-NCE-0273 - Change of Site Access Date to Workshop No. 2 Forming Part of Portion C-3 of the Site	0		24-Sep-21 A		11-Jun-25			
CE0273a	NCE-NCE-0273 - Portion C-3 (within 615 to 815 days from starting date)	815	23-Oct-19 A	31-Dec-21 A	11-Jun-25	11-Jun-25			CE0273b
CE0273b	NCE-NCE-0273 - Revised Access Date for Portion C-3	1	31-Dec-21 A	31-Dec-21 A	11-Jun-25	11-Jun-25		CE0273a	
CE0275	NCE-PMI-0275 - Additional Lighting Fittings for UV System No.1 & Effluent Pumping Station No.1	0		29-Sep-21 A		11-Jun-25			
CE0277	NCE-PMI-0277 - Provision of Access Platform for the EOT Crane (LA-01-03) in Sludge Dewatering Building	0		27-Sep-21 A		11-Jun-25			
CE0279	NCE-PPMI-0279 - Implementation of Digital Twin Pilot Project in Advance Works Area of Shek Wu Hui Sewage Treatment Works	0		11-Aug-22 A		11-Jun-25			
CE0280	NCE-PMI-0280 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		21-Oct-21 A		11-Jun-25			
CE0280a	PMI-PMI-0280 - Employment of Temporary Staff under Job Creation Scheme 2.0 (JCS 2.0) under Anti-Epidemiv Fund (AEF)	0		16-Jun-23 A		11-Jun-25			
CE0283	NCE-PMI-0283 - Provision of Metal Base Plate,Stopper&Guide Rail for Loading&Unloading of Sludge Skip at Skip Rm of SDB	0		11-Nov-21 A		11-Jun-25			
CE0284	NCE-PMI-0284 - Revised Road Lighting System for Zone C	0		03-Dec-21 A		11-Jun-25			
CE0286	NCE-NCE-0286 - Change of Site Access Date to Combined Heat and Power Building Forming Part of Portion C-2B of the Site	0		21-Jan-22 A		11-Jun-25			
CE0286a	NCE-NCE-0286 - Portion C-2B (within 765 to 880 days from starting date)	880	23-Oct-19 A	20-Mar-22 A	20-Mar-22	20-Mar-22			CE0286b
CE0286b	NCE-NCE-0286 - Revised Access Date for Portion C2-B	1	21-Aug-23	21-Aug-23*	20-Mar-22	20-Mar-22	-519	CE0286a	
CE0287	NCE-NCE-0287 - Change of Site Access Date to Sludge Digester & Distribution Chamber Forming Part of Portion C- 2C	0		24-Dec-21 A		11-Jun-25			
CE0287a	NCE-NCE-0287 - Portion C-2C (within 715 to 934 days from starting date)	934	23-Oct-19 A	13-May-22 A	13-May-22	13-May-22			CE0287b
CE0287b	NCE-NCE-0287 - Revised Access Date for Portion C2-C	1	21-Aug-23	21-Aug-23*	13-May-22	13-May-22	-465	CE0287a	
CE0288	NCE-NCE-0288 - Change of Site Access Date to Sludge Dewatering Building Forming Part of the Portion C- 2A of the site	0		18-Dec-21 A		11-Jun-25			
CE0288a	NCE-NCE-0288 - Portion C-2A (within 705 to 831 days from starting date)	831	23-Oct-19 A	30-Jan-22 A	30-Jan-22	30-Jan-22			CE0288b
CE0288b	NCE-NCE-0288 - Revised Access Date for Portion C-2A	1	21-Aug-23	21-Aug-23*	30-Jan-22	30-Jan-22	-568	CE0288a	
CE0292	RCNE-CNE-0292 - Inclement Weather - August 2021 (Time Implication)	0		02-Nov-21 A		11-Jun-25			
CE0293	RCNE-CNE-0293 - Inclement Weather - September 2021 (Time Implication)	0		02-Nov-21 A		11-Jun-25			
CE0294	NCE-PMI-0294 - IIB for FAT for THP System	0		30-Nov-21 A		11-Jun-25			
CE0296	NCE-PMI-0296 - Provision of emMiC Adoption of FRP Walkway and Platform for Sludge Digesters	0		03-Dec-21 A		11-Jun-25			
CE0297	NCE-PMI-0297-Provision of Addit. Module BIM Collaboration Pro to existing CDE&Omission of Procurement Maintenance of CDE	0		03-Dec-21 A		11-Jun-25			
CE0298	NCE-PMI-0298 - Additional Light Fittings at Roof Floor of UV System No.1 & Effluent Pumping Station No.1	0		30-Nov-21 A		11-Jun-25			
CE0299	NCE-PMI-0299 - Revised Plumbing Layout for UV System No.1 & Effluent Pumping Station No.1	0		14-Dec-21 A		11-Jun-25			
CE0300	NCE-PMI-0300 - Revised Plumbing Layout for CHP, DOU 12 and SD&DC	0		10-Mar-22 A		11-Jun-25			
CE0301	NCE-PMI-0301 - Revised Plumbing Layout for SDB & FeCl3 Dosing System	0		24-Feb-22 A		11-Jun-25			
CE0302	NCE-PMI-0302 - Revised Lighting Layout Plan for Workshop No.2	0		17-Dec-21 A		11-Jun-25			
CE0303	NCE-CNE-0303 - Revise Fire Services Provision for Server Room of Workshop No.2	0		19-Jan-22 A		11-Jun-25			
CE0304	NCE-PMI-0304 - Provision of Digital Displaying Screen and Softwarewithin Portion B Area	0		29-Dec-21 A		11-Jun-25			
CE0305	NCE-PMI-0305 - Process Review for Advance Works	0		12-Jan-22 A		11-Jun-25			
CE0306	NCE-CNE-0306 - Additional Trial Pits & the Associated Modification Works for Uncharted Utilities at STF	0		01-Mar-22 A		11-Jun-25			
CE0307	NCE-PMI-0307 - Revised Quantity for Stoplogs of Sewage Pumping Station	0		13-Dec-21 A		11-Jun-25			
CE0309	RCNE-CNE-0309 - Inclement Weather - October 2021 (Time Implication)	0		16-Dec-21 A		11-Jun-25			

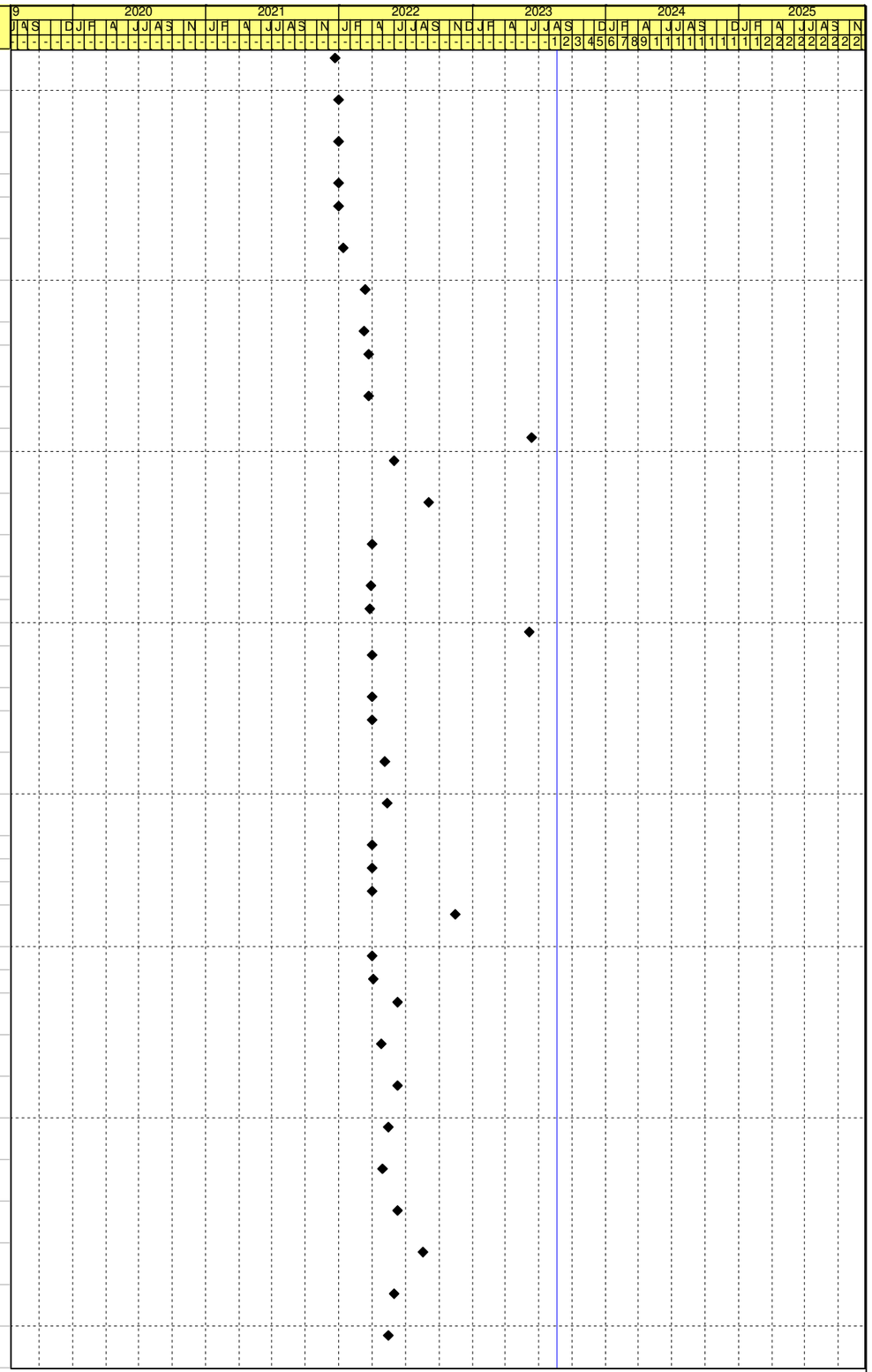


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CE0310	NCE-PMI-0310 - Temp. Leased Line for UV System No.1, Effluent PS No.1 & existing Control Room at Zone B	0		20-Dec-21 A		11-Jun-25			
CE0311	NCE-PMI-0311 - Temp. Setup for SCADA System Monitoring & CCTV System Surveillance	0		29-Dec-21 A		11-Jun-25			
CE0312	CNE-0312 - Weather Condition Affecting the Site in Oct due to Typhoon Signal No.8 or above, Red/Black Rainstorm Warning	0		29-Dec-21 A		11-Jun-25			
CE0313	CNE-0313 - Inclement Weather - November 2021 (Time Implication)	0		29-Dec-21 A		11-Jun-25			
CE0315	NCE-PMI-0315 - Modification of Monorali LA-01-04 in Sludge Dewatering Building	0		30-Dec-21 A		11-Jun-25			
CE0317	NCE-PMI-0317 - Revised CCTV Layout Plan & Addition of CCTV Camera for UV System No.1 & Effluent Pumping Station	0		11-Jan-22 A		11-Jun-25			
CE0325	NCE-PMI-0325 - Provision of 2 Nos. of 3 Tons Mobile A-frame with Electrical Hoist in Sludge Dewatering Building	0		14-Mar-22 A		11-Jun-25			
CE0327	NCE-PMI-0327 - Change of Material for Electrical Wiring Accessories	0		08-Mar-22 A		11-Jun-25			
CE0328	NCE-PMI-0328 - Provision of Chequer Plates at SAS Pumping Station	0		22-Mar-22 A		11-Jun-25			
CE0329	NCE-PMI-0329 - Provision of IIB for FAT for Sludge Thickening and Dewatering Centrifuges	0		23-Mar-22 A		11-Jun-25			
CE0331	RCNE-CNE-0331 - Unavailability of Temporary Power Supply by CLP	0		13-Jun-23 A		11-Jun-25			
CE0333	NCE-PMI-0333 - Revised MVAC Layout and Control Schematic for Workshop No.2	0		30-May-22 A		11-Jun-25			
CE0334	NCE-PMI-0334 - Provision of 1 Set of SWL 1 Tons Davit with Electrical Chain Hoist on the Roof of Distribution Chamber	0		02-Sep-22 A		11-Jun-25			
CE0335	NCE-PMI-0335 - Revised Power & Control for MVAC Provision at Workshop No.2	0		01-Apr-22 A		11-Jun-25			
CE0336	NCE-PMI-0336 - Provision of Additional Temporary Storage Area	0		30-Mar-22 A		11-Jun-25			
CE0337	NCE-PMI-0337 - Revised Pipe Trenches in Zone C	0		24-Mar-22 A		11-Jun-25			
CE0337a	PMI-PMI-0337 - Revised Pipe Trenches in Zone C	0		07-Jun-23 A		11-Jun-25			
CE0338	NCE-PMI-0338 - Provision of Additional RFID Handheld Readers with 4G Data SIM Card Service	0		01-Apr-22 A		11-Jun-25			
CE0339	NCE-PMI-0339 - Revised Lighting Layout for SDB	0		01-Apr-22 A		11-Jun-25			
CE0340	NCE-PMI-0340 - Buillding Services & SCADA Interface Provisions for Workshop No.2	0		01-Apr-22 A		11-Jun-25			
CE0341	NCE-PMI-0341 - Revised MVAC Layout for Sludge Digesters and Distribution Chamber	0		05-May-22 A		11-Jun-25			
CE0342	NCE-PMI-0342 - Provision and Installation of Additional Pipes to Manhole MHSS1	0		12-May-22 A		11-Jun-25			
CE0343	CNE-0343 - Inclement Weather - December 2021 (Time Implication)	0		01-Apr-22 A		11-Jun-25			
CE0344	CNE-0344 - Inclement Weather - January 2022 (Time Implication)	0		01-Apr-22 A		11-Jun-25			
CE0345	CNE-0345 - Inclement Weather - February 2022 (Time Implication)	0		01-Apr-22 A		11-Jun-25			
CE0346	NCE-CNE-0346 - Left in Temporary Steel Casing for Pile No. SSHP5 at Sidesteam Treatment Facilities	0		16-Nov-22 A		11-Jun-25			
CE0347	NCE-PMI-0347 - IIB for FAT for 11kV Switchboards	0		01-Apr-22 A		11-Jun-25			
CE0348	NCE-PMI-0348 - Provision of (IIB) for FAT for CHP Generating Sets	0		04-Apr-22 A		11-Jun-25			
CE0352	NCE-PMI-0352 - Revised MVAC Layout and for Transformer and Switch Room	0		10-Jun-22 A		11-Jun-25			
CE0353	NCE-PMI-0353 - Additional Auto-sampler for sampling Location at UV system No.1 and Effluent Pumping Station No.1	0		27-Apr-22 A		11-Jun-25			
CE0354	NCE-EWP-0354 - Early Deployment of Tower Crane to Enhance Programme affected by Uncharted U/U at STF	0		10-Jun-22 A		11-Jun-25			
CE0359	NCE-PMI-0359 - Revised Lighting Layout for Sludge Digesters and Districbution Chamber (Basement 1 and Basement 2)	0		16-May-22 A		11-Jun-25			
CE0360	NCE-PMI-0360 - Provision of Video Wall with Additional Monitors in the Control Room of Workshop No.2	0		29-Apr-22 A		11-Jun-25			
CE0361	NCE-PMI-0361 - Revised Power Layout for Sludge Dewatering Building	0		08-Jun-22 A		11-Jun-25			
CE0362	NCE-CNE-0362 - Amendment of Dangers Goods Ordinance (Cap.295)	0		19-Aug-22 A		11-Jun-25			
CE0363	NCE-PMI-0363 - Revised MVAC Layout and Control Schematic for CHP Building	0		30-May-22 A		11-Jun-25			
CE0364	NCE-PMI-0364 - Provision of Security and Utility Services for Additional Temporary Storage Area	0		16-May-22 A		11-Jun-25			

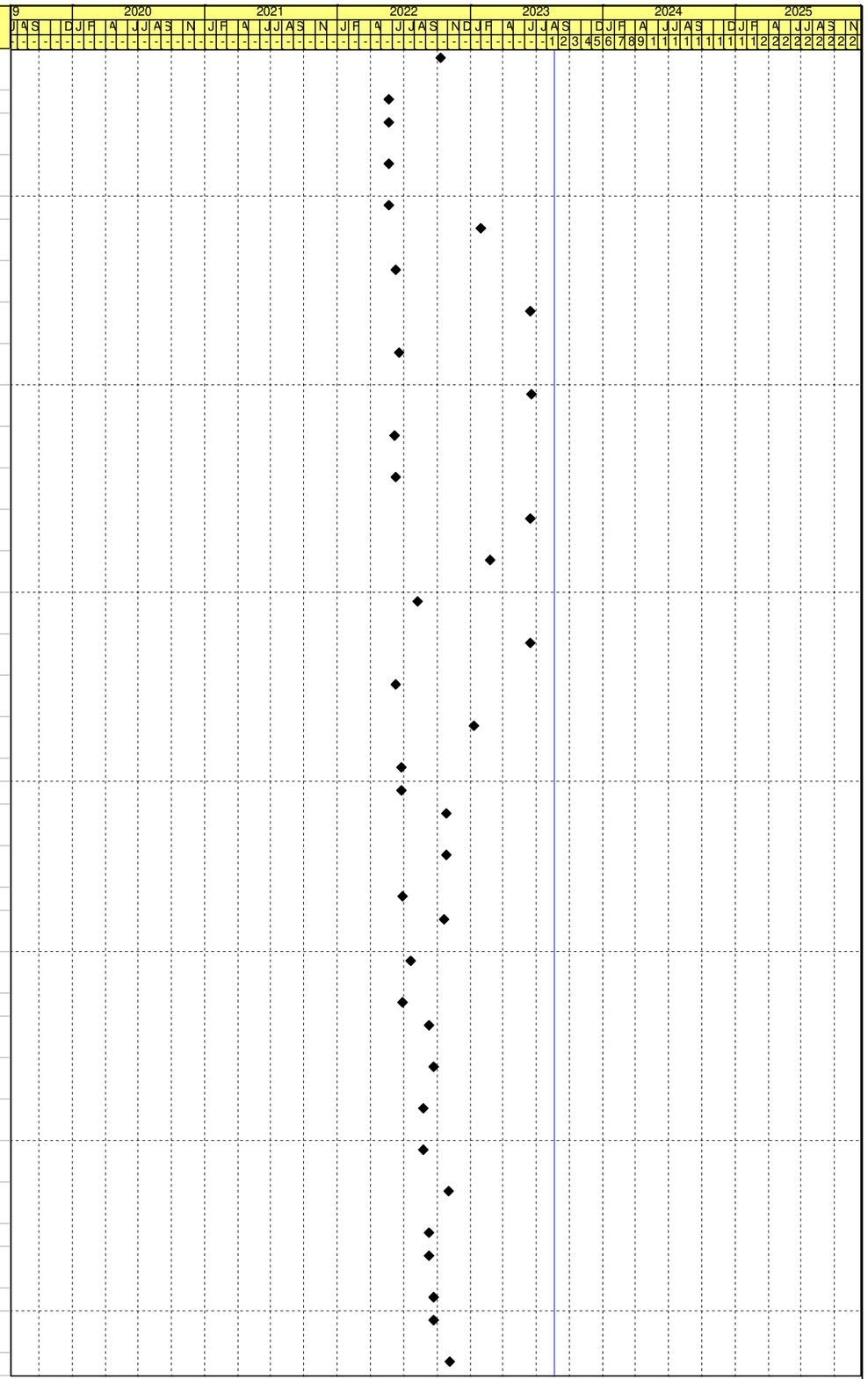


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CE0364-1	NCE-PMI-0364-1 - Provision of Security and Utility Services for Additional Temporary Storage Area	0		10-Oct-22 A		11-Jun-25			
CE0366	CNE-0366 - No Access to and Use of Portion C-2B for Area for CHP	0		20-May-22 A		11-Jun-25			
CE0367	NCE-PMI-0367 - Sealing Works for UV System & Effluent Pumping Station No. 1	0		20-May-22 A		11-Jun-25			
CE0369	CNE-0369 - No Access to and use of Portion C-2C for Area for SD & DC	0		20-May-22 A		11-Jun-25			
CE0370	CNE-0370 - No Access to and Use of Portion C-2A for Area for SDB	0		20-May-22 A		11-Jun-25			
CE0370-1	RCNE-CNE-0370-1 - No Access to and Use of Portion C-2A for Area for Sludge Dewatering Building	0		31-Jan-23 A		11-Jun-25			
CE0372	NCE-PMI-0372 - Building Services Control & Monitoring Provisions for SDB & Gas Detection System for Pipe Tranch No.1	0		08-Jun-22 A		11-Jun-25			
CE0372-1	PMI-PMI-0372-1 -Building Services Control & Monitoring Provisions for SDB & Gas Detection System for Pipe Tranch No.1	0		16-Jun-23 A		11-Jun-25			
CE0374	NCE-PMI-0374 - Revised Power Layout for SDDC & Control Provisions for Sump Pumps at Pipe Trench No.1 & No.2	0		20-Jun-22 A		11-Jun-25			
CE0374-1	PMI-PMI-0374-1 - Revised Power Layout for SDDC & Control Provisions for Sump Pumps at Pipe Trench No.1 & No.2	0		19-Jun-23 A		11-Jun-25			
CE0375	NCE-PMI-0375 - Gas Detection System for Pipe Trench No.3 in Zone C	0		06-Jun-22 A		11-Jun-25			
CE0376	NCE-PMI-0376 - BS Provisions for SDDC (G/F & Roof) & Pipe Trench No.2	0		10-Jun-22 A		11-Jun-25			
CE0376-1	PMI-PMI-0376-1 - BS Provisions for SDDC (G/F & Roof) & Pipe Trench No.2	0		16-Jun-23 A		11-Jun-25			
CE0380	CNE-0380 - No Access and Use of Portion C-2D for Area for THP, H2S removal, DOU, WGB system, BHT, THP CWTPS, Fecl3 etc.	0		24-Feb-23 A		11-Jun-25			
CE0381	NCE-PMI-0381 - Employment of Temporary Staff under Job Creation Scheme 3.0 (JCS 3.0) under Anti-Epidemic Fund (AEF)	0		08-Aug-22 A		11-Jun-25			
CE0381-1	PMI-PMI-0381-1 - Employment of Temporary Staff under Job Creation Scheme 3.0 (JCS 3.0) under Anti-Epidemic Fund (AEF)	0		16-Jun-23 A		11-Jun-25			
CE0384	NCE-PMI-0384 - Enhanced Protective Measures against Spread of Omicron COVID Variant	0		08-Jun-22 A		11-Jun-25			
CE0384-1	NCE-PMI-0384-1 - Enhanced Protective Measures against Spread of Omicron COVID Variant	0		11-Jan-23 A		11-Jun-25			
CE0386	CNE-0386 - Inclement Weather - March 2022 (Time Implication)	0		24-Jun-22 A		11-Jun-25			
CE0387	CNE-0387 - Inclement Weather - April 2022 (Time Implication)	0		24-Jun-22 A		11-Jun-25			
CE0389	NCE-PMI-0389 - Enhancement of Ventilation for CHP Acoustic Enclosures at Combined Heat and Power Building	0		27-Oct-22 A		11-Jun-25			
CE0390	NCE-PMI-0390 - Electricity Supply for DSD Maintenance Works at Workshop No.2	0		26-Oct-22 A		11-Jun-25			
CE0391	CNE-0391 - Inclement Weather - May 2022 (Time Implication)	0		30-Jun-22 A		11-Jun-25			
CE0393	NCE-PMI-0393 - Automatic Changeover System for UV System No.1 in LV Switchboard at Transformer and Switchroom	0		22-Oct-22 A		11-Jun-25			
CE0395	NCE-PMI-0395 - Omission of the Set-up Work for Temporary Water and Electricity Supply for Works Area WA1-B	0		20-Jul-22 A		11-Jun-25			
CE0397	CNE-0397 - Inclement Weather - Jun 2022 (Time Implication)	0		30-Jun-22 A		11-Jun-25			
CE0398	CNE-0398 - Red Rainstorm Warning -June 2022 (Time and Cost Implication)	0		08-Sep-22 A		11-Jun-25			
CE0399	NCE-PMI-0399 - Revised MVAC Layout for Sludge Dewatering Building	0		22-Sep-22 A		11-Jun-25			
CE0400	NCE-PMI-0400 - Provision of High Tide Detection System for System No.1 and Effluent Pumping Station No. 1	0		23-Aug-22 A		11-Jun-25			
CE0402	NCE-PMI-0402 - Provision of Flow Control System for Effluent to Shek Sheung River	0		24-Aug-22 A		11-Jun-25			
CE0403	NCE-PMI-0403 - Revised MVAC Provisions for SDB, TX&Switchrrom, UV no.1 & EPS and FHBP Rm	0		03-Nov-22 A		11-Jun-25			
CE0405	CNE-0405 - Inclement Weather -July 2022 (Time Implication)	0		08-Sep-22 A		11-Jun-25			
CE0406	CNE-0406 - Tropical Cyclone Warning Signal No. 8 - July 2022 (Time and Cost Implication)	0		08-Sep-22 A		11-Jun-25			
CE0409	CNE-0409 - Inclement Weather -August 2022 (Time Implication)	0		22-Sep-22 A		11-Jun-25			
CE0410	CNE-0410 - Tropical Cyclone Warning Signal No. 8 - August 2022 (Time and Cost Implication)	0		22-Sep-22 A		11-Jun-25			
CE0411	NCE-PMI-0411 - Revised Lighting Design for CHP Building	0		07-Nov-22 A		11-Jun-25			

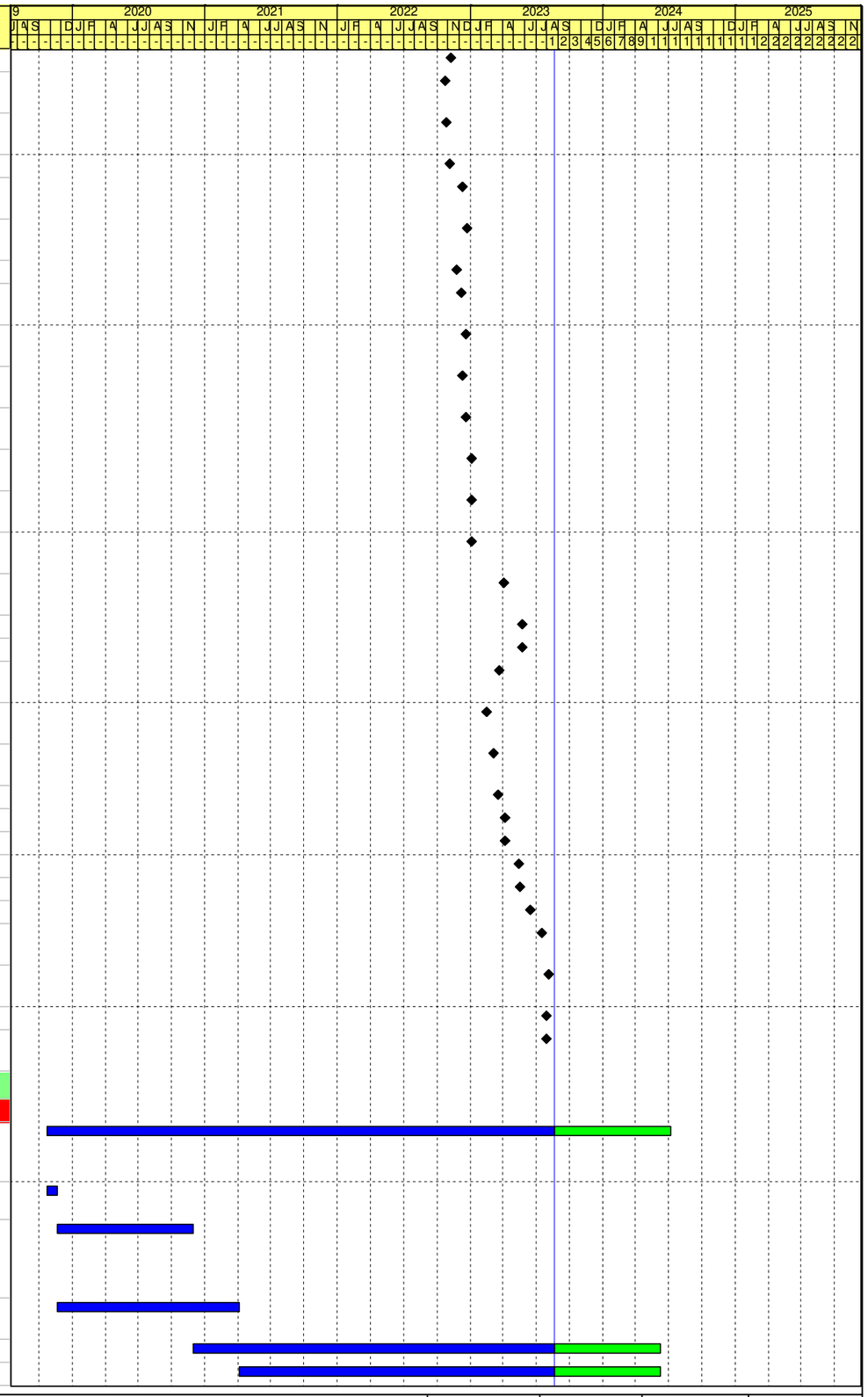


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CE0412	NCE-PMI-0412 - Omission of the Works of CMMS & IDMS	0		09-Nov-22 A		11-Jun-25			
CE0413	NCE-PMI-0413 - MV for UV Plant Area (Level +4.9mPD) of UV System No.1 & Effluent Pumping Station No.1	0		25-Oct-22 A		11-Jun-25			
CE0414	NCE-PMI-0414 - Sample Collection and Analysis for Existing Sewage Treatment Facilities	0		27-Oct-22 A		11-Jun-25			
CE0415	NCE-PMI-0415 - Modification Works for Instrument of UV Channels	0		07-Nov-22 A		11-Jun-25			
CE0420	NCE-PMI-0420 - Pipework Modifcation for THP Feeding System (from SDB to THP)	0		09-Dec-22 A		11-Jun-25			
CE0421	NCE-PMI-0421 - Provision of BLI System for THP Feeding System at Sludge Dewatering Building	0		22-Dec-22 A		11-Jun-25			
CE0422	NCE-PMI-0422 - MVAC Provisions for Store at Workshop No. 2	0		25-Nov-22 A		11-Jun-25			
CE0423	NCE-PMI-0423 - Provision of Puddle Flanges for Draft Tube Mixer Installation at Sludge Digester No. 2	0		06-Dec-22 A		11-Jun-25			
CE0424	NCE-PMI-0424 - Provision of Addtional Ethernet Module for Dual Ring in SCADA and PMS System	0		20-Dec-22 A		11-Jun-25			
CE0425	NCE-PMI-0425 - Provision of PLC Gateway for the Interface Work with Reclaimed Water Facilities in Zone D	0		09-Dec-22 A		11-Jun-25			
CE0429	NCE-PMI-0429 - Provision of Additional Access Platform for the EOT in CHP Building	0		20-Dec-22 A		11-Jun-25			
CE0430	NCE-PMI-0430 - Provision of Additional Lifting Davits for Thermal Hydrolysis Process (THP) System	0		05-Jan-23 A		11-Jun-25			
CE0433	CNE-0433 - Weather Conditions Affecting the Site in Nov 22 due to Amber Rainstorm warning, or Inclement Weather	0		05-Jan-23 A		11-Jun-25			
CE0434	CNE-0434 - Weather Condition Affecting the Site in Nov due to Typhoon Signal No.8 or above, Red/Black Rainstorm Warning	0		05-Jan-23 A		11-Jun-25			
CE0435	NCE-PMI-0435 - Provision of Hydraulic Operated Sludge Skip of Sludge Dewatering Building	0		03-Apr-23 A		11-Jun-25			
CE0438	NICE-PMI-0438 - Revised Valve Type for Biogas Holding Tanks	0		25-May-23 A		11-Jun-25			
CE0438-1	PMI-PMI-04238 - Revised Valve Type for Biogas Holding Tanks	0		25-May-23 A		11-Jun-25			
CE0439	NCE-PMI-0439 - Building Services Provision for Unmanned Services Duct	0		21-Mar-23 A		11-Jun-25			
CE0441	CNE-0441 - Weather Conditions Affecting the Site in Dec 22 due to Amber Rainstorm warning, or Inclement Weather	0		16-Feb-23 A		11-Jun-25			
CE0444	NCE-PMI-0444 - Building Services Provision for Additional Shower Cubicles at Workshop No. 2	0		06-Mar-23 A		11-Jun-25			
CE0445	NCE-PMI-0445 - Additional Power Provisions for Workshop No. 2	0		17-Mar-23 A		11-Jun-25			
CE0450	CNE-0450 - Inclement Weather - February 2023 (Time Implication)	0		06-Apr-23 A		11-Jun-25			
CE0451	CNE-0451 - Inclement Weather - January 2023 (Time Implication)	0		06-Apr-23 A		11-Jun-25			
CE0456	CNE-0456 - Inclement Weather - March 2023 (Time Implication)	0		15-May-23 A		11-Jun-25			
CE0460	CNE-0460 - Inclement Weather - April 2023 (Time Implication)	0		19-May-23 A		11-Jun-25			
CE0461	CNE-0461 - Inclement Weather - May 2023 (Time Implication)	0		16-Jun-23 A		11-Jun-25			
CE0464	CNE-0464 - Updated Version of Guidance Notes on Prevention of Heat Stroke at Work	0		17-Jul-23 A		11-Jun-25			
CE0466	CNE-0466 - Red Rainstorm Warning -May 2023 (Time and Cost Implication)	0		04-Aug-23 A		11-Jun-25			
CE0468	CNE-0468 - Inclement Weather - June 2023 (Time Implication)	0		31-Jul-23 A		11-Jun-25			
CE0469	CNE-0469 - Weather Conditions Affecting the Site in June 23 due to Amber Rainstorm warning, or Inclement Weather	0		31-Jul-23 A		11-Jun-25			
Preliminaries		2059	23-Oct-19 A	11-Jun-25	11-Oct-22	11-Jun-25	0		
Mobilisation		1720	23-Oct-19 A	07-Jul-24	11-Oct-22	11-Jun-25	339		
PL1000	Provison of Equipment / Facilities for the PM's Office	1720	23-Oct-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	AD1200, AD1220, CD1010	CD1040
PL1010	Mobilisation	28	23-Oct-19 A	19-Nov-19 A	11-Oct-22	11-Oct-22		CD1010	PL1240, S2P1010,
PL1020	Design, Procurement & PO & Construction of Contractor's Site Office (Works Area WA1-B)	270	20-Nov-19 A	27-Nov-20 A	03-Jan-23	03-Jan-23		AD1200, PL1010	PL1040, S2D1930, S2D1990, S5CHPP1040
PL1030	Design, Procurement & PO & Construction of Contractor's Storage Area (Works Area WA3)	503	20-Nov-19 A	05-Apr-21 A	25-Jul-24	25-Jul-24		AD1220, PL1010	PL1050
PL1040	Maintain Contractor's Site Office	1288	28-Nov-20 A	07-Jun-24	25-Jul-24	12-May-25	339	PL1020	PL1060
PL1050	Maintain Contractor's Storage Area	1159	06-Apr-21 A	07-Jun-24	25-Jul-24	12-May-25	339	PL1030	PL1060

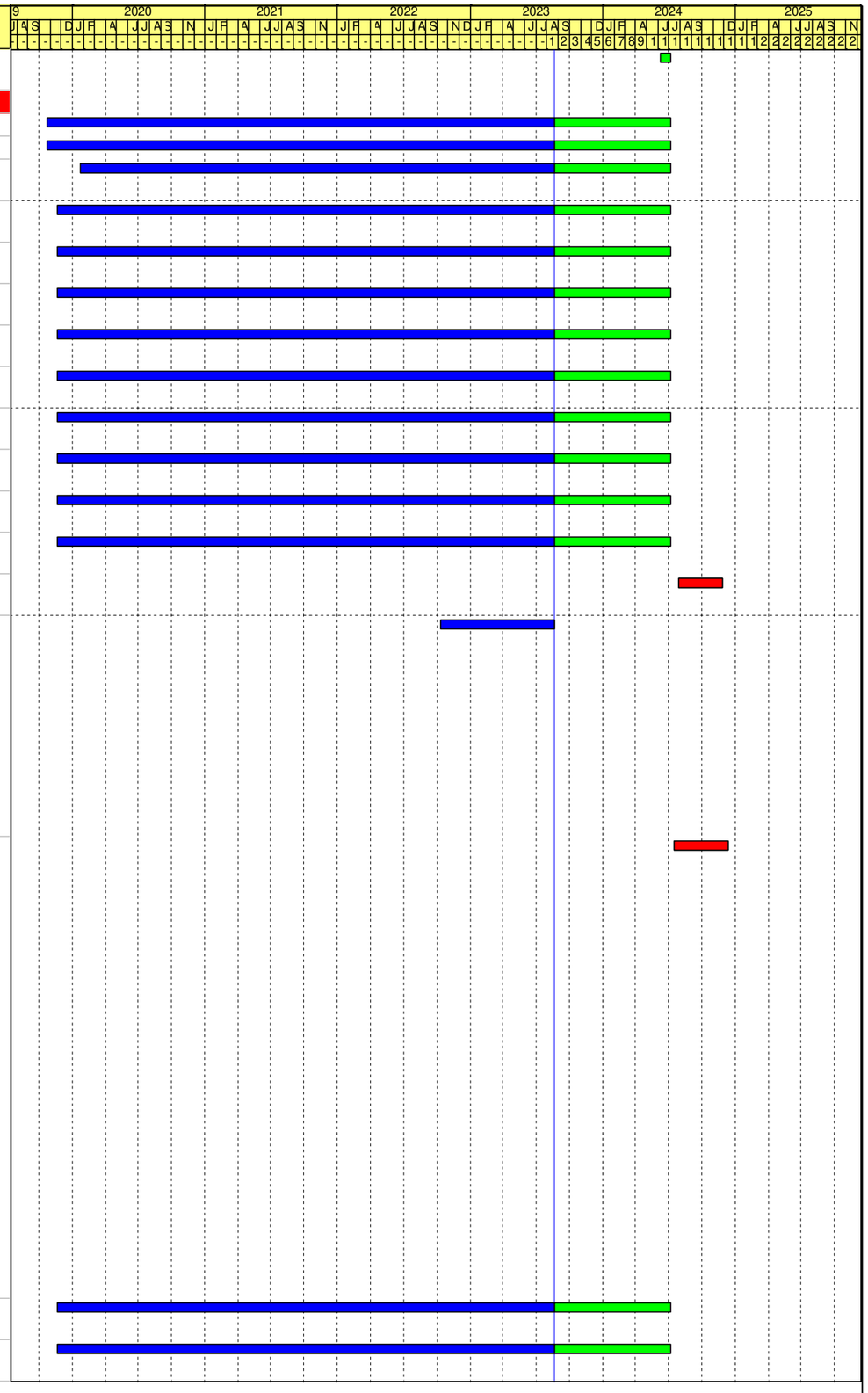


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
PL1060	Removal of Site Office, Storage & Relevant Facilities	30	08-Jun-24	07-Jul-24	13-May-25	11-Jun-25	339	PL1040, PL1050	CD1040
Site Preliminaries		2059	23-Oct-19 A	11-Jun-25	30-Nov-23	11-Jun-25	0		
PL1070	Provision of Insurance, Third Party Insurances & PII	1720	23-Oct-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010	CD1040
PL1080	Provision of 2 Contract Car for the Use of the PM & Supervisor	1720	23-Oct-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010	CD1040
PL1090	Provision of 1 Electric Car for the Use of the PM & Supervisor	1629	22-Jan-20 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1100	Provision of Photographs	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1110	Provision of Environmental Mitigation Measures	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1120	Provision of Air Pollution Abatment	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1130	Provision of Noise Pollution Abatment	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1140	Provision of Wastewater Pollution Abatement	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1150	Provision of Wastement Management	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1160	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1170	Provision of Environmental Management	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1180	Provision of Site Management Plan for Trip Ticket System	1692	20-Nov-19 A	07-Jul-24	25-Jul-24	11-Jun-25	339	CD1010, PL1010	CD1040
PL1190	Provision of As-constructed Drawings for Section 3	121	29-Jul-24	26-Nov-24	28-Mar-24	26-Jul-24	-123	CD1010, S3C1150	CD1040, SC31110
PL1200	Provision of As-constructed Drawings for Section 4	293	13-Oct-22 A	21-Aug-23	11-Jun-25	11-Jun-25	660	CD1010, S4C1160, S4C1150, S4C1120, S4C1110, S4C1100, S4C1090, S4C1080, S4C1070, S4C1040, S4C1030, S4C1020	CD1040, SC41110
PL1210	Provision of As-constructed Drawings for Section 5	151	15-Jul-24	12-Dec-24	07-Feb-24	07-Jul-24	-159	CD1010, S5DIGC1040, S5TXRC1050, S5WS2C1110, S5WS2C1120, S5WS2C1130, S5WS2C1180, S5BIOC1040, S5THPC1030, S5H2SC1020, S5WGBC1020, S5PSWC1000, S5DOUC1040, S5SPSC1000, S5TCWC1020, S5FCDC1030, S5SHPC1020, S5EXAC1045, S5EXAC1030, S5EXAC1080, S5EXAC1100, S5EXAC1110, S5SASC1010, S5ECHC1000, S5UVPC1000	CD1040, SC51110
PL1220	Provision of Systematic Risk Management	1691	20-Nov-19 A	06-Jul-24	26-Jul-24	11-Jun-25	340	CD1010, PL1010	CD1040
PL1230	Provision of Site Liaison Group & Community Liaison Group	1691	20-Nov-19 A	06-Jul-24	26-Jul-24	11-Jun-25	340	CD1010, PL1010	CD1040

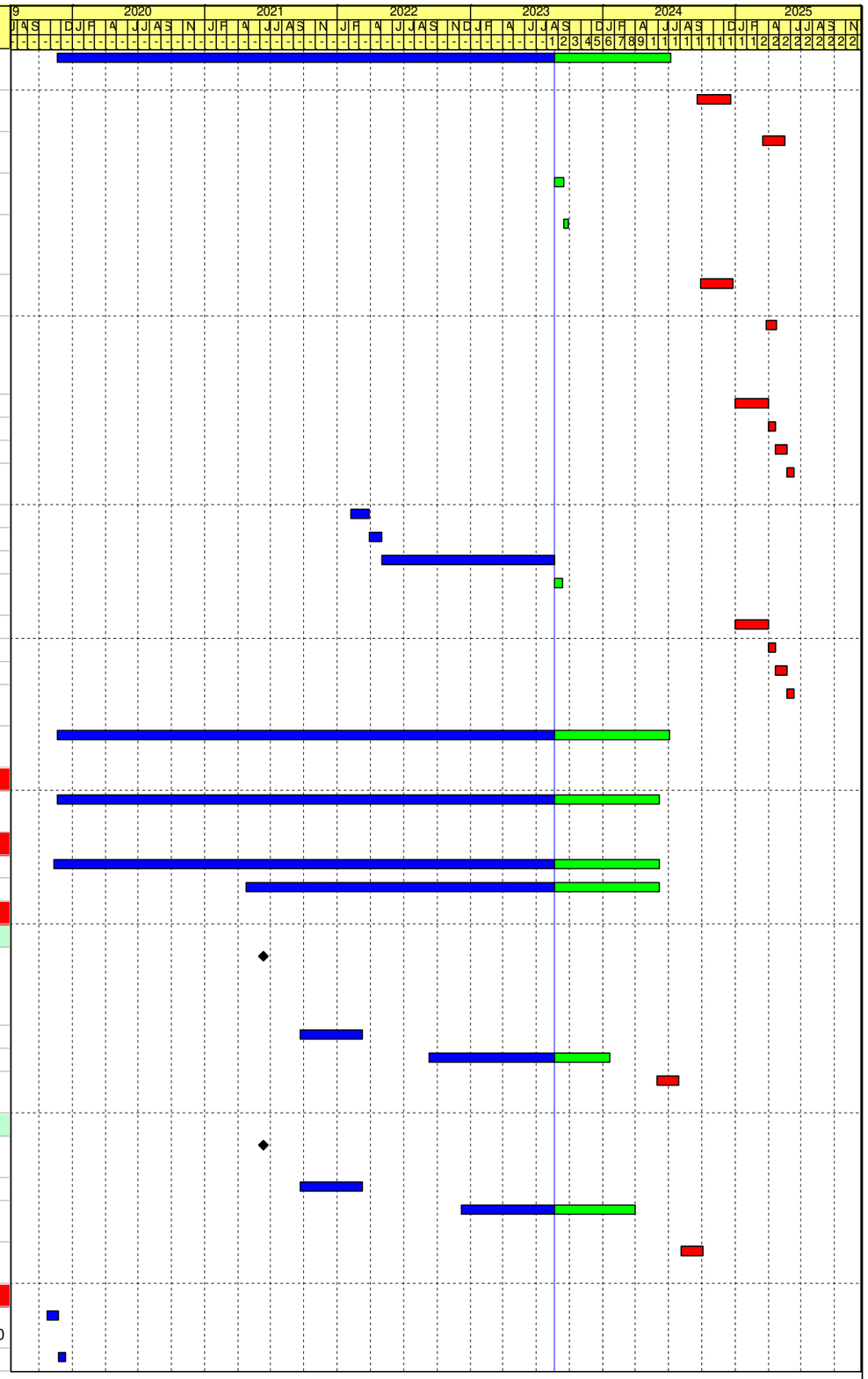


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
PL1240	Provision of 24-Hour Telephone Line	1691	20-Nov-19 A	06-Jul-24	26-Jul-24	11-Jun-25	340	CD1010, PL1010	CD1040
PL1260	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 3	90	19-Sep-24	17-Dec-24	30-Nov-23	27-Feb-24	-294		PL1270
PL1270	Provision of Training for Employer's Staff for Section 3	60	18-Mar-25	16-May-25	28-May-24	26-Jul-24	-294	CD1010, PL1260	CD1040, SC31110
PL1280	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 4	27	21-Aug-23	16-Sep-23	04-May-25	30-May-25	622		PL1290
PL1290	Provision of Training for Employer's Staff for Section 4	12	17-Sep-23	28-Sep-23	31-May-25	11-Jun-25	622	CD1010, S4T1020, PL1280	CD1040, SC41110
PL1300	Submission & Acceptance of Training Programme, Training Manual & Syllabus for Section 5	90	27-Sep-24	25-Dec-24	10-Dec-23	09-Mar-24	-292		PL1310
PL1310	Provision of Training for Employer's Staff for Section 5	30	26-Mar-25	24-Apr-25	07-Jun-24	07-Jul-24	-292	CD1010, S5T1180, S5DIGC1040, PL1300	CD1040, SC51110
PL1320	Prepare & Submit O&M Manual for Section 3	90	01-Jan-25	31-Mar-25	13-Mar-24	10-Jun-24	-294	CD1010	CD1040, PL13
PL1330	PM Reivew & Comment O&M Manual for Section 3	21	01-Apr-25	21-Apr-25	11-Jun-24	01-Jul-24	-294	PL1320	PL1340
PL1340	Revise & Re-submit O&M Manual for Section 3	30	22-Apr-25	21-May-25	02-Jul-24	31-Jul-24	-294	PL1330	PL1350
PL1350	PM Reivew & Approval of O&M Manual for Section 3	21	22-May-25	11-Jun-25	01-Aug-24	21-Aug-24	-294	PL1340	CD1040, SC31110
PL1360	Prepare & Submit O&M Manual for Section 4	50	07-Feb-22 A	28-Mar-22 A	21-May-25	21-May-25		CD1010	CD1040, PL13
PL1370	PM Reivew & Comment O&M Manual for Section 4	36	29-Mar-22 A	03-May-22 A	21-May-25	21-May-25		PL1360	PL1380
PL1380	Revise & Re-submit O&M Manual for Section 4	475	04-May-22 A	21-Aug-23	21-May-25	21-May-25	639	PL1370	PL1390
PL1390	PM Reivew & Approval of O&M Manual for Section 4	21	22-Aug-23	11-Sep-23	22-May-25	11-Jun-25	639	PL1380	CD1040, SC41110
PL1400	Prepare & Submit O&M Manual for Section 5	90	01-Jan-25	31-Mar-25	22-Feb-24	22-May-24	-314	CD1010	CD1040, PL14
PL1410	PM Reivew & Comment O&M Manual for Section 5	21	01-Apr-25	21-Apr-25	22-May-24	12-Jun-24	-314	PL1400	PL1420
PL1420	Revise & Re-submit O&M Manual for Section 5	30	22-Apr-25	21-May-25	12-Jun-24	12-Jul-24	-314	PL1410	PL1430
PL1430	PM Reivew & Approval of O&M Manual for Section 5	21	22-May-25	11-Jun-25	12-Jul-24	02-Aug-24	-314	PL1420	CD1040, SC51110
PL1440	Provision of ICE for Certification of the Design, Cal, Dwgs, Plans and all relevant Doc and Process Commissioning	1689	20-Nov-19 A	04-Jul-24	28-Jul-24	11-Jun-25	342	CD1010, PL1010	CD1040
Site Upkeeping		1659	20-Nov-19 A	04-Jun-24	27-Aug-24	11-Jun-25	372		
PL1450	General Site Upkeeping of the Site	1659	20-Nov-19 A	04-Jun-24	27-Aug-24	11-Jun-25	372	CD1010, PL1010	CD1040
Safety and Environmental Management		1675	10-Nov-19 A	04-Jun-24	27-Aug-24	11-Jun-25	372		
PL1460	Construction Health and Safety Plan	1669	10-Nov-19 A	04-Jun-24	27-Aug-24	11-Jun-25	372	CD1000	CD1040
PL1470	Site Traffic Safety Management Plan	1137	25-Apr-21 A	04-Jun-24	27-Aug-24	11-Jun-25	372	AD1010	CD1040
Compliance with BEAM Requirements		1180	11-Jun-21 A	03-Oct-24	24-Oct-23	02-Aug-24	-63		
Sludge Dewatering Building		1114	11-Jun-21 A	29-Jul-24	01-Jan-24	02-Aug-24	4		
PL1490	Material Submission & Design Calculation Approved	0		11-Jun-21 A		01-Jan-24		S2D1290, S2D1330, S2D1450, S2D1490	PL1500, SC21120
PL1500	Issued approved submission & Calculation to Cinotech	161	21-Sep-21 A	11-Mar-22 A	01-Jan-24	01-Jan-24		PL1490	PL1510
PL1510	Monthly Review & Submission	500	09-Sep-22 A	21-Jan-24	01-Jan-24	03-Jun-24	134	PL1500	PL1520
PL1520	Submission & Approval of Test Record	60	31-May-24	29-Jul-24	03-Jun-24	02-Aug-24	4	PL1510, S5T1060	SC51120
CHP Building		1180	11-Jun-21 A	03-Oct-24	24-Oct-23	02-Aug-24	-63		
PL1530	Material Submission & Design Calculation Approved	0		11-Jun-21 A		24-Oct-23		S2D1610	PL1540, SC21120
PL1540	Issued approved submission & Calculation to Cinotech	168	21-Sep-21 A	11-Mar-22 A	24-Oct-23	24-Oct-23		PL1530	PL1550
PL1550	Monthly Review & Submission	480	07-Dec-22 A	30-Mar-24	24-Oct-23	03-Jun-24	65	S5CHPC1020, PL1540	PL1560
PL1560	Submission & Approval of Test Record	60	05-Aug-24	03-Oct-24	03-Jun-24	02-Aug-24	-63	PL1550, S5T1100	SC51120
BIM		1623	24-Oct-19 A	02-Apr-24	29-Oct-24	11-Jun-25	435		
PL1570	Prepare & Submit Construction Stage BIM Execution Plan	30	24-Oct-19 A	22-Nov-19 A	29-Oct-24	29-Oct-24		CD1010	PL1580, PL1630, PL1620
PL1580	PM Reivew & Comment Construction Stage BIM Execution Plan	21	23-Nov-19 A	13-Dec-19 A	29-Oct-24	29-Oct-24		PL1570	PL1590

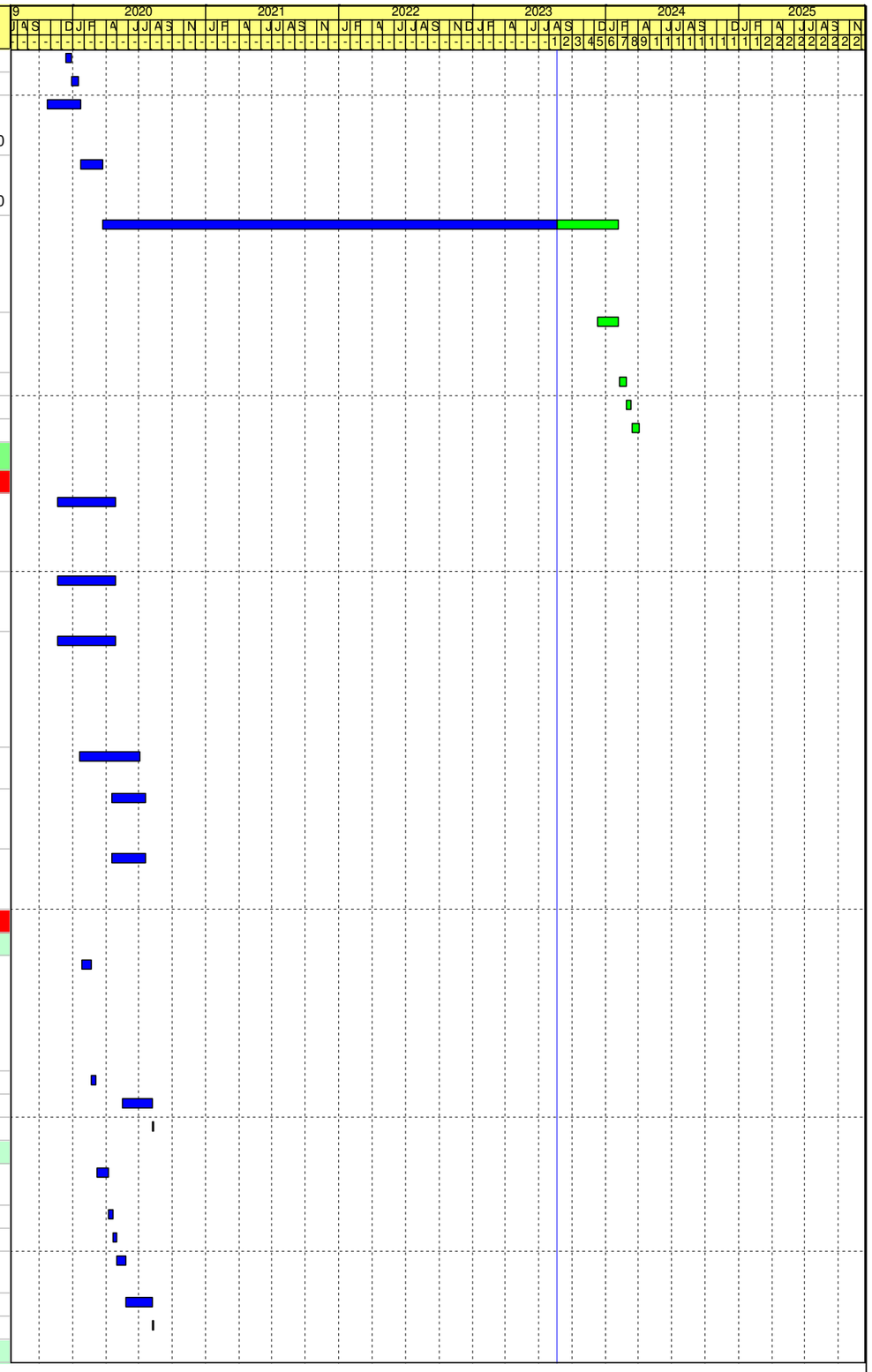


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
PL1590	Revise & Re-submit Construction Stage BIM Execution Plan	14	14-Dec-19 A	27-Dec-19 A	29-Oct-24	29-Oct-24		PL1580	PL1600
PL1600	PM Reivew & Approval of Construction Stage BIM Execution Plan	21	28-Dec-19 A	17-Jan-20 A	29-Oct-24	29-Oct-24		PL1590	PL1630, PL162
PL1610	Contractor Review & Study Design Stage BIM	92	24-Oct-19 A	23-Jan-20 A	29-Oct-24	29-Oct-24		CD1010	CD1040, PL1640, PL1630, PL1620
PL1620	Contractor Develop 1st Construction Stage BIM	60	24-Jan-20 A	23-Mar-20 A	29-Oct-24	29-Oct-24		PL1600, PL1570, PL1610	CD1040, PL1640, PL1630, PL1630
PL1630	Review & Update BIM Execution Plan & BIM Model	1415	24-Mar-20 A	06-Feb-24	29-Oct-24	16-Apr-25	435	PL1570, PL1620, PL1600, PL1610, PL1620	CD1040, PL1640
PL1640	Prepare & Submit the Fully Coordinated BIM	60	09-Dec-23	06-Feb-24	16-Feb-25	16-Apr-25	435	PL1620, PL1630, PL1610	PL1650
PL1650	PM Reivew & Comment Fully Coordinated BIM	21	07-Feb-24	27-Feb-24	17-Apr-25	07-May-25	435	PL1640	PL1660
PL1660	Revise & Re-submit Fully Coordinated BIM	14	28-Feb-24	12-Mar-24	08-May-25	21-May-25	435	PL1650	PL1670
PL1670	PM Reivew & Approval of Fully Coordinated BIM	21	13-Mar-24	02-Apr-24	22-May-25	11-Jun-25	435	PL1660	CD1040
Section 1 - Design for UV System No. 1 & Effluent Pumping Station		284	21-Nov-19 A	08-Aug-20 A	22-Oct-22	11-Jun-25			
Major Plant & Materials Procurement		240	21-Nov-19 A	17-Jul-20 A	22-Oct-22	08-May-23			
S1P1000	Procurement & PO for UV Disinfection System (S10)	150	21-Nov-19 A	28-Apr-20 A	22-Oct-22	22-Oct-22		CD1000, CD1010, PL1010	SC11110, S4P1040, S1D1000, S1P1030
S1P1010	Procurement & PO for Lift-up Pumps (S11)	150	21-Nov-19 A	28-Apr-20 A	22-Oct-22	22-Oct-22		CD1010, PL1010	SC11110, S4P1070, S1D1000
S1P1020	Procurement & PO for Transfer Pumps (S13)	150	21-Nov-19 A	28-Apr-20 A	22-Oct-22	22-Oct-22		CD1010, PL1010	SC11110, S4P1080, S1P1040, S1P1050, S1D1000, S4P1090
S1P1030	Procurement & PO for EOT Cranes (2T & 5T) (S19)	150	19-Jan-20 A	03-Jul-20 A	08-May-23	08-May-23		S1P1000	SC11110, S4P1100
S1P1040	Procurement & PO for Stoplogs (S21)	90	18-Apr-20 A	17-Jul-20 A	08-May-23	08-May-23		S1P1020, PL1010	SC11110, S4P1110, S2P1160
S1P1050	Procurement & PO for Penstocks (S21)	90	18-Apr-20 A	17-Jul-20 A	08-May-23	08-May-23		S1P1020, PL1010	SC11110, S4P1120, S2P1170
Design & Submission		217	27-Jan-20 A	08-Aug-20 A	22-Oct-22	11-Jun-25			
General Arrangement Drawings		217	27-Jan-20 A	08-Aug-20 A	22-Oct-22	11-Jun-25			
S1D1000	Prepare & Submit General Arrangement Drawings	90	27-Jan-20 A	19-Feb-20 A	22-Oct-22	22-Oct-22		S1P1000, S1P1010, S1P1020, PL1010	S1D1010, S1D1040, S1D1100, S1D1180, S1D1260, S4P1010
S1D1010	Review & Comment on General Arrangement Drawings by PM	21	20-Feb-20 A	04-Mar-20 A	11-Jun-25	11-Jun-25		S1D1000	S1D1020
S1D1020	Revise & Re-submit General Arrangement Drawings	14	16-May-20 A	05-Aug-20 A	11-Jun-25	11-Jun-25		S1D1010	S1D1030
S1D1030	Review & Accept of General Arrangement Drawings by PM	5	06-Aug-20 A	08-Aug-20 A	11-Jun-25	11-Jun-25		S1D1020	SC11110
Civil & Dimensional / Tolerance Requirement Drawings		176	07-Mar-20 A	08-Aug-20 A	08-May-23	11-Jun-25			
S1D1040	Prepare & Submit Civil Requirement Drawings	60	07-Mar-20 A	08-Apr-20 A	08-May-23	08-May-23		CD1010, S1D1000	S1D1050, KD1000
S1D1050	Review & Comment on Civil Requirement Drawings by PM	21	09-Apr-20 A	20-Apr-20 A	11-Jun-25	11-Jun-25		S1D1040	S1D1060
S1D1060	Revise & Re-submit Civil Requirement Drawings	14	21-Apr-20 A	29-Apr-20 A	11-Jun-25	11-Jun-25		S1D1050	S1D1070
S1D1070	Review & Comment of Civil Requirement Drawings by PM	21	30-Apr-20 A	25-May-20 A	11-Jun-25	11-Jun-25		S1D1060	SC11110, S1D1080
S1D1080	Revise & Re-submit Civil Requirement Drawings	28	26-May-20 A	05-Aug-20 A	11-Jun-25	11-Jun-25		S1D1070	S1D1090
S1D1090	Review & Accept of Civil Requirement Drawings by PM	5	06-Aug-20 A	08-Aug-20 A	11-Jun-25	11-Jun-25		S1D1080	SC11110
Electrical Schematic Drawings		116	25-Feb-20 A	03-Jun-20 A	22-Oct-22	03-Dec-22			

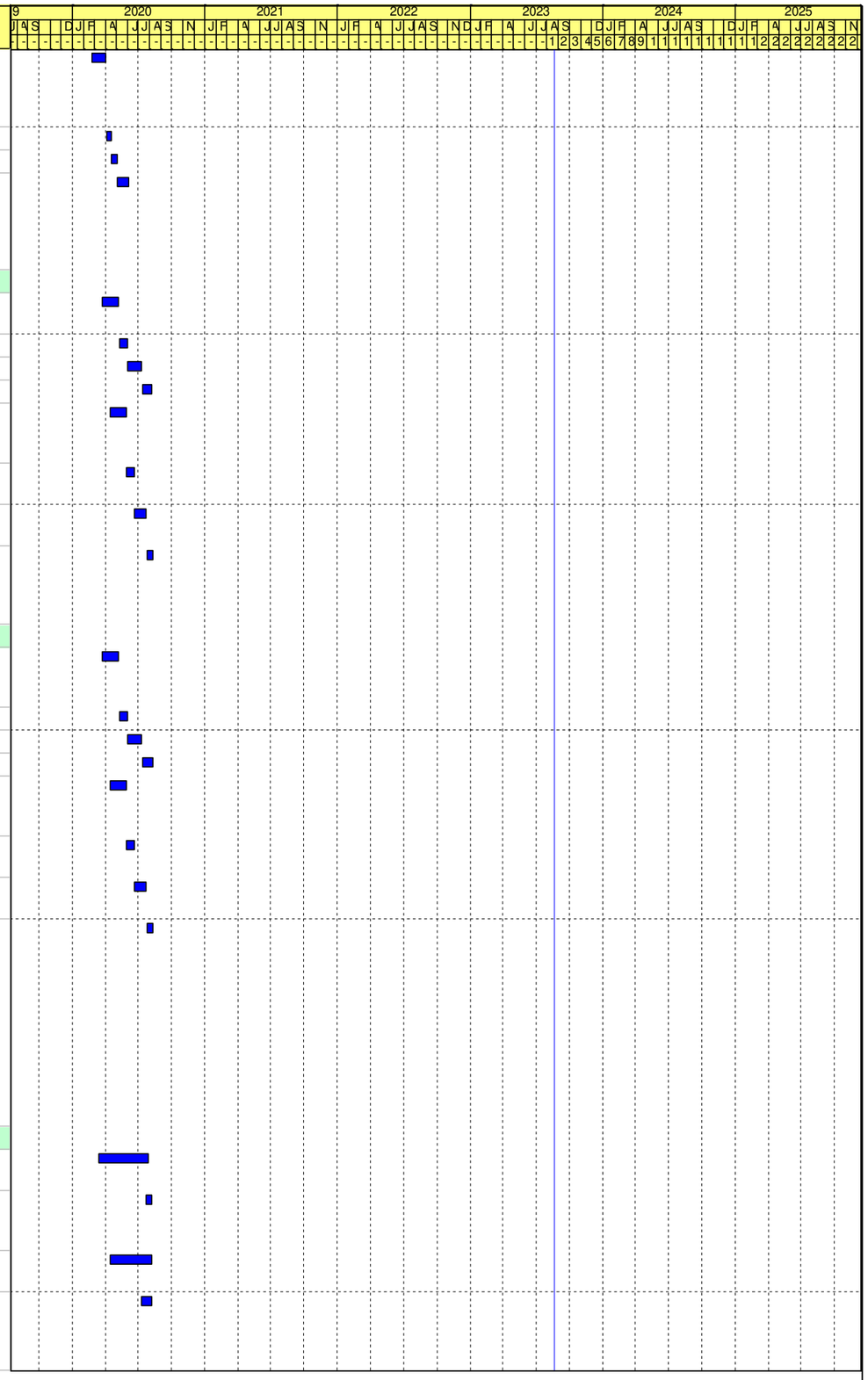


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S1D1100	Prepare & Submit Elec. Schematic Drawings	60	25-Feb-20 A	03-Apr-20 A	22-Oct-22	22-Oct-22		CD1010, S1D1000	S1D1110, KD1000, S1D1140, S1D1220
S1D1110	Review & Comment on Elec. Schematic Drawings by PM	21	04-Apr-20 A	16-Apr-20 A	03-Dec-22	03-Dec-22		S1D1100	S1D1120
S1D1120	Revise & Re-submit Elec. Schematic Drawings	14	17-Apr-20 A	04-May-20 A	03-Dec-22	03-Dec-22		S1D1110	S1D1130
S1D1130	Review & Accept of Elec. Schematic Drawings by PM	21	05-May-20 A	03-Jun-20 A	03-Dec-22	03-Dec-22		S1D1120	S5TXRP1000, S4C1000, S4C1010, S4P1020, SC11110
UV System No. 1		146	24-Mar-20 A	08-Aug-20 A	22-Oct-22	11-Jun-25			
S1D1140	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20 A	08-May-20 A	22-Oct-22	22-Oct-22		CD1010, S1D1100	S1D1150, S1D1180
S1D1150	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	09-May-20 A	01-Jun-20 A	11-Jun-25	11-Jun-25		S1D1140	S1D1160
S1D1160	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	02-Jun-20 A	10-Jul-20 A	11-Jun-25	11-Jun-25		S1D1150	S1D1170
S1D1170	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	11-Jul-20 A	06-Aug-20 A	11-Jun-25	11-Jun-25		S1D1160	SC11110
S1D1180	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20 A	29-May-20 A	22-Oct-22	22-Oct-22		CD1010, S1D1140, S1D1000	S1D1190, S4C1020
S1D1190	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	30-May-20 A	19-Jun-20 A	22-Oct-22	22-Oct-22		S1D1180	S1D1200
S1D1200	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	20-Jun-20 A	23-Jul-20 A	22-Oct-22	22-Oct-22		S1D1190	S1D1210
S1D1210	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	14	24-Jul-20 A	08-Aug-20 A	22-Oct-22	22-Oct-22		S1D1200	S4P1040, S5TXRP1000, S5TXRP1010, SC11110
Effluent Pumping Station No. 1		139	24-Mar-20 A	08-Aug-20 A	22-Oct-22	11-Jun-25			
S1D1220	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20 A	08-May-20 A	22-Oct-22	22-Oct-22		CD1010, S1D1100	S1D1230, S1D1260, S1D1300
S1D1230	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	09-May-20 A	01-Jun-20 A	11-Jun-25	11-Jun-25		S1D1220	S1D1240
S1D1240	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	02-Jun-20 A	10-Jul-20 A	11-Jun-25	11-Jun-25		S1D1230	S1D1250
S1D1250	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	11-Jul-20 A	08-Aug-20 A	11-Jun-25	11-Jun-25		S1D1240	SC11110
S1D1260	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20 A	29-May-20 A	22-Oct-22	22-Oct-22		CD1010, S1D1220, S1D1000	S1D1270, S4C1020
S1D1270	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	30-May-20 A	19-Jun-20 A	22-Oct-22	22-Oct-22		S1D1260	S1D1280
S1D1280	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	20-Jun-20 A	23-Jul-20 A	22-Oct-22	22-Oct-22		S1D1270	S1D1290
S1D1290	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	14	24-Jul-20 A	08-Aug-20 A	22-Oct-22	22-Oct-22		S1D1280	S4P1110, S4P1120, S4P1070, S4P1080, S4P1090, S4P1100, S5TXRP1000, S5TXRP1010, S5TXRP1020, S4P1130, SC11110
Building Services		147	15-Mar-20 A	06-Aug-20 A	08-Dec-22	11-Jun-25			
S1D1300	Prepare & Submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	90	15-Mar-20 A	27-Jul-20 A	08-Dec-22	08-Dec-22		S1D1220	S1D1320, S1D1310
S1D1310	Review & Accept of BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	8	21-Jul-20 A	05-Aug-20 A	08-Dec-22	08-Dec-22		S1D1300	SC11110, S5TXRC1030, S4C1110
S1D1320	Prepare & Submit FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	60	14-Apr-20 A	05-Aug-20 A	11-Jun-25	11-Jun-25		S1D1300	S1D1330
S1D1330	Review & Accept of FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	8	09-Jul-20 A	06-Aug-20 A	11-Jun-25	11-Jun-25		S1D1320	SC11110, S4P1030, S4P1140, S4P1150

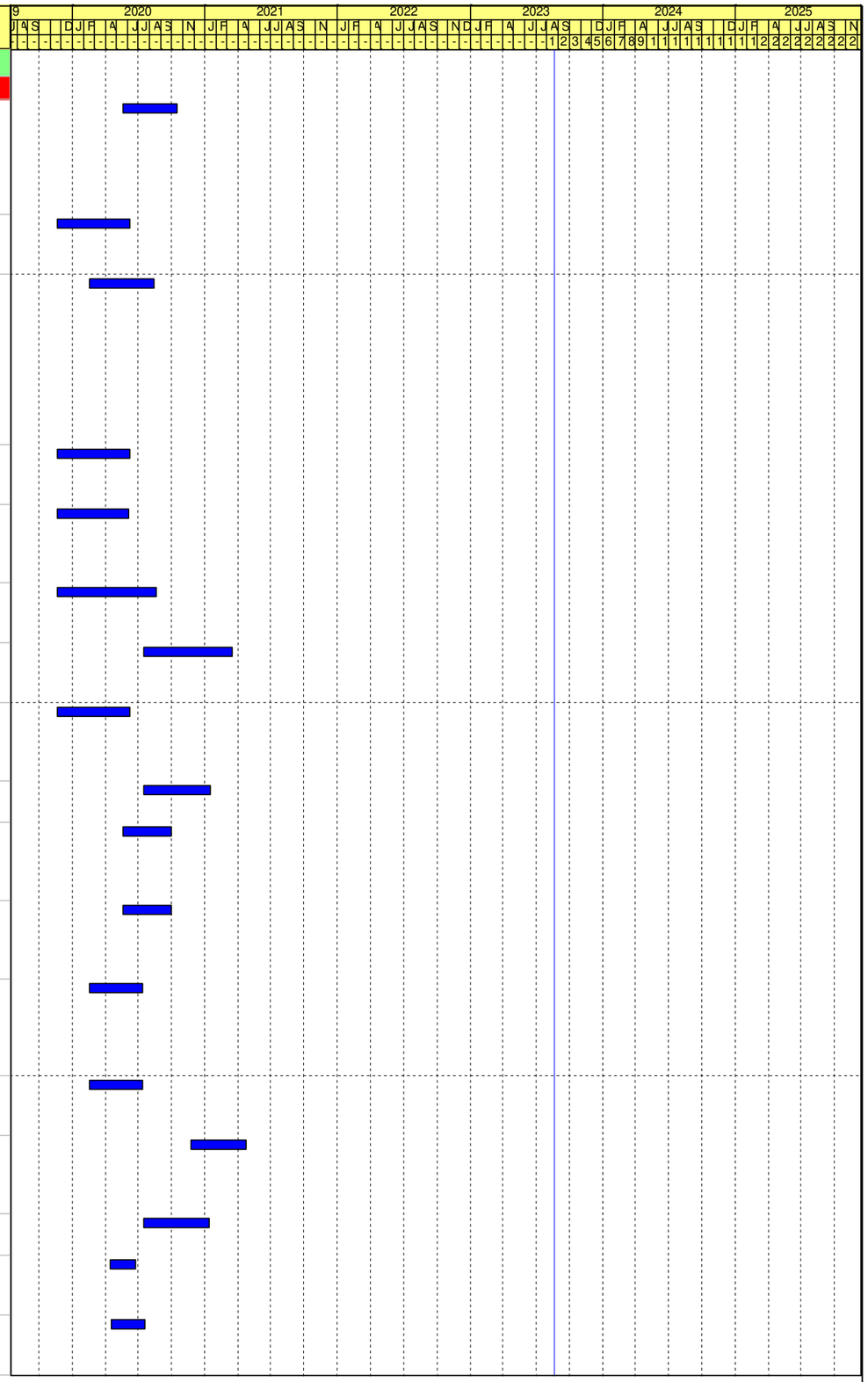


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
Section 2 - Complete All Designs (exclude Sec. 1 & 3)		1421	20-Nov-19 A	21-Aug-23	31-Oct-21	11-Jun-25	660		
Major Plant & Materials Procurement		571	20-Nov-19 A	23-Apr-21 A	11-Oct-22	11-Jun-25			
S2P1000	Procurement & PO for Sludge Screening System (S2)	150	18-May-20 A	16-Oct-20 A	13-Oct-22	13-Oct-22		S2P1020	SC21110, S2D1260, S5P1000, S2P1060, S2P1150, S5P1030
S2P1010	Procurement & PO for Sludge Thickening System (S3)	180	20-Nov-19 A	08-Jun-20 A	17-Nov-22	17-Nov-22		PL1010, CD1010	SC21110, S2D1300, S2P1030
S2P1020	Procurement & PO for Sludge Digestion System (S5)	150	18-Feb-20 A	12-Aug-20 A	11-Oct-22	11-Oct-22		CD1010, S2P1040	SC21110, S5DIGP1000, S2D1420, S5DIGP1010, S2P1180, S2P1210, S5P1040, S2P1000, S5P1020
S2P1030	Procurement & PO for Sludge Dewatering System (S6)	180	20-Nov-19 A	08-Jun-20 A	17-Nov-22	17-Nov-22		PL1010, CD1010, S2P1010	SC21110, S2D1460
S2P1040	Procurement & PO for THP System (S4)	180	20-Nov-19 A	05-Jun-20 A	11-Oct-22	11-Oct-22		CD1010, PL1010	SC21110, S5THPP1000, S2D1340, S2P1020
S2P1050	Procurement & PO for Biogas Holding Tanks(S7)	180	20-Nov-19 A	20-Aug-20 A	17-Nov-22	17-Nov-22		PL1010	SC21110, S5BIOP1010, S2D1500
S2P1060	Procurement & PO for H2S Removal System (S7)	234	17-Jul-20 A	17-Mar-21 A	13-Oct-22	13-Oct-22		S2P1000	SC21110, S5H2SP1000, S2D1500
S2P1070	Procurement & PO for CHP System (S8)	180	20-Nov-19 A	08-Jun-20 A	22-Oct-22	22-Oct-22		PL1010	SC21110, S5CHPP1010, S2D1540, S2P1110
S2P1080	Procurement & PO for Waste Gas Burning System (S9)	150	17-Jul-20 A	15-Jan-21 A	18-Feb-23	18-Feb-23			SC21110, S5WGBP1000
S2P1090	Procurement & PO for Plant Service Water System (S12)	150	18-May-20 A	30-Sep-20 A	17-Nov-22	17-Nov-22			SC21110, S5PSWP1000, S2D1660, S2P1190
S2P1100	Procurement & PO for SAS Pumping System (S14)	150	18-May-20 A	30-Sep-20 A	03-Feb-23	03-Feb-23			SC21110, S5SASP1000, S2D1700, S2P1220
S2P1110	Procurement & PO for Transfomers (S17)	150	18-Feb-20 A	13-Jul-20 A	22-Oct-22	22-Oct-22		S2P1070	SC21110, S5WS2P1000, S2P1120, S2P1140, S5TXRP1000
S2P1120	Procurement & PO for 11 kV Switchboard (S17)	150	18-Feb-20 A	13-Jul-20 A	22-Oct-22	22-Oct-22		S2P1110	SC21110, S5WS2P1060, S2P1130
S2P1130	Procurement & PO for 380V Switchboard (S17)	174	21-Nov-20 A	23-Apr-21 A	22-Oct-22	22-Oct-22		S2P1120, S2D1220	SC21110, S5WS2P1090, S5P1050, S5TXRP1010
S2P1140	Procurement & PO for Control & Monitoring System (S18)	183	17-Jul-20 A	11-Jan-21 A	28-May-23	28-May-23		PL1010, S2P1110	SC21110, S5TXRP1020
S2P1150	Procurement & PO for DO System (S21)	150	15-Apr-20 A	24-Jun-20 A	14-Feb-23	14-Feb-23		S2P1000	SC21110, S5DOUP1000, S2D1930
S2P1160	Procurement & PO for Stoplog (S21)	90	18-Apr-20 A	17-Jul-20 A	18-Jun-23	18-Jun-23		PL1010, S1P1040	SC21110, S5SASP1010, S2P1170

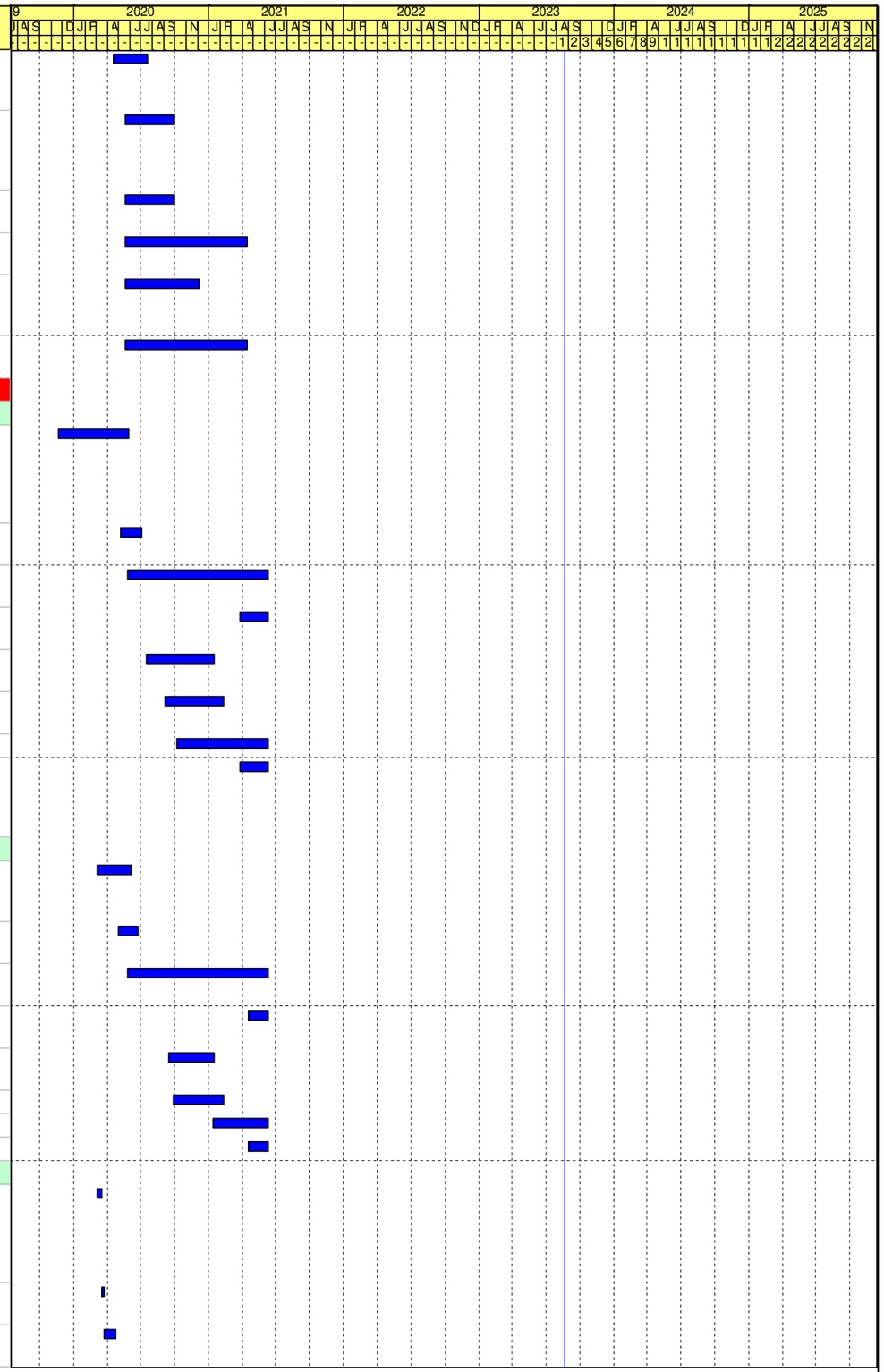


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S2P1170	Procurement & PO for Penstock (S21)	90	18-Apr-20 A	17-Jul-20 A	18-Jun-23	18-Jun-23		PL1010, S2P1160, S1P1050	SC21110, S5SASP1020
S2P1180	Procurement & PO for Sewage Pump (S21)	120	18-May-20 A	30-Sep-20 A	05-Apr-23	05-Apr-23		S2P1020	SC21110, S5SPSP1000, S2D1940, S2P1200
S2P1190	Procurement & PO for Process Water Pump (S21)	120	18-May-20 A	30-Sep-20 A	11-Jun-25	11-Jun-25		S2P1090	SC21110, S2D1950
S2P1200	Procurement & PO for External Sludge Transfer Pump (S21)	348	18-May-20 A	14-Apr-21 A	07-Jul-23	07-Jul-23		S2P1180	SC21110, S2D1960
S2P1210	Procurement & PO for THP Cooling Pump (S21)	150	18-May-20 A	04-Dec-20 A	07-Jul-23	07-Jul-23		S2P1020	SC21110, S5TCWP1000, S2D1970
S2P1220	Procurement & PO for Temporary Primary Sludge Pump (S21)	348	18-May-20 A	14-Apr-21 A	03-Feb-23	03-Feb-23		PL1010, S2P1100	SC21110, S5ECHP1000
Design & Submission		860	20-Nov-19 A	11-Jun-21 A	11-Oct-22	11-Jun-25			
General Arrangement Drawings		715	20-Nov-19 A	11-Jun-21 A	13-Oct-22	11-Jun-25			
S2D1000	Prepare & Submit General Arrangement Drawings (from formation level up to +8mPD)	180	20-Nov-19 A	29-May-20 A	13-Oct-22	13-Oct-22		PL1010	S2D1010, S2D1080, S2D1160, S2D1040, S2D1340
S2D1010	Review & Comment on General Arrangement Drawings by PM (from formation level up to +8mPD)	21	07-May-20 A	02-Jul-20 A	11-Jun-25	11-Jun-25		S2D1000	S2D1020
S2D1020	Revise & Re-submit General Arrangement Drawings (from formation level up to +8mPD)	381	26-May-20 A	10-Jun-21 A	11-Jun-25	11-Jun-25		S2D1010	S2D1030
S2D1030	Review & Accept of General Arrangement Drawings by PM (from formation level up to +8mPD)	77	26-Mar-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1020	SC21110
S2D1040	Prepare & Submit General Arrangement Drawings (remaining)	177	17-Jul-20 A	15-Jan-21 A	13-Oct-22	13-Oct-22		PL1010, S2D1000	S2D1050, S2D1120
S2D1050	Review & Comment on General Arrangement Drawings by PM (remaining)	21	05-Sep-20 A	08-Feb-21 A	13-Oct-22	13-Oct-22		S2D1040	S2D1060
S2D1060	Revise & Re-submit General Arrangement Drawings (remaining)	248	06-Oct-20 A	10-Jun-21 A	13-Oct-22	13-Oct-22		S2D1050	S2D1070
S2D1070	Review & Accept of General Arrangement Drawings by PM (remaining)	77	26-Mar-21 A	11-Jun-21 A	13-Oct-22	13-Oct-22		S2D1060	SC21110, S5S1060, S5P1010, S5S1050
Civil & Dimensional / Tolerance Requirement Drawings		522	04-Mar-20 A	11-Jun-21 A	17-Nov-22	11-Jun-25			
S2D1080	Prepare & Submit Civil Requirement Drawings (from formation level up to +8mPD) -KD2A	90	04-Mar-20 A	04-Jun-20 A	17-Nov-22	17-Nov-22		S2D1000	S2D1090, S2D1660, KD1010
S2D1090	Review & Comment on Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	30-Apr-20 A	23-Jun-20 A	11-Jan-23	11-Jan-23		S2D1080	S2D1100
S2D1100	Revise & Re-submit Civil Requirement Drawings (from formation level up to +8mPD)	381	26-May-20 A	10-Jun-21 A	11-Jan-23	11-Jan-23		S2D1090	S2D1110
S2D1110	Review & Accept of Civil Requirement Drawings by PM (from formation level up to +8mPD)	55	17-Apr-21 A	11-Jun-21 A	11-Jan-23	11-Jan-23		S2D1100	SC21110, AD1120
S2D1120	Prepare & Submit Civil Requirement Drawings (remaining) -KD2B	120	15-Sep-20 A	15-Jan-21 A	11-Jun-25	11-Jun-25		S2D1040	S2D1130, KD1020
S2D1130	Review & Comment on Civil Requirement Drawings by PM (remaining)	21	28-Sep-20 A	08-Feb-21 A	11-Jun-25	11-Jun-25		S2D1120	S2D1140
S2D1140	Revise & Re-submit Civil Requirement Drawings (remaining)	150	12-Jan-21 A	10-Jun-21 A	11-Jun-25	11-Jun-25		S2D1130	S2D1150
S2D1150	Review & Accept of Civil Requirement Drawings by PM (remaining)	55	17-Apr-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1140	SC21110
Electrical Schematic Drawings		754	05-Mar-20 A	11-Jun-21 A	22-Oct-22	11-Jun-25			
S2D1160	Prepare & Elec. Schematic Drawings (from formation level up to +8mPD) -KD2A	90	05-Mar-20 A	16-Mar-20 A	22-Oct-22	22-Oct-22		S2D1000	S2D1170, S2D1260, S2D1660, KD1010, S2D1220
S2D1170	Review & Comment on Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	17-Mar-20 A	24-Mar-20 A	22-Oct-22	22-Oct-22		S2D1160	S2D1180
S2D1180	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	28	25-Mar-20 A	23-Apr-20 A	22-Oct-22	22-Oct-22		S2D1170	S2D1190, S2D1220

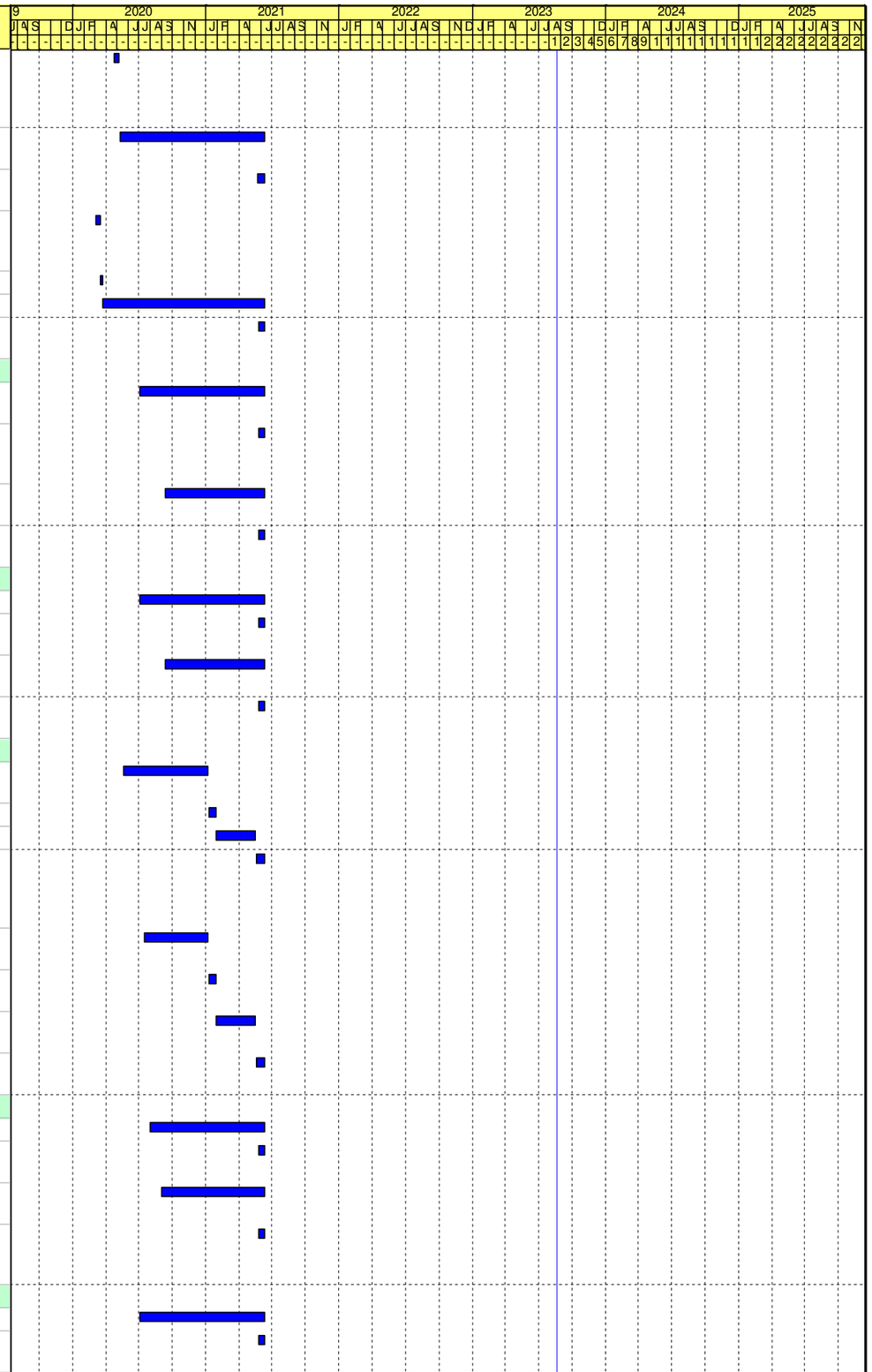


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S2D1190	Review & Comment of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	24-Apr-20 A	08-May-20 A	22-Oct-22	22-Oct-22		S2D1180	S2D1250, S5WS2P1090, S2D1220, S2D1200
S2D1200	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	398	09-May-20 A	10-Jun-21 A	11-Jun-25	11-Jun-25		S2D1190	S2D1210
S2D1210	Review & Accept of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	21-May-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1200	SC21110
S2D1220	Prepare & Submit Elec. Schematic Drawings (remaining) -KD2B	120	05-Mar-20 A	16-Mar-20 A	22-Oct-22	22-Oct-22		S2D1160, S2D1180, S2D1190	S2D1230, KD1020, S2P1130
S2D1230	Review & Comment on Elec. Schematic Drawings by PM (remaining)	21	17-Mar-20 A	24-Mar-20 A	04-Dec-23	04-Dec-23		S2D1220	S2D1240
S2D1240	Revise & Re-submit Elec. Schematic Drawings (remaining)	443	25-Mar-20 A	10-Jun-21 A	04-Dec-23	04-Dec-23		S2D1230	S2D1250
S2D1250	Review & Accept of Elec. Schematic Drawings by PM (remaining)	21	24-May-21 A	11-Jun-21 A	04-Dec-23	04-Dec-23		S2D1240, S2D1190	SC21110, S5WS2P1090
Sludge Screening (SSc)		357	02-Jul-20 A	11-Jun-21 A	17-Nov-22	01-Jan-24			
S2D1260	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	344	02-Jul-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22		S2D1160, S2P1000	S2D1270
S2D1270	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1260	S5WS2P1090, S5P1050, SC21110
S2D1280	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	274	10-Sep-20 A	10-Jun-21 A	01-Jan-24	01-Jan-24			S2D1290
S2D1290	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	01-Jan-24	01-Jan-24		S2D1280	SC21110, PL1490
Sludge Thickening (STh)		357	02-Jul-20 A	11-Jun-21 A	17-Nov-22	01-Jan-24			
S2D1300	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	344	02-Jul-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22		S2P1010	S2D1310
S2D1310	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1300	SC21110, S5P1050
S2D1320	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	274	10-Sep-20 A	10-Jun-21 A	01-Jan-24	01-Jan-24			S2D1330
S2D1330	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	01-Jan-24	01-Jan-24		S2D1320	SC21110, PL1490
Thermal Hydrolysis Process (THP)		416	18-May-20 A	11-Jun-21 A	17-Nov-22	20-Jan-23			
S2D1340	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	241	18-May-20 A	07-Jan-21 A	17-Nov-22	17-Nov-22		S2P1040, S2D1000	S2D1350, S2D1970
S2D1350	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	08-Jan-21 A	27-Jan-21 A	17-Nov-22	17-Nov-22		S2D1340	S2D1360
S2D1360	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	117	28-Jan-21 A	17-May-21 A	17-Nov-22	17-Nov-22		S2D1350	S2D1370
S2D1370	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	24	18-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1360	SC21110, S5THPP1000, S5TCWP1000, S5P1050
S2D1380	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	17-Jul-20 A	07-Jan-21 A	20-Jan-23	20-Jan-23			S2D1390
S2D1390	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	08-Jan-21 A	27-Jan-21 A	20-Jan-23	20-Jan-23		S2D1380	S2D1400
S2D1400	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	117	28-Jan-21 A	17-May-21 A	20-Jan-23	20-Jan-23		S2D1390	S2D1410
S2D1410	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	24	18-May-21 A	11-Jun-21 A	20-Jan-23	20-Jan-23		S2D1400	S5THPP1000, SC21110
Sludge Digestion (SDi)		325	01-Aug-20 A	11-Jun-21 A	11-Oct-22	17-Nov-22			
S2D1420	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	314	01-Aug-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22		S2P1020	S2D1430
S2D1430	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1420	SC21110, S5P1050
S2D1440	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	284	31-Aug-20 A	10-Jun-21 A	11-Oct-22	11-Oct-22			S2D1450
S2D1450	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	11-Oct-22	11-Oct-22		S2D1440	S5DIGP1000, SC21110, PL1490
Sludge Dewatering (SDe)		357	02-Jul-20 A	11-Jun-21 A	17-Nov-22	01-Jan-24			
S2D1460	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	344	02-Jul-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22		S2P1030	S2D1470
S2D1470	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1460	SC21110, S5P1050

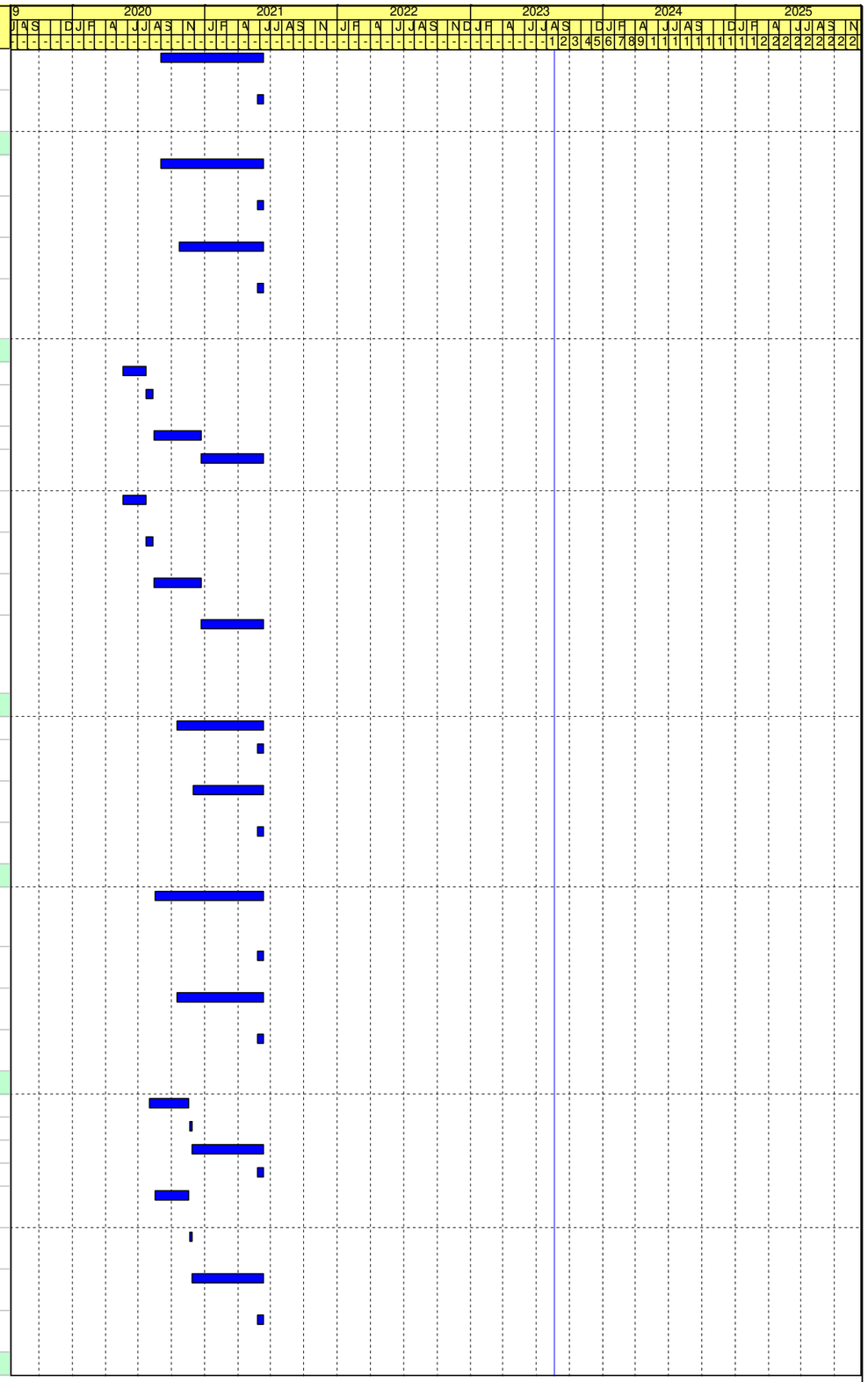


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S2D1480	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	284	31-Aug-20 A	10-Jun-21 A	01-Jan-24	01-Jan-24			S2D1490
S2D1490	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	01-Jan-24	01-Jan-24		S2D1480	SC21110, PL1490
Biogas Storage & Pre-Treatment (BSPT)		295	31-Aug-20 A	11-Jun-21 A	13-Oct-22	17-Nov-22			
S2D1500	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	284	31-Aug-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22		S2P1060, S2P1050	S2D1510
S2D1510	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1500	SC21110, S5P1050
S2D1520	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	232	22-Oct-20 A	10-Jun-21 A	13-Oct-22	13-Oct-22			S2D1530
S2D1530	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	13-Oct-22	13-Oct-22		S2D1520	S5BIOP1010, S5H2SP1000, SC21110
Combined Heat & Power Generation (CHP)		512	18-May-20 A	11-Jun-21 A	17-Nov-22	13-Jan-23			
S2D1540	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	233	18-May-20 A	21-Jul-20 A	17-Nov-22	17-Nov-22		S2P1070	S2D1550
S2D1550	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	22-Jul-20 A	11-Aug-20 A	17-Nov-22	17-Nov-22		S2D1540	S2D1560, S2D1870
S2D1560	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	12-Aug-20 A	21-Dec-20 A	17-Nov-22	17-Nov-22		S2D1550	S2D1570
S2D1570	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	171	22-Dec-20 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1560	SC21110, S5P1050
S2D1580	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	18-May-20 A	21-Jul-20 A	13-Jan-23	13-Jan-23			S2D1590
S2D1590	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	22-Jul-20 A	11-Aug-20 A	13-Jan-23	13-Jan-23		S2D1580	S2D1600
S2D1600	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	12-Aug-20 A	21-Dec-20 A	13-Jan-23	13-Jan-23		S2D1590	S2D1610
S2D1610	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	171	22-Dec-20 A	11-Jun-21 A	13-Jan-23	13-Jan-23		S2D1600	S5CHPP1010, SC21110, S5S1020, PL1530
Waste Gas Burning System (WGB)		264	15-Oct-20 A	11-Jun-21 A	17-Nov-22	18-Feb-23			
S2D1620	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	239	15-Oct-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22			S2D1630
S2D1630	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1620	SC21110, S5P1050
S2D1640	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	194	29-Nov-20 A	10-Jun-21 A	18-Feb-23	18-Feb-23			S2D1650
S2D1650	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	18-Feb-23	18-Feb-23		S2D1640	S5WGBP1000, SC21110
Plant Service Water System (PSW)		325	16-Aug-20 A	11-Jun-21 A	17-Nov-22	26-Nov-22			
S2D1660	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	299	16-Aug-20 A	10-Jun-21 A	17-Nov-22	17-Nov-22		S2D1080, S2D1160, S2P1090	S2D1670
S2D1670	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Nov-22	17-Nov-22		S2D1660	SC21110, S5P1050
S2D1680	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	239	15-Oct-20 A	10-Jun-21 A	26-Nov-22	26-Nov-22			S2D1690
S2D1690	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	26-Nov-22	26-Nov-22		S2D1680	S5PSWP1000, SC21110
Surplus Activated Sludge Pumping Station (SAS)		440	01-Aug-20 A	11-Jun-21 A	18-Jun-23	11-Jun-25			
S2D1700	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	202	01-Aug-20 A	17-Nov-20 A	11-Jun-25	11-Jun-25		S2P1100	S2D1710
S2D1710	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Nov-20 A	24-Nov-20 A	11-Jun-25	11-Jun-25		S2D1700	S2D1720
S2D1720	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	198	25-Nov-20 A	10-Jun-21 A	11-Jun-25	11-Jun-25		S2D1710	S2D1730
S2D1730	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1720	SC21110
S2D1740	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	183	16-Aug-20 A	17-Nov-20 A	18-Jun-23	18-Jun-23			S2D1750
S2D1750	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	18-Nov-20 A	24-Nov-20 A	18-Jun-23	18-Jun-23		S2D1740	S2D1760
S2D1760	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	198	25-Nov-20 A	10-Jun-21 A	18-Jun-23	18-Jun-23		S2D1750	S2D1770
S2D1770	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	18-Jun-23	18-Jun-23		S2D1760	S5SASP1000, SC21110
Control and Monitoring System		211	30-Oct-20 A	11-Jun-21 A	11-Jun-25	11-Jun-25			

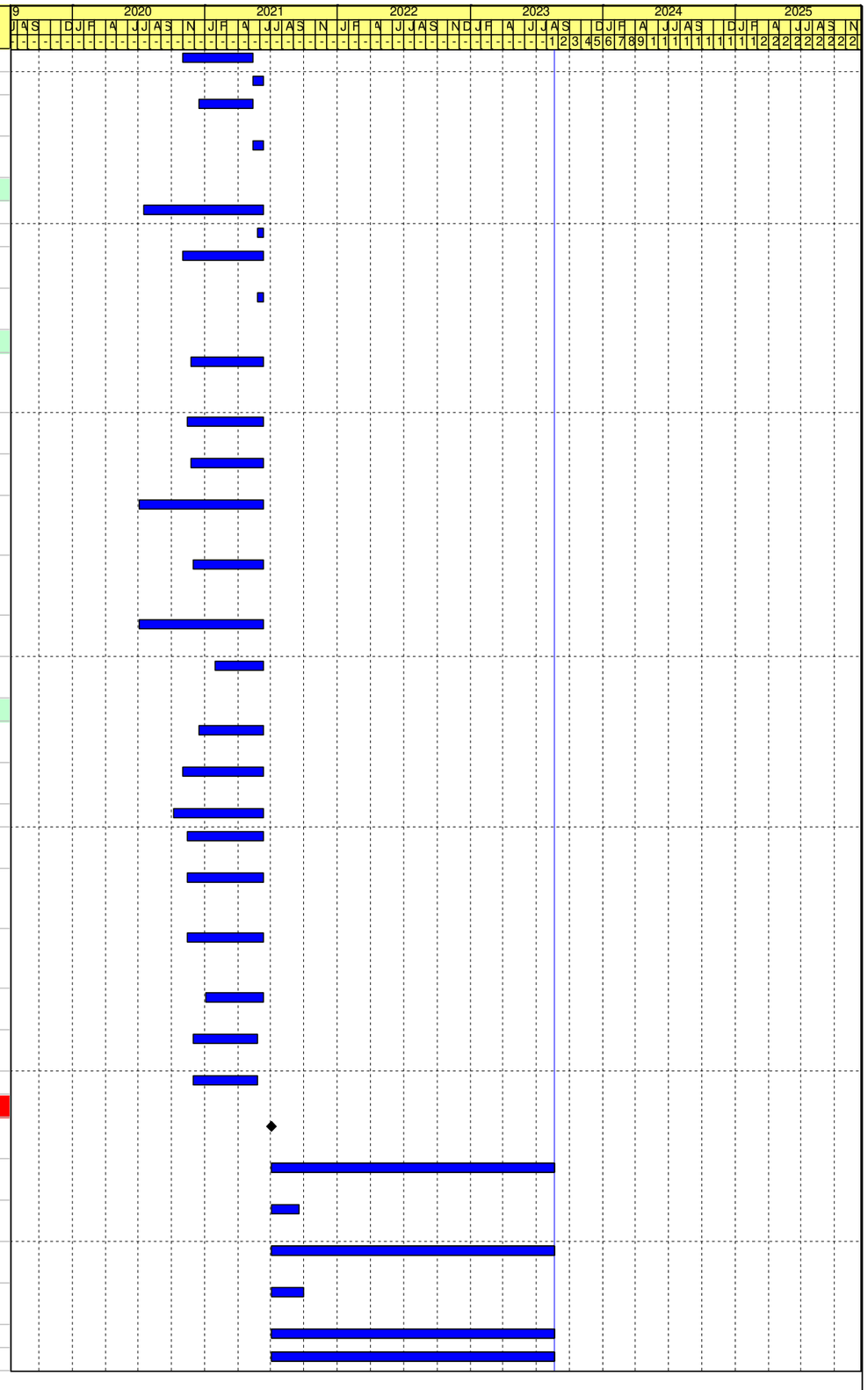


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S2D1780	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	193	30-Oct-20 A	11-May-21 A	11-Jun-25	11-Jun-25			S2D1790
S2D1790	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	30	12-May-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1780	SC21110
S2D1800	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	148	14-Dec-20 A	11-May-21 A	11-Jun-25	11-Jun-25			S2D1810
S2D1810	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	30	12-May-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1800	SC21110
Lifting Appliances		358	17-Jul-20 A	11-Jun-21 A	11-Jun-25	11-Jun-25			
S2D1820	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	329	17-Jul-20 A	10-Jun-21 A	11-Jun-25	11-Jun-25			S2D1830
S2D1830	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1820	SC21110
S2D1840	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	224	30-Oct-20 A	10-Jun-21 A	11-Jun-25	11-Jun-25			S2D1850
S2D1850	Review & Acceptt on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1840	SC21110
Building Services		357	02-Jul-20 A	11-Jun-21 A	03-Nov-22	11-Jun-25			
S2D1860	Submit & Accept BS Works Design & Dwgs for Sludge Dewatering Building	202	21-Nov-20 A	11-Jun-21 A	03-Nov-22	03-Nov-22			SC21110, S5S1010, S5S1120
S2D1870	Submit & Accept BS Works Design & Dwgs for CHP Building	209	14-Nov-20 A	11-Jun-21 A	06-Oct-23	06-Oct-23		S2D1550	SC21110, S5S1120
S2D1880	Submit & Accept BS Works Design & Dwgs for Sludge Digester & Distribution Chamber	202	21-Nov-20 A	11-Jun-21 A	06-Oct-23	06-Oct-23			SC21110, S5S1120
S2D1890	Submit & Accept BS Works Design & Dwgs for Workshop No. 2	344	02-Jul-20 A	11-Jun-21 A	11-Jan-23	11-Jan-23			SC21110, S5S1030, S5S1120
S2D1900	Submit & Accept BS Works Design & Dwgs for Other Facilities	194	29-Nov-20 A	11-Jun-21 A	06-Oct-23	06-Oct-23			S2D1920, SC21110, S5S1120
S2D1910	Submit & Accept BS Works Design & Dwgs for FS Installation	344	02-Jul-20 A	11-Jun-21 A	06-Oct-23	06-Oct-23			SC21110, S5S1120
S2D1920	Submit & Accept BS Works Design & Dwgs for Outdoor Lighting Installation	134	28-Jan-21 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2D1900	SC21110
Miscellaneous		264	05-Oct-20 A	11-Jun-21 A	20-Dec-22	11-Jun-25			
S2D1930	Submit & Accept Design & Dwgs for DO System	179	14-Dec-20 A	11-Jun-21 A	14-Feb-23	14-Feb-23		S2P1150, PL1020	S5DOUP1000, SC21110
S2D1940	Submit & Accept Design & Dwgs for Sewage Pumping Station	224	30-Oct-20 A	11-Jun-21 A	05-Apr-23	05-Apr-23		S2P1180	S5SPSP1000, SC21110
S2D1950	Submit & Accept Design & Dwgs for Process Water Pumping System	249	05-Oct-20 A	11-Jun-21 A	11-Jun-25	11-Jun-25		S2P1190	SC21110
S2D1960	Submit & Accept Design & Dwgs for External Sludge Transfer Pumping System	209	14-Nov-20 A	11-Jun-21 A	07-Jul-23	07-Jul-23		S2P1200	S2D1970, SC21110
S2D1970	Submit & Accept Design & Dwgs for THP Cooling Water Pumping Station	209	14-Nov-20 A	10-Jun-21 A	07-Jul-23	07-Jul-23		S2D1340, S2D1960, S2P1210	S5TCWP1000, SC21110
S2D1980	Submit & Accept Design & Dwgs for Ferric Chloride Dosing System	209	14-Nov-20 A	11-Jun-21 A	20-Dec-22	20-Dec-22			S5FCDP1000, S5FCDP1010, SC21110
S2D1990	Submit & Accept Design & Dwgs for Temporary Primary Sludge Pumping Facility	158	04-Jan-21 A	11-Jun-21 A	03-Feb-23	03-Feb-23		PL1020	S5ECHP1000, SC21110
S2D2000	Submit & Accept Design & Dwgs for Gas Detection System	194	29-Nov-20 A	24-May-21 A	03-Jan-23	03-Jan-23			SC21110, S5CHPP1040
S2D2010	Submit & Accept Design & Dwgs for CCTV System	194	29-Nov-20 A	26-May-21 A	11-Jun-25	11-Jun-25			SC21110
Outstanding Works		812	02-Jul-21 A	21-Aug-23	31-Oct-21	11-Jun-25	660		
S2D2020	Certifiate of Completion - Section 2 of the works (Ref: RCYK:ccm:60427128/92-2021004626w)	0	02-Jul-21 A		11-Jun-25				
S2D2030	Provide ICE Certificate for all design, calculations, drawings, plans & relevant documents	781	02-Jul-21 A	21-Aug-23*	31-May-22	31-May-22	-447		
S2D2040	Submit finalized design calculations, drawings & material submissions for BS systems (Workshop No.2)	76	02-Jul-21 A	15-Sep-21 A	11-Jun-25	11-Jun-25			
S2D2050	Submit finalized design calculations, drawings & material submissions for BS systems (except Workshop No.2)	781	02-Jul-21 A	21-Aug-23*	30-Apr-22	30-Apr-22	-478		
S2D2060	Submit finalized sizing calculations for the actuators and stems for penstocks	91	02-Jul-21 A	30-Sep-21 A	11-Jun-25	11-Jun-25			
S2D2070	Submit finalized cable schedules & sizing calculation (LV System)	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2080	Submit finalized pumps and associated motor and VSD calculations	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		

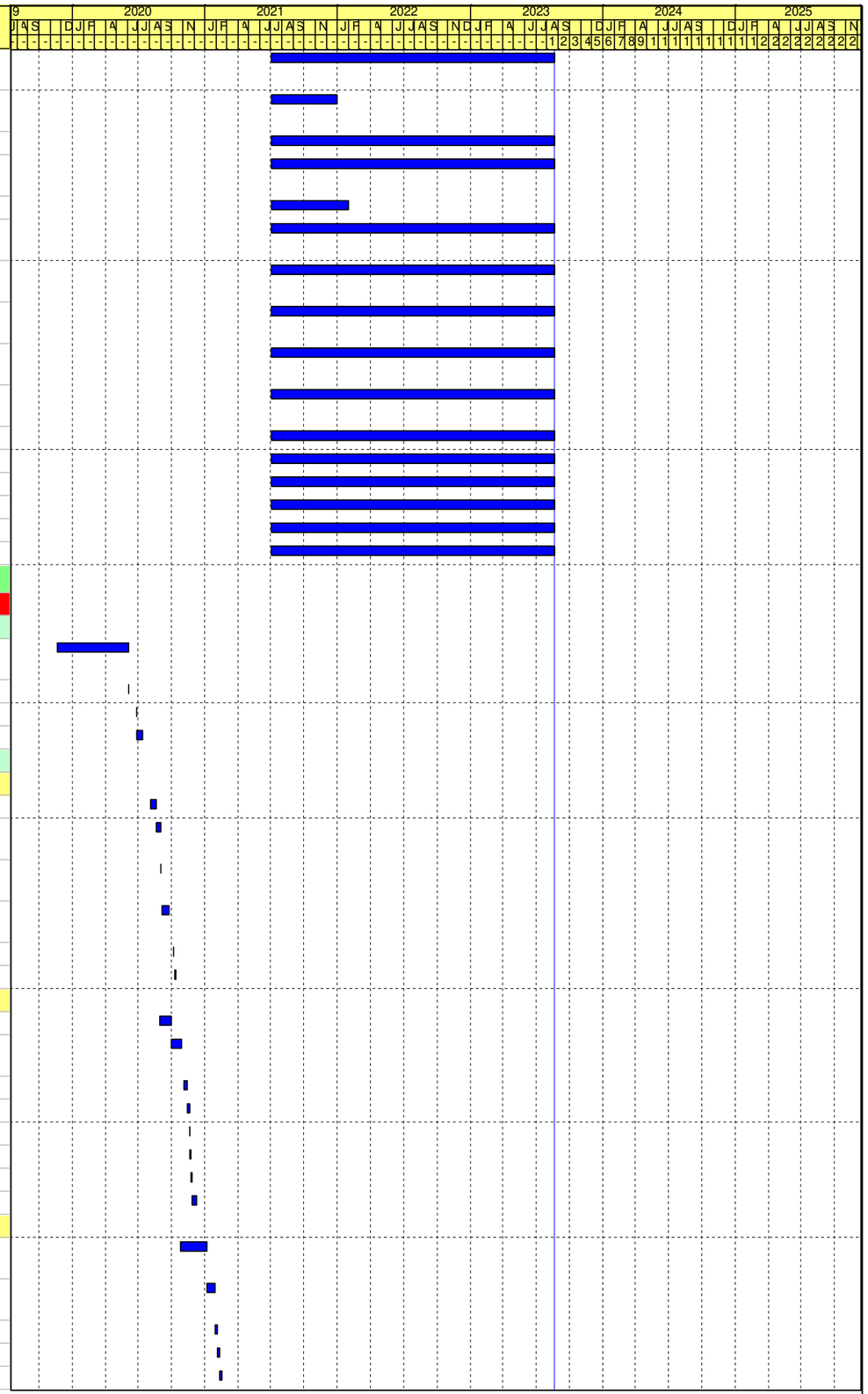


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S2D2090	Submit finalized electrical loads to verify the rating of the switchgears, transformers and protective devices	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2100	Submit finalized material submissions of the cables, cable tray, ladder and accessories	294	02-Jul-21 A	31-Dec-21 A	11-Jun-25	11-Jun-25			
S2D2110	Submit finalized cable route drawings	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2120	Submit finalized layout and control wiring diagrams for switchboard, MCC, control panel, etc	781	02-Jul-21 A	21-Aug-23*	31-Jan-22	31-Jan-22	-567		
S2D2130	Submit finalized design submissions of the CHP system	294	02-Jul-21 A	31-Jan-22 A	11-Jun-25	11-Jun-25			
S2D2140	Submit finalized interlock devices for electrical equipment and system	781	02-Jul-21 A	21-Aug-23*	30-Apr-22	30-Apr-22	-478		
S2D2150	Submit finalized calculations for total harmonic distortion, electrical faults and touch voltage	781	02-Jul-21 A	21-Aug-23*	30-Apr-22	30-Apr-22	-478		
S2D2160	Submit finalized design calculations, drawings & material submissions for ELV systems	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2170	Submit finalized design submissions of SCADA, PMS, CMMS, IDMS, UPS for FCS	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2180	Submit finalized configuration of SCADA / PLC system, CMMS & PMS	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2190	Submit finalized PLC and MCC panel design	781	02-Jul-21 A	21-Aug-23*	28-Feb-22	28-Feb-22	-539		
S2D2200	Submit finalized design & philosophy of the process instrument	781	02-Jul-21 A	21-Aug-23*	31-Dec-21	31-Dec-21	-598		
S2D2210	Submit finalized Process Design Submission	781	02-Jul-21 A	21-Aug-23*	30-Nov-21	30-Nov-21	-629		
S2D2220	Submit finalized acoustic and noise calculations for all equipment	781	02-Jul-21 A	21-Aug-23*	30-Apr-22	30-Apr-22	-478		
S2D2230	Submit finalized design of THP feeding system	781	02-Jul-21 A	21-Aug-23*	31-Oct-21	31-Oct-21	-659		
S2D2240	Submit finalized design of the centrifuge discharge system	781	02-Jul-21 A	21-Aug-23*	30-Nov-21	30-Nov-21	-629		
Section 3 - Complete Design, Construction & T&C for Sidestream Fa		2005	20-Nov-19 A	16-May-25	01-Jan-23	11-Jun-25	26		
Major Subcontractor / Supplier Procurement		633	20-Nov-19 A	06-Sep-21 A	12-May-23	11-Jun-25			
Design		320	20-Nov-19 A	12-Jul-20 A	12-May-23	11-Jun-25			
S3P1000	Procurement & PO for Deammonification Sidestream Treatment Facilities	200	20-Nov-19 A	05-Jun-20 A	12-May-23	12-May-23		CD1010, PL1010	S3D1000, S3D1440
S3P1010	E&M (Process) Designer Award	1	05-Jun-20 A	05-Jun-20 A	11-Jun-25	11-Jun-25			
S3P1020	Civil & BS Designer Award	1	26-Jun-20 A	26-Jun-20 A	11-Jun-25	11-Jun-25			S3P1030
S3P1030	Mobilisation	14	27-Jun-20 A	12-Jul-20 A	11-Jun-25	11-Jun-25		S3P1020	
Civil & Building Contractor		327	05-Aug-20 A	06-Sep-21 A	16-Aug-23	16-Aug-23			
For Site Clearance & Survey		36	05-Aug-20 A	12-Oct-20 A	16-Aug-23	16-Aug-23			
S3P1040	Submit Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	05-Aug-20 A	20-Aug-20 A	16-Aug-23	16-Aug-23			S3P1050
S3P1050	Review & Comment the Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	21-Aug-20 A	01-Sep-20 A	16-Aug-23	16-Aug-23		S3P1040	S3P1060
S3P1060	Re-submit Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	02-Sep-20 A	02-Sep-20 A	16-Aug-23	16-Aug-23		S3P1050	S3P1070
S3P1070	Review & Accept Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	03-Sep-20 A	23-Sep-20 A	16-Aug-23	16-Aug-23		S3P1060	S3P1080
S3P1080	Civil Contractor (Site Clearance & Survey) Award	1	07-Oct-20 A	07-Oct-20 A	16-Aug-23	16-Aug-23		S3P1070	S3P1090
S3P1090	Mobilisation	5	08-Oct-20 A	12-Oct-20 A	16-Aug-23	16-Aug-23		S3P1080	S3C1010
For Ground Investigation		98	29-Aug-20 A	08-Dec-20 A	16-Aug-23	16-Aug-23			
S3P1100	Submit Tender proprosal of Civil Contractor (Ground Investigation)	14	29-Aug-20 A	29-Sep-20 A	16-Aug-23	16-Aug-23			S3P1110
S3P1110	Review & Accept the Tender proprosal of Civil Contractor (Ground Investigation)	21	30-Sep-20 A	27-Oct-20 A	16-Aug-23	16-Aug-23		S3P1100	S3P1120
S3P1120	Tender Invitation of Civil Contractor (Ground Investigation)	7	02-Nov-20 A	13-Nov-20 A	16-Aug-23	16-Aug-23		S3P1110	S3P1130
S3P1130	Submission of Tender Report	7	14-Nov-20 A	18-Nov-20 A	16-Aug-23	16-Aug-23		S3P1120	S3P1140
S3P1140	Review & Accept the Tender Report by PM	21	19-Nov-20 A	19-Nov-20 A	16-Aug-23	16-Aug-23		S3P1130	S3P1150
S3P1150	Contract Preparation	3	20-Nov-20 A	23-Nov-20 A	16-Aug-23	16-Aug-23		S3P1140	S3P1160
S3P1160	Civil Contractor (Ground Investigation) Award	1	24-Nov-20 A	24-Nov-20 A	16-Aug-23	16-Aug-23		S3P1150	S3P1170
S3P1170	Mobilisation	7	25-Nov-20 A	08-Dec-20 A	16-Aug-23	16-Aug-23		S3P1160	S3C1020
For Pre-drilling & Post-drilling		116	26-Oct-20 A	21-Feb-21 A	16-Aug-23	16-Aug-23			
S3P1180	Submit Tender proprosal of Civil Contractor (Pre-drilling & Post-drilling)	74	26-Oct-20 A	06-Jan-21 A	16-Aug-23	16-Aug-23		S3D1300, S3D1240	S3P1190
S3P1190	Review & Accept the Tender proprosal of Civil Contractor (Predrill & Proof drill)	21	07-Jan-21 A	27-Jan-21 A	16-Aug-23	16-Aug-23		S3P1180	S3P1200
S3P1200	Tender Invitation of Civil Contractor (Pre-drilling & Post-drilling)	14	28-Jan-21 A	04-Feb-21 A	16-Aug-23	16-Aug-23		S3P1190	S3P1210
S3P1210	Submission of Tender Report	4	05-Feb-21 A	10-Feb-21 A	16-Aug-23	16-Aug-23		S3P1200	S3P1220
S3P1220	Review & Accept the Tender Report by PM	21	11-Feb-21 A	16-Feb-21 A	16-Aug-23	16-Aug-23		S3P1210	S3P1230

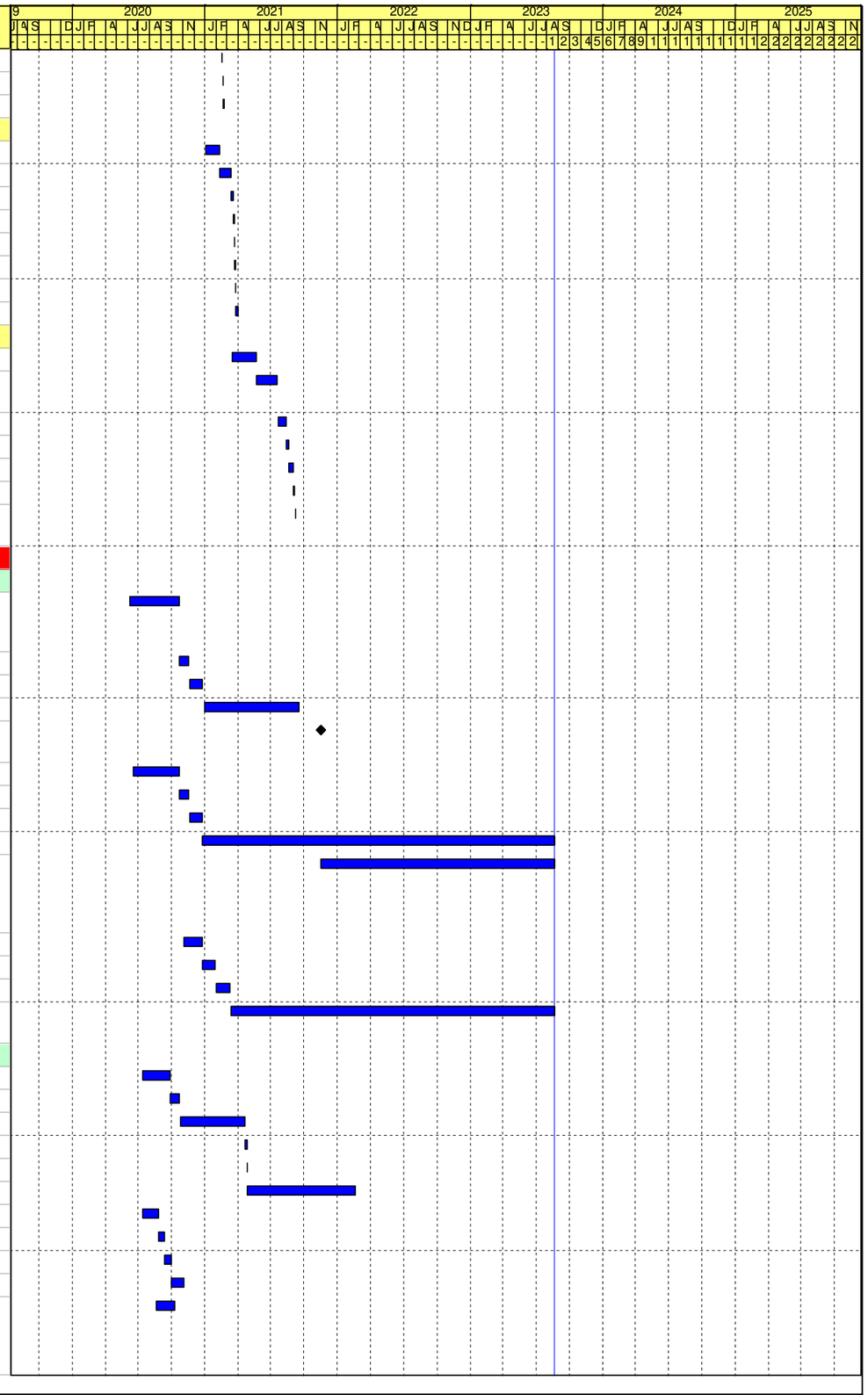


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3P1230	Contract Preparation	3	17-Feb-21 A	17-Feb-21 A	16-Aug-23	16-Aug-23		S3P1220	S3P1240
S3P1240	Civil Contractor (Pre-drilling & Post-drilling) Award	1	18-Feb-21 A	18-Feb-21 A	16-Aug-23	16-Aug-23		S3P1230	S3P1250
S3P1250	Mobilisation	3	19-Feb-21 A	21-Feb-21 A	16-Aug-23	16-Aug-23		S3P1240	S3C1030
For Piling		90	04-Jan-21 A	01-Apr-21 A	16-Aug-23	16-Aug-23			
S3P1260	Submit Tender proprosal of Civil Contractor (Piling)	39	04-Jan-21 A	10-Feb-21 A	16-Aug-23	16-Aug-23			S3P1270
S3P1270	Review & Accept the Tender proprosal of Civil Contractor (Piling)	25	11-Feb-21 A	12-Mar-21 A	16-Aug-23	16-Aug-23		S3P1260	S3P1280
S3P1280	Tender Invitation of Civil Contractor (Piling)	14	12-Mar-21 A	19-Mar-21 A	16-Aug-23	16-Aug-23		S3P1270	S3P1290
S3P1290	Submission of Tender Report	7	20-Mar-21 A	22-Mar-21 A	16-Aug-23	16-Aug-23		S3P1280	S3P1300
S3P1300	Review & Accept the Tender Report by PM	21	23-Mar-21 A	23-Mar-21 A	16-Aug-23	16-Aug-23		S3P1290	S3P1310
S3P1310	Contract Preparation	3	24-Mar-21 A	25-Mar-21 A	16-Aug-23	16-Aug-23		S3P1300	S3P1320
S3P1320	Civil Contractor (Piling) Award	1	26-Mar-21 A	26-Mar-21 A	16-Aug-23	16-Aug-23		S3P1310	S3P1330
S3P1330	Mobilisation	3	26-Mar-21 A	01-Apr-21 A	16-Aug-23	16-Aug-23		S3P1320	S3C1030
For Main Civil Works		146	17-Mar-21 A	06-Sep-21 A	16-Aug-23	16-Aug-23			
S3P1340	Submit Tender proprosal of Civil Contractor (Main Civil Works)	30	17-Mar-21 A	21-May-21 A	16-Aug-23	16-Aug-23			S3P1350
S3P1350	Review & Accept the Tender proprosal of Civil Contractor (Main Civil Works)	42	22-May-21 A	19-Jul-21 A	16-Aug-23	16-Aug-23		S3P1340	S3P1360
S3P1360	Tender Invitation of Civil Contractor (Main Civil Works)	14	21-Jul-21 A	11-Aug-21 A	16-Aug-23	16-Aug-23		S3P1350	S3P1370
S3P1370	Submission of Tender Report	1	12-Aug-21 A	19-Aug-21 A	16-Aug-23	16-Aug-23		S3P1360	S3P1380
S3P1380	Review & Accept the Tender Report by PM	6	20-Aug-21 A	31-Aug-21 A	16-Aug-23	16-Aug-23		S3P1370	S3P1390
S3P1390	Contract Preparation	1	01-Sep-21 A	05-Sep-21 A	16-Aug-23	16-Aug-23		S3P1380	S3P1400
S3P1400	Civil Contractor (Main Civil Works) Award	1	06-Sep-21 A	06-Sep-21 A	16-Aug-23	16-Aug-23		S3P1390	S3D1360, S3C1070
Design & Submission		1409	07-Jun-20 A	21-Aug-23	01-Jan-23	11-Jun-25	660		
Architectural		1409	07-Jun-20 A	21-Aug-23	31-Jul-23	31-Jul-23	-21		
S3D1000	Prepare & Submit Building Layout Plan	60	07-Jun-20 A	21-Oct-20 A	31-Jul-23	31-Jul-23		CD1010, S3P1000	S3D1010, S3D1050, S3D1100
S3D1010	Review & Comment on Buildingl Layout Plan by PM	67	22-Oct-20 A	17-Nov-20 A	31-Jul-23	31-Jul-23		S3D1000	S3D1020
S3D1020	Revise & Re-submit Building Layout Plan	28	18-Nov-20 A	24-Dec-20 A	31-Jul-23	31-Jul-23		S3D1010	S3D1030
S3D1030	Review & Accept of Building Layout Plan by PM	214	01-Jan-21 A	16-Sep-21 A	31-Jul-23	31-Jul-23		S3D1020	S3D1090
S3D1040	Coordination Meeting with DSD (Employer) for the Architectural Drawing	0		15-Nov-21 A		31-Jul-23			S3D1090
S3D1050	Prepare & Submit Architectural Design / Drawings	60	17-Jun-20 A	21-Oct-20 A	31-Jul-23	31-Jul-23		S3D1000	S3D1060
S3D1060	Review & Comment on Architectural Design / Drawings by PM	67	22-Oct-20 A	17-Nov-20 A	31-Jul-23	31-Jul-23		S3D1050	S3D1070
S3D1070	Revise & Re-submit Architectural Design / Drawings	28	18-Nov-20 A	24-Dec-20 A	31-Jul-23	31-Jul-23		S3D1060	S3D1080
S3D1080	Review & Accept of Architectural Design / Drawings by PM	970	25-Dec-20 A	21-Aug-23	31-Jul-23	31-Jul-23	-21	S3D1070	S3D1090
S3D1090	Review & Accept of Architectural Design / Drawings by DSD (incl. VCAB) & DAP of ArchSD	645	15-Nov-21 A	21-Aug-23	31-Jul-23	31-Jul-23	-21	S3D1080, S3D1130, S3D1030, S3D1040	S3C1140, S3P2150
S3D1100	Prepare & Submit ABWF Works Drawings	68	03-Nov-20 A	24-Dec-20 A	31-Jul-23	31-Jul-23		S3D1000	S3D1110
S3D1110	Review & Comment on ABWF Works Drawings by PM	21	25-Dec-20 A	29-Jan-21 A	31-Jul-23	31-Jul-23		S3D1100	S3D1120
S3D1120	Revise & Re-submit ABWF Works Drawings	41	30-Jan-21 A	11-Mar-21 A	31-Jul-23	31-Jul-23		S3D1110	S3D1130
S3D1130	Review & Accept of ABWF Works Drawings by PM	893	12-Mar-21 A	21-Aug-23	31-Jul-23	31-Jul-23	-21	S3D1120	S3C1140, S3D1090
Civil / Structural		639	13-Jul-20 A	18-Feb-22 A	01-Jan-23	11-Jun-25			
S3D1140	Prepare & Submit Loading Plan to ICE	60	13-Jul-20 A	25-Sep-20 A	16-Aug-23	16-Aug-23			S3D1150
S3D1150	Review & Comment on Loading Plan by ICE	14	26-Sep-20 A	23-Oct-20 A	16-Aug-23	16-Aug-23		S3D1140	S3D1160
S3D1160	Revise & Re-submit Loading Plan to ICE	175	24-Oct-20 A	20-Apr-21 A	16-Aug-23	16-Aug-23		S3D1150	S3D1170
S3D1170	Review & Accept of Loading Plan by ICE	7	21-Apr-21 A	26-Apr-21 A	16-Aug-23	16-Aug-23		S3D1160	S3D1180
S3D1180	Prepare & Submit Loading Plan to PM	7	27-Apr-21 A	27-Apr-21 A	16-Aug-23	16-Aug-23		S3D1170	S3D1190
S3D1190	Review & Accept of Loading Plan by PM & DSD (incl. BCM)	359	28-Apr-21 A	18-Feb-22 A	16-Aug-23	16-Aug-23		S3D1180	S3C1090
S3D1200	Prepare & Submit GI Plan	60	13-Jul-20 A	26-Aug-20 A	16-Aug-23	16-Aug-23			S3D1210
S3D1210	Review & Comment on GI Plan by PM	14	27-Aug-20 A	10-Sep-20 A	16-Aug-23	16-Aug-23		S3D1200	S3D1220
S3D1220	Revise & Re-submit GI Plan	7	11-Sep-20 A	28-Sep-20 A	16-Aug-23	16-Aug-23		S3D1210	S3D1230
S3D1230	Review & Accept of GI Plan by PM	21	29-Sep-20 A	02-Nov-20 A	16-Aug-23	16-Aug-23		S3D1220	S3C1020
S3D1240	Prepare & Submit Foundation Design / Drawings to ICE & PM	60	20-Aug-20 A	09-Oct-20 A	01-Jan-23	01-Jan-23			S3D1250, S3C1010, S3D1300, S3P1180

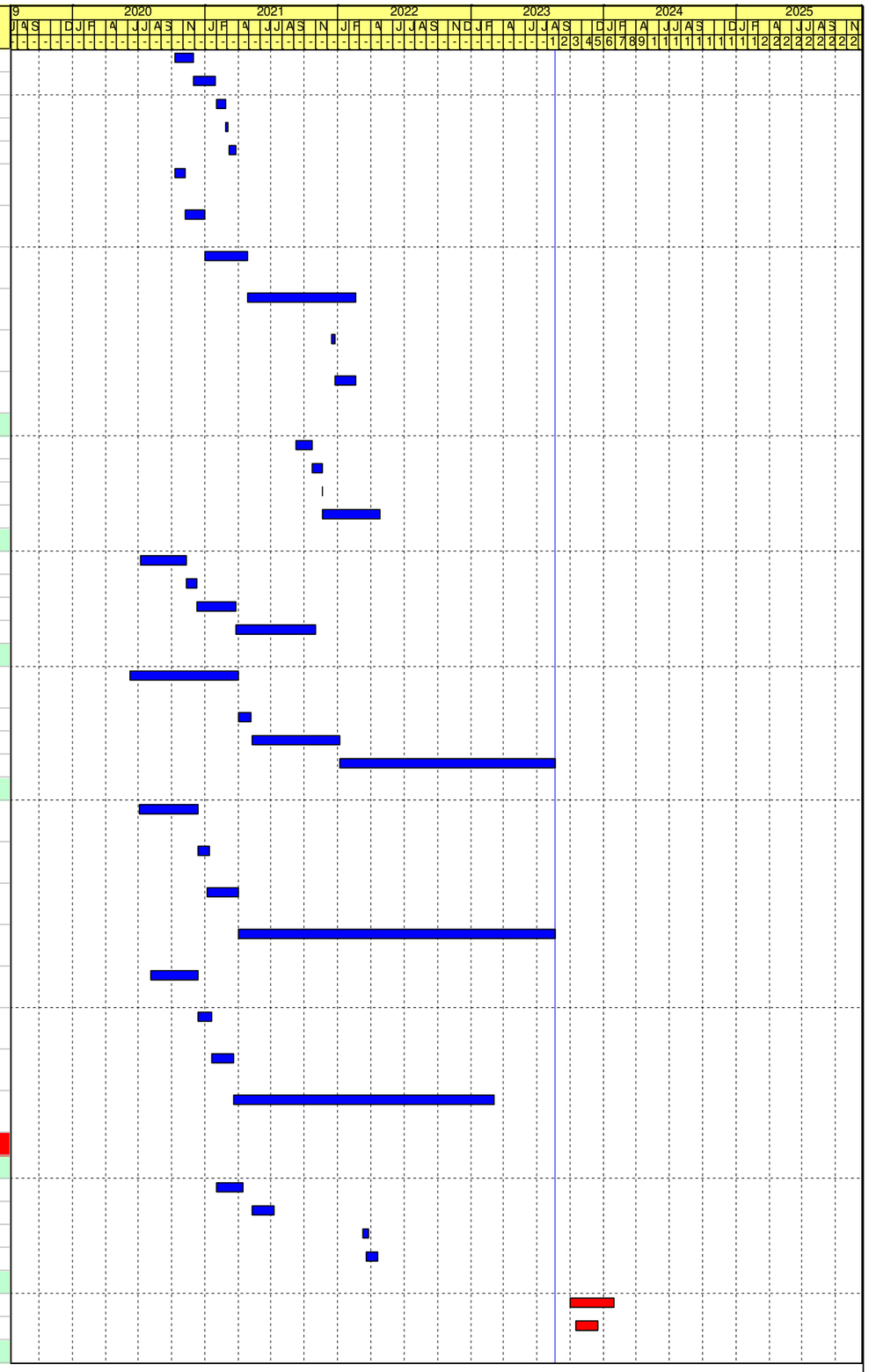


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3D1250	Review & Comment on Foundation Design / Drawings by ICE & PM	79	10-Oct-20 A	27-Nov-20 A	11-Jun-25	11-Jun-25		S3D1240	S3D1260
S3D1260	Revise & Re-submit Foundation Design / Drawings to ICE & PM	14	28-Nov-20 A	29-Jan-21 A	11-Jun-25	11-Jun-25		S3D1250	S3D1270
S3D1270	Review & Accept of Foundation Design / Drawings by ICE & PM	10	30-Jan-21 A	26-Feb-21 A	11-Jun-25	11-Jun-25		S3D1260	S3D1280
S3D1280	Prepare & Submit Foundation Design / Drawings to DSD (incl. BCM)	7	27-Feb-21 A	05-Mar-21 A	11-Jun-25	11-Jun-25		S3D1270	S3D1290
S3D1290	Review & Accept of Foundation Design / Drawings by DSD (incl. BCM)	45	06-Mar-21 A	26-Mar-21 A	11-Jun-25	11-Jun-25		S3D1280	
S3D1300	Prepare & Submit Substructure / Superstructure Design / Drawings to ICE & PM	25	10-Oct-20 A	05-Nov-20 A	01-Jan-23	01-Jan-23		S3D1240	S3D1310, S3P1180
S3D1310	Review & Comment on Substructure / Superstructure Design / Drawings by ICE & PM	55	06-Nov-20 A	30-Dec-20 A	01-Jan-23	01-Jan-23		S3D1300	S3D1320
S3D1320	Revise & Re-submit Substructure / Superstructure Design / Drawings to ICE & PM	72	31-Dec-20 A	26-Apr-21 A	01-Jan-23	01-Jan-23		S3D1310	S3D1330
S3D1330	Review & Accept of Substructure / Superstructure Design / Drawings by ICE & PM	271	27-Apr-21 A	18-Feb-22 A	01-Jan-23	01-Jan-23		S3D1320	S3D1340
S3D1340	Prepare & Submit Substructure / Superstructure Design / Drawings to DSD (incl. BCM)	2	13-Dec-21 A	23-Dec-21 A	01-Jan-23	01-Jan-23		S3D1330	S3D1350
S3D1350	Review & Accept of Substructure / Superstructure Design / Drawings by DSD (incl. BCM)	119	24-Dec-21 A	18-Feb-22 A	01-Jan-23	01-Jan-23		S3D1340	S3C1100
ELS		214	07-Sep-21 A	26-Apr-22 A	16-Aug-23	16-Aug-23			
S3D1360	Prepare & Submit ELS Plan to ICE	45	07-Sep-21 A	20-Oct-21 A	16-Aug-23	16-Aug-23		S3P1400	S3D1370
S3D1370	Review & Accept of ELS Plan by ICE	5	21-Oct-21 A	18-Nov-21 A	16-Aug-23	16-Aug-23		S3D1360	S3D1380
S3D1380	Prepare & Submit ELS Plan to PM	3	19-Nov-21 A	19-Nov-21 A	16-Aug-23	16-Aug-23		S3D1370	S3D1390
S3D1390	Review & Accept of ELS Plan by PM	153	20-Nov-21 A	26-Apr-22 A	16-Aug-23	16-Aug-23		S3D1380	S3C1080
Process Design		454	06-Jul-20 A	29-Oct-21 A	11-Jun-25	11-Jun-25			
S3D1400	Prepare & Submit E&M Works (Process) Design Drawings	198	06-Jul-20 A	10-Nov-20 A	11-Jun-25	11-Jun-25			S3D1410
S3D1410	Review & Comment on E&M Works (Process) Design Drawings by PM	21	11-Nov-20 A	08-Dec-20 A	11-Jun-25	11-Jun-25		S3D1400	S3D1420
S3D1420	Revise & Re-submit E&M Works (Process) Design Drawings	87	09-Dec-20 A	26-Mar-21 A	11-Jun-25	11-Jun-25		S3D1410	S3D1430
S3D1430	Review & Accept of E&M Works (Process) Design Drawings by PM	278	27-Mar-21 A	29-Oct-21 A	11-Jun-25	11-Jun-25		S3D1420	
E&M Design		1201	07-Jun-20 A	21-Aug-23	12-May-23	13-May-23	-101		
S3D1440	Prepare & Submit General Arrangement Drawings	298	07-Jun-20 A	31-Mar-21 A	12-May-23	12-May-23		S3P1000	S3D1450, S3C1080
S3D1450	Review & Comment on General Arrangement Drawings by PM	37	01-Apr-21 A	07-May-21 A	12-May-23	12-May-23		S3D1440	S3D1460
S3D1460	Revise & Re-submit General Arrangement Drawings	247	08-May-21 A	06-Jan-22 A	12-May-23	12-May-23		S3D1450	S3D1470
S3D1470	Review & Accept of General Arrangement Drawings by PM	591	07-Jan-22 A	21-Aug-23	12-May-23	13-May-23	-101	S3D1460	S3C1995
BS		1085	03-Jul-20 A	21-Aug-23	28-May-23	29-May-23	-85		
S3D1480	Prepare & Submit BS Works Design & Dwgs for Sidestream Treatment Facilities	264	03-Jul-20 A	10-Dec-20 A	28-May-23	28-May-23			S3D1490
S3D1490	Review & Comment on BS Works Design & Dwgs for Sidestream Treatment Facilities by PM	21	11-Dec-20 A	11-Jan-21 A	28-May-23	28-May-23		S3D1480	S3D1500
S3D1500	Revise & Re-submit BS Works Design & Dwgs for Sidestream Treatment Facilities	102	05-Jan-21 A	31-Mar-21 A	28-May-23	28-May-23		S3D1490	S3D1510
S3D1510	Review & Accept of BS Works Design & Dwgs for Sidestream Treatment Facilities by PM	873	01-Apr-21 A	21-Aug-23	28-May-23	28-May-23	-85	S3D1500	S3S1020
S3D1520	Submission & Submit FS Works Design & Dwgs for Sidestream Treatment Facilities	182	03-Aug-20 A	10-Dec-20 A	29-May-23	29-May-23			S3D1530
S3D1530	Review & Comment on FS Works Design & Dwgs for Sidestream Treatment Facilities by PM	21	11-Dec-20 A	19-Jan-21 A	29-May-23	29-May-23		S3D1520	S3D1540
S3D1540	Revise & Re-submit FS Works Design & Dwgs for Sidestream Treatment Facilities	66	20-Jan-21 A	19-Mar-21 A	29-May-23	29-May-23		S3D1530	S3D1550
S3D1550	Review & Accept of FS Works Design & Dwgs for Sidestream Treatment Facilities by PM	398	20-Mar-21 A	06-Mar-23 A	29-May-23	29-May-23		S3D1540	S3S1020
Major Plant & Materials Procurement		1158	18-Feb-20 A	08-Mar-24	01-Jan-23	06-Oct-23	-155		
Civil & Structure		378	01-Feb-21 A	19-Apr-22 A	16-Aug-23	16-Aug-23			
S3P1410	Procurement, Manufacture & Delivery of Piling	60	01-Feb-21 A	14-Apr-21 A	16-Aug-23	16-Aug-23			S3C1040
S3P1420	Procurement, Manufacture & Delivery of Metal Works Material	80	09-May-21 A	07-Jul-21 A	16-Aug-23	16-Aug-23			S3C1080
S3P1430	Procurement, Manufacture & Delivery of Steel Reinforcement	15	11-Mar-22 A	25-Mar-22 A	16-Aug-23	16-Aug-23			S3C1090
S3P1440	Procurement, Manufacture & Delivery of Concrete Mix	15	21-Mar-22 A	19-Apr-22 A	16-Aug-23	16-Aug-23			S3C1090
ABWF		120	03-Oct-23	30-Jan-24	02-Jun-23	29-Sep-23	-123		
S3P1450	Procurement, Manufacture & Delivery of ABWF Works Material	120	03-Oct-23	30-Jan-24	02-Jun-23	29-Sep-23	-123		S3C1140
S3P1460	Procurement, Manufacture & Delivery of Water Proofing Material	60	18-Oct-23	16-Dec-23	17-Jun-23	15-Aug-23	-123		S3C1130
E&M Process		668	20-May-22 A	01-Feb-24	01-Jan-23	16-Sep-23	-139		

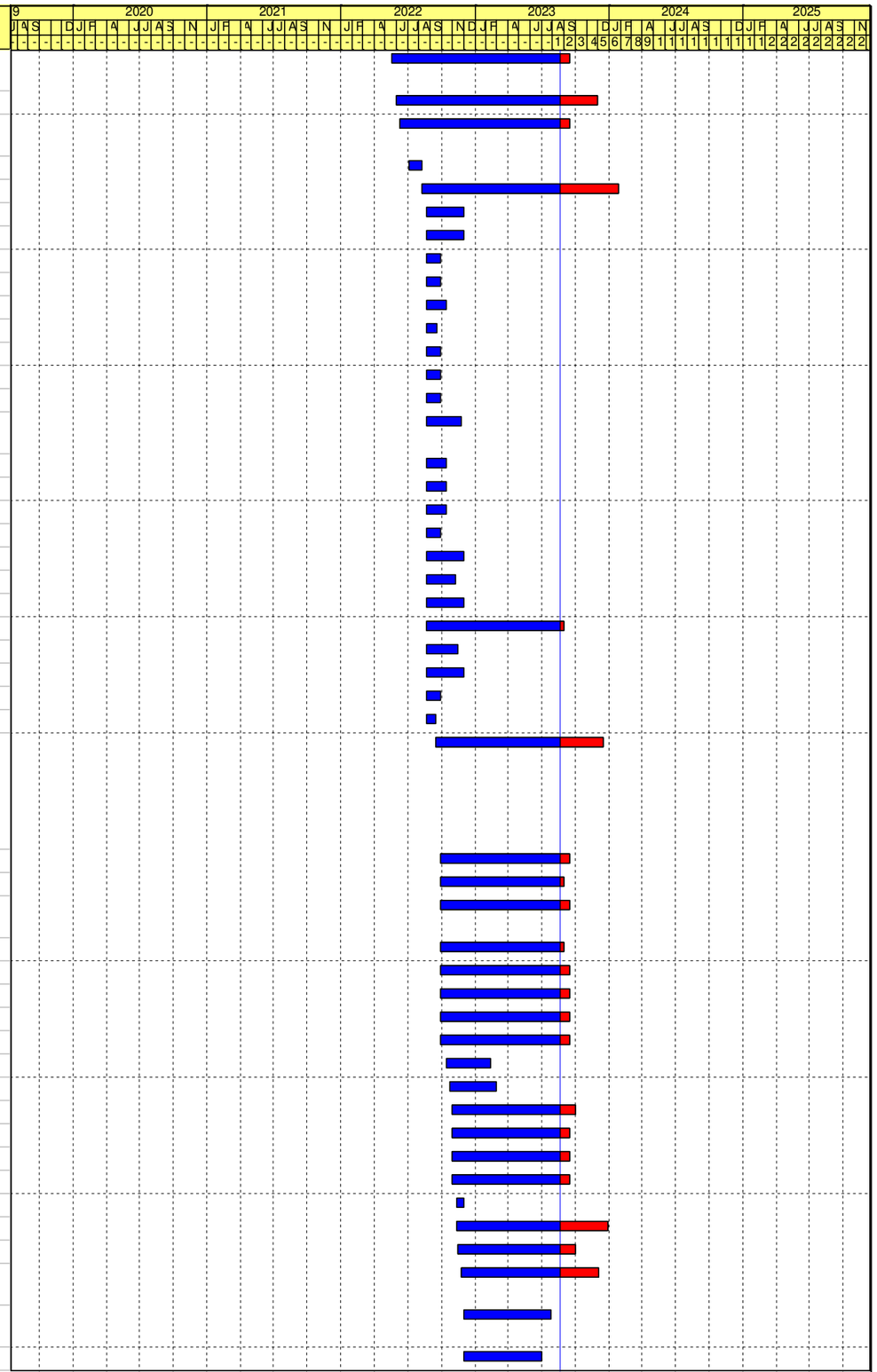


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3P1470	Manufacture & Delivery of Primary and Secondary Clarifiers for Phospaq	485	20-May-22 A	16-Sep-23	01-Jun-23	28-Jun-23	-81		S3C2280, S3C2090
S3P1480	Manufacture & Delivery of Drum sludge thickener	550	31-May-22 A	01-Dec-23	20-Feb-23	03-Jun-23	-182		S3C2240
S3P1490	Manufacture & Delivery of Tilted Plates for Phospaq and Anammox internals	463	11-Jun-22 A	16-Sep-23	16-Jun-23	13-Jul-23	-66		S3C2100, S3C2110
S3P1500	Procurement of Air Blower System	36	04-Jul-22 A	08-Aug-22 A	01-Jan-23	01-Jan-23			S3P1510
S3P1510	Manufacture & Delivery of Air Blower System	536	09-Aug-22 A	26-Jan-24	01-Jan-23	09-Jun-23	-232	S3P1500	S3C2310
S3P1520	Procurement of Diffusers for Phospaq and Anammox Internals	93	21-Aug-22 A	02-Dec-22 A	23-Feb-23	23-Feb-23			S3P1950
S3P1530	Procurement of Ancillary Air Blower	96	21-Aug-22 A	02-Dec-22 A	01-Mar-23	01-Mar-23			S3P1970
S3P1540	Procurement of Buffer tank Lifting Pump	38	21-Aug-22 A	27-Sep-22 A	02-May-23	02-May-23			S3P1760
S3P1550	Procurement of Anammox feed pump and Sludge Discharge pump	38	21-Aug-22 A	27-Sep-22 A	17-Apr-23	17-Apr-23			S3P1770
S3P1560	Procurement of Metering Pump	55	21-Aug-22 A	14-Oct-22 A	29-Apr-23	29-Apr-23			S3P1850
S3P1570	Procurement of 2nd Sludge Pump	30	21-Aug-22 A	19-Sep-22 A	22-May-23	22-May-23			S3P1780
S3P1580	Procurement of Struvite Pump	38	21-Aug-22 A	27-Sep-22 A	14-May-23	14-May-23			S3P1790
S3P1590	Procurement of Primary Sludge Pump	38	21-Aug-22 A	27-Sep-22 A	21-May-23	21-May-23			S3P1800
S3P1600	Procurement of Drum Thickener Feed Pump	38	21-Aug-22 A	27-Sep-22 A	01-May-23	01-May-23			S3P1810
S3P1610	Procurement of FRP Tanks (NaOH, Micro-Nutrient, Anti-foamer and Polymer)	97	21-Aug-22 A	25-Nov-22 A	16-Apr-23	16-Apr-23			S3P1930
S3P1620	Procurement of NaOH Dosing Pump	55	21-Aug-22 A	14-Oct-22 A	07-Jun-23	07-Jun-23			S3P1860
S3P1630	Procurement of Micro-Nutrient Dosing Pump	55	21-Aug-22 A	14-Oct-22 A	07-Jun-23	07-Jun-23			S3P1870
S3P1640	Procurement of Anti-foamer Dosing Pump	55	21-Aug-22 A	14-Oct-22 A	07-Jun-23	07-Jun-23			S3P1880
S3P1650	Procurement of Polymer Dosing Pump	38	21-Aug-22 A	27-Sep-22 A	07-Jun-23	07-Jun-23			S3P1750
S3P1660	Procurement of DOU no.4	97	21-Aug-22 A	02-Dec-22 A	01-Jan-23	01-Jan-23			S3P1980
S3P1670	Procurement of SCADA System	153	21-Aug-22 A	10-Nov-22 A	18-Mar-23	18-Mar-23			S3P1910
S3P1680	Procurement of Local control panel parts for Drum Sludge Thickener	102	21-Aug-22 A	02-Dec-22 A	12-Apr-23	12-Apr-23			S3P1990
S3P1690	Procurement of uPVC pipe and GRP Pipe	360	21-Aug-22 A	01-Sep-23	09-Mar-23	21-Mar-23	-165		S3P2020
S3P1700	Procurement of EM Flowmeter	86	21-Aug-22 A	14-Nov-22 A	07-Jul-23	07-Jul-23			S3P1920
S3P1710	Procurement of Instrument	111	21-Aug-22 A	02-Dec-22 A	22-May-23	22-May-23			S3P2000
S3P1720	Procurement of PAM dosing pump	38	21-Aug-22 A	27-Sep-22 A	07-Jun-23	07-Jun-23			S3P1820
S3P1730	Procurement of Lifting Applicance	14	23-Aug-22 A	16-Sep-22 A	12-Feb-23	12-Feb-23			S3P1740
S3P1740	Manufacture & Delivery of Lifting Applicance	455	17-Sep-22 A	15-Dec-23	12-Feb-23	09-Jun-23	-190	S3P1730	S3C2170, S3C2180, S3C2190, S3C2260, S3C2270, S3C2290
S3P1750	Manufacture & Delivery of Polymer Dosing Pump	353	28-Sep-22 A	15-Sep-23	07-Jun-23	03-Jul-23	-75	S3P1650	S3C2200
S3P1760	Manufacture & Delivery of Buffer tank Lifting Pump	341	29-Sep-22 A	31-Aug-23	02-May-23	13-May-23	-111	S3P1540	S3C2000
S3P1770	Manufacture & Delivery of Anammox feed pump and Anammox Sludge pump	352	29-Sep-22 A	15-Sep-23	17-Apr-23	13-May-23	-126	S3P1550	S3C2020, S3C2040
S3P1780	Manufacture & Delivery of 2nd Sludge Pump	341	29-Sep-22 A	31-Aug-23	22-May-23	02-Jun-23	-91	S3P1570	S3C2010
S3P1790	Manufacture & Delivery of Struvite Pump	352	29-Sep-22 A	15-Sep-23	14-May-23	09-Jun-23	-99	S3P1580	S3C2050
S3P1800	Manufacture & Delivery of Primary Sludge Pump	352	29-Sep-22 A	15-Sep-23	21-May-23	16-Jun-23	-92	S3P1590	S3C2070
S3P1810	Manufacture & Delivery of Drum Thickener Feed Pump	352	29-Sep-22 A	15-Sep-23	01-May-23	27-May-23	-112	S3P1600	S3C2060
S3P1820	Manufacture & Delivery of PAM dosing pump	352	29-Sep-22 A	15-Sep-23	07-Jun-23	03-Jul-23	-75	S3P1720	S3C2200
S3P1830	Procurement of PE pipework	90	15-Oct-22 A	11-Feb-23 A	27-May-23	27-May-23			S3P2060
S3P1840	Procurement of Flushing pump	97	24-Oct-22 A	28-Feb-23 A	27-May-23	27-May-23			S3P2050
S3P1850	Manufacture & Delivery of Metering Pump	335	31-Oct-22 A	30-Sep-23	29-Apr-23	09-Jun-23	-114	S3P1560	S3C2030
S3P1860	Manufacture & Delivery of NaOH Dosing pump	320	31-Oct-22 A	15-Sep-23	07-Jun-23	03-Jul-23	-75	S3P1620	S3C2200
S3P1870	Manufacture & Delivery of Micro-Nutrient Dosing Pump	320	31-Oct-22 A	15-Sep-23	07-Jun-23	03-Jul-23	-75	S3P1630	S3C2200
S3P1880	Manufacture & Delivery of Anti-foamer Dosing Pump	320	31-Oct-22 A	15-Sep-23	07-Jun-23	03-Jul-23	-75	S3P1640	S3C2200
S3P1900	Procurement of Mixer	22	11-Nov-22 A	02-Dec-22 A	28-Apr-23	28-Apr-23			S3P1960
S3P1910	Manufacture & Delivery of SCADA System	415	11-Nov-22 A	30-Dec-23	18-Mar-23	27-Jul-23	-156	S3P1670	S3C2400
S3P1920	Manufacture & Delivery of EM Flowmeter	320	15-Nov-22 A	30-Sep-23	07-Jul-23	17-Aug-23	-45	S3P1700	S3C2430
S3P1930	Manufacture & Delivery of FRP Tanks (NaOH, Micro-Nutrient, Anti-foamer and Polymer)	374	26-Nov-22 A	04-Dec-23	16-Apr-23	31-Jul-23	-127	S3P1610	S3C2210
S3P1940	Procurement of SS pipe and Fittings	213	01-Dec-22 A	25-Jul-23 A	09-Mar-23	09-Mar-23			S3P2070, S3P1945
S3P1945	Procurement of Ductile Iron Pipes and Fittings	212	01-Dec-22 A	30-Jun-23 A	13-May-23	13-May-23		S3P1940	S3P2160

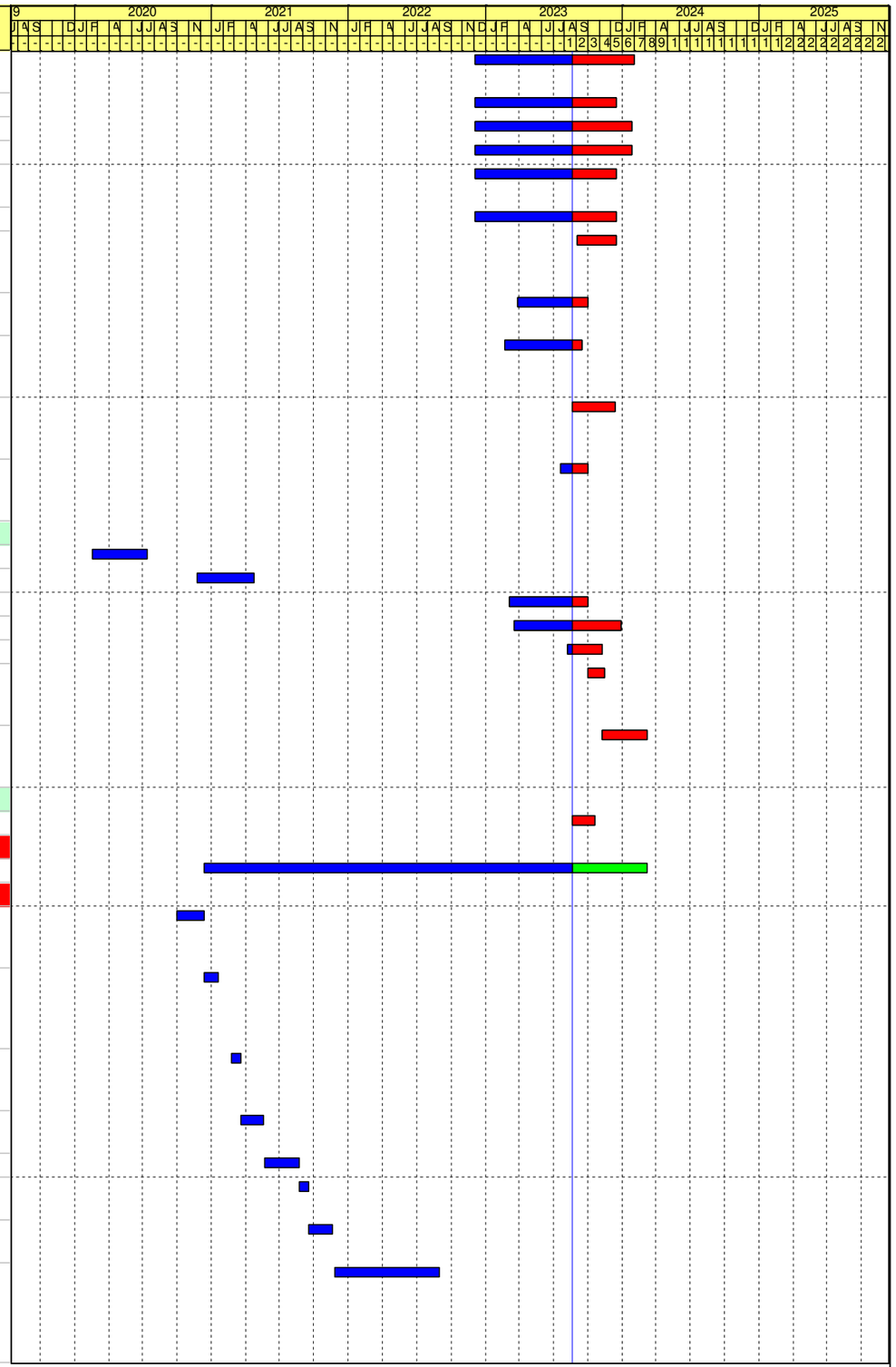


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3P1950	Manufacture & Delivery of Diffusers for Phospaq and Anammox Internals	426	03-Dec-22 A	01-Feb-24	23-Feb-23	07-Aug-23	-179	S3P1520	S3C2130, S3C2140
S3P1960	Manufacture & Delivery of Mixer	378	03-Dec-22 A	15-Dec-23	28-Apr-23	23-Aug-23	-115	S3P1900	S3C2120
S3P1970	Manufacture & Delivery of Ancillary air blower	420	03-Dec-22 A	26-Jan-24	01-Mar-23	07-Aug-23	-173	S3P1530	S3C2340
S3P1980	Manufacture & Delivery of DOU no.4	420	03-Dec-22 A	26-Jan-24	01-Jan-23	09-Jun-23	-232	S3P1660	S3C2300
S3P1990	Manufacture & Delivery of Local control panel parts for Drum Sludge Thickener	378	03-Dec-22 A	15-Dec-23	12-Apr-23	07-Aug-23	-131	S3P1680	S3C2430
S3P2000	Manufacture & Delivery of Instrument	378	03-Dec-22 A	15-Dec-23	22-May-23	16-Sep-23	-91	S3P1710	S3C2430
S3P2020	Manufacture & Delivery of uPVC pipe and FRP Pipe	105	02-Sep-23	15-Dec-23	21-Mar-23	04-Jul-23	-165	S3P1690	S3C2250, S3C2350, S3C2150
S3P2050	Manufacture & Delivery of Flushing pump	186	30-Mar-23 A	01-Oct-23	27-May-23	08-Jul-23	-86	S3P1840	S3C2350, S3T1030
S3P2060	Manufacture & Delivery of PE pipework	208	21-Feb-23 A	16-Sep-23	27-May-23	23-Jun-23	-86	S3P1830	S3C2250, S3C2150, S3C2350
S3P2070	Manufacture & Delivery of SS pipe and Fittings	114	21-Aug-23	12-Dec-23	09-Mar-23	01-Jul-23	-165	S3P1940	S3C2150, S3C2250, S3C2350
S3P2160	Manufacture & Delivery of Ductile Iron Pipes and Fittings	72	21-Jul-23 A	30-Sep-23	13-May-23	23-Jun-23	-100	S3P1945	S3C2150, S3C2350, S3C2250
BS		575	18-Feb-20 A	08-Mar-24	04-Mar-23	06-Oct-23	-155		
S3P2080	Procurement of Transformer	75	18-Feb-20 A	13-Jul-20 A	03-Apr-23	03-Apr-23			S3P2120
S3P2090	Procurement of Low Voltage Switchboard and Accessories	80	21-Nov-20 A	23-Apr-21 A	04-Mar-23	04-Mar-23			S3P2110
S3P2100	Procurement of MVAC System	207	08-Mar-23 A	30-Sep-23	26-Apr-23	05-Jun-23	-117		S3P2130
S3P2110	Manufacture & Delivery of Low Voltage Switchboard and Accessories	167	18-Mar-23 A	29-Dec-23	04-Mar-23	13-Jul-23	-170	S3P2090	S3C2380
S3P2120	Manufacture & Delivery of Transformer	92	10-Aug-23 A	09-Nov-23	03-Apr-23	23-Jun-23	-140	S3P2080	S3C2360
S3P2130	Manufacture & Delivery of MVAC System	45	01-Oct-23	14-Nov-23	06-Jun-23	20-Jul-23	-117	S3P2100	S3C2490, S3C2500, S3C2530
S3P2140	Procurement, Manufacture & Delivery of BS Works Material	120	10-Nov-23	08-Mar-24	08-Jun-23	06-Oct-23	-155		S3T1170, S3C2420, S3T1270
Fitting-out		60	22-Aug-23	20-Oct-23	01-Aug-23	29-Sep-23	-21		
S3P2150	Procurement, Manufacture & Delivery of Fit-out Works Material	60	22-Aug-23	20-Oct-23	01-Aug-23	29-Sep-23	-21	S3D1090	S3C1140
Ground Settlement, Tilting & Utility Monitoring		1184	12-Dec-20 A	09-Mar-24	07-Jan-24	26-Jul-24	139		
S3C1000	Ground Settlement, Tilting & Utility Monitoring	1184	12-Dec-20 A	09-Mar-24	07-Jan-24	26-Jul-24	139	S3C1010	SC31110
Civil Works Construction		1669	30-Sep-20 A	16-May-25	01-Jan-23	26-Jul-24	-294		
S3C1010	Site Clearance & Survey	74	30-Sep-20 A	12-Dec-20 A	16-Aug-23	16-Aug-23		S3D1240, AD1140, S3P1090	S3C1020, S3C1000
S3C1020	Ground Investigation	38	12-Dec-20 A	18-Jan-21 A	16-Aug-23	16-Aug-23		AD1140, S3C1010, S3P1170, S3D1230	S3C1030
S3C1030	Pre-drilling Works	26	22-Feb-21 A	19-Mar-21 A	16-Aug-23	16-Aug-23		S3C1020, S3P1250, S3P1330	S3C1040
S3C1040	Minor Civil Works & Preperation Works for Piling	62	20-Mar-21 A	20-May-21 A	16-Aug-23	16-Aug-23		S3C1030, S3P1410	S3C1050
S3C1050	Piling Works (Impacted by Inclement Weather)	93	21-May-21 A	21-Aug-21 A	16-Aug-23	16-Aug-23		S3C1040	S3C1060
S3C1060	Post-drilling, Proof test & remaining works (Impacted by Inclement Weather)	27	22-Aug-21 A	17-Sep-21 A	16-Aug-23	16-Aug-23		S3C1050	S3C1080, S3C1070
S3C1070	Site Set-up / Mobilisation (Impacted by Inclement Weather)	64	18-Sep-21 A	20-Nov-21 A	16-Aug-23	16-Aug-23		S3C1060, S3P1400	S3C1080
S3C1080	Excavation / ELS (Impacted by Inclement Weather)	281	24-Nov-21 A	31-Aug-22 A	16-Aug-23	16-Aug-23		S3D1440, S3P1420, S3D1390, S3C1060, S3C1070	S3C1090

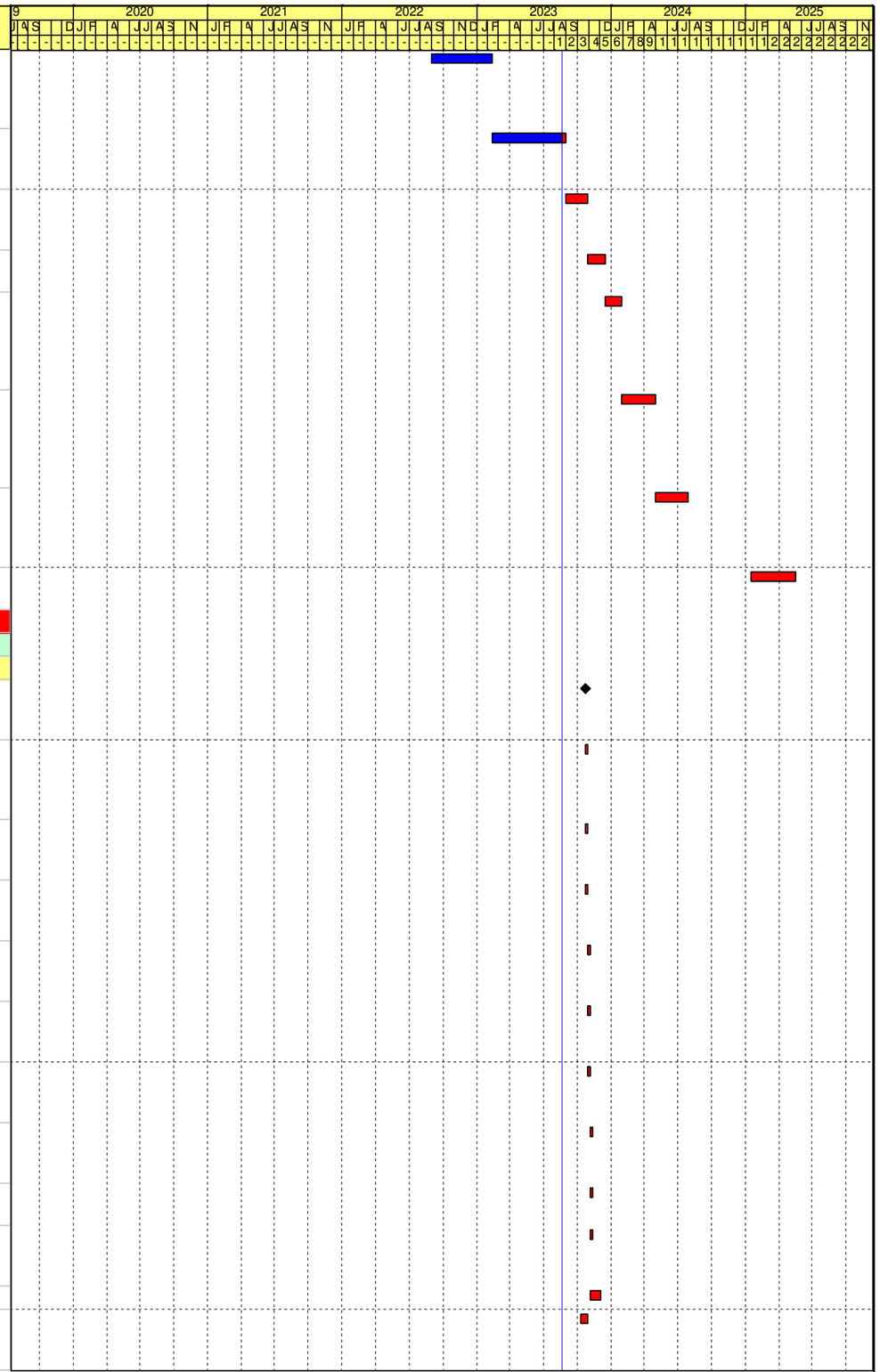


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3C1090	Pile Caps installation & Basement Slab	164	01-Sep-22 A	11-Feb-23 A	16-Aug-23	16-Aug-23		S3C1080, S3P1440, S3P1430, S3D1190	S3C1130
S3C1100	Construction of Basement up to G/F Slab	198	12-Feb-23 A	29-Aug-23	01-Jan-23	10-Jan-23	-232	S3D1350, S3S1010	S3C1110, S3C1130, S3C1995
S3C1110	Construction of G/F up to 1/F Slab	61	30-Aug-23	29-Oct-23	10-Jan-23	12-Mar-23	-232	S3C1100	S3C1120, S3C1130, S3C2155
S3C1120	Construction of 1/F up to Roof	48	30-Oct-23	16-Dec-23	12-Mar-23	29-Apr-23	-232	S3C1110	S3C1130, S3C2285
S3C1130	Waterproofing	45	17-Dec-23	30-Jan-24	16-Aug-23	29-Sep-23	-123	S3P1460, S3C1120, S3C1090, S3C1100, S3C1110	S3C1140
S3C1140	External & Internal Finishes - 1st Fix (Blockwork, Plastering, Wet Trade)	90	31-Jan-24	29-Apr-24	30-Sep-23	28-Dec-23	-123	S3C1130, S3P1450, S3D1090, S3D1130, S3P2150	S3C1150, S3C1160
S3C1150	External & Internal Finishes - 2nd Fix (Ceiling / Wall / Floor Finishing, Door)	90	30-Apr-24	28-Jul-24	29-Dec-23	27-Mar-24	-123	S3C1140	SC31110, S3S1170, S3C1160, PL1190
S3C1160	Landscaping Works	120	17-Jan-25	16-May-25	29-Mar-24	26-Jul-24	-294	S3C1140, S3C1150	SC31110
E&M Installation		171	11-Oct-23	29-Mar-24	13-May-23	11-Jun-25	439		
Mechanical Installations		171	11-Oct-23	29-Mar-24	13-May-23	11-Jun-25	439		
Basement		144	11-Oct-23	02-Mar-24	13-May-23	22-Sep-23	-163		
S3C1995	Access to Sidestream Treatment Facilities (B/F)	0	23-Oct-23		13-May-23		-163	S3C1100, S3D1470	S3C2000, S3C2450, S3C2460
S3C2000	Installation of Buffer Tank Lifting pumps (3 nos.)	7	23-Oct-23	29-Oct-23	13-May-23	20-May-23	-163	S3P1760, S3C1995	S3C2020, S3C2150, S3T1030, S3C2010
S3C2010	Installation of Secondary Clarifier Sludge discharge pumps (3 nos.)	7	23-Oct-23	29-Oct-23	02-Jun-23	09-Jun-23	-143	S3P1780, S3C2000	S3C2030, S3C2150, S3T1030
S3C2020	Installation of Anammox Feed pumps (3 nos.)	7	23-Oct-23	29-Oct-23	13-May-23	20-May-23	-163	S3C2000, S3P1770	S3C2040, S3C2150, S3T1030
S3C2030	Installation of Metering Pumps (2 nos.)	7	30-Oct-23	05-Nov-23	09-Jun-23	16-Jun-23	-143	S3C2010, S3P1850	S3C2050, S3C2150, S3T1030
S3C2040	Installation of Anammox Sludge discharge pumps (2 nos.)	7	30-Oct-23	05-Nov-23	20-May-23	27-May-23	-163	S3C2020, S3P1770	S3C2060, S3C2150, S3T1030
S3C2050	Installation of Struvite Pumps (3 nos.)	7	30-Oct-23	05-Nov-23	09-Jun-23	16-Jun-23	-143	S3C2030, S3P1790	S3C2070, S3C2150, S3T1030
S3C2060	Installation of Thickener feed pumps (2 nos.)	7	06-Nov-23	12-Nov-23	27-May-23	03-Jun-23	-163	S3C2040, S3P1810	S3C2080, S3C2150, S3T1030
S3C2070	Installation of Primary Clarifier sludge discharge pump (3 nos.)	7	06-Nov-23	12-Nov-23	16-Jun-23	23-Jun-23	-143	S3C2050, S3P1800	S3C2150, S3T1030
S3C2080	Installation of Flushing Pump (2 nos.)	7	06-Nov-23	12-Nov-23	27-May-23	03-Jun-23	-163	S3C2060	S3C2150, S3C2240, S3T1030
S3C2090	Installation of Secondary Clarifiers No.1 and 2	30	04-Nov-23*	03-Dec-23	23-Aug-23	22-Sep-23	-73	S3P1470	S3T1110
S3C2100	Installation of Separator for Phospaq No.1 and 2	21	11-Oct-23*	31-Oct-23	13-Jul-23	03-Aug-23	-90	S3P1490	S3C2130, S3T1140, S3C2110

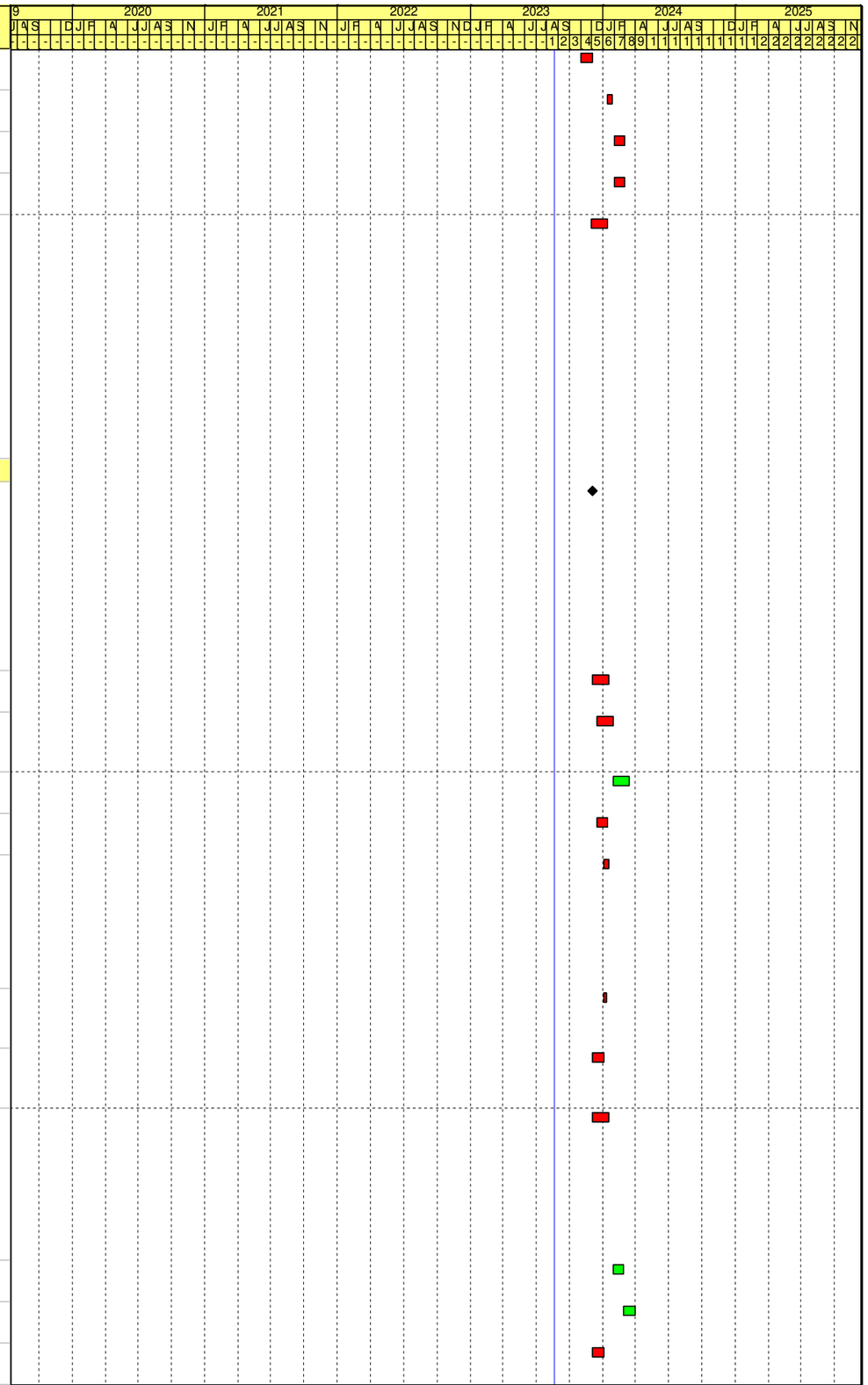


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3C2110	Installation of Separator for Anammox No. 1 and 2	34	01-Nov-23	04-Dec-23	03-Aug-23	06-Sep-23	-90	S3P1490, S3C2100	S3T1150
S3C2120	Installation of Mixer for Thickened Sludge Tank, Sludge MIxing Tank, Anammox Effluent Chamber and Filtrate Buffer Tank	14	15-Jan-24	28-Jan-24	23-Aug-23	06-Sep-23	-145	S3P1960, S3C2190	S3T1090
S3C2130	Installation of Diffusers and pipework for Phospaq	30	02-Feb-24	02-Mar-24	07-Aug-23	06-Sep-23	-179	S3P1950, S3C2100	S3T1140, S3C2140
S3C2140	Installation of Diffusers and pipework for Anammox	30	02-Feb-24	02-Mar-24	07-Aug-23	06-Sep-23	-179	S3P1950, S3C2130	S3T1150
S3C2150	Installation of Pipeworks, Associate Valves and Fittings	45	02-Dec-23	15-Jan-24	23-Jun-23	07-Aug-23	-162	S3C2000, S3C2010, S3C2020, S3C2030, S3C2040, S3C2050, S3C2060, S3C2070, S3C2080, S3P2060, S3P2070, S3P2020, S3P2160	S3T1000, S3T1070
G/F		116	05-Dec-23	29-Mar-24	03-Jun-23	11-Jun-25	439		
S3C2155	Access to Sidestream Treatment Facilities (G/F)	0	05-Dec-23		03-Jun-23		-185	S3C1110	S3C2200, S3C2170, S3C2210, S3C2240, S3C2250, S3C2160, S3C2340, S3T1170, S3C2280, S3C2360
S3C2160	E&M installation of DG Plant Room	45	05-Dec-23	18-Jan-24	01-Dec-23	14-Jan-24	-4	S3C2155, S3S1100	S3S1110
S3C2170	Installation of EOT crane (LA-01)	45	16-Dec-23	29-Jan-24	24-Jul-23	07-Sep-23	-145	S3P1740, S3C2155	S3C2180, S3C2190, S3C2260
S3C2180	Installation of EOT crane (LA-02)	45	30-Jan-24	14-Mar-24	28-Apr-25	11-Jun-25	454	S3C2170, S3P1740	
S3C2190	Installation of Monorail (LA-03)	30	16-Dec-23	14-Jan-24	24-Jul-23	23-Aug-23	-145	S3P1740, S3C2170	S3C2120
S3C2200	Installation of NaOH Dosing Pumps, Micro-Nutrient Dosing Pumps, Defoamer Dosing Pumps and PAM Dosing Pumps (12 nos.)	14	04-Jan-24	17-Jan-24	03-Jul-23	17-Jul-23	-185	S3P1860, S3P1870, S3P1880, S3P1820, S3C2155, S3P1750, S3C2240	S3C2250, S3T1030, S3T1020, S3C2210
S3C2210	Installation of PAM Tank, Deformer dissolving Tank, Micro-nutrient tank and NaOH Tank	7	04-Jan-24	10-Jan-24	31-Jul-23	07-Aug-23	-157	S3P1930, S3C2155, S3C2200	S3C2250, S3T1020
S3C2240	Installation of Drum Sludge Thickener	30	05-Dec-23	03-Jan-24	03-Jun-23	03-Jul-23	-185	S3P1480, S3C2080, S3C2155	S3T1040, S3C2200
S3C2250	Installation of Pipeworks, Associate Valves and Fittings	45	05-Dec-23	18-Jan-24	23-Jun-23	07-Aug-23	-165	S3C2280, S3C2200, S3C2210, S3P2060, S3P2070, S3P2020, S3C2155, S3P2160	S3T1000, S3C2430, S3T1070
S3C2260	Installation of Monorail (LA-04)	30	30-Jan-24	28-Feb-24	13-Apr-25	12-May-25	439	S3P1740, S3C2170	S3C2270
S3C2270	Installation of Monorail (LA-05)	30	29-Feb-24	29-Mar-24	13-May-25	11-Jun-25	439	S3P1740, S3C2260	
S3C2280	Installation of Primary Clarifiers No.1 and 2	30	05-Dec-23	03-Jan-24	28-Jun-23	28-Jul-23	-160	S3P1470, S3C2155	S3C2250, S3T1100

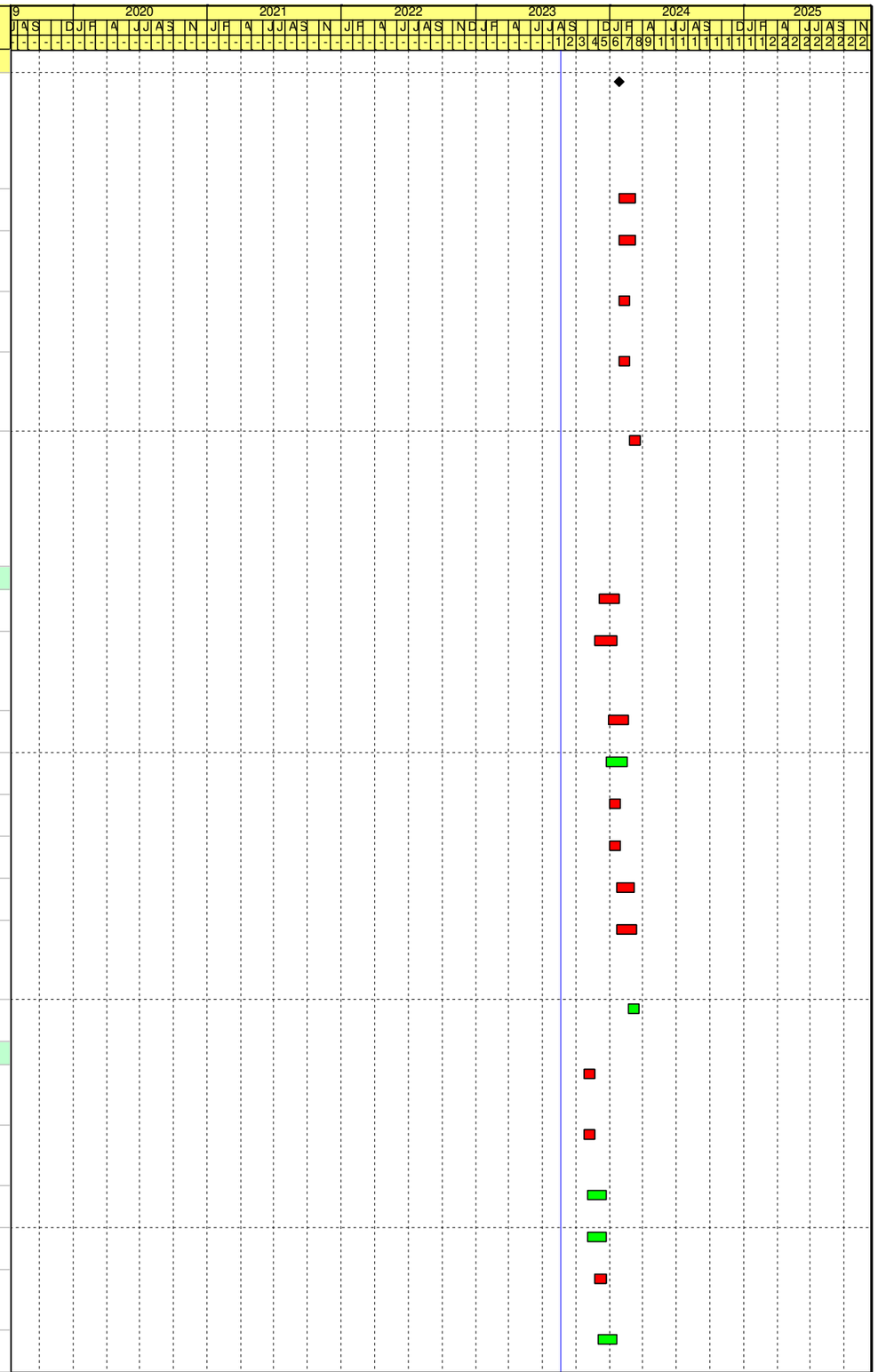


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
1/F		59	27-Jan-24	25-Mar-24	09-Jun-23	06-Sep-23	-202		
S3C2285	Access to Sidestream Treatment Facilities (1/F)	0	27-Jan-24		09-Jun-23		-232	S3C1120	S3C2290, S3C2300, S3C2310, S3C2340, S3C2350, S3T1030
S3C2290	Installation of EOT crane (LA-06)	45	27-Jan-24	11-Mar-24	09-Jun-23	24-Jul-23	-232	S3P1740, S3C2285	S3C2310
S3C2300	Installation of Deodorisation System (DOU) No.4	45	27-Jan-24	11-Mar-24	09-Jun-23	24-Jul-23	-232	S3P1980, S3C2310, S3C2285	S3C2350, S3T1080
S3C2310	Installation of Air Blower System	30	27-Jan-24	25-Feb-24	09-Jun-23	09-Jul-23	-232	S3P1510, S3C2290, S3C2285	S3C2340, S3C2300, S3T1060
S3C2340	Installation of Ancillary Air Blower	30	27-Jan-24	25-Feb-24	07-Aug-23	06-Sep-23	-173	S3P1970, S3C2310, S3C2285, S3C2155	S3T1060
S3C2350	Installation of Pipeworks, Associate Valves and Fittings	30	25-Feb-24	25-Mar-24	08-Jul-23	07-Aug-23	-232	S3C2300, S3P2060, S3P2070, S3P2020, S3C2285, S3P2160, S3P2050	S3T1000, S3T1070
Electrical Installations		120	22-Nov-23	20-Mar-24	23-Jun-23	30-Mar-24	10		
S3C2360	Installation of Transformer room	55	05-Dec-23	28-Jan-24	23-Jun-23	17-Aug-23	-165	S3P2120, S3C2155	S3T1120, S3C2380
S3C2370	Installation of Electrical system - Cable Containment	60	22-Nov-23	20-Jan-24	28-Jun-23	26-Aug-23	-147	S3C2490	S3C2390, S3T1280, S3C2410, S3C2400
S3C2380	Installation of LV Switchroom	55	30-Dec-23	22-Feb-24	13-Jul-23	06-Sep-23	-170	S3P2110, S3C2360	S3C2410, S3T1120
S3C2390	Installation of Electrical system - Wall Mount Equipment, Conduit & Wiring	60	22-Dec-23	19-Feb-24	01-Jan-24	29-Feb-24	10	S3C2370	S3C2440, S3T1280
S3C2400	Installation of SCADA system	31	31-Dec-23	30-Jan-24	28-Jul-23	27-Aug-23	-156	S3C2370, S3P1910	S3T1050
S3C2410	Power Cable laying and Termination	30	31-Dec-23	29-Jan-24	06-Sep-23	06-Oct-23	-116	S3C2380, S3C2370	S3T1160
S3C2420	Installation of Gas Detection System	50	19-Jan-24	08-Mar-24	17-Aug-23	06-Oct-23	-155	S3P2140, S3C2430	S3T1170
S3C2430	Installation of Online Monitoring instrument / Level Control Equipment	56	19-Jan-24	14-Mar-24	17-Aug-23	12-Oct-23	-155	S3P2000, S3P1920, S3P1990, S3C2250	S3C2420
S3C2440	Installation of Electrical system - Lighting and Small Power Accessories	30	20-Feb-24	20-Mar-24	01-Mar-24	30-Mar-24	10	S3C2390	S3T1280
BS Equipment Installation		120	23-Oct-23	19-Feb-24	29-May-23	30-Mar-24	40		
S3C2450	Installation of P&D System - Main Pipework	30	23-Oct-23	21-Nov-23	29-May-23	27-Jun-23	-147	S3C2460, S3S1020, S3C1995	S3C2470, S3C2490, S3T1250
S3C2460	Installation of FS system - Main Pipework	30	23-Oct-23	21-Nov-23	29-May-23	27-Jun-23	-147	S3S1020, S3C1995	S3C2480, S3C2450, S3T1240
S3C2470	Installation of P&D System - Branch Pipework	50	02-Nov-23	21-Dec-23	02-Dec-23	20-Jan-24	30	S3C2450	S3C2510, S3T1250
S3C2480	Installation of FS system - Branch Pipework, Conduit & Wiring	50	02-Nov-23	21-Dec-23	02-Dec-23	20-Jan-24	30	S3C2460	S3C2520, S3T1240
S3C2490	Installation of MVAC system - Ceiling Mount Equipment, Main Ductwork & Pipework	30	22-Nov-23	21-Dec-23	28-Jun-23	27-Jul-23	-147	S3C2450, S3P2130	S3C2500, S3T1260, S3C2370
S3C2500	Installation of MVAC system - Wall Mount Equipment, Branch Duct & pipework	50	02-Dec-23	20-Jan-24	11-Jan-24	29-Feb-24	40	S3C2490, S3P2130	S3C2530, S3T1260

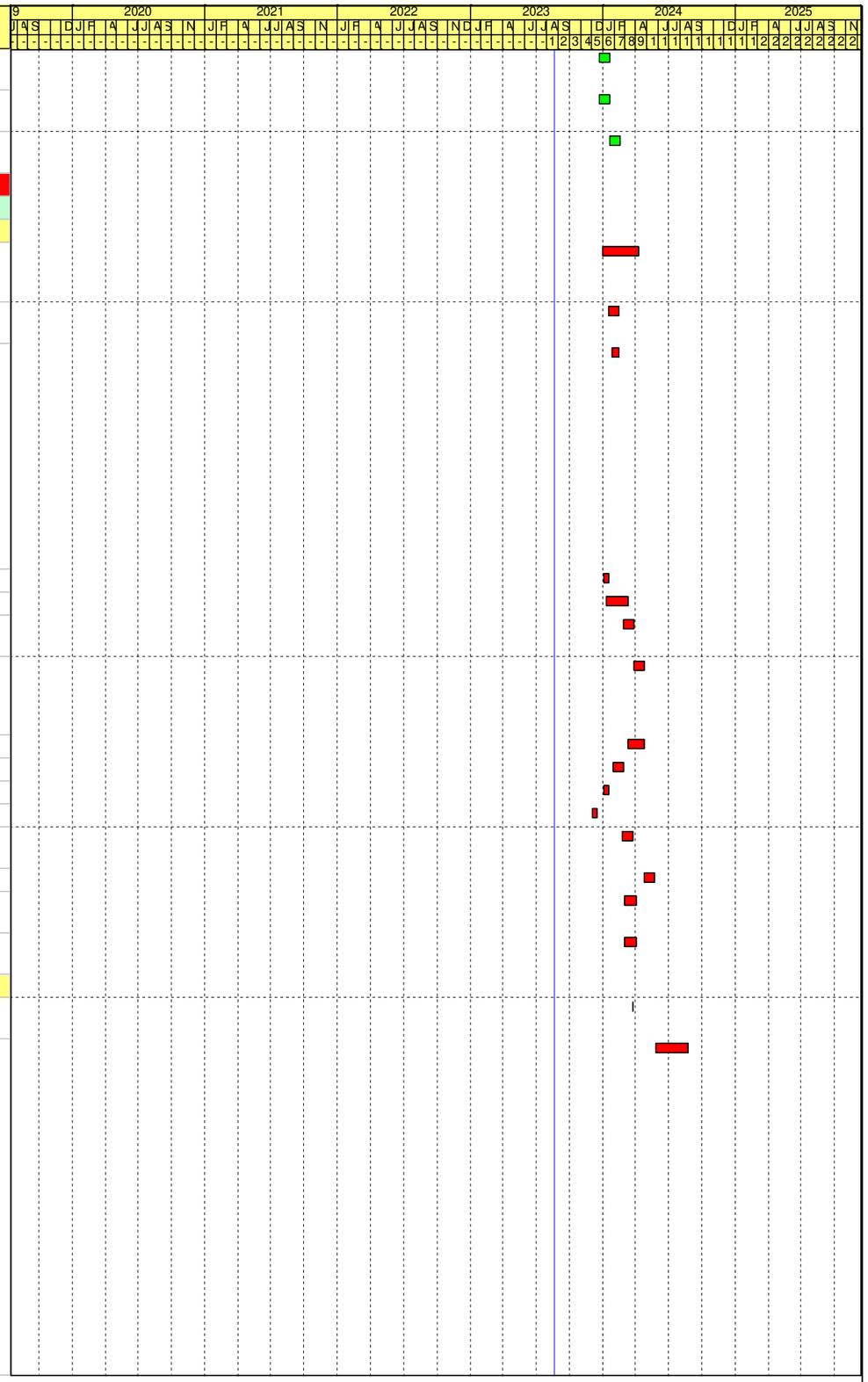


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3C2510	Installation of P&D System - Sanitary Fitting	30	22-Dec-23	20-Jan-24	21-Jan-24	19-Feb-24	30	S3C2470	S3T1250, S3S1030
S3C2520	Installation of FS system - Dropper, Sprinkler Head, Detector & Devices	30	22-Dec-23	20-Jan-24	21-Jan-24	19-Feb-24	30	S3C2480	S3T1240, S3S1030
S3C2530	Installation of MVAC system - Air Grills & Diffuser	30	21-Jan-24	19-Feb-24	01-Mar-24	30-Mar-24	40	S3C2500, S3P2130	S3T1260
Testing & Commissioning		530	04-Dec-23	16-May-25	28-Jun-23	26-Jul-24	-294		
For KD3A - Completion of Phase 1 Commissioning - 15 Jan 2024		339	04-Dec-23	06-Nov-24	28-Jun-23	06-Apr-24	-214		
SAT		173	04-Dec-23	24-May-24	28-Jun-23	06-Oct-23	-232		
S3T1000	Pipe Pressure Test	100	01-Jan-24	09-Apr-24	28-Jun-23	06-Oct-23	-187	S3C2150, S3C2250, S3C2350	S3T1170
S3T1020	SAT for Chemical Dosing system (i.e. NaOH, Micro-Nutrient, Defoamer and PAM)	30	18-Jan-24	16-Feb-24	06-Sep-23	06-Oct-23	-134	S3C2210, S3C2200	S3T1170
S3T1030	Dry Test for Pumps	21	27-Jan-24	16-Feb-24	17-Jul-23	07-Aug-23	-194	S3C2000, S3C2010, S3C2020, S3C2030, S3C2040, S3C2050, S3C2060, S3C2070, S3C2080, S3C2200, S3P2050, S3C2285	S3T1070
S3T1040	SAT for Drum Sludge Thickener	14	04-Jan-24	17-Jan-24	22-Sep-23	06-Oct-23	-104	S3C2240	S3T1170
S3T1050	SAT for SCADA System	60	10-Jan-24	10-Mar-24	07-Aug-23	06-Oct-23	-156	S3C2400	S3T1170
S3T1060	SAT for Air blowers	30	26-Feb-24	26-Mar-24	06-Sep-23	06-Oct-23	-173	S3C2310, S3C2340	S3T1170
S3T1070	Wet Test for Pumps	30	26-Mar-24	24-Apr-24	07-Aug-23	06-Sep-23	-232	S3T1030, S3C2350, S3C2250, S3C2150	S3T1130
S3T1080	SAT for DOU no.4	45	12-Mar-24	25-Apr-24	22-Aug-23	06-Oct-23	-203	S3C2300	S3T1170
S3T1090	SAT for mixer	30	29-Jan-24	27-Feb-24	06-Sep-23	06-Oct-23	-145	S3C2120	S3T1170
S3T1100	SAT for Primary clarifier	14	04-Jan-24	17-Jan-24	22-Sep-23	06-Oct-23	-104	S3C2280	S3T1170
S3T1110	SAT for Secondary clarifier	14	04-Dec-23	17-Dec-23	22-Sep-23	06-Oct-23	-73	S3C2090	S3T1170
S3T1120	SAT for TX & LV Switchboard	30	23-Feb-24	23-Mar-24	06-Sep-23	06-Oct-23	-170	S3C2380, S3C2360	S3T1160
S3T1130	Functional Test for Pumps	30	25-Apr-24	24-May-24	06-Sep-23	06-Oct-23	-232	S3T1070	S3T1170
S3T1140	SAT for Phospaq Reactor	30	03-Mar-24	01-Apr-24	06-Sep-23	06-Oct-23	-179	S3C2130, S3C2100	S3T1170
S3T1150	SAT for Anammox Reactor	30	03-Mar-24	01-Apr-24	06-Sep-23	06-Oct-23	-179	S3C2140, S3C2110	S3T1170
Process Start Up & Phase 1 Commissioning Test		228	24-Mar-24	06-Nov-24	06-Oct-23	06-Apr-24	-214		
S3T1160	Power Energization (Power Provision from DE/2018/04 Contract)	0	24-Mar-24	24-Mar-24	06-Oct-23	06-Oct-23	-170	S3T1120, S3C2410	S3T1270, S3T1170
S3T1170	Process Start Up	92	25-May-24	24-Aug-24	06-Oct-23	06-Jan-24	-232	S3T1190, S3T1180, S3C2420, S3P2140, S3T1160, S3T1130, S3T1100, S3T1110, S3T1060, S3T1040, S3T1090, S3T1020, S3T1080, S3T1150, S3T1140, S3T1000, S3T1050, S3C2155	S3T1200

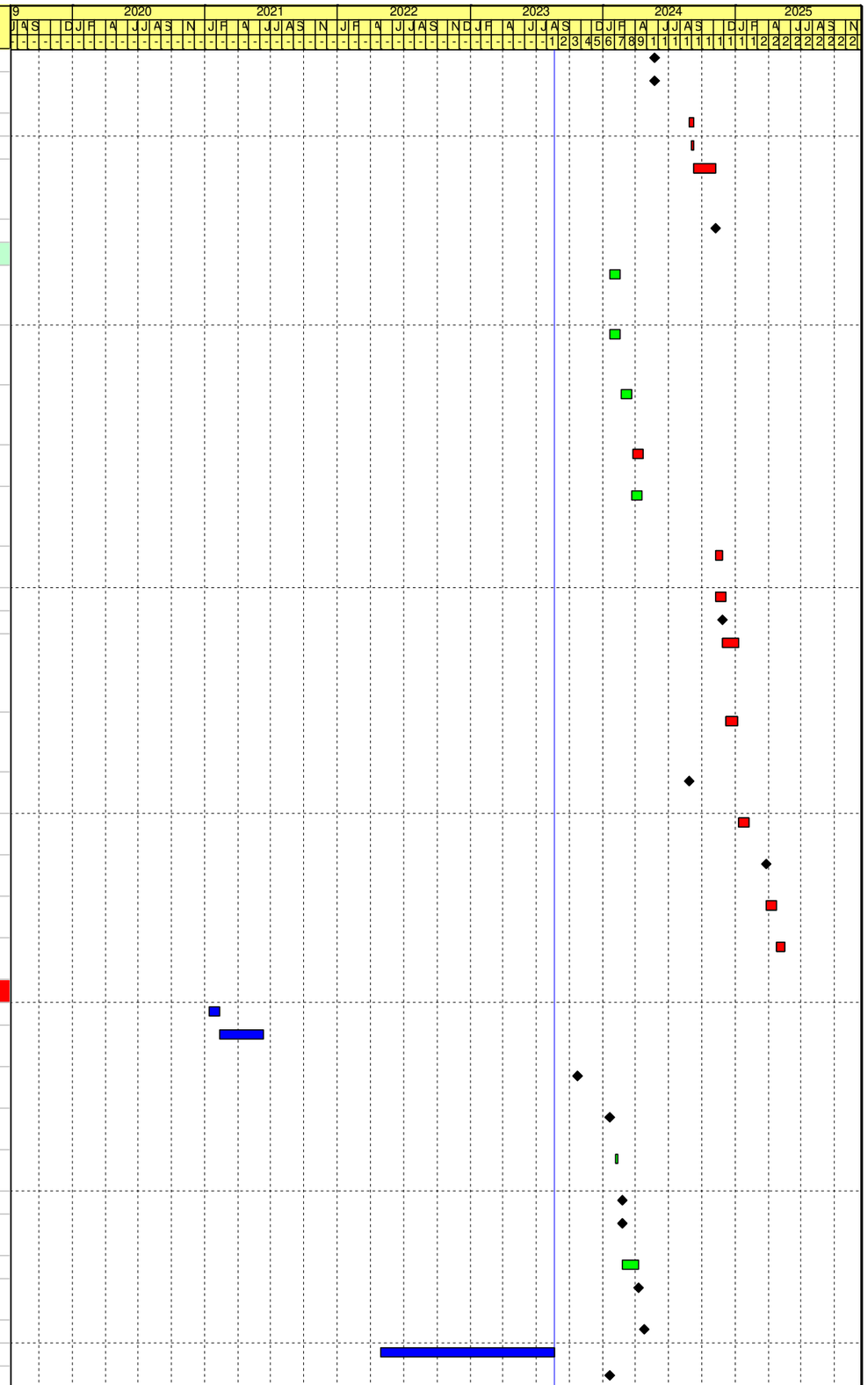


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3T1180	Existing sludge dewatering facilities Ready (by DE/2018/04 Contract)	0		24-May-24		06-Oct-23	-232		S3T1170
S3T1190	Plant service water from zone B/C Ready (Zone B by DE/2018/04 Contract)	0		24-May-24		06-Oct-23	-232		S3T1170
S3T1200	Submission & Acceptance of Process Start Up Report	14	25-Aug-24	07-Sep-24	06-Jan-24	20-Jan-24	-232	S3T1170	S3T1210
S3T1210	Notice for Commencement of Phase 1 Commissioning Tests	7	01-Sep-24	07-Sep-24	13-Jan-24	20-Jan-24	-232	S3T1200	S3T1220
S3T1220	Phase 1 Commissioning Tests with daily result to PM	60	08-Sep-24	06-Nov-24	20-Jan-24	20-Mar-24	-232	S3T1210	S3T1300, S3T1290, S3T1230
S3T1230	Completion of KD3A	0		06-Nov-24		06-Apr-24	-214	S3T1220	KD1050-2
For Section 3 Completion - Remaining Commissioning Works - 05 Jun 2024		482	21-Jan-24	16-May-25	25-Feb-24	26-Jul-24	-294		
S3T1240	SAT for FS system	30	21-Jan-24	19-Feb-24	31-Mar-24	29-Apr-24	70	S3C2520, S3C2460, S3C2480	S3S1170
S3T1250	SAT for P&D system	30	21-Jan-24	19-Feb-24	31-Mar-24	29-Apr-24	70	S3C2450, S3C2470, S3C2510	S3S1170
S3T1260	SAT for MVAC System	30	20-Feb-24	20-Mar-24	31-Mar-24	29-Apr-24	40	S3C2530, S3C2490, S3C2500	S3S1170
S3T1270	Essential T&C for FSD Inspection	30	24-Mar-24	22-Apr-24	25-Feb-24	25-Mar-24	-28	S3T1160, S3P2140	S3S1150
S3T1280	SAT for Electrical System (BS)	30	21-Mar-24	19-Apr-24	31-Mar-24	29-Apr-24	10	S3C2370, S3C2390, S3C2440	S3S1170
S3T1290	Phase 1 Post Commissioning with daily result to PM	19	07-Nov-24	25-Nov-24	20-Mar-24	08-Apr-24	-232	S3T1220	S3T1330, S3T1320
S3T1300	Submission & Acceptance of Phase 1 Commissioning Tests Report	30	07-Nov-24	06-Dec-24	06-Apr-24	05-May-24	-215	S3T1220	S3T1330
S3T1310	THP digested sludge centrate from Zone C Ready	0		25-Nov-24		08-Apr-24	-232		S3T1320
S3T1320	Phase 2 Commissioning Tests with daily result to PM	45	26-Nov-24	09-Jan-25	08-Apr-24	23-May-24	-232	S3T1310, S3T1290, S3T1340	S3T1350, S3T1360, S3T1370, S5T1200
S3T1330	Submission & Acceptance of Phase 1 Post Commissioning Report	30	07-Dec-24	05-Jan-25	06-May-24	04-Jun-24	-215	S3T1290, S3T1340, S3T1300	S3T1350
S3T1340	Ready to Process start up of the first Anaerobic Digester in Zone C	0	25-Aug-24		08-Apr-24		-139	S5T1120	S3T1330, S3T1320
S3T1350	Submission & Acceptance of Phase 2 Commissioning Tests Report	30	10-Jan-25	08-Feb-25	05-Jun-24	04-Jul-24	-219	S3T1320, S3T1330	S3T1380
S3T1360	Commissioning of new Anaerobic Digesters (2 nos.) in Zone C Finished	0		25-Mar-25		04-Jun-24	-294	S3T1320, S5T1180	S3T1370
S3T1370	Phase 3 Commissioning Tests with daily result to PM	30	26-Mar-25	24-Apr-25	05-Jun-24	04-Jul-24	-294	S3T1360, S3T1320	S3T1380
S3T1380	Submission & Acceptance of Phase 3 Commissioning Tests Report	22	25-Apr-25	16-May-25	05-Jul-24	26-Jul-24	-294	S3T1370, S3T1350	SC31110
Statutory Submission / Inspection (FSD)		1373	12-Jan-21 A	24-Oct-24	01-Jan-23	26-Jul-24	-90		
S3S1000	Prepare & Submit GBP for FSD approval	90	12-Jan-21 A	10-Feb-21 A	01-Jan-23	01-Jan-23			S3S1010
S3S1010	FSD Review & Approval of GBP	180	11-Feb-21 A	11-Jun-21 A	01-Jan-23	01-Jan-23		S3S1000	S3S1150, S3C1100
S3S1020	Submit WWO46 Part I/II to WSD (FS / PD)	0	23-Oct-23		29-May-23		-147	S3D1550, S3D1510	S3C2460, S3C2450
S3S1030	Submit WWO46 Part IV to WSD (FS / PD)	0	21-Jan-24		20-Feb-24		30	S3C2510, S3C2520	S3S1040
S3S1040	WSD Inspection	7	04-Feb-24	10-Feb-24	05-Mar-24	11-Mar-24	30	S3S1030	S3S1060, S3S1050
S3S1050	Issuance of FS Water Certificate	0		24-Feb-24		25-Mar-24	30	S3S1040	S3S1150
S3S1060	Issuance of Form WWO46 Part Va	0		24-Feb-24		28-May-24	94	S3S1040	S3S1080, S3S1070
S3S1070	System Flushing / Sampling	45	25-Feb-24	09-Apr-24	29-May-24	12-Jul-24	94	S3S1060	S3S1080
S3S1080	Issuance of Form WWO46 Part Vb	0		09-Apr-24		12-Jul-24	94	S3S1060, S3S1070	S3S1090
S3S1090	Issuance of Water Certificate	0		23-Apr-24		26-Jul-24	94	S3S1080	SC31110
S3S1100	Submission & Approval of DG Application to FSD	180	29-Apr-22 A	21-Aug-23	30-Nov-23	30-Nov-23	101		S3C2160
S3S1110	Submit Application to FSD for DG Licence	0	19-Jan-24		15-Jan-24		-4	S3C2160	S3S1120

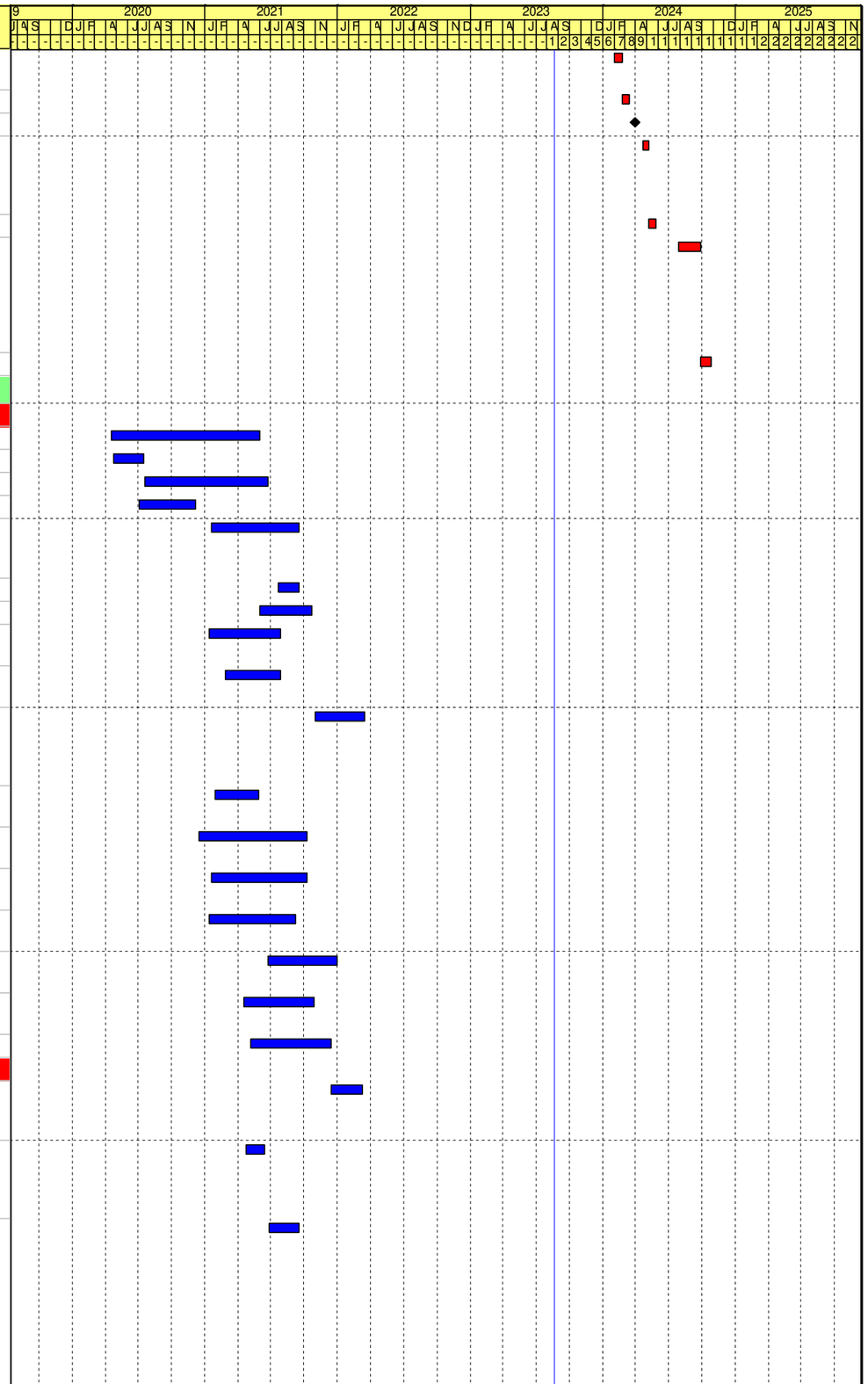


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S3S1120	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	03-Feb-24	23-Feb-24	30-Jan-24	19-Feb-24	-4	S3S1110	S3S1130
S3S1130	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	24-Feb-24	15-Mar-24	20-Feb-24	11-Mar-24	-4	S3S1120	S3S1140
S3S1140	DG Licence issued	0		29-Mar-24		25-Mar-24	-4	S3S1130	S3S1150
S3S1150	Prepare & Submit FS/314, FS/501 & FS/501a	14	23-Apr-24	06-May-24	26-Mar-24	08-Apr-24	-28	S3S1010, S3S1140, S3S1050, S3T1270	S3S1160
S3S1160	FSD Review & Approval of FS/314, FS/501 & FS/501a	21	07-May-24	27-May-24	09-Apr-24	29-Apr-24	-28	S3S1150	S3S1170
S3S1170	F.S. Inspection, Defects Rectification & Re-inspection	60	29-Jul-24	26-Sep-24	30-Apr-24	28-Jun-24	-90	S3S1160, S3C1150, S3T1240, S3T1250, S3T1260, S3T1280	S3S1180
S3S1180	Issuance of Acceptance Letter	28	27-Sep-24	24-Oct-24	29-Jun-24	26-Jul-24	-90	S3S1170	SC31110
Section 4 - Complete Construction & T&C for UV System No.1 & EP		932	18-Apr-20 A	14-Sep-22 A	08-Dec-22	11-Jun-25			
Major Plant & Materials Fabrication & Delivery		725	18-Apr-20 A	16-Mar-22 A	08-May-23	11-Jun-25			
S4P1000	Procurement & PO for FRP Cover	409	18-Apr-20 A	31-May-21 A	08-May-23	08-May-23		PL1010	S4P1090
S4P1010	Procurement & PO for Pipeworks & Associated Valves	90	25-Apr-20 A	15-Jul-20 A	08-May-23	08-May-23		S1D1000	S4P1130
S4P1020	Procurement & PO for Elec. Materials	365	18-Jul-20 A	22-Jun-21 A	11-Jun-25	11-Jun-25		S1D1130	S4P1140
S4P1030	Procurement & PO for FS System	60	02-Jul-20 A	04-Dec-20 A	11-Jun-25	11-Jun-25		S1D1330	S4P1150
S4P1040	Fabrication of UV Disinfection System	239	18-Jan-21 A	17-Sep-21 A	08-May-23	08-May-23		S1P1000, KD1000, S1D1210	S4C1080, S4P1050
S4P1050	FAT for UV Disinfection System	71	23-Jul-21 A	17-Sep-21 A	08-May-23	08-May-23		S4P1040	S4P1060
S4P1060	Delivery of UV Disinfection System	149	01-Jun-21 A	22-Oct-21 A	08-May-23	08-May-23		S4P1050	S4C1080
S4P1070	Fabrication & Delivery of Lift-up Pumps	225	11-Jan-21 A	26-Jul-21 A	08-May-23	08-May-23		S1P1010, S1D1290	S4C1040
S4P1080	Fabrication & Delivery of Transfer Pumps	218	26-Feb-21 A	26-Jul-21 A	08-May-23	08-May-23		S1P1020, S1D1290	S5UVPC1000
S4P1090	Fabrication & Delivery of FRP Cover	89	01-Nov-21 A	16-Mar-22 A	08-May-23	08-May-23		S1D1290, S4P1000, S1P1020, PL1010	S4T1010
S4P1100	Fabrication & Delivery of EOT Cranes (2T & 5T)	170	28-Jan-21 A	27-May-21 A	08-May-23	08-May-23		S1P1030, S1D1290	S4C1020
S4P1110	Fabrication & Delivery of Stoplogs	289	16-Dec-20 A	07-Oct-21 A	08-May-23	08-May-23		S1P1040, S1D1290	S4C1070
S4P1120	Fabrication & Delivery of Penstocks	256	18-Jan-21 A	07-Oct-21 A	08-May-23	08-May-23		S1P1050, S1D1290	S4C1070
S4P1130	Fabrication & Delivery of Pipeworks & Associated Valves	200	11-Jan-21 A	08-Sep-21 A	08-May-23	08-May-23		S4P1010, S1D1290	S4C1040
S4P1140	Fabrication & Delivery of Elec. Materials	190	24-Jun-21 A	31-Dec-21 A	11-Jun-25	11-Jun-25		S4P1020, S1D1330	S4C1120
S4P1150	Fabrication & Delivery of FS System	187	18-Apr-21 A	28-Oct-21 A	11-Jun-25	11-Jun-25		S4P1030, S1D1330	S4C1100
S4P1160	Fabrication & Delivery of Temp. Switchboard	194	05-May-21 A	15-Dec-21 A	08-May-23	08-May-23			S4C1000
E&M Installation		449	25-Apr-21 A	23-Jun-22 A	08-Dec-22	11-Jun-25			
S4C1000	Provision of Temporary Power for UV System No.1 & Effluent Transfer Pumping Station	45	15-Dec-21 A	11-Mar-22 A	08-May-23	08-May-23		S4C1010, S1D1130, S4P1160	S4T1010, S4C1140
S4C1010	Mobilisation (Partial Access on 24 Apr 2021, Remaining Access on 12 May 2021)	30	25-Apr-21 A	12-Jun-21 A	08-Dec-22	08-Dec-22		AD1010, S1D1130, AD1020	S4C1020, S5TXRC1030, S4C1090, S4C1000
S4C1020	E&M Installation of EOT Cranes (2T)	46	25-Jun-21 A	17-Sep-21 A	08-May-23	08-May-23		S1D1180, S1D1260, S4C1010, S4P1100	S4T1010, S4C1030, S4C1040, S4C1110, S4C1090, S4T1000, S4C1080, S4C1070, PL1200

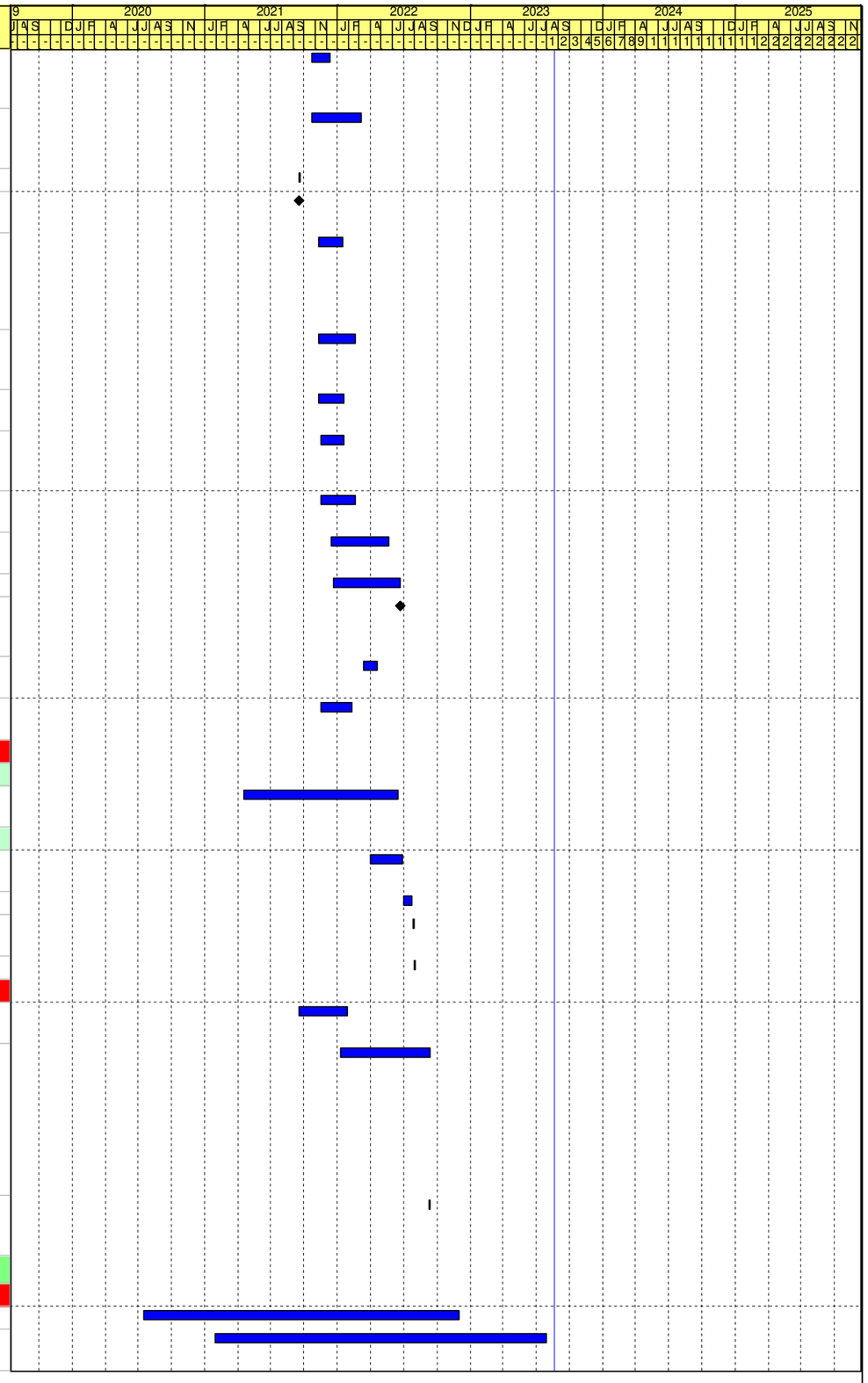


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S4C1030	E&M Installation of EOT Cranes (5T)	60	20-Oct-21 A	11-Dec-21 A	08-May-23	08-May-23		S4C1020	S5UVPC1000, S4T1000, PL1200
S4C1040	E&M Installation of Transfer Pumps & Associated Pipeworks / Valves	103	21-Oct-21 A	05-Mar-22 A	08-May-23	08-May-23		S4C1020, S4P1070, S4P1130	S5TXRC1050, S4T1010, PL1200
S4C1050	Preperation Works for E&M Installation of Penstocks & Stoplogs	3	17-Sep-21 A	19-Sep-21 A	08-May-23	08-May-23			S4C1070
S4C1060	CNE-014 Access to and use to Portion C-1A for Installation of EOT, UV Equipment and Effluent Transfer Pump	0	16-Sep-21 A		08-May-23				S4C1070
S4C1070	E&M Installation of Penstocks & Stoplogs (Impacted by CNE-014)	66	11-Nov-21 A	15-Jan-22 A	08-May-23	08-May-23		S4P1110, S4P1120, S4C1020, S4C1050, S4C1060	S4T1010, S5TXRC1050, PL1200
S4C1080	E&M Installation of UV System	44	11-Nov-21 A	19-Feb-22 A	08-May-23	08-May-23		S4P1040, S4P1060, S4C1020	S4T1010, S5TXRC1050, PL1200
S4C1090	FS Installation - Conduits, Trunking, & Pipeworks	74	08-Nov-21 A	18-Jan-22 A	11-Jun-25	11-Jun-25		S4C1010, S4C1020	S4C1100, PL1200
S4C1100	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	67	15-Nov-21 A	18-Jan-22 A	11-Jun-25	11-Jun-25		S4P1150, S4C1090	SC41110, S4S1010, PL1200
S4C1110	BS Fitting Installation - Conduits, Trunking, & Ductworks	111	15-Nov-21 A	19-Feb-22 A	11-Jun-25	11-Jun-25		S4C1020, S1D1310	S4C1120, PL1200
S4C1120	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	139	13-Dec-21 A	21-May-22 A	11-Jun-25	11-Jun-25		S4C1110, S4P1140	S4C1150, PL1200
S4C1130	Excavation Works & Cable Laying - by CLP (Impacted by CNE-035)	184	22-Dec-21 A	23-Jun-22 A	08-May-23	08-May-23			S4C1140
S4C1140	Ready for Power Energization	0		23-Jun-22 A		08-May-23		S4C1000, S4C1130, S4S1000	S4S1030, S4T1010
S4C1150	Installation of CCTV System	37	14-Mar-22 A	19-Apr-22 A	11-Jun-25	11-Jun-25		S4C1120	SC41110, PL1200
S4C1160	Installation of FS Link	84	17-Nov-21 A	08-Feb-22 A	11-Jun-25	11-Jun-25			S4S1010, PL1200
Statutory Submission / Inspection		511	17-Apr-21 A	02-Aug-22 A	08-May-23	11-Jun-25			
CLP Submission		425	17-Apr-21 A	15-Jun-22 A	08-May-23	08-May-23			
S4S1000	Submission & Approval of Electrical Schematic Wiring Diagram to CLP (Temp. Power)	425	17-Apr-21 A	15-Jun-22 A	08-May-23	08-May-23			S4C1140
FSD Submission & Inspection		176	01-Apr-22 A	02-Aug-22 A	11-Jun-25	11-Jun-25			
S4S1010	Prepare & Submit FS/314, FS/501 & FS/501a	91	01-Apr-22 A	30-Jun-22 A	11-Jun-25	11-Jun-25		S4C1100, S4C1160	S4S1020
S4S1020	FSD Review & Approval of FS/314, FS/501 & FS/501a	25	01-Jul-22 A	25-Jul-22 A	11-Jun-25	11-Jun-25		S4S1010	S4S1030
S4S1030	F.S. Inspection, Defects Rectification & Re-inspection	4	26-Jul-22 A	29-Jul-22 A	11-Jun-25	11-Jun-25		S4S1020, S4C1140	S4S1040
S4S1040	Issuance of Acceptance Letter	14	30-Jul-22 A	02-Aug-22 A	11-Jun-25	11-Jun-25		S4S1030	SC41110
Testing & Commissioning		329	18-Sep-21 A	14-Sep-22 A	08-May-23	08-May-23			
S4T1000	T&C and R.P.E inspection for EOT Cranes	133	18-Sep-21 A	28-Jan-22 A	08-May-23	08-May-23		S4C1020, S4C1030	S4T1010
S4T1010	SAT for UV System No. 1 & Effluent Transfer Pumping Station No. 1 (Impacted by CNE-035)	217	10-Jan-22 A	14-Sep-22 A	08-May-23	08-May-23		S4C1020, S4C1070, S4C1080, S4C1000, S4T1000, S4C1040, S4P1090, S4C1140	S4T1020
S4T1020	System Commissioning Tests	3	11-Sep-22 A	14-Sep-22 A	08-May-23	08-May-23		S4T1010	SC41110, PL1290, S5UVPC1000
Section 5 - Complete all remaining Works (incl. T&C)		1825	18-May-20 A	16-May-25	11-Oct-22	11-Jun-25	26		
Fabrication, FAT & Delivery of Major Plant & Materials		1330	18-May-20 A	07-Jan-24	13-Oct-22	11-Jun-25	521		
S5P1000	Procurement & PO for Biogas Booster and Transfer Pumps	735	17-Jul-20 A	30-Nov-22 A	06-Jun-23	06-Jun-23		S2P1000	S5BIOP1000
S5P1010	Procurement & PO for Pipeworks & Associated Valves	883	29-Jan-21 A	30-Jul-23 A	13-Oct-22	13-Oct-22		S2D1070	S5CHPP1070, S5DIGP1020

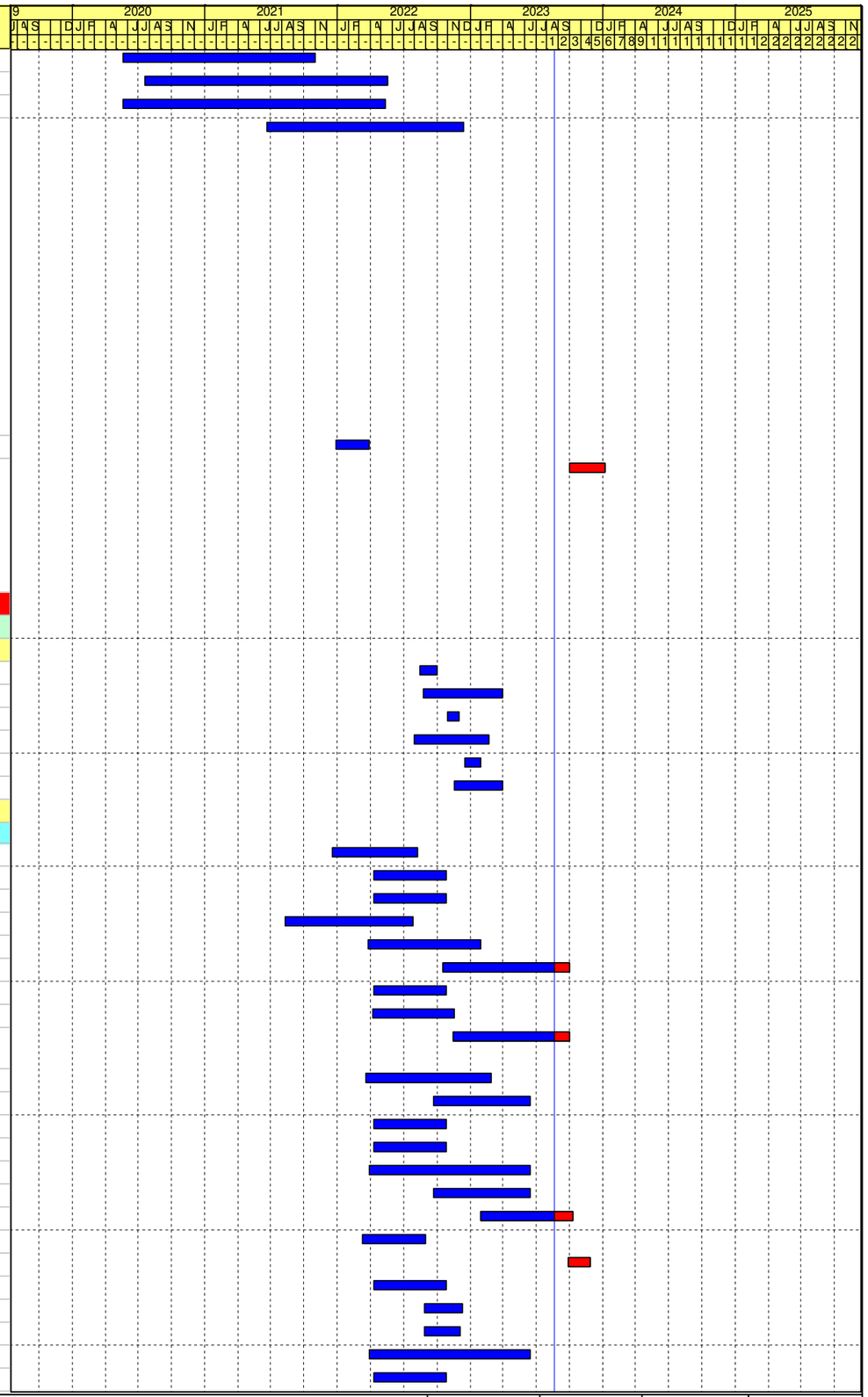


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5P1020	Procurement & PO for Lifting Appliances	530	18-May-20 A	29-Oct-21 A	11-Jun-25	11-Jun-25		S2P1020	
S5P1030	Procurement & PO for Ferric Chloride Storage Tank	668	20-Jul-20 A	18-May-22 A	20-Dec-22	20-Dec-22		S2P1000	S5FCDP1000
S5P1040	Procurement & PO for Ferric Chloride Dosing Pump	726	18-May-20 A	13-May-22 A	01-Apr-23	01-Apr-23		S2P1020	S5FCDP1010
S5P1050	Procurement & PO for Electrical Sub-contractor	396	21-Jun-21 A	14-Dec-22 A	17-Nov-22	17-Nov-22		PL1010, S2P1130, S2D1370, S2D1570, S2D1270, S2D1310, S2D1430, S2D1470, S2D1510, S2D1630, S2D1670	S5SDBC1170, S5SDBC1310, S5SDBC1540, S5CHPC1100, S5CHPC1230, S5CHPC1290, S5TXRC1030, S5TXRC1040, S5DIGC1120, S5DIGC1160, S5DIGC1200, S5DIGC1260, S5EXAC1030, S5EXAC1080, S5EXAC1100, S5EXAC1110, S5EXAC1070
S5P1070	Procurement & PO for mechanical ventilation system	90	28-Dec-21 A	28-Mar-22 A	11-Jun-25	11-Jun-25			
S5P1080	Fabrication and Delivery of Ventilation Fan	100	30-Sep-23*	07-Jan-24	05-Jan-23	15-Apr-23	-268		S5SDBC1620, S5SDBC1720, S5SDBC1820, S5CHPC1090, S5CHPC1220, S5DIGC1290, S5WS2C1150
Sludge Dewatering Building		1388	11-Aug-21 A	18-May-24	24-Oct-22	11-Jun-25	389		
Procurement, Fabrication, FAT & Delivery of Major Plant & Materials		1266	11-Aug-21 A	31-Dec-23	24-Oct-22	22-Jan-24	22		
Procurement		949	31-Jul-22 A	31-Mar-23 A	24-Oct-22	08-Apr-23			
S5SDBP1000	Procurement & PO for DI pipework (B/F)	45	17-Aug-22 A	30-Sep-22 A	14-Dec-22	14-Dec-22			S5SDBP1630
S5SDBP1010	Procurement & PO for DI pipework (G/F and 1/F)	160	24-Aug-22 A	31-Mar-23 A	24-Oct-22	24-Oct-22			S5SDBP1640
S5SDBP1020	Procurement & PO for FRP ductworks	45	31-Oct-22 A	30-Nov-22 A	08-Apr-23	08-Apr-23			S5SDBP1650
S5SDBP1030	Procurement & PO for Genset	174	31-Jul-22 A	22-Feb-23 A	18-Nov-22	18-Nov-22			S5SDBP1670
S5SDBP1040	Procurement & PO for Process Water Pumps	45	17-Dec-22 A	30-Jan-23 A	16-Jan-23	16-Jan-23			S5SDBP1210
S5SDBP1050	Procurement & PO for Sludge Skip (PS Screen & Dewatering Screen)	75	18-Nov-22 A	31-Mar-23 A	21-Mar-23	21-Mar-23			S5SDBP1230
Mechanical		789	11-Aug-21 A	27-Dec-23	24-Oct-22	22-Jan-24	26		
Fabrication and FAT		789	11-Aug-21 A	27-Nov-23	17-Nov-22	22-Jan-24	56		
S5SDBP1060	Fabrication & Delivery of Lift	210	18-Dec-21 A	10-Aug-22 A	22-Jan-24	22-Jan-24			S5SDBC1780
S5SDBP1070	Fabrication & FAT of External Sludge Transfer Pump	201	11-Apr-22 A	28-Oct-22 A	15-Dec-22	15-Dec-22			S5SDBP1400
S5SDBP1080	Fabrication & FAT of PS Screen Feed Pump	201	11-Apr-22 A	28-Oct-22 A	28-Mar-23	28-Mar-23			S5SDBP1490
S5SDBP1090	Fabrication & FAT of Sludge Screen	350	11-Aug-21 A	26-Jul-22 A	16-Apr-23	16-Apr-23			S5SDBP1520
S5SDBP1100	Fabrication and FAT of Centrate Transfer Pumps	313	25-Mar-22 A	31-Jan-23 A	24-Mar-23	24-Mar-23			S5SDBP1360
S5SDBP1110	Fabrication and FAT of Conveyor	349	17-Oct-22 A	30-Sep-23	07-Feb-23	20-Mar-23	-195		S5SDBP1370
S5SDBP1120	Fabrication and FAT of Dewatering Centrifuge Feed Pumps	201	11-Apr-22 A	28-Oct-22 A	15-Dec-22	15-Dec-22			S5SDBP1380
S5SDBP1130	Fabrication and FAT of Dewatering Polymer Powder Unit	226	06-Apr-22 A	17-Nov-22 A	17-Nov-22	17-Nov-22		S5SDBP1290	S5SDBP1390
S5SDBP1140	Fabrication and FAT of FRP Tank (Thickening & Dewatering Polymer Dosing System)	321	14-Nov-22 A	30-Sep-23	29-Nov-22	09-Jan-23	-265		S5SDBP1410
S5SDBP1150	Fabrication and FAT of Hoist	197	21-Mar-22 A	28-Feb-23 A	24-Mar-23	24-Mar-23			S5SDBP1420
S5SDBP1160	Fabrication and FAT of Mixers (Digested Sludge Holding Tank)	266	22-Sep-22 A	14-Jun-23 A	23-Mar-23	23-Mar-23			S5SDBP1430
S5SDBP1170	Fabrication and FAT of Polymer Dosing Pumps	201	11-Apr-22 A	28-Oct-22 A	19-May-23	19-May-23			S5SDBP1440
S5SDBP1180	Fabrication and FAT of Polymer Transfer Pumps	201	11-Apr-22 A	28-Oct-22 A	15-Dec-22	15-Dec-22			S5SDBP1450
S5SDBP1190	Fabrication and FAT of Preparation Tank Mixers	310	28-Mar-22 A	14-Jun-23 A	03-Mar-23	03-Mar-23			S5SDBP1460
S5SDBP1200	Fabrication and FAT of Primary Sludge Holding Tank Mixer	266	22-Sep-22 A	14-Jun-23 A	23-Mar-23	23-Mar-23			S5SDBP1470
S5SDBP1210	Fabrication and FAT of Process Water Pumps	253	31-Jan-23 A	10-Oct-23	16-Jan-23	08-Mar-23	-217	S5SDBP1040	S5SDBP1480
S5SDBP1220	Fabrication and FAT of Recirculation Pumps	175	10-Mar-22 A	31-Aug-22 A	15-Dec-22	15-Dec-22			S5SDBP1500
S5SDBP1230	Fabrication and FAT of Sludge Skip (PS Screen & Dewatering Screen)	60	29-Sep-23*	27-Nov-23	21-Mar-23	20-May-23	-192	S5SDBP1050	S5SDBP1530
S5SDBP1240	Fabrication and FAT of Sludge Transfer Pumps (THP By Pass)	201	11-Apr-22 A	28-Oct-22 A	15-Dec-22	15-Dec-22			S5SDBP1550
S5SDBP1250	Fabrication and FAT of Steel Work (EOT)	60	29-Aug-22 A	09-Dec-22 A	24-Mar-23	24-Mar-23			S5SDBP1560
S5SDBP1260	Fabrication and FAT of Steel Work (Monorails)	60	29-Aug-22 A	03-Dec-22 A	28-Mar-23	28-Mar-23			S5SDBP1570
S5SDBP1270	Fabrication and FAT of Storage Tank Mixers	444	28-Mar-22 A	14-Jun-23 A	03-Mar-23	03-Mar-23			S5SDBP1580
S5SDBP1280	Fabrication and FAT of Thickening Centrifuge Feed Pump	201	11-Apr-22 A	28-Oct-22 A	15-Dec-22	15-Dec-22			S5SDBP1590



JEC

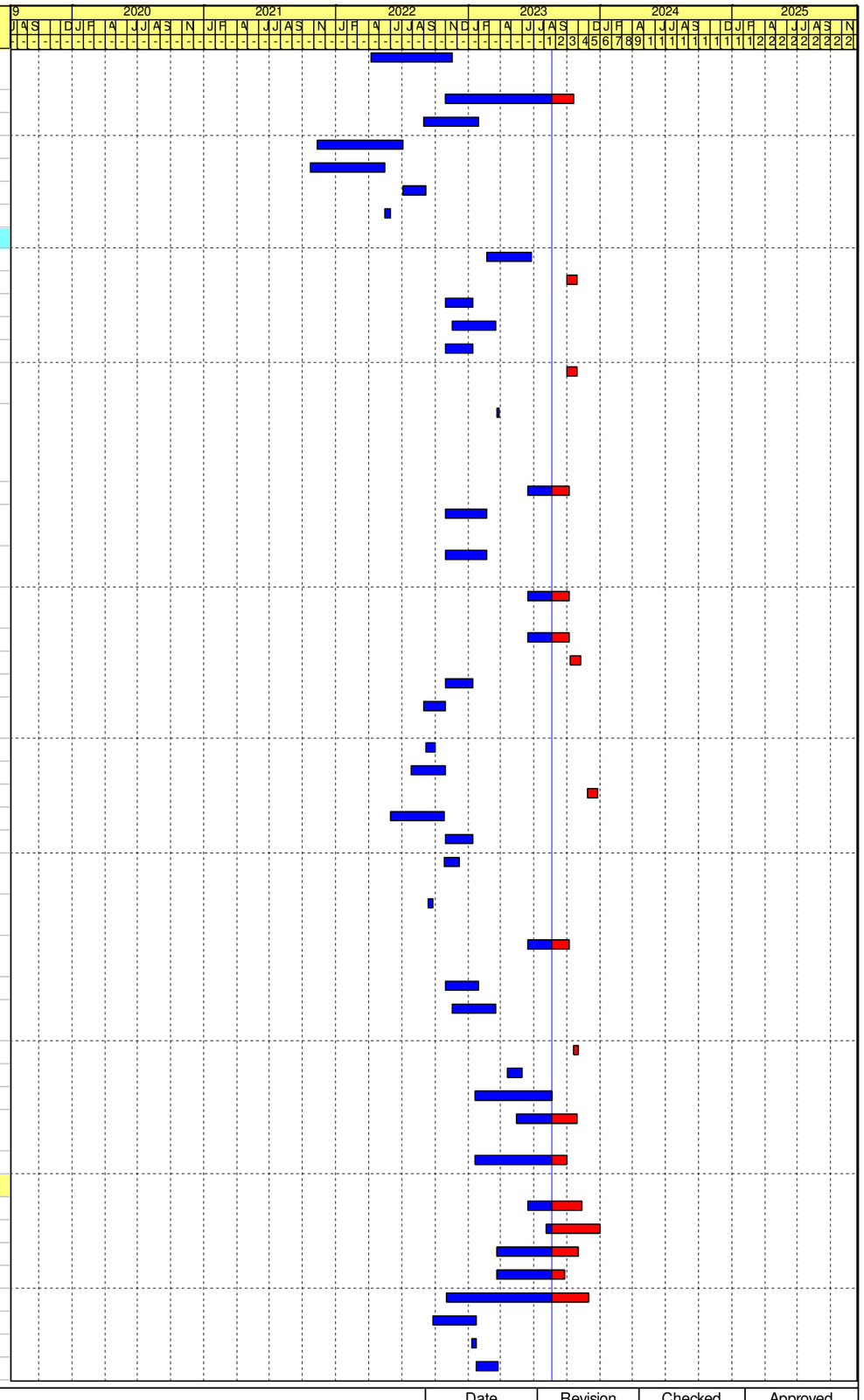
File Name: DE/2018/03 RP R37
Layout: DE1803 RP (August 2023) - WBS

Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SDBP1290	Fabrication and FAT of Thickening Polymer Powder Unit	226	06-Apr-22 A	17-Nov-22 A	17-Nov-22	17-Nov-22			S5SDBP1600, S5SDBP1130
S5SDBP1300	Fabrication and FAT of Thickening Sludge Silo	354	01-Nov-22 A	20-Oct-23	15-Mar-23	15-May-23	-159		S5SDBP1610
S5SDBP1310	Fabrication and FAT of THP Feed Pump	100	31-Aug-22 A	31-Jan-23 A	28-Mar-23	28-Mar-23			S5SDBP1620
S5SDBP1320	Fabrication of Sludge Dewatering Centrifuges	238	10-Nov-21 A	05-Jul-22 A	14-May-23	14-May-23			S5SDBP1340
S5SDBP1330	Fabrication of Sludge Thickening Centrifuges	206	22-Oct-21 A	15-May-22 A	24-Mar-23	24-Mar-23			S5SDBP1350
S5SDBP1340	FAT of Sludge Dewatering Centrifuges	62	06-Jul-22 A	05-Sep-22 A	14-May-23	14-May-23		S5SDBP1320	S5SDBP1510
S5SDBP1350	FAT of Sludge Thickening Centrifuges	16	16-May-22 A	31-May-22 A	24-Mar-23	24-Mar-23		S5SDBP1330	S5SDBP1540
Delivery		463	01-Jun-22 A	27-Dec-23	24-Oct-22	19-Jun-23	-192		
S5SDBP1360	Delivery of Centrate Transfer Pumps	135	21-Feb-23 A	26-Jun-23 A	24-Mar-23	24-Mar-23		S5SDBP1100	S5SDBC1030
S5SDBP1370	Delivery of Conveyor	30	01-Oct-23	30-Oct-23	20-Mar-23	19-Apr-23	-195	S5SDBP1110	S5SDBC1260
S5SDBP1380	Delivery of Dewatering Centrifuges Feed Pumps	78	29-Oct-22 A	14-Jan-23 A	15-Dec-22	15-Dec-22		S5SDBP1120	S5SDBC1040
S5SDBP1390	Delivery of Dewatering Polymer Powder Unit	30	18-Nov-22 A	20-Mar-23 A	17-Nov-22	17-Nov-22		S5SDBP1130	S5SDBC1050
S5SDBP1400	Delivery of External Sludge Transfer Pump	78	29-Oct-22 A	14-Jan-23 A	15-Dec-22	15-Dec-22		S5SDBP1070	S5SDBC1070
S5SDBP1410	Delivery of FRP Tank (Thickening & Dewatering Polymer Dosing System)	30	01-Oct-23	30-Oct-23	09-Jan-23	08-Feb-23	-265	S5SDBP1140	S5SDBC1480, S5SDBC1060
S5SDBP1420	Delivery of Hoist	8	21-Mar-23 A	28-Mar-23 A	24-Mar-23	24-Mar-23		S5SDBP1150	S5SDBC1230, S5SDBC1450, S5SDBC1400, S5SDBC1390
S5SDBP1430	Delivery of Mixers (Digested Sludge Holding Tank)	114	15-Jun-23 A	06-Oct-23	23-Mar-23	09-May-23	-151	S5SDBP1160	S5SDBC1420
S5SDBP1440	Delivery of Polymer Dosing Pumps	78	29-Oct-22 A	20-Feb-23 A	19-May-23	19-May-23		S5SDBP1170	S5SDBC1500, S5SDBC1520
S5SDBP1450	Delivery of Polymer Transfer Pumps	138	29-Oct-22 A	20-Feb-23 A	15-Dec-22	15-Dec-22		S5SDBP1180	S5SDBC1130, S5SDBC1280
S5SDBP1460	Delivery of Preparation Tank Mixers	114	15-Jun-23 A	06-Oct-23	03-Mar-23	19-Apr-23	-171	S5SDBP1190	S5SDBC1430, S5SDBC1090
S5SDBP1470	Delivery of Primay Sludge Holding Tank Mixer	114	15-Jun-23 A	06-Oct-23	23-Mar-23	09-May-23	-151	S5SDBP1200	S5SDBC1440
S5SDBP1480	Delivery of Process Water Pumps	30	11-Oct-23	09-Nov-23	08-Mar-23	07-Apr-23	-217	S5SDBP1210	S5SDBC1110
S5SDBP1490	Delivery of PS Screen Feed Pump	78	29-Oct-22 A	14-Jan-23 A	28-Mar-23	28-Mar-23		S5SDBP1080	S5SDBC1250
S5SDBP1500	Delivery of Recirculation Pumps	60	01-Sep-22 A	31-Oct-22 A	15-Dec-22	15-Dec-22		S5SDBP1220	S5SDBC1120, S5SDBC1150
S5SDBP1510	Delivery of Sludge Dewatering Centrifuges	24	07-Sep-22 A	30-Sep-22 A	14-May-23	14-May-23		S5SDBP1340	S5SDBC1490
S5SDBP1520	Delivery of Sludge Screen Press	76	27-Jul-22 A	31-Oct-22 A	16-Apr-23	16-Apr-23		S5SDBP1090	S5SDBC1470
S5SDBP1530	Delivery of Sludge Skip (PS Screen & Dewatering Screen)	30	28-Nov-23	27-Dec-23	20-May-23	19-Jun-23	-192	S5SDBP1230	S5SDBC1300
S5SDBP1540	Delivery of Sludge Thickening Centrifuges	143	01-Jun-22 A	28-Oct-22 A	24-Mar-23	24-Mar-23		S5SDBP1350	S5SDBC1510
S5SDBP1550	Delivery of Sludge Transfer Pumps (THP By Pass)	78	29-Oct-22 A	14-Jan-23 A	15-Dec-22	15-Dec-22		S5SDBP1240	S5SDBC1150
S5SDBP1560	Delivery of Steel Work (EOT)	40	28-Oct-22 A	06-Dec-22 A	24-Mar-23	24-Mar-23		S5SDBP1250	S5SDBC1400, S5SDBC1390
S5SDBP1570	Delivery of Steel Work (Monorails)	14	12-Sep-22 A	25-Sep-22 A	28-Mar-23	28-Mar-23		S5SDBP1260	S5SDBC1230, S5SDBC1450
S5SDBP1580	Delivery of Storage Tank Mixers	114	15-Jun-23 A	06-Oct-23	03-Mar-23	19-Apr-23	-171	S5SDBP1270	S5SDBC1430, S5SDBC1090
S5SDBP1590	Delivery of Thickening Centrifuges Feed Pump	95	29-Oct-22 A	31-Jan-23 A	15-Dec-22	15-Dec-22		S5SDBP1280	S5SDBC1140
S5SDBP1600	Delivery of Thickening Polymer Powder Unit	75	18-Nov-22 A	20-Mar-23 A	17-Nov-22	17-Nov-22		S5SDBP1290	S5SDBC1270, S5SDBC1050
S5SDBP1610	Delivery of Thickening Sludge Silo	14	21-Oct-23	03-Nov-23	15-May-23	29-May-23	-159	S5SDBP1300	S5SDBC1260
S5SDBP1620	Delivery of THP Feed Pump	32	21-Apr-23 A	30-May-23 A	28-Mar-23	28-Mar-23		S5SDBP1310	S5SDBC1290
S5SDBP1630	Fabrication and delivery of DI pipework (B/F)	227	21-Jan-23 A	21-Aug-23	14-Dec-22	15-Dec-22	-250	S5SDBP1000	S5SDBC1100
S5SDBP1640	Fabrication and delivery of DI pipework (G/F and 1/F)	124	15-May-23 A	31-Oct-23	24-Oct-22	04-Jan-23	-301	S5SDBP1010	S5SDBC1240, S5SDBC1460
S5SDBP1650	Fabrication and delivery of FRP ductworks	253	21-Jan-23 A	30-Sep-23	08-Apr-23	19-May-23	-135	S5SDBP1020	S5SDBC1210
Electrical and Control		393	26-Sep-22 A	31-Dec-23	18-Nov-22	14-Apr-23	-262		
S5SDBP1660	Fabrication & Delivery of Cable	150	15-Jun-23 A	11-Nov-23	07-Dec-22	28-Feb-23	-257		S5SDBC1350
S5SDBP1670	Fabrication & Delivery of Genset	150	04-Aug-23 A	31-Dec-23	18-Nov-22	31-Mar-23	-276	S5SDBP1030	S5SDBC1770
S5SDBP1680	Fabrication & Delivery of LV Switchboard for G/F	242	22-Mar-23 A	03-Nov-23	29-Nov-22	12-Feb-23	-265		S5SDBC1370
S5SDBP1690	Fabrication & Delivery of LV Switchboard for 1/F	197	22-Mar-23 A	25-Sep-23	24-Dec-22	29-Jan-23	-240		S5SDBC1580
S5SDBP1710	Fabrication & Delivery of SCADA System for 1/F	392	04-Nov-22 A	30-Nov-23	02-Jan-23	14-Apr-23	-231		S5SDBC1570
S5SDBP1720	Fabrication of 380V Transfomers	120	26-Sep-22 A	23-Jan-23 A	13-Feb-23	13-Feb-23			S5SDBP1730
S5SDBP1730	FAT for 380V Transfomers	14	10-Jan-23 A	23-Jan-23 A	13-Feb-23	13-Feb-23		S5SDBP1720	S5SDBP1740
S5SDBP1740	Delivery of 380V Transfomers	66	24-Jan-23 A	26-Mar-23 A	13-Feb-23	13-Feb-23		S5SDBP1730	S5SDBC1380

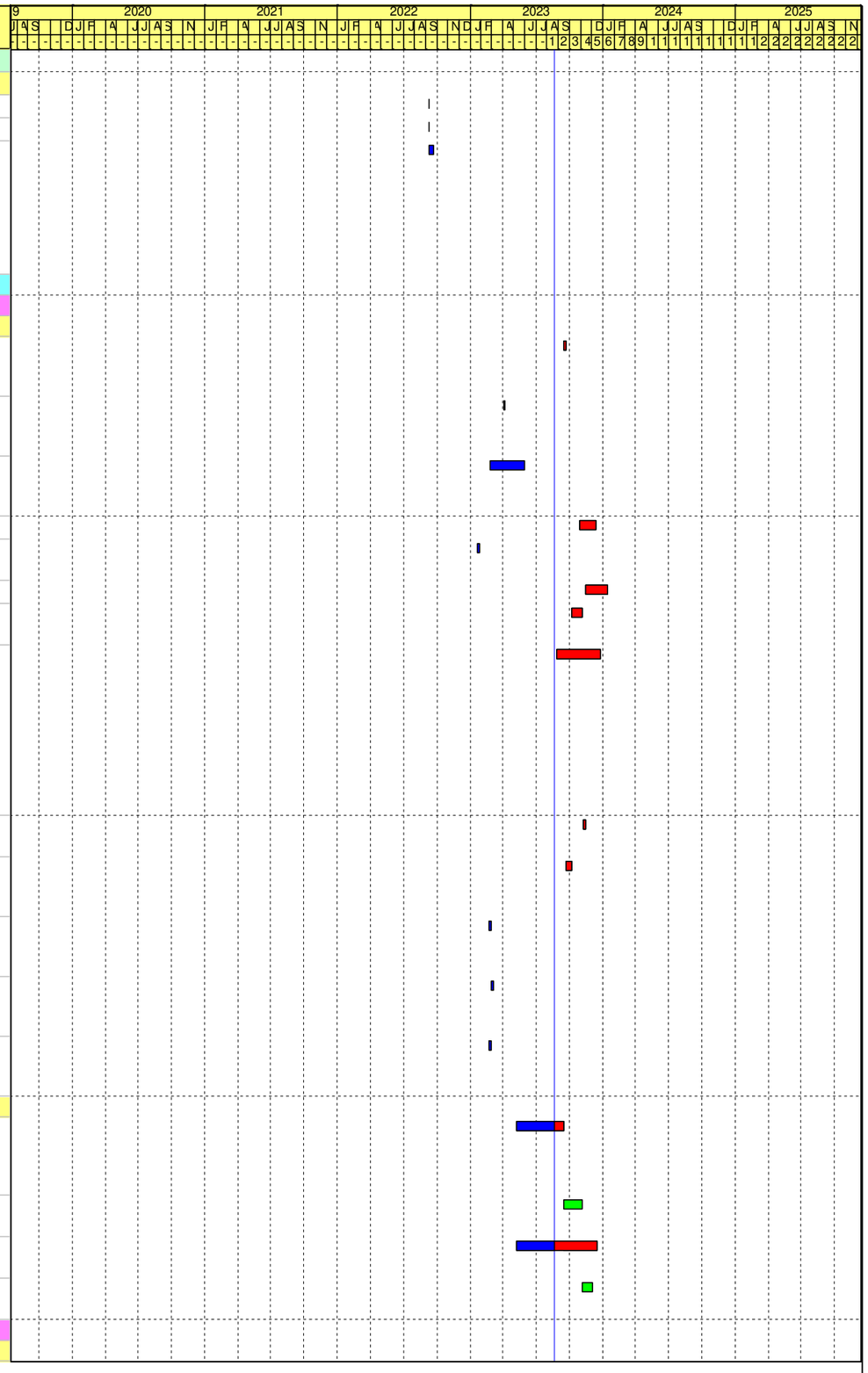


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
Installation		627	06-Jun-22 A	18-Apr-24	17-Nov-22	11-Jun-25	419		
NCE-PMI-0325 - Provision of 2 nos of 3 Tons Mobile A-frame with Electrical Hoist in SDB		627	06-Jun-22 A	18-Apr-24	17-Nov-22	11-Jun-25	419		
S5SDBC1000	Access to Sludge Dewatering Building (Impacted by EWN-0314)	1	09-Sep-22 A	09-Sep-22 A	17-Nov-22	17-Nov-22			S5SDBC1020
S5SDBC1010	Access to Sludge Dewatering Building (Impacted by EWN-0314-1)	1	09-Sep-22 A	09-Sep-22 A	17-Nov-22	17-Nov-22			S5SDBC1020
S5SDBC1020	Mobilisation	15	09-Sep-22 A	23-Sep-22 A	17-Nov-22	17-Nov-22		S5SDBC1000, S5SDBC1010	S5SDBC1200, S5SDBC1680, S5SDBC1370, S5SDBC1590, S5SDBC1770, S5SDBC1120, S5SDBC1050
E&M Installation		607	06-Jun-22 A	29-Mar-24	17-Nov-22	11-Jun-25	439		
Basement		386	21-Jan-23 A	14-Jan-24	17-Nov-22	02-Jan-24	-13		
Mechanical		328	21-Jan-23 A	14-Jan-24	17-Nov-22	19-May-23	-241		
S5SDBC1030	Installation of Centrate Transfer Pumps (3 nos.)	7	16-Sep-23*	22-Sep-23	24-Mar-23	31-Mar-23	-176	S5SDBP1360	S5SDBC1100, S5SDBT1000, S5SDBC1120
S5SDBC1040	Installation of Dewatering Centrifuges Feed Pumps (3 nos.)	7	03-Apr-23 A	08-Apr-23 A	15-Dec-22	15-Dec-22		S5SDBP1380, S5SDBC1140	S5SDBT1000, S5SDBC1100, S5SDBC1110
S5SDBC1050	Installation of Dewatering Polymer Powder Feed Units	104	24-Feb-23 A	31-May-23 A	17-Nov-22	17-Nov-22		S5SDBP1390, S5SDBP1600, S5SDBC1020	S5SDBC1170, S5SDBT1080, S5SDBC1420
S5SDBC1060	Installation of Dewatering Polymer Preparation Tanks	45	31-Oct-23	14-Dec-23	08-Feb-23	25-Mar-23	-265	S5SDBP1410	S5SDBC1480
S5SDBC1070	Installation of External Sludge Transfer Pumps (2 nos.)	7	21-Jan-23 A	27-Jan-23 A	15-Dec-22	15-Dec-22		S5SDBP1400	S5SDBT1000, S5SDBC1100
S5SDBC1080	Installation of Instruments	60	16-Nov-23	14-Jan-24	05-Mar-23	04-May-23	-256	S5SDBC1100	S5SDBT1160
S5SDBC1090	Installation of Polymer Mixer	30	07-Oct-23	05-Nov-23	19-Apr-23	19-May-23	-171	S5SDBP1580, S5SDBP1460	S5SDBT1170
S5SDBC1100	Installation of Process Pipe	120	28-Aug-23*	25-Dec-23	15-Dec-22	14-Apr-23	-256	S5SDBC1120, S5SDBC1030, S5SDBC1070, S5SDBC1130, S5SDBC1150, S5SDBC1140, S5SDBC1040, S5SDBC1110, S5SDBP1630	S5SDBT1040, S5SDBC1080
S5SDBC1110	Installation of Process Water Pumps (3 nos.)	7	10-Nov-23	16-Nov-23	07-Apr-23	14-Apr-23	-217	S5SDBP1480, S5SDBC1040	S5SDBT1000, S5SDBC1100
S5SDBC1120	Installation of Recirculation Pumps for Centrate Tank, Sludge Blend Tanks & THP by-pass Sludge Holding Tank (6 nos,)	14	23-Sep-23*	06-Oct-23	31-Mar-23	14-Apr-23	-176	S5SDBP1500, S5SDBC1020, S5SDBC1030	S5SDBT1000, S5SDBC1100
S5SDBC1130	Installation of Sludge Dewatering Polymer Transfer Pumps (2 nos.)	7	21-Feb-23 A	27-Feb-23 A	15-Dec-22	15-Dec-22		S5SDBP1450	S5SDBT1000, S5SDBC1100, S5SDBC1150
S5SDBC1140	Installation of Thickening Centrifuges Feed Pumps (4 nos.)	7	28-Feb-23 A	06-Mar-23 A	15-Dec-22	15-Dec-22		S5SDBP1590, S5SDBC1150	S5SDBT1000, S5SDBC1100, S5SDBC1040
S5SDBC1150	Installation of THP by-pass Sludge Holding Tank Transfer Pumps (4 nos.)	7	21-Feb-23 A	27-Feb-23 A	15-Dec-22	15-Dec-22		S5SDBP1550, S5SDBP1500, S5SDBC1130	S5SDBT1000, S5SDBC1100, S5SDBC1140
Electrical		256	08-May-23 A	16-Dec-23	17-Nov-22	02-Jan-24	17		
S5SDBC1170	Installation of Electrical System - Cable Containment	116	08-May-23 A	16-Sep-23	17-Nov-22	14-Dec-22	-277	S5SDBC1050, S5SDBC1590, S5P1050	S5SDBC1180, S5SDBC1185, S5SDBC1310, S5SDBT1200
S5SDBC1180	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	50	17-Sep-23	05-Nov-23	14-Oct-23	03-Dec-23	28	S5SDBC1170	S5SDBC1190
S5SDBC1185	Installation of Control Cable Laying	206	09-May-23 A	16-Dec-23	14-Dec-22	15-Mar-23	-277	S5SDBC1170	S5SDBC1530, S5SDBT1200
S5SDBC1190	Installation of Electrical System - Lighting and Small Power Accessories	30	06-Nov-23	05-Dec-23	03-Dec-23	02-Jan-24	28	S5SDBC1180	S5SDBT1130
Ground Floor		577	06-Jun-22 A	28-Feb-24	04-Jan-23	02-Jan-24	-58		
Mechanical		577	06-Jun-22 A	28-Feb-24	04-Jan-23	03-Jul-23	-241		

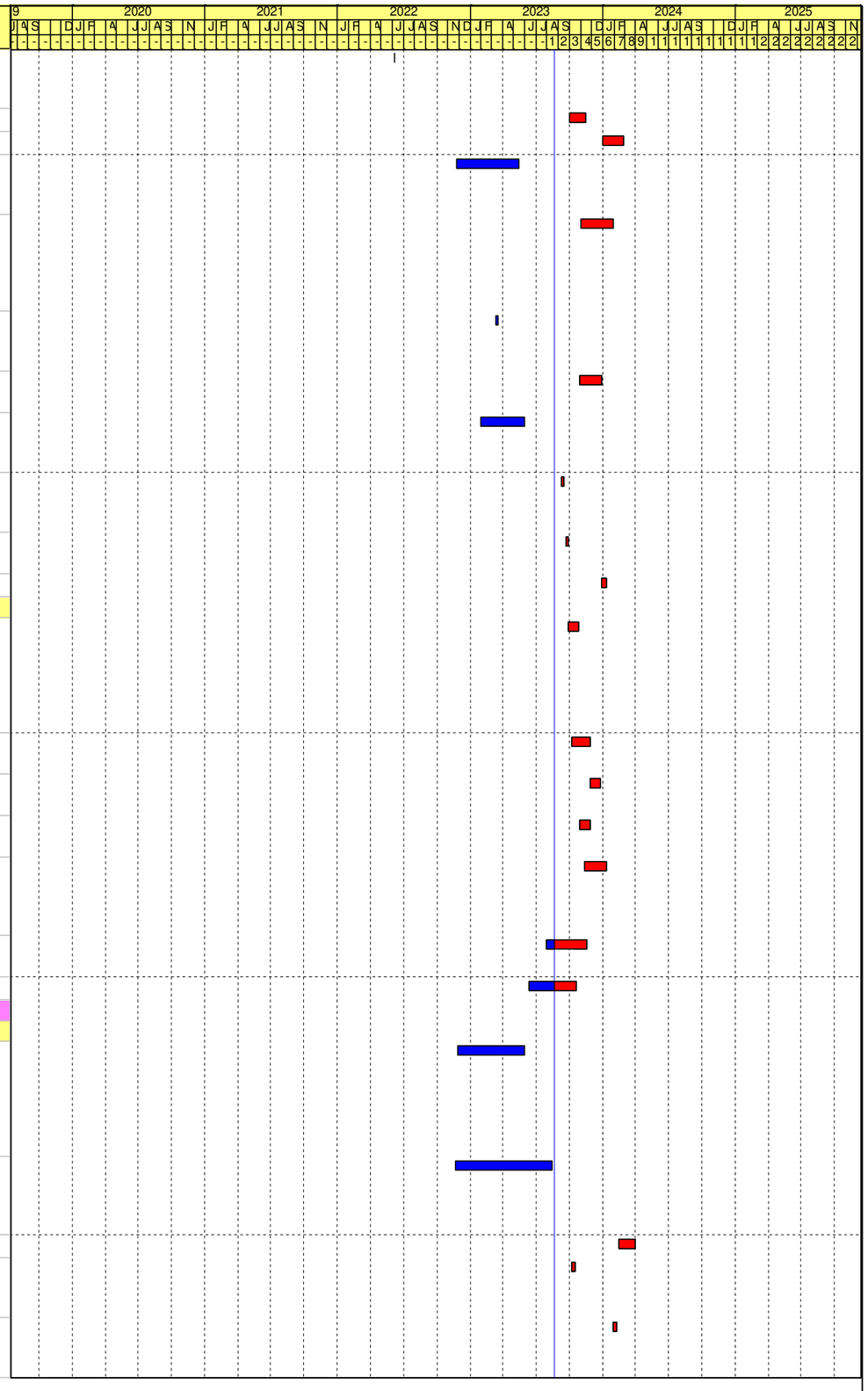


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SDBC1200	Installation of A-Frame (Effected by NCE-PMI-0325)	3	06-Jun-22 A	06-Jun-22 A	25-Mar-23	25-Mar-23		S5SDBC1020	S5SDBC1480, S5SDBC1470, S5SDBC1400
S5SDBC1210	Installation of DOU Ductworks	45	01-Oct-23	14-Nov-23	19-May-23	03-Jul-23	-135	S5SDBP1650	S5T1060
S5SDBC1220	Installation of Instruments	60	31-Dec-23	28-Feb-24	05-Mar-23	04-May-23	-301	S5SDBC1240	S5SDBT1160
S5SDBC1230	Installation of Monorail LA-01-01	185	25-Nov-22 A	16-May-23 A	28-Mar-23	28-Mar-23		S5SDBC1450, S5SDBP1570, S5SDBP1420	S5SDBC1280
S5SDBC1240	Installation of Process Pipe	90	01-Nov-23	29-Jan-24	04-Jan-23	04-Apr-23	-301	S5SDBP1640, S5SDBC1290, S5SDBC1280, S5SDBC1250, S5SDBC1270	S5SDBT1040, S5SDBC1220
S5SDBC1250	Installation of PS Screen Feed Pumps (3 nos.)	7	13-Mar-23 A	19-Mar-23 A	28-Mar-23	28-Mar-23		S5SDBP1490	S5SDBT1000, S5SDBC1280, S5SDBC1240
S5SDBC1260	Installation of Silo & Conveyor	60	31-Oct-23	29-Dec-23	19-Apr-23	18-Jun-23	-195	S5SDBP1610, S5SDBP1370	S5SDBT1060
S5SDBC1270	Installation of Sludge Thickening Polymer Preparation Tanks	128	31-Jan-23 A	31-May-23 A	04-Apr-23	04-Apr-23		S5SDBP1600	S5SDBT1080, S5SDBC1420, S5SDBC1240
S5SDBC1280	Installation of Sludge Thickening Polymer Transfer Pumps (2 nos.)	7	10-Sep-23*	16-Sep-23	28-Mar-23	04-Apr-23	-166	S5SDBP1450, S5SDBC1250, S5SDBC1230	S5SDBT1000, S5SDBC1240
S5SDBC1290	Installation of THP Feed Pumps (4 nos.)	7	23-Sep-23*	29-Sep-23	28-Mar-23	04-Apr-23	-179	S5SDBP1620	S5SDBT1000, S5SDBC1240
S5SDBC1300	Position of Sludge Skips and Installation of Hydraulic System	14	28-Dec-23	10-Jan-24	19-Jun-23	03-Jul-23	-192	S5SDBP1530	S5T1060
Electrical		204	12-Jun-23 A	10-Jan-24	14-Jan-23	02-Jan-24	-9		
S5SDBC1310	Installation of Electrical System - Cable Containment	30	29-Sep-23	28-Oct-23	14-Jan-23	13-Feb-23	-258	S5SDBC1680, S5P1050, S5SDBC1170	S5SDBC1320, S5SDBC1540, S5SDBC1340, S5SDBC1350, S5SDBT1200, S5SDBT1200
S5SDBC1320	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	50	09-Oct-23	27-Nov-23	14-Oct-23	03-Dec-23	6	S5SDBC1310	S5SDBC1330
S5SDBC1330	Installation of Electrical System - Lighting and Small Power Accessories	30	28-Nov-23	27-Dec-23	03-Dec-23	02-Jan-24	6	S5SDBC1320	S5SDBT1130
S5SDBC1340	Installation of Control Cable Laying	30	29-Oct-23	27-Nov-23	04-Apr-23	04-May-23	-208	S5SDBC1310	S5SDBT1200, S5SDBT1200
S5SDBC1350	Installation of Power Cable Laying and Termination	60	12-Nov-23	10-Jan-24	28-Feb-23	29-Apr-23	-257	S5SDBC1370, S5SDBP1660, S5SDBC1310, S5SDBC1580	S5SDBT1050
S5SDBC1370	LV Switchroom Installation	60	30-Jul-23 A	19-Nov-23	21-Jan-23	28-Feb-23	-265	S5SDBC1020, S5SDBP1680	S5SDBT1110, S5SDBC1350
S5SDBC1380	TX Room Installation	120	12-Jun-23 A	20-Oct-23	13-Feb-23	15-Apr-23	-189	S5SDBP1740	S5SDBT1120
First Floor		436	17-Nov-22 A	29-Mar-24	19-Jan-23	11-Jun-25	439		
Mechanical		436	17-Nov-22 A	29-Mar-24	19-Jan-23	11-Jun-25	439		
S5SDBC1390	Installation of EOT Crane LA-01-02	215	28-Nov-22 A	31-May-23 A	24-Mar-23	24-Mar-23		S5SDBP1560, S5SDBP1420	S5SDBC1490, S5SDBC1400, S5SDBC1470, S5SDBC1500, S5SDBC1520, S5SDBC1510
S5SDBC1400	Installation of EOT Crane LA-01-03	267	22-Nov-22 A	15-Aug-23 A	11-Jun-25	11-Jun-25		S5SDBC1200, S5SDBP1560, S5SDBP1420, S5SDBC1390	
S5SDBC1410	Installation of Instruments	45	14-Feb-24	29-Mar-24	04-May-23	18-Jun-23	-286	S5SDBC1460	S5SDBT1160
S5SDBC1420	Installation of Mixer for Digested Sludge Holding Tank	10	07-Oct-23	16-Oct-23	09-May-23	19-May-23	-151	S5SDBP1430, S5SDBC1050, S5SDBC1270	S5SDBT1170
S5SDBC1430	Installation of Mixer for Polymer Tank	10	29-Jan-24	07-Feb-24	09-May-23	19-May-23	-265	S5SDBP1580, S5SDBP1460, S5SDBC1480	S5SDBT1170

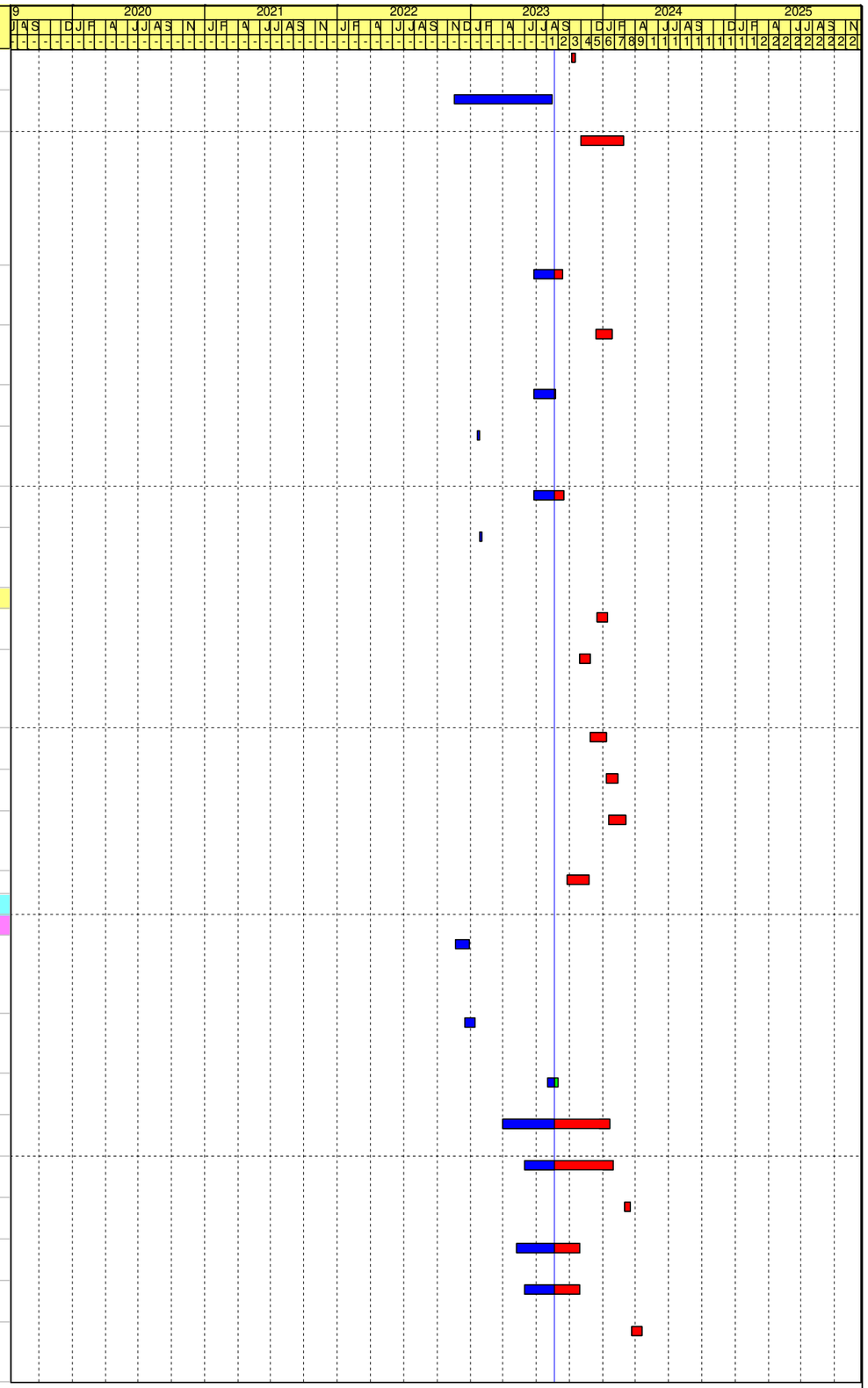


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SDBC1440	Installation of Mixer for PS holding tank	10	07-Oct-23	16-Oct-23	09-May-23	19-May-23	-151	S5SDBP1470, S5SDBC1470	S5SDBT1170
S5SDBC1450	Installation of Monorail LA-01-04	272	17-Nov-22 A	15-Aug-23 A	28-Mar-23	28-Mar-23		S5SDBP1570, S5SDBP1420	S5SDBC1230
S5SDBC1460	Installation of Process Pipe	120	01-Nov-23	28-Feb-24	19-Jan-23	19-May-23	-286	S5SDBP1640, S5SDBC1480, S5SDBC1510, S5SDBC1490, S5SDBC1470, S5SDBC1500, S5SDBC1520	S5SDBT1040, S5SDBC1410
S5SDBC1470	Installation of Screen Press	79	26-Jun-23 A	12-Sep-23	16-Apr-23	09-May-23	-127	S5SDBC1200, S5SDBP1520, S5SDBC1390	S5SDBT1210, S5SDBC1440, S5SDBC1460
S5SDBC1480	Installation of Sludge Dewatering / Thickening Polymer Dilution Tanks	45	15-Dec-23	28-Jan-24	25-Mar-23	09-May-23	-265	S5SDBC1200, S5SDBP1410, S5SDBC1060	S5SDBT1080, S5SDBC1430, S5SDBC1460
S5SDBC1490	Installation of Sludge Dewatering Centrifuges (3 nos)	90	26-Jun-23 A	25-Aug-23	14-May-23	19-May-23	-99	S5SDBC1390, S5SDBP1510	S5SDBT1090, S5SDBC1460
S5SDBC1500	Installation of Sludge Dewatering Polymer Dosing Pumps (4 nos.)	7	21-Jan-23 A	27-Jan-23 A	19-May-23	19-May-23		S5SDBP1440, S5SDBC1390	S5SDBT1000, S5SDBC1520, S5SDBC1460
S5SDBC1510	Installation of Sludge Thickening Centrifuges (4 nos.)	82	26-Jun-23 A	15-Sep-23	24-Mar-23	19-Apr-23	-150	S5SDBP1540, S5SDBC1390	S5SDBT1100, S5SDBC1460
S5SDBC1520	Installation of Sludge Thickening Polymer Dosing Pumps (5 nos.)	7	28-Jan-23 A	03-Feb-23 A	19-May-23	19-May-23		S5SDBP1440, S5SDBC1500, S5SDBC1390	S5SDBT1000, S5SDBC1460
Electrical		162	26-Sep-23	05-Mar-24	29-Jan-23	02-Jan-24	-64		
S5SDBC1530	Installation of Control Cable Laying	30	17-Dec-23	15-Jan-24	15-Mar-23	14-Apr-23	-277	S5SDBC1540, S5SDBC1185	S5SDBC1570
S5SDBC1540	Installation of Electrical System - Cable Containment	30	29-Oct-23	27-Nov-23	13-Feb-23	15-Mar-23	-258	S5SDBC1310, S5SDBC1790, S5P1050	S5SDBT1050, S5SDBC1570, S5SDBC1550, S5SDBC1530
S5SDBC1550	Installation of Electrical System - Wall Mount Equipment, Conduit & Wiring	45	28-Nov-23	11-Jan-24	19-Oct-23	03-Dec-23	-40	S5SDBC1540	S5SDBC1560
S5SDBC1560	Installation of Electrical System - Lighting and Small Power Accessories	30	12-Jan-24	10-Feb-24	03-Dec-23	02-Jan-24	-40	S5SDBC1550	S5SDBT1130
S5SDBC1570	Installation of SCADA System / Control Monitoring System (SPS, Process Water)	50	16-Jan-24	05-Mar-24	14-Apr-23	03-Jun-23	-277	S5SDBC1540, S5SDBC1530, S5SDBP1710	S5SDBT1200
S5SDBC1580	LV Switchroom Installation	60	26-Sep-23	24-Nov-23	29-Jan-23	30-Mar-23	-240	S5SDBP1690	S5SDBC1350
BS Installation		465	21-Nov-22 A	18-Apr-24	17-Nov-22	05-Mar-24	-45		
Basement		465	21-Nov-22 A	18-Apr-24	17-Nov-22	05-Mar-24	-45		
S5SDBC1590	Installation of FS System - Main Pipework	30	21-Nov-22 A	30-Dec-22 A	17-Nov-22	17-Nov-22		S5SDBC1020	S5SDBC1620, S5SDBC1170, S5SDBC1790, S5SDBC1680
S5SDBC1600	Installation of FS System - Branch Pipework, Conduit & Wiring	40	16-Dec-22 A	14-Jan-23 A	08-Dec-23	08-Dec-23			S5SDBC1610, S5S1130, S5SDBC1690
S5SDBC1610	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	30	01-Aug-23 A	30-Aug-23	07-Jan-24	17-Jan-24	140	S5SDBC1600	S5SDBT1150
S5SDBC1620	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	237	31-Mar-23 A	21-Jan-24	08-Nov-23	08-Dec-23	-45	S5SDBC1590, S5P1080	S5SDBC1630
S5SDBC1630	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	185	01-Jun-23 A	31-Jan-24	18-Nov-23	18-Dec-23	-45	S5SDBC1620	S5SDBC1640
S5SDBC1640	Installation of MVAC System - Air Grills & Diffuser	15	02-Mar-24	16-Mar-24	18-Dec-23	02-Jan-24	-75	S5SDBC1630, S5SDBC1840	S5SDBT1180, S5SDBC1730
S5SDBC1650	Installation of Plumbing System - Main Pipework	175	10-May-23 A	31-Oct-23	07-Jul-23	17-Sep-23	-45		S5SDBC1670, S5SDBC1660
S5SDBC1660	Installation of Plumbing System - Branch Pipework	155	30-May-23 A	31-Oct-23	08-Jul-23	17-Sep-23	-45	S5SDBC1650	S5SDBC1670, S5SDBC1740
S5SDBC1670	Installation of Plumbing System - Sanitary Fitting	30	20-Mar-24	18-Apr-24	04-Feb-24	05-Mar-24	-45	S5SDBC1650, S5SDBC1660, S5SDBC1870	S5SDBT1190

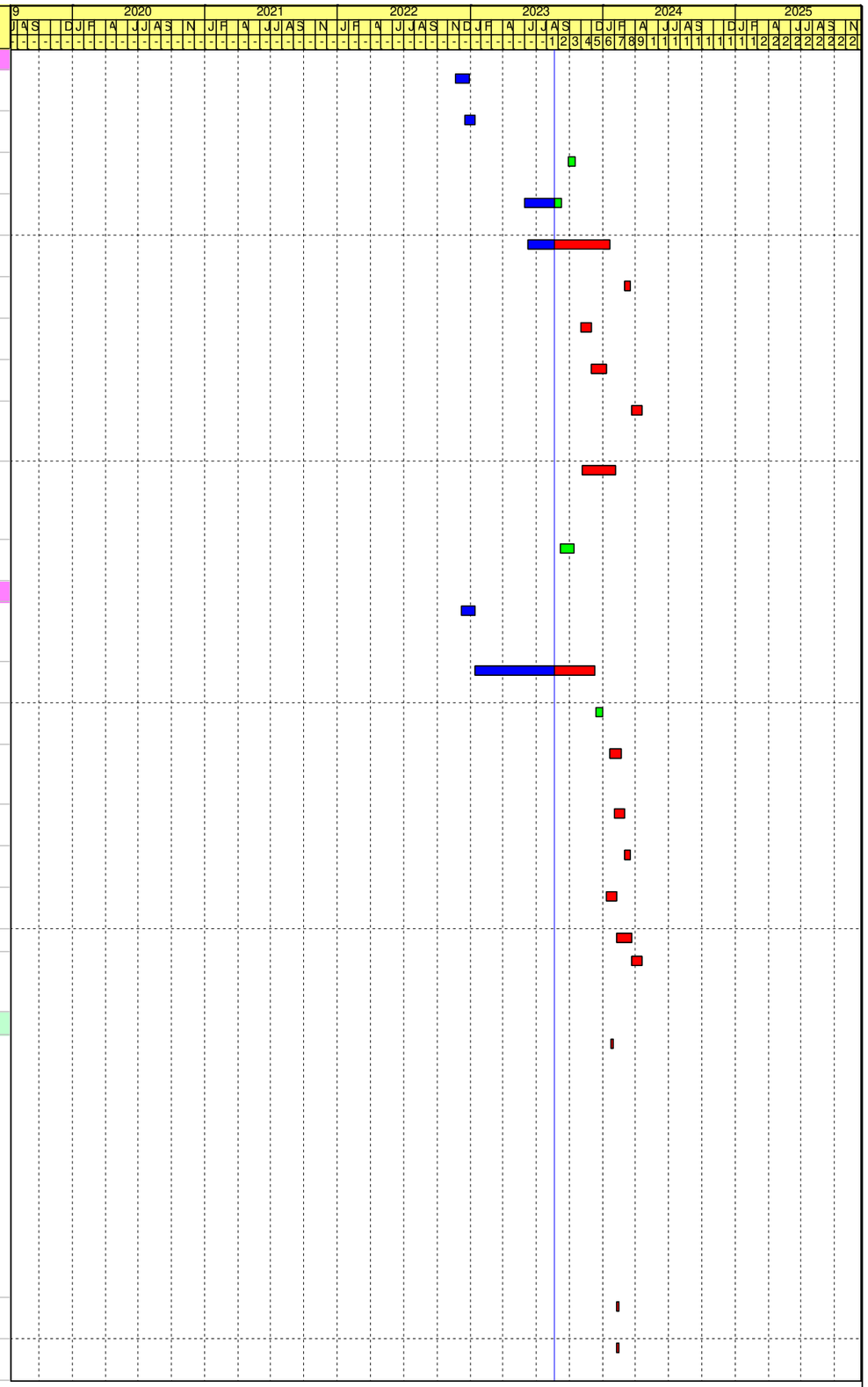


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
Ground Floor		454	21-Nov-22 A	18-Apr-24	14-Jan-23	05-Mar-24	-45		
S5SDBC1680	Installation of FS System - Main Pipework	20	21-Nov-22 A	30-Dec-22 A	14-Jan-23	14-Jan-23		S5SDBC1020, S5SDBC1590	S5SDBC1710, S5SDBC1310
S5SDBC1690	Installation of FS System - Branch pipework, Conduit & Wiring	30	16-Dec-22 A	14-Jan-23 A	08-Dec-23	08-Dec-23		S5SDBC1600	S5SDBC1700, S5S1130
S5SDBC1700	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	20	29-Sep-23*	18-Oct-23	28-Dec-23	17-Jan-24	91	S5SDBC1690	S5SDBT1150
S5SDBC1710	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	101	31-May-23 A	08-Sep-23	09-Nov-23	28-Nov-23	81	S5SDBC1680	S5SDBC1720
S5SDBC1720	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	166	10-Jun-23 A	21-Jan-24	20-Oct-23	08-Nov-23	-75	S5SDBC1710, S5P1080	S5SDBC1730, S5SDBC1820
S5SDBC1730	Installation of MVAC System - Air Grills & Diffuser	15	02-Mar-24	16-Mar-24	18-Dec-23	02-Jan-24	-75	S5SDBC1720, S5SDBC1640	S5SDBT1180
S5SDBC1740	Installation of Plumbing System - Main Pipework	30	01-Nov-23	30-Nov-23	17-Sep-23	17-Oct-23	-45	S5SDBC1660	S5SDBC1760, S5SDBC1750
S5SDBC1750	Installation of Plumbing System - Branch Pipework	40	01-Dec-23	09-Jan-24	17-Oct-23	26-Nov-23	-45	S5SDBC1740	S5SDBC1760, S5SDBC1850
S5SDBC1760	Installation of Plumbing System - Sanitary Fitting	30	20-Mar-24	18-Apr-24	04-Feb-24	05-Mar-24	-45	S5SDBC1740, S5SDBC1750, S5SDBC1870	S5SDBT1190
S5SDBC1770	Generator & Fuel Room Installation	90	07-Nov-23	04-Feb-24	20-Jan-23	20-Apr-23	-291	S5SDBP1670, S5SDBC1020, S5S1010, S5S1260	S5SDBT1140
S5SDBC1780	Installation of Lift	40	06-Sep-23*	15-Oct-23	22-Jan-24	02-Mar-24	139	S5SDBP1060, S5WS2C1190	S5SDBT1070
First Floor		454	06-Dec-22 A	18-Apr-24	13-Feb-23	05-Mar-24	-45		
S5SDBC1790	Installation of FS System - Main Pipework	20	06-Dec-22 A	15-Jan-23 A	13-Feb-23	13-Feb-23		S5SDBC1590	S5SDBC1800, S5SDBC1540, S5SDBC1820
S5SDBC1800	Installation of FS System - Branch pipework, Conduit & Wiring	330	16-Jan-23 A	11-Dec-23	17-Aug-23	08-Dec-23	-4	S5SDBC1790	S5SDBC1810, S5S1130
S5SDBC1810	Installation of FS System - Dropper, Sprinkler Head, Detector & Devices	20	12-Dec-23	31-Dec-23	28-Dec-23	17-Jan-24	17	S5SDBC1800	S5SDBT1150
S5SDBC1820	Installation of MVAC System - Ceiling Mount Equipment, Main Ductwork and Pipework	30	22-Jan-24	20-Feb-24	08-Nov-23	08-Dec-23	-75	S5SDBC1790, S5SDBC1720, S5P1080	S5SDBC1830
S5SDBC1830	Installation of MVAC System - Wall Mount Equipment, Branch Duct & Pipework	30	01-Feb-24	01-Mar-24	18-Nov-23	18-Dec-23	-75	S5SDBC1820	S5SDBC1840
S5SDBC1840	Installation of MVAC System - Air Grills & Diffuser	15	02-Mar-24	16-Mar-24	18-Dec-23	02-Jan-24	-75	S5SDBC1830	S5SDBT1180, S5SDBC1640
S5SDBC1850	Installation of Plumbing System - Main Pipework	30	10-Jan-24	08-Feb-24	26-Nov-23	26-Dec-23	-45	S5SDBC1750	S5SDBC1870, S5SDBC1860
S5SDBC1860	Installation of Plumbing System - Branch Pipework	40	09-Feb-24	19-Mar-24	26-Dec-23	04-Feb-24	-45	S5SDBC1850	S5SDBC1870
S5SDBC1870	Installation of Plumbing System - Sanitary Fitting	30	20-Mar-24	18-Apr-24	04-Feb-24	05-Mar-24	-45	S5SDBC1850, S5SDBC1860	S5SDBT1190, S5SDBC1760, S5SDBC1670
Testing and Commissioning		211	21-Oct-23	18-May-24	28-Feb-23	01-May-24	-18		
S5SDBT1000	Dry Test for Pumps	7	24-Jan-24	30-Jan-24	12-Jun-23	19-Jun-23	-226	S5SDBC1250, S5SDBC1120, S5SDBC1110, S5SDBC1070, S5SDBC1130, S5SDBC1150, S5SDBC1140, S5SDBC1040, S5SDBC1290, S5SDBC1280, S5SDBC1500, S5SDBC1520, S5SDBC1030, S5SDBT1050	S5SDBT1220, S5SDBT1230
S5SDBT1010	Functional Check for Pumps (excluded FS Water Pumps and Process Water Pumps)	7	07-Feb-24	13-Feb-24	26-Jun-23	03-Jul-23	-226	S5SDBT1220, S5SDBT1050	S5T1060
S5SDBT1020	Functional Check for Pumps (FS Water Pumps and Process Water Pumps)	7	07-Feb-24	13-Feb-24	09-Feb-24	16-Feb-24	3	S5SDBT1050, S5SDBT1230	S5S1220

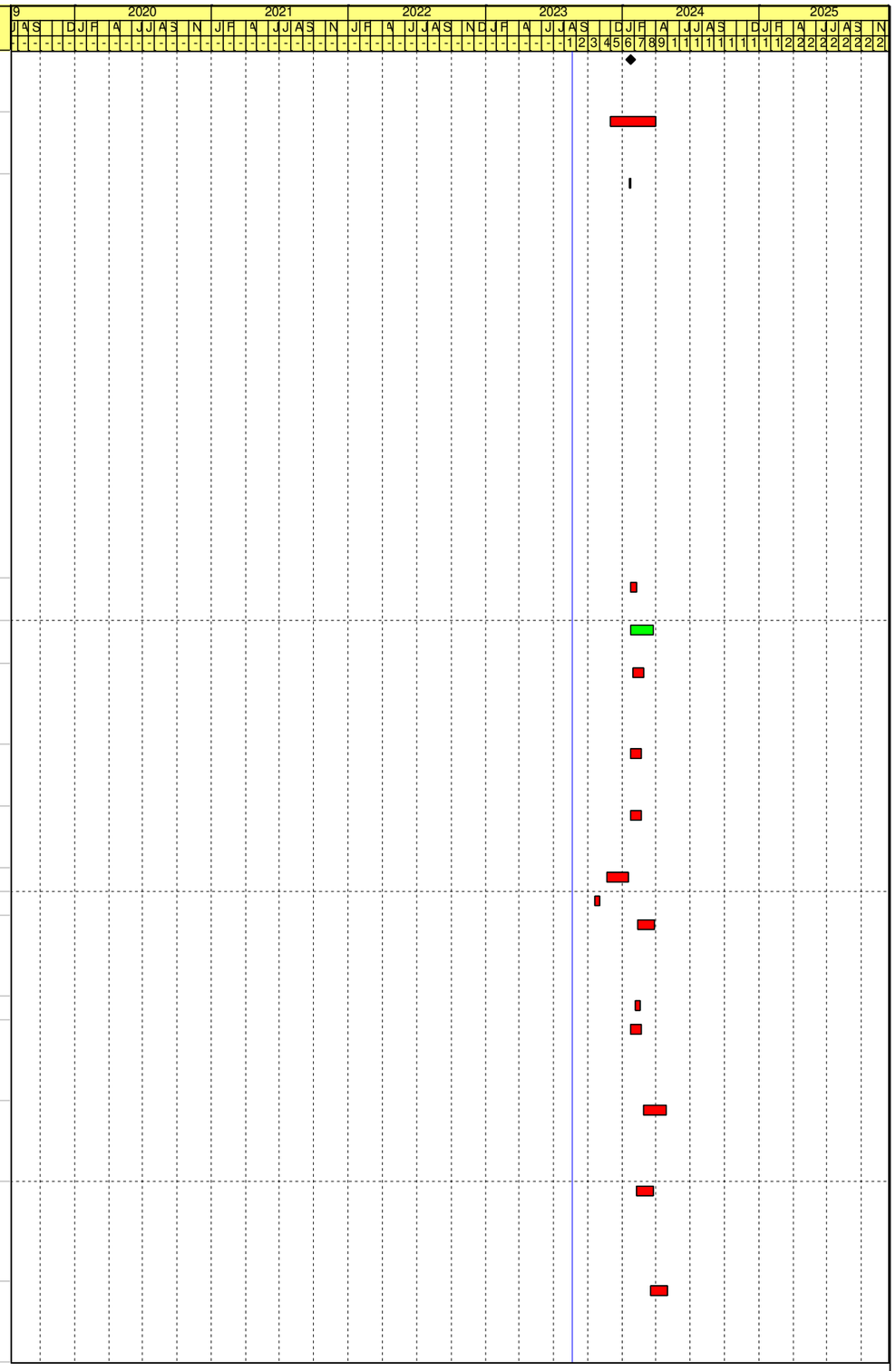


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SDBT1030	Permanent Power ready for T&C	0	24-Jan-24		03-Jun-23		-235	S5SDBT1050	S5SDBT1100, S5SDBT1230, S5SDBT1090
S5SDBT1040	Pipe Pressure Test	120	01-Dec-23	29-Mar-24	05-Mar-23	03-Jul-23	-271	S5SDBC1460, S5SDBC1240, S5SDBC1100	S5T1060
S5SDBT1050	Ready for Power Energisation - LV	5	19-Jan-24	23-Jan-24	29-Apr-23	04-May-23	-265	S5SDBC1540, S5SDBT1110, S5SDBC1350, S5SDBT1120, S5WS2C1120	S5SDBT1090, S5SDBT1070, S5SDBT1100, S5SDBT1020, S5SDBT1230, S5SDBT1080, S5SDBT1060, S5SDBT1130, S5SDBT1150, S5SDBT1180, S5SDBT1190, S5SDBT1170, S5SDBT1210, S5SDBT1200, S5SDBT1160, S5SDBT1220, S5SDBT1010, S5SDBT1000, S5SDBT1030, S5SPST1000, S5FCDT1000
S5SDBT1060	SAT for Conveyor	15	24-Jan-24	07-Feb-24	18-Jun-23	03-Jul-23	-220	S5SDBC1260, S5SDBT1050	S5T1060
S5SDBT1070	SAT for Lift	60	24-Jan-24	23-Mar-24	02-Mar-24	01-May-24	39	S5SDBC1780, S5SDBT1050	S5S1090
S5SDBT1080	SAT for Polymer System	30	29-Jan-24	27-Feb-24	03-Jun-23	03-Jul-23	-240	S5SDBC1480, S5SDBC1270, S5SDBC1050, S5SDBT1050	S5T1060
S5SDBT1090	SAT for Sludge Dewatering Centrifuges	30	24-Jan-24	22-Feb-24	03-Jun-23	03-Jul-23	-235	S5SDBT1050, S5SDBC1490, S5SDBT1030	S5T1060
S5SDBT1100	SAT for Sludge Thickening Cnetrifuge	30	24-Jan-24	22-Feb-24	03-Jun-23	03-Jul-23	-235	S5SDBT1050, S5SDBC1510, S5SDBT1030	S5T1060
S5SDBT1110	SAT for Switchboard	60	20-Nov-23	18-Jan-24	28-Feb-23	29-Apr-23	-265	S5SDBC1370	S5SDBT1050
S5SDBT1120	SAT for Tranformer	14	21-Oct-23	03-Nov-23	15-Apr-23	29-Apr-23	-189	S5SDBC1380	S5SDBT1050
S5SDBT1130	SAT of Electrical System (BS)	45	11-Feb-24	26-Mar-24	02-Jan-24	16-Feb-24	-40	S5SDBC1330, S5SDBC1190, S5SDBC1560, S5SDBT1050	S5S1220
S5SDBT1140	SAT of Emergency Generator System	15	05-Feb-24	19-Feb-24	20-Apr-23	05-May-23	-291	S5SDBC1770	S5S1270
S5SDBT1150	SAT of FS System	30	24-Jan-24	22-Feb-24	17-Jan-24	16-Feb-24	-7	S5SDBC1810, S5SDBC1700, S5SDBC1610, S5SDBT1050	S5S1220
S5SDBT1160	SAT of Instrumentation	60	29-Feb-24	28-Apr-24	04-May-23	03-Jul-23	-301	S5SDBC1410, S5SDBC1220, S5SDBC1080, S5SDBT1050	S5T1060
S5SDBT1170	SAT of Mixer	45	08-Feb-24	23-Mar-24	19-May-23	03-Jul-23	-265	S5SDBC1430, S5SDBC1420, S5SDBC1440, S5SDBC1090, S5SDBT1050	S5T1060
S5SDBT1180	SAT of MVAC System	45	17-Mar-24	30-Apr-24	02-Jan-24	16-Feb-24	-75	S5SDBC1840, S5SDBC1730, S5SDBC1640, S5SDBT1050	S5S1220

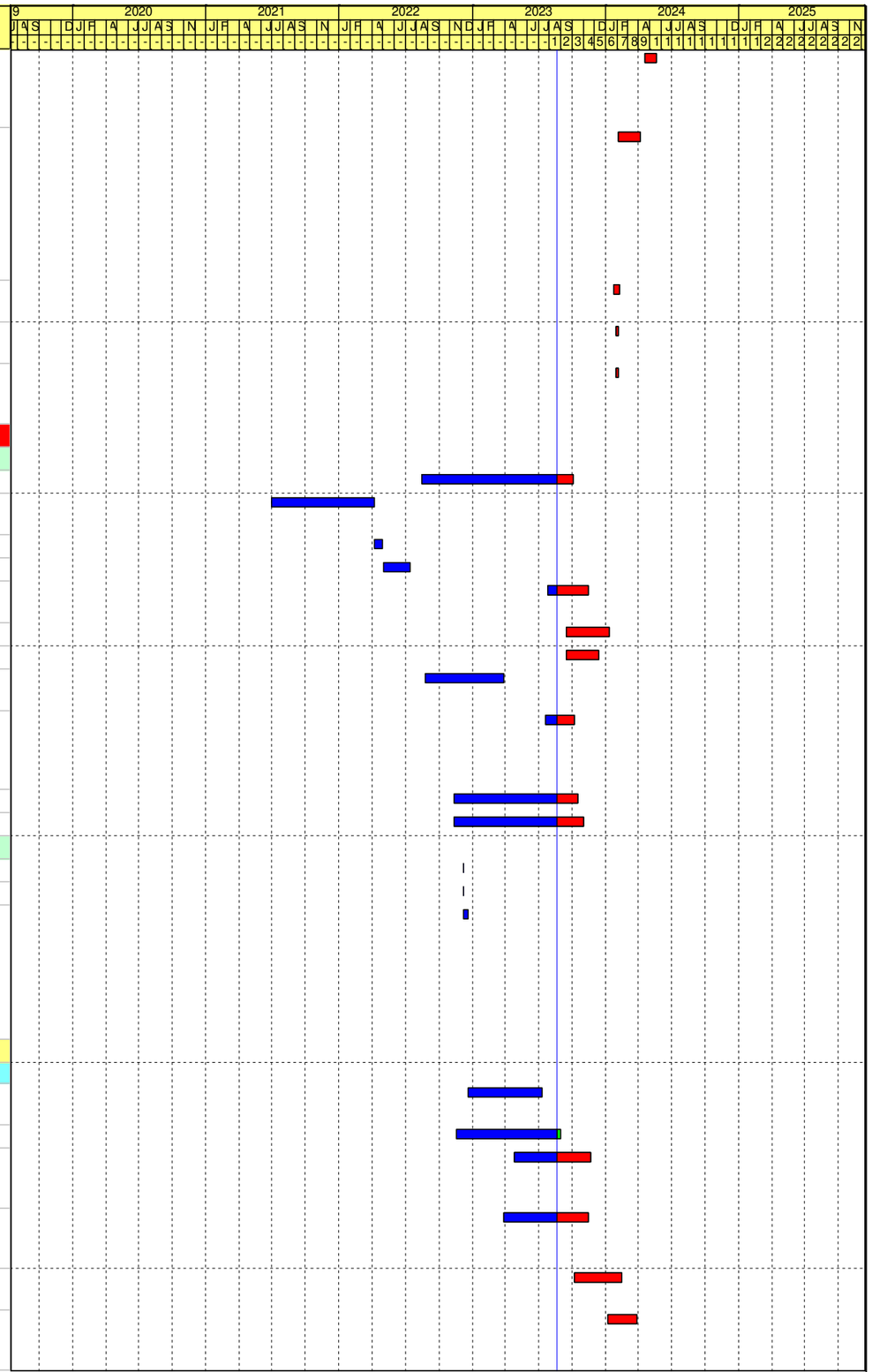


Remaining Work
Critical Activity
Milestone
Actual Progress

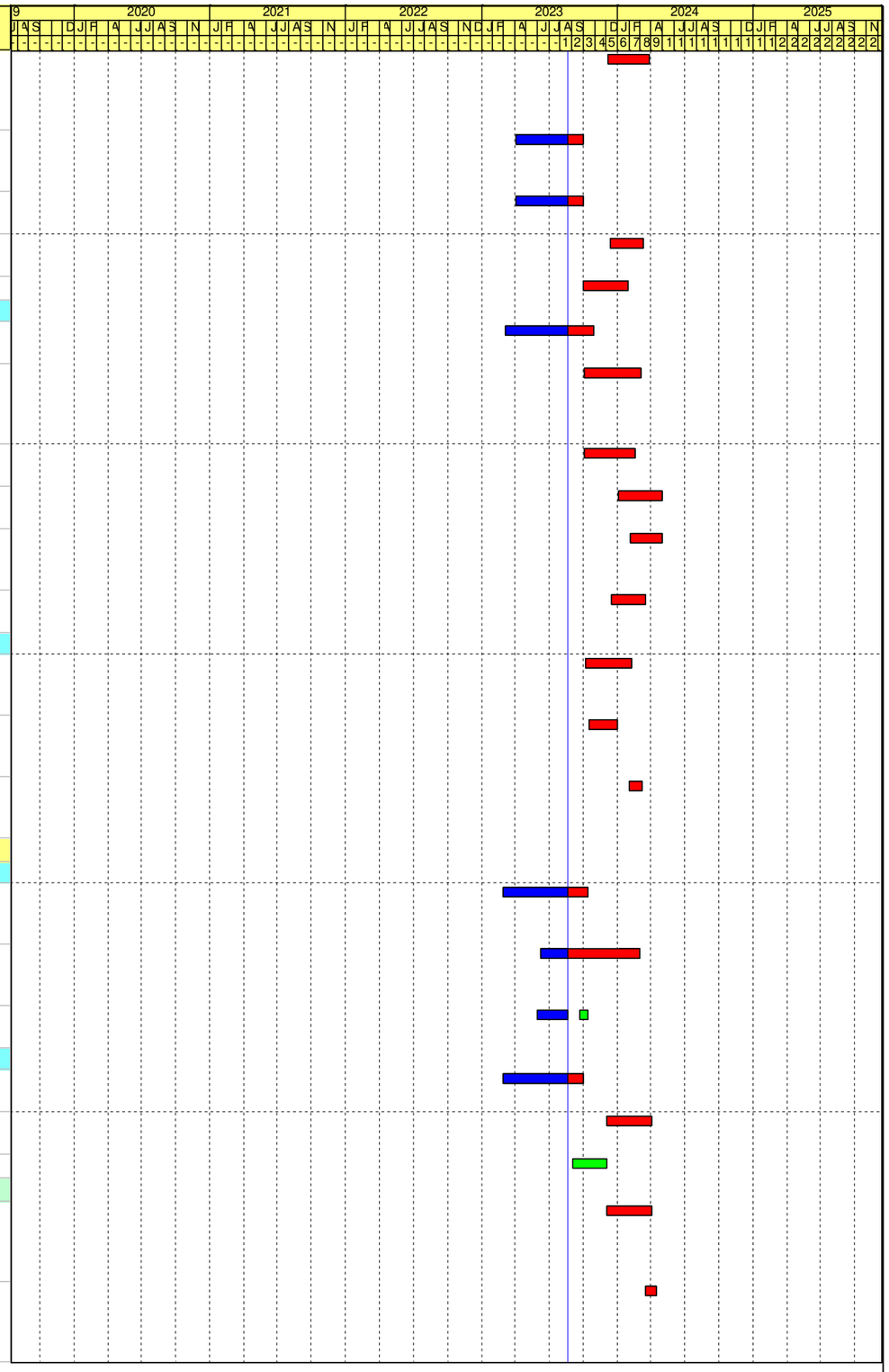
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SDBT1190	SAT of Plumbing System	30	19-Apr-24	18-May-24	05-Mar-24	04-Apr-24	-45	S5SDBC1670, S5SDBC1760, S5SDBC1870, S5SDBT1050	S5S1160
S5SDBT1200	SAT of SCADA & PMS	60	05-Feb-24	04-Apr-24	04-May-23	03-Jul-23	-277	S5SDBC1570, S5SDBT1050, S5SDBC1170, S5SDBC1185, S5SDBC1340, S5SDBC1340, S5SDBC1310, S5SDBC1310	S5T1060
S5SDBT1210	SAT of Screen Press	15	24-Jan-24	07-Feb-24	18-Jun-23	03-Jul-23	-220	S5SDBC1470, S5SDBT1050	S5T1060
S5SDBT1220	Wet Test for Pumps (excluded FS Water Pumps and Process Water Pumps)	7	31-Jan-24	06-Feb-24	19-Jun-23	26-Jun-23	-226	S5SDBT1000, S5SDBT1050	S5SDBT1010
S5SDBT1230	Wet Test for Pumps (FS Water Pumps and Process Water Pumps)	7	31-Jan-24	06-Feb-24	02-Feb-24	09-Feb-24	3	S5SDBT1000, S5SDBT1050, S5SDBT1030	S5SDBT1020
Combined Heat & Power Building		1063	29-Jun-21 A	17-Jun-24	04-Nov-22	11-Jun-25	359		
Fabrication, FAT & Delivery of Major Plant & Materials		906	29-Jun-21 A	12-Jan-24	04-Nov-22	19-Jun-23	-208		
S5CHPP1000	Fabrication & Delivery of Pre-Treatment	417	15-Aug-22 A	05-Oct-23	04-Nov-22	20-Dec-22	-290		S5CHPC1170
S5CHPP1010	Fabrication of CHP System	270	29-Jun-21 A	06-Apr-22 A	13-Jan-23	13-Jan-23		S2P1070, S2D1610	S5CHPP1020
S5CHPP1020	FAT for CHP Generators	14	07-Apr-22 A	30-Apr-22 A	13-Jan-23	13-Jan-23		S5CHPP1010	S5CHPP1030
S5CHPP1030	Delivery of CHP Generators	60	02-May-22 A	14-Jul-22 A	13-Jan-23	13-Jan-23		S5CHPP1020	S5CHPC1050
S5CHPP1040	Fabrication & Delivery of Gas Detection System	112	28-Jul-23 A	16-Nov-23	03-Jan-23	01-Apr-23	-230	S2D2000, PL1020	S5CHPC1170, S5CHPC1280
S5CHPP1050	Fabrication & Delivery of LV Switchboard for G/F	120	15-Sep-23*	12-Jan-24	14-Nov-22	14-Mar-23	-305		S5CHPC1145
S5CHPP1055	Fabrication & Delivery of LV Switchboard for 1/F	90	15-Sep-23*	13-Dec-23	10-Nov-22	08-Feb-23	-309		S5CHPC1260
S5CHPP1060	Fabrication & Delivery of Lifting Appliances	90	24-Aug-22 A	28-Mar-23 A	08-Mar-23	08-Mar-23			S5CHPC1030, S5CHPC1160
S5CHPP1070	Fabrication & Delivery of Pipeworks & Associated Valves	79	20-Jul-23 A	06-Oct-23	20-Nov-22	06-Jan-23	-274	S5P1010	S5CHPC1070, S5CHPC1200, S5CHPC1270, S5CHPC1280
S5CHPP1080	Fabrication & Delivery of SCADA System for G/F	340	11-Nov-22 A	16-Oct-23	23-Apr-23	19-Jun-23	-120		S5CHPC1120
S5CHPP1090	Fabrication & Delivery of SCADA System for 1/F	358	11-Nov-22 A	03-Nov-23	23-Mar-23	06-Jun-23	-151		S5CHPC1250
Installation		499	19-Nov-22 A	02-May-24	20-Dec-22	11-Jun-25	405		
S5CHPC1000	Access to CHP Building (Impacted by EWN-0314)	1	07-Dec-22 A	07-Dec-22 A	18-Feb-23	18-Feb-23			S5CHPC1020
S5CHPC1010	Access to CHP Building (Impacted by EWN-0314-1)	1	07-Dec-22 A	07-Dec-22 A	18-Feb-23	18-Feb-23			S5CHPC1020
S5CHPC1020	Mobilisation	12	08-Dec-22 A	19-Dec-22 A	18-Feb-23	18-Feb-23		AD1060, S5S1020, S5CHPC1000, S5CHPC1010	PL1550, S5CHPC1030, S5CHPC1040, S5CHPC1080, S5CHPC1130, S5CHPC1140, S5CHPC1210
E&M Installation		498	19-Nov-22 A	02-May-24	20-Dec-22	11-Jun-25	405		
Ground Floor		461	19-Nov-22 A	26-Mar-24	20-Dec-22	11-Jun-25	442		
S5CHPC1030	Installation of EOT Crane LA-04-01	199	19-Dec-22 A	10-Jul-23 A	08-Mar-23	08-Mar-23		S5CHPC1020, S5CHPP1060	S5CHPC1050, S5CHPC1160
S5CHPC1040	Installation of Monorail LA-04-02 (total 3nos.)	286	19-Nov-22 A	31-Aug-23	01-Jun-25	11-Jun-25	650	S5CHPC1020	
S5CHPC1050	Installation of CHP System - Mechanical Work	210	26-Apr-23 A	21-Nov-23	13-Jan-23	16-Apr-23	-220	S5CHPC1030, S5CHPP1030	S5CHPC1100, S5CHPT1030, S5CHPC1270
S5CHPC1060	Installation of Steam Boiler System - Mechanical Work	230	29-Mar-23 A	13-Nov-23	20-Dec-22	15-Mar-23	-244		S5CHPC1070, S5CHPC1170, S5CHPT1050
S5CHPC1070	Installation of pipework	133	07-Oct-23	16-Feb-24	06-Jan-23	19-May-23	-274	S5CHPC1060, S5CHPP1070	S5CHPT1000
S5CHPC1100	Installation of Electrical System	79	08-Jan-24	26-Mar-24	15-Apr-23	03-Jul-23	-268	S5CHPC1090, S5CHPC1050, S5P1050	S5CHPC1120, S5CHPT1050, S5CHPT1030



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5CHPC1120	Installation of SCADA System	111	07-Dec-23	26-Mar-24	13-May-23	01-Sep-23	-208	S5CHPC1100, S5CHPP1080	S5T1100, S5T1000, S5T1010, S5CHPC1250
S5CHPC1130	Transfomers Room Installation	180	04-Apr-23 A	30-Sep-23	03-Mar-23	13-Apr-23	-171	S5WS2P1020, S5CHPC1020	S5CHPT1020, S5CHPC1260, S5CHPT1010
S5CHPC1140	HV Switchroom Installation	181	03-Apr-23 A	30-Sep-23	02-Apr-23	13-May-23	-141	S5CHPC1020, S5WS2P1080	S5CHPT1020, S5CHPT1010
S5CHPC1145	LV Switchroom Installation	90	14-Dec-23	12-Mar-24	12-Feb-23	13-May-23	-305	S5CHPP1050	S5CHPT1010, S5CHPT1020
S5CHPC1150	Diesel Storage & Pump Room Installation	120	03-Oct-23*	30-Jan-24	05-Jan-23	05-May-23	-271		S5S1280
First Floor		342	07-Mar-23 A	02-May-24	20-Dec-22	01-Sep-23	-245		
S5CHPC1160	Installation of Monorail / Davit LA-04-03 to LA-04-10 (total 8nos.)	239	07-Mar-23 A	31-Oct-23	08-Mar-23	19-May-23	-166	S5CHPP1060, S5CHPC1030	S5CHPC1170
S5CHPC1170	Installation of Biogas Pre-treatment System - Mechanical Work	150	06-Oct-23	03-Mar-24	20-Dec-22	19-May-23	-290	S5CHPC1060, S5CHPC1160, S5CHPP1000, S5CHPP1040	S5CHPC1200, S5CHPC1230, S5CHPT1040
S5CHPC1200	Installation of pipework	135	06-Oct-23	17-Feb-24	04-Jan-23	19-May-23	-275	S5CHPC1170, S5CHPP1070	S5CHPT1000
S5CHPC1230	Installation of Electrical System	120	04-Jan-24	02-May-24	20-Mar-23	18-Jul-23	-290	S5CHPC1170, S5P1050	S5CHPC1250, S5CHPT1040
S5CHPC1250	Installation of SCADA System (THP, Digester,H2S removal System, Dou12, Biogas Holding Tank)	87	06-Feb-24	02-May-24	06-Jun-23	01-Sep-23	-245	S5CHPC1230, S5CHPC1120, S5CHPP1090	S5T1100, S5T1000, S5T1010
S5CHPC1260	LV Switchroom Installation	92	16-Dec-23	16-Mar-24	10-Feb-23	13-May-23	-309	S5CHPC1130, S5CHPP1055	S5CHPT1020, S5CHPT1010
Roof		153	09-Oct-23	09-Mar-24	13-Jan-23	15-Jun-23	-269		
S5CHPC1270	Installation of CHP System - Mechanical Work	123	09-Oct-23*	08-Feb-24	13-Jan-23	16-May-23	-269	S5CHPC1050, S5CHPP1070	S5CHPT1030, S5CHPC1280, S5CHPC1290
S5CHPC1280	Installation of Steam Boiler System - Mechanical Work	77	16-Oct-23	31-Dec-23	28-Feb-23	16-May-23	-230	S5CHPC1270, S5CHPP1070, S5CHPP1040	S5CHPT1050, S5CHPC1290
S5CHPC1290	Installation of Electrical System	38	01-Feb-24	09-Mar-24	08-May-23	15-Jun-23	-269	S5CHPC1270, S5CHPC1280, S5P1050	S5CHPT1040, S5CHPT1020
BS Installation		378	27-Feb-23 A	01-Apr-24	18-Feb-23	04-Apr-24	3		
Ground Floor		343	27-Feb-23 A	02-Mar-24	18-Feb-23	05-Mar-24	3		
S5CHPC1080	Installation of FS System	231	27-Feb-23 A	15-Oct-23	18-Feb-23	15-Apr-23	-184	S5CHPC1020, S5CHPC1210	S5CHPC1090, S5CHPC1110, S5S1220
S5CHPC1090	Installation of MVAC System	207	10-Jun-23 A	02-Mar-24	15-Apr-23	09-Jun-23	-268	S5CHPC1080, S5P1080	S5CHPC1100, S5S1220, S5CHPC1220
S5CHPC1110	Installation of Plumbing System	137	01-Jun-23 A	15-Oct-23	09-Feb-24	05-Mar-24	142	S5CHPC1080	S5S1160, S5CHPC1240
First Floor		378	27-Feb-23 A	01-Apr-24	18-Feb-23	04-Apr-24	3		
S5CHPC1210	Installation of FS System	216	27-Feb-23 A	30-Sep-23	18-Feb-23	31-Mar-23	-184	S5CHPC1020	S5S1220, S5CHPC1080
S5CHPC1220	Installation of MVAC System	120	04-Dec-23	01-Apr-24	19-Oct-23	16-Feb-24	-46	S5CHPC1090, S5P1080	S5S1220
S5CHPC1240	Installation of Plumbing System	90	04-Sep-23*	02-Dec-23	05-Jan-24	04-Apr-24	124	S5CHPC1110	S5S1160
Testing and Commissioning		196	05-Dec-23	17-Jun-24	05-Mar-23	01-Sep-23	-291		
S5CHPT1000	Pipe Pressure Test	120	05-Dec-23	02-Apr-24	05-Mar-23	03-Jul-23	-275	S5CHPC1200, S5CHPC1070	S5T1100, S5CHPT1030, S5CHPT1040, S5CHPT1050
S5CHPT1010	SAT for Transformer & Switchboard	30	17-Mar-24	15-Apr-24	13-May-23	12-Jun-23	-309	S5CHPC1260, S5CHPC1140, S5CHPC1130, S5CHPC1145	S5CHPT1020

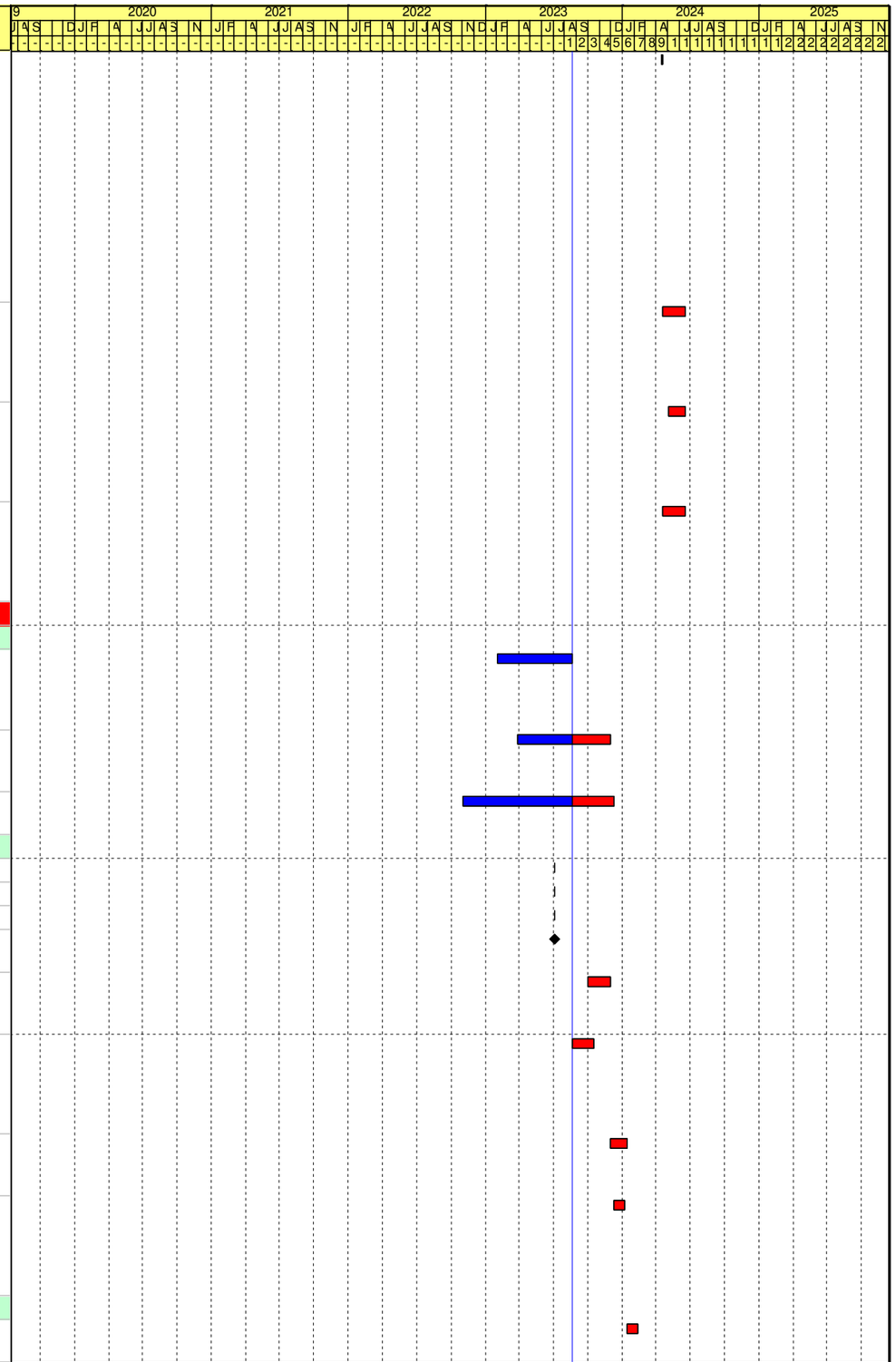


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5CHPT1020	Ready for Power Energisation	3	16-Apr-24	18-Apr-24	12-Jun-23	15-Jun-23	-309	S5CHPC1260, S5CHPC1130, S5CHPC1140, S5CHPT1010, S5CHPC1290, S5CHPC1145, S5WS2C1110	S5CHPT1030, S5BIOT1010, S5THPT1010, S5CHPT1040, S5CHPT1050, S5DIGT1010, S5WS2T1010, S5BIOT1000, S5THPT1000, S5H2ST1000, S5WGBT1000, S5DOUT1010, S5TCWT1000
S5CHPT1030	SAT for CHP System	60	19-Apr-24	17-Jun-24	03-Jul-23	01-Sep-23	-291	S5CHPT1020, S5CHPC1050, S5CHPC1100, S5CHPC1270, S5CHPT1000	S5T1100
S5CHPT1040	SAT for Pre-treatment System	45	03-May-24	16-Jun-24	18-Jul-23	01-Sep-23	-290	S5CHPC1170, S5CHPT1020, S5CHPC1230, S5CHPC1290, S5CHPT1000	S5T1100
S5CHPT1050	SAT for Steam Boiler System	60	19-Apr-24	17-Jun-24	03-Jul-23	01-Sep-23	-291	S5CHPC1060, S5CHPC1100, S5CHPT1020, S5CHPC1280, S5CHPT1000	S5T1100
Tx Rm & LV Switchroom (for UV)		401	04-Nov-22 A	15-Feb-24	22-Oct-22	16-Oct-23	-123		
Fabrication, FAT & Delivery of Major Plant & Materials		401	04-Nov-22 A	09-Dec-23	22-Oct-22	16-Sep-23	-85		
S5TXRP1000	Fabrication & Delivery of Transfomers -UV (Tx 07 & 08)	225	03-Feb-23 A	20-Aug-23 A	03-Dec-22	03-Dec-22		S1D1130, S1D1290, S1D1210, S2P1110	S5TXRC1030
S5TXRP1010	Fabrication & Delivery of LVSB -UV	270	28-Mar-23 A	29-Nov-23	22-Oct-22	31-Jan-23	-303	S1D1210, S1D1290, S2P1130	S5TXRC1040
S5TXRP1020	Fabrication & Delivery of SCADA System	401	04-Nov-22 A	09-Dec-23	28-May-23	16-Sep-23	-85	S1D1290, S2P1140	S5TXRC1050
Installation		177	05-Jul-23 A	13-Jan-24	08-Dec-22	16-Oct-23	-90		
S5TXRC1000	Access to TX Rm & LV Switchroom (Impacted by EWN-0314)	1	05-Jul-23 A	05-Jul-23 A	14-Mar-23	14-Mar-23			S5TXRC1020
S5TXRC1010	Access to TX Rm & LV Switchroom (Impacted by EWN-0314-1)	1	05-Jul-23 A	05-Jul-23 A	14-Mar-23	14-Mar-23			S5TXRC1020
S5TXRC1012	Access to TX Rm & LV Switchroom (Impacted by EWN-0314-2)	1	05-Jul-23 A	05-Jul-23 A	08-Dec-22	08-Dec-22			S5TXRC1015
S5TXRC1015	Assume actual access Date	0	05-Jul-23 A		08-Dec-22			S5TXRC1012	S5TXRC1020, S5TXRC1030
S5TXRC1020	BS Fitting Intallation (at Tx Rm & LV Switchroom)	60	03-Oct-23*	01-Dec-23	14-Mar-23	13-May-23	-203	S5TXRC1000, S5TXRC1010, S5TXRC1015	S5TXRT1010
S5TXRC1030	E&M Installation of Transfomers in Tx Rm	60	20-Aug-23 A	18-Oct-23	08-Dec-22	31-Jan-23	-261	S4C1010, S5TXRP1000, S1D1310, S5P1050, S5TXRC1015	S5TXRC1040, S5TXRT1000
S5TXRC1040	E&M Installation of LVSB	45	30-Nov-23	13-Jan-24	31-Jan-23	17-Mar-23	-303	S5TXRC1030, S5TXRP1010, S5P1050	S5TXRT1010, S5TXRT1000, S5EXAC1080
S5TXRC1050	Installation of SCADA System (UV, DOU11, PSW)	30	10-Dec-23	08-Jan-24	16-Sep-23	16-Oct-23	-85	S4C1040, S5TXRP1020, S4C1070, S4C1080	S5T1200, S5T1120, S5T1000, S5T1010, PL1210
Testing and Commissioning		33	14-Jan-24	15-Feb-24	13-Apr-23	16-May-23	-276		
S5TXRT1000	SAT for Transformer & Switchboard	30	14-Jan-24	12-Feb-24	13-Apr-23	13-May-23	-276	S5TXRC1040, S5TXRC1030	S5TXRT1010

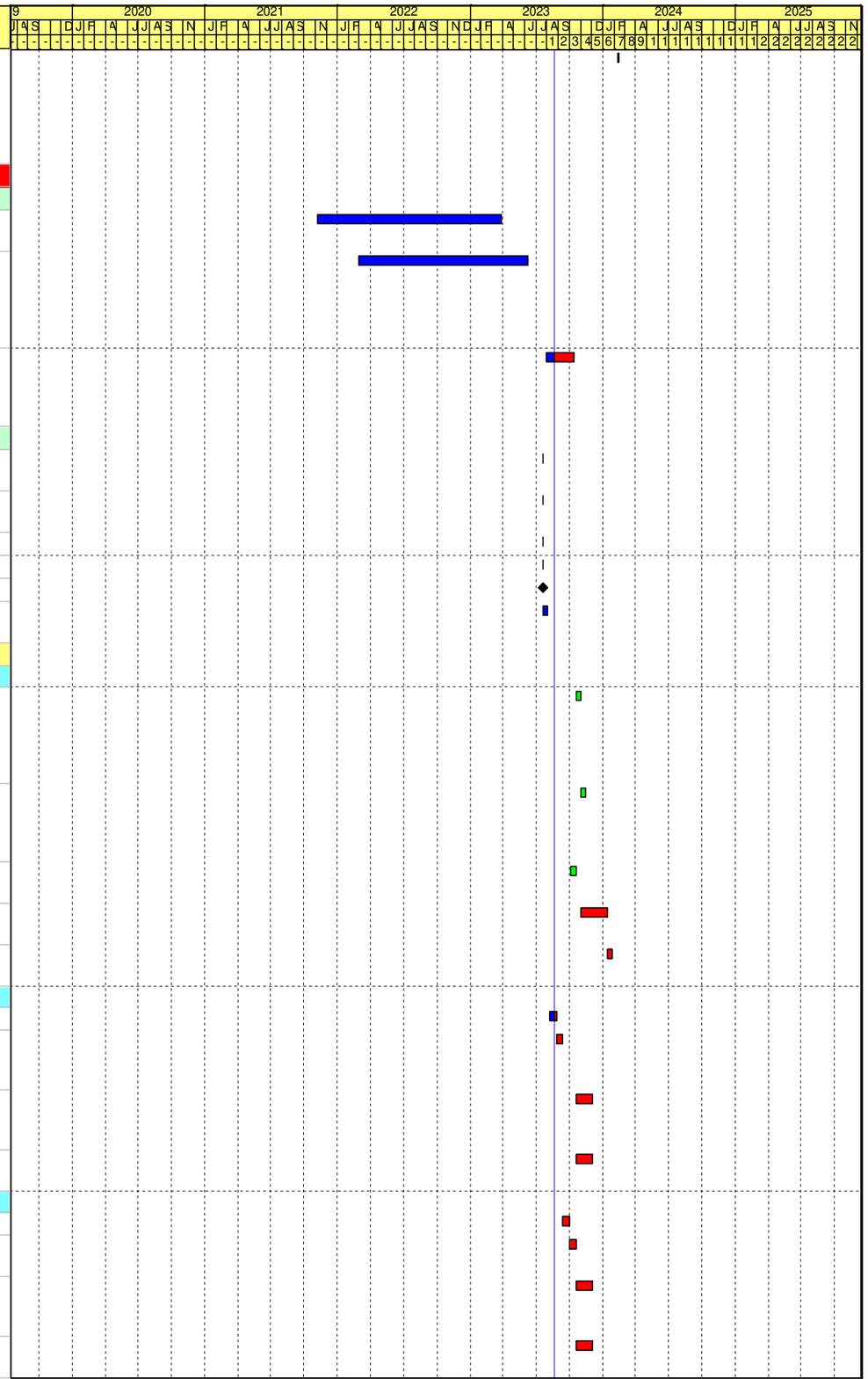


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5TXRT1010	Ready for Power Energisation	3	13-Feb-24	15-Feb-24	13-May-23	16-May-23	-276	S5TXRC1020, S5TXRC1040, S5WS2C1060, S5WS2C1040, S5WS2C1130, S5TXRT1000	SC51110, S5SHPT1000, S5DOUT1000, S5PSWT1000
Sludge Digesters & Distribution Chamber		928	06-Nov-21 A	05-Jun-24	11-Oct-22	11-Jun-25	371		
Fabrication, FAT & Delivery of Major Plant & Materials		698	06-Nov-21 A	15-Oct-23	11-Oct-22	21-Mar-23	-209		
S5DIGP1000	Fabrication & Delivery of Sludge Digestion System	180	06-Nov-21 A	29-Mar-23 A	11-Oct-22	11-Oct-22		S2P1020, S2D1450	S5DIGC1210
S5DIGP1010	Fabrication & Delivery of FRP Walkway / Cover	480	01-Mar-22 A	10-Jun-23 A	21-Mar-23	21-Mar-23		S2P1020	S5DIGC1040, S5DIGC1050, S5DIGC1060, S5DIGC1070, S5DIGC1080
S5DIGP1020	Fabrication & Delivery of Pipeworks & Associated Valves	60	31-Jul-23 A	15-Oct-23	13-Oct-22	08-Dec-22	-312	S5P1010	S5DIGC1110, S5DIGC1150, S5DIGC1190, S5DIGC1250
Installation		316	29-Jun-23 A	31-May-24	11-Oct-22	11-Jun-25	376		
S5DIGC1000	Access to Sludge Digesters & Distribution Chamber (Impacted by EWN-0314)	1	20-Jul-23 A	20-Jul-23 A	11-Jun-25	11-Jun-25			
S5DIGC1010	Access to Sludge Digester No.1 & Distribution Chamber (Impacted by EWN-0314-1)	1	20-Jul-23 A	20-Jul-23 A	11-Jun-25	11-Jun-25			
S5DIGC1020	Access to Sludge Digesters - Remaining (Impacted by EWN-0314-1)	1	20-Jul-23 A	20-Jul-23 A	29-May-25	29-May-25			S5DIGC1050
S5DIGC1022	Access to Sludge Digesters - Remaining (Impacted by EWN-0314-2)	1	20-Jul-23 A	20-Jul-23 A	11-Oct-22	11-Oct-22			S5DIGC1025
S5DIGC1025	Actual Access Date	0	20-Jul-23 A		11-Oct-22			S5DIGC1022	S5DIGC1030
S5DIGC1030	Mobilisation	15	20-Jul-23 A	03-Aug-23 A	11-Oct-22	11-Oct-22		S5DIGC1025	S5DIGC1210, S5DIGC1040
E&M Installation		229	29-Jun-23 A	05-Mar-24	11-Oct-22	11-Jun-25	463		
FRP Walkway / Cover Installation		115	06-Oct-23	28-Jan-24	21-Mar-23	11-Jun-25	500		
S5DIGC1040	Installation of Working Platform for Digester 1 (Roof)	14	20-Oct-23	02-Nov-23	24-Jan-24	07-Feb-24	97	AD1080, S5DIGP1010, S5DIGC1030, S5DIGC1100, S5DIGC1060	SC51110, PL1210, PL1310, S5DIGC1050
S5DIGC1050	Installation of Working Platform for Digester 3 (Roof)	14	03-Nov-23	16-Nov-23	29-May-25	11-Jun-25	573	S5DIGC1020, S5DIGC1140, S5DIGP1010, S5DIGC1040	
S5DIGC1060	Installation of Working Platform for Digester 4 (Roof)	14	06-Oct-23*	19-Oct-23	10-Jan-24	24-Jan-24	97	S5DIGC1180, S5DIGP1010	S5DIGC1040
S5DIGC1070	Installation of Working Platform for Distribution Chamber & Overflow Chamber	75	01-Nov-23*	14-Jan-24	21-Mar-23	04-Jun-23	-225	S5DIGP1010	S5DIGC1080
S5DIGC1080	Installation of Working Platform for Digester 2 (Roof)	14	15-Jan-24	28-Jan-24	04-Jun-23	18-Jun-23	-225	S5DIGC1070, S5DIGP1010	S5DIGT1020
Sludge Digester 1		105	08-Aug-23 A	03-Dec-23	02-Mar-23	15-Jun-23	-172		
S5DIGC1090	Installation of Sludge Mixer (4 nos.)	19	08-Aug-23 A	26-Aug-23	02-Mar-23	08-Mar-23	-172	S5DIGC1180	S5DIGC1100
S5DIGC1100	Installation of Motor with Belt adjustment	18	27-Aug-23	13-Sep-23	08-Mar-23	26-Mar-23	-172	S5DIGC1090	S5DIGC1110, S5DIGC1130, S5DIGC1040
S5DIGC1110	Installation of Pipework, Valve, Inpsection Window, Telescopic Valve & Instruments	45	20-Oct-23	03-Dec-23	01-May-23	15-Jun-23	-172	S5DIGC1100, S5DIGP1020, S5DIGC1150	S5DIGC1120
S5DIGC1120	Installation of Electrical System	45	20-Oct-23	03-Dec-23	01-May-23	15-Jun-23	-172	S5DIGC1110, S5P1050	S5DIGT1010
Sludge Digester 3		81	14-Sep-23	03-Dec-23	26-Mar-23	15-Jun-23	-172		
S5DIGC1130	Installation of Sludge Mixer (4 nos.)	18	14-Sep-23	01-Oct-23	26-Mar-23	13-Apr-23	-172	S5DIGC1100	S5DIGC1140
S5DIGC1140	Installation of Motor with Belt adjustment	18	02-Oct-23	19-Oct-23	13-Apr-23	01-May-23	-172	S5DIGC1130	S5DIGC1150, S5DIGC1050
S5DIGC1150	Installation of Pipework, Valve, Inpsection Window, Telescopic Valve & Instruments	45	20-Oct-23	03-Dec-23	01-May-23	15-Jun-23	-172	S5DIGC1140, S5DIGP1020	S5DIGC1160, S5DIGC1110, S5DIGC1190
S5DIGC1160	Installation of Electrical System	45	20-Oct-23	03-Dec-23	01-May-23	15-Jun-23	-172	S5DIGC1150, S5P1050	S5DIGT1010

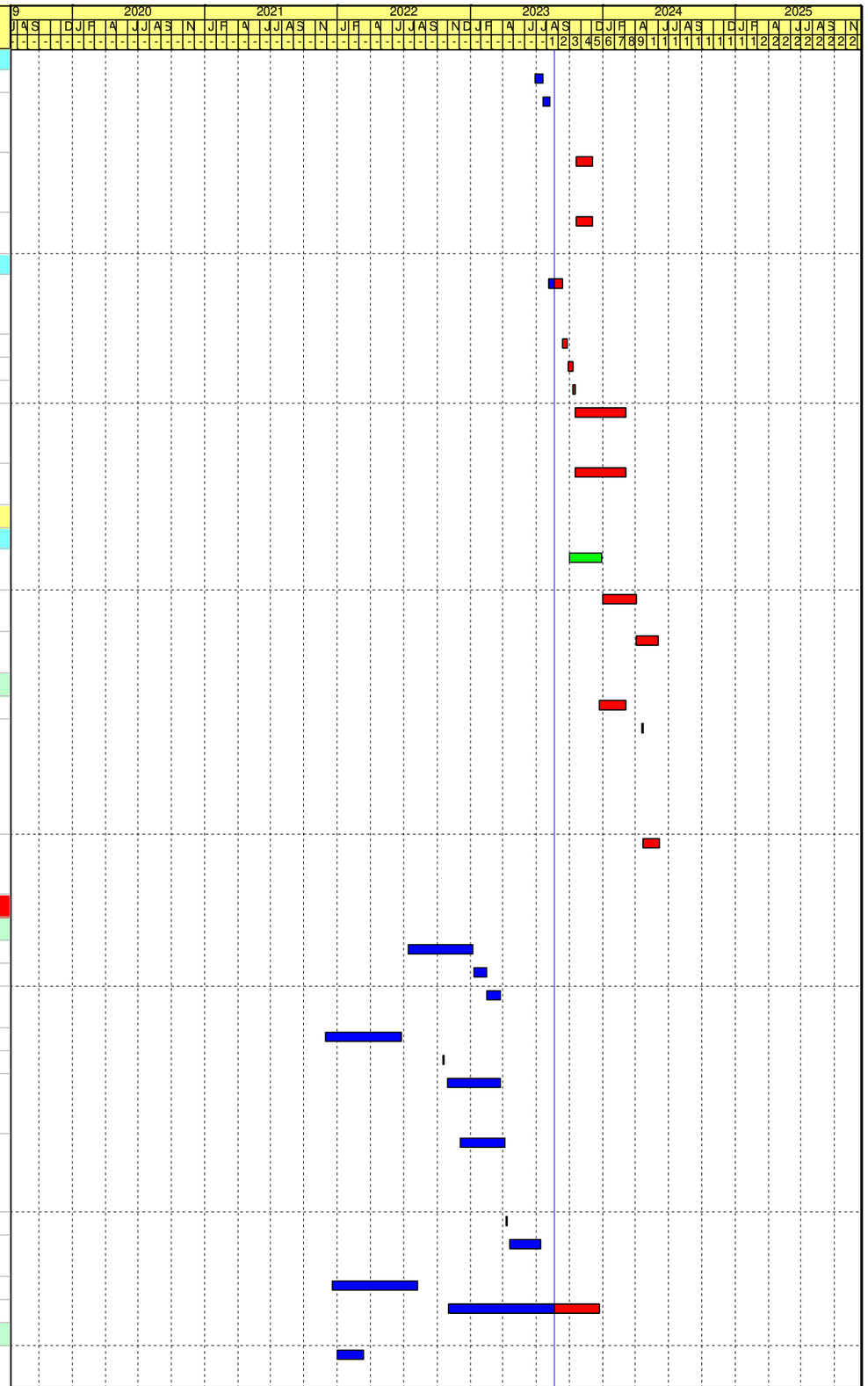


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
Sludge Digester 4		136	29-Jun-23 A	03-Dec-23	02-Mar-23	15-Jun-23	-172		
S5DIGC1170	Installation of Sludge Mixer (4 nos.)	18	29-Jun-23 A	20-Jul-23 A	02-Mar-23	02-Mar-23			S5DIGC1180
S5DIGC1180	Installation of Motor with Belt adjustment	18	21-Jul-23 A	07-Aug-23 A	02-Mar-23	02-Mar-23		S5DIGC1170	S5DIGC1190, S5DIGC1090, S5DIGC1060
S5DIGC1190	Installation of Pipework, Valve, Inpsection Window, Telescopic Valve & Instruments	45	20-Oct-23	03-Dec-23	01-May-23	15-Jun-23	-172	S5DIGC1180, S5DIGP1020, S5DIGC1150	S5DIGC1200
S5DIGC1200	Installation of Electrical System	45	20-Oct-23	03-Dec-23	01-May-23	15-Jun-23	-172	S5DIGC1190, S5P1050	S5DIGT1010
Distribution Chamber		198	04-Aug-23 A	05-Mar-24	11-Oct-22	15-Jun-23	-265		
S5DIGC1210	Installation of Sludge Recirculation Pumps (5 nos.)	40	04-Aug-23 A	12-Sep-23	11-Oct-22	03-Nov-22	-314	AD1080, S5DIGP1000, S5DIGC1030	S5DIGC1220, S5DIGC1280
S5DIGC1220	Installation of Heat Exchanger (3 nos.)	14	13-Sep-23	26-Sep-23	03-Nov-22	17-Nov-22	-314	S5DIGC1210	S5DIGC1230
S5DIGC1230	Installation of Sludge Transfer Pump (2 nos.)	14	27-Sep-23	10-Oct-23	17-Nov-22	01-Dec-22	-314	S5DIGC1220	S5DIGC1240
S5DIGC1240	Installation of Vertical Mixer at Sludge Buffer Tank (2 nos.)	7	11-Oct-23	17-Oct-23	01-Dec-22	08-Dec-22	-314	S5DIGC1230	S5DIGC1250
S5DIGC1250	Installation of Pipework, Valve & Instruments	140	18-Oct-23	05-Mar-24	08-Dec-22	27-Apr-23	-314	S5DIGC1240, S5DIGP1020	S5DIGC1260, S5DIGT1000, S5H2SC1020
S5DIGC1260	Installation of Electrical System	140	18-Oct-23	05-Mar-24	26-Jan-23	15-Jun-23	-265	S5DIGC1250, S5P1050	S5DIGT1010
BS Installation		245	30-Sep-23	31-May-24	06-Nov-23	04-Apr-24	-58		
Distribution Chamber		245	30-Sep-23	31-May-24	06-Nov-23	04-Apr-24	-58		
S5DIGC1280	Installation of FS System	90	30-Sep-23*	28-Dec-23	06-Nov-23	04-Feb-24	38	S5DIGC1210	S5DIGC1290, S5S1220
S5DIGC1290	Installation of MVAC System	90	03-Jan-24	01-Apr-24	06-Nov-23	04-Feb-24	-58	S5DIGC1280, S5P1080	S5DIGC1300, S5S1220
S5DIGC1300	Installation of Plumbing System	60	02-Apr-24	31-May-24	04-Feb-24	04-Apr-24	-58	S5S1120, S5DIGC1290	S5S1160
Testing and Commissioning		167	22-Dec-23	05-Jun-24	04-Apr-23	02-Aug-23	-309		
S5DIGT1000	Pipe Pressure Test	75	22-Dec-23	05-Mar-24	04-Apr-23	18-Jun-23	-262	S5DIGC1250	S5DIGT1020
S5DIGT1010	Ready for Power Energisation	3	19-Apr-24	21-Apr-24	15-Jun-23	18-Jun-23	-309	S5DIGC1260, S5DIGC1200, S5DIGC1160, S5DIGC1120, S5EXAC1030, S5CHPT1020	S5DIGT1020
S5DIGT1020	SAT for Sludge Digestion System	45	22-Apr-24	05-Jun-24	18-Jun-23	02-Aug-23	-309	S5DIGC1080, S5DIGT1010, S5DIGT1000	S5T1080
Workshop No. 2		882	29-Nov-21 A	20-Jun-24	18-Nov-22	11-Jun-25	356		
Fabrication, FAT & Delivery of Major Plant & Materials		760	29-Nov-21 A	23-Dec-23	27-Feb-23	22-Jan-24	30		
S5WS2P1000	Fabrication of 11kV to 380V Transfomers	123	14-Jul-22 A	09-Jan-23 A	03-Mar-23	03-Mar-23		S2P1110	S5WS2P1010
S5WS2P1010	FAT for 11kV to 380V Transfomers	37	10-Jan-23 A	15-Feb-23 A	03-Mar-23	03-Mar-23		S5WS2P1000	S5WS2P1020
S5WS2P1020	Delivery of 11kV to 380V Transfomers	28	16-Feb-23 A	25-Mar-23 A	03-Mar-23	03-Mar-23		S5WS2P1010	S5CHPC1130, S5WS2C1070
S5WS2P1060	Fabrication of 11 kV Switchboard	210	29-Nov-21 A	26-Jun-22 A	27-Feb-23	27-Feb-23		S2P1120	S5WS2P1070
S5WS2P1070	FAT for 11 kV Switchboard	14	18-Oct-22 A	21-Oct-22 A	27-Feb-23	27-Feb-23		S5WS2P1060	S5WS2P1080
S5WS2P1080	Delivery of 11kV Switchboard	90	01-Nov-22 A	25-Mar-23 A	27-Feb-23	27-Feb-23		S5WS2P1070	S5WS2C1060, S5CHPC1140, S5WS2T1000
S5WS2P1090	Fabrication of LV Switchboard	120	04-Dec-22 A	07-Apr-23 A	04-Dec-23	04-Dec-23		S2P1130, S2D1250, S2D1190, S2D1270	S5WS2P1100
S5WS2P1100	FAT for LV Switchboard	14	10-Apr-23 A	14-Apr-23 A	04-Dec-23	04-Dec-23		S5WS2P1090	S5WS2P1110
S5WS2P1110	Delivery of LV Switchboard	60	20-Apr-23 A	14-Jul-23 A	04-Dec-23	04-Dec-23		S5WS2P1100	S5WS2C1080, S5WS2T1005
S5WS2P1120	Fabrication & Delivery of Lift	210	18-Dec-21 A	10-Aug-22 A	22-Jan-24	22-Jan-24			S5WS2C1190
S5WS2P1130	Fabrication, FAT & Delivery of SCADA System	415	04-Nov-22 A	23-Dec-23	29-Jun-23	01-Nov-23	-53		S5WS2C1180
Installation		771	31-Dec-21 A	01-Mar-24	18-Nov-22	11-Jun-25	467		
S5WS2C1000	Mobilisation	14	31-Dec-21 A	12-Mar-22 A	11-Jan-23	11-Jan-23		AD1120, S5S1030	S5WS2C1010, S5WS2C1050

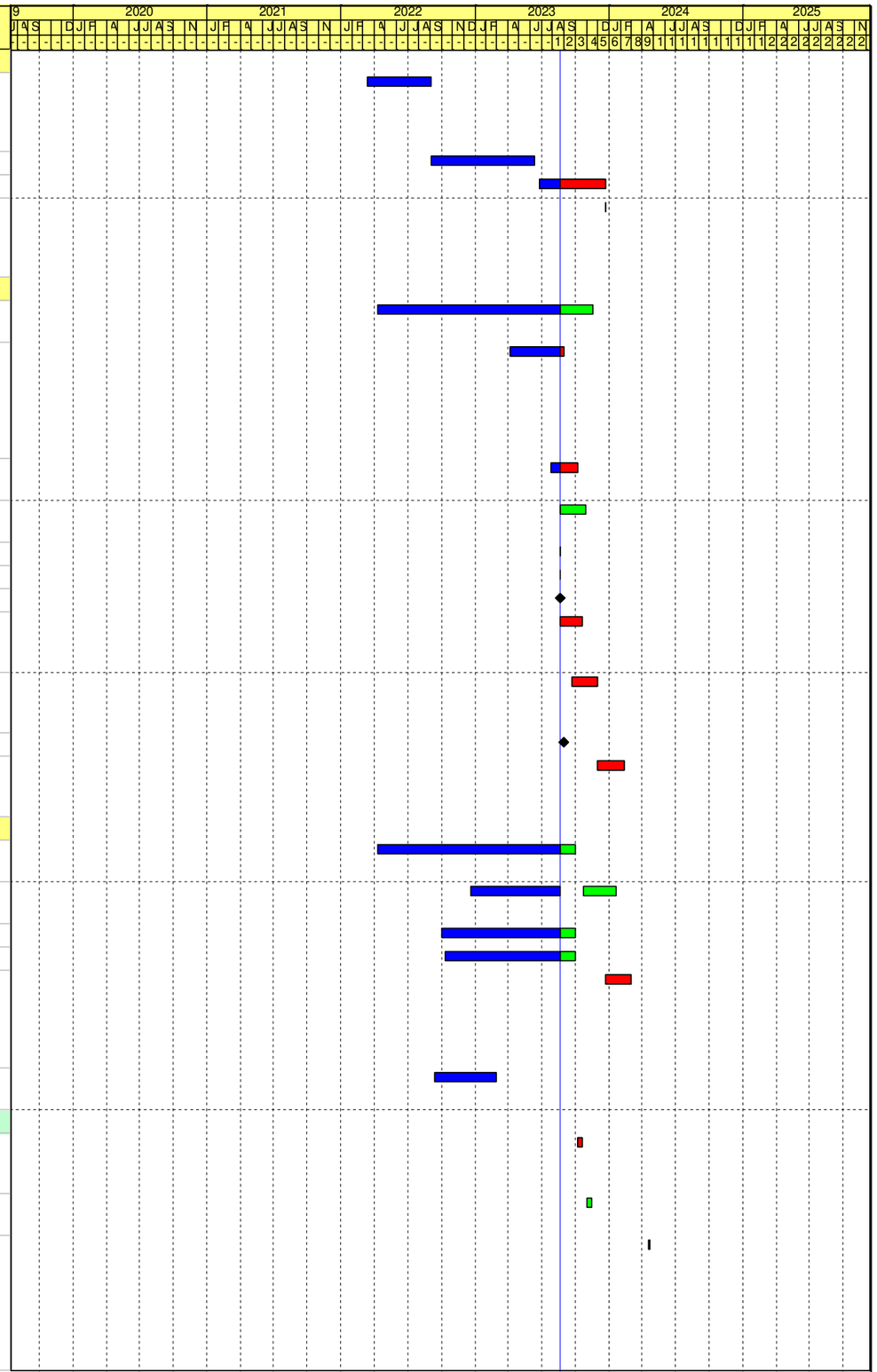


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
CLP Substation		667	14-Mar-22 A	23-Dec-23	11-Jan-23	16-May-23	-222		
S5WS2C1010	BS Fitting Installation (at CLP Sub-station in Workshop No.2)	60	14-Mar-22 A	02-Sep-22 A	11-Jan-23	11-Jan-23		S5WS2C1000, AD1120	KD1060, S5WS2C1020, S5WS2C1050, KD1060-1
S5WS2C1020	Inspections, Rectification & H/O to CLP	270	03-Sep-22 A	13-Jun-23 A	11-Jan-23	11-Jan-23		S5WS2C1010	S5WS2C1030
S5WS2C1030	E&M Installation of HV Transformer (By CLP)	180	26-Jun-23 A	22-Dec-23	11-Jan-23	15-May-23	-222	S5WS2C1020	S5WS2C1040
S5WS2C1040	Energisation (By CLP)	1	23-Dec-23	23-Dec-23	15-May-23	16-May-23	-222	S5WS2C1030, S5WS2C1060, S5S1000, S5WS2T1000	S5TXRT1010
HV Switchroom / Transformer Room / LV Switchroom		661	11-Apr-22 A	12-Feb-24	18-Nov-22	11-Jun-25	485		
S5WS2C1050	BS Fitting Intallation	586	11-Apr-22 A	17-Nov-23	15-Mar-25	11-Jun-25	572	S5WS2C1000, S5WS2C1010	
S5WS2C1060	HV Switchroom Installation	148	06-Apr-23 A	31-Aug-23	16-Feb-23	27-Feb-23	-186	S5WS2P1080	S5WS2C1130, S5TXRT1010, S5WS2C1040, S5WS2C1070, S5WS2T1010, S5WS2T1000
S5WS2C1070	TX Room Installation	71	28-Jul-23 A	06-Oct-23	15-Mar-23	01-May-23	-159	S5WS2C1060, S5WS2P1020	S5WS2T1010, S5WS2T1000
S5WS2C1080	LV Switchroom Installation	73	20-Aug-23 A	31-Oct-23	04-Dec-23	14-Feb-24	106	S5WS2P1110	S5WS2T1010, S5WS2T1005
S5WS2C1090	Access to Other Peripheral Systems (Impacted by EWN-0314)	1	21-Aug-23*	21-Aug-23	18-Nov-22	19-Nov-22	-276		S5WS2C1110
S5WS2C1100	Access to Other Peripheral Systems (Impacted by EWN-0314-1)	1	21-Aug-23*	21-Aug-23	11-Jun-25	11-Jun-25	660		
S5WS2C1105	Access to Stage 1 External Area	0	21-Aug-23*		19-Nov-22		-275		S5WS2C1110
S5WS2C1110	HV Cables Laying between Workshop No.2 & Tx Rm for CHP Bldg and Termination	60	22-Aug-23	20-Oct-23	19-Nov-22	18-Jan-23	-276	S5WS2C1090, S5WS2C1105	S5WS2C1120, PL1210, S5CHPT1020
S5WS2C1120	HV Cables Laying between Workshop No.2 & Tx Rm for Sludge Dewatering Bldg and Termination	70	21-Sep-23	29-Nov-23	19-Dec-22	27-Feb-23	-276	S5WS2C1110	S5WS2C1130, PL1210, S5SDBT1050
S5WS2C1125	Access to Stage 3 External Area	0	01-Sep-23*		27-Feb-23		-186		S5WS2C1130
S5WS2C1130	HV Cables Laying between Workshop No.2 & Tx Rm for UV System No.1 and Termination	75	30-Nov-23*	12-Feb-24	27-Feb-23	13-May-23	-276	S5WS2C1060, S5WS2C1120, S5WS2C1125	S5TXRT1010, PL1210
Building Services		528	11-Apr-22 A	01-Mar-24	21-Sep-23	04-Apr-24	34		
S5WS2C1140	Installation of FS System	508	11-Apr-22 A	30-Sep-23	28-Oct-23	08-Dec-23	69	S5S1120	S5WS2C1150, S5S1130
S5WS2C1150	Installation of MVAC System	339	19-Dec-22 A	21-Jan-24	18-Nov-23	16-Feb-24	26	S5WS2C1140, S5P1080	S5S1220
S5WS2C1160	Installation of Electrical System	333	03-Oct-22 A	30-Sep-23	21-Sep-23	01-Nov-23	32		S5WS2C1180
S5WS2C1170	Installation of Plumbing System	326	10-Oct-22 A	30-Sep-23	23-Feb-24	04-Apr-24	187	S5S1120	S5S1160
S5WS2C1180	Installation of SCADA System	69	24-Dec-23	01-Mar-24	01-Nov-23	09-Jan-24	-53	S5WS2C1160, S5WS2P1130	S5T1200, S5T1000, S5T1010, S5S0990, PL1210
S5WS2C1190	Installation of Lift	120	13-Sep-22 A	28-Feb-23 A	22-Jan-24	22-Jan-24		S5WS2P1120	S5WS2T1020, S5SDBC1780
Testing and Commissioning		258	07-Oct-23	20-Jun-24	01-May-23	01-May-24	-51		
S5WS2T1000	SAT for Transformer & Switchboard	14	07-Oct-23	20-Oct-23	01-May-23	15-May-23	-159	S5WS2P1080, S5WS2C1060, S5WS2C1070	S5WS2T1010, S5WS2C1040
S5WS2T1005	SAT for LV Switchboard	14	01-Nov-23	14-Nov-23	14-Feb-24	28-Feb-24	106	S5WS2P1110, S5WS2C1080	S5WS2T1010
S5WS2T1010	Ready for Power Energisation	3	19-Apr-24	21-Apr-24	28-Feb-24	02-Mar-24	-51	S5EXAC1030, S5WS2C1060, S5WS2C1080, S5WS2C1070, S5CHPT1020, S5WS2T1000, S5WS2T1005	S5WS2T1020

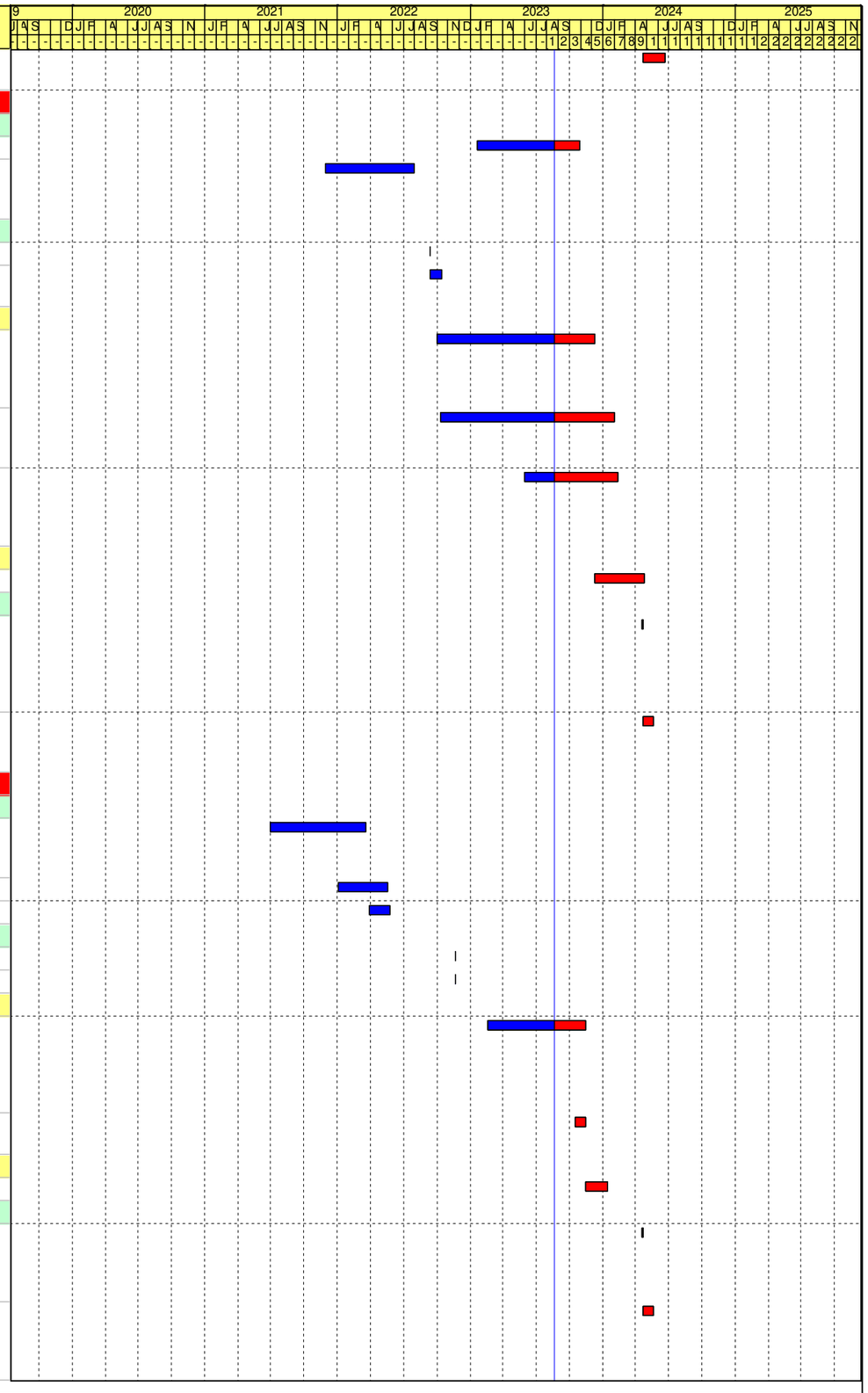


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5WS2T1020	SAT for Lift	60	22-Apr-24	20-Jun-24	02-Mar-24	01-May-24	-51	S5WS2C1190, S5WS2T1010	S5S1090
Biogas Storage		883	29-Nov-21 A	21-May-24	16-Feb-23	12-Dec-23	-162		
Fabrication, FAT & Delivery of Major Plant & Materials		638	29-Nov-21 A	31-Oct-23	16-Feb-23	17-Aug-23	-76		
S5BIOP1000	Fabrication & Delivery of Biogas Booster and Transfer Pumps	210	22-Jan-23 A	31-Oct-23	06-Jun-23	17-Aug-23	-76	S5P1000	S5BIOC1040
S5BIOP1010	Fabrication & Delivery of Biogas Storage	180	29-Nov-21 A	30-Jul-22 A	16-Feb-23	16-Feb-23		S2P1050, S2D1530	S5BIOC1020, S5BIOC1030, S5BIOC1040
E&M Installation		586	13-Sep-22 A	23-Apr-24	16-Feb-23	12-Dec-23	-134		
S5BIOC1000	Access to Biogas Holding Tanks (Impacted by EWN-0314-1)	1	13-Sep-22 A	13-Sep-22 A	16-Feb-23	16-Feb-23			S5BIOC1010
S5BIOC1010	Mobilisation	30	13-Sep-22 A	14-Oct-22 A	16-Feb-23	16-Feb-23		AD1100, S5BIOC1000	S5BIOC1020
Mechanical Installation		494	03-Oct-22 A	10-Feb-24	16-Feb-23	17-Aug-23	-178		
S5BIOC1020	Mechanical Installation of Biogas Storage Tank 3	433	03-Oct-22 A	10-Dec-23	16-Feb-23	07-Jun-23	-187	AD1100, S5BIOP1010, S5S1060, S5BIOC1010	S5BIOC1030, S5BIOT1000, S5BIOC1060
S5BIOC1030	Mechanical Installation of Biogas Storage Tank 2	479	10-Oct-22 A	01-Feb-24	16-Feb-23	30-Jul-23	-187	AD1100, S5BIOC1020, S5BIOP1010	S5BIOC1040, S5WGBC1020, S5BIOT1000
S5BIOC1040	Mechanical Installation of Biogas Storage Tank 1	254	01-Jun-23 A	10-Feb-24	25-Feb-23	17-Aug-23	-178	AD1100, S5BIOC1030, S5BIOP1010, S5BIOP1000	S5BIOT1010, PL1210
Electrical Installation		135	11-Dec-23	23-Apr-24	30-Jul-23	12-Dec-23	-134		
S5BIOC1060	Electrical Installation for Biogas Holding Tanks	135	11-Dec-23	23-Apr-24	30-Jul-23	12-Dec-23	-134	S5BIOC1020	S5BIOT1000
Testing and Commissioning		33	19-Apr-24	21-May-24	30-Jul-23	01-Sep-23	-264		
S5BIOT1000	Ready for Power Energisation	3	19-Apr-24	21-Apr-24	30-Jul-23	02-Aug-23	-264	S5BIOC1030, S5BIOC1020, S5EXAC1050, S5BIOC1060, S5CHPT1020	S5BIOT1010
S5BIOT1010	SAT for Biogas Storage System	30	22-Apr-24	21-May-24	02-Aug-23	01-Sep-23	-264	S5BIOC1040, S5CHPT1020, S5BIOT1000	S5T1070
THP Area		1016	29-Jun-21 A	21-May-24	20-Jan-23	18-Jul-23	-309		
Fabrication, FAT & Delivery of Major Plant & Materials		315	29-Jun-21 A	23-May-22 A	20-Jan-23	20-Jan-23			
S5THPP1000	Fabrication of THP System	300	29-Jun-21 A	18-Mar-22 A	20-Jan-23	20-Jan-23		S2P1040, S2D1410, S2D1370	S5THPP1010
S5THPP1010	FAT for THP System	14	03-Jan-22 A	17-May-22 A	20-Jan-23	20-Jan-23		S5THPP1000	S5THPP1020
S5THPP1020	Delivery of THP System	60	29-Mar-22 A	23-May-22 A	20-Jan-23	20-Jan-23		S5THPP1010	S5THPC1020
E&M Installation		390	22-Nov-22 A	14-Jan-24	20-Jan-23	18-Jun-23	-211		
S5THPC1000	Access to THP Area (Impacted by EWN-0314)	1	22-Nov-22 A	22-Nov-22 A	20-Jan-23	20-Jan-23			S5THPC1020
S5THPC1010	Access to THP Area (Impacted by EWN-0314-1)	1	22-Nov-22 A	22-Nov-22 A	20-Jan-23	20-Jan-23			S5THPC1020
Mechanical Installation		269	20-Feb-23 A	15-Nov-23	20-Jan-23	18-Jun-23	-151		
S5THPC1020	Mechanical Installation of THP System	269	20-Feb-23 A	15-Nov-23	20-Jan-23	16-Apr-23	-214	AD1100, S5THPP1020, S5S1020, S5THPC1000, S5THPC1010	S5THPC1030, S5THPT1010, S5THPC1050, S5WGBC1020, S5THPT1000
S5THPC1030	Mechanical Installation of Thickened Sludge Feed Pipe to THP System	30	17-Oct-23	15-Nov-23	19-May-23	18-Jun-23	-151	S5THPC1020	S5THPT1010, PL1210
Electrical Installation		60	16-Nov-23	14-Jan-24	16-Apr-23	15-Jun-23	-214		
S5THPC1050	Electrical Installation for THP Facilities	60	16-Nov-23	14-Jan-24	16-Apr-23	15-Jun-23	-214	S5THPC1020	S5THPT1000
Testing and Commissioning		33	19-Apr-24	21-May-24	15-Jun-23	18-Jul-23	-309		
S5THPT1000	Ready for Power Energisation	3	19-Apr-24	21-Apr-24	15-Jun-23	18-Jun-23	-309	S5THPC1020, S5EXAC1050, S5THPC1050, S5CHPT1020	S5THPT1010
S5THPT1010	SAT of THP System	30	22-Apr-24	21-May-24	18-Jun-23	18-Jul-23	-309	S5THPC1020, S5THPC1030, S5CHPT1020, S5THPT1000	S5T1050

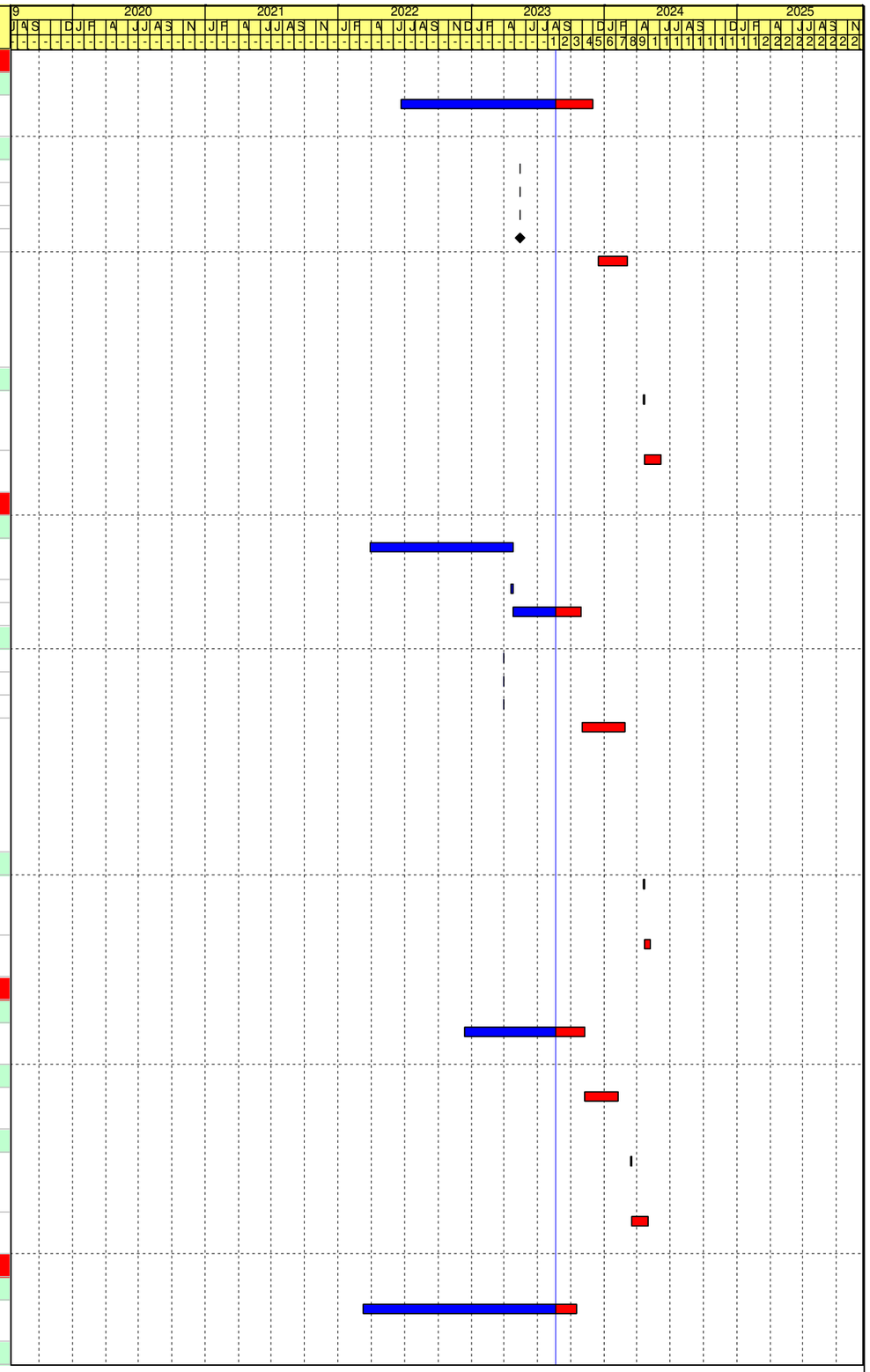


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
H2S Removal Area		655	23-Jun-22 A	05-Jun-24	13-Oct-22	11-Jun-25	371		
Fabrication, FAT & Delivery of Major Plant & Materials		526	23-Jun-22 A	30-Nov-23	13-Oct-22	23-Jan-23	-312		
S5H2SP1000	Fabrication & Delivery of H2S Removal System	526	23-Jun-22 A	30-Nov-23	13-Oct-22	23-Jan-23	-312	S2P1060, S2D1530	S5H2SC1020
Installation		320	15-May-23 A	05-Mar-24	06-Feb-23	11-Jun-25	463		
S5H2SC1000	Access to H2S Removal Area (Impacted by EWN-0314)	1	15-May-23 A	15-May-23 A	06-Feb-23	06-Feb-23			S5H2SC1020
S5H2SC1010	Access to H2S Removal Area (Impacted by EWN-0314-1)	1	15-May-23 A	15-May-23 A	06-Feb-23	06-Feb-23			S5H2SC1020
S5H2SC1012	Access to H2S Removal Area (Impacted by EWN-0314-2)	1	15-May-23 A	15-May-23 A	11-Jun-25	11-Jun-25			
S5H2SC1015	Actual Access Date	0	15-May-23 A		06-Feb-23				S5H2SC1020
S5H2SC1020	E&M Installation of H2S Removal System	80	17-Dec-23	05-Mar-24	06-Feb-23	27-Apr-23	-314	AD1100, S5H2SP1000, S5H2SC1000, S5H2SC1010, S5H2SC1015, S5DIGC1250	S5H2ST1000, PL1210, S5DOUC1030, S5DOUC1040
Testing and Commissioning		48	19-Apr-24	05-Jun-24	15-Jun-23	02-Aug-23	-309		
S5H2ST1000	Ready for Power Energisation	3	19-Apr-24	21-Apr-24	15-Jun-23	18-Jun-23	-309	S5H2SC1020, S5EXAC1050, S5CHPT1020	S5H2ST1010
S5H2ST1010	SAT of H2S Removal System	45	22-Apr-24	05-Jun-24	18-Jun-23	02-Aug-23	-309	S5H2ST1000	S5T1080, S5T1110
Waste Gas Burning Area		686	29-Mar-22 A	06-May-24	18-Feb-23	16-Sep-23	-234		
Fabrication, FAT & Delivery of Major Plant & Materials		528	29-Mar-22 A	31-Oct-23	18-Feb-23	01-May-23	-184		
S5WGBP1000	Fabrication of Waste Gas Burning System	210	29-Mar-22 A	26-Apr-23 A	18-Feb-23	18-Feb-23		S2P1080, S2D1650	S5WGBP1010
S5WGBP1010	FAT for Waste Gas Burning System	6	20-Apr-23 A	26-Apr-23 A	18-Feb-23	18-Feb-23		S5WGBP100	S5WGBP1020
S5WGBP1020	Delivery of Waste Gas Burning System	188	27-Apr-23 A	31-Oct-23	18-Feb-23	01-May-23	-184	S5WGBP101	S5WGBC1020
Installation		314	31-Mar-23 A	28-Feb-24	01-May-23	29-Aug-23	-184		
S5WGBC1000	Access to Waste Gas Burning Area (Impacted by EWN-0314)	1	31-Mar-23 A	31-Mar-23 A	01-May-23	01-May-23			S5WGBC1020
S5WGBC1010	Access to Waste Gas Burning Area (Impacted by EWN-0314-1)	1	31-Mar-23 A	31-Mar-23 A	01-May-23	01-May-23			S5WGBC1020
S5WGBC1015	Actual Access Date	1	31-Mar-23 A	31-Mar-23 A	01-May-23	01-May-23			S5WGBC1020
S5WGBC1020	E&M Installation of Waste Gas Burning System	120	01-Nov-23	28-Feb-24	01-May-23	29-Aug-23	-184	AD1100, S5WGBP1020, S5BIOC1030, S5THPC1020, S5WGBC1000, S5WGBC1010, S5WGBC1015	S5WGBT1010, S5WGBT1000, PL1210
Testing and Commissioning		18	19-Apr-24	06-May-24	29-Aug-23	16-Sep-23	-234		
S5WGBT1000	Ready for Power Energisation	3	19-Apr-24	21-Apr-24	29-Aug-23	01-Sep-23	-234	S5WGBC1020, S5EXAC1090, S5CHPT1020	S5WGBT1010
S5WGBT1010	SAT for Gas Burning System	15	22-Apr-24	06-May-24	01-Sep-23	16-Sep-23	-234	S5WGBC1020, S5WGBT1000	S5T1090
Plant Service Water Area		435	15-Dec-22 A	30-Apr-24	26-Nov-22	03-Jul-23	-303		
Fabrication, FAT & Delivery of Major Plant & Materials		330	15-Dec-22 A	09-Nov-23	26-Nov-22	15-Feb-23	-268		
S5PSWP1000	Fabrication & Delivery of Plant Service Water System	330	15-Dec-22 A	09-Nov-23	26-Nov-22	15-Feb-23	-268	S2P1090, S2D1690	S5PSWC1000
Installation		90	10-Nov-23	07-Feb-24	15-Feb-23	16-May-23	-268		
S5PSWC1000	E&M Installation of Plant Service Water System	90	10-Nov-23*	07-Feb-24	15-Feb-23	16-May-23	-268	AD1100, S5PSWP1000	S5PSWT1000, PL1210
Testing and Commissioning		48	14-Mar-24	30-Apr-24	16-May-23	03-Jul-23	-303		
S5PSWT1000	Ready for Power Energisation	3	14-Mar-24	16-Mar-24	16-May-23	19-May-23	-303	S5PSWC1000, S5EXAC1080, S5TXRT1010	S5PSWT1010
S5PSWT1010	SAT & System Commissioning Tests for Plant Services Water System	45	17-Mar-24	30-Apr-24	19-May-23	03-Jul-23	-303	S5PSWT1000, S5UVPC1000	S5T1060
DO Area		778	10-Mar-22 A	06-Jul-24	14-Feb-23	16-Oct-23	-265		
Fabrication, FAT & Delivery of Major Plant & Materials		586	10-Mar-22 A	16-Oct-23	14-Feb-23	12-Apr-23	-188		
S5DOUP1000	Fabrication & Delivery of DO System	586	10-Mar-22 A	16-Oct-23	14-Feb-23	12-Apr-23	-188	S2P1150, S2D1930	S5DOUC1030, S5DOUC1040
Installation		304	01-Jun-23 A	19-May-24	12-Apr-23	11-Jul-23	-314		

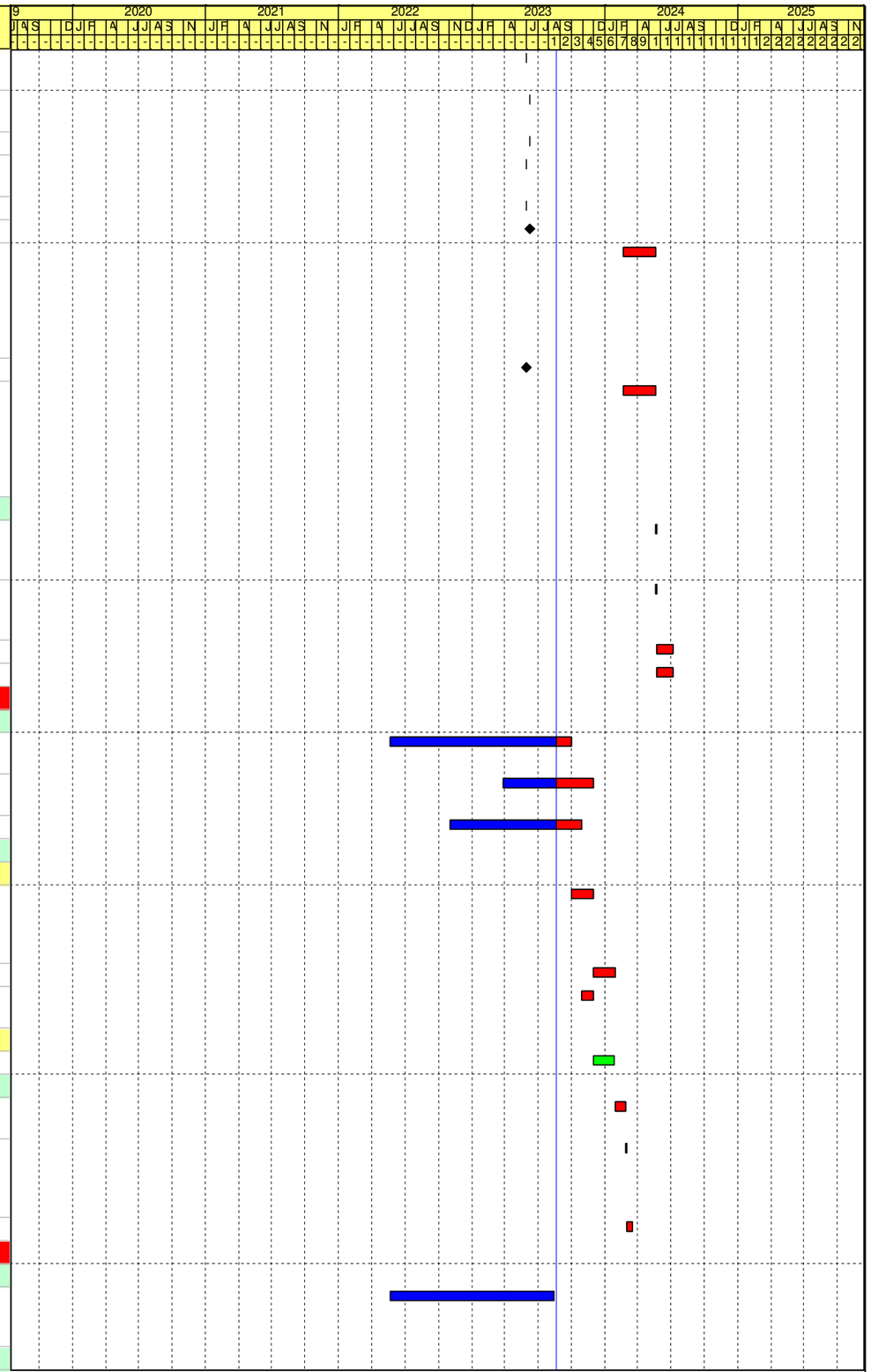


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5DOUC1000	Access to DO Area (Impacted by EWN-0314)	1	01-Jun-23 A	01-Jun-23 A	12-Apr-23	12-Apr-23			S5DOUC1030, S5DOUC1040
S5DOUC1010	Access to DO Area No.11 (Impacted by EWN-0314-1)	1	08-Jun-23 A	08-Jun-23 A	12-Apr-23	12-Apr-23			S5DOUC1030, S5DOUC1012
S5DOUC1012	Access to DO Area No.11 (Impacted by EWN-0314-2)	1	08-Jun-23 A	08-Jun-23 A	12-Apr-23	12-Apr-23		S5DOUC1010	S5DOUC1025
S5DOUC1020	Access to DO Area No.12 (Impacted by EWN-0314-1)	1	01-Jun-23 A	01-Jun-23 A	12-Apr-23	12-Apr-23			S5DOUC1040, S5DOUC1022
S5DOUC1022	Access to DO Area No.12 (Impacted by EWN-0314-2)	1	01-Jun-23 A	01-Jun-23 A	12-Apr-23	12-Apr-23		S5DOUC1020	S5DOUC1035
S5DOUC1025	Actual Access Date (DO Area No.11)	0	08-Jun-23 A		12-Apr-23			S5DOUC1012	S5DOUC1030
S5DOUC1030	E&M Installation of DO System No.11	90	20-Feb-24	19-May-24	12-Apr-23	11-Jul-23	-314	AD1100, S5DOUP1000, S5DOUC1000, S5DOUC1010, S5DOUC1025, S5H2SC1020	S5DOUT1000, S5TCWC1020
S5DOUC1035	Actual Access Date (DO Area No.12)	0	01-Jun-23 A		12-Apr-23			S5DOUC1022	S5DOUC1040
S5DOUC1040	E&M Installation of DO System No.12	90	20-Feb-24	19-May-24	12-Apr-23	11-Jul-23	-314	AD1100, S5DOUP1000, S5DOUC1000, S5DOUC1020, S5DOUC1035, S5H2SC1020	S5DOUT1010, PL1210, S5TCWC1020
Testing and Commissioning		48	20-May-24	06-Jul-24	29-Aug-23	16-Oct-23	-265		
S5DOUT1000	Ready for Power Energisation of DO No.11	3	20-May-24	22-May-24	29-Aug-23	01-Sep-23	-265	S5DOUC1030, S5EXAC1080, S5TXRT1010	S5DOUT1020
S5DOUT1010	Ready for Power Energisation of DO No.12	3	20-May-24	22-May-24	29-Aug-23	01-Sep-23	-265	S5DOUC1040, S5EXAC1050, S5CHPT1020	S5DOUT1030
S5DOUT1020	SAT & System Commissioning Tests for DO System No.11	45	23-May-24	06-Jul-24	01-Sep-23	16-Oct-23	-265	S5DOUT1000	S5T1110
S5DOUT1030	SAT & System Commissioning Tests for DO System No.12	45	23-May-24	06-Jul-24	01-Sep-23	16-Oct-23	-265	S5DOUT1010	S5T1110
Sewage Pump Station		636	23-May-22 A	17-Mar-24	04-Jan-23	04-Apr-24	18		
Fabrication, FAT & Delivery of Major Plant & Materials		552	23-May-22 A	30-Nov-23	04-Jan-23	12-Sep-23	-80		
S5SPSP1000	Fabrication & Delivery of Sewage Pump	496	23-May-22 A	30-Sep-23	05-Apr-23	16-May-23	-138	S2P1180, S2D1940	S5SPSC1000
S5SPSP1010	Fabrication & Delivery of LV Switchboard	248	28-Mar-23 A	30-Nov-23	04-Jan-23	16-Apr-23	-229		S5SPSC1001, S5SPST0990
S5SPSP1020	Delivery of Control & Monitoring System / SCADA System	360	04-Nov-22 A	29-Oct-23	04-Jul-23	12-Sep-23	-48		S5SPSC1010
Installation		121	01-Oct-23	29-Jan-24	16-Apr-23	04-Apr-24	66		
E&M Installation		121	01-Oct-23	29-Jan-24	16-Apr-23	12-Oct-23	-110		
S5SPSC1000	E&M Installation of Sewage Pump	60	01-Oct-23	29-Nov-23	16-May-23	15-Jul-23	-138	AD1100, S5SPSP1000	S5SPSC1020, S5SPST1000, PL1210, S5SPSC1010
S5SPSC1001	LV Switchboard Installation	60	01-Dec-23	29-Jan-24	16-Apr-23	15-Jun-23	-229	S5SPSP1010	S5SPST0990
S5SPSC1010	Installation of SCADA System / Control Monitoring System	30	31-Oct-23	29-Nov-23	12-Sep-23	12-Oct-23	-49	S5SPSP1020, S5SPSC1000	S5T1000, S5T1010
BS Installation		60	30-Nov-23	28-Jan-24	04-Feb-24	04-Apr-24	67		
S5SPSC1020	BS Installation for Sewage Pumping Station	60	30-Nov-23	28-Jan-24	04-Feb-24	04-Apr-24	67	S5SPSC1000	S5S1160
Testing and Commissioning		48	30-Jan-24	17-Mar-24	15-Jun-23	02-Aug-23	-229		
S5SPST0990	SAT of Switchboard	30	30-Jan-24	28-Feb-24	15-Jun-23	15-Jul-23	-229	S5SPSP1010, S5SPSC1001	S5SPST1000
S5SPST1000	Ready for Power Energisation	3	29-Feb-24	02-Mar-24	15-Jul-23	18-Jul-23	-229	S5SPSC1000, S5SPST0990, S5EXAC1070, S5SDBT1050	S5SPST1010
S5SPST1010	SAT & System Commissioning Tests for Sewage Pumping Station	15	03-Mar-24	17-Mar-24	18-Jul-23	02-Aug-23	-229	S5SPST1000	S5T1060
THP Cooling Water Transfer Pumping Station		796	23-May-22 A	24-Aug-24	07-Jul-23	16-Oct-23	-314		
Fabrication, FAT & Delivery of Major Plant & Materials		450	23-May-22 A	15-Aug-23 A	07-Jul-23	07-Jul-23			
S5TCWP1000	Fabrication & Delivery of THP Cooling Pump	450	23-May-22 A	15-Aug-23 A	07-Jul-23	07-Jul-23		S2P1210, S2D1970, S2D1370	S5TCWC1020
Installation		360	07-Jun-23 A	14-Jul-24	07-Jul-23	05-Sep-23	-314		

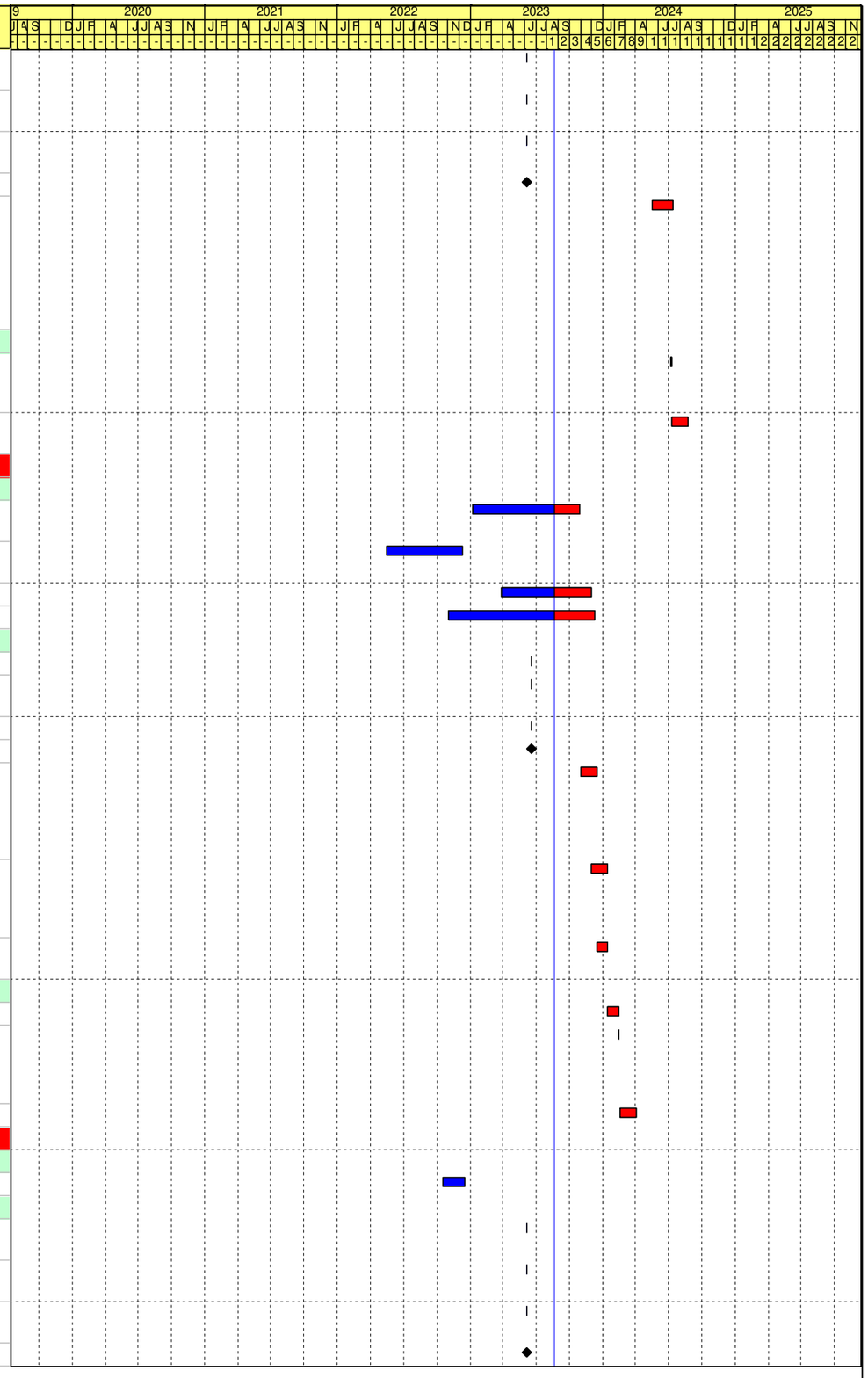


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5TCWC1000	Access to THP CW Transfer Pumping Station (Impacted by EWN-0314)	1	07-Jun-23 A	07-Jun-23 A	07-Jul-23	07-Jul-23			S5TCWC1020
S5TCWC1010	Access to THP CW Transfer Pumping Station (Impacted by EWN-0314-1)	1	07-Jun-23 A	07-Jun-23 A	07-Jul-23	07-Jul-23			S5TCWC1020, S5TCWC1012
S5TCWC1012	Access to THP CW Transfer Pumping Station (Impacted by EWN-0314-2)	1	07-Jun-23 A	07-Jun-23 A	07-Jul-23	07-Jul-23		S5TCWC1010	S5TCWC1015
S5TCWC1015	Actual Access Date	0	07-Jun-23 A		07-Jul-23			S5TCWC1012	S5TCWC1020
S5TCWC1020	E&M Installation of THP Cooling Pump	60	16-May-24	14-Jul-24	07-Jul-23	05-Sep-23	-314	AD1100, S5TCWP1000, S5TCWC1000, S5TCWC1010, S5TCWC1015, S5DOUC1030, S5DOUC1040	S5TCWT1000, PL1210, S5TCWT1010
Testing and Commissioning		48	08-Jul-24	24-Aug-24	29-Aug-23	16-Oct-23	-314		
S5TCWT1000	Ready for Power Energisation	3	08-Jul-24	10-Jul-24	29-Aug-23	01-Sep-23	-314	S5TCWC1020, S5EXAC1030, S5CHPT1020	S5TCWT1010
S5TCWT1010	SAT & System Commissioning Tests for THP Cooling Water Pumping System	45	11-Jul-24	24-Aug-24	01-Sep-23	16-Oct-23	-314	S5TCWT1000, S5TCWC1020	S5T1110
Ferric Chloride Dosing Facility		592	14-May-22 A	01-Apr-24	20-Dec-22	12-Oct-23	-173		
Fabrication, FAT & Delivery of Major Plant & Materials		556	14-May-22 A	11-Dec-23	20-Dec-22	12-Sep-23	-91		
S5FCDP1000	Fabrication & Delivery of Ferric Chloride Storage Tank	90	09-Jan-23 A	31-Oct-23	20-Dec-22	02-Mar-23	-244	S5P1030, S2D1980	S5FCDC1020
S5FCDP1010	Fabrication & Delivery of Ferric Chloride Dosing Pump	150	14-May-22 A	09-Dec-22 A	01-Apr-23	01-Apr-23		S5P1040, S2D1980	S5FCDC1030
S5FCDP1020	Fabrication & Delivery of LV Switchboard	248	28-Mar-23 A	30-Nov-23	20-Dec-22	01-Apr-23	-244		S5FCDC1030
S5FCDP1030	Delivery of Control & Monitoring System / SCADA System	403	04-Nov-22 A	11-Dec-23	22-May-23	12-Sep-23	-91		S5FCDP1040
Installation		178	20-Jun-23 A	14-Jan-24	02-Mar-23	12-Oct-23	-95		
S5FCDC1000	Access to Ferric Chloride Dosing Facility (Impacted by EWN-0314)	1	20-Jun-23 A	20-Jun-23 A	02-Mar-23	02-Mar-23			S5FCDC1020
S5FCDC1010	Access to Ferric Chloride Dosing Facility (Impacted by EWN-0314-1)	1	20-Jun-23 A	20-Jun-23 A	02-Mar-23	02-Mar-23			S5FCDC1020, S5FCDC1012
S5FCDC1012	Access to Ferric Chloride Dosing Facility (Impacted by EWN-0314-2)	1	20-Jun-23 A	20-Jun-23 A	02-Mar-23	02-Mar-23		S5FCDC1010	S5FCDC1015
S5FCDC1015	Actual Access Date	0	20-Jun-23 A		02-Mar-23			S5FCDC1012	S5FCDC1020
S5FCDC1020	E&M Installation of Ferric Chloride Storage Tank	45	01-Nov-23	15-Dec-23	02-Mar-23	16-Apr-23	-244	AD1100, S5FCDP1000, S5FCDC1000, S5FCDC1010, S5FCDC1015	S5FCDC1030, S5S1280
S5FCDC1030	E&M Installation of Ferric Chloride Dosing Pump	45	01-Dec-23	14-Jan-24	01-Apr-23	16-May-23	-244	AD1100, S5FCDC1020, S5FCDP1010, S5FCDP1020	S5FCDT1000, S5FCDT0990, PL1210, S5FCDP1040
S5FCDP1040	Installation of SCADA System / Control Monitoring System	30	16-Dec-23	14-Jan-24	12-Sep-23	12-Oct-23	-95	S5FCDP1030, S5FCDC1030	S5T1000, S5T1010
Testing and Commissioning		78	15-Jan-24	01-Apr-24	16-May-23	02-Aug-23	-244		
S5FCDT0990	SAT of Switchboard	30	15-Jan-24	13-Feb-24	16-May-23	15-Jun-23	-244	S5FCDC1030	S5FCDT1000
S5FCDT1000	Ready for Power Energisation	3	14-Feb-24	16-Feb-24	15-Jun-23	18-Jun-23	-244	S5FCDC1030, S5FCDT0990, S5EXAC1070, S5SDBT1050	S5FCDT1010
S5FCDT1010	SAT & System Commissioning Tests for FeCl3 Dosing Facility	45	17-Feb-24	01-Apr-24	18-Jun-23	02-Aug-23	-244	S5FCDT1000	S5T1080
Fire Hydrant and Booster Pump Room		482	18-Oct-22 A	15-Apr-24	06-Oct-23	16-Feb-24	-60		
Fabrication, FAT & Delivery of Major Plant & Materials		60	18-Oct-22 A	16-Dec-22 A	06-Oct-23	06-Oct-23			
S5SHPP1000	Fabrication & Delivery of Fire Hydrant and Booster Pump	60	18-Oct-22 A	16-Dec-22 A	06-Oct-23	06-Oct-23			S5SHPC1020
Installation		195	07-Jun-23 A	31-Jan-24	06-Oct-23	08-Dec-23	-55		
S5SHPC1000	Access to Fire Hydrant and Booster Pump Room (Impacted by EWN-0314)	1	07-Jun-23 A	07-Jun-23 A	06-Oct-23	06-Oct-23			S5SHPC1020
S5SHPC1010	Access to Fire Hydrant and Booster Pump Room (Impacted by EWN-0314-1)	1	07-Jun-23 A	07-Jun-23 A	06-Oct-23	06-Oct-23			S5SHPC1020, S5SHPC1012
S5SHPC1012	Access to Fire Hydrant and Booster Pump Room (Impacted by EWN-0314-2)	1	07-Jun-23 A	07-Jun-23 A	06-Oct-23	06-Oct-23		S5SHPC1010	S5SHPC1015
S5SHPC1015	Actual Access Date	0	07-Jun-23 A		06-Oct-23			S5SHPC1012	S5SHPC1020

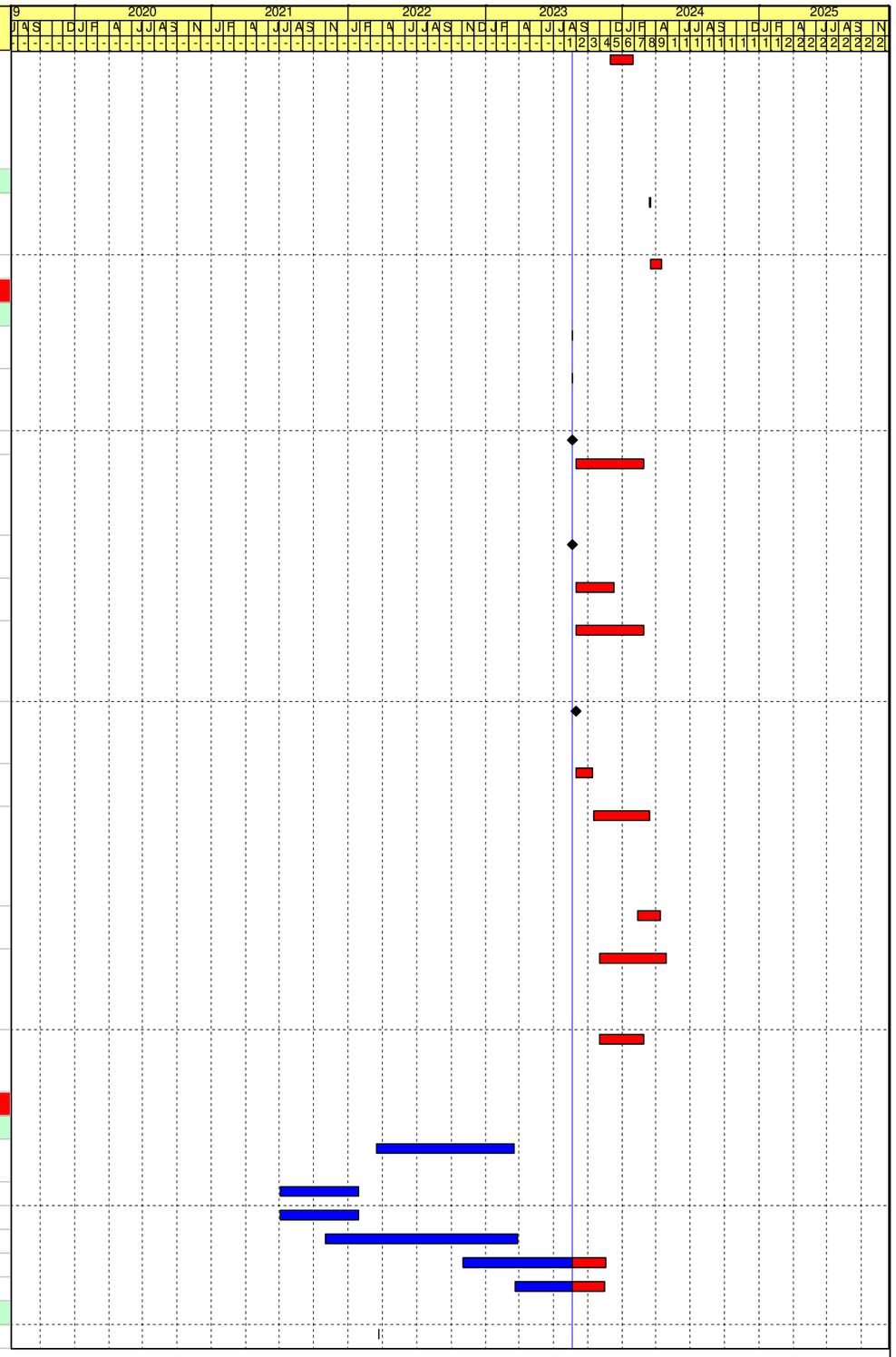


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SHPC1020	Fire Hydrant and Booster Pump Room Installation	63	30-Nov-23*	31-Jan-24	06-Oct-23	08-Dec-23	-55	S5S1120, AD1100, S5SHPC1000, S5SHPC1010, S5SHPP1000, S5SHPC1015	S5S1130, S5SHPT1000, PL1210
Testing and Commissioning		33	14-Mar-24	15-Apr-24	14-Jan-24	16-Feb-24	-60		
S5SHPT1000	Ready for Power Energisation	3	14-Mar-24	16-Mar-24	14-Jan-24	17-Jan-24	-60	S5SHPC1020, S5EXAC1080, S5TXRT1010	S5SHPT1010
S5SHPT1010	SAT for Fire Hydrant and Booster Pump	30	17-Mar-24	15-Apr-24	17-Jan-24	16-Feb-24	-60	S5SHPT1000	S5S1220
External Area		252	21-Aug-23	28-Apr-24	17-Dec-22	07-Feb-24	-82		
Installation		252	21-Aug-23	28-Apr-24	17-Dec-22	07-Feb-24	-82		
S5EXAC1000	Access to Other Peripheral Systems (Impacted by EWN-0314)	1	21-Aug-23*	21-Aug-23	10-Aug-23	11-Aug-23	-11		S5EXAC1100, S5EXAC1110
S5EXAC1010	Access to Other Peripheral Systems (Impacted by EWN-0314-1)	1	21-Aug-23*	21-Aug-23	03-Apr-23	04-Apr-23	-140		S5EXAC1100, S5EXAC1110, S5EXAC1030
S5EXAC1020	Access to Stage 1 External Area	0	21-Aug-23*		17-Dec-22		-247		S5EXAC1030
S5EXAC1030	LV Cable Laying from CHP to Sludge Digestor, Workshop no.2 and THP CW transfer PS (120 days) & Termination (60 days)	180	01-Sep-23*	27-Feb-24	17-Dec-22	15-Jun-23	-258	S5EXAC1010, S5P1050, S5EXAC1020	S5TCWT1000, S5WS2T1010, S5DIGT1010, PL1210
S5EXAC1040	Access to Stage 2 External Area	0	21-Aug-23*		17-Dec-22		-247		S5EXAC1050, S5EXAC1045
S5EXAC1045	E&M Installation of Pipe Trench No.1, No.2 (Duration assumed no interface work)	100	01-Sep-23*	09-Dec-23	09-Apr-23	18-Jul-23	-145	AD1100, S5EXAC1040	S5T1050, PL1210
S5EXAC1050	LV Cable Laying from CHP to BHT, THP, DOU No.12, H2S removal & Guard Hse (120 days) & Termination (60 days)	180	01-Sep-23*	27-Feb-24	17-Dec-22	15-Jun-23	-258	S5EXAC1040	S5BIOT1000, S5THPT1000, S5DOUT1010, S5H2ST1000
S5EXAC1060	Access to Stage 3 External Area	0	01-Sep-23*		17-Dec-22		-258		S5EXAC1090, S5EXAC1080, S5EXAC1070
S5EXAC1070	LV Cable Laying from SDB to SPS (20 days) & Termination (25 days)	45	01-Sep-23	15-Oct-23	01-May-23	15-Jun-23	-123	S5EXAC1060, S5P1050	S5SPST1000, S5FCDT1000
S5EXAC1080	LV Cable Laying from TX & SW Room to DOU no. 11, Street Hydrant Pump room and PSWS (90 days) & Termination (60 days)	150	16-Oct-23	13-Mar-24	17-Dec-22	16-May-23	-303	S5P1050, S5EXAC1060, S5TXRC1040	S5SHPT1000, S5DOUT1000, S5PSWT1000, PL1210, S5EXAC1090
S5EXAC1090	LV Cable Laying from CHP to FeCl3 Dosing Facility and Waste Gas Burning System (30 days) & Termination (30 days)	60	13-Feb-24	12-Apr-24	30-Jun-23	29-Aug-23	-228	S5EXAC1060, S5EXAC1080	S5WGBT1000
S5EXAC1100	Road Lighting Installation	180	01-Nov-23*	28-Apr-24	11-Aug-23	07-Feb-24	-82	AD1100, S5EXAC1000, S5EXAC1010, S5P1050	S5S1220, PL1210
S5EXAC1110	Landscape Lighting Installation	120	01-Nov-23*	28-Feb-24	10-Oct-23	07-Feb-24	-22	S5EXAC1000, S5EXAC1010, S5P1050	S5S1220, PL1210
SAS Pumping Station		953	04-Jul-21 A	30-Apr-24	21-Nov-22	12-Oct-23	-202		
Fabrication, FAT & Delivery of Major Plant & Materials		856	04-Jul-21 A	18-Nov-23	21-Nov-22	12-Sep-23	-68		
S5SASP1000	Fabrication & Delivery of SAS Pumping System	518	16-Mar-22 A	20-Mar-23 A	18-Jun-23	18-Jun-23		S2P1100, S2D1770	S5SASC1010
S5SASP1010	Fabrication & Delivery of Stoplog	270	04-Jul-21 A	27-Jan-22 A	18-Jun-23	18-Jun-23		S2P1160	S5SASC1010
S5SASP1020	Fabrication & Delivery of Penstock	270	04-Jul-21 A	27-Jan-22 A	18-Jun-23	18-Jun-23		S2P1170	S5SASC1010
S5SASP1030	Fabrication & Delivery of Lifting Appliances	309	30-Oct-21 A	28-Mar-23 A	18-Jun-23	18-Jun-23			S5SASC1010
S5SASP1040	Delivery of Control & Monitoring System / SCADA System	360	04-Nov-22 A	18-Nov-23	14-Jun-23	12-Sep-23	-68		S5SASC1020
S5SASP1050	Fabrication & Delivery of LV Switchboard	218	22-Mar-23 A	14-Nov-23	21-Nov-22	15-Feb-23	-273		S5SASC1030
Installation		602	23-Mar-22 A	12-Feb-24	15-Feb-23	12-Oct-23	-124		
S5SASC1000	Access to SAS Pumping Station (Impacted by NCE-NCE-219)	1	23-Mar-22 A	23-Mar-22 A	23-May-23	23-May-23		AD1160	S5SASC1010

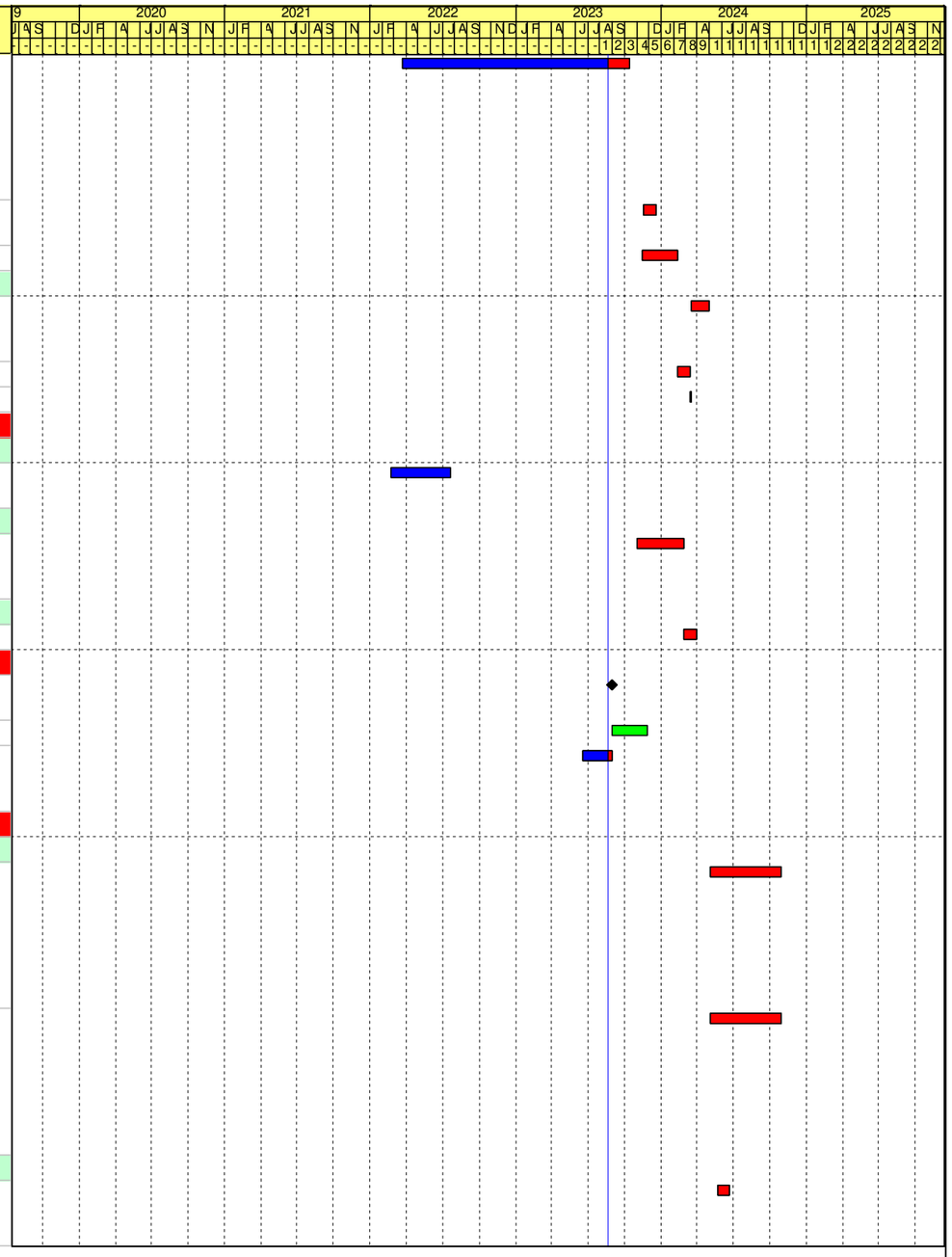


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5SASC1010	E&M Installation of SAS Pumping System	572	23-Mar-22 A	15-Oct-23	23-May-23	18-Jun-23	-90	AD1160, S5SASP1000, CE0219b, S5SASP1010, S5SASP1020, S5SASC1000, S5SASP1030	S5SAST1000, PL1210, S5SASC1020
S5SASC1020	Installation of SCADA System / Control Monitoring System	30	19-Nov-23	18-Dec-23	12-Sep-23	12-Oct-23	-68	S5SASP1040, S5SASC1010	S5T1000, S5T1010
S5SASC1030	LV Switchboard Installation	90	15-Nov-23	12-Feb-24	15-Feb-23	16-May-23	-273	S5SASP1050	S5SAST1010
Testing and Commissioning		78	13-Feb-24	30-Apr-24	16-May-23	02-Aug-23	-273		
S5SAST1000	SAT & System Commissioning Tests for SAS Pumping Station	45	17-Mar-24	30-Apr-24	18-Jun-23	02-Aug-23	-273	S5SASC1010, S5SAST1020	S5T1110, S5T1120, S5T1060
S5SAST1010	SAT of Switchboard	30	13-Feb-24	13-Mar-24	16-May-23	15-Jun-23	-273	S5SASC1030	S5SAST1020
S5SAST1020	Ready for Power Energisation	3	14-Mar-24	16-Mar-24	15-Jun-23	18-Jun-23	-273	S5SAST1010	S5SAST1000
Existing Consolidation House		403	21-Feb-22 A	29-Mar-24	03-Feb-23	03-Jul-23	-271		
Fabrication, FAT & Delivery of Major Plant & Materials		150	21-Feb-22 A	20-Jul-22 A	03-Feb-23	03-Feb-23			
S5ECHP1000	Fabrication & Delivery of Temporary Primary Sludge Pump	150	21-Feb-22 A	20-Jul-22 A	03-Feb-23	03-Feb-23		S2P1220, S2D1990	S5ECHC1000
Installation		120	01-Nov-23	28-Feb-24	03-Feb-23	03-Jun-23	-271		
S5ECHC1000	E&M Installation of Existing Consolidation House	120	01-Nov-23*	28-Feb-24	03-Feb-23	03-Jun-23	-271	CE0219d, S5ECHP1000	S5T1060, S5ECHT1000, PL1210
Testing and Commissioning		30	29-Feb-24	29-Mar-24	03-Jun-23	03-Jul-23	-271		
S5ECHT1000	SAT for Temporary Primary Sludge Pump	30	29-Feb-24	29-Mar-24	03-Jun-23	03-Jul-23	-271	S5ECHC1000	S5T1060
Miscellaneous		131	19-Jun-23 A	28-Nov-23	08-May-23	16-Feb-24	80		
S5MISC1000	Access to Other Peripheral Systems - Guard House Only (Impacted by EWN-0314-2)	0	31-Aug-23*		18-Nov-23		80		S5MISC1010
S5MISC1010	E&M Installation - Guard House	90	31-Aug-23*	28-Nov-23	18-Nov-23	16-Feb-24	80	S5MISC1000	S5S1220
S5UVPC1000	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves	54	19-Jun-23 A	31-Aug-23	08-May-23	19-May-23	-105	S4C1030, S4P1080, S4T1020	S5PSWT1010, PL1210
Testing & Commissioning		381	01-May-24	16-May-25	03-Jul-23	07-Jul-24	-314		
T&C of Control Monitoring System		180	03-May-24	29-Oct-24	12-Oct-23	09-Apr-24	-204		
S5T1000	SAT of SCADA System	180	03-May-24	29-Oct-24	12-Oct-23	09-Apr-24	-204	S5WS2C1180, S5CHPC1120, S5CHPC1250, S5TXRC1050, S5SPSC1010, S5FCDP1040, S5SASC1020	SC51110, S5T1140
S5T1010	SAT of PMS	180	03-May-24	29-Oct-24	12-Oct-23	09-Apr-24	-204	S5WS2C1180, S5CHPC1120, S5CHPC1250, S5TXRC1050, S5SPSC1010, S5FCDP1040, S5SASC1020	SC51110, S5T1140
T&C of E&M Process		381	01-May-24	16-May-25	03-Jul-23	07-Jul-24	-314		
S5T1050	System Commissioning Tests for THP System	30	22-May-24	20-Jun-24	18-Jul-23	17-Aug-23	-309	S5THPT1010, S5EXAC1045, S5T1060	S5T1120, S5T1080, S5T1110

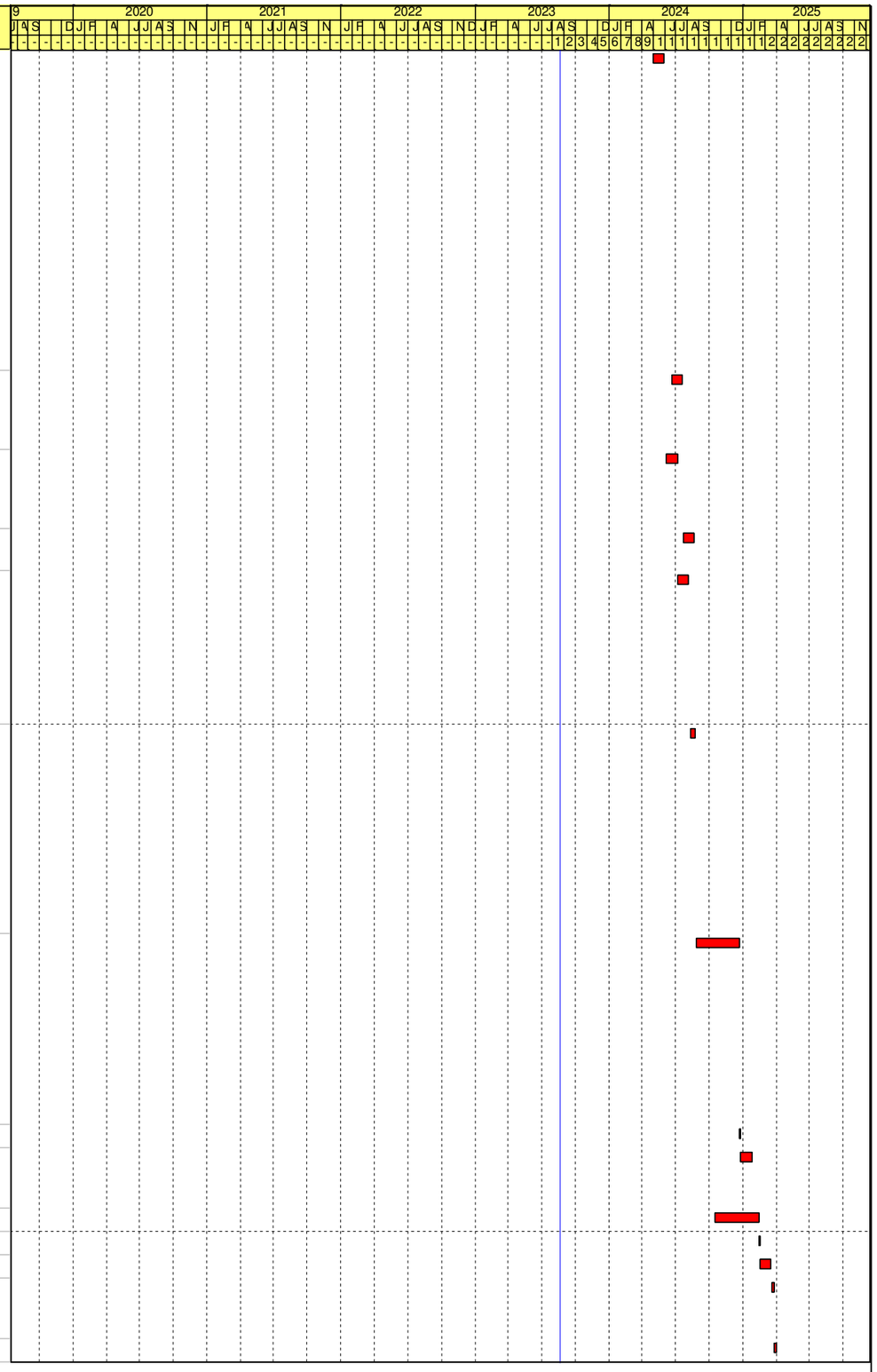


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5T1060	System Commissioning Tests for Sludge Dewatering System	30	01-May-24	30-May-24	03-Jul-23	02-Aug-23	-303	S5ECHC1000, S5SPST1010, S5SAST1000, S5ECHT1000, S5SDBT1200, S5SDBT1100, S5SDBT1090, S5SDBT1160, S5SDBT1170, S5SDBT1080, S5SDBT1010, S5SDBT1210, S5SDBT1060, S5SDBT1040, S5SDBC1300, S5SDBC1210, S5PSWT1010	S5T1120, S5T1110, PL1520, S5T1050
S5T1070	System Commissioning Tests for Biogas Storage System	30	21-Jun-24	20-Jul-24	17-Aug-23	16-Sep-23	-309	S5BIOT1010, S5T1080	S5T1120, S5T1110, S5S1070, S5T1100
S5T1080	System Commissioning Tests for Sludge Digestion System	30	06-Jun-24	05-Jul-24	02-Aug-23	01-Sep-23	-309	S5DIGT1020, S5T1050, S5H2ST1010, S5FCDT1010	S5T1120, S5T1110, S5T1070
S5T1090	System Commissioning Tests for Gas Burning System	30	21-Jul-24	19-Aug-24	16-Sep-23	16-Oct-23	-309	S5WGBT1010, S5T1100	S5T1120, S5T1110
S5T1100	System Commissioning Tests for CHP System	30	06-Jul-24	04-Aug-24	01-Sep-23	01-Oct-23	-309	S5CHPT1030, S5S1310, S5CHPC1120, S5CHPT1000, S5CHPC1250, S5CHPT1040, S5CHPT1050, S5T1070	S5T1120, S5T1110, PL1560, S5T1090
S5T1110	Seeding	14	11-Aug-24	24-Aug-24	02-Oct-23	16-Oct-23	-314	S5T1090, S5T1070, S5T1080, S5T1100, S5T1060, S5T1050, S5SAST1000, S5TCWT1010, S5DOUT1020, S5DOUT1030, S5H2ST1010	S5T1120
S5T1120	Process Start Up - Digester 1	120	25-Aug-24	22-Dec-24	16-Oct-23	13-Feb-24	-314	S5T1090, S5T1070, S5T1080, S5T1100, S5T1060, S5T1050, S5T1110, S5S1080, S5TXRC1050, S5SAST1000	S5T1150, S5T1130, S3T1340
S5T1130	Notice to Commence Phase 1 System Commissioning - Digester 1	3	23-Dec-24	25-Dec-24	06-Apr-24	09-Apr-24	-261	S5T1120	S5T1140
S5T1140	Phase 1 System Commissioning - Digester 1	30	26-Dec-24	24-Jan-25	09-Apr-24	09-May-24	-261	S5T1130, S5T1000, S5T1010	S5T1180
S5T1150	Process Start Up - Digester 2	120	17-Oct-24	13-Feb-25	08-Dec-23	06-Apr-24	-314	S5T1120	S5T1160
S5T1160	Notice to Commence Phase 1 System Commissioning - Digester 2	3	14-Feb-25	16-Feb-25	06-Apr-24	09-Apr-24	-314	S5T1150	S5T1170
S5T1170	Phase 1 System Commissioning - Digester 2	30	17-Feb-25	18-Mar-25	09-Apr-24	09-May-24	-314	S5T1160	S5T1180
S5T1180	Phase 2 System Commissioning - Digester 1 & 2	7	19-Mar-25	25-Mar-25	09-May-24	16-May-24	-314	S5T1170, S5T1140	S5T1190, PL1310, S3T1360
S5T1190	Notice to Commence Plant Commissioning	7	26-Mar-25	01-Apr-25	16-May-24	23-May-24	-314	S5T1180	S5T1200

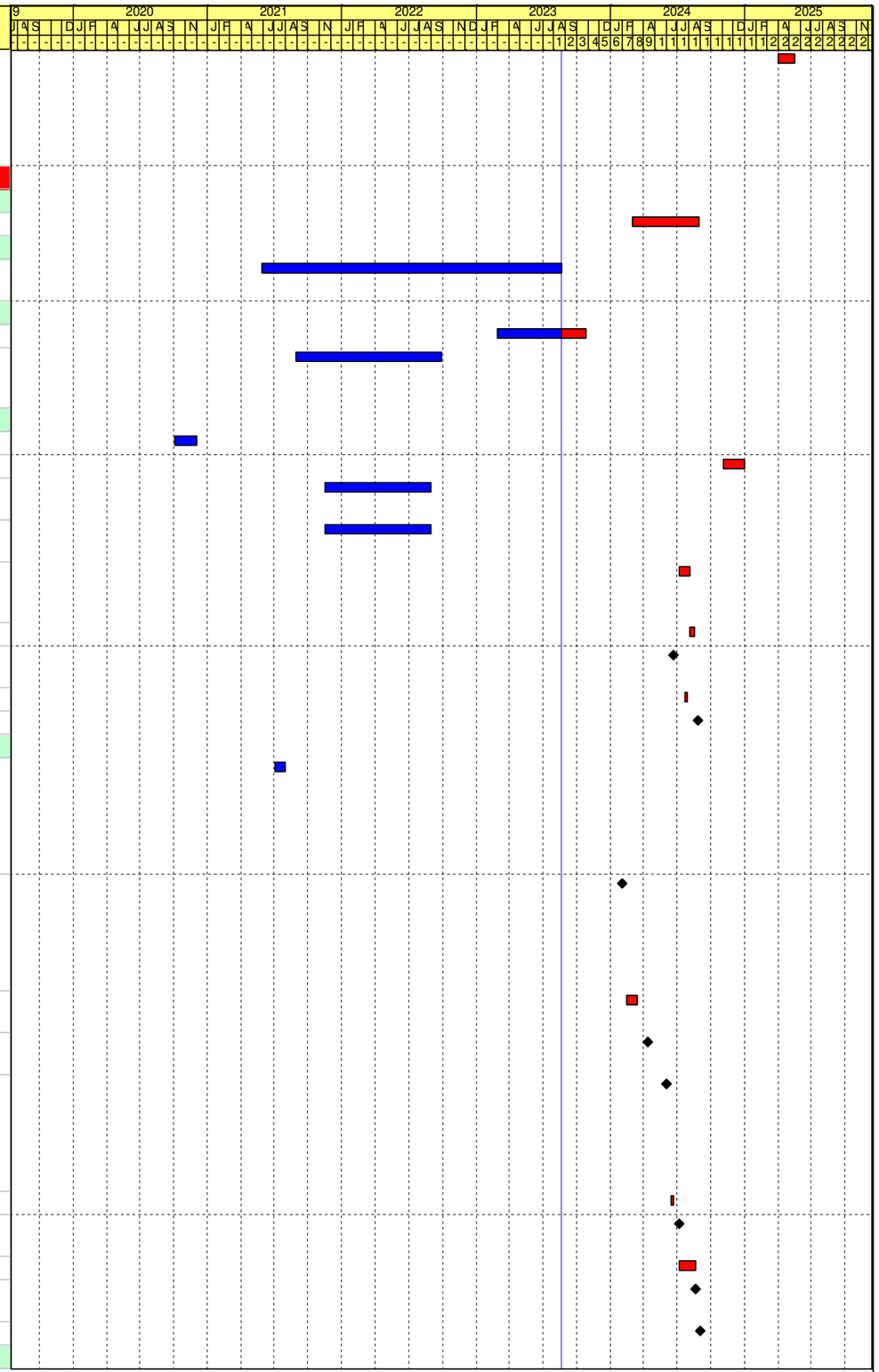


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5T1200	Plant Commissioning Tests	45	02-Apr-25	16-May-25	23-May-24	07-Jul-24	-314	S5T1190, S5S1020, S5TXRC1050, S5WS2C1180, S5S1150, S3T1320	SC51110
Statutory Submission / Inspection		1335	03-Oct-20 A	01-Jan-25	03-Nov-22	02-Aug-24	-153		
HKT Submission		180	02-Mar-24	28-Aug-24	09-Jan-24	07-Jul-24	-53		
S5S0990	Application of Telemetry Lines for Workshop No. 2.	180	02-Mar-24	28-Aug-24	09-Jan-24	07-Jul-24	-53	S5WS2C1180	SC51110
CLP Submission		793	30-May-21 A	21-Aug-23	13-Feb-23	14-Feb-23	-189		
S5S1000	Submission & Approval of Electrical Schematic Wiring Diagram to CLP	793	30-May-21 A	21-Aug-23	13-Feb-23	14-Feb-23	-189		S5WS2C1040
EPD Submission / Inspection		821	28-Aug-21 A	26-Oct-23	03-Nov-22	20-Jan-23	-280		
S5S1010	EPD Submission & Approval for Air Pollution Control - Genset	220	01-Mar-23 A	26-Oct-23	03-Nov-22	09-Jan-23	-291	S2D1860	S5SDBC1770
S5S1020	EPD Submission & Approval for Air Pollution Control - CHP & Burner	180	28-Aug-21 A	29-Sep-22 A	20-Jan-23	20-Jan-23		S2D1610	S5T1200, S5THPC1020, S5CHPC1020
EMSD Submission / Inspection		1335	03-Oct-20 A	01-Jan-25	11-Jan-23	02-Aug-24	-153		
S5S1030	BEEO Stage one: Submit EE1 & EE-SU to EMSD	60	03-Oct-20 A	02-Dec-20 A	11-Jan-23	11-Jan-23		S2D1890	S5WS2C1000
S5S1040	BEEO Stage two: Submit EE2 & EE-SU to EMSD	60	03-Nov-24	01-Jan-25	03-Jun-24	02-Aug-24	-153	S5S1250	SC51120
S5S1050	Application & Approval of the Zone Classification of Hazardous Area - including Fire Risk Assessment Report	180	15-Nov-21 A	30-Aug-22 A	16-Feb-23	16-Feb-23		S2D1070	S5S1070, S5S1060
S5S1060	Application for Construction Approval of Notifiable Gas Installation (Form 104)	180	15-Nov-21 A	30-Aug-22 A	16-Feb-23	16-Feb-23		S2D1070, S5S1050	S5S1070, S5BIOC1020
S5S1070	Application for Approval of Use of Notifiable Gas Installation (Form 105)	28	07-Jul-24	03-Aug-24	04-Sep-23	02-Oct-23	-307	S5S1060, S5T1070, S5S1050	S5S1080
S5S1080	EMSD Inspection - Gas Holding Tanks	14	04-Aug-24	17-Aug-24	02-Oct-23	16-Oct-23	-307	S5S1070	S5T1120
S5S1090	Form 5 Submission to EMSD - Lift Installation	0	21-Jun-24		01-May-24		-51	S5WS2T1020, S5SDBT1070	S5S1100
S5S1100	EMSD Inspection - Lift Installation	7	21-Jul-24	27-Jul-24	31-May-24	07-Jun-24	-51	S5S1090	S5S1110
S5S1110	Issuance of Form 6 - Lift Installation	0		26-Aug-24		07-Jul-24	-51	S5S1100	SC51110
WSD Submission / Inspection		1160	01-Jul-21 A	02-Sep-24	06-Oct-23	07-Jul-24	-58		
S5S1120	Submit WWO46 Part I / II to WSD (FS/PD)	30	01-Jul-21 A	30-Jul-21 A	06-Oct-23	06-Oct-23		S2D1910, S2D1860, S2D1870, S2D1880, S2D1890, S2D1900	S5S1130, S5WS2C1140, S5SHPC1020, S5DIGC1300, S5WS2C1170
S5S1130	Submit WWO46 Part IV to WSD (FS)	0	01-Feb-24		08-Dec-23		-55	S5S1120, S5WS2C1140, S5SHPC1020, S5SDBC1800, S5SDBC1690, S5SDBC1600	S5S1140, S5S1150
S5S1140	WSD Inspection (FS)	28	15-Feb-24	13-Mar-24	22-Dec-23	19-Jan-24	-55	S5S1130	S5S1250, S5S1150
S5S1150	Issuance of FS Water Certificate	0		10-Apr-24		16-Feb-24	-55	S5S1130, S5S1140	S5T1200, S5S1220
S5S1160	Submit WWO46 Part IV to WSD (PD)	0	01-Jun-24		04-Apr-24		-58	S5SPSC1020, S5CHPC1240, S5CHPC1110, S5DIGC1300, S5WS2C1170, S5SDBT1190	S5S1170
S5S1170	WSD Inspection	7	15-Jun-24	21-Jun-24	18-Apr-24	25-Apr-24	-58	S5S1160	S5S1180
S5S1180	Issuance of Form WWO46 Part Va	0		05-Jul-24		09-May-24	-58	S5S1170	S5S1200, S5S1190
S5S1190	System Flushing / Sampling	45	06-Jul-24	19-Aug-24	09-May-24	23-Jun-24	-58	S5S1180	S5S1200
S5S1200	Issuance of Form WWO46 Part Vb	0		19-Aug-24		23-Jun-24	-58	S5S1180, S5S1190	S5S1210
S5S1210	Issuance of Water Certificate	0		02-Sep-24		07-Jul-24	-58	S5S1200	SC51110
FSD Submission / Inspection		491	29-Apr-22 A	02-Nov-24	19-Jan-23	03-Jun-24	-153		

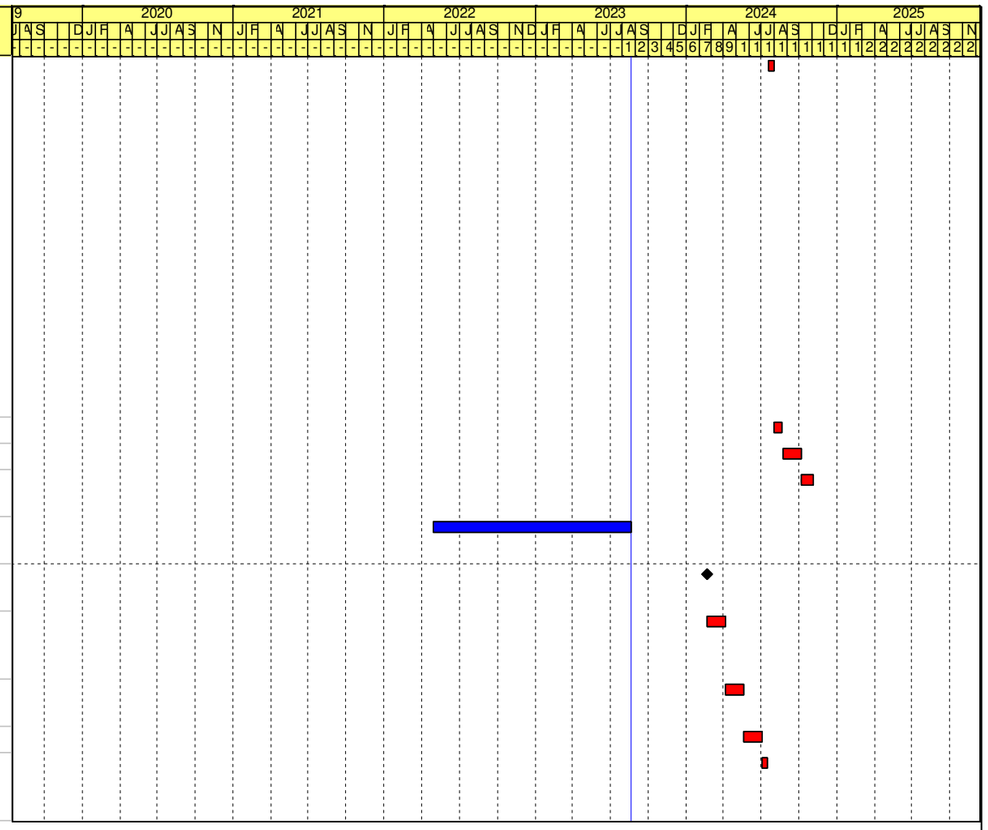


Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	Predecessors	Successors
S5S1220	Prepare & Submit FSI/314 & FSI/501	14	18-Jul-24	31-Jul-24	16-Feb-24	01-Mar-24	-153	S5WS2C1150, S5S1310, S5S1150, S5EXAC1100, S5EXAC1110, S5CHPC1080, S5CHPC1090, S5CHPC1210, S5CHPC1220, S5DIGC1280, S5DIGC1290, S5SHPT1010, S5SDBT1020, S5SDBT1150, S5SDBT1180, S5SDBT1130, S5MISC1010	S5S1230
S5S1230	FSD Review & Approval of FSI/314 & FSI/501	21	01-Aug-24	21-Aug-24	01-Mar-24	22-Mar-24	-153	S5S1220	S5S1240
S5S1240	F.S. Inspection, Defects Rectification & Re-inspection	45	22-Aug-24	05-Oct-24	22-Mar-24	06-May-24	-153	S5S1230	S5S1250
S5S1250	Issuance of Acceptance Letter	28	06-Oct-24	02-Nov-24	06-May-24	03-Jun-24	-153	S5S1240, S5S1140	SC51110, S5S1040
S5S1260	Submission & Approval of DG Application to FSD	460	29-Apr-22 A	21-Aug-23	19-Jan-23	20-Jan-23	-214		S5S1270, S5SDBC1770
S5S1270	Application of D.G. Licence	0	20-Feb-24		05-May-23		-291	S5SDBT1140, S5S1260	S5S1280
S5S1280	Apply for D.G. Inspection	45	20-Feb-24	04-Apr-24	05-May-23	19-Jun-23	-291	S5CHPC1150, S5FCDC1020, S5S1270	S5S1310, S5S1290
S5S1290	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	45	05-Apr-24	19-May-24	19-Jun-23	03-Aug-23	-291	S5S1280	S5S1310, S5S1300
S5S1300	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	45	20-May-24	03-Jul-24	03-Aug-23	17-Sep-23	-291	S5S1290	S5S1310
S5S1310	Issue D.G. Licence	14	04-Jul-24	17-Jul-24	17-Sep-23	01-Oct-23	-291	S5S1290, S5S1300, S5S1280	S5S1220, S5T1100



Remaining Work
Critical Activity
Milestone
Actual Progress

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 August 2023

Date	Revision	Checked	Approved
30-Apr-23	Rev.33	IM/LT	KM
31-May-23	Rev.34	IM/LT	KM
30-Jun-23	Rev.35	IM/LT	KM
31-Jul-23	Rev.36	IM/LT	KM
31-Aug-23	Rev.37	IM/LT	KM

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
Drawing Submisssion for Key Dates												
KD1A: Submission of civil and dimensional requirement drawing, electrical schematic drawings, etc. from formation level up to +8mPD in accordance with the contract requirement of Contract No. DC/2018/07 to carry out civil works construction	KD1A: Submission of Civil Requirement Drawing (Final)	28/8/2020	18/9/2020	5/11/2020	5/11/2020	Task Completed	no.	26	26	100%		
	KD1A: Submission of Electrical Schematic Drawing (Final)	15/7/2020	15/7/2020	5/11/2020	5/11/2020	Task Completed	no.	11	11	100%		
	KD1A: 6 November 2020											
KD1B: Submission of remaining civil and dimenssional requirement drawings, electrical schematic drawing, etc. in accordance with the contract requirement of Contract No. DC/2018/07 to carry out civil works construction	KD1B: Submission of Civil Requirement Drawing (First Draft)	30/9/2020	28/9/2020	30/12/2020	31/3/2021	Task Completed	no.	47	47	100%		
	KD1B: Submission of Civil Requirement Drawing (Final)	6/11/2020	5/11/2020	4/6/2021	4/6/2021	Task Completed	no.	47	47	100%		All the CWR Drawings were submitted.
	KD1B: 4 June 2021											
KD3A: 04SC010 - Dismantle & Removal of Emergency Generators in existing Power House	Submission of subletting package for acceptance (C9)	1/3/2020	24/2/2020	14/3/2020	22/4/2020	Task Completed				100%	-	Bestwise resubmitted on 22 April 2020
	Acceptance of subletting package (C9)	14/3/2020	6/5/2020	1/4/2020	5/5/2020	Task Completed				100%	-	AECOM accepted subletting package on 5 May 2020
	Tender invitation (C9)	1/4/2020	15/5/2020	15/4/2020	22/5/2020	Task Completed				100%	-	Invitation to tender was commenced on 12 May 2020 and tender returned on 22 May 2020
	Tender award (C9)	15/4/2020	22/5/2020	29/4/2020	26/5/2020	Task Completed				100%	-	Bestwise submitted tender report on 26 May 2020
	Acceptance of tender award (C9)	-	-	-	6/6/2020	Task Completed				100%	-	AECOM accepted tender report on 2 June 2020, Letter of Acceptance was issued on 6 June
	Dismantle of existing BS equipment		15/6/2020		25/7/2020	Task Completed				100%		
	Removal of emergency generators	1/6/2020	15/6/2020	30/6/2020	25/7/2020	Task Completed				100%		
KD3A: 04SC010 - Dismantle & Removal of Emergency Generators in existing Power House	KD3A: Testing and Comissioning	1/7/2020	3/7/2020	29/7/2020	29/7/2020	Task Completed				100%		First test was conducted on 3 July 2020. Remaining test would be subjected to completion of civil works. KD3A - 29 July 2020. Joint Site Inspection was conducted on 24 July 2020 and Notice of completion of work was submitted on 28 July 2020
	KD3A: 29 July 2020											
	Submission of onsite survey plan on E&M aspects for	1/3/2020	25/3/2020	30/3/2020	27/4/2020	Task Completed				100%	-	Bestwise resubmitted onsite survey plan on 27 April 2020
	Acceptance of submission of onsite survey plan	1/3/2020	25/3/2020	30/3/2020	22/5/2020	Task Completed				100%	-	AECOM accepted the onsite survey plan on 22 May 2020. Onsite coordination with ST1
KD3B: 6B.2.15 Operation Restoration of Existing Primary Sedimentation Tank (PST) No. 4 and 6	KD3B: Submission of onsite survey report	11/7/2020	20/7/2020	16/7/2020	30/7/2021	Task Completed				100%	Bestwise	- Onsite survey conducted from 20 July 2020 to 22 July 2020. Bestwise submitted survey report on 5 August 2020. AECOM commented on 19 Aug 2020. Bestwise to resubmit upon conducting the remaining onsite survey. (Done) - Bestwise revised survey plan for remaining onsite checking of PST No. 6 on 1 Sep 2020. After discussion with plant operator, the remaining survey would be conducted after the dismantling work of PSTs. Formal survey record for PST No.4 was submitted on 24 May 2021. - Remaining survey (level of bridge & scraper) for PST 6 completed. - Formal survey report shall be submitted on 30 Jul 2021.
	KD3B: Acceptancce of onsite survey report	17/7/2020	6/8/2020	23/7/2020	6/8/2021	Task Completed				-		Acceptance for the center point, vertical and horizontal alignment of ductfoot installation of PST No.4 shall subject to joint site meeting conducted on 2 June 2021. Refer to E-RISC no. 000014A & 000016 result for details.
	KD3B: Preparation of procurement package (C11)	2/12/2019	1/8/2020	13/4/2020	7/8/2020	Task Completed				100%		
	KD3B: Tender invitation - Clarifier (C11)	2/12/2019	14/8/2020	13/4/2020	26/8/2020	Task Completed				100%		
	KD3B: Tender Award - Clarifier (C11)	2/12/2019	26/8/2020	13/4/2020	25/9/2020	Task Completed				100%		
	KD3B: Acceptance of tender award (C11)	2/12/2019	11/9/2020	13/4/2020	18/9/2020	Task Completed				-		
	KD3B: Tender invitation - DI Pipe (C11)	2/12/2019	13/1/2021	13/4/2020	19/1/2021	Task Completed				100%		
	KD3B: Tender Award - DI Pipe (C11)	2/12/2019	21/1/2021	13/4/2020	23/1/2021	Task Completed				100%		
	KD3B: Tender invitation - LCP (C11)	2/12/2019	3/2/2021	13/4/2020	5/2/2021	Task Completed						
	KD3B: Tender Award - LCP (C11)	2/12/2019	6/2/2021	13/4/2020	8/2/2021	Task Completed				100%		
	KD3B: Preparation of subletting package for dismantling work (C9)	2/12/2019	21/9/2020	13/4/2020	21/10/2020	Task Completed				100%		
	KD3B: Tender invitation for dismantling work (C9)	2/12/2019	12/11/2020	13/4/2020	19/11/2020	Task Completed				100%		
	KD3B: Tender Award for dismantling work (C9)	2/12/2019	20/11/2020	13/4/2020	22/11/2020	Task Completed				100%		
	KD3B: Acceptance of tender award for dismantling	2/12/2019	23/11/2020	13/4/2020	1/12/2020	Task Completed				100%		

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	KD3B: Preparation and Acceptance of subletting package for installation work (C9)	2/12/2019	15/12/2020	13/4/2020	1/3/2021	Task Completed				100%		
	KD3B: Tender invitation for installation work (C9)	2/12/2019	3/3/2021	13/4/2020	10/3/2021	Task Completed				100%		
	KD3B: Tender Award for installation work (C9)	2/12/2019	12/3/2021	13/4/2020	15/3/2021	Task Completed				100%		
	KD3B: Acceptance of tender award for installation work	2/12/2019	15/3/2021	13/4/2020	19/3/2021	Task Completed				100%		
	Submission and Acceptance of Drawing Submission	14/4/2020	5/8/2020	10/9/2020	11/1/2021	Task Completed				100%		
	Submission and Acceptance of P&M Submission	14/4/2020	5/8/2020	10/9/2020	30/6/2021	Task Completed						Formal resubmission of P&M for Rotating Bridge Scraper P&M-0024 (Rev.1) was submitted to AECOM on 24 June 2021 and is accepted by AECOM. P&M submission for Local Control Panel Rev.3 was submitted on 20 Mar 2021 and AECOM accepted on 26 Mar 2021.
	Submission and Acceptance of FAT Plan	1/12/2020	27/1/2021	15/12/2020	16/2/2021	Task Completed				100%		
	Submission and Acceptance of SAT Plan	1/3/2021	1/3/2021	1/4/2021	5/5/2021	Task Completed				100%		Bestwise submitted on 13 Apr 2021. AECOM accepted with comments on 5 May 2021.
	Submission and Acceptance of Design Submission (Support to DN700 Feed Pipe)	N/A	22/2/2021	N/A	13/5/2021	Task Completed						Advanced Calculation was provided on 17 Mar 2021 and revised on 18 Mar 2021. Bestwise proposed to use the existing support. Calculation was provided on 1 Apr 2021 via email. Dimension of support column was checked again on 14 Apr 2021. Proposal submitted on 30 Apr 2021. AECOM accepted with comments on 13 May 2021.
	Submission and Acceptance of Design Submission (Stainless steel support to FRP Cover of Effluent	N/A	24/2/2021	N/A	19/4/2021	Task Completed				100%		Advanced Calculation was provided on 17 Mar 2021 and revised on 18 Mar 2021. Bestwise formal submitted on 26 Mar 2021. AECOM accepted with comment on 19 Apr 2021.
	KD3B: Dismantle and Removal of E&M Equipment at PST No. 6	9/2/2021	21/12/2020	19/2/2021	15/1/2021	Task Completed				100%		
	Flow Diversion and drain out PST No.4	N/A	25/1/2021	N/A	26/3/2021	Task Completed				100%		
	KD3B: Dismantle and Removal of E&M Equipment at PST No. 4	9/2/2021	5/3/2021	19/2/2021	1/4/2021	Task Completed				100%		
	KD3B: Material Manufacturing (Clarifier)	12/9/2020	16/12/2020	12/12/2020	20/2/2021	Task Completed				100%		The clarifier would be manufactured in 2 batches (rotating bridge related and FRP launder cover). Manufaturing instruction was issued on 16 Dec 2020. Jash suggested 1st batch of material (clarifier) would be ready for shipping on 20 Feb 2021 and 2nd batch of material (FRP Launder Cover) would be ready for shipping on 13 Mar 2021. (To be confirmed by Jash by providing shipment booking, but supplier cannot provide updated information at thie moment due to second surge of COVID-19 in india)
	KD3B: FAT of the Clarifier	N/A	24/2/2021	N/A	1/3/2021	Task Completed				100%		FAT Report submitted on 24 Feb 2021 and AECOM accepted subject to comment on 1 Mar 2021
	KD3B: Material Delivery (Clarifier)	13/12/2020	27/2/2021	18/1/2021	6/4/2021	Task Completed				100%		
	KD3B: Material Deliver to Site (Clarifier)	N/A	6/4/2021	N/A	8/4/2021	Task Completed				100%		
	KD3B: Material Manufacturing (DI pipes and fittings)	11/9/2020	26/1/2021	18/1/2021	15/3/2021	Task Completed				100%		Extracted from C9 package to C11 package to suit the installation programme
	KD3B: Material Delivery (DI pipes and fittings)	11/9/2020	16/3/2021	18/1/2021	24/3/2021	Task Completed				100%		
	KD3B: Material Delivery (FRP Cover)	N/A	26/3/2021	N/A	21/6/2021	Task Completed				100%		All the FRP covers were delivered to site.
	KD3B: Material Manufacturing (LCP)	11/9/2020	4/3/2021	18/1/2021	16/4/2021	Task Completed				100%		
	KD3B: Material Delivery (LCP)	11/9/2020	17/4/2021	18/1/2021	30/4/2021	Task Completed				100%		
	KD3B: Retrofitting Concrete Structure of PST No. 4	N/A	2/4/2021	N/A	22/4/2021	Task Completed				100%		
	KD3B: Installation of E&M Equipment at PST No. 4	27/2/2021	5/4/2021	10/5/2021	17/5/2021	Task Completed						
	KD3B: Testing and Comisssioning for PST No. 4	11/5/2021	19/4/2021	9/6/2021	26/7/2021	Task Completed						Wet test for PST 4 completed on 26 July 2021.
	Flow Diversion from PST No.6 to Temporary Filtrate Equalization Tank	N/A	19/5/2021	N/A	20/5/2021	Task Completed				100%		Filtrate feeding to TFES was resumed on 19/5/2021 with fine-tuned control.
	Removal of Accumulated Sludge Inside PST No. 6	N/A	19/5/2021	N/A	30/5/2021	Task Completed				100%		NCE-0229, this includes removal of floating scum/ sludge and clearance of blockage of drain pipe
	KD3B: Retrofitting Concrete Structure of PST No. 6	N/A	28/5/2021	N/A	24/6/2021	Task Completed				100%		
	KD3B: Mechanical Installation of E&M Equipment at PST No. 6	27/2/2021	31/5/2021	10/5/2021	21/7/2021	Task Completed				100%		This includes PST Influent feed pipe, center bearing & slip ring assembly, motor & gearbox assembly, rotating bridge sludge & scum scraper assembly, circular baffle diffuser box, v-notched weir plate, scum baffle plate, scum collection box and FRP cover.
	KD3B: Electrical Installation of E&M Equipment at PST No. 6	27/2/2021	9/6/2021	10/5/2021	21/7/2021	Task Completed				100%		This includes installation of LCP, cable laying & terminations.

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	KD3B: Testing and Comisssioning for PST No. 6	11/5/2021	22/6/2021	9/6/2021	20/8/2021	Task Completed				100%		Wet test (1st) completed on 20 Aug 2021 and wet test (2nd) completed on 3 Sep 2021.
KD3B: 6B.2.15 Operation Restoration of Existing Primary Sedimentation Tank (PST) No. 4 and 6	KD3B: System Commissioning for PST No. 4 & 6	N/A	22/6/2021	N/A	3/9/2021	Task Completed				100%		Wet test (2nd) for PST#6 completed on 3 Sep 2021 and pre-handover inspection arranged on 30 Aug 2021. Defect list (final) received on 17 Sep 2021 and defect rectification was completed. Site training/ demonstration shall be conducted by end Feb and PMI modification work shall be completed by end March.
	KD3B: 9 June 2021											
Section 1 of Works (outstanding works list)												
6B.2.12 Provision of New Replacement Filter Plates	Submission of onsite survey plan for acceptance	1/3/2020	25/3/2020	30/3/2020	21/4/2020	not yet commenced				100%	-	Bestwise resubmitted onsite survey plan on 21 April 2020
	Acceptance of submission of onsite survey plan	1/3/2020	25/3/2020	30/3/2020	12/5/2020	not yet commenced				100%	-	Survey plan acceptance received on 12 May 2020. Onsite discussion with ST1 was
	Submission of onsite survey report	21/5/2020	21/5/2020	29/5/2020	29/5/2020	not yet commenced				100%		
	Acceptancce of onsite survey report	30/5/2020	30/5/2020	15/6/2020	15/6/2020	not yet commenced				-		
	Preparation of procurement package (C11)	22/6/2020	22/6/2020	6/7/2020	14/7/2020	Task Completed				100%		
	Tender invitation (C11)	15/7/2020	15/7/2020	22/7/2020	24/7/2020	Task Completed				100%		
	Tender Award (C11)	23/7/2020	25/7/2020	29/7/2020	31/7/2020	Task Completed				100%		Revised survey report (second draft) was sent to AECOM on 21 Oct 2020. Technical
	Material Submission	21/8/2020	21/8/2020	28/8/2020	7/12/2020	Task Completed				100%		Material submission (Rev.1) resubmitted on 7 Dec 2020. AECOM accepted subject to comments on 24 Dec 2020. Material submission (Rev. 2) resubmitted on 12 Jan 2021. AECOM accepted subject to comment on 22 Jan 2021.
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Delivery	1/12/2020	1/12/2020	8/8/2021	8/8/2021	Task Completed				-		"Filter Press Plates and Cloths" were handed over to DSD.
6B.2.12 Provision of Membrane Filter Press System at Existing Sludge Press House	Submission of onsite survey plan for acceptance	1/3/2020	25/3/2020	30/3/2020	Task to be deleted	Task to be deleted				-	-	PPMI No.5 was issused by PM on 24 April 2020. Bestwise is requested to submit quotation on delete the provision of one (1) no. of membrane filter press system in pursuant to Particular Specification Clause 6B.2.12.
6B.2.16 Temporary Filtrate Equalisation System (Sub-programme was provided by Bestwise)	Submission of onsite survey plan on E&M aspects for acceptance	1/3/2020	1/4/2020	30/3/2020	7/5/2020	not yet commenced				100%	-	Bestwise resubmitted onsite survey plan on 7 May 2020
	Acceptance of submission of onsite survey plan	1/3/2020	1/4/2020	30/3/2020	23/5/2020	not yet commenced				100%	-	AECOM accepted the onsite survey plan on 23 May 2020
6B.2.16 Temporary Filtrate Equalisation System (Sub-programme was provided by Bestwise)	Submission and Acceptance of ELS Design for Lifting Well	15/06/2020 -> 17/08/2020*	2/9/2020	30/07/2020 -> 30/11/2020*	9/2/2021	Task Completed				100%	Bestwise	- * = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020. Bestwise submitted Rev.0 on 21 Oct 2020 and resubmitted Rev.2 on 23 Jan 2021. - AECOM provide consent for the ELS temporary works on 9 Feb 2021. AECOM accepted on 9 Feb 2021.
	Submission and Acceptance of Design for Filtrate Lifting Well Construction	15/06/2020 -> 17/08/2020*	2/9/2020	30/07/2020 -> 30/11/2020*	15/1/2021	Task Completed				100%		* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020. AECOM commented on 21 Dec 2020. Bestwise submitted Rev.0 on 2 Nov 2020 and Rev.1 on 8 Jan 2021.
	Submission and Acceptance of Design of FRP Filtrate Equalization Tank	15/06/2020 -> 07/09/2020**	2/9/2020	30/07/2020 -> 22/10/2020*	15/1/2021	Task Completed				100%		** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020.
	Submission and Acceptance of Design of footing for FRP Filtrate Equalization Tank	15/06/2020 -> 07/09/2020**	2/9/2020	30/07/2020 -> 22/10/2020*	19/2/2021	Task Completed				100%		** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - Re-design work was proceeded and the planned start date was revised to 17 Aug 2020.
	Submission and Acceptance of Design of Formwork & Flasework Design for Construction of Lifting Well	15/06/2020 -> 17/08/2020*	2/9/2020	30/07/2020 -> 30/11/2020*	15/1/2021	Task Completed				100%		- * = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Bestwise submitted Rev.0 on 12 Jan 2020.

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission and Acceptance of Contractor's Design for Temporary Filtrate Equalisation System (E&M Works) (CDS010-2)	01/06/2020 -> 7/9/2020**	5/7/2020	30/07/2020 -> 30/11/2020**	30/7/2021	Task Completed				-	Bestwise	** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - Bestwise submitted (CDS 0010 Rev.0) on 6 August 2020, AECOM commented on 27 Aug 2020. Bestwise to resubmit (Separate submissions P&M0049, DWG0038, CDS0026, P&M0008, P&M0004, CDS0037, CDS0027, DWG0040 were submitted) - Control philosophy (CDS0027 Rev.0) was submitted on 22 Dec 2020. AECOM commented on 13 Jan 2021, Bestwise resubmitted on 27 May 2021 formally, AECOM accepted with comments on 4 Jun 2021.
	Drawing Submission	01/06/2020 -> 17/08/2020*	29/9/2020	30/07/2020 -> 30/11/2020*	5/3/2021	Task Completed				100%	Bestwise	- '* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. - Bestwise submitted (rev.0) on 29 Oct 2020 and resubmitted (rev.2) on 25 Jan 2021, AECOM accepted on 5 Feb 2021.
	Material Submission	01/06/2020 -> 17/08/2020*	29/11/2020	30/07/2020 -> 30/11/2020*	25/2/2021	Task Completed				100%	Bestwise	** = Change of material of temporary filtrate equalization tank from concrete to FRP on 07 Sep 2020. - P&M submission of temporary filtrate equalization tank (P&M 0030 Rev.1) on 29 Jan 2021. AECOM accepted subject to comments on 25 Feb 2021.
Subletting Package for Temporary Filtrate Equalization System	Tender invitation (C11) (EQT-002 & EQT-004)	17/4/2020	17/4/2020	7/5/2020	7/5/2020	Task Completed				100%		
	Tender award (C11) (EQT-002 & EQT-004)	14/4/2020	24/4/2020	13/5/2020	13/5/2020	Task Completed				100%	Bestwise	Bestwise submitted tender report on 29 April 2020 for filtrate pumps, AECOM commented on 29 May 2020, Bestwise to resubmit. Bestwise submitted tender report of instrument on 13 May 2020, AECOM noted on 26 May
	Acceptance of tender award (C11) (EQT-002 & EQT-	25/4/2020	25/4/2020	21/5/2020	21/5/2020	Task Completed				100%	Bestwise	
	Material Submission	20/07/2020 ->	16/10/2020	20/08/2020 -	5/2/2021	Task Completed				-	Bestwise	** = Change of material of temporary filtrate equalization tank from concrete to FRP on 18
	Submission of subletting package for acceptance (C9)	1/3/2020	13/7/2020	14/3/2020	13/7/2020	Task Completed				100%		
	Acceptance of subletting package (C9)	15/3/2020	14/7/2020	28/3/2020	14/7/2020	Task Completed				100%		
	Tender invitation (C9)	29/3/2020	15/7/2020	11/4/2020	22/7/2020	Task Completed				100%		
	Tender award (C9)	12/4/2020	23/7/2020	25/4/2020	13/8/2020	Task Completed				100%		
	Acceptance of tender award for civil construction work (C9)	26/04/2020	14/8/2020	5/5/2020	2/9/2020	Task Completed				100%		
	Preparation of subletting package for mech work (C9)	01/08/2020 -> 01/12/2020*	25/1/2021	08/08/20 -> 08/12/2020*	1/3/2021	Task Completed				100%		* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. Subletting package would was submitted on 25 Feb 2021 and AECOM accepted on 1 Mar
	Tender invitation for mech work (C9)	08/08/20 ->	2/3/2021	15/08/2020 -	9/3/2021	Task Completed				100%		Tender invitation was conducted on 2 Mar 2021 and returned on 9 Mar 2021
	Tender Award for mech work (C9)	15/08/2020 ->	10/3/2021	22/08/2020 -	15/3/2021	Task Completed				100%		Tender report was submitted on 15 Mar 2021
	Acceptance of tender award for mech work (C9)	22/08/2020 ->	15/3/2021	29/08/2020 -	19/3/2021	Task Completed				100%		Tender award on 19 Mar 2021.
	Preparation of subletting package for elect work (C9)	01/08/2020 -> 01/12/2020*	2/2/2021	08/08/20 -> 08/12/2020*	1/3/2021	Task Completed				100%		* = PMI014 - Revised Location for Construction of Temporary Filtrate Equalization System reveiced on 17 Aug 2020. Subletting package resubmitted on 26 Feb 2021 and AECOM accepted on 1 Mar 2021..
	Tender invitation for elect work (C9)	01/08/2020 ->	2/3/2021	15/08/2020 -	9/3/2021	Task Completed				100%		Tender invitation was conducted on 2 Mar 2021 and returned on 9 Mar 2021
	Tender Award for elect work (C9)	08/08/20 ->	10/3/2021	22/08/2020 -	15/3/2021	Task Completed				100%		Tender report was submitted on 15 Mar 2021
	Acceptance of tender award for elect work (C9)	15/08/2020 -> 15/12/2020*	15/3/2021	29/08/2020 - >	19/3/2021	Task Completed				100%		Tender award on 19 Mar 2021.
Construction of Temporary Filtrate Equalisation System	Construction of minor civil works under PMI 014	22/08/2020 -> 22/12/2020*	5/10/2020	15/10/2020	31/3/2021	Task Completed				100%	Bestwise	Utilities survey report of lifting well and EQ tank were submitted on 23 Sept 2020 and 29 Sept 2020. AECOM commented lifting well on 29 Sept 2020.
	RC Structure Works of lifting well	7/11/2020	12/1/2021	30/12/2020	25/2/2021	Task Completed				100%		
	Construction of concrete plinth for filtrate EQ tank	23/1/2021	8/2/2021	1/2/2021	26/2/2021	Task Completed				100%		
	Offsite fabrication and delivery of filtrate EQ tank	31/10/2020	16/1/2021	2/2/2021	4/3/2021	Task Completed				100%		First batch of filtrate EQ tank panel was delivered on 4 Mar 2021.
	Onsite assembly of filtrate EQ tank	2/2/2021	1/3/2021	12/3/2021	16/4/2021	Task Completed				100%		
6B.2.16 Temporary Filtrate Equalisation System	Mechanical Installation	17/3/2021	30/3/2021	12/4/2021	14/5/2021	Task Completed				-		
	Electrical Installation	13/3/2021	29/3/2021	15/4/2021	10/12/2021	Task Completed				-		PLC programme for water spray system (stage 1) is on-going, motorized gate valve for stage 2 under PMI is being fabricated and the delivery lead time is by end November.
	Testing and Comissioning	15/4/2021	22/4/2021	1/5/2021	30/11/2022	Completed				-		Defect rectification for BCM comments was partially completed and Site Acceptance Test (72 hours) was completed.
6B.1.17 Overall plant treatment process review by the Treatment Process Specialist	Submission of Treatment Process Specialist's review report	1/6/2020	1/6/2020	30/6/2020	2/7/2020	not yet commenced				-	Bestwise	Preliminary Draft submitted, meeting completed on 15 May 2020 with SRE and TPS. Initial process design evaluation was submitted on 20 May 2020. Design calculation submitted on
	Acceptance of submission for further design	14/6/2020	3/7/2020	30/6/2020	17/7/2020	not yet commenced				-		

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
6B Overall plant process equipment sizing review	Submission of Contractor's Design Calculation for	1/6/2020	1/6/2020	30/6/2020	2/7/2020	not yet commenced				-	Bestwise	Preliminary Draft submitted, meeting completed on 15 May 2020 with SRE and TPS. Initial
	Acceptance of submission for further detail design	14/6/2020	3/7/2020	30/6/2020	17/7/2020	not yet commenced				-		
6B.2.1 Inlet Works	Submission of Contractor's Design for Inlet Works No. 1	6/9/2020	16/11/2020	14/5/2021	31/8/2023	not yet commenced				-	Bestwise	All finalized design calculations for Inlet Works no.1 shall be submitted by 20 Jan 2023.
	Submission of P&M Submission	6/9/2020	7/9/2020	14/5/2021	31/8/2023	not yet commenced						P&M0022 - Inlet Pumps (status: B) P&M0003 - Coarse Screens & Fine Screens (status: B) P&M0085 - Grit Traps (status: B) P&M0084 - Screw Compactor (status: B) P&M0042 - Screw Conveyors for Coarse Screens and Fine Screens (status: B) All P&M for Inlet Works no.1 shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	6/9/2020	14/5/2021	29/12/2020	Task Completed						PID (rev.B) submitted on 13 Nov 2020. AECOM accepted subject to comments on 29 Dec 2020.
	Submission of GA Drawing	6/9/2020	5/1/2021	14/5/2021	31/8/2023	not yet commenced						E&M GA submission DWG0082 resubmitted on 9 July 2021. AECOM commented on 19 Feb 2021. Bestwise reviewed GA in BIM with AECOM on 12 Jan 2022. Electrical GA DWG0095 resubmitted on 3 July 2021. AECOM commented on 21 Apr 2021. Bestwise reviewed GA in BIM with AECOM on 12 Jan 2022. All finalized drawings for Inlet Works no.1 shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 5, 12, 19/5/2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2023	not yet commenced						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. All finalized drawings for Inlet Works no.1 shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		
	Submission of detailed design for electrical installation for Inlet Works No. 1 (CDS021)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for Inlet Works No. 1 (CDS025-1)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation BS for Inlet Works No. 1 (CDS034-1)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for Inlet Works No. 1 up to +8.0 mPD (CDS080-1)	1/9/2020	1/9/2020	30/10/2020	30/10/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for Inlet Works No. 1 up to +8.0 mPD (First Draft))	15/7/2020	15/7/2020	15/8/2020	17/9/2020	Task Completed	no.	3	3	100%		1st draft of drawing submitted on 17 September 2020
	KD1A: Submission of civil requirement drawing for Inlet Works No. 1 up to +8.0 mPD (Final)	28/8/2020	18/9/2020	5/11/2020	5/11/2020	Task Completed	no.	3	3	100%	Bestwise	Bestwise resubmitted (rev.A) on 27 Oct 2020.
	KD1A: Submission of electrical schematic drawings for Inlet Works No. 1 (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	2	2	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of electrical schematic drawings for Inlet Works No. 1 (Final)	7/9/2020	1/10/2020	5/11/2020	20/10/2020	Task Completed	no.	2	2	100%	Bestwise	Bestwise submitted on 20 Oct 2020
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.2 Primary Sedimentation Tank No. 1-4	Submission of Contractor's Design for Primary Sedimentation Tanks No. 1-4	6/9/2020	28/12/2020	14/5/2021	31/8/2023	not yet commenced				-	Bestwise	PFD (rev.B) under DWG0004 submitted on 22 June 2021. Finalized design calculations for PST shall be submitted by 20 Jan 2023.
	Submission of P&M Submission	6/9/2020	26/11/2020	14/5/2021	31/8/2023	not yet commenced						P&M0058 - Lamella Plate Settler (status: B) P&M0097 - Scum Skimmer and Scum Collection Pipe (status: B) P&M0086 - Sludge Bottom Scraper (status: B) P&M0051 - Drain Pump (status: B) P&M0044 - Primary Sludge Pump (status: B) Finalized material submissions for PST shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	2/10/2020	14/5/2021	24/6/2021	Task Completed						PID under DWG0037 (rev.1) submitted on 24 June 2021 and is accepted by AECOM.

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission of GA Drawing	6/9/2020	3/2/2021	14/5/2021	31/8/2023	not yet commenced						Mechanical GA was submitted on 19 Jun 2021. Electrical GA under DWG0103 (rev.1) was submitted on 6 Jul 2021 and is accepted by AECOM. Finalized drawings for PST shall be submitted by 30 Aug 2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2023	not yet commenced						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawings for PST shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	2/4/2021	29/5/2021	31/8/2023	not yet commenced				-		Refer to outstanding list under "Certificate of completion no.1 - section 1 of the works".
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for Primary Sedimentation Tanks (CDS025-2)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for Primary Sedimentation Tanks up to +8.0 mPD (CDS080-2)	1/9/2020	1/9/2020	30/10/2020	30/10/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for Primary Sedimentation Tanks No. 1-4 up to +8.0 mPD	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	4	4	100%		1st part of drafted drawing (2 nos.) was submitted on 23 Sept 2020. Remaining drawings (2 nos.) were submitted on 30 Sept 2020.
	KD1A: Submission of civil requirement drawing for Primary Sedimentation Tanks No. 1-4 up to +8.0 mPD	28/8/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed	no.	4	4	100%	Bestwise	Bestwise resubmitted (Rev.A) on 27 Oct & 13 Nov 2020.
	KD1A: Submission of electrical schematic drawings for Primary Sedimentation Tanks No. 1-4 (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of electrical schematic drawings for Primary Sedimentation Tanks No. 1-4 (Final)	7/9/2020	1/10/2020	5/11/2020	20/10/2020	Task Completed	no.	1	1	100%	Bestwise	Bestwise submitted on 20 Oct 2020
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.3 Chemical Storage and Dosing System	Submission of Contractor's Design for Chemical Dosing System (CDS006)	6/9/2020	7/1/2021	14/5/2021	29/10/2021	Task Completed				-	Bestwise	Design calculation (rev.0) of CHS1 and TCHS submitted on 2 Sep 2020 and 28 Aug 2020, AECOM commented on 24 Sep and 6 Oct 2020, Bestwise submitted CDS0060 on 15 Jul 2021 and CDS0044 on 19 Jul 2021. Finalized design calculation for chemical systems was submitted on 29 Oct 2021.
	Submission of P&M Submission	6/9/2020	6/9/2020	14/5/2021	30/10/2021	Task Completed						Finalized material submissions for chemical system was submitted on 30 Oct 2021.
	Submission of P&ID Drawing	6/9/2020	11/12/2020	14/5/2021	29/6/2021	Task Completed						PID resubmitted under DWG0053 (rev.1) on 28 Jun 2021, DWG0057 (rev.1) on 29 Jun 2021 and DWG0058 (rev.1) on 29 Jun 2021.
	Submission of GA Drawing	6/9/2020	8/2/2021	14/5/2021	31/8/2023	not yet commenced						Electrical GA drawings for CS1 under DWG0096 submitted on 10 April 2021. AECOM accepted subject to comments on 17 Apr 2021. Mechanical GA drawings for CS1 submitted on 1 April 2021. AECOM commented on 24 April 2021. Bestwise resubmitted DWG0093 (rev.1) on 30 Jun 2021 and is accepted by AECOM. Mechanical GA for Temp CS submitted on 12 Jun 2021. All finalized drawings for chemical systems shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 17, 21, 28/4/2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2023	not yet commenced						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. All finalized drawings for chemical system shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		
	Submission of detailed design for electrical installations	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installations	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installations	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	KD1A: Submission of civil requirement drawing for	15/7/2020	15/7/2020	15/8/2020	16/9/2020	Task Completed	no.	2	2	100%		1st draft of drawing submitted on 15 September for CHS1 and 16 September 2020 for
	KD1A: Submission of civil requirement drawing for	7/9/2020	17/9/2020	5/11/2020	5/11/2020	Task Completed	no.	2	2	100%		Bestwise resubmitted (Rev.A) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	15/9/2020	Task Completed				-		1st draft of drawing to be submitted by 16 September 2020
	KD1A: Submission of electrical schematic drawings for Chemical System No. 1 and No. 2 (Final)	7/9/2020	16/9/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for Temporary Chemical System up to +8.0 mPD (First	15/7/2020	15/7/2020	15/8/2020	15/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 15 September 2020

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	KD1A: Submission of civil requirement drawing for Temporary Chemical System up to +8.0 mPD (Final)	7/9/2020	16/9/2020	5/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (Rev.A) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for Temporary Chemical System (First Draft)	15/7/2020	15/7/2020	15/8/2020	15/9/2020	Task Completed				-		1st draft of drawing to be submitted by 16 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	16/9/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.4 Membrane Bioreactor (MBR) System - Bio Reactor 2A and 2B	Submission of Contractor's Design for Bioreactor 2A and 2B (CDS004)	6/9/2020	12/1/2021	14/5/2021	31/8/2023	not yet commenced				-	Bestwise	PFD (rev.1) submitted on 3 Nov 2020. AECOM accepted on 7 Dec 2020 subject to comment. MBR system process and design calculation (rev.2) submitted on 6 Nov 2020. AECOM accepted on 17 Nov 2020 subject to comments. Electrical CDS submitted on 23 Jun 2021. Finalized design calculations shall be submitted by 20 Jan 2023.
	Submission of P&M Submission	6/9/2020	26/11/2020	14/5/2021	31/8/2023	not yet commenced						P&M0060 - Pre-treatment Fine Screen (status: B) P&M0053 - MLR Pump (status: B) P&M0118 - Scum Skimmer & Scum Pump (status: C) P&M0088 - Fine Bubble Air Diffuser (status: B) P&M0xxx - Wash Compactor (status: B) P&M0041 - Submersible Mixer (status: B) Finalized material submission shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	2/11/2020	14/5/2021	2/7/2021	Task Completed						PID (Rev.1) under DWG0042 resubmitted on 6 July 2021.
	Submission of GA Drawing	6/9/2020	17/2/2021	14/5/2021	31/8/2023	not yet commenced						Mechanical GA under DWG0132 submitted on 26 Jun 2021 and is accepted by AECOM. Electrical GA submitted on 23 Jun 2021. Finalized drawing shall be submitted by 30 June 2022. BIM GA review meeting is scheduled on 1, 8, 15/6/2022.
	Submission of Electrical Drawing	6/9/2020	15/1/2021	14/5/2021	31/8/2023	not yet commenced						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		Refer to outstanding list under "Certificate of completion no.1 - section 1 of the works".
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for BR 2A and 2B (CDS025-3)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for BR 2A and 2B up to +8.0 mPD (CDS080-3)	1/9/2020	1/9/2020	30/10/2020	30/10/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for BR 2A and 2B up to +8.0 mPD (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	2	2	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of civil requirement drawing for BR 2A and 2B up to +8.0 mPD (Final)	28/8/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed	no.	2	2	100%	Bestwise	AECOM commented on 23 Oct 2020, Bestwise resubmitted on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for BR 2A and 2B (First Draft)	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed				-		1st draft of drawing was sent to AECOM via email on 15 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.4 Membrane Bioreactor (MBR) System - Membrane Filtration System No. 2 (MFB No. 2)	Submission of Contractor's Design for Membrane Filtration System (CDS005)	6/9/2020	11/1/2021	14/5/2021	31/8/2023	not yet commenced				-	Bestwise	PFD (rev.1) submitted on 3 Nov 2020. AECOM accepted on 10 Dec 2020 subject to comment. MBR system process and design calculation (rev.2) submitted on 6 Nov 2020. AECOM accepted on 17 Nov 2020 subject to comments. Finalized design calculations shall be submitted by 30 Aug 2022.
	Submission of P&M Submission	6/9/2020	19/11/2020	14/5/2021	31/8/2023	not yet commenced						P&M0072 - Membrane Module (status: B) P&M0069 - Permeate Pump (status: B) P&M0047 - RAS Pump (status: B) P&M0050 - Drain Pump (status: B) P&M0074 - Air Scour Blower (status: C) P&M0073 - Aeration Blower (status: C) P&M0093 - Air Compressor (status: B) P&M0091 - Chemical Pump (status: B) P&M0xxx - Chemical Tank (to be submitted) Finalized material submission shall be submitted by 20 Jan 2023.
	Submission of P&ID Drawing	6/9/2020	30/10/2020	14/5/2021	2/7/2021	Task Completed						DWG0049 (Rev.1) was resubmitted on 2 Jul 2021.
	Submission of GA Drawing	31/3/2021	18/2/2021	14/5/2021	31/8/2023	not yet commenced						DWG0121 (rev.1) was resubmitted to AECOM on 17 Jul 2021 Finalized drawings shall be submitted by 30 June 2022. BIM GA review meeting is scheduled on 19, 26/5/2022 and 2/6/2022 (Lower part) BIM GA review meeting is scheduled on 16, 23, 30/6/2022 (Upper part)

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission of Electrical Drawing	15/4/2021	15/1/2021	14/5/2021	31/8/2023	not yet commenced						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Electrical GA under DWG0079 (rev.1) was resubmitted on 8 Jul 2021. Finalized drawings shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation BS for MFB (CDS034-4)	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for MFB up to	1/9/2020	1/9/2020	30/9/2020	30/9/2020	Task Completed						
	KD1A: Submission of civil requirement drawing for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	7	7	100%		1st draft of drawing submitted on 30 September
	KD1A: Submission of civil requirement drawing for MFB No. 2 up to +8.0 mPD (Final)	28/8/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed	no.	7	7	100%	Bestwise	Bestwise resubmitted (Rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed	no.	3	3	100%		1st draft of drawing submitted on 30 September 2020
	KD1A: Submission of electrical schematic drawings for MFB No. 2 (Final)	7/9/2020	1/10/2020	5/11/2020	20/10/2020	Task Completed	no.	3	3	100%	Bestwise	Bestwise submitted (Rev.1) on 20 Oct 2020
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
6B.2.6 Deodorisation System (EQT-001 - Deodorization Unit)	Tender invitation (C11)	17/4/2020	17/4/2020	24/4/2020	24/4/2020	Task Completed				100%		
6B.2.6 Deodorisation System (EQT-001 - Deodorization Unit)	Tender award (C11)	25/4/2020	25/4/2020	12/5/2020	12/5/2020	Task Completed				100%	Bestwise	Bestwise submitted tender report on 13 May 2020. AECOM commented on 23 July 2020, Bestwise to resubmit.
	Acceptance of tender award (C11)	13/5/2020	13/5/2020	21/5/2020	21/5/2020	Task Completed				100%		
	Submission of Contractor's Design for Deodorisation System , DOU No. 1 (CDS0019 & CDS0045)	6/9/2020	6/9/2020	14/5/2021	31/12/2021	Task Completed				-		Design Calculation (Rev.0) was submitted on 24 Nov 2020. AECOM commented on 6 Jan 2021, Bestwise to resubmit. Bestwise submitted CDS0045 on 3 June 2021. Finalized design was completed.
	Submission of P&ID Drawing of DOU No. 1	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.
	Submission of GA Drawing of DOU No. 1	6/9/2020	6/9/2020	14/5/2021	31/8/2023	not yet commenced						GA submitted on 21 Jun 2021 Finalized drawings shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 11, 18, 25/5/2022.
	Submission of Electrical Drawing of DOU No. 1	21/3/2021	30/1/2021	14/5/2021	31/8/2023	not yet commenced						Control wiring diagrams was resubmitted on 1 April 2021. AECOM commented on 23 Apr 2021. Bestwise to resubmit. Finalized drawings shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		
	KD1A: Submission of civil requirement drawing for Deodorisation System , DOU No. 1 up to +8.0 mPD (First Draft)	15/7/2020	15/7/2020	15/8/2020	28/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing was submitted on 28 September 2020
	KD1A: Submission of civil requirement drawing for Deodorisation System , DOU No. 1 up to +8.0 mPD (Final)	28/8/2020	29/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%	Bestwise	Bestwise resubmitted (rev.1) on 5 Nov 2020.
	Submission of Contractor's Design for Deodorisation System , DOU No. 2A (CDS0019 & CDS0048)	6/9/2020	6/9/2020	14/5/2021	10/12/2021	Task Completed				-		CDS0019: Design Calculation for Deodorisation System (status: B) CDS0048: Design Calculation on DOU2A - air extraction fan (status: B)
	Submission of P&ID Drawing of DOU No. 2A	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.
	Submission of GA Drawing of DOU No. 2A	6/9/2020	3/8/2020	14/5/2021	31/8/2023	not yet commenced				-	Bestwise	Bestwise submitted (rev.1) on 30 Nov 2020. AECOM commented on 16 Dec 2020. Bestwise to resubmit. Finalized drawings shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 1, 8, 15/6/2022.
	Submission of Electrical Drawing of DOU No. 2A	21/3/2021	26/1/2021	14/5/2021	31/8/2023	not yet commenced						Bestwise submitted (rev.0) on 26 Jan 2021, AECOM commented on 4 Feb 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		
	Submission of Contractor's Design for Deodorisation System , DOU No. 3A (CDS0019 & CDS0055)	6/9/2020	6/9/2020	14/5/2021	10/12/2021	Task Completed				-		CDS0019: Design Calculation for Deodorisation System (status: B) CDS0055: Design Calculation on DOU3A - air extraction fan (status: B)
	Submission of P&ID Drawing of DOU No. 3A	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission of GA Drawing of DOU No. 3A	6/9/2020	8/7/2020	14/5/2021	31/8/2023	not yet commenced				-	Bestwise	Bestwise submitted (rev.1) on 28 Oct 2020. AECOM commeneted on 16 Dec 2020. Bestwise resubmitted on 24 June 2021. Finalized drawings shall be submitted by 30 June 2022 and BIM GA review meeting is scheduled on 27/4/2022, 4, 11/5/2022.
	Submission of Electrical Drawing of DOU No. 3A	21/3/2021	26/2/2021	14/5/2021	31/8/2023	not yet commenced						Bestwise submitted on 17 Apr 2021. AECOM commented on 27 Apr 2021. Bestwise to resubmit. GA submitted on 24 Jun 2021 Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced						
	KD1A: Submission of civil requirement drawing for Deodorisation System , DOU No. 3A up to +8.0 mPD	15/7/2020	15/7/2020	15/8/2020	28/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing was submitted on 28 September 2020
	KD1A: Submission of civil requirement drawing for	28/8/2020	29/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%	Bestwise	Bestwise resubmitted (rev.1) on 5 Nov 2020.
	Submission of Contractor's Design for Deodorisation System , DOU No. 3B (CDS0019 & CDS0049)	6/9/2020	6/9/2020	14/5/2021	10/12/2021	Task Completed						CDS0019: Design Calculation for Deodorisation System (status: B) CDS0049: Design Calculation on DOU3B - air extraction fan (status: B)
	Submission of P&ID Drawing of DOU No. 3B	6/9/2020	5/8/2020	14/5/2021	2/7/2021	Task Completed				-	Bestwise	Bestwise resubmitted rev.3 on 29 Mar 2021. AECOM accepted subject to comments on 13 Apr 2021.
	Submission of GA Drawing of DOU No. 3B	6/9/2020	6/9/2020	14/5/2021	31/8/2023	not yet commenced						Bestwise submitted DWG0081 (rev.0) on 5 Feb 2021. AECOM commeneted on 12 Mar 2021. Bestwise to resubmit. Finalized drawings shall be submitted by 30 June 2022 and BIM GA revew meeting is scheduled on 16, 23, 30/6/2022.
	Submission of Electrical Drawing of DOU No. 3B	21/3/2021	22/2/2021	14/5/2021	31/8/2023	not yet commenced						GA submitted on 24 Jun 2021 Finalized drawing shall be submitted by 20 Jan 2023.
	Acceptance of submission	15/5/2021	15/5/2021	29/5/2021	31/8/2023	not yet commenced				-		
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for LV Switchboards for	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of detailed design for electrical installation	6/9/2020	6/9/2020	14/5/2021	14/5/2021	Task Completed						
	Submission of civil work requirements for MFB up to	1/9/2020	1/9/2020	30/9/2020	30/9/2020	Task Completed						
	Submission of civil requirement drawing for MFB up to	28/8/2020	28/8/2020	2/11/2020	2/11/2020	Task Completed						
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed				-		1st draft of drawing to be submitted by 30 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
04SC008 - Design, Supply and Installation of detailed design for lifting appliances	Acceptance of tender award (C9)	-	-	-	6/7/2020	Task Completed				100%	-	AECOM accepted tender report on 6 July 2020.
	Submission of detailed design for lifting appliances for Inlet Works No. 1 (CDS050-1)	6/9/2020	5/12/2020	6/9/2020	31/8/2023	not yet commenced						DWG 0055 (Rev.0) was submitted on 13 Mar 2021. AECOM commented on 20 Apr 2021. Bestwise to resubmit. Bestwise submitted P&M0025 on 15 June 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for Primary Sedimentation Tanks (CDS050-2)	6/9/2020	5/12/2020	6/9/2020	31/8/2023	not yet commenced						DWG 0054 (Rev.0) was submitted on 18 Jan 2021. AECOM commented on 9 Mar 2021. Bestwise to resubmit. Finalized design shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for BR 2A and 2B (CDS050-3)	6/9/2020	5/12/2020	6/9/2020	31/8/2023	not yet commenced						DWG 0065 (Rev.0) was submitted on 18 Jan 2021. AECOM commented on 9 Mar 2021. Bestwise to resubmit. P&M-0026 (Rev.1) received status B. Finalized design calculation shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for MFB (CDS050-4)	6/9/2020	5/12/2020	6/9/2020	31/8/2023	not yet commenced						DWG 0066 (Rev.1) was submitted on 1 Mar 2021. AECOM commented on 5 Mar 2021. Bestwise to resubmit. P&M-0027 (Rev.1) received status B. Finalized design calculation shall be submitted by 20 Jan 2023.
	Submission of detailed design for lifting appliances for Temporary Filtration Tank (CDS050-5)	6/9/2020	5/12/2020	6/9/2020	21/5/2021	Task Completed						DWG 0051 (Rev.2) was resubmitted on 7 May 2021 and acceptance by AECOM subject to condition on 21 May 2021. Bestwise submitted P&M0021 on 21 June 2021.
Building Services System	Submission for MVAC system	N/A	10/12/2020	N/A	31/8/2023	not yet commenced						Design calculations and drawings for inlet works was submitted on 16 Dec 2020. AECOM commented on 15 Jan 2021 and 20 Jan 2021. Design calculations and drawings for PST was submitted on 30 Dec 2020. AECOM commented on 22 Jan 2021 and 26 Jan 2021. Design calculations and drawings for MFB2 was submitted on 29 Jan 2021. AECOM commented on 26 Mar 2021. Subletting package resubmitted by 18 Mar 2021. AECOM accepted on 19 Mar 2021. Finalized design shall be submitted by 20 Jan 2023.

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Submission for Fire Services System	N/A	15/3/2021	N/A	31/8/2023	not yet commenced						Subletting Package to be resubmitted by 31 Mar 2021. AECOM accepted on 9 Apr 2021. Drawings: Inlet Works: submitted on 8 June 2021. PST 1-4: submitted on 23 Jun 2021 BR2A &2B: submitted on 8 Jun 2021 MFB 2: submitted on 8 Jun 2021 Finalized design shall be submitted by 20 Jan 2023.
	Submission for Plumbing and Drainage System	N/A	15/3/2021	N/A	31/8/2023	not yet commenced						Subletting Package resubmitted by 10 Mar 2021. AECOM accepted on 12 Mar 2021. Tender invitation was conducted on 15 Mar 2021 and closed on 26 Mar 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission for Electrical Services System	N/A	10/12/2020	N/A	31/8/2023	not yet commenced						GA for lighting was submitted on 18 Dec 2020. AECOM commented on 6 Jan 2021. Bestwise to resubmit. GA for small power system was submitted in 8 Feb 2021. AECOM commented on 3 Mar 2021. Bestwise to resubmit. Finalized design shall be submitted by 20 Jan 2023.
	Submission of ELV system	N/A	8/1/2021	N/A	31/8/2023	not yet commenced						GA for CCTV was resubmitted on 16 Mar 2021. AECOM commented on 30 Mar 2021. Bestwise resubmitted on 25 Jun 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission for PV system	N/A	15/3/2021	N/A	31/8/2023	not yet commenced						Tender package was submitted to AECOM. Finalized design shall be submitted by 20 Jan 2023.
SCADA System & PMS	Submission for SCADA system	N/A	11/2/2021	N/A	31/8/2023	not yet commenced						Revised SCADA structure was provided via email on 9 Apr 2021 and tender package is under preparation. Finalized design shall be submitted by 20 Jan 2023.
	Submission for PMS system	N/A	8/3/2021	N/A	31/8/2023	not yet commenced						Tender package to be resubmitted on 29 June 2021. Finalized design shall be submitted by 20 Jan 2023.
	Submission for CMMS & IDMS system	N/A	1/6/2021	N/A	31/8/2023	not yet commenced						Finalized design shall be submitted by 20 Jan 2023.
Section 2 of Works												
Street Fire Hydrant Pump Room	KD1A: Submission of civil requirement drawing for	15/7/2020	15/7/2020	15/8/2020	17/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 17 September 2020
	KD1A: Submission of civil requirement drawing for	28/8/2020	18/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed						1st draft of drawing to be submitted by 30 September 2020
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
FS & Sprinkler Pump Room	KD1A: Submission of civil requirement drawing for FS	15/7/2020	15/7/2020	15/8/2020	17/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 17 September 2020
	KD1A: Submission of civil requirement drawing for FS	28/8/2020	18/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020	Task Completed						
	KD1A: Submission of electrical schematic drawings for	7/9/2020	1/10/2020	5/11/2020	5/11/2020	Task Completed						
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
	Fire Services Installation Work	1/3/2023	16/3/2023	16/7/2023	31/7/2023							
Emergency Generator House	KD1A: Submission of civil requirement drawing for Emergency Generator House up to +8.0 mPD (First Draft)	15/7/2020	15/7/2020	15/8/2020	18/9/2020	Task Completed	no.	1	1	100%		1st draft of drawing submitted on 18 September 2020
	KD1A: Submission of civil requirement drawing for Emergency Generator House up to +8.0 mPD (Final)	28/8/2020	19/9/2020	2/11/2020	5/11/2020	Task Completed	no.	1	1	100%		Bestwise resubmitted (rev.1) on 5 Nov 2020.
	KD1A: Submission of electrical schematic drawings for	15/7/2020	15/7/2020	15/8/2020	30/9/2020							
	KD1A: Submission of electrical schematic drawings for Street Fire Hydrant Pump Room (Final)	7/9/2020	1/10/2020	5/11/2020	5/11/2020							
	KD1A: 6 November 2020											Notice of completion works was submitted on 17 Nov 2020
DOU3A	Material Delivery	7/3/2023	7/3/2023	7/5/2023								
	Mechanical Installation for DOU3A	8/3/2023		6/7/2023								
	Testing & Commissioning											

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
Lightning Protection System for DOU3A (underground)	Submission and Acceptance for Lightning Protection System Design	6/12/2021	6/12/2021	31/1/2022	31/1/2022	Task Completed						
	Material Delivery	7/2/2022	7/2/2022	28/2/2022	28/2/2022	Task Completed						
	Installation Work	31/3/2022	26/4/2022	5/5/2022	5/5/2022	Task Completed						
	Testing & Commissioning	7/1/2023	7/1/2023	31/1/2023								
Lightning Protection System for Inlet Works (underground)	Submission and Acceptance for Lightning Protection System Design	20/12/2021	20/12/2021	31/1/2022	31/1/2022	Task Completed						
	Material Delivery	15/12/2022	1/10/2022	31/3/2022	31/10/2022	Task Completed						
	Installation Work	15/3/2022	1/11/2022	30/10/2022	14/12/2022	Task Completed						
	Testing & Commissioning	1/11/2022	15/12/2022	15/11/2022	31/12/2022							
MFB No.2	Rail Beam Installation at Basement 2	12/5/2023	22/5/2023	11/7/2023								
	MVAC Installation at Basement 2	8/5/2023	8/5/2023	7/7/2023								
	Fire Services Installation at Basement 2	8/5/2023	8/5/2023	7/7/2023								
	Plumbing Services Installation at Basement 2	8/5/2023	8/5/2023	7/7/2023								
Section 3 of Works												
6B.2.12 Provision of New Replacement Filter Plates	Submission of onsite survey plan for acceptance	1/3/2020	25/3/2020	30/3/2020	21/4/2020	not yet commenced				100%	-	Bestwise resubmitted onsite survey plan on 21 April 2020
	Acceptance of submission of onsite survey plan	1/3/2020	25/3/2020	30/3/2020	12/5/2020	not yet commenced				100%	-	Survey plan acceptance received on 12 May 2020. Onsite discussion with ST1 was
	Submission of onsite survey report	21/5/2020	21/5/2020	29/5/2020	29/5/2020	not yet commenced				100%		
	Acceptancce of onsite survey report	30/5/2020	30/5/2020	15/6/2020	15/6/2020	not yet commenced				-		
	Preparation of procurement package (C11)	22/6/2020	22/6/2020	6/7/2020	14/7/2020	Task Completed				100%		
	Tender invitation (C11)	15/7/2020	15/7/2020	22/7/2020	24/7/2020	Task Completed				100%		
	Tender Award (C11)	23/7/2020	25/7/2020	29/7/2020	31/7/2020	Task Completed				100%		Revised survey report (second draft) was sent to AECOM on 21 Oct 2020. Technical
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Submission	21/8/2020	21/8/2020	28/8/2020	7/12/2020	Task Completed				100%		Material submission (Rev.1) resubmitted on 7 Dec 2020. AECOM accepted subject to comments on 24 Dec 2020. Material submission (Rev. 2) resubmitted on 12 Jan 2021. AECOM accepted subject to comment on 22 Jan 2021.
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Delivery	1/12/2020	1/12/2020	8/8/2021	13/7/2021	Task Completed				-		Handed over to DSD.
	Completion Date of Section 3: 22 September 2021											
Subcontracting												
	Submission of subletting package for acceptance	1/1/2020	6/3/2020	30/3/2020	6/3/2020	Task Completed				100%	-	
	Acceptance of subletting package	1/3/2020	21/3/2020	30/3/2020	21/3/2020	Task Completed				100%	-	
	Tender invitation	1/3/2020	24/3/2020	1/4/2020	30/3/2020	Task Completed				100%	-	
	Tender award	22/3/2020		14/4/2020	6/4/2020	Task Completed				100%	-	Bestwise submitted tender report on 6 April 2020
	Acceptance of tender award	-	-	-	15/4/2020	Task Completed				100%		AECOM accepted tender report on 15 April 2020
Construction of *Contractor*'s site accommodation in WA1-C	Design of MiC	15/4/2020	16/4/2020	1/6/2020	15/8/2020	Task Completed				100%		Revised layout drawings received from AluHouse on 28 May 2020. Comments provided to AluHouse on 2 June 2020.
	Submission of detailed design including foundation works, septic tank	1/7/2020	1/7/2020	14/7/2020	4/9/2020	Task Completed				100%		Design calculation of foundation work was submitted on 7 July 2020, comment received on 27 July 2020. Bestwise to resubmit.
	Site Clearence Work	15/7/2020	20/7/2020	31/7/2020	15/8/2020	Task Completed				100%		Tender invitation commenced on 29 May 2020 and tenders received on 4 June 2020. Tender
	Off-site fabrication of Septic tank	15/7/2020	20/7/2020	31/7/2020	31/7/2020	Task Completed				100%		Site clearence work started on 20 July 2020
	Submission of method statement with ICE certificate	1/8/2020	1/8/2020	7/8/2020	8/10/2020	Task Completed				100%		CV of ICE was submitted on 4 August 2020 and accepted on 25 August 2020
	Submission of design calculation with ICE certificate	1/8/2020	1/8/2020	7/8/2020	8/10/2020	Task Completed				100%		Design calculation of foundation work was submitted on 7 July 2020, comment received on
	Acceptance of method statement and design calculation	8/8/2020	9/10/2020	14/8/2020	16/10/2020	Task Completed				100%		Method Statement and Design Calculation was submitted on 8 Oct 2020.
	Submission of method statement with ICE certificate	1/8/2020	1/8/2020	7/8/2020	23/11/2020	Task Completed				100%		
	Submission of design calculation with ICE certificate	1/8/2020	1/8/2020	7/8/2020	23/11/2020	Task Completed				100%		
	Acceptance of method statement and design calculation	8/8/2020	24/11/2020	14/8/2020	27/11/2020	Task Completed				100%		
	Excavation work	17/8/2020	21/10/2020	18/8/2020	21/10/2020	Task Completed				100%		
	Installation of septic tank	19/8/2020	21/10/2020	20/8/2020	22/10/2020	Task Completed				100%		

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Construction of RC foundation	21/8/2020	23/10/2020	31/8/2020	12/11/2020	Task Completed				100%		
	Off-site fabrication and delivery of MiC Office	1/6/2020	30/9/2020	31/7/2020	4/12/2020	Task Completed				100%		
	On-site installation of MiC Office	1/8/2020	4/12/2020	30/8/2020	5/1/2021	Task Completed				100%		
	Installation of car park shelter	4/1/2021	7/1/2021	11/1/2021	9/1/2021	Task Completed				100%		Subject to the completion of car park shelter of PM office and JEC office.
04SC003 - Building Information Modeling (BIM)	Submission of subletting package for acceptance (C9)	1/3/2020	25/3/2020	14/3/2020	25/3/2020	Task Completed				100%	-	
	Acceptance of subletting package (C9)	14/3/2020	2/4/2020	30/3/2020	2/4/2020	Task Completed				100%	-	
	Tender invitation (C9)	1/4/2020	1/4/2020	8/4/2020	9/4/2020	Task Completed				100%	-	
	Tender award (C9)	-	-	-	15/4/2020	Task Completed				100%	-	Bestwise submitted tender report on 15 April 2020
	Submission of subletting package for acceptance	14/3/2020	16/3/2020	30/3/2020	20/4/2020	not yet commenced				100%	-	Bestwise resubmitted on 20 April 2020
	Acceptance of subletting package	28/3/2020	4/5/2020	13/4/2020	13/5/2020	not yet commenced				100%	-	AECOM accepted subletting package on 13 May 2020
	Tender invitation	11/4/2020	19/6/2020	27/4/2020	26/6/2020	not yet commenced				-		Invitation to tender was commenced on 19 June 2020 and tender returned on 26 June 2020
	Tender award	25/4/2020	27/6/2020	11/5/2020	4/7/2020	not yet commenced				-		Bestwise submitted tender report on 30 June 2020
	Acceptance of tender award	-	-	-	18/7/2020					-		
04SC007 - Independent Beam Plus Consultant	Submission of subletting package for acceptance	1/3/2020	30/3/2020	14/3/2020	30/3/2020	not yet commenced				100%	-	
	Acceptance of subletting package	14/3/2020	3/4/2020	30/3/2020	3/4/2020	not yet commenced				100%	-	
	Tender invitation	30/3/2020	30/3/2020	9/4/2020	9/4/2020	not yet commenced				100%	-	
	Tender award	-	-	-	15/4/2020	Task Completed				100%	-	Bestwise submitted tender report on 15 April 2020
	Acceptance of tender award	-	-	-	17/4/2020	Task Completed				100%	-	AECOM accepted tender report on 17 April 2020
	Introduction meeting with IBPC, Cinotech	-	-	-	28/4/2020	Task Completed				100%	-	Meeting completed on 28 April 2020 followed by planning work progress
04SC008 - Design, Supply and Installation of detailed	Submission of subletting package for acceptance (C9)	1/4/2020	17/3/2020	14/4/2020	17/3/2020	Task Completed				100%	-	Bestwise submitted subletting package on 3 April 2020
	Acceptance of subletting package (C9)	14/4/2020	17/4/2020	30/4/2020	28/4/2020	Task Completed				100%	-	AECOM accepted subletting package on 28 April 2020
	Tender invitation (C9)	30/4/2020	6/5/2020	14/5/2020	28/5/2020	Task Completed				100%	-	Invitation to tender was commenced on 6 May 2020 and tender returned on 28 May 2020
	Tender award (C9)	14/5/2020	29/5/2020	30/5/2020	9/6/2020	Task Completed				100%	-	Bestwise submitted tender report on 9 June 2020.
Temporary Primary Sludge Thickener and its	Submission of subletting package (C9) for acceptance	15/05/2020 ->	14/8/2020	15/05/2020 -	27/8/2020	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020.
	Acceptance of subletting package (C9) (Mech)	30/05/2020 -> 30/7/2020*	15/8/2020	15/06/2020- > 15/8/2020*	16/9/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020.
	Tender invitation (C9) (Mech)	15/06/2020-> 15/8/2020*	9/9/2020	22/06/2020- > 22/8/2020*	14/10/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender invitation for FRP Tank was conducted on 9 Sep 2020, tender returned on 16 Sep 2020. - Tender invitation for mechanical installation was conducted on 29 Sept 2020, tender returned on 14 Oct 2020,
	Tender award (C9) (Mech)	22/06/2020-> 22/8/2020*	17/9/2020	29/06/2020- > 29/8/2020*	22/10/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender report for FRP Tank was submitted on 24 Sep 2020 and accepted on 9 Oct 2020. - Tender report for mechanical installation submitted on 22 Oct 2020 and accepted on 16
	Acceptance of tender award (C9) (Mech)	-	-	-	16/11/2020	Task Completed				100%		
	Submission of subletting package (C9) for acceptance (Elect)	15/05/2020 -> 15/7/2020*	9/12/2020	15/05/2020 - > 30/11/2020*	28/1/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Bestwise resubmitted subcontracting package of electrical installation on 28 Jan 2021
	Acceptance of subletting package (C9) (Elect)	30/05/2020 -> 30/7/2020*	29/1/2021	15/06/2020- > 15/8/2020*	1/2/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020.
	Tender invitation (C9) (Elect)	15/06/2020-> 15/8/2020*	1/2/2021	22/06/2020- > 22/8/2020*	11/2/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender invitation commenced on 1 Feb 2021 and returned on 11 Feb 2021
	Tender award (C9) (Elect)	22/06/2020-> 22/8/2020*	11/2/2021	29/06/2020- > 29/8/2020*	23/2/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Tender report target submitted on 23 Feb 2021 and accepted on 24 Feb 2021
	Acceptance of tender award (C9) (Elect)	-	-	-	26/2/2021	Task Completed				100%		

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Tender invitation (C11)	30/04/2020-> 15/07/2020*	30/4/2020	30/06/2020-> 15/09/2020*	18/11/2020	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. -Tender invitation of Primary Sludge Thickener commenced on 22 April 2020 and tender was received on 29 April 2020. Tender queries was requested on 5 May 2020 and received on 7 May 2020. Tender report was commented by PM and resubmitted on 22 May 2020. Accepted by AECOM on 12 Jun 2020. - Tender Invitation of process pumps for the thickening system was commenced on 5 Jun 2020 and tenders were received on 10 June 2020. Tender report submitted to PM on 2 July 2020. - Tender Invitation of activated carbon filter was commenced on 22 Oct 2020 and to be returned on 2 Nov 2020. Tender report submitted on 5 Nov 2020 and accepted on 16 Nov 2020 - Tender Invitation of FRP platform was commenced on 13 Nov 2020 and to be returned on 20 Nov 2020. Tender report submitted on 30 Nov 2020 and accepted on 11 Jan 2020 - Tender Invitation of instrument was commenced on 18 Nov 2020 and to be returned on 25 Nov 2020. Tender report submitted on 30 Nov 2020 - Based on the control philosophy agreed on 23 Dec 2020, motorized and solenoid valves were selected
	Tender award (C11)	15/05/2020-> 29/07/2020*	30/5/2020	15/07/2020->	30/11/2020	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020.
	Acceptance of tender award (C11)	-	-	-	18/9/2020					-		
	Design Submission	03/07/2020 -> 15/07/2020*	5/8/2020	21/09/2020-> 02/10/2020*	10/5/2021	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. -Design submission of Process Pumps (Rev.3) resubmitted on14 Apr 2021, AECOM accepted with comments on 7 May 2021. -Design submission of electrical calculation (rev.2) was resubmitted on 29 Apr 2021. AECOM accepted with comments on 10 May 2021. -Control Philosophy (Rev.2) resubmitted on 5 Mar 2021. AECOM accepted subject to comments on 26 Mar 2021.
	Plant and Material Submission	21/07/2020 -> 30/07/2020*	21/7/2020	31/08/2020 -> 31/10/2020*	30/6/2021	Task Completed					Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Plant and Material submission of primary sludge thickener was resubmitted on 1 Sep 2020 (Rev. 3) and AECOM accepted on 8 Sep 2020. - Plant and Material submission P&M0002 (Rev.2) of process pumps was submitted on 5 August 2020 and AECOM commented on 26 Aug 2020, Bestwise to re-submitted to AECOM. - Plant and Material submission (Rev.0) for valves was submitted on 16 Nov 2020. AECOM accepted on 14 Dec 2020 subject to comments - Plant and Material submission (Rev.1) for DI pipes and fittings was resubmitted on 3 Dec 2020. AECOM accepted on 14 Dec 2020 - Plant and Material submission (Rev.0) for primary sludge equalization tank was submitted on 5 Feb 2021. AECOM accepted subject to comments on 25 Feb 2021. - Plant and Material submission (Rev.0) for activated carbon filter was submitted on 28 Jan 2021. AECOM accepted subject to comments on 5 Feb 2021. - Plant and Material submission (Rev. 1) for instruments was resubmitted on 13 Mar 2021. AECOM accepted subject to comments on 7 Apr 2021.
	Drawing Submission	03/07/2020 -> 30/07/2020*	3/8/2020	21/09/2020 -> 21/11/2020*	10/2/2021	Task Completed				100%	Bestwise	- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - PFD, P&ID, Schematic GA (Rev.3) resubmitted on 22 Jan 2021 according to the finallized control philosophy. AECOM accepted subject to comment on 29 Jan 2021. - Electrical drawing - Bestwise resubmitted electrical drawing (Rev.5) on 22 Mar 2021. AECOM accepted on 16 Apr 2021.
	Material Manufacturing	31/07/2020 -> 30/09/2020*	4/8/2020	21/10/2020 -> 21/12/2020*	20/4/2021	Task Completed				100%		- *=Corresponding PMI No.009 and CE No.009 were issued by AECOM on 14 July 2020. CE was implemented on 15 July 2020. - Manufacturing instruction of PS thickener was issued on 3 August 2020. - Manufacturing instruction of process pumps was issued on 24 September 2020 - Electrical sub-contractor is awarded and manufacturing LCP
	Material Delivery	05/09/2020 ->	4/11/2020	16/11/2020 -	21/6/2021	Task Completed						

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Mechanical Installation	01/10/2020 -> 01/12/2020*	2/2/2021	15/11/2020 -> 15/01/2021*	17/5/2021	Task Completed				-		
	Offsite Fabrication and Delivery of FRP Tank		16/1/2021		7/4/2021	Task Completed				100%		First batch to be delivered on 23 Mar 2021
	Onsite Installation of FRP Tank		7/4/2021		30/7/2021	Task Completed						Water filling to tank completed; Tank hydraulic test completed.
	Electrical Installation	01/10/2020 -> 01/12/2020*	19/3/2021	15/11/2020 -> 15/01/2021*	19/7/2021	Task Completed				-		Energize of all LCPs on 24 May 2021 and isolated prior to system commissioning.
Temporary Primary Sludge Thickener and its accessories (Sub-programme was provided by Bestwise)	Testing and Comissioning	15/11/2020 -> 15/01/2021*	8/5/2021	22/11/2020 -> 22/01/2021*	30/9/2022	Completed				-		Improvement works under PMI are on-going and defect rectification for BCM comments was partially completed. - Testing and Commissioning (3 x 24hrs) completed by End September.
Modification of Existing Emergency Generator Electrical Works	Submission of subletting package (C9) for acceptance	15/10/2020	15/10/2020	31/10/2020	11/12/2020	Task Completed				100%		
	Acceptance of subletting package (C9)	1/11/2020	5/11/2020	15/11/2020	2/1/2021	Task Completed				100%		
	Tender invitation (C9)	16/11/2020	26/1/2021	30/11/2020	5/2/2021	Task Completed				100%		Tender invitation commenced on 26 Jan 2021, and returned on 5 Feb 2021
	Tender award (C9)	30/11/2020	18/2/2021	7/12/2020	18/2/2021	Task Completed				100%		Tender report was submitted on 18 Feb 2021 and accepted on 26 Feb 2021
	Acceptance of tender award (C9)	8/12/2020	18/2/2021	15/12/2020	26/2/2021	Task Completed				100%		
	Design Submission	15/12/2020	15/3/2021	15/1/2021	23/4/2021	Task Completed				100%		DWG-0100 was submitted on 23 Apr 2021. AECOM accepted with comments on 30 Apr
	Transportation of existing dismantled genset no. 2 (Genset No.2) to subcontractor (Click Ltd.)'s workshop	9/3/2021	9/3/2021	9/3/2021	9/3/2021	Task Completed				100%		
	Drawing submission (Drawing of General Layout for Existing 600kVA Genset Container)	23/4/2021	23/4/2021	30/4/2021	30/4/2021	Task Completed				100%		
	Drawing submission (Cable route ,general arrangement, etc)	14/5/2021	28/5/2021	21/5/2021	5 July 2021	Task Completed				100%		
	Material submission P431 P&M-0087	21 May 2021	19 June 2021	28 May 2021	12 July 2021	Task Completed				100%		
	Fabrication of container at PRC	21 June 2021	21 June 2021	TBC	12/8/2021	Task Completed				100%		
	Container deliver to HK	TBC	12/8/2021	10/8/2021	12/8/2021	Task Completed				100%		
	Off site modification work at HK factory	TBC	16/8/2021	24/8/2021	24/8/2021	Task Completed				100%		
	FAT plan of modified Genset No.2 P431 MS-036	12/7/2021	12/7/2021	20/8/2021	20/8/2021	Task Completed				100%		
	FAT of Genset No.2 after modification works	25/8/2021	25/8/2021	25/8/2021	25/8/2021	Task Completed				100%		
	Installation Work of I-beam Support	26/8/2021	26/8/2021	26/8/2021	26/8/2021	Task Completed				100%		
	Transportation of Genset No. 2 to existing power house in SWHSTW and completion of the Genset No.2 installation on I-beam supporting frame	27/8/2021	27/8/2021	27/8/2021	27/8/2021	Task Completed				100%		
	Provision of one (1) can of 160L diesel and a diesel hand pump placed at diesel daily tank of Genset No.1 for standby top up (PPMI-012 item L) Location to be coordinated and advised by SWHSTW operator DSD/ST1	27/7/2021	27/7/2021	31/8/2021								Location to be further coordinated with DSD.
	Modification works of existing switchboard	1/9/2021	1/9/2021	8/9/2021	8/9/2021	Task Completed				100%		
	Cables (including control cable and power cables) laying and installation of cable containment, busbar chamber	21/7/2021	30/7/2021	8/9/2021	8/9/2021	Task Completed				100%		
	Supply of busbar chamber/ connection box	10/8/2021	10/8/2021	3/9/2021	3/9/2021	Task Completed				100%		
	Completion of all Genset cables and cable termination work to existing power house in SWHSTW after the completion of Genset No. 2 installation work	1/9/2021	1/9/2021	8/9/2021	8/9/2021	Task Completed				100%		
	Delivery of dummy load and self-test	9/9/2021	9/9/2021	14/9/2021	15/9/2021	Task Completed				100%		
	SAT and T&C (witness by AECOM and DSD/ST1) Please allow 1 week advance notice for coordination with DSD/ST1, e.g. genset signal start, etc.)	15/9/2021	15/9/2021	15/9/2021	16/9/2021	Task Completed				100%		
04SC009 - Design, Supply and Installation of HVSB	Submission of subletting package for acceptance	21/4/2020		1/5/2020		-						
	Acceptance of subletting package	21/5/2020		30/5/2020		-						

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Tender invitation	1/6/2020		14/6/2020		-						
	Tender award	1/7/2020		14/7/2020		-						
04SC010 - Design, Supply and Installation of LVSB	Submission of subletting package for acceptance	1/5/2020		14/5/2020		-						
	Acceptance of subletting package	1/6/2020		14/6/2020		-						
	Tender invitation	14/6/2020		30/6/2020		-						
	Tender award	1/7/2020		14/7/2020		-						
04SC011 - Design and Installation of Building	Submission of subletting package for acceptance	14/4/2020		30/4/2020		-						
	Acceptance of subletting package	14/5/2020		30/5/2020		-						
	Tender invitation	30/5/2020		14/6/2020		-						
	Tender award	21/6/2020		30/6/2020		-						
04SC012 - Facility Computerized Systems	Submission of subletting package for acceptance	14/5/2020		30/5/2020		-						
	Acceptance of subletting package	14/6/2020		30/6/2020		-						
	Tender invitation	1/7/2020		14/7/2020		-						
	Tender award	21/7/2020		14/8/2020		-						
Plant and Materials (Marking Scheme)												
PS Clause no. 6B.2.1 Inlet Pump	Submission of marking scheme for PM's acceptance (fourth draft)	1/5/2020	1/5/2020	1/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020.
	Submission of marking scheme for PM's acceptance	1/5/2020	1/5/2020	1/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020.
	Acceptance of marking scheme by the PM	15/5/2020	20/8/2020	15/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
	Tender invitation	29/5/2020	9/9/2020	29/9/2020	18/9/2020	Task Completed				100%		Tender invitation was conducted on 9 Sept 2020 and returned on 18 Sept 2020.
PS Clause no. 6B.2.1 Inlet Pump	Tender award	5/6/2020	19/9/2020	5/10/2020	7/10/2020	Task Completed				100%		Technical Submission Evaluation Report was submitted on 5 Oct 2020, Tender report was submitted on 7 Oct 2020. AECOM noted on 8 Oct 2020.
	Acceptance of tender award	19/6/2020	17/10/2020	19/10/2020	15/11/2020	Task Completed				-		
	Submission of marking scheme for PM's acceptance (third draft)	1/5/2020	14/5/2020	1/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020
	Submission of marking scheme for PM's acceptance	1/5/2020	14/5/2020	1/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020
PS Clause no. 6B.2.4	Acceptance of marking scheme by the PM	15/5/2020	20/8/2020	15/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
MBR Pre-treatment Screen	Tender invitation	29/5/2020	20/11/2020	29/9/2020	11/12/2020	Task Completed				100%		Tender invitation was conducted on 20 Nov 2020 and returned on 11 Dec 2020. Tender
	Tender award	5/6/2020	13/12/2020	5/10/2020	3/3/2021	Task Completed				100%		Technical Submission Evaluation Report was submitted on 12 Jan 2021. AECOM noted on 22 Jan 2021. Tender Report was submitted on 4 Feb 2021, AECOM commented on 19 Feb 2021, Bestwise submitted supplementary information on 26 Feb 2021. AECOM noted on 3 Mar
PS Clause no. 6B.2.4	Submission of marking scheme for PM's acceptance	1/5/2020	14/5/2020	1/9/2020	2/9/2020	Task Completed				100%		AECOM commented on 1 September 2020, Bestwise resubmitted on 2 Sep 2020
	Submission of marking scheme for PM's acceptance	1/5/2020	3/9/2020	1/9/2020	2/9/2020	Task Completed				100%		Bestwise resubmitted on 2 Sep 2020
PS Clause no. 6B.2.4	Acceptance of marking scheme by the PM	15/5/2020	20/8/2020	15/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020, subject to conditions.
Air Diffusion System	Tender invitation	29/5/2020	17/2/2021	29/9/2020	12/3/2021	Task Completed				100%		Procurement package would follow the approved format (i.e. aeration blower) Tender invitation was conducted on 17 Feb 2021. Addendum No. 1 was issued on 18 Feb 2021. Tender return date was extended from 26 Feb 2021 to 12 Mar 2021. Tender returned
	Tender award	5/6/2020	18/3/2021	5/10/2020	20/4/2021	Task Completed				-		Technical Submission Evaluation Report was submitted on 18 Mar 2021. AECOM noted on 30 Mar 2021. Tender Report was submitted on 8 Apr 2021. LOI was issued to supplier.
	Acceptance of tender award	19/6/2020	20/2/2021	19/10/2020	12/3/2021	Task Completed				-		
PS Clause no. 6B.2.4	Submission of marking scheme for PM's acceptance	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020
	Submission of marking scheme for PM's acceptance	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020
PS Clause no. 6B.2.4	Acceptance of marking scheme by the PM	28/5/2020	20/8/2020	28/9/2020	1/9/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
BR Aeration Blower	Tender invitation	11/6/2020	3/2/2021	12/10/2020	3/3/2021	Task Completed				100%		Procurement package was submitted to AECOM under CGS-066. AECOM replied on 29 Jan 2021. Tender invitation was conducted on 3 Feb 2021. Tender returned on 3 Mar 2021
	Tender award	18/6/2020	4/3/2021	19/10/2020	12/4/2021	Task Completed				-		Technical Submission Evaluation Report was submitted on 10 Mar 2021. AECOM noted on 19 Mar 2021. Tender Report was submitted on 24 Mar 2021. LOI was issued to supplier.
	Acceptance of tender award	2/7/2020	4/3/2021	2/11/2020	25/3/2021	Task Completed				-		AECOM accepted on 1 Sep 2020, subject to conditions.
PS Clause no. 6B.2.4	Submission of marking scheme for PM's acceptance	14/5/2020	1/5/2020	14/9/2020	2/9/2020	Task Completed				100%		AECOM commented on 1 September 2020, Bestwise resubmitted on 2 Sep 2020
	Submission of marking scheme for PM's acceptance	14/5/2020	3/9/2020	14/9/2020	2/9/2020	Task Completed				100%		Bestwise resubmitted on 2 Sep 2020
	Acceptance of marking scheme by the PM	28/5/2020	3/9/2020	28/9/2020	5/9/2020	Task Completed				100%		AECOM accepted on 5 Sep 2020 subject to conditions.

Contract No. DE/2018/04
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
- E&M Works for Sewage Treatment Facilities
3 Month Rolling Programme (From 01/09/2023 to 01/11/2023)

Item	Major Activities & Submission in coming 3 months	Time					Progress (E&M contract)				Action	Remarks / Status
		Contract Planned Commencement Date	Anticipated / Actual Commencement Date	Contract Planned Finish Date	Anticipated / Actual Finish Date	% of time elapsed based on "updated date")	Unit	Total Quantity	Completed Quantity	Actual Progress %		
	Tender invitation	11/6/2020	14/9/2020	12/10/2020	5/10/2020	Task Completed				100%		Tender invitation was conducted on 14 Sept 2020 and returned on 5 Oct 2020.
PS Clause no. 6B.2.4 Membrane Modules, Cassettes / Racks	Tender award	18/6/2020	6/10/2020	19/10/2020	2/11/2020	Task Completed				100%		Technical Submission Evaluation Report was submitted on 14 Oct 2020, Tender report was submitted on 2 Nov 2020. AECOM noted on 4 Nov 2020.
	Acceptance of tender award	2/7/2020	3/11/2020	2/11/2020	24/11/2020	Task Completed				-		
	Submission of marking scheme for PM's acceptance (second draft)	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		AECOM commented on 14 August 2020, Bestwise resubmitted on 19 Aug 2020
	Submission of marking scheme for PM's acceptance	14/5/2020	14/5/2020	14/9/2020	19/8/2020	Task Completed				100%		Bestwise resubmitted on 19 Aug 2020
	Acceptance of marking scheme by the PM	28/5/2020	20/8/2020	28/9/2020	1/9/2020	Task Completed				100%		AECOM accepeted on 1 Sep 2020
	Tender invitation	11/6/2020	25/9/2020	12/10/2020	29/10/2020	Task Completed				100%		Tender invitation was conducted on 25 Sept 2020 and returned on 29 Oct 2020.
PS Clause no. 6B.2.4 RAS Pump	Tender award	18/6/2020	30/10/2020	19/10/2020	2/12/2020	Task Completed				100%		Technical Submission Evaluation Report was submitted on 6 Nov 2020. Tender report was submitted on 24 Nov 2020, AECOM noted on 2 Dec 2020.
	Acceptance of tender award	2/7/2020	21/11/2020	2/11/2020	12/12/2020	Task Completed				-		
Usage of WA2-A		-		21/2/2020	21/2/2020	Task Completed				-		Site works including fencing and site clearnace works to be completed by DC/2018/06 by 30/4/2020 WA2C handovered to Bestwise on 21 February 2020