CONTRACT NO. SPW 12/2021

ENVIRONMENTAL TEAM (2021 – 2024) FOR SHEK WU HUI EFFLUENT POLISHING PLANT – MAIN WORK

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

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

SEPTEMBER 2021

CLIENTS:

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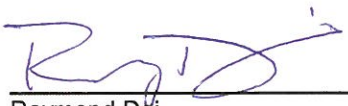


Raymond Dai
Environmental Team Leader

DATE:

19 October 2021

Meinhardt Infrastructure and Environment Limited

Contract No. SPW 12/2021
Shek Wu Hui Effluent Polishing Plant – Main Work

Monthly EM&A Report
(1 September 2021 – 30 September 2021)

(October 2021)

Verified by:	W. K. Chiu
Position:	Independent Environmental Checker
Date:	19 October 2021

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

EXECUTIVE SUMMARY

i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – September 2021 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 1st 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 01 September 2021 to 30 September 2021. 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
- Excavation works
- Sewerage and drainage works
- Sheet piling
- Pipe laying
- Backfilling
- Removal of Layer Struct and Waling

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

- Ground Investigation

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

- ELS works
- R.C. Structure works
- Pre-bored H piles
- Sheetpile Installation
- Demolition works
- Excavation
- E&M installation and T&C works
- ABWF works & BS works

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

- Electrical Installation of Temporary Filtrate Equalisation Tank

- Installation of FRP Tank. Testing and Commission of Temporary Primary Sludge Thickener and its accessories.
- Retrofitting the Existing Primary Sedimentation Tank No. 6.
- Modification of Existing Emergency Generator Electrical Works

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.

Noise Monitoring

v. Noise monitoring was conducted at one noise monitoring station once per week in the reporting month.

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

Ecological Monitoring

vii. 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.

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

Site Inspections and Audit

ix. The Environmental Team (ET) conducted weekly site inspections on 7, 9, 14, 16, 21 and 28 September 2021 and biweekly landscape inspection on 7 (for DE/2018/03 & DE/2018/04), 9 (for DC/2018/06 & DC/2018/07) and 21 September 2021. IEC attended the joint site inspection on 28 September 2021. No non-compliance was found during the site inspection while reminders on environmental measures were recommended.

Complaints, Notifications of Summons and Successful Prosecutions

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

Reporting Changes

xi. There are no particular reporting changes.

Future Key Issues

xii. 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
- Excavation works
- Pipe laying
- Backfilling
- Removal of Layer Struct and Waling

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

- ELS works
- Sheetpiling
- Installation of F.S. equipment
- Installation of Power cable
- Installation of guide bar bracket, guide bar and placing the effluent transfer pump.
- Installation of Cable Tray, Conduit

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

- ELS works
- R.C. Structure works
- Pre-bored H piles
- Sheetpile Installation
- Demolition works
- Excavation
- E&M installation and T&C works
- ABWF works & BS works

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

- Testing and Commission of Temporary Filtrate Equalisation Tank .
- Installation of FRP platform & Testing and Commission of Temporary Primary Sludge Thickener and its accessories.
- Testing and Commission of Existing Primary Sedimentation Tank No. 4 & 6.
- Testing and Commission of Existing Emergency Generator Electrical 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. Konica Cheung	2594 7463
AECOM	Supervisor Representative	Resident Engineer	Ms. Bianca Choi	3907 6141
Chun Wo – China Metallurgical Group Corporation Joint Venture	Contractor (DC/2018/06)	Environmental Engineer	Ms. Tiffany Choi	9789 1027
		Environmental Engineer	Ms. Ruby Hui	6218 6408
	Contractor (DC/2018/07)	Environmental Engineer	Ms. Shirley Kong	5162 5933
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 Group	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. W.K. Chiu	2859 5881
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.

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
- Excavation works
- Sewerage and drainage works
- Sheet piling
- Pipe laying
- Backfilling
- Removal of Layer Struct and Waling

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

- ELS works
- R.C. Structure works
- Pre-bored H piles
- Sheetpile Installation
- Demolition works
- Excavation
- E&M installation and T&C works
- ABWF works & BS works

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

- Ground Investigation

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

- Electrical Installation of Temporary Filtrate Equalisation Tank
- Installation of FRP Tank. Testing and Commission of Temporary Primary Sludge Thickener and its accessories.
- Retrofitting the Existing Primary Sedimentation Tank No. 6.
- Modification of Existing Emergency Generator Electrical Works

2.3.2 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
- Excavation works
- Pipe laying
- Backfilling
- Removal of Layer Struct and Waling

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

- ELS works
- R.C. Structure works
- Pre-bored H piles

- Sheetpile Installation
- Demolition works
- Excavation
- E&M installation and T&C works
- ABWF works & BS works

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

- ELS works
- Sheetpiling
- Installation of F.S. equipment
- Installation of Power cable
- Installation of guide bar bracket, guide bar and placing the effluent transfer pump.
- Installation of Cable Tray, Conduit

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

- Testing and Commission of Temporary Filtrate Equalisation Tank .
- Installation of FRP platform & Testing and Commission of Temporary Primary Sludge Thickener and its accessories.
- Testing and Commission of Existing Primary Sedimentation Tank No. 4 & 6.
- Testing and Commission of Existing Emergency Generator Electrical 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
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
Environmental Permit	FEP-02/474/2013	15 Feb 2018	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-RN0610-21	01 Sep 2021	28 Feb 2022	Valid
	GW-RN0479-21	07 Jul 2021	30 Sep 2021	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
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	451031	19 Nov 2019	N/A	Valid
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Water Pollution Ordinance Licence	WT00035727-2020	01 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-RN0610-21	01 Sep 2021	28 Feb 2022	Valid
Admission Ticket for Special Waste	16303	17 Jun 2021	16 Oct 2021	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
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
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	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-RN0484-21	6 Jul 2021	27 Jan 2022	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
Notification pursuant to Air Pollution Control (Construction Dust) Regulation	460181	17/09/2020	N/A	Valid
Environmental Permit	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Billing Account for Disposal of Construction Waste	703621912	02 Jan 2020	N/A	Valid
Registration as a Chemical Waste Producer	5213-624-B2592-01	07 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***.

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
Integrated Sound Level Meter	LxT1	0004797
Acoustic Calibrator	HLES-02	2019612870

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
AMS1	House No. 15, Wai Loi Tsuen	1-hour TSP
AMS2	Fu Tei Au	1-hour TSP
AM1a	Site boundary of the Shek Wu Hui STW (East)	24-hour TSP
AM2a	Site boundary of the Shek Wu Hui STW (North)	24-hour TSP

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 m3 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-5170) 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
Portable direct reading dust meter	Met One BT- 645 / Met One 831	R22586 X19297 Y23154 R14332 X19295 W15449
High Volume Sampler	Tisch Total Suspended Particulate Mass Flow Controlled High Volume Air Sampler TE-5170	HVS001 HVS003
Wind Anemometer	YiGu	YGY-FSXY1

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

WIND DATA

4.2.10. Hong 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)	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

4.3.8. 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.

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

MONITORING LOCATIONS

4.3.10. 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 5.6***.

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

4.3.11. 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

4.3.12. 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.

4.3.13. 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.

4.3.14. 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).

4.3.15. 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

4.3.16. 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

4.3.17. 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.

4.3.18. 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 – 4.3*** respectively.

5.0.2 The environment 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 can be referred in ***Appendix 5.2***.

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

5.2 Air 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 ***Appendix 5.3***.

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

5.3 Ecology Monitoring Results

5.3.1 Details of ecological Monitoring results in the reporting month are provided in ***Appendix 5.4***.

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

5.3.3 No Breeding behaviour observed during ecological monitoring in reporting month.

5.4 Waste Management

4.4.1 The quantities of waste for disposal in the Reporting Period are summarized in ***Table 5.1*** to ***5.4***. The Monthly Summary Waste Flow Table is shown in ***Appendix 5.7***. Whenever possible, materials were reused on-site as far as practicable.

Table 5.1 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)	Cumulative Quantity
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0	0	0
Reused in this Contract (Inert) (in '000m^3)	0	0	0
Reused in other Projects (Inert) (in '000m^3)	0	0	0
Disposal as Public Fill (Inert) (in '000m^3)	0.567	0.184	0.751
Metals (in '000kg)	0.002	0	0.002
Paper / Cardboard Packing (in '000kg)	0.017	0	0.017
Plastics (in '000kg)	0.008	0	0.008
Chemical Wastes (in '000kg)	0	0	0
General Refuses (in '000m^3)	0.066	0.037	0.697

Table 5.2 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)	Cumulative Quantity
Hard Rock and Large Broken Concrete (Inert) (in '000m^3)	0	0	0
Reused in this Contract (Inert) (in '000m^3)	0	0	0
Reused in other Projects (Inert) (in '000m^3)	0	0	0
Disposal as Public Fill (Inert) (in '000m^3)	5.061	4.093	9.154

Waste Type	Quantity (Previous month)	Quantity (Reporting month)	Cumulative Quantity
Metals (in '000kg)	24.14	0	24.14
Paper / Cardboard Packing (in '000kg)	0.013	0	0.013
Plastics (in '000kg)	0.014	0.03	0.017
Chemical Wastes (in '000kg)	0	0	0
General Refuses (in '000m^3)	0.01	0.009	0.019

Table 5.3 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)	Cumulative Quantity
Hard Rock and Large Broken Concrete (Inert) (in '000kg)	0	0	0
Reused in this Contract (Inert) (in '000kg)	0	0	0
Reused in other Projects (Inert) (in '000kg)	0	0	0
Disposal as Public Fill (Inert) (in '000kg)	64.14	39.42	103.56
Metals (in '000kg)	0	0	0
Paper / Cardboard Packing (in '000kg)	0.11	0	0.11
Plastics (in '000kg)	0	0	0
Chemical Wastes (in '000kg)	0	0	0
General Refuses (in '000kg)	6.13	0	6.13

Table 5.4 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)	Cumulative Quantity
Hard Rock and Large Broken Concrete (Inert) (in '000kg)	0	0	0
Reused in this Contract (Inert) (in '000kg)	0	0	0
Reused in other Projects (Inert) (in '000m^3)	0	0	0
Disposal as Public Fill (Inert) (in '000m^3)	0	4.24	4.24
Metals (in '000kg)	0	0	0
Paper / Cardboard Packing (in '000kg)	0	0	0
Plastics (in '000kg)	0	0	0
Chemical Wastes (in '000kg)	0	0	0
General Refuses (in '000m^3)	1.09	0	1.09

6 Compliance Audit

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

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

6.2 Noise Monitoring

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

6.3 Air Quality Monitoring

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

6.4 Ecological Monitoring

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

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

6.5.1 No environmental non-compliance was recorded in the reporting month.

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

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

7 Environmental Site Audit

7.0.1. Within this reporting month, weekly environmental site audits were conducted on 7, 9, 14, 16, 21 and 28 September 2021. Biweekly landscape site audits were conducted on 7 (for DE/2018/03 & DE/2018/04), 9 (for DC/2018/06 & DC/2018/07) and 21 September 2021. IEC attended the joint site inspection on 28 September 2021.

7.0.2. 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
20210916_1	16 Sep 2021	The Contractor (DC/2018/06) was reminded to provide drip tank for the chemical container to prevent leakage	As observed on 21 Sep, drip tray was provided	Completion as observed
20210928_1	28 Sep 2021	The Contractor (DC/2018/06) is reminded to provide drip tank for the chemical container to prevent leakage	As observed on 4 Oct, drip tray was provided	Completion as observed

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

Item	Date	Reminder(s)/ Observation(s)	Action taken by Contractor	Outcome
20210916_2	16 Sep 2021	The Contractor (DC/2018/07) is reminded to implement noise reduction measures in which the breaking tip should be wrapped with acoustic material	As observed on 21 Sep, noise measures are adopted to the breaking tip	Completion as observed
20210928_2	28 Sep 2021	The Contractor (DC/2018/07) is reminded to maintain good housekeeping at the site	As observed on 4 Oct, housekeeping issue was conducted	Completion as observed

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
20210914_2	14 Sep 2021	The Contractor (DE/2018/04) is reminded to clear the trash to prevent the trash entering the sewage system	As observed on 21 Sep, trash issue was solved	Completion as observed

8. Complaints, Notification of Summons and Prosecution

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

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

8.0.3. 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	3
September 2021	0
Total	**3**

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

9.0.1. 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.

9.0.2. 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.

9.0.3. 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 3 Months

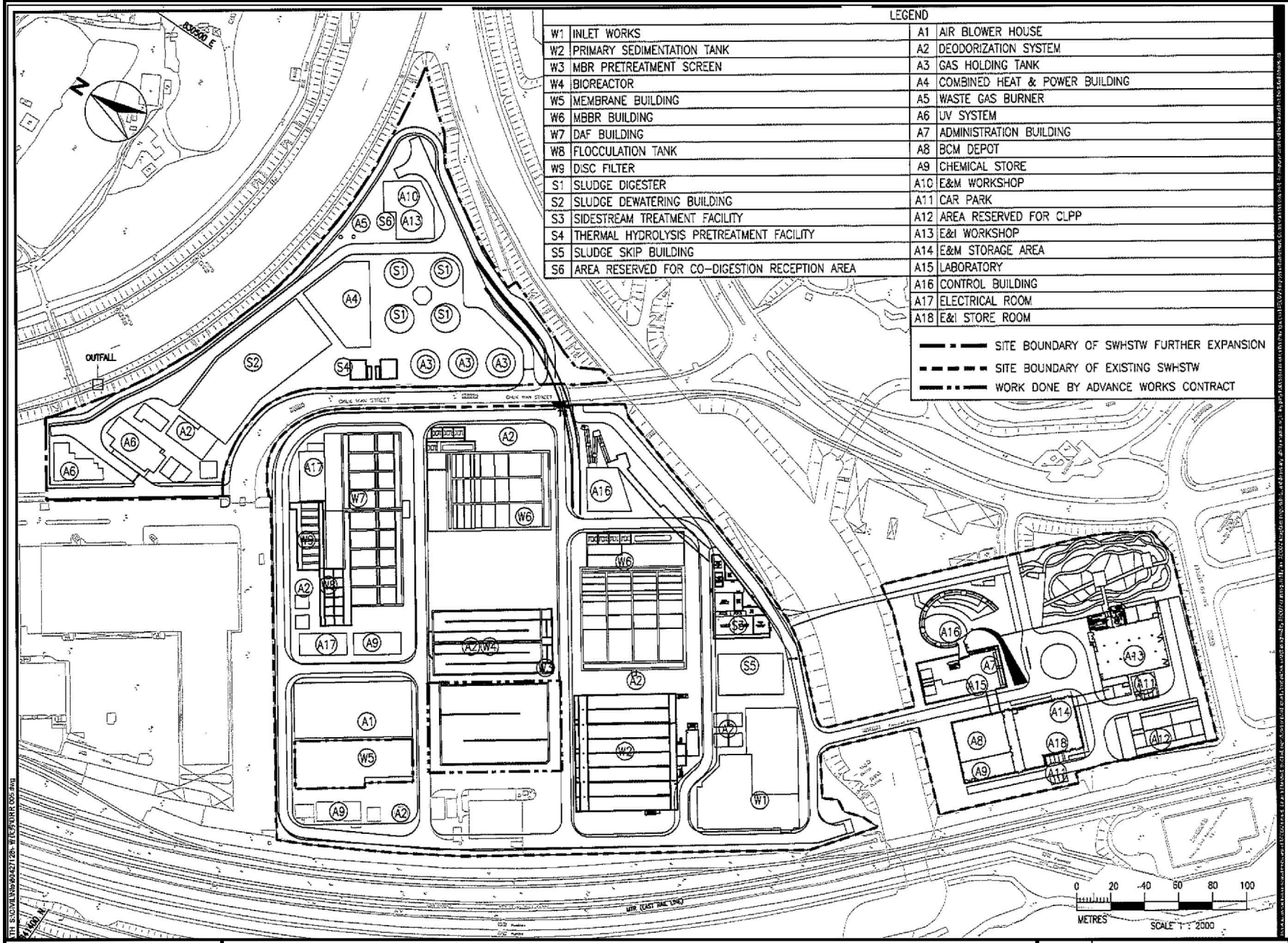
Contract No.	Key Construction Works	Recommended Mitigation Measures
DC/2018/06	• RC works • Excavation works • Pipe laying • Backfilling • Removal of Layer Struct and Waling	• Implement proper dust mitigation measures on dusty surface and stockpiles • Implement proper measures to prevent excavated material, 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 • 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
DC/2018/07	• ELS works • R.C. Structure works • Pre-bored H piles	• Implement proper dust mitigation measures on dusty surface and stockpiles • Implement proper measures to prevent

Contract No.	Key Construction Works	Recommended Mitigation Measures
	• Sheetpile Installation • Demolition works • Excavation • E&M installation and T&C works • ABWF works & BS works	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 • 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
DE/2018/03	• ELS works • Sheetpiling • Installation of F.S. equipment • Installation of Power cable • Installation of guide bar bracket, guide bar and placing the effluent transfer pump. • Installation of Cable Tray, Conduit	• Implement proper dust mitigation measures on dusty surface and stockpiles • Implement proper noise mitigation measures to prevent potential noise nuisances to nearby sensitive receivers • 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
DE/2018/04	• Testing and Commission of Temporary Filtrate Equalisation Tank • Installation of FRP platform & Testing and Commission of Temporary Primary Sludge Thickener	• 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.

Contract No.	Key Construction Works	Recommended Mitigation Measures
	and its accessories. • Testing and Commission of Existing Primary Sedimentation Tank No. 4 & 6 • Testing and Commission of Existing Emergency Generator Electrical Works	

Figure 2.1

Project Layout



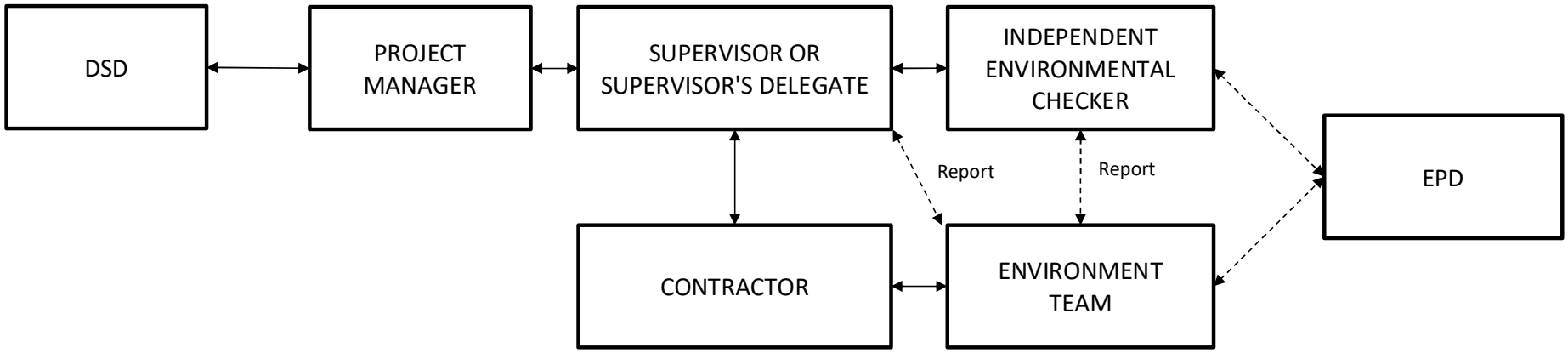
Shek Wu Hui Effluent Polishing Plant

General Site Layout Of SWHEPP

SCALE	As Shown	DATE	SEP 2019
CHECK	JM	DRAWN	SY
JOB No.		FIGURE NO. 2.1	REV -

Figure 2.2

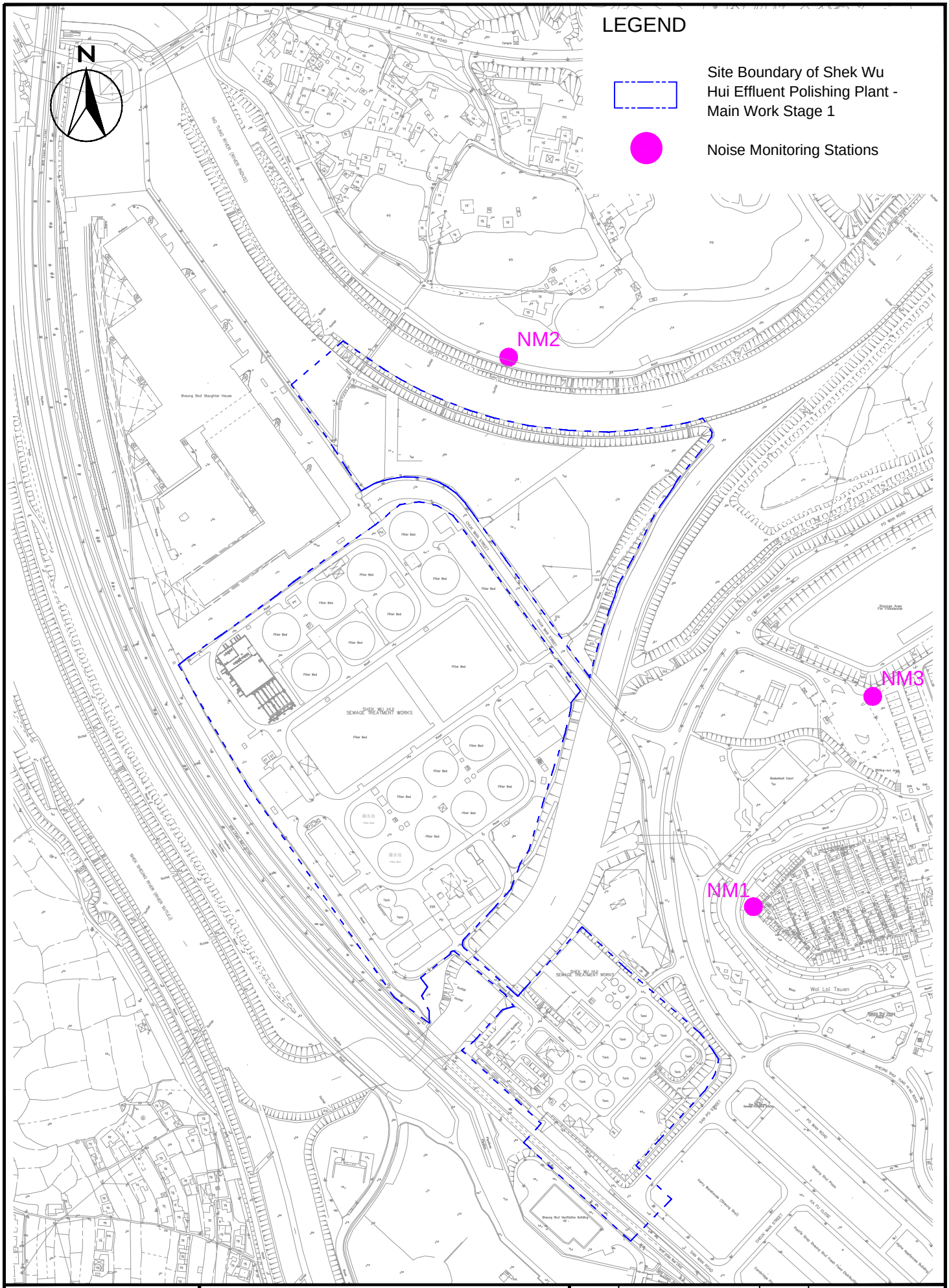
Project Organization Chart



	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.**	2.2

Figure 4.1

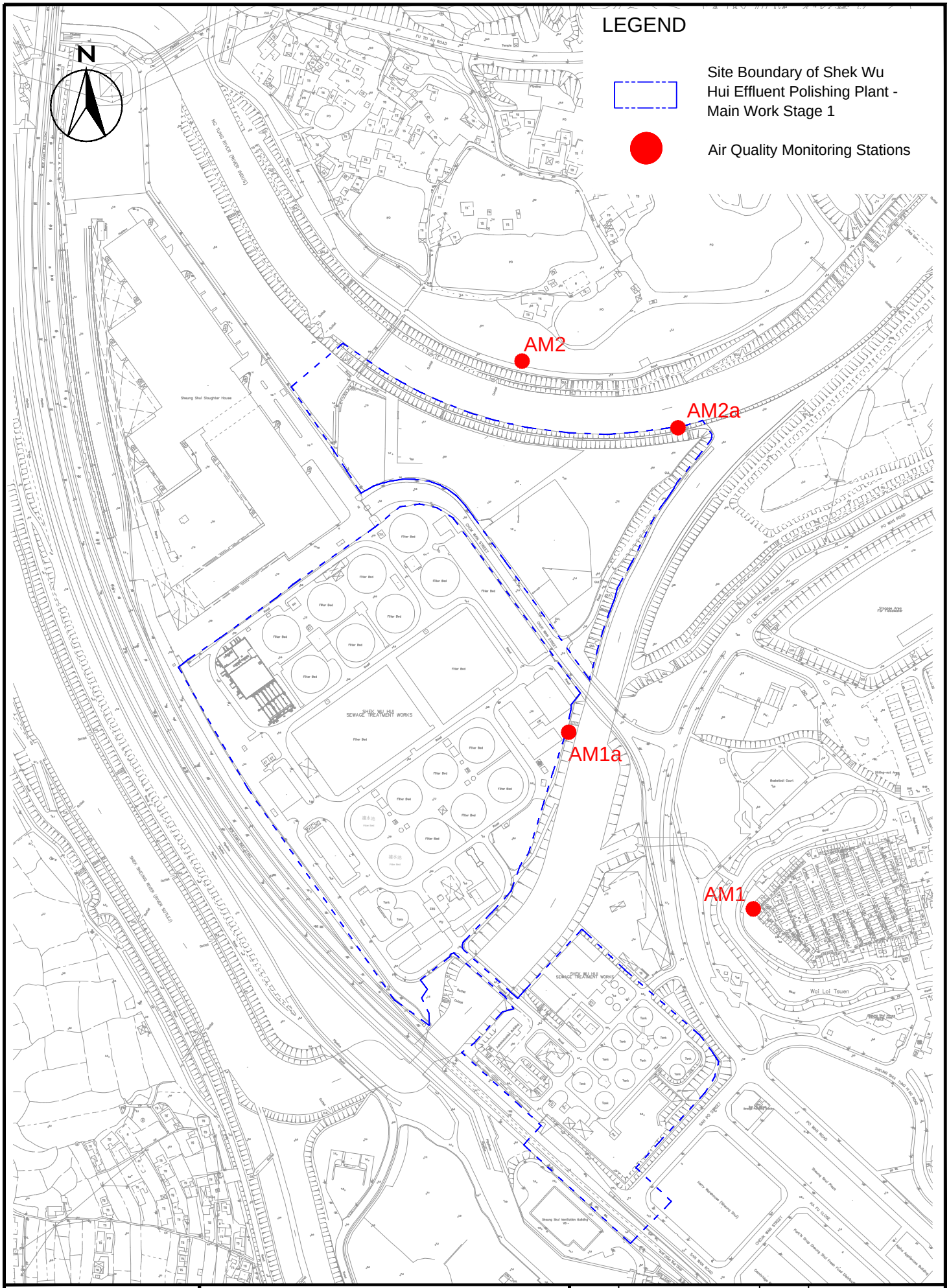
Locations of Noise Monitoring Stations



	Shek Wu Hui Effluent Polishing Plant	SCALE	1:4000@A4	DATE	SEP 2019
		CHECK	JM	DRAWN	SY
	Location of Noise Monitoring Stations	JOB No.	MA19019	FIGURE NO. 4.1	REV -

Figure 4.2

Locations of Air Quality Monitoring Stations

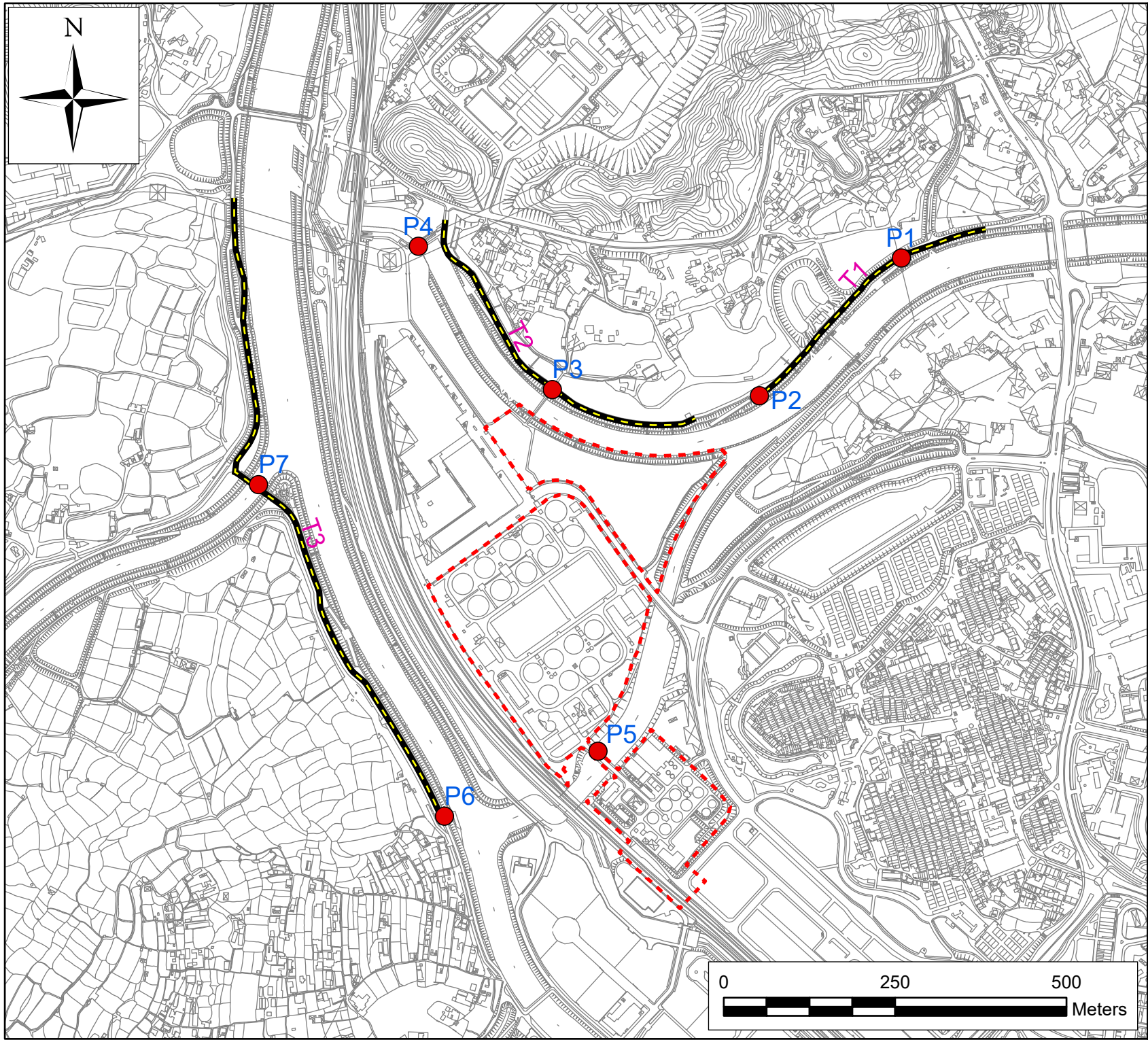


Shek Wu Hui Effluent Polishing Plant - Location of Air Quality Monitoring Stations	SCALE	1:400@A4	DATE	SEP 2019
	CHECK	JM	DRAWN	SY
	JOB No.		FIGURE NO. 4.2	REV -

F:/Project_drawings

Figure 4.3

Locations of Ecological Monitoring Stations



Legend

- Project Site Boundary
- Walk Transects
- Point Count Locations

PREPARED BY

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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. ***4.3***	REVISION NO. ***-***

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/m³		24-hour TSP Level in μg/m³	
	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

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.: 21CA0526 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	163704	042622
Adaptors used:	-	-	-

Item submitted by

Customer Name:	Lam Environmental Services Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	26-May-2021

Date of test: 27-May-2021

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	23-Aug-2021	CIGISMEC
Signal generator	DS 360	61227	31-Dec-2021	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:** 28-May-2021 **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.

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CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 21CA0526 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:** 27-May-2021

Checked by: Chan Yuk Yiu **Date:** 28-May-2021

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.

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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 27-May-2021
Microphone	type:	377B02	Serial No.	163704	
Preamp	type:	PRMLxT1L	Serial No.	042622	Report: 21CA0526 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	10.6	dB
Noise level in C weighting	14.8	dB
Noise level in Lin	22.3	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	73.9	73.9	0.7	-0.1	-0.1
69.0	68.9	68.9	0.7	-0.1	-0.1
64.0	63.9	63.9	0.7	-0.1	-0.1
59.0	58.9	58.9	0.7	-0.1	-0.1
54.0	53.9	53.9	0.7	-0.1	-0.1
49.0	48.9	48.9	0.7	-0.1	-0.1
44.0	43.9	43.9	0.7	-0.1	-0.1
39.0	38.9	38.9	0.7	-0.1	-0.1
34.0	33.9	33.9	0.7	-0.1	-0.1
33.0	32.9	32.9	0.7	-0.1	-0.1

Test Data for Sound Level Meter

Sound level meter type:	LxT1		Serial No.	0004797	Date 27-May-2021
Microphone type:	377B02		Serial No.	163704	
Preamp type:	PRMLxT1L		Serial No.	042622	Report: 21CA0526 02-01

32.0	31.9	31.9	0.7	-0.1	-0.1
31.0	30.9	30.9	0.7	-0.1	-0.1
30.0	29.9	29.9	0.7	-0.1	-0.1

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	29.9	0.7	-0.1
	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	54.5	1.5	1.5	-0.1
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	85.3	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	89.7	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

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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 27-May-2021
Microphone type: 377B02 Serial No. 163704
Preamp type: PRMLxT1L Serial No. 042622 Report: 21CA0526 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	93.9	1.5	1.5	-0.1
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	118.7	2.0	-0.3

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SMECLab

Sound level meter type:	LxT1	Serial No.	0004797	Date	27-May-2021
Microphone type:	377B02	Serial No.	163704		
Preamp type:	PRMLxT1L	Serial No.	042622	Report:	21CA0526 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	118.7	2.0	-0.3

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	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

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SMECLab

Sound level meter type:	LxT1	Serial No.	0004797	Date	27-May-2021
Microphone type:	377B02	Serial No.	163704		
Preamp type:	PRMLxT1L	Serial No.	042622	Report:	21CA0526 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	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
113.4	112.4	109.4	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
120.2	119.2	79.2	79.2	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	78.1	1.0	1.0	0.2
8000	92.9	91.2	1.5	3.0	-1.7

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

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HOKLAS 028
CAL

CERTIFICATE OF CALIBRATION

Certificate No.: 21CA0120 03 **Page:** 1 of 2

Item tested

Description:	Acoustical Calibrator (Class 1)
Manufacturer:	Honglim Co., Ltd.
Type/Model No.:	HLES-02
Serial/Equipment No.:	2019612870
Adaptors used:	-

Item submitted by

Curstomer:	Lam Environmental Services Limited.
Address of Customer:	-
Request No.:	-
Date of receipt:	20-Jan-2021

Date of test: 24-Jan-2021

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Lab standard microphone	B&K 4180	2341427	11-May-2021	SCL
Preamplifier	B&K 2673	2743150	03-Jun-2021	CEPREI
Measuring amplifier	B&K 2610	2346941	03-Jun-2021	CEPREI
Signal generator	DS 360	33873	19-May-2021	CEPREI
Digital multi-meter	34401A	US36087050	19-May-2021	CEPREI
Audio analyzer	8903B	GB41300350	18-May-2021	CEPREI
Universal counter	53132A	MY40003662	18-May-2021	CEPREI

Ambient conditions

Temperature:	21 ± 1 °C
Relative humidity:	55 ± 10 %
Air pressure:	1000 ± 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:** 25-Jan-2021 **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 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.

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HOKLAS 028 CAL

CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 21CA0120 03 **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	93.77	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 = 0.013 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 = 999.3 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 = 0.4 %**

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:** 24-Jan-2021

Checked by: Feng Junqi **Date:** 25-Jan-2021

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.

TISCH Environmental

RECALIBRATION DUE DATE:
August 3, 2022

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	August 3, 2021	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 750.3	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	1.3610	3.2	2.00
2	3	4	1	0.9540	6.4	4.00
3	5	6	1	0.8460	7.9	5.00
4	7	8	1	0.8070	8.7	5.50
5	9	10	1	0.6630	12.7	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)
0.9930	0.7296	1.4123	0.9957	0.7316	0.8868
0.9888	1.0365	1.9973	0.9915	1.0393	1.2541
0.9868	1.1664	2.2330	0.9895	1.1696	1.4021
0.9857	1.2215	2.3420	0.9884	1.2248	1.4705
0.9804	1.4788	2.8246	0.9831	1.4828	1.7735
QSTD	**m=**	**1.88375**	**QA**	**m=**	**1.17957**
	b=	**0.03970**		**b=**	**0.02493**
	r=	**0.99998**		**r=**	**0.99998**

Calculations

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

For subsequent flow rate calculations:

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

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

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

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

RECALIBRATION

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

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

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

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM1a	**Calbration Date**	:	31-Aug-21
Equipment no.	:	HVS001	**Calbration Due Date**	:	31-Oct-21

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	1011.1	Kelvin	**Pressure, P_a**	27	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3166**	**Slope, m_c**	1.88375	**Intercept, bc**	0.03970
Last Calibration Date	3-Aug-21	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	3-Aug-22	$= m_c \times Q_{std} + b_c$			

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	1.2	1.2	2.4	0.0522	22	1.9604
2	2.3	2.3	4.6	0.0804	34	3.0297
3	3.5	3.5	7.0	0.1041	42	3.7426
4	4.6	4.6	9.2	0.1224	54	4.8119
5	5.7	5.7	11.4	0.1386	57	5.0792

By Linear Regression of Y on X

Slope, m = 37.3367 Intercept, b = 0.0081

Correlation Coefficient* = 0.9932

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

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

** Delete as appropriate.

Remarks : _____

Calibrated by	:	Alan Ng	**Checked by**	:	James Chu
Date	:	31-Aug-21	**Date**	:	31-Aug-21

Lam Environmental Services Limited

Calibration Data for High Volume Sampler (TSP Sampler)

Location	:	AM2a	**Calbration Date**	:	31-Aug-21
Equipment no.	:	HVS003	**Calbration Due Date**	:	31-Oct-21

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition					
Temperature, T_a	1011.1	Kelvin	**Pressure, P_a**	27	mmHg

Orifice Transfer Standard Information					
Equipment No.	**3166**	**Slope, m_c**	1.88375	**Intercept, bc**	0.03970
Last Calibration Date	3-Aug-21	$(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$			
Next Calibration Date	3-Aug-22	$= m_c \times Q_{std} + b_c$			

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	1.1	1.1	2.2	0.0491	24	2.1386
2	2.2	2.2	4.4	0.0782	35	3.1188
3	3.6	3.6	7.2	0.1059	46	4.0990
4	4.5	4.5	9.0	0.1208	52	4.6337
5	5.4	5.4	10.8	0.1344	58	5.1683

By Linear Regression of Y on X

Slope, m	=	35.3755	Intercept, b	=	0.3768
Correlation Coefficient*	=	0.9997			
Calibration Accepted	=	Yes/~~No~~**			

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

** Delete as appropriate.

Remarks : _____

Calibrated by	:	Alan Ng	**Checked by**	:	James Chu
Date	:	31-Aug-21	**Date**	:	31-Aug-21

Met One Instruments
1600 Washington Blvd
Grants Pass, OR 97526
(541) 471-7111
(541) 471-7116 (Fax)
Service@metone.com

Calibration Certificate

The calibration results on this report certify that this instrument complies with the product specifications at the time of calibration. Calibration was performed according to accepted industry methods using equipment, procedures, and standards that are traceable to NIST and ISO.

Recommended calibration interval is 12 months from the first day of use.

Instrument Model# *Aerocet 831* **Instrument Serial#** *W15449*

Date of Calibration *4/29/2021* **Sensor #** *16439*

Jason Gist AT14 — AT5

Calibration Technician **Quality Check**

Temperature *23* °C **Relative Humidity** *35* %

Test Procedure: *Aerocet 831-6100*

PSL Size (µm)	Test Results	Test Spec.	Lot# NIST	Expiration
0.3	Pass	± 10%	223077	04/30/2023
0.5	Pass	± 10%	219480	11/30/2022
1.0	Pass	± 10%	229294	8/31/2023
2.5	Pass	± 10%	REF	NA
4.0	Pass	± 10%	REF	NA
5.0	Pass	± 10%	REF	NA
7.0	Pass	± 10%	REF	NA
10.0	Pass	± 10%	REF	NA

Standards	Model	SN	Cal Due
Dry Cal	Defender 530+	170092	2/9/2022
DMM	289	27720071	7/31/2021
RH/TEMP SENSOR	083E-1-6	R20313	9/17/2021
Particle Counter	GT-526	M1761	8/26/2021

Met One Instruments
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Grants Pass, OR 97526
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(541) 471-7116 (Fax)
Service@metone.com

Calibration Certificate

As Received

This certificate documents the as received condition of your instrument. Calibration was verified using accepted industry methods, equipment, procedures and standards that are traceable to NIST and ISO.

Instrument Model# Aerocet 831 **Instrument Serial#** W15449

Date of comparison against standard 4-27-2021 **Sensor #** 16439

Quality Control Technician Jason Gist AT 14

Temperature 23 °C **Relative Humidity** 32 %

Test Procedure: Aerocet 831-6100

As Received	Value	Range	Condition
Zero Count	0	Less than 5 particles in 5 min.	PASS
Air Flow	.08916	.092 to .108 CFM	FAIL

PSL Size Micron	LOT# NIST	As Received PSL Count Comparison	Allowable PSL Count Comparison	Allowable Size Accuracy	As Received Condition
0.3	223077	48.87	10% to 90%	+/- 10 %	PASS
0.5	219480	48.71	10% to 90%	+/- 10 %	PASS
1.0	229294	48.09	10% to 90%	+/- 10 %	PASS

Standards	Model	SN	Cal Due
Dry Cal	Defender 530+	170092	2/9/2022
DMM	289	23700150	5/4/2021
RH/TEMP SENSOR	083E-1-6	R20313	9/17/2021
Particle Counter	GT-526	M1761	8/26/2021

Calibration was performed by direct comparison to a count standard.

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Service@metone.com

Calibration Certificate

The calibration results on this report certify that this instrument complies with the product specifications at the time of calibration. Calibration was performed according to accepted industry methods using equipment, procedures, and standards that are traceable to NIST and ISO.

Recommended calibration interval is 12 months from the first day of use.

Instrument Model# *Aerocet 831* **Instrument Serial#** *Y23154*

Date of Calibration *12/3/2020* **Sensor #** *19494*

Jason Gist AT14 AT21 DEC 07 2020

Calibration Technician **Quality Check**

Temperature *23* °C **Relative Humidity** *28* %

Test Procedure: *Aerocet 831-6100*

PSL Size (µm)	Test Results	Test Spec.	Lot# NIST	Expiration
0.3	Pass	± 10%	223077	04/30/2023
0.5	Pass	± 10%	219480	11/30/2022
1.0	Pass	± 10%	193291	1/31/2021
2.5	Pass	± 10%	REF	NA
4.0	Pass	± 10%	REF	NA
5.0	Pass	± 10%	REF	NA
7.0	Pass	± 10%	REF	NA
10.0	Pass	± 10%	REF	NA

Standards	Model	SN	Cal Due
Dry Cal	Defender 530+	170092	1/28/2021
DMM	289	23700150	5/4/2021
RH/TEMP SENSOR	083E-1-6	R20313	9/17/2021
Particle Counter	GT-526S	X17420	12/20/2020

Met One Instruments
1600 Washington Blvd
Grants Pass, OR 97526
(541) 471-7111
(541) 471-7116 (Fax)
Service@metone.com

Calibration Certificate

As Received

This certificate documents the as received condition of your instrument. Calibration was verified using accepted industry methods, equipment, procedures and standards that are traceable to NIST and ISO.

Instrument Model# Aerocet 831 **Instrument Serial#** Y23154

Date of comparison against standard 12-2-2020 **Sensor #** 19494

Quality Control Technician Jason Gist AT14

Temperature 23 °C **Relative Humidity** 29 %

Test Procedure: Aerocet 831-6100

As Received	Value	Range	Condition
Zero Count	0	Less than 5 particles in 5 min.	PASS
Air Flow	.08784	.092 to .108 CFM	FAIL

PSL Size Micron	LOT# NIST	As Received PSL Count Comparison	Allowable PSL Count Comparison	Allowable Size Accuracy	As Received Condition
0.3	223077	54.38	10% to 90%	+/- 10 %	PASS
0.5	219480	28.50	10% to 90%	+/- 10 %	PASS
1.0	193291	13.39	10% to 90%	+/- 10 %	PASS

Standards	Model	SN	Cal Due
Dry Cal	Defender 530+	170092	1/28/2021
DMM	289	23700150	5/4/2021
RH/TEMP SENSOR	083E-1-6	R20313	9/17/2021
Particle Counter	GT-526S	X17420	12/20/2020

Calibration was performed by direct comparison to a count standard.

Met One Instruments
1600 Washington Blvd
Grants Pass, OR 97526
(541) 471-7111
(541) 471-7116 (Fax)
Service@metone.com

Calibration Certificate

The calibration results on this report certify that this instrument complies with the product specifications at the time of calibration. Calibration was performed according to accepted industry methods using equipment, procedures, and standards that are traceable to NIST and ISO.

Recommended calibration interval is 12 months from the first day of use.

Instrument Model# 831 **Instrument Serial#** R14332

Date of Calibration 2/18/2021 **Sensor #** 12228

J. Chester AT1
Calibration Technician

AT14 MAR 0 2 2021
Quality Check

Temperature 30 °C **Relative Humidity** 33 %

Test Procedure: 831-6100

PSL Size (µm)	Test Results	Test Spec.	Lot# NIST	Expiration
0.5	Pass	± 10%	219480	11/30/2022
0.7	Pass	± 10%	229561	08/31/2023
1.0	Pass	± 10%	229294	8/31/2023
2.5	Pass	± 10%	REF	NA
4.0	Pass	± 10%	REF	NA
5.0	Pass	± 10%	REF	NA
7.0	Pass	± 10%	REF	NA
10.0	Pass	± 10%	REF	NA

Standards	Model	SN	Cal Due
Flowmeter	DCL-M	103751	3/14/2021
DMM	189 Multimeter	92130180	10/26/2021
RH/TEMP SENSOR	083E-1-6	R20313	9/17/2021
Particle Counter	GT-526	M1760	5/19/2021

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:**	**1.2.0**
Serial Number:	**R22586**	**81113**	**0.2.5**
Calibrated By:	J. Chester AT	**Cal. Date:**	**04/13/2021**
Quality Inspector:	AJC	**Date:**	APR 15 2021
Calibration Hz/µg/m³:	**6.06**		

Final Test

Flow (2.0 L/min):	**Pass**	**Ambient Temp (C):**	**23**
Serial Communication:	**Pass**	**RH (%):**	**24**
Concentration:	370	**Standard:**	**372**

Calibration Standards

Standards	Manufacturer	Model	SN	Cal Due Date
DMM	Fluke	189	92130180	10/26/2021
Temp/Humidity	Met One Instruments	083E-1-6	R20313	09/17/21
Flow Meter	TSI	4000	40419545007	11/21/2021
LD-3B	SIBATA	LD-3B	476795	06/29/2021

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. The Calibration system complies with MIL-STD-45662A.

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:**	**R1.1.0**
Serial Number:	**X19295**	**81113**	**R0.2.4**
Calibrated By:	**Alice M.**	**Cal. Date:**	**Jan 9, 2020**
Quality Inspector:	AB	**Date:**	FEB 11 2020
Calibration Hz/µg/m³:	**5.295**		

Final Test

Flow (2.0 L/min):	**Pass**	**Ambient Temp (C):**	**23.5**
Serial Communication:	**Pass**	**RH (%):**	**31.3%**
Concentration:	**398**	**Standard:**	**398**

Calibration Standards

Standards	Manufacturer	Model	SN	Cal Due
RMS Multimeter	Fluke	289 Multimeter	23740018	5/17/2020
RH &TEMPERATURE	Met One Instruments	083E-1-6	R20313	9/19/2020
Primary Flow Meter	BIOS	Defender-530+	170092	1/30/2020
Digital Dust Indicator	SIBATA	LD-3B	6X7759	12/14/2019

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. The Calibration system complies with MIL-STD-45662A.

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:**	**R1.1.0**
Serial Number:	**X19297**	**81113**	**R0.2.4**
Calibrated By:	**Alice M.**	**Cal. Date:**	**Jan 9, 2020**
Quality Inspector:	AT8	**Date:**	FEB 1 1 2020
Calibration Hz/µg/m³:	**6.60**		

Final Test

Flow (2.0 L/min):	**Pass**	**Ambient Temp (C):**	**23.5**
Serial Communication:	**Pass**	**RH (%):**	**31.3%**
Concentration:	**401**	**Standard:**	**403**

Calibration Standards

Standards	Manufacturer	Model	SN	Cal Due
RMS Multimeter	Fluke	289 Multimeter	23740018	5/17/2020
RH &TEMPERATURE	Met One Instruments	083E-1-6	R20313	9/19/2020
Primary Flow Meter	BIOS	Defender-530+	170092	1/30/2020
Digital Dust Indicator	SIBATA	LD-3B	6X7759	12/14/2019

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. The Calibration system complies with MIL-STD-45662A.

出 厂 检 验 报 告

产品名称：在线式风速风向仪

产品型号：YGY-FSXY1

被检产品SN号：YG 21071630T0924

武汉辰云科技有限公司

2021年8月9日

1. 检验类别

一、在线式风速风向仪

检验项目	检测要求	检测结果
外观检查	1. 要求成品外观无破损，各部件完整，无掉漆，无凹陷变形； 2. 采集仪内部无目视可见灰尘杂物油污，布局整洁美观； 3. 芯线，航插完整，保护皮无破损，无油污；	
结构检查	1. 内部电路板固定牢固可靠，无挤压，无晃动； 2. 检查防尘防水措施是否到位，密封是否严密，端子与外壳缝隙不宜过大，以不透光为原则；	

二、风速风向传感器示值校准结果

实际风速（m/s）	指示风速（m/s）
0.5	启动
1	0.8
5	4.8
10	9.9
15	14.8
20	20.2
25	25.2
30	29.7

实际风向（°）	指示风向（°）
45	44
90	89
135	136
200	202
235	234
275	275
315	313
359	0

2. 备注 NOTE

数据采集仪数据显示风速、风向值正常，通过 RJ45 通讯与电脑连接，仪器软件数据显示正常。

3. 检验结论：

各项检测和实验结果表明：

在线式风速风向仪 仪器全部测试通过，系统硬件测试符合工厂（ 武汉易谷科技有限公司检验标准 ）测试标准。符合技术文件的要求，检验合格，准予出厂。

4. 校准的环境条件：

环境条件： 温度：27.5，相对湿度：61.0%RH，大气压力：1013.3hpa

测试员：李元华

检验员：吴肖

测试日期：2021 年 8 月 9 日

Appendix 4.3

Wind Data

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
31-Aug-21	17:00	0.9	84(E)
	18:00	1.1	337(NNW)
	19:00	0.9	304(NW)
	20:00	0.5	284(WNW)
	21:00	0.0	257(WSW)
	22:00	0.9	24(NNE)
	23:00	1.3	298(WNW)
1-Sep-21	00:00	1.5	350(N)
	01:00	1.9	33(NNE)
	02:00	1.3	118(ESE)
	03:00	1.3	214(SW)
	04:00	0.9	357(N)
	05:00	0.0	36(NE)
	06:00	1.1	337(NNW)
	07:00	0.7	263(W)
	08:00	1.9	318(NW)
	09:00	2.3	268(W)
	10:00	2.3	134(SE)
	11:00	1.9	88(E)
	12:00	1.9	34(NE)
	13:00	2.7	126(SE)
	14:00	3.1	80(E)
	15:00	2.1	225(SW)
	16:00	2.9	269(W)
	17:00	2.5	32(NNE)
	18:00	2.5	82(E)
	19:00	1.7	326(NW)
	20:00	1.5	354(N)
	21:00	1.7	333(NNW)
	22:00	1.1	348(NNW)
	23:00	1.3	346(NNW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
2-Sep-21	00:00	0.7	335(NNW)
	01:00	1.1	329(NNW)
	02:00	0.5	277(W)
	03:00	1.5	271(W)
	04:00	0.9	254(WSW)
	05:00	1.1	352(N)
	06:00	0.0	334(NNW)
	07:00	0.0	298(WNW)
	08:00	1.5	24(NNE)
	09:00	1.1	328(NNW)
	10:00	1.9	287(WNW)
	11:00	1.5	221(SW)
	12:00	0.9	202(SSW)
	13:00	1.5	27(NNE)
	14:00	2.1	179(S)
	15:00	3.3	76(ENE)
	16:00	1.3	73(ENE)
	17:00	1.9	296(WNW)
	18:00	1.7	103(ESE)
	19:00	2.3	356(N)
	20:00	2.1	145(SE)
	21:00	1.3	345(NNW)
	22:00	2.3	84(E)
	23:00	1.1	339(NNW)
3-Sep-21	00:00	0.9	311(NW)
	01:00	0.0	317(NW)
	02:00	0.0	273(W)
	03:00	0.0	59(ENE)
	04:00	0.0	148(SSE)
	05:00	0.0	192(SSW)
	06:00	0.0	337(NNW)
	07:00	1.1	325(NW)
	08:00	0.7	309(NW)
	09:00	0.7	231(SW)
	10:00	0.9	83(E)
	11:00	0.0	43(NE)
	12:00	1.3	131(SE)
	13:00	1.7	286(WNW)
	14:00	1.9	111(ESE)
	15:00	1.5	139(SE)
	16:00	1.3	132(SE)
	17:00	1.1	70(ENE)
	18:00	1.3	51(NE)
	19:00	1.1	331(NNW)
	20:00	0.9	352(N)
	21:00	1.1	21(NNE)
	22:00	1.1	345(NNW)
	23:00	1.7	310(NW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
4-Sep-21	00:00	2.7	22(NNE)
	01:00	0.7	308(NW)
	02:00	0.0	282(WNW)
	03:00	0.0	345(NNW)
	04:00	0.5	272(W)
	05:00	0.0	129(SE)
	06:00	1.1	257(WSW)
	07:00	0.9	106(ESE)
	08:00	2.3	299(WNW)
	09:00	1.7	10(N)
	10:00	4.1	132(SE)
	11:00	1.7	149(SSE)
	12:00	2.7	190(S)
	13:00	1.7	190(S)
	14:00	0.7	305(NW)
	15:00	2.7	69(ENE)
	16:00	1.9	137(SE)
	17:00	1.9	69(ENE)
	18:00	1.7	147(SSE)
	19:00	1.3	95(E)
	20:00	2.1	127(SE)
	21:00	0.7	290(WNW)
	22:00	1.5	67(ENE)
	23:00	0.0	320(NW)
5-Sep-21	00:00	1.1	330(NNW)
	01:00	0.5	295(WNW)
	02:00	0.7	344(NNW)
	03:00	0.7	112(ESE)
	04:00	0.9	263(W)
	05:00	1.1	336(NNW)
	06:00	0.0	358(N)
	07:00	1.1	348(NNW)
	08:00	0.0	204(SSW)
	09:00	0.7	336(NNW)
	10:00	3.3	339(NNW)
	11:00	1.7	134(SE)
	12:00	3.7	16(NNE)
	13:00	3.1	142(SE)
	14:00	1.5	231(SW)
	15:00	1.5	245(WSW)
	16:00	2.1	135(SE)
	17:00	1.3	329(NNW)
	18:00	1.9	235(SW)
	19:00	0.0	243(WSW)
	20:00	1.3	33(NNE)
	21:00	0.7	359(N)
	22:00	1.3	259(W)
	23:00	1.1	329(NNW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
6-Sep-21	00:00	0.9	335(NNW)
	01:00	0.0	268(W)
	02:00	0.7	11(N)
	03:00	0.0	335(NNW)
	04:00	0.0	301(WNW)
	05:00	0.0	141(SE)
	06:00	0.0	329(NNW)
	07:00	0.7	342(NNW)
	08:00	0.5	221(SW)
	09:00	1.3	10(N)
	10:00	0.9	358(N)
	11:00	1.1	207(SSW)
	12:00	0.0	195(SSW)
	13:00	2.1	258(WSW)
	14:00	2.9	149(SSE)
	15:00	1.1	161(SSE)
	16:00	0.9	270(W)
	17:00	2.1	328(NNW)
	18:00	0.9	235(SW)
	19:00	1.3	332(NNW)
	20:00	0.9	297(WNW)
	21:00	1.3	316(NW)
	22:00	1.7	125(SE)
	23:00	1.3	127(SE)
7-Sep-21	00:00	1.3	11(N)
	01:00	1.1	334(NNW)
	02:00	1.3	234(SW)
	03:00	1.5	340(NNW)
	04:00	3.5	338(NNW)
	05:00	1.1	282(WNW)
	06:00	0.0	276(W)
	07:00	0.9	349(N)
	08:00	3.7	338(NNW)
	09:00	1.7	326(NW)
	10:00	1.1	255(WSW)
	11:00	2.9	135(SE)
	12:00	1.5	30(NNE)
	13:00	3.3	21(NNE)
	14:00	3.3	85(E)
	15:00	1.1	95(E)
	16:00	1.7	309(NW)
	17:00	2.1	178(S)
	18:00	1.3	230(SW)
	19:00	2.1	48(NE)
	20:00	1.5	228(SW)
	21:00	0.7	334(NNW)
	22:00	0.7	350(N)
	23:00	1.1	231(SW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
8-Sep-21	00:00	1.5	240(WSW)
	01:00	1.5	223(SW)
	02:00	1.7	299(WNW)
	03:00	0.9	350(N)
	04:00	0.0	339(NNW)
	05:00	0.9	342(NNW)
	06:00	0.9	128(SE)
	07:00	0.7	299(WNW)
	08:00	1.5	333(NNW)
	09:00	1.3	334(NNW)
	10:00	2.1	222(SW)
	11:00	1.1	295(WNW)
	12:00	2.1	245(WSW)
	13:00	1.5	264(W)
	14:00	3.1	139(SE)
	15:00	1.5	171(S)
	16:00	1.9	225(SW)
	17:00	2.9	179(S)
	18:00	1.7	190(S)
	19:00	1.5	34(NE)
	20:00	0.9	170(S)
	21:00	1.1	355(N)
	22:00	0.9	307(NW)
	23:00	0.0	337(NNW)
9-Sep-21	00:00	0.0	266(W)
	01:00	1.1	146(SE)
	02:00	0.0	35(NE)
	03:00	0.0	80(E)
	04:00	0.0	245(WSW)
	05:00	0.9	102(ESE)
	06:00	0.0	165(SSE)
	07:00	0.0	330(NNW)
	08:00	0.0	328(NNW)
	09:00	0.7	334(NNW)
	10:00	1.7	207(SSW)
	11:00	2.1	307(NW)
	12:00	0.9	143(SE)
	13:00	1.1	326(NW)
	14:00	1.1	314(NW)
	15:00	1.3	330(NNW)
	16:00	0.9	304(NW)
	17:00	1.3	332(NNW)
	18:00	0.7	303(WNW)
	19:00	0.9	329(NNW)
	20:00	0.5	247(WSW)
	21:00	0.0	275(W)
	22:00	0.5	284(WNW)
	23:00	0.7	313(NW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
10-Sep-21	00:00	1.5	350(N)
	01:00	0.9	295(WNW)
	02:00	1.3	34(NE)
	03:00	1.3	319(NW)
	04:00	1.5	337(NNW)
	05:00	1.9	343(NNW)
	06:00	1.9	33(NNE)
	07:00	1.1	127(SE)
	08:00	1.1	341(NNW)
	09:00	1.3	343(NNW)
	10:00	1.9	324(NW)
	11:00	1.3	327(NNW)
	12:00	1.3	118(ESE)
	13:00	1.7	333(NNW)
	14:00	1.5	230(SW)
	15:00	1.7	344(NNW)
	16:00	1.5	219(SW)
	17:00	1.5	356(N)
	18:00	2.5	111(ESE)
	19:00	2.9	347(NNW)
	20:00	1.9	318(NW)
	21:00	1.1	267(W)
	22:00	2.5	329(NNW)
	23:00	1.7	304(NW)
11-Sep-21	00:00	0.7	104(ESE)
	01:00	1.9	309(NW)
	02:00	2.3	268(W)
	03:00	3.7	129(SE)
	04:00	1.9	329(NNW)
	05:00	1.3	101(E)
	06:00	1.7	116(ESE)
	07:00	2.3	134(SE)
	08:00	1.3	129(SE)
	09:00	1.5	134(SE)
	10:00	1.3	53(NE)
	11:00	1.3	226(SW)
	12:00	2.7	117(ESE)
	13:00	1.9	88(E)
	14:00	1.1	305(NW)
	15:00	1.1	131(SE)
	16:00	2.7	64(ENE)
	17:00	1.9	131(SE)
	18:00	1.5	84(E)
	19:00	1.9	34(NE)
	20:00	2.1	161(SSE)
	21:00	0.9	102(ESE)
	22:00	1.7	211(SSW)
	23:00	2.1	225(SW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
12-Sep-21	00:00	1.5	212(SSW)
	01:00	1.1	315(NW)
	02:00	0.9	51(NE)
	03:00	1.5	354(N)
	04:00	0.0	172(S)
	05:00	0.0	181(S)
	06:00	0.9	309(NW)
	07:00	1.1	314(NW)
	08:00	1.5	18(NNE)
	09:00	1.7	333(NNW)
	10:00	1.1	313(NW)
	11:00	1.7	191(S)
	12:00	1.5	326(NW)
	13:00	2.9	312(NW)
	14:00	0.0	57(ENE)
	15:00	1.3	332(NNW)
	16:00	2.3	37(NE)
	17:00	0.9	202(SSW)
	18:00	2.7	30(NNE)
	19:00	2.1	320(NW)
	20:00	1.3	311(NW)
	21:00	2.1	277(W)
	22:00	2.5	27(NNE)
	23:00	1.5	27(NNE)
13-Sep-21	00:00	1.7	214(SW)
	01:00	1.5	182(S)
	02:00	1.3	125(SE)
	03:00	0.7	136(SE)
	04:00	3.1	169(S)
	05:00	2.1	236(SW)
	06:00	3.3	76(ENE)
	07:00	0.9	232(SW)
	08:00	1.5	44(NE)
	09:00	0.9	142(SE)
	10:00	1.7	250(WSW)
	11:00	4.3	11(N)
	12:00	1.3	73(ENE)
	13:00	0.9	71(ENE)
	14:00	2.7	70(ENE)
	15:00	3.5	132(SE)
	16:00	1.1	267(W)
	17:00	2.1	336(NNW)
	18:00	1.9	296(WNW)
	19:00	2.5	332(NNW)
	20:00	1.7	290(WNW)
	21:00	1.9	236(SW)
	22:00	2.7	347(NNW)
	23:00	1.7	93(E)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
14-Sep-21	00:00	1.3	140(SE)
	01:00	1.9	206(SSW)
	02:00	2.5	104(ESE)
	03:00	2.3	119(ESE)
	04:00	1.1	96(E)
	05:00	1.3	345(NNW)
	06:00	0.7	202(SSW)
	07:00	1.7	113(ESE)
	08:00	0.9	271(W)
	09:00	1.5	328(NNW)
	10:00	1.1	267(W)
	11:00	0.7	264(W)
	12:00	1.3	325(NW)
	13:00	1.3	328(NNW)
	14:00	1.1	338(NNW)
	15:00	0.0	317(NW)
	16:00	1.1	313(NW)
	17:00	0.9	303(WNW)
	18:00	1.3	325(NW)
	19:00	1.1	321(NW)
	20:00	0.0	289(WNW)
	21:00	0.0	273(W)
	22:00	2.3	278(W)
	23:00	1.5	290(WNW)
15-Sep-21	00:00	1.1	354(N)
	01:00	1.3	125(SE)
	02:00	0.9	304(NW)
	03:00	0.0	59(ENE)
	04:00	0.7	273(W)
	05:00	0.9	299(WNW)
	06:00	0.7	313(NW)
	07:00	0.0	263(W)
	08:00	0.0	285(WNW)
	09:00	0.0	148(SSE)
	10:00	0.9	200(SSW)
	11:00	0.0	263(W)
	12:00	1.1	336(NNW)
	13:00	0.9	333(NNW)
	14:00	5.5	358(N)
	15:00	3.1	334(NNW)
	16:00	4.9	335(NNW)
	17:00	2.9	321(NW)
	18:00	2.3	108(ESE)
	19:00	1.5	344(NNW)
	20:00	0.5	346(NNW)
	21:00	1.3	331(NNW)
	22:00	0.9	81(E)
	23:00	0.7	182(S)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
16-Sep-21	00:00	0.9	337(NNW)
	01:00	1.3	345(NNW)
	02:00	0.9	326(NW)
	03:00	1.1	40(NE)
	04:00	1.5	341(NNW)
	05:00	1.3	297(WNW)
	06:00	1.3	37(NE)
	07:00	1.3	331(NNW)
	08:00	1.1	346(NNW)
	09:00	1.9	174(S)
	10:00	2.3	312(NW)
	11:00	0.9	100(E)
	12:00	1.9	336(NNW)
	13:00	3.7	14(NNE)
	14:00	1.1	109(ESE)
	15:00	3.1	298(WNW)
	16:00	1.3	166(SSE)
	17:00	0.0	161(SSE)
	18:00	0.7	322(NW)
	19:00	2.1	332(NNW)
	20:00	1.9	318(NW)
	21:00	0.0	323(NW)
	22:00	0.0	296(WNW)
	23:00	0.0	149(SSE)
17-Sep-21	00:00	0.0	355(N)
	01:00	0.0	333(NNW)
	02:00	0.0	350(N)
	03:00	0.0	350(N)
	04:00	0.0	226(SW)
	05:00	0.0	336(NNW)
	06:00	0.0	313(NW)
	07:00	0.0	308(NW)
	08:00	0.0	176(S)
	09:00	0.0	233(SW)
	10:00	1.3	311(NW)
	11:00	1.5	283(WNW)
	12:00	1.3	269(W)
	13:00	4.7	270(W)
	14:00	1.5	309(NW)
	15:00	1.3	88(E)
	16:00	2.5	321(NW)
	17:00	0.9	259(W)
	18:00	1.1	203(SSW)
	19:00	1.3	335(NNW)
	20:00	1.1	123(ESE)
	21:00	0.7	199(SSW)
	22:00	0.9	197(SSW)
	23:00	1.5	142(SE)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
18-Sep-21	00:00	1.5	191(S)
	01:00	1.3	167(SSE)
	02:00	0.9	147(SSE)
	03:00	0.5	260(W)
	04:00	0.7	247(WSW)
	05:00	0.0	303(WNW)
	06:00	0.7	212(SSW)
	07:00	1.1	170(S)
	08:00	1.5	140(SE)
	09:00	1.5	171(S)
	10:00	4.1	174(S)
	11:00	2.3	211(SSW)
	12:00	2.3	193(SSW)
	13:00	3.7	201(SSW)
	14:00	2.5	199(SSW)
	15:00	1.5	251(WSW)
	16:00	1.7	206(SSW)
	17:00	2.1	176(S)
	18:00	2.7	241(WSW)
	19:00	1.5	166(SSE)
	20:00	3.3	193(SSW)
	21:00	2.1	200(SSW)
	22:00	1.1	318(NW)
	23:00	1.3	202(SSW)
19-Sep-21	00:00	2.9	217(SW)
	01:00	1.7	168(SSE)
	02:00	0.9	93(E)
	03:00	0.9	177(S)
	04:00	1.1	148(SSE)
	05:00	1.3	159(SSE)
	06:00	0.0	286(WNW)
	07:00	0.9	157(SSE)
	08:00	2.1	181(S)
	09:00	1.5	202(SSW)
	10:00	0.5	126(SE)
	11:00	7:12	332(NNW)
	12:00	16:48	174(S)
	13:00	16:48	203(SSW)
	14:00	3.5	221(SW)
	15:00	1.9	274(W)
	16:00	2.5	182(S)
	17:00	1.7	279(W)
	18:00	1.5	138(SE)
	19:00	1.9	182(S)
	20:00	0.0	122(ESE)
	21:00	1.3	157(SSE)
	22:00	0.5	212(SSW)
	23:00	1.3	189(S)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
20-Sep-21	00:00	1.3	73(ENE)
	01:00	0.0	43(NE)
	02:00	1.3	197(SSW)
	03:00	0.0	186(S)
	04:00	0.0	331(NNW)
	05:00	0.0	310(NW)
	06:00	0.0	102(ESE)
	07:00	0.0	38(NE)
	08:00	0.0	83(E)
	09:00	0.9	177(S)
	10:00	0.0	291(WNW)
	11:00	2.3	297(WNW)
	12:00	3.3	240(WSW)
	13:00	1.3	189(S)
	14:00	3.3	31(NNE)
	15:00	2.5	177(S)
	16:00	1.9	182(S)
	17:00	1.7	176(S)
	18:00	1.1	137(SE)
	19:00	1.7	215(SW)
	20:00	0.7	212(SSW)
	21:00	1.1	148(SSE)
	22:00	1.7	185(S)
	23:00	1.3	173(S)
21-Sep-21	00:00	0.0	192(SSW)
	01:00	0.0	167(SSE)
	02:00	1.3	219(SW)
	03:00	0.0	261(W)
	04:00	0.0	323(NW)
	05:00	0.0	300(WNW)
	06:00	0.0	14(NNE)
	07:00	0.0	328(NNW)
	08:00	0.0	45(NE)
	09:00	0.0	42(NE)
	10:00	2.5	31(NNE)
	11:00	1.3	186(S)
	12:00	1.7	150(SSE)
	13:00	0.0	17(NNE)
	14:00	0.7	134(SE)
	15:00	0	131(SE)
	16:00	1.3	133(SE)
	17:00	1.9	333(NNW)
	18:00	0	156(SSE)
	19:00	0	162(SSE)
	20:00	0	19(NNE)
	21:00	0.5	190(S)
	22:00	0	315(NW)
	23:00	0.7	209(SSW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
22-Sep-21	00:00	0	81(E)
	01:00	0	345(NNW)
	02:00	0	79(E)
	03:00	0	311(NW)
	04:00	0	263(W)
	05:00	0	340(NNW)
	06:00	0	233(SW)
	07:00	0.9	252(WSW)
	08:00	0	141(SE)
	09:00	0	230(SW)
	10:00	0.7	290(WNW)
	11:00	1.3	216(SW)
	12:00	0	134(SE)
	13:00	0.7	223(SW)
	14:00	0	210(SSW)
	15:00	1.7	180(S)
	16:00	0	279(W)
	17:00	1.1	183(S)
	18:00	0.9	241(WSW)
	19:00	1.7	204(SSW)
	20:00	0.7	31(NNE)
	21:00	1.9	202(SSW)
	22:00	0.5	133(SE)
	23:00	1.3	165(SSE)
23-Sep-21	00:00	2.3	223(SW)
	01:00	1.7	180(S)
	02:00	1.1	200(SSW)
	03:00	2.1	171(S)
	04:00	1.3	194(SSW)
	05:00	1.1	298(WNW)
	06:00	0	114(ESE)
	07:00	1.9	139(SE)
	08:00	1.1	164(SSE)
	09:00	0.9	143(SE)
	10:00	0	93(E)
	11:00	1.5	207(SSW)
	12:00	1.1	204(SSW)
	13:00	0.7	250(WSW)
	14:00	0.9	171(S)
	15:00	1.1	241(WSW)
	16:00	0.9	142(SE)
	17:00	3.3	320(NW)
	18:00	0.5	80(E)
	19:00	0.5	13(NNE)
	20:00	0	192(SSW)
	21:00	1.3	325(NW)
	22:00	0.5	35(NE)
	23:00	1.5	194(SSW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
24-Sep-21	00:00	0.5	280(W)
	01:00	1.5	160(SSE)
	02:00	0	156(SSE)
	03:00	1.7	328(NNW)
	04:00	0	182(S)
	05:00	0.5	150(SSE)
	06:00	0	114(ESE)
	07:00	2.5	181(S)
	08:00	0.9	225(SW)
	09:00	2.7	154(SSE)
	10:00	0.5	46(NE)
	11:00	1.5	312(NW)
	12:00	1.5	201(SSW)
	13:00	2.3	125(SE)
	14:00	2.7	189(S)
	15:00	3.1	234(SW)
	16:00	0.7	142(SE)
	17:00	2.3	216(SW)
	18:00	1.5	192(SSW)
	19:00	2.1	175(S)
	20:00	2.1	172(S)
	21:00	0.9	215(SW)
	22:00	1.3	154(SSE)
	23:00	1.5	233(SW)
25-Sep-21	00:00	2.9	178(S)
	01:00	1.5	126(SE)
	02:00	1.1	234(SW)
	03:00	2.3	176(S)
	04:00	2.5	180(S)
	05:00	1.1	176(S)
	06:00	0	273(W)
	07:00	1.7	191(S)
	08:00	1.5	151(SSE)
	09:00	1.7	173(S)
	10:00	1.5	151(SSE)
	11:00	2.9	176(S)
	12:00	1.5	213(SSW)
	13:00	2.7	177(S)
	14:00	2.7	217(SW)
	15:00	3.1	153(SSE)
	16:00	2.5	204(SSW)
	17:00	1.3	230(SW)
	18:00	1.5	240(WSW)
	19:00	0.9	246(WSW)
	20:00	1.5	274(W)
	21:00	2.3	183(S)
	22:00	0.9	261(W)
	23:00	1.9	195(SSW)

Wind Speed and Wind Direction

Date	Time	Wind Speed (m/s)	Wind Direction (degree)
26-Sep-21	00:00	1.9	198(SSW)
	01:00	2.9	193(SSW)
	02:00	1.3	210(SSW)
	03:00	1.1	177(S)
	04:00	1.1	167(SSE)
	05:00	1.9	182(S)
	06:00	1.1	181(S)
	07:00	0.9	167(SSE)
	08:00	1.5	220(SW)
	09:00	2.1	187(S)
	10:00	3.1	176(S)
	11:00	2.3	168(SSE)
	12:00	0	183(S)
	13:00	1.7	219(SW)
	14:00	1.9	263(W)
	15:00	2.7	340(NNW)
	16:00	0	89(E)
	17:00	3.5	344(NNW)
	18:00	0.7	83(E)
	19:00	1.1	191(S)
	20:00	0.9	191(S)
	21:00	1.3	164(SSE)
	22:00	1.3	206(SSW)
	23:00	1.1	188(S)
27-Sep-21	00:00	0.7	173(S)
	01:00	1.3	192(SSW)
	02:00	1.1	189(S)
	03:00	0	184(S)
	04:00	0	180(S)
	05:00	0	70(ENE)
	06:00	0	322(NW)
	07:00	0	151(SSE)
	08:00	1.9	207(SSW)
	09:00	1.3	192(SSW)
	10:00	2.9	163(SSE)
	11:00	1.9	303(WNW)
	12:00	1.1	263(W)
	13:00	0.5	168(SSE)
	14:00	0	188(S)
	15:00	4.5	346(NNW)

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
Tentative Impact Monitoring Schedule
Sep 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01 Sep	02 Sep AQM - 24hr TSP	03 Sep AQM - 1hr TSP NM Ecological Monitoring	04 Sep
05 Sep	06 Sep	07 Sep	08 Sep AQM - 24hr TSP	09 Sep AQM - 1hr TSP NM	10 Sep Ecological Monitoring	11 Sep
12 Sep	13 Sep	14 Sep AQM - 24hr TSP	15 Sep AQM - 1hr TSP NM	16 Sep	17 Sep Ecological Monitoring	18 Sep
19 Sep	20 Sep AQM - 24hr TSP	21 Sep AQM - 1hr TSP NM	22 Sep	23 Sep	24 Sep Ecological Monitoring	25 Sep AQM - 24hr TSP
26 Sep	27 Sep AQM - 1hr TSP NM	28 Sep Ecological Monitoring	29 Sep	30 Sep		

Remark:

- 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
Oct 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01 Oct AQM - 24hr TSP	02 Oct AQM - 1hr TSP
03 Oct	04 Oct	05 Oct	06 Oct	07 Oct AQM - 24hr TSP	08 Oct AQM - 1hr TSP NM Ecological Monitoring	09 Oct
10 Oct	11 Oct	12 Oct AQM - 24hr TSP Ecological Monitoring	13 Oct AQM - 1hr TSP NM	14 Oct	15 Oct	16 Oct
17 Oct	18 Oct AQM - 24hr TSP	19 Oct AQM - 1hr TSP NM	20 Oct	21 Oct	22 Oct Ecological Monitoring	23 Oct AQM - 24hr TSP
24 Oct	25 Oct AQM - 1hr TSP NM	26 Oct	27 Oct	28 Oct	29 Oct AQM - 24hr TSP Ecological Monitoring	30 Oct AQM - 1hr TSP
31 Oct						

Remark:

- 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

Day Time (0700 - 1900hrs on weekday)

Location: NM1 - G/F, Wai Loi Tsuen

Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level			Limit Level
				Leq	L10	L90	Leq
				Unit: dB(A), (30min)			
03/09/2021	13:15	Fine	0.0	49.2	50.6	46.6	75
09/09/2021	10:30	Fine	0.0	47.9	49.8	45.4	75
15/09/2021	10:55	Fine	0.0	51.7	53.6	48.6	75
21/09/2021	13:15	Cloudy	0.0	56.4	63.8	47.8	75
27/09/2021	13:15	Fine	0.0	53.8	57.1	50.0	75

Location: NM2 - G/F, Fu Tei Au

Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level			Limit Level
				Leq	L10	L90	Leq
				Unit: dB(A), (30-min)			
03/09/2021	13:10	Fine	0.0	64.3	65.1	62.0	75
09/09/2021	11:30	Fine	0.0	57.4	58.0	56.0	75
15/09/2021	11:30	Fine	0.0	55.3	55.8	51.4	75
21/09/2021	14:50	Cloudy	0.0	67.2	69.6	62.6	75
27/09/2021	13:50	Fine	0.0	57.0	59.1	55.6	75

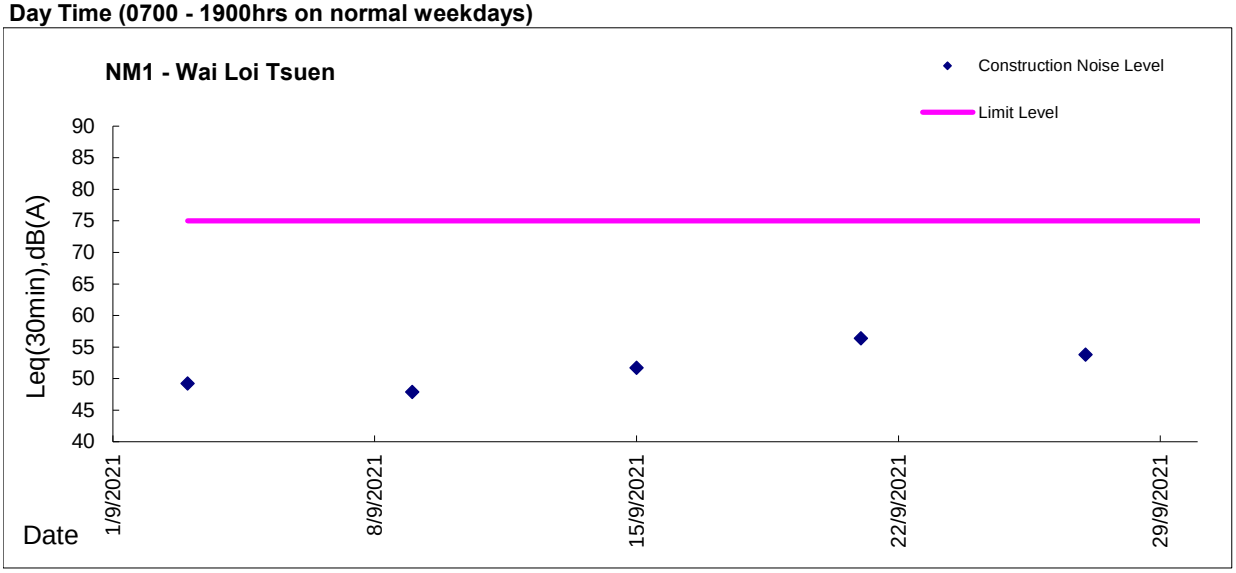
Location: NM3 - G/F, Man kok Village

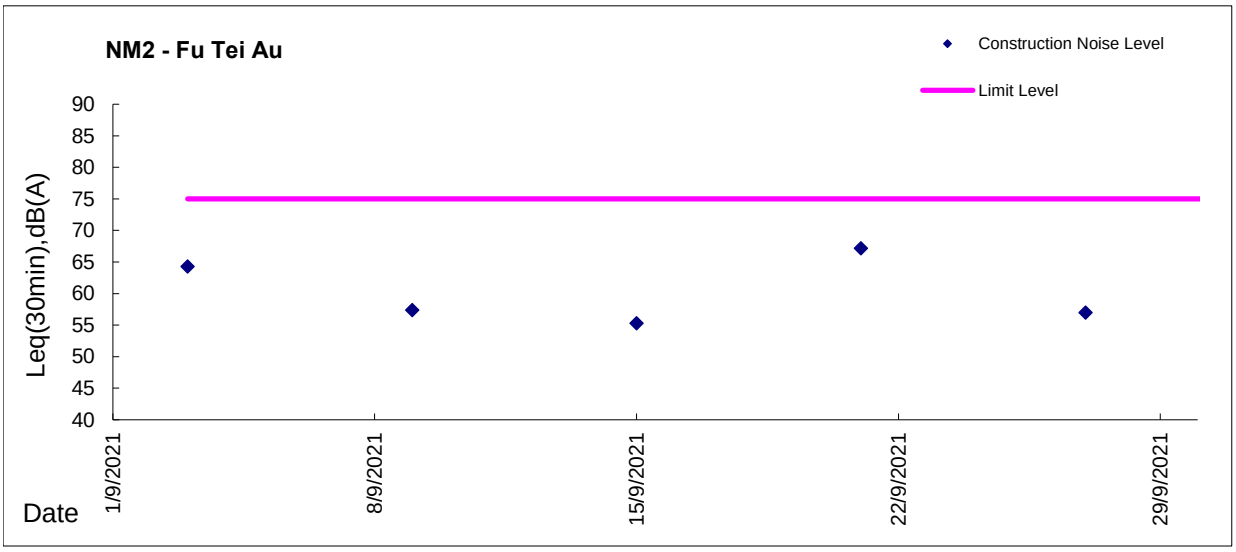
Date	Time	Weather	Wind Speed (m/s)	Measurement Noise Level			Limit Level
				Leq	L10	L90	Leq
				Unit: dB(A), (30min)			
03/09/2021	13:55	Fine	0.0	59.3	60.6	56.2	75
09/09/2021	11:05	Fine	0.0	60.4	57.6	54.6	75
15/09/2021	14:00	Fine	0.0	61.0	61.6	57.6	75
21/09/2021	14:00	Cloudy	0.0	67.0	70.1	58.8	75
27/09/2021	15:30	Fine	0.0	60.1	60.6	58.2	75

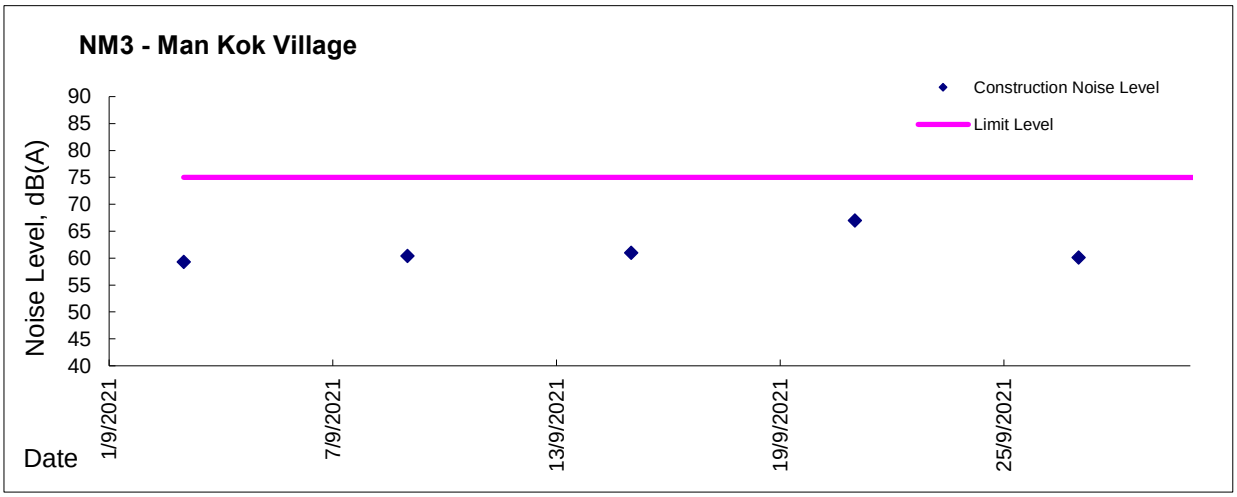
* Free field correction (Additional 3dB(A)) was made on NM1, NM2, and NM3 measurement result

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)
3-Sep-21	Fine	13:09	9
3-Sep-21	Fine	14:10	9
3-Sep-21	Fine	15:11	8
9-Sep-21	Fine	8:40	176
9-Sep-21	Fine	9:40	175
9-Sep-21	Fine	10:40	184
15-Sep-21	Fine	9:33	41
15-Sep-21	Fine	10:34	86
15-Sep-21	Fine	13:00	77
21-Sep-21	Fine	8:42	61
21-Sep-21	Fine	9:43	71
21-Sep-21	Fine	10:44	46
27-Sep-21	Fine	13:00	133
27-Sep-21	Fine	14:01	155
27-Sep-21	Fine	15:02	178

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)
3-Sep-21	Fine	13:09	17
3-Sep-21	Fine	14:11	11
3-Sep-21	Fine	15:12	11
9-Sep-21	Fine	8:21	45
9-Sep-21	Fine	9:22	53
9-Sep-21	Fine	10:23	50
15-Sep-21	Fine	9:54	59
15-Sep-21	Fine	10:55	87
15-Sep-21	Fine	13:00	48
21-Sep-21	Fine	8:55	23
21-Sep-21	Fine	9:56	18
21-Sep-21	Fine	10:56	15
27-Sep-21	Fine	13:00	22
27-Sep-21	Fine	14:01	33
27-Sep-21	Fine	15:02	17

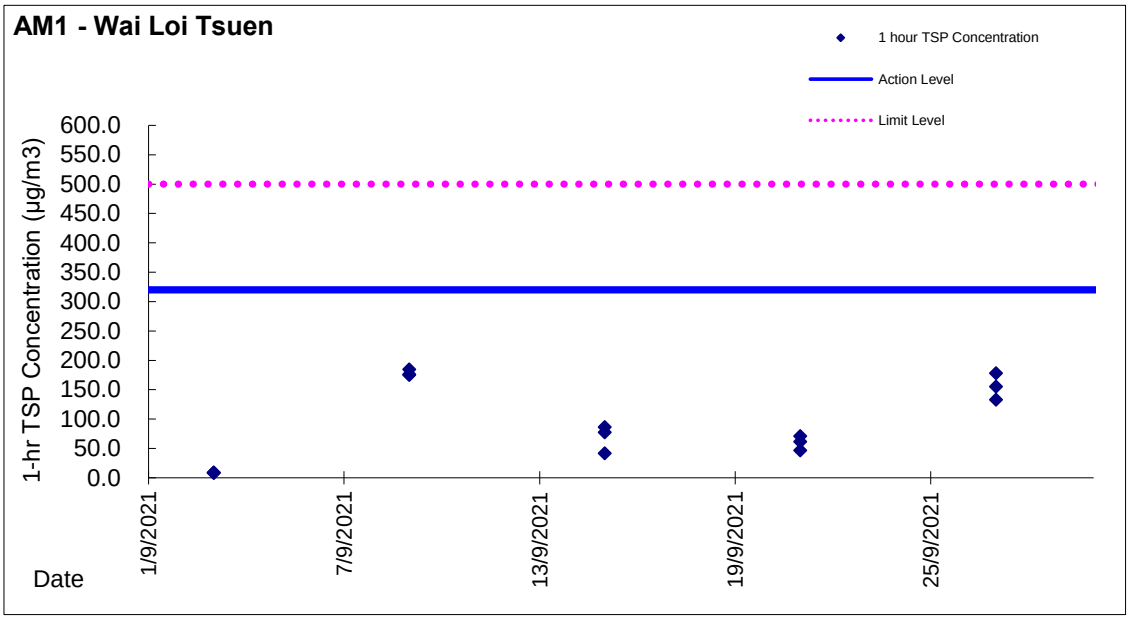
Location: AM1a - Site Boundary of the Shek Wu Hui STW (East)
Impact Monitoring Result on 24-hour TSP monitoring

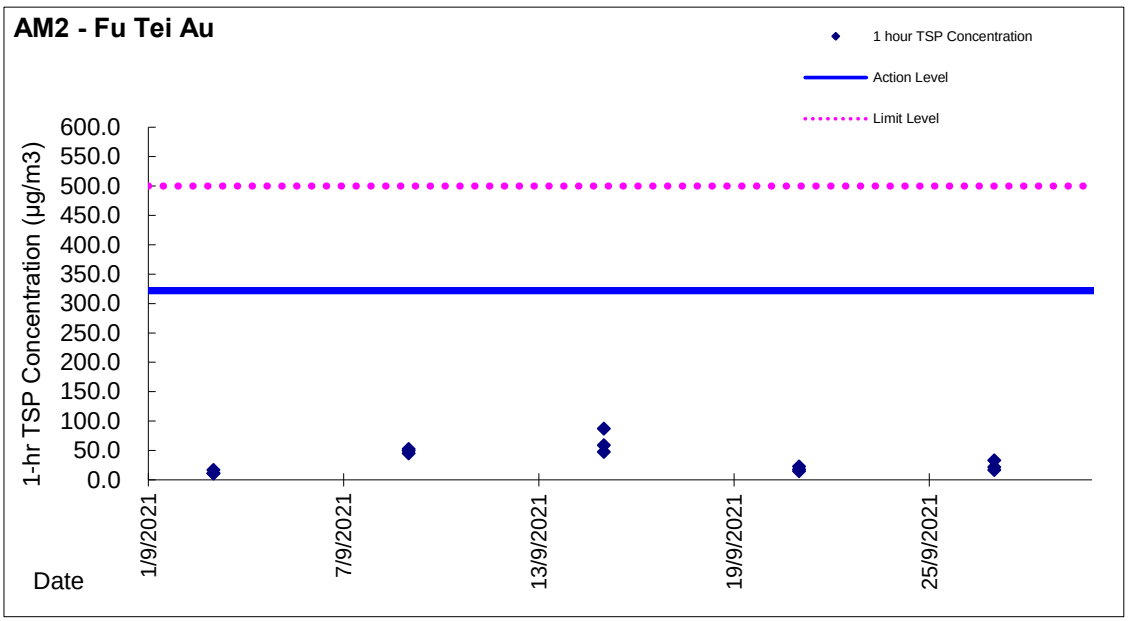
Date	Sampling Time	Weather Condition	Pressure, hPa		Temp. , °C		Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, ug/m^3
			Initial	Final	Initial	Final		Initial	Final	Initial	Final		Initial, Qsi	Final, Qsf	Average		
02-Sep-21	8:00	Fine	1009	1007	33	34	AM1a_24hr_008852	2.7390	2.7811	26079.97	26103.97	24.00	1.22	1.21	1.21	1747	24
08-Sep-21	8:00	Fine	1009	1009	34	33	AM1a_24hr_008870	2.7426	2.8173	26103.97	26127.97	24.00	1.21	1.22	1.21	1748	43
14-Sep-21	8:00	Fine	1011	1011	30	33	AM1a_24hr_008888	2.7181	2.7920	26127.97	26151.97	24.00	1.20	1.19	1.20	1725	43
20-Sep-21	8:00	Fine	1010	1009	29	29	AM1a_24hr_008891	2.7489	2.8036	26151.97	26175.97	24.00	1.14	1.14	1.14	1635	33
25-Sep-21	8:00	Fine	1013	1012	30	29	AM1a_24hr_009522	2.7781	2.8686	26175.97	26199.97	24.00	0.98	0.98	0.98	1411	64

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

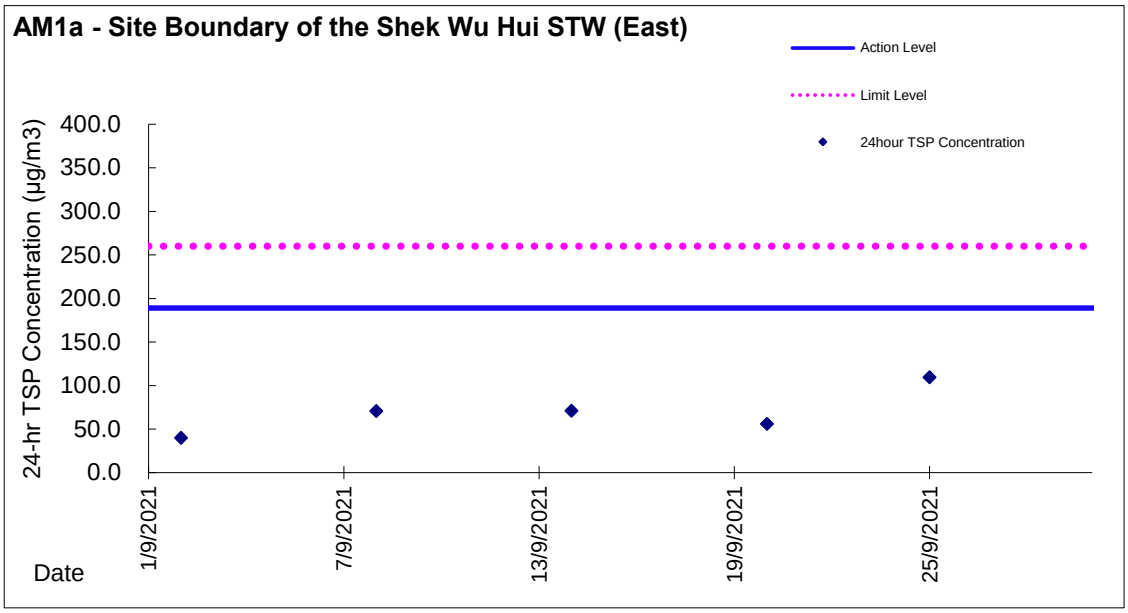
Date	Sampling Time	Weather Condition	Pressure, hPa		Temp. , °C		Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, ug/m^3
			Initial	Final	Initial	Final		Initial	Final	Initial	Final		Initial, Qsi	Final, Qsf	Average		
02-Sep-21	8:00	Fine	1009	1007	33	34	AM2a_24hr_008853	2.7456	2.8037	17053.93	17077.93	24.00	1.20	1.22	1.21	1742	33
08-Sep-21	8:00	Fine	1009	1009	34	33	AM2a_24hr_006546	2.8234	2.9375	17077.93	17101.93	24.00	1.18	1.19	1.18	1704	67
14-Sep-21	8:00	Fine	1011	1011	30	33	AM2a_24hr_008889	2.7318	2.8413	17101.93	17125.93	24.00	1.16	1.15	1.15	1662	66
20-Sep-21	8:00	Fine	1010	1009	29	29	Am2a_24hr_008890	2.7432	2.8127	17125.93	17149.93	24.00	1.16	1.16	1.16	1670	42
25-Sep-21	8:00	Fine	1013	1012	30	29	Am2a_24hr_009508	2.7776	2.9318	17149.93	17173.93	24.00	1.12	1.13	1.12	1619	95

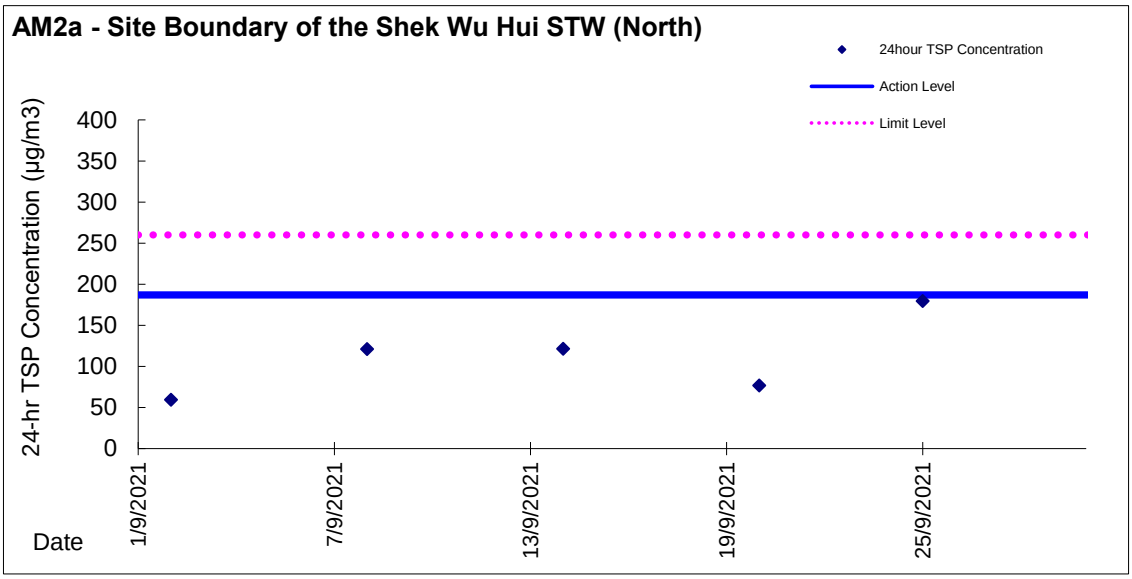
Graphic Presentation of TSP Result





Graphic Presentation of TSP Result





Appendix 5.4

Details of Ecological Monitoring Results in the Reporting Month

5.4. ECOLOGICAL MONITORING RESULTS

5.4.1. For this reporting month, the numbers of species and individuals recorded were provided in **Table 1** and the abundance of representative species were shown in **Table 2.**

Table 1 Total Bird Species and Abundance in the Reporting Month

	Number of Species	Abundance
All Avifauna	51	2221
Waterbirds	21	599

Table 2 Abundance of Representative Waterbirds in the Reporting Month

Species Name	Common Name	Chinese Name	Abundance
Egretta garzetta	Little Egret	小白鷺	189
Ardea cinerea	Grey Heron	蒼鷺	33
Ardeola bacchus	Chinese Pond Heron	池鷺	147
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0
Ardea alba	Great Egret	大白鷺	22
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	105
		Total	**496**

Analysis

5.4.2. The result of student t-tests for all waterbirds and representative waterbirds are compiled in **Table 3 and 4** respectively. Further details are provided in **Appendix 5.4b.**

Table 3 T-test Result for All Waterbirds in the Reporting Month

T-values of Data in Reporting Month			Confidence Level (Critical Value)	
			95% (-2.132)	99% (-3.747)
Abundance	Monthly	9.511	✔	✔
	Seasonal	9.457	✔	✔

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 4 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% (-2.132)	99% (-3.747)	Seasonal	95% (-2.132)	99% (-3.747)	
Little Egret	8.460	✔	✔	6.908	✔	✔	✔
Grey Heron*	N/A						
Chinese Pond Heron	4.213	✔	✔	0.557	✔	✔	✔
Great Cormorant*	N/A						
Great Egret	-0.466	✔	✔	1.087	✔	✔	✔
Eastern Cattle Egret	5.093	✔	✔	4.366	✔	✔	✔

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.

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

5.4.4. The monitoring work will continue next month to evaluate any construction impact on waterbirds.

Observations

5.4.5. Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting

5.4.6. The anthropogenic activities observed during ecological monitoring are listed in **Table 5.**

Table 5 Observations during Ecological Monitoring in the Reporting Month

Location(s)	Observations	
	Project Related	**Non-project Related**
T1 (PC1, PC2)	N/A	Playing with R.C. Boat and Generator and sedimentation tank
T2 (PC3, PC4)	Excavation and crane	Fishing, Excavation Sheet-piling, generator & wielding works Scaffolding
PC5	N/A	N/A

Location(s)	Observations	
	Project Related	**Non-project Related**
T3 (PC6, PC7)	N/A	Fishing, Excavation Sheet-piling, generator & wielding works Scaffolding

Appendix 5.5

Ecological Monitoring Results and Analysis

Summary data of the Ecological Monitoring

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Nycticorax nycticorax	Black-crowned Night Heron	夜鷺	X	11	+
Ardeola bacchus	Chinese Pond Heron	池鷺	X	147	+++++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	X	105	++++
Ardea cinerea	Grey Heron	蒼鷺	X	33	++++
Ardea alba	Great Egret	大白鷺	X	22	++
Egretta garzetta	Little Egret	小白鷺	X	189	+++++
Milvus migrans	Black Kite	黑鳶	X	4	+
Buteo japonicus	Eastern Buzzard	普通鵟	X	0	+
Rallina eurizonoides	Slaty-legged Crake	灰腳秧雞	X	1	+
Amaurornis phoenicurus	White-breasted Waterhen	白胸苦惡鳥	X	2	+
Himantopus himantopus	Black-winged Stilt	黑翅長腳鷸	X	5	++
Pluvialis fulva	Pacific Golden Plover	太平洋金斑鴴	X	2	+
Charadrius dubius	Little Ringed Plover	金眶鴴	X	0	+
Tringa stagnatilis	Marsh Sandpiper	澤鷸	X	4	+
Tringa nebularia	Common Greenshank	青腳鷸	X	16	+
Tringa ochropus	Green Sandpiper	白腰草鷸	X	3	+
Actitis hypoleucos	Common Sandpiper	磯鷸	X	33	++++
Spilopelia chinensis	Spotted Dove	珠頸斑鳩		135	+++++
Centropus sinensis	Greater Coucal	褐翅鴉鵑		4	+
Hierococcyx sparverioides	Large Hawk Cuckoo	大鷹鵑		0	+
Halcyon smyrnensis	White-throated Kingfisher	白胸翡翠	X	5	+

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Alcedo atthis	Common Kingfisher	普通翠鳥	X	7	+
Ceryle rudis	Pied Kingfisher	斑魚狗	X	2	+
Psittacula krameri	Rose-ringed Parakeet	紅領綠鸚鵡		5	+
Lanius schach	Long-tailed Shrike	棕背伯勞		4	+
Dicrurus macrocercus	Black Drongo	黑卷尾		0	+
Urocissa erythroryncha	Red-billed Blue Magpie	紅嘴藍鵲		5	+
Corvus torquatus	Collared Crow	白頸鴉	X	8	+
Corvus macrorhynchos	Large-billed Crow	大嘴烏鴉		2	+
Parus cinereus	Cinereous Tit	蒼背山雀		31	++++
Pycnonotus jocosus	Red-whiskered Bulbul	紅耳鵯		133	+++++
Pycnonotus sinensis	Chinese Bulbul	白頭鵯		128	+++++
Hirundo rustica	Barn Swallow	家燕		2	+
Phylloscopus proregulus	Pallas's Leaf Warbler	黃腰柳鶯		2	+
Phylloscopus inornatus	Yellow-browed Warbler	黃眉柳鶯		31	+++
Prinia flaviventris	Yellow-bellied Prinia	黃腹鷦鶯		7	+
Prinia inornata	Plain Prinia	純色鷦鶯		31	+++++
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		82	+++++
Garrulax perspicillatus	Masked Laughingthrush	黑臉噪鶥		22	++
Zosterops japonicus	Japanese White-eye	暗綠繡眼鳥		177	+++++
Acridotheres cristatellus	Crested Myna	八哥		419	+++++
Acridotheres tristis	Common Myna	家八哥		1	+

Scientific Names	Common Names	Chinese Names	Waterbird	Point Count Abundance	Transect Count Abundance
Gracupica nigricollis	Black-collared Starling	黑領椋鳥		166	+++++
Sturnia sinensis	White-shouldered Starling	灰背椋鳥		1	+
Copsychus saularis	Oriental Magpie Robin	鵲鴝		21	+++
Dicaeum cruentatum	Scarlet-backed Flowerpecker	朱背啄花鳥		1	+
Passer montanus	Eurasian Tree Sparrow	樹麻雀		139	++++
Lonchura punctulata	Scaly-breasted Munia	斑文鳥		8	+
Motacilla alba	White Wagtail	白鶺鴒		65	+++++
Anthus richardi	Richard's Pipit	理氏鷚		0	+
Anthus godlewskii	Olive-backed Pipit	樹鷚		0	+

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	3/9/2021	9:00	H	234	527	19
		12:00	L	293		24

2	10/9/2021	11:00	H	164	384	20
		16:30	L	220		23
3	17/9/2021	9:00	H	180	399	22
		12:00	L	219		29
4	24/9/2021	13:00	H	202	462	24
		16:00	L	260		24
5	28/9/2021	11:00	H	150	449	22
		15:00	L	299		30

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	3/9/2021	9:00	H	52	118
		12:00	L	66	
2	10/9/2021	11:00	H	39	95
		16:30	L	56	
3	17/9/2021	9:00	H	38	117
		12:00	L	79	
4	24/9/2021	13:00	H	68	145
		16:00	L	77	
5	28/9/2021	11:00	H	31	124
		15:00	L	93	
				Overall Total	**599**
				Average	**120**

Remarks: H: High Tide; L: Low Tide

T-Test Analysis for All Waterbirds

Baseline Data

Monthly Average Abundance (Sep)	43.75
Seasonal Average Abundance (Wet 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 = -2.132 (95% Confidence Level)

Crit. Value = -3.747 (99% Confidence Level)

Analysis for All Waterbirds			Confidence Level (Critical Value)	
			95%	99%
Abundance	Monthly	9.511	✓	✓
	Seasonal	9.457	✓	✓

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.

Abundance of Representative Waterbirds from Point Count											
Representative Species			**Recorded Abundance**							**Baseline Data**	
Species Name	**Common Name**	**Chinese Name**	**3/9/2021**	**10/9/2021**	**17/9/2021**	**24/9/2021**	**28/9/2021**	**Total**	**Average**	**Average (Sep)**	**Average (Wet Season)**
Egretta garzetta	Little Egret	小白鷺	39	30	44	42	34	189	38	16	20
Ardea cinerea	Grey Heron	蒼鷺	7	5	2	4	15	33	7	5	1
Ardeola bacchus	Chinese Pond Heron	池鷺	36	30	29	36	16	147	29	14	16
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0	0	0	0	0	0	0	0	0
Ardea alba	Great Egret	大白鷺	8	2	6	5	1	22	4	5	3
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	10	13	24	26	32	105	21	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 = -2.132 (95% Confidence Level)

Crit. Value = -3.747 (99% Confidence Level)

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall
	Monthly	95%	99%	Seasonal	95%	99%	
Little Egret	8.460	✓	✓	6.908	✓	✓	✓
Grey Heron*	N/A*						
Chinese Pond Heron	4.213	✓	✓	0.557	✓	✓	✓
Great Cormorant*	N/A*						
Great Egret	-0.466	✓	✓	1.087	✓	✓	✓
Eastern Cattle Egret	5.093	✓	✓	4.366	✓	✓	✓

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.

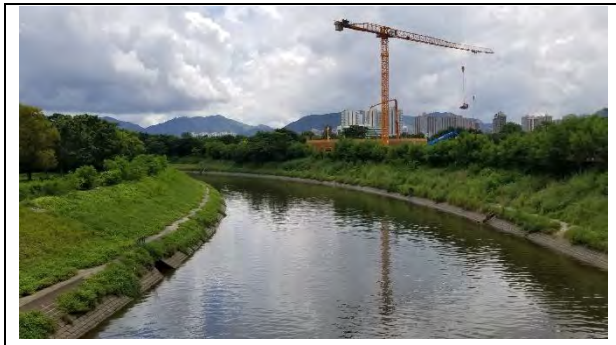
Appendix 5.6

Photo Record of Ecological Monitoring

Conditions of Rivers

	
Sheung Yue River (Taken on 3 September 2021)	**Sheung Yue River (Taken on 10 September 2021)**
	
Shek Sheung River (Taken on 24 September 2021)	**Shek Sheung River (Taken on 28 September 2021)**

Human Activities & Site Conditions

		
Excavation & Crane **(Project-related, taken on 3 September 2021)**	**Sheet-piling, generator & wielding works** **(Non-project-related, taken on 3 September 2021)**	**Excavation** **(Non-project-related, taken on 24 September 2021)**
		
Fishing **(Non-project-related, taken on 17 September 2021)**	**Playing with R.C. Boat** **(Non-project-related, taken on 28 September 2021)**	**Excavation** **(Non-project-related, taken on 24 September 2021)**

Appendix 5.7

Monthly Summary Waste Flow Table

Name of Department: DSD

Contract No. DC/2018/06

Monthly Summary Waste Flow Table for 2021

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	10.034	0.000	0.000	8.257	1.777	0.606	0.000	0.000	0.002	0.000	0.038
Feb	3.703	0.000	0.000	2.871	0.833	0.071	2.120	0.000	0.000	0.000	0.024
Mar	4.644	0.000	0.000	2.190	2.454	0.037	0.000	0.000	0.006	0.000	0.044
Apr	0.211	0.000	0.023	0.000	0.188	0.167	0.000	0.000	0.008	0.000	0.042
May	0.557	0.000	0.218	0.000	0.340	0.190	0.001	0.002	0.008	0.000	0.081
Jun	0.370	0.000	0.023	0.000	0.348	0.119	8.210	0.000	0.000	0.000	0.069
Sub-total	19.519	0.000	0.263	13.317	5.939	1.189	10.331	0.002	0.023	0.000	0.299
Jul	0.592	0.000	0.000	0.000	0.592	0.096	0.000	0.000	0.010	0.000	0.046
Aug	0.567	0.000	0.000	0.000	0.567	0.368	0.002	0.017	0.008	0.000	0.066
Sep	0.184	0.000	0.000	0.000	0.184	0.497	0.000	0.000	0.000	0.000	0.037
Oct											
Nov											
Dec											
Total	20.862	0.000	0.263	13.317	7.283	2.150	10.333	0.018	0.041	0.000	0.447

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 slurry and bentonite are disposed at Tseung Kwun O 137.
7. The non-inert C&D wastes are disposed at NENT.

Name of Department: DSD

Contract No. DC/2018/07

Monthly Summary Waste Flow Table for 2021

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	0.836	0.000	0.000	0.000	0.836	0.301	21.25	0.000	0.002	0.000	0.006
Feb	0.911	0.000	0.000	0.000	0.911	0.376	39.35	0.000	0.000	0.000	0.007
Mar	0.954	0.000	0.000	0.000	0.954	0.202	0.00	0.000	0.003	0.000	0.016
Apr	0.550	0.000	0.000	0.046	0.504	0.000	0.00	0.000	0.008	0.000	0.009
May	1.368	0.000	0.000	0.149	1.220	0.000	0.00	0.000	0.008	0.000	0.012
Jun	0.670	0.000	0.000	0.074	0.596	0.000	0.00	0.010	0.000	0.000	0.012
Sub-total	5.290	0.000	0.000	0.269	5.021	0.879	60.60	0.010	0.020	0.000	0.062
Jul	2.818	0.000	0.000	0.058	2.760	0.000	0.00	0.000	0.010	0.000	0.011
Aug	5.061	0.000	0.000	0.000	5.061	0.000	24.14	0.013	0.014	0.000	0.010
Sep	4.093	0.000	0.000	0.000	4.093	0.000	0.00	0.000	0.000	0.000	0.009
Oct											
Nov											
Dec											
Total	17.262	0.000	0.000	0.327	16.935	0.879	84.74	0.023	0.044	0.000	0.093

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 2021 (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	9.53 T	0	0	0	9.53 T	0	0	0	0	0	0
Feb	3.47T	0	0	0	3.47 T	0	0	0	0	0	0
Mar	14.79T	0	0	0	14.79T	0	0	0	0	0	0
Apr	7.21T	0	0	0	7.21T	0	0	0	0	0	0
May	11.34T	0	0	0	11.34T	0	0	0	0	0	0
June	328.08T	0	0	0	328.08T	0	0	0	0	0	0
Sub-total	374.42T	0	0	0	374.42T	0	0	0	0	0	0
July	579.34T	0	0	0	579.34T	0	0	0.131	0.007	0	0
Aug	64.14T	0	0	0	64.14T	0	0	0.11	0	0	6.13T
Sept	39.42T	0	0	0	39.42T	0	0	0	0	0	0
Oct											
Nov											
Dec											
Total	1057.32T	0	0	0	1057.32T	0	0	0.241	0.007	0	6.13T

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

Monthly Summary Waste Flow Table for 2021 (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	230.16	0	0	0	230.16	0	0	0	0	0	1.54
Feb	175.98	0	100	0	75.98	0	0	0	0	0	3.63
Mar	11.98	0	0	0	11.98	0	0	0	0	0	1.35
Apr	0	0	0	0	0	0	0	0	0	0	1.48
May	0	0	0	0	0	0	0	0	0	0	3.25
June	0	0	0	0	0	0	0	0	0	0	2.01
Sub-total	418.12	0	100	0	318.12	0	0	0	0	0	13.26
July	0	0	0	0	0	0	0	0	0	0	4.21
Aug	0	0	0	0	0	0	0	0	0	0	1.09
Sept	4.24	0	0	0	4.24	0	0	0	0	0	0
Oct											
Nov											
Dec											
Total	422.36	0	100	0	322.36	0	0	0	0	0	18.56

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.

Appendix 6.2

Summary of Notification of Exceedance

Summary for Notification of Exceedance

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

Appendix 8.1 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

Appendix 9.1

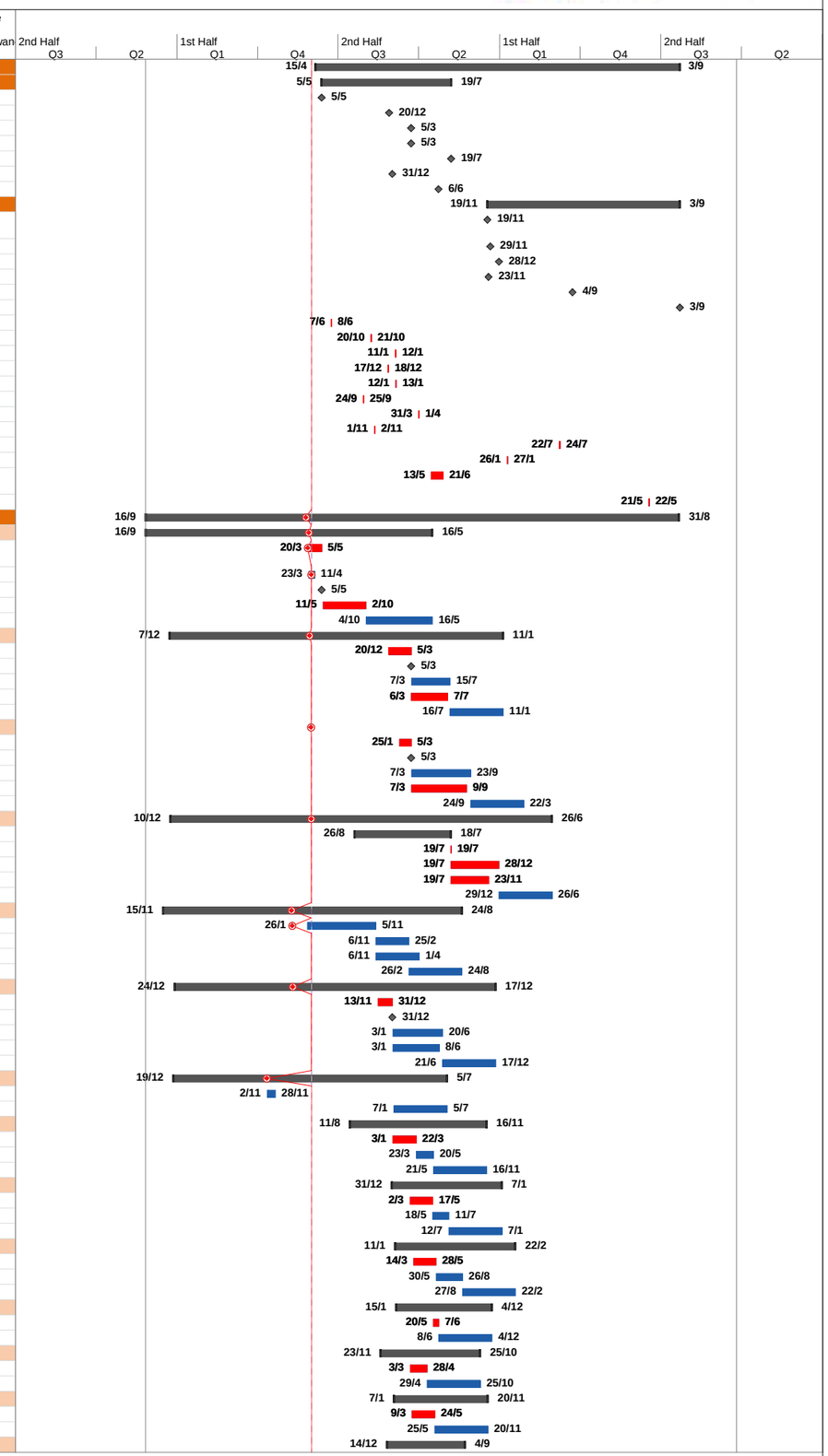
Construction Programme of Individual Contracts

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

Updated Programme (Status Date: 31/07/2021)

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	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowan
34	**PD-00000**	*	**Planned Completion - Key Date (cal. day)**			**1238 days**	**Thu 15/4/21**	**Tue 3/9/24**	**NA**	**NA**	**-55 days**			**0%**	
35	**PKD-00000**	*	**Planned Completion - Key Dates**			**440 days**	**Wed 5/5/21**	**Tue 19/7/22**	**NA**	**NA**	**-21 days**			**0%**	
36	PKD-01000	KD1A	KD1A			0 days	Wed 5/5/21	Wed 5/5/21	NA	NA	-17 days	250FF		0%	
37	PKD-02000	KD2A	KD2A			0 days	Mon 20/12/21	Mon 20/12/21	NA	NA	-96 days	556FF,559FF		0%	
38	PKD-03000	KD3A	KD3A			0 days	Sat 5/3/22	Sat 5/3/22	NA	NA	-87 days	272FF		0%	
39	PKD-04000	KD3B	KD3B			0 days	Sat 5/3/22	Sat 5/3/22	NA	NA	-99 days	295FF		0%	
40	PKD-05000	KD3C	KD3C			0 days	Tue 19/7/22	Tue 19/7/22	NA	NA	-188 days	315FF		0%	
41	PKD-06000	KD3D	KD3D			0 days	Fri 31/12/21	Fri 31/12/21	NA	NA	-118 days	347FF		0%	
42	PKD-07000	KD3E	KD3E			0 days	Mon 6/6/22	Mon 6/6/22	NA	NA	-88 days	362FF,369FF,376FF,383FI		0%	
43	**PCD-00000**	*	**Planned Completion - Section of the Works (cal. day)**			**522 days**	**Sat 19/11/22**	**Tue 3/9/24**	**NA**	**NA**	**-356 days**			**0%**	
44	PCD-01000	SW1	Section 1 of Works			0 days	Sat 19/11/22	Sat 19/11/22	NA	NA	-356 days	447FF,483FF,491FF,510FI		0%	
45	PCD-02000	SW2	Section 2 of Works			0 days	Tue 29/11/22	Tue 29/11/22	NA	NA	144 days	561FF,578FF		0%	
46	PCD-03000	SW3	Section 3 of Works			0 days	Wed 28/12/22	Wed 28/12/22	NA	NA	-23 days	171FF,317FF,331FF,349FI	526	0%	
47	PCD-04000	SW4	Section 4 of Works			0 days	Wed 23/11/22	Wed 23/11/22	NA	NA	-172 days	390FF,396FF,401FF,448FI		0%	
48	PCD-05000	SW5	Section 5 of Works			0 days	Mon 4/9/23	Mon 4/9/23	NA	NA	0 days	252FF,277FF,299FF,319FI	49,50	0%	
49	PCD-06000	DLP	Defect Liability Period			365 days	Tue 5/9/23	Tue 3/9/24	NA	NA	141 days	48		0%	
54	IWKD1A-01020	KD1A	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Mon 7/6/21	Tue 8/6/21	NA	NA	-43 days	53		0%	
60	IWKD2A-01020	KD2A	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Wed 20/10/21	Thu 21/10/21	NA	NA	-43 days	59		0%	
66	IWKD3A-01020	KD3A	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Tue 11/1/22	Wed 12/1/22	NA	NA	-26 days	65		0%	
72	IWKD3B-01020	KD3B	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Fri 17/12/21	Sat 18/12/21	NA	NA	-16 days	71		0%	
77	IWKD3C-01020	KD3C	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Wed 12/1/22	Thu 13/1/22	NA	NA	-37 days	76		0%	
82	IWKD3D-01020	KD3D	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Fri 24/9/21	Sat 25/9/21	NA	NA	-37 days	81		0%	
87	IWKD3E-01020	KD3E	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Thu 31/3/22	Fri 1/4/22	NA	NA	-37 days	86		0%	
92	IWSW1-01020	SW1	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Mon 1/11/21	Tue 2/11/21	NA	NA	-43 days	91		0%	
98	IWSW2-01020	SW2	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Sat 22/7/23	Mon 24/7/23	NA	NA	-43 days	97		0%	
104	IWSW3-01020	SW3	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Thu 26/1/23	Fri 27/1/23	NA	NA	-43 days	103		0%	
109	IWSW4-01010	SW4	Delay and Disruption of Works before Mar 2021	257, (69), (92), (112), (165)		33 days	Fri 13/5/22	Tue 21/6/22	NA	NA	-43 days	113	110	0%	
116	IWSW5-01020	SW5	Delay and Disruption of Works for the month of Mar 2021	(181)		2 days	Tue 21/5/24	Wed 22/5/24	NA	NA	-43 days	115		0%	
215	**CWPC-00000**	*	**Construction Works of Portion C of the Site**			**1463 days**	**Mon 16/9/19**	**Sat 31/8/24**	**Mon 16/9/19**	**NA**	**0 days**			**18%**	
216	**CUV1-00000**	*	**UV System No. 1 & Effluent Pumping Station No. 1 (1)**			**787 days**	**Mon 16/9/19**	**Mon 16/5/22**	**Mon 16/9/19**	**NA**	**389 days**			**61%**	
247	CUV1-09041	KD1A	Walls, Slabs and staircase Construction @+7.4mPD to 16.4mPD [Additional SP1-3 puddle (DN100 x 2 & DN80)		(108), (146), (148), (179), (182)	35 days	Sat 20/3/21	Wed 5/5/21	Sat 20/3/21	NA	-17 days	244	250,251,249	0%	
248	CUV1-10000	KD1A	Construction of Switch room			20 days	Tue 23/3/21	Sun 11/4/21	Tue 23/3/21	NA	3 days			50%	
250	CUV1-11000	**KD1A**	**Allow access to Contarctor DE/2018/03 for E&M Installation**			**0 days**	**Wed 5/5/21**	**Wed 5/5/21**	**NA**	**NA**	**-17 days**	**247**	**36FF**	**0%**	
251	CUV1-12000	SW1	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining		(95)	120 days	Tue 11/5/21	Sat 2/10/21	NA	NA	-20 days	208,135,247	252,44FF	0%	
252	CUV1-13000	SW5	Surrounding Site formation works and road works			180 days	Mon 4/10/21	Mon 16/5/22	NA	NA	389 days	251	48FF	0%	
253	**CSDC-00000**	*	**Sludge Digesters and Distribution Chamber (4)**			**916 days**	**Sat 7/12/19**	**Wed 11/1/23**	**Sat 7/12/19**	**NA**	**191 days**			**36%**	
270	CSDC-11050	KD3A	Construction of Roof Slab			60 days	Mon 20/12/21	Sat 5/3/22	NA	NA	-87 days	269	272,275,273,274,	0%	
272	CSDC-12000	**KD3A**	**Allow access to Contarctor DE/2018/03 for E&M Installation**			**0 days**	**Sat 5/3/22**	**Sat 5/3/22**	**NA**	**NA**	**-87 days**	**270**	**38FF**	**0%**	
275	CSDC-15000	SW3	ABWF Works & BS Works		(173)	105 days	Mon 7/3/22	Fri 15/7/22	NA	NA	114 days	208,135,270	277	0%	
276	CSDC-15500	SW4	Surrounding sewerage, utility and process pipe works			124 days	Sun 6/3/22	Thu 7/7/22	NA	NA	-70 days	270	47FF	0%	
277	CSDC-16000	SW5	Surrounding Site formation works and road works			180 days	Sat 16/7/22	Wed 11/1/23	NA	NA	236 days	275	48FF	0%	
278	**CSDB-00000**	*	**Sludge Dewatering Building (2)**			**875 days**	**Tue 26/11/19**	**Wed 9/11/22**	**Tue 26/11/19**	**NA**	**242 days**			**39%**	
294	CSDB-11040	KD3B	Roof Construction @ +25.65mPD			32 days	Tue 25/1/22	Sat 5/3/22	NA	NA	-119 days	293	416,295,387,298,	0%	
295	CSDB-12000	**KD3B**	**Allow access to Contarctor DE/2018/03 for E&M Installation**			**0 days**	**Sat 5/3/22**	**Sat 5/3/22**	**NA**	**NA**	**-99 days**	**294**	**39FF**	**0%**	
297	CSDB-14000	SW3	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining		(95), (173)	164 days	Mon 7/3/22	Fri 23/9/22	NA	NA	55 days	290,208,135	299	0%	
298	CSDB-14500	SW4	Surrounding sewerage, utility and process pipe works			153 days	Mon 7/3/22	Fri 9/9/22	NA	NA	-111 days	294	47FF	0%	
299	CSDB-15000	SW5	Surrounding Site formation works and road works			180 days	Sat 24/9/22	Wed 22/3/23	NA	NA	166 days	297	48FF	0%	
300	**CHPB-00000**	*	**Combined Heat Power Building (3)**			**1046 days**	**Tue 10/12/19**	**Mon 26/6/23**	**Tue 10/12/19**	**NA**	**59 days**			**13%**	
309	**CHPB-08000**	**KD3C**	**R.C. Structure**			**263 days**	**Thu 26/8/21**	**Mon 18/7/22**	**NA**	**NA**	**-188 days**	**205,206,133,307,204,308S**	**316,317,315**	**0%**	10
315	CHPB-09000	**KD3C**	**Allow access to Contarctor DE/2018/03 for E&M Installation**			**1 day**	**Tue 19/7/22**	**Tue 19/7/22**	**NA**	**NA**	**-188 days**	**309,314**	**40FF**	**0%**	
317	CHPB-11000	SW3	ABWF Works & BS Works		(95), (173)	135 days	Tue 19/7/22	Wed 28/12/22	NA	NA	-23 days	309,208,135	319,46FF	0%	
318	CHPB-11500	SW4	Surrounding sewerage, utility and process pipe works			107 days	Tue 19/7/22	Wed 23/11/22	NA	NA	-172 days	314	47FF	0%	
319	CHPB-12000	SW5	Surrounding Site formation works and road works			180 days	Thu 29/12/22	Mon 26/6/23	NA	NA	70 days	317	48FF	0%	
320	**CSPS-00000**	*	**Sewage Pumping Station (9)**			**821 days**	**Fri 15/11/19**	**Wed 24/8/22**	**Fri 15/11/19**	**NA**	**305 days**			**16%**	
330	CSPS-09000	KD3E	R.C. Structure & waterproofing works	(165), (181)	(63)	230 days	Tue 26/1/21	Fri 5/11/21	Tue 26/1/21	NA	50 days	328,133,204,205,206,329S	331,42FF,365SS-	0%	
331	CSPS-10000	SW3	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining			90 days	Sat 6/11/21	Fri 25/2/22	NA	NA	226 days	208,135,134,330	333,46FF	0%	3
332	CSPS-10500	SW4	Surrounding sewerage, utility and process pipe works			120 days	Sat 6/11/21	Fri 1/4/22	NA	NA	191 days	330	47FF	0%	
333	CSPS-11000	SW5	Surrounding Site formation works and road works			180 days	Sat 26/2/22	Wed 24/8/22	NA	NA	376 days	331	48FF	0%	
334	**CWS2-00000**	*	**Workshop No. 2 (5)**			**884 days**	**Tue 24/12/19**	**Sat 17/12/22**	**Tue 24/12/19**	**NA**	**209 days**			**14%**	
346	CWS2-08030	KD3D	Roof Construction @+19.00mPD			40 days	Sat 13/11/21	Fri 31/12/21	NA	NA	-118 days	345	348,349,347,404,	0%	
347	CWS2-09000	**KD3D**	**Allow access to Contarctor DE/2018/03 for E&M Installation**			**0 days**	**Fri 31/12/21**	**Fri 31/12/21**	**NA**	**NA**	**-118 days**	**346**	**41FF**	**0%**	
349	CWS2-11000	SW3	ABWF Works & BS Works		(95), (173)	135 days	Mon 3/1/22	Mon 20/6/22	NA	NA	135 days	208,135,346	351,46FF	0%	
350	CWS2-11500	SW4	Surrounding sewerage, utility and process pipe works			125 days	Mon 3/1/22	Wed 8/6/22	NA	NA	140 days	346	47FF	0%	
351	CWS2-12000	SW5	Surrounding Site formation works and road works			180 days	Tue 21/6/22	Sat 17/12/22	NA	NA	261 days	349	48FF	0%	
352	**CTHP-00000**	*	**Thermal Hydrolysis Pretreatment (6)**			**749 days**	**Thu 19/12/19**	**Tue 5/7/22**	**Thu 19/12/19**	**NA**	**348 days**			**35%**	
362	CTHP-09000	KD3E	R.C. Plinth	(165), (181)	225, (115)	0 days	Mon 2/11/20	Sat 28/11/20	Mon 2/11/20	Sat 28/11/20	0 days	360,265,361SS-2 emons	363,42FF	100%	
363	CTHP-10000	SW5	Surrounding Site formation works and road works			180 days	Fri 7/1/22	Tue 5/7/22	NA	NA	426 days	362,426SS	48FF	0%	
364	**CFCD-00000**	*	**Ferric Chloride Dosing Facilities (10)**			**377 days**	**Wed 11/8/21**	**Wed 16/11/22**	**NA**	**NA**	**-30 days**			**0%**	
369	CFCD-04000	KD3E	Steel Roof Structure (On-site Fabrication)			65 days	Mon 3/1/22	Tue 22/3/22	NA	NA	-30 days	368	370,42FF	0%	
370	CFCD-05000	SW3	ABWF Works & BS Works			45 days	Wed 23/3/22	Fri 20/5/22	NA	NA	160 days	369,208,135	371,46FF	0%	
371	CFCD-06000	SW5	Surrounding Site formation works and road works			180 days	Sat 21/5/22	Wed 16/11/22	NA	NA	292 days	370	48FF	0%	
372	**CFHB-00000**	*	**Fire Hydrant and Booster Pump Room (16)**			**302 days**	**Fri 31/12/21**	**Sat 7/1/23**	**NA**	**NA**	**-83 days**			**0%**	
376	CFHB-03000	KD3E	R.C. Structure & waterproofing works			60 days	Wed 2/3/22	Tue 17/5/22	NA	NA	-103 days	374	377,42FF,478,475	0%	5
377	CFHB-04000	SW3	ABWF Works & BS Works			45 days	Wed 18/5/22	Mon 11/7/22	NA	NA	118 days	376,208,135	378,46FF	0%	
378	CFHB-05000	SW5	Surrounding Site formation works and road works			180 days	Tue 12/7/22	Sat 7/1/23	NA	NA	240 days	377	48FF	0%	
379	**CTFS-00000**	*	**Transformer and Switchroom (15)**			**330 days**	**Tue 11/1/22**	**Wed 22/2/23**	**NA**	**NA**	**-101 days**			**0%**	
383	CTFS-03000	KD3E	R.C. Structure			60 days	Mon 14/3/22	Sat 28/5/22	NA	NA	-113 days	381,133,413,204,382SS-2	384,42FF,478,475	0%	5
384	CTFS-04000	SW3	ABWF Works & BS Works		(95)	75 days	Mon 30/5/22	Fri 26/8/22	NA	NA	78 days	383,208,135	385,46FF	0%	
385	CTFS-05000	SW5	Surrounding Site formation works and road works			180 days	Sat 27/8/22	Wed 22/2/23	NA	NA	194 days	384	48FF	0%	
386	**CWMC-00000**	*	**Water Meter Cabinet (11)**		**204**	**263 days**	**Sat 15/1/22**	**Sun 4/12/22**	**NA**	**NA**	**9 days**			**0%**	
390	CWMC-03000	SW4	ABWF Works & BS Works			15 days	Fri 20/5/22	Tue 7/6/22	NA	NA	-31 days	389,208,135	391,47FF	0%	
391	CWMC-04000	SW5	Surrounding Site formation works and road works			180 days	Wed 8/6/22	Sun 4/12/22	NA	NA	274 days	390	48FF	0%	
392	**CGH-00000**	*	**Guard House (14)**			**272 days**	**Tue 23/11/21**	**Tue 25/10/22**	**NA**	**NA**	**29 days**			**0%**	
396	CGH-03000	SW4	ABWF Works & BS Works		(95)	45 days	Thu 3/3/22	Thu 28/4/22	NA	NA	0 days	395,208,135	397,47FF	0%	
397	CGH-04000	SW5	Surrounding Site formation works and road works			180 days	Fri 29/4/22	Tue 25/10/22	NA	NA	314 days	396	48FF	0%	
398	**CCPS-00000**	*	**THP Coolers Pumping Station (21)**			**258 days**	**Fri 7/1/22**	**Sun 20/11/22**	**NA**	**NA**	**-11 days**			**0%**	
401	CCPS-02000	SW4	R.C. Structure			60 days	Wed 9/3/22	Tue 24/5/22	NA	NA	-20 days	399,133,204,400SS-2 emo	402,47FF	0%	5
402	CCPS-03000	SW5	Surrounding Site formation works and road works			180 days	Wed 25/5/22	Sun 20/11/22	NA	NA	288 days	401	48FF	0%	
403	**CWGB-00000**	*	**Waste Gas Buner (8)**			**213 days**	**Tue 14/12/21**	**Sun 4/9/22**	**NA**	**NA**	**-24 days**			**0%**	



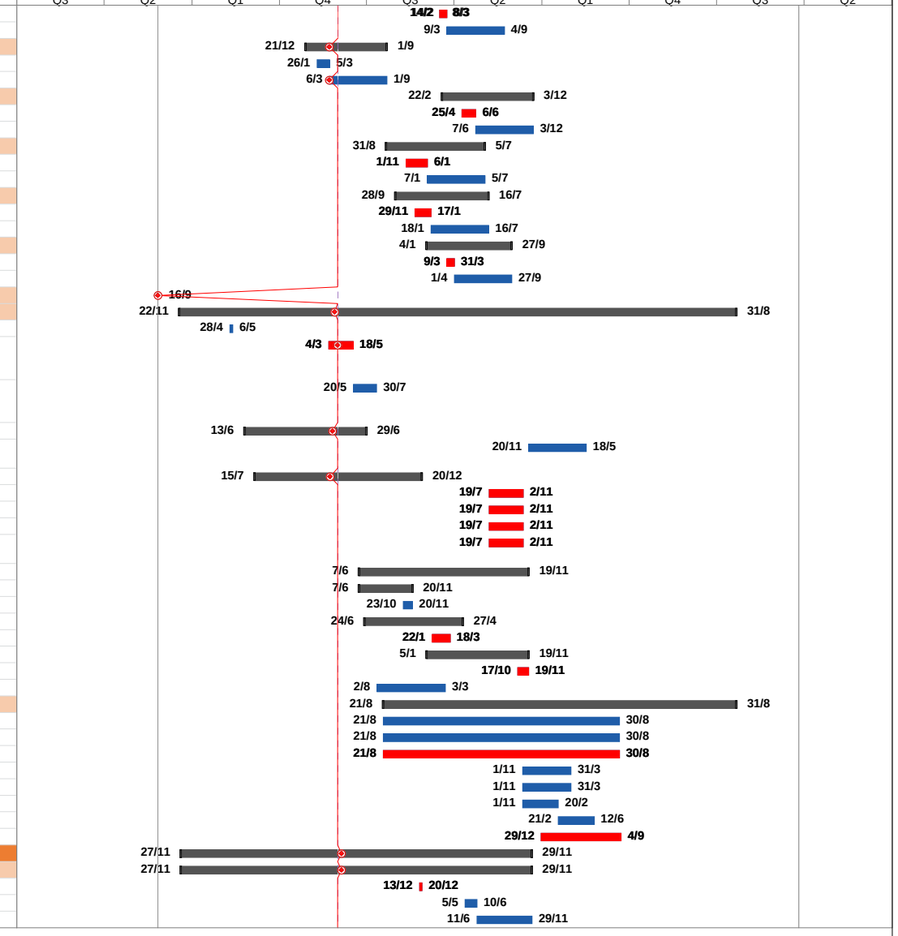
Critical Split | Task | Milestone | Summary | Critical

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

Updated Programme (Status Date: 31/07/2021)

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	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowan
407	CWGB-03000	KD3E	R.C. Plinth			20 days	Mon 14/2/22	Tue 8/3/22	NA	NA	-38 days	405,133,406SS-2 emons	437,408,42FF	0%	
408	CWGB-04000	SW5	Surrounding Site formation works and road works			180 days	Wed 9/3/22	Sun 4/9/22	NA	NA	365 days	407	48FF	0%	
409	**CPSW-00000**	*	**Plant Services Water System (20)**			**205 days**	**Mon 21/12/20**	**Wed 1/9/21**	**Mon 21/12/20**	**NA**	**594 days**			**14%**	
413	CPSW-03000	KD3E	Basement Construction @+1.20mPD		(136), (117)	0 days	Tue 26/1/21	Fri 5/3/21	Tue 26/1/21	Fri 5/3/21	0 days	411,133,412SS-2 emons	383,414,42FF	100%	
414	CPSW-04000	SW5	Surrounding Site formation works and road works			180 days	Sat 6/3/21	Wed 1/9/21	NA	NA	733 days	413	48FF	0%	
415	**CDS11-00000**	*	**Deodorization System No. 11 (18)**			**234 days**	**Tue 22/2/22**	**Sat 3/12/22**	**NA**	**NA**	**-108 days**			**0%**	
419	CDS11-03000	KD3E	R.C. Plinth			34 days	Mon 25/4/22	Mon 6/6/22	NA	NA	-119 days	417,133,418SS-2 emons	420,42FF,478,475	0%	
420	CDS11-04000	SW5	Surrounding Site formation works and road works			180 days	Tue 7/6/22	Sat 3/12/22	NA	NA	275 days	419	48FF	0%	
421	**CBGH-00000**	*	**Biogas Holder (7)**			**248 days**	**Tue 31/8/21**	**Tue 5/7/22**	**NA**	**NA**	**12 days**			**0%**	
425	CBGH-03000	KD3E	R.C. Plinth			55 days	Mon 1/11/21	Thu 6/1/22	NA	NA	0 days	423,133,424SS-2 emons	426,42FF,478,475	0%	
426	CBGH-04000	SW5	Surrounding Site formation works and road works			180 days	Fri 7/1/22	Tue 5/7/22	NA	NA	426 days	425	48FF,363SS	0%	
427	**CH2S-00000**	*	**H2S Removal System (12)**			**235 days**	**Tue 28/9/21**	**Sat 16/7/22**	**NA**	**NA**	**-15 days**			**0%**	
431	CH2S-03000	KD3E	R.C. Plinth			40 days	Mon 29/11/21	Mon 17/1/22	NA	NA	-36 days	429,430SS-2 emons	432,42FF,399,43	0%	
432	CH2S-04000	SW5	Surrounding Site formation works and road works			180 days	Tue 18/1/22	Sat 16/7/22	NA	NA	415 days	431	48FF	0%	
433	**CDS12-00000**	*	**Deodorization System No. 12 (19)**			**217 days**	**Tue 4/1/22**	**Tue 27/9/22**	**NA**	**NA**	**-24 days**			**0%**	
437	CDS12-03000	KD3E	R.C. Plinth			20 days	Wed 9/3/22	Thu 31/3/22	NA	NA	-38 days	435,133,407,436SS-2 emo	438,42FF	0%	
438	CDS12-04000	SW5	Surrounding Site formation works and road works			180 days	Fri 1/4/22	Tue 27/9/22	NA	NA	342 days	437	48FF	0%	
439	CUPH-00000	*	Underpass & Pump House		332	0 days	Mon 16/9/19	Mon 16/9/19	NA	NA	0 days			0%	
440	**CPWU-00000**	*	**Pipe Works and Utility Installation**			**1407 days**	**Fri 22/11/19**	**Sat 31/8/24**	**Fri 22/11/19**	**NA**	**0 days**			**11%**	
445	CPWU-01130	KD1A	Stage 1 - Backfilling Works for Drainage Diversion			9 days	Tue 28/4/20	Wed 6/5/20	Tue 28/4/20	Wed 6/5/20	0 days		229	100%	
446	CPWU-01140	KD1A	Stage 2 - Drainage Diversion of Drainage b/w MHD26 and SMHH1003177A, to Abandon of Exisitng Drainage Culvert (1 Cell, 1000mm x 1150mm) within Portion C-1A & C-1B - Part 1	(181)		60 days	Thu 4/3/21	Tue 18/5/21	Thu 4/3/21	NA	-28 days	241	447	40%	
447	CPWU-01150	SW1	Stage 2 - Drainage Diversion of Drainage b/w MHD26 and SMHH1003177A, to Abandon of Exisitng Drainage Culvert (1 Cell, 1000mm x 1150mm) outside Portion C-1A & C-1B - Part 2			60 days	Thu 20/5/21	Fri 30/7/21	NA	NA	33 days	446	44FF	0%	
448	CPWU-01200	**SW4**	**Trenchless Work for Pipe Installation**			**309 days**	**Sat 13/6/20**	**Tue 29/6/21**	**Sat 13/6/20**	**NA**	**502 days**		**47FF**	**64%**	
471	CPWU-01020	SW5	Surrounding Site formation works and road works			180 days	Sun 20/11/22	Thu 18/5/23	NA	NA	109 days	470,478,479,480,481,482	48FF	0%	
475	CPWU-02111	**SW1**	**Effluent Pipe(approx. 70m, dia 300-1600)**			**524 days**	**Wed 15/7/20**	**Mon 20/12/21**	**Wed 15/7/20**	**NA**	**338 days**			**79%**	
478	CPWU-02120	SW4	Remaining Effluent Pipes & testing works			89 days	Tue 19/7/22	Wed 2/11/22	NA	NA	-154 days	138,288,341,197,200,271,2	47FF,471	0%	
479	CPWU-02130	SW4	Stormdrain Pipeworks & testing works			89 days	Tue 19/7/22	Wed 2/11/22	NA	NA	-154 days	138,288,341,188,271,294,2	47FF,471	0%	
480	CPWU-02140	SW4	Sewerage Pipeworks, manhole, protective lining & testing works		210	89 days	Tue 19/7/22	Wed 2/11/22	NA	NA	-154 days	138,288,341,194,271,294,2	47FF,471	0%	
481	CPWU-02150	SW4	Watermain Pipeworks & testing works		205, 206, 207, 216, 219, 220, 221, 221-1, 222	89 days	Tue 19/7/22	Wed 2/11/22	NA	NA	-154 days	138,288,341,191,194,271,2	47FF,471	0%	
482	**CPWU-02160**	**SW4**	Cable & Other Underground Utility Pipeworks			**434 days**	**Mon 7/6/21**	**Sat 19/11/22**	**NA**	**NA**	**-342 days**	**138,288,341**	**471**	**0%**	
483	**CPWU-02161**	**SW1**	**Portion C1-B, Area 1**			**139 days**	**Mon 7/6/21**	**Sat 20/11/21**	**NA**	**NA**	**273 days**	**249**	**44FF**	**0%**	
490	CPWU-02161g	SW1	Road works (footpath 25m)			25 days	Sat 23/10/21	Sat 20/11/21	NA	NA	273 days	489	477	0%	
491	**CPWU-02162**	**SW1**	**Portion C1-B, Area 2**			**250 days**	**Thu 24/6/21**	**Wed 27/4/22**	**NA**	**NA**	**-356 days**		**44FF**	**0%**	
509	CPWU-02162j4	SW1	Road works (footpath & carriageway)			45 days	Sat 22/1/22	Fri 18/3/22	NA	NA	-356 days	508,507	511FS-60 days	0%	
510	**CPWU-02163**	**SW1**	**Portion C1-1B, Area 3**			**260 days**	**Wed 5/1/22**	**Sat 19/11/22**	**NA**	**NA**	**-356 days**		**44FF**	**0%**	
516	CPWU-02163f	SW1	Road Works (footpath & carriageway)			30 days	Mon 17/10/22	Sat 19/11/22	NA	NA	-356 days	515		0%	
517	CPWU-02200	SW4	Pipe Bridge No.1			175 days	Mon 2/8/21	Thu 3/3/22	NA	NA	44 days	2	47FF	0%	
518	**CRWL-00000**	*	**Remaining Works & Landscape Works**			**891 days**	**Sat 21/8/21**	**Sat 31/8/24**	**NA**	**NA**	**0 days**			**0%**	
519	CRWL-01000	SW5	Irrigation System		218	600 days	Sat 21/8/21	Wed 30/8/23	NA	NA	4 days	141	48FF	0%	
520	CRWL-02000	SW5	Hard Landscape Works			600 days	Sat 21/8/21	Wed 30/8/23	NA	NA	4 days	141	48FF	0%	
521	CRWL-03000	SW5	Soft Landscape Works			600 days	Sat 21/8/21	Wed 30/8/23	NA	NA	0 days	141	527,48FF	0%	
522	CRWL-04000	SW5	Outfall for Effluent Pipes			124 days	Tue 1/11/22	Fri 31/3/23	NA	NA	126 days	180	48FF	0%	
523	CRWL-05000	SW5	Slope Formation Works near Outfall			124 days	Tue 1/11/22	Fri 31/3/23	NA	NA	126 days	180	48FF	0%	
524	CRWL-06000	SW5	Removal of invasive trees along River Embankment		(37)	90 days	Tue 1/11/22	Mon 20/2/23	NA	NA	70 days	180	525	0%	
525	CRWL-07000	SW5	Retaining Wall along River Embankment, street furniture & road works			90 days	Tue 21/2/23	Mon 12/6/23	NA	NA	70 days	180,524	48FF	0%	
526	CRWL-08000	SW5	Remaining Site formation works, road works and boundary fence wall			250 days	Thu 29/12/22	Mon 4/9/23	NA	NA	0 days	46	48FF	0%	
528	**CWPA-00000**	*	**Construction of Portion A of the Site**			**891 days**	**Wed 27/11/19**	**Tue 29/11/22**	**Wed 27/11/19**	**NA**	**144 days**			**42%**	
529	**C132S-00000**	*	**132kV Substation**			**891 days**	**Wed 27/11/19**	**Tue 29/11/22**	**Wed 27/11/19**	**NA**	**144 days**			**42%**	
559	C132SI-31000	KD2A	**Handover to CLP for Electrical System Installation**			7 days	Mon 13/12/21	Mon 20/12/21	NA	NA	-96 days	557,558	560,37FF	0%	
561	C132SI-33000	SW2	Inspection and Handover to CLP			30 days	Thu 5/5/22	Fri 10/6/22	NA	NA	144 days	560	578,45FF	0%	
578	C132SE-03000	SW2	Construction of New Boundary Wall		(155)	143 days	Sat 11/6/22	Tue 29/11/22	NA	NA	144 days	561,577	45FF	0%	

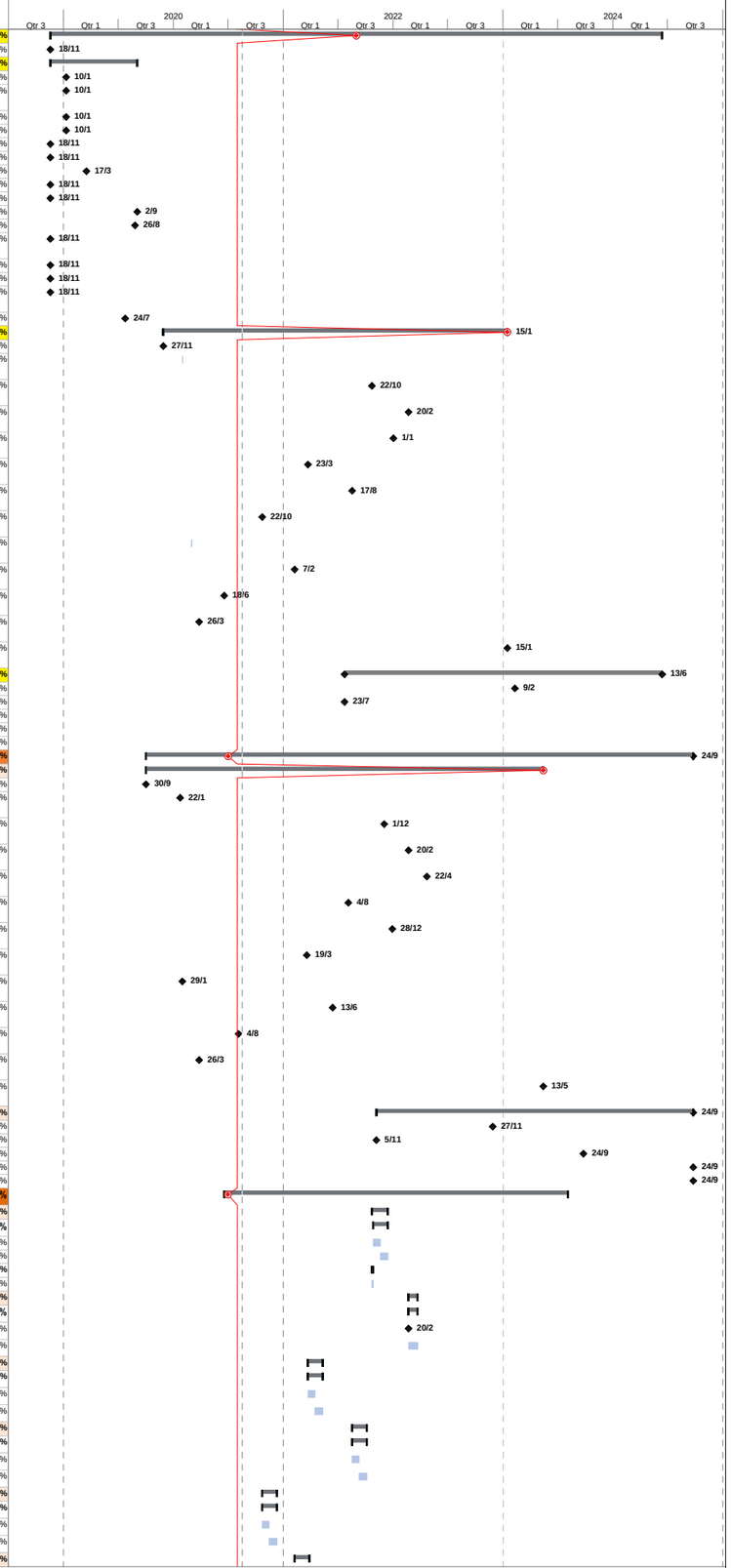


Critical Split | Task | Milestone | Summary | Critical

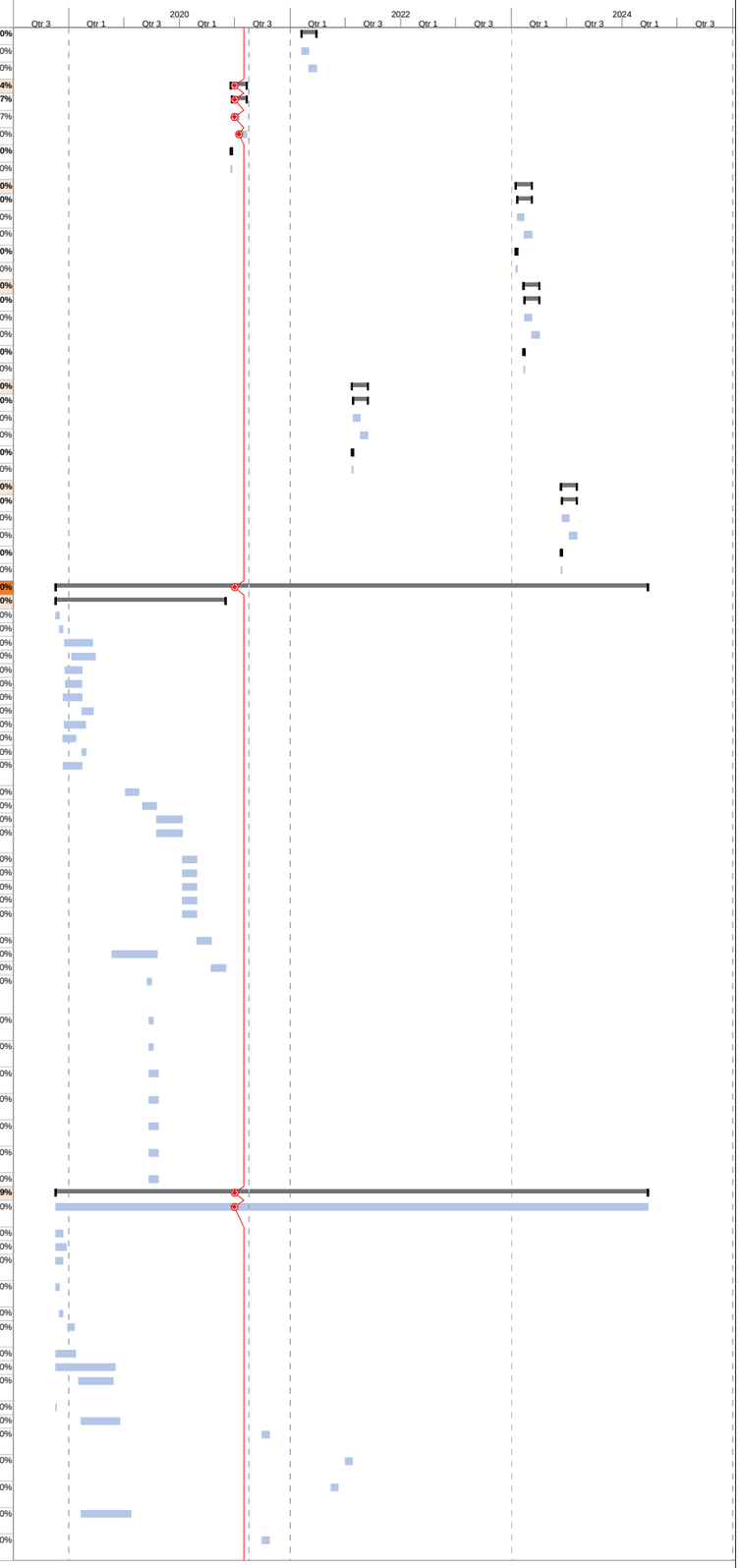
Contract No. DC/2018/07
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1

Revised Works Programme (Status Date: 31/07/2021)

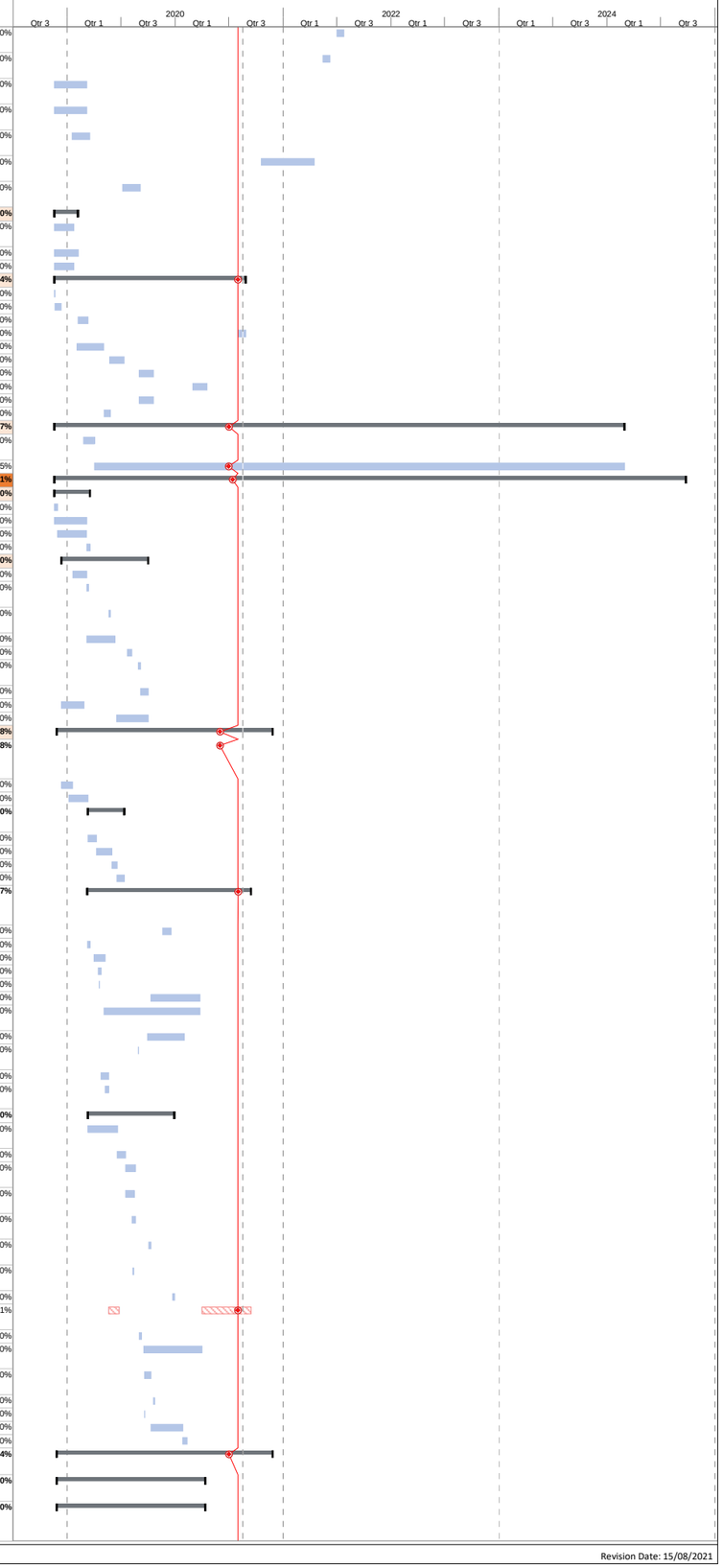
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
1	**CD-1000**		**Contract Dates**			**1585 days**	**Mon 18/11/19**	**Thu 27/3/25**	**1651.5 days**	**Mon 18/11/19**	**Fri 13/6/25**	**Mon 18/11/19**	**NA**			**88.5 days**		**0%**
2	CD-1010		Starting Date			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19		8,9,13FS+290 days,14FS+311 days	0 days		100%
3	**CAD-1000**		**Access Dates (cal. day)**			**310 days**	**Mon 18/11/19**	**Wed 23/9/20**	**289 days**	**Mon 18/11/19**	**Wed 2/9/20**	**Mon 18/11/19**	**Wed 2/9/20**			**0 days**		**100%**
4	CAD-1010		Portion B-1 (Access Road AR3)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	2	201	0 days		100%
5	CAD-1020		Portion B-1A (Area for the works for Sidestream Treatment Facilities by Others			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	2		0 days		100%
6	CAD-1030		Portion B-2 (Inlet Works No.1)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	2	295,306	0 days		100%
7	CAD-1040		Portion B-2A (Area for the pipe-jacking works by others)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	Fri 10/1/20	2		0 days		100%
8	CAD-1050		Portion B-3 (Primary Sedimentation Tanks No. 1-4)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	335	0 days		100%
9	CAD-1060		Portion B-4 (Bioreactor No. 2A & 2B)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	353	0 days		100%
10	CAD-1070		Portion B-5 (Membrane Facilities Building No.2)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Tue 17/3/20	Tue 17/3/20	Tue 17/3/20	Tue 17/3/20	2	402,419,425	0 days		100%
11	CAD-1080		Portion B-6 (SAS Pumping Station)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	434	0 days		100%
12	CAD-1090		Portion B-7 (Ancillary structures)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	461	0 days		100%
13	CAD-1100		Portion B-7A (Alternation works for existing Power House)			0 days	Wed 2/9/20	Wed 2/9/20	0 days	Wed 2/9/20	Wed 2/9/20	Wed 2/9/20	Wed 2/9/20	2FS+290 days	539FS-1 day,29FS+179 days	0 days		100%
14	CAD-1110		Portion B-8 (Alternation for existing Membrane Facilities Building No.1)			0 days	Tue 22/9/20	Tue 22/9/20	0 days	Wed 26/8/20	Wed 26/8/20	Wed 26/8/20	Wed 26/8/20	2FS+311 days	541FS-1 day	0 days		100%
15	CAD-1020		Portion B-8A (Alternation of air supply main for existing Air Blower House No.2)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	532	0 days		100%
16	CAD-1130		Portion B-9 (remainder works in Zone B)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	542,556	0 days		100%
17	CAD-1140		Portion B-9A (Area for the pipe-jacking works by others)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2		0 days		100%
18	CAD-1150		Portion B-9B (Area for underground pipework modification and connection works by others)			0 days	Mon 18/11/19	Mon 18/11/19	0 days	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2		0 days		100%
19	CAD-1160		Portion B-9C (Area for the works for pipeworks)			0 days	Wed 22/7/20	Wed 22/7/20	0 days	Fri 24/7/20	Fri 24/7/20	Fri 24/7/20	Fri 24/7/20	2FS+151 days		0 days		100%
20	**CKD-1000**		**Key Dates (cal. day)**			**1440 days**	**Tue 19/11/19**	**Sat 28/10/23**	**1144 days**	**Fri 27/11/20**	**Mon 15/1/24**	**Fri 27/11/20**	**NA**			**618 days**		**99%**
21	CKD-1010		KD1A completion of AR3 in Portion B-1 (375 days after starting date)			300 days	Tue 19/11/19	Sun 13/9/20	0 days	Fri 27/11/20	Fri 27/11/20	Fri 27/11/20	Fri 27/11/20	2FS+376 days		0 days		100%
22	CKD-1020		KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2 (438.5 days after starting date)			360 days	Tue 19/11/19	Thu 12/11/20	1 day	Sat 30/1/21	Sat 30/1/21	Sat 30/1/21	Sat 30/1/21	2FS+439.5 days		0 days		100%
23	CKD-1030		KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2 (1068.5 days after starting date)			990 days	Tue 19/11/19	Thu 4/8/22	0 days	Sat 22/10/22	Sat 22/10/22	NA	NA	2FS+1069.5 days	67	1056.5 days		0%
24	CKD-1040		KD1D completion of civil and structural works of Primary Sedimentation Tanks in Portion B-3 (1190days after starting date)			1190 days	Tue 19/11/19	Mon 20/2/23	0 days	Mon 20/2/23	Mon 20/2/23	NA	NA	2FS+1191 days	70	947 days		0%
25	CKD-1050		KD1E completion of civil and structural works of Bioreactor in Portion B-4 (1140days after starting date)			1140 days	Tue 19/11/19	Sun 1/1/23	0 days	Sun 1/1/23	Sun 1/1/23	NA	NA	2FS+1141 days		997 days		0%
26	CKD-1060		KD1F completion of civil and structural works of MFB from B2 floor to 1st floor level in Portion B-5 (855.5 days after starting date)			800 days	Tue 19/11/19	Wed 26/1/22	0 days	Wed 23/3/22	Wed 23/3/22	NA	NA	2FS+856.5 days	74	1273.5 days		0%
27	CKD-1070		KD1G completion of civil and structural works of MFB in Portion B-5 (1002.5 days after starting date)			950 days	Tue 19/11/19	Sat 25/6/22	0 days	Wed 17/8/22	Wed 17/8/22	NA	NA	2FS+1003.5 days	78	1126.5 days		0%
28	CKD-1080		KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6 (703.5 days after starting date)			630 days	Tue 19/11/19	Mon 9/8/21	0 days	Fri 22/10/21	Fri 22/10/21	NA	NA	2FS+704.5 days	82	1425.5 days		0%
29	CKD-1090		KD1I completion alternation works for existing Power House in Portion B-7A (179days after access date of B-7A)			150 days	Fri 4/9/20	Sun 31/1/21	1 day	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	Mon 1/3/21	13FS+179 days		0 days		100%
30	CKD-1100		KD1J completion of auxiliary facilites in Portion B-7 (811.5 days after starting date)			800 days	Tue 19/11/19	Wed 26/1/22	0 days	Mon 7/2/22	Mon 7/2/22	NA	NA	2FS+812.5 days	86	1317.5 days		0%
31	CKD-1110		KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9 (577.5 days after starting date)			495 days	Tue 19/11/19	Sat 27/3/21	0 days	Fri 18/6/21	Fri 18/6/21	Fri 18/6/21	Fri 18/6/21	2FS+578.5 days	93	0 days		100%
32	CKD-1120		KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A (494 days after starting date)			420 days	Tue 19/11/19	Mon 11/1/21	0 days	Fri 26/3/21	Fri 26/3/21	Fri 26/3/21	Fri 26/3/21	2FS+495 days		0 days		100%
33	CKD-1130		KD3A completion of all utilities and road works (1519 days after starting date)			1440 days	Tue 19/11/19	Sat 28/10/23	0 days	Mon 15/1/24	Mon 15/1/24	NA	NA	2FS+1520 days	99	606 days		0%
34	**CCD-1000**		**Completion Date (cal. Day)**			**1956 days**	**Tue 19/11/19**	**Thu 27/3/25**	**1056 days**	**Sat 23/7/22**	**Fri 13/6/25**	**Sat 23/7/22**	**NA**			**50.5 days**		**0%**
35	CCD-1010		Section 1 of the Works (1,543.5 after starting date)			1460 days	Tue 19/11/19	Fri 17/11/23	0 days	Fri 9/2/24	Fri 9/2/24	NA	NA	2FS+1544.5 days	105	0 days		0%
36	CCD-1020		Section 2 of the Works (977.5 after starting date)			900 days	Tue 19/11/19	Fri 6/5/22	0 days	Sat 23/7/22	Sat 23/7/22	NA	NA	2FS+978.5 days	111	0 days		0%
37	CCD-1030		Section 3 of the Works (1,667.5 after starting date)			1590 days	Tue 19/11/19	Tue 26/3/24	0 days	Wed 12/6/24	Wed 12/6/24	Wed 12/6/24	NA	2FS+1668.5 days	39FS+1 day,117,38FS+1 day	-77.5 days		99%
38	CCD-1040		Defects Liability Period			365 days	Wed 27/3/24	Thu 27/3/25	365 days	Thu 13/6/24	Fri 13/6/25	NA	NA	37FS+1 day		0 days		0%
39	CCD-1050		Landscape Establishment Works			365 days	Wed 27/3/24	Thu 27/3/25	365 days	Thu 13/6/24	Fri 13/6/25	NA	NA	37FS+1 day		103.5 days		0%
40	**PD-1000**	*	**Planned Completion**			**1686 days**	**Fri 14/8/20**	**Thu 27/3/25**	**1820 days**	**Wed 30/9/20**	**Wed 24/9/25**	**Wed 30/9/20**	**NA**			**0 days**		**3%**
41	**PCD-1000**	*	**Planned Completion - Key Dates (cal. day)**			**1170 days**	**Fri 14/8/20**	**Sat 28/10/23**	**1321 days**	**Wed 30/9/20**	**Mon 13/5/24**	**Wed 30/9/20**	**NA**			**-119 days**		**99%**
42	PKD-1010	KD1A	KD1A completion of AR3 in Portion B-1 (300days after starting date)			0 days	Sat 12/9/20	Sat 12/9/20	0 days	Wed 30/9/20	Wed 30/9/20	Wed 30/9/20	Wed 30/9/20	210FF		0 days		100%
43	PCD-1020	KD1B	KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2 (360days after starting date)			0 days	Fri 14/8/20	Fri 14/8/20	0 days	Fri 22/1/21	Fri 22/1/21	Fri 22/1/21	Fri 22/1/21	286FF,291FF,273FF		0 days		100%
44	PCD-1030	KD1C	KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2 (990days after starting date)			0 days	Thu 4/8/22	Thu 4/8/22	0 days	Thu 1/12/22	Thu 1/12/22	NA	NA	330FF,322FF,248FF,294FF,212FF,250FF		-40 days		0%
45	PCD-1040	KD1D	KD1D completion of civil and structural works of Primary Sedimentation Tanks in Portion B-3 (1190days after starting date)			0 days	Mon 20/2/23	Mon 20/2/23	0 days	Mon 20/2/23	Mon 20/2/23	NA	NA	349FF,348FF,351FF,333FF		0 days		0%
46	PCD-1050	KD1E	KD1E completion of civil and structural works of Bioreactor in Portion B-4 (1,140days after starting date)			0 days	Sat 31/12/22	Sat 31/12/22	0 days	Sat 22/4/23	Sat 22/4/23	NA	NA	391FF,397FF,393FF,396FF,392FF		-111 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 (800days after starting date)			0 days	Tue 25/1/22	Tue 25/1/22	0 days	Thu 4/8/22	Thu 4/8/22	NA	NA	430FF		-135 days		0%
48	PCD-1070	KD1G	KD1G completion of civil and structural works of MFB in Portion B-5 (950days after starting date)			0 days	Sat 25/6/22	Sat 25/6/22	0 days	Wed 28/12/22	Wed 28/12/22	NA	NA	431FF		-133 days		0%
49	PCD-1080	KD1H	KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6 (630days after starting date)			0 days	Mon 9/8/21	Mon 9/8/21	0 days	Sat 19/3/22	Sat 19/3/22	NA	NA	459FF,458FF		-148 days		0%
50	PCD-1090	KD1I	KD1I completion alternation works for existing Power House in Portion B-7A (150days after access date of B-7A)			0 days	Sat 30/1/21	Sat 30/1/21	1 day	Fri 29/1/21	Fri 29/1/21	Fri 29/1/21	Fri 29/1/21	539FF		0 days		100%
51	PCD-1100	KD1J	KD1J completion of auxiliary facilites in Portion B-7 (800days after starting date)			0 days	Wed 26/1/22	Wed 26/1/22	0 days	Mon 13/6/22	Mon 13/6/22	NA	NA	496FF,495FF,521FF,520FF,513FF,512FF		-126 days		0%
52	PCD-1110	KD2A	KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9 (495days after starting date)			0 days	Sat 27/3/21	Sat 27/3/21	0 days	Wed 4/8/21	Wed 4/8/21	NA	NA	545FF,543FF		-47 days		0%
53	PCD-1120	KD2B	KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A (420days after starting date)			0 days	Thu 3/9/20	Thu 3/9/20	1 day	Fri 26/3/21	Fri 26/3/21	Fri 26/3/21	Fri 26/3/21	532FF,536FF,537FF,538FF		0 days		100%
54	PCD-1130	KD3A	KD3A completion of all utilities and road works (1440days after starting date)			0 days	Sat 28/10/23	Sat 28/10/23	0 days	Mon 13/5/24	Mon 13/5/24	NA	NA	555FF,557FF		-119 days		0%
55	**PCD-1000**	*	**Planned Completion Date (cal. Day)**			**1056 days**	**Fri 6/5/22**	**Thu 27/3/25**	**1054 days**	**Sat 5/11/22**	**Wed 24/9/25**	**NA**	**NA**			**-106 days**		**0%**
56	PCD-1010	SW1	Section 1 of the Works (1,460 after starting date)			0 days	Wed 23/8/23	Wed 23/8/23	0 days	Mon 27/11/23	Mon 27/11/23	NA	NA	522FF,514FF,477FF,504FF,488FF,460FF		73 days		0%
57	PCD-1020	SW2	Section 2 of the Works (900 after starting date)			0 days	Fri 6/5/22	Fri 6/5/22	0 days	Sat 5/11/22	Sat 5/11/22	NA	NA	549FF,399FF,433FF,352FF,334FF,550FF		-106 days		0%
58	PCD-1030	SW3	Section 3 of the Works (1,590 after starting date)			0 days	Tue 26/3/24	Tue 26/3/24	0 days	Tue 24/9/24	Tue 24/9/24	NA	NA	558FF,559FF,541FF,540FF		-105 days		0%
59	PCD-1040	DLP	Defects Liability Period			0 days	Thu 27/3/25	Thu 27/3/25	0 days	Wed 24/9/25	Wed 24/9/25	NA	NA	560FF,153FF		0 days		0%
60	PCD-1050		Landscape Establishment Works			0 days	Thu 27/3/25	Thu 27/3/25	0 days	Wed 24/9/25	Wed 24/9/25	NA	NA	560FF		0 days		0%
61	**ET-1000**		**Effects from Inclement Weather and Other Time Affected Events**			**0 days**	**NA**	**NA**	**1143 days**	**Fri 18/6/21**	**Sun 4/8/24**	**Fri 18/6/21**	**NA**			**416.5 days**		**2%**
62	**ET1C-1000**		**Effects to KD1C**			**0 days**	**NA**	**NA**	**53 days**	**Sat 22/10/22**	**Wed 14/12/22**	**NA**	**NA**			**1015.5 days**		**0%**
63	**ET1C-1100**		**Inclement Weather to KD1C (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Wed 26/10/22**	**Wed 14/12/22**	**NA**	**NA**			**1015.5 days**		**0%**
64	ET1C-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Wed 26/10/22	Fri 18/11/22	NA	NA	67	65	1015.5 days		0%
65	ET1C-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Fri 18/11/22	Wed 14/12/22	NA	NA	64		1015.5 days		0%
66	**ET1C-1200**		**Other Events to KD1C (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Sat 22/10/22**	**Wed 26/10/22**	**NA**	**NA**			**1015.5 days**		**0%**
67	ET1C-1210		Special working arrangement due to COVID-19 in January 2020			0 days	NA	NA	4 days	Sat 22/10/22	Wed 26/10/22	NA	NA	23	64	1056.5 days		0%
68	**ET1D-1000**		**Effects to KD1D**			**0 days?**	**NA**	**NA**	**26 days**	**Mon 20/2/23**	**Wed 22/3/23**	**NA**	**NA**			**749 days**		**0%**
69	**ET1D-1100**		**Inclement Weather to KD1D (cal. Day)**			**0 days?**	**NA**	**NA**	**26 days**	**Mon 20/2/23**	**Wed 22/3/23**	**NA**	**NA**			**749 days**		**0%**
70	ET1D-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	0 days	Mon 20/2/23	Mon 20/2/23	NA	NA	24	71	749 days		0%
71	ET1D-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Tue 21/2/23	Wed 22/3/23	NA	NA	70		749 days		0%
72	**ET1F-1000**		**Effects to KD1F**			**0 days**	**NA**	**NA**	**49 days**	**Wed 23/3/22**	**Wed 11/5/22**	**NA**	**NA**			**1232.5 days**		**0%**
73	**ET1F-1100**		**Inclement Weather to KD1F (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Wed 23/3/22**	**Wed 11/5/22**	**NA**	**NA**			**1232.5 days**		**0%**
74	ET1F-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Wed 23/3/22	Fri 15/4/22	NA	NA	26	75	1232.5 days		0%
75	ET1F-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Fri 15/4/22	Wed 11/5/22	NA	NA	74		1232.5 days		0%
76	**ET1G-1000**		**Effects to KD1G**			**0 days**	**NA**	**NA**	**49 days**	**Wed 17/8/22**	**Wed 5/10/22**	**NA**	**NA**			**1085.5 days**		**0%**
77	**ET1G-1100**		**Inclement Weather to KD1G (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Wed 17/8/22**	**Wed 5/10/22**	**NA**	**NA**			**1085.5 days**		**0%**
78	ET1G-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Wed 17/8/22	Fri 9/9/22	NA	NA	27	79	1085.5 days		0%
79	ET1G-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Fri 9/9/22	Wed 5/10/22	NA	NA	78		1085.5 days		0%
80	**ET1H-1000**		**Effects to KD1H**			**0 days**	**NA**	**NA**	**49 days**	**Fri 22/10/21**	**Fri 10/12/21**	**NA**	**NA**			**1384.5 days**		**0%**
81	**ET1H-1100**		**Inclement Weather to KD1H (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Fri 22/10/21**	**Fri 10/12/21**	**NA**	**NA**			**1384.5 days**		**0%**
82	ET1H-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Fri 22/10/21	Sun 14/11/21	NA	NA	28	83	1384.5 days		0%
83	ET1H-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Sun 14/11/21	Fri 10/12/21	NA	NA	82		1384.5 days		0%
84	**ET1H-1000**		**Effects to KD1J**			**0 days**	**NA**	**NA**	**49 days**	**Mon 7/2/22**	**Mon 28/3/22**	**NA**	**NA**			**1276.5 days**		**0%**



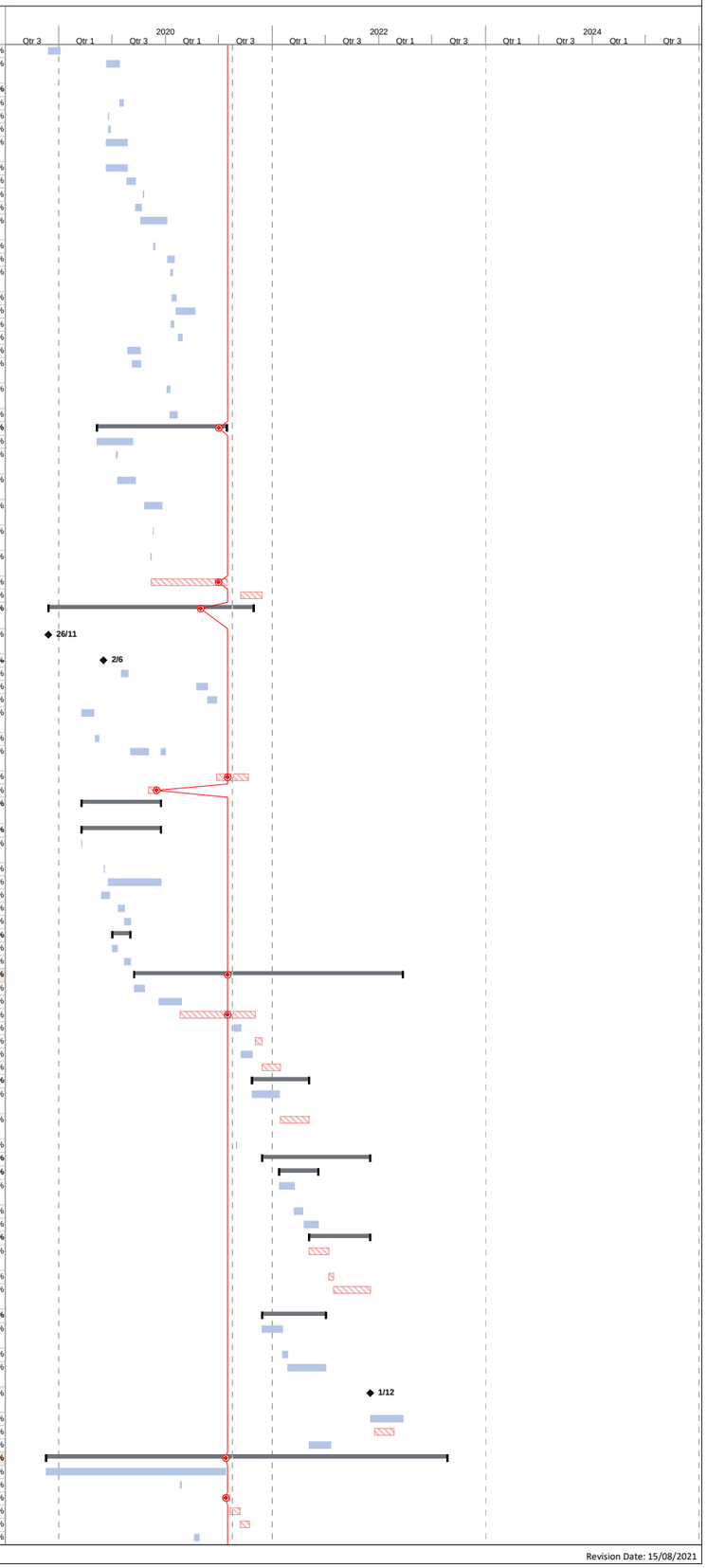
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
85	**ET1H-1100**		**Inclement Weather to KD1J (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Mon 7/2/22**	**Mon 28/3/22**	**NA**	**NA**			**1276.5 days**		**0%**
86	ET1H-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Mon 7/2/22	Wed 2/3/22	NA	NA	30	87	1276.5 days		0%
87	ET1H-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Wed 2/3/22	Mon 28/3/22	NA	NA	86		1276.5 days		0%
88	**ET2A-1000**		**Effects to KD2A**			**0 days**	**NA**	**NA**	**53 days**	**Fri 18/6/21**	**Tue 10/8/21**	**Fri 18/6/21**	**NA**			**1506.5 days**		**24%**
89	**ET2A-1100**		**Inclement Weather to KD2A (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Tue 22/6/21**	**Tue 10/8/21**	**Tue 22/6/21**	**NA**			**1506.5 days**		**17%**
90	ET2A-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Tue 22/6/21	Thu 15/7/21	Tue 22/6/21	NA	93	91	1506.5 days		37%
91	ET2A-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Thu 15/7/21	Tue 10/8/21	NA	NA	90		1506.5 days		0%
92	**ET2A-1200**		**Other Events to KD2A (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Fri 18/6/21**	**Tue 22/6/21**	**Fri 18/6/21**	**Tue 22/6/21**			**0 days**		**100%**
93	ET2A-1210		Special working arrangement due to COVID-19 in January 2020			0 days	NA	NA	4 days	Fri 18/6/21	Tue 22/6/21	Fri 18/6/21	Tue 22/6/21	31	90	0 days		100%
94	**ET3A-1000**		**Effects to KD3A**			**0 days**	**NA**	**NA**	**53 days**	**Tue 16/1/24**	**Fri 8/3/24**	**NA**	**NA**			**565 days**		**0%**
95	**ET3A-1100**		**Inclement Weather to KD3A (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Sat 20/1/24**	**Fri 8/3/24**	**NA**	**NA**			**565 days**		**0%**
96	ET3A-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Sat 20/1/24	Sun 11/2/24	NA	NA	99	97	565 days		0%
97	ET3A-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Mon 12/2/24	Fri 8/3/24	NA	NA	96		565 days		0%
98	**ET3A-1200**		**Other Events to KD3A (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Tue 16/1/24**	**Fri 19/1/24**	**NA**	**NA**			**565 days**		**0%**
99	ET3A-1210		Special working arrangement due to COVID-19 in January 2020			0 days	NA	NA	4 days	Tue 16/1/24	Fri 19/1/24	NA	NA	33	96	565 days		0%
100	**ETS1-1000**		**Effects to Section 1 of the Works**			**0 days**	**NA**	**NA**	**53 days**	**Fri 9/2/24**	**Tue 2/4/24**	**NA**	**NA**			**540.5 days**		**0%**
101	**ETS1-1100**		**Inclement Weather to Section 1 of the Works (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Tue 13/2/24**	**Tue 2/4/24**	**NA**	**NA**			**540.5 days**		**0%**
102	ETS1-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Tue 13/2/24	Thu 7/3/24	NA	NA	105	103	540.5 days		0%
103	ETS1-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Thu 7/3/24	Tue 2/4/24	NA	NA	102		540.5 days		0%
104	**ETS1-1200**		**Other Events to Section 1 of the Works (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Fri 9/2/24**	**Tue 13/2/24**	**NA**	**NA**			**540.5 days**		**0%**
105	ETS1-1210		Special working arrangement due to COVID-19 in January 2020			0 days	NA	NA	4 days	Fri 9/2/24	Tue 13/2/24	NA	NA	35	102	540.5 days		0%
106	**ETS2-1000**		**Effects to Section 2 of the Works**			**0 days**	**NA**	**NA**	**53 days**	**Sat 23/7/22**	**Wed 14/9/22**	**NA**	**NA**			**1106.5 days**		**0%**
107	**ETS2-1100**		**Inclement Weather to Section 2 of the Works (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Wed 27/7/22**	**Wed 14/9/22**	**NA**	**NA**			**1106.5 days**		**0%**
108	ETS2-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Wed 27/7/22	Fri 19/8/22	NA	NA	111	109	1106.5 days		0%
109	ETS2-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Fri 19/8/22	Wed 14/9/22	NA	NA	108		1106.5 days		0%
110	**ETS2-1200**		**Other Events to Section 2 of the Works (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Sat 23/7/22**	**Wed 27/7/22**	**NA**	**NA**			**1106.5 days**		**0%**
111	ETS2-1210		Special working arrangement due to COVID-19 in January 2020			0 days	NA	NA	4 days	Sat 23/7/22	Wed 27/7/22	NA	NA	36	108	1106.5 days		0%
112	**ETS3-1000**		**Effects to Section 3 of the Works**			**0 days**	**NA**	**NA**	**53 days**	**Wed 12/6/24**	**Sun 4/8/24**	**NA**	**NA**			**416.5 days**		**0%**
113	**ETS3-1100**		**Inclement Weather to Section 3 of the Works (cal. Day)**			**0 days**	**NA**	**NA**	**49 days**	**Sun 16/6/24**	**Sun 4/8/24**	**NA**	**NA**			**416.5 days**		**0%**
114	ETS3-1110		Delay and Disruption of Works before June 2021			0 days	NA	NA	23 days	Sun 16/6/24	Tue 9/7/24	NA	NA	117	115	416.5 days		0%
115	ETS3-1120		Delay and Disruption of Works in June 2021			0 days	NA	NA	26 days	Tue 9/7/24	Sun 4/8/24	NA	NA	114		416.5 days		0%
116	**ETS3-1200**		**Other Events to Section 3 of the Works (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Wed 12/6/24**	**Sun 16/6/24**	**NA**	**NA**			**416.5 days**		**0%**
117	ETS3-1210		Special working arrangement due to COVID-19 in January 2020			0 days	NA	NA	4 days	Wed 12/6/24	Sun 16/6/24	NA	NA	37	114	416.5 days		0%
118	**SUB-1000**		**Submissions (cal.day)**			**1564 days**	**Mon 18/11/19**	**Wed 28/2/24**	**1956 days**	**Mon 18/11/19**	**Wed 26/3/25**	**Mon 18/11/19**	**NA**			**182 days**		**60%**
119	**SUBS-1000**		**Subletting Package**			**96 days**	**Mon 18/11/19**	**Fri 21/2/20**	**562 days**	**Mon 18/11/19**	**Tue 1/6/21**	**Mon 18/11/19**	**Tue 1/6/21**			**0 days**		**100%**
120	SUBS-1010		Prepare & submit subletting procedure			12 days	Mon 18/11/19	Fri 29/11/19	12 days	Mon 18/11/19	Fri 29/11/19	Mon 18/11/19	Fri 29/11/19	2	121	0 days		100%
121	SUBS-1020		PM review and accept subletting procedure			15 days	Sat 30/11/19	Wed 11/12/19	12 days	Sat 30/11/19	Wed 11/12/19	Sat 30/11/19	Wed 11/12/19	120	142,122,125,124,123	0 days		100%
122	SUBS-1030		Subletting for demolition works			24 days	Thu 12/12/19	Sat 4/1/20	93 days	Tue 17/12/19	Wed 18/3/20	Tue 17/12/19	Wed 18/3/20	121,154	339,462,295,402,539,359	0 days		100%
123	SUBS-1040		Subletting for UU diversion for Inlet Works No.1			24 days	Thu 12/12/19	Sat 4/1/20	78 days	Fri 10/1/20	Fri 27/3/20	Fri 10/1/20	Fri 27/3/20	121	212	0 days		100%
124	SUBS-1050		Subletting for Inspection pit excavation			0 days	NA	NA	56 days	Thu 19/12/19	Wed 12/2/20	Thu 19/12/19	Wed 12/2/20	121,154	214,126	0 days		100%
125	SUBS-1060		Subletting for Preliminary Works (topographic surveying)			14 days	Thu 12/12/19	Wed 25/12/19	54 days	Fri 20/12/19	Tue 11/2/20	Fri 20/12/19	Tue 11/2/20	121,154	159,198,129,130,131,127	0 days		100%
126	SUBS-1070		Subletting for AR3 access road			24 days	Thu 12/12/19	Sat 4/1/20	0 days	Fri 13/12/19	Tue 11/2/20	Fri 13/12/19	Tue 11/2/20	124	127,210	0 days		100%
127	SUBS-1080		Subletting for pre-drilling works			24 days	Thu 12/12/19	Sat 4/1/20	38 days	Thu 6/2/20	Fri 20/3/20	Thu 6/2/20	Fri 20/3/20	125,126	452,342,414,128	0 days		100%
128	SUBS-1090		Subletting for Contractor designer for temporary works and ICE			24 days	Thu 12/12/19	Sat 4/1/20	71 days	Mon 16/12/19	Mon 24/2/20	Mon 16/12/19	Mon 24/2/20	127		0 days		100%
129	SUBS-1100		Subletting for independent BIM consultant			24 days	Thu 12/12/19	4/1/120	0 days	Wed 11/12/19	Thu 23/1/20	Wed 11/12/19	Thu 23/1/20	125	193	0 days		100%
130	SUBS-1110		Subletting for independent BIM services			0 days	NA	NA	15 days	Tue 14/1/20	Wed 26/2/20	Tue 14/1/20	Wed 26/2/20	125	193	0 days		100%
131	SUBS-1120		Subletting for Design, Supply & Install of Temporary Activated Carbon Deodorization Units (E&M Works)			0 days	NA	NA	0 days	Fri 13/12/19	Tue 11/2/20	Fri 13/12/19	Tue 11/2/20	125	132,133	0 days		100%
132	SUBS-1130		Subletting for pre-bored H pile works			36 days	Thu 12/12/19	Thu 16/1/20	45 days	Sun 5/7/20	Tue 18/8/20	Sun 5/7/20	Tue 18/8/20	131	343,415,453,309	0 days		100%
133	SUBS-1140		Subletting for Sheetpile installation works			0 days	NA	NA	45 days	Tue 1/9/20	Thu 15/10/20	Tue 1/9/20	Thu 15/10/20	131	344,455,134,135	0 days		100%
134	SUBS-1150		Subletting for ELS works for Inlet Works No.1			48 days	Sun 5/1/20	Fri 21/2/20	85 days	Fri 16/10/20	Fri 8/1/21	Fri 16/10/20	Fri 8/1/21	133		0 days		100%
135	SUBS-1160		Subletting for ELS works for Membrance Facilities Building and other buildings			48 days	Sun 5/1/20	Fri 21/2/20	85 days	Fri 16/10/20	Fri 8/1/21	Fri 16/10/20	Fri 8/1/21	133	346,389,456,136,137,138,139,140,4	0 days		100%
136	SUBS-1170		Subletting for structural works for Inlet Works Building			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Sat 9/1/21	Thu 25/2/21	Sat 9/1/21	Thu 25/2/21	135		0 days		100%
137	SUBS-1180		Subletting for structural works for Primary Sedimentation Tanks			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Sat 9/1/21	Thu 25/2/21	Sat 9/1/21	Thu 25/2/21	135	348	0 days		100%
138	SUBS-1190		Subletting for structural works for Bioreactors			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Sat 9/1/21	Thu 25/2/21	Sat 9/1/21	Thu 25/2/21	135	391	0 days		100%
139	SUBS-1200		Subletting for structural works for Membrance Facilities Building			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Sat 9/1/21	Thu 25/2/21	Sat 9/1/21	Thu 25/2/21	135	426	0 days		100%
140	SUBS-1210		Subletting for structural works for SAS pumping house and ancillary structures			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Sat 9/1/21	Thu 25/2/21	Sat 9/1/21	Thu 25/2/21	135	141	0 days		100%
141	SUBS-1220		Subletting for ABWF works			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Fri 26/2/21	Wed 14/4/21	Fri 26/2/21	Wed 14/4/21	140	332,350,398,460,488,504,514,522,5	0 days		100%
142	SUBS-1230		Subletting for Process Pipeworks, Utilities and Roadworks			48 days	Thu 12/12/19	Tue 28/1/20	150 days	Fri 22/5/20	Sun 18/10/20	Fri 22/5/20	Sun 18/10/20	121	532,549,551,552,553,554,543	0 days		100%
143	SUBS-1240		Subletting for Landscape Hardworks and Softworks			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Thu 15/4/21	Tue 1/6/21	Thu 15/4/21	Tue 1/6/21	141	559,560	0 days		100%
144	SUBS-1250		Subletting for Trial dewatering works and installation of additional stop logs at BR2 connon channel due to malfucntioned of existing penstock at FST no. 5 and 7 (EWN 055)			0 days	NA	NA	15 days	Tue 15/9/20	Tue 29/9/20	Tue 15/9/20	Tue 29/9/20		355	0 days		100%
145	SUBS-1260		Subletting for Diversion of Power supply for existing Slaghter House pump station (CE 034)			0 days	NA	NA	14 days	Mon 21/9/20	Sun 4/10/20	Mon 21/9/20	Sun 4/10/20			0 days		100%
146	SUBS-1270		Subletting for Decommission of exisiting power and signal systems in leachate Pump station switch room (PMI 039)			0 days	NA	NA	14 days	Mon 21/9/20	Sun 4/10/20	Mon 21/9/20	Sun 4/10/20		439	0 days		100%
147	SUBS-1280		Subletting for Diversion of Existing DN250 Leachate Raising Main (PPMI 025)			0 days	NA	NA	31 days	Mon 21/9/20	Wed 21/10/20	Mon 21/9/20	Wed 21/10/20			0 days		100%
148	SUBS-1290		Subletting for Construction of Cable trough for CLP 11kv Cable Diversion (PPMI 041)			0 days	NA	NA	31 days	Mon 21/9/20	Wed 21/10/20	Mon 21/9/20	Wed 21/10/20		453	0 days		100%
149	SUBS-1300		Subletting for Demolition of Existing Pillar box and its concrete plinth (CE 030)			0 days	NA	NA	31 days	Mon 21/9/20	Wed 21/10/20	Mon 21/9/20	Wed 21/10/20		441	0 days		100%
150	SUBS-1310		Subletting for Excavation to locate existing underground cable near SAS Pump Station (PPMI 038)			0 days	NA	NA	31 days	Mon 21/9/20	Wed 21/10/20	Mon 21/9/20	Wed 21/10/20			0 days		100%
151	SUBS-1320		Subletting for Diversion of pumping system sewerage (PPMI 083)			0 days	NA	NA	31 days	Mon 21/9/20	Wed 21/10/20	Mon 21/9/20	Wed 21/10/20		446	0 days		100%
152	**SUBA-1000**		**Statutory Submission, Submission and Approval**			**1564 days**	**Mon 18/11/19**	**Wed 28/2/24**	**1956 days**	**Mon 18/11/19**	**Wed 26/3/25**	**Mon 18/11/19**	**NA**			**182 days**		**49%**
153	SUBA-1010		Liaison with operator of SWHSTW and obtain their consent of associated method statement of major activities			0 days	NA	NA	1584 days	Mon 18/11/19	Wed 26/3/25	Mon 18/11/19	NA	2	59FF	156 days		30%
154	SUBA-1020		Prepare and submit Subcontractor Management Plan (SMP)			24 days	Mon 18/11/19	Wed 11/12/19	24 days	Mon 18/11/19	Wed 11/12/19	Mon 18/11/19	Wed 11/12/19	2	122,125,124	0 days		100%
155	SUBA-1030		Prepare and submit Interface Management Plan			36 days	Mon 18/11/19	Mon 23/12/19	36 days	Mon 18/11/19	Mon 23/12/19	Mon 18/11/19	Mon 23/12/19	2		0 days		100%
156	SUBA-1040		Prepare and submit the TTA plans inside Treatment Plant for UU diversion and buildings construction			24 days	Mon 18/11/19	Wed 11/12/19	24 days	Mon 18/11/19	Wed 11/12/19	Mon 18/11/19	Wed 11/12/19	2	201	0 days		100%
157	SUBA-1050		Prepare and submit method statement for UU diversion for Inlet Works No.1			12 days	Mon 18/11/19	Fri 29/11/19	12 days	Mon 18/11/19	Fri 29/11/19	Mon 18/11/19	Fri 29/11/19	2	158	0 days		100%
158	SUBA-1060		PM review and accept the method statement			12 days	Sat 30/11/19	Wed 11/12/19	0 days	Sat 30/11/19	Wed 11/12/19	Sat 30/11/19	Wed 11/12/19	157	213,214	0 days		100%
159	SUBA-1070		Prepare and submit combine underground services drawing for PM's review the alignment			24 days	Thu 26/12/19	Sat 18/1/20	23 days	Thu 26/12/19	Sat 18/1/20	Thu 26/12/19	Sat 18/1/20	125		0 days		100%
160	SUBA-1080		Prepare and submit method statement for demolition existing structures			24 days	Mon 18/11/19	Wed 11/12/19	66 days	Mon 18/11/19	Wed 22/1/20	Mon 18/11/19	Wed 22/1/20	2	402,339,462,295,539	0 days		100%
161	SUBA-1090		Prepare and submit method statement for structural works for buildings			24 days	Mon 18/11/19	Wed 11/12/19	197 days	Mon 18/11/19	Mon 1/6/20	Mon 18/11/19	Mon 1/6/20	2		0 days		100%
162	SUBA-1100		Prepare and submit method statements to MTRC regarding the works within railing protection boundary			36 days	Mon 18/11/19	Mon 23/12/19	92 days	Sat 1/2/20	Mon 25/5/20	Sat 1/2/20	Mon 25/5/20	2	339,462,539,359	0 days		100%
163	SUBA-1110		Prepare and submit & approve Safety Management Plan			24 days	Mon 18/11/19	Wed 11/12/19	3 days	Mon 18/11/19	Wed 20/11/19	Mon 18/11/19	Wed 20/11/19	2		0 days		100%
164	SUBA-1120		Prepare and submit Excavation and lateral support (ELS) proposal			24 days	Mon 10/2/20	Wed 4/3/20	128 days	Mon 10/2/20	Tue 16/6/20	Mon 10/2/20	Tue 16/6/20	2		0 days		100%
165	SUBA-1120a		Prepare and submit Excavation and lateral support (ELS) proposal for Inlet Works No.1			0 days	NA	NA	24 days	Wed 29/9/21	Sat 23/10/21	NA	NA	314SF		1433 days		0%
166	SUBA-1120b		Prepare and submit Excavation and lateral support (ELS) proposal for Primnary Sedimentation tanks No.1-4			0 days	NA	NA	24 days	Fri 1/7/22	Mon 25/7/22	NA	NA	346SF		1158 days		0%
167	SUBA-1120c		Prepare and submit Excavation and lateral support (ELS) proposal for Bioreactor No. 2A&2B			0 days	NA	NA	24 days	Sun 15/5/22	Wed 8/6/22	NA	NA	389SF		1205 days		0%
168	SUBA-1130		Prepare and submit Dewatering proposal for basement construction			24 days	Mon 10/2/20	Wed 4/3/20	165 days	Mon 10/2/20	Thu 23/7/20	Mon 10/2/20	Thu 23/7/20	2		0 days		100%
169	SUBA-1130a		Prepare and submit Dewatering proposal for basement construction for Inlet Works No.1			0 days	NA	NA	24 days	Wed 29/9/21	Sat 23/10/21	NA	NA	314SF		1433 days		0%



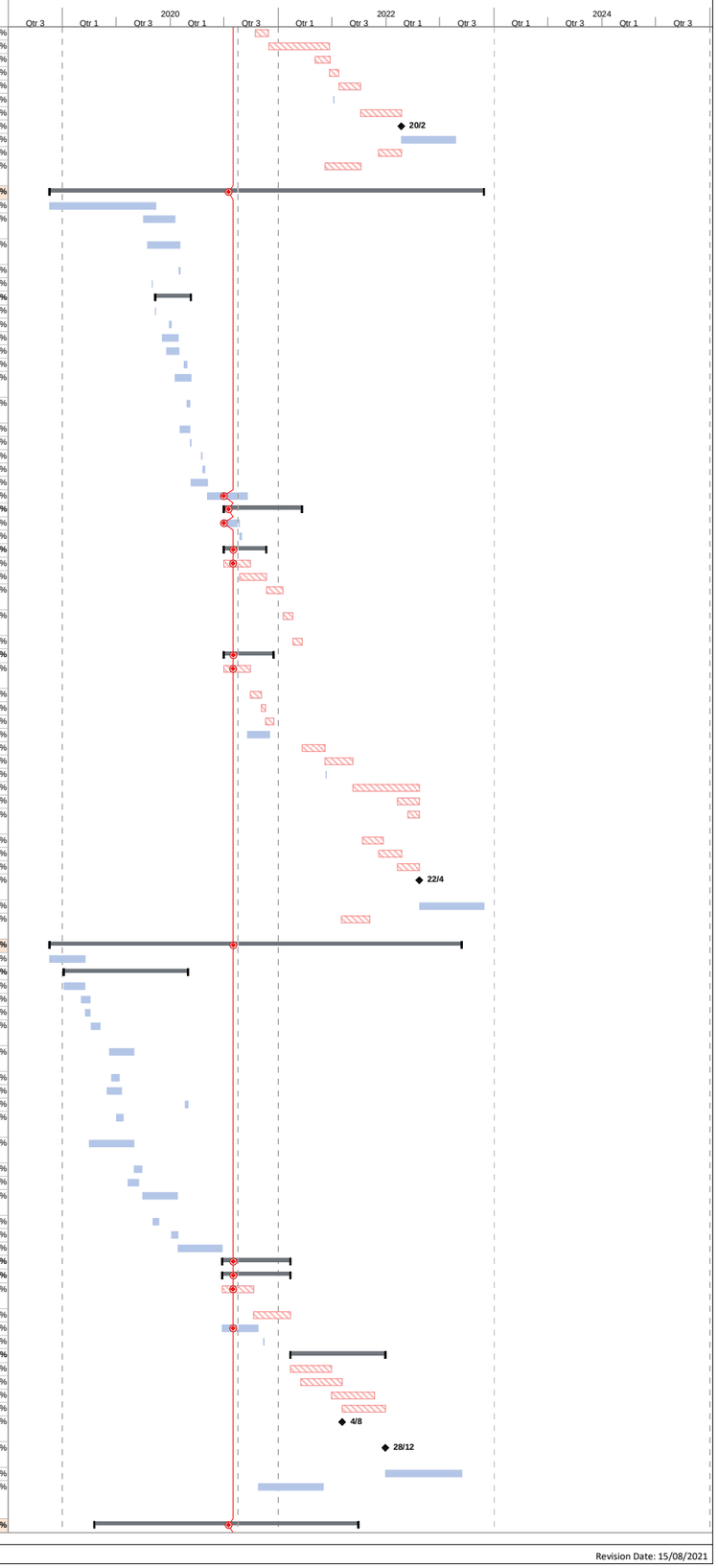
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
170	SUBA-1130b		Prepare and submit Dewatering proposal for basement construction for Primnary Sedimentation tanks No.1-4			0 days	NA	NA	24 days	Fri 1/7/22	Mon 25/7/22	NA	NA	346SF		1158 days		0%
171	SUBA-1130c		Prepare and submit Dewatering proposal for basement construction for Bioreactor No. 2A&2B			0 days	NA	NA	24 days	Sun 15/5/22	Wed 8/6/22	NA	NA	389SF		1205 days		0%
172	SUBA-1140		Prepare and submit Pre-construction condition survey of existing structures/ services			24 days	Wed 5/2/20	Fri 28/2/20	0 days	Mon 18/11/19	Fri 6/3/20	Mon 18/11/19	Fri 6/3/20	198		0 days		100%
173	SUBA-1150		Prepare and submit Settlement and movement monitoring proposal of existing structures/ services			24 days	Wed 5/2/20	Fri 28/2/20	110 days	Mon 18/11/19	Fri 6/3/20	Mon 18/11/19	Fri 6/3/20	198FS+120 days		0 days		100%
174	SUBA-1160		Prepare and submit design of structure elements of the temporary activated carbon deodourization unit			60 days	Fri 17/1/20	Mon 16/3/20	60 days	Mon 18/11/19	Mon 16/3/20	Mon 18/11/19	Mon 16/3/20	2FS+60 days		0 days		100%
175	SUBA-1170		Prepare of RSE and structural design for alternation and additional (A&A) works at Membrane Facilities Building No.1			180 days	Mon 18/10/21	Fri 15/4/22	180 days	Mon 18/10/21	Fri 15/4/22	NA	NA		541	332 days		0%
176	SUBA-1180		Prepare of RSE and structural design for alternation and additional (A&A) works at Main Power House			44 days	Wed 15/7/20	Thu 3/9/20	60 days	Mon 6/7/20	Thu 3/9/20	Mon 6/7/20	Thu 3/9/20		539	0 days		100%
177	**SUBE-1000**		**Environmental Aspect Submissions**			**45 days**	**Mon 18/11/19**	**Wed 1/1/20**	**81 days**	**Mon 18/11/19**	**Thu 6/2/20**	**Mon 18/11/19**	**Thu 6/2/20**			**0 days**		**100%**
178	SUBE-1010		Prepare, submit & approve Site Management Plan for Trip Ticket System			45 days	Mon 18/11/19	Wed 1/1/20	66 days	Mon 18/11/19	Wed 22/1/20	Mon 18/11/19	Wed 22/1/20	2		0 days		100%
179	SUBP-1020		Prepare, submit & approve Waste Management Plan			45 days	Mon 18/11/19	Wed 1/1/20	81 days	Mon 18/11/19	Thu 6/2/20	Mon 18/11/19	Thu 6/2/20	2		0 days		100%
180	SUBE-1030		Prepare, submit & approve Environmental Management Plan			45 days	Mon 18/11/19	Wed 1/1/20	66 days	Mon 18/11/19	Wed 22/1/20	Mon 18/11/19	Wed 22/1/20	2		0 days		100%
181	**SUBP-1000**		**Procurement**			**731 days**	**Mon 18/11/19**	**Wed 17/11/21**	**648 days**	**Mon 18/11/19**	**Thu 26/8/21**	**Mon 18/11/19**	**NA**			**278 days**		**94%**
182	SUBP-1010		Prepare and submit the Procurement Procedure			12 days	Mon 18/11/19	Fri 29/11/19	2 days	Mon 18/11/19	Tue 19/11/19	Mon 18/11/19	Tue 19/11/19	2	183	0 days		100%
183	SUBP-1020		PM Review & Accept Procurement Procedure			12 days	Sat 30/11/19	Wed 11/12/19	21 days	Tue 19/11/19	Tue 10/12/19	Tue 19/11/19	Tue 10/12/19	182	184,185,186,187,188,189,190,191,	0 days		100%
184	SUBP-1030		Prepare, submit and approve the pipe works material			25 days	Thu 12/12/19	Sun 5/1/20	34 days	Thu 6/2/20	Tue 10/3/20	Thu 6/2/20	Tue 10/3/20	183	212,532,551,552,554,553,549,557,5	0 days		100%
185	SUBP-1040		Prepare, submit and approve the water proofing material			25 days	Thu 12/12/19	Sun 5/1/20	25 days	Mon 2/8/21	Thu 26/8/21	NA	NA	183	329,325	278 days		0%
186	SUBP-1050		Prepare, submit and approve the concrete mix material			48 days	Thu 12/12/19	Tue 28/1/20	90 days	Mon 3/2/20	Sat 2/5/20	Mon 3/2/20	Sat 2/5/20	183	391,426	0 days		100%
187	SUBP-1060		Prepare, submit and approve the rebar material			48 days	Thu 12/12/19	Tue 28/1/20	49 days	Sat 23/5/20	Fri 10/7/20	Sat 23/5/20	Fri 10/7/20	183	391,426	0 days		100%
188	SUBP-1070		Prepare, submit and approve the metal works material			48 days	Thu 12/12/19	Tue 28/1/20	48 days	Tue 1/9/20	Sun 18/10/20	Tue 1/9/20	Sun 18/10/20	183	391,426	0 days		100%
189	SUBP-1080		Prepare, submit and approve the ABWF works material			48 days	Sat 12/12/20	Tue 28/1/20	48 days	Mon 1/3/21	Sat 17/4/21	Mon 1/3/21	Sat 17/4/21	183	332,350,398,460,488,504,514,522,4	0 days		100%
190	SUBP-1090		Prepare, submit and approve the protective lining to concrete			0 days	NA	NA	48 days	Tue 1/9/20	Sun 18/10/20	Tue 1/9/20	Sun 18/10/20	183	391,426	0 days		100%
191	SUBP-1100		Prepare, submit and approve the multi-part covers			0 days	NA	NA	21 days	Tue 5/5/20	Mon 25/5/20	Tue 5/5/20	Mon 25/5/20	183		0 days		100%
192	**SUBB-1000**		**BIM**			**1205 days**	**Thu 6/2/20**	**Wed 28/2/24**	**1562 days**	**Mon 18/11/19**	**Fri 28/2/25**	**Mon 18/11/19**	**NA**			**178 days**		**27%**
193	SUBB-1010		Prepare, submit and approve the proposal of details of Common data environment (CDE)			48 days	Thu 6/2/20	Wed 1/4/20	37 days	Mon 18/11/19	Wed 1/4/20	Mon 18/11/19	Wed 1/4/20	129,130	194	0 days		100%
194			Prepare and submit BIM submission			1484 days	Thu 6/2/20	Wed 28/2/24	1451 days	Thu 2/4/20	Fri 28/2/25	Thu 2/4/20	NA	193		178 days		25%
195	**C-1000**	*	**Construction Works (Working day)**			**1957 days**	**Mon 18/11/19**	**Thu 27/3/25**	**2138 days**	**Mon 18/11/19**	**Wed 24/9/25**	**Mon 18/11/19**	**NA**			**0 days**		**51%**
196	**CPW-1000**		**Preliminary Works**			**109 days**	**Mon 18/11/19**	**Thu 5/3/20**	**121 days**	**Mon 18/11/19**	**Tue 17/3/20**	**Mon 18/11/19**	**Tue 17/3/20**			**0 days**		**100%**
197	CPW-1000		Initial Survey			24 days	Mon 18/11/19	Sat 14/12/19	10 days	Mon 18/11/19	Thu 28/11/19	Mon 18/11/19	Thu 28/11/19	2	198	0 days		100%
198	CPW-2000		Condition Survey			30 days	Fri 27/12/19	Tue 4/2/20	89 days	Mon 18/11/19	Fri 6/3/20	Mon 18/11/19	Fri 6/3/20	125,197	199,172,173FS+120 days,200	0 days		100%
199	CPW-3000		Installation of Monitoring Markers			26 days	Wed 5/2/20	Thu 5/3/20	78 days	Fri 29/11/19	Thu 5/3/20	Fri 29/11/19	Thu 5/3/20	198		0 days		100%
200	CPW-4000		Tree Felling Works		22, 235	0 days	NA	NA	9 days	Sat 7/3/20	Tue 17/3/20	Sat 7/3/20	Tue 17/3/20	198		0 days		100%
201	**CAR-0000**	*	**Access Road (AR3), B-1**			**193 days**	**Mon 20/1/20**	**Sat 12/9/20**	**238 days**	**Thu 12/12/19**	**Wed 30/9/20**	**Thu 12/12/19**	**Wed 30/9/20**	**4,156**		**0 days**		**100%**
202	CAR-1000		Site setup and clearance wroks		05	28 days	Mon 20/1/20	Mon 24/2/20	38 days	Mon 20/1/20	Fri 6/3/20	Mon 20/1/20	Fri 6/3/20		203	0 days		100%
203	CAR-1001		Awaiting for AECOM instruction for alignment confirmation for road works		055	0 days	NA	NA	5 days	Mon 17/2/20	Thu 12/3/20	Mon 17/2/20	Thu 12/3/20	202	204	0 days		100%
204	CAR-1002		Additional Works in Access Road AR3 to Settle Left-in Material by Contract DC/2016/07		215-1	0 days	NA	NA	4 days	Thu 21/5/20	Mon 25/5/20	Thu 21/5/20	Mon 25/5/20	203	205	0 days		100%
205	CAR-2000		Drainage and Utilities Works			76 days	Fri 6/3/20	Tue 9/6/20	75 days	Sat 7/3/20	Tue 9/6/20	Sat 7/3/20	Tue 9/6/20	204	206	0 days		100%
206	CAR-2000a		Trimming of Existing Sheet Piles in Access Road AR3		215-2	0 days	NA	NA	20 days	Tue 14/7/20	Wed 5/8/20	Tue 14/7/20	Wed 5/8/20	205	207	0 days		100%
207	CAR-2000b		Installation of Multi-part Cover and Manhole Cover of Chamber RP6 and Associated Concreting Works in Portion B-1		215	0 days	NA	NA	7 days	Fri 28/8/20	Fri 4/9/20	Fri 28/8/20	Fri 4/9/20	206	208	0 days		100%
208	CAR-2001		Diversion of Existing Underground Cables in Portion B-1A		036	0 days	NA	NA	172 days	Thu 5/3/20	Wed 30/9/20	Thu 5/3/20	Wed 30/9/20	207	210	0 days		100%
209	CAR-2002		Additional U-channel, beam barrier and footway concrete pavement		055	0 days	NA	NA	60 days	Thu 12/12/19	Wed 26/2/20	Thu 12/12/19	Wed 26/2/20		210	0 days		100%
210	CAR-3000	KD1A	Roadworks			80 days	Wed 10/6/20	Sat 12/9/20	133 days	Fri 24/4/20	Wed 30/9/20	Fri 24/4/20	Wed 30/9/20	126,209,208	42FF	0 days		100%
211	**CIW-0000**	*	**Inlet Works No.1, B-2**			**854 days**	**Mon 6/1/20**	**Mon 21/11/22**	**594 days**	**Tue 26/11/19**	**Thu 25/11/21**	**Tue 26/11/19**	**NA**			**0 days**		**88%**
212	**CIW-1000**		**Diversion Works (1. Inlet Trunk Sewer, Leachate Rising Mains, Sludge Pipes, Tank Drains and Pipelines near Primary Sludge Thinkeners)**			**180 days**	**Mon 6/1/20**	**Fri 14/8/20**	**459 days**	**Tue 26/11/19**	**Wed 16/6/21**	**Tue 26/11/19**	**NA**	**184,123**	**44FF**	**111 days**		**88%**
213	CIW-1100		Utilities scanning to idenify existing UU arrangement			12 days	Mon 6/1/20	Sat 18/1/20	0 days	Fri 13/12/19	Sat 18/1/20	Fri 13/12/19	Sat 18/1/20	158	214SS,216	0 days		100%
214	CIW-1200		Trial pits to locate the collection points			24 days	Mon 6/1/20	Wed 5/2/20	0 days	Mon 6/1/20	Tue 10/3/20	Mon 6/1/20	Tue 10/3/20	158,213SS,124	232,251	0 days		100%
215	**CIW-1300**		**Installation and Commissioning of Temporary Activated Carbon Deodorization Unit for the Existing Inlet Works**			**0 days**	**NA**	**NA**	**98 days**	**Wed 11/3/20**	**Sat 11/7/20**	**Wed 11/3/20**	**Sat 11/7/20**			**0 days**		**100%**
216	CIW-1310		Construction of concrete plinth			0 days	NA	NA	24 days	Wed 11/3/20	Wed 8/4/20	Wed 11/3/20	Wed 8/4/20	213	217	0 days		100%
217	CIW-1320		Installation of Deodorizer			0 days	NA	NA	40 days	Thu 9/4/20	Sat 30/5/20	Thu 9/4/20	Sat 30/5/20	216	218	0 days		100%
218	CIW-1330		Testing & commissioning			0 days	NA	NA	15 days	Mon 1/6/20	Wed 17/6/20	Mon 1/6/20	Wed 17/6/20	217	219FS-1 day	0 days		100%
219	CIW-1340		Demolishment of the existing carbon deodorization unit			0 days	NA	NA	20 days	Wed 17/6/20	Sat 11/7/20	Wed 17/6/20	Sat 11/7/20	218FS-1 day		0 days		100%
220	**CIW-1400**		**Diversion of Inlet Trunk Sewer (approx. 40m 1800mm dia concrete pipe, 4 deep manholes and Inlet Reception Chamber)**			**146 days**	**Thu 6/2/20**	**Mon 3/8/20**	**451 days**	**Mon 9/3/20**	**Mon 13/9/21**	**Mon 9/3/20**	**NA**			**0 days**		**97%**
221	CIW-1405		Joint Initial Survey arrangement with MTRCL			0 days	NA	NA	24 days	Thu 19/11/20	Wed 16/12/20	Thu 19/11/20	Wed 16/12/20		222	0 days		100%
222	CIW-1410		Remedial Works for uncharted sludge Pipe leakage		41	0 days	NA	NA	8 days	Mon 9/3/20	Tue 17/3/20	Mon 9/3/20	Tue 17/3/20	221	223	0 days		100%
223	CIW-1420		Diversion of uncharted DN250 sludge pipe		41	0 days	NA	NA	27 days	Tue 31/3/20	Thu 7/5/20	Tue 31/3/20	Thu 7/5/20	222	230,224,225	0 days		100%
224	CIW-1421		Diversion of uncharted 2' water pipe		24	0 days	NA	NA	9 days	Wed 15/4/20	Fri 24/4/20	Wed 15/4/20	Fri 24/4/20	223	230	0 days		100%
225	CIW-1422		Additional Underground Utility Scanning for existing sludge pipe		32	0 days	NA	NA	1 day	Sat 18/4/20	Sat 18/4/20	Sat 18/4/20	Sat 18/4/20	223		0 days		100%
226	CIW-1423		HV Cable Diversion for Inlet Works		84	0 days	NA	NA	135 days	Sat 10/10/20	Wed 24/3/21	Sat 10/10/20	Wed 24/3/21			0 days		100%
227	CIW-1423a		Exposing, Removal and Diversion of Existing Cables near Inlet Works No. 1		236	0 days	NA	NA	268 days	Mon 4/5/20	Wed 24/3/21	Mon 4/5/20	Wed 24/3/21			0 days		100%
228	CIW-1424		Diversion of Existing Sludge Rising Main and Sewerage System		81	0 days	NA	NA	102 days	Mon 28/9/20	Sat 30/1/21	Mon 28/9/20	Sat 30/1/21		307,309,279,280	0 days		100%
229	CIW-1425		Demolition of Deodorization System and Facilities between Existing Primary Sludge Thickeners and Primary Sludge Pump Pit		037	0 days	NA	NA	1 day	Fri 28/8/20	Fri 28/8/20	Fri 28/8/20	Fri 28/8/20			0 days		100%
230	CIW-1430		Removal of concrete surround and uncharted sludge pipe		030	0 days	NA	NA	20 days	Fri 24/4/20	Tue 19/5/20	Fri 24/4/20	Tue 19/5/20	223,224	231	0 days		100%
231	CIW-1440		Remedial works for uncharted pipe and unforeseen water seepage		273	0 days	NA	NA	10 days	Fri 8/5/20	Tue 19/5/20	Fri 8/5/20	Tue 19/5/20	230	232,233	0 days		100%
232	**CIW-1450**		**Trench Excavation for 1800mm dia pipeline and manholes**			**146 days**	**Thu 6/2/20**	**Mon 3/8/20**	**238 days**	**Wed 11/3/20**	**Mon 28/12/20**	**Wed 11/3/20**	**Mon 28/12/20**	**214,231**		**0 days**		**100%**
233	CIW-1450a		Sheetpile installation (on hold due to identification of uncharted obstruction)		28	0 days	NA	NA	80 days	Wed 11/3/20	Thu 18/6/20	Wed 11/3/20	Thu 18/6/20	231	234	0 days		100%
234	CIW-1450b		Trench Excavation for 1800mm dia pipeline and manholes			45 days	Thu 6/2/20	Sat 28/3/20	22 days	Thu 18/6/20	Wed 15/7/20	Thu 18/6/20	Wed 15/7/20	233	235,247	0 days		100%
235	CIW-1450c		Identification of uncharted concrete surround and pipes near MHA01		28	0 days	NA	NA	29 days	Thu 16/7/20	Tue 18/8/20	Thu 16/7/20	Tue 18/8/20	234	238,243,247	0 days		100%
236	CIW-1450d		Removal of existing DSD drawpits near IRC & exposure of CLP cables with installation of additional temporary support		215-2	0 days	NA	NA	26 days	Thu 16/7/20	Fri 14/8/20	Thu 16/7/20	Fri 14/8/20			0 days		100%
237	CIW-1450e		Removal of uncharted concrete surround and pipes near MHA01 and Sheetpile installation		(045)	0 days	NA	NA	10 days	Fri 7/8/20	Tue 18/8/20	Fri 7/8/20	Tue 18/8/20		238,243	0 days		100%
238	CIW-1450f		Revised type of pipe bedding between Manholes no. MHA01 and MHA02		096	0 days	NA	NA	6 days	Sat 3/10/20	Fri 9/10/20	Sat 3/10/20	Fri 9/10/20	237,235	239	0 days		100%
239	CIW-1450g		Replace top soil with Grade 200 Rockfill below Formation level of the proposed pipe between MHA01 and MHA02		079	0 days	NA	NA	3 days	Mon 10/8/20	Wed 12/8/20	Mon 10/8/20	Wed 12/8/20	238	241	0 days		100%
240	CIW-1450h		Grade 200 Rockfill in ELS cofferdam of IRC		(161)	0 days	NA	NA	3 days	Wed 23/12/20	Mon 28/12/20	Wed 23/12/20	Mon 28/12/20		241	0 days		100%
241	CIW-1451		Construct M/H MHA01, MHA02, MHA04 and Inlet Reception Chamber			65 days	Mon 30/3/20	Fri 19/6/20	395 days	Wed 20/5/20	Mon 13/9/21	Wed 20/5/20	NA	239,243,242,244,240	283	-135 days		91%
242	CIW-1452		Enlarged size of Manhole MHA02		052	0 days	NA	NA	6 days	Tue 1/9/20	Mon 7/9/20	Tue 1/9/20	Mon 7/9/20		241	0 days		100%
243	CIW-1453		Additional Works for Manhole MHA01 Construction and Pipe Connection to Manhole MHA01		(094) (146)	0 days	NA	NA	160 days	Wed 16/9/20	Wed 31/3/21	Wed 16/9/20	Wed 31/3/21	235,237	241	0 days		100%
244	CIW-1454		Additional Works for IRC and Pipe Connection to IRC from Existing Manhole FMH1004115		(096)	0 days	NA	NA	17 days	Fri 18/9/20	Fri 9/10/20	Fri 18/9/20	Fri 9/10/20		245,247,241	0 days		100%
245	CIW-1455		Removal of left-in sheetpiles at IRC		381	0 days	NA	NA	3 days	Mon 19/10/20	Wed 21/10/20	Mon 19/10/20	Wed 21/10/20	244		0 days		100%
246	CIW-1456		Compliance Test for DN1800 Precast Concrete Pipe		065	0 days	NA	NA	1 day	Fri 18/9/20	Fri 18/9/20	Fri 18/9/20	Fri 18/9/20			0 days		100%
247	CIW-1457		Lay 1800mm dia concretre pipe			24 days	Sat 20/6/20	Mon 20/7/20	88 days	Thu 17/9/20	Mon 25/1/21	Thu 17/9/20	Mon 25/1/21	234,235,244	248	0 days		100%
248	CIW-1458		Connection to existing Inlet Chamber			12 days	Tue 21/7/20	Mon 3/8/20	12 days	Tue 26/1/21	Mon 8/2/21	Tue 26/1/21	Mon 8/2/21	247	307,44FF	0 days		100%
249	**CIW-1500**		**Diversion of Leachate Rising Main, Sludge Pipes and Tank Drain**			**150 days**	**Thu 6/2/20**	**Fri 7/8/20**	**594 days**	**Tue 26/11/19**	**Thu 25/11/21**	**Tue 26/11/19**	**NA**			**-99 days**		**94%**
250	**CIW-1510**	**KD1B**	**Diversion of Tank Drain MHD9.5 (approx. 70m CHES1 & CHES2)**			**150 days**	**Thu 6/2/20**	**Fri 7/8/20**	**406 days**	**Tue 26/11/19**	**Mon 12/4/21**	**Tue 26/11/19**	**Sat 10/4/21**	**278**	**307,44FF**	**0 days**		**100%**
251	**CIW-1500a**		**Diversion of Tank Drain MHD9.5 to MHA04 (approx. 70m 675mm dia conrete pipe, 24m DN250 DI leachate rising main, 90m CHES1&S2 DN250 CI)**			150 days	Thu 6/2/20	Fri 7/8/20	**406 days**	**Tue 26/11/19**	**Mon 12/4/21**	**Tue 26/11/19**	**Sat 10/4/21**	**214**		**0 days**		**100%**



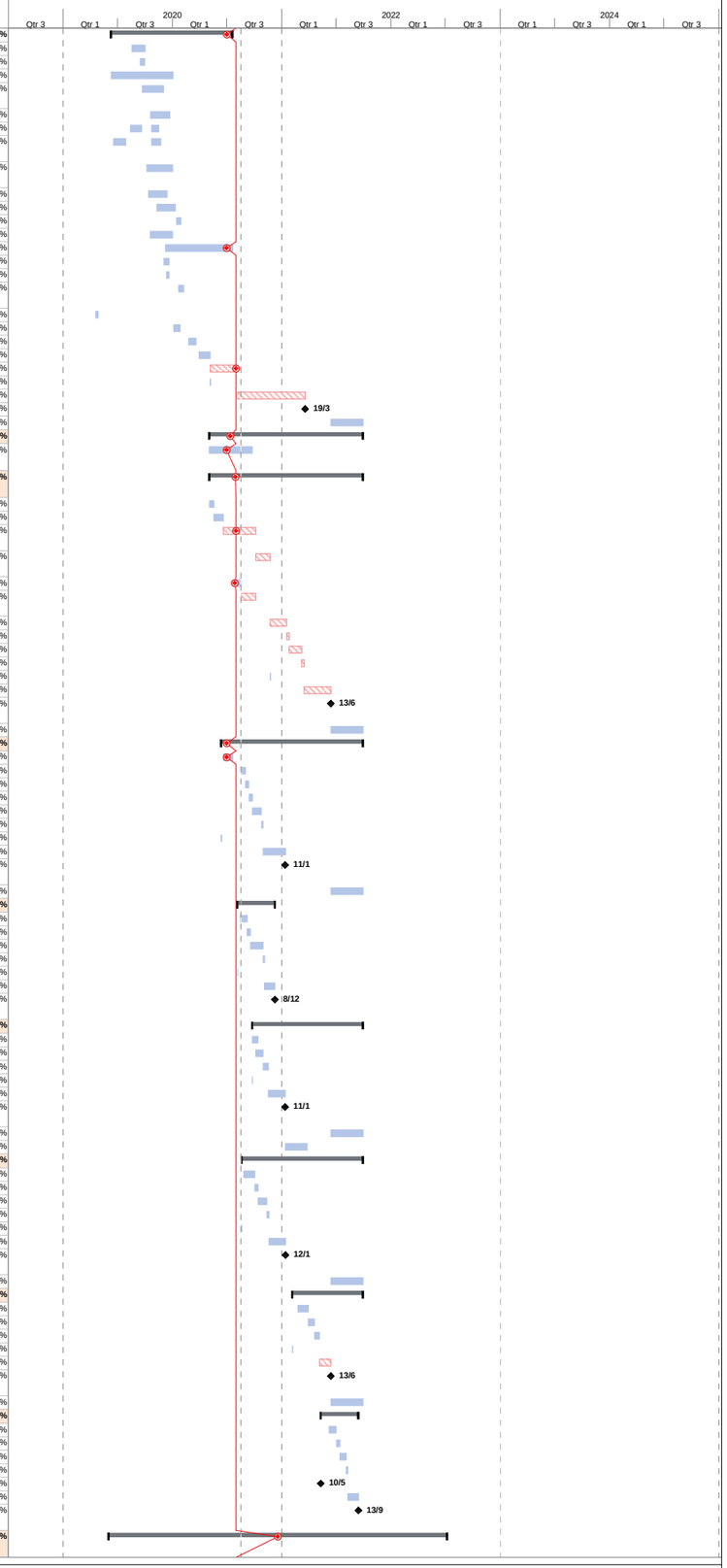
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
252	CIW-1500b		Joint Initial Survey arrangement with MTRCL			0 days	NA	NA	158 days	Tue 26/11/19	Wed 10/6/20	Tue 26/11/19	Wed 10/6/20			0 days		100%
253	CIW-1500c		Site Clearance & inspection pit excavation under conforming alignments			0 days	NA	NA	36 days	Fri 12/6/20	Sat 25/7/20	Fri 12/6/20	Sat 25/7/20			0 days		100%
254	**CIW-1511**		**Tank Drain Diversion near MTRCL track**			**0 days**	**NA**	**NA**	**248 days**	**Thu 11/6/20**	**Mon 12/4/21**	**Thu 11/6/20**	**Sat 10/4/21**			**0 days**		**100%**
255	CIW-1511a		Excavation of trial pit near MHD9.5 (TP45 & 47)		040	0 days	NA	NA	12 days	Mon 27/7/20	Sat 8/8/20	Mon 27/7/20	Sat 8/8/20		256,260	0 days		100%
256	CIW-1511b		Uncharted cables found near MTRC track and identification			0 days	NA	NA	1 day	Thu 18/6/20	Thu 18/6/20	Thu 18/6/20	Thu 18/6/20	255		0 days		100%
257	CIW-1511c		Excavation of trial pit near MHD8.5			0 days	NA	NA	5 days	Fri 19/6/20	Wed 24/6/20	Fri 19/6/20	Wed 24/6/20		258	0 days		100%
258	CIW-1511d		Lower the ground surface, opening and additional trial pit (TP38)		(046)	0 days	NA	NA	60 days	Thu 11/6/20	Fri 21/8/20	Thu 11/6/20	Fri 21/8/20	257	259	0 days		100%
259	CIW-1511e		Excavation of Trial Pits near Manhole MHA04 and MH09		040	0 days	NA	NA	60 days	Thu 11/6/20	Fri 21/8/20	Thu 11/6/20	Fri 21/8/20	258		0 days		100%
260	CIW-1511f		Additional Trial Pit between MHD9.5 and MHA04		040	0 days	NA	NA	25 days	Fri 21/8/20	Fri 18/9/20	Fri 21/8/20	Fri 18/9/20	255		0 days		100%
261	CIW-1511g		Sheetpile installation for MHD9.5			0 days	NA	NA	38 days	Tue 1/9/20	Fri 16/10/20	Tue 1/9/20	Fri 16/10/20			0 days		100%
262	CIW-1511h		Sheetpile installation between MHD9.5 & MHA04			0 days	NA	NA	25 days	Tue 8/9/20	Thu 8/10/20	Tue 8/9/20	Thu 8/10/20			0 days		100%
263	CIW-1511i		UU supporting & ELS works& excavatuib between MHD9.5 & MHA04			0 days	NA	NA	73 days	Wed 7/10/20	Mon 4/1/21	Wed 7/10/20	Mon 4/1/21			0 days		100%
264	CIW-1511j		Unsuit excavated material from MHD9.5 to MHA04		261	0 days	NA	NA	4 days	Fri 20/11/20	Tue 24/11/20	Fri 20/11/20	Tue 24/11/20			0 days		100%
265	CIW-1511k		Revise design of manhole MHD9.5		(167)	0 days	NA	NA	20 days	Thu 7/1/21	Fri 29/1/21	Thu 7/1/21	Fri 29/1/21			0 days		100%
266	CIW-1511l		Break up opening and plugging existing concrete pipe at MHD9.5			0 days	NA	NA	6 days	Mon 18/1/21	Sat 23/1/21	Mon 18/1/21	Sat 23/1/21			0 days		100%
267	CIW-1511l1		Trimming existing concrete pipe at MHD9.5			0 days	NA	NA	13 days	Fri 22/1/21	Fri 5/2/21	Fri 22/1/21	Fri 5/2/21			0 days		100%
268	CIW-1511l2		Construction of manhole MHD9.5			0 days	NA	NA	49 days	Sat 6/2/21	Sat 10/4/21	Sat 6/2/21	Sat 10/4/21			0 days		100%
269	CIW-1511m		Additional work to prevent backflow from MHI1 to MHD9.5		(176)	0 days	NA	NA	9 days	Mon 18/1/21	Wed 27/1/21	Mon 18/1/21	Wed 27/1/21			0 days		100%
270	CIW-1511n		Sewage overflow incident of MHD11		(180)	0 days	NA	NA	9 days	Sat 13/2/21	Thu 25/2/21	Sat 13/2/21	Thu 25/2/21			0 days		100%
271	CIW-1512		Additional Special manhole for tank drain (NCE)			0 days	NA	NA	35 days	Mon 24/8/20	Mon 5/10/20	Mon 24/8/20	Mon 5/10/20		272,273	0 days		100%
272	CIW-1513		Breaking of concrete surround of cables (0.8mx0.8mx70m) (NCE)			0 days	NA	NA	24 days	Tue 8/9/20	Wed 7/10/20	Tue 8/9/20	Wed 7/10/20	271		0 days		100%
273	CIW-1514	KD1B	Construction of tank drain along revised alignment w/ concrete surround		051	0 days	NA	NA	10 days	Tue 5/1/21	Fri 15/1/21	Tue 5/1/21	Fri 15/1/21	271	43FF,307	0 days		100%
274	CIW-1516		Backfilling trench between MHD9.5 & MHA04			0 days	NA	NA	20 days	Sat 16/1/21	Mon 8/2/21	Sat 16/1/21	Mon 8/2/21			0 days		100%
275	**CIW-1520**		**Diversion of Sludge Pipes**			75 days	Tue 21/4/20	Tue 21/7/20	**364 days**	**Mon 11/5/20**	**Thu 29/7/21**	**Mon 11/5/20**	**NA**			**0 days**		**96%**
276	CIW-1520a		Excavation of trial pit and identification of connection point		351	0 days	NA	NA	103 days	Mon 11/5/20	Wed 9/9/20	Mon 11/5/20	Wed 9/9/20		277	0 days		100%
277	CIW-1520b		Trench excavation for twin DN250 sludge pipe ,on hold due to encounter of uncharted sludge pipe		351	75 days	Tue 21/4/20	Tue 21/7/20	4 days	Wed 15/7/20	Sat 18/7/20	Wed 15/7/20	Sat 18/7/20	276	278	0 days		100%
278	CIW-1520c		Additional hole drilling works and identification of connetion point			0 days	NA	NA	53 days	Mon 20/7/20	Fri 18/9/20	Mon 20/7/20	Fri 18/9/20	277	250	0 days		100%
279	CIW-1520d		Temporary diversion of substandard DI 250 Leachate raising main		202	0 days	NA	NA	127 days	Tue 20/10/20	Wed 24/3/21	Tue 20/10/20	Wed 24/3/21	228		0 days		100%
280	CIW-1520e		Protection work for substandard DI 500 tank drain Pipe (near MHD 9.5)		302	0 days	NA	NA	93 days	Wed 18/11/20	Fri 12/3/21	Wed 18/11/20	Fri 12/3/21	228		0 days		100%
281	CIW-1520f		Encounter of uncharted concrete pipe within sheetpile cofferdam at MHA04			0 days	NA	NA	2 days	Tue 10/11/20	Wed 11/11/20	Tue 10/11/20	Wed 11/11/20		282	0 days		100%
282	CIW-1520g		Resumption and construction of sludge pipe construction			0 days	NA	NA	253 days	Sat 19/9/20	Thu 29/7/21	Sat 19/9/20	NA	281	307,44FF	-36 days		91%
283	CIW-1530		Diversion of Leachate Rising Main			60 days	Tue 21/4/20	Fri 3/7/20	60 days	Tue 14/9/21	Thu 25/11/21	NA	NA	241		-135 days		0%
284	**CIW-1600**		**Diversion of pipelines near Primary Sludge Thickeners (approx. 180m long 150mm to 375mm concrete pipes)**			**156 days**	**Thu 6/2/20**	**Fri 14/8/20**	**570 days**	**Tue 26/11/19**	**Thu 28/10/21**	**Tue 26/11/19**	**NA**			**0 days**		**55%**
285	CIW-1610		~~Trench Excavation from M/H MHD1E to MHD5 (approx. 90m long with M/Hs MHD1A, 1B, 1C, 1D & 1E) - realigned~~		87	~~60 days~~	~~Thu 6/2/20~~	~~Mon 20/4/20~~	~~0 days~~	~~Tue 26/11/19~~	~~Tue 26/11/19~~	~~Tue 26/11/19~~	~~Tue 26/11/19~~			0 days		100%
286	~~CIW-1620~~		~~Manholes construction and Pipe laying - omitted~~		87	~~60 days~~	~~Mon 30/3/20~~	~~Sat 13/6/20~~	~~0 days~~	~~Tue 2/6/20~~	~~Tue 2/6/20~~	~~Tue 2/6/20~~	~~Tue 2/6/20~~		~~43FF,291~~	~~0 days~~		~~100%~~
287	CIW-1621		Temporary Diversion of Existing DN200 Filitrate Rising Main		034	0 days	NA	NA	20 days	Sat 1/8/20	Mon 24/8/20	Sat 1/8/20	Mon 24/8/20		288	0 days		100%
288	CIW-1623		Pipeline Diversion Works near Primary Sludge Thickening Tank		(114)	0 days	NA	NA	30 days	Fri 16/4/21	Sat 22/5/21	Fri 16/4/21	Sat 22/5/21	287	289	0 days		100%
289	CIW-1625		Uncharted underground utilities near Proposed MHD5B		0260	0 days	NA	NA	26 days	Mon 24/5/21	Wed 23/6/21	Mon 24/5/21	Wed 23/6/21	288	290,293	0 days		100%
290	CIW-1630		Trench Excavation from M/H (approx. 90m long with M/Hs M1A to M3B)			60 days	Tue 21/4/20	Fri 3/7/20	32 days	Thu 19/3/20	Wed 29/4/20	Thu 19/3/20	Wed 29/4/20	289	291,292	0 days		100%
291	CIW-1640		Manholes construction (M1A, M1B, M2B, M3B) and Pipe laying			25 days	Mon 15/6/20	Wed 15/7/20	12 days	Mon 4/5/20	Sat 16/5/20	Mon 4/5/20	Sat 16/5/20	290,286	43FF	0 days		100%
292	CIW-1650		Trench Excavation from MHD5 to MHD9.5 (approx. 90m long with M/Hs MHD5A & 5B)		(114)	50 days	Thu 16/7/20	Fri 11/9/20	60 days	Wed 2/9/20	Wed 30/12/20	Wed 2/9/20	Wed 30/12/20	290,296,301,303,305		0 days		100%
293	CIW-1660		Provision of Pumping System from Screen to Flume Channel		87	0 days	NA	NA	287 days	Tue 10/11/20	Thu 28/10/21	Tue 10/11/20	NA	289	294	-111 days		75%
294	CIW-1670		Manholes construction (MHD5A, MHD5B, MHD5C) and Pipe laying			45 days	Sat 23/5/20	Thu 16/7/20	293 days	Tue 3/11/20	Thu 28/10/21	Tue 3/11/20	NA	293	44FF	-111 days		8%
295	**CIW-2000**		**Decommission and Demolition of Existing Faciliates and Structures**			**240 days**	**Mon 2/3/20**	**Fri 18/12/20**	**222 days**	**Thu 19/3/20**	**Tue 15/12/20**	**Thu 19/3/20**	**Tue 15/12/20**	**6,122,160**		**0 days**		**100%**
296	**CIW-2100**		**Primary Sludge Thickening Tank No.1 and No.2**			**80 days**	**Mon 2/3/20**	**Tue 9/6/20**	**222 days**	**Thu 19/3/20**	**Tue 15/12/20**	**Thu 19/3/20**	**Tue 15/12/20**		**292**	**0 days**		**100%**
297	CIW-2101		Additional Works for Temporary Diversion of Bypass Pipe near Primary Sludge Thickeners			0 days	NA	NA	45 days	Thu 19/3/20	Sun 17/5/20	Thu 19/3/20	Sun 17/5/20			0 days		100%
298	CIW-2110		Removal of E&M equipment of primary sludge thickening tank			0 days	NA	NA	1 day	Thu 4/6/20	Thu 4/6/20	Thu 4/6/20	Thu 4/6/20		299	0 days		100%
299	CIW-2120		Decommission and Demolition the tank			80 days	Mon 2/3/20	Tue 9/6/20	150 days	Thu 18/6/20	Tue 15/12/20	Thu 18/6/20	Tue 15/12/20	298	301	0 days		100%
300	CIW-2130		Demolition of structure no.2			0 days	NA	NA	24 days	Mon 18/5/20	Mon 22/6/20	Mon 18/5/20	Mon 22/6/20			0 days		100%
301	CIW-2200		Primary Sludge Pump Pit			60 days	Wed 10/6/20	Thu 20/8/20	18 days	Wed 22/7/20	Tue 11/8/20	Wed 22/7/20	Tue 11/8/20	299	302,303,292,304	0 days		100%
302	CIW-2300		Septic Tank			50 days	Fri 21/8/20	Tue 20/10/20	18 days	Wed 12/8/20	Tue 1/9/20	Wed 12/8/20	Tue 1/9/20	301		0 days		100%
303	**CIW-2400**		**Diesel Tank**			**50 days**	**Wed 21/10/20**	**Fri 18/12/20**	**53 days**	**Thu 2/7/20**	**Tue 1/9/20**	**Thu 2/7/20**	**Tue 1/9/20**	**301**	**292**	**0 days**		**100%**
304	CIW-2410		Transfers of Remaining Diesel Fuel of Existing Diesel Tank			0 days	NA	NA	15 days	Thu 2/7/20	Tue 21/7/20	Thu 2/7/20	Tue 21/7/20	301	305	0 days		100%
305	CIW-2420		Demolition of diesel tank			50 days	Wed 21/10/20	Fri 18/12/20	18 days	Wed 12/8/20	Tue 1/9/20	Wed 12/8/20	Tue 1/9/20	304	**292**	0 days		100%
306	**CIW-3000**	*	**Inlet Works No.1 Building (1)**			**569 days**	**Sat 19/12/20**	**Mon 21/11/22**	**747 days**	**Tue 15/9/20**	**Thu 23/3/23**	**Tue 15/9/20**	**NA**	**6**		**748 days**		**18%**
307	CIW-3100		Predrilling (10nrs, 1rigs, 2.5days/drillhole/rig) - stage 1			40 days	Mon 4/1/21	Mon 22/2/21	28 days	Tue 15/9/20	Mon 19/10/20	Tue 15/9/20	Mon 19/10/20	248,250,273,228,282		0 days	1	100%
308	CIW-3100a		Predrilling (22nrs, 1rigs, 2.5days/drillhole/rig) - stage 2			0 days	NA	NA	60 days	Tue 8/12/20	Mon 22/2/21	Tue 8/12/20	Mon 22/2/21			0 days		100%
309	CIW-3200		Pre-bored H piles (188nos, 1.8rigs, 2days/rig/pile)			133 days	Tue 23/2/21	Wed 4/8/21	210 days	Fri 19/2/21	Tue 2/11/21	Fri 19/2/21	NA	228,132	310SS+150 days,311	-34 days	5	63%
310	CIW-3400a		Pile Load Test at stage 1			26 days	Thu 5/8/21	Fri 3/9/21	21 days	Sat 21/8/21	Tue 14/9/21	NA	NA	309SS+150 days	312	83 days		0%
311	CIW-3400b		Pile Load Test at stage 2 & 3			0 days	NA	NA	21 days	Wed 3/11/21	Fri 26/11/21	NA	NA	309	328,313	-34 days		0%
312	CIW-3300a		Sheetpile Installation at Phase C(900sq.m, 1rigs, 50sqm/rig/day)			80 days	Tue 23/3/21	Wed 30/6/21	30 days	Wed 15/9/21	Fri 22/10/21	NA	NA	310	315	83 days		0%
313	CIW-3300b		Sheetpile Installation at Phase B (2300sq.m, 1rigs, 50sqm/rig/day)			0 days	NA	NA	50 days	Sat 27/11/21	Thu 27/1/22	NA	NA	311	316	-34 days		0%
314	CIW-3500		**ELS works**			**77 days**	**Sat 4/9/21**	**Mon 6/12/21**	**157 days**	**Sat 23/10/21**	**Fri 6/5/22**	**NA**	**NA**		**334,165SF,169SF**	**3 days**	**5**	**0%**
315	CIW-3510		Phrase C (Grid G3 to L7)) - Excavation to -3.3mPD and blinding (strutting 2 layers, excavate soil 2250 cu.m)			77 days	Fri 4/6/21	Mon 6/12/21	77 days	Sat 23/10/21	Mon 24/1/22	NA	NA	312	320,333	83 days		0%
316	CIW-3520		Phrase B (Grid A1 to G3) - Excavation to -7.5mPD and blinding (strutting 4 layers, excavate soil 11000cu.m)			77 days	Fri 4/6/21	Mon 6/12/21	77 days	Fri 28/1/22	Fri 6/5/22	NA	NA	313	324	-34 days		0%
317	CIW-3590		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Mon 30/8/21	Mon 30/8/21	NA	NA	318SS-3 emons		1211 days		0%
318	CIW-3600		**R.C. Structure works**			**296 days**	**Thu 5/8/21**	**Thu 4/8/22**	**300 days**	**Sat 27/11/21**	**Thu 1/12/22**	**NA**	**NA**		**317SS-3 emons,332**	**-34 days**	**5**	**0%**
319	CIW-3610		**Phase C (Grid G3 to L7)**			**105 days**	**Thu 5/8/21**	**Wed 8/12/21**	**105 days**	**Tue 25/1/22**	**Tue 7/6/22**	**NA**	**NA**			**114 days**		**0%**
320	CIW-3611		Rebar fix and formwork and concreting for the pile cap (G/F) (including ELS demolition works)			40 days	Thu 5/8/21	Mon 20/9/21	40 days	Tue 25/1/22	Tue 15/3/22	NA	NA	315	321	114 days		0%
321	CIW-3612		Rebar fix and formwork and concreting upto +13.45mPD (1/F)			25 days	Tue 21/9/21	Fri 22/10/21	25 days	Wed 16/3/22	Thu 14/4/22	NA	NA	320	322	114 days		0%
322	CIW-3613	KD1C	Rebar fix and formwork and concreting upto +25.80mPD (R/F)			40 days	Sat 23/10/21	Wed 8/12/21	40 days	Tue 19/4/22	Tue 7/6/22	NA	NA	321	44FF,331,524	114 days		0%
323	CIW-3620		**Phase B (Gride A1 to G3)**			**193 days**	**Tue 7/12/21**	**Thu 4/8/22**	**173 days**	**Sat 7/5/22**	**Thu 1/12/22**	**NA**	**NA**			**-34 days**		**0%**
324	CIW-3621		Rebar fix and formwork and concreting for the Inlet Works structure upto Ground Level (including ELS demolition works)			54 days	Tue 7/12/21	Mon 14/2/22	54 days	Sat 7/5/22	Tue 12/7/22	NA	NA	316	325	-34 days		0%
325	CIW-3622		Apply waterproofing membrance and backfilling			14 days	Tue 15/2/22	Wed 2/3/22	14 days	Wed 13/7/22	Thu 28/7/22	NA	NA	324,185	326	-34 days		0%
326	CIW-3623	KD1C	Rebar fix and formwork and concreting for the Inlet Works structure upto Roof Level			105 days	Thu 3/3/22	Thu 4/8/22	105 days	Fri 29/7/22	Thu 1/12/22	NA	NA	325	331	-34 days		0%
327	CIW-3630		**Phase A (G1 to L3)**			**193 days**	**Tue 7/12/21**	**Thu 4/8/22**	**173 days**	**Sat 27/11/21**	**Sat 2/7/22**	**NA**	**NA**			**93 days**		**0%**
328	CIW-3631		Rebar fix and formwork and concreting for the Inlet Works structure upto Ground Level (including ELS demolition works)			54 days	Tue 7/12/21	Mon 14/2/22	54 days	Sat 27/11/21	Fri 4/2/22	NA	NA	311	329	93 days		0%
329	CIW-3632		Apply waterproofing membrance and backfilling			14 days	Tue 15/2/22	Wed 2/3/22	14 days	Sat 5/2/22	Mon 21/2/22	NA	NA	328,185	330	93 days		0%
330	CIW-3633	KD1C	Rebar fix and formwork and concreting for the Inlet Works structure upto Roof Level			105 days	Thu 3/3/22	Thu 4/8/22	105 days	Tue 22/2/22	Sat 2/7/22	NA	NA	329	332,44FF,331	93 days		0%
331	CIW-3700	KD1C	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Thu 4/8/22	Thu 4/8/22	0 days	Thu 1/12/22	Thu 1/12/22	NA	NA	330,322,326	44FF	-34 days		0%
332	CIW-3800	SW1	ABWF works + BS works			90 days	Fri 5/8/22	Mon 21/11/22	90 days	Fri 2/12/22	Thu 23/3/23	NA	NA	330,189,141,318	56FF	262 days		0%
333	CIW-3900	KD1D	Process Pipe CHE chainage 0-20 & CHF chainage 0-20			0 days	NA	NA	50 days	Sat 17/12/22	Mon 20/2/23	NA	NA	315,351FF	45FF	0 days		0%
334	CIW-4000	SW2	Remaining sewerage and utilities in Portion B1 & B2			0 days	NA	NA	60 days	Sat 7/5/22	Tue 19/7/22	NA	NA	314	57FF,555	3 days		0%
335	**CPS-0000**	*	**Primary Sedimentation Tanks, B-3 (2)**			**1115 days**	**Mon 18/11/19**	**Wed 23/8/23**	**1115 days**	**Mon 18/11/19**	**Wed 23/8/23**	**Mon 18/11/19**	**NA**	**8**		**139 days**		**44%**
336	CPS-1000		Operation of the Existing Primary sedimentation Tanks			615 days	Mon 18/11/19	Sat 24/7/21	615 days	Mon 18/11/19	Sat 24/7/21	Mon 18/11/19	Sat 24/7/21	2	339,338	0 days		100%
337	CPS-1100		Identification of existing cables near Primary Sedimentation Tank		88	0 days	NA	NA	3 days	Fri 19/2/21	Mon 22/2/21	Fri 19/2/21	Mon 22/2/21			0 days		100%
338	CPS-1200		Removal of residual sludge			0 days	NA	NA	12 days	Mon 26/7/21	Sat 7/8/21	NA	NA	336	339	-62 days		0%
339	CPS-2000		Demolition of existing primary sedimentation tanks no. 1			45 days	Mon 13/12/21	Wed 9/2/22	30 days	Mon 9/8/21	Sat 11/9/21	NA	NA	122,160,162,336,338	342,340	-62 days		0%
340	CPS-2000a		Demolition of existing primary sedimentation tanks no. 2			0 days	NA	NA	25 days	Mon 13/9/21	Wed 13/10/21	NA	NA	339	342	-62 days		0%
341	CPS-3000a		Predrilling (5nrs, 1rigs, 3days/drillhole/rig) - In-advanced stage			0 days	NA	NA	15 days	Thu 8/4/21	Sat 24/4/21	Thu 8/4/21	Sat 24/4/21		343	0 days		100%



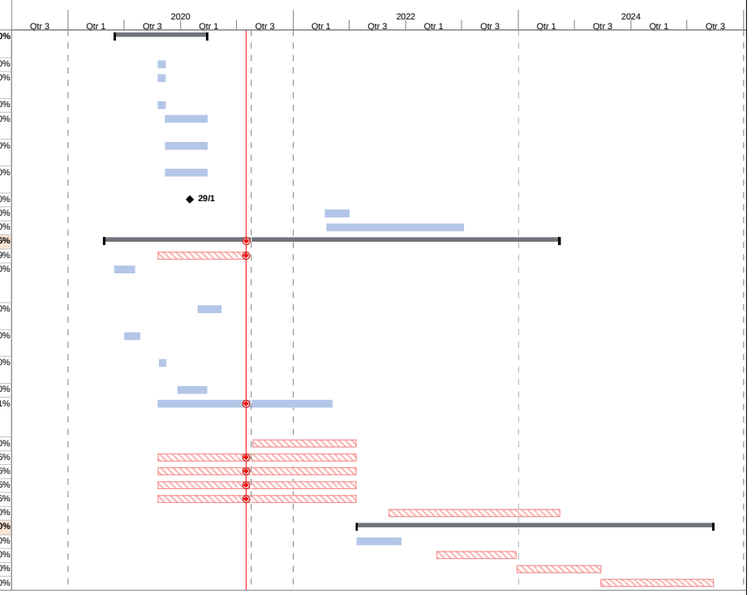
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
342	CPS-3000		Predrilling (63nrs, 3rigs, 3days/drillhole/rig)			38 days	Thu 10/2/22	Fri 25/3/22	38 days	Fri 15/10/21	Sat 27/11/21	NA	NA	127,452,339,340	343	-62 days	1	0%
343	CPS-4000		Pre-bored H piles (205nos, 2.5rigs, 2days/pile/rig)			102 days	Sat 26/3/22	Mon 1/8/22	164 days	Mon 29/11/21	Wed 22/6/22	NA	NA	132,453,341,342	344FS-40 days,346,345	-62 days	5	0%
344	CPS-5000		Sheetpile Installation (FSP-II, 3360sq.m, 1rigs, 50sqm/rig/day)			85 days	Wed 25/5/22	Fri 2/9/22	42 days	Thu 5/5/22	Fri 24/6/22	NA	NA	343FS-40 days,133	346,352SS+27 days	-62 days		0%
345	CPS-6000		Pile Load Test			26 days	Tue 2/8/22	Wed 31/8/22	26 days	Thu 23/6/22	Sat 23/7/22	NA	NA	343	346	0 days		0%
346	CPS-7000		ELS works (20000cu.m soil with 2 layers wailing / strutting)			45 days	Sat 3/9/22	Fri 28/10/22	60 days	Mon 25/7/22	Wed 5/10/22	NA	NA	343,135,345,344	347FF-3 emons,348,166SF,170SF	0 days	3	0%
347	CPS-7900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 7/7/22	Thu 7/7/22	NA	NA	346FF-3 emons	348SS-3 emons	186 days		0%
348	CPS-8000	KD1D	R.C. Structure works (including ELS demolition works)			92 days	Sat 29/10/22	Mon 20/2/23	112 days	Thu 6/10/22	Mon 20/2/23	NA	NA	137,346,347SS-3 emons	349,350,45FF,351FF	0 days	3	0%
349	CPS-9000	KD1D	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Mon 20/2/23	Mon 20/2/23	0 days	Mon 20/2/23	Mon 20/2/23	NA	NA	348	45FF	0 days		0%
350	CPS-10000	SW1	ABWF works + BS works			150 days	Tue 21/2/23	Wed 23/8/23	150 days	Tue 21/2/23	Wed 23/8/23	NA	NA	348,189,141	56FF	139 days		0%
351	CPS-11000	KD1D	Flowmeter Chamber no.1			60 days	Tue 21/2/23	Sat 6/5/23	60 days	Tue 6/12/22	Mon 20/2/23	NA	NA	348FF	45FF,333FF	0 days		0%
352	CPS-12000	SW2	Process Pipe CHG chainage 0-50, CHH chainage 0-80, CHI chainage 0-95 & CHJ chianage 0-40 and surrounding utilities			0 days	NA	NA	100 days	Wed 8/6/22	Thu 6/10/22	NA	NA	344SS+27 days	57FF,555	-62 days		0%
353	**CBR-0000**	*	**Bioreactors No.2A & 2B, B-4 (3)**			**1106 days**	**Mon 18/11/19**	**Sat 12/8/23**	**1194 days**	**Mon 18/11/19**	**Mon 27/11/23**	**Mon 18/11/19**	**NA**	**9**		**546 days**		**38%**
354	CBR-1000		Operation of 2no. Existing 800mm air mains over bioreactor no.2			360 days	Mon 18/11/19	Wed 11/11/20	292 days	Mon 18/11/19	Wed 11/11/20	Mon 18/11/19	Wed 11/11/20	2		0 days		100%
355	CBR-2000		Construction of Removable Steel Shutter in the Common Channel of BR2 and 3		67	0 days	NA	NA	86 days	Thu 1/10/20	Fri 15/1/21	Thu 1/10/20	Fri 15/1/21	144	365	0 days		100%
356	CBR-4100		Take Down E&M Equipment & cables in Bioreactor BR2 and Return to DSD		95	0 days	NA	NA	90 days	Thu 15/10/20	Mon 1/2/21	Thu 15/10/20	Mon 1/2/21		366	0 days		100%
357	CBR-4200		Installation of monitoring points before demolition of BR2		219	0 days	NA	NA	5 days	Wed 27/1/21	Mon 1/2/21	Wed 27/1/21	Mon 1/2/21	363	358	0 days		100%
358	CBR-4300		Condition Survey for BR2			0 days	NA	NA	1 day	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	357	366	0 days		100%
359	**CBR-5000**		**Demolition of existing bioreactor no.2**			**60 days**	**Wed 3/2/21**	**Tue 20/4/21**	**98 days**	**Tue 10/11/20**	**Wed 10/3/21**	**Tue 10/11/20**	**Wed 10/3/21**	**122,162**		**0 days**		**100%**
360	CBR-5100		Identification and removal of existing cables on air main pipe bridge		210	0 days	NA	NA	35 days	Tue 10/11/20	Sat 19/12/20	Tue 10/11/20	Sat 19/12/20		361,365	0 days		100%
361	CBR-5300		Plugging and demolition of existing DN800 air main			0 days	NA	NA	5 days	Mon 28/12/20	Sat 2/1/21	Mon 28/12/20	Sat 2/1/21	360		0 days		100%
362	CBR-5200		Diversion of existing lighting cable and Earthing ducts_stage 1		264	0 days	NA	NA	43 days	Fri 4/12/20	Tue 26/1/21	Fri 4/12/20	Tue 26/1/21	363	366	0 days		100%
363	CBR-5400		Overflow incident from BR1 to BR2 works area no.1 (Dec 2020)		285	0 days	NA	NA	33 days	Fri 18/12/20	Thu 28/1/21	Fri 18/12/20	Thu 28/1/21	364	357,362	0 days		100%
364	CBR-5410		Overflow incident from BR1 to BR2 works area (Feb 2021)		340	0 days	NA	NA	8 days	Tue 16/2/21	Wed 24/2/21	Tue 16/2/21	Wed 24/2/21	365	366,363	0 days		100%
365	CBR-3000		Construction of Isolation Wall & stoplog in common channel of BR2 & BR3		277	0 days	NA	NA	43 days	Sat 16/1/21	Wed 10/3/21	Sat 16/1/21	Wed 10/3/21	355,360	364	0 days		100%
366	CBR-5500		Demolition of existing pipe bridge, partition wall and base slab (Stage 1)			30 days	Wed 3/2/21	Fri 12/3/21	26 days	Tue 2/2/21	Sat 6/3/21	Tue 2/2/21	Sat 6/3/21	362,358,364,356	367SS,368	0 days		100%
367	CBR-5520		Removal of additional concrete infill within the partition walls		(174)	0 days	NA	NA	26 days	Tue 2/2/21	Sat 6/3/21	Tue 2/2/21	Sat 6/3/21	366SS	368	0 days		100%
368	CBR-5900		Construction of precautionary measures (i.e. isolation wall)		322	0 days	NA	NA	2 days	Tue 9/3/21	Wed 10/3/21	Tue 9/3/21	Wed 10/3/21	366,367	369,371	0 days		100%
369	CBR-5905		Construction of precautionary measures (i.e. bund wall)		305	0 days	NA	NA	3 days	Thu 15/4/21	Sat 17/4/21	Thu 15/4/21	Sat 17/4/21	368		0 days		100%
370	CBR-5910		Removal of abandoned DN250 air pipe		209	0 days	NA	NA	6 days	Tue 20/4/21	Mon 26/4/21	Tue 20/4/21	Mon 26/4/21			0 days		100%
371	CBR-6000		Predrilling (33nrs, 3rigs, 2days/drillhole/rig)_stage 1			44 days	Wed 21/4/21	Sat 12/6/21	44 days	Mon 1/3/21	Wed 5/5/21	Mon 1/3/21	Wed 5/5/21	368	372	0 days	1	100%
372	CBR-7000		Pre-bored H piles (113nos, 2rigs, 2days/pile/rig)_stage 1			113 days	Tue 15/6/21	Thu 18/11/21	113 days	Thu 6/5/21	Fri 17/9/21	Thu 6/5/21	NA	371	382SS+30 days,377SS+45 days,38	1 day	5	41%
373	CBR-7100		**External works between BR2 and MFB2**			**0 days**	**NA**	**NA**	**217 days**	**Wed 30/6/21**	**Mon 21/3/22**	**Wed 30/6/21**	**NA**			**1046 days**		**9%**
374	CBR-7110		DN700 (CHER)RAS Diversion			0 days	NA	NA	45 days	Wed 30/6/21	Sat 21/8/21	Wed 30/6/21	NA	372SS+45 days	375	1212 days		2%
375	CBR-7120		Temporary vehicle diversion for RAS operation			0 days	NA	NA	6 days	Mon 23/8/21	Sat 28/8/21	NA	NA	374		1212 days		0%
376	CBR-7130		**DN600 Temporary Sewage diversion**			**0 days**	**NA**	**NA**	**120 days**	**Wed 30/6/21**	**Sat 20/11/21**	**Wed 30/6/21**	**NA**			**-45 days**		**18%**
377	CBR-7131		2nos. Manhole Construction (MHTD1 and MHTD2)		204, 353	0 days	NA	NA	75 days	Wed 30/6/21	Mon 27/9/21	Wed 30/6/21	NA	372SS+45 days	378FS-30 days	-88 days		36%
378	CBR-7132		Existing DN600 tank drain diversion		204, 353	45 days	NA	NA	75 days	Mon 23/8/21	Sat 20/11/21	NA	NA	377FS-30 days	379	-88 days		0%
379	CBR-7140		Demolition of abandoned DN600 pipe and existing surrounded wall & channel of BR2		353, 336	30 days	NA	NA	45 days	Mon 22/11/21	Sat 15/1/22	NA	NA	378	380	-88 days		0%
380	CBR-7150		Pre-drilling(3nr.) & Pre-bored H piles (20nrs, 1rig, 2days/drillhole/rig)_stage 2A			26 days	NA	NA	26 days	Mon 17/1/22	Fri 18/2/22	NA	NA	379	381	-88 days		0%
381	CBR-7160		Pile load test			26 days	NA	NA	26 days	Sat 19/2/22	Mon 21/3/22	NA	NA	380,386	389,388	-88 days		0%
382	CBR-7200		**External works between BR2 and PST**			**0 days**	**NA**	**NA**	**141 days**	**Wed 30/6/21**	**Wed 15/12/21**	**Wed 30/6/21**	**NA**	**372SS+30 days**		**-38 days**		**19%**
383	CBR-7210		Demolition of existing DN1200. DN900 and DN500 pipe (w/ ELS works)		91	0 days	NA	NA	75 days	Wed 30/6/21	Mon 27/9/21	Wed 30/6/21	NA	372SS+45 days	384	-38 days		36%
384	CBR-7220		Diversion of existing lighting cable and Earthing ducts (w/ ELS)		264	0 days	NA	NA	30 days	Tue 28/9/21	Wed 3/11/21	NA	NA	383	385	-38 days		0%
385	CBR-7230		Demolition of existing side wall		336	0 days	NA	NA	12 days	Thu 4/11/21	Wed 17/11/21	NA	NA	384	386	-38 days		0%
386	CBR-7240		Pre-bored H piles (24nrs, 2rig, 2days/drillhole/rig)_stage 2B			24 days	NA	NA	24 days	Thu 18/11/21	Wed 15/12/21	NA	NA	385	381	-38 days		0%
387	CBR-7340		Demolition of existing side wall between BR2 & BR3 and baseslab			0 days	NA	NA	60 days	Sat 18/9/21	Tue 30/11/21	NA	NA	372	388	1 day		0%
388	CBR-8000		Sheetpile Installation (3000sq.m, 3rigs, 50sqm/rig/day)			60 days	Wed 8/9/21	Fri 19/11/21	60 days	Tue 22/3/22	Tue 7/6/22	NA	NA	381,387	389	-88 days		0%
389	CBR-10000		ELS works (18100cu.m soil with 4 layers wailing / strutting)			125 days	Mon 20/12/21	Fri 27/5/22	80 days	Wed 8/6/22	Fri 9/9/22	NA	NA	135,381,388	391,390FF-3 emons,399SS+46 day	-88 days	3	0%
390	CBR-10900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Sat 11/6/22	Sat 11/6/22	NA	NA	389FF-3 emons	391SS-3 emons	168 days		0%
391	CBR-11000	KD1E	R.C. Structure works (including ELS demolition works)			180 days	Sat 28/5/22	Sat 31/12/22	180 days	Sat 10/9/22	Sat 22/4/23	NA	NA	138,186,187,190,188,389,390SS-3 emons	398,46FF,397,393FF,394SS+25 da	-88 days	5	0%
392		KD1E	Process Pipe CHO chainage 65-140			0 days	NA	NA	60 days	Wed 8/2/23	Sat 22/4/23	NA	NA	391FF	46FF	-88 days		0%
393	CBR-11020	KD1E	Additional backfill works after end wall construction at BR2 common channel		277	0 days	NA	NA	30 days	Wed 15/3/23	Sat 22/4/23	NA	NA	391FF	46FF	-88 days		0%
394	CBR-13000	KD1E	Flowmeter no. 2-4			180 days	2023/1/3	2023/8/12	60 days	Thu 13/10/22	Wed 21/12/22	NA	NA	391SS+25 days	395FS-13 days	-88 days		0%
395	CBR-14000	KD1E	Gate Valve Chamber no.1-3			180 days	2023/1/3	2023/8/12	60 days	Wed 7/12/22	Tue 21/2/23	NA	NA	394FS-13 days	396FS-12 days	-88 days		0%
396	CBR-15000	KD1E	Plug Valve Chamber no.1-2			180 days	2023/1/3	2023/8/12	60 days	Wed 8/2/23	Sat 22/4/23	NA	NA	395FS-12 days	46FF	-88 days		0%
397	CBR-12000	KD1E	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Sat 31/12/22	Sat 31/12/22	0 days	Sat 22/4/23	Sat 22/4/23	NA	NA	391	46FF	-88 days		0%
398	CBR-16000	SW1	ABWF works + BS works			180 days	Tue 3/1/23	Sat 12/8/23	180 days	Mon 24/4/23	Mon 27/11/23	NA	NA	391,189,141	56FF	60 days		0%
399	CBR-17000	SW2	Process Pipe CHQ chainage 65-170, CHP chainage 60-130, CHL chainage 0-35 & CHK chianage 0-50 and surrounding utilities			0 days	NA	NA	80 days	Tue 2/8/22	Sat 5/11/22	NA	NA	389SS+46 days	57FF,555	-88 days		0%
400	**CMF-0000**	*	**Membrane Facilities Building, B-5**			**941 days**	**Mon 6/1/20**	**Thu 9/3/23**	**1133 days**	**Mon 18/11/19**	**Wed 13/9/23**	**Mon 18/11/19**	**NA**	**2**		**121 days**		**45%**
401			Operation of existing Final Sedimentation Tanks no.3 & 4		26	0 days	NA	NA	98 days	Mon 18/11/19	Tue 17/3/20	Mon 18/11/19	Tue 17/3/20	2		0 days		100%
402	**CMF-1000**		**Demolition of existing final sedimentation tanks no. 3 & 4**			**14 days**	**Mon 6/1/20**	**Tue 21/1/20**	**340 days**	**Mon 6/1/20**	**Sun 28/2/21**	**Mon 6/1/20**	**Sun 28/2/21**	**160,122,10**		**0 days**		**100%**
403	CMF-1100		Confirmation of Decommission Schedule	68	30	0 days	NA	NA	58 days	Mon 6/1/20	Mon 16/3/20	Mon 6/1/20	Mon 16/3/20		404	0 days		100%
404	CMF-1200		Provision of new submersed pump	68	26	0 days	NA	NA	27 days	Wed 4/3/20	Fri 3/4/20	Wed 4/3/20	Fri 3/4/20	403	405	0 days		100%
405	CMF-1205		Assistant to decommissioning of Final Sedimentation Tank No. 3 and 4	68	7	0 days	NA	NA	14 days	Wed 4/3/20	Fri 3/4/20	Wed 4/3/20	Fri 3/4/20	404	406	0 days		100%
406	CMF-1300		Additional dismantling works to retain specified electrical and mechanical equipment	75	(013)	0 days	NA	NA	21 days	Tue 7/4/20	Wed 6/5/20	Tue 7/4/20	Wed 6/5/20	405	407	0 days		100%
407	CMF-1400		Additional pluging works for DN 1200 Conc. S&S pipe at wash water pumping station chamber	76, 77, 144	(015)	0 days	NA	NA	70 days	Mon 8/6/20	Sat 29/8/20	Mon 8/6/20	Sat 29/8/20	406	408	0 days		100%
408	CMF-1500		Diversion of wash water main	76, 77	032	0 days	NA	NA	21 days	Mon 15/6/20	Fri 10/7/20	Mon 15/6/20	Fri 10/7/20	407	409	0 days		100%
409	CMF-1600		Isolation wall for RAS Channel No.1	76, 77	035	0 days	NA	NA	40 days	Mon 1/6/20	Sat 18/7/20	Mon 1/6/20	Sat 18/7/20	408	413	0 days		100%
410	CMF-1710		Removal of DN1400 Bioreactor No. 2 Effluent Pipe		043	0 days	NA	NA	8 days	Fri 19/2/21	Sun 28/2/21	Fri 19/2/21	Sun 28/2/21			0 days		100%
411	CMF-1800		Exposed and disconnet uncharted existing cable between FST3 and FST 4	77	038	0 days	NA	NA	20 days	Thu 2/7/20	Fri 24/7/20	Thu 2/7/20	Fri 24/7/20			0 days		100%
412	CMF-1110		Demolition of structure no. 3 & 4	68, 75, 76, 77, 144		14 days	Mon 6/1/20	Tue 21/1/20	122 days	Wed 1/4/20	Sat 29/8/20	Wed 1/4/20	Sat 29/8/20		414	0 days		100%
413	CMF-1900		Removal of Existing DN150 SAS Rising Main at RAS Channel No. 1	212	060	0 days	NA	NA	23 days	Mon 31/8/20	Fri 25/9/20	Mon 31/8/20	Fri 25/9/20	409	415	0 days		100%
414	CMF-2000		Predrilling (83nrs, 4rigs, 2.5days/drillhole/rig)	144, 212	120	42 days	Sat 6/6/20	Mon 27/7/20	31 days	Mon 10/8/20	Mon 14/9/20	Mon 10/8/20	Mon 14/9/20	127,412	415	0 days	1	100%
415	CMF-3000		Pre-bored H piles (171nos, 2rigs, 1.5days/pile/rig) [Extended working hours 0700-1900 & shortern pile length]	212, 308, 309	120	140 days	Tue 28/7/20	Wed 13/1/21	96 days	Mon 28/9/20	Sat 23/1/21	Mon 28/9/20	Sat 23/1/21	414,132,413	416,417	0 days	5	100%
416	CMF-3100		Change of Layout of Basement of MFB no. 2		(102)	0 days	NA	NA	17 days	Tue 3/11/20	Sat 21/11/20	Tue 3/11/20	Sat 21/11/20	415		0 days		100%
417	CMF-4000		Pile Load Test			25 days	Thu 14/1/21	Tue 16/2/21	19 days	Mon 4/1/21	Mon 25/1/21	Mon 4/1/21	Mon 25/1/21	415	421,418	0 days		100%
418	CMF-5000		Installation of sheetpile [with pre-boring]		120	40 days	Wed 22/1/20	Wed 11/3/20	120 days	Mon 28/12/20	Thu 24/6/21	Mon 28/12/20	Thu 24/6/21	417	421	0 days		100%
419	**CMF-6000**		**ELS works**			**169 days**	**Wed 17/2/21**	**Thu 9/9/21**	**188 days**	**Fri 25/6/21**	**Thu 10/2/22**	**Fri 25/6/21**	**NA**	**10**	**424FF-3 emons**	**-87 days**	**5**	**22%**
420	**CMF-6100**		**Pharse A (A1 to N6) - Excavation to -9mPD and blinding**		**45**	**169 days**	**Wed 17/2/21**	**Thu 9/9/21**	**188 days**	**Fri 25/6/21**	**Thu 10/2/22**	**Fri 25/6/21**	**NA**		**423SS**	**-100 days**		**16%**
421	CMF-6110		Soil Excavation [Extended working hours 0700-1900 & reduction of excavation volume]		120, 207	169 days	Wed 17/2/21	Thu 9/9/21	88 days	Fri 25/6/21	Fri 8/10/21	Fri 25/6/21	NA	418,135,417	422	-117 days		35%
422	CMF-6120		Additional Rock Excavation [2200 cu.m, 7.5cu.m/group x 2]		120, 207	0 days	NA	NA	100 days	Sat 9/10/21	Thu 10/2/22	NA	NA	421	426	-117 days		0%
423	CMF-6200		Pharse B (A6 to N10) - Excavation to -1.9mPD and blinding			169 days	Wed 17/2/21	Thu 9/9/21	100 days	Fri 25/6/21	Sat 23/10/21	Fri 25/6/21	NA	420SS	427,433	1 day		31%
424	CMF-6900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Fri 12/11/21	Fri 12/11/21	NA	NA	419FF-3 emons	425SS-3 emons	216 days		0%
425	**CMF-7000**		**RC Structure works**			**232 days**	**Fri 10/9/21**	**Sat 25/6/22**	**262 days**	**Fri 11/2/22**	**Wed 28/12/22**	**NA**	**NA**	**10,424SS-3 emons**		**-117 days**	**5**	**0%**
426	CMF-7100	KD1F	Phase A - from B2 - Level 1 (including ELS demolition works)			112 days	Fri 10/9/21	Tue 25/1/22	112 days	Fri 11/2/22	Wed 29/6/22	NA	NA	139,186,187,190,188,422	427SS+30 days,428,430	-117 days		0%
427	CMF-7110	KD1F	Phase B - from B1 - Level 1 (including ELS demolition works)			112 days	Fri 10/9/21	Tue 25/1/22	112 days	Fri 18/3/22	Thu 4/8/22	NA	NA	426SS+30 days,423	429,430	-117 days		0%
428	CMF-7120	KD1G	Phase A - from Level 1 to Roof			120 days	Wed 26/1/22	Sat 25/6/22	120 days	Thu 30/6/22	Mon 21/11/22	NA	NA	426	431,432	-87 days		0%
429	CMF-7130	KD1G	Phase B - from Level 1 to Roof			120 days	Wed 26/1/22	Sat 25/6/22	120 days	Fri 5/8/22	Wed 28/12/22	NA	NA	427	431,432	-117 days		0%
430	CMF-8000	KD1F	Allow access to Contractor DE/2018/04 for E&M installation and T&C works (from B2-level 1)			0 days	Tue 25/1/22	Tue 25/1/22	0 days	Thu 4/8/22	Thu 4/8/22	NA	NA	426,427	47FF	-115 days		0%
431	CMF-9000	KD1G	Allow access to Contractor DE/2018/04 for E&M installation and T&C works (from Level to Roof)			0 days	Sat 25/6/22	Sat 25/6/22	0 days	Wed 28/12/22	Wed 28/12/22	NA	NA	428,429	48FF	-117 days		0%
432	CMF-10000	SW1	ABWF works + BS works			210 days	Mon 27/6/22	Thu 9/3/23	210 days	Thu 29/12/22	Wed 13/9/23	NA	NA	189,428,429	56FF	121 days		0%
433	CMF-11000	SW2	Process Pipe CHQ chainage 0-65, CHM chainage 0-120, CHN chainage 0-125, CHO chainage 0-65, CHP chainage 0-60 & CHV chaiange 0-50 and surrounding utilties			0 days	NA	NA	176 days	Mon 25/10/21	Tue 31/5/22	NA	NA	423	57FF,555	43 days		0%
434	**CSA-0000**	*	**SAS Pumping Station, B-6**			**455 days**	**Wed 20/5/20**	**Thu 25/11/21**	**728 days**	**Sat 18/4/20**	**Wed 28/9/22**	**Sat 18/4/20**	**NA**	**11**		**891 days**		**78%**



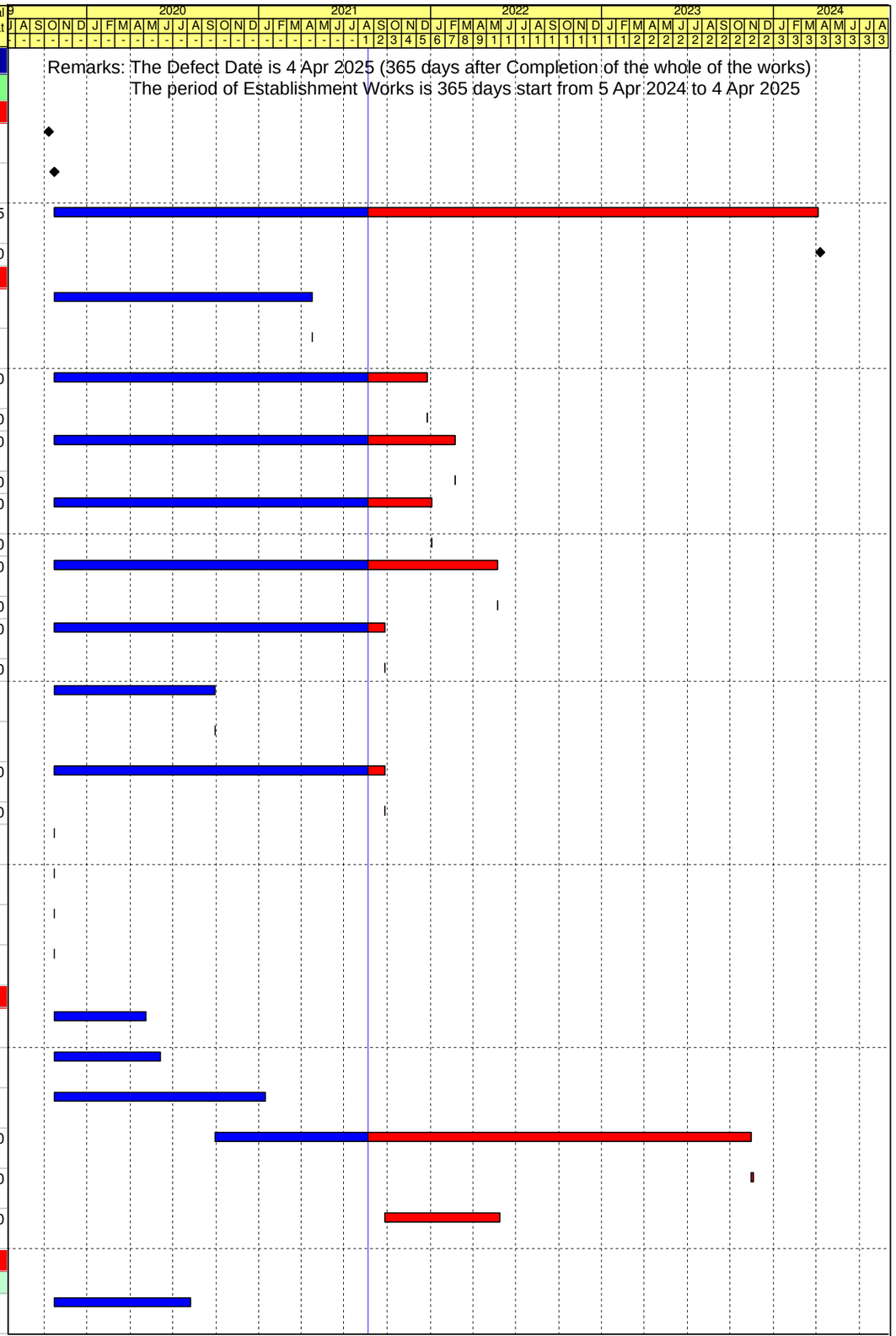
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
435	**CSA-1000**		**Additional Preliminary Works**			**0 days**	**NA**	**NA**	**330 days**	**Tue 9/6/20**	**Mon 19/7/21**	**Tue 9/6/20**	**NA**			**1247 days**		**98%**
436	CSA-1020		Expose and abandon existing electric cable & trial pits		78	0 days	NA	NA	39 days	Mon 17/8/20	Wed 30/9/20	Mon 17/8/20	Wed 30/9/20			0 days		100%
437	CSA-1030		Installation of standpipes		71	0 days	NA	NA	13 days	Mon 14/9/20	Mon 28/9/20	Mon 14/9/20	Mon 28/9/20			0 days		100%
438	CSA-1100		Diversion of Existing SAS Rising Main near SAS Pumping Station	68, 75, 76	69	0 days	NA	NA	170 days	Tue 9/6/20	Thu 31/12/20	Tue 9/6/20	Thu 31/12/20		453	0 days		100%
439	CSA-1200		Decommission of exisiting power and signal systems in leachate Pump station switch room	312, 309, 310	74	0 days	NA	NA	58 days	Mon 21/9/20	Mon 30/11/20	Mon 21/9/20	Mon 30/11/20	146	453	0 days		100%
440	CSA-1300		Construction of Cable trough for CLP 11kv Cable Diversion	75, 76, 77, 161		0 days	NA	NA	54 days	Mon 19/10/20	Mon 21/12/20	Mon 19/10/20	Mon 21/12/20		453	0 days		100%
441	CSA-1400		Demolition of Existing Pillar box and its concrete plinth	144, 212, 30	30	0 days	NA	NA	53 days	Wed 12/8/20	Sat 14/11/20	Wed 12/8/20	Sat 14/11/20	149	453	0 days		100%
442	CSA-1500		Excavation to locate existing underground cble near SAS Pump Station		78	0 days	NA	NA	59 days	Wed 17/6/20	Sat 21/11/20	Wed 17/6/20	Sat 21/11/20		453	0 days		100%
443	CSA-1600		Diversion of Existing DN80 Permeate Rising Main near SAS Pumping station		89	0 days	NA	NA	72 days	Tue 6/10/20	Thu 31/12/20	Tue 6/10/20	Thu 31/12/20		453	0 days		100%
444	CSA-1800		Trench Excavation near SAS for CLP diversion of 11kV cable	309, 310	97	0 days	NA	NA	53 days	Mon 12/10/20	Sat 12/12/20	Mon 12/10/20	Sat 12/12/20		453	0 days		100%
445	CSA-1700		Relocation of Oil Interceptor Near Existing Compressor House	144, 212, 30	70	0 days	NA	NA	50 days	Mon 9/11/20	Fri 8/1/21	Mon 9/11/20	Fri 8/1/21		453	0 days		100%
446	CSA-1900		Diversion of pumping system sewerage	212, 309, 31	83	0 days	NA	NA	36 days	Wed 13/1/21	Fri 26/2/21	Wed 13/1/21	Fri 26/2/21	151	455,453,447	0 days		100%
447	CSA-1910		Diversion of Existing copper pipe near proposed SAS pumping station	309, 310	225	0 days	NA	NA	61 days	Mon 19/10/20	Thu 31/12/20	Mon 19/10/20	Thu 31/12/20	446	453	0 days		100%
448	CSA-1920		Pipework of proposed SAS Pumping Station - 13 nos. of puddles		221	0 days	NA	NA	180 days	Mon 7/12/20	Mon 19/7/21	Mon 7/12/20	NA			1247 days		92%
449	CSA-1930		Additional DN150 Rising main for SAS		220/69	0 days	NA	NA	15 days	Wed 2/12/20	Fri 18/12/20	Wed 2/12/20	Fri 18/12/20			0 days		100%
450	CSA-1940		Additional DN90 PE pipe diversion		89	0 days	NA	NA	7 days	Fri 11/12/20	Fri 18/12/20	Fri 11/12/20	Fri 18/12/20			0 days		100%
451	CSA-1970		Additional diversion of existing sludge rising main and sewerage system		81	0 days	NA	NA	15 days	Thu 21/1/21	Sat 6/2/21	Thu 21/1/21	Sat 6/2/21			0 days		100%
452	CSA-2000		Predrilling (4nrs, 1rig, 4days/drillhole/rig)	68		16 days	Wed 20/5/20	Sat 6/6/20	7 days	Sat 18/4/20	Sat 25/4/20	Sat 18/4/20	Sat 25/4/20	127	342,453	0 days		100%
453	CSA-3000		Pre-bored H piles (12nos, 1rigs, 4days/pile/rig)			60 days	Mon 8/6/20	Tue 18/8/20	19 days	Mon 4/1/21	Mon 25/1/21	Mon 4/1/21	Mon 25/1/21	132,452,148,438,439,441,442,443,445,44	343,454	0 days	2	100%
454	CSA-4000		Pile Load Test			21 days	Wed 19/8/20	Thu 17/9/20	22 days	Tue 23/2/21	Fri 19/3/21	Tue 23/2/21	Fri 19/3/21	453	456,455	0 days		100%
455	CSA-5000		Sheetpile Installation (FSP-II, 690sq.m, 40sqm/day)			28 days	Wed 19/8/20	Sat 19/9/20	28 days	Tue 30/3/21	Wed 5/5/21	Tue 30/3/21	Wed 5/5/21	133,454,446	456	0 days		100%
456	CSA-6000		ELS works (1300cu.m soil with 2 layers wailing / strutting)			75 days	Mon 21/9/20	Wed 19/2/20	75 days	Thu 6/5/21	Wed 4/8/21	Thu 6/5/21	NA	455,135,454	458,457FF-3 emons	-121 days	2	96%
457	CSA-6900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 6/5/21	Thu 6/5/21	Thu 6/5/21	Thu 6/5/21	456FF-3 emons	458SS-3 emons	0 days		100%
458	CSA-7000	KD1H	R.C. Structure works (including ELS demolition works)			186 days	Mon 21/12/20	Mon 9/8/21	186 days	Thu 5/8/21	Sat 19/3/22	NA	NA	456,457SS-3 emons	459,460,49FF	-121 days	5	0%
459	CSA-8000	KD1H	Allow access to Contractor DE/2018/03 for E&M installation and T&C works			0 days	Mon 9/8/21	Mon 9/8/21	0 days	Sat 19/3/22	Sat 19/3/22	NA	NA	458	49FF	-121 days		0%
460	CSA-9000	SW1	ABWF works + BS works			90 days	Tue 10/8/21	Thu 25/11/21	90 days	Tue 14/6/22	Wed 28/9/22	NA	NA	458,189,141,522SS	56FF	405 days		0%
461	**CAS-0000**	*	**Ancillary Structures, B-7**			**503 days**	**Mon 7/9/20**	**Sat 21/5/22**	**420 days**	**Mon 3/5/21**	**Wed 28/9/22**	**Mon 3/5/21**	**NA**	**12**		**891 days**		**7%**
462	**CAS-1000**		Demolition of Existing Faciliates and Structures (leachate pump pit & pumping station)			120 days	Mon 7/9/20	Sat 30/1/21	120 days	Mon 3/5/21	Thu 23/9/21	Mon 3/5/21	NA	122,160,162	497	48 days		41%
463	**CFS-1000**	*	**Fire Services Sprinkler Pumping Room & Emergency Generator House (9)+(10)****		**301**	**220 days**	**Sat 10/4/21**	**Sun 3/1/21**	**419 days**	**Tue 4/5/21**	**Wed 28/9/22**	**Tue 4/5/21**	**NA**			**405 days**		**14%**
464	CFS-1000		Water Sampling and Testing for existing effluent pump pit		384	0 days	NA	NA	12 days	Tue 4/5/21	Mon 17/5/21	Tue 4/5/21	Mon 17/5/21		465	0 days		100%
465	CFS-1150		Identification, decommission and demolition of the existing kiosk		86	0 days	NA	NA	26 days	Tue 18/5/21	Fri 18/6/21	Tue 18/5/21	Fri 18/6/21	464	466,479	0 days		100%
466	CFS-1100		Provision of Flowmeter chamber, gate valve chamber and associated seweage		85	0 days	NA	NA	90 days	Sat 19/6/21	Tue 5/10/21	Sat 19/6/21	NA	465	467,469FF	-101 days		40%
467	CFS-1200		Decommission and demolistion of the existing pump pit and associated sewerage manholes and pipes		86	0 days	NA	NA	40 days	Wed 6/10/21	Mon 22/11/21	NA	NA	466	470	-101 days		0%
468	CFS-1250		Diversion of Leachate Rising Main near SSSH		241	0 days	NA	NA	18 days	Wed 28/7/21	Wed 18/8/21	NA	NA	469SF	480	18 days		0%
469	CFS-1300		E&M provision of flowmeter chamber and associated sewerage for effluent and sewage from SSSH		256	0 days	NA	NA	40 days	Wed 18/8/21	Tue 5/10/21	NA	NA	466FF	470,468SF	-61 days		0%
470	CFS-2000		Excavation for Raft Footing (800cu.m)			65 days	NA	NA	44 days	Tue 23/11/21	Sat 15/1/22	NA	NA	469,467	471	-101 days		0%
471	CFS-2800		Plate load test at bottom level of compacted generall fill(2no.)			12 days	NA	NA	7 days	Mon 17/1/22	Mon 24/1/22	NA	NA	470	472	-101 days		0%
472	CFS-2900		Soil Replacement (14 layers SRT)			0 days	NA	NA	42 edays	Mon 24/1/22	Mon 7/3/22	NA	NA	471	473	-124.42 edays		0%
473	CFS-3000		Plate load test at bottom level of base slab (3no.)			28 days	Fri 4/6/21	Mon 21/6/21	7 days	Tue 8/3/22	Tue 15/3/22	NA	NA	472	474FF-3 mons,475	-101 days		0%
474	CFS-3900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Tue 23/11/21	Tue 23/11/21	NA	NA	473FF-3 mons	475SS-3 emons	59 days		0%
475	CFS-4000	KD1J	R.C. structure works			120 days	NA	NA	70 days	Wed 16/3/22	Mon 13/6/22	NA	NA	473,474SS-3 emons	477,476,51FF,521FF,520FF	-101 days	2	0%
476	CFS-5000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Mon 13/9/21	Mon 13/9/21	0 days	Mon 13/6/22	Mon 13/6/22	NA	NA	475	51FF	-101 days		0%
477	CFS-6000	SW1	ABWF works + BS works			90 days	Tue 14/9/21	Mon 3/1/22	90 days	Tue 14/6/22	Wed 28/9/22	NA	NA	475	56FF	405 days		0%
478	**CCS-1000**	*	**Chemical System No.1 (8)***			**168 days**	**Mon 1/2/21**	**Thu 26/8/21**	**386 days**	**Sat 12/6/21**	**Wed 28/9/22**	**Sat 12/6/21**	**NA**			**891 days**		**4%**
479	CCS-1310		Demolition of SSSH Pump Pit and Associated Sewerage System		086	0 days	NA	NA	26 days	Sat 19/6/21	Tue 20/7/21	Sat 19/6/21	NA	465	481	54 days		38%
480	CCS-1110		Removal of existing Leachate Rising Main near SSSH		241	0 days	NA	NA	12 days	Wed 18/8/21	Tue 31/8/21	NA	NA	468	481	18 days		0%
481	CCS-1100		Excavation for Raft Footing (20cu.m)			10 days	Mon 1/2/21	Thu 11/2/21	10 days	Wed 1/9/21	Sat 11/9/21	NA	NA	480,479	485FF-3 emons,486,482	18 days		0%
482	CCS-1080		Plate load test at bottom level of compacted generall fill(2no.)			9 days	NA	NA	9 days	Mon 13/9/21	Thu 23/9/21	NA	NA	481	483	18 days		0%
483	CCS-1090		Soil Replacement (10 layers SRT)			0 days	NA	NA	30 edays	Thu 23/9/21	Sat 23/10/21	NA	NA	482	484	23.58 edays		0%
484	CCS-1200		Plate load test at bottom level of base slab (1no.)			5 days	Tue 16/2/21	Wed 3/3/21	5 days	Mon 25/10/21	Fri 29/10/21	NA	NA	483	486,493	19 days		0%
485	CCS-1190		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Sat 12/6/21	Sat 12/6/21	Sat 12/6/21	Sat 12/6/21	481FF-3 emons	486SS-3 emons	0 days		100%
486	CCS-1300	KD1J	R.C. structure works			45 days	Mon 15/3/21	Mon 10/5/21	60 days	Sat 30/10/21	Tue 11/1/22	NA	NA	481,485SS-3 emons,484	51FF,488,487	20 days	2	0%
487	CCS-1400	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Mon 10/5/21	Mon 10/5/21	0 days	Tue 11/1/22	Tue 11/1/22	NA	NA	486	51FF	20 days		0%
488	CCS-1500	SW1	ABWF works + BS works			90 days	Tue 11/5/21	Thu 26/8/21	90 days	Tue 14/6/22	Wed 28/9/22	NA	NA	189,141,486,522SS	56FF	405 days		0%
489	**CDS-0000**	*	**Deodorization System No.3A (7)***			**149 days**	**Tue 16/11/21**	**Sat 21/5/22**	**105 days**	**Thu 5/8/21**	**Wed 8/12/21**	**NA**	**NA**			**90 days**		**0%**
490	CDS-2000		Excavation for Raft Footing (400cu.m)			20 days	Tue 16/11/21	Wed 8/12/21	20 days	Sat 14/8/21	Tue 7/9/21	NA	NA	491SF		1205 days		0%
491	CDS-2008		Plate load test at bottom level of compacted generall fill(2no.)			10 days	NA	NA	10 days	Tue 7/9/21	Sat 18/9/21	NA	NA	492SF	490SF	1195 days		0%
492	CDS-2100		Soil Replacement (14 layers SRT)			0 days	NA	NA	42 edays	Sat 18/9/21	Sat 30/10/21	NA	NA	493SF	491SF	1425.42 edays		0%
493	CDS-3000		Plate load test at bottom level of base slab (1no.)			4 days	Thu 9/12/21	Fri 24/12/21	4 days	Sat 30/10/21	Wed 3/11/21	NA	NA	484	494FF-3 emons,495,492SF,500FS	-19 days		0%
494	CDS-3900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 5/8/21	Thu 5/8/21	NA	NA	493FF-3 emons	495SS-3 emons	150 days		0%
495	CDS-4000	KD1J	Footing works			20 days	Tue 4/1/22	Wed 26/1/22	30 days	Thu 4/11/21	Wed 8/12/21	NA	NA	493,494SS-3 emons	496,51FF	46 days		0%
496	CDS-5000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Wed 26/1/22	Wed 26/1/22	0 days	Wed 8/12/21	Wed 8/12/21	NA	NA	495	51FF	46 days		0%
497	**CCS-2000**	*	**Chemical System No.2 (11)**			**189 days**	**Thu 4/3/21**	**Thu 21/10/21**	**300 days**	**Fri 24/9/21**	**Wed 28/9/22**	**NA**	**NA**	**462**		**48 days**		**0%**
498	CCS-2100		Excavation for Raft Footing (100cu.m)			15 days	Thu 4/3/21	Sat 20/3/21	14 days	Fri 24/9/21	Mon 11/10/21	NA	NA	499SF		1177 days		0%
499	CCS-2110		Soil Replacement (8 layers SRT)			0 days	NA	NA	24 edays	Wed 6/10/21	Sat 30/10/21	NA	NA	500SF	498SF	1425.42 edays		0%
500	CCS-2200		Plate load test (2no.)			14 days	Mon 22/3/21	Fri 9/4/21	15 days	Sat 30/10/21	Tue 16/11/21	NA	NA	493FS-4 days	501FF-3 emons,502,499SF,510FS	-19 days		0%
501	CCS-2290		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Fri 24/9/21	Fri 24/9/21	NA	NA	500FF-3 emons	502SS-3 emons	108 days		0%
502	CCS-2300	KD1J	R.C. structure works			45 days	Tue 11/5/21	Mon 5/7/21	45 days	Wed 17/11/21	Tue 11/1/22	NA	NA	500,501SS-3 emons	503,51FF,504,505	20 days	2	0%
503	CCS-2400	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Mon 5/7/21	Mon 5/7/21	0 days	Tue 11/1/22	Tue 11/1/22	NA	NA	502	51FF	20 days		0%
504	CCS-2500	SW1	ABWF works + BS works			90 days	Tue 6/7/21	Thu 21/10/21	90 days	Tue 14/6/22	Wed 28/9/22	NA	NA	189,141,502,522SS	56FF	405 days		0%
505	CCS-2600	SW1	Demolition of existing chemical room			60 days	Tue 6/7/21	Mon 13/9/21	60 days	Wed 12/1/22	Fri 25/3/22	NA	NA	502	56FF	556 days		0%
506	**CTC-0000**	*	**Temporary Chemical Dosing System (5)**			**191 days**	**Tue 22/6/21**	**Thu 10/2/22**	**330 days**	**Thu 19/8/21**	**Wed 28/9/22**	**NA**	**NA**			**89 days**		**0%**
507	CTC-2000		Excavation for Raft Footing (300cu.m)			30 days	Tue 22/6/21	Tue 27/7/21	30 days	Thu 26/8/21	Sat 2/10/21	NA	NA	508SF		1185 days		0%
508	CTC-2080		Plate load test at bottom level of compacted generall fill(2no.)			9 days	NA	NA	9 days	Sat 2/10/21	Wed 13/10/21	NA	NA	509SF	507SF	1176 days		0%
509	CTC-2100		Soil Replacement (10 layers SRT)			0 days	NA	NA	30 edays	Wed 13/10/21	Fri 12/11/21	NA	NA	510SF	508SF	1412.42 edays		0%
510	CTC-1000		Plate load test at bottom level of base slab (1no.)			5 days	Wed 28/7/21	Thu 12/8/21	5 days	Fri 12/11/21	Wed 17/11/21	NA	NA	500FS-4 days	509SF,511FF-3 emons,512	19 days		0%
511	CTC-2900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 19/8/21	Thu 19/8/21	NA	NA	510FF-3 emons	512SS-3 emons	138 days		0%
512	CTC-3000	KD1J	R.C. structure works			30 days	Tue 14/9/21	Thu 21/10/21	45 days	Thu 18/11/21	Wed 12/1/22	NA	NA	511SS-3 emons,510	513,51FF,514	19 days	1	0%
513	CTC-4000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Thu 21/10/21	Thu 21/10/21	0 days	Wed 12/1/22	Wed 12/1/22	NA	NA	512	51FF	19 days		0%
514	CTC-5000	SW1	ABWF works + BS works			90 days	Fri 22/10/21	Thu 10/2/22	90 days	Tue 14/6/22	Wed 28/9/22	NA	NA	189,141,512,522SS	56FF	405 days		0%
515	**CFB-0000**	*	**Fire Hydrant and Booster Pump Room (13)***			**177 days**	**Fri 13/8/21**	**Thu 17/3/22**	**193 days**	**Sat 5/2/22**	**Wed 28/9/22**	**NA**	**NA**			**-28 days**		**0%**
516	CFB-1000		Excavation for Raft Footing (200cu.m)			30 days	Fri 13/8/21	Thu 16/9/21	30 days	Wed 23/2/22	Wed 30/3/22	NA	NA	517SF		1039 days		0%
517	CFB-1100		Soil Replacement (7 layers SRT)			0 days	NA	NA	21 edays	Wed 30/3/22	Wed 20/4/22	NA	NA	518SF	516SF	1253.42 edays		0%
518	CFB-2000		Plate load test (3no.)			14 days	Fri 17/9/21	Tue 5/10/21	14 days	Wed 20/4/22	Sat 7/5/22	NA	NA	520SF	519FF-3 emons,517SF	1011 days		0%
519	CFB-2900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Sat 5/2/22	Sun 6/2/22	NA	NA	518FF-3 emons		1083 days		0%
520	CFB-3000	KD1J	R.C. structure works			30 days	Fri 22/10/21	Thu 25/11/21	30 days	Sat 7/5/22	Mon 13/6/22	NA	NA	475FF	521,522,51FF,518SF	-101 days	1	0%
521	CFB-4000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	Thu 25/11/21	Thu 25/11/21	0 days	Mon 13/6/22	Mon 13/6/22	NA	NA	520,475FF	51FF	-101 days		0%
522	CFB-5000	SW1	ABWF works + BS works			90 days	Fri 26/11/21	Thu 17/3/22	90 days	Tue 14/6/22	Wed 28/9/22	NA	NA	520,189,141	56FF,514SS,504SS,488SS,460SS	405 days		0%
523	**CDS1-0000**		**Deodorization System No.1 (6)***			**64 days**	**NA**	**NA**	**105 days**	**Tue 10/5/22**	**Tue 13/9/22**	**NA**	**NA**			**418 days**		**0%**
524	CDS1-1000		Excavation for Raft Footing (400cu.m)			20 days	NA	NA	20 days	Wed 8/6/22	Thu 30/6/22	NA	NA	322	525	420 days		0%
525	CDS1-1080		Plate load test at bottom level of compacted generall fill(2no.)			10 days	NA	NA	10 days	Sat 2/7/22	Wed 13/7/22	NA	NA	524	526	420 days		0%
526	CDS1-1100		Soil Replacement (7 layers SRT)			0 days	NA	NA	21 edays	Wed 13/7/22	Wed 3/8/22	NA	NA	525	527	513.58 edays		0%
527	CDS1-2000		Plate load test at bottom level of base slab (1no.)			4 days	NA	NA	4 days	Thu 4/8/22	Mon 8/8/22	NA	NA	526	529,528FF-3 emons	418 days		0%
528	CDS1-2900		Receiving of Civil Requirements from PM			0 days	NA	NA	0 days	Tue 10/5/22	Tue 10/5/22	NA	NA	527FF-3 emons	529SS-3 emons	523 days		0%
529	CDS1-3000	SW1	Footing works			30 days	NA	NA	30 days	Tue 9/8/22	Tue 13/9/22	NA	NA	527,528SS-3 emons	530,56FF	418 days		0%
530	CDS1-4000	SW1	Allow access to Contractor DE/2018/04 for E&M installation and T&C works			0 days	NA	NA	0 days	Tue 13/9/22	Tue 13/9/22	NA	NA	529	56FF	418 days		0%
531	**CAA-0000**	*	**Additional and Alternation Works for Existing Facilities (B-7A, B-8, B-8A)**			**662 days**	**Wed 29/1/20**	**Fri 22/4/22**	**918 days**	**Mon 1/6/20**	**Thu 6/7/23**	**Mon 1/6/20**	**NA**			**269 days**		**64%**



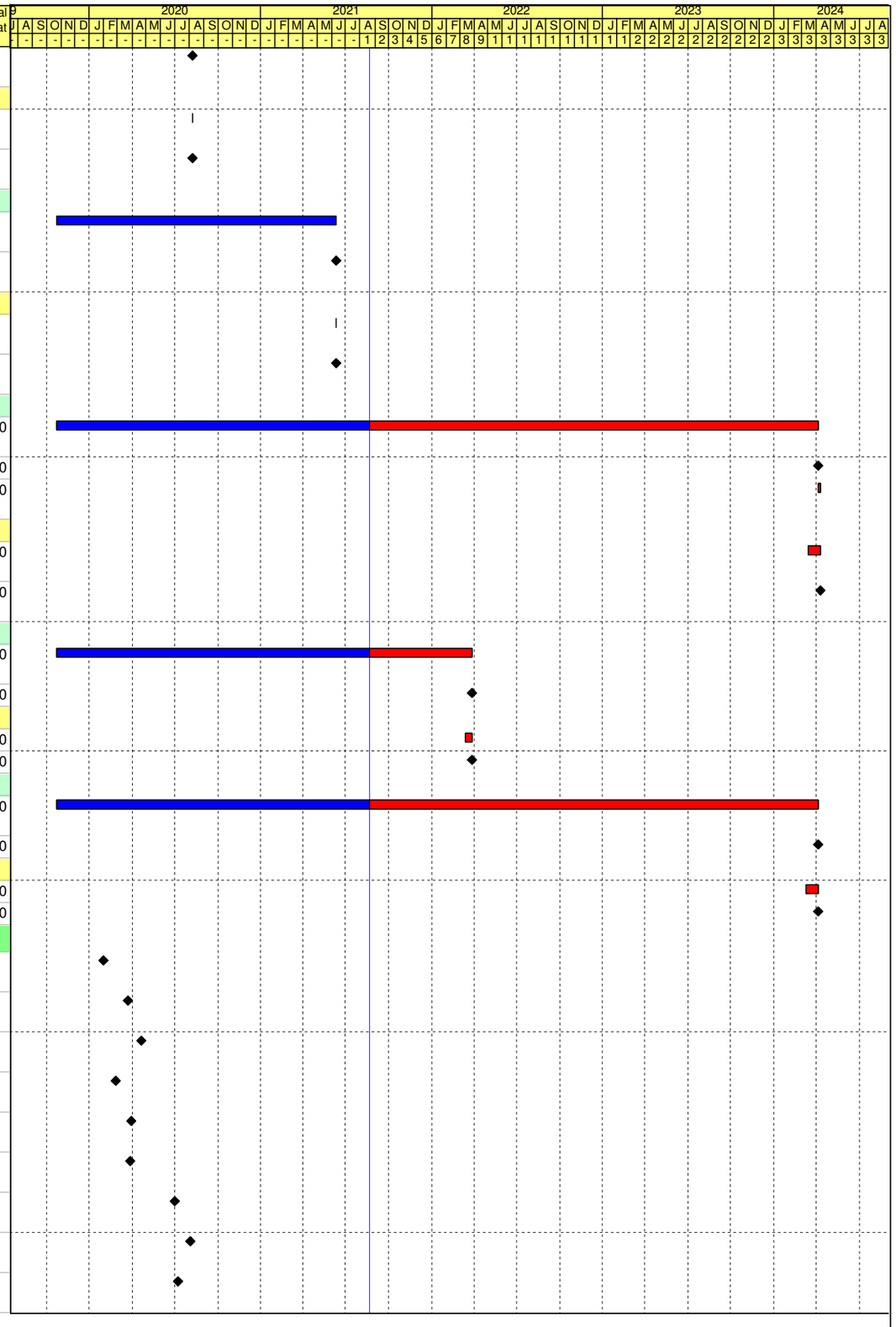
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
532	**CAA-1000**	**KD2B**	**B-8A Alternation works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)**			**180 days**	**Wed 29/1/20**	**Thu 3/9/20**	**246 days**	**Mon 1/6/20**	**Fri 26/3/21**	**Mon 1/6/20**	**Fri 26/3/21**	**15,142,184**	**53FF**	**0 days**		**100%**
533	CAA-1100		Change of pipe bridge design		(057)	0 days	NA	NA	135 days	Mon 1/6/20	Tue 10/11/20	Mon 1/6/20	Tue 10/11/20		536,537,538	0 days		100%
534	CAA-1200		Additional inspection pit to veriify the connection point to existing (CE xxx)			0 days	NA	NA	135 days	Mon 1/6/20	Tue 10/11/20	Mon 1/6/20	Tue 10/11/20		536,537,538	0 days		100%
535	CAA-1300		Additional MBV installation (CE xxx)			0 days	NA	NA	135 days	Mon 1/6/20	Tue 10/11/20	Mon 1/6/20	Tue 10/11/20		536,537,538	0 days		100%
536	CAA-1400		Alternation works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)			180 days	Wed 29/1/20	Thu 3/9/20	111 days	Wed 11/11/20	Fri 26/3/21	Wed 11/11/20	Fri 26/3/21	533,534,535	53FF	0 days		100%
537	CAA-1500	KD2B	Re-alignmnet of DN800 Temporary Air Main (CHTA) and Provision of FRP Staircases		064	0 days	NA	NA	111 days	Wed 11/11/20	Fri 26/3/21	Wed 11/11/20	Fri 26/3/21	533,534,535	53FF	0 days		100%
538	CAA-1600	KD2B	Elevated Section of DN800 Temporary Air Main (CHTA) across existing Bioreactor's Distibution Chamber No. 2		062	0 days	NA	NA	111 days	Wed 11/11/20	Fri 26/3/21	Wed 11/11/20	Fri 26/3/21	533,534,535	53FF,539	0 days		100%
539	CAA-2000	KD1I	B7-A Alternation works for existing Power House			122 days	Fri 4/9/20	Sat 30/1/21	0 days	Wed 11/11/20	Fri 29/1/21	Wed 11/11/20	Fri 29/1/21	13FS-1 day,122,160,162,176,538	50FF,540FS+356 days	0 days		100%
540	CAA-2100	SW3	Additional works for Power House		224	0 days	NA	NA	60 days	Thu 14/4/22	Wed 29/6/22	NA	NA	539FS+356 days	58FF	570 days		0%
541	CAA-3000	SW3	Alternation works for existing Membrane Facilities Building No.1			360 days	Mon 1/2/21	Fri 22/4/22	360 days	Tue 19/4/22	Thu 6/7/23	NA	NA	14FS-1 day,175	58FF	269 days		0%
542	**CUU-0000**	*****	**External Underground Service, Utilities, Road/Drain**			**1091 days**	**Mon 24/2/20**	**Sat 28/10/23**	**1192 days**	**Mon 27/4/20**	**Mon 13/5/24**	**Mon 27/4/20**	**NA**	**16**		**-88 days**		**46%**
543	CUU-1000	KD2A	Process Pipes CHR and CHS (approx. 93m twin DN900 D.I.)		33, 222, 255	325 days	Mon 24/2/20	Sat 27/3/21	379 days	Mon 27/4/20	Wed 4/8/21	Mon 27/4/20	NA	184,142	554SS+48 days,552SS+48 days,55	-39 days		99%
544	CUU-1000a		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		33	0 days	NA	NA	54 days	Sat 30/5/20	Mon 3/8/20	Sat 30/5/20	Mon 3/8/20			0 days		100%
545	CUU-1000b		Trenchless work for Process Pipes CHR and CHS (approx. 7m twin DN900 D.I.)		255	0 days	NA	NA	60 days	Thu 25/2/21	Mon 10/5/21	Thu 25/2/21	Mon 10/5/21		52FF	0 days		100%
546	CUU-1001		Removal of Abandoned DN1800 Concrete Pipe and Concrete Mass near Existing UV Disinfection Channel at CHR & CHS Process Pipe Works Area		033	0 days	NA	NA	43 days	Thu 2/7/20	Thu 20/8/20	Thu 2/7/20	Thu 20/8/20			0 days		100%
547	CUU-1002		Grouting for Sheung Shui Slaughter House Boundary Walls along CHR & CHS Pipes Works Area		222	0 days	NA	NA	20 days	Fri 23/10/20	Mon 16/11/20	Fri 23/10/20	Mon 16/11/20			0 days		100%
548	CUU-1004		Delay Delivery of DI pipes due to COVID-19		(076)	0 days	NA	NA	75 days	Tue 22/12/20	Thu 25/3/21	Tue 22/12/20	Thu 25/3/21		549FF	0 days		100%
549	CUU-2000	SW2	Process Pipes, including CHT, CHX, CHY, CHPS1&2, CHS S1&2, CHDO 1&2, CHPSW 1-8, CHTPS, CHPT1&2, CHTFT 1&2, CHTE, CHTD, Foam Collection & Surplus activated sludge rising main pipe			550 days	Mon 29/6/20	Fri 6/5/22	457 days	Mon 19/10/20	Fri 6/5/22	Mon 19/10/20	NA	184,142,548FF,543SS+48 days	57FF,555,550SS+250 days	63 days		51%
550	CUU-2100	SW2	Remaining Process Pipes			0 days	NA	NA	270 days	Mon 23/8/21	Fri 22/7/22	NA	NA	549SS+250 days	57FF	0 days		0%
551	CUU-3000	SW2	Remaining Drainage			550 days	Mon 29/6/20	Fri 6/5/22	520 days	Mon 19/10/20	Fri 22/7/22	Mon 19/10/20	NA	184,142	555,57FF	0 days	5	45%
552	CUU-4000	SW2	Remaining Sewerage			550 days	Mon 29/6/20	Fri 6/5/22	520 days	Mon 19/10/20	Fri 22/7/22	Mon 19/10/20	NA	184,142,543SS+48 days	555,57FF	0 days	5	45%
553	CUU-5000	SW2	Remaining Waterworks			550 days	Mon 29/6/20	Fri 6/5/22	520 days	Mon 19/10/20	Fri 22/7/22	Mon 19/10/20	NA	184,142,543SS+48 days	557FS+2 days,57FF	0 days	5	45%
554	CUU-6000	SW2	Remaining Cable Ducts			550 days	Mon 29/6/20	Fri 6/5/22	520 days	Mon 19/10/20	Fri 22/7/22	Mon 19/10/20	NA	184,142,543SS+48 days	555,57FF	0 days	5	45%
555	CUU-7000	KD3A	Roadworks			540 days	Fri 31/12/21	Sat 28/10/23	440 days	Mon 7/11/22	Mon 13/5/24	NA	NA	554,551,552,549,352,399,334,433	54FF,558SS+123 days	-88 days	5	0%
556	**CLW-0000**	*****	**Landscaping Works**			**854 days**	**Wed 11/5/22**	**Thu 27/3/25**	**946 days**	**Tue 26/7/22**	**Wed 24/9/25**	**NA**	**NA**	**16**		**0 days**		**0%**
557	CLW-1000	KD3A	Irrigation System			120 days	Wed 11/5/22	Fri 30/9/22	120 days	Tue 26/7/22	Thu 15/12/22	NA	NA	553FS+2 days,184	558,54FF	1 day		0%
558	CLW-2000	SW3	Hard Landscaping Works			220 days	Mon 3/10/22	Mon 3/7/23	214 days	Tue 11/4/23	Sat 23/12/23	NA	NA	557,555SS+123 days	559,58FF	-88 days	5	0%
559	CLW-3000	SW3	Soft Landscaping Works			220 days	Tue 4/7/23	Tue 26/3/24	214 days	Wed 27/12/23	Tue 24/9/24	NA	NA	558,143	560,58FF	-88 days	5	0%
560	CLW-4000	DLP	Establishment Works (365 days)			294 days	Wed 27/3/24	Thu 27/3/25	365 days	Wed 25/9/24	Wed 24/9/25	NA	NA	559,143	59FF,60FF	0 days	5	0%



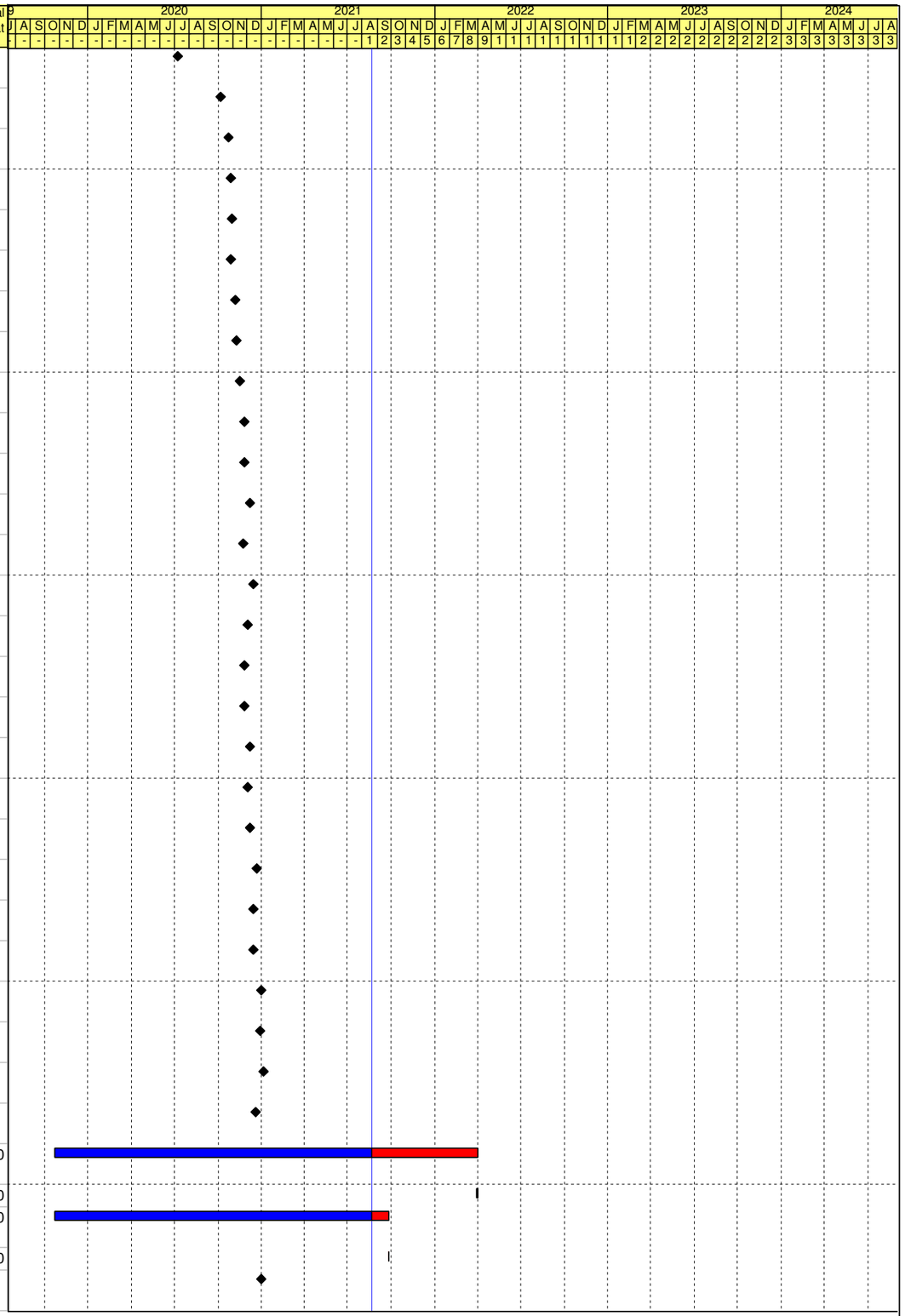
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
SWH - Main Works Stage 1 Sidestream Treatment Facilities & E&M Works for Sludge Treatment Facilities							
Contract Data							
Starting Date & Completion Date							
AS000010	Contract Date (LOA)	0	11-Oct-19 A		21-Aug-21		
AS000020	Starting Date	0	23-Oct-19 A		21-Aug-21		
AS000110	Whole Contract Period (1626 days from starting date)	1626	23-Oct-19 A	04-Apr-24	26-Aug-21	09-Apr-24	5
AS000220	Completion Date for the whole of the Works	0		09-Apr-24		09-Apr-24	0
Access Date							
AS001100	Portion C-1A (within 480 to 550 days from starting date)	550	23-Oct-19 A	24-Apr-21 A	21-Aug-21	21-Aug-21	
AS001120	Planned Access Date for Portion C-1A	1	24-Apr-21 A	24-Apr-21 A	21-Aug-21	21-Aug-21	
AS001200	Portion C-2A (within 705 to 795 days from starting date)	795	23-Oct-19 A	25-Dec-21	21-Aug-21	25-Dec-21	0
AS001220	Planned Access Date for Portion C-2A	1	25-Dec-21	25-Dec-21*	25-Dec-21	25-Dec-21	0
AS001300	Portion C-2B (within 765 to 855 days from starting date)	855	23-Oct-19 A	23-Feb-22	21-Aug-21	23-Feb-22	0
AS001320	Planned Access Date for Portion C-2B	1	23-Feb-22	23-Feb-22*	23-Feb-22	23-Feb-22	0
AS001400	Portion C-2C (within 715 to 805 days from starting date)	805	23-Oct-19 A	04-Jan-22	21-Aug-21	04-Jan-22	0
AS001420	Planned Access Date for Portion C2-C	1	04-Jan-22	04-Jan-22*	04-Jan-22	04-Jan-22	0
AS001500	Portion C-2D (within 825 to 945 days from starting date)	945	23-Oct-19 A	24-May-22	21-Aug-21	24-May-22	0
AS001520	Planned Access Date for Portion C-2D	1	24-May-22	24-May-22*	24-May-22	24-May-22	0
AS001600	Portion C-3 (within 615 to 705 days from starting date)	705	23-Oct-19 A	26-Sep-21	21-Aug-21	26-Sep-21	0
AS001620	Planned Access Date for Portion C-3	1	26-Sep-21	26-Sep-21*	26-Sep-21	26-Sep-21	0
AS001700	Portion B-1 (within 285 to 345 days from starting date)	345	23-Oct-19 A	30-Sep-20 A	21-Aug-21	21-Aug-21	
AS001720	Planned Access Date for Portion B-1	1	30-Sep-20 A	30-Sep-20 A	21-Aug-21	21-Aug-21	
AS001800	Portion B-2 (within 615 to 705 days from starting date) (SS by NCE-NCE-219)	705	23-Oct-19 A	26-Sep-21	21-Aug-21	26-Sep-21	0
AS001820	Planned Access Date for Portion B-2 (SS by NCE-NCE-219)	1	26-Sep-21	26-Sep-21*	26-Sep-21	26-Sep-21	0
AS001900	Works Area WA1-B (starting date)	1	23-Oct-19 A	23-Oct-19 A	23-Aug-21	23-Aug-21	
AS001910	Planned Access Date for Works Area WA1-B	1	23-Oct-19 A	23-Oct-19 A	23-Aug-21	23-Aug-21	
AS001920	Works Area WA3 (starting date)	1	23-Oct-19 A	23-Oct-19 A	23-Aug-21	23-Aug-21	
AS001930	Planned Access Date for Works Area WA3	1	23-Oct-19 A	23-Oct-19 A	23-Aug-21	23-Aug-21	
Key Dates							
AS002010	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	09-Sep-21	09-Sep-21	
AS002020	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	09-Apr-24	09-Apr-24	
AS002040	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	461	23-Oct-19 A	15-Jan-21 A	09-Apr-24	09-Apr-24	
AS002050	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-21	14-Nov-23	0
AS002050j	Revised KD3A Completion Date (Impacted by NICE-CNE-0248 - Inclement Weather - May 2021)	4	15-Nov-23	18-Nov-23*	15-Nov-23	18-Nov-23	0
AS002060	KD5A - Completion of the BS Fittings Installation at CLP Sub-Station at Workshop No. 2 (245d after Portion C-3 Access)	246	26-Sep-21	29-May-22*	26-Sep-21	29-May-22	0
Completion Date							
Section 1 - Complete All Design at UV System No.1 & EP Station No. 1							
AS003100	Contract Duration of Section 1	291	23-Oct-19 A	08-Aug-20 A	09-Apr-24	09-Apr-24	



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS003110	Completion date - Section 1 (290 days after starting date)	0		08-Aug-20 A		09-Apr-24	
Time Risk Allowance and Planned Completion							
AS003105	Time Risk Allowance for Section 1	1	08-Aug-20 A	08-Aug-20 A	09-Apr-24	09-Apr-24	
AS003130	Planned Completion for Section 1	0		08-Aug-20 A		09-Apr-24	
Section 2 - Complete All Designs (exclude Sec. 1 & 3)							
AS003200	Contract Duration of Section 2	601	23-Oct-19 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
AS003210	Completion date - Section 2 (600 days after starting date)	0		11-Jun-21 A		09-Apr-24	
Time Risk Allowance and Planned Completion							
AS003220	Time Risk Allowance for Section 2	6	11-Jun-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
AS003230	Planned Completion for Section 2	0		11-Jun-21 A		09-Apr-24	
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities							
AS003300	Contract Duration of Section 3	1626	23-Oct-19 A	04-Apr-24	21-Aug-21	04-Apr-24	0
AS003310	Completion date - Section 3 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0
AS003311j	Revised Section 3 Completion Date (Impacted by NICE-CNE-0248 - Inclement Weather - May 2021)	4	05-Apr-24	09-Apr-24*	05-Apr-24	09-Apr-24	0
Time Risk Allowance and Planned Completion							
AS003320	Time Risk Allowance for Section 3 (Impacted by NICE-CNE-0248 - Inclement Weather - May 2021)	26	14-Mar-24	09-Apr-24	14-Mar-24	09-Apr-24	0
AS003330	Planned Completion for Section 3 (Impacted by NICE-CNE-0248 - Inclement Weather - May 2021)	0		09-Apr-24*		09-Apr-24	0
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1							
AS003400	Contract Duration of Section 4	886	23-Oct-19 A	26-Mar-22	21-Aug-21	26-Mar-22	0
AS003410	Completion date - Section 4 (885 days after starting date)	0		26-Mar-22*		26-Mar-22	0
Time Risk Allowance and Planned Completion							
AS003420	Time Risk Allowance for Section 4	14	13-Mar-22	26-Mar-22	13-Mar-22	26-Mar-22	0
AS003430	Planned Completion for Section 4	0		26-Mar-22*		26-Mar-22	0
Section 5 - Complete all remaining Works (incl. T&C)							
AS003500	Contract Duration of Section 5	1626	23-Oct-19 A	04-Apr-24	21-Aug-21	04-Apr-24	0
AS003510	Completion date - Section 5 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0
Time Risk Allowance and Planned Completion							
AS003520	Time Risk Allowance for Section 5	26	10-Mar-24	04-Apr-24	10-Mar-24	04-Apr-24	0
AS003530	Planned Completion for Section 5	0		04-Apr-24*		04-Apr-24	0
Compensation Event							
CE000010	CE No.001 - Special Work Arrangement in Ruducing the Risk of the Spread of Novel Coronavirus	0		30-Jan-20 A		09-Apr-24	
CE000020	CE No.002 - The Contractor's Site Accomodation by Modular Integrated Construction (MIC) Method	0		23-Mar-20 A		09-Apr-24	
CE000030	CE No.003 - Flowmeter Relocation & Pipework Rearrangement at Effluent Transfer Pumping Station	0		20-Apr-20 A		09-Apr-24	
CE000040	CE No.004 - Designated Area for the Contractor's Site Accommodation in Works Area WA1	0		26-Feb-20 A		09-Apr-24	
CE000050	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		09-Apr-24	
CE000055	CE No.006 - Additional Duty Point for Effluent Transfer Pumps	0		27-Mar-20 A		09-Apr-24	
CE000060	CE No.007 - Additional Adjustable Weir at UV System No.1 & Effluent Pumping Station No.1	0		30-Jun-20 A		09-Apr-24	
CE000070	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		09-Apr-24	
CE000080	CE No.009 - Employment of Temporary Staff under Anti-Epidemic Fund	0		07-Jul-20 A		09-Apr-24	



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
CE000090	CE No.010 - Revised Setting Out Plan for Sidestream Treatment Facilities	0		07-Jul-20 A		09-Apr-24	
CE000100	CE No.012 - Provision of Touchscreen Display System for the Project Manager's Office	0		06-Oct-20 A		09-Apr-24	
CE000110	CE No.013 - Feasibility Study for Adopting emMiC & DfMA	0		22-Oct-20 A		09-Apr-24	
CE000120	CE No.014 - Revised FS Water Supply Arrangement for CHP, Guard House, Workshop No.2, SludgeDigester&DistributionChamber	0		28-Oct-20 A		09-Apr-24	
CE000130	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		09-Apr-24	
CE000140	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		09-Apr-24	
CE000150	CE No.018 - MVAC Layout for Plant Service Water System	0		05-Nov-20 A		09-Apr-24	
CE000160	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		09-Apr-24	
CE000165	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		09-Apr-24	
CE000170	NCE-PMI-0202 - Revised Plumbing Arrangement for Sludge Dewatering Building	0		26-Nov-20 A		09-Apr-24	
CE000175	NCE-PPMI-0203 - MVAC Layout for SAS Pumping Station	0		25-Nov-20 A		09-Apr-24	
CE000180	NCE-PMI-0204 - CHP - Provisional of Additional ATS for Power Supply for UPS	0		08-Dec-20 A		09-Apr-24	
CE000185	NCE-PPMI-0205 - Fibre Optics Network Connection for SCADA Systems between Zone B & Zone C	0		23-Nov-20 A		09-Apr-24	
CE000190	NCE-PMI-0206 - SDB - Provisional of Additional ATS for Power Supply for UPS	0		15-Dec-20 A		09-Apr-24	
CE000191	NCE-PMI-0207 - TX Rm & Switch Rm - Provision of ATS for Power Supply for UPS	0		01-Dec-20 A		09-Apr-24	
CE000192	NCE-PPMI-0208 - Provision of Drainage service Layout for SAS Pumping Station	0		26-Nov-20 A		09-Apr-24	
CE000193	NCE-PPMI-0209 - Drainage System for Plant Service Water System	0		26-Nov-20 A		09-Apr-24	
CE000194	NCE-PPMI-0210 - Electrical provisions for MVAC & Drainage Systems in SAS Pumping Station	0		08-Dec-20 A		09-Apr-24	
CE000195	NCE-PPMI-0211 - Revised MVAC Layout & Electrical Provisions for MVAC in TX and Switch Rm	0		02-Dec-20 A		09-Apr-24	
CE000196	NCE-PMI-0212 - Provision of Louvre Panel for Outdoor AC Units at Contractor's Site Accomodation	0		07-Dec-20 A		09-Apr-24	
CE000197	NCE-PPMI-0213 - Electrical provisions for MVAC & Drainage System in UV System No.1 & Effluent Pumping Station No.1	0		21-Dec-20 A		09-Apr-24	
CE000200	NCE-PPMI-0214 - Additional Sump Pump & Drain Pipes at UV System No.1 & Effluent Pumping Station	0		14-Dec-20 A		09-Apr-24	
CE000210	NCE-PPMI-0215 - Revised MVAC Layout for UV System No.1 & Effluent Pumping Station No.1	0		14-Dec-20 A		09-Apr-24	
CE000220	NCE-PPMI-0216 - Electrical Provisions for MVAC & drainage Sytems in Plant Service Water System	0		31-Dec-20 A		09-Apr-24	
CE000230	NCE-PMI-0217 - Revised Duty Points for Effluent Transfer Pumps	0		29-Dec-20 A		09-Apr-24	
CE000240	NCE-PMI-0218 - Scoping Study for Application of Digital Twin & IoT in Zone B & Zone C of SWHEPP	0		04-Jan-21 A		09-Apr-24	
CE000250	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		09-Apr-24	
CE000252	NCE-NCE-0219 - Portion B-2a (within 771 to 891 days from starting date)	891	23-Oct-19 A	31-Mar-22	21-Aug-21	31-Mar-22	0
CE000254	NCE-NCE-0219 - Revised Access Date for Portion B-2a	1	31-Mar-22	31-Mar-22*	31-Mar-22	31-Mar-22	0
CE000256	NCE-NCE-0219 - Portion B-2b (within 615 to 705 days from starting date)	705	23-Oct-19 A	26-Sep-21	21-Aug-21	26-Sep-21	0
CE000258	NCE-NCE-0219 - Revised Access Date for Portion B-2b	1	26-Sep-21	26-Sep-21*	26-Sep-21	26-Sep-21	0
CE000260	NCE-PMI-0220 - Supply of Puddle Pipes for Effluent to Shek Sheung River	0		30-Dec-20 A		09-Apr-24	



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Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
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31-Aug-21	Rev.13	LT	KM

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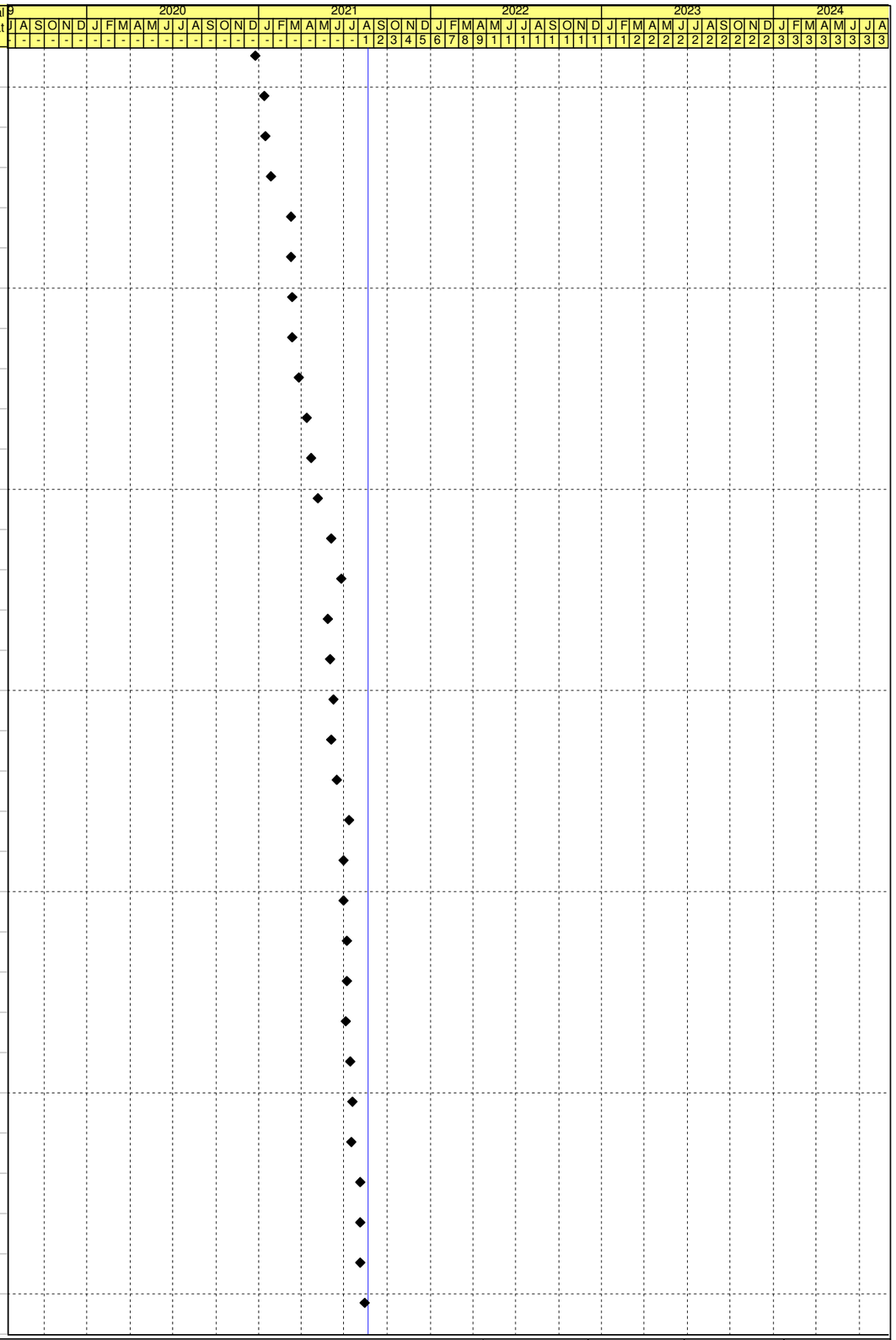
CE000270	NCE-PPMI-0221 - General Arrangement for Fire Hydrant & Booster Pump Room	0		24-Dec-20 A		09-Apr-24	
CE000280	NCE-PMI-0222 - Revised Water Supply Arrangement (FS Water) to Sludge Dewatering Building	0		12-Jan-21 A		09-Apr-24	
CE000290	NCE-PMI-0223 - Construction of Trial Pits for Sidestream Treatment Facilities	0		15-Jan-21 A		09-Apr-24	
CE000300	NCE-PMI-0224 - Independent Inspection Body (IIB) for the Factory Acceptance Test (FAT) for UV Disinfeciton System	0		25-Jan-21 A		09-Apr-24	
CE000310	NCE-PMI-0225 - Supply of Ductile Iron Puddle Pipes at the Basement of Sludge Dewatering Building	0		09-Mar-21 A		09-Apr-24	
CE000320	NCE-PMI-0226 - Provision of Solar Water Heating System at the Contractor's Site Accomodation	0		09-Mar-21 A		09-Apr-24	
CE000330	NCE-PMI-0227 - Dual Power Fedder for LV Switch Panel at Sewage Pumping Station	0		11-Mar-21 A		09-Apr-24	
CE000340	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		09-Apr-24	
CE000350	NCE-PMI-0230 - Provision of Project Jackets with Fleece Vests	0		26-Mar-21 A		09-Apr-24	
CE000360	NCE-PMI-0231 - Extension of Sampling Pipe From Low Level on Sludge Digesters	0		12-Apr-21 A		09-Apr-24	
CE000370	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		09-Apr-24	
CE000380	NCE-PMI-0233 - Sampling, Simulating and Testing of Existing Sludge for Obtaining the Viscosity of the Mixed Sludge	0		06-May-21 A		09-Apr-24	
CE000390	NCE-PMI-0234 - Provision of FRP Walkway, Access Platform & Handrailing for Sludge Digester No. 2	0		02-Jun-21 A		09-Apr-24	
CE000395	NCE-CNE-0237 - Provision of Inspectin Windows for Sludge Digester	0		25-Jun-21 A		09-Apr-24	
CE000400	NCE-PMI-0238 - Supply of Stainless Steel Puddle Pipes for Surplus Activated Sludge (SAS) Pumping Station	0		27-May-21 A		09-Apr-24	
CE000410	NCE-PMI-0239 - Revised the Arrangement for Process Water Supply and Plant Services Water System	0		01-Jun-21 A		09-Apr-24	
CE000420	NCE-PMI-0240 - Revised Coping and Invert Levels for Penstock and Stoplog of SAS Pumping Station	0		09-Jun-21 A		09-Apr-24	
CE000430	NCE-PMI-0241 - Revised Diesel Fuel Tank at Combined Heat and Power (CHP) Building	0		04-Jun-21 A		09-Apr-24	
CE000440	NCE-PMI-0242 - Revised Fire Services Provision of UV System No. 1 and Effluent Pumping Station No. 1	0		15-Jun-21 A		09-Apr-24	
CE000450	NCE-PMI-0243 - Provision of Flow Signal Inputs for UV Disinfection System	0		12-Jul-21 A		09-Apr-24	
CE000460	CNE-0244 - Access to and use of portion C-1A	0		29-Jun-21 A		09-Apr-24	
CE000470	NCE-PMI-0245 - Provision of Augmented Reality (AR) Mobile Application	0		30-Jun-21 A		09-Apr-24	
CE000480	NCE-PMI-0246 - Revised HV Remote Control Panels at CHP & Workshop No. 2	0		06-Jul-21 A		09-Apr-24	
CE000490	NCE-PMI-0247 - Temporary 4G System for SCADA System Monitoring	0		07-Jul-21 A		09-Apr-24	
CE000500	RCNE-CNE-0248 - Inclement Weather - May 2021 (Time Implication)	0		05-Jul-21 A		09-Apr-24	
CE000510	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		09-Apr-24	
CE000520	NCE-PMI-0252 - Provision of Neutral Earthing Resistor (NER) at Workshop No. 2	0		19-Jul-21 A		09-Apr-24	
CE000530	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		09-Apr-24	
CE000540	CNE-0256 - Amber Rainstrom Warning and Inclement Weather - June 2021 (Time Implication)	0		05-Aug-21 A		09-Apr-24	
CE000550	CNE-0257 - Black and Red Rainstrom Warning and Inclement Weather - June 2021 (Time Implication)	0		05-Aug-21 A		09-Apr-24	
CE000560	NCE-PMI-0258 - Provision of FRP Cover for Overflow Chambers of Sludge Digesters	0		04-Aug-21 A		09-Apr-24	
CE000570	NCE-PMI-0259 - Provision of Virtual Reality (VR) Safety Training Platform	0		13-Aug-21 A		09-Apr-24	



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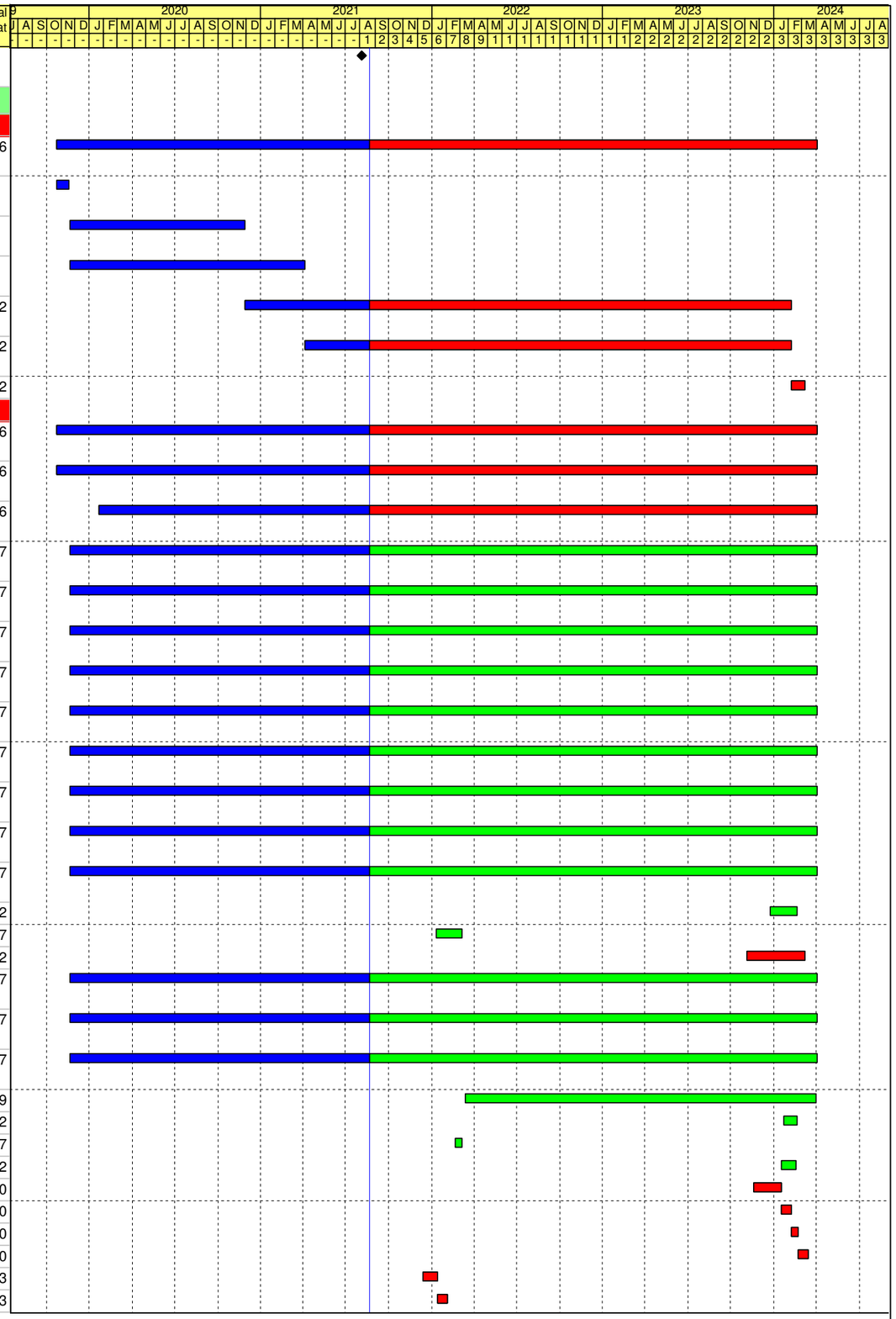
31-Aug-21	Rev.13	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
CE000580	NCE-PMI-0260 - Provision of Chequer Plates at UV System No. 1 & Effluent Pumping Station No. 1	0		04-Aug-21 A		09-Apr-24	
Preliminaries							
Mobilisation							
AS010100	Provison of Equipment / Facilities for the PM's Office	1625	23-Oct-19 A	03-Apr-24	27-Aug-21	09-Apr-24	6
AS010200	Mobilisation	28	23-Oct-19 A	19-Nov-19 A	21-Aug-21	21-Aug-21	
AS010205a	Design, Procurement & PO & Construction of Contractor's Site Office (Works Area WA1-B)	270	20-Nov-19 A	27-Nov-20 A	23-Aug-21	23-Aug-21	
AS010210	Design, Procurement & PO & Construction of Contractor's Storage Area (Works Area WA3)	503	20-Nov-19 A	05-Apr-21 A	23-Aug-21	23-Aug-21	
AS010220	Maintain Contractor's Site Office	1166	28-Nov-20 A	06-Feb-24	23-Aug-21	08-Feb-24	2
AS010230a	Maintain Contractor's Storage Area	1037	06-Apr-21 A	06-Feb-24	23-Aug-21	08-Feb-24	2
AS010240	Removal of Site Office, Storage & Relevant Facilities	30	07-Feb-24	07-Mar-24	09-Feb-24	09-Mar-24	2
Site Preliminaries							
AS010300	Provision of Insurance, Third Party Insurances & PII	1625	23-Oct-19 A	03-Apr-24	27-Aug-21	09-Apr-24	6
AS010400	Provision of 2 Contract Car for the Use of the PM & Supervisor	1625	23-Oct-19 A	03-Apr-24	27-Aug-21	09-Apr-24	6
AS010420a	Provision of 1 Electric Car for the Use of the PM & Supervisor	1534	22-Jan-20 A	03-Apr-24	27-Aug-21	09-Apr-24	6
AS010600	Provision of Photographs	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS010700	Provision of Environmental Mitigation Measures	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS010800	Provision of Air Pollution Abatment	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS010900	Provision of Noise Pollution Abatment	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011000	Provision of Wastewater Pollution Abatement	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011100	Provision of Wastement Management	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011200	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011300	Provision of Environmental Management	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011400	Provision of Site Management Plan for Trip Ticket System	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011500	Provision of As-constructed Drawings for Section 3	58	25-Dec-23	20-Feb-24	16-Jan-24	13-Mar-24	22
AS011520a	Provision of As-constructed Drawings for Section 4	55	10-Jan-22	06-Mar-22	17-Jan-22	12-Mar-22	7
AS011540a	Provision of As-constructed Drawings for Section 5	124	05-Nov-23	08-Mar-24	07-Nov-23	09-Mar-24	2
AS011600	Provision of Systematic Risk Management	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011700	Provision of Site Liaison Group & Community Liaison Group	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS011800	Provision of 24-Hour Telephone Line	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
AS012000	Provision of Upkeeping and Protection of Completed Works	750	13-Mar-22	31-Mar-24	22-Mar-22	09-Apr-24	9
AS012100	Provision of Training for Employer's Staff for Section 3	30	22-Jan-24	20-Feb-24	13-Feb-24	13-Mar-24	22
AS012120a	Provision of Training for Employer's Staff for Section 4	15	19-Feb-22	06-Mar-22	26-Feb-22	12-Mar-22	7
AS012140a	Provision of Training for Employer's Staff for Section 5	30	18-Jan-24	16-Feb-24	09-Feb-24	09-Mar-24	22
AS012300	Prepare & Submit O&M Manual for Section 3	60	19-Nov-23	17-Jan-24	19-Nov-23	17-Jan-24	0
AS012302a	PM Reivew & Comment O&M Manual for Section 3	21	18-Jan-24	07-Feb-24	18-Jan-24	07-Feb-24	0
AS012304a	Revise & Re-submit O&M Manual for Section 3	14	08-Feb-24	21-Feb-24	08-Feb-24	21-Feb-24	0
AS012306a	PM Reivew & Approval of O&M Manual for Section 3	21	22-Feb-24	13-Mar-24	22-Feb-24	13-Mar-24	0
AS012320a	Prepare & Submit O&M Manual for Section 4	30	14-Dec-21*	12-Jan-22	17-Dec-21	15-Jan-22	3
AS012322a	PM Reivew & Comment O&M Manual for Section 4	21	13-Jan-22	02-Feb-22	16-Jan-22	05-Feb-22	3



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31-Aug-21	Rev.13	LT	KM

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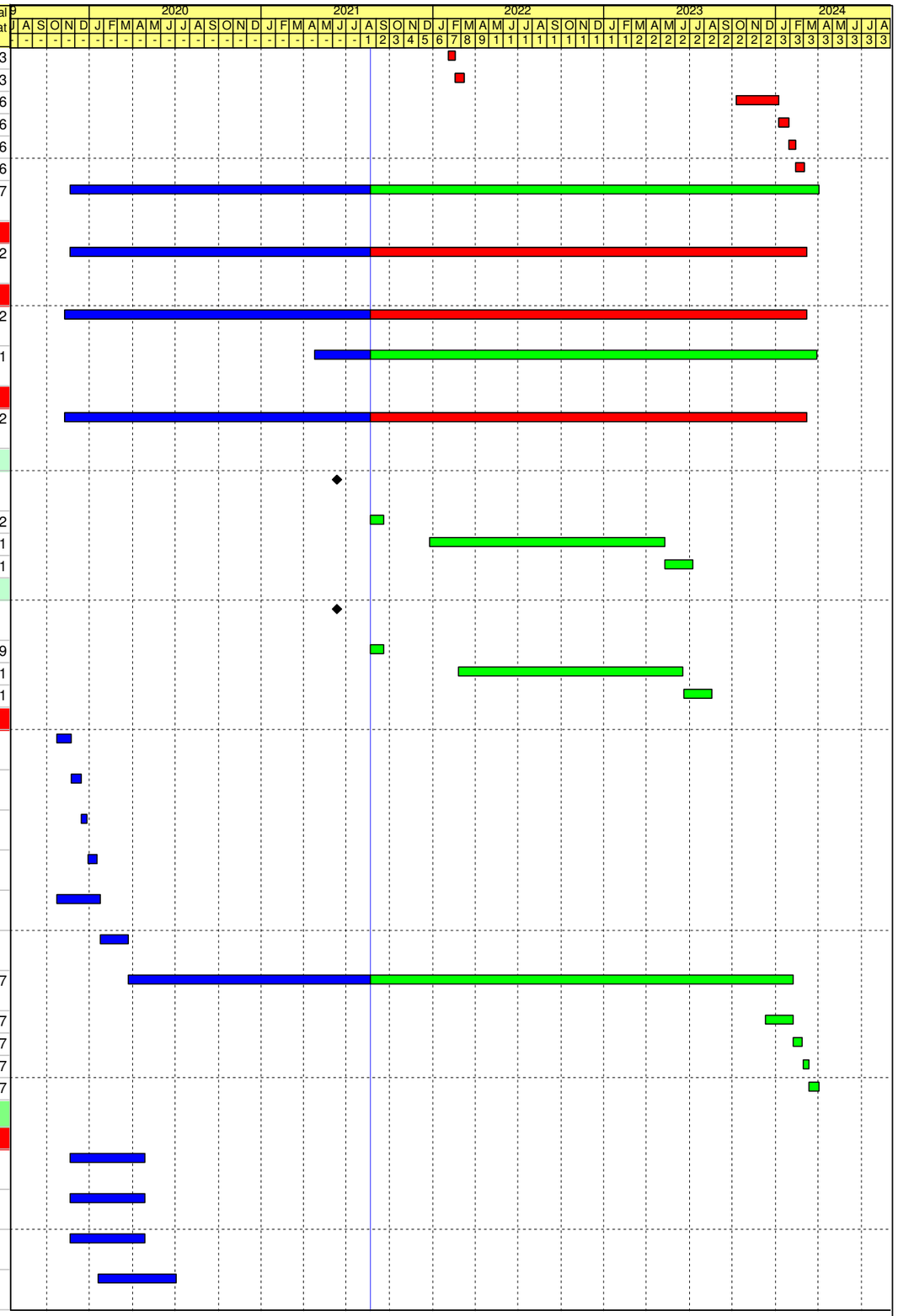
AS012324a	Revise & Re-submit O&M Manual for Section 4	14	03-Feb-22	16-Feb-22	06-Feb-22	19-Feb-22	3
AS012326a	PM Reivew & Approval of O&M Manual for Section 4	21	17-Feb-22	09-Mar-22	20-Feb-22	12-Mar-22	3
AS012340a	Prepare & Submit O&M Manual for Section 5	90	10-Oct-23	07-Jan-24	16-Oct-23	13-Jan-24	6
AS012342a	PM Reivew & Comment O&M Manual for Section 5	21	08-Jan-24	28-Jan-24	14-Jan-24	03-Feb-24	6
AS012344a	Revise & Re-submit O&M Manual for Section 5	14	29-Jan-24	11-Feb-24	04-Feb-24	17-Feb-24	6
AS012346a	PM Reivew & Approval of O&M Manual for Section 5	21	12-Feb-24	03-Mar-24	18-Feb-24	09-Mar-24	6
AS012400	Provision of ICE for Certification of the Design, Cal, Dwgs, Plans and all relevant Doc and Process Commissioning	1596	20-Nov-19 A	02-Apr-24	28-Aug-21	09-Apr-24	7
Site Upkeeping							
AS013100	General Site Upkeeping of the Site	1570	20-Nov-19 A	07-Mar-24	23-Aug-21	09-Mar-24	2
Safety and Environmental Management							
AS013200	Construction Health and Safety Plan	1580	10-Nov-19 A	07-Mar-24	23-Aug-21	09-Mar-24	2
AS013300	Site Traffic Safety Management Plan	1070	25-Apr-21 A	29-Mar-24	01-Sep-21	09-Apr-24	11
Compliance with BEAM Requirements							
AS013400	BEAM Plus	1580	10-Nov-19 A	07-Mar-24	23-Aug-21	09-Mar-24	2
Sludge Dewatering Building							
AS013410f	Material Submission & Design Calculation Approved	0		11-Jun-21 A		11-Nov-21	
AS013420f	Issued approved submission & Calculation to Cinotech	30	21-Aug-21	19-Sep-21	11-Nov-21	10-Dec-21	82
AS013430f	Monthly Review & Submission	500	26-Dec-21	09-May-23	23-Sep-22	04-Feb-24	271
AS013440f	Submission & Approval of Test Record	60	10-May-23	08-Jul-23	05-Feb-24	04-Apr-24	271
CHP Building							
AS013450f	Material Submission & Design Calculation Approved	0		11-Jun-21 A		07-Jan-22	
AS013460f	Issued approved submission & Calculation to Cinotech	30	21-Aug-21	19-Sep-21	07-Jan-22	05-Feb-22	139
AS013470f	Monthly Review & Submission	480	24-Feb-22	18-Jun-23	13-Oct-22	04-Feb-24	231
AS013480f	Submission & Approval of Test Record	60	19-Jun-23	17-Aug-23	05-Feb-24	04-Apr-24	231
BIM							
AS011820a	Prepare & Submit Construction Stage BIM Execution Plan	30	24-Oct-19 A	22-Nov-19 A	28-Aug-21	28-Aug-21	
AS011830a	PM Reivew & Comment Construction Stage BIM Execution Plan	21	23-Nov-19 A	13-Dec-19 A	28-Aug-21	28-Aug-21	
AS011840a	Revise & Re-submit Construction Stage BIM Execution Plan	14	14-Dec-19 A	27-Dec-19 A	28-Aug-21	28-Aug-21	
AS011850a	PM Reivew & Approval of Construction Stage BIM Execution Plan	21	28-Dec-19 A	17-Jan-20 A	28-Aug-21	28-Aug-21	
AS011880b	Contractor Review & Study Design Stage BIM	92	24-Oct-19 A	23-Jan-20 A	28-Aug-21	28-Aug-21	
AS011900	Contractor Develop 1st Construction Stage BIM	60	24-Jan-20 A	23-Mar-20 A	28-Aug-21	28-Aug-21	
AS011920a	Review & Update BIM Execution Plan & BIM Model	1415	24-Mar-20 A	06-Feb-24	28-Aug-21	13-Feb-24	7
AS011960	Prepare & Submit the Fully Coordinated BIM	60	09-Dec-23	06-Feb-24	16-Dec-23	13-Feb-24	7
AS011961	PM Reivew & Comment Fully Coordinated BIM	21	07-Feb-24	27-Feb-24	14-Feb-24	05-Mar-24	7
AS011962	Revise & Re-submit Fully Coordinated BIM	14	28-Feb-24	12-Mar-24	06-Mar-24	19-Mar-24	7
AS011963	PM Reivew & Approval of Fully Coordinated BIM	21	13-Mar-24	02-Apr-24	20-Mar-24	09-Apr-24	7
Section 1 - Design for UV System No. 1 & Effluent Pumping Station No.1							
Major Plant & Materials Procurement							
AS103100	Procurement & PO for UV Disinfection System (S10)	150	21-Nov-19 A	28-Apr-20 A	21-Aug-21	21-Aug-21	
AS103120	Procurement & PO for Lift-up Pumps (S11)	150	21-Nov-19 A	28-Apr-20 A	21-Aug-21	21-Aug-21	
AS103140	Procurement & PO for Transfer Pumps (S13)	150	21-Nov-19 A	28-Apr-20 A	21-Aug-21	21-Aug-21	
AS103180	Procurement & PO for EOT Cranes (2T & 5T) (S19)	150	19-Jan-20 A	03-Jul-20 A	21-Aug-21	21-Aug-21	



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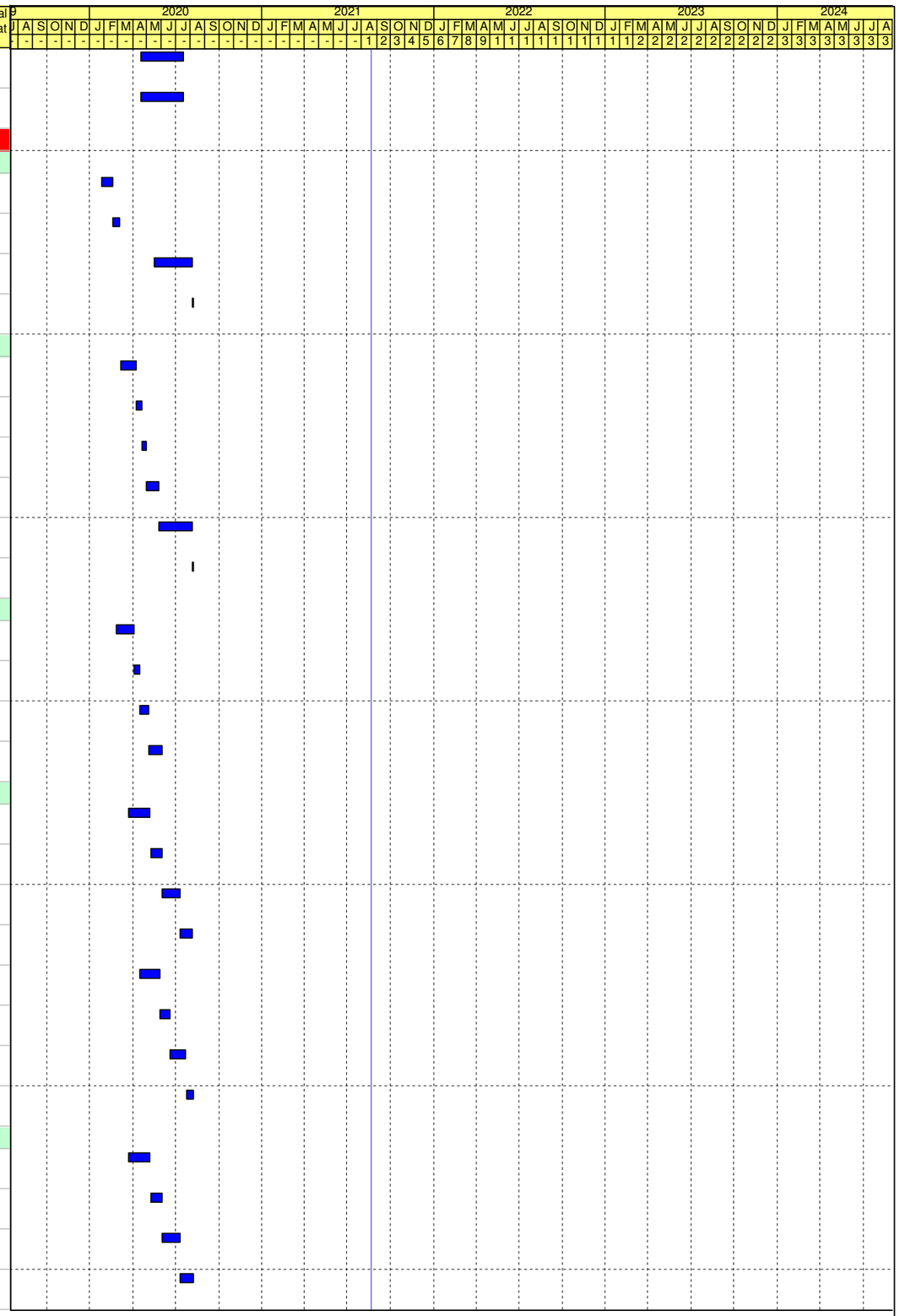
31-Aug-21	Rev.13	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS103200	Procurement & PO for Stoplogs (S21)	90	18-Apr-20 A	17-Jul-20 A	21-Aug-21	21-Aug-21	
AS103220	Procurement & PO for Penstocks (S21)	90	18-Apr-20 A	17-Jul-20 A	21-Aug-21	21-Aug-21	
Design & Submission							
General Arrangement Drawings							
AS101100	Prepare & Submit General Arrangement Drawings	90	27-Jan-20 A	19-Feb-20 A	21-Aug-21	21-Aug-21	
AS101110	Review & Comment on General Arrangement Drawings by PM	21	20-Feb-20 A	04-Mar-20 A	09-Apr-24	09-Apr-24	
AS101120	Revise & Re-submit General Arrangement Drawings	14	16-May-20 A	05-Aug-20 A	09-Apr-24	09-Apr-24	
AS101130	Review & Accept of General Arrangement Drawings by PM	5	06-Aug-20 A	08-Aug-20 A	09-Apr-24	09-Apr-24	
Civil & Dimensional / Tolerance Requirement Drawings							
AS102100	Prepare & Submit Civil Requirement Drawings	60	07-Mar-20 A	08-Apr-20 A	09-Sep-21	09-Sep-21	
AS102110	Review & Comment on Civil Requirement Drawings by PM	21	09-Apr-20 A	20-Apr-20 A	09-Apr-24	09-Apr-24	
AS102120	Revise & Re-submit Civil Requirement Drawings	14	21-Apr-20 A	29-Apr-20 A	09-Apr-24	09-Apr-24	
AS102130	Review & Comment of Civil Requirement Drawings by PM	21	30-Apr-20 A	25-May-20 A	09-Apr-24	09-Apr-24	
AS512140	Revise & Re-submit Civil Requirement Drawings	28	26-May-20 A	05-Aug-20 A	09-Apr-24	09-Apr-24	
AS512150	Review & Accept of Civil Requirement Drawings by PM	5	06-Aug-20 A	08-Aug-20 A	09-Apr-24	09-Apr-24	
Electrical Schematic Drawings							
AS102150	Prepare & Submit Elec. Schematic Drawings	60	25-Feb-20 A	03-Apr-20 A	21-Aug-21	21-Aug-21	
AS102160	Review & Comment on Elec. Schematic Drawings by PM	21	04-Apr-20 A	16-Apr-20 A	21-Aug-21	21-Aug-21	
AS102170	Revise & Re-submit Elec. Schematic Drawings	14	17-Apr-20 A	04-May-20 A	21-Aug-21	21-Aug-21	
AS102180	Review & Accept of Elec. Schematic Drawings by PM	21	05-May-20 A	03-Jun-20 A	21-Aug-21	21-Aug-21	
UV System No. 1							
AS102200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20 A	08-May-20 A	21-Aug-21	21-Aug-21	
AS102210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	09-May-20 A	01-Jun-20 A	09-Apr-24	09-Apr-24	
AS102220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	02-Jun-20 A	10-Jul-20 A	09-Apr-24	09-Apr-24	
AS102230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	11-Jul-20 A	06-Aug-20 A	09-Apr-24	09-Apr-24	
AS102300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20 A	29-May-20 A	21-Aug-21	21-Aug-21	
AS102310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	30-May-20 A	19-Jun-20 A	09-Sep-21	09-Sep-21	
AS102320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	20-Jun-20 A	23-Jul-20 A	09-Sep-21	09-Sep-21	
AS102330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	14	24-Jul-20 A	08-Aug-20 A	09-Sep-21	09-Sep-21	
Effluent Pumping Station No. 1							
AS112200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20 A	08-May-20 A	21-Aug-21	21-Aug-21	
AS112210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	09-May-20 A	01-Jun-20 A	09-Apr-24	09-Apr-24	
AS112220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	02-Jun-20 A	10-Jul-20 A	09-Apr-24	09-Apr-24	
AS112230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	11-Jul-20 A	08-Aug-20 A	09-Apr-24	09-Apr-24	



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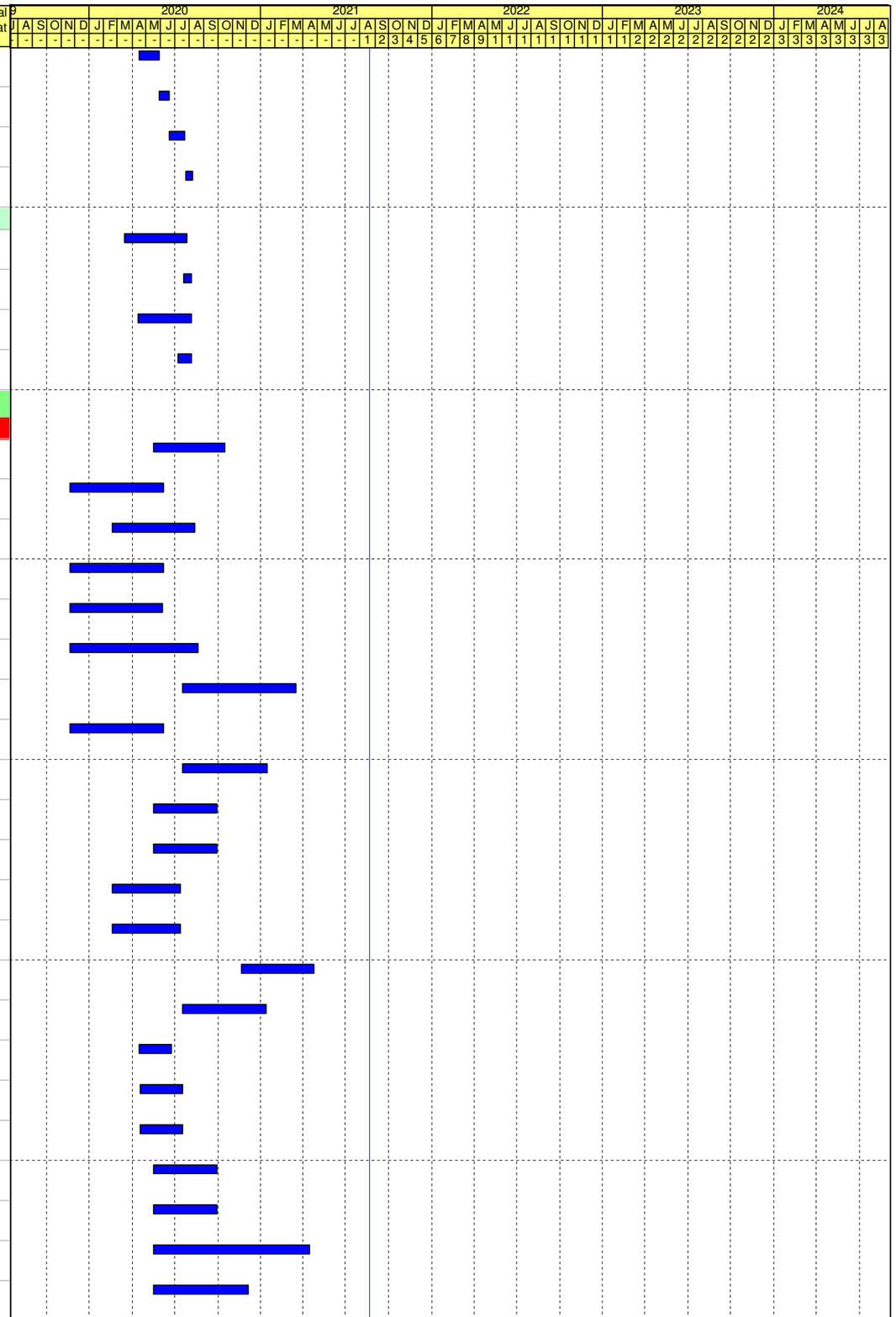
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS112300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20 A	29-May-20 A	21-Aug-21	21-Aug-21	
AS112310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	30-May-20 A	19-Jun-20 A	21-Aug-21	21-Aug-21	
AS112320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	20-Jun-20 A	23-Jul-20 A	21-Aug-21	21-Aug-21	
AS112330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	14	24-Jul-20 A	08-Aug-20 A	21-Aug-21	21-Aug-21	
Building Services							
AS113100	Prepare & Submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	90	15-Mar-20 A	27-Jul-20 A	20-Sep-21	20-Sep-21	
AS113160c	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	27-Nov-21	27-Nov-21	
AS113200	Prepare & Submit FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	60	14-Apr-20 A	05-Aug-20 A	20-Sep-21	20-Sep-21	
AS113260c	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	20-Sep-21	20-Sep-21	
Section 2 - Complete All Designs (exclude Sec. 1 & 3)							
Major Plant & Materials Procurement							
AS023100	Procurement & PO for Sludge Screening System (S2)	150	18-May-20 A	16-Oct-20 A	21-Aug-21	21-Aug-21	
AS023120	Procurement & PO for Sludge Thickening System (S3)	180	20-Nov-19 A	08-Jun-20 A	31-Aug-21	31-Aug-21	
AS023140	Procurement & PO for Sludge Digestion System (S5)	150	18-Feb-20 A	12-Aug-20 A	21-Aug-21	21-Aug-21	
AS023160	Procurement & PO for Sludge Dewatering System (S6)	180	20-Nov-19 A	08-Jun-20 A	31-Aug-21	31-Aug-21	
AS023180	Procurement & PO for THP System (S4)	180	20-Nov-19 A	05-Jun-20 A	21-Aug-21	21-Aug-21	
AS023190a	Procurement & PO for Biogas Holding Tanks (S7)	180	20-Nov-19 A	20-Aug-20 A	28-Aug-21	28-Aug-21	
AS023210	Procurement & PO for H2S Removal System (S7)	234	17-Jul-20 A	17-Mar-21 A	04-Mar-22	04-Mar-22	
AS023220	Procurement & PO for CHP System (S8)	180	20-Nov-19 A	08-Jun-20 A	01-Sep-21	01-Sep-21	
AS023240	Procurement & PO for Waste Gas Burning System (S9)	150	17-Jul-20 A	15-Jan-21 A	27-Mar-22	27-Mar-22	
AS023260	Procurement & PO for Plant Service Water System (S12)	150	18-May-20 A	30-Sep-20 A	04-Mar-22	04-Mar-22	
AS023280	Procurement & PO for SAS Pumping System (S14)	150	18-May-20 A	30-Sep-20 A	04-Jan-22	04-Jan-22	
AS023300	Procurement & PO for Transfomers (S17)	150	18-Feb-20 A	13-Jul-20 A	08-Dec-21	08-Dec-21	
AS023320	Procurement & PO for 11 kV Switchboard (S17)	150	18-Feb-20 A	13-Jul-20 A	08-Dec-21	08-Dec-21	
AS023340	Procurement & PO for 380V Switchboard (S17)	174	21-Nov-20 A	23-Apr-21 A	22-Dec-21	22-Dec-21	
AS023380	Procurement & PO for Control & Monitoring System (S18)	183	17-Jul-20 A	11-Jan-21 A	08-Dec-21	08-Dec-21	
AS023420	Procurement & PO for DO System (S21)	150	15-Apr-20 A	24-Jun-20 A	03-Jul-22	03-Jul-22	
AS023440	Procurement & PO for Stoplog (S21)	90	18-Apr-20 A	17-Jul-20 A	08-Oct-21	08-Oct-21	
AS023460	Procurement & PO for Penstock (S21)	90	18-Apr-20 A	17-Jul-20 A	08-Oct-21	08-Oct-21	
AS023480	Procurement & PO for Sewage Pump (S21)	120	18-May-20 A	30-Sep-20 A	05-Mar-22	05-Mar-22	
AS023500	Procurement & PO for Process Water Pump (S21)	120	18-May-20 A	30-Sep-20 A	25-Jul-22	25-Jul-22	
AS023520	Procurement & PO for External Sludge Transfer Pump (S21)	348	18-May-20 A	14-Apr-21 A	27-Sep-22	27-Sep-22	
AS023540	Procurement & PO for THP Cooling Pump (S21)	150	18-May-20 A	04-Dec-20 A	27-Sep-22	27-Sep-22	



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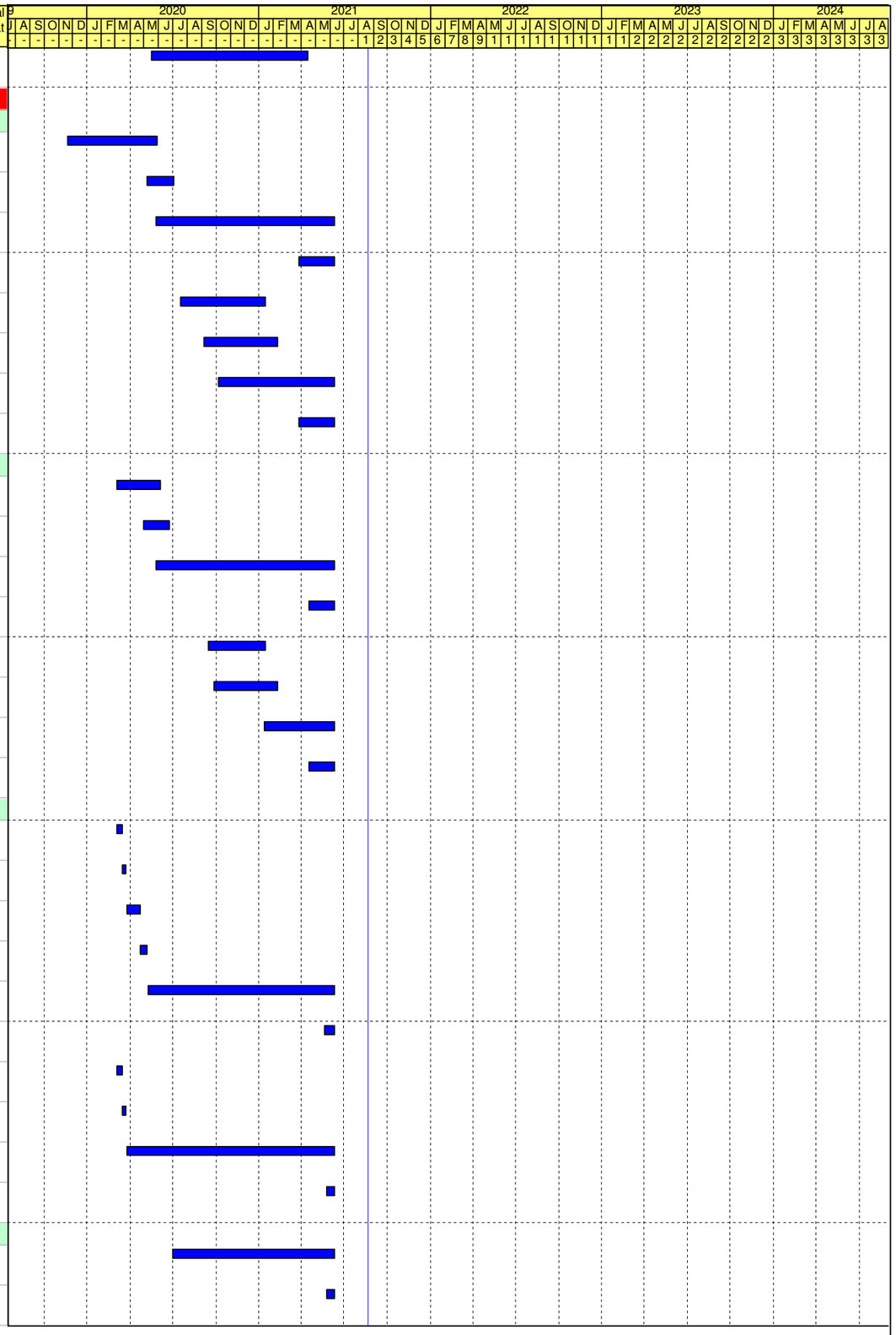
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS023600	Procurement & PO for Temporary Primary Sludge Pump (S21)	348	18-May-20 A	14-Apr-21 A	03-Jul-22	03-Jul-22	
Design & Submission							
General Arrangement Drawings							
AS020100	Prepare & Submit General Arrangement Drawings (from formation level up to +8mPD)	180	20-Nov-19 A	29-May-20 A	26-Sep-21	26-Sep-21	
AS020110	Review & Comment on General Arrangement Drawings by PM (from formation level up to +8mPD)	21	07-May-20 A	02-Jul-20 A	09-Apr-24	09-Apr-24	
AS020120	Revise & Re-submit General Arrangement Drawings (from formation level up to +8mPD)	381	26-May-20 A	10-Jun-21 A	09-Apr-24	09-Apr-24	
AS020130	Review & Accept of General Arrangement Drawings by PM (from formation level up to +8mPD)	77	26-Mar-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
AS020140a	Prepare & Submit General Arrangement Drawings (remaining)	177	17-Jul-20 A	15-Jan-21 A	26-Nov-21	26-Nov-21	
AS020150a	Review & Comment on General Arrangement Drawings by PM (remaining)	21	05-Sep-20 A	08-Feb-21 A	26-Nov-21	26-Nov-21	
AS020160a	Revise & Re-submit General Arrangement Drawings (remaining)	248	06-Oct-20 A	10-Jun-21 A	26-Nov-21	26-Nov-21	
AS020170a	Review & Accept of General Arrangement Drawings by PM (remaining)	77	26-Mar-21 A	11-Jun-21 A	26-Nov-21	26-Nov-21	
Civil & Dimensional / Tolerance Requirement Drawings							
AS020200	Prepare & Submit Civil Requirement Drawings (from formation level up to +8mPD) -KD2A	90	04-Mar-20 A	04-Jun-20 A	26-Sep-21	26-Sep-21	
AS020210	Review & Comment on Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	30-Apr-20 A	23-Jun-20 A	26-Sep-21	26-Sep-21	
AS020220	Revise & Re-submit Civil Requirement Drawings (from formation level up to +8mPD)	381	26-May-20 A	10-Jun-21 A	26-Sep-21	26-Sep-21	
AS020230	Review & Accept of Civil Requirement Drawings by PM (from formation level up to +8mPD)	55	17-Apr-21 A	11-Jun-21 A	26-Sep-21	26-Sep-21	
AS020300	Prepare & Submit Civil Requirement Drawings (remaining) -KD2B	120	15-Sep-20 A	15-Jan-21 A	09-Apr-24	09-Apr-24	
AS020310	Review & Comment on Civil Requirement Drawings by PM (remaining)	21	28-Sep-20 A	08-Feb-21 A	09-Apr-24	09-Apr-24	
AS020320	Revise & Re-submit Civil Requirement Drawings (remaining)	150	12-Jan-21 A	10-Jun-21 A	09-Apr-24	09-Apr-24	
AS020330	Review & Accept of Civil Requirement Drawings by PM (remaining)	55	17-Apr-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
Electrical Schematic Drawings							
AS021200	Prepare & Elec. Schematic Drawings (from formation level up to +8mPD) -KD2A	90	05-Mar-20 A	16-Mar-20 A	06-Oct-21	06-Oct-21	
AS021210	Review & Comment on Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	17-Mar-20 A	24-Mar-20 A	27-Oct-21	27-Oct-21	
AS021220	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	28	25-Mar-20 A	23-Apr-20 A	27-Oct-21	27-Oct-21	
AS021230	Review & Comment of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	24-Apr-20 A	08-May-20 A	27-Oct-21	27-Oct-21	
AS021240	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	398	09-May-20 A	10-Jun-21 A	09-Apr-24	09-Apr-24	
AS021250	Review & Accept of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	21-May-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
AS021300	Prepare & Submit Elec. Schematic Drawings (remaining) -KD2B	120	05-Mar-20 A	16-Mar-20 A	27-Oct-21	27-Oct-21	
AS021310	Review & Comment on Elec. Schematic Drawings by PM (remaining)	21	17-Mar-20 A	24-Mar-20 A	22-Dec-21	22-Dec-21	
AS021320	Revise & Re-submit Elec. Schematic Drawings (remaining)	443	25-Mar-20 A	10-Jun-21 A	22-Dec-21	22-Dec-21	
AS021330	Review & Accept of Elec. Schematic Drawings by PM (remaining)	21	24-May-21 A	11-Jun-21 A	22-Dec-21	22-Dec-21	
Sludge Screening (SSc)							
AS022200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	344	02-Jul-20 A	10-Jun-21 A	22-Dec-21	22-Dec-21	
AS022210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	22-Dec-21	22-Dec-21	



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31-Aug-21	Rev.13	LT	KM

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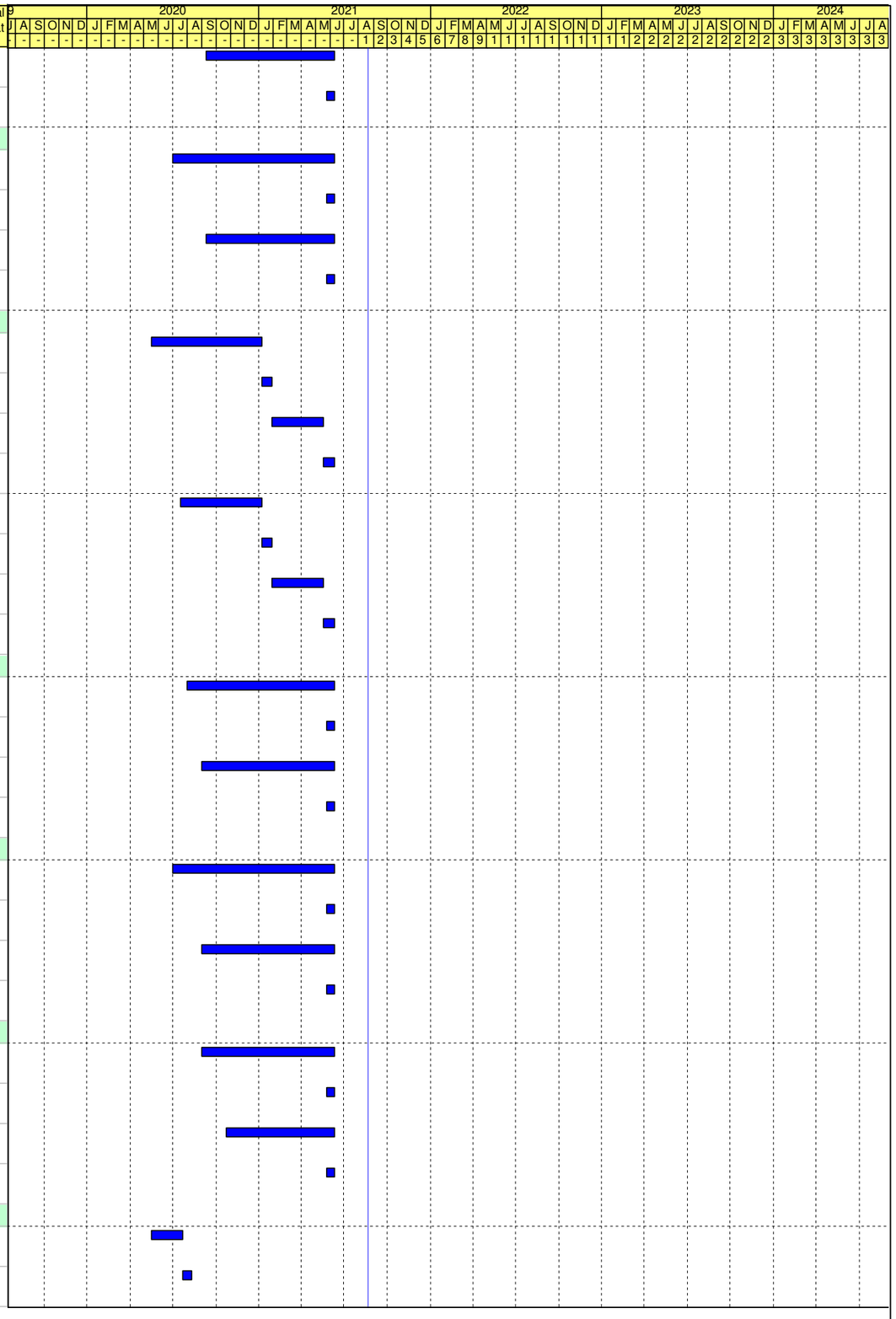
AS022300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	274	10-Sep-20 A	10-Jun-21 A	11-Nov-21	11-Nov-21	
AS022310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	11-Nov-21	11-Nov-21	
Sludge Thickening (STh)							
AS032200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	344	02-Jul-20 A	10-Jun-21 A	04-Mar-22	04-Mar-22	
AS032210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS032300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	274	10-Sep-20 A	10-Jun-21 A	13-Oct-21	13-Oct-21	
AS032310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	13-Oct-21	13-Oct-21	
Thermal Hydrolysis Process (THP)							
AS042200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	241	18-May-20 A	07-Jan-21 A	05-Dec-21	05-Dec-21	
AS042210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	08-Jan-21 A	27-Jan-21 A	05-Dec-21	05-Dec-21	
AS042220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	117	28-Jan-21 A	17-May-21 A	05-Dec-21	05-Dec-21	
AS042230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	24	18-May-21 A	11-Jun-21 A	05-Dec-21	05-Dec-21	
AS042300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	17-Jul-20 A	07-Jan-21 A	05-Dec-21	05-Dec-21	
AS042310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	08-Jan-21 A	27-Jan-21 A	05-Dec-21	05-Dec-21	
AS042320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	117	28-Jan-21 A	17-May-21 A	05-Dec-21	05-Dec-21	
AS042330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	24	18-May-21 A	11-Jun-21 A	05-Dec-21	05-Dec-21	
Sludge Digestion (SDi)							
AS052200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	314	01-Aug-20 A	10-Jun-21 A	04-Mar-22	04-Mar-22	
AS052210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS052300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	284	31-Aug-20 A	10-Jun-21 A	31-Oct-21	31-Oct-21	
AS052310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	31-Oct-21	31-Oct-21	
Sludge Dewatering (SDe)							
AS062200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	344	02-Jul-20 A	10-Jun-21 A	04-Mar-22	04-Mar-22	
AS062210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS062300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	284	31-Aug-20 A	10-Jun-21 A	31-Aug-21	31-Aug-21	
AS062310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	31-Aug-21	31-Aug-21	
Biogas Storage & Pre-Treatment (BSPT)							
AS072200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	284	31-Aug-20 A	10-Jun-21 A	04-Mar-22	04-Mar-22	
AS072210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS072300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	232	22-Oct-20 A	10-Jun-21 A	28-Aug-21	28-Aug-21	
AS072310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	28-Aug-21	28-Aug-21	
Combined Heat & Power Generation (CHP)							
AS082200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	233	18-May-20 A	21-Jul-20 A	10-Jan-22	10-Jan-22	
AS082210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	22-Jul-20 A	11-Aug-20 A	10-Jan-22	10-Jan-22	



Remaining Work
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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
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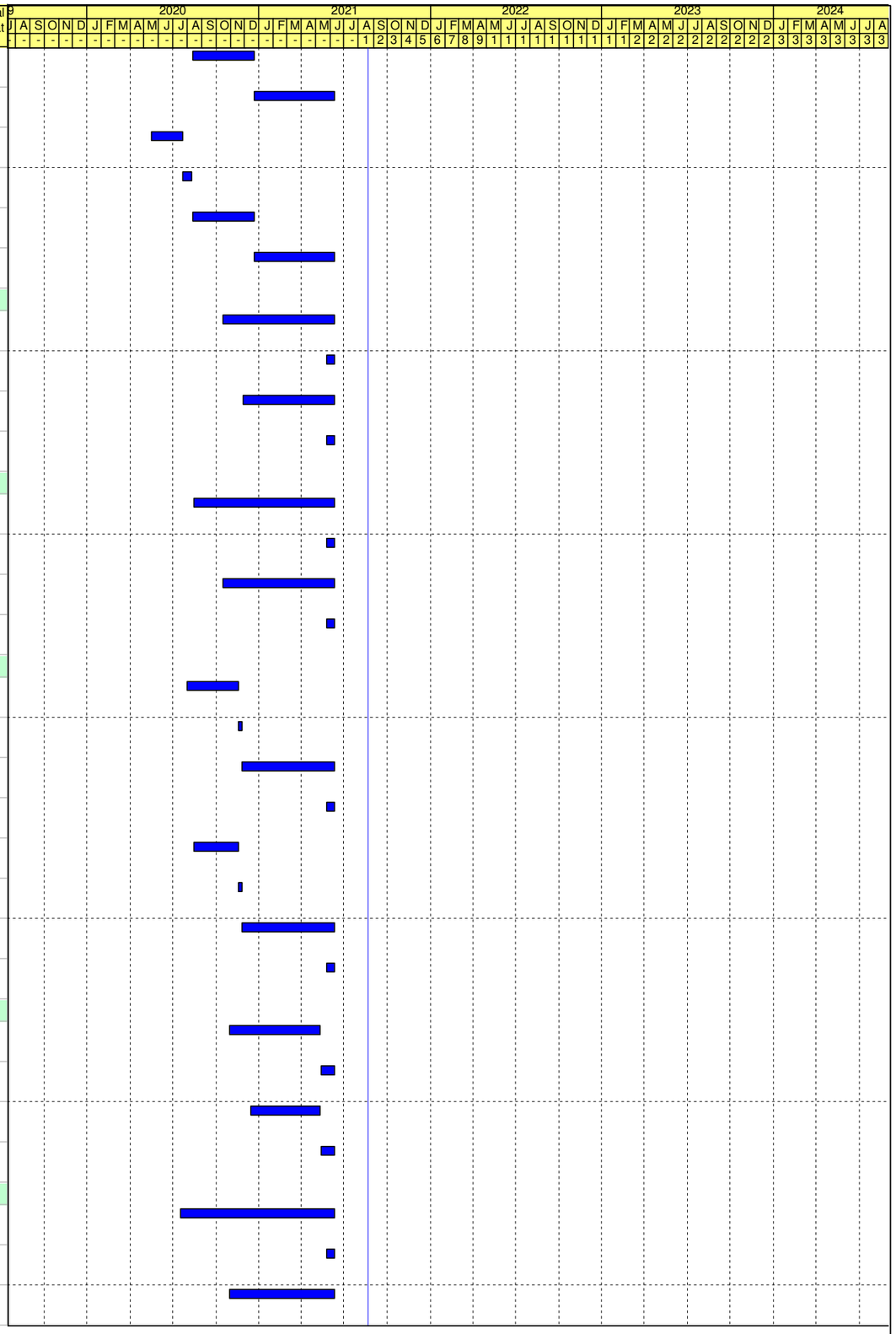
31-Aug-21	Rev.13	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS082220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	12-Aug-20 A	21-Dec-20 A	04-Mar-22	04-Mar-22	
AS082230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	171	22-Dec-20 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS082300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	18-May-20 A	21-Jul-20 A	01-Sep-21	01-Sep-21	
AS082310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	22-Jul-20 A	11-Aug-20 A	01-Sep-21	01-Sep-21	
AS082320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	12-Aug-20 A	21-Dec-20 A	01-Sep-21	01-Sep-21	
AS082330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	171	22-Dec-20 A	11-Jun-21 A	01-Sep-21	01-Sep-21	
Waste Gas Burning System (WGB)							
AS092200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	239	15-Oct-20 A	10-Jun-21 A	04-Mar-22	04-Mar-22	
AS092210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS092300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	194	29-Nov-20 A	10-Jun-21 A	27-Mar-22	27-Mar-22	
AS092310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	27-Mar-22	27-Mar-22	
Plant Service Water System (PSW)							
AS122200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	299	16-Aug-20 A	10-Jun-21 A	04-Mar-22	04-Mar-22	
AS122210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	04-Mar-22	04-Mar-22	
AS122300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	239	15-Oct-20 A	10-Jun-21 A	23-Sep-22	23-Sep-22	
AS122310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	23-Sep-22	23-Sep-22	
Surplus Activated Sludge Pumping Station (SAS)							
AS142200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	202	01-Aug-20 A	17-Nov-20 A	09-Apr-24	09-Apr-24	
AS142210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Nov-20 A	24-Nov-20 A	09-Apr-24	09-Apr-24	
AS142220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	198	25-Nov-20 A	10-Jun-21 A	09-Apr-24	09-Apr-24	
AS142230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
AS142300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	183	16-Aug-20 A	17-Nov-20 A	04-Jan-22	04-Jan-22	
AS142310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	18-Nov-20 A	24-Nov-20 A	04-Jan-22	04-Jan-22	
AS142320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	198	25-Nov-20 A	10-Jun-21 A	04-Jan-22	04-Jan-22	
AS142330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	04-Jan-22	04-Jan-22	
Control and Monitoring System							
AS182200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	193	30-Oct-20 A	11-May-21 A	09-Apr-24	09-Apr-24	
AS182210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	30	12-May-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
AS182300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	148	14-Dec-20 A	11-May-21 A	08-Dec-21	08-Dec-21	
AS182310	Review & Accept on the Schedule, Design Cal. & Fixing Details of Equipment	30	12-May-21 A	11-Jun-21 A	08-Dec-21	08-Dec-21	
Lifting Appliances							
AS192200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	329	17-Jul-20 A	10-Jun-21 A	17-Sep-21	17-Sep-21	
AS192210	Review & Accept on Wiring Dwgs, Cable Schedule & Design Cal.	21	24-May-21 A	11-Jun-21 A	17-Sep-21	17-Sep-21	
AS192300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	224	30-Oct-20 A	10-Jun-21 A	17-Sep-21	17-Sep-21	



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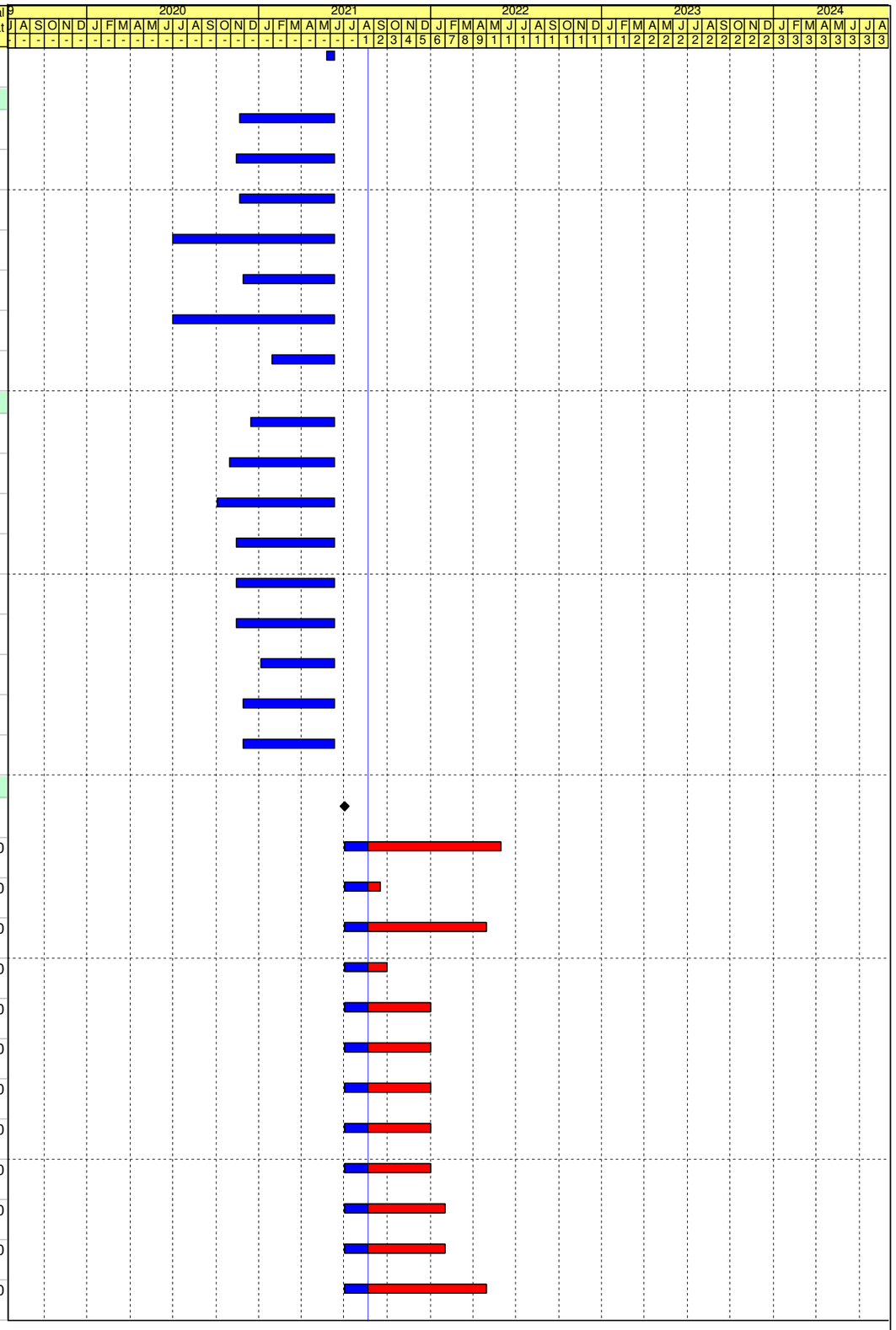
AS192310	Review & Acceptt on the Schedule, Design Cal. & Fixing Details of Equipment	21	24-May-21 A	11-Jun-21 A	17-Sep-21	17-Sep-21	
Building Services							
AS201100	Submit & Accept BS Works Design & Dwgs for Sludge Dewatering Building	202	21-Nov-20 A	11-Jun-21 A	27-Nov-21	27-Nov-21	
AS201200	Submit & Accept BS Works Design & Dwgs for CHP Building	209	14-Nov-20 A	11-Jun-21 A	10-Jan-22	10-Jan-22	
AS201300	Submit & Accept BS Works Design & Dwgs for Sludge Digester & Distribution Chamber	202	21-Nov-20 A	11-Jun-21 A	10-Jan-22	10-Jan-22	
AS201500	Submit & Accept BS Works Design & Dwgs for Workshop No. 2	344	02-Jul-20 A	11-Jun-21 A	10-Jan-22	10-Jan-22	
AS201700	Submit & Accept BS Works Design & Dwgs for Other Facilities	194	29-Nov-20 A	11-Jun-21 A	10-Jan-22	10-Jan-22	
AS201800	Submit & Accept BS Works Design & Dwgs for FS Installation	344	02-Jul-20 A	11-Jun-21 A	10-Jan-22	10-Jan-22	
AS201900	Submit & Accept BS Works Design & Dwgs for Outdoor Lighting Installation	134	28-Jan-21 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
Miscellaneous							
AS211100	Submit & Accept Design & Dwgs for DO System	179	14-Dec-20 A	11-Jun-21 A	03-Jul-22	03-Jul-22	
AS211200	Submit & Accept Design & Dwgs for Sewage Pumping Station	224	30-Oct-20 A	11-Jun-21 A	05-Mar-22	05-Mar-22	
AS211300	Submit & Accept Design & Dwgs for Process Water Pumping System	249	05-Oct-20 A	11-Jun-21 A	25-Jul-22	25-Jul-22	
AS211400	Submit & Accept Design & Dwgs for External Sludge Transfer Pumping System	209	14-Nov-20 A	11-Jun-21 A	27-Sep-22	27-Sep-22	
AS211500	Submit & Accept Design & Dwgs for THP Cooling Water Pumping Station	209	14-Nov-20 A	10-Jun-21 A	27-Sep-22	27-Sep-22	
AS211600	Submit & Accept Design & Dwgs for Ferric Chloride Dosing System	209	14-Nov-20 A	11-Jun-21 A	03-Jun-22	03-Jun-22	
AS211700	Submit & Accept Design & Dwgs for Temporary Primary Sludge Pumping Facility	158	04-Jan-21 A	11-Jun-21 A	03-Jul-22	03-Jul-22	
AS211800	Submit & Accept Design & Dwgs for Gas Detection System	194	29-Nov-20 A	11-Jun-21 A	24-Aug-22	24-Aug-22	
AS211900	Submit & Accept Design & Dwgs for CCTV System	194	29-Nov-20 A	11-Jun-21 A	09-Apr-24	09-Apr-24	
Outstanding Works							
AS211950i	Certifiate of Completion - Section 2 of the works (Ref: RCYK:ccm:60427128/92-2021004626w)	0	02-Jul-21 A		09-Apr-24		
AS212000i	Provide ICE Certificate for all design, calculations, drawings, plans & relevant documents	334	02-Jul-21 A	31-May-22*	21-Aug-21	31-May-22	0
AS212010i	Submit finalized design calculations, drawings & material submissions for BS systems (Workshop No.2)	76	02-Jul-21 A	15-Sep-21*	21-Aug-21	15-Sep-21	0
AS212015j	Submit finalized design calculations, drawings & material submissions for BS systems (except Workshop No.2)	303	02-Jul-21 A	30-Apr-22*	21-Aug-21	30-Apr-22	0
AS212020i	Submit finalized sizing calculations for the actuators and stems for penstocks	91	02-Jul-21 A	30-Sep-21*	21-Aug-21	30-Sep-21	0
AS212021j	Submit finalized cable schedules & sizing calculation (LV System)	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212022j	Submit finalized pumps and associated motor and VSD calculations	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212023j	Submit finalized electrical loads to verify the rating of the switchgears, transformers and protective devices	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212024j	Submit finalized material submissions of the cables, cable tray, ladder and accessories	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212025j	Submit finalized cable route drawings	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212026j	Submit finalized layout and control wiring diagrams for switchboard, MCC, control panel, etc	214	02-Jul-21 A	31-Jan-22*	21-Aug-21	31-Jan-22	0
AS212027j	Submit finalized design submissions of the CHP system	214	02-Jul-21 A	31-Jan-22*	21-Aug-21	31-Jan-22	0
AS212028j	Submit finalized interlock devices for electrical equipment and system	303	02-Jul-21 A	30-Apr-22*	21-Aug-21	30-Apr-22	0



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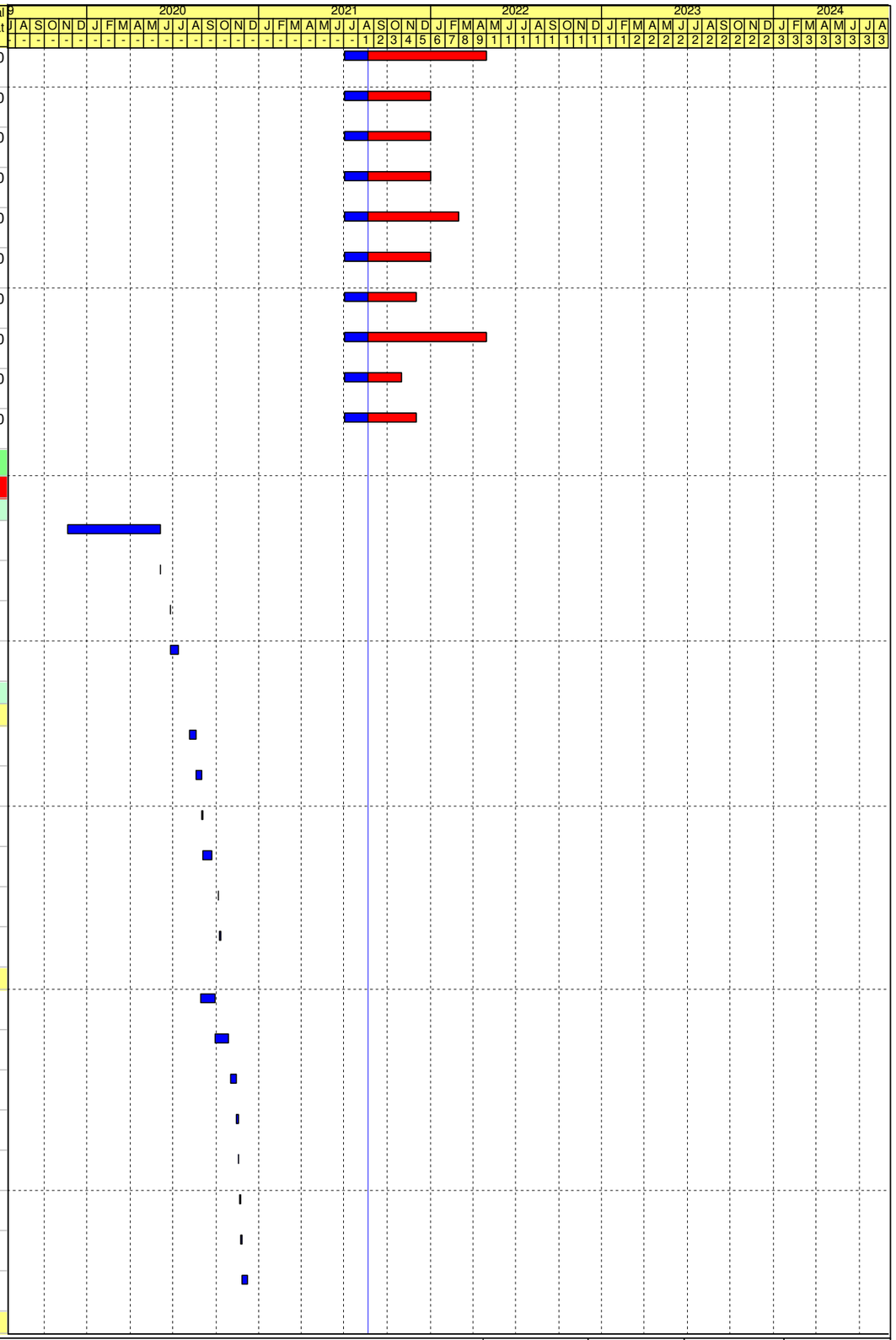
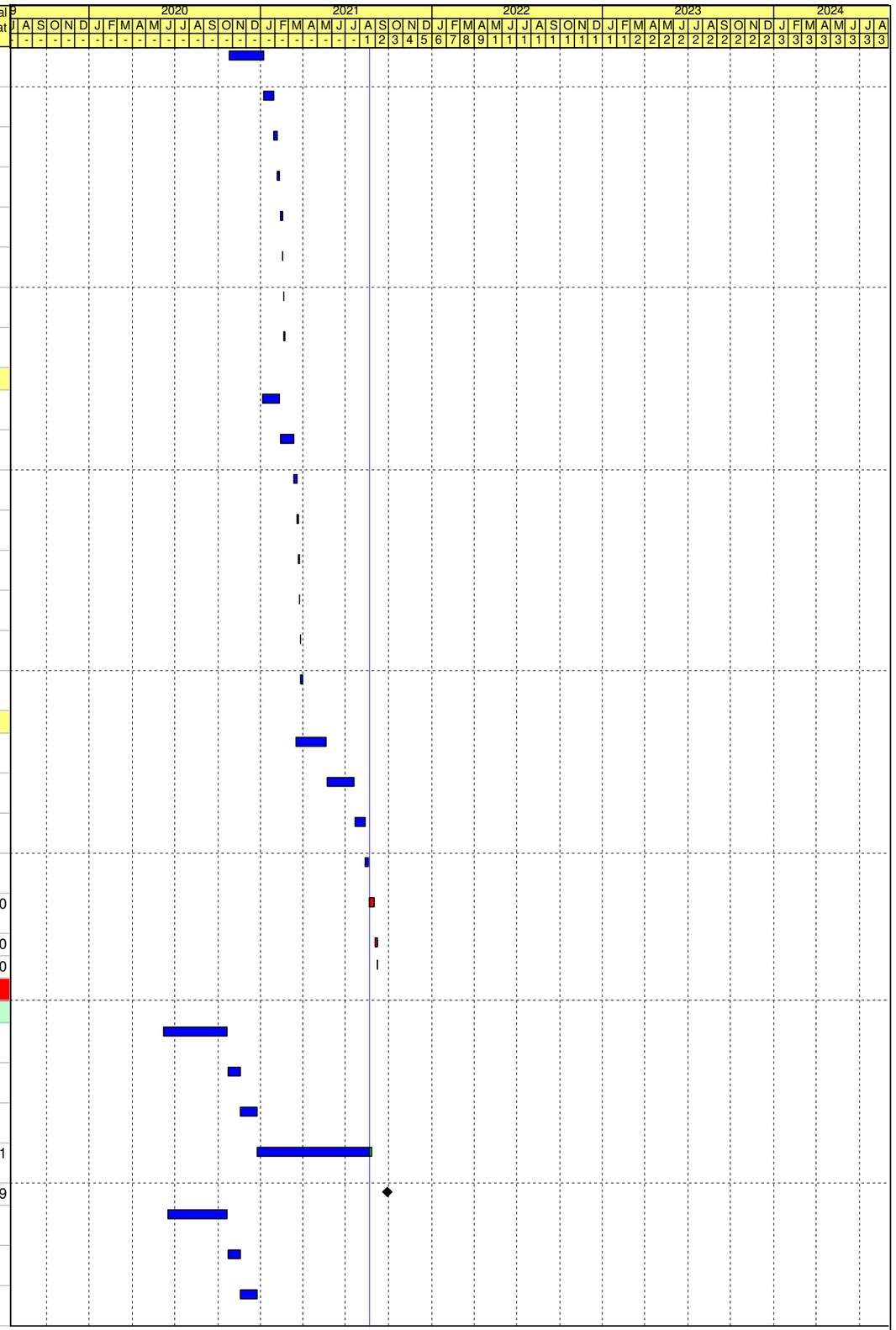
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS212029j	Submit finalized calculations for total harmonic distortion, electrical faults and touch voltage	303	02-Jul-21 A	30-Apr-22*	21-Aug-21	30-Apr-22	0
AS212030i	Submit finalized design calculations, drawings & material submissions for ELV systems	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212040i	Submit finalized design submissions of SCADA, PMS, CMMS, IDMS, UPS for FCS	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212042j	Submit finalized configuration of SCADA / PLC system, CMMS & PMS	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212044j	Submit finalized PLC and MCC panel design	242	02-Jul-21 A	28-Feb-22*	21-Aug-21	28-Feb-22	0
AS212050i	Submit finalized design & philosophy of the process instrument	183	02-Jul-21 A	31-Dec-21*	21-Aug-21	31-Dec-21	0
AS212060i	Submit finalized Process Design Submission	152	02-Jul-21 A	30-Nov-21*	21-Aug-21	30-Nov-21	0
AS212070i	Submit finalized acoustic and noise calculations for all equipment	303	02-Jul-21 A	30-Apr-22*	21-Aug-21	30-Apr-22	0
AS212080i	Submit finalized design of THP feeding system	122	02-Jul-21 A	31-Oct-21*	21-Aug-21	31-Oct-21	0
AS212090i	Submit finalized design of the centrifuge discharge system	152	02-Jul-21 A	30-Nov-21*	21-Aug-21	30-Nov-21	0
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities							
Major Subcontractor / Supplier Procurement							
Design							
AS160020	Procurement & PO for Deammonification Sidestream Treatment Facilities	200	20-Nov-19 A	05-Jun-20 A	07-Oct-21	07-Oct-21	
AS512260e	E&M (Process) Designer Award	1	05-Jun-20 A	05-Jun-20 A	09-Apr-24	09-Apr-24	
AS512270e	Civil & BS Designer Award	1	26-Jun-20 A	26-Jun-20 A	09-Apr-24	09-Apr-24	
AS512280e	Mobilisation	14	27-Jun-20 A	12-Jul-20 A	09-Apr-24	09-Apr-24	
Civil & Building Contractor							
For Site Clearance & Survey							
AS512290e	Submit Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	05-Aug-20 A	20-Aug-20 A	21-Aug-21	21-Aug-21	
AS512300e	Review & Comment the Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	21-Aug-20 A	01-Sep-20 A	21-Aug-21	21-Aug-21	
AS512310e	Re-submit Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	02-Sep-20 A	02-Sep-20 A	21-Aug-21	21-Aug-21	
AS512320e	Review & Accept Tender proprosal of Civil Contractor (Site Clearance & Survey)	14	03-Sep-20 A	23-Sep-20 A	21-Aug-21	21-Aug-21	
AS512330e	Civil Contractor (Site Clearance & Survey) Award	1	07-Oct-20 A	07-Oct-20 A	21-Aug-21	21-Aug-21	
AS512340e	Mobilisation	5	08-Oct-20 A	12-Oct-20 A	21-Aug-21	21-Aug-21	
For Ground Investigation							
AS512350e	Submit Tender proprosal of Civil Contractor (Ground Investigation)	14	29-Aug-20 A	29-Sep-20 A	21-Aug-21	21-Aug-21	
AS512360	Review & Accept the Tender proprosal of Civil Contractor (Ground Investigation)	21	30-Sep-20 A	27-Oct-20 A	21-Aug-21	21-Aug-21	
AS512370e	Tender Invitation of Civil Contractor (Ground Investigation)	7	02-Nov-20 A	13-Nov-20 A	21-Aug-21	21-Aug-21	
AS512380e	Submission of Tender Report	7	14-Nov-20 A	18-Nov-20 A	21-Aug-21	21-Aug-21	
AS512390e	Review & Accept the Tender Report by PM	21	19-Nov-20 A	19-Nov-20 A	21-Aug-21	21-Aug-21	
AS512400e	Contract Preparation	3	20-Nov-20 A	23-Nov-20 A	21-Aug-21	21-Aug-21	
AS512410e	Civil Contractor (Ground Investigation) Award	1	24-Nov-20 A	24-Nov-20 A	21-Aug-21	21-Aug-21	
AS512420e	Mobilisation	7	25-Nov-20 A	08-Dec-20 A	21-Aug-21	21-Aug-21	
For Pre-drilling & Post-drilling							



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS512430e	Submit Tender proprosal of Civil Contractor (Pre-drilling & Post-drilling)	74	26-Oct-20 A	06-Jan-21 A	21-Aug-21	21-Aug-21	
AS512440e	Review & Accept the Tender proprosal of Civil Contractor (Predrill & Proof drill)	21	07-Jan-21 A	27-Jan-21 A	21-Aug-21	21-Aug-21	
AS512450e	Tender Invitation of Civil Contractor (Pre-drilling & Post-drilling)	14	28-Jan-21 A	04-Feb-21 A	21-Aug-21	21-Aug-21	
AS512460e	Submission of Tender Report	4	05-Feb-21 A	10-Feb-21 A	21-Aug-21	21-Aug-21	
AS512470e	Review & Accept the Tender Report by PM	21	11-Feb-21 A	16-Feb-21 A	21-Aug-21	21-Aug-21	
AS512480e	Contract Preparation	3	17-Feb-21 A	17-Feb-21 A	21-Aug-21	21-Aug-21	
AS512490e	Civil Contractor (Pre-drilling & Post-drilling) Award	1	18-Feb-21 A	18-Feb-21 A	21-Aug-21	21-Aug-21	
AS512500e	Mobilisation	3	19-Feb-21 A	21-Feb-21 A	21-Aug-21	21-Aug-21	
For Piling							
AS512510f	Submit Tender proprosal of Civil Contractor (Piling)	39	04-Jan-21 A	10-Feb-21 A	21-Aug-21	21-Aug-21	
AS512520f	Review & Accept the Tender proprosal of Civil Contractor (Piling)	25	11-Feb-21 A	12-Mar-21 A	21-Aug-21	21-Aug-21	
AS512530f	Tender Invitation of Civil Contractor (Piling)	14	12-Mar-21 A	19-Mar-21 A	21-Aug-21	21-Aug-21	
AS512540f	Submission of Tender Report	7	20-Mar-21 A	22-Mar-21 A	21-Aug-21	21-Aug-21	
AS512550f	Review & Accept the Tender Report by PM	21	23-Mar-21 A	23-Mar-21 A	21-Aug-21	21-Aug-21	
AS512560f	Contract Preparation	3	24-Mar-21 A	25-Mar-21 A	21-Aug-21	21-Aug-21	
AS512570f	Civil Contractor (Piling) Award	1	26-Mar-21 A	26-Mar-21 A	21-Aug-21	21-Aug-21	
AS512580f	Mobilisation	3	26-Mar-21 A	01-Apr-21 A	21-Aug-21	21-Aug-21	
For Main Civil Works							
AS512590f	Submit Tender proprosal of Civil Contractor (Main Civil Works)	30	17-Mar-21 A	21-May-21 A	21-Aug-21	21-Aug-21	
AS512600f	Review & Accept the Tender proprosal of Civil Contractor (Main Civil Works)	42	22-May-21 A	19-Jul-21 A	21-Aug-21	21-Aug-21	
AS512610f	Tender Invitation of Civil Contractor (Main Civil Works)	14	21-Jul-21 A	11-Aug-21 A	21-Aug-21	21-Aug-21	
AS512620f	Submission of Tender Report	1	12-Aug-21 A	19-Aug-21 A	21-Aug-21	21-Aug-21	
AS512630f	Review & Accept the Tender Report by PM	2	20-Aug-21 A	31-Aug-21	21-Aug-21	31-Aug-21	0
AS512640f	Contract Preparation	5	01-Sep-21	05-Sep-21	01-Sep-21	05-Sep-21	0
AS512650f	Civil Contractor (Main Civil Works) Award	1	06-Sep-21	06-Sep-21	06-Sep-21	06-Sep-21	0
Design & Submission							
Architectural							
AS160100	Prepare & Submit Building Layout Plan	60	07-Jun-20 A	21-Oct-20 A	17-May-22	17-May-22	
AS160110	Review & Comment on Buildingl Layout Plan by PM	67	22-Oct-20 A	17-Nov-20 A	18-Jun-22	18-Jun-22	
AS160120	Revise & Re-submit Building Layout Plan	28	18-Nov-20 A	24-Dec-20 A	18-Jun-22	18-Jun-22	
AS160130	Review & Accept of Building Layout Plan by PM	214	25-Dec-20 A	26-Aug-21	18-Jun-22	23-Jun-22	301
AS160190e	Coordination Meeting with DSD (Employer) for the Architectural Drawing	0		27-Sep-21		23-Jun-22	269
AS160200	Prepare & Submit Architectural Design / Drawings	60	17-Jun-20 A	21-Oct-20 A	04-Jun-22	04-Jun-22	
AS160210	Review & Comment on Architectural Design / Drawings by PM	67	22-Oct-20 A	17-Nov-20 A	04-Jun-22	04-Jun-22	
AS160220	Revise & Re-submit Architectural Design / Drawings	28	18-Nov-20 A	24-Dec-20 A	04-Jun-22	04-Jun-22	



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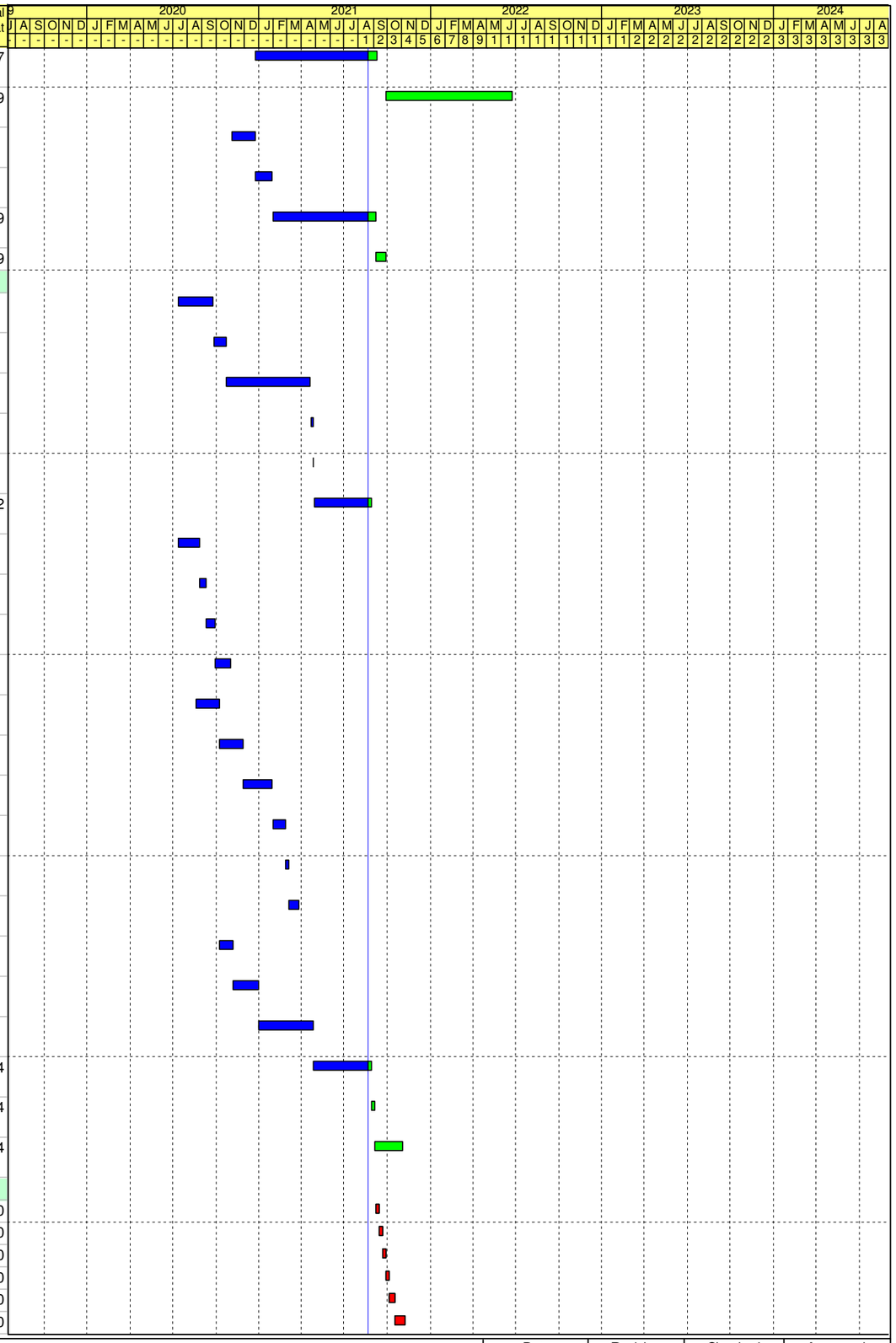
AS160230	Review & Accept of Architectural Design / Drawings by PM	228	25-Dec-20 A	09-Sep-21	04-Jun-22	23-Jun-22	287
AS160240	Review & Accept of Architectural Design / Drawings by DSD (incl. VCAB) & DAP of ArchSD	269	28-Sep-21	23-Jun-22	24-Jun-22	19-Mar-23	269
AS160500	Prepare & Submit ABWF Works Drawings	68	03-Nov-20 A	24-Dec-20 A	17-May-22	17-May-22	
AS160510	Review & Comment on ABWF Works Drawings by PM	21	25-Dec-20 A	29-Jan-21 A	17-May-22	17-May-22	
AS160520	Revise & Re-submit ABWF Works Drawings	189	30-Jan-21 A	06-Sep-21	17-May-22	02-Jun-22	269
AS160530	Review & Accept of ABWF Works Drawings by PM	21	07-Sep-21	27-Sep-21	03-Jun-22	23-Jun-22	269
Civil / Structural							
AS160240e	Prepare & Submit Loading Plan to ICE	60	13-Jul-20 A	25-Sep-20 A	30-Jan-22	30-Jan-22	
AS160250e	Review & Comment on Loading Plan by ICE	14	26-Sep-20 A	23-Oct-20 A	30-Jan-22	30-Jan-22	
AS160260e	Revise & Re-submit Loading Plan to ICE	175	24-Oct-20 A	20-Apr-21 A	30-Jan-22	30-Jan-22	
AS160270e	Review & Accept of Loading Plan by ICE	7	21-Apr-21 A	26-Apr-21 A	30-Jan-22	30-Jan-22	
AS160280e	Prepare & Submit Loading Plan to PM	7	27-Apr-21 A	27-Apr-21 A	30-Jan-22	30-Jan-22	
AS160290e	Review & Accept of Loading Plan by PM & DSD (incl. BCM)	91	28-Apr-21 A	27-Aug-21	30-Jan-22	05-Feb-22	162
AS160292e	Prepare & Submit GI Plan	60	13-Jul-20 A	26-Aug-20 A	21-Aug-21	21-Aug-21	
AS160294e	Review & Comment on GI Plan by PM	14	27-Aug-20 A	10-Sep-20 A	21-Aug-21	21-Aug-21	
AS160296e	Revise & Re-submit GI Plan	7	11-Sep-20 A	28-Sep-20 A	21-Aug-21	21-Aug-21	
AS160298e	Review & Accept of GI Plan by PM	21	29-Sep-20 A	02-Nov-20 A	21-Aug-21	21-Aug-21	
AS160300	Prepare & Submit Foundation Design / Drawings to ICE & PM	60	20-Aug-20 A	09-Oct-20 A	21-Aug-21	21-Aug-21	
AS160310	Review & Comment on Foundation Design / Drawings by ICE & PM	79	10-Oct-20 A	27-Nov-20 A	09-Apr-24	09-Apr-24	
AS160320	Revise & Re-submit Foundation Design / Drawings to ICE & PM	14	28-Nov-20 A	29-Jan-21 A	09-Apr-24	09-Apr-24	
AS160330	Review & Accept of Foundation Design / Drawings by ICE & PM	10	30-Jan-21 A	26-Feb-21 A	09-Apr-24	09-Apr-24	
AS160340e	Prepare & Submit Foundation Design / Drawings to DSD (incl. BCM)	7	27-Feb-21 A	05-Mar-21 A	09-Apr-24	09-Apr-24	
AS160350e	Review & Accept of Foundation Design / Drawings by DSD (incl. BCM)	45	06-Mar-21 A	26-Mar-21 A	09-Apr-24	09-Apr-24	
AS160400	Prepare & Submit Substructure / Superstructure Design / Drawings to ICE & PM	25	10-Oct-20 A	05-Nov-20 A	21-Aug-21	21-Aug-21	
AS160410	Review & Comment on Substructure / Superstructure Design / Drawings by ICE & PM	55	06-Nov-20 A	30-Dec-20 A	23-Nov-21	23-Nov-21	
AS160420	Revise & Re-submit Substructure / Superstructure Design / Drawings to ICE & PM	72	31-Dec-20 A	26-Apr-21 A	23-Nov-21	23-Nov-21	
AS160430	Review & Accept of Substructure / Superstructure Design / Drawings by ICE & PM	93	27-Apr-21 A	28-Aug-21	23-Nov-21	30-Nov-21	94
AS160440e	Prepare & Submit Substructure / Superstructure Design / Drawings to DSD (incl. BCM)	7	29-Aug-21	04-Sep-21	01-Dec-21	07-Dec-21	94
AS160450e	Review & Accept of Substructure / Superstructure Design / Drawings by DSD (incl. BCM)	60	05-Sep-21	03-Nov-21	08-Dec-21	05-Feb-22	94
ELS							
AS512160e	Prepare & Submit ELS Plan to ICE	7	07-Sep-21	13-Sep-21	07-Sep-21	13-Sep-21	0
AS512170e	Review & Comment on ELS Plan by ICE	7	14-Sep-21	20-Sep-21	14-Sep-21	20-Sep-21	0
AS512180e	Revise & Re-submit ELS Plan to ICE	7	21-Sep-21	27-Sep-21	21-Sep-21	27-Sep-21	0
AS512190e	Review & Accept of ELS Plan by ICE	7	28-Sep-21	04-Oct-21	28-Sep-21	04-Oct-21	0
AS512200e	Prepare & Submit ELS Plan to PM	13	05-Oct-21	17-Oct-21	05-Oct-21	17-Oct-21	0
AS512210e	Review & Accept of ELS Plan by PM	21	18-Oct-21	07-Nov-21	18-Oct-21	07-Nov-21	0



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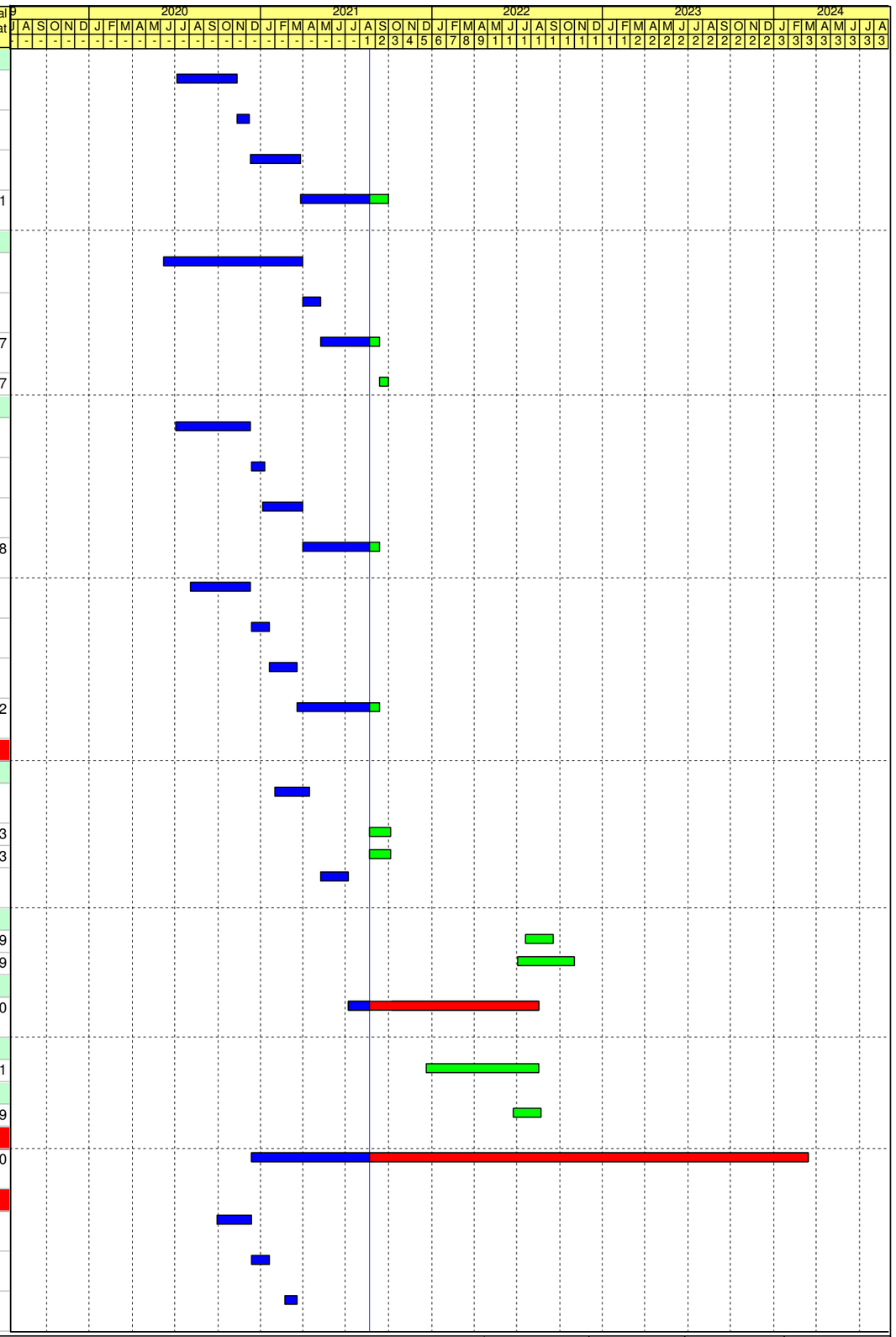
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
Process Design							
AS512220e	Prepare & Submit E&M Works (Process) Design Drawings	198	06-Jul-20 A	10-Nov-20 A	08-Jul-22	08-Jul-22	
AS512230e	Review & Comment on E&M Works (Process) Design Drawings by PM	21	11-Nov-20 A	08-Dec-20 A	08-Jul-22	08-Jul-22	
AS512240e	Revise & Re-submit E&M Works (Process) Design Drawings	87	09-Dec-20 A	26-Mar-21 A	08-Jul-22	08-Jul-22	
AS512250e	Review & Accept of E&M Works (Process) Design Drawings by PM	157	27-Mar-21 A	30-Sep-21	08-Jul-22	17-Aug-22	321
E&M Design							
AS151100	Prepare & Submit General Arrangement Drawings	298	07-Jun-20 A	31-Mar-21 A	08-Nov-21	08-Nov-21	
AS151110	Review & Comment on General Arrangement Drawings by PM	37	01-Apr-21 A	07-May-21 A	26-Dec-21	26-Dec-21	
AS151120	Revise & Re-submit General Arrangement Drawings	95	08-May-21 A	10-Sep-21	26-Dec-21	15-Jan-22	127
AS151130	Review & Accept of General Arrangement Drawings by PM	21	11-Sep-21	01-Oct-21	16-Jan-22	05-Feb-22	127
BS							
AS201400	Prepare & Submit BS Works Design & Dwgs for Sidestream Treatment Facilities	264	03-Jul-20 A	10-Dec-20 A	03-Oct-22	03-Oct-22	
AS201405e	Review & Comment on BS Works Design & Dwgs for Sidestream Treatment Facilities by PM	21	11-Dec-20 A	11-Jan-21 A	03-Oct-22	03-Oct-22	
AS201410e	Revise & Re-submit BS Works Design & Dwgs for Sidestream Treatment Facilities	102	05-Jan-21 A	31-Mar-21 A	03-Oct-22	03-Oct-22	
AS201415e	Review & Accept of BS Works Design & Dwgs for Sidestream Treatment Facilities by PM	132	01-Apr-21 A	10-Sep-21	03-Oct-22	23-Oct-22	408
AS201420	Submission & Submit FS Works Design & Dwgs for Sidestream Treatment Facilities	182	03-Aug-20 A	10-Dec-20 A	27-Sep-22	27-Sep-22	
AS201430e	Review & Comment on FS Works Design & Dwgs for Sidestream Treatment Facilities by PM	21	11-Dec-20 A	19-Jan-21 A	27-Sep-22	27-Sep-22	
AS201440e	Revise & Re-submit FS Works Design & Dwgs for Sidestream Treatment Facilities	66	20-Jan-21 A	19-Mar-21 A	27-Sep-22	27-Sep-22	
AS201450e	Review & Accept of FS Works Design & Dwgs for Sidestream Treatment Facilities by PM	144	20-Mar-21 A	10-Sep-21	27-Sep-22	17-Oct-22	402
Major Plant & Materials Procurement							
Civil & Structure							
AS153130e	Procurement, Manufacture & Delivery of Piling	60	01-Feb-21 A	14-Apr-21 A	21-Aug-21	21-Aug-21	
AS153140e	Procurement, Manufacture & Delivery of Concrete Mix	45	22-Aug-21*	05-Oct-21	23-Dec-21	05-Feb-22	123
AS153150e	Procurement, Manufacture & Delivery of Steel Reinforcement	45	22-Aug-21*	05-Oct-21	23-Dec-21	05-Feb-22	123
AS153160e	Procurement, Manufacture & Delivery of Metal Works Material	80	09-May-21 A	07-Jul-21 A	08-Nov-21	08-Nov-21	
ABWF							
AS153170	Procurement, Manufacture & Delivery of Water Proofing Material	60	19-Jul-22	16-Sep-22	03-Feb-23	03-Apr-23	199
AS153180	Procurement, Manufacture & Delivery of ABWF Works Material	120	04-Jul-22	31-Oct-22	19-Jan-23	18-May-23	199
E&M Process							
AS153100	Procurement, Manufacture & Delivery of Deammonification Sidestream Treatment Facilities	360	07-Jul-21 A	17-Aug-22	07-Oct-21	17-Aug-22	0
BS							
AS153190	Procurement, Manufacture & Delivery of BS Works Material	240	21-Dec-21	17-Aug-22	20-Feb-22	17-Oct-22	61
Fitting-out							
AS512370f	Procurement, Manufacture & Delivery of Fit-out Works Material	60	24-Jun-22	22-Aug-22	20-Mar-23	18-May-23	269
Ground Settlement, Tilting & Utility Monitoring							
AS153200f	Ground Settlement, Tilting & Utility Monitoring	1188	12-Dec-20 A	13-Mar-24	21-Aug-21	13-Mar-24	0
Civil Works Construction							
AS161100	Site Clearance & Survey	50	30-Sep-20 A	11-Dec-20 A	21-Aug-21	21-Aug-21	
AS161120	Ground Investigation	65	12-Dec-20 A	18-Jan-21 A	21-Aug-21	21-Aug-21	
AS161140	Pre-drilling Works	180	22-Feb-21 A	19-Mar-21 A	21-Aug-21	21-Aug-21	



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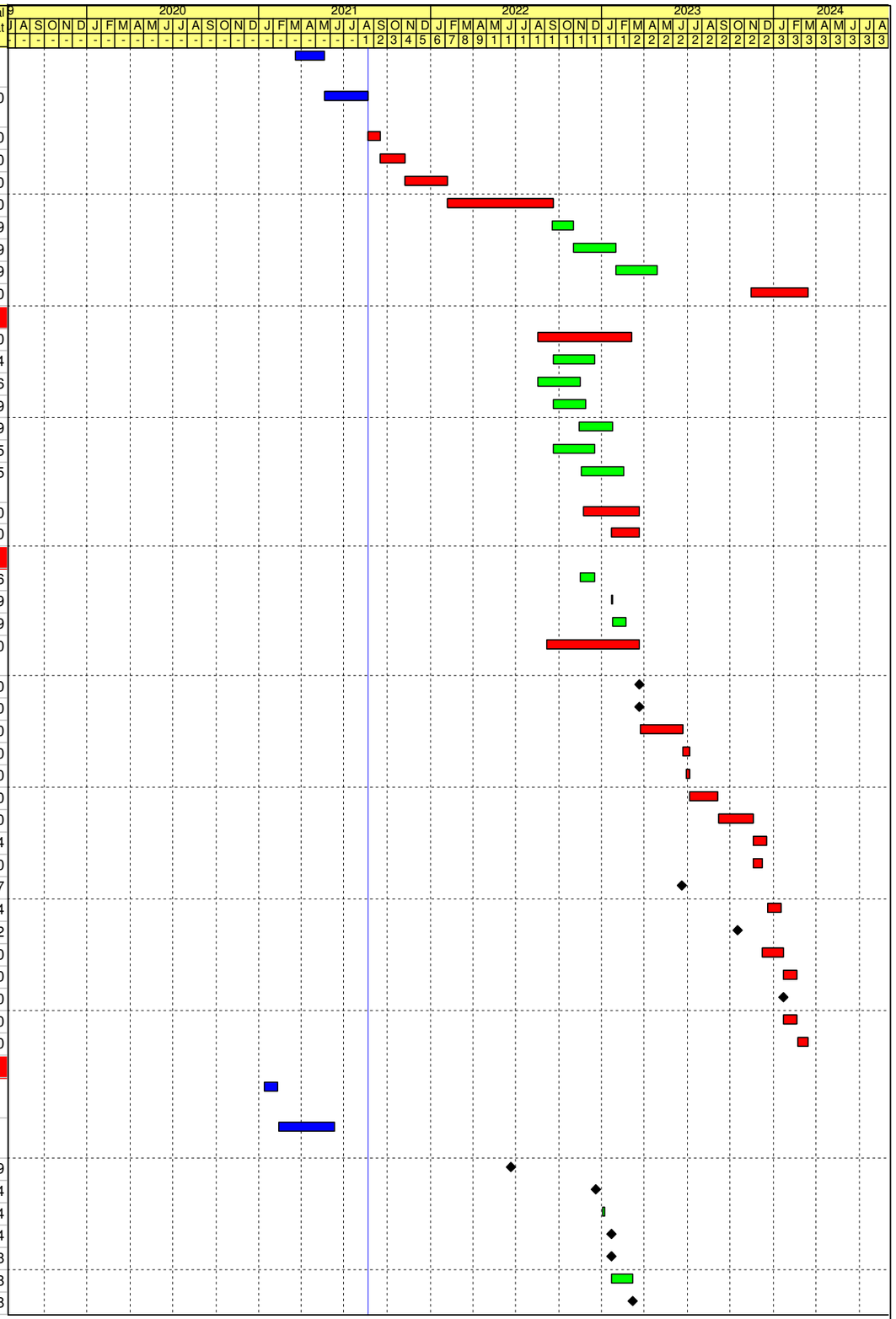
AS161145g	Minor Civil Works & Preperation Works for Piling	31	20-Mar-21 A	20-May-21 A	21-Aug-21	21-Aug-21	
AS161150g	Piling Works	69	21-May-21 A	21-Aug-21	21-Aug-21	21-Aug-21	0
AS161155g	Post-drilling, Proof test & remaining works	25	22-Aug-21	15-Sep-21	22-Aug-21	15-Sep-21	0
AS161157i	Site Set-up / Mobilisation	53	16-Sep-21	07-Nov-21	16-Sep-21	07-Nov-21	0
AS161160	Excavation / ELS	90	08-Nov-21	05-Feb-22	08-Nov-21	05-Feb-22	0
AS161180	Substructure / Superstructure	225	06-Feb-22	18-Sep-22	06-Feb-22	18-Sep-22	0
AS161200	Waterproofing	45	17-Sep-22	31-Oct-22	04-Apr-23	18-May-23	199
AS161220	External & Internal Finishes - 1st Fix (Blockwork, Plastering, Wet Trade)	90	01-Nov-22	29-Jan-23	19-May-23	16-Aug-23	199
AS161240	External & Internal Finishes - 2nd Fix (Ceiling / Wall / Floor Finishing, Door)	90	30-Jan-23	29-Apr-23	17-Aug-23	14-Nov-23	199
AS161260	Landscaping Works	120	15-Nov-23	13-Mar-24	15-Nov-23	13-Mar-24	0
E&M Installation							
AS154100	E&M Installation of Deammonification Sidestream Treatment Facilities	200	18-Aug-22	05-Mar-23	18-Aug-22	05-Mar-23	0
AS154110e	E&M installation of DG Plant Room	90	19-Sep-22	17-Dec-22	13-Oct-22	10-Jan-23	24
AS154120	Installation of Electrical Supply Systems (TX, LV Switchboard & Temp. Power)	90	18-Aug-22	15-Nov-22	23-Oct-22	20-Jan-23	66
AS154160	FS Installation - Conduits, Trunking, & Pipeworks	70	19-Sep-22	27-Nov-22	18-Oct-22	26-Dec-22	29
AS154180	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	70	14-Nov-22	22-Jan-23	13-Dec-22	20-Feb-23	29
AS154200	BS Fitting Installation - Conduits, Trunking, & Ductworks	90	19-Sep-22	17-Dec-22	24-Oct-22	21-Jan-23	35
AS154220	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	18-Nov-22	15-Feb-23	23-Dec-22	22-Mar-23	35
AS154240	Installation of Control & Monitoring System	120	23-Nov-22	22-Mar-23	23-Nov-22	22-Mar-23	0
AS154270	Installation of Gas Detection System	60	22-Jan-23	22-Mar-23	22-Jan-23	22-Mar-23	0
Testing & Commissioning							
AS155000d	SAT for TX & LV Switchboard	30	16-Nov-22	15-Dec-22	21-Jan-23	19-Feb-23	66
AS155020d	Power Energization (Power Provision from DE/2018/04 Contract)	1	22-Jan-23	22-Jan-23	20-Feb-23	20-Feb-23	29
AS155040d	Essential T&C for FSD Inspection	30	23-Jan-23	21-Feb-23	21-Feb-23	22-Mar-23	29
AS155100	SAT for Deammonification Sidestream Treatment Facilities (Ref. to PS6B.1.18.3)	200	04-Sep-22	22-Mar-23	04-Sep-22	22-Mar-23	0
AS155105e	Existing sludge dewatering facilities Ready (by DE/2018/04 Contract)	0		22-Mar-23		22-Mar-23	0
AS155110e	Plant service water from zone B/C Ready (Zone B by DE/2018/04 Contract)	0		22-Mar-23		22-Mar-23	0
AS155120a	Process Start Up	92	23-Mar-23	22-Jun-23	23-Mar-23	22-Jun-23	0
AS155140a	Submission & Acceptance of Process Start Up Report	14	23-Jun-23	06-Jul-23	23-Jun-23	06-Jul-23	0
AS155160a	Notice for Commencement of Phase 1 Commissioning Tests	7	30-Jun-23	06-Jul-23	30-Jun-23	06-Jul-23	0
AS155200	Phase 1 Commissioning Tests	60	07-Jul-23	04-Sep-23	07-Jul-23	04-Sep-23	0
AS155210e	Phase 1 Re-commissioning Tests (If Failure)	75	05-Sep-23	18-Nov-23	05-Sep-23	18-Nov-23	0
AS155220a	Submission & Acceptance of Phase 1 Commissioning Tests Report	30	19-Nov-23	18-Dec-23	23-Nov-23	22-Dec-23	4
AS155240a	Phase 1 Post Commissioning	19	19-Nov-23	07-Dec-23	19-Nov-23	07-Dec-23	0
AS155250e	Ready to Process start up of the first Anaerobic Digester in Zone C	0	19-Jun-23		23-Dec-23		187
AS155260a	Submission & Acceptance of Phase 1 Post Commissioning Report	30	19-Dec-23	17-Jan-24	23-Dec-23	21-Jan-24	4
AS155270e	THP digested sludge centrate from Zone C Ready	0		16-Oct-23		07-Dec-23	52
AS155300	Phase 2 Commissioning Tests	45	08-Dec-23	21-Jan-24	08-Dec-23	21-Jan-24	0
AS155320a	Submission & Acceptance of Phase 2 Commissioning Tests Report	30	22-Jan-24	20-Feb-24	22-Jan-24	20-Feb-24	0
AS155330e	Commissioning of new Anaerobic Digesters (2 nos.) in Zone C Finished	0		21-Jan-24		21-Jan-24	0
AS155340a	Phase 3 Commissioning Tests	30	22-Jan-24	20-Feb-24	22-Jan-24	20-Feb-24	0
AS155360a	Submission & Acceptance of Phase 3 Commissioning Tests Report	22	21-Feb-24	13-Mar-24	21-Feb-24	13-Mar-24	0
Statutory Submission / Inspection (FSD)							
AS201440	Prepare & Submit GBP for FSD approval	90	12-Jan-21 A	10-Feb-21 A	06-Feb-22	06-Feb-22	
AS201460	FSD Review & Approval of GBP	180	11-Feb-21 A	11-Jun-21 A	06-Feb-22	06-Feb-22	
AS201470e	Submit WWO46 Part I/II to WSD (FS / PD)	0	21-Jun-22		20-Jul-22		29
AS201472e	Submit WWO46 Part IV to WSD (FS / PD)	0	18-Dec-22		08-Oct-23		294
AS201475e	WSD Inspection	7	01-Jan-23	07-Jan-23	22-Oct-23	28-Oct-23	294
AS201477e	Issuance of FS Water Certificate	0		21-Jan-23		11-Nov-23	294
AS201480e	Issuance of Form WWO46 Part Va	0		21-Jan-23		14-Jan-24	358
AS201482f	System Flushing / Sampling	45	22-Jan-23	07-Mar-23	15-Jan-24	28-Feb-24	358
AS201485e	Issuance of Form WWO46 Part Vb	0		07-Mar-23		28-Feb-24	358



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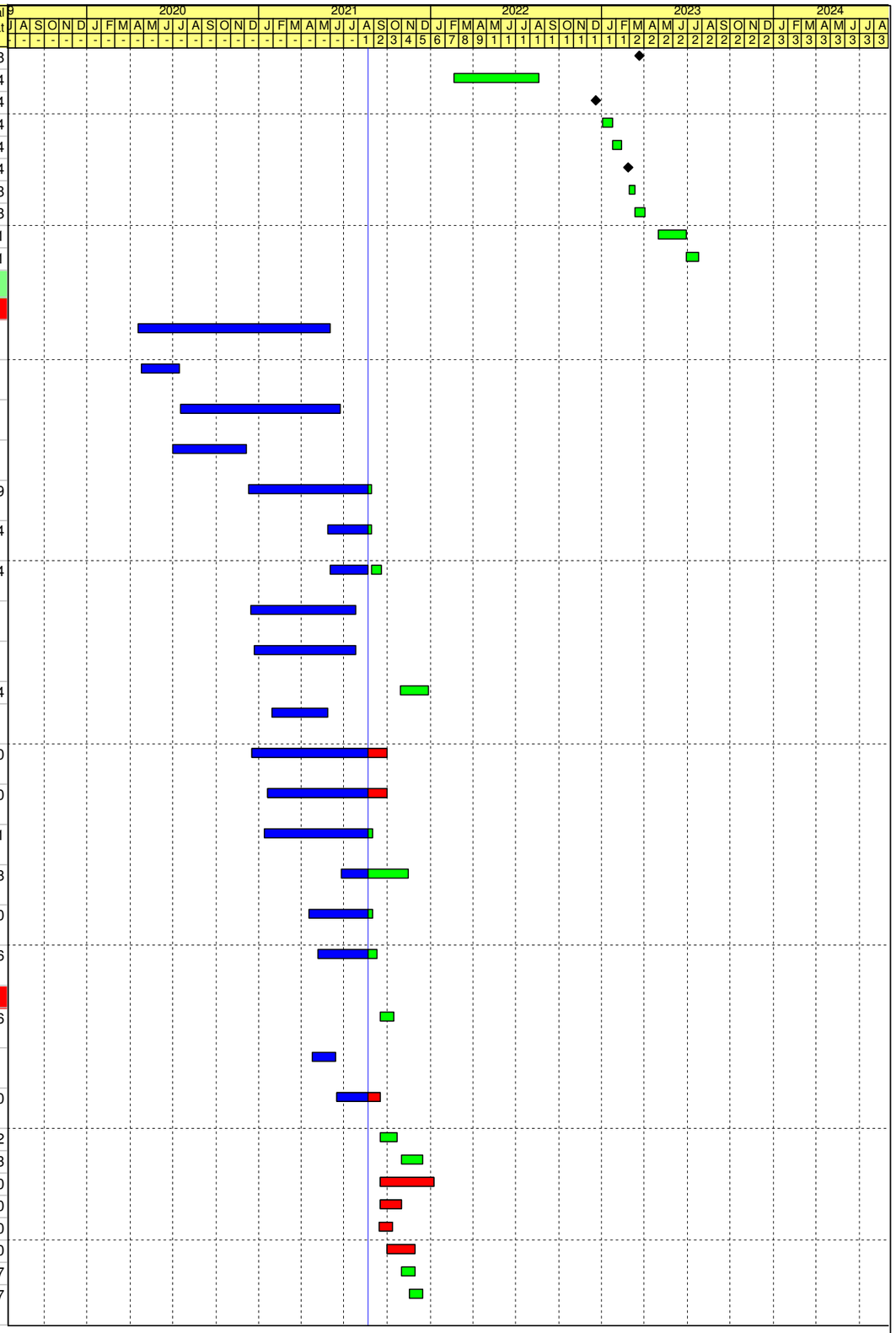
AS201487f	Issuance of Water Certificate	0		21-Mar-23		13-Mar-24	358
AS201489g	Submission & Approval of DG Application to FSD	180	21-Feb-22	19-Aug-22	17-Mar-22	12-Sep-22	24
AS201490e	Submit Application to FSD for DG Licence	0	18-Dec-22		11-Jan-23		24
AS201495e	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	21	02-Jan-23	22-Jan-23	26-Jan-23	15-Feb-23	24
AS201500e	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	21	23-Jan-23	12-Feb-23	16-Feb-23	08-Mar-23	24
AS201505e	DG Licence issued	0		26-Feb-23		22-Mar-23	24
AS201510a	Prepare & Submit FS/314, FS/501 & FS/501a	14	27-Feb-23	12-Mar-23	12-Nov-23	25-Nov-23	258
AS201520a	FSD Review & Approval of FS/314, FS/501 & FS/501a	21	13-Mar-23	02-Apr-23	26-Nov-23	16-Dec-23	258
AS201540a	F.S. Inspection, Defects Rectification & Re-inspection	60	30-Apr-23	28-Jun-23	17-Dec-23	14-Feb-24	231
AS201560a	Issuance of Acceptance Letter	28	29-Jun-23	26-Jul-23	15-Feb-24	13-Mar-24	231
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1							
Major Plant & Materials Fabrication & Delivery							
AS103160	Procurement & PO for FRP Cover (S11)	409	18-Apr-20 A	31-May-21 A	10-Feb-24	10-Feb-24	
AS103300	Procurement & PO for Pipeworks & Associated Valves	90	25-Apr-20 A	15-Jul-20 A	30-Dec-21	30-Dec-21	
AS103320	Procurement & PO for Elec. Materials	365	18-Jul-20 A	22-Jun-21 A	18-Oct-21	18-Oct-21	
AS103400	Procurement & PO for FS System (S20)	60	02-Jul-20 A	04-Dec-20 A	20-Sep-21	20-Sep-21	
AS104100	Fabrication of UV Disinfection System (S10)	239	10-Dec-20 A	27-Aug-21	09-Sep-21	15-Sep-21	19
AS104105c	FAT for UV Disinfection System (S10)	71	27-May-21 A	27-Aug-21	04-Oct-21	10-Oct-21	44
AS104110c	Delivery of UV Disinfection System (S10)	106	01-Jun-21 A	17-Sep-21	11-Oct-21	31-Oct-21	44
AS104120	Fabrication & Delivery of Lift-up Pumps (S11)	225	14-Dec-20 A	26-Jul-21 A	24-Nov-21	24-Nov-21	
AS104140	Fabrication & Delivery of Transfer Pumps (S13)	218	21-Dec-20 A	26-Jul-21 A	17-Jul-22	17-Jul-22	
AS104160	Fabrication & Delivery of FRP Cover (S11)	60	29-Oct-21*	27-Dec-21	10-Feb-24	09-Apr-24	834
AS104180	Fabrication & Delivery of EOT Cranes (2T & 5T) (S19)	170	28-Jan-21 A	27-May-21 A	21-Aug-21	21-Aug-21	
AS104200	Fabrication & Delivery of Stoplogs (S21)	289	16-Dec-20 A	30-Sep-21	21-Aug-21	30-Sep-21	0
AS104220	Fabrication & Delivery of Penstocks (S21)	256	18-Jan-21 A	30-Sep-21	21-Aug-21	30-Sep-21	0
AS104300	Fabrication & Delivery of Pipeworks & Associated Valves	200	11-Jan-21 A	29-Aug-21	30-Dec-21	07-Jan-22	131
AS104320	Fabrication & Delivery of Elec. Materials	145	24-Jun-21 A	15-Nov-21	18-Oct-21	12-Jan-22	58
AS104400	Fabrication & Delivery of FS System (S20)	180	18-Apr-21 A	31-Aug-21	20-Sep-21	30-Sep-21	30
AS104410h	Fabrication & Delivery of Temp. Switchboard	90	05-May-21 A	09-Sep-21	05-Nov-21	24-Nov-21	76
E&M Installation							
AS105100	Provision of Temporary Power for UV System No.1 & Effluent Transfer Pumping Station	30	15-Sep-21	14-Oct-21	30-Nov-21	29-Dec-21	76
AS106100	Mobilisation	30	25-Apr-21 A	12-Jun-21 A	21-Aug-21	21-Aug-21	
AS106120	E&M Installation of EOT Cranes (2T)	46	15-Jun-21 A	15-Sep-21	21-Aug-21	15-Sep-21	0
AS106140	E&M Installation of EOT Cranes (5T)	37	16-Sep-21	22-Oct-21	17-Nov-21	23-Dec-21	62
AS106160	E&M Installation of Transfer Pumps & Associated Pipeworks / Valves	45	01-Nov-21	15-Dec-21	24-Nov-21	07-Jan-22	23
AS106200	E&M Installation of Penstocks & Stoplogs	114	16-Sep-21	07-Jan-22	16-Sep-21	07-Jan-22	0
AS106210	E&M Installation of UV System	46	16-Sep-21	31-Oct-21	16-Sep-21	31-Oct-21	0
AS106220	FS Installation - Conduits, Trunking, & Pipeworks	30	13-Sep-21*	12-Oct-21	13-Sep-21	12-Oct-21	0
AS106240	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	60	01-Oct-21	29-Nov-21	01-Oct-21	29-Nov-21	0
AS106260	BS Fitting Installation - Conduits, Trunking, & Ductworks	30	31-Oct-21	29-Nov-21	27-Nov-21	26-Dec-21	27
AS106280	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	30	17-Nov-21	16-Dec-21	14-Dec-21	12-Jan-22	27



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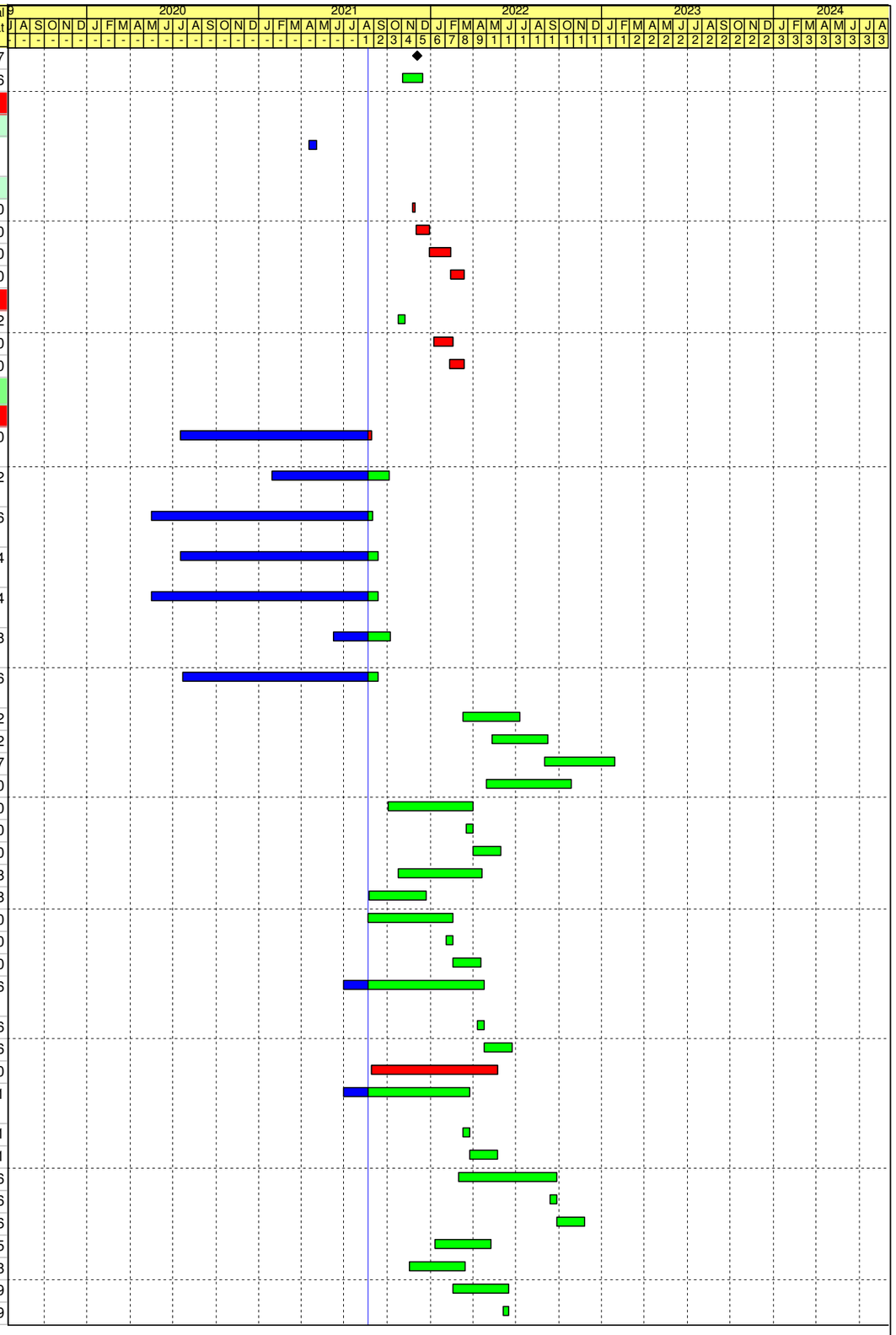
AS106290g	Ready for Power Energization	0		03-Dec-21		29-Dec-21	27
AS106320	Installation of CCTV System	45	02-Nov-21	16-Dec-21	28-Dec-21	10-Feb-22	56
Statutory Submission / Inspection							
CLP Submission							
AS107090g	Submission & Approval of Electrical Schematic Wiring Diagram to CLP (Temp. Power)	60	17-Apr-21 A	04-May-21 A	05-Nov-21	05-Nov-21	
FSD Submission & Inspection							
AS107100	Prepare & Submit FS/314, FS/501 & FS/501a	7	23-Nov-21	29-Nov-21	23-Nov-21	29-Nov-21	0
AS107110a	FSD Review & Approval of FS/314, FS/501 & FS/501a	30	30-Nov-21	29-Dec-21	30-Nov-21	29-Dec-21	0
AS107200	F.S. Inspection, Defects Rectification & Re-inspection	45	30-Dec-21	12-Feb-22	30-Dec-21	12-Feb-22	0
AS107300	Issuance of Acceptance Letter	28	13-Feb-22	12-Mar-22	13-Feb-22	12-Mar-22	0
Testing & Commissioning							
AS107350f	T&C and R.P.E inspection for EOT Cranes	15	23-Oct-21	06-Nov-21	24-Dec-21	07-Jan-22	62
AS107400	SAT for UV System No. 1 & Effluent Transfer Pumping Station No. 1	40	08-Jan-22	16-Feb-22	08-Jan-22	16-Feb-22	0
AS107500	System Commissioning Tests	30	11-Feb-22	12-Mar-22	11-Feb-22	12-Mar-22	0
Section 5 - Complete all remaining Works (incl. T&C)							
Fabrication, FAT & Delivery of Major Plant & Materials							
AS023200	Procurement & PO for Biogas Booster and Transfer Pumps (S7)	391	17-Jul-20 A	27-Aug-21	21-Aug-21	27-Aug-21	0
AS023290	Procurement & PO for Pipeworks & Associated Valves	218	29-Jan-21 A	04-Oct-21	22-Oct-21	05-Dec-21	62
AS023400	Procurement & PO for Lifting Appliances (S19)	451	18-May-20 A	31-Aug-21	06-Sep-21	16-Sep-21	16
AS023560	Procurement & PO for Ferric Chloride Storage Tank (S21)	391	17-Jul-20 A	11-Sep-21	11-Jun-22	02-Jul-22	294
AS023580	Procurement & PO for Ferric Chloride Dosing Pump (S21)	451	18-May-20 A	11-Sep-21	12-May-22	02-Jun-22	264
AS023620	Procurement & PO for Elec. Materials	90	09-Jun-21 A	07-Oct-21	16-Jan-22	04-Mar-22	148
AS023620b	Procurement & PO for Genset	386	22-Jul-20 A	11-Sep-21	06-Oct-21	27-Oct-21	46
AS104240	Fabrication & Delivery of Transfomers -UV (Tx 07 & 08) (S17)	120	12-Mar-22	09-Jul-22	22-Jun-22	19-Oct-22	102
AS104260	Fabrication & Delivery of LVSB -UV (S17)	120	11-May-22	07-Sep-22	21-Aug-22	18-Dec-22	102
AS104280	Fabrication & Delivery of Control & Monitoring System -UV (S18)	150	01-Sep-22	28-Jan-23	18-Oct-22	16-Mar-23	47
AS501100	Fabrication & Delivery of Sludge Screening System (S2)	180	01-May-22	27-Oct-22	11-May-22	06-Nov-22	10
AS501120	Fabrication of Sludge Thickening System (S3)	180	03-Oct-21	31-Mar-22	13-Oct-21	10-Apr-22	10
AS501125c	FAT for Sludge Thickening System (S3)	14	18-Mar-22	31-Mar-22	28-Mar-22	10-Apr-22	10
AS501130c	Delivery of Sludge Thickening System (S3)	60	01-Apr-22	30-May-22	11-Apr-22	09-Jun-22	10
AS501140	Fabrication & Delivery of Sludge Digestion System (S5)	180	23-Oct-21	20-Apr-22	31-Oct-21	28-Apr-22	8
AS501150a	Fabrication & Delivery of FRP Walkway / Cover (S5)	120	24-Aug-21	21-Dec-21	01-Sep-21	29-Dec-21	8
AS501160	Fabrication of Sludge Dewatering System (S6)	180	21-Aug-21	16-Feb-22	31-Aug-21	26-Feb-22	10
AS501165c	FAT for Sludge Dewatering System (S6)	14	03-Feb-22	16-Feb-22	13-Feb-22	26-Feb-22	10
AS501170c	Delivery of Sludge Dewatering System (S6)	60	17-Feb-22	17-Apr-22	27-Feb-22	27-Apr-22	10
AS501180	Fabrication of THP System (S4)	300	29-Jun-21 A	24-Apr-22	05-Dec-21	08-Aug-22	106
AS501200	FAT for THP System (S4)	14	11-Apr-22	24-Apr-22	26-Jul-22	08-Aug-22	106
AS501220	Delivery of THP System (S4)	60	25-Apr-22	23-Jun-22	09-Aug-22	07-Oct-22	106
AS501240	Fabrication & Delivery of Biogas Storage & Pre-Treatment (S7)	270	28-Aug-21*	24-May-22	28-Aug-21	24-May-22	0
AS501260	Fabrication of CHP System (S8)	270	29-Jun-21 A	25-Mar-22	01-Sep-21	05-Apr-22	11
AS501280	FAT for CHP Generators (S8)	14	12-Mar-22	25-Mar-22	23-Mar-22	05-Apr-22	11
AS501300	Delivery of CHP Generators (S8)	60	26-Mar-22	24-May-22	06-Apr-22	04-Jun-22	11
AS501320	Fabrication of Waste Gas Burning System (S9)	210	01-Mar-22	26-Sep-22	27-Mar-22	22-Oct-22	26
AS501340	FAT for Waste Gas Burning System (S9)	14	13-Sep-22	26-Sep-22	09-Oct-22	22-Oct-22	26
AS501360	Delivery of Waste Gas Burning System (S9)	60	27-Sep-22	25-Nov-22	23-Oct-22	21-Dec-22	26
AS501380	Fabrication & Delivery of Plant Service Water System (S12)	120	11-Jan-22	10-May-22	23-Sep-22	20-Jan-23	255
AS501400	Fabrication & Delivery of SAS Pumping System (S14)	120	17-Nov-21	16-Mar-22	04-Jan-22	03-May-22	48
AS501420	Fabrication of 11kV Transfomers (S17)	120	18-Feb-22	17-Jun-22	07-Jun-22	04-Oct-22	109
AS501440	FAT for 11kV Transfomers (S17)	14	04-Jun-22	17-Jun-22	21-Sep-22	04-Oct-22	109

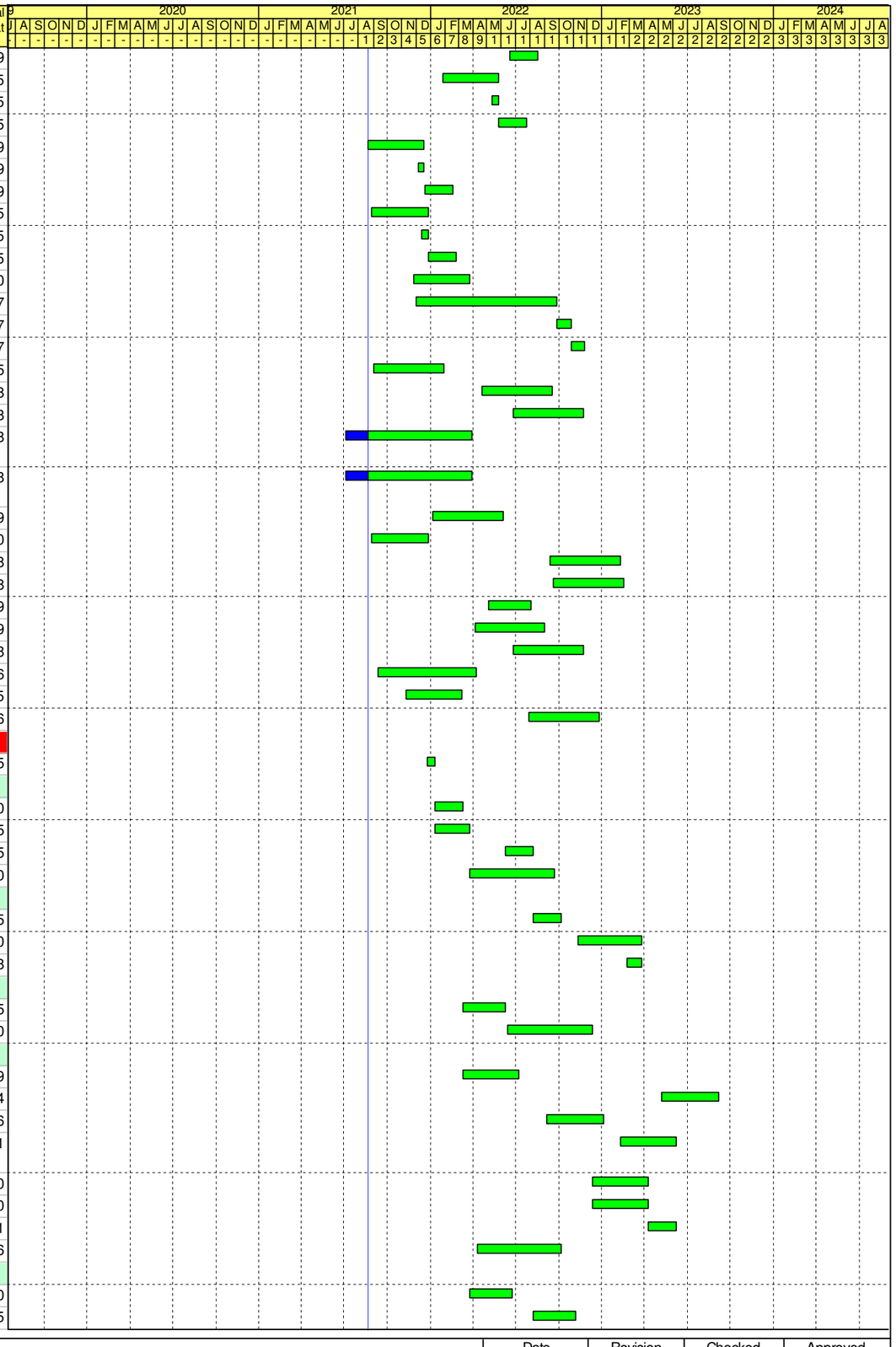


Remaining Work
Critical Activity
Milestone
Actual Progress

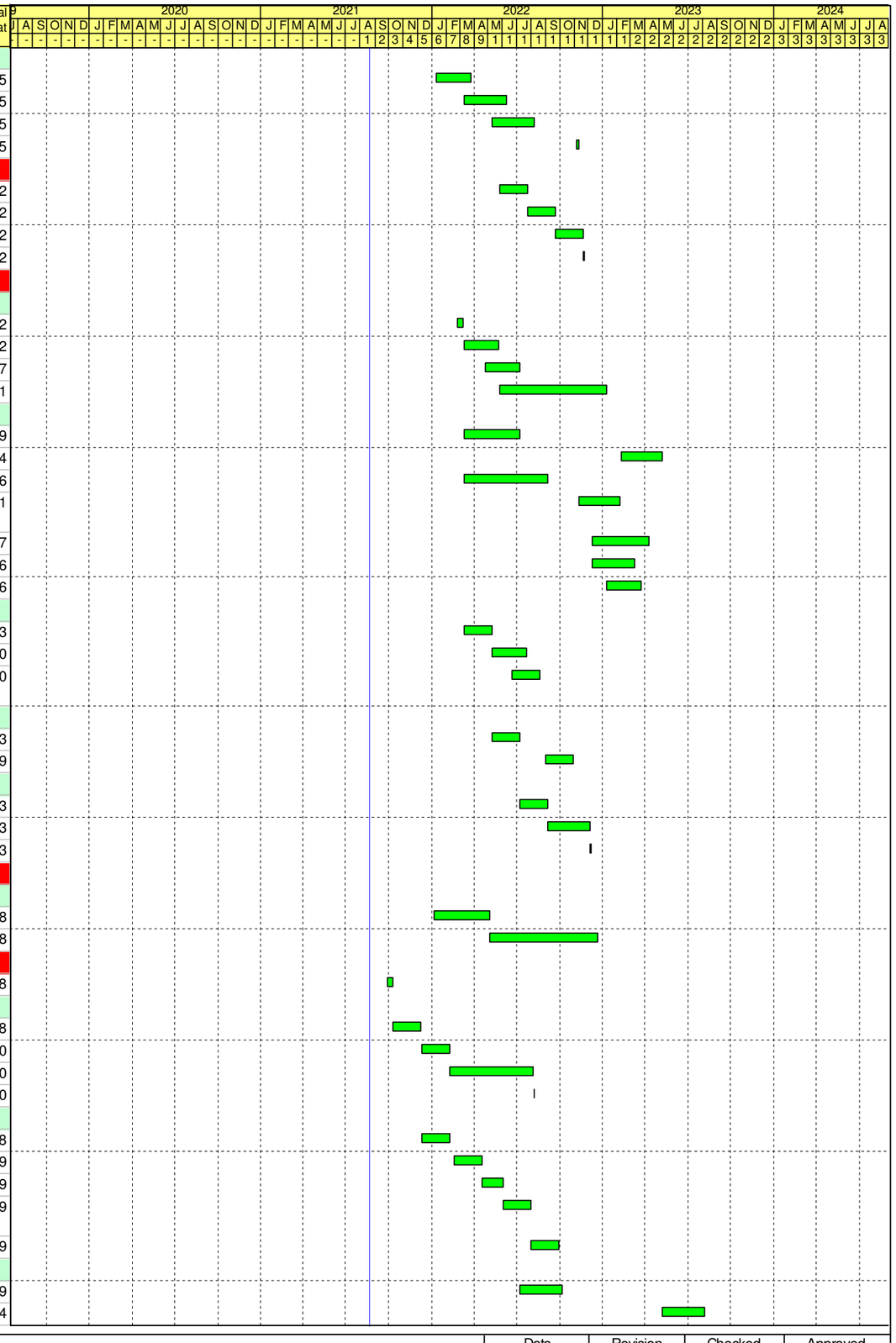
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities
Revised Programme - as at 20 Aug 2021

Date	Revision	Checked	Approved
30-Apr-21	Rev.9	LT	KM
31-May-21	Rev.10	LT	KM
30-Jun-21	Rev.11	LT	KM
31-Jul-21	Rev.12	LT	KM
31-Aug-21	Rev.13	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS501460	Delivery of 11kV Transfomers (S17)	60	18-Jun-22	16-Aug-22	05-Oct-22	03-Dec-22	109
AS501480	Fabrication of 380V Transfomers (S17)	120	26-Jan-22	25-May-22	21-May-22	17-Sep-22	115
AS501500	FAT for 380V Transfomers (S17)	14	12-May-22	25-May-22	04-Sep-22	17-Sep-22	115
AS501520	Delivery of 380V Transfomers (S17)	60	26-May-22	24-Jul-22	18-Sep-22	16-Nov-22	115
AS501540	Fabrication of 11 kV Switchboard (S17)	120	21-Aug-21	18-Dec-21	08-Dec-21	06-Apr-22	109
AS501560	FAT for 11 kV Switchboard (S17)	14	05-Dec-21	18-Dec-21	24-Mar-22	06-Apr-22	109
AS501580	Delivery of 11 kV Switchboard (S17)	60	19-Dec-21	16-Feb-22	07-Apr-22	05-Jun-22	109
AS501600	Fabrication of 380V Switchboard (S17)	120	29-Aug-21	26-Dec-21	22-Dec-21	20-Apr-22	115
AS501620	FAT for 380V Switchboard (S17)	14	13-Dec-21	26-Dec-21	07-Apr-22	20-Apr-22	115
AS501640	Delivery of 380V Switchboard (S17)	60	27-Dec-21	24-Feb-22	21-Apr-22	19-Jun-22	115
AS501660b	Fabrication & Delivery of Pipeworks & Associated Valves	120	26-Nov-21	25-Mar-22	06-Dec-21	04-Apr-22	10
AS501680	Fabrication of Control & Monitoring System (S18)	300	01-Dec-21*	26-Sep-22	08-Dec-21	03-Oct-22	7
AS501700	FAT for SCADA System (S18)	30	27-Sep-22	26-Oct-22	04-Oct-22	02-Nov-22	7
AS501720	Delivery of SCADA System (S18)	30	27-Oct-22	25-Nov-22	03-Nov-22	02-Dec-22	7
AS501740	Fabrication & Delivery of Lifting Appliances (S19)	150	02-Sep-21	29-Jan-22	17-Sep-21	13-Feb-22	15
AS501780	Fabrication & Delivery of H2S Removal System (S7)	150	21-Apr-22	17-Sep-22	29-Apr-22	25-Sep-22	8
AS501800	Fabrication & Delivery of DO System (S21)	150	25-Jun-22	21-Nov-22	03-Jul-22	29-Nov-22	8
AS501820	Fabrication & Delivery of Stoplog (S21)	270	04-Jul-21 A	30-Mar-22	08-Oct-21	17-May-22	48
AS501840	Fabrication & Delivery of Penstock (S21)	270	04-Jul-21 A	30-Mar-22	08-Oct-21	17-May-22	48
AS501860	Fabrication & Delivery of Sewage Pump (S21)	150	05-Jan-22	03-Jun-22	05-Mar-22	01-Aug-22	59
AS501880	Fabrication & Delivery of Process Water Pump (S21)	120	29-Aug-21	26-Dec-21	25-Jul-22	21-Nov-22	330
AS501900	Fabrication & Delivery of External Sludge Transfer Pump (S21)	150	13-Sep-22	09-Feb-23	01-Oct-22	27-Feb-23	18
AS501920	Fabrication & Delivery of THP Cooling Pump (S21)	150	19-Sep-22	15-Feb-23	27-Sep-22	23-Feb-23	8
AS501940	Fabrication & Delivery of Ferric Chloride Storage Tank (S21)	90	05-May-22	02-Aug-22	03-Jul-22	30-Sep-22	59
AS501960	Fabrication & Delivery of Ferric Chloride Dosing Pump (S21)	150	05-Apr-22	01-Sep-22	03-Jun-22	30-Oct-22	59
AS501980	Fabrication & Delivery of Temporary Primary Sludge Pump (S21)	150	25-Jun-22	21-Nov-22	03-Jul-22	29-Nov-22	8
AS501990b	Fabrication & Delivery of Genset	210	12-Sep-21	09-Apr-22	28-Oct-21	25-May-22	46
AS510060	Fabrication & Delivery of Elec. Materials	120	10-Nov-21	09-Mar-22	05-Mar-22	02-Jul-22	115
AS510080	Fabrication & Delivery of Gas Detection System	150	29-Jul-22	25-Dec-22	24-Aug-22	20-Jan-23	26
Sludge Dewatering Building							
AS502100	Mobilisation	15	26-Dec-21	09-Jan-22	10-Jan-22	24-Jan-22	15
Sludge Dewatering (SDe)							
AS502120	E&M Installation of Process Water Pump (S21)	60	10-Jan-22	10-Mar-22	06-Dec-22	03-Feb-23	330
AS502140	E&M Installation of EOT Crane LA-01-02	75	10-Jan-22	25-Mar-22	25-Jan-22	09-Apr-22	15
AS502150	E&M Installation of Monorail LA-01-04	60	09-Jun-22	07-Aug-22	24-Jul-22	21-Sep-22	45
AS502160	E&M Installation of Sludge Dewatering System (S6)	180	26-Mar-22	21-Sep-22	05-Apr-22	01-Oct-22	10
Sludge Screening (SSc)							
AS502180	E&M Installation of Monorail LA-01-01	60	08-Aug-22	06-Oct-22	22-Sep-22	20-Nov-22	45
AS502200	E&M Installation of Sludge Screening System (S2)	135	11-Nov-22	25-Mar-23	21-Nov-22	04-Apr-23	10
AS502220	E&M Installation of External Sludge Transfer Pump (S21)	30	24-Feb-23	25-Mar-23	14-Mar-23	12-Apr-23	18
Sludge Thickening (STh)							
AS502260	E&M Installation of EOT Crane LA-01-03	90	11-Mar-22	08-Jun-22	26-Mar-22	23-Jun-22	15
AS502280	E&M Installation of Sludge Thickening System (S3)	180	14-Jun-22	10-Dec-22	24-Jun-22	20-Dec-22	10
Building Services							
AS502300	FS Installation - Conduits, Trunking, & Pipeworks	120	10-Mar-22	07-Jul-22	23-Jan-23	22-May-23	319
AS502320	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	09-May-23	05-Sep-23	23-May-23	19-Sep-23	14
AS502340	BS Fitting Installation - Conduits, Trunking, & Ductworks	120	06-Sep-22	03-Jan-23	22-Oct-22	18-Feb-23	46
AS502360	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	08-Feb-23	07-Jun-23	19-Feb-23	18-Jun-23	11
AS502380	Installation of Control & Monitoring System	120	11-Dec-22	09-Apr-23	21-Dec-22	19-Apr-23	10
AS502400	Installation of CCTV System	120	11-Dec-22	09-Apr-23	21-Dec-22	19-Apr-23	10
AS502410	Installation of Gas Detection System	60	09-Apr-23	07-Jun-23	20-Apr-23	18-Jun-23	11
AS506500b	E&M Installation of Genset	180	10-Apr-22	06-Oct-22	26-May-22	21-Nov-22	46
Tx Rm							
AS502420	BS Fitting Intallation	90	26-Mar-22	23-Jun-22	02-Sep-22	30-Nov-22	160
AS502440	E&M Installation of 380V Transformers (S17)	90	08-Aug-22	05-Nov-22	01-Dec-22	28-Feb-23	115



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
LV Switchroom							
AS502460	BS Fitting Intallation	75	10-Jan-22	25-Mar-22	05-May-22	18-Jul-22	115
AS502480	E&M Installation of LVSB at G/F (S17)	90	11-Mar-22	08-Jun-22	04-Jul-22	01-Oct-22	115
AS502500	E&M Installation of LVSB at 1/F (S17)	90	10-May-22	07-Aug-22	02-Sep-22	30-Nov-22	115
AS502520	Ready for Energisation	5	06-Nov-22	10-Nov-22	01-Mar-23	05-Mar-23	115
Tx Rm & LV Switchroom (for UV)							
AS105120	BS Fitting Intallation (at Tx Rm & LV Switchroom)	60	25-May-22	23-Jul-22	04-Sep-22	02-Nov-22	102
AS105140	E&M Installation of Transfomers in Tx Rm	60	24-Jul-22	21-Sep-22	03-Nov-22	01-Jan-23	102
AS105160	E&M Installation of LVSB	60	22-Sep-22	20-Nov-22	02-Jan-23	02-Mar-23	102
AS105180	Ready for Permanet Power Energisation	3	21-Nov-22	23-Nov-22	03-Mar-23	05-Mar-23	102
Combined Heat & Power Building							
Combined Heat & Power Generation (CHP)							
AS503100	Mobilisation	14	24-Feb-22	09-Mar-22	08-Mar-22	21-Mar-22	12
AS503120	E&M Installation of EOT Crane No. 1	75	10-Mar-22	23-May-22	22-Mar-22	04-Jun-22	12
AS503140	E&M Installation of EOT Crane No. 2	75	24-Apr-22	07-Jul-22	10-Jun-22	23-Aug-22	47
AS503160	E&M Installation of CHP System (S8)	230	25-May-22	09-Jan-23	05-Jun-22	20-Jan-23	11
Building Services							
AS503180	FS Installation - Conduits, Trunking, & Pipeworks	120	10-Mar-22	07-Jul-22	27-Jun-22	24-Oct-22	109
AS503200	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	08-Feb-23	08-May-23	22-Feb-23	22-May-23	14
AS503220	BS Fitting Installation - Conduits, Trunking, & Ductworks	180	10-Mar-22	05-Sep-22	25-Apr-22	21-Oct-22	46
AS503240	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	10-Nov-22	07-Feb-23	21-Nov-22	18-Feb-23	11
AS503260	Installation of Control & Monitoring System	120	10-Dec-22	08-Apr-23	17-Dec-22	15-Apr-23	7
AS503280	Installation of CCTV System	90	10-Dec-22	09-Mar-23	05-Jan-23	04-Apr-23	26
AS503290	Installation of Gas Detection System	75	09-Jan-23	24-Mar-23	04-Feb-23	19-Apr-23	26
11kV Switchroom							
AS503300	BS Fitting Installation	60	10-Mar-22	08-May-22	21-Jun-22	19-Aug-22	103
AS503320	E&M Installation of 11kV Switchboard (S17)	75	09-May-22	22-Jul-22	06-Oct-22	19-Dec-22	150
AS503340	Main Cables Laying between 11kV SwitchRoom of CHP Bldg to Tx Rm of Workshop No.2	60	21-Jun-22	19-Aug-22	18-Nov-22	16-Jan-23	150
Tx Rm							
AS503360	BS Fitting Installation	60	09-May-22	07-Jul-22	20-Aug-22	18-Oct-22	103
AS503380	E&M Installation of 11kV Transfomers (S17)	60	31-Aug-22	29-Oct-22	18-Dec-22	15-Feb-23	109
LV Switchroom							
AS503400	BS Fitting Intallation	60	08-Jul-22	05-Sep-22	19-Oct-22	17-Dec-22	103
AS503420	E&M Installation of LVSB at 1/F (S17)	90	06-Sep-22	04-Dec-22	18-Dec-22	17-Mar-23	103
AS503440	Ready for Energisation	3	05-Dec-22	07-Dec-22	18-Mar-23	20-Mar-23	103
Sludge Digesters & Distribution Chamber							
Sludge Digestion (SDi)							
AS503500	FRP Walkway / Cover Installation	120	05-Jan-22	04-May-22	13-Jan-22	12-May-22	8
AS503600	E&M Installation of Sludge Digestion System (S5)	230	05-May-22	20-Dec-22	13-May-22	28-Dec-22	8
Workshop No. 2							
AS504000	Mobilisation	14	27-Sep-21	10-Oct-21	23-Jan-22	05-Feb-22	118
CLP Substation							
AS504100	BS Fitting Intallation (at CLP Sub-station in Workshop No.2)	60	11-Oct-21	09-Dec-21	06-Feb-22	06-Apr-22	118
AS509940a	Inspections, Rectification & H/O to CLP	60	10-Dec-21	07-Feb-22	08-Jul-22	05-Sep-22	210
AS509960	E&M Installation of HV Transformer (By CLP)	180	08-Feb-22	06-Aug-22	06-Sep-22	04-Mar-23	210
AS509980	Energisation (By CLP)	1	07-Aug-22	07-Aug-22	05-Mar-23	05-Mar-23	210
11kV HV Switchroom							
AS504200	BS Fitting Intallation	60	10-Dec-21	07-Feb-22	07-Apr-22	05-Jun-22	118
AS504240	E&M Installation of 11kV HVSB (at Workshop No.2)	60	17-Feb-22	17-Apr-22	06-Jun-22	04-Aug-22	109
AS504260	Main Cables Laying between Workshop No.2 & Tx Rm for UV System No.1	45	18-Apr-22	01-Jun-22	05-Aug-22	18-Sep-22	109
AS504280	Main Cables Laying between Workshop No.2 & Tx Rm for Sludge Dewatering Bldg	60	02-Jun-22	31-Jul-22	19-Sep-22	17-Nov-22	109
AS504300	Main Cables Laying between Workshop No.2 & Tx Rm for CHP Bldg	60	01-Aug-22	29-Sep-22	18-Nov-22	16-Jan-23	109
Building Services							
AS504400a	FS Installation - Conduits, Trunking, & Pipeworks	90	08-Jul-22	05-Oct-22	23-Apr-23	21-Jul-23	289
AS504410a	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	09-May-23	06-Aug-23	22-Jul-23	19-Oct-23	74



Remaining Work
Critical Activity
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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
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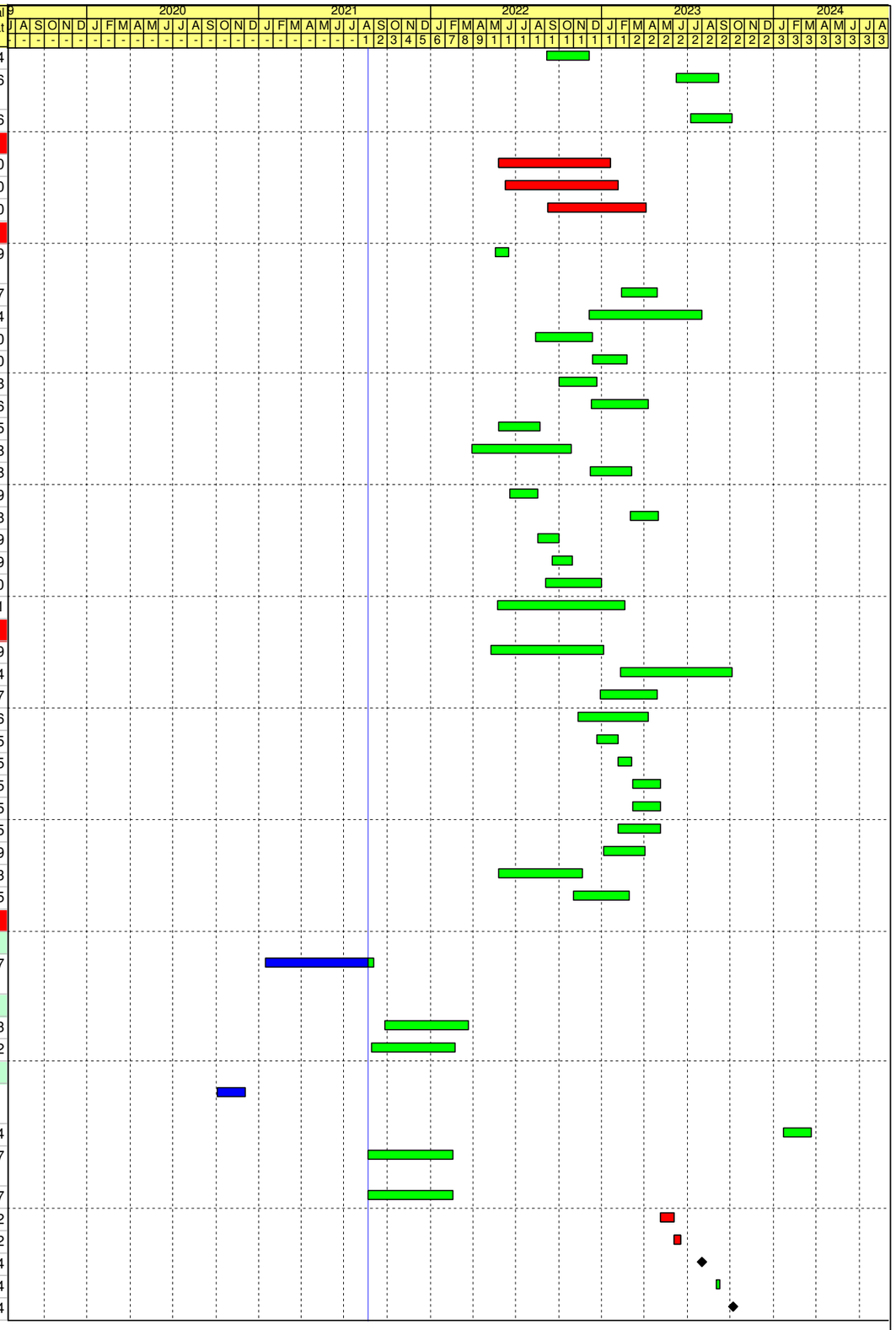
31-Aug-21	Rev.13	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS504420a	BS Fitting Installation - Conduits, Trunking, & Ductworks	90	06-Sep-22	04-Dec-22	07-Feb-23	07-May-23	154
AS504430a	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	08-Jun-23	05-Sep-23	14-Jul-23	11-Oct-23	36
AS504450	Installation of CCTV System	90	08-Jul-23	05-Oct-23	13-Aug-23	10-Nov-23	36
Biogas Storage & Pre-Treatment (BSPT)							
AS504500	E&M Installation of Biogas Storage Tank 1	240	25-May-22	19-Jan-23	25-May-22	19-Jan-23	0
AS504520	E&M Installation of Biogas Storage Tank 2	240	09-Jun-22	03-Feb-23	09-Jun-22	03-Feb-23	0
AS504540	E&M Installation of Biogas Storage Tank 3	210	07-Sep-22	04-Apr-23	07-Sep-22	04-Apr-23	0
Miscellaneous							
AS106180	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves at Effluent Lift-up Pump Station	30	19-May-22	17-Jun-22	17-Jul-22	15-Aug-22	59
AS106300	Installation of Control & Monitoring System - UV	75	12-Feb-23	27-Apr-23	31-Mar-23	13-Jun-23	47
AS504460	Installation of Lift	240	05-Dec-22	01-Aug-23	08-May-23	02-Jan-24	154
AS505000	E&M Installation of THP System (S4)	120	13-Aug-22	10-Dec-22	22-Oct-22	18-Feb-23	70
AS505100	E&M Installation of Thickened Sludge Feed Pipe to THP System	75	11-Dec-22	23-Feb-23	20-Jan-23	04-Apr-23	40
AS505200	E&M Installation of H2S Removal System (S7)	80	02-Oct-22	20-Dec-22	10-Oct-22	28-Dec-22	8
AS505300	E&M Installation of Waste Gas Burning System (S9)	120	10-Dec-22	08-Apr-23	05-Jan-23	04-May-23	26
AS505400	E&M Installation of Plant Service Water System (S12)	90	25-May-22	22-Aug-22	04-Feb-23	04-May-23	255
AS505600	E&M Installation of SAS Pumping System (S14)	210	31-Mar-22	26-Oct-22	18-May-22	13-Dec-22	48
AS505700	E&M Installation of DO System (S21)	90	06-Dec-22	05-Mar-23	14-Dec-22	13-Mar-23	8
AS506000	E&M Installation of Sewage Pump (S21)	60	18-Jun-22	16-Aug-22	16-Aug-22	14-Oct-22	59
AS506100	E&M Installation of THP Cooling Pump (S21)	60	02-Mar-23	30-Apr-23	10-Mar-23	08-May-23	8
AS506200	E&M Installation of Ferric Chloride Storage Tank (S21)	45	17-Aug-22	30-Sep-22	15-Oct-22	28-Nov-22	59
AS506300	E&M Installation of Ferric Chloride Dosing Pump (S21)	45	16-Sep-22	30-Oct-22	14-Nov-22	28-Dec-22	59
AS506500h	E&M Installation of Existing Consolidation House	120	02-Sep-22	30-Dec-22	21-Dec-22	19-Apr-23	110
AS506600j	E&M Installation of Pipe Trench No.1, No.2 & No.3	270	24-May-22	17-Feb-23	24-Jul-22	19-Apr-23	61
Building Services							
AS507000	FS Installation - Conduits, Trunking, & Pipeworks	240	09-May-22	03-Jan-23	26-Aug-22	22-Apr-23	109
AS507100	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	240	08-Feb-23	05-Oct-23	22-Feb-23	19-Oct-23	14
AS507200	Installation of Control & Monitoring System	120	29-Dec-22	27-Apr-23	05-Jan-23	04-May-23	7
AS507300	Installation of CCTV System	150	10-Nov-22	08-Apr-23	06-Dec-22	04-May-23	26
AS507700	BS Installation for Sludge Digester	45	21-Dec-22	03-Feb-23	04-Feb-23	20-Mar-23	45
AS507800	BS Installation for THP Facilities	30	04-Feb-23	05-Mar-23	20-Apr-23	19-May-23	75
AS507900	BS Installation for Biogas Holding Tanks	60	06-Mar-23	04-May-23	21-Mar-23	19-May-23	15
AS508000	BS Installation for Sewage Pumping Station	60	06-Mar-23	04-May-23	21-Mar-23	19-May-23	15
AS508100	BS Installation for Other Facilities	90	04-Feb-23	04-May-23	19-Feb-23	19-May-23	15
AS508110g	BS Installation for Fire Hydrant and Booster Pump Room	90	04-Jan-23	03-Apr-23	13-May-23	10-Aug-23	129
AS508120g	Road Lighting Installation	180	25-May-22	20-Nov-22	23-Apr-23	19-Oct-23	333
AS508130g	Landscape Lighting Installation	120	01-Nov-22*	28-Feb-23	14-Feb-23	13-Jun-23	105
Statutory Submission / Inspection							
CLP Submission							
AS512375f	Submission & Approval of Electrical Schematic Wiring Diagram to CLP	180	14-Jan-21 A	01-Sep-21	26-Dec-21	06-Jan-22	127
EPD Submission / Inspection							
AS509500a	EPD Submission & Approval for Air Pollution Control - Genset	180	25-Sep-21*	23-Mar-22	27-Nov-21	25-May-22	63
AS509520a	EPD Submission & Approval for Air Pollution Control - CHP & THP	180	28-Aug-21	23-Feb-22	09-Sep-21	07-Mar-22	12
EMSD Submission / Inspection							
AS509370b	BEEO Stage one: Submit EE1 & EE-SU to EMSD	60	03-Oct-20 A	02-Dec-20 A	23-Jan-22	23-Jan-22	
AS509375f	BEEO Stage two: Submit EE2 & EE-SU to EMSD	60	22-Jan-24	21-Mar-24	05-Feb-24	04-Apr-24	14
AS509380b	Application & Approval of the Zone Classification of Hazardous Area - including Fire Risk Assessment Report	180	21-Aug-21	16-Feb-22	26-Nov-21	24-May-22	97
AS509400a	Application for Construction Approval of Notifiable Gas Installation (Form 104)	180	21-Aug-21	16-Feb-22	26-Nov-21	24-May-22	97
AS509420a	Application for Approval of Use of Notifiable Gas Installation (Form 105)	28	06-May-23	02-Jun-23	08-May-23	04-Jun-23	2
AS509440a	EMSD Inspection - Gas Holding Tanks	14	03-Jun-23	16-Jun-23	05-Jun-23	18-Jun-23	2
AS509450f	Form 5 Submission to EMSD - Lift Installation	0	02-Aug-23		03-Jan-24		154
AS509460f	EMSD Inspection - Lift Installation	7	01-Sep-23	07-Sep-23	02-Feb-24	08-Feb-24	154
AS509470f	Issuance of Form 6 - Lift Installation	0		07-Oct-23		09-Mar-24	154

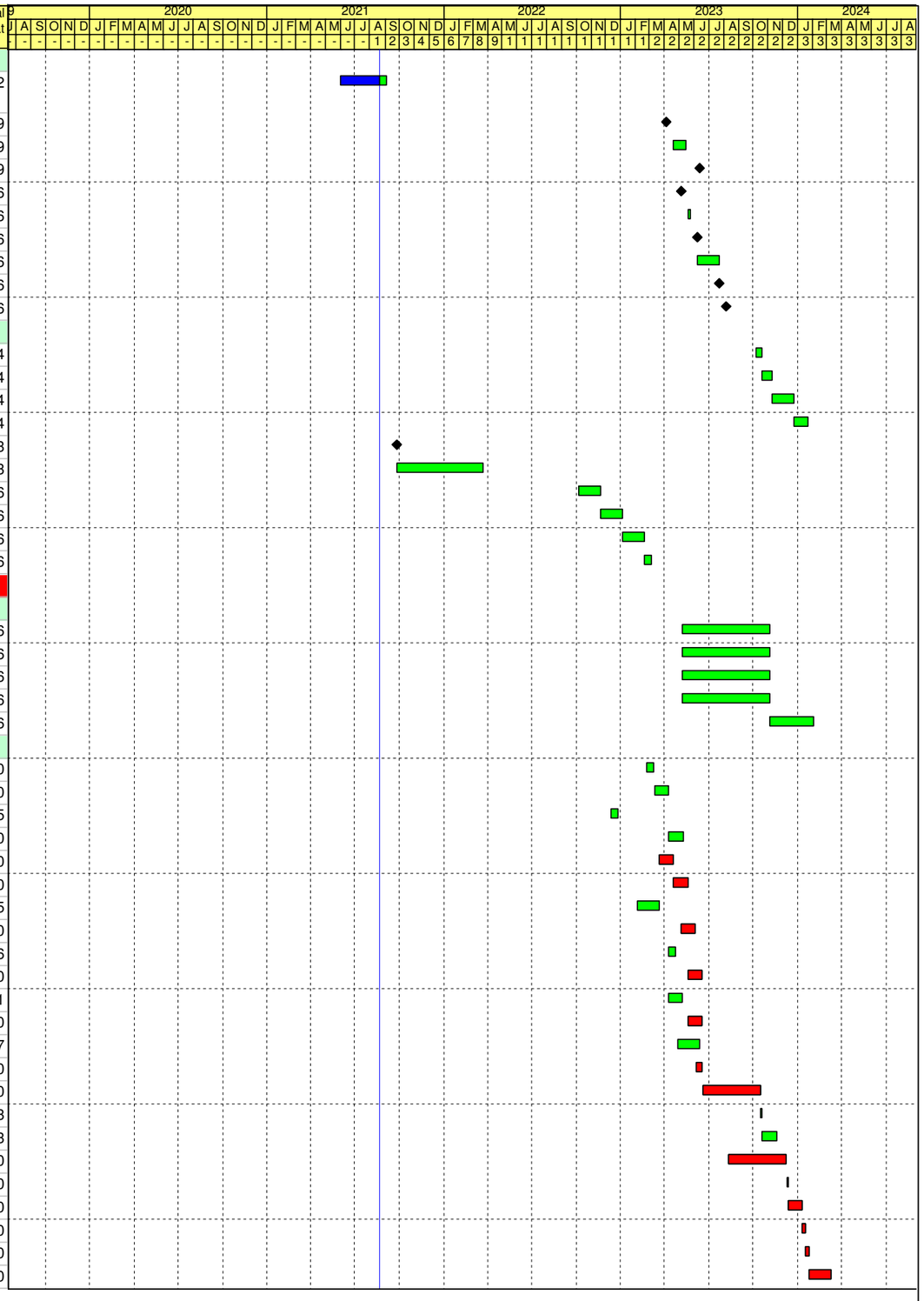


Remaining Work
Critical Activity
Milestone
Actual Progress

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 Aug 2021

Date	Revision	Checked	Approved
30-Apr-21	Rev.9	LT	KM
31-May-21	Rev.10	LT	KM
30-Jun-21	Rev.11	LT	KM
31-Jul-21	Rev.12	LT	KM
31-Aug-21	Rev.13	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
WSD Submission / Inspection							
AS509300	Submit WWO46 Part I / II to WSD (FS/PD)	30	01-Jun-21 A	04-Sep-21	10-Jan-22	24-Jan-22	142
AS509340	Submit WWO46 Part IV to WSD (FS)	0	04-Apr-23		11-Aug-23		129
AS509360	WSD Inspection (FS)	28	18-Apr-23	15-May-23	25-Aug-23	21-Sep-23	129
AS509362b	Issuance of FS Water Certificate	0		12-Jun-23		19-Oct-23	129
AS509370f	Submit WWO46 Part IV to WSD (PD)	0	05-May-23		07-Dec-23		216
AS509380f	WSD Inspection	7	19-May-23	25-May-23	21-Dec-23	27-Dec-23	216
AS509390f	Issuance of Form WWO46 Part Va	0		08-Jun-23		10-Jan-24	216
AS509400f	System Flushing / Sampling	45	09-Jun-23	23-Jul-23	11-Jan-24	24-Feb-24	216
AS509410f	Issuance of Form WWO46 Part Vb	0		23-Jul-23		24-Feb-24	216
AS509420f	Issuance of Water Certificate	0		06-Aug-23		09-Mar-24	216
FSD Submission / Inspection							
AS509120	Prepare & Submit FSI/314 & FSI/501	14	06-Oct-23	19-Oct-23	20-Oct-23	02-Nov-23	14
AS509120a	FSD Review & Approval of FSI/314 & FSI/501	21	20-Oct-23	09-Nov-23	03-Nov-23	23-Nov-23	14
AS509140a	F.S. Inspection, Defects Rectification & Re-inspection	45	10-Nov-23	24-Dec-23	24-Nov-23	07-Jan-24	14
AS509200	Issuance of Acceptance Letter	28	25-Dec-23	21-Jan-24	08-Jan-24	04-Feb-24	14
AS509220	Application of D.G. Licence	0	25-Sep-21*		27-Nov-21		63
AS509240	Processing of D.G. Licence Application	180	25-Sep-21	23-Mar-22	27-Nov-21	25-May-22	63
AS509250b	Apply for D.G. Inspection	45	07-Oct-22	20-Nov-22	22-Nov-22	05-Jan-23	46
AS509260	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	45	21-Nov-22	04-Jan-23	06-Jan-23	19-Feb-23	46
AS509280b	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	45	05-Jan-23	18-Feb-23	20-Feb-23	05-Apr-23	46
AS509300b	Issue D.G. Licence	14	19-Feb-23	04-Mar-23	06-Apr-23	19-Apr-23	46
Testing & Commissioning							
T&C of Control Monitoring System							
AS512380f	SAT of SCADA System	180	09-May-23	04-Nov-23	14-Jun-23	10-Dec-23	36
AS512390f	SAT of PMS	180	09-May-23	04-Nov-23	14-Jun-23	10-Dec-23	36
AS512400f	SAT of CMMS	180	09-May-23	04-Nov-23	14-Jun-23	10-Dec-23	36
AS512410f	SAT of IDMS	180	09-May-23	04-Nov-23	14-Jun-23	10-Dec-23	36
AS512420f	Overall Testing for Whole System	90	05-Nov-23	02-Feb-24	11-Dec-23	09-Mar-24	36
T&C of E&M Process							
AS510100	SAT of THP System	15	24-Feb-23	10-Mar-23	05-Apr-23	19-Apr-23	40
AS510200a	System Commissioning Tests for THP System	30	11-Mar-23	09-Apr-23	20-Apr-23	19-May-23	40
AS510300	SAT for Sludge Dewatering System	15	11-Dec-22	25-Dec-22	06-Mar-23	20-Mar-23	85
AS510400	System Commissioning Tests for Sludge Dewatering System	30	10-Apr-23	09-May-23	20-Apr-23	19-May-23	10
AS510500	SAT for Biogas Storage System	30	21-Mar-23	19-Apr-23	21-Mar-23	19-Apr-23	0
AS510600	System Commissioning Tests for Biogas Storage System	30	20-Apr-23	19-May-23	20-Apr-23	19-May-23	0
AS510700	SAT for Sludge Digestion System	45	04-Feb-23	20-Mar-23	21-Mar-23	04-May-23	45
AS510800	System Commissioning Tests for Sludge Digestion System	30	05-May-23	03-Jun-23	05-May-23	03-Jun-23	0
AS510900	SAT for Gas Burning System	15	09-Apr-23	23-Apr-23	05-May-23	19-May-23	26
AS511000	System Commissioning Tests for Gas Burning System	30	20-May-23	18-Jun-23	20-May-23	18-Jun-23	0
AS511100	SAT for CHP System	30	09-Apr-23	08-May-23	20-Apr-23	19-May-23	11
AS511200	System Commissioning Tests for CHP System	30	20-May-23	18-Jun-23	20-May-23	18-Jun-23	0
AS511300b	SAT & System Commissioning Tests for Other Facilities	45	28-Apr-23	11-Jun-23	05-May-23	18-Jun-23	7
AS512100	Seeding	14	05-Jun-23	18-Jun-23	05-Jun-23	18-Jun-23	0
AS512200a	Process Start Up - Digester 1	120	19-Jun-23	16-Oct-23	19-Jun-23	16-Oct-23	0
AS512300a	Notice to Commence Phase 1 System Commissioning - Digester 1	3	17-Oct-23	19-Oct-23	09-Dec-23	11-Dec-23	53
AS512400a	Phase 1 System Commissioning - Digester 1	30	20-Oct-23	18-Nov-23	12-Dec-23	10-Jan-24	53
AS512500a	Process Start Up - Digester 2	120	11-Aug-23	08-Dec-23	11-Aug-23	08-Dec-23	0
AS512600a	Notice to Commence Phase 1 System Commissioning - Digester 2	3	09-Dec-23	11-Dec-23	09-Dec-23	11-Dec-23	0
AS512700a	Phase 1 System Commissioning - Digester 2	30	12-Dec-23	10-Jan-24	12-Dec-23	10-Jan-24	0
AS512800a	Phase 2 System Commissioning - Digester 1 & 2	7	11-Jan-24	17-Jan-24	11-Jan-24	17-Jan-24	0
AS512900a	Notice to Commence Plant Commissioning	7	18-Jan-24	24-Jan-24	18-Jan-24	24-Jan-24	0
AS513000a	Plant Commissioning Tests	45	25-Jan-24	09-Mar-24	25-Jan-24	09-Mar-24	0

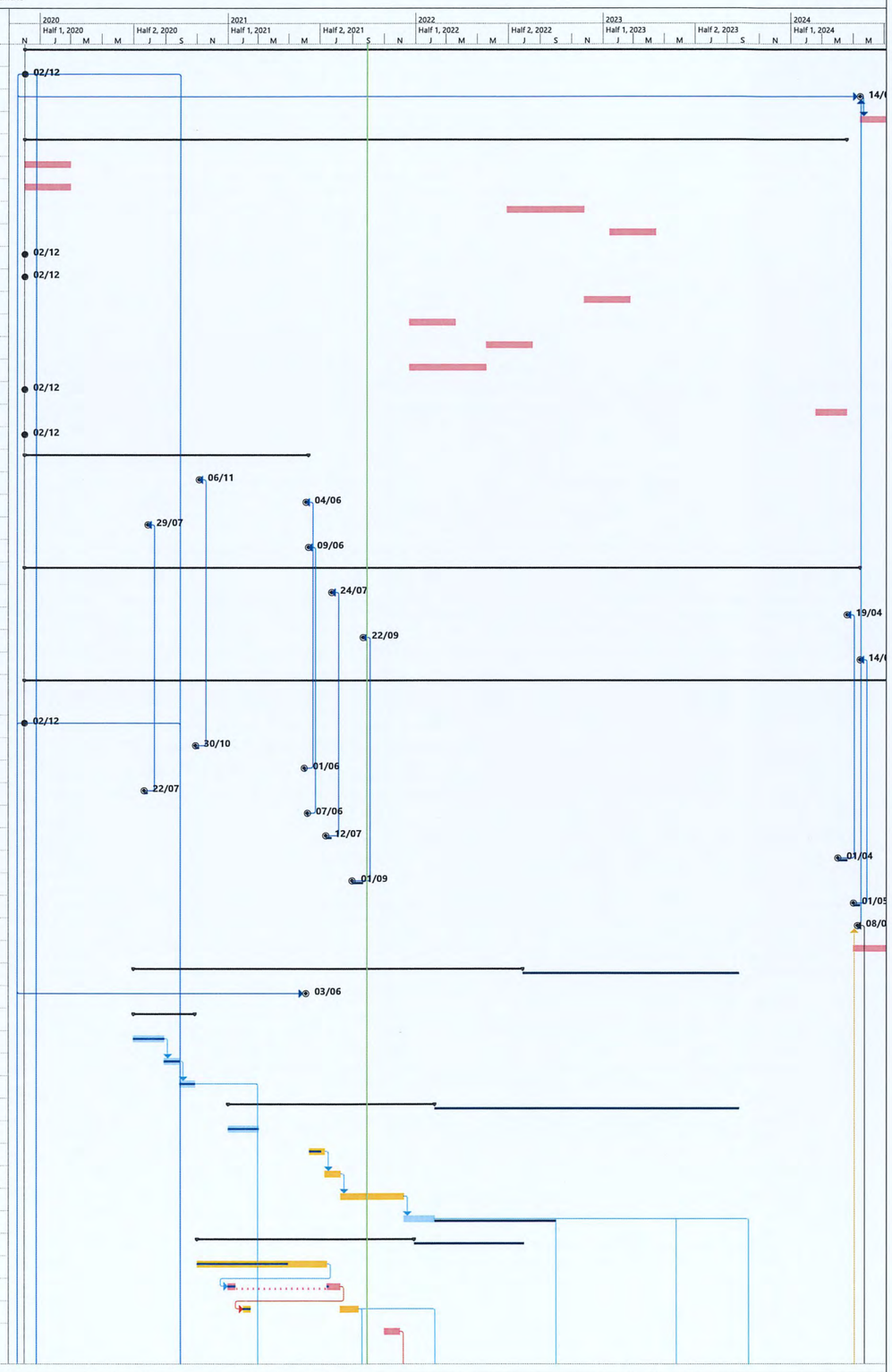


Remaining Work
Critical Activity
Milestone
Actual Progress

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 Aug 2021

Date	Revision	Checked	Approved
30-Apr-21	Rev.9	LT	KM
31-May-21	Rev.10	LT	KM
30-Jun-21	Rev.11	LT	KM
31-Jul-21	Rev.12	LT	KM
31-Aug-21	Rev.13	LT	KM

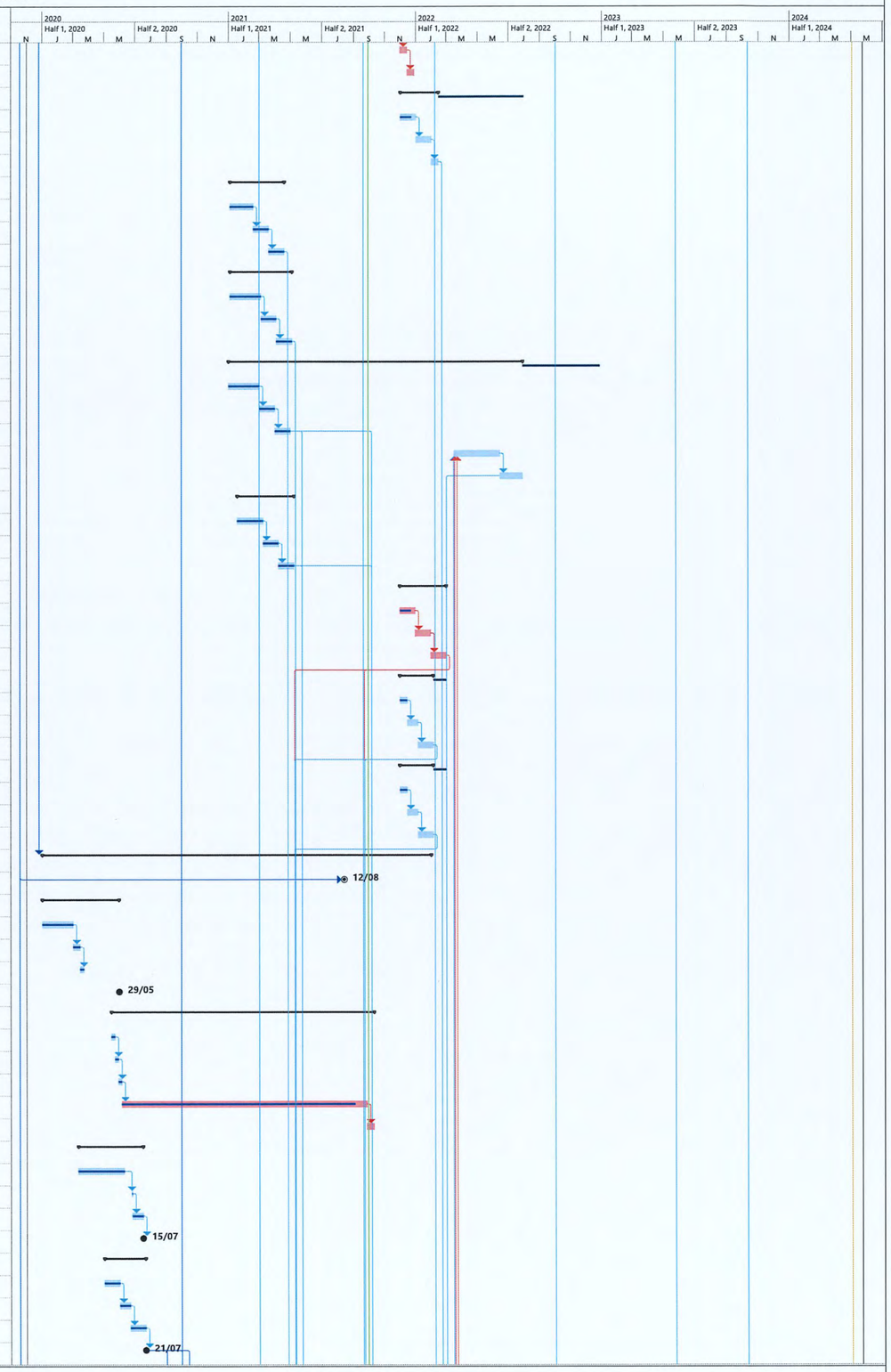
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1	1	1	**DE/2018/04 - Contract Master Programme**	**1990 days**	**Mon 02/12/19**	**Tue 13/05/25**	**Mon 02/12/19**	**Tue 13/05/25**	**0 days**			
2	2	1.1	Starting Date	0 days	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 days		3SS+1625 edays,628,202	
3	3	1.2	Completion Date	0 days	Tue 14/05/24	Tue 14/05/24	Tue 14/05/24	Tue 14/05/24	0 days	2SS+1625 ec	4	
4	4	1.3	Defect Dates with respect to Completion Date	365 days	Tue 14/05/24	Tue 13/05/25	Tue 14/05/24	Tue 13/05/25	0 days	3		
5	5	2	**Access Dates**	**1599 days**	**Mon 02/12/19**	**Thu 18/04/24**	**Mon 02/12/19**	**Thu 18/04/24**	**0 days**			
6	6	2.1	Access Date for Works Area WA1-C	90 days	Mon 02/12/19	Sat 29/02/20	Mon 02/12/19	Sat 29/02/20	0 days			
7	7	2.2	Access Date for Works Area WA2-C	90 days	Mon 02/12/19	Sat 29/02/20	Mon 02/12/19	Sat 29/02/20	0 days			
8	8	2.3	Access Date for Portion B-2, Inlet Works No. 1	150 edays	Tue 28/06/22	Fri 25/11/22	Tue 28/06/22	Fri 25/11/22	0 edays			
9	9	2.4	Access Date for Portion B-3, PST No. 1~4	90 edays	Sat 14/01/23	Fri 14/04/23	Sat 14/01/23	Fri 14/04/23	0 edays			
10	10	2.5	Access Date for Portion B-3A, Existing PST No. 4 and No. 6	0 days	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 days			
11	11	2.6	Access Date for Portion B-3B, Temporary Filtrate Lifting Well and Eq. Tank	0 days	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 days			
12	12	2.7	Access Date for Portion B-4, BR 2A & 2B	90 edays	Fri 25/11/22	Thu 23/02/23	Fri 25/11/22	Thu 23/02/23	0 edays			
13	13	2.8	Access Date for Portion B-5A, MFB No. 2 below 1st floor level	90 edays	Mon 20/12/21	Sun 20/03/22	Mon 20/12/21	Sun 20/03/22	0 edays			
14	14	2.9	Access Date for Portion B-5B, MFB No. 2 remaining portion	90 edays	Thu 19/05/22	Wed 17/08/22	Thu 19/05/22	Wed 17/08/...	0 edays			
15	15	2.10	Access Date for Portion B-7 & 7B, Chemical Dosing, Concrete Plinth for DOs,	150 edays	Mon 20/12/21	Thu 19/05/22	Mon 20/12/21	Thu 19/05/22	0 edays			
16	16	2.11	Access Date for Portion B-7A & 7B, area for modification of existing emerge	0 edays	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 edays			
17	17	2.12	Access Date for Portion B-9B, underground pipework	60 edays	Sun 18/02/24	Thu 18/04/24	Sun 18/02/24	Thu 18/04/24	0 edays			
18	18	2.13	Access Date for B-10, existing sludge thickening building	0 edays	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 edays			
19	19	3	**Key Dates**	**555 days**	**Mon 02/12/19**	**Wed 09/06/21**	**Mon 02/12/19**	**Wed 09/06...**	**0 days**			
20	20	3.1	KD1A - Submission of civil and dimensional requirement drawings, electrical	340 edays	Mon 02/12/19	Fri 06/11/20	Mon 02/12/19	Fri 06/11/20	0 edays	31FF		
21	21	3.2	KD1B - Submission of remaining civil and dimensional requirement drawings	550 edays	Mon 02/12/19	Fri 04/06/21	Mon 02/12/19	Fri 04/06/21	0 edays	32FF		
22	22	3.3	KD3A - Completion of E&M Installation works of existing power house in Po	240 edays	Mon 02/12/19	Wed 29/07/20	Mon 02/12/19	Wed 29/07/...	0 edays	33FF		
23	23	3.4	KD3B - Completion of all work for reprovision of the existing Primary Sedim	555 edays	Mon 02/12/19	Wed 09/06/21	Mon 02/12/19	Wed 09/06/...	0 edays	34FF		
24	24	4	**Sectional Completion Dates**	**1625 days**	**Mon 02/12/19**	**Tue 14/05/24**	**Mon 02/12/19**	**Tue 14/05/24**	**0 days**			
25	25	4.1	Section 1 - Completion of the design of E&M Works for all works as defined	600 edays	Mon 02/12/19	Sat 24/07/21	Mon 02/12/19	Sat 24/07/21	0 edays	35FF		
26	26	4.2	Section 2 - Completion of all works for Inlet Works, PST No. 1~4, BR No. 2A &	1600 edays	Mon 02/12/19	Fri 19/04/24	Mon 02/12/19	Fri 19/04/24	0 edays	36FF		
27	27	4.3	Section 3 - Completion of all works for retrofitting of the existing PST...etc (6	660 edays	Mon 02/12/19	Wed 22/09/21	Mon 02/12/19	Wed 22/09/...	0 edays	37FF		
28	28	4.4	Section 4 - Completion of Work for remainder of the works (1625 days after	1625 edays	Mon 02/12/19	Tue 14/05/24	Mon 02/12/19	Tue 14/05/24	0 edays	38FF		
29	29	5	**DE/2018/04 - the Contractor's Programme (w/ Defects Date of Planned Completion Date)**	**1977 days**	**Mon 02/12/19**	**Wed 30/04/25**	**Mon 02/12/19**	**Wed 30/04/25**	**0 days**			
30	30	5.1	Starting Date	0 days	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 days		628,202SS+30 edays,425	
31	31	5.2	Planned Key Date Completion Date - KD1A	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	7 days	20FF		
32	32	5.3	Planned Key Date Completion Date - KD1B	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	3 days	21FF		
33	33	5.4	Planned Key Date Completion Date - KD3A	0 days	Wed 22/07/20	Wed 22/07/20	Wed 22/07/20	Wed 22/07/...	7 days	22FF		
34	34	5.5	Planned Key Date Completion Date - KD3B	0 days	Mon 07/06/21	Mon 07/06/21	Mon 07/06/21	Mon 07/06/...	2 days	23FF		
35	35	5.6	Planned Sectional Completion Date - Section 1	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	11 days	25FF		
36	36	5.7	Planned Sectional Completion Date - Section 2	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	18 days	26FF		
37	37	5.8	Planned Sectional Completion Date - Section 3	0 days	Wed 01/09/21	Wed 01/09/21	Wed 01/09/21	Wed 01/09/...	21 days	27FF		
38	38	5.9	Planned Sectional Completion Date - Section 4	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/...	13 days	28FF		
39	39	5.10	Planned Completion Date	0 days	Wed 08/05/24	Wed 08/05/24	Wed 08/05/24	Wed 08/05/...	5 days	1284,1285,13		
40	40	5.11	Defect Dates with respect to planned completion date	365 days	Wed 01/05/24	Wed 30/04/25	Wed 01/05/24	Wed 30/04/...	0 days			
41	41	5.12	**Part A: Procurement and Delivery of Major Plant and Materials**	**758 days**	**Wed 01/07/20**	**Thu 28/07/22**	**Wed 01/07/20**	**Thu 28/07/22**	**422 days**			
42	42	5.12.1	Planned Completion Date for Procurement of major plant and materials	0 days	Thu 03/06/21	Thu 03/06/21	Thu 03/06/21	Thu 03/06/21	0 days	30SS+550 d		
43	43	5.12.2	**General - stoplogs and penstocks, C11, EQT013**	**120 days**	**Wed 01/07/20**	**Wed 28/10/20**	**Wed 01/07/20**	**Wed 28/10...**	**0 days**			
44	44	5.12.2.1	Submission for acceptance of purchasing package	60 days	Wed 01/07/20	Sat 29/08/20	Wed 01/07/20	Sat 29/08/20	0 days		45	
45	45	5.12.2.2	Invitation of quotations for purchasing package	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/...	0 days	44	46	
46	46	5.12.2.3	Acceptance of conforming quotation (Completed)	30 days	Tue 29/09/20	Wed 28/10/20	Tue 29/09/20	Wed 28/10/...	0 days	45	253	
47	47	5.12.3	**General - Instrumentations except use at BR, C11, EQT035-1**	**401 days**	**Sat 02/01/21**	**Sun 06/02/22**	**Sat 02/01/21**	**Sun 06/02/22**	**594 days**			
48	48	5.12.3.1	Submission for acceptance of purchasing package	60 days	Sat 02/01/21	Tue 02/03/21	Sat 02/01/21	Tue 02/03/21	0 days			
49	49	5.12.3.2	Invitation of quotations for purchasing package (Rev. 10)	30 days	Fri 11/06/21	Sat 10/07/21	Fri 11/06/21	Sat 10/07/21	0 days		50	
50	50	5.12.3.3	Acceptance of conforming quotation (Rev. 10)	30 days	Sun 11/07/21	Mon 09/08/21	Sun 11/07/21	Mon 09/08/...	0 days	49	51	
51	51	5.12.3.4	Manufacturing and Factory Acceptance Test of Plant (Rev. 10)	121 days	Tue 10/08/21	Wed 08/12/21	Tue 10/08/21	Wed 08/12/...	0 days	50	52	
52	52	5.12.3.5	Shipping and Delivery of Plant (Rev. 10)	60 days	Thu 09/12/21	Sun 06/02/22	Thu 09/12/21	Sun 06/02/22	237 days	51	335,465,747	
53	53	5.12.4	**General - pipework and valves, C11, ref. EQT036 (Rev. 11)**	**422 days**	**Mon 02/11/20**	**Tue 28/12/21**	**Mon 02/11/20**	**Tue 28/12/21**	**214 days**			
54	54	5.12.4.1	Submission for acceptance of purchasing package (Rev. 11)	255 days	Mon 02/11/20	Wed 14/07/21	Mon 02/11/20	Wed 14/07/...	0 days		55	
55	55	5.12.4.2	Invitation of quotations for purchasing package (Rev. 11)	40 days	Fri 01/01/21	Sun 08/08/21	Fri 01/01/21	Sun 08/08/21	0 days	54	56	
56	56	5.12.4.3	Acceptance of conforming quotation (Rev. 11)	50 days	Sun 31/01/21	Sun 12/09/21	Sun 31/01/21	Sun 12/09/21	0 days	55	279,285,429,558,681	
57	57	5.12.4.4	Submission for acceptance of purchasing package for remaining pipework and valves (Rev. 13)	30 days	Mon 01/11/21	Tue 30/11/21	Mon 01/11/21	Tue 30/11/21	0 days		58	



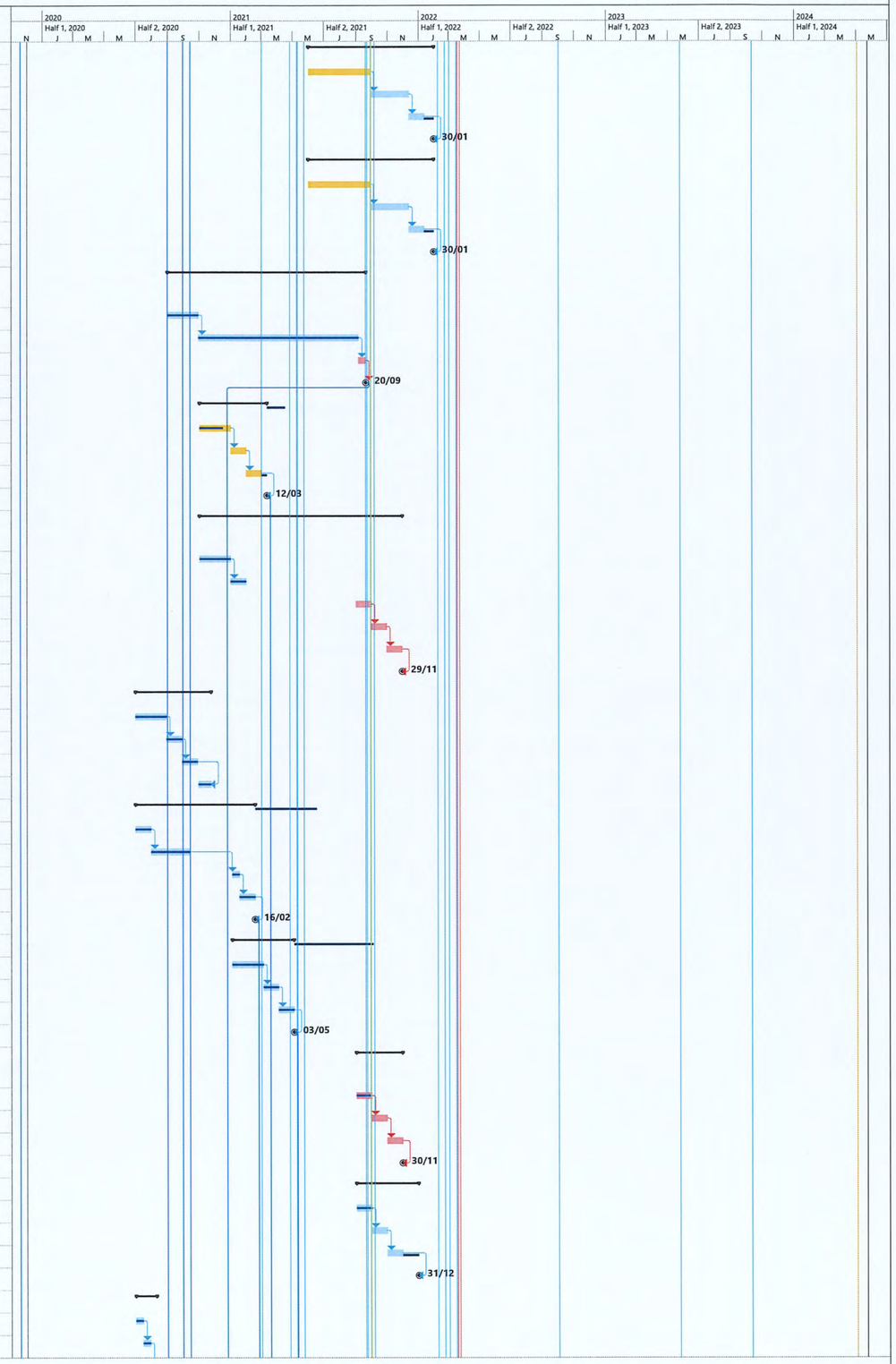
Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

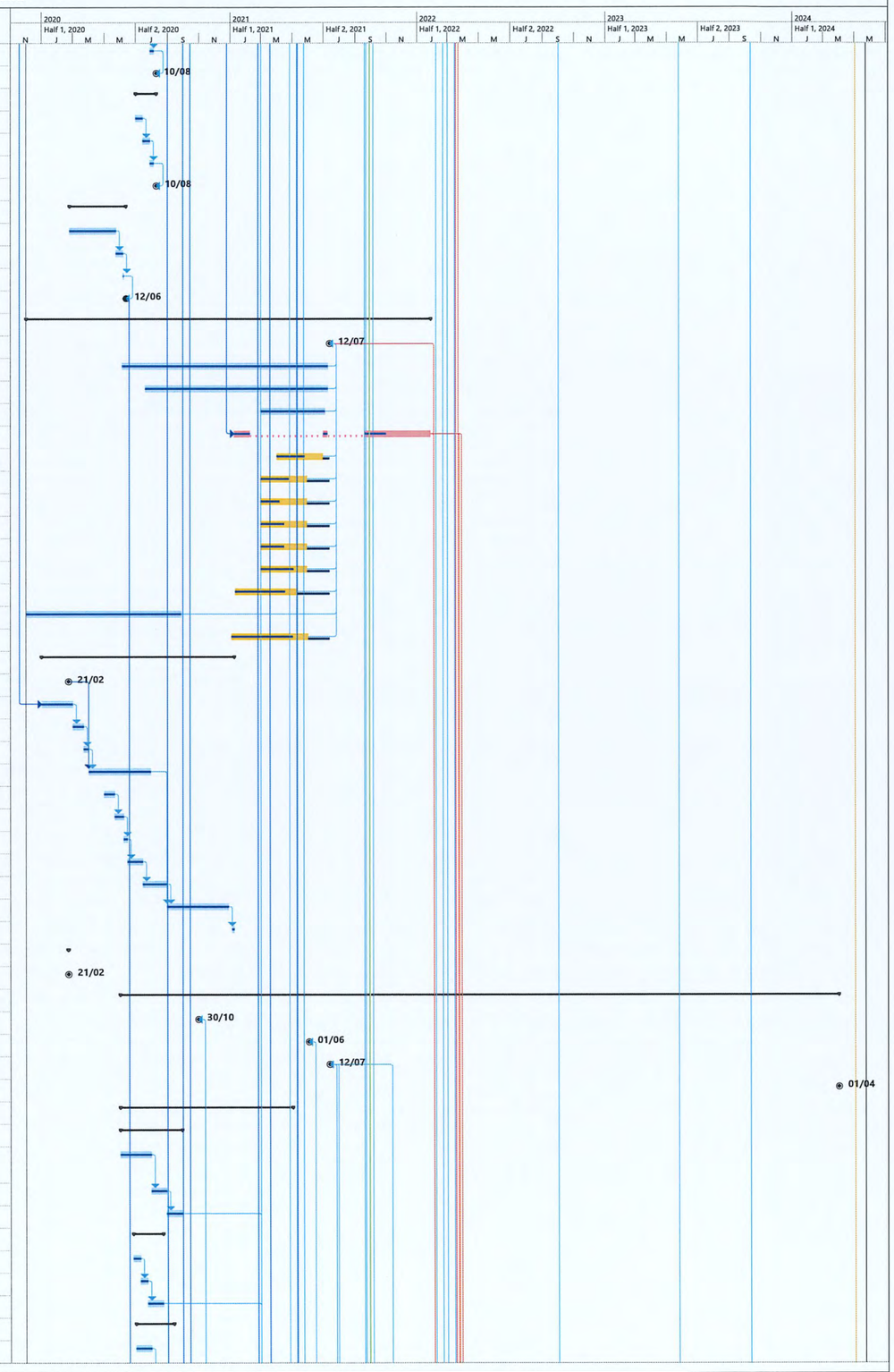
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
58	58	5.12.4.5	Invitation of quotations for purchasing package (Rev. 13)	14 days	Wed 01/12/21	Tue 14/12/21	Wed 01/12/21	Tue 14/12/21	0 days	57	59	
59	59	5.12.4.6	Acceptance of conforming quotation (Rev. 13)	14 days	Wed 15/12/21	Tue 28/12/21	Wed 15/12/21	Tue 28/12/21	0 days	58		
60	**60**	**5.12.5**	**General - Electric actuators, C11, ref. EQT072 (Rev. 11)**	**74 days**	**Thu 02/12/21**	**Sun 13/02/22**	**Thu 02/12/21**	**Sun 13/02/22**	**167 days**			
61	61	5.12.5.1	Submission for acceptance of purchasing package (Rev. 11)	30 days	Thu 02/12/21	Fri 31/12/21	Thu 02/12/21	Fri 31/12/21	0 days		62	
62	62	5.12.5.2	Invitation of quotations for purchasing package (Rev. 11)	30 days	Sat 01/01/22	Sun 30/01/22	Sat 01/01/22	Sun 30/01/22	0 days	61	63	
63	63	5.12.5.3	Acceptance of conforming quotation (Rev. 11)	14 days	Mon 31/01/22	Sun 13/02/22	Mon 31/01/22	Sun 13/02/22	0 days	62	285,429,558,681	
64	**64**	**5.12.6**	**General - HV Switchboards, C9, ref. 04SC012 (Rev. 14)**	**105 days**	**Mon 04/01/21**	**Sun 18/04/21**	**Mon 04/01/21**	**Sun 18/04/21**	**0 days**			
65	65	5.12.6.1	Submission for acceptance of purchasing package	45 days	Mon 04/01/21	Wed 17/02/21	Mon 04/01/21	Wed 17/02/...	0 days		66	
66	66	5.12.6.2	Invitation of quotations for purchasing package	30 days	Thu 18/02/21	Fri 19/03/21	Thu 18/02/21	Fri 19/03/21	0 days	65	67	
67	67	5.12.6.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Sat 20/03/21	Sun 18/04/21	Sat 20/03/21	Sun 18/04/21	0 days	66	656,257	
68	**68**	**5.12.7**	**General - LV Switchboards, C9, ref. 04SC013 (Rev. 14)**	**120 days**	**Mon 04/01/21**	**Mon 03/05/21**	**Mon 04/01/21**	**Mon 03/05...**	**0 days**			
69	69	5.12.7.1	Submission for acceptance of purchasing package	60 days	Mon 04/01/21	Thu 04/03/21	Mon 04/01/21	Thu 04/03/21	0 days		70	
70	70	5.12.7.2	Invitation of quotations for purchasing package	30 days	Fri 05/03/21	Sat 03/04/21	Fri 05/03/21	Sat 03/04/21	0 days	69	71	
71	71	5.12.7.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Sun 04/04/21	Mon 03/05/21	Sun 04/04/21	Mon 03/05/...	0 days	70	256,531,402,655	
72	**72**	**5.12.8**	**General - VSDs & Passive Type Harmonic Filters, C11, ref. EQT034 (Rev. 5**	**574 days**	**Fri 01/01/21**	**Thu 28/07/22**	**Fri 01/01/21**	**Thu 28/07/22**	**152 days**			
73	73	5.12.8.1	Submission for acceptance of purchasing package	60 days	Fri 01/01/21	Mon 01/03/21	Fri 01/01/21	Mon 01/03/...	0 days		74	
74	74	5.12.8.2	Invitation of quotations for purchasing package	30 days	Tue 02/03/21	Wed 31/03/21	Tue 02/03/21	Wed 31/03/...	0 days	73	75	
75	75	5.12.8.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Thu 01/04/21	Fri 30/04/21	Thu 01/04/21	Fri 30/04/21	0 days	74	254,400,529,652	
76	76	5.12.8.4	Manufacturing and Factory Acceptance Test of Plant	90 days	Wed 16/03/22	Mon 13/06/22	Wed 16/03/22	Mon 13/06/...	0 days	254,400,525	77	
77	77	5.12.8.5	Shipping and Delivery of Plant to LVSB Sub-Contractor	45 days	Tue 14/06/22	Thu 28/07/22	Tue 14/06/22	Thu 28/07/22	0 days	76	292SS-90 edays	
78	**78**	**5.12.9**	**General - 11kV/380V Stepdown Power Transformers, C11, EQT032 (Rev.**	**110 days**	**Mon 18/01/21**	**Fri 07/05/21**	**Mon 18/01/21**	**Fri 07/05/21**	**0 days**			
79	79	5.12.9.1	Submission for acceptance of purchasing package	50 days	Mon 18/01/21	Mon 08/03/21	Mon 18/01/21	Mon 08/03/...	0 days		80	
80	80	5.12.9.2	Invitation of quotations for purchasing package	30 days	Tue 09/03/21	Wed 07/04/21	Tue 09/03/21	Wed 07/04/...	0 days	79	81	
81	81	5.12.9.3	Acceptance of conforming quotation (Rev. 11, Completed)	30 days	Thu 08/04/21	Fri 07/05/21	Thu 08/04/21	Fri 07/05/21	0 days	80	254,652	
82	**82**	**5.12.10**	**General - UPS, C11, EQT039A (Rev. 14)**	**90 days**	**Wed 01/12/21**	**Mon 28/02/22**	**Wed 01/12/21**	**Mon 28/02...**	**0 days**			
83	83	5.12.10.1	Submission for acceptance of purchasing package (Rev. 13)	30 days	Wed 01/12/21	Thu 30/12/21	Wed 01/12/21	Thu 30/12/21	0 days		84	
84	84	5.12.10.2	Invitation of quotations for purchasing package (Rev. 13)	30 days	Fri 31/12/21	Sat 29/01/22	Fri 31/12/21	Sat 29/01/22	0 days	83	85	
85	85	5.12.10.3	Acceptance of conforming quotation (Rev. 13)	30 days	Sun 30/01/22	Mon 28/02/22	Sun 30/01/22	Mon 28/02/...	0 days	84	254,400,529,652	
86	**86**	**5.12.11**	**General - HV Cables, C11, EQT041 (Rev. 13)**	**65 days**	**Wed 01/12/21**	**Thu 03/02/22**	**Wed 01/12/21**	**Thu 03/02/22**	**25 days**			
87	87	5.12.11.1	Submission for acceptance of purchasing package	14 days	Wed 01/12/21	Tue 14/12/21	Wed 01/12/21	Tue 14/12/21	0 days		88	
88	88	5.12.11.2	Invitation of quotations for purchasing package	21 days	Wed 15/12/21	Tue 04/01/22	Wed 15/12/21	Tue 04/01/22	0 days	87	89	
89	89	5.12.11.3	Acceptance of conforming quotation	30 days	Wed 05/01/22	Thu 03/02/22	Wed 05/01/22	Thu 03/02/22	0 days	88	254,652	
90	**90**	**5.12.12**	**General - LV Cables, C11, EQT042 (Rev. 13)**	**65 days**	**Wed 01/12/21**	**Thu 03/02/22**	**Wed 01/12/21**	**Thu 03/02/22**	**25 days**			
91	91	5.12.12.1	Submission for acceptance of purchasing package	14 days	Wed 01/12/21	Tue 14/12/21	Wed 01/12/21	Tue 14/12/21	0 days		92	
92	92	5.12.12.2	Invitation of quotations for purchasing package	21 days	Wed 15/12/21	Tue 04/01/22	Wed 15/12/21	Tue 04/01/22	0 days	91	93	
93	93	5.12.12.3	Acceptance of conforming quotation	30 days	Wed 05/01/22	Thu 03/02/22	Wed 05/01/22	Thu 03/02/22	0 days	92	254,400,529,652	
94	**94**	**5.13**	**Part B: Subletting of major sub-contract works**	**761 days**	**Wed 01/01/20**	**Sun 30/01/22**	**Wed 01/01/20**	**Sun 30/01/22**	**0 days**	2,30		
95	95	5.13.1	Planned Completion Date for major sub-contract works	0 days	Thu 12/08/21	Thu 12/08/21	Thu 12/08/21	Thu 12/08/21	0 days	2SS+620 day		
96	**96**	**5.13.2**	**General - Independent BEAM Plus Consultant (04SC007)**	**150 days**	**Wed 01/01/20**	**Fri 29/05/20**	**Wed 01/01/20**	**Fri 29/05/20**	**0 days**			
97	97	5.13.2.1	Submission for acceptance of proposed Independent BEAM Plus Consu	60 edays	Wed 01/01/20	Sun 01/03/20	Wed 01/01/20	Sun 01/03/20	0 edays		98	
98	98	5.13.2.2	Acceptance of proposed Independent BEAM Plus Consultant	14 edays	Sun 01/03/20	Sun 15/03/20	Sun 01/03/20	Sun 15/03/20	0 edays	97	99	
99	99	5.13.2.3	Engagement with an Independent BEAM Plus Consultant	7 days	Sun 15/03/20	Sat 21/03/20	Sun 15/03/20	Sat 21/03/20	0 days	98		
100	100	5.13.2.4	Actual Date for engagement with an independent BEAM Plus Consultar	0 days	Fri 29/05/20	Fri 29/05/20	Fri 29/05/20	Fri 29/05/20	0 days			
101	**101**	**5.13.3**	**General - Conduction of Pump sump physical model test 04SC015**	**514 days**	**Fri 15/05/20**	**Sun 10/10/21**	**Fri 15/05/20**	**Sun 10/10/21**	**0 days**			
102	102	5.13.3.1	Submission for acceptance of proposed hydraulic laboratory to conduc	7 edays	Fri 15/05/20	Fri 22/05/20	Fri 15/05/20	Fri 22/05/20	0 edays		103	
103	103	5.13.3.2	Invitation to quotations for provision of service	7 edays	Fri 22/05/20	Fri 29/05/20	Fri 22/05/20	Fri 29/05/20	0 edays	102	104	
104	104	5.13.3.3	Acceptance of proposed hydraulic laboratory	6 days	Fri 29/05/20	Wed 03/06/20	Fri 29/05/20	Wed 03/06/...	0 days	103	105	
105	105	5.13.3.4	Commencement of detailed proposal and conduction of test (Rev 13)	480 days	Thu 04/06/20	Sun 26/09/21	Thu 04/06/20	Sun 26/09/21	0 days	104	106	
106	106	5.13.3.5	Acceptance of hydraulic Report (Rev 13)	14 days	Mon 27/09/21	Sun 10/10/21	Mon 27/09/21	Sun 10/10/21	0 days	105		
107	**107**	**5.13.4**	**General - Independent Checking Engineer (04SC004)**	**127 days**	**Wed 11/03/20**	**Wed 15/07/20**	**Wed 11/03/20**	**Wed 15/07...**	**0 days**			
108	108	5.13.4.1	Submission for acceptance of proposed Independent Checking Enginee	90 edays	Wed 11/03/20	Tue 09/06/20	Wed 11/03/20	Tue 09/06/20	0 edays		109	
109	109	5.13.4.2	Acceptance of proposed Independent Checking Engineer	1 eday	Wed 24/06/20	Thu 25/06/20	Wed 24/06/20	Thu 25/06/20	0 edays	108	110	
110	110	5.13.4.3	Engagement with an Independent Checking Engineer	21 days	Thu 25/06/20	Wed 15/07/20	Thu 25/06/20	Wed 15/07/...	0 days	109	111	
111	111	5.13.4.4	Actual Date for engagement with an ICE (Completed)	0 days	Wed 15/07/20	Wed 15/07/20	Wed 15/07/20	Wed 15/07/...	0 days	110		
112	**112**	**5.13.5**	**General - Lifting Appliances (04SC008)**	**81 days**	**Fri 01/05/20**	**Tue 21/07/20**	**Fri 01/05/20**	**Tue 21/07/20**	**0 days**			
113	113	5.13.5.1	Submission for acceptance of subcontract works package	30 edays	Fri 01/05/20	Sun 31/05/20	Fri 01/05/20	Sun 31/05/20	0 edays		114	
114	114	5.13.5.2	Invitation of tender for subcontract works	21 edays	Sun 31/05/20	Sun 21/06/20	Sun 31/05/20	Sun 21/06/20	0 edays	113	115	
115	115	5.13.5.3	Acceptance of conforming tender	30 edays	Sun 21/06/20	Tue 21/07/20	Sun 21/06/20	Tue 21/07/20	0 edays	114	116	
116	116	5.13.5.4	Sub-contract work commencement date (Completed)	0 days	Tue 21/07/20	Tue 21/07/20	Tue 21/07/20	Tue 21/07/20	0 days	115	258,403,532,657,1047	



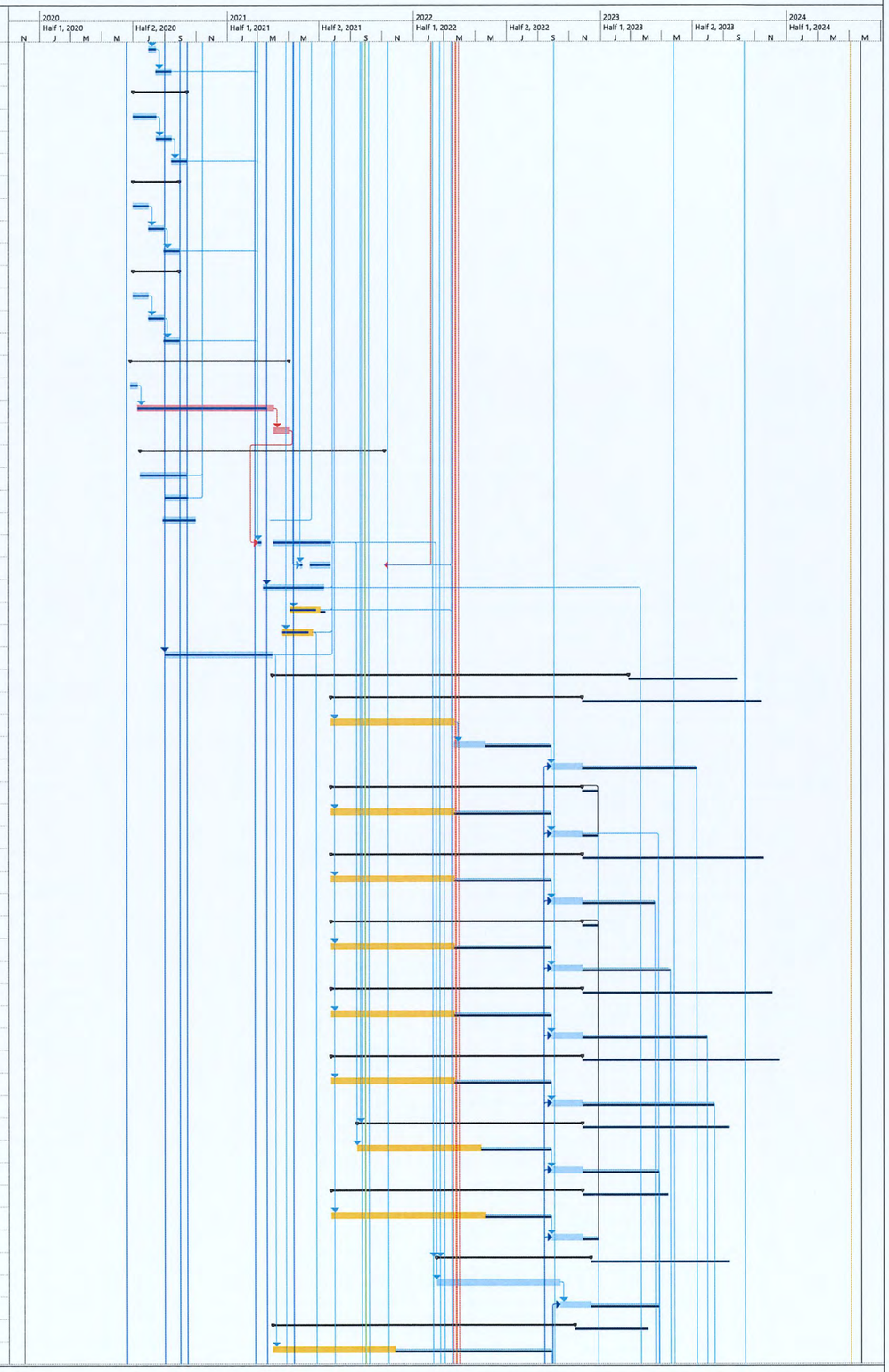
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
117	**117**	**5.13.6**	**General - Mechanical Installations**	**244 days**	**Tue 01/06/21**	**Sun 30/01/22**	**Tue 01/06/21**	**Sun 30/01/22**	**0 days**			
118	118	5.13.6.1	Submission for acceptance of subcontract works package	120 days	Tue 01/06/21	Tue 28/09/21	Tue 01/06/21	Tue 28/09/21	0 days		119	
119	119	5.13.6.2	Invitation of tender for subcontract works	75 days	Wed 29/09/21	Sun 12/12/21	Wed 29/09/21	Sun 12/12/21	0 days	118	120	
120	120	5.13.6.3	Acceptance of conforming tender	30 days	Mon 13/12/21	Tue 11/01/22	Mon 13/12/21	Tue 11/01/22	19 days	119	121FF	
121	121	5.13.6.4	Sub-contract work commencement date	1 day	Sun 30/01/22	Sun 30/01/22	Sun 30/01/22	Sun 30/01/22	0 days	120FF		
122	**122**	**5.13.7**	**General - Electrical Installations**	**244 days**	**Tue 01/06/21**	**Sun 30/01/22**	**Tue 01/06/21**	**Sun 30/01/22**	**0 days**			
123	123	5.13.7.1	Submission for acceptance of subcontract works package	120 edays	Tue 01/06/21	Wed 29/09/21	Tue 01/06/21	Wed 29/09/...	0 edays		124	
124	124	5.13.7.2	Invitation of tender for subcontract works	75 edays	Wed 29/09/21	Mon 13/12/21	Wed 29/09/21	Mon 13/12/...	0 edays	123	125	
125	125	5.13.7.3	Acceptance of conforming tender	30 edays	Mon 13/12/21	Wed 12/01/22	Mon 13/12/21	Wed 12/01/...	18.38 edays	124	126FF	
126	126	5.13.7.4	Sub-contract work commencement date	1 day	Sun 30/01/22	Sun 30/01/22	Sun 30/01/22	Sun 30/01/22	0 days	125FF		
127	**127**	**5.13.8**	**General - Facility Computerized Systems (SCADA, CMMS, PMS, IDMS) (Rev. 13) 04SC018**	**384 days**	**Tue 01/09/20**	**Mon 20/09/21**	**Tue 01/09/20**	**Mon 20/09/21**	**0 days**			
128	128	5.13.8.1	Submission for acceptance of subcontract works package	60 edays	Tue 01/09/20	Sat 31/10/20	Tue 01/09/20	Sat 31/10/20	0 edays		129	
129	129	5.13.8.2	Invitation of tender for subcontract works	310 edays	Sat 31/10/20	Mon 06/09/21	Sat 31/10/20	Mon 06/09/...	0 edays	128	130	
130	130	5.13.8.3	Acceptance of conforming tender	14 edays	Mon 06/09/21	Mon 20/09/21	Mon 06/09/21	Mon 20/09/...	0 edays	129	131	
131	131	5.13.8.4	Sub-contract work commencement date	0 days	Mon 20/09/21	Mon 20/09/21	Mon 20/09/21	Mon 20/09/...	0 days	130	190	
132	**132**	**5.13.9**	**General - Building Services Installations**	**130 days**	**Mon 02/11/20**	**Fri 12/03/21**	**Mon 02/11/20**	**Fri 12/03/21**	**36 days**			
133	133	5.13.9.1	Submission for acceptance of subcontract works package	60 edays	Mon 02/11/20	Fri 01/01/21	Mon 02/11/20	Fri 01/01/21	0 edays		134	
134	134	5.13.9.2	Invitation of tender for subcontract works	30 edays	Fri 01/01/21	Sun 31/01/21	Fri 01/01/21	Sun 31/01/21	0 edays	133	135	
135	135	5.13.9.3	Acceptance of conforming tender	30 edays	Sun 31/01/21	Tue 02/03/21	Sun 31/01/21	Tue 02/03/21	10 edays	134	136FF	
136	136	5.13.9.4	Sub-contract work commencement date	0 days	Fri 12/03/21	Fri 12/03/21	Fri 12/03/21	Fri 12/03/21	0 days	135FF	255,401,530,654,799,875	
137	**137**	**5.13.10**	**General - Mechanical Ventilation and Air Conditioning Installation (Rev. 13) (04SC020)**	**393 days**	**Mon 02/11/20**	**Mon 29/11/21**	**Mon 02/11/20**	**Mon 29/11/21**	**0 days**			
138	138	5.13.10.1	Submission for acceptance of subcontract works package	60 days	Mon 02/11/20	Thu 31/12/20	Mon 02/11/20	Thu 31/12/20	0 days		139	
139	139	5.13.10.2	Invitation of tender for subcontract works	30 edays	Thu 31/12/20	Sat 30/01/21	Thu 31/12/20	Sat 30/01/21	0 edays	138		
140	140	5.13.10.3	Submission for acceptance of revised subcontract works package (Rev.	30 days	Wed 01/09/21	Thu 30/09/21	Wed 01/09/21	Thu 30/09/21	0 days		141	
141	141	5.13.10.4	Invitation of tender for subcontract works (Rev. 13)	30 days	Fri 01/10/21	Sat 30/10/21	Fri 01/10/21	Sat 30/10/21	0 days	140	142	
142	142	5.13.10.5	Acceptance of conforming tender (Rev. 13)	30 days	Sun 31/10/21	Mon 29/11/21	Sun 31/10/21	Mon 29/11/...	0 days	141	143FF	
143	143	5.13.10.6	Sub-contract work commencement date	0 days	Mon 29/11/21	Mon 29/11/21	Mon 29/11/21	Mon 29/11/...	0 days	142FF		
144	**144**	**5.13.11**	**General - Emergency Power Generator Set (04SC006)**	**146 days**	**Wed 01/07/20**	**Mon 23/11/20**	**Wed 01/07/20**	**Mon 23/11...**	**0 days**			
145	145	5.13.11.1	Submission for acceptance of subcontract works package	60 edays	Wed 01/07/20	Sun 30/08/20	Wed 01/07/20	Sun 30/08/20	0 edays		146	
146	146	5.13.11.2	Invitation of tender for subcontract works	30 edays	Sun 30/08/20	Tue 29/09/20	Sun 30/08/20	Tue 29/09/20	0 edays	145	147	
147	147	5.13.11.3	Acceptance of conforming tender	30 edays	Tue 29/09/20	Thu 29/10/20	Tue 29/09/20	Thu 29/10/20	0 edays	146	148FF	
148	148	5.13.11.4	Sub-contract work commencement date (Completed)	24 days	Sat 31/10/20	Mon 23/11/20	Sat 31/10/20	Mon 23/11/...	0 days	147FF		
149	**149**	**5.13.12**	**General - Plumbing Installation (Rev. 5) (04SC021)**	**231 days**	**Wed 01/07/20**	**Tue 16/02/21**	**Wed 01/07/20**	**Tue 16/02/21**	**120 days**			
150	150	5.13.12.1	Submission for acceptance of subcontract works package	30 edays	Wed 01/07/20	Fri 31/07/20	Wed 01/07/20	Fri 31/07/20	0 edays		151	
151	151	5.13.12.2	Invitation of tender for subcontract works	75 edays	Fri 31/07/20	Wed 14/10/20	Fri 31/07/20	Wed 14/10/...	0 edays	150	152	
152	152	5.13.12.3	Retender of subcontract works (Rev. 5)	14 days	Mon 04/01/21	Sun 17/01/21	Mon 04/01/21	Sun 17/01/21	0 days	151	153	
153	153	5.13.12.4	Acceptance of conforming tender (Completed)	30 edays	Sun 17/01/21	Tue 16/02/21	Sun 17/01/21	Tue 16/02/21	0 edays	152	154FF	
154	154	5.13.12.5	Sub-contract work commencement date (Extended)	0 days	Tue 16/02/21	Tue 16/02/21	Tue 16/02/21	Tue 16/02/21	0 days	153FF	1238	
155	**155**	**5.13.13**	**General - Fire Services Installation (Rev. 5) (04SC019)**	**120 days**	**Mon 04/01/21**	**Mon 03/05/21**	**Mon 04/01/21**	**Mon 03/05...**	**153 days**			
156	156	5.13.13.1	Submission for acceptance of subcontract works package	60 days	Mon 04/01/21	Thu 04/03/21	Mon 04/01/21	Thu 04/03/21	0 days		157	
157	157	5.13.13.2	Invitation of tender for subcontract works	30 days	Fri 05/03/21	Sat 03/04/21	Fri 05/03/21	Sat 03/04/21	0 days	156	158	
158	158	5.13.13.3	Acceptance of conforming tender (Completed)	30 days	Sun 04/04/21	Mon 03/05/21	Sun 04/04/21	Mon 03/05/...	0 days	157	159FF	
159	159	5.13.13.4	Sub-contract work commencement date	0 days	Mon 03/05/21	Mon 03/05/21	Mon 03/05/21	Mon 03/05/...	0 days	158FF	1189	
160	**160**	**5.13.14**	**General - Lightning Protection System and Main Earthing System (Rev. 13) (04SC017)**	**90 days**	**Wed 01/09/21**	**Tue 30/11/21**	**Wed 01/09/21**	**Tue 30/11/21**	**0 days**			
161	161	5.13.14.1	Submission for acceptance of subcontract works package (Rev. 13)	30 edays	Wed 01/09/21	Fri 01/10/21	Wed 01/09/21	Fri 01/10/21	0 edays		162	
162	162	5.13.14.2	Invitation of tender for subcontract works (Rev. 13)	30 edays	Fri 01/10/21	Sun 31/10/21	Fri 01/10/21	Sun 31/10/21	0 edays	161	163	
163	163	5.13.14.3	Acceptance of conforming tender (Rev. 13)	30 edays	Sun 31/10/21	Tue 30/11/21	Sun 31/10/21	Tue 30/11/21	0 edays	162	164FF	
164	164	5.13.14.4	Sub-contract work commencement date (Rev. 13)	0 days	Tue 30/11/21	Tue 30/11/21	Tue 30/11/21	Tue 30/11/21	0 days	163FF		
165	**165**	**5.13.15**	**General - CCTV Installation (Rev. 13) (04SC016)**	**121 days**	**Wed 01/09/21**	**Fri 31/12/21**	**Wed 01/09/21**	**Fri 31/12/21**	**0 days**			
166	166	5.13.15.1	Submission for acceptance of subcontract works package	30 edays	Wed 01/09/21	Fri 01/10/21	Wed 01/09/21	Fri 01/10/21	0 edays		167	
167	167	5.13.15.2	Invitation of tender for subcontract works	30 edays	Fri 01/10/21	Sun 31/10/21	Fri 01/10/21	Sun 31/10/21	0 edays	166	168	
168	168	5.13.15.3	Acceptance of conforming tender	30 edays	Sun 31/10/21	Tue 30/11/21	Sun 31/10/21	Tue 30/11/21	31 edays	167	169FF	
169	169	5.13.15.4	Sub-contract work commencement date	0 days	Fri 31/12/21	Fri 31/12/21	Fri 31/12/21	Fri 31/12/21	0 days	168FF		
170	**170**	**5.13.16**	**General - Civil Construction Work for underground pipework (04SC005)**	**40 days**	**Wed 01/07/20**	**Mon 10/08/20**	**Wed 01/07/20**	**Mon 10/08...**	**0 days**			
171	171	5.13.16.1	Submission for acceptance of subcontract works package	14 days	Wed 01/07/20	Tue 14/07/20	Wed 01/07/20	Tue 14/07/20	0 days		172	
172	172	5.13.16.2	Invitation of tender for subcontract works	14 days	Wed 15/07/20	Tue 28/07/20	Wed 15/07/20	Tue 28/07/20	0 days	171	173	



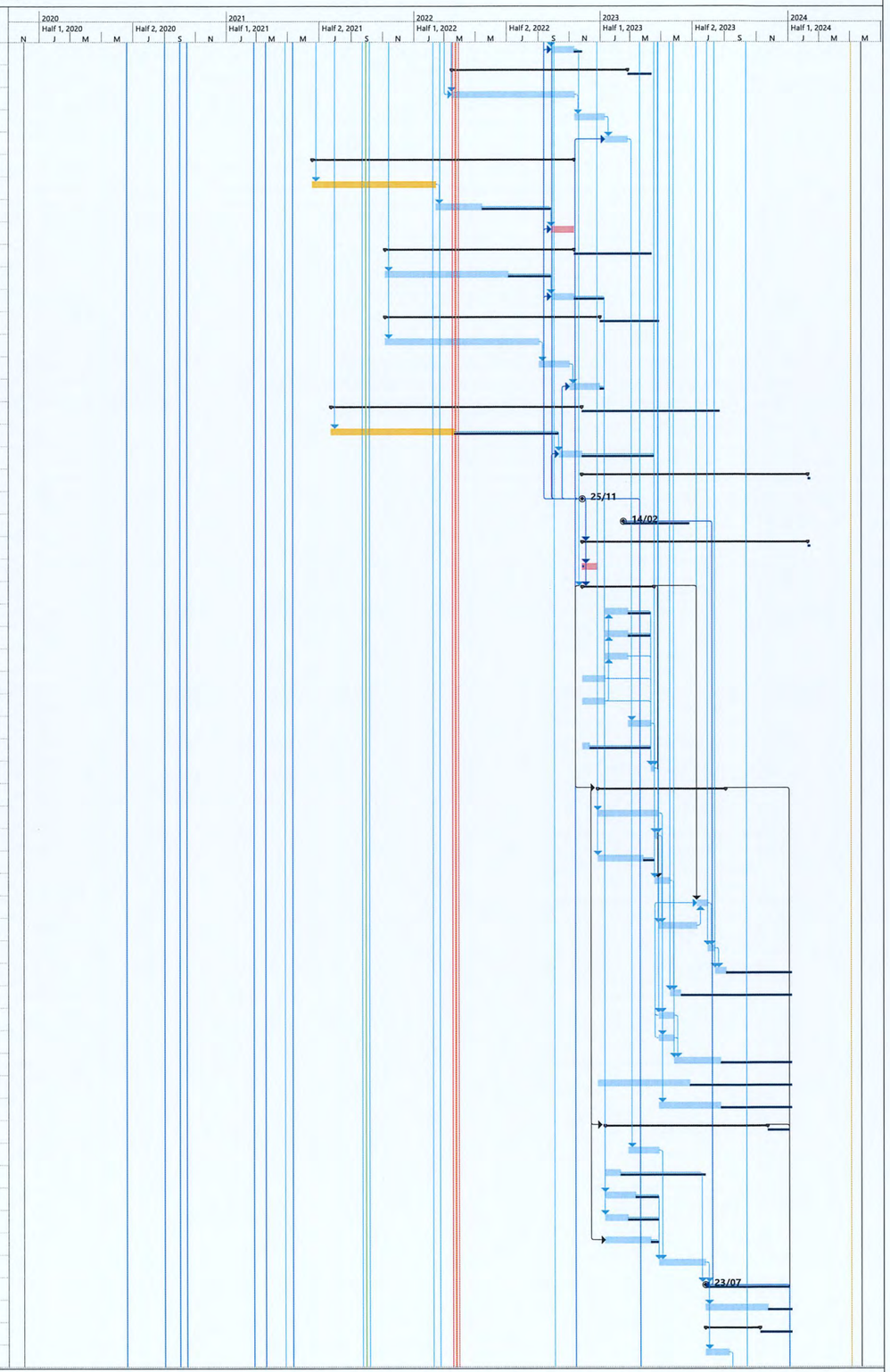
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
173	173	5.13.16.3	Acceptance of conforming tender	7 days	Wed 29/07/20	Tue 04/08/20	Wed 29/07/20	Tue 04/08/20	0 days	172	174FF	
174	174	5.13.16.4	Sub-contract work commencement date (Completed)	0 days	Mon 10/08/20	Mon 10/08/20	Mon 10/08/20	Mon 10/08/...	0 days	173FF		
175	**175**	**5.13.17**	**General - Civil Construction Work for Temp. Filtrate Eq. System (04SC00**	**40 days**	**Wed 01/07/20**	**Mon 10/08/20**	**Wed 01/07/20**	**Mon 10/08...**	**0 days**			
176	176	5.13.17.1	Submission for acceptance of subcontract works package	14 days	Wed 01/07/20	Tue 14/07/20	Wed 01/07/20	Tue 14/07/20	0 days		177	
177	177	5.13.17.2	Invitation of tender for subcontract works	14 days	Wed 15/07/20	Tue 28/07/20	Wed 15/07/20	Tue 28/07/20	0 days	176	178	
178	178	5.13.17.3	Acceptance of conforming tender	7 days	Wed 29/07/20	Tue 04/08/20	Wed 29/07/20	Tue 04/08/20	0 days	177	179FF	
179	179	5.13.17.4	Sub-contract work commencement date (Completed)	0 days	Mon 10/08/20	Mon 10/08/20	Mon 10/08/20	Mon 10/08/...	0 days	178FF		
180	**180**	**5.13.18**	**Mis - Modification of existing power house (04SC010)**	**109 days**	**Mon 24/02/20**	**Fri 12/06/20**	**Mon 24/02/20**	**Fri 12/06/20**	**0 days**			
181	181	5.13.18.1	Submission for acceptance of subcontract works package	90 days	Mon 24/02/20	Sat 23/05/20	Mon 24/02/20	Sat 23/05/20	0 days		182	
182	182	5.13.18.2	Invitation of tender for subcontract works	14 days	Sun 24/05/20	Sat 06/06/20	Sun 24/05/20	Sat 06/06/20	0 days	181	183	
183	183	5.13.18.3	Acceptance of conforming tender	1 day	Sun 07/06/20	Sun 07/06/20	Sun 07/06/20	Sun 07/06/20	0 days	182	184FF	
184	184	5.13.18.4	Sub-contract work commencement date (Completed)	0 days	Fri 12/06/20	Fri 12/06/20	Fri 12/06/20	Fri 12/06/20	0 days	183FF	1160	
185	**185**	**5.14**	**Part C: General Design Submissions**	**788 days**	**Mon 02/12/19**	**Thu 27/01/22**	**Mon 02/12/19**	**Thu 27/01/22**	**0 days**			
186	186	5.14.1	Planned Sectional Completion Date - Section 1	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	187FF,188FF		
187	187	5.14.2	CDS001 - General Design Parameters (Rev. 11)	400 edays	Fri 05/06/20	Sat 10/07/21	Fri 05/06/20	Sat 10/07/21	0 edays		186FF	
188	188	5.14.3	CDS020 - Electrical Installation Typical Details	355 edays	Mon 20/07/20	Sat 10/07/21	Mon 20/07/20	Sat 10/07/21	0 edays		186FF	
189	189	5.14.4	CDS009 - Detailed Design for Plant Service Water System	125 edays	Mon 01/03/21	Sun 04/07/21	Mon 01/03/21	Sun 04/07/21	0 edays		186FF	
190	190	5.14.5	CDS012 - Detailed Design for SCADA System	383.4 edays	Sat 09/01/21	Thu 27/01/22	Sat 09/01/21	Thu 27/01/22	0 edays	131	186FF,254FF,400FF,529FI	
191	191	5.14.6	CDS13-1 - Detailed Design for CCTV System	90 edays	Thu 01/04/21	Wed 30/06/21	Thu 01/04/21	Wed 30/06/...	12.38 edays		186FF	
192	192	5.14.7	CDS13-2 - Detailed Design for Gas Detection and Monitoring System	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		186FF	
193	193	5.14.8	CDS14-1 - Detailed Design for Power monitoring system (PMS)	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		186FF	
194	194	5.14.9	CDS14-2 - Detailed Design for Computerized maintenance and manageme	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		186FF	
195	195	5.14.10	CDS14-3 - Detailed Design for Information and documents management s	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		186FF	
196	196	5.14.11	CDS031 - Detailed Design for MVAC System	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	43.38 edays		186FF	
197	197	5.14.12	CDS042 - Detailed Design for Lightning Protection System	120 edays	Mon 11/01/21	Tue 11/05/21	Mon 11/01/21	Tue 11/05/21	62.38 edays		186FF	
198	198	5.14.13	Design submissions for E&M installation works of existing sludge thickeni	300 edays	Mon 02/12/19	Sun 27/09/20	Mon 02/12/19	Sun 27/09/20	0 edays		186FF	
199	199	5.14.14	Design Submission for Earthing and Lightning (Rev. 8)	147.38 edays	Mon 04/01/21	Mon 31/05/21	Mon 04/01/21	Mon 31/05/...	42 edays		186FF	
200	**200**	**5.15**	**Works Area WA1-C**	**374 days**	**Wed 01/01/20**	**Fri 08/01/21**	**Wed 01/01/20**	**Fri 08/01/21**	**0 days**			
201	201	5.15.1	Actual Access / Handover Date	1 day	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	0 days		205	
202	202	5.15.2	Submission for acceptance of subcontract works package (Site Office) (04	60 days	Wed 01/01/20	Sat 29/02/20	Wed 01/01/20	Sat 29/02/20	0 days	2SS+30 eday	203	
203	203	5.15.3	Invitation of quotations for subcontract works (Site Office)	21 days	Sun 01/03/20	Sat 21/03/20	Sun 01/03/20	Sat 21/03/20	0 days	202	204	
204	204	5.15.4	Acceptance of conforming quotation (Site Office)	10 days	Sun 22/03/20	Tue 31/03/20	Sun 22/03/20	Tue 31/03/20	0 days	203	205	
205	205	5.15.5	Design and Fabrication of the Contractor's Site Accommodations	120 days	Wed 01/04/20	Wed 29/07/20	Wed 01/04/20	Wed 29/07/...	0 days	201,204	211	
206	206	5.15.6	Submission for acceptance of subcontract works package (Site Office Fou	20 days	Fri 01/05/20	Wed 20/05/20	Fri 01/05/20	Wed 20/05/...	0 days		207	
207	207	5.15.7	Invitation of quotations for subcontract works (Site Office Foundation)	18 days	Thu 21/05/20	Sun 07/06/20	Thu 21/05/20	Sun 07/06/20	0 days	206	208	
208	208	5.15.8	Acceptance of conforming quotation (Site foundation)	7 days	Mon 08/06/20	Sun 14/06/20	Mon 08/06/20	Sun 14/06/20	0 days	207	209	
209	209	5.15.9	Design and Construction of the Contractor's Site Office foundation	30 days	Mon 15/06/20	Tue 14/07/20	Mon 15/06/20	Tue 14/07/20	0 days	208	210	
210	210	5.15.10	Construction of Contractor's Site Office foundation (Completed)	47 days	Wed 15/07/20	Sun 30/08/20	Wed 15/07/20	Sun 30/08/20	0 days	209	211	
211	211	5.15.11	Site Installation of the Contractor's Site Accommodations (MiC) (Rev. 5)	120 days	Mon 31/08/20	Mon 28/12/20	Mon 31/08/20	Mon 28/12/...	0 days	205,210	212	
212	212	5.15.12	Anticipated date of working at site (Rev. 5) (Completed)	4 days	Tue 05/01/21	Fri 08/01/21	Tue 05/01/21	Fri 08/01/21	0 days	211		
213	**213**	**5.16**	**Works Area WA2-C**	**1 day**	**Fri 21/02/20**	**Fri 21/02/20**	**Fri 21/02/20**	**Fri 21/02/20**	**0 days**			
214	214	5.16.1	Actual Access / Handover Date	1 day	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	Fri 21/02/20	0 days			
215	**215**	**5.17**	**Inlet Works No. 1, Portion B-2 (PS 6B.2.1)**	**1400 days**	**Mon 01/06/20**	**Mon 01/04/24**	**Mon 01/06/20**	**Mon 01/04...**	**0 days**			
216	216	5.17.1	Planned Key Date Completion Date - KD1A, IW	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	0 days	250FF,251FI		
217	217	5.17.2	Planned Key Date Completion Date - KD1B, IW	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	252FF		
218	218	5.17.3	Planned Sectional Completion Date - Section 1, IW	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	253FF,254FI		
219	219	5.17.4	Planned Sectional Completion Date - Section 2, IW	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
220	**220**	**5.17.5**	**Selection of Suppliers for major plant and materials for Inlet Works No.**	**335 days**	**Mon 01/06/20**	**Sat 01/05/21**	**Mon 01/06/20**	**Sat 01/05/21**	**0 days**			
221	**221**	**5.17.5.1**	**Inlet Works - inlet Pumps (Marking Scheme Approach), C11, ref. EQT006**	**120 days**	**Mon 01/06/20**	**Mon 28/09/20**	**Mon 01/06/20**	**Mon 28/09/20**	**0 days**			
222	222	5.17.5.1.1	Submission for acceptance of purchasing package including proposed marking scheme	60 days	Mon 01/06/20	Thu 30/07/20	Mon 01/06/20	Thu 30/07/20	0 days		223	
223	223	5.17.5.1.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	222	224	
224	224	5.17.5.1.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	223	253	
225	**225**	**5.17.5.2**	**Inlet Works - mechanical raked bar screens, C11, ref. EQT052**	**58 days**	**Fri 26/06/20**	**Sat 22/08/20**	**Fri 26/06/20**	**Sat 22/08/20**	**0 days**			
226	226	5.17.5.2.1	Submission for acceptance of purchasing package	14 days	Fri 26/06/20	Thu 09/07/20	Fri 26/06/20	Thu 09/07/20	0 days		227	
227	227	5.17.5.2.2	Invitation of quotations for purchasing package	14 days	Fri 10/07/20	Thu 23/07/20	Fri 10/07/20	Thu 23/07/20	0 days	226	228	
228	228	5.17.5.2.3	Acceptance of conforming quotation (Completed)	30 days	Fri 24/07/20	Sat 22/08/20	Fri 24/07/20	Sat 22/08/20	0 days	227	253	
229	**229**	**5.17.5.3**	**Inlet Works - screening conveyors and Diverters, C11, ref. EQT053**	**74 days**	**Wed 01/07/20**	**Sat 12/09/20**	**Wed 01/07/20**	**Sat 12/09/20**	**0 days**			
230	230	5.17.5.3.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		231	



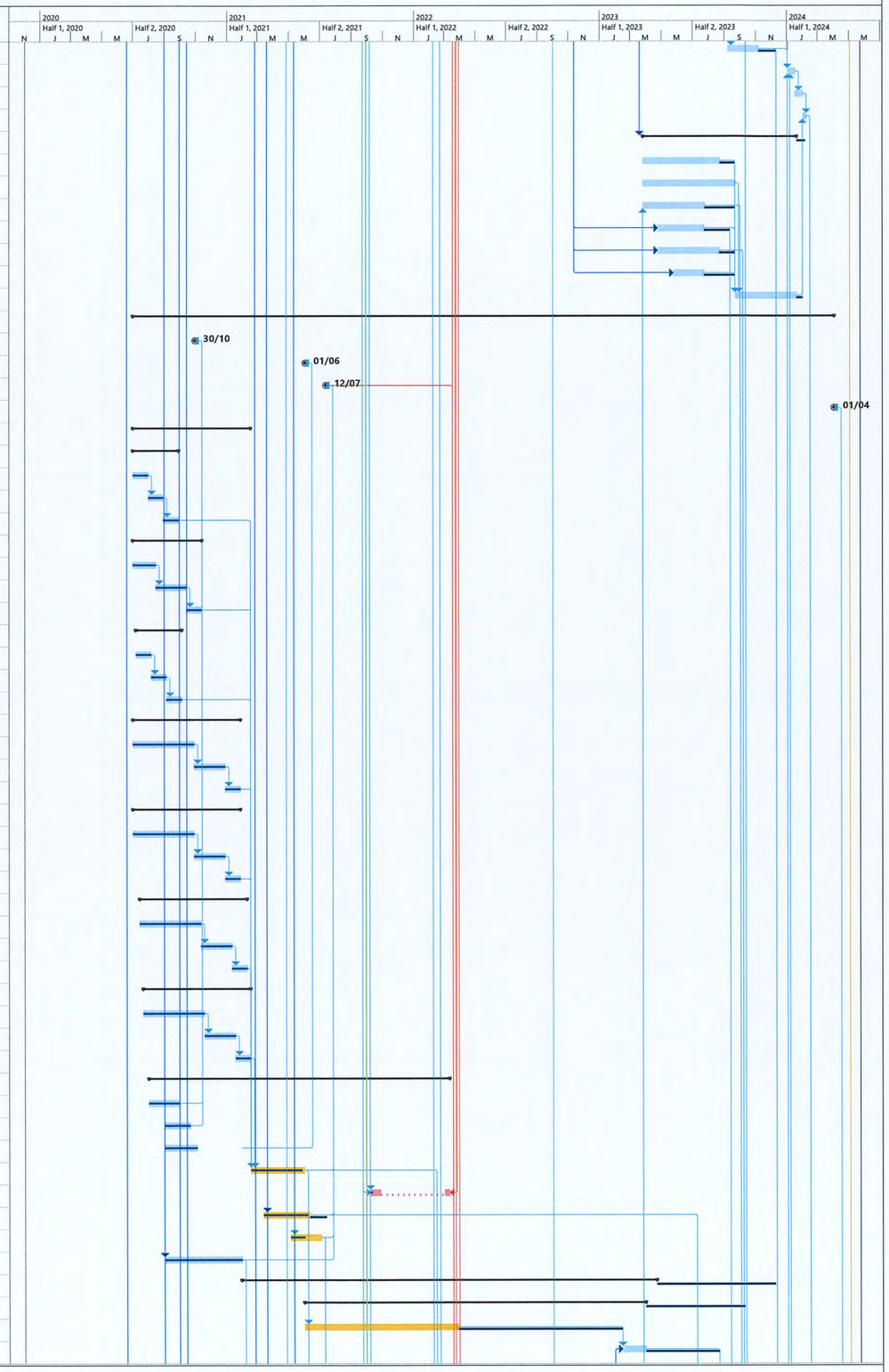
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
231	231	5.17.5.3.2	Invitation of quotations for purchasing package	14 days	Fri 31/07/20	Thu 13/08/20	Fri 31/07/20	Thu 13/08/20	0 days	230	232	
232	232	5.17.5.3.3	Acceptance of conforming quotation (Completed)	30 days	Fri 14/08/20	Sat 12/09/20	Fri 14/08/20	Sat 12/09/20	0 days	231	253	
233	**233**	**5.17.5.4**	**Inlet Works - screening screw type compactors, C11, ref. EQT003**	**105 days**	**Wed 01/07/20**	**Tue 13/10/20**	**Wed 01/07/20**	**Tue 13/10/20**	**0 days**			
234	234	5.17.5.4.1	Submission for acceptance of purchasing package	45 days	Wed 01/07/20	Fri 14/08/20	Wed 01/07/20	Fri 14/08/20	0 days		235	
235	235	5.17.5.4.2	Invitation of quotations for purchasing package	30 days	Sat 15/08/20	Sun 13/09/20	Sat 15/08/20	Sun 13/09/20	0 days	234	236	
236	236	5.17.5.4.3	Acceptance of conforming quotation (Completed)	30 days	Mon 14/09/20	Tue 13/10/20	Mon 14/09/20	Tue 13/10/20	0 days	235	253	
237	**237**	**5.17.5.5**	**Inlet Works - grit removal system, C11, ref. EQT004**	**90 days**	**Wed 01/07/20**	**Mon 28/09/20**	**Wed 01/07/20**	**Mon 28/09/20**	**0 days**			
238	238	5.17.5.5.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		239	
239	239	5.17.5.5.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	238	240	
240	240	5.17.5.5.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	239	253	
241	**241**	**5.17.5.6**	**Inlet Works - grit classifiers, C11, ref. EQT005**	**90 days**	**Wed 01/07/20**	**Mon 28/09/20**	**Wed 01/07/20**	**Mon 28/09/20**	**0 days**			
242	242	5.17.5.6.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		243	
243	243	5.17.5.6.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	242	244	
244	244	5.17.5.6.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	243	253	
245	**245**	**5.17.5.7**	**Inlet Works - Fixed Bar Screen, C11, ref. EQT046 (Rev. 10)**	**310 days**	**Fri 26/06/20**	**Sat 01/05/21**	**Fri 26/06/20**	**Sat 01/05/21**	**0 days**			
246	246	5.17.5.7.1	Submission for acceptance of purchasing package	14 days	Fri 26/06/20	Thu 09/07/20	Fri 26/06/20	Thu 09/07/20	0 days		247	
247	247	5.17.5.7.2	Invitation of quotations for purchasing package	266 days	Fri 10/07/20	Thu 01/04/21	Fri 10/07/20	Thu 01/04/21	0 days	246	248	
248	248	5.17.5.7.3	Acceptance of conforming quotation (Rev. 10)	30 days	Fri 02/04/21	Sat 01/05/21	Fri 02/04/21	Sat 01/05/21	0 days	247	253	
249	**249**	**5.17.6**	**Design Submissions for IW**	**479 days**	**Wed 15/07/20**	**Sat 06/11/21**	**Wed 15/07/20**	**Sat 06/11/21**	**0 days**			
250	250	5.17.6.1	Electrical schematic drawings for Inlet Works No. 1	90 days	Wed 15/07/20	Mon 12/10/20	Wed 15/07/20	Mon 12/10/...	0 days		216FF	
251	251	5.17.6.2	CDS080-1 - Civil and dimensional requirements drawings for Inlet Works No. 1	45 days	Tue 01/09/20	Thu 15/10/20	Tue 01/09/20	Thu 15/10/20	0 days		216FF	
252	252	5.17.6.3	CDS081-1 - Civil and dimensional requirements drawings for Inlet Work	210 days	Fri 28/08/20	Thu 25/03/21	Fri 28/08/20	Thu 25/03/21	0 days		217FF	
253	253	5.17.6.4	CDS002 - Detailed Design for Inlet Works No. 1	144 edays	Mon 01/03/21	Fri 23/07/21	Mon 01/03/21	Fri 23/07/21	0 edays	228,232,224	261,283,268,271,274,277	
254	254	5.17.6.5	CDS021 - Detailed Design for Electrical Installations for Inlet Works No.	166.63 edays	Sun 23/05/21	Sat 06/11/21	Sun 23/05/21	Sat 06/11/21	0 edays	75,81,85,89,	76,300,292,303,218FF	
255	255	5.17.6.6	CDS034-1 - Detailed Design for Electrical Installations BS at Inlet Works	120 edays	Fri 12/03/21	Sat 10/07/21	Fri 12/03/21	Sat 10/07/21	0 edays	136	353,218FF	
256	256	5.17.6.7	CDS025-1 - Detailed Design for LV Switchboards for Inlet Works No. 1	60 edays	Mon 03/05/21	Fri 02/07/21	Mon 03/05/21	Fri 02/07/21	10 edays	71	292,218FF	
257	257	5.17.6.8	CDS026-1 - Detailed Design for HV Switchboards for Inlet Works No. 1	60 edays	Sun 18/04/21	Thu 17/06/21	Sun 18/04/21	Thu 17/06/21	0.63 edays	67	296,218FF	
258	258	5.17.6.9	CDS050-1 - Detailed Design for Lifting Appliances - Inlet Works No. 1	210 edays	Tue 01/09/20	Tue 30/03/21	Tue 01/09/20	Tue 30/03/21	0 edays	116	289,218FF	
259	**259**	**5.17.7**	**Manufacturing and Delivery of Plant & Materials**	**696 days**	**Tue 30/03/21**	**Thu 23/02/23**	**Tue 30/03/21**	**Thu 23/02/23**	**215 days**			
260	**260**	**5.17.7.1**	**Inlet Pumps, EQT006**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**352 days**			
261	261	5.17.7.1.1	Manufacturing of Inlet Pumps, EQT006	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	0 days	253	262	
262	262	5.17.7.1.2	Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Mon 21/03/22	Thu 19/05/22	Mon 21/03/22	Thu 19/05/22	129 days	261	263	
263	263	5.17.7.1.3	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	225 days	262,310SS-6	328	
264	**264**	**5.17.7.2**	**Mechanical Raked Bar Screen, EQT052**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**31 days**		**324**	
265	265	5.17.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	253	266	
266	266	5.17.7.2.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	31 days	265,310SS-6	326,329	
267	**267**	**5.17.7.3**	**Screening Conveyors and Diverters, EQT053**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**357 days**			
268	268	5.17.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	253	269	
269	269	5.17.7.3.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	143 days	268,310SS-6	327	
270	**270**	**5.17.7.4**	**Screening Screw Type Compactors, EQT003**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**31 days**		**324**	
271	271	5.17.7.4.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	253	272	
272	272	5.17.7.4.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	173 days	271,310SS-6	332	
273	**273**	**5.17.7.5**	**Grit Removal System, EQT004**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**373 days**			
274	274	5.17.7.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	253	275	
275	275	5.17.7.5.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	246 days	274,310SS-6	330	
276	**276**	**5.17.7.6**	**Grit Classifiers, EQT005**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**387 days**			
277	277	5.17.7.6.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	189 days	253	278	
278	278	5.17.7.6.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	260 days	277,310SS-6	331	
279	**279**	**5.17.7.7**	**Pipework, EQT036 (Rev. 11)**	**438 days**	**Mon 13/09/21**	**Thu 24/11/22**	**Mon 13/09/21**	**Thu 24/11/22**	**288 days**	**56**		
280	280	5.17.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 13/09/21	Tue 10/05/22	Mon 13/09/21	Tue 10/05/22	138 days	253	281	
281	281	5.17.7.7.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	151 days	280,310SS-6	333	
282	**282**	**5.17.7.8**	**Stoplogs and Penstocks, EQT013**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**168 days**			
283	283	5.17.7.8.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 24/07/21	Thu 19/05/22	Sat 24/07/21	Thu 19/05/22	129 days	253	284	
284	284	5.17.7.8.2	Shipping and Delivery of Plant to site	60 days	Mon 26/09/22	Thu 24/11/22	Mon 26/09/22	Thu 24/11/22	31 days	283,310SS-6	324	
285	**285**	**5.17.7.9**	**Valves and Actuators, EQT036, EQT042 (Rev. 11)**	**300 days**	**Mon 14/02/22**	**Sat 10/12/22**	**Mon 14/02/22**	**Sat 10/12/22**	**272 days**	**56,63**		
286	286	5.17.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 14/02/22	Tue 11/10/22	Mon 14/02/22	Tue 11/10/22	0 days	253	287	
287	287	5.17.7.9.2	Shipping and Delivery of Plant to site	60 days	Wed 12/10/22	Sat 10/12/22	Wed 12/10/22	Sat 10/12/22	135 days	286,310SS-6	333	
288	**288**	**5.17.7.10**	**Lifting Appliances**	**590 days**	**Tue 30/03/21**	**Wed 09/11/22**	**Tue 30/03/21**	**Wed 09/11...**	**143 days**			
289	289	5.17.7.10.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Tue 30/03/21	Wed 24/11/21	Tue 30/03/21	Wed 24/11/...	305 days	258	290	



ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
290	290	5.17.7.10.2	Shipping and Delivery of Plant to site	45 days	Mon 26/09/22	Wed 09/11/22	Mon 26/09/22	Wed 09/11/...	16 days	289,310SS-6	314	
291	**291**	**5.17.7.11**	**LV Switchboards**	**345 days**	**Wed 16/03/22**	**Thu 23/02/23**	**Wed 16/03/22**	**Thu 23/02/23**	**47 days**			
292	292	5.17.7.11.1	IW - Manufacturing of Plant	240 days	Wed 16/03/22	Thu 10/11/22	Wed 16/03/22	Thu 10/11/22	0 days	254,256,77	293	
293	293	5.17.7.11.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Fri 11/11/22	Mon 09/01/23	Fri 11/11/22	Mon 09/01/...	0 days	292	294	
294	294	5.17.7.11.3	IW - Shipping and Delivery of Plant to site	45 days	Tue 10/01/23	Thu 23/02/23	Tue 10/01/23	Thu 23/02/23	0 days	310SS-60 ed	339	
295	**295**	**5.17.7.12**	**HV Switchboards, EQT031**	**510 days**	**Fri 18/06/21**	**Wed 09/11/22**	**Fri 18/06/21**	**Wed 09/11...**	**0 days**			
296	296	5.17.7.12.1	IW - Manufacturing of Plant	240 days	Fri 18/06/21	Sat 12/02/22	Fri 18/06/21	Sat 12/02/22	0 days	257	297	
297	297	5.17.7.12.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Sun 13/02/22	Fri 13/05/22	Sun 13/02/22	Fri 13/05/22	135 days	296	298	
298	298	5.17.7.12.3	IW - Shipping and Delivery of Plant to site	45 days	Mon 26/09/22	Wed 09/11/22	Mon 26/09/22	Wed 09/11/...	0 days	297,310SS-6		
299	**299**	**5.17.7.13**	**11kV/380V Stepdown Power Transformers, EQT032**	**369 days**	**Sat 06/11/21**	**Wed 09/11/22**	**Sat 06/11/21**	**Wed 09/11...**	**153 days**			
300	300	5.17.7.13.1	IW - Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 06/11/21	Sun 03/07/22	Sat 06/11/21	Sun 03/07/22	84 days	254	301	
301	301	5.17.7.13.2	IW - Shipping and Delivery of Plant to site	45 days	Mon 26/09/22	Wed 09/11/22	Mon 26/09/22	Wed 09/11/...	60 days	300,310SS-6	341	
302	**302**	**5.17.7.14**	**PLC System**	**420 days**	**Sat 06/11/21**	**Fri 30/12/22**	**Sat 06/11/21**	**Fri 30/12/22**	**117 days**			
303	303	5.17.7.14.1	Manufacturing of Plant, PLC for IW	300 days	Sat 06/11/21	Thu 01/09/22	Sat 06/11/21	Thu 01/09/22	0 days	254	304	
304	304	5.17.7.14.2	Factory Acceptance Test of Plant, PLC for IW (To be witnessed by PM	60 days	Fri 02/09/22	Mon 31/10/22	Fri 02/09/22	Mon 31/10/...	0 days	303	305	
305	305	5.17.7.14.3	Shipping and Delivery of Plant to site	60 days	Tue 01/11/22	Fri 30/12/22	Tue 01/11/22	Fri 30/12/22	9 days	310SS-60 ed	342	
306	**306**	**5.17.7.15**	**Fixed Bar Screen, EQT046**	**489 days**	**Sat 24/07/21**	**Thu 24/11/22**	**Sat 24/07/21**	**Thu 24/11/22**	**270 days**			
307	307	5.17.7.15.1	IW - Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	204 days	253	308	
308	308	5.17.7.15.2	IW - Shipping and Delivery of Plant to site	45 days	Tue 11/10/22	Thu 24/11/22	Tue 11/10/22	Thu 24/11/22	143 days	307,310SS-4	325	
309	**309**	**5.17.8**	**Site Installation Work**	**440 days**	**Fri 25/11/22**	**Wed 07/02/24**	**Fri 25/11/22**	**Wed 07/02...**	**5 days**			
310	310	5.17.8.1	Tentative Civil Handover Date, Portion B-2, Inlet Works No. 1 (Rev. 5)	1 day	Fri 25/11/22	Fri 25/11/22	Fri 25/11/22	Fri 25/11/22	0 days		314,312,353FS+120 days,	
311	311	5.17.8.2	Tentative Civil Handover Date, HV cables draw pits from MFB2 to IW	1 day	Tue 14/02/23	Tue 14/02/23	Tue 14/02/23	Tue 14/02/23	129 days		345FF+30 days	
312	**312**	**5.17.8.3**	**Commencement of E&M Installation at Inlet Works No. 1**	**439 days**	**Sat 26/11/22**	**Wed 07/02/24**	**Sat 26/11/22**	**Wed 07/02...**	**5 days**	**310**		
313	313	5.17.8.3.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, W	30 days	Sat 26/11/22	Sun 25/12/22	Sat 26/11/22	Sun 25/12/22	0 days	310		
314	**314**	**5.17.8.3.2**	**Installation of Lifting Appliances at Inlet Works No. 1**	**142 days**	**Sat 26/11/22**	**Sun 16/04/23**	**Sat 26/11/22**	**Sun 16/04/23**	**0 days**	**310,290**	**323SS+30 days,327,328**	
315	315	5.17.8.3.2.1	1/F EOT Crane LA-01-01 SWL 5t	45 days	Tue 10/01/23	Thu 23/02/23	Tue 10/01/23	Thu 23/02/23	45 days	318,319	322	LA - A x 4~6 men
316	316	5.17.8.3.2.2	1/F EOT Crane LA-01-02 SWL 5t	45 days	Tue 10/01/23	Thu 23/02/23	Tue 10/01/23	Thu 23/02/23	45 days	318,319	322	LA - B x 4~6 men
317	317	5.17.8.3.2.3	1/F EOT Crane LA-01-03 SWL 5t	45 days	Tue 10/01/23	Thu 23/02/23	Tue 10/01/23	Thu 23/02/23	0 days	318,319	320,322	LA - C x 4~6 men
318	318	5.17.8.3.2.4	UG EOT Crane LA-01-04 SWL 10t	45 days	Sat 26/11/22	Mon 09/01/23	Sat 26/11/22	Mon 09/01/...	0 days		315,316,317,322	LA - A x 4~6 men
319	319	5.17.8.3.2.5	UG EOT Crane LA-01-05 SWL 10t	45 days	Sat 26/11/22	Mon 09/01/23	Sat 26/11/22	Mon 09/01/...	0 days		315,316,317,322	LA - B x 4~6 men
320	320	5.17.8.3.2.6	1/F Retractable Crane LA-01-06 SWL 10t	45 days	Fri 24/02/23	Sun 09/04/23	Fri 24/02/23	Sun 09/04/23	0 days	317	322	LA - C x 4~6 men
321	321	5.17.8.3.2.7	Submission of T&C Plan and Procedures of LA for acceptance	14 days	Sat 26/11/22	Fri 09/12/22	Sat 26/11/22	Fri 09/12/22	121 days		322	
322	322	5.17.8.3.2.8	T&C, Loading Test for Lifting Appliances	7 days	Mon 10/04/23	Sun 16/04/23	Mon 10/04/23	Sun 16/04/23	0 days	315,316,317	325	LA - B x 4~6 men
323	**323**	**5.17.8.3.3**	**Mechanical Installations for Inlet Works No. 1**	**250 days**	**Mon 26/12/22**	**Fri 01/09/23**	**Mon 26/12/22**	**Fri 01/09/23**	**0 days**	**314SS+30 d**	**338SS+14 days,350,343S**	
324	324	5.17.8.3.3.1	Installation of penstocks and stoplogs (Penstock 35nos, Stoplogs 3	120 days	Mon 26/12/22	Mon 24/04/23	Mon 26/12/22	Mon 24/04/...	0 days	270,264,284	333,334,337	ME - E x 4~6 men
325	325	5.17.8.3.3.2	Installation of fixed bar screen (x1), EQT046	7 days	Mon 17/04/23	Sun 23/04/23	Mon 17/04/23	Sun 23/04/23	0 days	322,308	329	ME - D x 2~4 men
326	326	5.17.8.3.3.3	Installation of mechanical raked coarse bar screens (x4), EQT052	90 days	Mon 26/12/22	Sat 25/03/23	Mon 26/12/22	Sat 25/03/23	22 days	266	327	ME - A x 4~6 men
327	327	5.17.8.3.3.4	Installation of screening conveyors (x6), EQT053	30 days	Mon 17/04/23	Tue 16/05/23	Mon 17/04/23	Tue 16/05/23	0 days	314,326,265	332	ME - A x 4~6 men
328	328	5.17.8.3.3.5	Installation of inlet pumps (x5), EQT006	21 days	Sat 08/07/23	Fri 28/07/23	Sat 08/07/23	Fri 28/07/23	0 days	314,333SS+	330	ME - B x 4~6 men
329	329	5.17.8.3.3.6	Installation of mechanical raked fine bar screens (x4), EQT052	75 days	Mon 24/04/23	Fri 07/07/23	Mon 24/04/23	Fri 07/07/23	0 days	325,266	328	ME - B x 4~6 men
330	330	5.17.8.3.3.7	Installation of grit removal system (x3), EQT004	14 days	Sat 29/07/23	Fri 11/08/23	Sat 29/07/23	Fri 11/08/23	0 days	328,275	331	ME - B x 4~6 men
331	331	5.17.8.3.3.8	Installation of grit classifiers (x2), EQT005	21 days	Sat 12/08/23	Fri 01/09/23	Sat 12/08/23	Fri 01/09/23	127 days	330,278		ME - B x 4~6 men
332	332	5.17.8.3.3.9	Installation of compactors (x2), EQT003	21 days	Wed 17/05/23	Tue 06/06/23	Wed 17/05/23	Tue 06/06/23	214 days	327,272		ME - A x 4~6 men
333	333	5.17.8.3.3.10	Installation of pipework and valves, EQT036	30 days	Tue 25/04/23	Wed 24/05/23	Tue 25/04/23	Wed 24/05/...	0 days	324,281,287	328SS+14 days,335	ME - D x 2~4 men
334	334	5.17.8.3.3.11	Pipework pressure tests	30 days	Tue 25/04/23	Wed 24/05/23	Tue 25/04/23	Wed 24/05/...	0 days	324	328SS+14 days,335	ME - D x 2~4 men
335	335	5.17.8.3.3.12	Installation of instrumentations, EQT035-1	90 days	Thu 25/05/23	Tue 22/08/23	Thu 25/05/23	Tue 22/08/23	137 days	333,334,52		ME - A x 4~6 men
336	336	5.17.8.3.3.13	Installation of Platforms, Covers etc, EQT050	180 days	Mon 26/12/22	Fri 23/06/23	Mon 26/12/22	Fri 23/06/23	197 days			ME - D x 2~4 men
337	337	5.17.8.3.3.14	Site Acceptance Tests - mechanical aspects including alignment an	120 days	Tue 25/04/23	Tue 22/08/23	Tue 25/04/23	Tue 22/08/23	137 days	324		ME - D x 2~4 men
338	**338**	**5.17.8.3.4**	**Electrical Installations for Inlet Works No. 1**	**316 days**	**Mon 09/01/23**	**Mon 20/11/23**	**Mon 09/01/23**	**Mon 20/11...**	**42 days**	**323SS+14 d**	**350**	
339	339	5.17.8.3.4.1	Installation of LV Switchboards, IW	60 days	Fri 24/02/23	Mon 24/04/23	Fri 24/02/23	Mon 24/04/...	0 days	294	344	LV - A x 4~6 men
340	340	5.17.8.3.4.2	Modification of HV Switchboards, MFB No. 1 (Rev. 8)	30 days	Mon 09/01/23	Tue 07/02/23	Mon 09/01/23	Tue 07/02/23	166 days		345	LV - A x 4~6 men
341	341	5.17.8.3.4.3	Installation of Transformer, IW, EQT032	60 days	Mon 09/01/23	Thu 09/03/23	Mon 09/01/23	Thu 09/03/23	46 days	301	344	EE - A x 4~6 men
342	342	5.17.8.3.4.4	Installation of PLC Panels, IW	45 days	Mon 09/01/23	Wed 22/02/23	Mon 09/01/23	Wed 22/02/...	61 days	305	344	EE - B x 4~6 men
343	343	5.17.8.3.4.5	Installation of cable trays and cable containments	90 days	Mon 09/01/23	Sat 08/04/23	Mon 09/01/23	Sat 08/04/23	16 days	323SS	344	EE - C x 4~6 men
344	344	5.17.8.3.4.6	Cables laying and terminations	90 days	Tue 25/04/23	Sun 23/07/23	Tue 25/04/23	Sun 23/07/23	0 days	339,341,342	345,348,346	EE - C x 4~6 men
345	345	5.17.8.3.4.7	Energisation of LV Switchboards, IW	0 days	Sun 23/07/23	Sun 23/07/23	Sun 23/07/23	Sun 23/07/23	162 days	344,311FF+	350	LV - A x 4~6 men
346	346	5.17.8.3.4.8	Site Acceptance Tests - Electrical aspects including voltage and cur	120 days	Mon 24/07/23	Mon 20/11/23	Mon 24/07/23	Mon 20/11/...	47 days	344		LV - A x 4~6 men
347	**347**	**5.17.8.3.5**	**SCADA Systems, Inlet Works**	**105 days**	**Mon 24/07/23**	**Sun 05/11/23**	**Mon 24/07/23**	**Sun 05/11/23**	**62 days**			
348	348	5.17.8.3.5.1	Configuration of PLC System, IW	45 days	Mon 24/07/23	Wed 06/09/23	Mon 24/07/23	Wed 06/09/...	0 days	344	349	PLC - A x 1 man



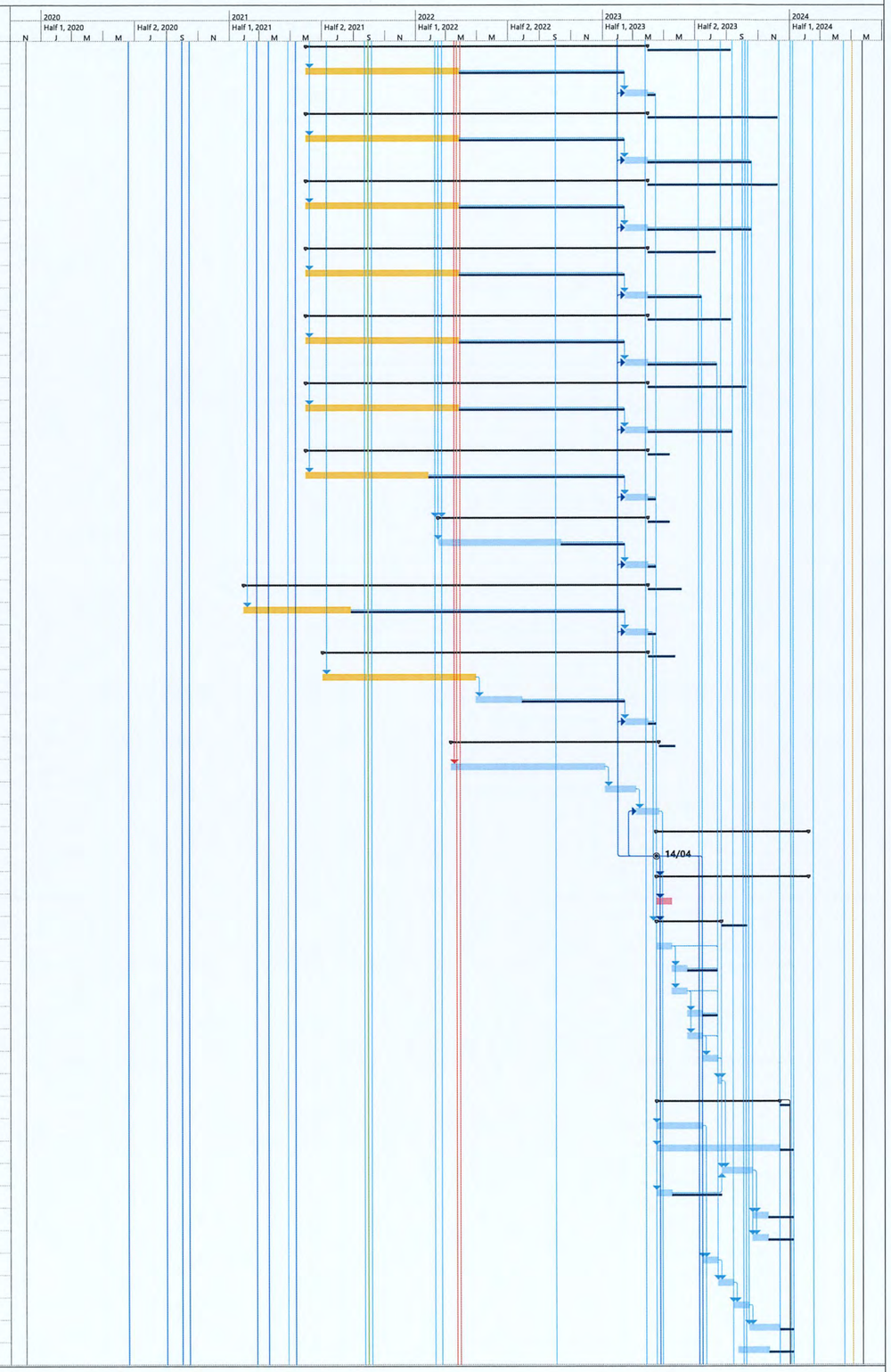
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
349	349	5.17.8.3.5.1	Site Acceptance Test for PLC System at Inlet Works No. 1	60 days	Thu 07/09/23	Sun 05/11/23	Thu 07/09/23	Sun 05/11/23	35 days	348	350,1275	
350	350	5.17.8.3.6	Site Acceptance Test for E&M Equip & Instrumentations calibration,	15 days	Tue 02/01/24	Tue 16/01/24	Tue 02/01/24	Tue 16/01/24	0 days	323,338,345	351	
351	351	5.17.8.3.7	System Commissioning for E&M Equip at Inlet Works No. 1	15 edays	Tue 16/01/24	Wed 31/01/24	Tue 16/01/24	Wed 31/01/...	0 edays	350	352	
352	352	5.17.8.3.8	Risk Allowances for completion of Processing Plant at Inlet Works No	7 edays	Wed 31/01/24	Wed 07/02/24	Wed 31/01/24	Wed 07/02/...	0.63 edays	351,360	1271	
353	**353**	**5.17.8.3.9**	**Building Services Installations for Inlet Works No. 1**	**300 days**	**Sun 26/03/23**	**Fri 19/01/24**	**Sun 26/03/23**	**Fri 19/01/24**	**17 days**	**310FS+120**		
354	354	5.17.8.3.9.1	Mechanical Ventilation and Air Conditioning System, IW	150 days	Sun 26/03/23	Tue 22/08/23	Sun 26/03/23	Tue 22/08/23	30 days		360	MVAC - B x 4~6 men
355	355	5.17.8.3.9.2	Lighting and Power Distribution System, IW	180 days	Sun 26/03/23	Thu 21/09/23	Sun 26/03/23	Thu 21/09/23	0 days		360	BS - A x 4~6 men
356	356	5.17.8.3.9.3	Plumbing Installation, IW	120 days	Sun 26/03/23	Sun 23/07/23	Sun 26/03/23	Sun 23/07/23	60 days	1242	1244,360	Pb - A x 4~6 men
357	357	5.17.8.3.9.4	CCTV Installation (5 indoor +5 outdoor Cameras), IW	90 days	Mon 24/04/23	Sat 22/07/23	Mon 24/04/23	Sat 22/07/23	51 days	310SS+150	360,1274	BS - B x 4~6 men
358	358	5.17.8.3.9.5	Fire Services Installation, IW	120 days	Mon 24/04/23	Mon 21/08/23	Mon 24/04/23	Mon 21/08/...	31 days	310SS+150	1195,1207,1208,360	FS - A x 4~6 men
359	359	5.17.8.3.9.6	Earthing and Lightning Protection System, IW	60 days	Wed 24/05/23	Sat 22/07/23	Wed 24/05/23	Sat 22/07/23	61 days	310SS+180	360	BS - C x 2~4 men
360	360	5.17.8.3.9.7	Testing and Commissioning of Building Services Installations, IW	120 days	Fri 22/09/23	Fri 19/01/24	Fri 22/09/23	Fri 19/01/24	12 days	354,355,35	352	BS - C x 2~4 men
361	**361**	**5.18**	**Primary Sedimentation Tanks No. 1 ~ 4, Portion B-3 (PS 6B2.2)**	**1371 days**	**Wed 01/07/20**	**Mon 01/04/24**	**Wed 01/07/20**	**Mon 01/04...**	**0 days**			
362	362	5.18.1	Planned Key Date Completion Date - KD1A, PST No. 1~4	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	0 days	396FF,397FF		
363	363	5.18.2	Planned Key Date Completion Date - KD1B, PST No. 1~4	1 day	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	398FF		
364	364	5.18.3	Planned Sectional Completion Date - Section 1, PST No. 1~4	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	401FF,400FF		
365	365	5.18.4	Planned Sectional Completion Date - Section 2, PST No. 1~4	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days	489FF		
366	**366**	**5.18.5**	**Selection of Suppliers for major plant and materials for PST No. 1~4**	**230 days**	**Wed 01/07/20**	**Mon 15/02/21**	**Wed 01/07/20**	**Mon 15/02...**	**0 days**			
367	**367**	**5.18.5.1**	**PST - lamella plate settlers, C11, ref. EQT014**	**90 days**	**Wed 01/07/20**	**Mon 28/09/20**	**Wed 01/07/20**	**Mon 28/09/20**	**0 days**			
368	368	5.18.5.1.1	Submission for acceptance of purchasing package	30 days	Wed 01/07/20	Thu 30/07/20	Wed 01/07/20	Thu 30/07/20	0 days		369	
369	369	5.18.5.1.2	Invitation of quotations for purchasing package	30 days	Fri 31/07/20	Sat 29/08/20	Fri 31/07/20	Sat 29/08/20	0 days	368	370	
370	370	5.18.5.1.3	Acceptance of conforming quotation (Completed)	30 days	Sun 30/08/20	Mon 28/09/20	Sun 30/08/20	Mon 28/09/20	0 days	369	399	
371	**371**	**5.18.5.2**	**PST - reciprocating type bottom scrapers, C11, ref. EQT014**	**135 days**	**Wed 01/07/20**	**Thu 12/11/20**	**Wed 01/07/20**	**Thu 12/11/20**	**0 days**			
372	372	5.18.5.2.1	Submission for acceptance of purchasing package	45 days	Wed 01/07/20	Fri 14/08/20	Wed 01/07/20	Fri 14/08/20	0 days		373	
373	373	5.18.5.2.2	Invitation of quotations for purchasing package	60 days	Sat 15/08/20	Tue 13/10/20	Sat 15/08/20	Tue 13/10/20	0 days	372	374	
374	374	5.18.5.2.3	Acceptance of conforming quotation (Completed)	30 days	Wed 14/10/20	Thu 12/11/20	Wed 14/10/20	Thu 12/11/20	0 days	373	399	
375	**375**	**5.18.5.3**	**PST - surface scum skimmers, C11, ref. EQT015**	**90 days**	**Tue 07/07/20**	**Sun 04/10/20**	**Tue 07/07/20**	**Sun 04/10/20**	**0 days**			
376	376	5.18.5.3.1	Submission for acceptance of purchasing package	30 days	Tue 07/07/20	Wed 05/08/20	Tue 07/07/20	Wed 05/08/20	0 days		377	
377	377	5.18.5.3.2	Invitation of quotations for purchasing package	30 days	Thu 06/08/20	Fri 04/09/20	Thu 06/08/20	Fri 04/09/20	0 days	376	378	
378	378	5.18.5.3.3	Acceptance of conforming quotation	30 days	Sat 05/09/20	Sun 04/10/20	Sat 05/09/20	Sun 04/10/20	0 days	377	399	
379	**379**	**5.18.5.4**	**PST - scum collector pipes, C11, ref. EQT015**	**210 days**	**Wed 01/07/20**	**Tue 26/01/21**	**Wed 01/07/20**	**Tue 26/01/21**	**0 days**			
380	380	5.18.5.4.1	Submission for acceptance of purchasing package	120 days	Wed 01/07/20	Wed 28/10/20	Wed 01/07/20	Wed 28/10/20	0 days		381	
381	381	5.18.5.4.2	Invitation of quotations for purchasing package	60 days	Thu 29/10/20	Sun 27/12/20	Thu 29/10/20	Sun 27/12/20	0 days	380	382	
382	382	5.18.5.4.3	Acceptance of conforming quotation	30 days	Mon 28/12/20	Tue 26/01/21	Mon 28/12/20	Tue 26/01/21	0 days	381	399	
383	**383**	**5.18.5.5**	**PST - piston type primary sludge pumps, C11, ref. EQT016**	**210 days**	**Wed 01/07/20**	**Tue 26/01/21**	**Wed 01/07/20**	**Tue 26/01/21**	**0 days**			
384	384	5.18.5.5.1	Submission for acceptance of purchasing package	120 days	Wed 01/07/20	Wed 28/10/20	Wed 01/07/20	Wed 28/10/20	0 days		385	
385	385	5.18.5.5.2	Invitation of quotations for purchasing package	60 days	Thu 29/10/20	Sun 27/12/20	Thu 29/10/20	Sun 27/12/20	0 days	384	386	
386	386	5.18.5.5.3	Acceptance of conforming quotation (Completed)	30 days	Mon 28/12/20	Tue 26/01/21	Mon 28/12/20	Tue 26/01/21	0 days	385	399	
387	**387**	**5.18.5.6**	**PST - drain pumps, C11, ref. EQT007**	**210 days**	**Tue 14/07/20**	**Mon 08/02/21**	**Tue 14/07/20**	**Mon 08/02/21**	**0 days**			
388	388	5.18.5.6.1	Submission for acceptance of purchasing package	120 days	Tue 14/07/20	Tue 10/11/20	Tue 14/07/20	Tue 10/11/20	0 days		389	
389	389	5.18.5.6.2	Invitation of quotations for purchasing package	60 days	Wed 11/11/20	Sat 09/01/21	Wed 11/11/20	Sat 09/01/21	0 days	388	390	
390	390	5.18.5.6.3	Acceptance of conforming quotation (Completed)	30 days	Sun 10/01/21	Mon 08/02/21	Sun 10/01/21	Mon 08/02/21	0 days	389	399	
391	**391**	**5.18.5.7**	**PST - air blowers, C11, ref. EQT018**	**210 days**	**Tue 21/07/20**	**Mon 15/02/21**	**Tue 21/07/20**	**Mon 15/02/21**	**0 days**			
392	392	5.18.5.7.1	Submission for acceptance of purchasing package	120 days	Tue 21/07/20	Tue 17/11/20	Tue 21/07/20	Tue 17/11/20	0 days		393	
393	393	5.18.5.7.2	Invitation of quotations for purchasing package	60 days	Wed 18/11/20	Sat 16/01/21	Wed 18/11/20	Sat 16/01/21	0 days	392	394	
394	394	5.18.5.7.3	Acceptance of conforming quotation	30 days	Sun 17/01/21	Mon 15/02/21	Sun 17/01/21	Mon 15/02/21	0 days	393	399	
395	**395**	**5.18.6**	**Design Submissions for PST No. 1~ 4**	**587 days**	**Sat 01/08/20**	**Fri 11/03/22**	**Sat 01/08/20**	**Fri 11/03/22**	**0 days**			
396	396	5.18.6.1	Electrical schematic drawings for PST No. 1 ~4	60 days	Sat 01/08/20	Tue 29/09/20	Sat 01/08/20	Tue 29/09/20	0 days		362FF	
397	397	5.18.6.2	CDS080-2 - Civil and dimensional requirements drawings for PST No. 1~4 up to	50 days	Tue 01/09/20	Tue 20/10/20	Tue 01/09/20	Tue 20/10/20	0 days		362FF	
398	398	5.18.6.3	CDS081-2 - Civil and dimensional requirements drawings for PST No. 1	150 days	Tue 01/09/20	Thu 28/01/21	Tue 01/09/20	Thu 28/01/21	0 days		363FF	
399	399	5.18.6.4	CDS003 - Detailed Design for Primary Sedimentation Tanks No. 1~4	104 edays	Mon 15/02/21	Sun 30/05/21	Mon 15/02/21	Sun 30/05/21	0.63 edays	370,374,37	406,409,412,415,418,421	
400	400	5.18.6.5	CDS022 - Detailed Design for Electrical Installations for PST No. 1~4	154.88 edays	Thu 07/10/21	Fri 11/03/22	Thu 07/10/21	Fri 11/03/22	0 edays	75,85,93,19	76,440,364FF	
401	401	5.18.6.6	CDS034-2 - Detailed Design for Electrical Installations BS at PST No. 1~4	90 edays	Fri 12/03/21	Thu 10/06/21	Fri 12/03/21	Thu 10/06/21	32.38 edays	136	482,364FF	
402	402	5.18.6.7	CDS025-2 - Detailed Design for LV Switchboards for PST No. 1~4	60 edays	Mon 03/05/21	Fri 02/07/21	Mon 03/05/21	Fri 02/07/21	0.63 edays	71	436,364FF	
403	403	5.18.6.8	CDS050-2 - Detailed Design for Lifting Appliances - PST No. 1 ~ 4	150 edays	Tue 01/09/20	Fri 29/01/21	Tue 01/09/20	Fri 29/01/21	0 edays	116	433,364FF	
404	**404**	**5.18.7**	**Manufacturing and Delivery of Plant & Materials**	**811 days**	**Fri 29/01/21**	**Wed 19/04/23**	**Fri 29/01/21**	**Wed 19/04...**	**232 days**			
405	**405**	**5.18.7.1**	**Lamella Plate Settlers, EQT014**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**193 days**			
406	406	5.18.7.1.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	407	
407	407	5.18.7.1.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	143 days	406,444SS-6	458	



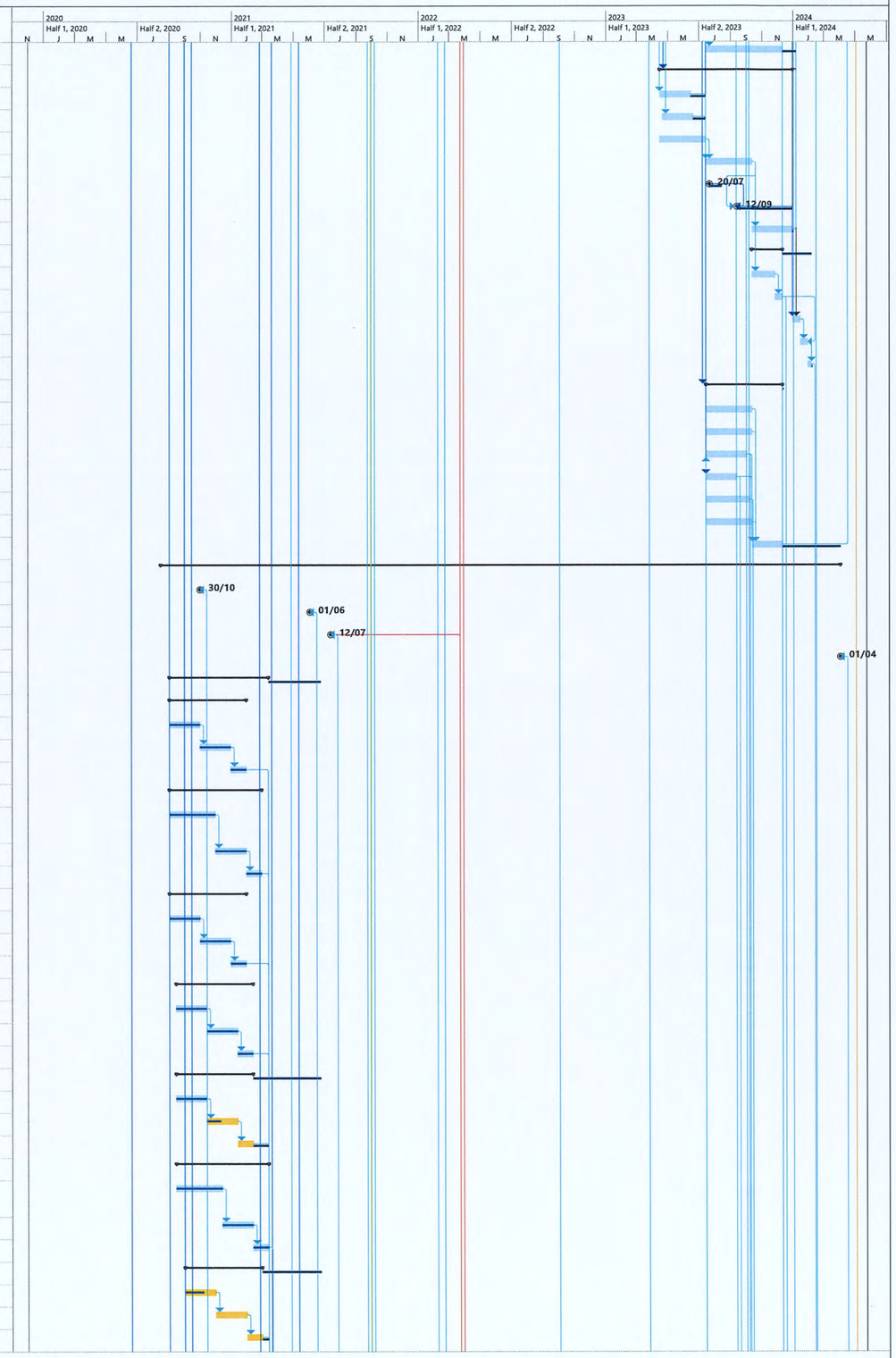
Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
408	**408**	**5.18.7.2**	**Reciprocating Type Bottom Scrappers, EQT014**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**163 days**			
409	409	5.18.7.2.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	410	
410	410	5.18.7.2.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	409,444SS-6	459	
411	**411**	**5.18.7.3**	**Surface Scum Skimmers, EQT015**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**253 days**			
412	412	5.18.7.3.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	413	
413	413	5.18.7.3.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	203 days	412,444SS-6	460	
414	**414**	**5.18.7.4**	**Surface Scum Collection Pipes, EQT015**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**253 days**			
415	415	5.18.7.4.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	416	
416	416	5.18.7.4.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	203 days	415,444SS-6	461	
417	**417**	**5.18.7.5**	**Piston Type Primary Sludge Pumps, EQT016**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**133 days**			
418	418	5.18.7.5.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	419	
419	419	5.18.7.5.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	106 days	418,444SS-6	462	
420	**420**	**5.18.7.6**	**Drain Pumps, EQT007**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**163 days**			
421	421	5.18.7.6.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	422	
422	422	5.18.7.6.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	136 days	421,444SS-6	463	
423	**423**	**5.18.7.7**	**Air Blower, EQT018**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**193 days**			
424	424	5.18.7.7.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Mon 31/05/21	Sat 26/03/22	Mon 31/05/21	Sat 26/03/22	323 days	399	425	
425	425	5.18.7.7.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	166 days	424,444SS-6	464	
426	**426**	**5.18.7.8**	**Stoplogs and Penstocks, EQT013**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**43 days**			
427	427	5.18.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 31/05/21	Tue 25/01/22	Mon 31/05/21	Tue 25/01/22	383 days	399	428	
428	428	5.18.7.8.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	444SS-60 ed	456	
429	**429**	**5.18.7.9**	**Pipework, Valves and Electric Actuators, EQT036, EQT042 (Rev. 11)**	**409 days**	**Mon 14/02/22**	**Wed 29/03/23**	**Mon 14/02/22**	**Wed 29/03...**	**43 days**	**56,63**		
430	430	5.18.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 14/02/22	Tue 11/10/22	Mon 14/02/22	Tue 11/10/22	124 days	399	431	
431	431	5.18.7.9.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	430,444SS-6	457	
432	**432**	**5.18.7.10**	**Lifting Appliances**	**790 days**	**Fri 29/01/21**	**Wed 29/03/23**	**Fri 29/01/21**	**Wed 29/03...**	**66 days**			
433	433	5.18.7.10.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 29/01/21	Thu 26/08/21	Fri 29/01/21	Thu 26/08/21	535 days	403	434	
434	434	5.18.7.10.2	Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	433,444SS-6	447	
435	**435**	**5.18.7.11**	**LV Switchboards**	**635 days**	**Sat 03/07/21**	**Wed 29/03/23**	**Sat 03/07/21**	**Wed 29/03...**	**53 days**			
436	436	5.18.7.11.1	PST - Manufacturing of Plant	300 days	Sat 03/07/21	Thu 28/04/22	Sat 03/07/21	Thu 28/04/22	0 days	402	437	
437	437	5.18.7.11.2	PST - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Fri 29/04/22	Wed 27/07/22	Fri 29/04/22	Wed 27/07/...	200 days	436	438	
438	438	5.18.7.11.3	PST - Shipping and Delivery of Plant to site	45 days	Mon 13/02/23	Wed 29/03/23	Mon 13/02/23	Wed 29/03/...	16 days	437,444SS-6	469	
439	**439**	**5.18.7.12**	**PLC System**	**405 days**	**Fri 11/03/22**	**Wed 19/04/23**	**Fri 11/03/22**	**Wed 19/04...**	**32 days**			
440	440	5.18.7.12.1	Manufacturing of Plant, PLC for PST	300 days	Fri 11/03/22	Wed 04/01/23	Fri 11/03/22	Wed 04/01/...	0 days	400	441	
441	441	5.18.7.12.2	Factory Acceptance Test of Plant, PLC for PST (To be witnessed by PM	60 days	Thu 05/01/23	Sun 05/03/23	Thu 05/01/23	Sun 05/03/23	0 days	440	442	
442	442	5.18.7.12.3	Shipping and Delivery of Plant to site	45 days	Mon 06/03/23	Wed 19/04/23	Mon 06/03/23	Wed 19/04/...	0 days	441,444SS-6	470	
443	**443**	**5.18.8**	**Site Installation Work**	**298 days**	**Fri 14/04/23**	**Mon 05/02/24**	**Fri 14/04/23**	**Mon 05/02...**	**0 days**			
444	444	5.18.8.1	Tentative Civil Handover Date, Portion B-3, PST No. 1~4 (Rev. 5)	1 day	Fri 14/04/23	Fri 14/04/23	Fri 14/04/23	Fri 14/04/23	0 days		447,482FS+90 days,445,4	
445	**445**	**5.18.8.2**	**Commencement of E&M Installation at PST No. 1~4**	**297 days**	**Sat 15/04/23**	**Mon 05/02/24**	**Sat 15/04/23**	**Mon 05/02...**	**0 days**	**444**		**403**
446	446	5.18.8.2.1	Provision of Temporary Water Supply, Electricity Supply, Lighting We	30 days	Sat 15/04/23	Sun 14/05/23	Sat 15/04/23	Sun 14/05/23	0 days	444		
447	**447**	**5.18.8.2.2**	**Installation of Lifting Appliances at PST No. 1~4**	**127 days**	**Sat 15/04/23**	**Sat 19/08/23**	**Sat 15/04/23**	**Sat 19/08/23**	**50 days**	**444,434**		
448	448	5.18.8.2.2.1	Basement EOT Crane LA-02-01 SWL 10t	30 days	Sat 15/04/23	Sun 14/05/23	Sat 15/04/23	Sun 14/05/23	0 days		449,450,454	LA - A x 4~6 men
449	449	5.18.8.2.2.2	Coping Level EOT Crane LA-02-02 SWL 5t	30 days	Mon 15/05/23	Tue 13/06/23	Mon 15/05/23	Tue 13/06/23	60 days	448	454	LA - A x 4~6 men
450	450	5.18.8.2.2.3	Coping Level EOT Crane LA-02-03 SWL 5t	30 days	Mon 15/05/23	Tue 13/06/23	Mon 15/05/23	Tue 13/06/23	0 days	448	451,452,454	LA - B x 4~6 men
451	451	5.18.8.2.2.4	Coping Level EOT Crane LA-02-04 SWL 5t	30 days	Wed 14/06/23	Thu 13/07/23	Wed 14/06/23	Thu 13/07/23	30 days	450	454	LA - A x 4~6 men
452	452	5.18.8.2.2.5	Coping Level EOT Crane LA-02-05 SWL 5t	30 days	Wed 14/06/23	Thu 13/07/23	Wed 14/06/23	Thu 13/07/23	0 days	450	453,454	LA - B x 4~6 men
453	453	5.18.8.2.2.6	Coping Level EOT Crane LA-02-06 SWL 2t	30 days	Fri 14/07/23	Sat 12/08/23	Fri 14/07/23	Sat 12/08/23	0 days	452	454	LA - A x 4~6 men
454	454	5.18.8.2.2.7	T&C, Loading Test for Lifting Appliances at PST No. 1~4	7 days	Sun 13/08/23	Sat 19/08/23	Sun 13/08/23	Sat 19/08/23	0 days	448,449,450	458	LA - A x 4~6 men
455	**455**	**5.18.8.2.3**	**Mechanical Installations at PST No. 1~4**	**240 days**	**Sat 15/04/23**	**Sun 10/12/23**	**Sat 15/04/23**	**Sun 10/12/23**	**20 days**		**479**	
456	456	5.18.8.2.3.1	Installation of penstocks and stoplogs (Penstock 18nos, Stoplogs 1	90 days	Sat 15/04/23	Thu 13/07/23	Sat 15/04/23	Thu 13/07/23	0 days	428	462,467	ME - E x 4~6 men
457	457	5.18.8.2.3.2	Installation of pipework and valves, EQT036	240 days	Sat 15/04/23	Sun 10/12/23	Sat 15/04/23	Sun 10/12/23	27 days	431		ME - B x 4~6 men
458	458	5.18.8.2.3.3	Installation of lamella plate settlers (x4), EQT014	60 days	Sun 20/08/23	Wed 18/10/23	Sun 20/08/23	Wed 18/10/...	0 days	459,454,407	460,461	ME - A x 4~6 men
459	459	5.18.8.2.3.4	Installation of reciprocating type bottom scrapers (x4), EQT014	30 days	Sat 15/04/23	Sun 14/05/23	Sat 15/04/23	Sun 14/05/23	97 days	410	458	ME - A x 4~6 men
460	460	5.18.8.2.3.5	Installation of surface scum skimmers (x1), EQT015	30 days	Thu 19/10/23	Fri 17/11/23	Thu 19/10/23	Fri 17/11/23	50 days	458,413		ME - A x 4~6 men
461	461	5.18.8.2.3.6	Installation of scum collector pipes (x1), EQT015	30 days	Thu 19/10/23	Fri 17/11/23	Thu 19/10/23	Fri 17/11/23	50 days	458,416		ME - B x 4~6 men
462	462	5.18.8.2.3.7	Installation of piston type primary sludge pumps (x3), EQT016	30 days	Fri 14/07/23	Sat 12/08/23	Fri 14/07/23	Sat 12/08/23	0 days	456,419	463	ME - C x 4~6 men
463	463	5.18.8.2.3.8	Installation of drain pumps (x1), EQT007	30 days	Sun 13/08/23	Mon 11/09/23	Sun 13/08/23	Mon 11/09/...	0 days	462,422	464	ME - C x 4~6 men
464	464	5.18.8.2.3.9	Installation of air blowers (x2), EQT018	30 days	Tue 12/09/23	Wed 11/10/23	Tue 12/09/23	Wed 11/10/...	0 days	463,425	465	ME - C x 4~6 men
465	465	5.18.8.2.3.10	Installation of instrumentations, EQT035-1	60 days	Thu 12/10/23	Sun 10/12/23	Thu 12/10/23	Sun 10/12/23	27 days	464,52		ME - C x 4~6 men
466	466	5.18.8.2.3.11	Installation of Platforms, Covers etc., PST, EQT050	60 days	Thu 21/09/23	Sun 19/11/23	Thu 21/09/23	Sun 19/11/23	48 days			ME - F x 4~6 men



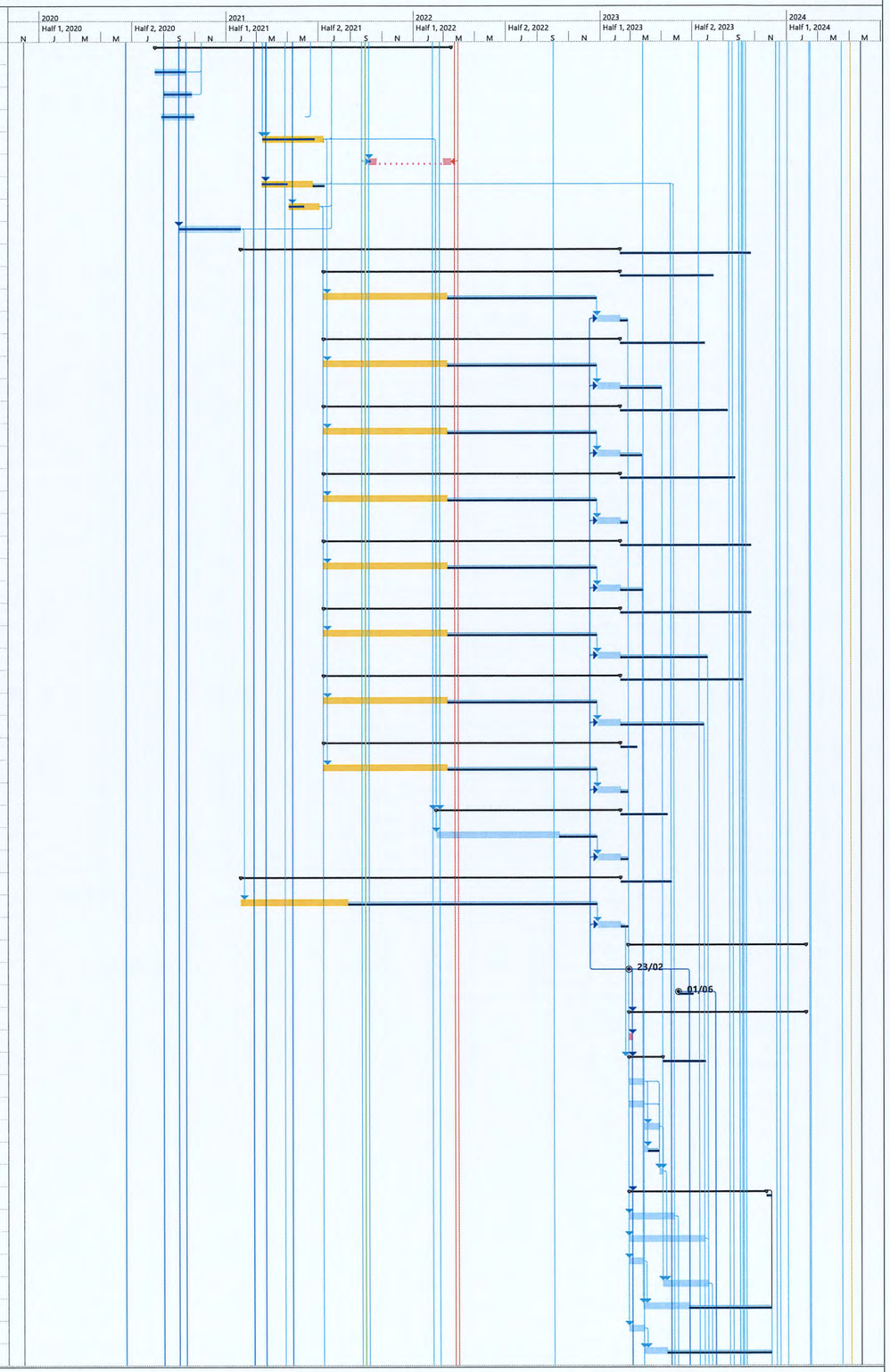
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
467	467	5.18.8.2.3.3	Site Acceptance Tests - mechanical aspects including alignment an	150 days	Fri 14/07/23	Sun 10/12/23	Fri 14/07/23	Sun 10/12/23	27 days	456		ME - D x 2~4 men
468	**468**	**5.18.8.2.4**	**Electrical Installations for PST No. 1~4**	**260 days**	**Sat 15/04/23**	**Sat 30/12/23**	**Sat 15/04/23**	**Sat 30/12/23**	**0 days**	**444**	**479**	
469	469	5.18.8.2.4.1	Installation of LV Switchboards, PST	60 days	Sat 15/04/23	Tue 13/06/23	Sat 15/04/23	Tue 13/06/23	30 days	438	472	LV - A x 4~6 men
470	470	5.18.8.2.4.2	Installation of PLC Panel, PST	60 days	Thu 20/04/23	Sun 18/06/23	Thu 20/04/23	Sun 18/06/23	25 days	442	472	EE - A x 4~6 men
471	471	5.18.8.2.4.3	Installation of cable trays and cable containments, PST	90 days	Sat 15/04/23	Thu 13/07/23	Sat 15/04/23	Thu 13/07/23	0 days		472	EE - A x 4~6 men
472	472	5.18.8.2.4.4	Cables laying and terminations, PST	90 days	Fri 14/07/23	Wed 11/10/23	Fri 14/07/23	Wed 11/10/...	0 days	469,470,471	474FS-30 days,477,475	EE - B x 4~6 men
473	473	5.18.8.2.4.5	Tentative Civil Handover Date, LV cables draw pits from IW to PST	1 day	Thu 20/07/23	Thu 20/07/23	Thu 20/07/23	Thu 20/07/23	24 days		474FF+30 days	
474	474	5.18.8.2.4.6	Energisation of LV Switchboards, PST	1 day	Tue 12/09/23	Tue 12/09/23	Tue 12/09/23	Tue 12/09/23	109 days	472FS-30 da	479	LV - A x 4~6 men
475	475	5.18.8.2.4.7	Site Acceptance Tests - Electrical aspects including voltage and cur	80 days	Thu 12/10/23	Sat 30/12/23	Thu 12/10/23	Sat 30/12/23	2 days	472	350	LV - A x 4~6 men
476	**476**	**5.18.8.2.5**	**SCADA Systems, PST No. 1~4**	**60 days**	**Thu 12/10/23**	**Sun 10/12/23**	**Thu 12/10/23**	**Sun 10/12/23**	**57 days**			
477	477	5.18.8.2.5.1	Configuration of PLC System	45 days	Thu 12/10/23	Sat 25/11/23	Thu 12/10/23	Sat 25/11/23	0 days	472	478	PLC - B x 1 man
478	478	5.18.8.2.5.2	Site Acceptance Test for PLC System at PST No. 1~4	15 days	Sun 26/11/23	Sun 10/12/23	Sun 26/11/23	Sun 10/12/23	0 days	477	480FF,1275	PLC - A x 1 man
479	479	5.18.8.2.6	Site Acceptance Test for E&M Equip and Instrumentations calibratio	15 edays	Sat 30/12/23	Sun 14/01/24	Sat 30/12/23	Sun 14/01/24	0.63 edays	455,468,474	480	
480	480	5.18.8.2.7	System Commissioning for E&M Equip at PST No, 1~4	15 days	Mon 15/01/24	Mon 29/01/24	Mon 15/01/24	Mon 29/01/...	0 days	479,478FF	481	
481	481	5.18.8.2.8	Risk Allowances for Completion of Processing Plant at PST No. 1~4	7 edays	Mon 29/01/24	Mon 05/02/24	Mon 29/01/24	Mon 05/02/...	2.63 edays	480	1271	
482	**482**	**5.18.8.2.9**	**Building Services Installations for PST No. 1~4**	**150 days**	**Fri 14/07/23**	**Sun 10/12/23**	**Fri 14/07/23**	**Sun 10/12/23**	**2 days**	**444FS+90 da**		
483	483	5.18.8.2.9.1	Mechanical Ventilation and Air Conditioning System, PST	90 days	Fri 14/07/23	Wed 11/10/23	Fri 14/07/23	Wed 11/10/...	0 days		489	MVAC - B x 4~6 men
484	484	5.18.8.2.9.2	Lighting and Power Distribution System, PST	90 days	Fri 14/07/23	Wed 11/10/23	Fri 14/07/23	Wed 11/10/...	0 days		489	BS - A x 4~6 men
485	485	5.18.8.2.9.3	Plumbing Installation, PST	80 days	Fri 14/07/23	Sun 01/10/23	Fri 14/07/23	Sun 01/10/23	0 days	1242	1244,489	Pb - B x 4~6 men
486	486	5.18.8.2.9.4	CCTV Installation (9 indoor + 2 outdoor Cameras), PST	60 days	Fri 14/07/23	Mon 11/09/23	Fri 14/07/23	Mon 11/09/...	0 days	444FS+60 da	489,1274	BS - B x 4~6 men
487	487	5.18.8.2.9.5	Fire Services Installation, PST	85 days	Fri 14/07/23	Fri 06/10/23	Fri 14/07/23	Fri 06/10/23	0 days		1195,1207,1208,489	FS - A x 4~6 men
488	488	5.18.8.2.9.6	Earthing and Lightning Protection System, PST	90 days	Fri 14/07/23	Wed 11/10/23	Fri 14/07/23	Wed 11/10/...	0 days		489	BS - C x 2~4 men
489	489	5.18.8.2.9.7	Testing and Commissioning of Building Services Installations, PST	60 days	Thu 12/10/23	Sun 10/12/23	Thu 12/10/23	Sun 10/12/23	113 days	483,484,485	365FF	BS - C x 2~4 men
490	**490**	**5.19**	**Bioreactors No. 2A & 2B, Portion B-4 (PS 6B2.4)**	**1326 days**	**Sat 15/08/20**	**Mon 01/04/24**	**Sat 15/08/20**	**Mon 01/04...**	**0 days**			
491	491	5.19.1	Planned Key Date Completion Date - KD1A, BR 2A & 2B	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	0 days	525FF,526FF		
492	492	5.19.2	Planned Key Date Completion Date - KD1B, BR 2A & 2B	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	527FF		
493	493	5.19.3	Planned Sectional Completion Date - Section 1, BR 2A & 2B	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	528FF,529FF		
494	494	5.19.4	Planned Sectional Completion Date - Section 2, BR 2A & 2B	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days	600FF,599FF		
495	**495**	**5.19.5**	**Selection of Suppliers for major plant and materials for BR 2A & 2B**	**193 days**	**Tue 01/09/20**	**Fri 12/03/21**	**Tue 01/09/20**	**Fri 12/03/21**	**102 days**			
496	496	5.19.5.1	BR - pre-treatment fine screens (Marking Scheme Approach), EQT019	150 days	Tue 01/09/20	Thu 28/01/21	Tue 01/09/20	Thu 28/01/21	0 days			
497	497	5.19.5.1.1	Submission for acceptance of purchasing package	60 days	Tue 01/09/20	Fri 30/10/20	Tue 01/09/20	Fri 30/10/20	0 days		498	
498	498	5.19.5.1.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	Sat 31/10/20	Tue 29/12/20	0 days	497	499	
499	499	5.19.5.1.3	Acceptance of conforming quotation (Completed)	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	0 days	498	528	
500	**500**	**5.19.5.2**	**BR - air diffusion system (Marking Scheme Approach), EQT017**	**180 days**	**Tue 01/09/20**	**Sat 27/02/21**	**Tue 01/09/20**	**Sat 27/02/21**	**0 days**			
501	501	5.19.5.2.1	Submission for acceptance of purchasing package including proposed marking scheme	90 days	Tue 01/09/20	Sun 29/11/20	Tue 01/09/20	Sun 29/11/20	0 days		502	
502	502	5.19.5.2.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/20	Thu 28/01/21	Mon 30/11/20	Thu 28/01/21	0 days	501	503	
503	503	5.19.5.2.3	Acceptance of conforming quotation	30 days	Fri 29/01/21	Sat 27/02/21	Fri 29/01/21	Sat 27/02/21	0 days	502	528	
504	**504**	**5.19.5.3**	**BR - submersible mixers, C11, EQT020**	**150 days**	**Tue 01/09/20**	**Thu 28/01/21**	**Tue 01/09/20**	**Thu 28/01/21**	**0 days**			
505	505	5.19.5.3.1	Submission for acceptance of purchasing package	60 days	Tue 01/09/20	Fri 30/10/20	Tue 01/09/20	Fri 30/10/20	0 days		506	
506	506	5.19.5.3.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	Sat 31/10/20	Tue 29/12/20	0 days	505	507	
507	507	5.19.5.3.3	Acceptance of conforming quotation (Completed)	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	0 days	506	528	
508	**508**	**5.19.5.4**	**BR - mixed liquor return pumps, C11, EQT008**	**150 days**	**Mon 14/09/20**	**Wed 10/02/21**	**Mon 14/09/20**	**Wed 10/02/21**	**0 days**			
509	509	5.19.5.4.1	Submission for acceptance of purchasing package	60 days	Mon 14/09/20	Thu 12/11/20	Mon 14/09/20	Thu 12/11/20	0 days		510	
510	510	5.19.5.4.2	Invitation of quotations for purchasing package	60 days	Fri 13/11/20	Mon 11/01/21	Fri 13/11/20	Mon 11/01/21	0 days	509	511	
511	511	5.19.5.4.3	Acceptance of conforming quotation (Completed)	30 days	Tue 12/01/21	Wed 10/02/21	Tue 12/01/21	Wed 10/02/21	0 days	510	528	
512	**512**	**5.19.5.5**	**BR - scum removal systems, C11, EQT021, EQT022**	**150 days**	**Mon 14/09/20**	**Wed 10/02/21**	**Mon 14/09/20**	**Wed 10/02/21**	**132 days**			
513	513	5.19.5.5.1	Submission for acceptance of purchasing package	60 days	Mon 14/09/20	Thu 12/11/20	Mon 14/09/20	Thu 12/11/20	0 days		514	
514	514	5.19.5.5.2	Invitation of quotations for purchasing package	60 days	Fri 13/11/20	Mon 11/01/21	Fri 13/11/20	Mon 11/01/21	0 days	513	515	
515	515	5.19.5.5.3	Acceptance of conforming quotation	30 days	Tue 12/01/21	Wed 10/02/21	Tue 12/01/21	Wed 10/02/21	30 days	514	528	
516	**516**	**5.19.5.6**	**BR - aeration blowers (Marking Scheme Approach), EQT039**	**180 days**	**Mon 14/09/20**	**Fri 12/03/21**	**Mon 14/09/20**	**Fri 12/03/21**	**0 days**			
517	517	5.19.5.6.1	Submission for acceptance of purchasing package including proposed marking scheme	90 days	Mon 14/09/20	Sat 12/12/20	Mon 14/09/20	Sat 12/12/20	0 days		518	
518	518	5.19.5.6.2	Invitation of quotations for purchasing package	60 days	Sun 13/12/20	Wed 10/02/21	Sun 13/12/20	Wed 10/02/21	0 days	517	519	
519	519	5.19.5.6.3	Acceptance of conforming quotation	30 days	Thu 11/02/21	Fri 12/03/21	Thu 11/02/21	Fri 12/03/21	0 days	518	528	
520	**520**	**5.19.5.7**	**BR - instrumentations, C11, EQT035-2**	**150 days**	**Thu 01/10/20**	**Sat 27/02/21**	**Thu 01/10/20**	**Sat 27/02/21**	**115 days**			
521	521	5.19.5.7.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		522	
522	522	5.19.5.7.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/20	Thu 28/01/21	Mon 30/11/20	Thu 28/01/21	0 days	521	523	
523	523	5.19.5.7.3	Acceptance of conforming quotation	30 days	Fri 29/01/21	Sat 27/02/21	Fri 29/01/21	Sat 27/02/21	13 days	522	528	



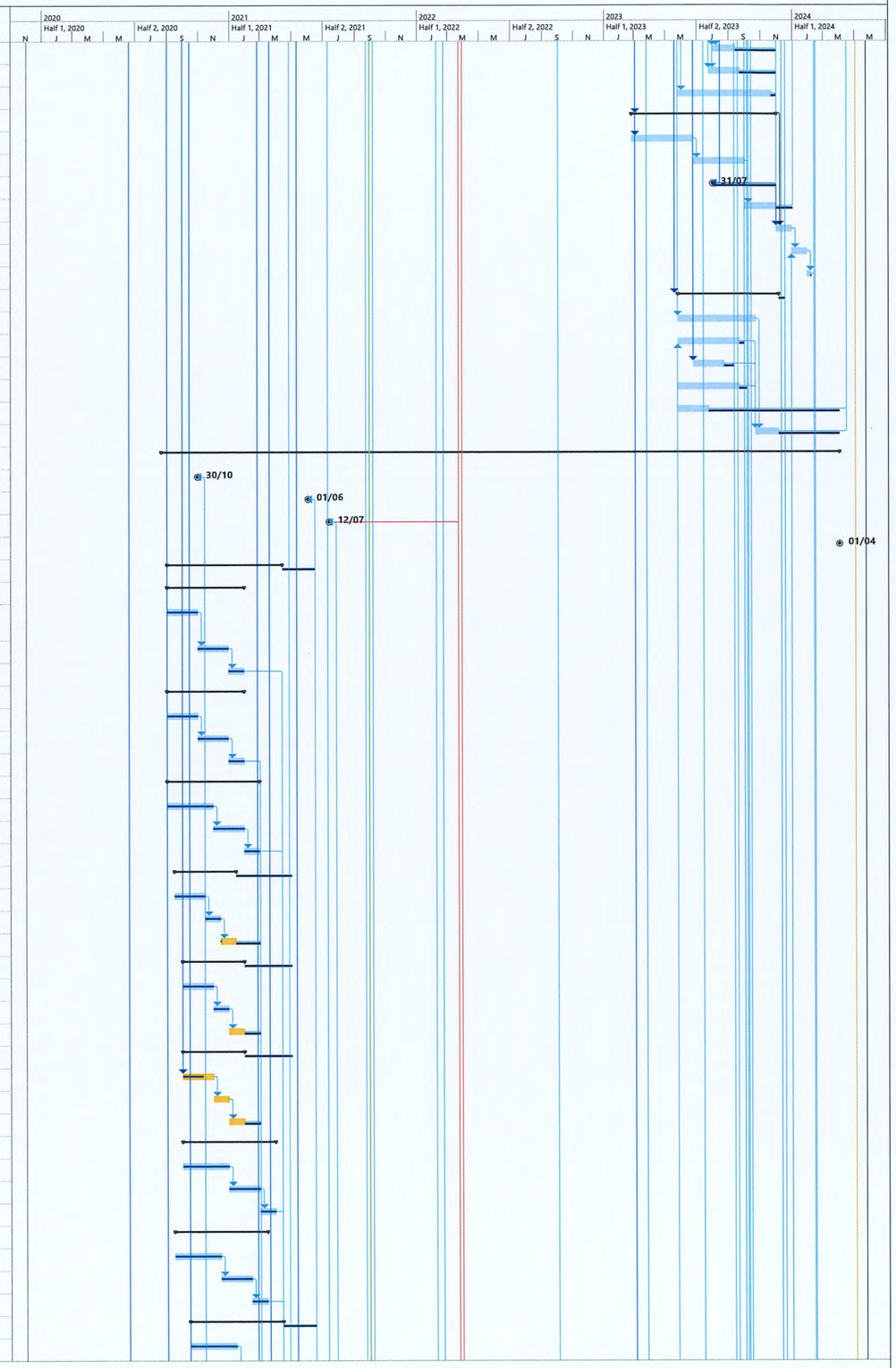
Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

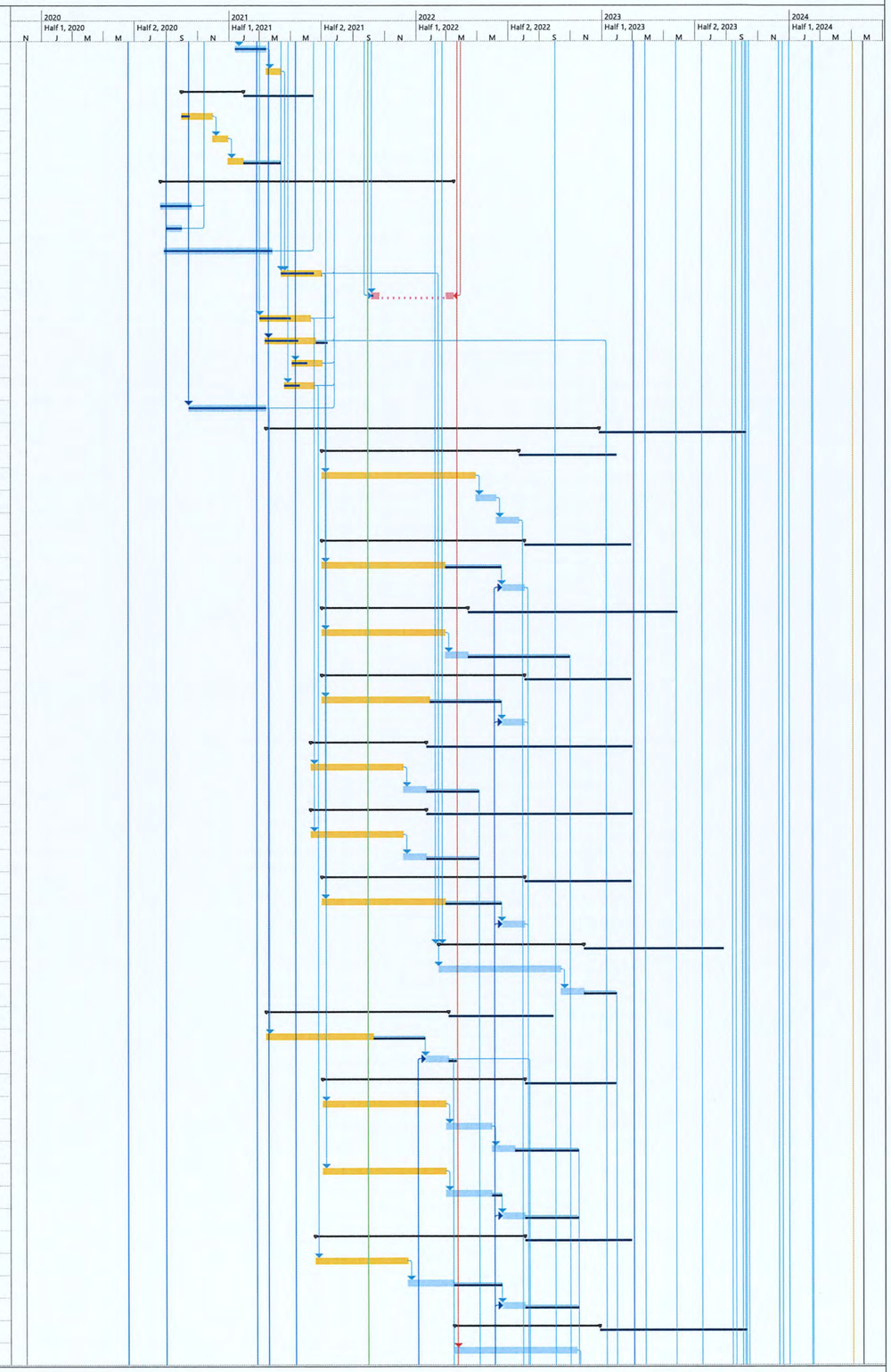
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
524	**524**	**5.19.6**	**Design Submissions for BR 2A & 2B**	**578 days**	**Sat 15/08/20**	**Tue 15/03/22**	**Sat 15/08/20**	**Tue 15/03/22**	**0 days**			
525	525	5.19.6.1	Electrical schematic drawings for BR No. 2A & 2B	60 days	Sat 15/08/20	Tue 13/10/20	Sat 15/08/20	Tue 13/10/20	0 days		491FF	
526	526	5.19.6.2	CDS080-3 - Civil and dimensional requirements drawings for BR 2A&2B up to +	55 days	Tue 01/09/20	Sun 25/10/20	Tue 01/09/20	Sun 25/10/20	0 days		491FF	
527	527	5.19.6.3	CDS081-3 - Civil and dimensional requirements drawings for BR 2A & 2	281 days	Fri 28/08/20	Fri 04/06/21	Fri 28/08/20	Fri 04/06/21	0 days		492FF	
528	528	5.19.6.4	CDS004 - Detailed Design for Bioreactor 2A and 2B	120 edays	Fri 12/03/21	Sat 10/07/21	Fri 12/03/21	Sat 10/07/21	0.63 edays	499,503,507	535,538,541,544,547,55(	
529	529	5.19.6.5	CDS023 - Detailed Design for Electrical Installations for BR No. 2A & 2B	159.38 edays	Thu 07/10/21	Tue 15/03/22	Thu 07/10/21	Tue 15/03/22	0 edays	75,85,93,19	76,493FF,702	
530	530	5.19.6.6	CDS034-3 - Detailed Design for Electrical Installations BS at BR No. 2A &	100 edays	Fri 12/03/21	Sun 20/06/21	Fri 12/03/21	Sun 20/06/21	22.38 edays	136	594,493FF,595	
531	531	5.19.6.7	CDS025-3 - Detailed Design for LV Switchboards for BR 2A and 2B	60 edays	Mon 03/05/21	Fri 02/07/21	Mon 03/05/21	Fri 02/07/21	0.63 edays	71	688,493FF	
532	532	5.19.6.8	CDS050-3 - Detailed Design for Lifting Appliances - BR 2A & 2B	120 edays	Thu 01/10/20	Fri 29/01/21	Thu 01/10/20	Fri 29/01/21	0 edays	116	562,493FF	
533	**533**	**5.19.7**	**Manufacturing and Delivery of Plant & Materials**	**740 days**	**Fri 29/01/21**	**Tue 07/02/23**	**Fri 29/01/21**	**Tue 07/02/23**	**258 days**			
534	**534**	**5.19.7.1**	**Pre-treatment Fine Screens, EQT019**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**185 days**			
535	535	5.19.7.1.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	536	
536	536	5.19.7.1.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	16 days	535,565SS-6	578	
537	**537**	**5.19.7.2**	**Air Diffusion System, EQT017**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**168 days**			
538	538	5.19.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	539	
539	539	5.19.7.2.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	83 days	538,565SS-6	579	
540	**540**	**5.19.7.3**	**Submersible Mixer, EQT020**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**213 days**			
541	541	5.19.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	542	
542	542	5.19.7.3.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	44 days	541,565SS-6	580	
543	**543**	**5.19.7.4**	**Mixed Liquor Return Pumps, EQT008**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**228 days**			
544	544	5.19.7.4.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	545	
545	545	5.19.7.4.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	16 days	544,565SS-6	581	
546	**546**	**5.19.7.5**	**Sum Removal System, EQT021, EQT022**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**258 days**			
547	547	5.19.7.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	548	
548	548	5.19.7.5.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	46 days	547,565SS-6	582	
549	**549**	**5.19.7.6**	**Aeration Blowers, EQT039**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**258 days**			
550	550	5.19.7.6.1	Manufacturing and Factory Acceptance Test of Plant (to be witnesse	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	551	
551	551	5.19.7.6.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	173 days	550,565SS-6	583	
552	**552**	**5.19.7.7**	**Instrumentations, EQT035-2**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**243 days**			
553	553	5.19.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	554	
554	554	5.19.7.7.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	166 days	553,565SS-6	584	
555	**555**	**5.19.7.8**	**Stoplogs and Penstocks, EQT013**	**577 days**	**Sun 11/07/21**	**Tue 07/02/23**	**Sun 11/07/21**	**Tue 07/02/23**	**33 days**			
556	556	5.19.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	528	557	
557	557	5.19.7.8.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	16 days	556,565SS-6	576	
558	**558**	**5.19.7.9**	**Pipework, Valves and Electric Actuators, EQT036, EQT042 (Rev. 11)**	**359 days**	**Mon 14/02/22**	**Tue 07/02/23**	**Mon 14/02/22**	**Tue 07/02/23**	**93 days**	**56,63**		
559	559	5.19.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 14/02/22	Tue 11/10/22	Mon 14/02/22	Tue 11/10/22	74 days	528	560	
560	560	5.19.7.9.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	16 days	559,565SS-6	577	
561	**561**	**5.19.7.10**	**Lifting Appliances**	**740 days**	**Fri 29/01/21**	**Tue 07/02/23**	**Fri 29/01/21**	**Tue 07/02/23**	**101 days**			
562	562	5.19.7.10.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 29/01/21	Thu 26/08/21	Fri 29/01/21	Thu 26/08/21	485 days	532	563	
563	563	5.19.7.10.2	Shipping and Delivery of Plant to site	45 days	Sun 25/12/22	Tue 07/02/23	Sun 25/12/22	Tue 07/02/23	16 days	562,565SS-6	569	
564	**564**	**5.19.8**	**Site Installation Work**	**348 days**	**Thu 23/02/23**	**Mon 05/02/24**	**Thu 23/02/23**	**Mon 05/02...**	**0 days**			
565	565	5.19.8.1	Tentative Civil Handover Date, Portion B-4, BR2A & 2B (Rev. 5)	1 day	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	0 days		569,575,586,594FS+90 e(	
566	566	5.19.8.2	Tentative Civil Handover Date, LV cables draw pits from MFB2 to BR2	1 day	Thu 01/06/23	Thu 01/06/23	Thu 01/06/23	Thu 01/06/23	30 days		589FF+30 days	
567	**567**	**5.19.8.3**	**Commencement of E&M Installation at Bioreactor No. 2A & 2B**	**347 days**	**Fri 24/02/23**	**Mon 05/02/24**	**Fri 24/02/23**	**Mon 05/02...**	**0 days**	**565**		
568	568	5.19.8.3.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, W	7 days	Fri 24/02/23	Thu 02/03/23	Fri 24/02/23	Thu 02/03/23	0 days	565		
569	**569**	**5.19.8.3.2**	**Installation of Lifting Appliances at BR 2A & 2B**	**67 days**	**Fri 24/02/23**	**Mon 01/05/23**	**Fri 24/02/23**	**Mon 01/05...**	**85 days**	**565,563**		
570	570	5.19.8.3.2.1	Coping Level EOT Crane LA-03-01 SWL 5t	30 days	Fri 24/02/23	Sat 25/03/23	Fri 24/02/23	Sat 25/03/23	0 days		572,573,574	LA - A x 4~6 men
571	571	5.19.8.3.2.2	Coping Level EOT Crane LA-03-02 SWL 5t	30 days	Fri 24/02/23	Sat 25/03/23	Fri 24/02/23	Sat 25/03/23	0 days		572,573,574	LA - B x 4~6 men
572	572	5.19.8.3.2.3	Coping Level EOT Crane LA-03-03 SWL 5t	30 days	Sun 26/03/23	Mon 24/04/23	Sun 26/03/23	Mon 24/04/...	0 days	570,571	574	LA - A x 4~6 men
573	573	5.19.8.3.2.4	Coping Level Mobile A-frame LA-03-04 SWL 4t	7 days	Sun 26/03/23	Sat 01/04/23	Sun 26/03/23	Sat 01/04/23	23 days	570,571	574	LA - B x 4~6 men
574	574	5.19.8.3.2.5	T&C, Loading Test for Lifting Appliances at Bioreactor No. 2A & 2B	7 days	Tue 25/04/23	Mon 01/05/23	Tue 25/04/23	Mon 01/05/...	0 days	570,571,572	579	LA - B x 4~6 men
575	**575**	**5.19.8.3.3**	**Mechanical Installations for E&M Equip at BR 2A & 2B**	**270 days**	**Fri 24/02/23**	**Mon 20/11/23**	**Fri 24/02/23**	**Mon 20/11...**	**10 days**	**565**	**591**	
576	576	5.19.8.3.3.1	Installation of penstocks and stoplogs (Penstocks 8nos, Stoplogs 8	90 days	Fri 24/02/23	Wed 24/05/23	Fri 24/02/23	Wed 24/05/...	0 days	557	585	ME - E x 4~6 men
577	577	5.19.8.3.3.2	Installation of pipework and valves, EQT036	150 days	Fri 24/02/23	Sun 23/07/23	Fri 24/02/23	Sun 23/07/23	0 days	560	584	ME - C x 4~6 men
578	578	5.19.8.3.3.3	Installation of pre-treatment fine screens (x4)	28 days	Fri 24/02/23	Thu 23/03/23	Fri 24/02/23	Thu 23/03/23	0 days	536	580	ME - A x 4~6 men
579	579	5.19.8.3.3.4	Installation of air diffusion system (x2), EQT017	90 days	Tue 02/05/23	Sun 30/07/23	Tue 02/05/23	Sun 30/07/23	0 days	574,539	583	ME - D x 2~4 men
580	580	5.19.8.3.3.5	Installation of submersible mixers (x16), EQT020	90 days	Fri 24/03/23	Wed 21/06/23	Fri 24/03/23	Wed 21/06/...	162 days	578,542	591	ME - B x 4~6 men
581	581	5.19.8.3.3.6	Installation of mixed liquor return pumps (x6), EQT008	30 days	Fri 24/02/23	Sat 25/03/23	Fri 24/02/23	Sat 25/03/23	0 days	545	582	ME - A x 4~6 men
582	582	5.19.8.3.3.7	Installation of scum removal systems (x2), EQT022	45 days	Sun 26/03/23	Tue 09/05/23	Sun 26/03/23	Tue 09/05/23	205 days	581,548	591	ME - B x 4~6 men



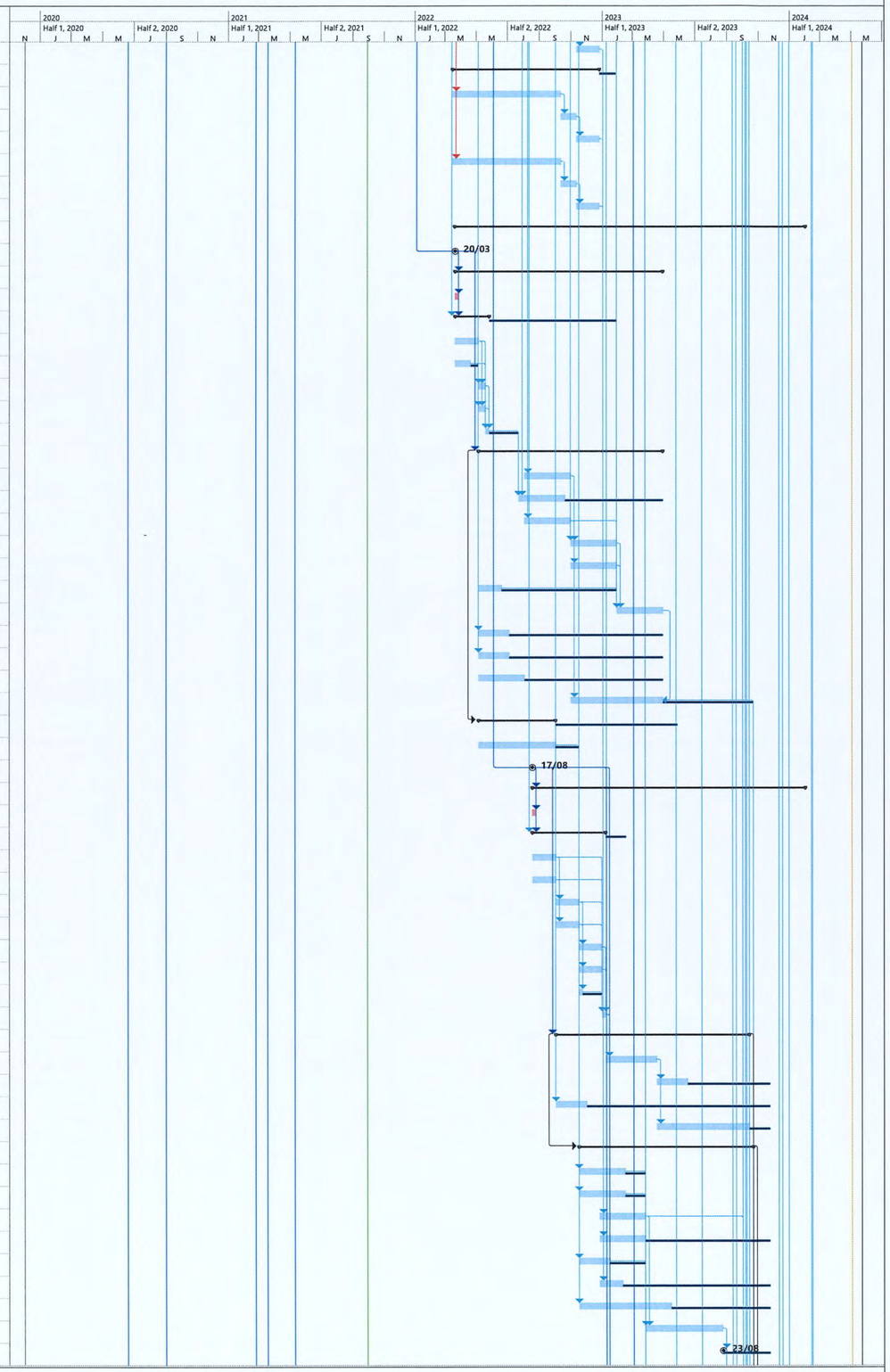
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
583	583	5.19.8.3.3	Installation of aeration blowers (x4), EQT039	45 days	Mon 31/07/23	Wed 13/09/23	Mon 31/07/23	Wed 13/09/...	78 days	579,551	591	ME - D x 2~4 men
584	584	5.19.8.3.3	Installation of instrumentations, EQT035-2	60 days	Mon 24/07/23	Thu 21/09/23	Mon 24/07/23	Thu 21/09/23	70 days	577,554	591	ME - D x 2~4 men
585	585	5.19.8.3.3	Site Acceptance Tests - mechanical aspects including alignment an	180 days	Thu 25/05/23	Mon 20/11/23	Thu 25/05/23	Mon 20/11/...	10 days	576	591	ME - D x 2~4 men
586	**586**	**5.19.8.3.4**	**Electrical Installations for E&M Equip at BR 2A & 2B**	**280 days**	**Fri 24/02/23**	**Thu 30/11/23**	**Fri 24/02/23**	**Thu 30/11/23**	**0 days**	**565**	**591**	
587	587	5.19.8.3.4	Installation of cable trays and cable containments	120 days	Fri 24/02/23	Fri 23/06/23	Fri 24/02/23	Fri 23/06/23	0 days	565	588	EE - A x 4~6 men
588	588	5.19.8.3.4	Cables laying and terminations	100 days	Sat 24/06/23	Sun 01/10/23	Sat 24/06/23	Sun 01/10/23	0 days	587	590,761	EE - C x 4~6 men
589	589	5.19.8.3.4	Energisation of LV Switchboards, BR2	1 day	Mon 31/07/23	Mon 31/07/23	Mon 31/07/23	Mon 31/07/...	122 days	566FF+30 d	591	LV - A x 4~6 men
590	590	5.19.8.3.4	Site Acceptance Tests - Electrical aspects including voltage and cur	60 days	Mon 02/10/23	Thu 30/11/23	Mon 02/10/23	Thu 30/11/23	32 days	588	350	LV - A x 4~6 men
591	591	5.19.8.3.5	Site Acceptance Test for E&M Equip at BR 2A & 2B	30 edays	Thu 30/11/23	Sat 30/12/23	Thu 30/11/23	Sat 30/12/23	0.63 edays	575,580,582	592	
592	592	5.19.8.3.6	System Commissioning for E&M Equip at BR 2A & 2B	30 days	Sun 31/12/23	Mon 29/01/24	Sun 31/12/23	Mon 29/01/...	0 days	591,763	593	
593	593	5.19.8.3.7	Risk Allowances for Completion of Processing Plant at BR 2A & 2B	7 edays	Mon 29/01/24	Mon 05/02/24	Mon 29/01/24	Mon 05/02/...	2.63 edays	592	1271	
594	**594**	**5.19.8.3.8**	**Building Services Installations for BR 2A & 2B**	**195 days**	**Thu 25/05/23**	**Tue 05/12/23**	**Thu 25/05/23**	**Tue 05/12/23**	**12 days**	**565FS+90 e**		
595	595	5.19.8.3.8	Lighting and Power Distribution System, BR2	150 days	Thu 25/05/23	Sat 21/10/23	Thu 25/05/23	Sat 21/10/23	0 days	530	600	BS - A x 4~6 men
596	596	5.19.8.3.8	Plumbing Installation, BR2	120 days	Thu 25/05/23	Thu 21/09/23	Thu 25/05/23	Thu 21/09/23	10 days	1242	1244,600	Pb - A x 4~6 men
597	597	5.19.8.3.8	CCTV Installation (7 indoor + 2 outdoor Cameras), BR2	60 days	Sat 24/06/23	Tue 22/08/23	Sat 24/06/23	Tue 22/08/23	20 days	565FS+120 c	600,1274	BS - B x 4~6 men
598	598	5.19.8.3.8	Fire Services Installation, BR2	120 days	Thu 25/05/23	Thu 21/09/23	Thu 25/05/23	Thu 21/09/23	15 days		1195,1207,1208,600	FS - B x 4~6 men
599	599	5.19.8.3.8	Lightning Protection System, BR2	60 days	Thu 25/05/23	Sun 23/07/23	Thu 25/05/23	Sun 23/07/23	253 days		494FF	BS - C x 2~4 men
600	600	5.19.8.3.8	Testing and Commissioning of Building Services Installations, BR2	45 days	Sun 22/10/23	Tue 05/12/23	Sun 22/10/23	Tue 05/12/23	118 days	595,596,597	494FF	BS - C x 2~4 men
601	**601**	**5.20**	**Membrane Facilities Building, Portion B-5 (PS 6B.2.4)**	**1320 days**	**Fri 21/08/20**	**Mon 01/04/24**	**Fri 21/08/20**	**Mon 01/04...**	**0 days**			
602	602	5.20.1	Planned Key Date Completion Date - KD1A, MFB No. 2	0 days	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	Fri 30/10/20	0 days	648FF,649FF		
603	603	5.20.2	Planned Key Date Completion Date - KD1B, MFB No. 2	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	650FF		
604	604	5.20.3	Planned Sectional Completion Date - Section 1, MFB No. 2	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	651FF,652FF		
605	605	5.20.4	Planned Sectional Completion Date - Section 2, MFB No. 2	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
606	**606**	**5.20.5**	**Selection of Suppliers for major plant and materials for MFB**	**224 days**	**Tue 01/09/20**	**Mon 12/04/21**	**Tue 01/09/20**	**Mon 12/04...**	**64 days**			
607	**607**	**5.20.5.1**	**MFS - hollow fibre membrane modules (Marking Scheme Approach), ref. EQT**	**150 days**	**Tue 01/09/20**	**Thu 28/01/21**	**Tue 01/09/20**	**Thu 28/01/21**	**0 days**			
608	608	5.20.5.1.1	Submission for acceptance of purchasing package including proposed marking scheme	60 days	Tue 01/09/20	Fri 30/10/20	Tue 01/09/20	Fri 30/10/20	0 days		609	
609	609	5.20.5.1.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	Sat 31/10/20	Tue 29/12/20	0 days	608	610	
610	610	5.20.5.1.3	Acceptance of conforming quotation (Completed)	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	0 days	609	651	
611	**611**	**5.20.5.2**	**MFS - air scour blowers, C11, ref. EQT040**	**150 days**	**Tue 01/09/20**	**Thu 28/01/21**	**Tue 01/09/20**	**Thu 28/01/21**	**0 days**			
612	612	5.20.5.2.1	Submission for acceptance of purchasing package	60 days	Tue 01/09/20	Fri 30/10/20	Tue 01/09/20	Fri 30/10/20	0 days		613	
613	613	5.20.5.2.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	Sat 31/10/20	Tue 29/12/20	0 days	612	614	
614	614	5.20.5.2.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	0 days	613	653	
615	**615**	**5.20.5.3**	**MFS - permeate pumps, C11, ref. EQT024**	**180 days**	**Tue 01/09/20**	**Sat 27/02/21**	**Tue 01/09/20**	**Sat 27/02/21**	**0 days**			
616	616	5.20.5.3.1	Submission for acceptance of purchasing package	90 days	Tue 01/09/20	Sun 29/11/20	Tue 01/09/20	Sun 29/11/20	0 days		617	
617	617	5.20.5.3.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/20	Thu 28/01/21	Mon 30/11/20	Thu 28/01/21	0 days	616	618	
618	618	5.20.5.3.3	Acceptance of conforming quotation (Completed)	30 days	Fri 29/01/21	Sat 27/02/21	Fri 29/01/21	Sat 27/02/21	0 days	617	651	
619	**619**	**5.20.5.4**	**MFS - compressed air system, C11, ref. EQT029**	**120 days**	**Tue 15/09/20**	**Tue 12/01/21**	**Tue 15/09/20**	**Tue 12/01/21**	**108 days**			
620	620	5.20.5.4.1	Submission for acceptance of purchasing package	60 days	Tue 15/09/20	Fri 13/11/20	Tue 15/09/20	Fri 13/11/20	0 days		621	
621	621	5.20.5.4.2	Invitation of quotations for purchasing package	30 days	Sat 14/11/20	Sun 13/12/20	Sat 14/11/20	Sun 13/12/20	0 days	620	622	
622	622	5.20.5.4.3	Acceptance of conforming quotation	30 days	Mon 14/12/20	Tue 12/01/21	Mon 14/12/20	Tue 12/01/21	48 days	621	653	
623	**623**	**5.20.5.5**	**MFS - chemical storage tanks, C11, ref. EQT025**	**120 days**	**Thu 01/10/20**	**Thu 28/01/21**	**Thu 01/10/20**	**Thu 28/01/21**	**92 days**			
624	624	5.20.5.5.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		625	
625	625	5.20.5.5.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	624	626	
626	626	5.20.5.5.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	32 days	625	653	
627	**627**	**5.20.5.6**	**MFS - chemical dosing pumps, C11, ref. EQT026**	**120 days**	**Thu 01/10/20**	**Thu 28/01/21**	**Thu 01/10/20**	**Thu 28/01/21**	**92 days**			
628	628	5.20.5.6.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days	2,30	629	
629	629	5.20.5.6.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	628	630	
630	630	5.20.5.6.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	32 days	629	653	
631	**631**	**5.20.5.7**	**MFS - return activated sludge pumps (Marking Scheme Approach), ref. EQT0**	**180 days**	**Thu 01/10/20**	**Mon 29/03/21**	**Thu 01/10/20**	**Mon 29/03/21**	**0 days**			
632	632	5.20.5.7.1	Submission for acceptance of purchasing package	90 days	Thu 01/10/20	Tue 29/12/20	Thu 01/10/20	Tue 29/12/20	0 days		633	
633	633	5.20.5.7.2	Invitation of quotations for purchasing package	60 days	Wed 30/12/20	Sat 27/02/21	Wed 30/12/20	Sat 27/02/21	0 days	632	634	
634	634	5.20.5.7.3	Acceptance of conforming quotation (Completed)	30 days	Sun 28/02/21	Mon 29/03/21	Sun 28/02/21	Mon 29/03/21	0 days	633	651	
635	**635**	**5.20.5.8**	**MFS - membrane tank drain pumps, C11, ref. EQT009**	**180 days**	**Tue 15/09/20**	**Sat 13/03/21**	**Tue 15/09/20**	**Sat 13/03/21**	**0 days**			
636	636	5.20.5.8.1	Submission for acceptance of purchasing package	90 days	Tue 15/09/20	Sun 13/12/20	Tue 15/09/20	Sun 13/12/20	0 days		637	
637	637	5.20.5.8.2	Invitation of quotations for purchasing package	60 days	Mon 14/12/20	Thu 11/02/21	Mon 14/12/20	Thu 11/02/21	0 days	636	638	
638	638	5.20.5.8.3	Acceptance of conforming quotation (Completed)	30 days	Fri 12/02/21	Sat 13/03/21	Fri 12/02/21	Sat 13/03/21	0 days	637	651	
639	**639**	**5.20.5.9**	**Plant Service Water System - booster pumps, C11, ref. EQT030**	**180 days**	**Thu 15/10/20**	**Mon 12/04/21**	**Thu 15/10/20**	**Mon 12/04...**	**64 days**			
640	640	5.20.5.9.1	Submission for acceptance of purchasing package	90 days	Thu 15/10/20	Tue 12/01/21	Thu 15/10/20	Tue 12/01/21	0 days		641	



ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
641	641	5.20.5.9.2	Invitation of quotations for purchasing package	60 days	Wed 13/01/21	Sat 13/03/21	Wed 13/01/21	Sat 13/03/21	0 days	640	642	
642	642	5.20.5.9.3	Acceptance of conforming quotation	30 days	Sun 14/03/21	Mon 12/04/21	Sun 14/03/21	Mon 12/04/...	0 days	641	651	
643	643	5.20.5.10	**Plant Service Water System - hydro-pneumatic pressure tanks, C11, re**	**120 days**	**Thu 01/10/20**	**Thu 28/01/21**	**Thu 01/10/20**	**Thu 28/01/21**	**138 days**			
644	644	5.20.5.10.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		645	
645	645	5.20.5.10.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	644	646	
646	646	5.20.5.10.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	74 days	645	651	
647	**647**	**5.20.6**	**Design Submissions for MFB No. 2**	**572 days**	**Fri 21/08/20**	**Tue 15/03/22**	**Fri 21/08/20**	**Tue 15/03/22**	**0 days**			
648	648	5.20.6.1	Electrical schematic drawings for MFB No. 2	60 days	Fri 21/08/20	Mon 19/10/20	Fri 21/08/20	Mon 19/10/...	0 days		602FF	
649	649	5.20.6.2	CDS080-4 - Civil and dimensional requirements drawigns for MFB no. 2 up to +	30 days	Tue 01/09/20	Wed 30/09/20	Tue 01/09/20	Wed 30/09/20	0 days		602FF	
650	650	5.20.6.3	CDS081-4 - Civil and dimensional requirements drawings for MFB No. 2	210 days	Fri 28/08/20	Thu 25/03/21	Fri 28/08/20	Thu 25/03/21	0 days		603FF	
651	651	5.20.6.4	CDS005 - Detailed Design for Membrane Filtration System, Pumps and	80 edays	Mon 12/04/21	Thu 01/07/21	Mon 12/04/21	Thu 01/07/21	0.63 edays	610,618,634	660,664,667,670,679,682	
652	652	5.20.6.5	CDS024 - Detailed Design for Electrical Installations for MFB No. 2	159.38 edays	Thu 07/10/21	Tue 15/03/22	Thu 07/10/21	Tue 15/03/22	0 edays	75,85,81,89	76,699,705,604FF	
653	653	5.20.6.6	CDS008 - Detailed Design for Membrane Filtration System, Air Blowers,	100 edays	Mon 01/03/21	Wed 09/06/21	Mon 01/03/21	Wed 09/06/...	0.63 edays	614,622,626	673,676,604FF	
654	654	5.20.6.7	CDS034-4 - Detailed Design for Electrical Installations BS at MFB No. 2	100 edays	Fri 12/03/21	Sun 20/06/21	Fri 12/03/21	Sun 20/06/21	22.38 edays	136	768,604FF	
655	655	5.20.6.8	CDS025-4 - Detailed Design for LV Switchboards for Membrane Filtratic	60 edays	Mon 03/05/21	Fri 02/07/21	Mon 03/05/21	Fri 02/07/21	0.63 edays	71	691,604FF	
656	656	5.20.6.9	CDS026-2 - Detailed Design for HV Switchboards for MFB No. 2	60 edays	Sun 18/04/21	Thu 17/06/21	Sun 18/04/21	Thu 17/06/21	0.63 edays	67	604FF,695	
657	657	5.20.6.10	CDS050-4 - Detailed Design for Lifting Appliances - MFB No. 2	150 edays	Thu 15/10/20	Sun 14/03/21	Thu 15/10/20	Sun 14/03/21	0 edays	116	685,604FF	
658	**658**	**5.20.7**	**Manufacturing and Delivery of Plant & Materials**	**652 days**	**Sun 14/03/21**	**Sun 25/12/22**	**Sun 14/03/21**	**Sun 25/12/22**	**287 days**			
659	**659**	**5.20.7.1**	**Hollow Fibre Membrane Modules, EQT023**	**385 days**	**Fri 02/07/21**	**Thu 21/07/22**	**Fri 02/07/21**	**Thu 21/07/22**	**191 days**			
660	660	5.20.7.1.1	MFS - Manufacturing of Plant	300 days	Fri 02/07/21	Wed 27/04/22	Fri 02/07/21	Wed 27/04/...	0 days	651	661	
661	661	5.20.7.1.2	MFS - Factory Acceptance Test of Plant (to be witnessed by PM)	40 days	Thu 28/04/22	Mon 06/06/22	Thu 28/04/22	Mon 06/06/...	0 days	660	662	
662	662	5.20.7.1.3	MFS - Shipping and Delivery of Plant to site	45 days	Tue 07/06/22	Thu 21/07/22	Tue 07/06/22	Thu 21/07/22	0 days	661	720	
663	**663**	**5.20.7.2**	**Air Scour Blowers, EQT040**	**396 days**	**Fri 02/07/21**	**Mon 01/08/22**	**Fri 02/07/21**	**Mon 01/08...**	**208 days**			
664	664	5.20.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 02/07/21	Sat 26/02/22	Fri 02/07/21	Sat 26/02/22	111 days	651	665	
665	665	5.20.7.2.2	Shipping and Delivery of Plant to site	45 days	Sat 18/06/22	Mon 01/08/22	Sat 18/06/22	Mon 01/08/...	0 days	664,732SS-67	21	
666	**666**	**5.20.7.3**	**Permeate Pump, EQT024**	**285 days**	**Fri 02/07/21**	**Tue 12/04/22**	**Fri 02/07/21**	**Tue 12/04/22**	**409 days**			
667	667	5.20.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 02/07/21	Sat 26/02/22	Fri 02/07/21	Sat 26/02/22	0 days	651	668	
668	668	5.20.7.3.2	Shipping and Delivery of Plant to site	45 days	Sun 27/02/22	Tue 12/04/22	Sun 27/02/22	Tue 12/04/22	201 days	667	722	
669	**669**	**5.20.7.4**	**Compressed Air System, EQT029**	**396 days**	**Fri 02/07/21**	**Mon 01/08/22**	**Fri 02/07/21**	**Mon 01/08...**	**208 days**			
670	670	5.20.7.4.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 02/07/21	Thu 27/01/22	Fri 02/07/21	Thu 27/01/22	141 days	651	671	
671	671	5.20.7.4.2	Shipping and Delivery of Plant to site	45 days	Sat 18/06/22	Mon 01/08/22	Sat 18/06/22	Mon 01/08/...	0 days	670,732SS-67	21	
672	**672**	**5.20.7.5**	**Chemical Storage Tanks, EQT025**	**225 days**	**Thu 10/06/21**	**Thu 20/01/22**	**Thu 10/06/21**	**Thu 20/01/22**	**403 days**			
673	673	5.20.7.5.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Thu 10/06/21	Mon 06/12/21	Thu 10/06/21	Mon 06/12/...	0 days	653	674	
674	674	5.20.7.5.2	Shipping and Delivery of Plant to site	45 days	Tue 07/12/21	Thu 20/01/22	Tue 07/12/21	Thu 20/01/22	104 days	673	726	
675	**675**	**5.20.7.6**	**Chemical Dosing Pumps, EQT026**	**225 days**	**Thu 10/06/21**	**Thu 20/01/22**	**Thu 10/06/21**	**Thu 20/01/22**	**403 days**			
676	676	5.20.7.6.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Thu 10/06/21	Mon 06/12/21	Thu 10/06/21	Mon 06/12/...	0 days	653	677	
677	677	5.20.7.6.2	Shipping and Delivery of Plant to site	45 days	Tue 07/12/21	Thu 20/01/22	Tue 07/12/21	Thu 20/01/22	104 days	676	727	
678	**678**	**5.20.7.7**	**Stoplogs and Penstocks, EQT013**	**396 days**	**Fri 02/07/21**	**Mon 01/08/22**	**Fri 02/07/21**	**Mon 01/08...**	**208 days**			
679	679	5.20.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 02/07/21	Sat 26/02/22	Fri 02/07/21	Sat 26/02/22	111 days	651	680	
680	680	5.20.7.7.2	Shipping and Delivery of Plant to site	45 days	Sat 18/06/22	Mon 01/08/22	Sat 18/06/22	Mon 01/08/...	0 days	679,732SS-67	19	
681	**681**	**5.20.7.8**	**Pipework, Valves and Electric Actuators, EQT036 (Rev. 11)**	**285 days**	**Mon 14/02/22**	**Fri 25/11/22**	**Mon 14/02/22**	**Fri 25/11/22**	**272 days**	**56,63**		
682	682	5.20.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Mon 14/02/22	Tue 11/10/22	Mon 14/02/22	Tue 11/10/22	0 days	651	683	
683	683	5.20.7.8.2	Shipping and Delivery of Plant to site	45 days	Wed 12/10/22	Fri 25/11/22	Wed 12/10/22	Fri 25/11/22	64 days	682	725	
684	**684**	**5.20.7.9**	**Lifting Appliances**	**356 days**	**Sun 14/03/21**	**Fri 04/03/22**	**Sun 14/03/21**	**Fri 04/03/22**	**206 days**			
685	685	5.20.7.9.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Sun 14/03/21	Sat 09/10/21	Sun 14/03/21	Sat 09/10/21	101 days	657	686	
686	686	5.20.7.9.2	Shipping and Delivery of Plant to site	45 days	Wed 19/01/22	Fri 04/03/22	Wed 19/01/22	Fri 04/03/22	16 days	685,709SS-67	12,735	
687	**687**	**5.20.7.10**	**LV Switchboards**	**395 days**	**Sat 03/07/21**	**Mon 01/08/22**	**Sat 03/07/21**	**Mon 01/08...**	**178 days**			
688	688	5.20.7.10.1	BR - Manufacturing of Plant	240 days	Sat 03/07/21	Sun 27/02/22	Sat 03/07/21	Sun 27/02/22	0 days	531	689	
689	689	5.20.7.10.2	BR - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Mon 28/02/22	Sat 28/05/22	Mon 28/02/22	Sat 28/05/22	0 days	688	690	
690	690	5.20.7.10.3	BR - Shipping and Delivery of Plant to site	45 days	Sun 29/05/22	Tue 12/07/22	Sun 29/05/22	Tue 12/07/22	126 days	689	750	
691	691	5.20.7.10.4	MFS - Manufacturing of Plant	240 days	Sat 03/07/21	Sun 27/02/22	Sat 03/07/21	Sun 27/02/22	0 days	655	692	
692	692	5.20.7.10.5	MFS - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Mon 28/02/22	Sat 28/05/22	Mon 28/02/22	Sat 28/05/22	20 days	691	693	
693	693	5.20.7.10.6	MFS - Shipping and Delivery of Plant to site	45 days	Sat 18/06/22	Mon 01/08/22	Sat 18/06/22	Mon 01/08/...	106 days	692,732SS-67	51	
694	**694**	**5.20.7.11**	**HV Switchboards, EQT031**	**410 days**	**Fri 18/06/21**	**Mon 01/08/22**	**Fri 18/06/21**	**Mon 01/08...**	**208 days**			
695	695	5.20.7.11.1	MFS - Manufacturing of Plant	180 days	Fri 18/06/21	Tue 14/12/21	Fri 18/06/21	Tue 14/12/21	0 days	656	696	
696	696	5.20.7.11.2	MFS - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Wed 15/12/21	Mon 14/03/22	Wed 15/12/21	Mon 14/03/...	95 days	695	697	
697	697	5.20.7.11.3	MFS - Shipping and Delivery of Plant to site	45 days	Sat 18/06/22	Mon 01/08/22	Sat 18/06/22	Mon 01/08/...	106 days	696,732SS-67	54	
698	**698**	**5.20.7.12**	**11kV/380V Stepdown Power Transformers, EQT032**	**285 days**	**Wed 16/03/22**	**Sun 25/12/22**	**Wed 16/03/22**	**Sun 25/12/22**	**287 days**			
699	699	5.20.7.12.1	MFS - Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 16/03/22	Thu 10/11/22	Wed 16/03/22	Thu 10/11/22	0 days	652	700	



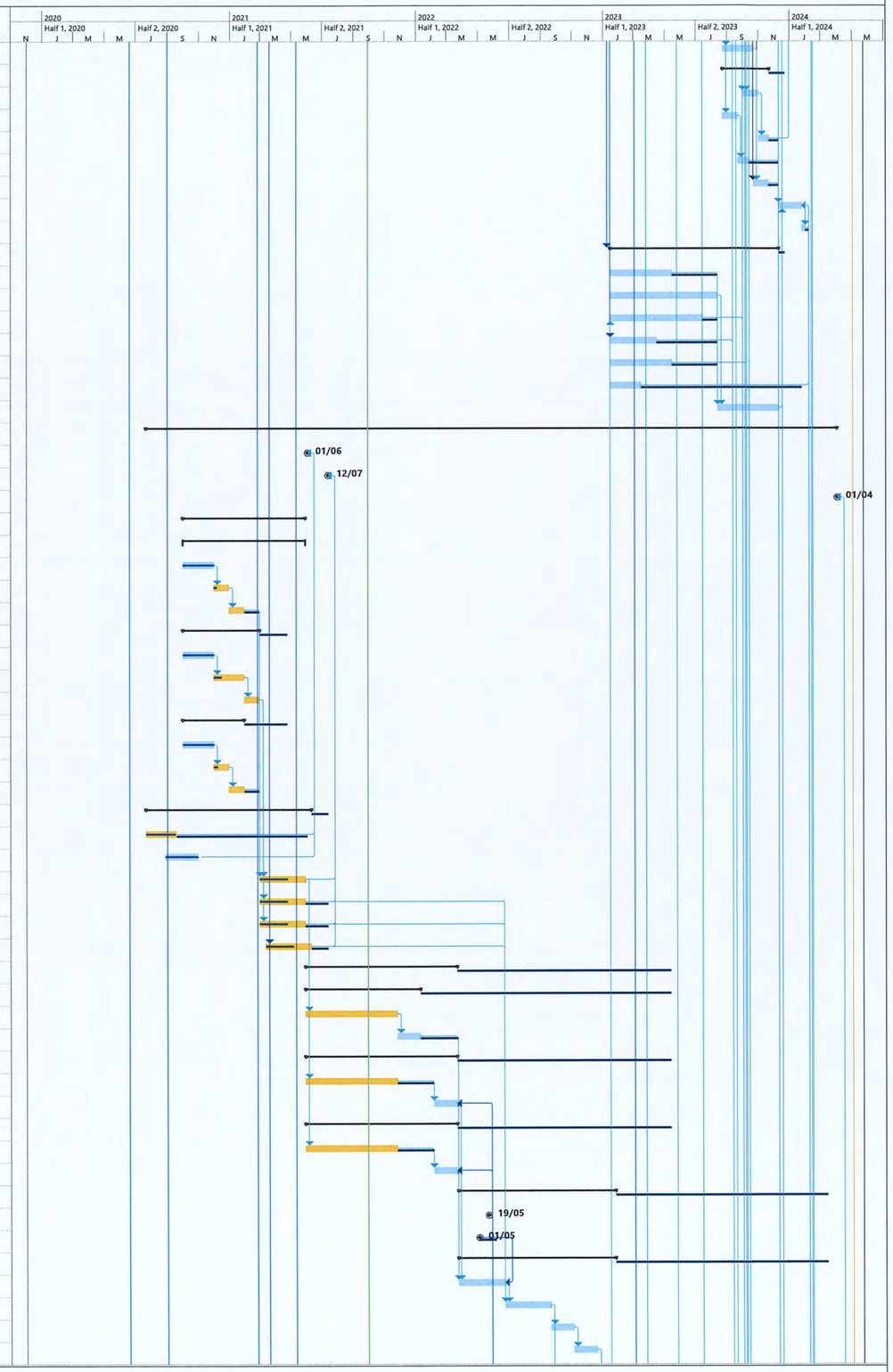
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
700	700	5.20.7.12.2	MFS - Shipping and Delivery of Plant to site	45 days	Fri 11/11/22	Sun 25/12/22	Fri 11/11/22	Sun 25/12/22	0 days	699	755	
701	**701**	**5.20.7.13**	**PLC System**	**285 days**	**Wed 16/03/22**	**Sun 25/12/22**	**Wed 16/03/22**	**Sun 25/12/22**	**32 days**			
702	702	5.20.7.13.1	Manufacturing of Plant, PLC for BR2A &B	210 days	Wed 16/03/22	Tue 11/10/22	Wed 16/03/22	Tue 11/10/22	0 days	529	703	
703	703	5.20.7.13.2	Factory Acceptance Test of Plant, PLC for BR2A &B (To be witnessed	30 days	Wed 12/10/22	Thu 10/11/22	Wed 12/10/22	Thu 10/11/22	0 days	702	704	
704	704	5.20.7.13.3	Shipping and Delivery of Plant to site	45 days	Fri 11/11/22	Sun 25/12/22	Fri 11/11/22	Sun 25/12/22	0 days	703	752	
705	705	5.20.7.13.4	Manufacturing of Plant, PLC for MFB2	210 days	Wed 16/03/22	Tue 11/10/22	Wed 16/03/22	Tue 11/10/22	0 days	652	706	
706	706	5.20.7.13.5	Factory Acceptance Test of Plant, PLC for MFB2 (To be witnessed by	30 days	Wed 12/10/22	Thu 10/11/22	Wed 12/10/22	Thu 10/11/22	0 days	705	707	
707	707	5.20.7.13.6	Shipping and Delivery of Plant to site	45 days	Fri 11/11/22	Sun 25/12/22	Fri 11/11/22	Sun 25/12/22	0 days	706	753	
708	**708**	**5.20.8**	**Site Installation Work**	**683 days**	**Sun 20/03/22**	**Wed 31/01/24**	**Sun 20/03/22**	**Wed 31/01...**	**0 days**			
709	709	5.20.8.1	Tentative Civil Handover Date, Portion B-5A, MFB No. 2 below 1st floor	1 day	Sun 20/03/22	Sun 20/03/22	Sun 20/03/22	Sun 20/03/22	0 days		712,718FS+45 edays,711,	
710	**710**	**5.20.8.2**	**Commencement of E&M Installation at MFB No. 2 Lower Part**	**404 days**	**Mon 21/03/22**	**Fri 28/04/23**	**Mon 21/03/22**	**Fri 28/04/23**	**0 days**	**709**		
711	711	5.20.8.2.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, W	7 days	Mon 21/03/22	Sun 27/03/22	Mon 21/03/22	Sun 27/03/22	0 days	709		
712	**712**	**5.20.8.2.2**	**Installation of Lifting Appliances at MFB No. 2**	**66 days**	**Mon 21/03/22**	**Wed 25/05/22**	**Mon 21/03/22**	**Wed 25/05...**	**248 days**	**709,686**		
713	713	5.20.8.2.2.1	B2 EOT Crane LA-04-01 SWL 5t	45 days	Mon 21/03/22	Wed 04/05/22	Mon 21/03/22	Wed 04/05/...	0 days		715,716,717	
714	714	5.20.8.2.2.2	B2 EOT Crane LA-04-02 SWL 5t	30 days	Mon 21/03/22	Tue 19/04/22	Mon 21/03/22	Tue 19/04/22	15 days		715,716,717	
715	715	5.20.8.2.2.3	B2 MR LA-04-03 SWL 5t	14 days	Thu 05/05/22	Wed 18/05/22	Thu 05/05/22	Wed 18/05/...	0 days	713,714	717	
716	716	5.20.8.2.2.4	B1 MR LA-04-04 SWL 3t	14 days	Thu 05/05/22	Wed 18/05/22	Thu 05/05/22	Wed 18/05/...	0 days	713,714	717	
717	717	5.20.8.2.2.5	T&C, Loading Test for Lifting Appliances	7 days	Thu 19/05/22	Wed 25/05/22	Thu 19/05/22	Wed 25/05/...	57 days	713,714,715	720	
718	**718**	**5.20.8.2.3**	**Mechanical Installations for E&M Equip. at MFB No. 2 Lower Part**	**359 days**	**Thu 05/05/22**	**Fri 28/04/23**	**Thu 05/05/22**	**Fri 28/04/23**	**0 days**	**709FS+45 e**	**730SS**	
719	719	5.20.8.2.3.1	Installation of penstocks and stoplogs (Penstocks 18nos, Stoplogs	90 days	Tue 02/08/22	Sun 30/10/22	Tue 02/08/22	Sun 30/10/22	0 days	680	729	ME - E x 4~6 men
720	720	5.20.8.2.3.2	Installation of hollow fibre membrane modules (x9), EQT023	90 days	Fri 22/07/22	Wed 19/10/22	Fri 22/07/22	Wed 19/10/...	191 days	662,717		ME - A x 4~6 men
721	721	5.20.8.2.3.3	Installation of air scour blowers (x3), EQT040	90 days	Tue 02/08/22	Sun 30/10/22	Tue 02/08/22	Sun 30/10/22	0 days	665,671	725,722,723	ME - B x 4~6 men
722	722	5.20.8.2.3.4	Installation of permeate pumps (x10), EQT024	90 days	Mon 31/10/22	Sat 28/01/23	Mon 31/10/22	Sat 28/01/23	0 days	721,668	725	ME - A x 4~6 men
723	723	5.20.8.2.3.5	Installation of return activated sludge pumps (x5), EQT010	90 days	Mon 31/10/22	Sat 28/01/23	Mon 31/10/22	Sat 28/01/23	0 days	721	725	ME - B x 4~6 men
724	724	5.20.8.2.3.6	Installation of membrane tank drain pumps (x2), EQT009	45 days	Thu 05/05/22	Sat 18/06/22	Thu 05/05/22	Sat 18/06/22	224 days		725	ME - C x 4~6 men
725	725	5.20.8.2.3.7	Installation of pipework and valves, EQT036	90 days	Sun 29/01/23	Fri 28/04/23	Sun 29/01/23	Fri 28/04/23	0 days	721,722,723	729FF	ME - C x 4~6 men
726	726	5.20.8.2.3.8	Installation of chemical storage tank, EQT025	60 days	Thu 05/05/22	Sun 03/07/22	Thu 05/05/22	Sun 03/07/22	299 days	674		ME - D x 2~4 men
727	727	5.20.8.2.3.9	Installation of chemical dosing pumps, EQT026	60 days	Thu 05/05/22	Sun 03/07/22	Thu 05/05/22	Sun 03/07/22	299 days	677		ME - D x 2~4 men
728	728	5.20.8.2.3.10	Installation of plant service water system	90 days	Thu 05/05/22	Tue 02/08/22	Thu 05/05/22	Tue 02/08/22	269 days			ME - C x 4~6 men
729	729	5.20.8.2.3.11	Site Acceptance Tests - mechanical aspects including alignment an	180 days	Mon 31/10/22	Fri 28/04/23	Mon 31/10/22	Fri 28/04/23	176 days	719,725FF	765	ME - D x 2~4 men
730	**730**	**5.20.8.2.4**	**Electrical Installations for E&M Equip. at MFB No. 2 Lower Part**	**150 days**	**Thu 05/05/22**	**Sat 01/10/22**	**Thu 05/05/22**	**Sat 01/10/22**	**237 days**	**718SS**		
731	731	5.20.8.2.4.1	Installation of cable trays and cable containments	150 days	Thu 05/05/22	Sat 01/10/22	Thu 05/05/22	Sat 01/10/22	45 days		756	
732	732	5.20.8.3	Tentative Civil Handover Date, Portion B-5B, MFB No. 2 remaining port	1 day	Wed 17/08/22	Wed 17/08/22	Wed 17/08/22	Wed 17/08/...	0 days		735,744FS+45 edays,768I	
733	**733**	**5.20.8.4**	**Commencement of E&M Installation at MFB No. 2 Upper Part**	**532 days**	**Thu 18/08/22**	**Wed 31/01/24**	**Thu 18/08/22**	**Wed 31/01...**	**0 days**	**732**		
734	734	5.20.8.4.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, W	7 days	Thu 18/08/22	Wed 24/08/22	Thu 18/08/22	Wed 24/08/...	0 days	732		
735	**735**	**5.20.8.4.2**	**Installation of Lifting Appliances at MFB No. 2**	**142 days**	**Thu 18/08/22**	**Fri 06/01/23**	**Thu 18/08/22**	**Fri 06/01/23**	**40 days**	**732,686**		
736	736	5.20.8.4.2.1	GF EOT Crane LA-04-05 SWL 5t	45 days	Thu 18/08/22	Sat 01/10/22	Thu 18/08/22	Sat 01/10/22	0 days		738,739,743	LA - A x 4~6 men
737	737	5.20.8.4.2.2	GF Gantry Crane LA-04-06 SWL 6t	45 days	Thu 18/08/22	Sat 01/10/22	Thu 18/08/22	Sat 01/10/22	0 days		738,739,743	LA - B x 4~6 men
738	738	5.20.8.4.2.3	1F EOT Crane LA-04-07 SWL 15t	45 days	Sun 02/10/22	Tue 15/11/22	Sun 02/10/22	Tue 15/11/22	0 days	736,737	740,741,742,743	LA - A x 4~6 men
739	739	5.20.8.4.2.4	1F EOT Crane LA-04-08 SWL 15t	45 days	Sun 02/10/22	Tue 15/11/22	Sun 02/10/22	Tue 15/11/22	0 days	736,737	740,741,742,743	LA - B x 4~6 men
740	740	5.20.8.4.2.5	RF EOT Crane LA-04-09 SWL 2t	45 days	Wed 16/11/22	Fri 30/12/22	Wed 16/11/22	Fri 30/12/22	0 days	738,739	743	LA - A x 4~6 men
741	741	5.20.8.4.2.6	RF Retractable MR LA-04-10 SWL 2t	45 days	Wed 16/11/22	Fri 30/12/22	Wed 16/11/22	Fri 30/12/22	0 days	738,739	743	LA - B x 4~6 men
742	742	5.20.8.4.2.7	Mobile A-frame LA-04-11 SWL 2t	7 days	Wed 16/11/22	Tue 22/11/22	Wed 16/11/22	Tue 22/11/22	38 days	738,739	743	LA - C x 4~6 men
743	743	5.20.8.4.2.8	T&C, Loading Test for Lifting Appliances	7 days	Sat 31/12/22	Fri 06/01/23	Sat 31/12/22	Fri 06/01/23	0 days	736,737,738	745	LA - A x 4~6 men
744	**744**	**5.20.8.4.3**	**Mechanical Installations for E&M Equip. at MFB No. 2 Upper Part**	**377 days**	**Sun 02/10/22**	**Fri 13/10/23**	**Sun 02/10/22**	**Fri 13/10/23**	**0 days**	**732FS+45 e**	**749SS+45 edays,765**	
745	745	5.20.8.4.3.1	Installation of air scour blowers (x3)	100 days	Sat 07/01/23	Sun 16/04/23	Sat 07/01/23	Sun 16/04/23	0 days	743	746,748	ME - A x 4~6 men
746	746	5.20.8.4.3.2	Installation of compressed air system (x1)	60 days	Mon 17/04/23	Thu 15/06/23	Mon 17/04/23	Thu 15/06/23	160 days	745		ME - B x 4~6 men
747	747	5.20.8.4.3.3	Installation of instrumentations, EQT035-1	60 days	Sun 02/10/22	Wed 30/11/22	Sun 02/10/22	Wed 30/11/...	357 days	52		ME - D x 2~4 men
748	748	5.20.8.4.3.4	Site Acceptance Tests - mechanical aspects including alignment an	180 days	Mon 17/04/23	Fri 13/10/23	Mon 17/04/23	Fri 13/10/23	40 days	745		ME - D x 2~4 men
749	**749**	**5.20.8.4.4**	**Electrical Installations for E&M Equip. at MFB No. 2 Upper Part**	**340 days**	**Wed 16/11/22**	**Sat 21/10/23**	**Wed 16/11/22**	**Sat 21/10/23**	**0 days**	**744SS+45 e**	**765**	
750	750	5.20.8.4.4.1	Installation of LV Switchboards, BR2	90 days	Wed 16/11/22	Mon 13/02/23	Wed 16/11/22	Mon 13/02/...	40 days	690	757	LV - B x 4~6 men
751	751	5.20.8.4.4.2	Installation of LV Switchboards, MFB No. 2	90 days	Wed 16/11/22	Mon 13/02/23	Wed 16/11/22	Mon 13/02/...	40 days	693	757	LV - A x 4~6 men
752	752	5.20.8.4.4.3	Installation of PLC Panels, BR2	90 days	Mon 26/12/22	Sat 25/03/23	Mon 26/12/22	Sat 25/03/23	0 days	704	757,761	
753	753	5.20.8.4.4.4	Installation of PLC Panels, MFB No. 2	90 days	Mon 26/12/22	Sat 25/03/23	Mon 26/12/22	Sat 25/03/23	242 days	707		PLC - B x 1 man
754	754	5.20.8.4.4.5	Installation of HV Switchboards, MFB No. 2	60 days	Wed 16/11/22	Sat 14/01/23	Wed 16/11/22	Sat 14/01/23	70 days	697	757	HV - A x 4~6 men
755	755	5.20.8.4.4.6	Installation of transformer, MFB No. 2, EQT032	45 days	Mon 26/12/22	Wed 08/02/23	Mon 26/12/22	Wed 08/02/...	287 days	700		
756	756	5.20.8.4.4.7	Installation of cable trays and cable containments	180 days	Wed 16/11/22	Sun 14/05/23	Wed 16/11/22	Sun 14/05/23	192 days	731		
757	757	5.20.8.4.4.8	Cables laying and terminations	150 days	Sun 26/03/23	Tue 22/08/23	Sun 26/03/23	Tue 22/08/23	0 days	750,751,752	762,759,758	
758	758	5.20.8.4.4.9	Energisation of LV Switchboards, MFB No. 2 (Rev. 8)	1 day	Wed 23/08/23	Wed 23/08/23	Wed 23/08/23	Wed 23/08/...	91 days	757		LA - A x 4~6 men



Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

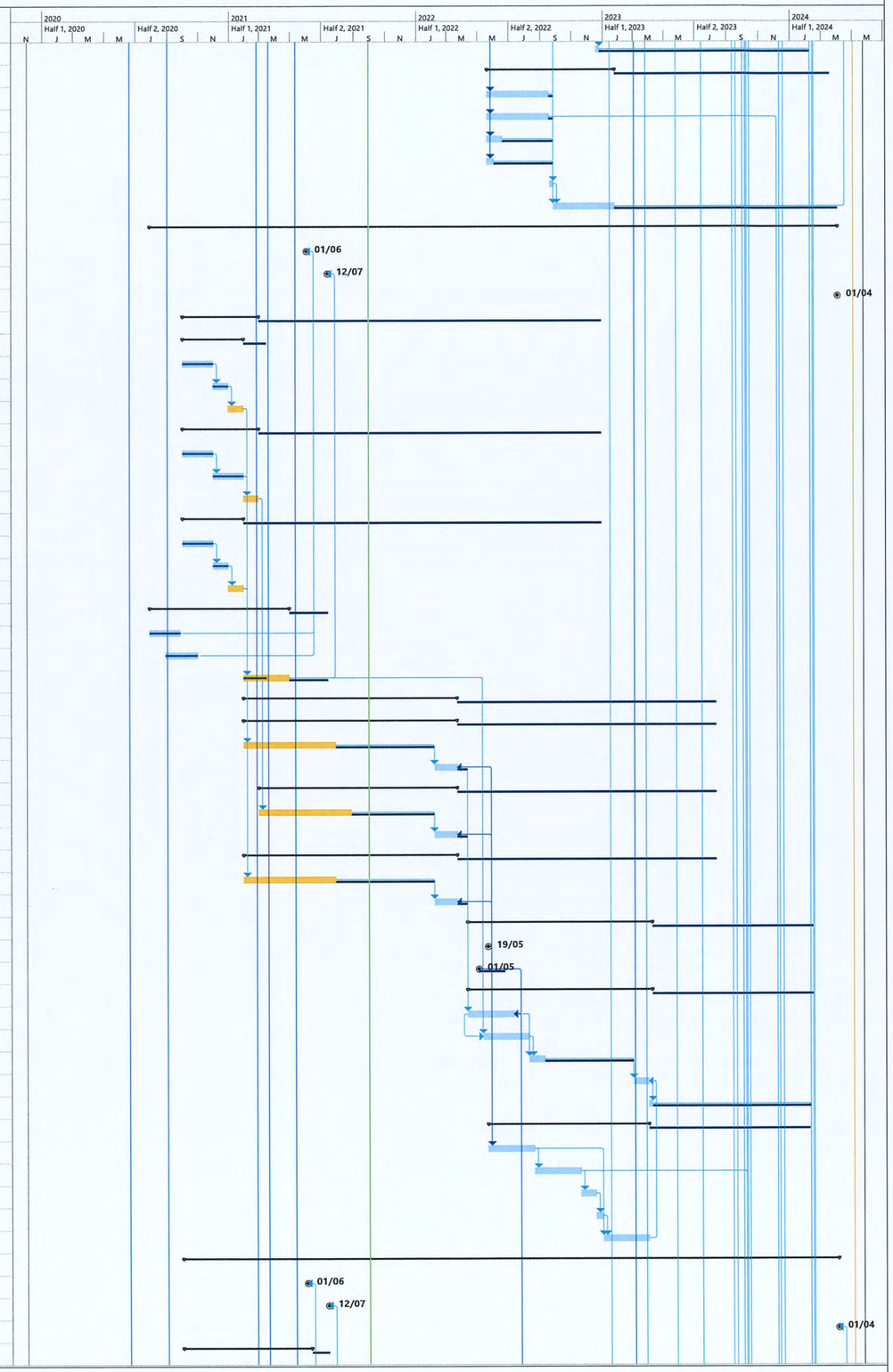
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
759	759	5.20.8.4.4.:	Site Acceptance Tests - Electrical aspects including voltage and cur	60 days	Wed 23/08/23	Sat 21/10/23	Wed 23/08/23	Sat 21/10/23	0 days	757	765	LV - A x 4~6 men
760	**760**	**5.20.8.4.5**	**SCADA Systems, BR No. 1 & No 2, MFB No. 2**	**91 days**	**Wed 23/08/23**	**Tue 21/11/23**	**Wed 23/08/23**	**Tue 21/11/23**	**31 days**			
761	761	5.20.8.4.5.:	Configuration of PLC System for BR No. 1 & No. 2	30 days	Mon 02/10/23	Tue 31/10/23	Mon 02/10/23	Tue 31/10/23	0 days	752,588	763	PLC - A x 1 man
762	762	5.20.8.4.5.:	Configuration of PLC System for MFB No. 2	30 days	Wed 23/08/23	Thu 21/09/23	Wed 23/08/23	Thu 21/09/23	0 days	757	764	
763	763	5.20.8.4.5.:	Site Acceptance Test for PLC System at BR No. 1 and No. 2	21 days	Wed 01/11/23	Tue 21/11/23	Wed 01/11/23	Tue 21/11/23	19 days	761	766,592,1275	
764	764	5.20.8.4.5.4	Site Acceptance Test for PLC System at MFB No. 2	21 days	Fri 22/09/23	Thu 12/10/23	Fri 22/09/23	Thu 12/10/23	59 days	762	766,1275	
765	765	5.20.8.4.6	Site Acceptance Test for E&M Equip at MFB No. 2	30 edays	Sat 21/10/23	Mon 20/11/23	Sat 21/10/23	Mon 20/11/...	20.63 edays	744,749,755	766	
766	766	5.20.8.4.7	System Commissioning for E&M Equip at MFB No. 2	45 days	Mon 11/12/23	Wed 24/01/24	Mon 11/12/23	Wed 24/01/...	0 days	763,765,775	767	
767	767	5.20.8.4.8	Risk Allowances for Completion of Processing Plant at MFB No. 2	7 edays	Wed 24/01/24	Wed 31/01/24	Wed 24/01/24	Wed 31/01/...	7.63 edays	766	1271	
768	**768**	**5.20.8.4.9**	**Building Services Installations for MFB No. 2**	**330 days**	**Sun 15/01/23**	**Sun 10/12/23**	**Sun 15/01/23**	**Sun 10/12/23**	**12 days**	**732FS+150 d**		
769	769	5.20.8.4.9.:	Mechanical Ventilation and Air Conditioning System, MFB No. 2	120 days	Sun 15/01/23	Sun 14/05/23	Sun 15/01/23	Sun 14/05/23	90 days		775	MVAC - A x 4~6 men
770	770	5.20.8.4.9.:	Lighting and Power Distribution System, MFB No. 2	210 days	Sun 15/01/23	Sat 12/08/23	Sun 15/01/23	Sat 12/08/23	0 days		775	BS - A x 4~6 men
771	771	5.20.8.4.9.:	Plumbing Installation, MFB No. 2	180 days	Sun 15/01/23	Thu 13/07/23	Sun 15/01/23	Thu 13/07/23	30 days	1242	1244,775	Pb - B x 4~6 men
772	772	5.20.8.4.9.4	CCTV Installation (10 indoor + 3 outdoor Cameras), MFB No. 2	90 days	Sun 15/01/23	Fri 14/04/23	Sun 15/01/23	Fri 14/04/23	120 days	732FS+120 d	775,1274	BS - B x 4~6 men
773	773	5.20.8.4.9.5	Fire Services Installation, MFB No. 2	120 days	Sun 15/01/23	Sun 14/05/23	Sun 15/01/23	Sun 14/05/23	90 days		1195,1207,1208,775	FS - B x 4~6 men
774	774	5.20.8.4.9.(	Earthing and Lightning Protection System, MFB No. 2	60 days	Sun 15/01/23	Wed 15/03/23	Sun 15/01/23	Wed 15/03/...	315 days		766FF	BS - C x 2~4 men
775	775	5.20.8.4.9.7	Testing and Commissioning of Building Services Installations, MFB	120 days	Sun 13/08/23	Sun 10/12/23	Sun 13/08/23	Sun 10/12/23	0 days	769,770,771	766	BS - C x 2~4 men
776	**776**	**5.21**	**Chemical System No. 1 and No. 2, Portion B-7 & B-7B (PS 6B.2.3)**	**1351 days**	**Tue 21/07/20**	**Mon 01/04/24**	**Tue 21/07/20**	**Mon 01/04...**	**0 days**			
777	777	5.21.1	Planned Key Date Completion Date - KD1B, Chem Sys No. 1 & 2	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	794FF,795FF		
778	778	5.21.2	Planned Sectional Completion Date - Section 1, Chem Sys No. 1 & 2	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	796FF,797FF		
779	779	5.21.3	Planned Sectional Completion Date - Section 2, Chem Sys No. 1 & 2	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days	825FF		
780	**780**	**5.21.4**	**Selection of Suppliers for major plant and materials for Chemical System**	**240 days**	**Thu 01/10/20**	**Fri 28/05/21**	**Thu 01/10/20**	**Fri 28/05/21**	**0 days**			
781	**781**	**5.21.4.1**	**Chemical Storage and Dosing - chemical storage tanks, C11, ref. EQT025**	**240 days**	**Thu 01/10/20**	**Fri 28/05/21**	**Thu 01/10/20**	**Fri 28/05/21**	**0 days**			
782	782	5.21.4.1.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		783	
783	783	5.21.4.1.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	782	784	
784	784	5.21.4.1.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	30 days	783	796	
785	**785**	**5.21.4.2**	**Chemical Storage and Dosing - chemical dosing pumps, C11, ref. EQT027**	**150 days**	**Thu 01/10/20**	**Sat 27/02/21**	**Thu 01/10/20**	**Sat 27/02/21**	**54 days**			
786	786	5.21.4.2.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		787	
787	787	5.21.4.2.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/20	Thu 28/01/21	Mon 30/11/20	Thu 28/01/21	0 days	786	788	
788	788	5.21.4.2.3	Acceptance of conforming quotation	30 days	Fri 29/01/21	Sat 27/02/21	Fri 29/01/21	Sat 27/02/21	0 days	787	796,797,798	
789	**789**	**5.21.4.3**	**Chemical Storage and Dosing - transfer pumps, C11, ref. EQT026**	**120 days**	**Thu 01/10/20**	**Thu 28/01/21**	**Thu 01/10/20**	**Thu 28/01/21**	**84 days**			
790	790	5.21.4.3.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		791	
791	791	5.21.4.3.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	790	792	
792	792	5.21.4.3.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	30 days	791	796	
793	**793**	**5.21.5**	**Design Submissions for Chemical System No. 1 and No. 2**	**324 days**	**Tue 21/07/20**	**Thu 10/06/21**	**Tue 21/07/20**	**Thu 10/06/21**	**33 days**			
794	794	5.21.5.1	Electrical schematic drawings for Chemical Systems No. 1 and No. 2	60 days	Tue 21/07/20	Fri 18/09/20	Tue 21/07/20	Fri 18/09/20	256 days		777FF	
795	795	5.21.5.2	CDS081-5 - Civil and dimensional requirements drawings for Chemical S	70 days	Fri 28/08/20	Thu 05/11/20	Fri 28/08/20	Thu 05/11/20	0 days		777FF	
796	796	5.21.5.3	CDS006 - Detailed Design for Chemical Dosing System	90 edays	Sat 27/02/21	Fri 28/05/21	Sat 27/02/21	Fri 28/05/21	0.63 edays	784,788,792	802,805,808,778FF	
797	797	5.21.5.4	CDS027 - Detailed Design for Electrical Installations for Chemical Syster	90 edays	Sat 27/02/21	Fri 28/05/21	Sat 27/02/21	Fri 28/05/21	45 edays	788	815,778FF	
798	798	5.21.5.5	CDS028 - Detailed Design for Electrical Installations for Chemical Syster	90 edays	Sat 27/02/21	Fri 28/05/21	Sat 27/02/21	Fri 28/05/21	45 edays	788	815,778FF	
799	799	5.21.5.6	CDS034-5 - Detailed Design for Electrical Installations BS at Chemical Sy	90 edays	Fri 12/03/21	Thu 10/06/21	Fri 12/03/21	Thu 10/06/21	32.38 edays	136	815,778FF	
800	**800**	**5.21.6**	**Manufacturing and Delivery of Plant & Materials**	**296 days**	**Sat 29/05/21**	**Sun 20/03/22**	**Sat 29/05/21**	**Sun 20/03/22**	**417 days**			
801	**801**	**5.21.6.1**	**Chemical Storage Tanks, EQT025**	**225 days**	**Sat 29/05/21**	**Sat 08/01/22**	**Sat 29/05/21**	**Sat 08/01/22**	**488 days**			
802	802	5.21.6.1.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 29/05/21	Wed 24/11/21	Sat 29/05/21	Wed 24/11/...	0 days	796	803	
803	803	5.21.6.1.2	Shipping and Delivery of Plant to site	45 days	Thu 25/11/21	Sat 08/01/22	Thu 25/11/21	Sat 08/01/22	73 days	802	814	
804	**804**	**5.21.6.2**	**Chemical Dosing Pumps, EQT027**	**296 days**	**Sat 29/05/21**	**Sun 20/03/22**	**Sat 29/05/21**	**Sun 20/03/22**	**417 days**			
805	805	5.21.6.2.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 29/05/21	Wed 24/11/21	Sat 29/05/21	Wed 24/11/...	71 days	796	806	
806	806	5.21.6.2.2	Shipping and Delivery of Plant to site	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	2 days	805,811FF-6	814	
807	**807**	**5.21.6.3**	**Chemical Transfer Pumps, EQT026**	**296 days**	**Sat 29/05/21**	**Sun 20/03/22**	**Sat 29/05/21**	**Sun 20/03/22**	**417 days**			
808	808	5.21.6.3.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 29/05/21	Wed 24/11/21	Sat 29/05/21	Wed 24/11/...	71 days	796	809	
809	809	5.21.6.3.2	Shipping and Delivery of Plant to site	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	2 days	808,811FF-6	814	
810	**810**	**5.21.7**	**Site Installation Work**	**307 days**	**Tue 22/03/22**	**Mon 23/01/23**	**Tue 22/03/22**	**Mon 23/01...**	**415 days**			
811	811	5.21.7.1	Tentative Civil Handover Date, Portion B-7 & B-7B (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days		809FF-60 edays,806FF-60	
812	812	5.21.7.2	Tentative Civil Handover Date, Chemical Pipe Trench (by others)	1 day	Sun 01/05/22	Sun 01/05/22	Sun 01/05/22	Sun 01/05/22	33 days		814FF+50 days	
813	**813**	**5.21.7.3**	**Commencement of E&M Installation at Chemical Dosing System 1 and**	**307 days**	**Tue 22/03/22**	**Mon 23/01/23**	**Tue 22/03/22**	**Mon 23/01...**	**415 days**			
814	814	5.21.7.3.1	Mechanical Installations for E&M Equip. for Chemical Dosing System	90 edays	Tue 22/03/22	Mon 20/06/22	Tue 22/03/22	Mon 20/06/...	0 edays	812FF+50 d	815	ME - D x 2~4 men
815	815	5.21.7.3.2	Electrical Installations for E&M Equip. for Chemical Dosing System	90 edays	Mon 20/06/22	Sun 18/09/22	Mon 20/06/22	Sun 18/09/22	0.63 edays	814,797,798	816,824	EE - B x 4~6 men
816	816	5.21.7.3.3	Site Acceptance Test for E&M Equip for Chemical Dosing System	45 days	Mon 19/09/22	Wed 02/11/22	Mon 19/09/22	Wed 02/11/...	0 days	815	817	EE - A x 4~6 men
817	817	5.21.7.3.4	System Commissioning for E&M Equip for Chemical Dosing System	45 days	Thu 03/11/22	Sat 17/12/22	Thu 03/11/22	Sat 17/12/22	0 days	816	818	



Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

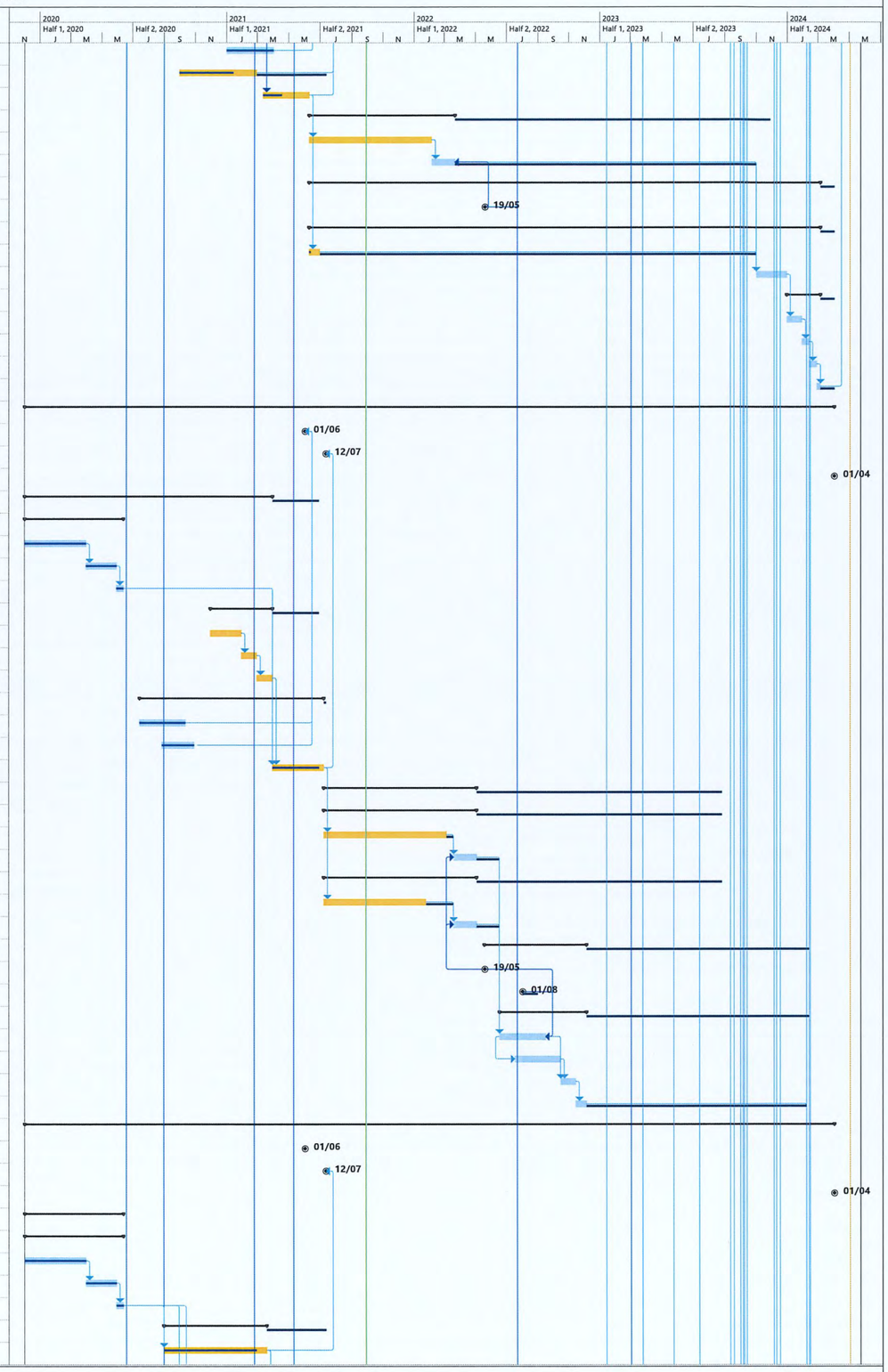
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
818	818	5.21.7.3.5	Risk Allowances for Completion of Processing Plant at Chemical Dosi	7 edays	Sat 17/12/22	Sat 24/12/22	Sat 17/12/22	Sat 24/12/22	410.63 ed...	817	1271	
819	**819**	**5.21.7.3.6**	**Building Services Installations at Chemical Dosing System areas**	**249 days**	**Fri 20/05/22**	**Mon 23/01/23**	**Fri 20/05/22**	**Mon 23/01...**	**419 days**			
820	820	5.21.7.3.6.1	Lighting and Power Distribution System, Chem 1&2	120 days	Fri 20/05/22	Fri 16/09/22	Fri 20/05/22	Fri 16/09/22	9 days	811	825	BS - B x 4~6 men
821	821	5.21.7.3.6.2	Fire Services Installation, DG Stores	120 days	Fri 20/05/22	Fri 16/09/22	Fri 20/05/22	Fri 16/09/22	9 days	811	1207,1208,1198,825	FS - A x 4~6 men
822	822	5.21.7.3.6.3	Lightning Protection System, Chem 1&2	30 days	Fri 20/05/22	Sat 18/06/22	Fri 20/05/22	Sat 18/06/22	99 days	811	825	EE - D x 4~6 men
823	823	5.21.7.3.6.4	Mechanical Ventilation System, Chem 2	14 days	Fri 20/05/22	Thu 02/06/22	Fri 20/05/22	Thu 02/06/22	115 days	811	825	MVAC - A x 4~6 men
824	824	5.21.7.3.6.5	Plumbing Installation, Chem 1	7 days	Mon 19/09/22	Sun 25/09/22	Mon 19/09/22	Sun 25/09/22	0 days	815	825	Pb - A x 4~6 men
825	825	5.21.7.3.6.6	Testing and Commissioning of Building Services Installations, Chen	120 days	Mon 26/09/22	Mon 23/01/23	Mon 26/09/22	Mon 23/01/...	434 days	820,821,824	779FF	BS - C x 2~4 men
826	**826**	**5.22**	**Temporary Chemical Dosing System, Portion B7 & B-7B (PS 6B.2.3)**	**1344 days**	**Tue 28/07/20**	**Mon 01/04/24**	**Tue 28/07/20**	**Mon 01/04...**	**0 days**			
827	827	5.22.1	Planned Key Date Completion Date - KD1B, Temp. Chem Dosing Sys	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	844FF,845FF		
828	828	5.22.2	Planned Sectional Completion Date - Section 1, Temp. Chem Dosing Sys	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	846FF		
829	829	5.22.3	Planned Sectional Completion Date - Section 2, Temp. Chem Dosing Sys	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
830	**830**	**5.22.4**	**Selection of Suppliers for major plant and materials for Temp. Chemical**	**150 days**	**Thu 01/10/20**	**Sat 27/02/21**	**Thu 01/10/20**	**Sat 27/02/21**	**668 days**			
831	**831**	**5.22.4.1**	**Chemical Storage and Dosing - chemical storage tanks, C11, ref. EQT0**	**120 days**	**Thu 01/10/20**	**Thu 28/01/21**	**Thu 01/10/20**	**Thu 28/01/21**	**45 days**			
832	832	5.22.4.1.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		833	
833	833	5.22.4.1.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	832	834	
834	834	5.22.4.1.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	0 days	833	846,849	
835	**835**	**5.22.4.2**	**Chemical Storage and Dosing - chemical dosing pumps, C11, ref. EQT0**	**150 days**	**Thu 01/10/20**	**Sat 27/02/21**	**Thu 01/10/20**	**Sat 27/02/21**	**668 days**			
836	836	5.22.4.2.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		837	
837	837	5.22.4.2.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/20	Thu 28/01/21	Mon 30/11/20	Thu 28/01/21	0 days	836	838	
838	838	5.22.4.2.3	Acceptance of conforming quotation	30 days	Fri 29/01/21	Sat 27/02/21	Fri 29/01/21	Sat 27/02/21	0 days	837	852	
839	**839**	**5.22.4.3**	**Chemical Storage and Dosing - transfer pumps, C11, ref. EQT026**	**120 days**	**Thu 01/10/20**	**Thu 28/01/21**	**Thu 01/10/20**	**Thu 28/01/21**	**698 days**			
840	840	5.22.4.3.1	Submission for acceptance of purchasing package	60 days	Thu 01/10/20	Sun 29/11/20	Thu 01/10/20	Sun 29/11/20	0 days		841	
841	841	5.22.4.3.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/20	Tue 29/12/20	Mon 30/11/20	Tue 29/12/20	0 days	840	842	
842	842	5.22.4.3.3	Acceptance of conforming quotation	30 days	Wed 30/12/20	Thu 28/01/21	Wed 30/12/20	Thu 28/01/21	0 days	841	855	
843	**843**	**5.22.5**	**Design Submissions for Temporary Chemical Dosing System**	**275 days**	**Tue 28/07/20**	**Wed 28/04/21**	**Tue 28/07/20**	**Wed 28/04...**	**75 days**			
844	844	5.22.5.1	Electrical schematic drawings for Temporary Chemical Dosing System	60 days	Tue 28/07/20	Fri 25/09/20	Tue 28/07/20	Fri 25/09/20	0 days		827FF	
845	845	5.22.5.2	CDS081-6 - Civil and dimensional requirements drawings for Temporar	70 days	Fri 28/08/20	Thu 05/11/20	Fri 28/08/20	Thu 05/11/20	0 days		827FF	
846	846	5.22.5.3	CDS029 - Detailed Design for Electrical Installations for Temporary Che	90 edays	Thu 28/01/21	Wed 28/04/21	Thu 28/01/21	Wed 28/04/...	75 edays	834	862,828FF	
847	**847**	**5.22.6**	**Manufacturing and Delivery of Plant & Materials**	**416 days**	**Fri 29/01/21**	**Sun 20/03/22**	**Fri 29/01/21**	**Sun 20/03/22**	**507 days**			
848	**848**	**5.22.6.1**	**Chemical Storage Tanks, EQT025**	**416 days**	**Fri 29/01/21**	**Sun 20/03/22**	**Fri 29/01/21**	**Sun 20/03/22**	**507 days**			
849	849	5.22.6.1.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Fri 29/01/21	Tue 27/07/21	Fri 29/01/21	Tue 27/07/21	191 days	834	850	
850	850	5.22.6.1.2	Shipping and Delivery of Plant to site	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	20 days	849,858FF-6	861	
851	**851**	**5.22.6.2**	**Chemical Dosing Pumps, EQT027**	**386 days**	**Sun 28/02/21**	**Sun 20/03/22**	**Sun 28/02/21**	**Sun 20/03/22**	**507 days**			
852	852	5.22.6.2.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sun 28/02/21	Thu 26/08/21	Sun 28/02/21	Thu 26/08/21	161 days	838	853	
853	853	5.22.6.2.2	Shipping and Delivery of Plant to site	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	20 days	852,858FF-6	861	
854	**854**	**5.22.6.3**	**Chemical Transfer Pumps, EQT026**	**416 days**	**Fri 29/01/21**	**Sun 20/03/22**	**Fri 29/01/21**	**Sun 20/03/22**	**507 days**			
855	855	5.22.6.3.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Fri 29/01/21	Tue 27/07/21	Fri 29/01/21	Tue 27/07/21	191 days	842	856	
856	856	5.22.6.3.2	Shipping and Delivery of Plant to site	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	20 days	855,858FF-6	861	
857	**857**	**5.22.7**	**Site Installation Work**	**361 days**	**Sat 09/04/22**	**Wed 05/04/23**	**Sat 09/04/22**	**Wed 05/04...**	**313 days**			
858	858	5.22.7.1	Tentative Civil Handover Date, Temporary Chemical Dosing (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days		850FF-60 edays,853FF-60	
859	859	5.22.7.2	Tentative Civil Handover Date, Chemical Pipe Trench (by others)	1 day	Sun 01/05/22	Sun 01/05/22	Sun 01/05/22	Sun 01/05/22	51 days		861FF+50 days	
860	**860**	**5.22.7.3**	**Commencement of E&M Installation at Temporary Chemical Dosing S**	**361 days**	**Sat 09/04/22**	**Wed 05/04/23**	**Sat 09/04/22**	**Wed 05/04...**	**313 days**			
861	861	5.22.7.3.1	Mechanical Installations for E&M Equip. for Chemical Dosing System	90 edays	Sat 09/04/22	Fri 08/07/22	Sat 09/04/22	Fri 08/07/22	0 edays	859FF+50 d	862SS+30 edays,863	ME - D x 2~4 men
862	862	5.22.7.3.2	Electrical Installations for E&M Equip. for Chemical Dosing System	90 edays	Mon 09/05/22	Sun 07/08/22	Mon 09/05/22	Sun 07/08/22	0 edays	861SS+30 e	863	EE - A x 4~6 men
863	863	5.22.7.3.3	Site Acceptance Test for E&M Equip for Chemical Dosing System	30 edays	Sun 07/08/22	Tue 06/09/22	Sun 07/08/22	Tue 06/09/22	174 edays	861,862	864	
864	864	5.22.7.3.4	System Commissioning for E&M Equip for Chemical Dosing System	30 edays	Mon 27/02/23	Wed 29/03/23	Mon 27/02/23	Wed 29/03/...	0 edays	863,871FF	865	
865	865	5.22.7.3.5	Risk Allowances for Completion of Processing Plant at Chemical Dosi	7 edays	Wed 29/03/23	Wed 05/04/23	Wed 29/03/23	Wed 05/04/...	308.63 ed...	864	1271	
866	**866**	**5.22.7.3.6**	**Building Services Installations at Temp. Chemical Dosing System ar**	**314 days**	**Fri 20/05/22**	**Wed 29/03/23**	**Fri 20/05/22**	**Wed 29/03...**	**313 days**			
867	867	5.22.7.3.6.1	Lighting and Power Distribution System, Temp. Chem	90 days	Fri 20/05/22	Wed 17/08/22	Fri 20/05/22	Wed 17/08/...	0 days	858	871,868	BS - A x 4~6 men
868	868	5.22.7.3.6.2	Fire Services Installation, DG Stores, Temp. Chem	90 days	Thu 18/08/22	Tue 15/11/22	Thu 18/08/22	Tue 15/11/22	0 days	867	1207,1208,871,869	FS - A x 4~6 men
869	869	5.22.7.3.6.3	Lightning Protection System, Temp. Chem	30 days	Wed 16/11/22	Thu 15/12/22	Wed 16/11/22	Thu 15/12/22	0 days	868	870	EE - D x 4~6 men
870	870	5.22.7.3.6.4	Mechanical Ventilation System, Temp. Chem	14 days	Fri 16/12/22	Thu 29/12/22	Fri 16/12/22	Thu 29/12/22	0 days	869	871	MVAC - A x 4~6 men
871	871	5.22.7.3.6.5	Testing and Commissioning of Building Services Installations, Tem	90 days	Fri 30/12/22	Wed 29/03/23	Fri 30/12/22	Wed 29/03/...	0 days	867,868,87	864FF	BS - C x 2~4 men
872	**872**	**5.23**	**Emergency Generator House, Portion B7 & B-7B (PS 6B.6.6)**	**1279 days**	**Thu 01/10/20**	**Mon 01/04/24**	**Thu 01/10/20**	**Mon 01/04...**	**0 days**			
873	873	5.23.1	Planned Key Date Completion Date - KD1B, Emergency Generator House	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	877FF		
874	874	5.23.2	Planned Sectional Completion Date - Section 1, Emergency Generator Hou	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	878FF,879FF		
875	875	5.23.3	Planned Sectional Completion Date - Section 2, Emergency Generator Hou	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days	892FF		
876	**876**	**5.23.4**	**Design Submissions for Emergency Generator Set**	**252 days**	**Thu 01/10/20**	**Thu 10/06/21**	**Thu 01/10/20**	**Thu 10/06/21**	**33 days**			



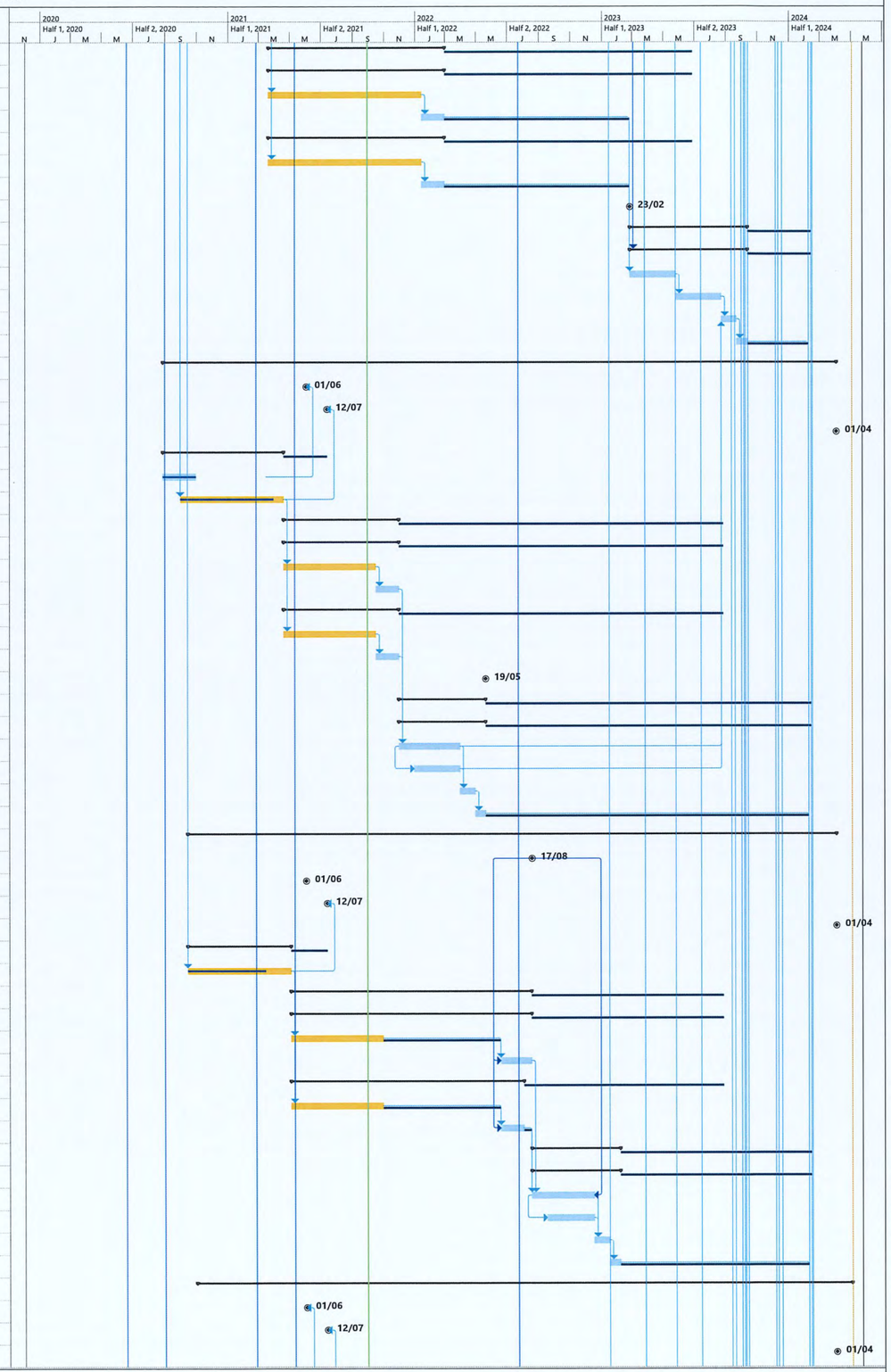
Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
877	877	5.23.4.1	CDS081-10 - Civil and dimensional requirements drawings for Emergen	90 days	Fri 01/01/21	Wed 31/03/21	Fri 01/01/21	Wed 31/03/...	0 days		873FF	
878	878	5.23.4.2	CDS061 - Detailed Design for Emergency Generator Set	150 edays	Thu 01/10/20	Sun 28/02/21	Thu 01/10/20	Sun 28/02/21	134.38 ed...		874FF	
879	879	5.23.4.3	CDS034-6 - Detailed Design for Electrical Installations BS at Emergency	90 edays	Fri 12/03/21	Thu 10/06/21	Fri 12/03/21	Thu 10/06/21	0 edays	136	881,886,874FF	
880	**880**	**5.23.5**	**Manufacturing and Delivery of Plant & Materials**	**285 days**	**Thu 10/06/21**	**Mon 21/03/22**	**Thu 10/06/21**	**Mon 21/03...**	**616 days**			
881	881	5.23.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 10/06/21	Fri 04/02/22	Thu 10/06/21	Fri 04/02/22	0 days	879	882	
882	882	5.23.5.2	Shipping and Delivery of Plant to Site	45 days	Sat 05/02/22	Mon 21/03/22	Sat 05/02/22	Mon 21/03/...	589 days	881,884FF-6	887	
883	**883**	**5.23.6**	**Site Installation Work**	**1000 days**	**Thu 10/06/21**	**Tue 05/03/24**	**Thu 10/06/21**	**Tue 05/03/24**	**27 days**			
884	884	5.23.6.1	Tentative Civil Handover Date, Emergency Generator House (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	1 day		861FF+50 days,882FF-60	
885	**885**	**5.23.6.2**	**Commencement of E&M Installation at Emergency Generator House**	**1000 days**	**Thu 10/06/21**	**Tue 05/03/24**	**Thu 10/06/21**	**Tue 05/03/24**	**27 days**			
886	886	5.23.6.2.1	Application for EPD's Approval for Installation of Diesel Engine Gene	21 days	Thu 10/06/21	Wed 30/06/21	Thu 10/06/21	Wed 30/06/...	853 days	879	887	
887	887	5.23.6.2.2	Installation and SAT of Emergency Power Generator and associated	60 days	Wed 01/11/23	Sat 30/12/23	Wed 01/11/23	Sat 30/12/23	0 days	886,882	889	GS - A x 4 men
888	**888**	**5.23.6.2.3**	**Building Services Installation at Emergency Generator House**	**66 days**	**Sun 31/12/23**	**Tue 05/03/24**	**Sun 31/12/23**	**Tue 05/03/24**	**27 days**			
889	889	5.23.6.2.3.1	Fire Services Installation, GH	30 days	Sun 31/12/23	Mon 29/01/24	Sun 31/12/23	Mon 29/01/...	0 days	887	890	FS - A x 4~6 men
890	890	5.23.6.2.3.2	Mechanical Ventilation System, GH	14 days	Tue 30/01/24	Mon 12/02/24	Tue 30/01/24	Mon 12/02/...	0 days	889	891	MVAC - A x 4~6 men
891	891	5.23.6.2.3.3	Lightning Protection System, GH	15 days	Tue 13/02/24	Tue 27/02/24	Tue 13/02/24	Tue 27/02/24	0 days	890	892	EE - D x 4~6 men
892	892	5.23.6.2.3.4	Testing and Commissioning of Building Services Installation, GH	7 days	Wed 28/02/24	Tue 05/03/24	Wed 28/02/24	Tue 05/03/24	27 days	891	875FF	BS - A x 4~6 men
893	**893**	**5.24**	**Deodorization System, DOU 1, Portion B7 & B-7B (PS 6B.2.6)**	**1583 days**	**Mon 02/12/19**	**Mon 01/04/24**	**Mon 02/12/19**	**Mon 01/04...**	**0 days**			
894	894	5.24.1	Planned Key Date Completion Date - KD1B, DOU 1	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	907FF,908FF		
895	895	5.24.2	Planned Sectional Completion Date - Section 1, DOU 1	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	909FF		
896	896	5.24.3	Planned Sectional Completion Date - Section 2, DOU 1	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
897	**897**	**5.24.4**	**Selection of Plant and Materials**	**485 days**	**Mon 02/12/19**	**Tue 30/03/21**	**Mon 02/12/19**	**Tue 30/03/21**	**90 days**			
898	**898**	**5.24.4.1**	**DOU - biotrickling filter (DOU No. 1), C11, ref. EQT001**	**194 days**	**Mon 02/12/19**	**Fri 12/06/20**	**Mon 02/12/19**	**Fri 12/06/20**	**0 days**			
899	899	5.24.4.1.1	Submission for acceptance of purchasing package	120 days	Mon 02/12/19	Mon 30/03/20	Mon 02/12/19	Mon 30/03/...	0 days		900	
900	900	5.24.4.1.2	Invitation of quotations for purchasing package	60 days	Tue 31/03/20	Fri 29/05/20	Tue 31/03/20	Fri 29/05/20	0 days	899	901	
901	901	5.24.4.1.3	Acceptance of conforming quotation (Completed)	14 days	Sat 30/05/20	Fri 12/06/20	Sat 30/05/20	Fri 12/06/20	0 days	900	909	
902	**902**	**5.24.4.2**	**DOU - FRP air ductwork, C11, EQT047**	**120 days**	**Tue 01/12/20**	**Tue 30/03/21**	**Tue 01/12/20**	**Tue 30/03/21**	**90 days**			
903	903	5.24.4.2.1	Submission for acceptance of purchasing package	60 days	Tue 01/12/20	Fri 29/01/21	Tue 01/12/20	Fri 29/01/21	0 days		904	
904	904	5.24.4.2.2	Invitation of quotations for purchasing package	30 days	Sat 30/01/21	Sun 28/02/21	Sat 30/01/21	Sun 28/02/21	0 days	903	905	
905	905	5.24.4.2.3	Acceptance of conforming quotation	30 days	Mon 01/03/21	Tue 30/03/21	Mon 01/03/21	Tue 30/03/21	0 days	904	909	
906	**906**	**5.24.5**	**Design Submissions for DOU No. 1**	**359 days**	**Wed 15/07/20**	**Thu 08/07/21**	**Wed 15/07/20**	**Thu 08/07/21**	**4 days**			
907	907	5.24.5.1	Electrical schematic drawings for Deodorisation Systems	90 days	Wed 15/07/20	Mon 12/10/20	Wed 15/07/20	Mon 12/10/...	0 days		894FF	
908	908	5.24.5.2	CDS081-7 - Civil and dimensional requirements drawings for DOU No. 1	70 days	Fri 28/08/20	Thu 05/11/20	Fri 28/08/20	Thu 05/11/20	0 days		894FF	
909	909	5.24.5.3	CDS007-1 - Detailed Design for Deodorisation System, DOU No. 1	100 edays	Tue 30/03/21	Thu 08/07/21	Tue 30/03/21	Thu 08/07/21	0.63 edays	901,905	912,915,895FF	
910	**910**	**5.24.6**	**Manufacturing and Delivery of Plant & Materials**	**299 days**	**Fri 09/07/21**	**Tue 03/05/22**	**Fri 09/07/21**	**Tue 03/05/22**	**479 days**			
911	**911**	**5.24.6.1**	**DOU 1**	**299 days**	**Fri 09/07/21**	**Tue 03/05/22**	**Fri 09/07/21**	**Tue 03/05/22**	**479 days**			
912	912	5.24.6.1.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 09/07/21	Sat 05/03/22	Fri 09/07/21	Sat 05/03/22	14 days	909	913	
913	913	5.24.6.1.2	Shipping and Delivery of Plant to site	45 days	Sun 20/03/22	Tue 03/05/22	Sun 20/03/22	Tue 03/05/22	45 days	912,918SS-6	921	
914	**914**	**5.24.6.2**	**FRP Air Ductwork**	**299 days**	**Fri 09/07/21**	**Tue 03/05/22**	**Fri 09/07/21**	**Tue 03/05/22**	**479 days**			
915	915	5.24.6.2.1	Manufacturing and Factory Acceptance Test of Plant	200 days	Fri 09/07/21	Mon 24/01/22	Fri 09/07/21	Mon 24/01/...	54 days	909	916	
916	916	5.24.6.2.2	Shipping and Delivery of Plant to Site	45 days	Sun 20/03/22	Tue 03/05/22	Sun 20/03/22	Tue 03/05/22	45 days	915,918SS-6	921	
917	**917**	**5.24.7**	**Site Installation Work**	**201 days**	**Thu 19/05/22**	**Mon 05/12/22**	**Thu 19/05/22**	**Mon 05/12...**	**434 days**			
918	918	5.24.7.1	Tentative Civil Handover, DOU 1 (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days		921FF+45 days,913SS-60	
919	919	5.24.7.2	Tentative Civil Handover Date, underground air pipework for DOU 1 (b	1 day	Mon 01/08/22	Mon 01/08/22	Mon 01/08/22	Mon 01/08/...	30 days		921FF+45 days	
920	**920**	**5.24.7.3**	**Commencement of E&M Installation at DOU 1**	**171 days**	**Fri 17/06/22**	**Mon 05/12/22**	**Fri 17/06/22**	**Mon 05/12...**	**434 days**			
921	921	5.24.7.3.1	Mechanical Installations for DOU 1	90 edays	Fri 17/06/22	Thu 15/09/22	Fri 17/06/22	Thu 15/09/22	0 edays	919FF+45 d	922SS+30 edays,923	ME - F x 4~6 men
922	922	5.24.7.3.2	Electrical Installations for DOU 1	90 edays	Sun 17/07/22	Sat 15/10/22	Sun 17/07/22	Sat 15/10/22	0 edays	921SS+30 e	923	EE - C x 4~6 men
923	923	5.24.7.3.3	Site Acceptance Test for DOU1	30 edays	Sat 15/10/22	Mon 14/11/22	Sat 15/10/22	Mon 14/11/...	0 edays	921,922	924	
924	924	5.24.7.3.4	System Commissioning for DOU 1	21 edays	Mon 14/11/22	Mon 05/12/22	Mon 14/11/22	Mon 05/12/...	429.63 ed...	923	1271	
925	**925**	**5.25**	**Deodorization System, DOU 2A, Portion B-4 (PS 6B.2.6)**	**1583 days**	**Mon 02/12/19**	**Mon 01/04/24**	**Mon 02/12/19**	**Mon 01/04...**	**0 days**			
926	926	5.25.1	Planned Key Date Completion Date - KD1B, DOU 2A	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days			
927	927	5.25.2	Planned Sectional Completion Date - Section 1, DOU 2A	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	935FF		
928	928	5.25.3	Planned Sectional Completion Date - Section 2, DOU 2A	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
929	**929**	**5.25.4**	**Selection of Plant and Materials**	**194 days**	**Mon 02/12/19**	**Fri 12/06/20**	**Mon 02/12/19**	**Fri 12/06/20**	**0 days**			
930	**930**	**5.25.4.1**	**DOU - activated carbon filter (DOU No. 2A, No. 3A, No. 3B), C11, ref. I**	**194 days**	**Mon 02/12/19**	**Fri 12/06/20**	**Mon 02/12/19**	**Fri 12/06/20**	**0 days**			
931	931	5.25.4.1.1	Submission for acceptance of purchasing package	120 days	Mon 02/12/19	Mon 30/03/20	Mon 02/12/19	Mon 30/03/...	0 days		932	
932	932	5.25.4.1.2	Invitation of quotations for purchasing package	60 days	Tue 31/03/20	Fri 29/05/20	Tue 31/03/20	Fri 29/05/20	0 days	931	933	
933	933	5.25.4.1.3	Acceptance of conforming quotation (Completed)	14 days	Sat 30/05/20	Fri 12/06/20	Sat 30/05/20	Fri 12/06/20	0 days	932	935,956,977	
934	**934**	**5.25.5**	**Design Submissions for DOU No. 2A**	**200 days**	**Tue 01/09/20**	**Sat 20/03/21**	**Tue 01/09/20**	**Sat 20/03/21**	**115 days**			
935	935	5.25.5.1	CDS007-2 - Detailed Design for Deodorisation System, DOU No. 2A	200 edays	Tue 01/09/20	Sat 20/03/21	Tue 01/09/20	Sat 20/03/21	0 edays	933	938,941,927FF	



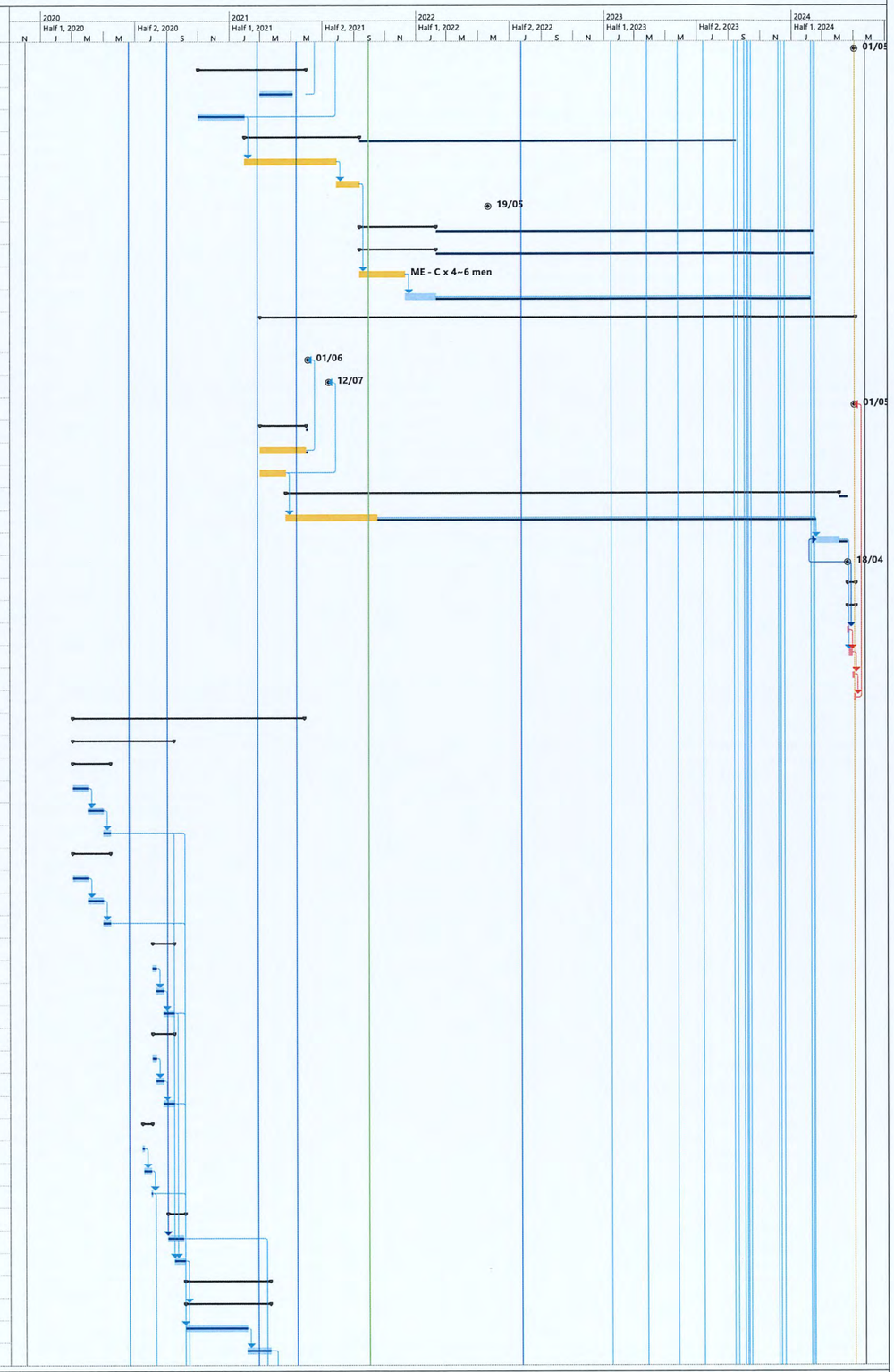
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
936	**936**	**5.25.6**	**Manufacturing and Delivery of Plant & Materials**	**345 days**	**Sat 20/03/21**	**Sun 27/02/22**	**Sat 20/03/21**	**Sun 27/02/22**	**484 days**			
937	**937**	**5.25.6.1**	**DOU 2A**	**345 days**	**Sat 20/03/21**	**Sun 27/02/22**	**Sat 20/03/21**	**Sun 27/02/22**	**484 days**			
938	938	5.25.6.1.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 20/03/21	Thu 13/01/22	Sat 20/03/21	Thu 13/01/22	0 days	935	939	
939	939	5.25.6.1.2	Shipping and Delivery of Plant to site	45 days	Fri 14/01/22	Sun 27/02/22	Fri 14/01/22	Sun 27/02/22	361 days	938	946	
940	**940**	**5.25.6.2**	**FRP Air Ductwork**	**345 days**	**Sat 20/03/21**	**Sun 27/02/22**	**Sat 20/03/21**	**Sun 27/02/22**	**484 days**			
941	941	5.25.6.2.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 20/03/21	Thu 13/01/22	Sat 20/03/21	Thu 13/01/22	0 days	935	942	
942	942	5.25.6.2.2	Shipping and Delivery of Plant to site	45 days	Fri 14/01/22	Sun 27/02/22	Fri 14/01/22	Sun 27/02/22	361 days	941	946	
943	943	5.25.7	Tentative Civil Handover, DOU 2A (Rev. 5)	1 day	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	0 days			
944	**944**	**5.25.8**	**Site Installation Work**	**231 days**	**Thu 23/02/23**	**Thu 12/10/23**	**Thu 23/02/23**	**Thu 12/10/23**	**123 days**			
945	**945**	**5.25.8.1**	**Commencement of E&M Installation at DOU 2A**	**231 days**	**Thu 23/02/23**	**Thu 12/10/23**	**Thu 23/02/23**	**Thu 12/10/23**	**123 days**	**565**		
946	946	5.25.8.1.1	Mechanical Installations for DOU 2A	90 edays	Thu 23/02/23	Wed 24/05/23	Thu 23/02/23	Wed 24/05/...	0 edays	939,942	947	ME - F x 4~6 men
947	947	5.25.8.1.2	Electrical Installations for DOU 2A	90 edays	Wed 24/05/23	Tue 22/08/23	Wed 24/05/23	Tue 22/08/23	0 edays	946	948	EE - C x 4~6 men
948	948	5.25.8.1.3	Site Acceptance Test for E&M Equip for DOU 2A	30 edays	Tue 22/08/23	Thu 21/09/23	Tue 22/08/23	Thu 21/09/23	0 edays	967,968,947	949	
949	949	5.25.8.1.4	System Commissioning Test for DOU 2A	21 edays	Thu 21/09/23	Thu 12/10/23	Thu 21/09/23	Thu 12/10/23	118.63 ed...	948	1271	
950	**950**	**5.26**	**Deodorization System, DOU 3A, Portion B7 & B-7B (PS 6B.2.6)**	**1313 days**	**Fri 28/08/20**	**Mon 01/04/24**	**Fri 28/08/20**	**Mon 01/04...**	**0 days**			
951	951	5.26.1	Planned Key Date Completion Date - KD1B, DOU 3A	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	955FF		
952	952	5.26.2	Planned Sectional Completion Date - Section 1, DOU 3A	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	956FF		
953	953	5.26.3	Planned Sectional Completion Date - Section 2, DOU 3A	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
954	**954**	**5.26.4**	**Design Submissions for DOU No. 3A**	**234 days**	**Fri 28/08/20**	**Mon 19/04/21**	**Fri 28/08/20**	**Mon 19/04...**	**85 days**			
955	955	5.26.4.1	CDS081-8 - Civil and dimensional requirements drawings for DOU No. 3	200 days	Fri 28/08/20	Mon 15/03/21	Fri 28/08/20	Mon 15/03/...	0 days		951FF	
956	956	5.26.4.2	CDS007-3 - Detailed Design for Deodorisation System, DOU No. 3A	200 edays	Thu 01/10/20	Mon 19/04/21	Thu 01/10/20	Mon 19/04/...	0 edays	933	959,962,952FF	
957	**957**	**5.26.5**	**Manufacturing and Delivery of Plant & Materials**	**225 days**	**Mon 19/04/21**	**Tue 30/11/21**	**Mon 19/04/21**	**Tue 30/11/21**	**634 days**			
958	**958**	**5.26.5.1**	**DOU 3A**	**225 days**	**Mon 19/04/21**	**Tue 30/11/21**	**Mon 19/04/21**	**Tue 30/11/21**	**634 days**			
959	959	5.26.5.1.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 19/04/21	Sat 16/10/21	Mon 19/04/21	Sat 16/10/21	0 edays	956	960	
960	960	5.26.5.1.2	Shipping and Delivery of Plant to Site	45 edays	Sat 16/10/21	Tue 30/11/21	Sat 16/10/21	Tue 30/11/21	0 edays	959	967	
961	**961**	**5.26.5.2**	**FRP Air Ductwork**	**225 days**	**Mon 19/04/21**	**Tue 30/11/21**	**Mon 19/04/21**	**Tue 30/11/21**	**634 days**			
962	962	5.26.5.2.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 19/04/21	Sat 16/10/21	Mon 19/04/21	Sat 16/10/21	0 edays	956	963	
963	963	5.26.5.2.2	Shipping and Delivery of Plant to Site	45 edays	Sat 16/10/21	Tue 30/11/21	Sat 16/10/21	Tue 30/11/21	0 edays	962	967	
964	964	5.26.6	Tentative Civil Handover, DOU 3A (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days			
965	**965**	**5.26.7**	**Site Installation Work**	**171 days**	**Tue 30/11/21**	**Fri 20/05/22**	**Tue 30/11/21**	**Fri 20/05/22**	**634 days**			
966	**966**	**5.26.7.1**	**Commencement of E&M Installation at DOU 3A**	**171 days**	**Tue 30/11/21**	**Fri 20/05/22**	**Tue 30/11/21**	**Fri 20/05/22**	**634 days**			
967	967	5.26.7.1.1	Mechanical Installations for DOU 3A	120 edays	Tue 30/11/21	Wed 30/03/22	Tue 30/11/21	Wed 30/03/...	0 edays	963,960	968SS+30 edays,969,948	ME - F x 4~6 men
968	968	5.26.7.1.2	Electrical Installations for DOU 3A	90 edays	Thu 30/12/21	Wed 30/03/22	Thu 30/12/21	Wed 30/03/...	0 edays	967SS+30 ec	969,948	EE - D x 4~6 men
969	969	5.26.7.1.3	Site Acceptance Test for E&M Equip for DOU 3A	30 edays	Wed 30/03/22	Fri 29/04/22	Wed 30/03/22	Fri 29/04/22	0 edays	967,968	970	
970	970	5.26.7.1.4	System Commissioning Test for DOU 3A	21 edays	Fri 29/04/22	Fri 20/05/22	Fri 29/04/22	Fri 20/05/22	629 edays	969	1271	
971	**971**	**5.27**	**Deodorization System, DOU 3B, Portion B-5B (PS 6B.2.6)**	**1265 days**	**Thu 15/10/20**	**Mon 01/04/24**	**Thu 15/10/20**	**Mon 01/04...**	**0 days**			
972	972	5.27.1	Tentative Civil Handover Date, underground air pipework for DOU 3B (by	1 day	Wed 17/08/22	Wed 17/08/22	Wed 17/08/22	Wed 17/08/...	0 days		987FF+30 days,981SS-60	
973	973	5.27.2	Planned Key Date Completion Date - KD1B, DOU 3B	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days			
974	974	5.27.3	Planned Sectional Completion Date - Section 1, DOU 3B	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	977FF		
975	975	5.27.4	Planned Sectional Completion Date - Section 2, DOU 3B	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			
976	**976**	**5.27.5**	**Design Submissions for DOU No. 3B**	**200 days**	**Thu 15/10/20**	**Mon 03/05/21**	**Thu 15/10/20**	**Mon 03/05...**	**71 days**			
977	977	5.27.5.1	CDS007-4 - Detailed Design for Deodorisation System, DOU No. 3B	200 edays	Thu 15/10/20	Mon 03/05/21	Thu 15/10/20	Mon 03/05/...	0 edays	933	980,983,974FF	
978	**978**	**5.27.6**	**Manufacturing and Delivery of Plant & Materials**	**471 days**	**Mon 03/05/21**	**Wed 17/08/22**	**Mon 03/05/21**	**Wed 17/08...**	**374 days**			
979	**979**	**5.27.6.1**	**DOU 3B**	**471 days**	**Mon 03/05/21**	**Wed 17/08/22**	**Mon 03/05/21**	**Wed 17/08...**	**374 days**			
980	980	5.27.6.1.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 03/05/21	Sat 30/10/21	Mon 03/05/21	Sat 30/10/21	231 edays	977	981	
981	981	5.27.6.1.2	Shipping and Delivery of Plant to Site	60 edays	Sat 18/06/22	Wed 17/08/22	Sat 18/06/22	Wed 17/08/...	0 edays	980,972SS-6	987	
982	**982**	**5.27.6.2**	**FRP Air Ductwork**	**456 days**	**Mon 03/05/21**	**Tue 02/08/22**	**Mon 03/05/21**	**Tue 02/08/22**	**389 days**			
983	983	5.27.6.2.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 03/05/21	Sat 30/10/21	Mon 03/05/21	Sat 30/10/21	231 edays	977	984	
984	984	5.27.6.2.2	Shipping and Delivery of Plant to Site	45 edays	Sat 18/06/22	Tue 02/08/22	Sat 18/06/22	Tue 02/08/22	15 edays	983,972SS-6	987	
985	**985**	**5.27.7**	**Site Installation Work**	**171 days**	**Wed 17/08/22**	**Sat 04/02/23**	**Wed 17/08/22**	**Sat 04/02/23**	**374 days**			
986	**986**	**5.27.7.1**	**Commencement of E&M Installation at DOU 3B**	**171 days**	**Wed 17/08/22**	**Sat 04/02/23**	**Wed 17/08/22**	**Sat 04/02/23**	**374 days**			
987	987	5.27.7.1.1	Mechanical Installations for DOU 3B	120 edays	Wed 17/08/22	Thu 15/12/22	Wed 17/08/22	Thu 15/12/22	0 edays	972FF+30 d	988SS+30 edays,989	ME - F x 4~6 men
988	988	5.27.7.1.2	Electrical Installations for DOU 3B	90 edays	Fri 16/09/22	Thu 15/12/22	Fri 16/09/22	Thu 15/12/22	0 edays	987SS+30 ec	989	EE - D x 4~6 men
989	989	5.27.7.1.3	Site Acceptance Test for E&M Equip for DOU 3B	30 edays	Thu 15/12/22	Sat 14/01/23	Thu 15/12/22	Sat 14/01/23	0 edays	987,988	990	
990	990	5.27.7.1.4	System Commissioning Test for DOU 3B	21 edays	Sat 14/01/23	Sat 04/02/23	Sat 14/01/23	Sat 04/02/23	369 edays	989	1271	
991	**991**	**5.28**	**Flowmeter and Valve Chambers, Portion B7 & B-7B (PS 6B.2.13)**	**1278 days**	**Sun 01/11/20**	**Wed 01/05/24**	**Sun 01/11/20**	**Wed 01/05...**	**0 days**			
992	992	5.28.1	Planned Key Date Completion Date - KD1B, Chambers	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	997FF		
993	993	5.28.2	Planned Sectional Completion Date - Section 1, Chambers	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	998FF		
994	994	5.28.3	Planned Sectional Completion Date - Section 2, Chambers	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days			



Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

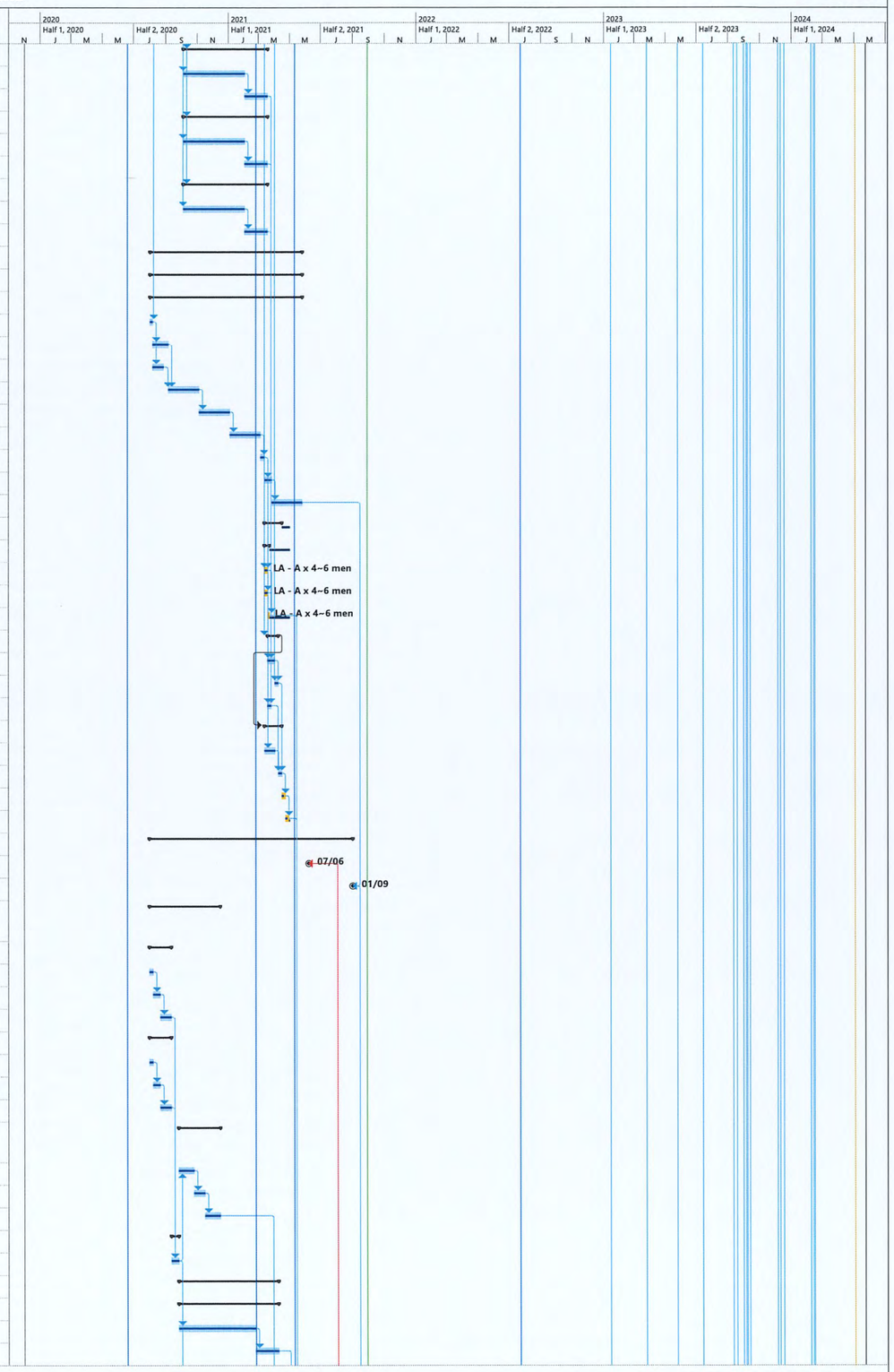
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
995	995	5.28.4	Planned Sectional Completion Date - Section 4, Chambers	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/...	0 days			
996	**996**	**5.28.5**	**Design Submissions for Valve and Flowmeter Chambers**	**210 days**	**Sun 01/11/20**	**Sat 29/05/21**	**Sun 01/11/20**	**Sat 29/05/21**	**0 days**			
997	997	5.28.5.1	CDS081-9 - Civil and dimensional requirements drawings for Valve and	90 days	Mon 01/03/21	Sat 29/05/21	Mon 01/03/21	Sat 29/05/21	0 days		992FF	
998	998	5.28.5.2	CDS018 - Detailed Design for Flowmeter and Valve Chambers	90 edays	Sun 01/11/20	Sat 30/01/21	Sun 01/11/20	Sat 30/01/21	0 edays		1000,993FF	
999	**999**	**5.28.6**	**Manufacturing and Delivery of Plant & Materials**	**225 days**	**Sat 30/01/21**	**Sat 11/09/21**	**Sat 30/01/21**	**Sat 11/09/21**	**734 days**			
1000	1000	5.28.6.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 30/01/21	Wed 28/07/21	Sat 30/01/21	Wed 28/07/...	0 days	998	1001	
1001	1001	5.28.6.2	Shipping and Delivery of Plant to Site	45 days	Thu 29/07/21	Sat 11/09/21	Thu 29/07/21	Sat 11/09/21	0 days	1000	1005	
1002	1002	5.28.7	Tentative Civil Handover, Chambers (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days			
1003	**1003**	**5.28.8**	**Site Installation Work**	**150 days**	**Sun 12/09/21**	**Tue 08/02/22**	**Sun 12/09/21**	**Tue 08/02/22**	**734 days**			
1004	**1004**	**5.28.8.1**	**Commencement of Valves and Flowmeters Installation at Chambers**	**150 days**	**Sun 12/09/21**	**Tue 08/02/22**	**Sun 12/09/21**	**Tue 08/02/22**	**734 days**			
1005	1005	5.28.8.1.1	Installation of valves and flowmeters	90 days	Sun 12/09/21	Fri 10/12/21	Sun 12/09/21	Fri 10/12/21	0 days	1001	1006	ME - C x 4~6 men
1006	1006	5.28.8.1.2	cables laying and terminations	60 days	Sat 11/12/21	Tue 08/02/22	Sat 11/12/21	Tue 08/02/22	729 days	1005	1271	EE - A x 4~6 men
1007	**1007**	**5.29**	**Underground Pipework, Modification and Connection Works, Portion B-9B (PS 6B.2.22)**	**1161 days**	**Mon 01/03/21**	**Sat 04/05/24**	**Mon 01/03/21**	**Sat 04/05/24**	**0 days**			
1008	1008	5.29.1	Planned Key Date Completion Date - KD1B, UU	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	1012FF		
1009	1009	5.29.2	Planned Sectional Completion Date - Section 1, Underground Pipework	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	1013FF		
1010	1010	5.29.3	Planned Sectional Completion Date - Section 4, Underground Pipework	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/...	0 days	1023FF		
1011	**1011**	**5.29.4**	**Design Submissions**	**90 days**	**Mon 01/03/21**	**Sun 30/05/21**	**Mon 01/03/21**	**Sun 30/05/21**	**3 days**			
1012	1012	5.29.4.1	CDS015 - Detailed Design for Underground Pipework Modification and	90 edays	Mon 01/03/21	Sun 30/05/21	Mon 01/03/21	Sun 30/05/21	2.38 edays		1008FF	
1013	1013	5.29.4.2	CDS016 - Detailed Design for Temporary Pumping System for maintaini	50 edays	Mon 01/03/21	Tue 20/04/21	Mon 01/03/21	Tue 20/04/21	0 edays		1015,1009FF	
1014	**1014**	**5.29.5**	**Manufacturing and Delivery of Plant & Materials**	**1079 days**	**Tue 20/04/21**	**Tue 02/04/24**	**Tue 20/04/21**	**Tue 02/04/24**	**16 days**			
1015	1015	5.29.5.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Tue 20/04/21	Sat 16/10/21	Tue 20/04/21	Sat 16/10/21	854 days	1013	1016	
1016	1016	5.29.5.2	Shipping and Delivery of Plant to Site	45 days	Sun 18/02/24	Tue 02/04/24	Sun 18/02/24	Tue 02/04/24	16 days	1015,1017S	1021	
1017	1017	5.29.6	Tentative Civil Handover, Road (Rev. 5)	1 day	Thu 18/04/24	Thu 18/04/24	Thu 18/04/24	Thu 18/04/24	0 days		1016SS-60 edays,1020	
1018	**1018**	**5.29.7**	**Site Installation**	**16 days**	**Fri 19/04/24**	**Sat 04/05/24**	**Fri 19/04/24**	**Sat 04/05/24**	**0 days**			
1019	**1019**	**5.29.7.1**	**Commencement of underground pipework modification and connection wor**	**16 days**	**Fri 19/04/24**	**Sat 04/05/24**	**Fri 19/04/24**	**Sat 04/05/24**	**0 days**			
1020	1020	5.29.7.1.1	Temporary Flow Diversion and Road Excavation Work	3 days	Fri 19/04/24	Sun 21/04/24	Fri 19/04/24	Sun 21/04/24	0 days	1017	1021	
1021	1021	5.29.7.1.2	Pipe Laying and connection works	7 days	Mon 22/04/24	Sun 28/04/24	Mon 22/04/24	Sun 28/04/24	0 days	1020,1016	1022	
1022	1022	5.29.7.1.3	Pressure Tests	3 days	Mon 29/04/24	Wed 01/05/24	Mon 29/04/24	Wed 01/05/24	0 days	1021	1023	
1023	1023	5.29.7.1.4	Make Good	3 days	Thu 02/05/24	Sat 04/05/24	Thu 02/05/24	Sat 04/05/24	0 days	1022	1010FF	
1024	**1024**	**5.30**	**Temporary Filtrate Lifting Well and Eq. Tank, Portion B-3B (PS 6B.2.16)**	**450 days**	**Mon 02/03/20**	**Tue 25/05/21**	**Mon 02/03/20**	**Tue 25/05/21**	**0 days**			
1025	**1025**	**5.30.1**	**Selection of Suppliers for major plant and materials and Civil Subcontrac**	**196 days**	**Mon 02/03/20**	**Sun 13/09/20**	**Mon 02/03/20**	**Sun 13/09/20**	**0 days**			
1026	**1026**	**5.30.1.1**	**Mis - filtrate lift pumps and filtrate transfer pumps, C11, ref. EQT011**	**73 days**	**Mon 02/03/20**	**Wed 13/05/20**	**Mon 02/03/20**	**Wed 13/05/20**	**0 days**			
1027	1027	5.30.1.1.1	Submission for acceptance of purchasing package	29 days	Mon 02/03/20	Mon 30/03/20	Mon 02/03/20	Mon 30/03/20	0 days		1028	
1028	1028	5.30.1.1.2	Invitation of quotations for purchasing package	30 days	Tue 31/03/20	Wed 29/04/20	Tue 31/03/20	Wed 29/04/20	0 days	1027	1029	
1029	1029	5.30.1.1.3	Acceptance of conforming quotation and acceptance for Manufacture (Com	14 days	Thu 30/04/20	Wed 13/05/20	Thu 30/04/20	Wed 13/05/20	0 days	1028	1048,1051	
1030	**1030**	**5.30.1.2**	**Mis - Instrumentations**	**73 days**	**Mon 02/03/20**	**Wed 13/05/20**	**Mon 02/03/20**	**Wed 13/05...**	**0 days**			
1031	1031	5.30.1.2.1	Submission for acceptance of purchasing package	29 days	Mon 02/03/20	Mon 30/03/20	Mon 02/03/20	Mon 30/03/...	0 days		1032	
1032	1032	5.30.1.2.2	Invitation of quotations for purchasing package	30 days	Tue 31/03/20	Wed 29/04/20	Tue 31/03/20	Wed 29/04/...	0 days	1031	1033	
1033	1033	5.30.1.2.3	Acceptance of conforming quotation and acceptance for Manufactur	14 days	Thu 30/04/20	Wed 13/05/20	Thu 30/04/20	Wed 13/05/...	0 days	1032	1048,1054	
1034	**1034**	**5.30.1.3**	**Mis - Pipework (To be provided by Mechanical Sub-Contactor)**	**42 days**	**Mon 03/08/20**	**Sun 13/09/20**	**Mon 03/08/20**	**Sun 13/09/20**	**0 days**			
1035	1035	5.30.1.3.1	Submission for acceptance of purchasing package	7 days	Mon 03/08/20	Sun 09/08/20	Mon 03/08/20	Sun 09/08/20	0 days		1036	
1036	1036	5.30.1.3.2	Invitation of quotations for purchasing package	14 days	Mon 10/08/20	Sun 23/08/20	Mon 10/08/20	Sun 23/08/20	0 days	1035	1037	
1037	1037	5.30.1.3.3	Acceptance of conforming quotation and acceptance for Manufactur	21 days	Mon 24/08/20	Sun 13/09/20	Mon 24/08/20	Sun 13/09/20	0 days	1036	1048,1057	
1038	**1038**	**5.30.1.4**	**Mis - Valve (To be provided by Mechanical Sub-Contractor)**	**42 days**	**Mon 03/08/20**	**Sun 13/09/20**	**Mon 03/08/20**	**Sun 13/09/20**	**0 days**			
1039	1039	5.30.1.4.1	Submission for acceptance of purchasing package	7 days	Mon 03/08/20	Sun 09/08/20	Mon 03/08/20	Sun 09/08/20	0 days		1040	
1040	1040	5.30.1.4.2	Invitation of quotations for purchasing package	14 days	Mon 10/08/20	Sun 23/08/20	Mon 10/08/20	Sun 23/08/20	0 days	1039	1041	
1041	1041	5.30.1.4.3	Acceptance of conforming quotation and acceptance for Manufactur	21 days	Mon 24/08/20	Sun 13/09/20	Mon 24/08/20	Sun 13/09/20	0 days	1040	1048,1060	
1042	**1042**	**5.30.1.5**	**Civil Work Subletting Package (Repeated WBS 5.13.17)**	**19 days**	**Tue 14/07/20**	**Sat 01/08/20**	**Tue 14/07/20**	**Sat 01/08/20**	**0 days**			
1043	1043	5.30.1.5.1	Submission for acceptance of subletting package	3 days	Tue 14/07/20	Thu 16/07/20	Tue 14/07/20	Thu 16/07/20	0 days		1044	
1044	1044	5.30.1.5.2	Invitation of tender for subletting package	14 days	Fri 17/07/20	Thu 30/07/20	Fri 17/07/20	Thu 30/07/20	0 days	1043	1045	
1045	1045	5.30.1.5.3	Acceptance of conforming quotation and acceptance for Manufactur	2 days	Fri 31/07/20	Sat 01/08/20	Fri 31/07/20	Sat 01/08/20	0 days	1044	1051,1054,1057,1060,10	
1046	**1046**	**5.30.2**	**Design Submissions for Temporary Filtrate Lifting Well and Eq. Tank**	**34 days**	**Tue 01/09/20**	**Sun 04/10/20**	**Tue 01/09/20**	**Sun 04/10/20**	**0 days**			
1047	1047	5.30.2.1	CDS050-5 - Detailed Design for Lifting Appliances - Temp. Filtrate Eq. Sy	30 edays	Tue 01/09/20	Thu 01/10/20	Tue 01/09/20	Thu 01/10/20	0 edays	116	1076	
1048	1048	5.30.2.2	Design submission for E&M Installation works for temp. filtrate eq. syst	21 days	Mon 14/09/20	Sun 04/10/20	Mon 14/09/20	Sun 04/10/20	0 days	1029,1033,1	1050,1056,1053,1059	
1049	**1049**	**5.30.3**	**Manufacturing and Delivery of Plant & Materials**	**165 days**	**Mon 05/10/20**	**Thu 18/03/21**	**Mon 05/10/20**	**Thu 18/03/21**	**0 days**			
1050	**1050**	**5.30.3.1**	**Filtrate Lift Pumps and Filtrate Transfer Pump, EQT011**	**165 days**	**Mon 05/10/20**	**Thu 18/03/21**	**Mon 05/10/20**	**Thu 18/03/21**	**0 days**	**1048**		
1051	1051	5.30.3.1.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/21	0 days	1045,1029	1052	
1052	1052	5.30.3.1.2	Shipping and Delivery of Plant to site (Delivered)	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1051	1081	



Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

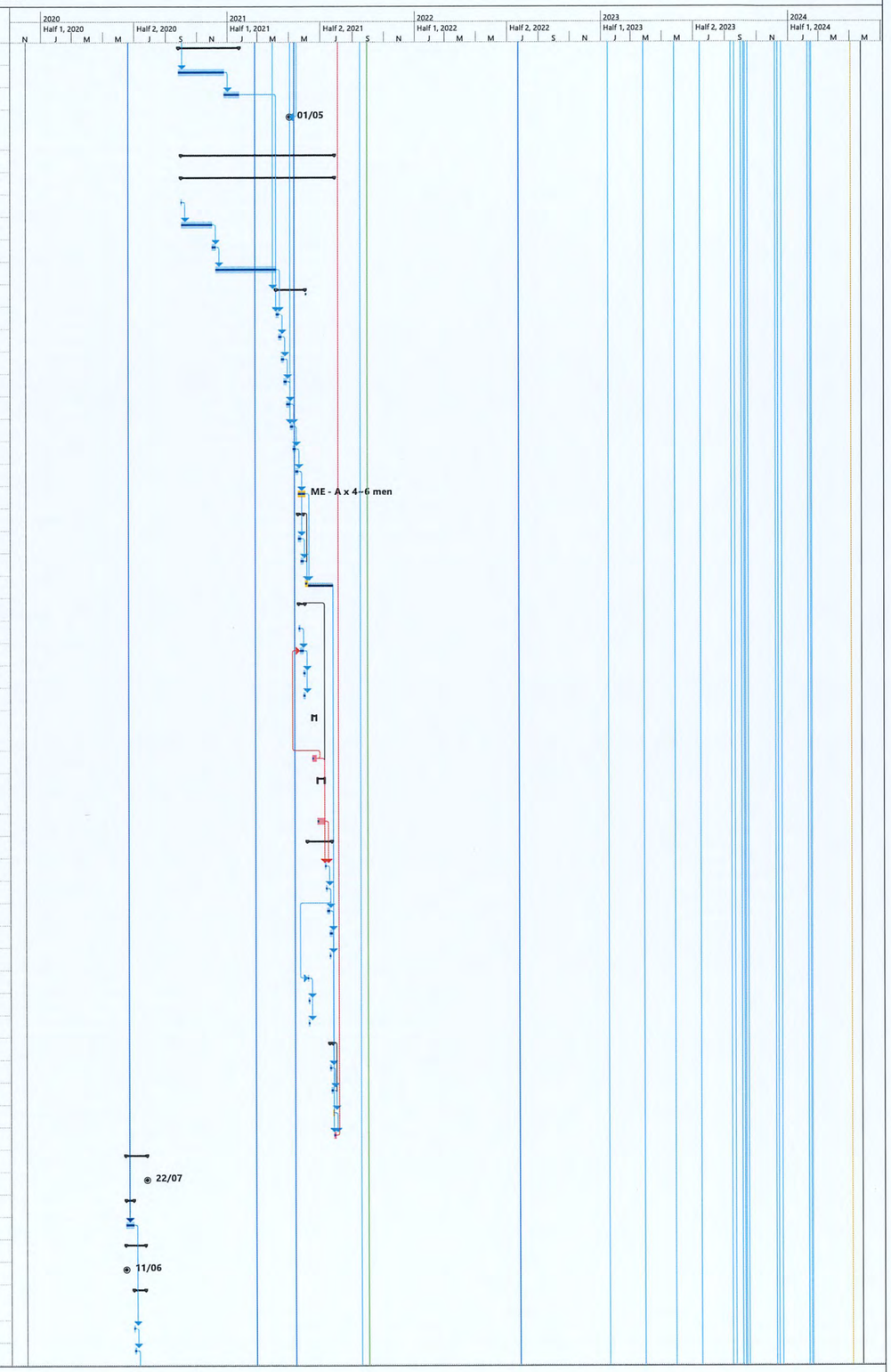
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1053	**1053**	**5.30.3.2**	**Instrumentations**	**165 days**	**Mon 05/10/20**	**Thu 18/03/21**	**Mon 05/10/20**	**Thu 18/03/21**	**0 days**	**1048**		
1054	1054	5.30.3.2.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/...	0 days	1045,1033	1055	
1055	1055	5.30.3.2.2	Shipping and Delivery of Plant to site	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1054	1082	
1056	**1056**	**5.30.3.3**	**Pipework**	**165 days**	**Mon 05/10/20**	**Thu 18/03/21**	**Mon 05/10/20**	**Thu 18/03/21**	**0 days**	**1048**		
1057	1057	5.30.3.3.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/...	0 days	1045,1037	1058	
1058	1058	5.30.3.3.2	Shipping and Delivery of Plant to site	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1057	1080	
1059	**1059**	**5.30.3.4**	**Valve**	**165 days**	**Mon 05/10/20**	**Thu 18/03/21**	**Mon 05/10/20**	**Thu 18/03/21**	**0 days**	**1048**		
1060	1060	5.30.3.4.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 05/10/20	Mon 01/02/21	Mon 05/10/20	Mon 01/02/...	0 days	1045,1041	1061	
1061	1061	5.30.3.4.2	Shipping and Delivery of Plant to site	45 days	Tue 02/02/21	Thu 18/03/21	Tue 02/02/21	Thu 18/03/21	0 days	1060	1080	
1062	**1062**	**5.30.4**	**Site Installation Work**	**297 days**	**Sat 01/08/20**	**Tue 25/05/21**	**Sat 01/08/20**	**Tue 25/05/21**	**0 days**			
1063	**1063**	**5.30.4.1**	**Commencement of Civil Construction and E&M Installation at Temp. I**	**297 days**	**Sat 01/08/20**	**Tue 25/05/21**	**Sat 01/08/20**	**Tue 25/05/21**	**0 days**			
1064	**1064**	**5.30.4.1.1**	**Civil Construction Work**	**297 days**	**Sat 01/08/20**	**Tue 25/05/21**	**Sat 01/08/20**	**Tue 25/05/21**	**0 days**			
1065	1065	5.30.4.1.1.1	Civil on-site survey and report submission for acceptance	5 edays	Sat 01/08/20	Thu 06/08/20	Sat 01/08/20	Thu 06/08/20	0 edays	1045	1066,1067	
1066	1066	5.30.4.1.1.2	Civil structural design and drawing submission for acceptance	30 days	Fri 07/08/20	Sat 05/09/20	Fri 07/08/20	Sat 05/09/20	0 days	1065	1068	
1067	1067	5.30.4.1.1.3	Site Clearance, UU diversion and construction of U-channel	21 days	Fri 07/08/20	Thu 27/08/20	Fri 07/08/20	Thu 27/08/20	0 days	1065	1068	
1068	1068	5.30.4.1.1.4	ELS (Sheeting and Excavation)	60 days	Sun 06/09/20	Wed 04/11/20	Sun 06/09/20	Wed 04/11/...	0 days	1067,1066	1069	
1069	1069	5.30.4.1.1.5	Grouting Works	60 days	Thu 05/11/20	Sun 03/01/21	Thu 05/11/20	Sun 03/01/21	0 days	1068	1070	
1070	1070	5.30.4.1.1.6	RC structure works including cast-in items	60 days	Mon 04/01/21	Thu 04/03/21	Mon 04/01/21	Thu 04/03/21	0 days	1069	1079,1076,1071	
1071	1071	5.30.4.1.1.7	Removal Formwork and Flasework	8 days	Fri 05/03/21	Fri 12/03/21	Fri 05/03/21	Fri 12/03/21	0 days	1070	1076,1077,1080,1082,10	
1072	1072	5.30.4.1.1.8	Waterproofing	14 days	Sat 13/03/21	Fri 26/03/21	Sat 13/03/21	Fri 26/03/21	0 days	1071	1073	
1073	1073	5.30.4.1.1.9	Other architectual works and finishing works	60 days	Sat 27/03/21	Tue 25/05/21	Sat 27/03/21	Tue 25/05/21	0 days	1072	1090FF	
1074	**1074**	**5.30.4.1.2**	**E&M Installation Work**	**34 days**	**Sat 13/03/21**	**Thu 15/04/21**	**Sat 13/03/21**	**Thu 15/04/21**	**16 days**			
1075	**1075**	**5.30.4.1.2.1**	**Installation of Lifting Appliances at Temporary Filtrate Lifting We**	**10 days**	**Sat 13/03/21**	**Mon 22/03/21**	**Sat 13/03/21**	**Mon 22/03...**	**40 days**			
1076	1076	5.30.4.1.2.1.1	GF MR LA-09-01 SWL 1t	7 days	Sat 13/03/21	Fri 19/03/21	Sat 13/03/21	Fri 19/03/21	0 days	1070,1047,11	1078	LA - A x 4~6 men
1077	1077	5.30.4.1.2.1.2	GF MR LA-09-02 SWL 1t	7 days	Sat 13/03/21	Fri 19/03/21	Sat 13/03/21	Fri 19/03/21	0 days	1071	1078	LA - A x 4~6 men
1078	1078	5.30.4.1.2.1.3	Site Acceptance test and loading test of LA	3 days	Sat 20/03/21	Mon 22/03/21	Sat 20/03/21	Mon 22/03/...	40 days	1076,1077	1113FF	LA - A x 4~6 men
1079	**1079**	**5.30.4.1.2.2**	**Mechanical Installations for Temp. Filtrate Lifting Well and Eq. T**	**21 days**	**Fri 19/03/21**	**Thu 08/04/21**	**Fri 19/03/21**	**Thu 08/04/21**	**0 days**	**1070**	**1083FS-30 days**	
1080	1080	5.30.4.1.2.2.1	Installation of pipework, chemical pipework and valves, EQT03	14 days	Fri 19/03/21	Thu 01/04/21	Fri 19/03/21	Thu 01/04/21	0 days	1071,1058,11	1081	ME - A x 4~6 men
1081	1081	5.30.4.1.2.2.2	Installation of pumps	7 days	Fri 02/04/21	Thu 08/04/21	Fri 02/04/21	Thu 08/04/21	0 days	1080,1052	1085	ME - A x 4~6 men
1082	1082	5.30.4.1.2.2.3	Installation of instrumentations, EQT035-3	7 days	Fri 19/03/21	Thu 25/03/21	Fri 19/03/21	Thu 25/03/21	0 days	1071,1055	1085	ME - A x 4~6 men
1083	**1083**	**5.30.4.1.2.3**	**Electrical Installations for Temp. Filtrate Lifting Well and Eq. Tan**	**34 days**	**Sat 13/03/21**	**Thu 15/04/21**	**Sat 13/03/21**	**Thu 15/04/21**	**0 days**	**1079FS-30 d**		
1084	1084	5.30.4.1.2.3.1	Installation of cable trays and cable containments	21 days	Sat 13/03/21	Fri 02/04/21	Sat 13/03/21	Fri 02/04/21	0 days	1071	1085	EE - A x 4~6 men
1085	1085	5.30.4.1.2.3.2	Cables laying and terminations	7 days	Fri 09/04/21	Thu 15/04/21	Fri 09/04/21	Thu 15/04/21	0 days	1084,1081,11	1086	EE - A x 4~6 men
1086	1086	5.30.4.1.3	Site Acceptance Test for E&M Equip at Filtrate Lifting Well and Eq. Ta	7 days	Fri 16/04/21	Thu 22/04/21	Fri 16/04/21	Thu 22/04/21	0 days	1085	1087	
1087	1087	5.30.4.1.4	System Commissioning for E&M Equip at Temp. Filtrate Lifting Well a	7 days	Fri 23/04/21	Thu 29/04/21	Fri 23/04/21	Thu 29/04/21	2 days	1086	1113FF	
1088	**1088**	**5.31**	**Existing PST No. 4 and No. 6, Portion B-3A (PS 6B.2.15)**	**397 days**	**Sat 01/08/20**	**Wed 01/09/21**	**Sat 01/08/20**	**Wed 01/09...**	**0 days**			
1089	1089	5.31.1	Planned Key Date Completion Date - KD3B	0 days	Mon 07/06/21	Mon 07/06/21	Mon 07/06/21	Mon 07/06/...	0 days	1156FF		
1090	1090	5.31.2	Planned Sectional Completion Date - Section 3, PST No. 4 and No. 6	0 days	Wed 01/09/21	Wed 01/09/21	Wed 01/09/21	Wed 01/09/...	0 days	1073FF,1182		
1091	**1091**	**5.31.3**	**Selection of Suppliers for major plant and materials and Subcontractor for PST No. 4 and No. 6**	**137 days**	**Sat 01/08/20**	**Tue 15/12/20**	**Sat 01/08/20**	**Tue 15/12/20**	**0 days**			
1092	**1092**	**5.31.3.1**	**Mis - Rotating Bridge Scrapers and associated materials, C11, ref. EQT037-1**	**42 days**	**Sat 01/08/20**	**Fri 11/09/20**	**Sat 01/08/20**	**Fri 11/09/20**	**0 days**			
1093	1093	5.31.3.1.1	Submission for acceptance of purchasing package	7 days	Sat 01/08/20	Fri 07/08/20	Sat 01/08/20	Fri 07/08/20	0 days		1094	
1094	1094	5.31.3.1.2	Invitation of quotations for purchasing package	14 days	Sat 08/08/20	Fri 21/08/20	Sat 08/08/20	Fri 21/08/20	0 days	1093	1095	
1095	1095	5.31.3.1.3	Acceptance of conforming quotation (Completed)	21 days	Sat 22/08/20	Fri 11/09/20	Sat 22/08/20	Fri 11/09/20	0 days	1094	1105	
1096	**1096**	**5.31.3.2**	**Mis - Pipework, C11, ref. EQT037-2**	**42 days**	**Sat 01/08/20**	**Fri 11/09/20**	**Sat 01/08/20**	**Fri 11/09/20**	**0 days**			
1097	1097	5.31.3.2.1	Submission for acceptance of purchasing package	7 days	Sat 01/08/20	Fri 07/08/20	Sat 01/08/20	Fri 07/08/20	0 days		1098	
1098	1098	5.31.3.2.2	Invitation of quotations for purchasing package	14 days	Sat 08/08/20	Fri 21/08/20	Sat 08/08/20	Fri 21/08/20	0 days	1097	1099	
1099	1099	5.31.3.2.3	Acceptance of conforming quotation (Completed)	21 days	Sat 22/08/20	Fri 11/09/20	Sat 22/08/20	Fri 11/09/20	0 days	1098	1105	
1100	**1100**	**5.31.3.3**	**Subletting of Electrical and Mechanical Installation Work w/ supply of LCP**	**81 days**	**Sat 26/09/20**	**Tue 15/12/20**	**Sat 26/09/20**	**Tue 15/12/20**	**0 days**			
1101	1101	5.31.3.3.1	Submission for Subletting Package	30 days	Sat 26/09/20	Sun 25/10/20	Sat 26/09/20	Sun 25/10/20	0 days	1105	1102	
1102	1102	5.31.3.3.2	Invitation to tender	21 days	Mon 26/10/20	Sun 15/11/20	Mon 26/10/20	Sun 15/11/20	0 days	1101	1103	
1103	1103	5.31.3.3.3	Acceptance of conforming tender (Completed)	30 days	Mon 16/11/20	Tue 15/12/20	Mon 16/11/20	Tue 15/12/20	0 days	1102	1120	
1104	**1104**	**5.31.4**	**Design Submissions**	**14 days**	**Sat 12/09/20**	**Fri 25/09/20**	**Sat 12/09/20**	**Fri 25/09/20**	**0 days**			
1105	1105	5.31.4.1	Design submissions for retrofitting the existing PST No. 4 and No. 6	14 days	Sat 12/09/20	Fri 25/09/20	Sat 12/09/20	Fri 25/09/20	0 days	1095,1099	1108,1111,1101	
1106	**1106**	**5.31.5**	**Manufacturing and Delivery of Plant & Materials**	**195 days**	**Sat 26/09/20**	**Thu 08/04/21**	**Sat 26/09/20**	**Thu 08/04/21**	**0 days**			
1107	**1107**	**5.31.5.1**	**Rotating Bridge Scrapers and associated materials**	**195 days**	**Sat 26/09/20**	**Thu 08/04/21**	**Sat 26/09/20**	**Thu 08/04/21**	**0 days**			
1108	1108	5.31.5.1.1	Manufacturing and Factory Acceptance Test of Plant	150 days	Sat 26/09/20	Mon 22/02/21	Sat 26/09/20	Mon 22/02/...	0 days	1105	1109	
1109	1109	5.31.5.1.2	Shipping and Delivery of Plant to site (Rev. 8)	45 days	Tue 23/02/21	Thu 08/04/21	Tue 23/02/21	Thu 08/04/21	0 days	1108	1126	



Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

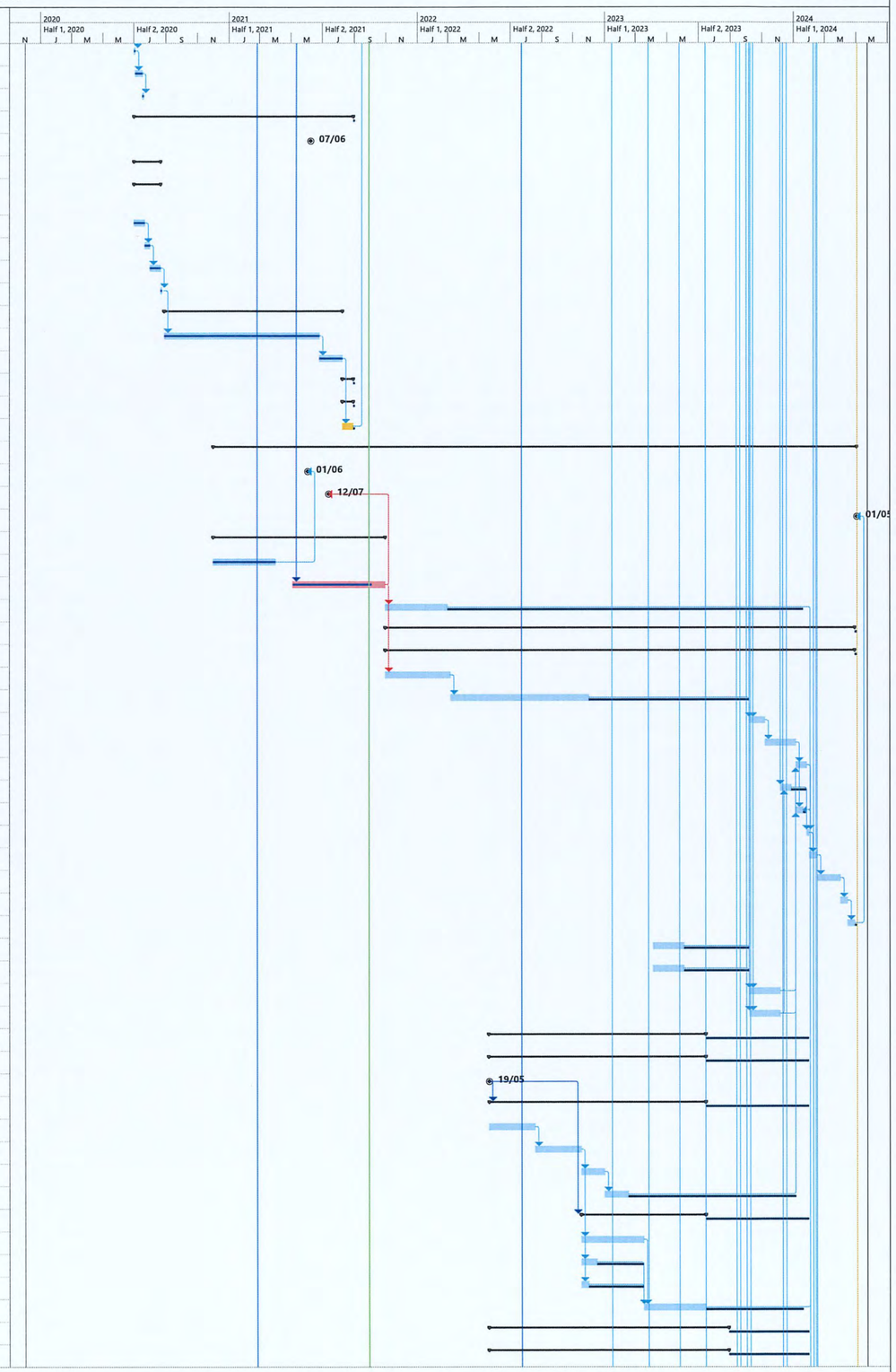
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1110	**1110**	**5.31.5.2**	**Pipework**	**120 days**	**Sat 26/09/20**	**Sat 23/01/21**	**Sat 26/09/20**	**Sat 23/01/21**	**0 days**			
1111	1111	5.31.5.2.1	Manufacturing and Factory Acceptance Test of Plant	90 days	Sat 26/09/20	Thu 24/12/20	Sat 26/09/20	Thu 24/12/20	0 days	1105	1112	
1112	1112	5.31.5.2.2	Shipping and Delivery of Plant to site	30 days	Fri 25/12/20	Sat 23/01/21	Fri 25/12/20	Sat 23/01/21	0 days	1111	1121	
1113	1113	5.31.6	Tentative Civil Handover, Filtrate Lifting Well and Eq. Tank (Completion of work)	1 day	Sat 01/05/21	Sat 01/05/21	Sat 01/05/21	Sat 01/05/21	0 days	1087FF,1078		
1114	**1114**	**5.31.7**	**Site Installation Work**	**300 days**	**Thu 01/10/20**	**Tue 27/07/21**	**Thu 01/10/20**	**Tue 27/07/21**	**0 days**			
1115	**1115**	**5.31.7.1**	**Commencement of retrofitting the existing PST No. 4 and No. 6**	**300 days**	**Thu 01/10/20**	**Tue 27/07/21**	**Thu 01/10/20**	**Tue 27/07/21**	**0 days**			
1116	1116	5.31.7.1.1	Temporary flow diversion of Filtrate from PST No. 4,	1 day	Thu 01/10/20	Thu 01/10/20	Thu 01/10/20	Thu 01/10/20	0 days		1117	
1117	1117	5.31.7.1.2	Dismantle and Removal of E&M Equipment at PST No. 6	60 days	Fri 02/10/20	Mon 30/11/20	Fri 02/10/20	Mon 30/11/...	0 days	1116	1118	
1118	1118	5.31.7.1.3	Temporary flow diversion of Filtrate from PST No. 6	7 days	Tue 01/12/20	Mon 07/12/20	Tue 01/12/20	Mon 07/12/...	0 days	1117	1119	
1119	1119	5.31.7.1.4	Dismantle and Removal of E&M Equipment at PST No. 4	119 days	Tue 08/12/20	Mon 05/04/21	Tue 08/12/20	Mon 05/04/...	0 days	1118	1121	
1120	**1120**	**5.31.7.1.5**	**Mechanical Installations of existing PSTs No. 4 (Completed)**	**56 days**	**Tue 06/04/21**	**Mon 31/05/21**	**Tue 06/04/21**	**Mon 31/05/21**	**2.5 days**	**1103**		
1121	1121	5.31.7.1.5.1	Installation of PST influent feed pipe	5 days	Tue 06/04/21	Sat 10/04/21	Tue 06/04/21	Sat 10/04/21	0 days	1119,1112	1122	ME - A x 4~6 men
1122	1122	5.31.7.1.5.2	Installation of circular baffle diffuser box	5 days	Sun 11/04/21	Thu 15/04/21	Sun 11/04/21	Thu 15/04/21	0 days	1121	1123	ME - A x 4~6 men
1123	1123	5.31.7.1.5.3	Installation of scum baffle plates	5 days	Fri 16/04/21	Tue 20/04/21	Fri 16/04/21	Tue 20/04/21	0 days	1122	1124	ME - A x 4~6 men
1124	1124	5.31.7.1.5.4	Installation of scum box with collection valve and pipework	5 days	Wed 21/04/21	Sun 25/04/21	Wed 21/04/21	Sun 25/04/21	0 days	1123	1125	ME - A x 4~6 men
1125	1125	5.31.7.1.5.5	Installation of v-notched weir plate	7 days	Mon 26/04/21	Sun 02/05/21	Mon 26/04/21	Sun 02/05/21	0 days	1124	1126	ME - A x 4~6 men
1126	1126	5.31.7.1.5.6	Installation of center bearing and slip ring assembly for rotating bridge	5 days	Mon 03/05/21	Fri 07/05/21	Mon 03/05/21	Fri 07/05/21	0 days	1125,1109	1127	ME - A x 4~6 men
1127	1127	5.31.7.1.5.7	Installation of motor and gearbox assembly for rotating bridge	5 days	Sat 08/05/21	Wed 12/05/21	Sat 08/05/21	Wed 12/05/21	0 days	1126	1128	ME - A x 4~6 men
1128	1128	5.31.7.1.5.8	Installation of rotating bridge sludge and scum scraper assembly	5 days	Thu 13/05/21	Mon 17/05/21	Thu 13/05/21	Mon 17/05/21	0 days	1127	1129,1131	ME - A x 4~6 men
1129	1129	5.31.7.1.5.9	installation of removable FRP covers for effluent channel	14 days	Tue 18/05/21	Mon 31/05/21	Tue 18/05/21	Mon 31/05/21	0 days	1128	1133	ME - A x 4~6 men
1130	**1130**	**5.31.7.1.6**	**Electrical Installations of existing PST No. 4**	**10 days**	**Tue 18/05/21**	**Thu 27/05/21**	**Tue 18/05/21**	**Thu 27/05/21**	**0 days**		**1133**	
1131	1131	5.31.7.1.6.1	Installation of local control panels	5 days	Tue 18/05/21	Sat 22/05/21	Tue 18/05/21	Sat 22/05/21	0 days	1128	1132	EE - A x 4~6 men
1132	1132	5.31.7.1.6.2	cable laying and terminations	5 days	Sun 23/05/21	Thu 27/05/21	Sun 23/05/21	Thu 27/05/21	0 days	1131	1133	EE - A x 4~6 men
1133	1133	5.31.7.1.7	Site Acceptance Test for E&M Equip at existing PST No. 4	5 days	Tue 01/06/21	Sat 05/06/21	Tue 01/06/21	Sat 05/06/21	49 days	1130,1129,11	1156	
1134	**1134**	**5.31.7.1.8**	**CNE-0229 - Removal of accumulated sludge inside PST No. 6**	**12 days**	**Wed 19/05/21**	**Sun 30/05/21**	**Wed 19/05/21**	**Sun 30/05/21**	**0 days**		**1144**	
1135	1135	5.31.7.1.8.1	Filtrate divserion to Temporary Filtrate Equalisation Tank	2 days	Wed 19/05/21	Thu 20/05/21	Wed 19/05/21	Thu 20/05/21	0 days		1136	
1136	1136	5.31.7.1.8.2	Removal of floating scum / sludge inside PST No. 6	7 days	Fri 21/05/21	Thu 27/05/21	Fri 21/05/21	Thu 27/05/21	0 days	1135,1140	1137,1138	
1137	1137	5.31.7.1.8.3	Clearance of blockage of PST No. 6 drain pipe	3 days	Fri 28/05/21	Sun 30/05/21	Fri 28/05/21	Sun 30/05/21	0 days	1136		
1138	1138	5.31.7.1.8.4	Retrofiting Concrete Structure of PST No. 6	3 days	Fri 28/05/21	Sun 30/05/21	Fri 28/05/21	Sun 30/05/21	0 days	1136		
1139	**1139**	**5.31.7.1.9**	**NCE-007 - Additional Contract Requirements for provision ICE's Certificates (RSE) on re-use of existing materials**	**8 days**	**Mon 14/06/21**	**Mon 21/06/21**	**Mon 14/06/21**	**Mon 21/06/21**	**0 days**			
1140	1140	5.31.7.1.9.1	Provision of ICE's Certificate	8 days	Mon 14/06/21	Mon 21/06/21	Mon 14/06/21	Mon 21/06/...	0 days		1136,1144	
1141	**1141**	**5.31.7.1.10**	**NCE-008 - Additional Contract Requirements for provision ICE's Certificates on product design of E&M plant and materials.**	**14 days**	**Thu 24/06/21**	**Wed 07/07/21**	**Thu 24/06/21**	**Wed 07/07/21**	**0 days**			
1142	1142	5.31.7.1.10	Provision of ICE's Certificate	14 days	Thu 24/06/21	Wed 07/07/21	Thu 24/06/21	Wed 07/07/...	0 days		1144	
1143	**1143**	**5.31.7.1.11**	**Mechanical Installations of existing PST No. 6**	**48 days**	**Fri 04/06/21**	**Wed 21/07/21**	**Fri 04/06/21**	**Wed 21/07...**	**0 days**			
1144	1144	5.31.7.1.11	Installation of PST influent feed pipe	2 days	Thu 08/07/21	Fri 09/07/21	Thu 08/07/21	Fri 09/07/21	0 days	1134,1140,11	1145	ME - A x 4~6 men
1145	1145	5.31.7.1.11	Installation of center bearing and slip ring assembly for rotating br	2 days	Sat 10/07/21	Sun 11/07/21	Sat 10/07/21	Sun 11/07/21	0 days	1144	1146,1149	ME - A x 4~6 men
1146	1146	5.31.7.1.11	Installation of motor and gearbox assembly for rotating bridge	5 days	Mon 12/07/21	Fri 16/07/21	Mon 12/07/21	Fri 16/07/21	0 days	1145	1153,1147,1148	ME - A x 4~6 men
1147	1147	5.31.7.1.11	Installation of rotating bridge sludge and scum scraper assembly	5 days	Sat 17/07/21	Wed 21/07/21	Sat 17/07/21	Wed 21/07/...	0 days	1146		ME - A x 4~6 men
1148	1148	5.31.7.1.11	Installation of circular baffle diffuser box	2 days	Sat 17/07/21	Sun 18/07/21	Sat 17/07/21	Sun 18/07/21	0 days	1146		ME - A x 4~6 men
1149	1149	5.31.7.1.11	Installation of v-notched weir plate	2 days	Fri 04/06/21	Sat 05/06/21	Fri 04/06/21	Sat 05/06/21	0 days	1145	1150,1151	ME - A x 4~6 men
1150	1150	5.31.7.1.11	Installation of scum baffle plates	2 days	Sun 06/06/21	Mon 07/06/21	Sun 06/06/21	Mon 07/06/...	0 days	1149		ME - A x 4~6 men
1151	1151	5.31.7.1.11	Installation of scum collection box	2 days	Sun 06/06/21	Mon 07/06/21	Sun 06/06/21	Mon 07/06/...	0 days	1149		ME - A x 4~6 men
1152	**1152**	**5.31.7.1.12**	**Electrical Installations of existing PSTs No. 6**	**6 days**	**Sat 17/07/21**	**Thu 22/07/21**	**Sat 17/07/21**	**Thu 22/07/21**	**0 days**		**1155**	
1153	1153	5.31.7.1.12	Installation of local control panels	3 days	Sat 17/07/21	Mon 19/07/21	Sat 17/07/21	Mon 19/07/...	0 days	1146	1154	
1154	1154	5.31.7.1.12	cable laying and terminations	3 days	Tue 20/07/21	Thu 22/07/21	Tue 20/07/21	Thu 22/07/21	0 days	1153	1155	
1155	1155	5.31.7.1.13	Site Acceptance Test for E&M Equip at existing PST No. 6	2 days	Fri 23/07/21	Sat 24/07/21	Fri 23/07/21	Sat 24/07/21	0 days	1152,1154	1156	
1156	1156	5.31.7.1.14	System Commissioning for E&M Equip at existing PST No. 4 and No. 6	3 days	Sun 25/07/21	Tue 27/07/21	Sun 25/07/21	Tue 27/07/21	0 days	1133,1155	1089FF	
1157	**1157**	**5.32**	**Existing Main Power House Electrical, Portion B-7A and B-7B (PS 6B.3.17)**	**42 days**	**Thu 11/06/20**	**Wed 22/07/20**	**Thu 11/06/20**	**Wed 22/07...**	**0 days**			
1158	1158	5.32.1	Planned Key Date Completion Date - KD3A	0 days	Wed 22/07/20	Wed 22/07/20	Wed 22/07/20	Wed 22/07/...	0 days			
1159	**1159**	**5.32.2**	**Design Submissions for Existing Emergency Generator House**	**15 days**	**Fri 12/06/20**	**Fri 26/06/20**	**Fri 12/06/20**	**Fri 26/06/20**	**0 days**			
1160	1160	5.32.2.1	Design submissions for E&M installation works of existing power house	15 days	Fri 12/06/20	Fri 26/06/20	Fri 12/06/20	Fri 26/06/20	0 days	184	1164	
1161	**1161**	**5.32.3**	**Site Installation Work**	**39 days**	**Thu 11/06/20**	**Sun 19/07/20**	**Thu 11/06/20**	**Sun 19/07/20**	**0 days**			
1162	1162	5.32.3.1	Tentative Civil Handover Date, Portion B-7A & 7B area for modification of exist	1 day	Thu 11/06/20	Thu 11/06/20	Thu 11/06/20	Thu 11/06/20	0 days			
1163	**1163**	**5.32.3.2**	**Commencement of Modification of existing emergency generator Electrical Works**	**23 days**	**Sat 27/06/20**	**Sun 19/07/20**	**Sat 27/06/20**	**Sun 19/07/20**	**0 days**			
1164	1164	5.32.3.2.1	Site survey and preparation work	1 day	Sat 27/06/20	Sat 27/06/20	Sat 27/06/20	Sat 27/06/20	0 days	1160	1165	
1165	1165	5.32.3.2.2	Modification of existing emergency generator electrical works	3 days	Sun 28/06/20	Tue 30/06/20	Sun 28/06/20	Tue 30/06/20	0 days	1164	1166	



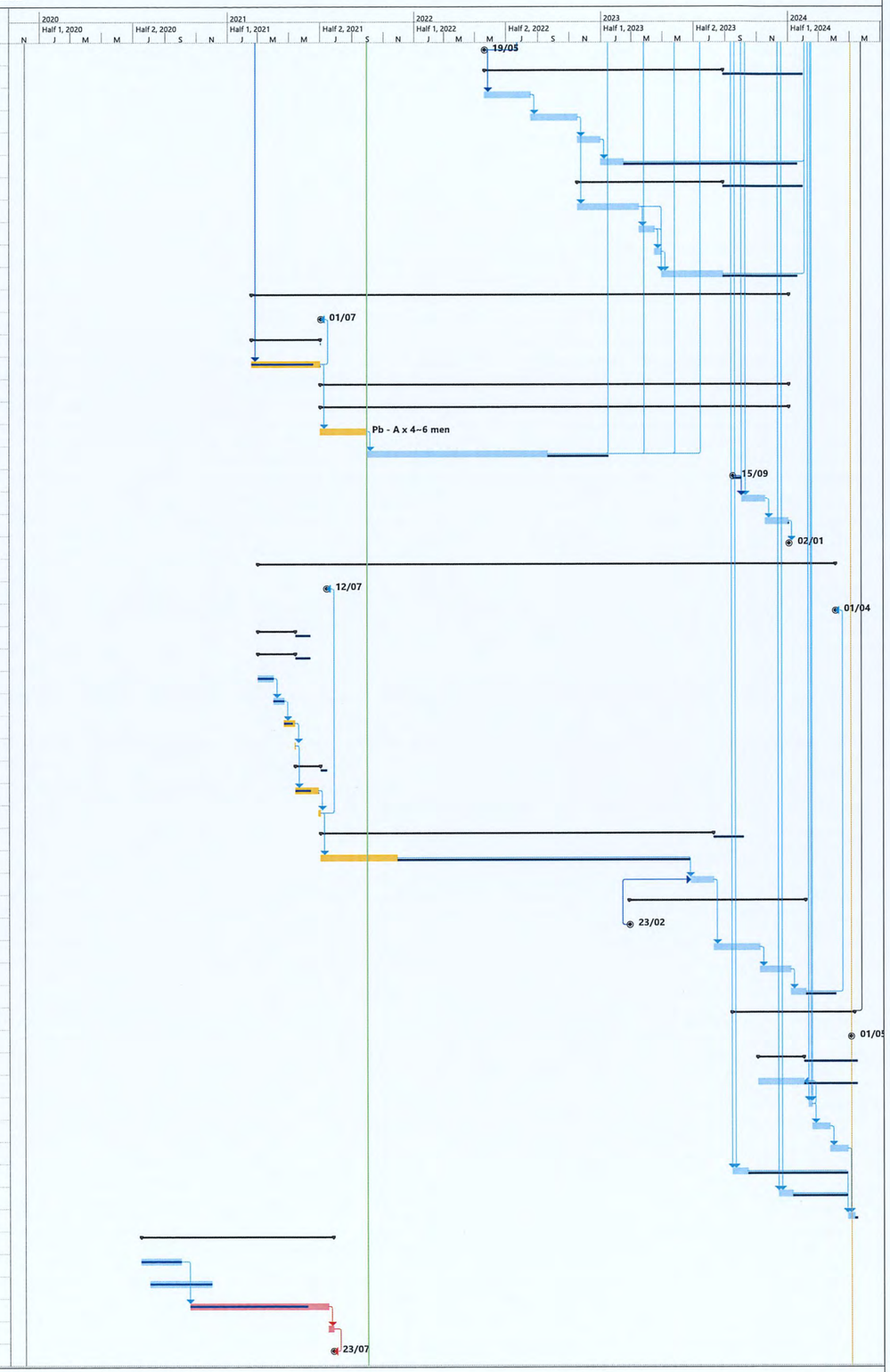
Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1166	1166	5.32.3.2.3	Test the new switchboard for on-site mobile generator	2 days	Wed 01/07/20	Thu 02/07/20	Wed 01/07/20	Thu 02/07/20	0 days	1165	1167	
1167	1167	5.32.3.2.4	Dismantling and removal the existing power & control cables	14 days	Fri 03/07/20	Thu 16/07/20	Fri 03/07/20	Thu 16/07/20	0 days	1166	1168	
1168	1168	5.32.3.2.5	Take down existing generator to DSD (Completed)	3 days	Fri 17/07/20	Sun 19/07/20	Fri 17/07/20	Sun 19/07/20	0 days	1167		
1169	**1169**	**5.33**	**Existing Sludge Press House, Portion B-10 (PS 6B.2.11)**	**425 days**	**Wed 01/07/20**	**Sun 29/08/21**	**Wed 01/07/20**	**Sun 29/08/21**	**3 days**			
1170	1170	5.33.1	Planned Key Date Completion Date - KD3B	0 days	Mon 07/06/21	Mon 07/06/21	Mon 07/06/21	Mon 07/06/...	0 days			
1171	**1171**	**5.33.2**	**Selection of Suppliers for major plant and materials for Filter Presses**	**52 days**	**Wed 01/07/20**	**Fri 21/08/20**	**Wed 01/07/20**	**Fri 21/08/20**	**0 days**			
1172	**1172**	**5.33.2.1**	**Mis - new replacement filter plates and provision of filter cloths, C11, ref. EQT038**	**52 days**	**Wed 01/07/20**	**Fri 21/08/20**	**Wed 01/07/20**	**Fri 21/08/20**	**0 days**			
1173	1173	5.33.2.1.1	Submission for acceptance of purchasing package	21 days	Wed 01/07/20	Tue 21/07/20	Wed 01/07/20	Tue 21/07/20	0 days		1174	
1174	1174	5.33.2.1.2	Invitation of quotations for purchasing package	10 days	Wed 22/07/20	Fri 31/07/20	Wed 22/07/20	Fri 31/07/20	0 days	1173	1175	
1175	1175	5.33.2.1.3	Acceptance of conforming quotation (Completed)	21 days	Sat 01/08/20	Fri 21/08/20	Sat 01/08/20	Fri 21/08/20	0 days	1174	1176	
1176	1176	5.33.3	Design submission for replacement of filter plates	7 edays	Fri 21/08/20	Fri 28/08/20	Fri 21/08/20	Fri 28/08/20	0 edays	1175	1178	
1177	**1177**	**5.33.4**	**Manufacturing and Delivery of Plant & Materials**	**345 days**	**Sat 29/08/20**	**Sun 08/08/21**	**Sat 29/08/20**	**Sun 08/08/21**	**0 days**			
1178	1178	5.33.4.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 29/08/20	Thu 24/06/21	Sat 29/08/20	Thu 24/06/21	0 days	1176	1179	
1179	1179	5.33.4.2	Shipping and Delivery of Plant to site	45 days	Fri 25/06/21	Sun 08/08/21	Fri 25/06/21	Sun 08/08/21	0 days	1178	1182	
1180	**1180**	**5.33.5**	**Site Installation Work**	**21 days**	**Mon 09/08/21**	**Sun 29/08/21**	**Mon 09/08/21**	**Sun 29/08/21**	**3 days**			
1181	**1181**	**5.33.5.1**	**Commencement of replacement of filter plates**	**21 days**	**Mon 09/08/21**	**Sun 29/08/21**	**Mon 09/08/21**	**Sun 29/08/21**	**3 days**			
1182	1182	5.33.5.1.1	Replacement of filter plates (On Hold)	21 days	Mon 09/08/21	Sun 29/08/21	Mon 09/08/21	Sun 29/08/21	3 days	1179	1090FF	
1183	**1183**	**5.34**	**Fire Services Installation (PS 6B.6.9)**	**1248 days**	**Tue 01/12/20**	**Wed 01/05/24**	**Tue 01/12/20**	**Wed 01/05...**	**0 days**			
1184	1184	5.34.1	Planned Key Date Completion Date - KD1B, Fire	0 days	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	Tue 01/06/21	0 days	1188FF		
1185	1185	5.34.2	Planned Sectional Completion Date - Section 1, FSI	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	1189FF		
1186	1186	5.34.3	Planned Sectional Completion Date - Section 4, FSI	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/...	0 days	1204FF		
1187	**1187**	**5.34.4**	**Design Submissions for FSI**	**334 days**	**Tue 01/12/20**	**Sat 30/10/21**	**Tue 01/12/20**	**Sat 30/10/21**	**0 days**			
1188	1188	5.34.4.1	CDS081-11 - Civil and dimensional requirements drawings for Fire Servi	120 days	Tue 01/12/20	Tue 30/03/21	Tue 01/12/20	Tue 30/03/21	0 days		1184FF	
1189	1189	5.34.4.2	CDS049 - Detailed Design for Fire Services include AFA, FS, FH, Sprinkle	180 edays	Mon 03/05/21	Sat 30/10/21	Mon 03/05/21	Sat 30/10/21	0 edays	159	1193,1190,1185FF	
1190	1190	5.34.5	DG Stores Submissions to FSD for approval	120 days	Sun 31/10/21	Sun 27/02/22	Sun 31/10/21	Sun 27/02/22	690 days	1189	1199FF	
1191	**1191**	**5.34.6**	**Site Installation Work**	**910 days**	**Sun 31/10/21**	**Sat 27/04/24**	**Sun 31/10/21**	**Sat 27/04/24**	**4 days**			
1192	**1192**	**5.34.6.1**	**Commencement of Fire Services Installation**	**910 days**	**Sun 31/10/21**	**Sat 27/04/24**	**Sun 31/10/21**	**Sat 27/04/24**	**4 days**			
1193	1193	5.34.6.1.1	Design Review of Approved General Building Plan	126 days	Sun 31/10/21	Sat 05/03/22	Sun 31/10/21	Sat 05/03/22	0 days	1189	1194	
1194	1194	5.34.6.1.2	Submission of WWO542 for WSD's approval	270 days	Sun 06/03/22	Wed 30/11/22	Sun 06/03/22	Wed 30/11/22	310 days	1193	1195	
1195	1195	5.34.6.1.3	Submission of WWO46 for WSD's Inspection	30 days	Sat 07/10/23	Sun 05/11/23	Sat 07/10/23	Sun 05/11/23	0 days	1194,358,487	1196	
1196	1196	5.34.6.1.4	Obtain WWO46 Part V	60 days	Mon 06/11/23	Thu 04/01/24	Mon 06/11/23	Thu 04/01/24	0 days	1195	1199,1197	
1197	1197	5.34.6.1.5	FSD Inspection and Approval for MVAC	21 days	Fri 05/01/24	Thu 25/01/24	Fri 05/01/24	Thu 25/01/24	0 days	1207,1208,11	1200	
1198	1198	5.34.6.1.6	FSD Inspection and Approval for DG Stores	21 days	Wed 06/12/23	Tue 26/12/23	Wed 06/12/23	Tue 26/12/23	30 days	1207,1208,82	1200	
1199	1199	5.34.6.1.7	Submission of (FSI/314 & FSI/501) to FSD	14 days	Fri 05/01/24	Thu 18/01/24	Fri 05/01/24	Thu 18/01/24	7 days	1207,1208,11	1200	
1200	1200	5.34.6.1.8	Pre-inspection meeting with FSD	5 days	Fri 26/01/24	Tue 30/01/24	Fri 26/01/24	Tue 30/01/24	0 days	1199,1197,11	1201	
1201	1201	5.34.6.1.9	Initial Inspection with FSD	15 days	Wed 31/01/24	Wed 14/02/24	Wed 31/01/24	Wed 14/02/24	0 days	1200	1202	
1202	1202	5.34.6.1.10	Document Checking	45 days	Thu 15/02/24	Sat 30/03/24	Thu 15/02/24	Sat 30/03/24	0 days	1201	1203	
1203	1203	5.34.6.1.11	Re-inspections with FSD	14 days	Sun 31/03/24	Sat 13/04/24	Sun 31/03/24	Sat 13/04/24	0 days	1202	1204	
1204	1204	5.34.6.1.12	Issue of acceptance memo by FSD	14 days	Sun 14/04/24	Sat 27/04/24	Sun 14/04/24	Sat 27/04/24	4 days	1203	1186FF	
1205	1205	5.34.6.1.13	Installation of FS Pumps and Sprinkler Pumps	60 days	Mon 03/04/23	Thu 01/06/23	Mon 03/04/23	Thu 01/06/23	127 days		1208	FS - A x 4~6 men
1206	1206	5.34.6.1.14	Installation of Fire Hydrant and Booster Pumps	60 days	Mon 03/04/23	Thu 01/06/23	Mon 03/04/23	Thu 01/06/23	127 days		1208	FS - A x 4~6 men
1207	1207	5.34.6.1.15	SAT for Manual and automatic fire detection and alarm system	60 days	Sat 07/10/23	Tue 05/12/23	Sat 07/10/23	Tue 05/12/23	0 days	358,487,598,	1199,1197,1198	
1208	1208	5.34.6.1.16	SAT for Fire hydrants, hose reels and street fire hydrant system	60 days	Sat 07/10/23	Tue 05/12/23	Sat 07/10/23	Tue 05/12/23	0 days	1205,1206,35	1199,1197,1198	
1209	**1209**	**5.35**	**Fire Services Sprinkler Pumping Room, Portion B-7 & B-7B (PS 6B.6.9)**	**421 days**	**Thu 19/05/22**	**Thu 13/07/23**	**Thu 19/05/22**	**Thu 13/07/23**	**200 days**			
1210	**1210**	**5.35.1**	**Site Installation Work**	**421 days**	**Thu 19/05/22**	**Thu 13/07/23**	**Thu 19/05/22**	**Thu 13/07/23**	**200 days**			
1211	1211	5.35.1.1	Tentative Civil Handover Date, FS Sprinkler Pump Room (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days		1212,1217	
1212	**1212**	**5.35.1.2**	**Commencement of E&M Installation at FS & Sprinkler Pump Room**	**420 days**	**Thu 19/05/22**	**Thu 13/07/23**	**Thu 19/05/22**	**Thu 13/07/23**	**200 days**	1211		
1213	1213	5.35.1.2.1	Mechanical Installations for FS & Sprinkler Pumps	90 edays	Thu 19/05/22	Wed 17/08/22	Thu 19/05/22	Wed 17/08/...	0 edays		1214	FS - A x 4~6 men
1214	1214	5.35.1.2.2	Electrical Installations for FS & Sprinkler Pumps	90 edays	Wed 17/08/22	Tue 15/11/22	Wed 17/08/22	Tue 15/11/22	0.63 edays	1213	1215,1218,1219,1220	FS - A x 4~6 men
1215	1215	5.35.1.2.3	Site Acceptance Test for FS & Sprinkler Pumps	45 days	Wed 16/11/22	Fri 30/12/22	Wed 16/11/22	Fri 30/12/22	0 days	1214	1216	
1216	1216	5.35.1.2.4	System Commissioning for FS & Sprinkler Pumps	45 days	Sat 31/12/22	Mon 13/02/23	Sat 31/12/22	Mon 13/02/...	325 days	1215	1199	
1217	**1217**	**5.35.1.2.5**	**Building Services Installations at FS & Sprinkler Pump Room**	**240 days**	**Wed 16/11/22**	**Thu 13/07/23**	**Wed 16/11/22**	**Thu 13/07/23**	**200 days**	1211		
1218	1218	5.35.1.2.5.1	Lighting and Power Distribution System, Chem 1&2	120 days	Wed 16/11/22	Wed 15/03/23	Wed 16/11/22	Wed 15/03/...	0 days	1214	1221	BS - A x 4~6 men
1219	1219	5.35.1.2.5.2	Lightning Protection System, FS & Sprinkler Pump Room	30 days	Wed 16/11/22	Thu 15/12/22	Wed 16/11/22	Thu 15/12/22	90 days	1214	1221	BS - A x 4~6 men
1220	1220	5.35.1.2.5.3	Mechanical Ventilation System, FS & Sprinkler PR	14 days	Wed 16/11/22	Tue 29/11/22	Wed 16/11/22	Tue 29/11/22	106 days	1214	1221	MVAC - A x 4~6 men
1221	1221	5.35.1.2.5.4	Testing and Commissioning of Building Services Installations, FS &	120 days	Thu 16/03/23	Thu 13/07/23	Thu 16/03/23	Thu 13/07/23	189 days	1218,1219,11	199FF	
1222	**1222**	**5.36**	**Fire Hydrant and Booster Pumping Room, Portion B7 & B-7B (PS 6B.6.9)**	**465 days**	**Thu 19/05/22**	**Sat 26/08/23**	**Thu 19/05/22**	**Sat 26/08/23**	**156 days**			
1223	**1223**	**5.36.1**	**Site Installation Work**	**465 days**	**Thu 19/05/22**	**Sat 26/08/23**	**Thu 19/05/22**	**Sat 26/08/23**	**156 days**			



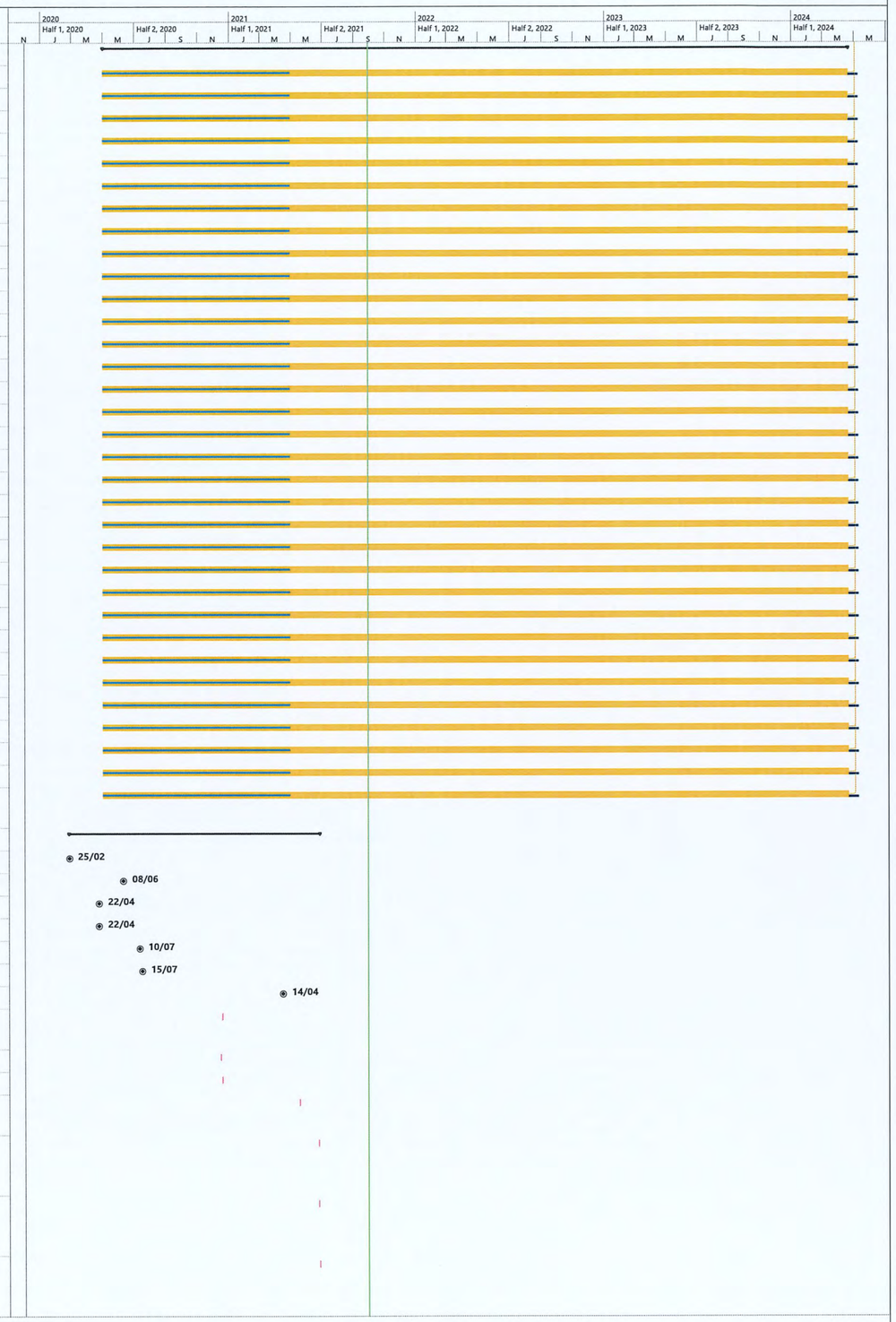
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1224	1224	5.36.1.1	Tentative Civil Handover Date, Fire Hydrant and Booster Pumping Roor	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days		861FF+50 days,1226	
1225	**1225**	**5.36.1.2**	**Commencement of E&M Installation at Street FH Pump Room**	**464 days**	**Thu 19/05/22**	**Sat 26/08/23**	**Thu 19/05/22**	**Sat 26/08/23**	**156 days**			
1226	1226	5.36.1.2.1	Mechanical Installations for Street FH Pumps	90 edays	Thu 19/05/22	Wed 17/08/22	Thu 19/05/22	Wed 17/08/...	0 edays	1224	1227	FS - A x 4~6 men
1227	1227	5.36.1.2.2	Electrical Installations for Street FH Pump	90 edays	Wed 17/08/22	Tue 15/11/22	Wed 17/08/22	Tue 15/11/22	0.63 edays	1226	1228,1231	FS - A x 4~6 men
1228	1228	5.36.1.2.3	Site Acceptance Test for Street FH Pump	45 days	Wed 16/11/22	Fri 30/12/22	Wed 16/11/22	Fri 30/12/22	0 days	1227	1229	
1229	1229	5.36.1.2.4	System Commissioning for Street FH Pumps	45 days	Sat 31/12/22	Mon 13/02/23	Sat 31/12/22	Mon 13/02/...	339 days	1228	1199FF	
1230	**1230**	**5.36.1.2.5**	**Building Services Installations at Street FH Pump Room**	**284 days**	**Wed 16/11/22**	**Sat 26/08/23**	**Wed 16/11/22**	**Sat 26/08/23**	**156 days**			
1231	1231	5.36.1.2.5.1	Lighting and Power Distribution System, Street FH PR	120 days	Wed 16/11/22	Wed 15/03/23	Wed 16/11/22	Wed 15/03/...	0 days	1227	1234,1232	BS - A x 4~6 men
1232	1232	5.36.1.2.5.2	Lightning Protection System, Street FH PR	30 days	Thu 16/03/23	Fri 14/04/23	Thu 16/03/23	Fri 14/04/23	0 days	1231	1233,1234	BS - A x 4~6 men
1233	1233	5.36.1.2.5.3	Mechanical Ventilation System, Street FH PR	14 days	Sat 15/04/23	Fri 28/04/23	Sat 15/04/23	Fri 28/04/23	0 days	1232	1234	MVAC - A x 4~6 men
1234	1234	5.36.1.2.5.4	Testing and Commissioning of Building Services Installations, FH P	120 days	Sat 29/04/23	Sat 26/08/23	Sat 29/04/23	Sat 26/08/23	145 days	1231,1232,1	1199FF	
1235	**1235**	**5.37**	**Plumbing Installation (PS 6B.6.8)**	**1049 days**	**Tue 16/02/21**	**Tue 02/01/24**	**Tue 16/02/21**	**Tue 02/01/24**	**0 days**			
1236	1236	5.37.1	Planned Sectional Completion Date - Section 1, Plumbing	0 days	Thu 01/07/21	Thu 01/07/21	Thu 01/07/21	Thu 01/07/21	0 days	1238FF		
1237	**1237**	**5.37.2**	**Design Submissions for Plumbing**	**134 days**	**Tue 16/02/21**	**Wed 30/06/21**	**Tue 16/02/21**	**Wed 30/06...**	**1 day**			
1238	1238	5.37.2.1	CDS033 - Detailed Design for Plumbing System	134 edays	Tue 16/02/21	Wed 30/06/21	Tue 16/02/21	Wed 30/06/...	0.63 edays	154	1241,1236FF	
1239	**1239**	**5.37.3**	**Site Installation Work**	**915 days**	**Thu 01/07/21**	**Tue 02/01/24**	**Thu 01/07/21**	**Tue 02/01/24**	**0 days**			
1240	1240	5.37.3.1	Commencement of Plumbing Installation	915 days	Thu 01/07/21	Tue 02/01/24	Thu 01/07/21	Tue 02/01/24	0 days			
1241	1241	5.37.3.1.1	Submission of detail design for acceptance	90 days	Thu 01/07/21	Tue 28/09/21	Thu 01/07/21	Tue 28/09/21	0 days	1238	1242	Pb - A x 4~6 men
1242	1242	5.37.3.1.2	Submission of WWO542 for WSD's approval	355 days	Wed 29/09/21	Sun 18/09/22	Wed 29/09/21	Sun 18/09/22	118 days	1241	356,485,596,771	Pb - B x 4~6 men
1243	1243	5.37.3.1.3	Connection of External Pumping System (By others)	0 days	Fri 15/09/23	Fri 15/09/23	Fri 15/09/23	Fri 15/09/23	17 days		1244	
1244	1244	5.37.3.1.4	Submission of WWO46 for WSD's Inspection	45 days	Mon 02/10/23	Wed 15/11/23	Mon 02/10/23	Wed 15/11/23	0 days	1243,356,485	1245	
1245	1245	5.37.3.1.5	Obtain WWO46 Part V	45 days	Thu 16/11/23	Sat 30/12/23	Thu 16/11/23	Sat 30/12/23	2 days	1244	1246	
1246	1246	5.37.3.1.6	Tentative Date for connection of external water pipework (by others)	0 days	Tue 02/01/24	Tue 02/01/24	Tue 02/01/24	Tue 02/01/24	0 days	1245		
1247	**1247**	**5.38**	**Photovoltaic Power System (PS 6B.6.11)**	**1128 days**	**Mon 01/03/21**	**Mon 01/04/24**	**Mon 01/03/21**	**Mon 01/04...**	**0 days**			
1248	1248	5.38.1	Planned Sectional Completion Date - Section 1, BR 2A & 2B	0 days	Mon 12/07/21	Mon 12/07/21	Mon 12/07/21	Mon 12/07/...	0 days	1258FF		
1249	1249	5.38.2	Planned Sectional Completion Date - Section 2, BR 2A & 2B	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days	1266FF		
1250	1250	5.38.3	Selection of Suppliers for major plant and materials for BR 2A & 2B	73 days	Mon 01/03/21	Wed 12/05/21	Mon 01/03/21	Wed 12/05/21	29 days			
1251	**1251**	**5.38.3.1**	**PV System (EQT041)**	**73 days**	**Mon 01/03/21**	**Wed 12/05/21**	**Mon 01/03/21**	**Wed 12/05...**	**29 days**			
1252	1252	5.38.3.1.1	Submission for acceptance of purchasing package	30 days	Mon 01/03/21	Tue 30/03/21	Mon 01/03/21	Tue 30/03/21	0 days		1253	
1253	1253	5.38.3.1.2	Invitation of quotations for purchasing package	21 days	Wed 31/03/21	Tue 20/04/21	Wed 31/03/21	Tue 20/04/21	0 days	1252	1254	
1254	1254	5.38.3.1.3	Acceptance of conforming quotation	21 days	Wed 21/04/21	Tue 11/05/21	Wed 21/04/21	Tue 11/05/21	0 days	1253	1255	
1255	1255	5.38.3.1.4	Commencement of Design Work	1 day	Wed 12/05/21	Wed 12/05/21	Wed 12/05/21	Wed 12/05/21	0 days	1254	1257	
1256	**1256**	**5.38.4**	**Design Submissions**	**49 days**	**Wed 12/05/21**	**Wed 30/06/21**	**Wed 12/05/21**	**Wed 30/06...**	**12 days**			
1257	1257	5.38.4.1	CDS060 - Detailed Design for PV System	45 edays	Wed 12/05/21	Sat 26/06/21	Wed 12/05/21	Sat 26/06/21	0.63 edays	1255	1258	
1258	1258	5.38.4.2	Complete the CLP's Electronic Application Form and Upload Required D	4 days	Sun 27/06/21	Wed 30/06/21	Sun 27/06/21	Wed 30/06/...	0 days	1257	1248FF,1260	
1259	**1259**	**5.38.5**	**Material ordering and delivery to site**	**767 days**	**Thu 01/07/21**	**Sun 06/08/23**	**Thu 01/07/21**	**Sun 06/08/23**	**59 days**			
1260	1260	5.38.5.1	Manufacturing and Factory Acceptance Test of Plant	150 days	Thu 01/07/21	Sat 27/11/21	Thu 01/07/21	Sat 27/11/21	572 days	1258	1261	
1261	1261	5.38.5.2	Shipping and Delivery of Plant to site	45 days	Fri 23/06/23	Sun 06/08/23	Fri 23/06/23	Sun 06/08/23	0 days	1260,1263S	1264	
1262	**1262**	**5.38.6**	**Site Installation Work**	**345 days**	**Thu 23/02/23**	**Fri 02/02/24**	**Thu 23/02/23**	**Fri 02/02/24**	**0 days**			
1263	1263	5.38.6.1	Tentative Civil Handover Date, Portion B-4, BR2A & 2B (Rev. 5)	1 day	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	Thu 23/02/23	0 days		1261SS+120 edays	
1264	1264	5.38.6.2	Commencement of Site Installation Work	90 days	Mon 07/08/23	Sat 04/11/23	Mon 07/08/23	Sat 04/11/23	0 days	1261	1265	PV - A x 4~6 men
1265	1265	5.38.6.3	Technical Assessment, System Test and Installation	60 days	Sun 05/11/23	Wed 03/01/24	Sun 05/11/23	Wed 03/01/...	0 days	1264	1266	PV - A x 4~6 men
1266	1266	5.38.6.4	CLP's smart meter installation and Final on-grid test with CLP	30 days	Thu 04/01/24	Fri 02/02/24	Thu 04/01/24	Fri 02/02/24	59 days	1265	1249FF	
1267	**1267**	**5.39**	**Plant Commissioning**	**240 days**	**Tue 12/09/23**	**Wed 08/05/24**	**Tue 12/09/23**	**Wed 08/05...**	**0 days**		**39FF**	
1268	1268	5.39.1	Planned Sectional Completion Date - Section 4, Plant Commissioning	0 days	Wed 01/05/24	Wed 01/05/24	Wed 01/05/24	Wed 01/05/...	0 days			
1269	**1269**	**5.39.2**	**Design Submission for Treatment Process Plant Testing & Commissionin**	**90 days**	**Wed 01/11/23**	**Mon 29/01/24**	**Wed 01/11/23**	**Mon 29/01...**	**105 days**			
1270	1270	5.39.2.1	Document Submission and Resubmission for T&C procedures	90 days	Wed 01/11/23	Mon 29/01/24	Wed 01/11/23	Mon 29/01/24	105 days	1271FF-120 d		
1271	1271	5.39.3	System Commissioning Tests of the E&M systems at IW, PST, BR 2A&2B, I	7 days	Thu 08/02/24	Wed 14/02/24	Thu 08/02/24	Wed 14/02/...	0 days	924,970,99(	1272,1270FF-120 days	
1272	1272	5.39.4	MBR System Process Startup	35 days	Thu 15/02/24	Wed 20/03/24	Thu 15/02/24	Wed 20/03/...	0 days	1271	1273	
1273	1273	5.39.5	Plant Commissioning	35 days	Thu 21/03/24	Wed 24/04/24	Thu 21/03/24	Wed 24/04/...	0 days	1272	1276	
1274	1274	5.39.6	Overall commissioning of CCTV system	30 days	Tue 12/09/23	Wed 11/10/23	Tue 12/09/23	Wed 11/10/23	196 days	357,486,597,	1276	
1275	1275	5.39.7	Overall commissioning of Facility Computerized Systems (SCADA, CMMS, PMS, ID	28 days	Mon 11/12/23	Sun 07/01/24	Mon 11/12/23	Sun 07/01/24	108 days	349,478,763,	1276	
1276	1276	5.39.8	Overall Plant Commissioning and DSD pre-handover inspections	14 days	Thu 25/04/24	Wed 08/05/24	Thu 25/04/24	Wed 08/05/24	5 days	1273,1274,12		
1277	**1277**	**5.40**	**CE No. 009 - Provision of an Additional Primary Sludge Thickening System**	**375 days**	**Tue 14/07/20**	**Fri 23/07/21**	**Tue 14/07/20**	**Fri 23/07/21**	**0 days**			
1278	1278	5.40.1	Detail Design Submission and Approval	77 days	Tue 14/07/20	Mon 28/09/20	Tue 14/07/20	Mon 28/09/...	0 days		1280	
1279	1279	5.40.2	Subletting, Procurement, Manufacturing and Delivery	120 days	Fri 31/07/20	Fri 27/11/20	Fri 31/07/20	Fri 27/11/20	0 days			
1280	1280	5.40.3	Site Installation	270 days	Sat 17/10/20	Tue 13/07/21	Sat 17/10/20	Tue 13/07/21	0 days	1278	1281	
1281	1281	5.40.4	Testing and Commissioning	10 days	Wed 14/07/21	Fri 23/07/21	Wed 14/07/21	Fri 23/07/21	0 days	1280	1282FF	
1282	1282	5.40.5	Planned Completion Date	1 day	Fri 23/07/21	Fri 23/07/21	Fri 23/07/21	Fri 23/07/21	0 days	1281FF		



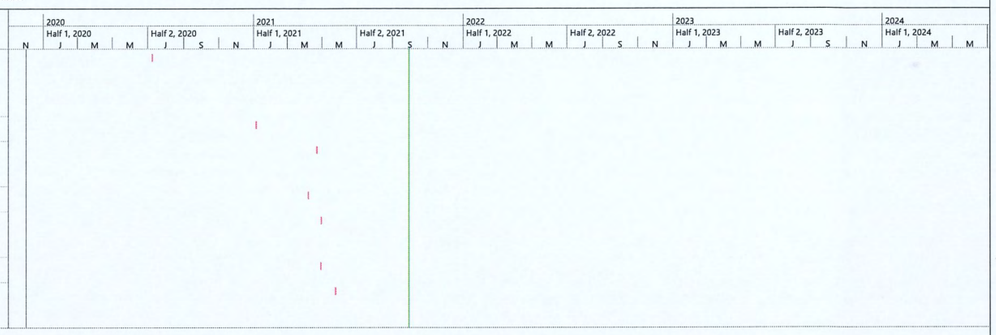
Bestwise
Project: DE/2018/04
Date: 28/09/21

Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1283	1283	6	**Beam Plus Submissions**	**1450 days**	**Fri 01/05/20**	**Fri 19/04/24**	**Fri 01/05/20**	**Fri 19/04/24**	**0 days**			
1284	1284	6.1	SA10 - Environmental Management Plan	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1285	1285	6.2	SA11 - Air Pollution During Construction	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1286	1286	6.3	SA12 - Noise During Construction	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1287	1287	6.4	SA14 - Noise from Building Equipment	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1288	1288	6.5	SA15 - Light Pollution	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1289	1289	6.6	MAP1 - Timber used for Temporary Works	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1290	1290	6.7	MAP2 - Use of Non-CFC Based Refrigerants	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1291	1291	6.8	MAP3 - Waste Management Plan	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1292	1292	6.9	MA2 - Modular and Standardized Design	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1293	1293	6.10	MA8 - Ozone Depleting Substances	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1294	1294	6.11	MA11 - Construction Waste Reduction	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1295	1295	6.12	EUP1 - Minimum Energy Performance	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1296	1296	6.13	EU1 - Reduction of CO2 Emissions	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1297	1297	6.14	EU2 - Peak Electricity Demand Reduction	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1298	1298	6.15	EU6 - Renewable Energy Systems	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1299	1299	6.16	EU9 - Energy Efficient Appliances	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1300	1300	6.17	EU10 - Testing and Commissioning	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1301	1301	6.18	EU11 - Operation and Maintenance	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1302	1302	6.19	EU12 - Meter and Monitoring	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1303	1303	6.20	WUP1 - Water Quality Survey	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1304	1304	6.21	WUP2 - Minimum Water Saving Performance	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1305	1305	6.22	WU1 / WU6 - Annual Water Use / Effluent Discharge to Foul Sewers	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1306	1306	6.23	IEQP1 - Minimum Ventilation Performance	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1307	1307	6.24	IEQ1 - Security	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1308	1308	6.25	IEQ2 - Plumbing and Drainage	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1309	1309	6.26	IEQ3 - Biological Contamination	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1310	1310	6.27	IEQ5 - Construction IAQ Management	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1311	1311	6.28	IEQ6 / IEQ7 - IAQ	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1312	1312	6.29	IEQ9 - Increased Ventilation	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1313	1313	6.30	IEQ11 - Localised Ventilation	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1314	1314	6.31	IEQ12 - Ventilation in Common Areas	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1315	1315	6.32	IEQ13 - Thermal Comfort in Air - Conditioned Premises	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1316	1316	6.33	IEQ16 / IEQ17 - Interior Lighting in Normally Occupied Area / Interior Lighting in Areas not Normally Occupied	1450 days	Fri 01/05/20	Fri 19/04/24	Fri 01/05/20	Fri 19/04/24	19 days		39	
1317	**1317**	**7**	**Summary of compensation events notified**	**487 days**	**Tue 25/02/20**	**Fri 25/06/21**	**Tue 25/02/20**	**Fri 25/06/21**	**0 days**			
1318	1318	7.1	Compensation Event (CE) No. 001, Special Arrangement in Reducing the Risk	1 day	Tue 25/02/20	Tue 25/02/20	Tue 25/02/20	Tue 25/02/20	0 days			
1319	1319	7.2	Compensation Event (CE) No. 002, the Contractor's Site Accommodation by	1 day	Mon 08/06/20	Mon 08/06/20	Mon 08/06/20	Mon 08/06/...	0 days			
1320	1320	7.3	Compensation Event (CE) No. 003, Designated Area for the Contractor's Site	1 day	Wed 22/04/20	Wed 22/04/20	Wed 22/04/20	Wed 22/04/...	0 days			
1321	1321	7.4	Compensation Event (CE) No. 005, Designated Area for the Contractor's Stor	1 day	Wed 22/04/20	Wed 22/04/20	Wed 22/04/20	Wed 22/04/...	0 days			
1322	1322	7.5	Compensation Event (CE) No. 007, Employment of Temporary Staff under Ai	1 day	Fri 10/07/20	Fri 10/07/20	Fri 10/07/20	Fri 10/07/20	0 days			
1323	1323	7.6	Compensation Event (CE) No. 009, Provision of an Additional Primary Sludge	1 day	Wed 15/07/20	Wed 15/07/20	Wed 15/07/20	Wed 15/07/...	0 days			
1324	1324	7.7	Compensation Event (CE) No. 011, Dismantling, relocating, disconnecting an	1 day	Wed 14/04/21	Wed 14/04/21	Wed 14/04/21	Wed 14/04/...	0 days			
1325	1325	7.8	NCE-PPMI-0202 (CE) Revised GA for F.S. & Sprinkler Pumping Room and Emergency Generator Room	1 day	Fri 18/12/20	Fri 18/12/20	Fri 18/12/20	Fri 18/12/20	0 days			
1326	1326	7.9	NCE-PPMI-0203 (CE) Revised General Arrangement for Temp. Chemical Syst	1 day	Tue 15/12/20	Tue 15/12/20	Tue 15/12/20	Tue 15/12/20	0 days			
1327	1327	7.10	NCE-PPMI-0204 (CE) Revised GA Layout Plan for DO Sys. No. 3A	1 day	Fri 18/12/20	Fri 18/12/20	Fri 18/12/20	Fri 18/12/20	0 days			
1328	1328	7.11	NCE-PPMI-0205 (CE) Provision of Louvre Panel for Outdoor AC Units at Contractor's Site Accommodation	1 day	Mon 17/05/21	Mon 17/05/21	Mon 17/05/21	Mon 17/05/21	0 days			
1329	1329	7.12	NCE-PPMI-0206 (CE) Modification of Feeders of the existing switchboards at Inlet Work and Provision of MCB Distribution Boards and Cables for Sidewide Submersible Pumps	1 day	Wed 23/06/21	Wed 23/06/21	Wed 23/06/21	Wed 23/06/21	0 days			
1330	1330	7.13	NCE-PPMI-0207 (CE) Modification of Feeders of the existing switchboards at Inlet Consolidation House and Provision of MCB Distribution Boards and Cables for Sidewide Submersible Pumps	1 day	Wed 23/06/21	Wed 23/06/21	Wed 23/06/21	Wed 23/06/21	0 days			
1331	1331	7.14	NCE-PPMI-0208 (CE) Modification of Feeders of the existing switchboards at Membrane Facilities Building and Provision of MCB Distribution Boards and Cables for Sidewide Submersible Pumps	1 day	Fri 25/06/21	Fri 25/06/21	Fri 25/06/21	Fri 25/06/21	0 days			



ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1332	1332	7.15	NCE-PPMI-0211 (CE) Provision of a New Chemical Storage and Dosing System fo the Application of Glycerin to Replace Methanol as an Alternative External Carbon Source for the Denitrification Process at BR2A and BR2B	1 day	Wed 08/07/20	Wed 08/07/20	Wed 08/07/20	Wed 08/07/20	0 days			
1333	1333	7.16	NCE-PPMI-0213 (CE) Revised General Arrangement for Chemical System No.	1 day	Tue 05/01/21	Tue 05/01/21	Tue 05/01/21	Tue 05/01/21	0 days			
1334	1334	7.17	NCE-PMI-0219 (CE) Provision and Removal of the Blank Flange to Blank Off Drain Valve and Temporary Submersible Pumps in PST No. 6	1 day	Thu 22/04/21	Thu 22/04/21	Thu 22/04/21	Thu 22/04/21	0 days			
1335	1335	7.18	NCE-PMI-0223 (CE) Revised GA for Chemical Pipe Trench	1 day	Wed 07/04/21	Wed 07/04/21	Wed 07/04/21	Wed 07/04/...	0 days			
1336	1336	7.19	NCE-PMI-0226 (CE) Modification Works of Manhole Cover for MHD13 for Filtrate Intake Pipe of Primary Sludge Thickening System	1 day	Fri 30/04/21	Fri 30/04/21	Fri 30/04/21	Fri 30/04/21	0 days			
1337	1337	7.20	NCE-PMI-0227 (CE) Provision of Project Jackets with Fleece Vests	1 day	Thu 29/04/21	Thu 29/04/21	Thu 29/04/21	Thu 29/04/21	0 days			
1338	1338	7.21	NCE-PMI-0234 (CE) Provision of removal of the blank flange to blank off drain valve of PST No. 4	1 day	Tue 25/05/21	Tue 25/05/21	Tue 25/05/21	Tue 25/05/21	0 days			



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 30/04/2021 to 30/07/2021)

Updated on: **23-Sep-21**

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)	8/28/2020	9/18/2020	11/5/2020	11/5/2020	Task Completed	no.	26	26	100%		
	KD1A: Submission of Electrical Schematic Drawing (Final)	7/15/2020	7/15/2020	11/5/2020	11/5/2020	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)	9/30/2020	9/28/2020	12/30/2020	3/31/2021	Task Completed	no.	47	47	100%		
	KD1B: Submission of Civil Requirement Drawing (Final)	11/6/2020	11/5/2020	6/4/2021	6/4/2021	Task Completed	no.	47	47	100%		All the CWR Drawings were submitted.
	KD1B: 4 June 2021											
KD3B: 6B.2.15 Operation Restoration of Existing Primary Sedimentation Tank (PST) No. 4 and 6	KD3B: Submission of onsite survey report	7/11/2020	7/20/2020	7/16/2020	7/30/2021	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	7/17/2020	8/6/2020	7/23/2020	8/6/2021	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: System Commissioning for PST No. 4 & 6	N/A	6/22/2021	N/A	9/3/2021	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 to be rectified by 13 Oct 2021. Site demo shall be carried out on 13 Oct 2021.
	KD3B: 9 June 2021											
Section 1 of Works												
Construction of Temporary Filtrate Equalisation System	Construction of minor civil works under PMI 014	22/08/2020 -> 22/12/2020*	10/5/2020	10/15/2020	3/31/2021	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	11/7/2020	1/12/2021	12/30/2020	2/25/2021	Task Completed				100%		
	Construction of concrete plinth for filtrate EQ tank	1/23/2021	2/8/2021	2/1/2021	2/26/2021	Task Completed				100%		
	Offsite fabrication and delivery of filtrate EQ tank	10/31/2020	1/16/2021	2/2/2021	3/4/2021	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	3/1/2021	3/12/2021	4/16/2021	Task Completed				100%		
	Mechanical Installation	3/17/2021	3/30/2021	4/12/2021	5/14/2021	Task Completed				-		
	Electrical Installation	3/13/2021	3/29/2021	4/15/2021	11/30/2021	72%				-		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 3.5 months.
	Testing and Comissioning	4/15/2021	4/22/2021	5/1/2021	11/30/2021	69%				-		Auto mode (without water spray system) is adpoted, water spray system (stage 2) under PMI shall be commenced after delivery of motorized gate valve.
6B.2.1 Inlet Works	Submission of Contractor's Design for Inlet Works No. 1	9/6/2020	11/16/2020	5/14/2021	12/31/2021	76%				-	Bestwise	Finalized design calculations for Inlet Works no.1 shall be submitted by 31 Dec 2021.
	Submission of P&M Submission	9/6/2020	9/7/2020	5/14/2021	12/31/2021	79%						P&M0003 (rev.3) for coarse screen and fine screen was submitted on 10 Feb 2021. AECOM accepted subject to comments on 16 Feb 2021. P&M submission (rev. 1) for inlet pumps was submitted on 10 Feb 2021. AECOM accepted subject to comments on 1 Apr 2021. P&M (rev.1) for penstock and actuator was submitted on 28 Jan 2021. AECOM commented on 12 Mar 2021. Finalized material submissions for Inlet Works no.1 shall be submitted by 31 Dec 2021.
	Submission of P&ID Drawing	9/6/2020	9/6/2020	5/14/2021	12/29/2020	Task Completed						PID (rev.B) submitted on 13 Nov 2020. AECOM accepted subject to comments on 29 Dec 2020.

	Submission of GA Drawing	9/6/2020	1/5/2021	5/14/2021	12/31/2021	73%						E&M GA submission submitted on 6 Feb 2021. AECOM commented on 19 Feb 2021. Bestwise resubmitted DWG-0082 Rev.1 on 9 July 2021. Electrical GA submitted on 7 Apr 2021. AECOM commented on 21 Apr 2021. Bestwise resubmitted DWG-0095 Rev.1 on 3 July 2021 and accepted by AECOM. Finalized drawings for Inlet Works no.1 shall be submitted by 31 Dec 2021.
	Submission of Electrical Drawing	9/6/2020	1/15/2021	5/14/2021	12/31/2021	72%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawings for Inlet Works no.1 shall be submitted by 31 Dec 2021.
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	1/21/2022	52%				-		
6B.2.2 Primary Sedimentation Tank No. 1-4	Submission of Contractor's Design for Primary Sedimentation Tanks No. 1-4	9/6/2020	12/28/2020	5/14/2021	5/31/2022	52%				-	Bestwise	PFD (rev.B) under DWG0004 submitted on 22 June 2021. Finalized design calculations for PST shall be submitted by 31 May 2022.
	Submission of P&M Submission	9/6/2020	11/26/2020	5/14/2021	5/31/2022	55%						Plant and Material (P&M0044) submission (Rev. 0) for primary sludge pump was submitted on 5 Feb 2021. AECOM commented on 1 Apr 2021. Bestwise to resubmit. Finalized material submissions for PST shall be submitted by 31 May 2022.
	Submission of P&ID Drawing	9/6/2020	10/2/2020	5/14/2021	6/24/2021	Task Completed						PID under DWG0037 (rev.1) submitted on 24 June 2021 and is accepted by AECOM.
	Submission of GA Drawing	9/6/2020	2/3/2021	5/14/2021	5/31/2022	48%						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 31 May 2022.
	Submission of Electrical Drawing	9/6/2020	1/15/2021	5/14/2021	5/31/2022	50%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawings for PST shall be submitted by 31 May 2022.
	Acceptance of submission	5/15/2021	4/2/2021	5/29/2021	6/21/2022	39%				-		
6B.2.3 Chemical Storage and Dosing System	Submission of Contractor's Design for Chemical Dosing System (CDS006)	9/6/2020	1/7/2021	5/14/2021	9/30/2021	97%				-	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 shall be submitted by 30 Sep 2021.
	Submission of P&M Submission	9/6/2020	9/6/2020	5/14/2021	9/30/2021	98%						Finalized material submissions for chemical system shall be submitted by 30 Sep 2021.
	Submission of P&ID Drawing	9/6/2020	12/11/2020	5/14/2021	6/29/2021	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	9/6/2020	2/8/2021	5/14/2021	9/30/2021	97%						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. Finalized drawings for chemical systems shall be submitted by 30 Sep 2021.
	Submission of Electrical Drawing	9/6/2020	1/15/2021	5/14/2021	9/30/2021	97%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawings for chemical system shall be submitted by 30 Sep 2021.
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	10/21/2021	82%				-		
6B.2.4 Membrane Bioreactor (MBR) System - Bio Reactor 2A and 2B	Submission of Contractor's Design for Bioreactor 2A and 2B (CDS004)	9/6/2020	1/12/2021	5/14/2021	6/30/2022	48%				-	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 30 June 2022.
	Submission of P&M Submission	9/6/2020	11/26/2020	5/14/2021	6/30/2022	52%						P&M0053 Mixed Liquor Return (MLR) Pump was resubmitted formally on 17 Jun 2021. Finalized material submission shall be submitted by 30 June 2022.
	Submission of P&ID Drawing	9/6/2020	11/2/2020	5/14/2021	7/2/2021	Task Completed						PID (Rev.1) under DWG0042 resubmitted on 6 July 2021.
	Submission of GA Drawing	9/6/2020	2/17/2021	5/14/2021	6/30/2022	44%						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.
	Submission of Electrical Drawing	9/6/2020	1/15/2021	5/14/2021	6/30/2022	47%						Electrical SLD submitted on 5 Feb 2021. AECOM commented on 20 Feb 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 30 June 2022.
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	7/21/2022	30%				-		

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)	9/6/2020	1/11/2021	5/14/2021	6/30/2022	48%				-	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 June 2022.
	Submission of P&M Submission	9/6/2020	11/19/2020	5/14/2021	6/30/2022	52%						P&M (rev.0) for penstock and actuator was submitted on 20 Nov 2020. AECOM commented on 5 Jan 2021. Bestwise to resubmit P&M0050 (rev. 0) for membrane tank drain pump was submitted on 5 Mar 2021. AECOM commented on 29 Mar 2021. Bestwise resubmitted formally on 19 Jun 2021. P&M0072 (rev. 0) for membrane module was submitted on 20 Apr 2021. AECOM commented on 20 May 2021, Bestwise to re-submit. P&M0069 (rev.0) for permeate pump was submitted on 4 Mar 2021. AECOM commented on 23 Apr 2021. Bestwise resubmitted formally on 19 Jun 2021. P&M0047 (rev. 1) for RAS pump was resubmitted on 17 Apr 2021. AECOM commented on 12 May 2021, Bestwise resubmitted formally on 19 Jun 2021. P&M0073 & 0074 (rev.0) for aeration blower and air scouring blower was submitted to AECOM formally on 19 Jun 2021. Finalized material submission shall be submitted by 30 June 2022.
	Submission of P&ID Drawing	9/6/2020	10/30/2020	5/14/2021	7/2/2021	Task Completed						DWG0049 (Rev.1) was resubmitted on 2 Jul 2021.
	Submission of GA Drawing	3/31/2021	2/18/2021	5/14/2021	6/30/2022	44%						DWG0121 (rev.1) was resubmitted to AECOM on 17 Jul 2021 Finalized drawings shall be submitted by 30 June 2022.
	Submission of Electrical Drawing	4/15/2021	1/15/2021	5/14/2021	6/30/2022	47%						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 30 June 2022.
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	7/21/2022	30%				-		
6B.2.6 Deodorisation System (EQT-001 - Deodorization Unit)	Tender award (C11)	4/25/2020	4/25/2020	5/12/2020	5/12/2020	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)	5/13/2020	5/13/2020	5/21/2020	5/21/2020	Task Completed				100%		
	Submission of Contractor's Design for Deodorisation System , DOU No. 1 (CDS0019 & CDS0045)	9/6/2020	9/6/2020	5/14/2021	12/31/2021	79%				-		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 shall be submitted by 31 Dec 2021. (follow Inlet Works)
	Submission of P&ID Drawing of DOU No. 1	9/6/2020	8/5/2020	5/14/2021	7/2/2021	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	9/6/2020	9/6/2020	5/14/2021	12/31/2021	79%						GA submitted on 21 Jun 2021 Finalized drawings shall be submitted by 31 Dec 2021. (follow Inlet Works)
	Submission of Electrical Drawing of DOU No. 1	3/21/2021	1/30/2021	5/14/2021	12/31/2021	70%						Control wiring diagrams was resubmitted on 1 April 2021. AECOM commented on 23 Apr 2021. Bestwise to resubmit. Finalized drawings shall be submitted by 31 Dec 2021. (follow Inlet Works)
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	1/21/2022	52%				-		
	Submission of Contractor's Design for Deodorisation System , DOU No. 2A (CDS0019 & CDS0048)	9/6/2020	9/6/2020	5/14/2021	6/30/2022	58%				-		Design Calculation (Rev.0) was submitted on 24 Nov 2020. AECOM commented on 6 Jan 2021, Bestwise to resubmit. Bestwise submitted CDS0048 on 17 June 2021. Finalized design shall be submitted by 30 June 2022. (follow BR2A2B)
	Submission of P&ID Drawing of DOU No. 2A	9/6/2020	8/5/2020	5/14/2021	7/2/2021	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	9/6/2020	8/3/2020	5/14/2021	6/30/2022	60%				-	Bestwise	Bestwise submitted (rev.1) on 30 Oct 2020. AECOM commented on 16 Dec 2020. Bestwise to resubmit. Finalized drawing shall be submitted by 30 June 2022. (follow BR2A2B)
	Submission of Electrical Drawing of DOU No. 2A	3/21/2021	1/26/2021	5/14/2021	6/30/2022	46%						Bestwise submitted (rev.0) on 26 Jan 2021, AECOM commented on 4 Feb 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 30 June 2022. (follow BR2A2B)
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	7/21/2022	30%				-		
	Submission of Contractor's Design for Deodorisation System , DOU No. 3A (CDS0019)	9/6/2020	9/6/2020	5/14/2021	9/30/2021	98%				-		Design Calculation (Rev.0) was submitted on 24 Nov 2020. AECOM commented on 6 Jan 2021, Bestwise to resubmit. Finalized design shall be submitted by 30 Sep 2021.
	Submission of P&ID Drawing of DOU No. 3A	9/6/2020	8/5/2020	5/14/2021	7/2/2021	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. 3A	9/6/2020	7/8/2020	5/14/2021	9/30/2021	98%				-	Bestwise	Bestwise submitted (rev.1) on 28 Oct 2020. AECOM commeneted on 16 Dec 2020. Bestwise resubmitted on 24 June 2021. Finalized drawing shall be submitted by 30 Sep 2021.
	Submission of Electrical Drawing of DOU No. 3A	3/21/2021	2/26/2021	5/14/2021	9/30/2021	97%						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 30 Sep 2021.
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	10/21/2021	82%						
	Submission of Contractor's Design for Deodorisation System , DOU No. 3B (CDS0019 & CDS0049)	9/6/2020	9/6/2020	5/14/2021	6/30/2022	58%						Design Calculation (Rev.0) was submitted on 24 Nov 2020. AECOM commented on 6 Jan 2021, Bestwise to resubmit. Bestwise submitted CDS0049 on 18 June 2021. Finalized design shall be submitted by 30 June 2022.

	Submission of P&ID Drawing of DOU No. 3B	9/6/2020	8/5/2020	5/14/2021	7/2/2021	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	9/6/2020	9/6/2020	5/14/2021	6/30/2022	58%						Bestwise submitted DWG0081 (rev.0) on 5 Feb 2021. AECOM commeneted on 12 Mar 2021. Bestwise to resubmit. Finalized drawing shall be submitted by 30 June 2022.
	Submission of Electrical Drawing of DOU No. 3B	3/21/2021	2/22/2021	5/14/2021	6/30/2022	43%						GA submitted on 24 Jun 2021 Finalized drawing shall be submitted by 30 June 2022.
	Acceptance of submission	5/15/2021	5/15/2021	5/29/2021	7/21/2022	30%				-		
04SC008 - Design, Supply and Installation of detailed design for lifting appliances	Acceptance of tender award (C9)	-	-	-	7/6/2020	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)	9/6/2020	12/5/2020	9/6/2020	12/31/2021	75%						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 31 Dec 2021.
	Submission of detailed design for lifting appliances for Primary Sedimentation Tanks (CDS050-2)	9/6/2020	12/5/2020	9/6/2020	5/31/2022	54%						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 31 May 2022.
	Submission of detailed design for lifting appliances for BR 2A and 2B (CDS050-3)	9/6/2020	12/5/2020	9/6/2020	5/31/2022	54%						DWG 0065 (Rev.0) was submitted on 18 Jan 2021. AECOM commented on 9 Mar 2021. Bestwise to resubmit. Finalized design shall be submitted by 31 May 2022.
	Submission of detailed design for lifting appliances for MFB (CDS050-4)	9/6/2020	12/5/2020	9/6/2020	5/31/2022	54%						DWG 0066 (Rev.1) was submitted on 1 Mar 2021. AECOM commented on 5 Mar 2021. Bestwise to resubmit. Finalized design shall be submitted by 31 May 2022.
	Submission of detailed design for lifting appliances for Temporary Filtration Tank (CDS050-5)	9/6/2020	12/5/2020	9/6/2020	5/21/2021	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	12/10/2020	N/A	6/30/2022	51%						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 30 June 2022.
	Submission for Fire Services System	N/A	3/15/2021	N/A	6/30/2022	41%						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 30 June 2022.
	Submission for Plumbing and Drainage System	N/A	3/15/2021	N/A	6/30/2022	41%						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 30 June 2022.
	Submission for Electrical Services System	N/A	12/10/2020	N/A	6/30/2022	51%						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 30 June 2022.
	Submission of ELV system	N/A	1/8/2021	N/A	9/30/2022	41%						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 30 Sep 2022.
	Submission for PV system	N/A	3/15/2021	N/A	6/30/2022	41%						Tender package was submitted to AECOM. Finalized design shall be submitted by 30 June 2022.
SCADA System & PMS	Submission for SCADA system	N/A	2/11/2021	N/A	8/31/2022	40%						Revised SCADA structure was provided via email on 9 Apr 2021 and tender package is under preparation. Finalized design shall be submitted by 31 Aug 2022.
	Submission for PMS system	N/A	3/8/2021	N/A	8/31/2022	37%						Tender package to be resubmitted on 29 June 2021. Finalized design shall be submitted by 31 Aug 2022.
	Submission for CMMS & IDMS system	N/A	6/1/2021	N/A	8/31/2022	25%						Finalized design shall be submitted by 31 Aug 2022.
Section 3 of Works												
6B.2.12 Provision of New Replacement Filter Plates for Existing Membrane Filter Presses at Existing Sludge Press House	Material Submission	8/21/2020	8/21/2020	8/28/2020	12/7/2020	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.
	Material Delivery	12/1/2020	12/1/2020	8/8/2021	7/13/2021	Task Completed				-		Handed over to DSD.
	Completion Date of Section 3: 22 September 2021											

Subcontracting												
Temporary Primary Sludge Thickener and its accessories (Sub-programme was provided by Bestwise)	Submission of subletting package (C9) for acceptance	15/05/2020 ->	8/14/2020	15/05/2020 -	8/27/2020	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*	8/15/2020	15/06/2020- >	9/16/2020	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*	10/14/2020	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*	9/17/2020	29/06/2020- > 29/8/2020*	10/22/2020	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 Nov 2020.
	Acceptance of tender award (C9) (Mech)	-	-	-	11/16/2020	Task Completed				100%		
	Submission of subletting package (C9) for acceptance (Elect)	15/05/2020 -> 15/7/2020*	12/9/2020	15/05/2020 - > 30/11/2020*	1/28/2021	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*	1/29/2021	15/06/2020- >	2/1/2021	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.
	Tender invitation (C9) (Elect)	15/06/2020-> 15/8/2020*	2/1/2021	22/06/2020- > 22/8/2020*	2/11/2021	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*	2/11/2021	29/06/2020- > 29/8/2020*	2/23/2021	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)	-	-	-	2/26/2021	Task Completed				100%		
	Tender invitation (C11)	30/04/2020-> 15/07/2020*	4/30/2020	30/06/2020- > 15/09/2020*	11/18/2020	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
	Tender award (C11)	15/05/2020-> 29/07/2020*	5/30/2020	15/07/2020- >	11/30/2020	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)	-	-	-	9/18/2020					-		
	Design Submission	03/07/2020 -> 15/07/2020*	8/5/2020	21/09/2020- > 02/10/2020*	5/10/2021	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*	7/21/2020	31/08/2020 - > 31/10/2020*	6/30/2021	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*	8/3/2020	21/09/2020 -> 21/11/2020*	2/10/2021	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*	8/4/2020	21/10/2020 -> 21/12/2020*	4/20/2021	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 ->	11/4/2020	16/11/2020 -	6/21/2021	Task Completed						
	Mechanical Installation	01/10/2020 -> 01/12/2020*	2/2/2021	15/11/2020 -> 15/01/2021*	5/17/2021	Task Completed				-		
	Offsite Fabrication and Delivery of FRP Tank		1/16/2021		4/7/2021	Task Completed				100%		First batch to be delivered on 23 Mar 2021
	Onsite Installation of FRP Tank		4/7/2021		7/30/2021	Task Completed						Water filling to tank completed; Tank hydraulic test completed.
	Electrical Installation	01/10/2020 -> 01/12/2020*	3/19/2021	15/11/2020 -> 15/01/2021*	7/19/2021	Task Completed				-		Energize of all LCPs on 24 May 2021 and isolated prior to system commissioning.
	Testing and Comissioning	15/11/2020 -> 15/01/2021*	5/8/2021	22/11/2020 -> 22/01/2021*	10/15/2021	86%				-		The remaining T&C work (performance test of pumps, thickeners) shall be completed on 30 Sep 2021; the remaining outstanding work (FRP maintenance platform and wash water infeed pipe connection) shall be completed before 30 Oct 2021.
Modification of Existing Emergency Generator Electrical Works	Submission of subletting package (C9) for acceptance	10/15/2020	10/15/2020	10/31/2020	12/11/2020	Task Completed				100%		
	Acceptance of subletting package (C9)	11/1/2020	11/5/2020	11/15/2020	1/2/2021	Task Completed				100%		
	Tender invitation (C9)	11/16/2020	1/26/2021	11/30/2020	2/5/2021	Task Completed				100%		Tender invitation commenced on 26 Jan 2021, and returned on 5 Feb 2021
	Tender award (C9)	11/30/2020	2/18/2021	12/7/2020	2/18/2021	Task Completed				100%		Tender report was submitted on 18 Feb 2021 and accepted on 26 Feb 2021
	Acceptance of tender award (C9)	12/8/2020	2/18/2021	12/15/2020	2/26/2021	Task Completed				100%		
	Design Submission	12/15/2020	3/15/2021	1/15/2021	4/23/2021	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	3/9/2021	3/9/2021	3/9/2021	3/9/2021	Task Completed				100%		
	Drawing submission (Drawing of General Layout for Existing 600kVA Genset Container)	4/23/2021	4/23/2021	4/30/2021	4/30/2021	Task Completed				100%		
	Drawing submission (Cable route ,general arrangement, etc)	5/14/2021	5/28/2021	5/21/2021	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	8/12/2021	Task Completed				100%		
	Container deliver to HK	TBC	8/12/2021	8/10/2021	8/12/2021	Task Completed				100%		
	Off site modification work at HK factory	TBC	8/16/2021	8/24/2021	8/24/2021	Task Completed				100%		
	FAT plan of modified Genset No.2 P431 MS-036	7/12/2021	7/12/2021	8/20/2021	8/20/2021	Task Completed				100%		
	FAT of Genset No.2 after modification works	8/25/2021	8/25/2021	8/25/2021	8/25/2021	Task Completed				100%		
	Installation Work of I-beam Support	8/26/2021	8/26/2021	8/26/2021	8/26/2021	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	8/27/2021	8/27/2021	8/27/2021	8/27/2021	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	7/27/2021	7/27/2021	8/31/2021								Location to be further coordinated with DSD.
	Modification works of existing switchboard	9/1/2021	9/1/2021	9/8/2021	9/8/2021	Task Completed				100%		
	Cables (including control cable and power cables) laying and installation of cable containment, busbar chamber	7/21/2021	7/30/2021	9/8/2021	9/8/2021	Task Completed				100%		
	Supply of busbar chamber/ connection box	8/10/2021	8/10/2021	9/3/2021	9/3/2021	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	9/1/2021	9/1/2021	9/8/2021	9/8/2021	Task Completed				100%		
	Delivery of dummy load and self-test	9/9/2021	9/9/2021	9/14/2021	9/15/2021	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.)	9/15/2021	9/15/2021	9/15/2021	9/16/2021	Task Completed				100%		

Plant and Materials (Marking Scheme)												
PS Clause no. 6B.2.1 Inlet Pump	Tender award	6/5/2020	9/19/2020	10/5/2020	10/7/2020	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	6/19/2020	10/17/2020	10/19/2020	11/15/2020	Task Completed				-		
PS Clause no. 6B.2.4 MBR Pre-treatment Screen	Acceptance of marking scheme by the PM	5/15/2020	8/20/2020	9/15/2020	9/1/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
	Tender invitation	5/29/2020	11/20/2020	9/29/2020	12/11/2020	Task Completed				100%		Tender invitation was conducted on 20 Nov 2020 and returned on 11 Dec 2020. Tender
	Tender award	6/5/2020	12/13/2020	10/5/2020	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 2021
PS Clause no. 6B.2.4 Air Diffusion System	Acceptance of marking scheme by the PM	5/15/2020	8/20/2020	9/15/2020	9/1/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020, subject to conditions.
	Tender invitation	5/29/2020	2/17/2021	9/29/2020	3/12/2021	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 on 12 Mar 2021
	Tender award	6/5/2020	3/18/2021	10/5/2020	4/20/2021	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	6/19/2020	2/20/2021	10/19/2020	3/12/2021	Task Completed				-		
PS Clause no. 6B.2.4 BR Aeration Blower	Acceptance of marking scheme by the PM	5/28/2020	8/20/2020	9/28/2020	9/1/2020	Task Completed				100%		AECOM accepted on 1 Sep 2020
	Tender invitation	6/11/2020	2/3/2021	10/12/2020	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	6/18/2020	3/4/2021	10/19/2020	4/12/2021	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	7/2/2020	3/4/2021	11/2/2020	3/25/2021	Task Completed				-		AECOM accepted on 1 Sep 2020, subject to conditions.
PS Clause no. 6B.2.4 Membrane Modules, Cassettes / Racks	Tender award	6/18/2020	10/6/2020	10/19/2020	11/2/2020	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	7/2/2020	11/3/2020	11/2/2020	11/24/2020	Task Completed				-		
PS Clause no. 6B.2.4 RAS Pump	Tender award	6/18/2020	10/30/2020	10/19/2020	12/2/2020	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	7/2/2020	11/21/2020	11/2/2020	12/12/2020	Task Completed				-		