Drainage Services Department

Agreement No. SPW 07/2019
Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Monthly EM&A Report
July 2021

(Version 1)

Certified By

(Environmental Team Leader:
Mr. KS Lee)

REMARKS:

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

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

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Ref.: DSDSWHS1EM00_0_0127E.21

13 August 2021

By E-mail and Fax (3922 9797)

AECOM Asia Company Limited
8/F., Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road
Sha Tin, New Territories, Hong Kong

Attention: Mr CHANG Ping Wah

Dear Mr CHANG,

Re: Contract No. SPW 08/2019
Independent Environmental Checker for
Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Monthly EM&A Report for July 2021

Reference is made to the Environmental Team's submission of Monthly EM&A Report for July 2021 (Version 1) certified by the ET Leader and provided to us via e-mail on 13 August 2021.

Please be informed that we have no adverse comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 3.4 of FEP-02/474/2013.

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

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

Y H Hui
Independent Environmental Checker

c.c.

DSD	Attn.: Ms Konica Cheung	(By Fax: 3104 6420)
Cinotech	Attn.: Mr K. S. Lee	(By Fax: 3107 1388)

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

EXECUTIVE SUMMARY

Introduction

1. This is the 19th EM&A Report prepared by the Environmental Team, Cinotech Consultants Ltd., for Agreement No. SPW 07/2019 "Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1". This report summarized the monitoring results and audits findings of the EM&A programme under the issued further EP No. FEP-02/474/2013 and in accordance with the Updated EM&A Manual during the reporting month of July 2021.

Summary of Main Works Undertaken and Key Measures Implemented

2. The main works undertaken during the reporting period are as follows:

Table I Summary Table for Major Site Activities in the Reporting Month

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work • Excavation works
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheetpile installation
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Socket H piling • Installation of EOT crane
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Electrical installation of temporary Filtrate equalisation tank • Electrical installation of temporary primary sludge thickener and its accessories • Retrofitting the existing primary sedimentation tank no. 6 • Modification of existing emergency generator electrical works

3. Implementation of the key mitigation measures during the reporting period are as follows:

Air Quality
- Stockpiles were covered by impervious sheets.
- Water spraying on haul road was done to minimize dust generation.

Water Quality
- Stagnant water on the impervious sheets was removed.

Waste Management
- Chemicals were stored in drip trays properly.
- Unused waste and materials were removed to maintain the tidiness of the site.

Summary of Exceedances, Investigation and Follow-up

4. Exceedance of Action/Limit levels during the reporting month (July 2021) and the investigation results and/or follow-up actions:

Air Quality Monitoring
- No Action/Limit Level exceedance for 1-hour TSP was recorded.
- No Action/Limit Level exceedance for 24-hour TSP was recorded.

Construction Noise Monitoring
- No Action/Limit Level exceedance for day time construction noise monitoring was recorded in the reporting month.

Ecological Monitoring
- No Action and Limit Level exceedance was triggered.

Complaint Handling, Prosecution and Public Engagement

Table II Summary of Complaint/Summons/Prosecution in the Reporting Month

Event	Event Details		Follow-up/ Remedial Actions	Status/ Remarks
	Number	Brief Description		
Complaints Received	0	-	-	-
Notification of Summons and Prosecutions Received	0	-	-	-
Public Engagement Activities	0	-	-	-

Reporting Changes

5. There were no reporting changes during the reporting month.

Future Key Issues

6. The key works or activities will be anticipated in the next reporting period are as follows:

Table III Summary Table for Site Activities in the Next Reporting Period

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheetpile installation
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Socket H piling • Installation of EOT crane • Installation of cable tray, conduit • Installation of F.S. equipment • Installation of power cable • Installation of guide bar bracket, guide bar and placing the effluent transfer pump
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment 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

1 INTRODUCTION

Background

1.1 The Further Expansion of Shek Wu Hui Effluent Polishing Plant (SWHEPP) is a designated Project (DP) under F.1 and F.2 of Part 1, Schedule 2 of Environmental Impact Assessment Ordinance (EIAO). The "North East New Territories New Development Areas" Environmental Impact Assessment (NENT NDAs EIA) Report (Registered No.: AEIAR-175/2013) covered the assessment for the Further Expansion of SWHSTW Phase 1A, 1B and 2, and the associated Environmental Monitoring and Audit (EM&A) Manual was approved on 18 October 2013.

1.2 The existing Shek Wu Hui Sewage Treatment Works (SWHSTW) is operated and maintained 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 year. In 2009, the expansion of SWHSTW was completed and its design capacity was 93,000m^2/day at average dry weather flow (ADWF). After the Resource Allocation Exercise 2017, the existing SWHSTW is proposed to be upgraded from secondary to tertiary treatment level as the new SWHEPP at 3 stages: Main Works Stage 1, Stage 2 and Stage 3.

1.3 A Further Environmental Permit (EP) (Permit No. FEP-02/474/2013) was issued on 15 February 2018 to DSD as the Permit Holder to assume the responsibility for construction and operating the SWHEPP Project up to a capacity of 190,000m^3/day. The updated Environmental Monitoring and Audit (EM&A) Manual was prepared in accordance with Condition 2.3 of the Further EP. The site layout plan for the Project is shown in **Figure 1.1**.

1.4 Cinotech Consultants Ltd. was designated as the Environmental Team (ET) to undertake the EM&A works for "Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1" (hereinafter called the "Project").

Purpose of the Report

1.5 This is the 19th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in July 2021.

Project Organizations

1.6 Different Parties with different levels of involvement in the project organization include:

- Permit Holder – Drainage Services Department (DSD)
- Supervisor Representative – AECOM Asia Company Limited (AECOM)
- Environmental Team (ET) – Cinotech Consultants Limited (Cinotech)
- Independent Environmental Checker (IEC) – Ramboll Hong Kong Limited (Ramboll)
- Contractors
    - Contract No.: DC/2018/06 - Kwan Lee - Chun Wo Joint Venture (KLCWJV)
    - Contract No.: DC/2018/07 - Kwan Lee - Chun Wo Joint Venture (KLCWJV)
    - Contract No.: DE/2018/03 - Jardine Engineering Corporation Limited (JEC)
    - Contract No.: DE/2018/04 - Bestwise Envirotech Limited (Bestwise)

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

Table 1.1 Key Project Contacts

Party	Role	Contact Person	Phone No.
DSD	Permit Holder	Ms. Konica Cheung	2594 7463
AECOM	Supervisor Representative	Ms. Bianca Choi	3907 6141
Cinotech	Environmental Team	Mr. KS Lee (ETL)	2151 2091
		Ms. Betty Choi	2151 2072
Ramboll	Independent Environmental Checker	Mr. YH Hui	3465 2850
KLCWJV	Contractor (DC/2018/06)	Ms. Ruby Hui	6218 6408
KLCWJV	Contractor (DC/2018/07)	Ms. Shirley Kong	5162 5933
JEC	Contractor (DE/2018/03)	Ms. Juliet Ting	6826 7319
Bestwise	Contractor (DE/2018/04)	Mr. Albus Cheung	9731 0831

1.8 The Organizational Structure for Environmental Management is shown in **Figure 1.2**.

Construction Activities undertaken during the Reporting Month

1.9 The major site activities undertaken in the reporting month included:

Table 1.2 Summary Table for Major Site Activities in the Reporting Month

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work • Excavation works
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheetpile installation

Contract No.	Contract Title	Site Activities
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Socket H piling • Installation of EOT crane
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Electrical installation of temporary Filtrate equalisation tank • Electrical installation of temporary primary sludge thickener and its accessories • Retrofitting the existing primary sedimentation tank no. 6 • Modification of existing emergency generator electrical works

Summary of EM&A Requirements

1.10 The EM&A programme requires construction noise monitoring, air quality monitoring, water quality monitoring, ecological monitoring and environmental site audit, etc. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the Project EIA Report.

1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 8 of this report.

1.12 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the monitoring parameters of the required environmental monitoring works and audit works for the Project in July 2021.

Statues of Environmental Licensing and Permitting

1.13 All permits/licenses obtained for the Project are summarized in **Table 1.3**.

Table 1.3 Summary of Environmental License and Permit

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
Environmental Permit (EP)				
All	FEP-02/474/2013	15 Feb 2018	N/A	Valid
Notification of Construction Works under Air Pollution Control Ordinance (APCO)				
DC/2018/06	449210 (Portion A & C)	23 Sep 2019	N/A	Valid
DC/2018/06	449211 (WM1)	23 Sep 2019	N/A	Valid
DC/2018/07	449210	23 Sep 2019	N/A	Valid
DE/2018/03	455843 (WA3)	6 May 2020	N/A	Valid
DE/2018/03	457212 (WA1-B)	15 Jun 2020	N/A	Valid
DE/2018/03	460065 (Sidestream)	16 Sep 2020	N/A	Valid
DE/2018/04	460181	17 Sep 2020	N/A	Valid
Billing Account for Construction Waste Disposal				
DC/2018/06	7035390	11 Oct 2019	N/A	Valid
DC/2018/07	7035985	9 Dec 2019	N/A	Valid
DE/2018/03	7035700	6 Nov 2019	N/A	Valid
DE/2018/04	703621912	2 Jan 2020	N/A	Valid
Registration of Chemical Waste Producer				
DC/2018/06	5213-624-K3371-01	14 Nov 2019	N/A	Valid
DC/2018/07	5213-624-K3371-02	6 Jan 2020	N/A	Valid
DE/2018/03	5213-624-T3861-01	14 Apr 2020	N/A	Valid
DE/2018/04	5213-624-B2592-01	7 Jul 2020	N/A	Valid
Effluent Discharge License				
DC/2018/06	WT00035431-2019 (Portion C)	27 Jul 2020	31 Jan 2025	Valid
DC/2018/06	WT00035718-2020 (Portion A)	2 Apr 2020	30 Apr 2025	Valid
DC/2018/07	WT00035727-2020	1 Apr 2020	30 Apr 2025	Valid
DE/2018/03	WT00037220-2020	16 Mar 2021	31 Jan 2026	Valid
Construction Noise Permit (Use of Powered Mechanical Equipment)				
DC/2018/06 & DC/2018/07	GW-RN0181-21	12 Apr 2021	11 Jul 2021	Expired on 11 Jul 2021
DC/2018/06 & DC/2018/07	GW-RN0432-21	12 Jul 2021	11 Jan 2022	Valid
DC/2018/06	GW-RN0479-21	7 Jul 2021	30 Sep 2021	Valid
DE/2018/03	GW-RN0274-21	28 Apr 2021	27 Jul 2021	Expired on 27 Jul 2021
DE/2018/03	GW-RN0484-21	6 Jul 2021	27 Jan 2022	Valid

2 AIR QUALITY

Monitoring Requirement

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

Monitoring Locations

2.2 Four designated monitoring stations were selected for air quality monitoring programme. **Table 2.1** describes the air quality monitoring locations, which are also depicted in **Figure 2**.

Table 2.1 Air Quality Monitoring Locations

Monitoring Stations	Location	Location of Measurement
AM1(1)	Wai Loi Tsuen	Ground Level
AM2(1)	Fu Tei Au	Ground Level
AM1a(2)	Site Boundary of the Shek Wu Hui STW (East)	Ground Level
AM2a(2)	Site Boundary of the Shek Wu Hui STW (North)	Ground Level

Remarks: (1) For 1-hour TSP monitoring; (2) For 24-hour TSP monitoring

Monitoring Parameters and Frequency

2.3 **Table 2.2** summarizes the monitoring parameters, monitoring period and frequencies of impact air quality monitoring. The monitoring schedule is shown in **Appendix B**.

Table 2.2 Frequency and Parameters of Air Quality Monitoring

Monitoring Stations	Parameter	Period	Frequency
AM1 & AM2	1-hour TSP	0700 – 1900	3 times/day, once every 6 days
AM1a & AM2a	24-hour TSP	24 hours	Once every 6 days

Monitoring Equipment

2.4 High Volume Samplers (HVS) in compliance with the specification stipulated in the EM&A Manual, Section 2.2.2, were used to carry out 24-hour TSP monitoring. Direct reading dust meter were also used to measure 1-hour average TSP levels. The 1-hour sampling was determined by HVS to check the validity and accuracy of the results measured by direct reading method.

2.5 Wind data monitoring equipment was set on rooftop (about 4/F) of the SWHSTW control room building 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 sectors of 22.5 degrees each.

2.6 **Table 2.3** summarizes the equipment to be used for air quality monitoring. Copies of calibration certificates are attached in **Appendix C**.

Table 2.3 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
1-hour TSP Dust Meter	Sibata Model No.: LD-5R	2
HVS Sampler	GMW Model: GS 2310	1
	TISCH Model: TE 5170	1
Calibrator	TISCH Model: TE-5025A	1
Wind Anemometer	Global Water Instrumentation WE800	1

Monitoring Methodology

1-hour TSP Monitoring

Measuring Procedures

2.7 The measuring procedures of the 1-hour dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

(Sibata Model No.: LD-5R)

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

Maintenance/Calibration

2.8 The following maintenance/calibration is required for the 1-hour dust meter:

- Check and calibrate the meter by HVS to check the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout all stages of the air quality monitoring.

24-hour TSP Monitoring

Instrumentation

2.9 High volume samplers (HVS) (TISCH Model: TE-5170) complete with appropriate sampling inlets was employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50). Moreover, the HVS also met all the requirements in Section 2.2 of the Annex II Specification.

2.10 The positioning of the HVS samplers are as follows:

- A horizontal platform with appropriate support to secure the samplers against gusty wind shall be provided;
- No two samplers shall be placed less than 2 meter apart;
- The distance between the sampler and an obstacle, such as buildings, must be at least twice the height that the obstacle protrudes above the sampler;
- A minimum of 2 metres of separation from walls, parapets and penthouses is required for rooftop samplers;
- A minimum of 2 metres of separation from any supporting structure, measured horizontally is required;
- No furnace or incinerator flue is nearby;
- Airflow around the sampler is unrestricted;
- The sampler is more than 20 metres from the dripline;
- Any wire fence and gate, to protect the sampler, shall not cause any obstruction during monitoring;
- Permission must be obtained to set up the samplers and to obtain access to the monitoring stations; and
- A secured supply of electricity is needed to operate the samplers.

Operating/analytical procedures for the operation of HVS

2.11 Operating/analytical procedures for the air quality monitoring are highlighted as follows:

- Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m^3/min. and 1.4 m^3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- For TSP sampling, fiberglass filters with a collection efficiency of > 99% for particles of 0.3μm diameter were used.
- The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.

- The shelter lid was closed and secured with the aluminum strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter was removed and sent to the HOKLAS laboratory (High Precision Chemical Testing Limited) for weighing. The elapsed time was also recorded.
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the relative humidity (RH) should be < 50% and not vary by more than ±5%. A convenient working RH is 40%.

Maintenance/Calibration

2.12 The following maintenance/calibration is required for the HVS:

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

Results and Observations

2.13 Impact air quality monitoring was conducted at four monitoring stations as scheduled. The monitoring schedule is shown in **Appendix B**.

2.14 No Action/Limit Level exceedance was recorded for all 1-hour TSP monitoring in the reporting month.

2.15 No Action/Limit Level exceedance was recorded for all 24-hour TSP monitoring in the reporting month.

2.16 The air temperature, precipitation and the relative humidity data was obtained from daily extract of Ta Kwu Ling Station in Hong Kong Observatory Climate Information Service, where the wind speed and wind direction were recorded by the installed Wind Anemometer at rooftop (about 4/F) of the SWHSTW control room building. This weather information for the reporting month is summarized in **Appendix D**.

2.17 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix E** and **Appendix F** respectively.

2.18 According to our field observations, the major dust source identified at the designated air quality monitoring stations are as follows:

Table 2.4 Major Dust Source during Air Quality Monitoring

Monitoring Stations	Major Dust Source
AM1 - Wai Loi Tsuen	Road Traffic at Sheung Shui Tung Hing Road
AM2 - Fu Tei Au	N/A
AM1a - Site Boundary of the Shek Wu Hui STW (East)	Vehicle Movement within SWHSTW
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A

Comparison of EM&A Result with EIA Prediction

2.19 The air monitoring data was compared with the predictions in the EIA Report (as approved in 2013) as summarised in **Tables 2.5** and **Table 2.6**.

Table 2.5 Comparison of 1-hr TSP Monitoring Data with Predictions in EIA Report (As Approved in 2013)

Monitoring Stations	ASR ID	Predicted 1-hr TSP Concentration in EIA Report (as Approved in 2013), dB(A), µg/m^3	Reporting Month (July 2021), µg/m^3
AM1 - Wai Loi Tsuen	N/A	N/A(1)	18.2 - 171.6
AM2 - Fu Tei Au	FLN-E28	255	18.2 - 75.4

Remarks:
(1) No 1-hr TSP concentration was predicted in EIA Report (As Approved in 2013).

Table 2.6 Comparison of 24-hr TSP Monitoring Data with Predictions in EIA Report (As Approved in 2013)

Monitoring Stations	Predicted 24-hr TSP Concentration in EIA Report (as approved in 2013), dB(A), µg/m^3	Reporting Month (July 2021), µg/m^3
AM1a - Site Boundary of the Shek Wu Hui STW (East)	N/A(1)	12.4 - 48.7
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A(1)	13.2 - 71.0

Remarks:
(1) No 24-hr TSP concentration was predicted in EIA Report (as approved in 2013).

2.20 The 1-hour TSP concentration at AM2 in the reporting month was lower than the prediction in the EIA Report (As Approved in 2013). The 1-hour TSP concentrations at AM1 as well as 24-hour TSP concentrations at AM1a and AM2a were not predicted in the EIA Report (As Approved in 2013).

3 NOISE

Monitoring Requirements

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

Monitoring Locations

3.2 Noise monitoring was conducted at three designated monitoring stations in the reporting period. **Table 3.1** and **Figure 3** show the locations of these stations.

Table 3.1 Noise Monitoring Stations

Monitoring Stations	Location	Location of Measurement
NM1	Wai Loi Tsuen	Ground Level
NM2	Fu Tei Au	Ground Level
NM3	Man Kok Village	Ground Level

Monitoring Parameters, Frequency and Duration

3.3 **Table 3.2** summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix B**.

Table 3.2 Frequency and Parameters of Noise Monitoring

Monitoring Stations	Time Period	Duration	Frequency	Parameter	Measurement
NM1	0700-1900 hrs on normal weekdays	30 minutes	Once per week	L_{10}(30 min.) dB(A) L_{90}(30 min.) dB(A) L_{eq}(30 min.) dB(A)	Free Field
NM2					Free Field
NM3					Free Field

Monitoring Equipment

3.4 Integrating Sound Level Meter was used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 3.3** summarizes the noise monitoring equipment being used. Copies of calibration certificates are attached in **Appendix G**.

Table 3.3 Noise Monitoring Equipment

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	BSWA 308	3
Calibrator	ST-120	2

Monitoring Methodology and QA/QC Procedure

3.5 The monitoring procedures are as follows:

- The monitoring station was normally be at a point 1m from the exterior of the sensitive receivers building façade and be at a position 1.2m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - Frequency weighting: A
  - Time weighting: Fast
  - Time measurement: 30 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq}, L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise monitoring would be cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. Supplementary monitoring would be provided to ensure sufficient data would be obtained.

Maintenance and Calibration

3.6 The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.

3.7 The sound level meter and calibrator were checked and calibrated at yearly intervals.

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

Results and Observations

3.9 No Action/Limit Level exceedance was recorded for all construction noise monitoring in the reporting month.

3.10 Noise monitoring results and graphical presentations are shown in **Appendix H**.

3.11 The major noise sources identified at the noise monitoring stations are shown in **Table 3.4**.

Table 3.4 Other Noise Source Identified during Noise Monitoring

Monitoring Stations	Major Noise Source
NM1	Railway Noise and Road Traffic at Sheung Shui Tung Hing Road
NM2	N/A
NM3	Road Traffic at Po Wan Road

3.12 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the Noise Limit Level at each designated noise monitoring station are presented in **Table 3.5**.

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

Monitoring Stations	Baseline Noise Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)	Noise Limit Level, dB (A) (at 0700 – 1900 hrs on normal weekdays)
NM1	63.4	75
NM2	58.0	
NM3	63.4	

Comparison of EM&A Result with EIA Prediction

3.13 The noise monitoring data was compared with the predictions in EIA Report (as approved in 2013) as summarised in **Table 3.6**.

Table 3.6 Comparison of Noise Monitoring Data with Predictions in EIA Report (As Approved in 2013)

Monitoring Stations	NSR ID	Predicted Mitigated Construction Noise Levels in EIA Report (as Approved in 2013), dB(A)	Reporting Month (July 2021), Leq (30min) dB(A)
NM1 - Wai Loi Tsuen	N/A	N/A(1)	53.8 – 59.7
NM2 - Fu Tei Au	N/A	N/A(1)	49.7 – 57.6
NM3 – Man Kok Village	FN-18	66-75	50.8 – 62.9

Remarks:
(1) No construction noise level was predicted in EIA Report (As Approved in 2013).

3.14 The results at NM3 were lower than the range of the predicted mitigated construction noise levels in the EIA Report (As Approved in 2013). Construction noise levels at NM1 and NM2 were not predicted in the EIA Report (As Approved in 2013).

4 ECOLOGY

Monitoring Requirements

4.1 According to the Updated EM&A Manual, waterbird species which use rivers near the Project Site were identified and recorded. The monitoring requirement in the EM&A Manual is shown in **Table 4.1**. **Appendix A** shows the established Action/Limit Levels for ecological monitoring works.

Table 4.1 Monitoring of Measures to Minimise Disturbance to Waterbirds on Ng Tung, Sheung Yue and Shek Sheung Rivers during Construction Phase

Phase	Methodology
Construction	Weekly transect at both high and low tides 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.

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

Monitoring Locations

4.3 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** and summarized in **Table 4.2**. The photo of each transect is provided in **Appendix J**.

Table 4.2 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

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

Monitoring Methodology

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

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

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

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

Analytical Methodology

4.9 The number and species of waterbirds utilizing the rivers fluctuate every day naturally. Therefore, the survey data were collectively analysed 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 4.3**.

Table 4.3 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

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

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

Results

4.12 For this reporting month, the numbers of species and individuals recorded were provided in **Table 4.4**. The photo record of waterbirds can be found in **Appendix J**.

Table 4.4 Total Bird Species and Abundance in the Reporting Month

	Number of Species	Abundance
All Avifauna	40	691
Waterbirds	10	270

4.13 **Table 4.5** presents the abundance of representative species.

Table 4.5 Abundance of Representative Waterbirds in the Reporting Month

Species Name	Common Name	Chinese Name	Abundance
Egretta garzetta	Little Egret	小白鷺	142
Ardea cinerea	Grey Heron	蒼鷺	0
Ardeola bacchus	Chinese Pond Heron	池鷺	80
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0
Ardea alba	Great Egret	大白鷺	24
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	16

Analysis

4.14 The result of student t-tests for all waterbirds and representative waterbirds are compiled in **Table 4.6** and **4.7** respectively. Further details are provided in **Appendix I**.

Table 4.6 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	1.058	✓	✓
	Seasonal	1.357	✓	✓

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 4.7 T-test Result for Representative Waterbirds in the Reporting Month

Common Name of Representative Waterbird	T-value	Confidence Level (Critical Value)		T-value	Confidence Level (Critical Value)		Overall
	Monthly	95% (-2.132)	99% (-3.747)	Seasonal	95% (-2.132)	99% (-3.747)	
Little Egret	0.367	✓	✓	0.793	✓	✓	✓
Grey Heron	N/A*						
Chinese Pond Heron	-0.663	✓	✓	-0.061	✓	✓	✓
Great Cormorant	N/A*						
Great Egret	3.130	✓	✓	2.987	✓	✓	✓
Eastern Cattle Egret	1.422	✓	✓	-0.114	✓	✓	✓

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 Summer.

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

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

Observations

4.17 Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting

4.18 The anthropogenic activities observed during ecological monitoring are listed in **Table 4.8**.

Table 4.8 Observations during Ecological Monitoring in the Reporting Month

Location	Observations	
	Project Related	**Non-project Related**
T1 (PC1, PC2)	N/A	Playing with R.C. Boat
T2 (PC3, PC4)	Excavation and crane	Fishing
PC5	N/A	N/A
T3 (PC6, PC7)	N/A	Excavation Sheet-piling, generator & wielding works Scaffolding

5 WATER QUALITY

Monitoring Requirement

5.1 According to the Updated EM&A Manual, no water monitoring is required before the commencement of outfall construction at Ng Tung River.

5.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of water quality mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix K**.

6 WASTE MANAGEMENT

Monitoring Requirement

6.1 According to the Updated EM&A Manual, waste management would be the contractor's responsibility to ensure that all wastes produced during the construction works for the Project are handled, stored and disposed of in accordance with good waste management practices, EPD's regulations and requirements. No monitoring for waste management is required for the Project. An environmental management plan (EMP) should be prepared and submitted to the Supervisor for approval. The monitoring and auditing requirements of the EMP should be followed with regard to the management of C&D material.

Waste Management Status

6.2 Site audits were carried out on a weekly basis to monitor and audit to ensure that proper storage, transportation and disposal practices of waste materials generated during construction activities, such as construction and demolition (C&D) materials and general refuse are being implemented. The summaries of site audits are attached in **Appendix K**.

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

7 LANDSCAPE AND VISUAL

Audit Requirement

7.1 According to the Updated EM&A Manual, site audits would be undertaken during the construction phase of the Project to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. Particularly audits would be carried out during site clearance when proposed tree felling and transplantation may occur. Site inspections would be undertaken at least once every two weeks during the construction period.

7.2 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of landscape and visual mitigation measures within the site boundaries of this Project. The summaries of site audits are attached in **Appendix K**.

8 ENVIRONMENTAL AUDIT

Site Audits

8.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix K**.

8.2 Site audits for Contract No. DC/2018/06 and DC/2018/07 were conducted on 6, 15, 23 & 27 July 2021 in the reporting month, whereas that for Contract No. DE/2018/03 and DE/2018/04 were conducted on 6, 13, 23 & 27 July 2021 in the reporting month. Joint site inspection with the representative of IEC was conducted on 23 July 2021. No non-compliance was observed during the site audit.

Implementation Status of Environmental Mitigation Measures

8.3 According to Environmental Permits, the approved EIA Report (Register No.: AEIAR-175/2013), and the Updated EM&A Manual of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An Environmental Mitigation Implementation Schedule (EMIS) is provided in **Appendix N**.

8.4 The ET weekly site inspections were carried out during the reporting month and the observations and recommendations are summarized in **Tables 8.1 - 8.4**. Refer to **Appendix K** for the site inspection summary reports in the reporting month.

Table 8.1 Observations and Recommendations of Site Audit of Contract No. DC/2018/06

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	N/A	There was no observation in the reporting period.	N/A
Air Quality	N/A	There was no observation in the reporting period.	N/A
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	N/A	There was no observation in the reporting period.	N/A
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

Table 8.2 Observations and Recommendations of Site Audit of Contract No. DC/2018/07

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	N/A	There was no observation in the reporting period.	N/A
Air Quality	N/A	There was no observation in the reporting period.	N/A
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	N/A	There was no observation in the reporting period.	N/A
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

Table 8.3 Observations and Recommendations of Site Audit of Contract No. DE/2018/03

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	N/A	There was no observation in the reporting period.	N/A
Air Quality	N/A	There was no observation in the reporting period.	N/A
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	N/A	There was no observation in the reporting period.	N/A
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

Table 8.4 Observations and Recommendations of Site Audit of Contract No. DE/2018/04

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	13 Jul 2021	Stagnant water should be removed at Portion B-3-A.	The condition was observed to be improved/rectified by the contractor during the audit session on 23 Jul 2021.
Air Quality	N/A	There was no observation in the reporting period.	N/A
Noise	N/A	There was no observation in the reporting period.	N/A
Waste / Chemical Management	N/A	There was no observation in the reporting period.	N/A
Ecology and Fisheries	N/A	There was no observation in the reporting period.	N/A
Visual and Landscape	N/A	There was no observation in the reporting period.	N/A
Permits /Licences	N/A	There was no observation in the reporting period.	N/A

Implementation Status of Event and Action Plans

8.5 The Event and Action Plans for air quality, construction noise, ecological monitoring and landscape and visual are presented in **Appendix M**.

Air Quality Monitoring

- No Action/Limit Level exceedance for 1-hour TSP was recorded.
- No Action/Limit Level exceedance for 24-hour TSP was recorded.

Construction Noise Monitoring

- No documented complaint on construction noise was received; no Action Level exceedance for day time construction noise monitoring was recorded.
- No Limit Level exceedance for day time construction noise monitoring was recorded in the reporting month.

Ecological Monitoring

- No Action and Limit Level was triggered.

Landscape and Visual Monitoring

- No non-conformity for landscape and visual was recorded.

9 ENVIRONMENTAL NON-CONFORMANCE

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

9.1 No environmental complaints, warning, notifications of summons and successful prosecutions were received in the reporting month.

9.2 The summary of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix O**.

Summary of Exceedance

9.3 The summary of exceedance record in reporting month is shown in **Appendix P**.

10 FUTURE KEY ISSUES

10.1 Tentative construction programmes for the next three months are provided in **Appendix Q**.

10.2 Major site activities undertaken for the coming months are summarized in **Table 10.1**.

Table 10.1 Summary Table for Site Activities in the Next Reporting Period

Contract No.	Contract Title	Site Activities
DC/2018/06	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sludge Treatment Facilities and 132kV Primary Substation	• RC works • Wall and slab construction • Backfilling • Pipe laying • Pipe jacking work
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• ELS and construction of inlet reception chamber • Trench excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Pre-drilling work and foundation work • Cable diversion works • Demolition work of existing main facilities • Alternation of existing powerhouse • Pre-bored H piles • Sheetpile installation
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sludge Treatment Facilities	• Socket H piling • Installation of EOT crane • Installation of cable tray, conduit • Installation of F.S. equipment • Installation of power cable • Installation of guide bar bracket, guide bar and placing the effluent transfer pump
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment 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

10.3 Key environmental issues in the coming months include:

- Stockpile accumulation on-site;
- Water spraying for dust generating activities and on haul road;
- Wastewater and runoff discharge from site;
- No disposition of slurry at the existing Shek Wu Hui Sewage Treatment Works;
- Coverage of open manholes to avoid dirty runoff to drainage system;
- Noise from operation of the equipment, especially for excavation works and machinery onsite;
- Accumulation of general refuse and construction waste on-site;
- Proper storage of construction materials on-site; and
- Storage of chemicals/fuel and chemical waste/waste oil on-site.

Monitoring Schedule

10.4 The tentative environmental monitoring schedule for the next month is shown in **Appendix B**.

11 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

11.1 This is the 19th Monthly EM&A Report which presents the EM&A works undertaken during the reporting month in accordance with the Updated EM&A Manual and the requirement under EP.

Air Quality Monitoring

11.2 No Action/Limit Level exceedance was recorded for all 1-hour and 24-hour TSP monitoring in the reporting month.

Construction Noise Monitoring

11.3 No Action/Limit Level exceedance was recorded for all noise monitoring in the reporting month.

Ecology

11.4 No Action and Limit Level exceedance was triggered for all ecological monitoring in the reporting month.

Site Audit

11.5 4 ET joint weekly environmental site inspections were conducted in the reporting month.

Complaint, Notification of Summons and Successful Prosecution

11.6 No environmental complaints, notifications of summons and successful prosecutions were received in the reporting month.

Recommendations

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

Air Quality

- Regular water spraying on haul road and dry surfaces should be applied to minimize dust generation.
- Stockpiles should be covered by impervious materials.

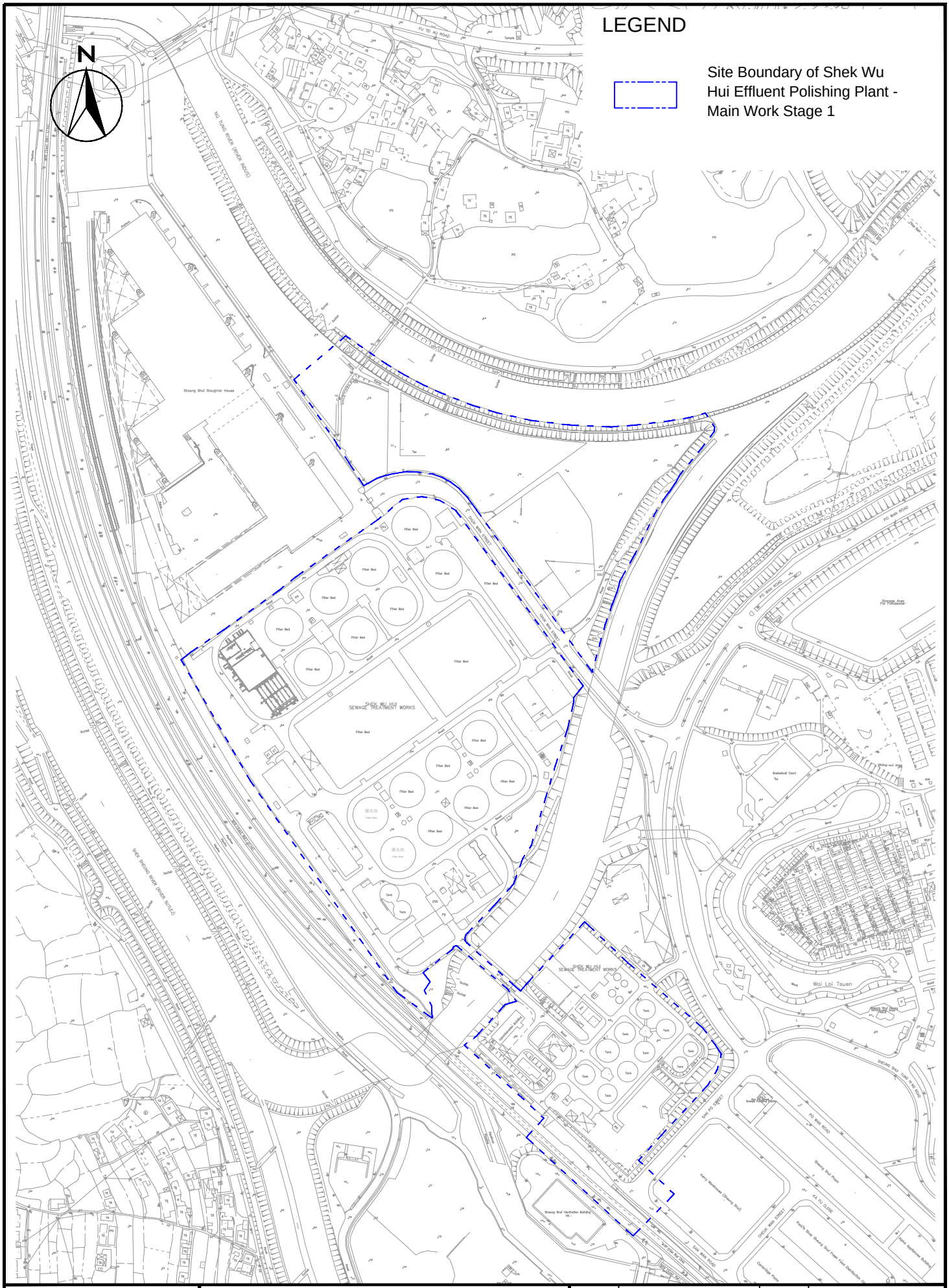
Water Quality

- Stagnant water should be removed and pumped through the sedimentation tank.
- Wastewater should be pumped and collected in the sedimentation tank before discharge.
- Muddy water should not be discharged into the surrounding rivers.
- No slurry should be disposed of at the existing Shek Wu Hui Sewage Treatment Works.

Waste Management

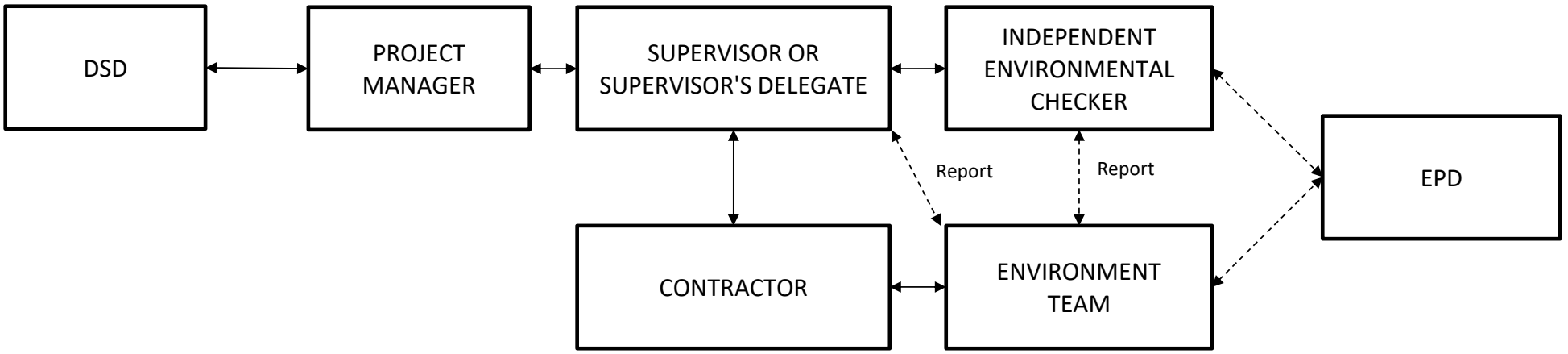
- General refuse and construction waste accumulation should be avoided.
- Chemicals should be stored in drip trays properly.

FIGURES



CINOTECH Cinotech Consultants Limited	Agreement No. SPW07/2019 Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Site Layout	SCALE: 1:4000@A4	DATE: OCT 2019
		CHECK: JM	DRAWN: SY
		JOB No.: MA19019	FIGURE NO.: 1.1
			REV: -

F:/Project_drawings

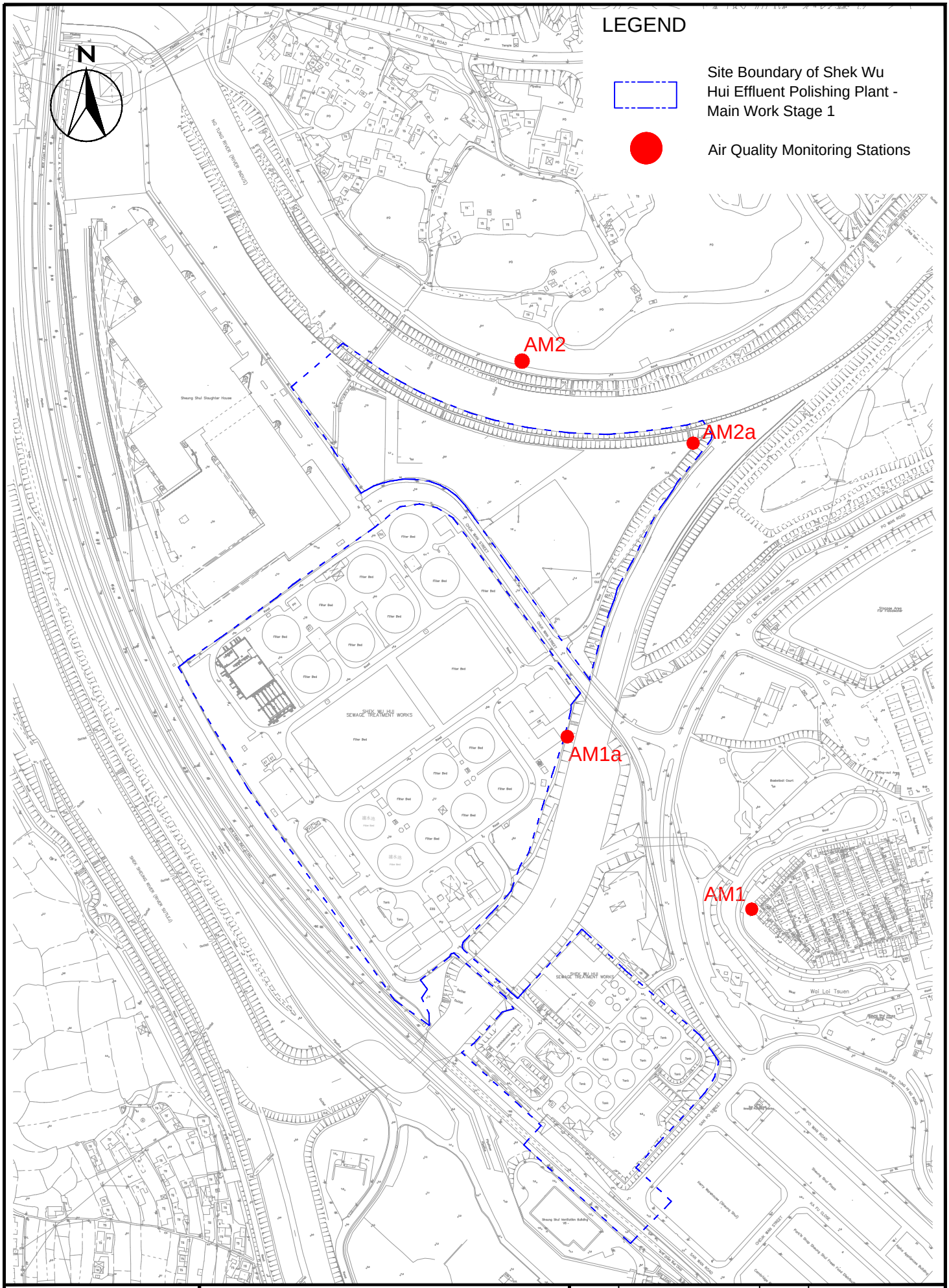


CINOTECH

Agreement No. SPW07/2019
Shek Wu Hui Effluent Polishing Plant- Main Works Stage 1

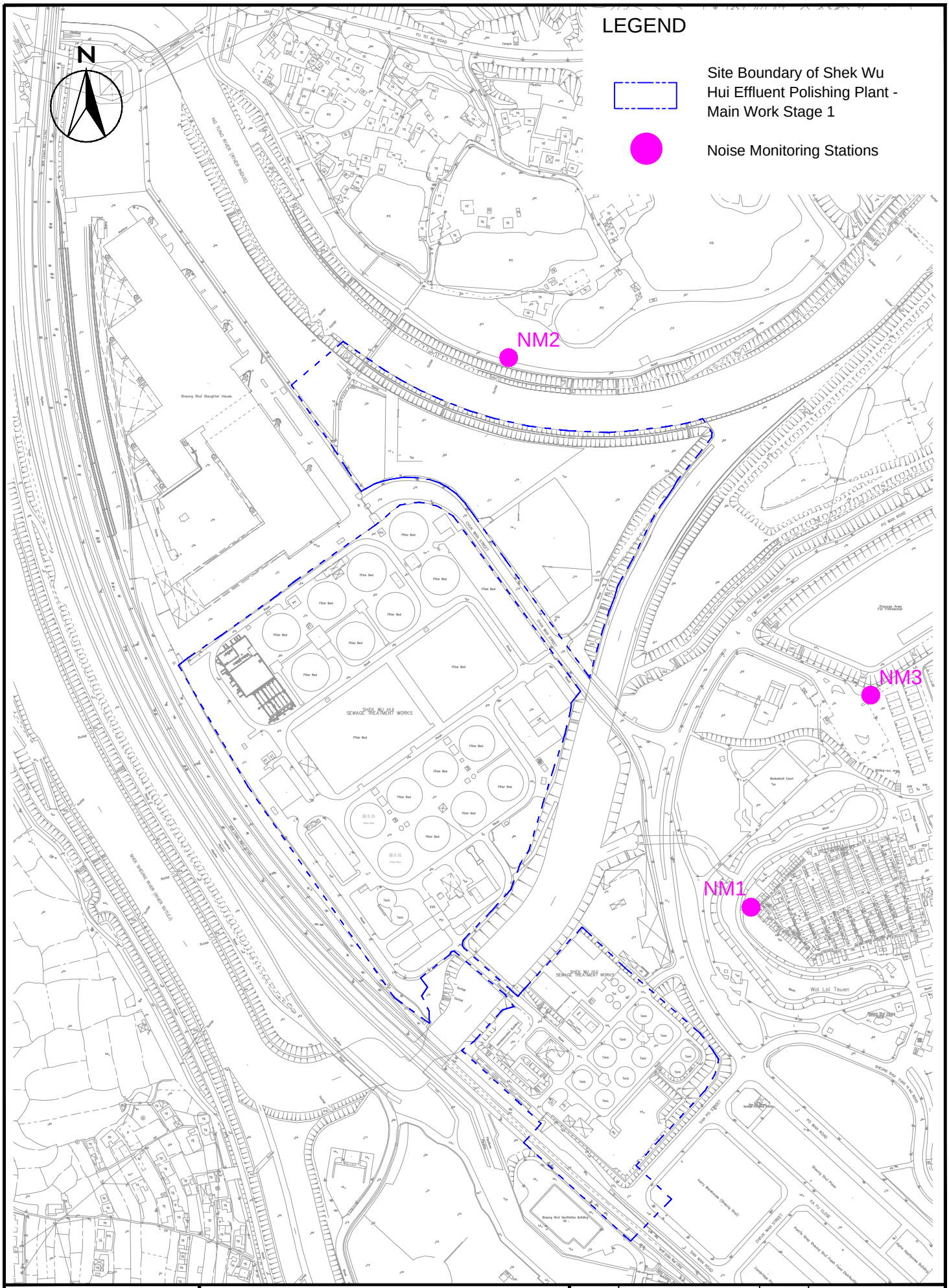
Project Organisation For Environmental Monitoring and Audit

SCALE	N.T.S.	**DATE**	Sep 2019
CHECK	JM	**DRAWN**	SY
JOB NO.	MA19019	**FIGURE NO.**	1.2



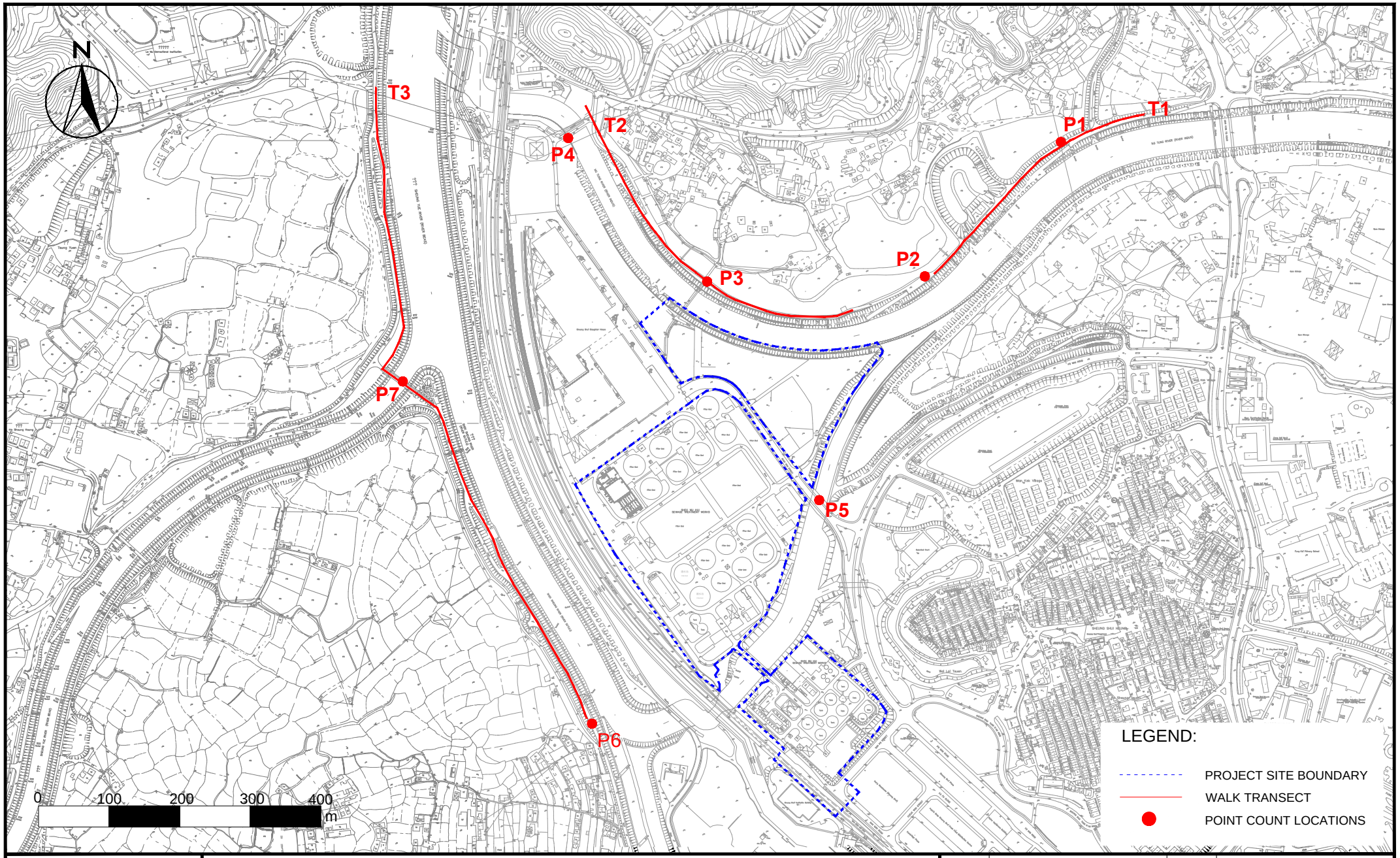
CINOTECH Cinotech Consultants Limited	Agreement No. SPW07/2019 Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Location of Air Quality Monitoring Stations	SCALE: 1:4000@A4	DATE: OCT 2019
		CHECK: JM	DRAWN: SY
		JOB No.: MA19019	FIGURE NO.: 2 / REV: -

F:/Project_drawings



CINOTECH Cinotech Consultants Limited	Agreement No. SPW07/2019 Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Location of Noise Monitoring Stations	SCALE: 1:4000@A4	DATE: OCT 2019
		CHECK: JM	DRAWN: SY
		JOB No.: MA19019	FIGURE NO.: 3
			REV: -

F:/Project_drawings



CINOTECH
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Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1

Survey Location for Impact Ecological Monitoring

SCALE	1:7000 @ A4	DATE	Jan 2020
CHECK	BC	DRAWN	JM
JOB No.	MA19019	FIGURE NO. 4	REV -

APPENDIX A
ACTION AND LIMIT LEVELS

Appendix A - Action and Limit Levels

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

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1	320	500
AM2	322	

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

Location	Action Level, µg/m^3	Limit Level, µg/m^3
AM1a	189	260
AM2a	187	

Table A-3 Action and Limit Levels for Noise during Construction Period

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

*Remarks:

- 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 have to be followed.
- Reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

Table A-4 Action and Limit Levels of Disturbance to 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 the 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 survey data.

APPENDIX B
ENVIRONMENTAL MONITORING SCHEDULES

Agreement No. SPW 07/2019
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Impact Air, Noise and Ecology Monitoring Schedule (July 2021)

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

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

Air Quality Monitoring Station

1-hr TSP

AM1 - Wai Loi Tsuen
AM2 - Fu Tei Au

24-hr TSP

AM1a - Site Boundary of the Shek Wu Hui STW (East)
AM2a - Site Boundary of the Shek Wu Hui STW (North)

Noise Monitoring Station

NM1 - Wai Loi Tsuen
NM2 - Fu Tei Au
NM3 - Man Kok Village

Agreement No. SPW 07/2019
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Tentative Impact Air, Noise and Ecology Monitoring Schedule (August 2021)

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

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

Air Quality Monitoring Station
1-hr TSP
AM1 - Wai Loi Tsuen
AM2 - Fu Tei Au

24-hr TSP
AM1a - Site Boundary of the Shek Wu Hui STW (East)
AM2a - Site Boundary of the Shek Wu Hui STW (North)

Noise Monitoring Station

NM1 - Wai Loi Tsuen
NM2 - Fu Tei Au
NM3 - Man Kok Village

APPENDIX C
COPIES OF CALIBRATION CERTIFICATES FOR AIR QUALITY MONITORING

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

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

Description: Digital Dust Indicator
Date of Calibration 1-Jun-21
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 1-Aug-21
Model No.: LD-5R
Serial No.: 972778
Equipment No.: SA-01-07
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-03
Before Sensitivity Adjustment 735 CPM
Tisch Calibration Orifice No.: 3864
After Sensitivity Adjustment 735 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	62.0	146.0
2	57.0	139.0
3	49.0	130.0
Average	**56.0**	**138.3**

By Linear Regression of Y on X

Slope , mw = **1.2209** **Intercept, bw =** **69.9612**

Correlation coefficient* = **0.9982**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	138.3
Particaulate Concentration by Dust Meter (µg/m^3)	56.0
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **2.5**

In-house method in according to the instruction manual:
The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: _____
Technical Officer (Wong Shing Kwai)

Approved by: _____
Project Manager (Henry Leung)

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

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

Description: Digital Dust Indicator
Date of Calibration 1-Jun-21
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 1-Aug-21
Model No.: LD-5R
Serial No.: 972779
Equipment No.: SA-01-08
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-03
Before Sensitivity Adjustment 744 CPM
Tisch Calibration Orifice No.: 3864
After Sensitivity Adjustment 744 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	63.0	146.0
2	58.0	139.0
3	51.0	130.0
Average	**57.3**	**138.3**

By Linear Regression of Y on X

Slope , mw = **1.3303** **Intercept, bw =** **62.0642**

Correlation coefficient* = **0.9997**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	138.3
Particaulate Concentration by Dust Meter (µg/m^3)	57.3
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **2.4**

In-house method in according to the instruction manual:
The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)

Calibrated by: _____
Technical Officer (Wong Shing Kwai)

Approved by: _____
Project Manager (Henry Leung)

TISCH Environmental

RECALIBRATION DUE DATE:
January 11, 2022

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 11, 2021	**Rootsmeter S/N:** 438320	**Ta:** 297	°K
Operator:	Jim Tisch		**Pa:** 750.1	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3864**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4470	3.2	2.00
2	3	4	1	1.0210	6.4	4.00
3	5	6	1	0.9140	8.0	5.00
4	7	8	1	0.8670	8.8	5.50
5	9	10	1	0.7140	12.9	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)
0.9860	0.6814	1.4073	0.9957	0.6881	0.8899
0.9818	0.9616	1.9902	0.9915	0.9711	1.2585
0.9797	1.0719	2.2251	0.9893	1.0824	1.4071
0.9786	1.1288	2.3337	0.9883	1.1399	1.4757
0.9732	1.3630	2.8146	0.9828	1.3765	1.7798
QSTD	**m=**	**2.06566**	**QA**	**m=**	**1.29348**
	b=	**0.00315**		**b=**	**0.00199**
	r=	**0.99996**		**r=**	**0.99996**

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

isch Environmental, Inc.
45 South Miami Avenue
illage of Cleves, OH 45002

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

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/17/0010

Project No. AM1a - Site boundary of the Shek Wu Hui STW (East)

Date: 6-May-21 Next Due Date: 6-Jul-21 Operator: SK

Equipment No.: A-01-17 Model No.: GS2310 Serial No. 3460

Ambient Condition			
Temperature, Ta (K)	298.2	Pressure, Pa (mmHg)	761.4

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05846	Intercept, bc	-0.00313
Last Calibration Date:	11-Jan-21	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	11-Jan-22	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.2	3.64	62.24	10.1	3.18
2	10.4	3.23	55.25	7.5	2.74
3	8.1	2.85	48.77	5.6	2.37
4	5.4	2.33	39.83	3.4	1.84
5	2.8	1.67	28.69	1.9	1.38

By Linear Regression of Y on X

Slope , mw = **0.0540** **Intercept, bw =** **-0.2347**

Correlation coefficient* = **0.9968**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.36**

Remarks:

Conducted by: SK Wong Signature: Date: 6 May 2021

Checked by: Henry Leung Signature: Date: 6 May 2021

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/17/0011

Project No. AM1a - Site boundary of the Shek Wu Hui STW (East)

Date: 6-Jul-21 Next Due Date: 6-Sep-21 Operator: SK

Equipment No.: A-01-17 Model No.: GS2310 Serial No. 3460

Ambient Condition			
Temperature, Ta (K)	302.4	Pressure, Pa (mmHg)	754.7

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05846	Intercept, bc	-0.00313
Last Calibration Date:	11-Jan-21	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	11-Jan-22	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.2	3.59	61.53	10.1	3.14
2	10.4	3.19	54.62	7.5	2.71
3	8.1	2.82	48.21	5.6	2.34
4	5.4	2.30	39.38	3.4	1.82
5	2.8	1.66	28.37	1.9	1.36

By Linear Regression of Y on X

Slope , mw = **0.0540** **Intercept, bw =** **-0.2321**

Correlation coefficient* = **0.9968**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.47**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 6-Jul-21

Checked by: Henry Leung Signature: Date: 6-Jul-21

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/24/0010

Project No. AM2a - Site Boundary of the Shek Wu Hui STW (North)

Date: 6-May-21 Next Due Date: 6-Jul-21 Operator: SK

Equipment No.: A-01-24 Model No.: TE 5170 Serial No. 1659

Ambient Condition			
Temperature, Ta (K)	298.2	Pressure, Pa (mmHg)	761.4

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05846	Intercept, bc	-0.00313
Last Calibration Date:	11-Jan-21	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	11-Jan-22	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.2	3.64	62.24	10.3	3.21
2	10.8	3.29	56.30	8.3	2.88
3	8.4	2.90	49.66	6.1	2.47
4	6.2	2.49	42.67	4.0	2.00
5	3.0	1.73	29.70	1.8	1.34

By Linear Regression of Y on X

Slope , mw = **0.0583** **Intercept, bw =** **-0.4226**

Correlation coefficient* = **0.9987**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.34**

Remarks:

Conducted by: SK Wong Signature: Date: 6 May 2021

Checked by: Henry Leung Signature: Date: 6 May 2021

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/24/0011

Project No. AM2a - Site Boundary of the Shek Wu Hui STW (North)

Date: 6-Jul-21 Next Due Date: 6-Sep-21 Operator: SK

Equipment No.: A-01-24 Model No.: TE 5170 Serial No. 1659

Ambient Condition			
Temperature, Ta (K)	302.4	Pressure, Pa (mmHg)	754.7

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05846	Intercept, bc	-0.00313
Last Calibration Date:	11-Jan-21	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	11-Jan-22	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.3	3.61	61.76	10.3	3.17
2	10.8	3.25	55.66	8.3	2.85
3	8.5	2.88	49.39	6.1	2.44
4	6.3	2.48	42.53	4.0	1.98
5	3.0	1.71	29.36	1.8	1.33

By Linear Regression of Y on X

Slope , mw = **0.0581** **Intercept, bw =** **-0.4176**

Correlation coefficient* = **0.9980**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **4.42**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 6-Jul-21

Checked by: Henry Leung Signature: Date: 6-Jul-21

Certificate of Calibration - Wind Monitoring Station

Description:	BM3 - Control Room at SWHSTW
Manufacturer:	Global Water Instrumentation
Model No.:	WE800 Weather Station
Serial No.:	1517001963
Equipment No.:	SA-03-01
Date of Calibration	29-Apr-2021
Next Due Date	29-Oct-2021

1. Performance check of Wind Speed

Wind Speed, m/s		Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V1)	D = V1 – V2
0.0	0.0	0.0
1.5	1.5	0.0
2.0	2.2	-0.2
3.0	3.0	0.0

2. Performance check of Wind Direction

Wind Direction (^{o})		Difference D (^{o})
Wind Direction Reading (V1)	Marine Compass Value (V1)	D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

1. Performance Wind Speed Test - The wind meter was on-site calibrated against the anemometer

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

Calibrated by: _____ Wong Shing Kwai

Approved by: _____ Henry Leung

APPENDIX D
WEATHER INFORMATION

APPENDIX D – WEATHER CONDITIONS DURING THE MONITORING PERIOD

I. General Information from Hong Kong Observatory

Date	Mean Air Temperature (°C)	Mean Relative Humidity (%)	Precipitation (mm)
1-Jul-21	30.3	78	Trace
2-Jul-21	30.6	77	0.0
3-Jul-21	30.4	79	Trace
4-Jul-21	30.4	79	0.0
5-Jul-21	30.2	79	2.3
6-Jul-21	29.4	80	18.4
7-Jul-21	29.4	81	11.7
8-Jul-21	29.8	79	1.5
9-Jul-21	30.5	76	0.0
10-Jul-21	30.5	76	0.0
11-Jul-21	30.6	77	Trace
12-Jul-21	30.9	75	0.1
13-Jul-21	31.1	72	0.0
14-Jul-21	30.7	75	1.5
15-Jul-21	31.3	71	0.0
16-Jul-21	29.6	78	Trace
17-Jul-21	28.8	80	0.2
18-Jul-21	26.9	90	42.4
19-Jul-21	26.5	93	117.2
20-Jul-21	26.2	94	87.8
21-Jul-21	26.8	94	28.4
22-Jul-21	29.3	80	0.0
23-Jul-21	30.3	77	0.0
24-Jul-21	29.8	82	26.5
25-Jul-21	29.6	81	8.9
26-Jul-21	30.7	78	0.0
27-Jul-21	31.3	75	Trace
28-Jul-21	30.8	79	Trace
29-Jul-21	29.5	82	7.8
30-Jul-21	28.8	83	7.9
31-Jul-21	29.7	84	16.9

* The above information was extracted from the daily extract of Ta Kwu Ling Station in Hong Kong Observatory Climate Information Service.

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
1-Jul-21	0:00	69.9	0.2
1-Jul-21	1:00	81.6	0.1
1-Jul-21	2:00	74.5	0.1
1-Jul-21	3:00	77.0	0.1
1-Jul-21	4:00	58.9	0.1
1-Jul-21	5:00	145.1	0.1
1-Jul-21	6:00	38.3	0.1
1-Jul-21	7:00	68.0	0.1
1-Jul-21	8:00	186.3	0.1
1-Jul-21	9:00	35.0	0.1
1-Jul-21	10:00	304.2	0.1
1-Jul-21	11:00	287.4	0.1
1-Jul-21	12:00	245.7	0.2
1-Jul-21	13:00	83.6	0.1
1-Jul-21	14:00	95.9	0.1
1-Jul-21	15:00	90.5	0.2
1-Jul-21	16:00	80.9	0.4
1-Jul-21	17:00	88.1	0.1
1-Jul-21	18:00	77.6	0.1
1-Jul-21	19:00	57.4	0.2
1-Jul-21	20:00	76.7	0.1
1-Jul-21	21:00	100.4	0.1
1-Jul-21	22:00	60.4	0.1
1-Jul-21	23:00	163.2	0.1
2-Jul-21	0:00	73.5	0.1
2-Jul-21	1:00	116.5	0.1
2-Jul-21	2:00	94.2	0.1
2-Jul-21	3:00	47.8	0.1
2-Jul-21	4:00	76.9	0.1
2-Jul-21	5:00	94.6	0.1
2-Jul-21	6:00	62.6	0.1
2-Jul-21	7:00	148.0	0.1
2-Jul-21	8:00	260.2	1.9
2-Jul-21	9:00	175.2	0.1
2-Jul-21	10:00	115.1	0.1
2-Jul-21	11:00	203.6	0.4
2-Jul-21	12:00	200.9	0.2
2-Jul-21	13:00	201.6	1.4
2-Jul-21	14:00	221.4	2.1
2-Jul-21	15:00	203.8	1.2
2-Jul-21	16:00	234.1	2.8
2-Jul-21	17:00	198.5	0.4
2-Jul-21	18:00	216.5	0.3
2-Jul-21	19:00	225.0	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
2-Jul-21	20:00	251.5	0.1
2-Jul-21	21:00	139.2	0.1
2-Jul-21	22:00	125.6	0.1
2-Jul-21	23:00	223.1	0.1
3-Jul-21	0:00	190.7	0.1
3-Jul-21	1:00	279.9	0.1
3-Jul-21	2:00	138.4	0.1
3-Jul-21	3:00	136.8	0.1
3-Jul-21	4:00	63.9	0.1
3-Jul-21	5:00	226.5	0.1
3-Jul-21	6:00	138.0	0.1
3-Jul-21	7:00	49.9	0.1
3-Jul-21	8:00	80.1	0.1
3-Jul-21	9:00	226.1	0.1
3-Jul-21	10:00	201.1	0.1
3-Jul-21	11:00	183.7	0.1
3-Jul-21	12:00	207.3	0.2
3-Jul-21	13:00	224.6	0.8
3-Jul-21	14:00	132.6	0.3
3-Jul-21	15:00	202.6	0.1
3-Jul-21	16:00	172.1	0.2
3-Jul-21	17:00	46.4	0.1
3-Jul-21	18:00	78.6	0.1
3-Jul-21	19:00	68.9	0.1
3-Jul-21	20:00	67.4	0.1
3-Jul-21	21:00	68.6	0.1
3-Jul-21	22:00	68.2	0.1
3-Jul-21	23:00	91.8	0.1
4-Jul-21	0:00	65.3	0.1
4-Jul-21	1:00	42.1	0.1
4-Jul-21	2:00	52.1	0.1
4-Jul-21	3:00	80.5	0.1
4-Jul-21	4:00	29.6	0.1
4-Jul-21	5:00	40.9	0.1
4-Jul-21	6:00	90.2	0.1
4-Jul-21	7:00	71.9	0.1
4-Jul-21	8:00	220.3	1.1
4-Jul-21	9:00	219.3	0.5
4-Jul-21	10:00	197.2	2.3
4-Jul-21	11:00	246.0	3.3
4-Jul-21	12:00	220.0	2.3
4-Jul-21	13:00	209.9	0.3
4-Jul-21	14:00	281.0	3.4
4-Jul-21	15:00	203.8	1.6

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
4-Jul-21	16:00	206.9	0.4
4-Jul-21	17:00	227.5	1.2
4-Jul-21	18:00	210.8	0.2
4-Jul-21	19:00	235.8	0.2
4-Jul-21	20:00	198.8	0.1
4-Jul-21	21:00	199.6	0.1
4-Jul-21	22:00	196.8	0.1
4-Jul-21	23:00	255.2	0.2
5-Jul-21	0:00	216.9	0.1
5-Jul-21	1:00	111.1	0.1
5-Jul-21	2:00	99.7	0.1
5-Jul-21	3:00	76.8	0.1
5-Jul-21	4:00	49.2	0.1
5-Jul-21	5:00	72.3	0.1
5-Jul-21	6:00	60.9	0.1
5-Jul-21	7:00	145.5	0.1
5-Jul-21	8:00	203.7	2.1
5-Jul-21	9:00	169.7	0.5
5-Jul-21	10:00	207.6	0.8
5-Jul-21	11:00	202.6	1.0
5-Jul-21	12:00	237.7	1.7
5-Jul-21	13:00	205.5	1.4
5-Jul-21	14:00	279.8	3.0
5-Jul-21	15:00	213.8	2.7
5-Jul-21	16:00	240.9	1.4
5-Jul-21	17:00	222.5	0.6
5-Jul-21	18:00	212.5	0.6
5-Jul-21	19:00	211.8	0.2
5-Jul-21	20:00	230.9	0.1
5-Jul-21	21:00	163.1	0.1
5-Jul-21	22:00	207.1	0.3
5-Jul-21	23:00	212.9	0.2
6-Jul-21	0:00	232.4	0.2
6-Jul-21	1:00	229.9	0.3
6-Jul-21	2:00	216.5	0.8
6-Jul-21	3:00	191.8	0.1
6-Jul-21	4:00	189.0	0.1
6-Jul-21	5:00	122.7	0.1
6-Jul-21	6:00	145.0	0.1
6-Jul-21	7:00	206.6	0.2
6-Jul-21	8:00	199.2	0.5
6-Jul-21	9:00	263.6	0.5
6-Jul-21	10:00	236.9	0.4
6-Jul-21	11:00	216.0	1.2

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
6-Jul-21	12:00	205.3	1.3
6-Jul-21	13:00	195.1	0.6
6-Jul-21	14:00	224.8	0.7
6-Jul-21	15:00	208.5	1.9
6-Jul-21	16:00	209.9	2.5
6-Jul-21	17:00	240.8	1.0
6-Jul-21	18:00	210.4	0.2
6-Jul-21	19:00	213.4	0.4
6-Jul-21	20:00	216.8	0.1
6-Jul-21	21:00	210.7	0.1
6-Jul-21	22:00	217.0	0.2
6-Jul-21	23:00	239.7	0.1
7-Jul-21	0:00	219.1	0.2
7-Jul-21	1:00	193.2	0.2
7-Jul-21	2:00	237.2	0.8
7-Jul-21	3:00	211.7	0.1
7-Jul-21	4:00	230.1	0.1
7-Jul-21	5:00	206.2	0.1
7-Jul-21	6:00	183.5	0.1
7-Jul-21	7:00	199.6	0.3
7-Jul-21	8:00	232.7	1.1
7-Jul-21	9:00	223.5	0.2
7-Jul-21	10:00	254.8	0.2
7-Jul-21	11:00	243.7	0.4
7-Jul-21	12:00	137.6	0.8
7-Jul-21	13:00	197.9	0.1
7-Jul-21	14:00	224.3	0.4
7-Jul-21	15:00	193.0	0.8
7-Jul-21	16:00	227.7	0.2
7-Jul-21	17:00	202.4	0.6
7-Jul-21	18:00	226.6	0.2
7-Jul-21	19:00	215.3	0.1
7-Jul-21	20:00	209.4	0.1
7-Jul-21	21:00	228.0	0.2
7-Jul-21	22:00	276.6	0.2
7-Jul-21	23:00	228.3	0.3
8-Jul-21	0:00	200.9	0.3
8-Jul-21	1:00	184.7	0.1
8-Jul-21	2:00	213.5	0.1
8-Jul-21	3:00	201.8	0.1
8-Jul-21	4:00	220.9	0.1
8-Jul-21	5:00	122.1	0.1
8-Jul-21	6:00	108.1	0.1
8-Jul-21	7:00	191.7	0.2

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
8-Jul-21	8:00	252.7	0.4
8-Jul-21	9:00	263.5	1.7
8-Jul-21	10:00	244.9	2.8
8-Jul-21	11:00	216.6	3.7
8-Jul-21	12:00	234.0	0.9
8-Jul-21	13:00	228.0	4.1
8-Jul-21	14:00	203.8	3.7
8-Jul-21	15:00	233.2	1.3
8-Jul-21	16:00	241.5	1.5
8-Jul-21	17:00	226.5	0.3
8-Jul-21	18:00	218.4	0.4
8-Jul-21	19:00	214.8	1.1
8-Jul-21	20:00	261.4	0.2
8-Jul-21	21:00	250.8	0.5
8-Jul-21	22:00	251.9	0.7
8-Jul-21	23:00	209.6	0.3
9-Jul-21	0:00	229.0	1.1
9-Jul-21	1:00	209.7	0.5
9-Jul-21	2:00	218.6	0.3
9-Jul-21	3:00	246.0	0.5
9-Jul-21	4:00	212.7	0.5
9-Jul-21	5:00	259.9	0.6
9-Jul-21	6:00	220.2	0.7
9-Jul-21	7:00	234.4	0.5
9-Jul-21	8:00	219.2	0.9
9-Jul-21	9:00	254.8	1.1
9-Jul-21	10:00	252.3	2.8
9-Jul-21	11:00	199.8	3.2
9-Jul-21	12:00	269.3	1.8
9-Jul-21	13:00	221.5	2.9
9-Jul-21	14:00	218.8	5.0
9-Jul-21	15:00	211.3	1.7
9-Jul-21	16:00	184.3	1.3
9-Jul-21	17:00	190.4	0.3
9-Jul-21	18:00	230.7	0.5
9-Jul-21	19:00	208.9	0.8
9-Jul-21	20:00	214.0	1.4
9-Jul-21	21:00	247.0	0.4
9-Jul-21	22:00	194.9	0.3
9-Jul-21	23:00	204.8	1.8
10-Jul-21	0:00	200.9	0.4
10-Jul-21	1:00	213.3	0.4
10-Jul-21	2:00	199.3	0.2
10-Jul-21	3:00	185.9	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
10-Jul-21	4:00	223.9	0.2
10-Jul-21	5:00	186.2	0.1
10-Jul-21	6:00	160.8	0.2
10-Jul-21	7:00	206.1	0.8
10-Jul-21	8:00	170.5	0.4
10-Jul-21	9:00	195.2	1.2
10-Jul-21	10:00	174.1	0.9
10-Jul-21	11:00	247.9	2.4
10-Jul-21	12:00	171.6	3.1
10-Jul-21	13:00	214.9	2.7
10-Jul-21	14:00	205.4	2.4
10-Jul-21	15:00	214.4	0.4
10-Jul-21	16:00	209.0	0.3
10-Jul-21	17:00	207.9	0.6
10-Jul-21	18:00	183.5	0.2
10-Jul-21	19:00	194.7	0.4
10-Jul-21	20:00	201.7	0.2
10-Jul-21	21:00	215.4	0.1
10-Jul-21	22:00	229.3	0.2
10-Jul-21	23:00	211.0	0.4
11-Jul-21	0:00	214.0	0.4
11-Jul-21	1:00	186.0	0.4
11-Jul-21	2:00	231.4	0.1
11-Jul-21	3:00	190.4	0.1
11-Jul-21	4:00	186.2	1.3
11-Jul-21	5:00	196.3	0.2
11-Jul-21	6:00	238.2	0.2
11-Jul-21	7:00	209.9	0.4
11-Jul-21	8:00	195.4	0.9
11-Jul-21	9:00	228.2	2.2
11-Jul-21	10:00	228.8	1.5
11-Jul-21	11:00	192.0	2.5
11-Jul-21	12:00	217.2	1.3
11-Jul-21	13:00	216.7	0.7
11-Jul-21	14:00	215.8	1.8
11-Jul-21	15:00	200.4	1.9
11-Jul-21	16:00	209.7	1.1
11-Jul-21	17:00	197.8	2.2
11-Jul-21	18:00	217.3	0.8
11-Jul-21	19:00	206.5	0.3
11-Jul-21	20:00	238.8	0.1
11-Jul-21	21:00	166.1	0.1
11-Jul-21	22:00	209.0	0.1
11-Jul-21	23:00	187.2	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
12-Jul-21	0:00	190.1	0.1
12-Jul-21	1:00	189.5	0.1
12-Jul-21	2:00	200.1	0.1
12-Jul-21	3:00	201.5	0.1
12-Jul-21	4:00	196.4	0.1
12-Jul-21	5:00	220.5	0.2
12-Jul-21	6:00	231.7	0.3
12-Jul-21	7:00	178.1	0.2
12-Jul-21	8:00	223.9	0.7
12-Jul-21	9:00	200.4	1.5
12-Jul-21	10:00	198.6	1.1
12-Jul-21	11:00	209.6	0.8
12-Jul-21	12:00	252.4	1.4
12-Jul-21	13:00	280.2	0.5
12-Jul-21	14:00	213.9	0.3
12-Jul-21	15:00	210.7	1.4
12-Jul-21	16:00	232.2	2.1
12-Jul-21	17:00	237.4	0.8
12-Jul-21	18:00	224.8	0.6
12-Jul-21	19:00	215.2	0.1
12-Jul-21	20:00	216.0	0.1
12-Jul-21	21:00	206.6	0.1
12-Jul-21	22:00	265.5	0.1
12-Jul-21	23:00	155.8	0.1
13-Jul-21	0:00	211.9	0.1
13-Jul-21	1:00	50.6	0.1
13-Jul-21	2:00	19.3	0.1
13-Jul-21	3:00	205.1	0.1
13-Jul-21	4:00	66.5	0.1
13-Jul-21	5:00	175.3	0.1
13-Jul-21	6:00	266.1	0.1
13-Jul-21	7:00	188.4	0.1
13-Jul-21	8:00	152.1	0.1
13-Jul-21	9:00	291.0	0.1
13-Jul-21	10:00	235.3	0.3
13-Jul-21	11:00	267.8	0.5
13-Jul-21	12:00	241.4	1.2
13-Jul-21	13:00	292.4	2.5
13-Jul-21	14:00	238.4	2.7
13-Jul-21	15:00	234.2	1.1
13-Jul-21	16:00	221.5	1.4
13-Jul-21	17:00	211.7	0.4
13-Jul-21	18:00	200.4	0.2
13-Jul-21	19:00	207.3	0.2

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
13-Jul-21	20:00	211.4	0.1
13-Jul-21	21:00	221.7	0.1
13-Jul-21	22:00	265.2	0.1
13-Jul-21	23:00	227.3	0.1
14-Jul-21	0:00	245.2	0.1
14-Jul-21	1:00	233.9	0.1
14-Jul-21	2:00	250.6	0.1
14-Jul-21	3:00	253.4	0.1
14-Jul-21	4:00	224.8	0.3
14-Jul-21	5:00	240.0	0.2
14-Jul-21	6:00	223.6	0.2
14-Jul-21	7:00	217.1	0.5
14-Jul-21	8:00	130.0	0.4
14-Jul-21	9:00	225.2	1.1
14-Jul-21	10:00	256.2	0.4
14-Jul-21	11:00	155.5	0.6
14-Jul-21	12:00	257.9	1.6
14-Jul-21	13:00	238.6	0.7
14-Jul-21	14:00	248.5	0.9
14-Jul-21	15:00	217.0	1.4
14-Jul-21	16:00	249.4	1.2
14-Jul-21	17:00	227.4	0.2
14-Jul-21	18:00	232.7	0.1
14-Jul-21	19:00	214.3	0.1
14-Jul-21	20:00	237.2	0.2
14-Jul-21	21:00	233.2	0.1
14-Jul-21	22:00	236.8	0.1
14-Jul-21	23:00	215.3	0.1
15-Jul-21	0:00	245.5	0.2
15-Jul-21	1:00	232.9	0.3
15-Jul-21	2:00	201.8	0.7
15-Jul-21	3:00	226.9	0.2
15-Jul-21	4:00	258.5	0.6
15-Jul-21	5:00	216.0	0.1
15-Jul-21	6:00	248.3	0.3
15-Jul-21	7:00	250.9	0.2
15-Jul-21	8:00	280.2	1.3
15-Jul-21	9:00	276.4	1.2
15-Jul-21	10:00	273.9	1.6
15-Jul-21	11:00	261.1	2.3
15-Jul-21	12:00	251.0	1.7
15-Jul-21	13:00	240.0	1.1
15-Jul-21	14:00	213.1	1.5
15-Jul-21	15:00	219.1	1.0

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
15-Jul-21	16:00	209.3	0.7
15-Jul-21	17:00	239.9	0.4
15-Jul-21	18:00	239.9	0.1
15-Jul-21	19:00	223.7	0.2
15-Jul-21	20:00	212.4	0.4
15-Jul-21	21:00	234.3	0.1
15-Jul-21	22:00	207.6	0.1
15-Jul-21	23:00	213.0	0.4
16-Jul-21	0:00	232.3	0.1
16-Jul-21	1:00	210.3	0.1
16-Jul-21	2:00	206.7	0.1
16-Jul-21	3:00	204.5	0.1
16-Jul-21	4:00	220.5	0.3
16-Jul-21	5:00	210.6	0.6
16-Jul-21	6:00	202.5	0.8
16-Jul-21	7:00	217.8	0.7
16-Jul-21	8:00	222.6	2.7
16-Jul-21	9:00	227.1	3.6
16-Jul-21	10:00	270.2	2.5
16-Jul-21	11:00	188.8	2.8
16-Jul-21	12:00	198.1	0.4
16-Jul-21	13:00	178.0	2.8
16-Jul-21	14:00	216.4	2.3
16-Jul-21	15:00	196.6	2.1
16-Jul-21	16:00	192.4	1.4
16-Jul-21	17:00	177.2	0.8
16-Jul-21	18:00	207.0	0.9
16-Jul-21	19:00	217.8	0.2
16-Jul-21	20:00	212.1	0.1
16-Jul-21	21:00	214.4	0.3
16-Jul-21	22:00	215.0	0.2
16-Jul-21	23:00	214.0	0.1
17-Jul-21	0:00	241.0	0.1
17-Jul-21	1:00	200.7	0.1
17-Jul-21	2:00	220.6	0.1
17-Jul-21	3:00	252.0	0.1
17-Jul-21	4:00	199.3	0.1
17-Jul-21	5:00	230.5	0.1
17-Jul-21	6:00	248.0	0.1
17-Jul-21	7:00	216.0	0.3
17-Jul-21	8:00	215.4	0.7
17-Jul-21	9:00	216.4	0.5
17-Jul-21	10:00	244.6	0.3
17-Jul-21	11:00	214.1	0.3

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
17-Jul-21	12:00	240.7	0.8
17-Jul-21	13:00	231.2	3.8
17-Jul-21	14:00	197.8	1.2
17-Jul-21	15:00	176.0	1.4
17-Jul-21	16:00	208.8	2.8
17-Jul-21	17:00	206.9	0.6
17-Jul-21	18:00	207.7	0.4
17-Jul-21	19:00	182.0	0.3
17-Jul-21	20:00	229.9	1.1
17-Jul-21	21:00	240.8	0.2
17-Jul-21	22:00	250.9	0.2
17-Jul-21	23:00	237.9	0.2
18-Jul-21	0:00	188.0	0.2
18-Jul-21	1:00	209.1	0.6
18-Jul-21	2:00	212.7	0.2
18-Jul-21	3:00	236.9	0.2
18-Jul-21	4:00	227.6	0.2
18-Jul-21	5:00	206.8	0.1
18-Jul-21	6:00	255.5	0.1
18-Jul-21	7:00	229.3	0.4
18-Jul-21	8:00	256.7	1.0
18-Jul-21	9:00	262.0	2.1
18-Jul-21	10:00	256.8	1.1
18-Jul-21	11:00	233.8	0.8
18-Jul-21	12:00	194.2	1.6
18-Jul-21	13:00	172.3	1.4
18-Jul-21	14:00	194.1	2.2
18-Jul-21	15:00	198.7	0.8
18-Jul-21	16:00	212.1	0.7
18-Jul-21	17:00	179.2	0.2
18-Jul-21	18:00	217.3	0.1
18-Jul-21	19:00	214.1	0.3
18-Jul-21	20:00	227.0	0.2
18-Jul-21	21:00	237.7	0.2
18-Jul-21	22:00	219.3	0.3
18-Jul-21	23:00	221.5	0.2
19-Jul-21	0:00	225.4	0.3
19-Jul-21	1:00	225.2	0.3
19-Jul-21	2:00	261.8	0.3
19-Jul-21	3:00	215.2	0.5
19-Jul-21	4:00	199.6	0.1
19-Jul-21	5:00	214.5	0.1
19-Jul-21	6:00	191.9	0.1
19-Jul-21	7:00	185.5	0.6

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
19-Jul-21	8:00	221.7	1.0
19-Jul-21	9:00	253.4	1.1
19-Jul-21	10:00	279.4	0.9
19-Jul-21	11:00	262.3	1.0
19-Jul-21	12:00	202.2	1.4
19-Jul-21	13:00	205.1	0.7
19-Jul-21	14:00	193.9	2.1
19-Jul-21	15:00	219.0	1.2
19-Jul-21	16:00	217.9	1.0
19-Jul-21	17:00	200.0	1.5
19-Jul-21	18:00	182.7	1.2
19-Jul-21	19:00	203.3	0.9
19-Jul-21	20:00	199.9	0.3
19-Jul-21	21:00	240.0	0.3
19-Jul-21	22:00	243.0	0.1
19-Jul-21	23:00	207.8	0.3
20-Jul-21	0:00	211.6	0.2
20-Jul-21	1:00	211.0	0.1
20-Jul-21	2:00	143.9	0.1
20-Jul-21	3:00	261.4	0.1
20-Jul-21	4:00	240.9	0.1
20-Jul-21	5:00	50.7	0.1
20-Jul-21	6:00	83.8	0.1
20-Jul-21	7:00	41.9	0.1
20-Jul-21	8:00	252.0	0.4
20-Jul-21	9:00	236.0	0.1
20-Jul-21	10:00	226.1	3.9
20-Jul-21	11:00	182.3	0.5
20-Jul-21	12:00	250.4	2.0
20-Jul-21	13:00	238.3	0.9
20-Jul-21	14:00	267.2	0.9
20-Jul-21	15:00	239.4	1.3
20-Jul-21	16:00	179.6	1.9
20-Jul-21	17:00	226.1	0.3
20-Jul-21	18:00	226.9	0.2
20-Jul-21	19:00	237.2	0.1
20-Jul-21	20:00	210.6	0.1
20-Jul-21	21:00	167.5	0.1
20-Jul-21	22:00	154.3	0.1
20-Jul-21	23:00	34.7	0.1
21-Jul-21	0:00	139.9	0.1
21-Jul-21	1:00	254.9	0.1
21-Jul-21	2:00	301.1	0.1
21-Jul-21	3:00	240.4	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
21-Jul-21	4:00	226.2	0.1
21-Jul-21	5:00	137.4	0.1
21-Jul-21	6:00	207.6	0.1
21-Jul-21	7:00	144.2	0.1
21-Jul-21	8:00	150.6	0.1
21-Jul-21	9:00	44.2	0.1
21-Jul-21	10:00	222.1	0.2
21-Jul-21	11:00	180.4	0.2
21-Jul-21	12:00	225.1	1.0
21-Jul-21	13:00	268.6	1.8
21-Jul-21	14:00	119.2	0.3
21-Jul-21	15:00	258.3	0.6
21-Jul-21	16:00	217.9	0.3
21-Jul-21	17:00	32.0	0.1
21-Jul-21	18:00	78.3	0.1
21-Jul-21	19:00	71.2	0.1
21-Jul-21	20:00	82.9	0.1
21-Jul-21	21:00	208.5	0.1
21-Jul-21	22:00	76.3	0.1
21-Jul-21	23:00	69.6	0.1
22-Jul-21	0:00	85.5	0.1
22-Jul-21	1:00	75.4	0.1
22-Jul-21	2:00	201.1	0.1
22-Jul-21	3:00	53.9	0.1
22-Jul-21	4:00	44.4	0.1
22-Jul-21	5:00	221.6	0.1
22-Jul-21	6:00	59.9	0.1
22-Jul-21	7:00	65.2	0.1
22-Jul-21	8:00	97.0	0.2
22-Jul-21	9:00	67.0	0.2
22-Jul-21	10:00	102.4	0.2
22-Jul-21	11:00	50.1	0.1
22-Jul-21	12:00	104.3	0.7
22-Jul-21	13:00	111.3	0.2
22-Jul-21	14:00	84.6	0.2
22-Jul-21	15:00	135.0	0.2
22-Jul-21	16:00	208.9	0.1
22-Jul-21	17:00	122.9	0.3
22-Jul-21	18:00	102.1	0.1
22-Jul-21	19:00	87.6	0.3
22-Jul-21	20:00	108.2	0.2
22-Jul-21	21:00	78.3	0.2
22-Jul-21	22:00	68.2	0.1
22-Jul-21	23:00	101.0	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
23-Jul-21	0:00	79.9	0.1
23-Jul-21	1:00	260.1	0.1
23-Jul-21	2:00	197.1	0.1
23-Jul-21	3:00	144.8	0.1
23-Jul-21	4:00	228.1	0.1
23-Jul-21	5:00	245.0	0.1
23-Jul-21	6:00	262.9	0.1
23-Jul-21	7:00	112.5	0.2
23-Jul-21	8:00	206.5	0.3
23-Jul-21	9:00	189.4	0.6
23-Jul-21	10:00	229.4	0.4
23-Jul-21	11:00	138.1	0.2
23-Jul-21	12:00	286.4	0.3
23-Jul-21	13:00	102.1	0.1
23-Jul-21	14:00	84.5	0.2
23-Jul-21	15:00	118.0	0.1
23-Jul-21	16:00	268.5	0.2
23-Jul-21	17:00	202.6	0.2
23-Jul-21	18:00	236.5	0.3
23-Jul-21	19:00	213.1	0.1
23-Jul-21	20:00	201.3	0.2
23-Jul-21	21:00	225.6	0.1
23-Jul-21	22:00	212.0	0.1
23-Jul-21	23:00	252.7	0.1
24-Jul-21	0:00	208.4	0.1
24-Jul-21	1:00	144.3	0.1
24-Jul-21	2:00	62.3	0.1
24-Jul-21	3:00	55.1	0.1
24-Jul-21	4:00	69.4	0.1
24-Jul-21	5:00	64.6	0.1
24-Jul-21	6:00	85.5	0.1
24-Jul-21	7:00	263.3	0.1
24-Jul-21	8:00	267.8	0.7
24-Jul-21	9:00	227.1	0.1
24-Jul-21	10:00	265.1	0.4
24-Jul-21	11:00	299.6	0.9
24-Jul-21	12:00	251.8	0.9
24-Jul-21	13:00	295.1	0.6
24-Jul-21	14:00	260.6	2.1
24-Jul-21	15:00	268.2	1.9
24-Jul-21	16:00	269.2	2.0
24-Jul-21	17:00	248.3	1.2
24-Jul-21	18:00	218.4	0.6
24-Jul-21	19:00	261.1	0.2

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
24-Jul-21	20:00	221.2	0.1
24-Jul-21	21:00	216.9	0.1
24-Jul-21	22:00	180.8	0.7
24-Jul-21	23:00	207.3	0.1
25-Jul-21	0:00	166.2	0.1
25-Jul-21	1:00	282.2	0.1
25-Jul-21	2:00	228.0	0.1
25-Jul-21	3:00	224.3	0.1
25-Jul-21	4:00	220.3	0.1
25-Jul-21	5:00	241.8	0.1
25-Jul-21	6:00	115.1	0.1
25-Jul-21	7:00	187.6	0.7
25-Jul-21	8:00	279.5	1.8
25-Jul-21	9:00	283.2	1.4
25-Jul-21	10:00	205.0	0.5
25-Jul-21	11:00	227.9	0.5
25-Jul-21	12:00	238.8	0.8
25-Jul-21	13:00	257.1	1.4
25-Jul-21	14:00	276.1	0.8
25-Jul-21	15:00	235.5	1.0
25-Jul-21	16:00	236.4	1.9
25-Jul-21	17:00	235.7	0.9
25-Jul-21	18:00	205.0	0.2
25-Jul-21	19:00	207.4	0.5
25-Jul-21	20:00	199.6	0.3
25-Jul-21	21:00	150.9	0.1
25-Jul-21	22:00	216.0	0.1
25-Jul-21	23:00	265.8	0.1
26-Jul-21	0:00	226.3	0.1
26-Jul-21	1:00	256.2	0.6
26-Jul-21	2:00	267.4	0.1
26-Jul-21	3:00	220.8	0.1
26-Jul-21	4:00	202.3	0.1
26-Jul-21	5:00	216.1	0.1
26-Jul-21	6:00	211.1	0.1
26-Jul-21	7:00	203.5	0.5
26-Jul-21	8:00	281.2	0.5
26-Jul-21	9:00	237.6	1.3
26-Jul-21	10:00	296.2	0.8
26-Jul-21	11:00	288.4	0.9
26-Jul-21	12:00	264.3	2.2
26-Jul-21	13:00	259.7	1.5
26-Jul-21	14:00	246.7	1.8
26-Jul-21	15:00	242.9	2.3

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
26-Jul-21	16:00	214.7	1.5
26-Jul-21	17:00	224.0	1.0
26-Jul-21	18:00	236.6	1.3
26-Jul-21	19:00	220.8	1.2
26-Jul-21	20:00	228.9	0.3
26-Jul-21	21:00	233.9	0.1
26-Jul-21	22:00	256.9	0.3
26-Jul-21	23:00	231.5	0.1
27-Jul-21	0:00	202.3	0.2
27-Jul-21	1:00	236.6	0.2
27-Jul-21	2:00	180.9	0.1
27-Jul-21	3:00	227.2	0.1
27-Jul-21	4:00	227.9	0.1
27-Jul-21	5:00	202.0	0.2
27-Jul-21	6:00	204.2	0.1
27-Jul-21	7:00	248.1	0.3
27-Jul-21	8:00	285.6	0.1
27-Jul-21	9:00	285.1	0.3
27-Jul-21	10:00	262.9	0.8
27-Jul-21	11:00	210.1	1.1
27-Jul-21	12:00	233.2	0.7
27-Jul-21	13:00	214.8	1.2
27-Jul-21	14:00	175.0	0.2
27-Jul-21	15:00	209.5	2.8
27-Jul-21	16:00	229.0	1.1
27-Jul-21	17:00	211.9	1.2
27-Jul-21	18:00	228.6	0.8
27-Jul-21	19:00	245.4	0.3
27-Jul-21	20:00	220.1	0.1
27-Jul-21	21:00	269.5	0.1
27-Jul-21	22:00	148.7	0.1
27-Jul-21	23:00	226.2	0.1
28-Jul-21	0:00	219.8	0.1
28-Jul-21	1:00	212.2	0.1
28-Jul-21	2:00	145.4	0.1
28-Jul-21	3:00	45.5	0.1
28-Jul-21	4:00	32.2	0.1
28-Jul-21	5:00	278.9	0.1
28-Jul-21	6:00	85.4	0.1
28-Jul-21	7:00	271.0	0.2
28-Jul-21	8:00	223.2	0.2
28-Jul-21	9:00	288.5	0.2
28-Jul-21	10:00	268.1	0.4
28-Jul-21	11:00	240.7	0.9

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
28-Jul-21	12:00	297.3	0.7
28-Jul-21	13:00	220.9	1.8
28-Jul-21	14:00	247.7	1.5
28-Jul-21	15:00	203.0	1.5
28-Jul-21	16:00	210.0	1.5
28-Jul-21	17:00	206.7	1.8
28-Jul-21	18:00	204.1	1.2
28-Jul-21	19:00	227.2	0.2
28-Jul-21	20:00	224.2	0.2
28-Jul-21	21:00	230.7	0.1
28-Jul-21	22:00	301.5	0.1
28-Jul-21	23:00	243.6	0.1
29-Jul-21	0:00	242.9	0.1
29-Jul-21	1:00	293.8	0.1
29-Jul-21	2:00	27.9	0.1
29-Jul-21	3:00	252.1	0.1
29-Jul-21	4:00	255.8	0.1
29-Jul-21	5:00	269.7	0.1
29-Jul-21	6:00	103.6	0.1
29-Jul-21	7:00	235.8	0.1
29-Jul-21	8:00	210.2	0.5
29-Jul-21	9:00	173.9	0.2
29-Jul-21	10:00	307.1	0.2
29-Jul-21	11:00	171.5	0.2
29-Jul-21	12:00	223.1	1.9
29-Jul-21	13:00	253.6	1.7
29-Jul-21	14:00	89.8	0.1
29-Jul-21	15:00	64.7	0.1
29-Jul-21	16:00	182.6	0.1
29-Jul-21	17:00	83.7	0.1
29-Jul-21	18:00	79.7	0.1
29-Jul-21	19:00	67.6	0.2
29-Jul-21	20:00	99.5	0.2
29-Jul-21	21:00	61.5	0.1
29-Jul-21	22:00	95.5	0.1
29-Jul-21	23:00	82.9	0.1
30-Jul-21	0:00	67.3	0.1
30-Jul-21	1:00	56.0	0.1
30-Jul-21	2:00	57.5	0.1
30-Jul-21	3:00	59.8	0.1
30-Jul-21	4:00	65.1	0.1
30-Jul-21	5:00	54.9	0.1
30-Jul-21	6:00	74.0	0.2
30-Jul-21	7:00	90.7	0.1

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
30-Jul-21	8:00	61.1	0.3
30-Jul-21	9:00	120.3	0.5
30-Jul-21	10:00	70.9	0.3
30-Jul-21	11:00	79.5	2.0
30-Jul-21	12:00	105.8	0.6
30-Jul-21	13:00	113.1	1.8
30-Jul-21	14:00	122.1	0.5
30-Jul-21	15:00	68.7	0.1
30-Jul-21	16:00	124.6	0.4
30-Jul-21	17:00	88.2	0.2
30-Jul-21	18:00	83.3	0.1
30-Jul-21	19:00	51.1	0.1
30-Jul-21	20:00	47.1	0.1
30-Jul-21	21:00	61.3	0.1
30-Jul-21	22:00	68.0	0.1
30-Jul-21	23:00	84.8	0.1
31-Jul-21	0:00	73.1	0.1
31-Jul-21	1:00	57.7	0.1
31-Jul-21	2:00	76.9	0.1
31-Jul-21	3:00	61.1	0.1
31-Jul-21	4:00	66.9	0.1
31-Jul-21	5:00	40.3	0.1
31-Jul-21	6:00	57.6	0.3
31-Jul-21	7:00	102.8	1.6
31-Jul-21	8:00	81.7	0.3
31-Jul-21	9:00	72.0	0.6
31-Jul-21	10:00	93.4	1.4
31-Jul-21	11:00	80.9	0.1
31-Jul-21	12:00	75.1	0.3
31-Jul-21	13:00	96.6	0.5
31-Jul-21	14:00	93.5	0.4
31-Jul-21	15:00	74.6	0.6
31-Jul-21	16:00	84.3	1.3
31-Jul-21	17:00	82.4	1.6
31-Jul-21	18:00	164.2	1.6
31-Jul-21	19:00	72.1	0.1
31-Jul-21	20:00	81.5	0.1
31-Jul-21	21:00	53.6	0.1
31-Jul-21	22:00	151.8	0.3
31-Jul-21	23:00	93.2	1.4

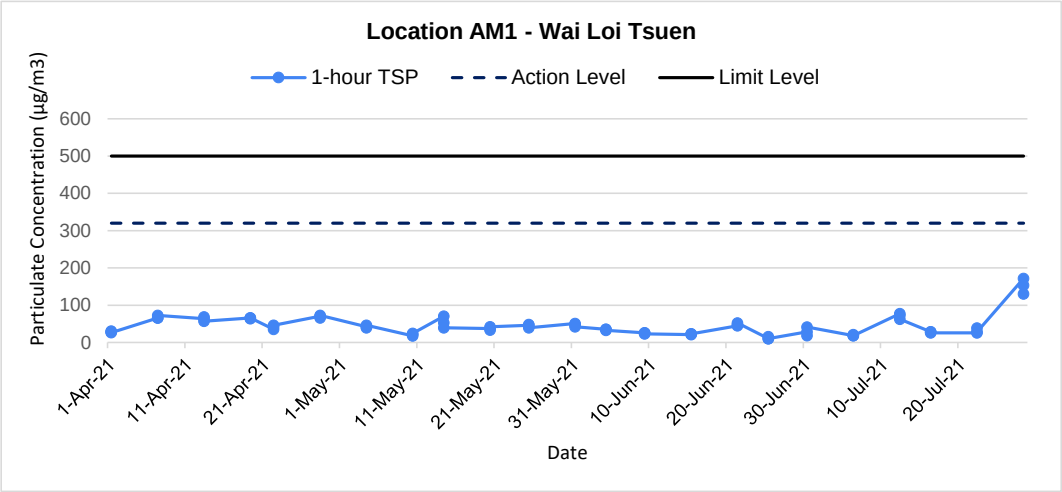
APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

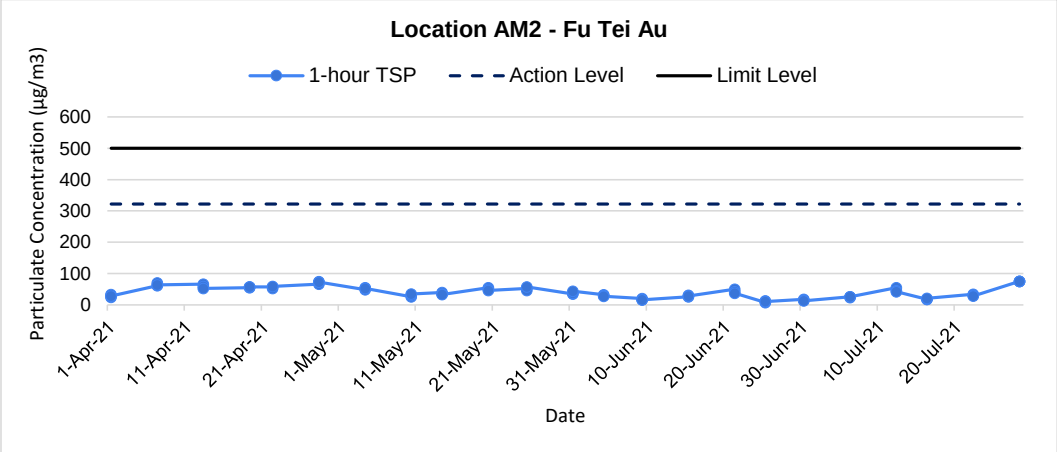
Appendix E - 1-hour TSP Monitoring Results

Location AM1 - Wai Loi Tsuen			
Date	Time	Weather	Particulate Concentration (μg/m^3)
6-Jul-21	9:00	Cloudy	18.2
6-Jul-21	10:00	Cloudy	20.8
6-Jul-21	11:00	Cloudy	18.2
12-Jul-21	9:30	Cloudy	77.5
12-Jul-21	10:30	Cloudy	72.5
12-Jul-21	11:30	Cloudy	62.5
16-Jul-21	9:20	Sunny	28.6
16-Jul-21	10:20	Sunny	28.6
16-Jul-21	11:20	Sunny	26.0
22-Jul-21	14:40	Sunny	26.0
22-Jul-21	15:40	Sunny	39.0
22-Jul-21	16:40	Sunny	28.6
28-Jul-21	14:30	Cloudy	171.6
28-Jul-21	15:30	Cloudy	153.4
28-Jul-21	16:30	Cloudy	130.0
		Average	60.1
		Maximum	171.6
		Minimum	18.2

Location AM2 - Fu Tei Au			
Date	Time	Weather	Particulate Concentration (μg/m^3)
6-Jul-21	13:00	Cloudy	26.0
6-Jul-21	14:00	Cloudy	23.4
6-Jul-21	15:00	Cloudy	26.0
12-Jul-21	13:35	Cloudy	55.0
12-Jul-21	14:35	Cloudy	45.0
12-Jul-21	15:35	Cloudy	42.5
16-Jul-21	13:40	Sunny	18.2
16-Jul-21	14:40	Sunny	18.2
16-Jul-21	15:40	Sunny	20.8
22-Jul-21	15:40	Sunny	33.8
22-Jul-21	16:40	Sunny	31.2
22-Jul-21	17:40	Sunny	28.6
28-Jul-21	15:00	Cloudy	75.4
28-Jul-21	16:00	Cloudy	75.4
28-Jul-21	17:00	Cloudy	75.4
		Average	39.7
		Maximum	75.4
		Minimum	18.2

1-hr TSP Concentration Levels





Title		Date	Project No.	
	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Jul 2021	MA19019	CINOTECH
	Graphical Presentation of 1-hour TSP Monitoring Results		Appendix E	

APPENDIX F
24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix F - 24-hour TSP Monitoring Results

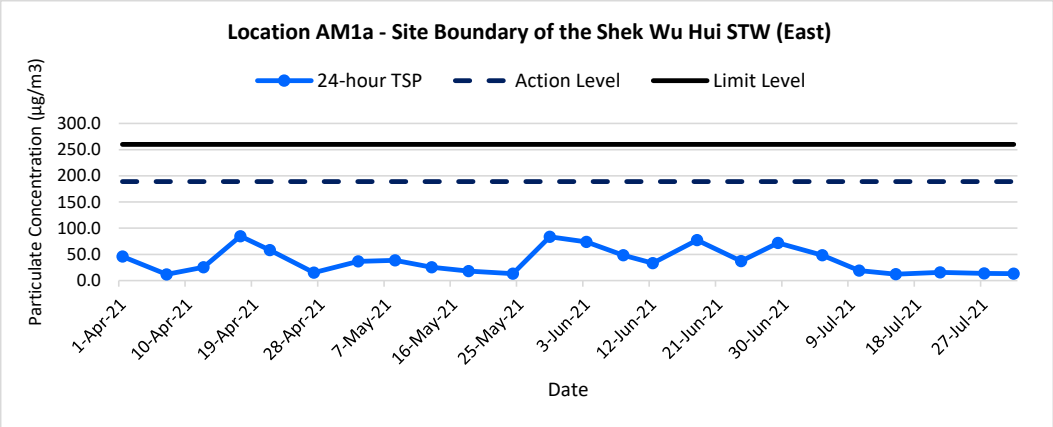
Location AM1a - Site Boundary of the Shek Wu Hui STW (East)

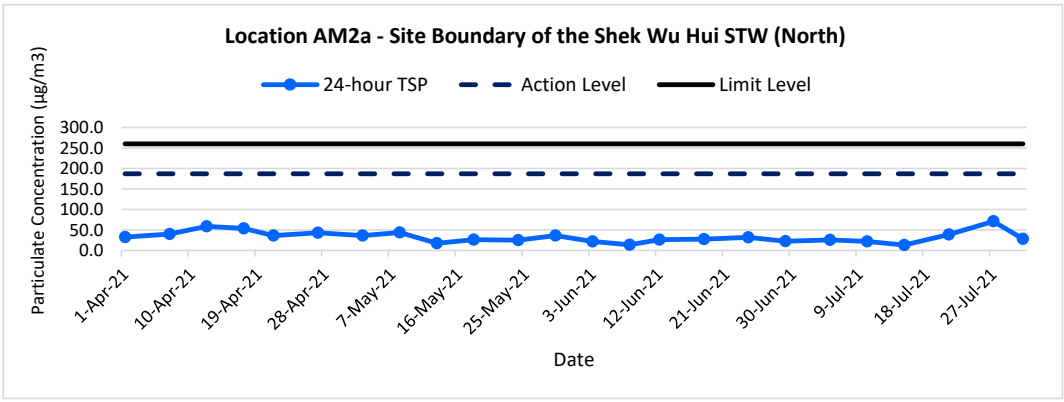
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (µg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
5-Jul-21	Sunny	302.8	756.2	3.6509	3.7354	0.0845	10508.8	10532.8	24.0	1.21	1.21	1.21	1736.4	48.7
10-Jul-21	Cloudy	303.6	759.1	3.6705	3.7039	0.0334	10532.8	10556.8	24.0	1.22	1.22	1.22	1755.1	19.1
15-Jul-21	Sunny	303.5	757.5	3.7545	3.7763	0.0218	10556.8	10580.8	24.0	1.22	1.22	1.22	1753.7	12.4
21-Jul-21	Sunny	301.1	752.5	3.7148	3.7427	0.0278	10580.8	10604.8	24.0	1.22	1.22	1.22	1754.7	15.9
27-Jul-21	Sunny	304.1	748.8	3.7320	3.7559	0.0239	10604.8	10628.8	24.0	1.21	1.21	1.21	1743.1	13.7
31-Jul-21	Sunny	302.6	750.5	3.6582	3.6816	0.0234	10628.8	10652.8	24.0	1.21	1.21	1.21	1748.8	13.4
													Min	12.4
													Max	48.7
													Average	20.5

Location AM2a - Site Boundary of the Shek Wu Hui STW (North)

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. (µg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
5-Jul-21	Sunny	302.8	756.2	3.6890	3.7330	0.0441	20727.3	20751.3	24.0	1.21	1.21	1.21	1736.4	25.4
10-Jul-21	Cloudy	303.6	759.1	3.6648	3.7034	0.0386	20751.3	20775.3	24.0	1.22	1.22	1.22	1753.1	22.0
15-Jul-21	Sunny	303.5	757.5	3.6915	3.7146	0.0231	20775.3	20799.3	24.0	1.22	1.22	1.22	1751.9	13.2
21-Jul-21	Sunny	301.1	752.5	3.7055	3.7735	0.0680	20799.3	20823.3	24.0	1.22	1.21	1.22	1752.8	38.8
27-Jul-21	Sunny	304.1	748.8	3.6974	3.8210	0.1236	20823.3	20847.3	24.0	1.21	1.21	1.21	1742.0	71.0
31-Jul-21	Sunny	302.6	750.5	3.6289	3.6784	0.0495	20847.3	20871.3	24.0	1.21	1.21	1.21	1747.3	28.3
													Min	13.2
													Max	71.0
													Average	33.1

24-hr TSP Concentration Levels





Title	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date	Project No.	CINOTECH
		Jul 2021	MA19019	
	Graphical Presentation of 24-hour TSP Monitoring Results		Appendix	
			F	

APPENDIX G
COPIES OF CALIBRATION CERTIFICATES FOR NOISE MONITORING

Equipment no.: N-12-01

Calibration Certificate

0024993

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : BSWA 308 SLM Serial No. /Ref. No. : 570183 / 550233 Object 2 : Serial No. /Ref. No. : Manufacturer : BSWAtech
Date of calibration: 07/10/2020 Date of the recommended re-calibration: 07/10/2021	Certificate No.: 0024993 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.4dB	-0.6dB	+/- 1.5dB	1
114.0dB	113.2dB	-0.8dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician Mr. K.L. Ng

Approved by

Mr. K.S. Ng

Quality Manager

Appleone Calibration Laboratory Ltd. Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR Tel: +852 2370 4437 Fax: +852 2114 0393

Equipment no.: N-12-02

Calibration Certificate

0024995

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : BSWA 308 SLM Serial No. /Ref. No. : 570187 / 550841 Object 2 : Serial No. /Ref. No. : Manufacturer : BSWAtech
Date of calibration: 07/10/2020 Date of the recommended re-calibration: 07/10/2021	Certificate No.: 0024995 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.1dB	-0.9dB	+/- 1.5dB	1
114.0dB	113.1dB	-0.9dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician Mr. K.L. Ng

Approved by

Mr. K.S. Ng

Quality Manager

Appleone Calibration Laboratory Ltd. Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR Tel: +852 2370 4437 Fax: +852 2114 0393

Equipment no.: N-12-03

Calibration Certificate

0024996

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : BSWA 308 SLM Serial No. /Ref. No. : 570188 / 550850 Object 2 : Serial No. /Ref. No. : Manufacturer : BSWAtech
Date of calibration: 07/10/2020 Date of the recommended re-calibration: 07/10/2021	Certificate No.: 0024996 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	92.9dB	-1.1dB	+/- 1.5dB	1
114.0dB	112.8dB	-1.2dB	+/- 1.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician Mr. K.L. Ng

Approved by

Mr. K.S. Ng

Quality Manager

Appleone Calibration Laboratory Ltd. Rm1309, 13/F, No.77 Wing Hong St, Kln, HKSAR Tel: +852 2370 4437 Fax: +852 2114 0393

Equipment no.:N-13-01

Calibration Certificate

0025247

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : ST-120 sound calibrator Serial No. /Ref. No. : 181001608 Object 2 : Serial No. /Ref. No. : Manufacturer : Soundtek
Date of calibration: 05/11/2020 Date of the recommended re-calibration: 05/11/2021	Certificate No.: 0025247 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.7dB	-0.3dB	+/- 0.3dB	1
114.0dB	113.6dB	-0.4dB	+/- 0.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician Mr. K.L. Ng

Approved by

Quality Manager

Equipment no.:N-13-02

Calibration Certificate

0025249

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : ST-120 sound calibrator Serial No. /Ref. No. : 181001636 Object 2 : Serial No. /Ref. No. : Manufacturer : Soundtek
Date of calibration: 05/11/2020 Date of the recommended re-calibration: 05/11/2021	Certificate No.: 0025249 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.7dB	-0.3dB	+/- 0.3dB	1
114.0dB	113.6dB	-0.4dB	+/- 0.5dB	1

Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

Ambient conditions

Temperature (20...26)°C Humidity (20...60)%RH

Measuring procedure

Calibrated by Type 1 Sound Level Meter and 1kHz Sound Source .

Uncertainty

+/- 0.2 dB for probability not less than 95%.

Conformity

1.The resulted values were those obtained at the time of test and applies only to the item calibrated.
2.The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains the uncertainty of the measuring procedure and the uncertainty of the measuring system.
3.The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.
4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.
5.The calibrations certificate may not be reproduced.

Measured value(s) within **the allowable deviation.**

Performed by

Calibration Technician Mr. K.L. Ng

Approved by

Quality Manager

APPENDIX H
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix H - Noise Monitoring Results

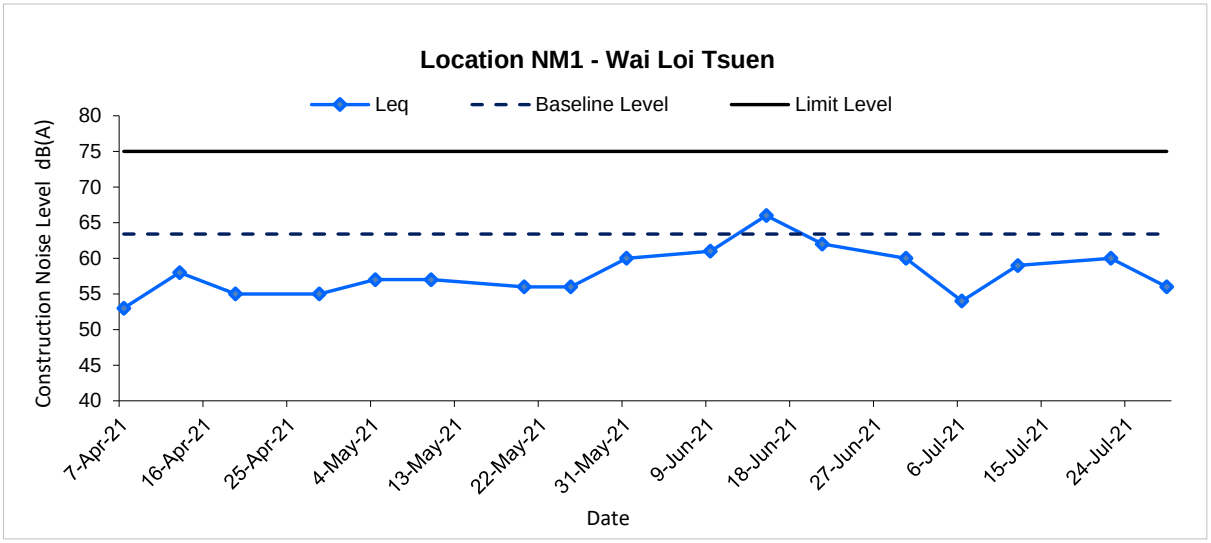
(0700-1900 hrs on Normal Weekdays)

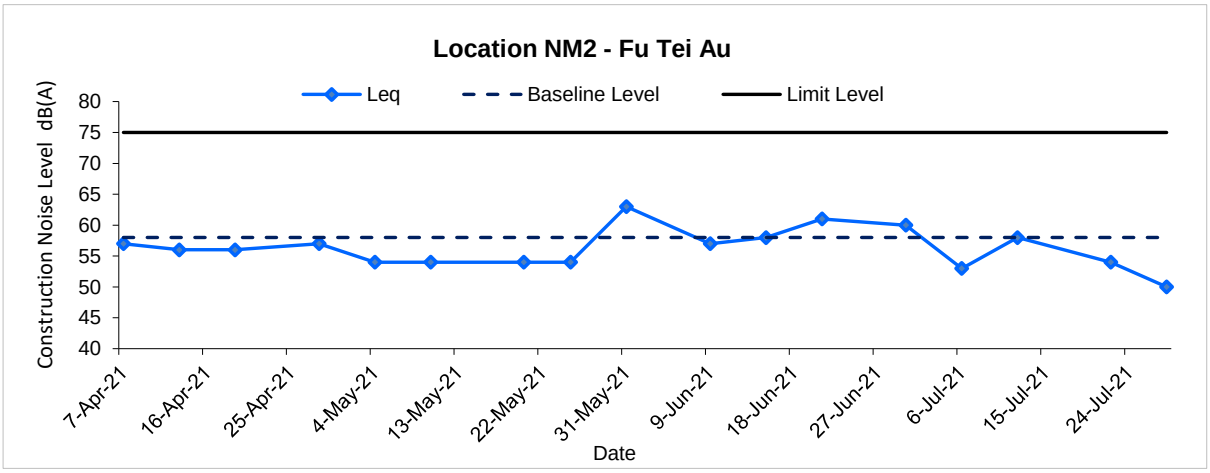
Location NM1 - Wai Loi Tsuen							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
6-Jul-21	9:00	Sunny	53.8	56.4	48.5	63.4	53.8 Measured ≦ Baseline
12-Jul-21	13:30	Cloudy	59.1	61.5	56.5	63.4	59.1 Measured ≦ Baseline
22-Jul-21	9:00	Sunny	59.7	63.9	52.5	63.4	59.7 Measured ≦ Baseline
28-Jul-21	13:50	Cloudy	55.8	58.9	50.2	63.4	55.8 Measured ≦ Baseline

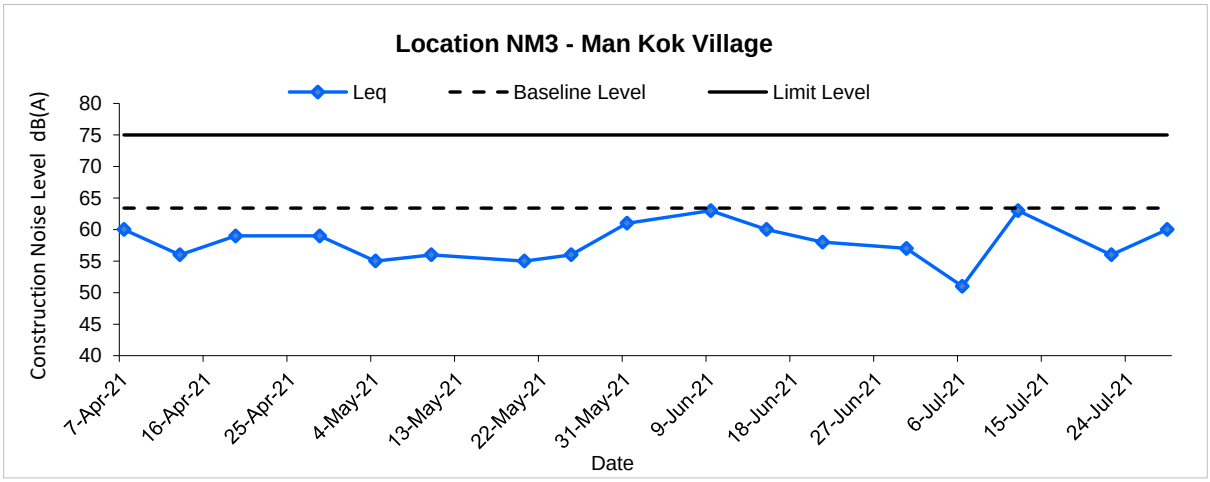
Location NM2 - Fu Tei Au							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
6-Jul-21	14:00	Sunny	52.9	55.0	49.6	58.0	52.9 Measured ≦ Baseline
12-Jul-21	15:45	Cloudy	60.8	63.4	58.1	58.0	57.6
22-Jul-21	14:00	Sunny	53.9	56.0	50.6	58.0	53.9 Measured ≦ Baseline
28-Jul-21	15:10	Cloudy	58.6	61.4	54.7	58.0	49.7

Location NM3 - Man Kok Village							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
6-Jul-21	10:00	Sunny	50.8	53.2	45.2	63.4	50.8 Measured ≦ Baseline
12-Jul-21	14:05	Cloudy	62.9	64.2	59.3	63.4	62.9 Measured ≦ Baseline
22-Jul-21	10:00	Sunny	56.4	57.9	54.5	63.4	56.4 Measured ≦ Baseline
28-Jul-21	14:30	Cloudy	59.5	61.2	55.9	63.4	59.5 Measured ≦ Baseline

Noise Levels







Title	Date	Project
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Graphical Presentation of Construction Noise Monitoring Results	Jul 2021	No. MA19019 Appendix H

CINOTECH

APPENDIX I
ECOLOGICAL MONITORING RESULTS AND ANALYSIS

MA19019 - Ecological Monitoring Result and Analysis

Table I: Recorded Bird Species and their Abundance in the Reporting Month					
Scientific Name	**Common Name**	**Chinese Name**	**Waterbird**	**Point Count Abundance**	**Transect Abundance**
Acridotheres cristatellus	Crested Myna	八哥		155	+++++
Acridotheres tristis	Common Myna	家八哥		0	
Actitis hypoleucos	Common Sandpiper	磯鷸	*	2	+
Alcedo atthis	Common Kingfisher	普通翠鳥	*	0	
Amaurornis phoenicurus	White-breasted Waterhen	白胸苦惡鳥	*	0	+
Anthus hodgsoni	Olive Backed Pipit	樹鷚		3	+
Anthus richardi	Richard's Pipit	理氏鷚		0	
Apus nipalensis	House Swift	小白腰雨燕		3	+
Ardea alba	Great Egret	大白鷺	*	24	+
Ardea cinerea	Grey Heron	蒼鷺	*	0	
Ardeola bacchus	Chinese Pond Heron	池鷺	*	80	+++++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	*	16	+
Buteo japonicus	Eastern Buzzard	普通鳶	*	0	+
Cacomantis merulinus	Plaintive cuckoo	八聲杜鵑		0	
Centropus bengaiensis	Lesser Coucal	小鴉鵑		0	+
Centropus sinensis	Greater Coucal	褐翅鴉鵑		6	+
Ceryle rudis	Pied Kingfisher	斑魚狗	*	0	
Charadrius alexandrinus	Kentish Plover	環頸鴴	*	0	
Charadrius dubius	Little Ringed Plover	金眶鴴	*	0	
Columba livia	Domestic Pigeon	原鴿		0	
Copsychus saularis	Magpie Robin	鵲鴝		4	+
Corvus macrorhynchus	Jungle Crow	大嘴烏鴉		1	+
Corvus torquatus	Collared Crow	白頸鴉	*	1	+
Cuculus micropterus	Indian Cuckoo	四聲杜鵑		0	
Cyanopica cyanus	Azure-winged magpie	灰喜鵲		10	
Dicrurus hottentottus	Hair-crested Drogon	髮冠卷尾		0	
Dicrurus macrocercus	Black Drongo	黑卷尾		1	+
Egretta garzetta	Little Egret	小白鷺	*	142	+++++
Egretta intermedia	Intermediate Egret	中白鷺	*	0	
Emberiza spodocephala	Blacked-face Bunting	灰頭鵐		0	
Eudynamys scolopacea	Common Koel	噪鵑		3	+
Falco tinnunculus	Common Kestrel	紅隼	*	0	
Ficedula albicilla	Red-throated Flycatcher	紅喉姬鶲		0	
Gallinula chloropus	Common Moorhen	黑水雞	*	0	
Garrulax perspicillatus	Masked Laughing Thrush	黑臉噪鸝		18	++
Glareola maldivarum	Oriental pratincole	普通燕鴴	*	0	
Halcyon smyrnensis	White-throated Kingfisher	白胸翡翠	*	4	+
Hierococcyx sparverioides	Large Hawk Cuckoo	大鷹鵑		1	+
Himantopus himantopus	Black-winged Stilt	黑翅長腳鷸	*	0	
Hirundo rustica	Barn Swallow	家燕		18	++
Lanius cristatus	Brown Shrinke	紅尾伯勞		0	
Lanius schach	Rufous-backed Shrike	棕背伯勞		0	
Leiothrix lutea	Red-billed Leiothrix	紅嘴相思鳥		0	
Lonchura punctulata	Spotted Munia	斑文鳥		6	++
Lonchura striata	White-rumped Munia	白腰文鳥		0	
Milvus migrans	Black Kite	黑鳶	*	1	+
Motacilla alba	White Wagtail	白鶺鴒		11	++
Motacilla cinerea	Grey Wagtail	灰鶺鴒		0	
Muscicapa latirostris	Asian Brown Flycatcher	北灰鶲		0	
Myophonus caeruleus	Blue Whistling Thrush	紫嘯鶇		0	
Nycticorax nycticorax	Black-crowned Night Heron	夜鷺	*	0	
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		14	++
Pandion haliaetus	Osprey	魚鷹	*	0	
Parus cinereus	Cinereous Tit	蒼背山雀		0	
Passer montanus	Eurasian Tree Sparrow	樹麻雀		27	+++
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	*	0	
Phoenicurus auroreus	Daurian Redstart	北紅尾鴝		0	
Phylloscopus borealis	Arctic Warbler	極北柳鶯		0	
Phylloscopus fuscatus	Dusky Warbler	褐柳鶯		1	+
Phylloscopus inornatus	Yellow-browed Warbler	黃眉柳鶯		0	+
Phylloscopus proregulus	Pallas's Leaf Warbler	黃腰柳鶯		4	+
Pica pica	Magpie	喜鵲		0	+
Platalea minor	Black-faced Spoonbill	黑臉琵鷺	*	0	
Prinia flaviventris	Yellow-bellied Prinia	黃腹鷦鶯		7	+
Prinia inornata	Plain Prinia	純色鷦鶯		2	
Psittacula eupatria	Alexandrine Parakeet	亞歷山大鸚鵡		0	+
Pycnonotus jocosus	Crested bulbul	紅耳鵯		19	+++
Pycnonotus sinensis	Chinese Bulbul	白頭鵯		4	+
Recurvirostra avosetta	Pied Avocet	反嘴鷸	*	0	
Saxicola stejnegeri	Stejneger's Stonechat	黑喉石鴝		0	
Spatula clypeata	Northern Shoveler	琵嘴鴨	*	0	
Spilornis cheela	Crested Serpent Eagle	蛇鵰	*	0	
Streptopelia chinensis	Spotted Dove	珠頸斑鳩		52	+++
Sturnus nigricollis	Black-necked Starling	黑領椋鳥		32	+++
Tachybaptus ruficollis	Little Grebe	小鸊鷉	*	0	
Tringa glareola	Wood Sandpiper	林鷸	*	0	
Tringa nebularia	Common Greenshank	青腳鷸	*	0	
Tringa ochropus	Green Sandpiper	白腰草鷸	*	0	
Turdus hortulorum	Grey-backed Thrush	灰背鶇		0	
Urocissa erythrorhyncha	Red-billed Blue Magpie	紅咀藍鵲		2	+
Vanellus cinereus	Grey-headed Lapwing	灰頭麥雞	*	0	
Zitting cisticola	Streaked Fantail Warbler	棕扇尾鶯		0	
Zosterops japonicus	Japanese White-eye	暗綠繡眼鳥		17	++
			Total Point Count Abundance	691	
			Total Waterbirds	270	

*For waterbird

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

Remarks: (1) 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, 2018). 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.

MA19019 - Waterbird Ecological Monitoring Result

Monitoring Month Jul
Season Summer

Table II : 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	2 Jul 2021	15:00	High	64	**132**	13
		10:00	Low	68		18
#2	7 Jul 2021	14:30	High	34	**88**	8
		11:00	Low	54		11
#3	16 Jul 2021	13:00	High	74	**189**	15
		9:00	Low	115		18
#4	22 Jul 2021	13:30	High	42	**100**	15
		10:30	Low	58		14
#5	28 Jul 2021	14:00	High	94	**182**	14
		16:00	Low	88		12
				Overall Total	**691**	

Table III: Total Waterbird Abundance from Point Count					
Survey Information				Numbers of Waterbirds	
No.	Date	Time	Tide Level	Individuals Recorded	Total
#1	2 Jul 2021	15:00	High	17	**41**
		10:00	Low	24	
#2	7 Jul 2021	14:30	High	16	**31**
		11:00	Low	15	
#3	16 Jul 2021	13:00	High	17	**65**
		9:00	Low	48	
#4	22 Jul 2021	13:30	High	20	**45**
		10:30	Low	25	
#5	28 Jul 2021	14:00	High	38	**88**
		16:00	Low	50	
				Overall Total	**270**
				Average	**46**

Table IV: T-Test Analysis for All Waterbirds

Baseline Data
Monthly Average Abundance (Jul) 47.25
Seasonal Average Abundance (Summer) 45.34

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 distrubution when compared to the baseline monitoring data.

H_1 The data collected does not falls within the normal distrubution 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)

			Confidence Level	
T-values of Data in Reporting Month			95%	99%
Abundance	Monthly	1.058	✔	✔
	Season	1.357	✔	✔
		Overall:	✔	✔

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.

MA19019 - Waterbird Ecological Monitoring Result

Monitoring Month Jul
Season Summer

Table V: Abundance of Representative Waterbirds from Point Count

Representative Species			Recorded Abundance							Baseline Data	
Species Name	**Common Name**	**Chinese Name**	**2 Jul 2021**	**7 Jul 2021**	**16 Jul 2021**	**22 Jul 2021**	**28 Jul 2021**	**Total**	**Average**	**Avg (Jul)**	**Avg (Summer)**
Egretta garzetta	Little Egret	小白鷺	13	14	31	18	66	142	28	25	21
Ardea cinerea	Grey Heron	蒼鷺	0	0	0	0	0	0	0	0	1
Ardeola bacchus	Chinese Pond Heron	池鷺	18	7	22	22	11	80	16	18	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	3	6	6	3	6	24	5	3	3
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	6	4	4	2	0	16	3	2	3

Table VI: 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 distrubution when compare to the baseline monitoring data.

H_1 The data collected does not falls within the normal distrubution when compare to the baseline monitoring data.

If t-test value for a specific representative 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)

Representative Species			T-value	Confidence Level		T-value	Confidence Level		Overall
Species Name	Common Name	Chinese Name	Monthly	95%	99%	Seasonal	95%	99%	
Egretta garzetta	Little Egret	小白鷺	0.367	✔	✔	0.793	✔	✔	✔
Ardea cinerea	Grey Heron	蒼鷺				N/A*			
Ardeola bacchus	Chinese Pond Heron	池鷺	-0.663	✔	✔	-0.061	✔	✔	✔
Phalacrocorax carbo	Great Cormorant	普通鸕鷀				N/A*			
Ardea alba	Great Egret	大白鷺	3.130	✔	✔	2.987	✔	✔	✔
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	1.422	✔	✔	-0.114	✔	✔	✔

Remarks

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

✔ = 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.

APPENDIX J
PHOTO RECORDS OF ECOLOGICAL MONITORING

Appendix J - Photo Records of Ecological Monitoring

Part A - Conditions of Rivers

Sheung Yue River (Taken on 16 July 2021)

Ng Tung River (Taken on 2 July 2021)

Shek Sheung River (Taken on 16 July 2021)

Part B – Waterbird Species

Ardea alba (Taken on 16 July 2021)

Egretta garzetta (Taken on 2 July 2021)

Ardeola bacchus (Taken on 2 July 2021)

Bubulcus coromandus (Taken on 2 July 2021)

Halcyon smyrnensis (Taken on 16 July 2021)

Actitis hypoleucos (Taken on 28 July 2021)

Part C – Human Activities & Site Conditions

Excavation & Crane (Project-related, taken on 16 July 2021)

Sheet-piling, generator & wielding works (Non-project-related, taken on 22 July 2021)

Excavation (Non-project-related, taken on 2 July 2021)

Scaffolding (Non-project-related, taken on 22 July 2021)

Fishing (Non-project-related, taken on 2 July 2021)

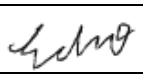
Playing with R.C. Boat (Non-project-related, taken on 16 July 2021)

APPENDIX K
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210706
Date	6 July 2021 (Tuesday)
Time	9:30 – 11:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210629).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		6 July 2021
Checked by	Ms. Betty Choi		7 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210715
Date	15 July 2021 (Thursday)
Time	9:30 – 12:00

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210706).	

	Name	Signature	Date
Recorded by	Mr. Macavity Yau		15 July 2021
Checked by	Ms. Betty Choi		16 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210723
Date	23 July 2021 (Friday)
Time	9:30 – 11:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210715).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		23 July 2021
Checked by	Ms. Betty Choi		26 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210727
Date	27 July 2021 (Tuesday)
Time	9:30 – 11:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210723).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 July 2021
Checked by	Ms. Betty Choi		28 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210706
Date	6 July 2021 (Tuesday)
Time	9:30 – 11:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210629).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		6 July 2021
Checked by	Ms. Betty Choi		7 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210715
Date	15 July 2021 (Thursday)
Time	9:30 – 12:00

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210706).	

	Name	Signature	Date
Recorded by	Mr. Macavity Yau		15 July 2021
Checked by	Ms. Betty Choi		16 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210723
Date	23 July 2021 (Friday)
Time	9:30 – 11:15

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210715).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		23 July 2021
Checked by	Ms. Betty Choi		26 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210727
Date	27 July 2021 (Tuesday)
Time	9:30 – 11:15

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210723).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 July 2021
Checked by	Ms. Betty Choi		28 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210706
Date	6 July 2021 (Tuesday)
Time	10:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210629).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		6 July 2021
Checked by	Ms. Betty Choi		7 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210713
Date	13 July 2021 (Tuesday)
Time	10:00 – 11:00

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210706).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		13 July 2021
Checked by	Ms. Betty Choi		14 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210723
Date	23 July 2021 (Friday)
Time	10:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210713).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		23 July 2021
Checked by	Ms. Betty Choi		26 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210727
Date	27 July 2021 (Tuesday)
Time	10:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210723).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 July 2021
Checked by	Ms. Betty Choi		28 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210706
Date	6 July 2021 (Tuesday)
Time	10:30 – 11:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210629).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		6 July 2021
Checked by	Ms. Betty Choi		7 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210713
Date	13 July 2021 (Tuesday)
Time	10:00 – 11:00

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
210713-R1	• Stagnant water should be removed at Portion B-3-A.	B8
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210706).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		13 July 2021
Checked by	Ms. Betty Choi		14 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210723
Date	23 July 2021 (Friday)
Time	10:30 – 11:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	Following up on the previous site inspection (ref no.: 210713): Item 210713-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		23 July 2021
Checked by	Ms. Betty Choi		26 July 2021

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	210727
Date	27 July 2021 (Tuesday)
Time	10:30 – 11:30

Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	D. Noise	
	• No environmental deficiency was identified during the site inspection.	
	E. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	F. Ecology and Fisheries	
	• No environmental deficiency was identified during the site inspection.	
	G. Landscape and Visual	
	• No environmental deficiency was identified during the site inspection.	
	H. Permits /Licences	
	• No environmental deficiency was identified during the site inspection.	
	I. Others	
	No follow-up items from the previous site inspection (ref no.: 210723).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 July 2021
Checked by	Ms. Betty Choi		28 July 2021

APPENDIX L
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	0.149	0.001	0.002	0.008	0.000	0.081
Jun	0.370	0.000	0.023	0.000	0.348	0.074	8.210	0.000	0.000	0.000	0.069
Sub-total	19.519	0.000	0.263	13.317	5.939	1.103	10.331	0.002	0.023	0.000	0.299
Jul	0.000	0.000	0.000	0.000	0.592	0.058	0.000	0.000	0.010	0.000	0.046
Aug											
Sep											
Oct											
Nov											
Dec											
Total	19.519	0.000	0.263	13.317	6.531	1.161	10.331	0.002	0.033	0.000	0.344

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											
Sep											
Oct											
Nov											
Dec											
Total	8.107	0.000	0.000	0.327	7.780	0.879	60.60	0.010	0.030	0.000	0.073

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											
Sept											
Oct											
Nov											
Dec											
Total	953.76T	0	0	0	953.76T	0	0	0.131	0.007	0	0

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

Notes:
(1) The performance targets are given in PS Clause 6A.27.8(14).
(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
(4) The *Contractor* shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m^3. (PS Clause 6.21.7(4)(b) refer

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											
Sept											
Oct											
Nov											
Dec											
Total	418.12	0	100	0	318.12	0	0	0	0	0	17.47

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

Forecast of Total Quantities of C&D Materials to be Generated from the Contract										
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
(in '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)
918.24	0	200	0	718.24	0	0	4.75	0	0	40.76

Notes: (1) The performance targets are given in PS Clause 6.21.8(14).
(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
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APPENDIX M
EVENT AND ACTION PLANS

Appendix M - Event Action Plans

Table M-1 Event/Action Plan for Air Quality

Event	Action			
	ET	IEC	ER	Contractor
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 Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues,	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.

Appendix M - Event Action Plans

Event	Action			
	ET	IEC	ER	Contractor
	arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring.			
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 ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of 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.
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;	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within three working days of notification;

Appendix M - Event Action Plans

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
	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.	necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	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.	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 M - Event Action Plans

Table M-2 Event/Action Plan for Construction Noise

Event	Action			
	ET	IEC	ER	Contractor
Action Level	1. Notify IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 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. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of	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;	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem;	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;

Appendix M - Event Action Plans

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
	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.	3. Supervise the implementation of remedial measures.	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.	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 M - Event Action Plans

Table M-3 Event/Action Plan for Ecology

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

Appendix M - Event Action Plans

Table M-4 Event/Action Plan for Landscape and Visual

Event	Action			
	ET	IEC	ER	Contractor
Non-conformity on one occasion	1. Inform the Contractor, IEC and ER; 2. Discuss remedial actions with IEC, ER and Contractor 3. Monitor remedial actions until rectification has been completed.	1. Check inspection report; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise ER on effectiveness of proposed remedial measures.	1. Confirm receipt of notification of non-conformity in writing; 2. Review and agree on the remedial measures proposed by the Contractor; 3. Supervise implementation of remedial measures.	1. Identify source and investigate the non-conformity; 2. Implement remedial measures; 3. Amend working methods agreed with ER as appropriate; 4. Rectify damage and undertake any necessary replacement.

Appendix M - Event Action Plans

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

APPENDIX N
ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

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	Status
Air Quality Impact							
S2.3.1.3	Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices:	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) Regulation	^
	Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading;						^
	Any dusty 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;						^
	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;						^

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	Status
S2.3.1.3	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;	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) Regulation	^
	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;						N/A
	Any skip hoist for material transport should be totally enclosed by impervious sheeting;						N/A
	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;						N/A
	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;						N/A
	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						N/A
	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	Status
Noise Impact							
S3.2.1.1	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)	^
S3.2.1.2	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.						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	Status
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 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	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;						^
	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;						^

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	Status
S4.2.1.4	Proper locations for discharge outlets of temporary wastewater treatment facilities well away from sensitive receivers should be identified;	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	^
	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;						N/A
	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.						N/A
	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						^

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	Status
Water Quality Impact							
S5.2.2.1	Construction Site Runoff 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	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	Status
Waste Management							
S6.2.2.1	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	Contractor	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	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	Contractor	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	Status
6.2.4.1	Waste, such as soil, should be handled and stored well to ensure secure containment, thus minimizing the potential of pollution;	Minimize waste impacts arising from waste storage	Contractor	Work Sites	Construction phase of Main Works Stage 1, Stage 2 and Stage 3	WDO	^
	Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and						^
	Different locations should be designated to stockpile each material to enhance reuse.						^
S6.2.4.2	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						^
	Disposal of waste should be done at licensed waste disposal facilities.						^
S6.2.5.2	Maintain temporary stockpiles and reuse excavated fill material for backfilling;	Minimize waste impacts from excavated and C&D materials	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						N/A
	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	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 from building demolition and new building construction	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	^

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	Status
S6.2.5.3	The use of wooden hoardings shall not be allowed. An alternative material, such as metal, aluminium or alloy etc, could be used.	Minimize waste impacts from building demolition and new building construction	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	^
	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	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 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	Status
Landscape and Visual							
S7.3.1.1	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	Status
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	^
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 man-made 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 works should comply with GWO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.						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	Status
S7.3.2.1	MM7 - Compensatory Planting 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	Status
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.	To screen undesirable views of the works site.	Designer	Work Sites	Construction phase		^
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		^

Remarks: EM&A Programme under FEP-02/474/2013	
^	Compliance of mitigation measure;
N/A N/A(1)	Not applicable at this stage; Not observed;
*	Recommendation was made during site audit but improved/retified by the contractor;
#	Recommendation was made during site audit but not yet improved/retified by the contractor;
X	Non-compliance of mitigation measure;
●	Non-compliance but rectified by the contractor.

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

Agreement No. SPW 07/2019

Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix O – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Reporting Month: July 2021

Log Ref.	Location	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
1	Expansion Site of SWHSTP (Portion C)	18 March 2020	Muddy water was suspected to be discharged from the expansion site of SWHSTP to Shek Sheung River, manholes and foul drains nearby	• 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

Appendix O – Summary of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

Log Ref.	Location	Received Date	Details of Complaint/Warning/Summon and Prosecution	Investigation/Mitigation Action	Status
2	SWHEPP	19 February 2021	Significant odour nuisance was suspected to be emitted from the construction activities of SWHEPP	• 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

Remarks: No environmental complaint/warning/summon and prosecution was received in the reporting period.

APPENDIX P
SUMMARY OF EXCEEDANCE

Agreement No. SPW 07/2019
Shek Wu Hui Effluent Polishing Plant – Main Works Stage 1

Appendix P – Summary of Exceedance

Reporting Month: July 2021

(A) Exceedance Report for Air Quality
(NIL in the reporting month)

(B) Exceedance Report for Construction Noise
(NIL in the reporting month)

(C) Exceedance Report for Ecology
(NIL in the reporting month)

APPENDIX Q
TENTATIVE CONSTRUCTION PROGRAMME

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
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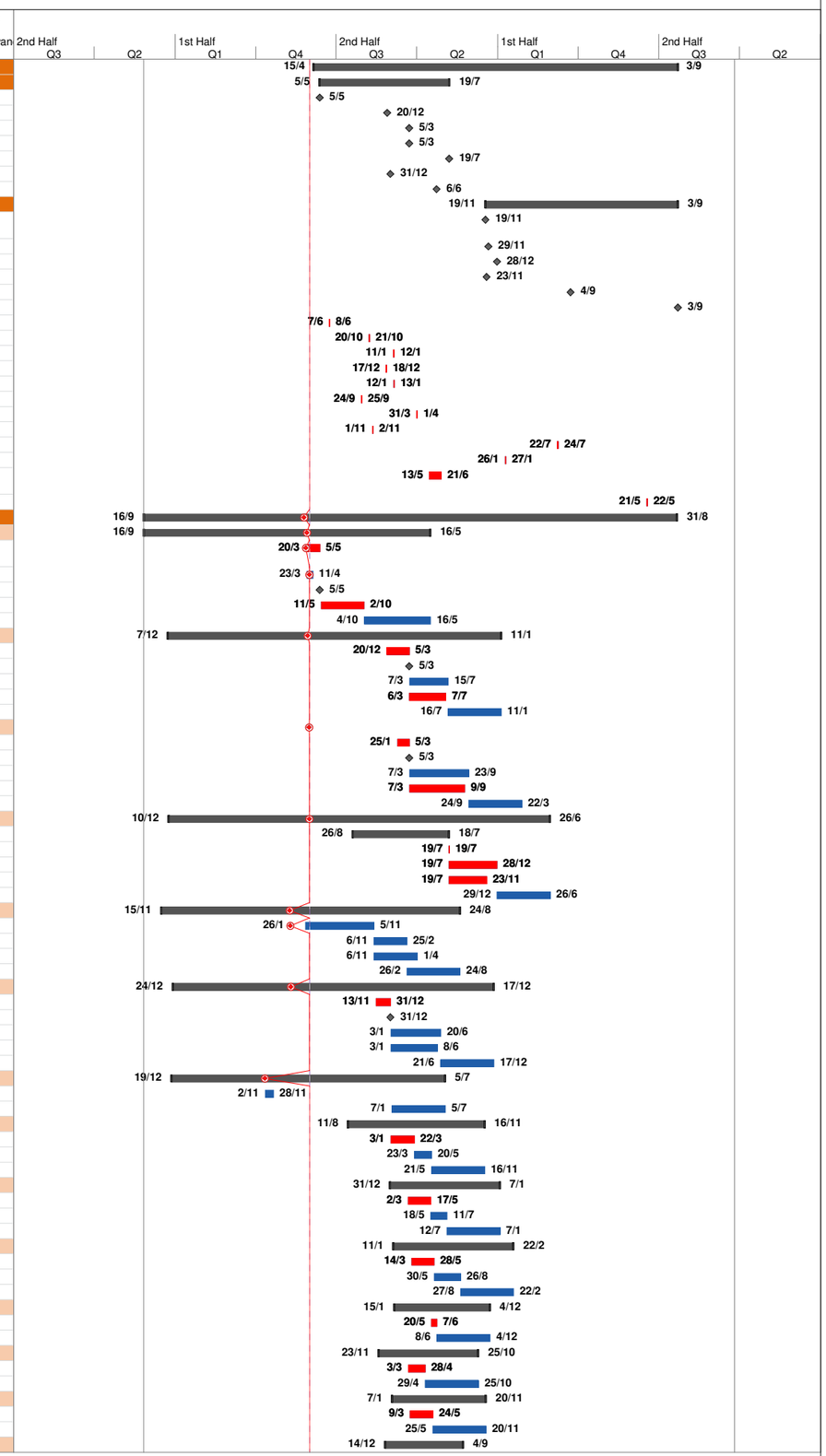
ID	Activity ID	KD	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowan
34	**PD-00000**	*	**Planned Completion - Key Date (cal. day)**			**1238 days**	**Thu 15/4/21**	**Tue 3/9/24**	**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,478,47!	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,478,47!	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%**	



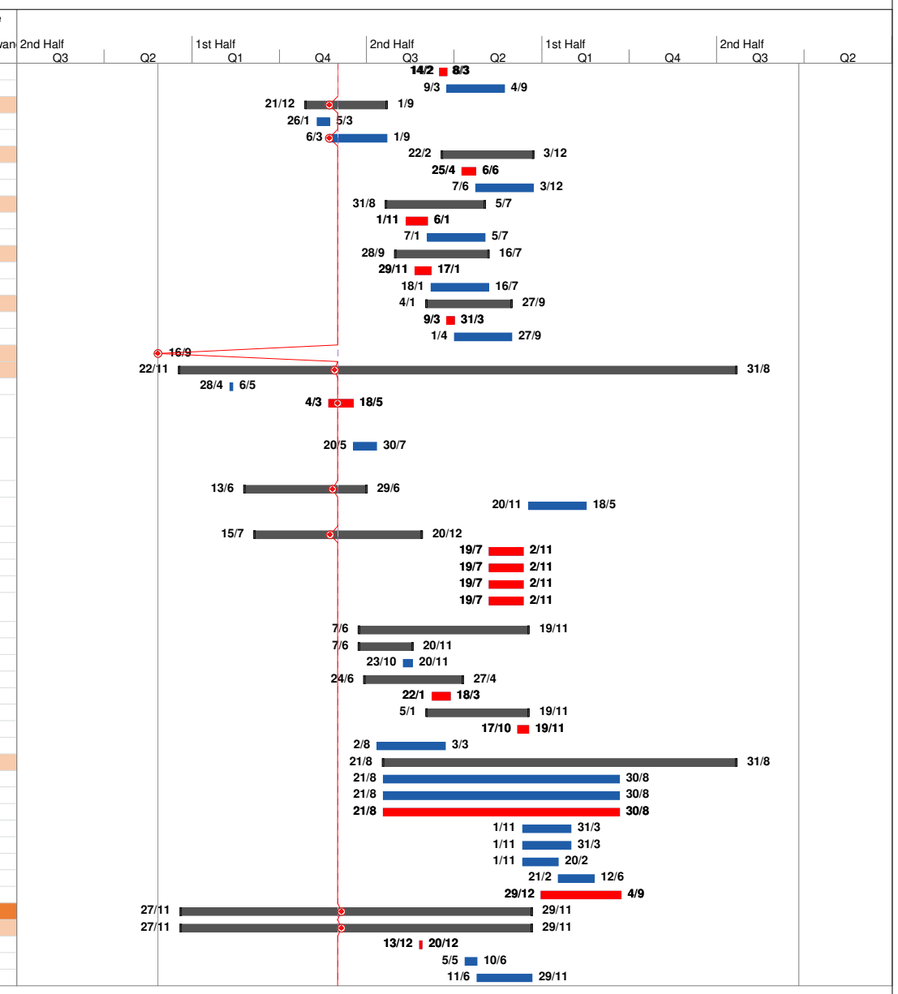
Critical Split | Task | Milestone | Summary | Critical

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 C1-1B, 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%	

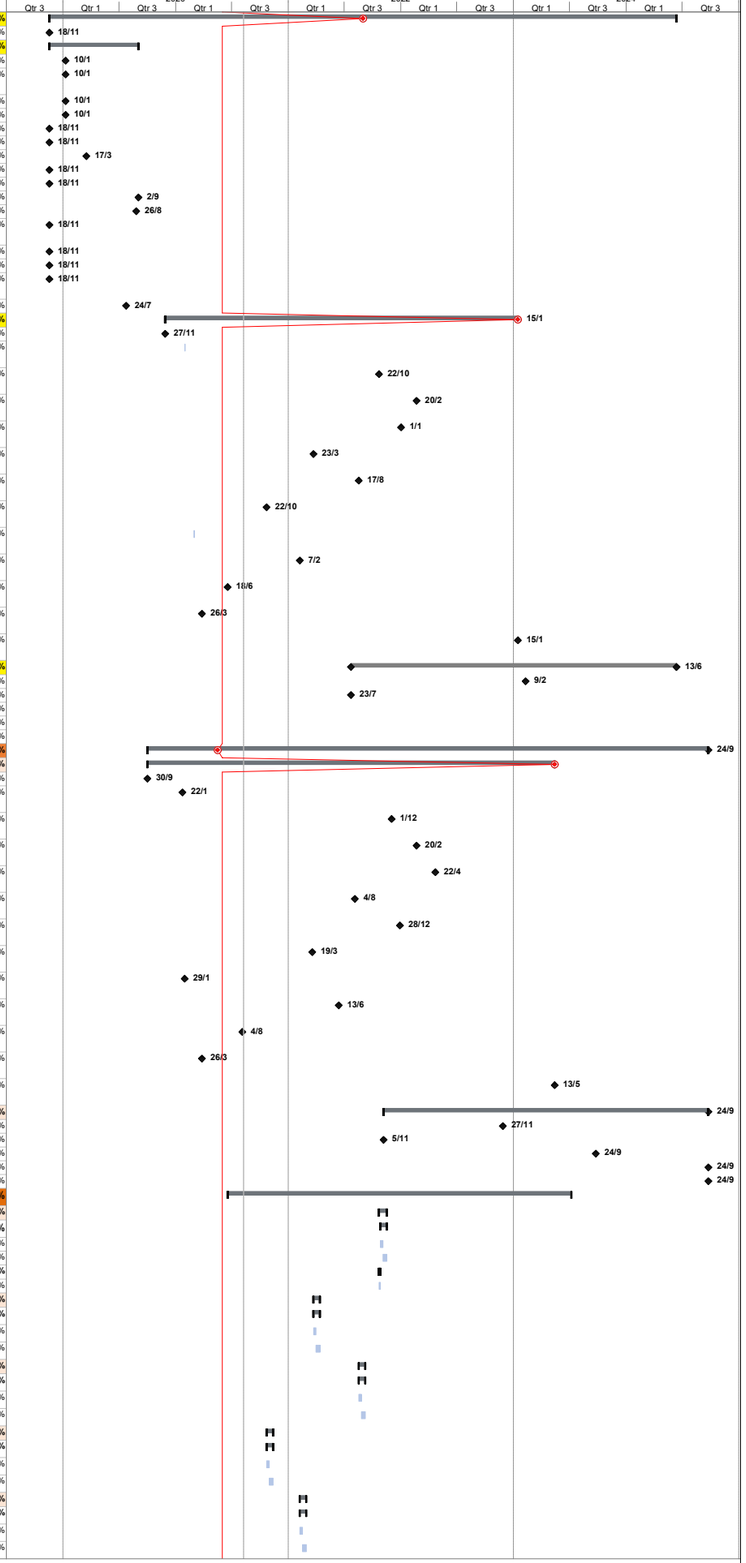


Critical Split · · · · · · · · · · · · · · · Task ▬▬▬ Milestone ◆ Summary ▬▬▬ Critical ▬▬▬

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

Revised Works Programme (Status Date: 31/05/2021)

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	197	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	291,302	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	331	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	349	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	398,415,421	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	430	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	457	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	535FS-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	537FS-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	528	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	538,552	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		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	70	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	74	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	78	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	82	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	NA	NA	2FS+578.5 days	89	1547.5 days		0%
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	95	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**			**78.5 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	101	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	107	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	NA	NA	2FS+1668.5 days	39FS+1 day,113,38FS+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**		**1%**
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	206FF		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	282FF,287FF,269FF		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	326FF,318FF,244FF,290FF,208FF,246FF		-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	345FF,344FF,347FF,329FF		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	387FF,393FF,389FF,392FF,388FF		-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	426FF		-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	427FF		-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	455FF,454FF		-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	535FF		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	492FF,491FF,517FF,516FF,509FF,508FF		-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	541FF,539FF		-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	528FF,532FF,533FF,534FF		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	551FF,553FF		-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	518FF,510FF,473FF,500FF,484FF,456FF		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	545FF,395FF,429FF,348FF,330FF,546FF		-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	554FF,555FF,537FF,536FF		-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	556FF,149FF		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	556FF		0 days		0%
61	**ET-1000**		**Effects from Inclement Weather and Other Time Affected Events**			**0 days**	**NA**	**NA**	**1115 days**	**Fri 18/6/21**	**Sun 7/7/24**	**NA**	**NA**			**444.5 days**		**0%**
62	**ET1C-1000**		**Effects to KD1C**			**0 days**	**NA**	**NA**	**25 days**	**Sat 22/10/22**	**Wed 16/11/22**	**NA**	**NA**			**1043.5 days**		**0%**
63	**ET1C-1100**		**Inclement Weather to KD1C (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Wed 26/10/22**	**Wed 16/11/22**	**NA**	**NA**			**1043.5 days**		**0%**
64	ET1C-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Wed 26/10/22	Thu 3/11/22	NA	NA	67	65	1043.5 days		0%
65	ET1C-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Thu 3/11/22	Wed 16/11/22	NA	NA	64		1043.5 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**			**1043.5 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	**ET1F-1000**		**Effects to KD1F**			**0 days**	**NA**	**NA**	**21 days**	**Wed 23/3/22**	**Wed 13/4/22**	**NA**	**NA**			**1260.5 days**		**0%**
69	**ET1F-1100**		**Inclement Weather to KD1F (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Wed 23/3/22**	**Wed 13/4/22**	**NA**	**NA**			**1260.5 days**		**0%**
70	ET1F-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Wed 23/3/22	Thu 31/3/22	NA	NA	26	71	1260.5 days		0%
71	ET1F-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Thu 31/3/22	Wed 13/4/22	NA	NA	70		1260.5 days		0%
72	**ET1G-1000**		**Effects to KD1G**			**0 days**	**NA**	**NA**	**21 days**	**Wed 17/8/22**	**Wed 7/9/22**	**NA**	**NA**			**1113.5 days**		**0%**
73	**ET1G-1100**		**Inclement Weather to KD1G (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Wed 17/8/22**	**Wed 7/9/22**	**NA**	**NA**			**1113.5 days**		**0%**
74	ET1G-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Wed 17/8/22	Thu 25/8/22	NA	NA	27	75	1113.5 days		0%
75	ET1G-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Thu 25/8/22	Wed 7/9/22	NA	NA	74		1113.5 days		0%
76	**ET1H-1000**		**Effects to KD1H**			**0 days**	**NA**	**NA**	**21 days**	**Fri 22/10/21**	**Fri 12/11/21**	**NA**	**NA**			**1412.5 days**		**0%**
77	**ET1H-1100**		**Inclement Weather to KD1H (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Fri 22/10/21**	**Fri 12/11/21**	**NA**	**NA**			**1412.5 days**		**0%**
78	ET1H-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Fri 22/10/21	Sat 30/10/21	NA	NA	28	79	1412.5 days		0%
79	ET1H-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Sat 30/10/21	Fri 12/11/21	NA	NA	78		1412.5 days		0%
80	**ET1H-1000**		**Effects to KD1J**			**0 days**	**NA**	**NA**	**21 days**	**Mon 7/2/22**	**Mon 28/2/22**	**NA**	**NA**			**1304.5 days**		**0%**
81	**ET1H-1100**		**Inclement Weather to KD1J (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Mon 7/2/22**	**Mon 28/2/22**	**NA**	**NA**			**1304.5 days**		**0%**
82	ET1H-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Mon 7/2/22	Tue 15/2/22	NA	NA	30	83	1304.5 days		0%
83	ET1H-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Tue 15/2/22	Mon 28/2/22	NA	NA	82		1304.5 days		0%

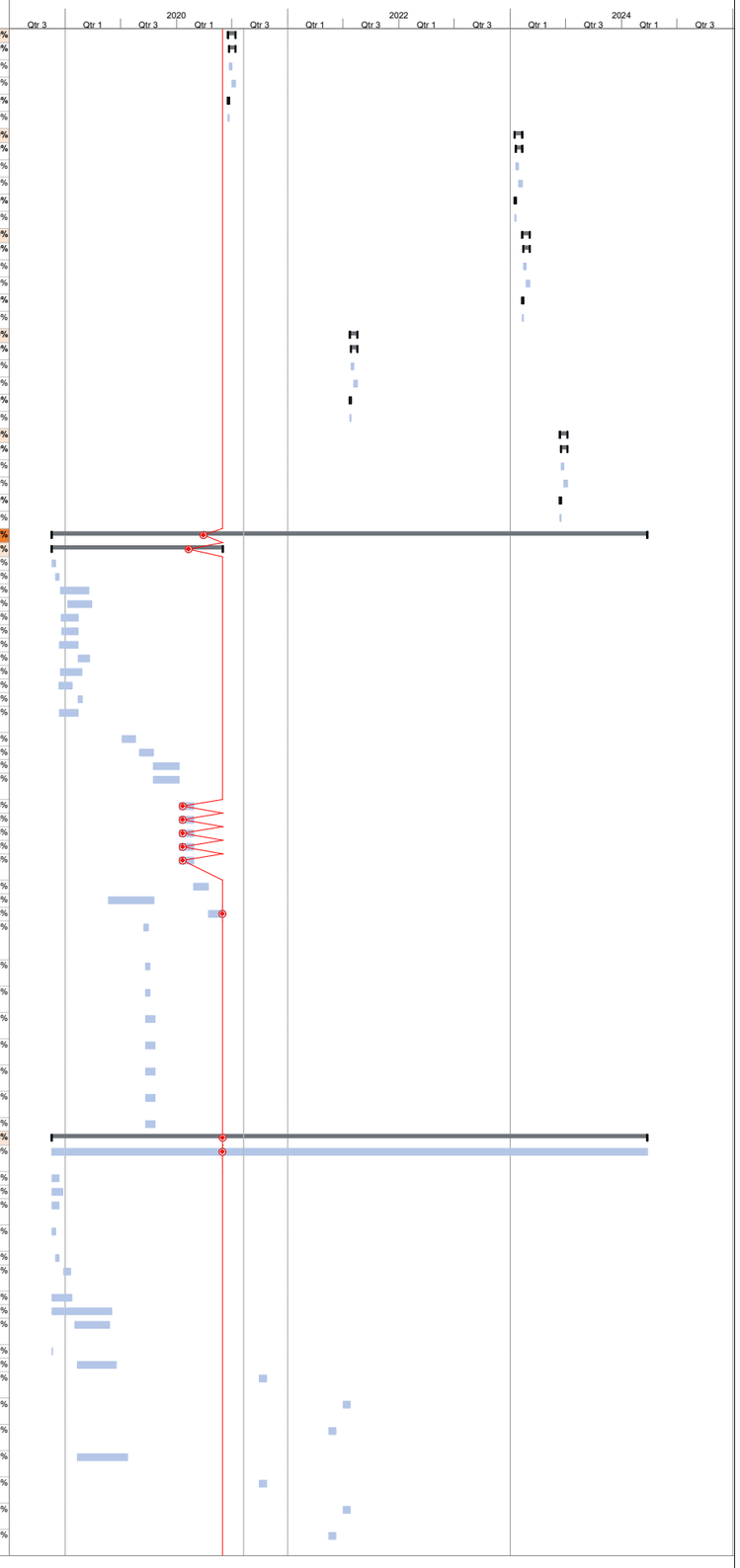


File: DC201807_Revised Works Progr | Task | Milestone | Summary | Critical

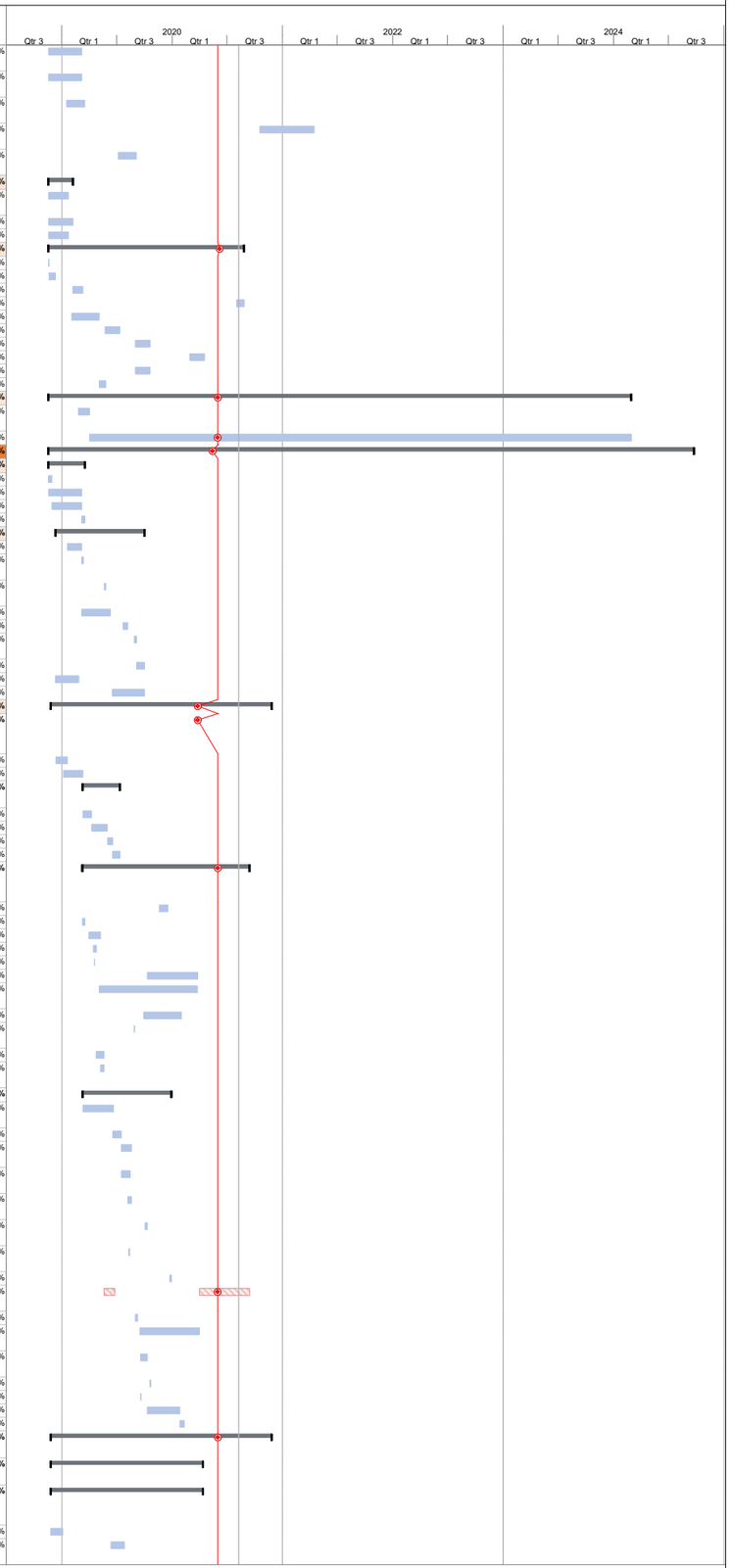
Data Date: 31/05/2021

Revision Date: 06/08/2021

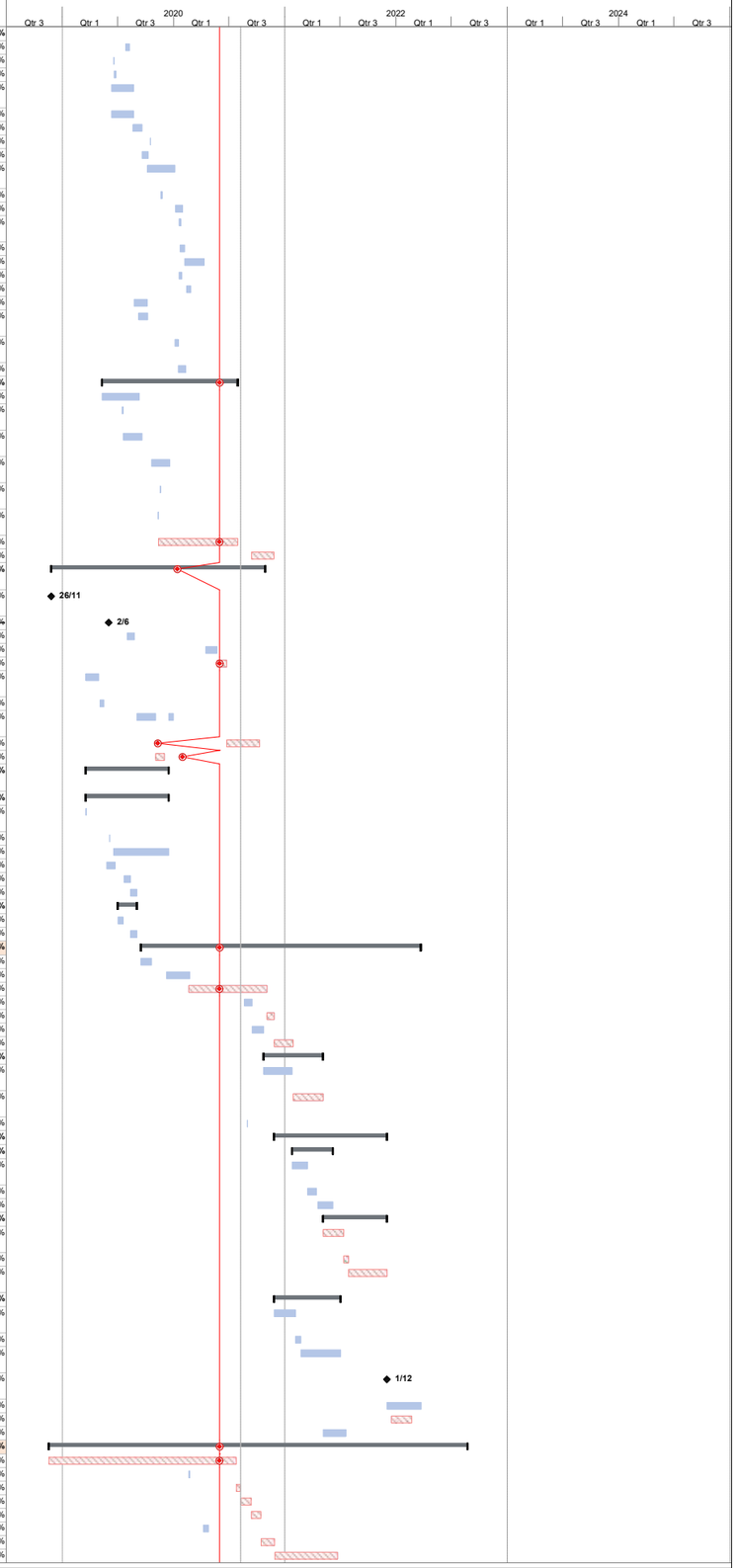
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
84	**ET2A-1000**		**Effects to KD2A**			**0 days**	**NA**	**NA**	**25 days**	**Fri 18/6/21**	**Tue 13/7/21**	**NA**	**NA**			**1534.5 days**		**0%**
85	**ET2A-1100**		**Inclement Weather to KD2A (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Tue 22/6/21**	**Tue 13/7/21**	**NA**	**NA**			**1534.5 days**		**0%**
86	ET2A-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Tue 22/6/21	Wed 30/6/21	NA	NA	89	87	1534.5 days		0%
87	ET2A-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Wed 30/6/21	Tue 13/7/21	NA	NA	86		1534.5 days		0%
88	**ET2A-1200**		**Other Events to KD2A (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Fri 18/6/21**	**Tue 22/6/21**	**NA**	**NA**			**1534.5 days**		**0%**
89	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	NA	NA	31	86	1547.5 days		0%
90	**ET3A-1000**		**Effects to KD3A**			**0 days**	**NA**	**NA**	**25 days**	**Tue 16/1/24**	**Fri 9/2/24**	**NA**	**NA**			**593 days**		**0%**
91	**ET3A-1100**		**Inclement Weather to KD3A (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Sat 20/1/24**	**Fri 9/2/24**	**NA**	**NA**			**593 days**		**0%**
92	ET3A-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Sat 20/1/24	Sat 27/1/24	NA	NA	95	93	593 days		0%
93	ET3A-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Sun 28/1/24	Fri 9/2/24	NA	NA	92		593 days		0%
94	**ET3A-1200**		**Other Events to KD3A (not all)**			**0 days**	**NA**	**NA**	**4 days**	**Tue 16/1/24**	**Fri 19/1/24**	**NA**	**NA**			**593 days**		**0%**
95	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	92	606 days		0%
96	**ETS1-1000**		**Effects to Section 1 of the Works**			**0 days**	**NA**	**NA**	**25 days**	**Fri 9/2/24**	**Tue 5/3/24**	**NA**	**NA**			**568.5 days**		**0%**
97	**ETS1-1100**		**Inclement Weather to Section 1 of the Works (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Tue 13/2/24**	**Tue 5/3/24**	**NA**	**NA**			**568.5 days**		**0%**
98	ETS1-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Tue 13/2/24	Wed 21/2/24	NA	NA	101	99	568.5 days		0%
99	ETS1-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Wed 21/2/24	Tue 5/3/24	NA	NA	98		568.5 days		0%
100	**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**			**568.5 days**		**0%**
101	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	98	581.5 days		0%
102	**ETS2-1000**		**Effects to Section 2 of the Works**			**0 days**	**NA**	**NA**	**25 days**	**Sat 23/7/22**	**Wed 17/8/22**	**NA**	**NA**			**1134.5 days**		**0%**
103	**ETS2-1100**		**Inclement Weather to Section 2 of the Works (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Wed 27/7/22**	**Wed 17/8/22**	**NA**	**NA**			**1134.5 days**		**0%**
104	ETS2-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Wed 27/7/22	Thu 4/8/22	NA	NA	107	105	1134.5 days		0%
105	ETS2-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Thu 4/8/22	Wed 17/8/22	NA	NA	104		1134.5 days		0%
106	**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**			**1134.5 days**		**0%**
107	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	104	1147.5 days		0%
108	**ETS3-1000**		**Effects to Section 3 of the Works**			**0 days**	**NA**	**NA**	**25 days**	**Wed 12/6/24**	**Sun 7/7/24**	**NA**	**NA**			**444.5 days**		**0%**
109	**ETS3-1100**		**Inclement Weather to Section 3 of the Works (cal. Day)**			**0 days**	**NA**	**NA**	**21 days**	**Sun 16/6/24**	**Sun 7/7/24**	**NA**	**NA**			**444.5 days**		**0%**
110	ETS3-1110		Delay and Disruption of Works before May 2021			0 days	NA	NA	8 days	Sun 16/6/24	Mon 24/6/24	NA	NA	113	111	444.5 days		0%
111	ETS3-1120		Delay and Disruption of Works in May 2021			0 days	NA	NA	13 days	Mon 24/6/24	Sun 7/7/24	NA	NA	110		444.5 days		0%
112	**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**			**444.5 days**		**0%**
113	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	110	457.5 days		0%
114	**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**		**57%**
115	**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**	**NA**			**1576 days**		**87%**
116	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	117	0 days		100%
117	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	116	138,118,121,120,119	0 days		100%
118	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	117,150	335,458,291,398,535,355	0 days		100%
119	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	117	208	0 days		100%
120	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	117,150	210,122	0 days		100%
121	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	117,150	155,194,125,126,127,123	0 days		100%
122	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	120	123,206	0 days		100%
123	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	121,122	448,338,410,124	0 days		100%
124	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	123		0 days		100%
125	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	121	189	0 days		100%
126	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	121	189	0 days		100%
127	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	121	128,129	0 days		100%
128	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	127	339,411,449,305	0 days		100%
129	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	127	340,451,130,131	0 days		100%
130	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	129		0 days		100%
131	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	129	342,385,452,132,133,134,135,136,4	0 days		100%
132	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	NA	131		1672 days		25%
133	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	NA	131	344	587 days		25%
134	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	NA	131	387	456 days		25%
135	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	NA	131	422	203 days		25%
136	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	NA	131	137	1672 days		25%
137	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	136	328,346,394,456,484,500,510,518,'	0 days		100%
138	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	117	528,545,547,548,549,550,539	0 days		100%
139	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	NA	137	555,556	829 days		98%
140	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		351	0 days		100%
141	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%
142	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		435	0 days		100%
143	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%
144	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		449	0 days		100%
145	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		437	0 days		100%
146	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%
147	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		442	0 days		100%
148	**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**		**48%**
149	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		29%
150	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	118,121,120	0 days		100%
151	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%
152	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	197	0 days		100%
153	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	154	0 days		100%
154	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	153	209,210	0 days		100%
155	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	121		0 days		100%
156	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	398,335,458,291,535	0 days		100%
157	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%
158	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	335,458,535,355	0 days		100%
159	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%
160	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%
161	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	310SF		1433 days		0%
162	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	342SF		1158 days		0%
163	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	385SF		1205 days		0%
164	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%
165	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	310SF		1433 days		0%
166	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	342SF		1158 days		0%
167	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	385SF		1205 days		0%



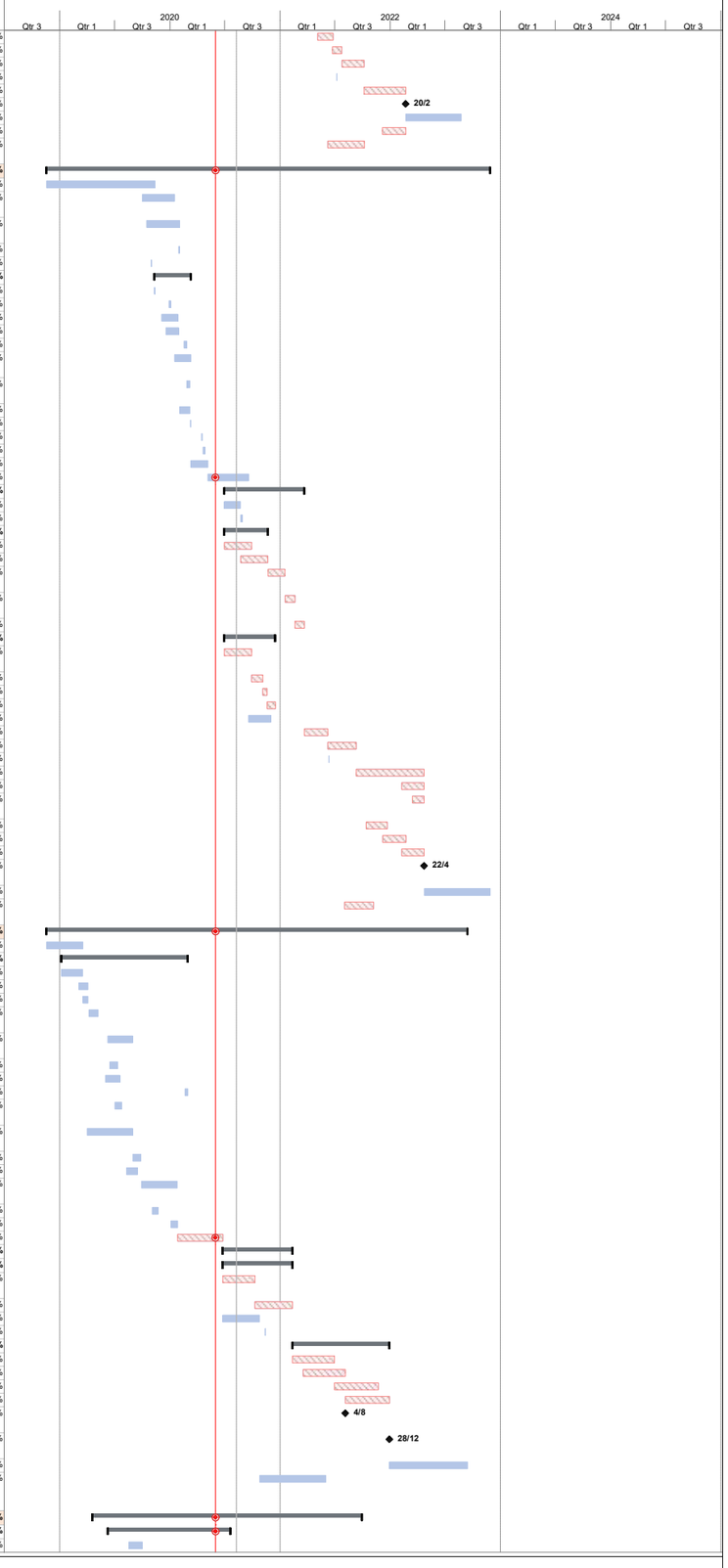
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
168	SUBA-1140		Prepare and submit Pre-construction 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	194		0 days		100%
169	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	194FS+120 days		0 days		100%
170	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%
171	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		537	332 days		0%
172	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		535	0 days		100%
173	**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%**
174	SUBE-1010		Prepare, submit & approve Site Management Plan for Trip Tricket 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%
175	SUBE-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%
176	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%
177	**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%**
178	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	179	0 days		100%
179	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	178	180,181,182,183,184,185,186,187	0 days		100%
180	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	179	208,528,547,548,550,549,545,553,5	0 days		100%
181	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	179	325,321	278 days		0%
182	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	179	387,422	0 days		100%
183	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	179	387,422	0 days		100%
184	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	179	387,422	0 days		100%
185	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	179	328,346,394,456,484,500,510,518,4	0 days		100%
186	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	179	387,422	0 days		100%
187	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	179		0 days		100%
188	**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**		**25%**
189	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	125,126	190	0 days		100%
190			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	189		178 days		24%
191	**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**		**46%**
192	**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%**
193	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	194	0 days		100%
194	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	121,193	195,168,169FS+120 days,196	0 days		100%
195	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	194		0 days		100%
196	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	194		0 days		100%
197	**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**	**4,152**		**0 days**		**100%**
198	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		199	0 days		100%
199	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	198	200	0 days		100%
200	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	199	201	0 days		100%
201	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	200	202	0 days		100%
202	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	201	203	0 days		100%
203	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	202	204	0 days		100%
204	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	203	206	0 days		100%
205	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		206	0 days		100%
206	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	122,205,204	42FF	0 days		100%
207	**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**		**82%**
208	**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**	**180,119**	**44FF**	**75 days**		**81%**
209	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	154	210SS,212	0 days		100%
210	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	154,209SS,120	228,247	0 days		100%
211	**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%**
212	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	209	213	0 days		100%
213	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	212	214	0 days		100%
214	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	213	215FS-1 day	0 days		100%
215	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	214FS-1 day		0 days		100%
216	**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**		**94%**
217	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		218	0 days		100%
218	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	217	219	0 days		100%
219	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	218	226,220,221	0 days		100%
220	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	219	226	0 days		100%
221	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	219		0 days		100%
222	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%
223	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%
224	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		303,305,275,276	0 days		100%
225	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%
226	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	219,220	227	0 days		100%
227	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	226	228,229	0 days		100%
228	**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**	**210,227**		**0 days**		**100%**
229	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	227	230	0 days		100%
230	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	229	231,243	0 days		100%
231	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	230	234,239,243	0 days		100%
232	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%
233	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		234,239	0 days		100%
234	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	233,231	235	0 days		100%
235	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	234	237	0 days		100%
236	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		237	0 days		100%
237	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	235,239,238,240,236	279	-135 days		78%
238	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		237	0 days		100%
239	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	231,233	237	0 days		100%
240	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		241,243,237	0 days		100%
241	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	240		0 days		100%
242	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%
243	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	230,231,240	244	0 days		100%
244	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	243	303,44FF	0 days		100%
245	**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**		**92%**
246	**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**	**274**	**303,44FF**	**0 days**		**100%**
247	**CIW-1500a**		**Diversion of Tank Drain MHD9.5 to MHA04 (approx. 70m 675mm dia convete 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**	**210**		**0 days**		**100%**
248	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%
249	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%



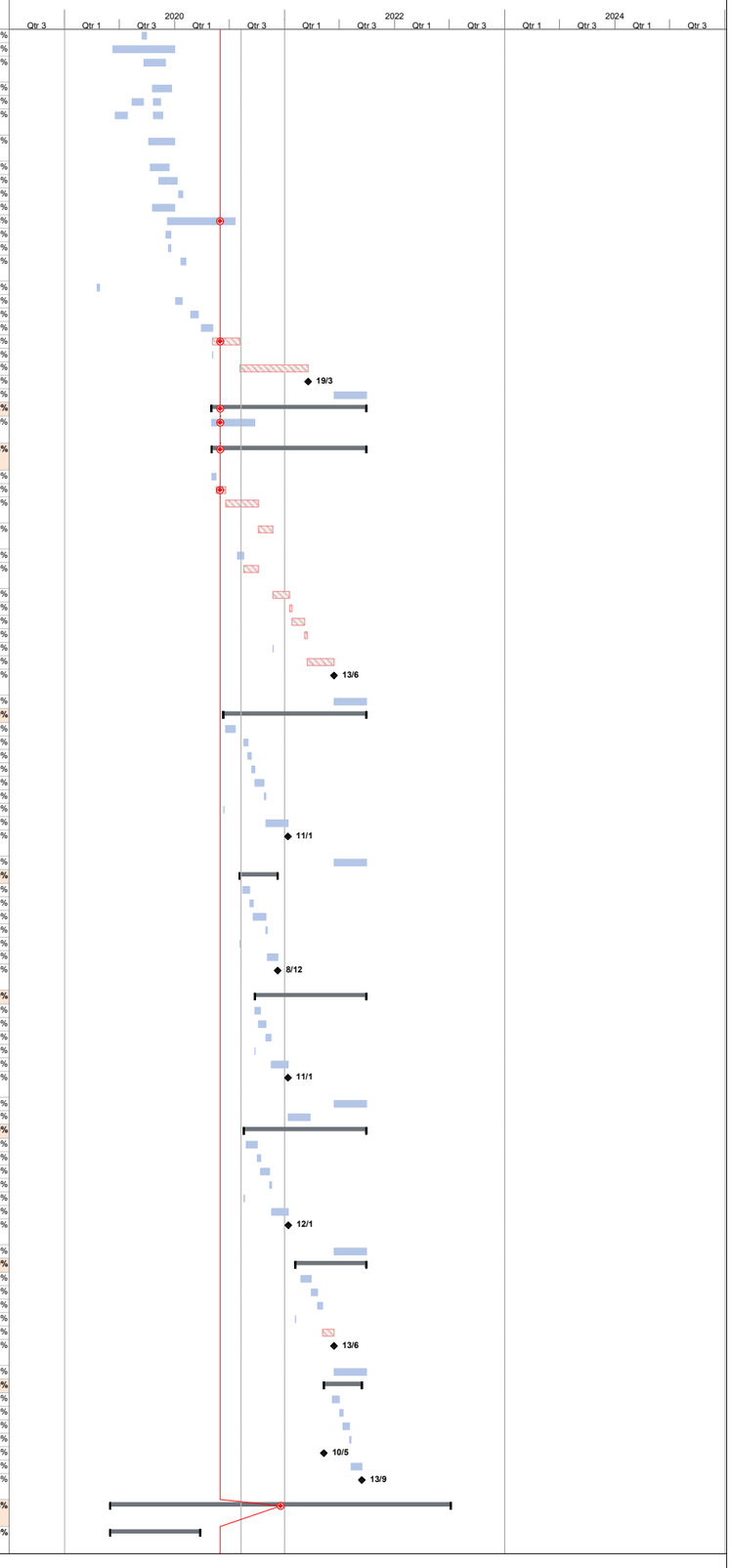
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
250	**CIW-1511**		**Tank Drain Diversion near MTRCL 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%**
251	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		252,256	0 days		100%
252	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	251		0 days		100%
253	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		254	0 days		100%
254	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	253	255	0 days		100%
255	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	254		0 days		100%
256	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	251		0 days		100%
257	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%
258	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%
259	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%
260	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%
261	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%
262	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%
263	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%
264	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%
265	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%
266	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%
267	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		268,269	0 days		100%
268	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	267		0 days		100%
269	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	267	43FF,303	0 days		100%
270	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%
271	**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**		**92%**
272	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		273	0 days		100%
273	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	272	274	0 days		100%
274	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	273	246	0 days		100%
275	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	224		0 days		100%
276	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	224		0 days		100%
277	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		278	0 days		100%
278	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	277	303,44FF	-36 days		81%
279	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	237		-135 days		0%
280	**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**			**-105 days**		**31%**
281	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%
282	~~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,28Z~~	~~0 days~~		~~100%~~
283	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		284	0 days		100%
284	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	283	285	0 days		100%
285	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	NA	284	286,289	-6 days		27%
286	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	285	287,288	0 days		100%
287	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	286,282	43FF	0 days		100%
288	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	286,292,297,299,301		0 days		100%
289	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	285	290	-111 days		0%
290	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	289	44FF	-111 days		25%
291	**CIW-2000**		**Decommission and Demolition of Existing Facilitates 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**	**6,118,156**		**0 days**		**100%**
292	**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**		**288**	**0 days**		**100%**
293	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%
294	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		295	0 days		100%
295	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	294	297	0 days		100%
296	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%
297	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	295	298,299,288,300	0 days		100%
298	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	297		0 days		100%
299	**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**	**297**	**288**	**0 days**		**100%**
300	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	297	301	0 days		100%
301	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	300	**288**	0 days		100%
302	**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**		**14%**
303	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	244,246,269,224,278		0 days	1	100%
304	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%
305	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	224,128	306SS+150 days,307	-34 days	5	39%
306	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	305SS+150 days	308	83 days		0%
307	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	305	324,309	-34 days		0%
308	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	306	311	83 days		0%
309	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	307	312	-34 days		0%
310	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**		**330,161SF,165SF**	**3 days**	**5**	**0%**
311	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	308	316,329	83 days		0%
312	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	309	320	-34 days		0%
313	CIW-3590		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Mon 30/8/21	Mon 30/8/21	NA	NA	314SS-3 emons		1211 days		0%
314	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**		**313SS-3 emons,328**	**-34 days**	**5**	**0%**
315	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%**
316	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	311	317	114 days		0%
317	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	316	318	114 days		0%
318	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	317	44FF,327,520	114 days		0%
319	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%**
320	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	312	321	-34 days		0%
321	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	320,181	322	-34 days		0%
322	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	321	327	-34 days		0%
323	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%**
324	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	307	325	93 days		0%
325	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	324,181	326	93 days		0%
326	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	325	328,44FF,327	93 days		0%
327	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	326,318,322	44FF	-34 days		0%
328	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	326,185,137,314	56FF	262 days		0%
329	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	311,347FF	45FF	0 days		0%
330	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	310	57FF,551	3 days		0%
331	**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**		**40%**
332	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	NA	2	335,334	-75 days		91%
333	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	Mon 22/2/21				0 days		100%
334	CPS-1200		Removal of residual sludge			0 days	NA	NA	12 days	Mon 26/7/21	Sat 7/8/21	NA	NA	332	335	-62 days		0%
335	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	118,156,158,332,334	338,336	-62 days		0%
336	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	335	338	-62 days		0%
337	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		339	0 days		100%
338	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	123,448,335,336	339	-62 days	1	0%
339	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	128,449,337,338	340FS-40 days,342,341	-62 days	5	0%



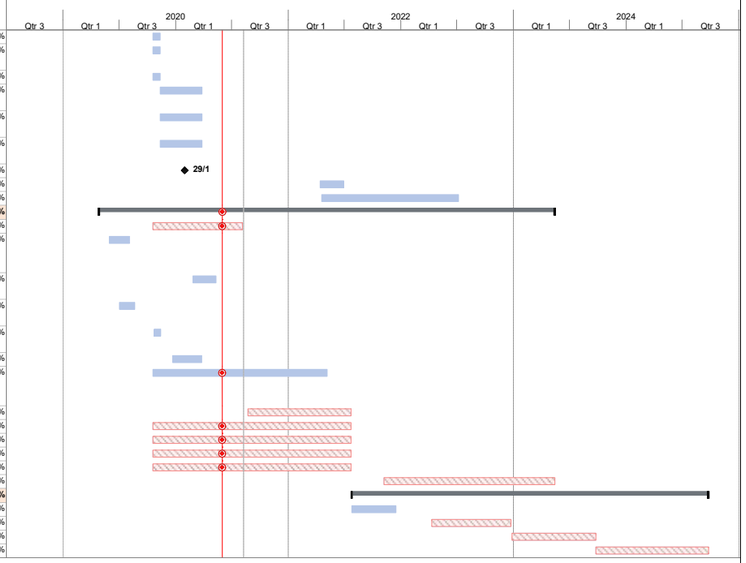
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
340	CPS-5000		Sheetpile Installation (FSP-II, 3360sq.m, 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	339FS-40 days,129	342,348SS+27 days	-62 days		0%
341	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	339	342	0 days		0%
342	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	339,131,341,340	343FF-3 emons,344,162SF,166SF	0 days	3	0%
343	CPS-7900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 7/7/22	Thu 7/7/22	NA	NA	342FF-3 emons	344SS-3 emons	186 days		0%
344	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	133,342,343SS-3 emons	345,346,45FF,347FF	0 days	3	0%
345	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	344	45FF	0 days		0%
346	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	344,185,137	56FF	139 days		0%
347	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	344FF	45FF,329FF	0 days		0%
348	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	340SS+27 days	57FF,551	-62 days		0%
349	**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**		**35%**
350	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%
351	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	140	361	0 days		100%
352	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		362	0 days		100%
353	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	359	354	0 days		100%
354	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	353	362	0 days		100%
355	**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**	**118,158**		**0 days**		**100%**
356	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		357,361	0 days		100%
357	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	356		0 days		100%
358	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	359	362	0 days		100%
359	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	360	353,358	0 days		100%
360	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	361	362,359	0 days		100%
361	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	351,356	360	0 days		100%
362	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	358,354,360,352	363SS,364	0 days		100%
363	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	362SS	364	0 days		100%
364	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	362,363	365,367	0 days		100%
365	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	364		0 days		100%
366	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%
367	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	364	368	0 days	1	100%
368	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	367	378SS+30 days,373SS+45 days,37	1 day	5	19%
369	CBR-7100		**External works between BR2 and MFB2**			**0 days**	**NA**	**NA**	**217 days**	**Wed 30/6/21**	**Mon 21/3/22**	**NA**	**NA**			**-88 days**		**0%**
370	CBR-7110		DN700 (CHER)RAS Diversion			0 days	NA	NA	45 days	Wed 30/6/21	Sat 21/8/21	NA	NA	368SS+45 days	371	1212 days		0%
371	CBR-7120		Temporary vehicle diversion for RAS operation			0 days	NA	NA	6 days	Mon 23/8/21	Sat 28/8/21	NA	NA	370		1212 days		0%
372	CBR-7130		**DN600 Temporary Sewage diversion**			**0 days**	**NA**	**NA**	**120 days**	**Wed 30/6/21**	**Sat 20/11/21**	**NA**	**NA**			**-88 days**		**0%**
373	CBR-7131		2nos. Manhole Construction (MHTD1 and MHTD2)		204, 353	0 days	NA	NA	75 days	Wed 30/6/21	Mon 27/9/21	NA	NA	368SS+45 days	374FS-30 days	-88 days		0%
374	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	373FS-30 days	375	-88 days		0%
375	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	374	376	-88 days		0%
376	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	375	377	-88 days		0%
377	CBR-7160		Pile load test			26 days	NA	NA	26 days	Sat 19/2/22	Mon 21/3/22	NA	NA	376,382	385,384	-88 days		0%
378	CBR-7200		**External works between BR2 and PST**			**0 days**	**NA**	**NA**	**141 days**	**Wed 30/6/21**	**Wed 15/12/21**	**NA**	**NA**	**368SS+30 days**		**-38 days**		**0%**
379	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	NA	NA	368SS+45 days	380	-38 days		0%
380	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	379	381	-38 days		0%
381	CBR-7230		Demolition of existing side wall		336	0 days	NA	NA	12 days	Thu 4/11/21	Wed 17/11/21	NA	NA	380	382	-38 days		0%
382	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	381	377	-38 days		0%
383	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	368	384	1 day		0%
384	CBR-8000		Sheetpile Installation (3000sq.m, 1rigs, 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	377,383	385	-88 days		0%
385	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	131,377,384	387,386FF-3 emons,395SS+46 day	-88 days	3	0%
386	CBR-10900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Sat 11/6/22	Sat 11/6/22	NA	NA	385FF-3 emons	387SS-3 emons	168 days		0%
387	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	134,182,183,186,184,385,386SS-3 emons	394,46FF,393,389FF,390SS+25 da	-88 days	5	0%
388		KD1E	Process Pipe CHO chainage 65-140			0 days	NA	NA	60 days	Wed 8/2/23	Sat 22/4/23	NA	NA	387FF	46FF	-88 days		0%
389	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	387FF	46FF	-88 days		0%
390	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	387SS+25 days	391FS-13 days	-88 days		0%
391	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	390FS-13 days	392FS-12 days	-88 days		0%
392	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	391FS-12 days	46FF	-88 days		0%
393	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	387	46FF	-88 days		0%
394	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	387,185,137	56FF	60 days		0%
395	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	385SS+46 days	57FF,551	-88 days		0%
396	**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**		**40%**
397			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%
398	**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**	**156,118,10**		**0 days**		**100%**
399	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		400	0 days		100%
400	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	399	401	0 days		100%
401	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	400	402	0 days		100%
402	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	401	403	0 days		100%
403	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	402	404	0 days		100%
404	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	403	405	0 days		100%
405	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	404	409	0 days		100%
406	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%
407	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%
408	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		410	0 days		100%
409	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	405	411	0 days		100%
410	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	123,408	411	0 days	1	100%
411	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	410,128,409	412,413	0 days	5	100%
412	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	411		0 days		100%
413	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	411	417,414	0 days		100%
414	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	NA	413	417	-117 days		83%
415	**CMF-6000**		**ELS works**			**169 days**	**Wed 17/2/21**	**Thu 9/9/21**	**188 days**	**Fri 25/6/21**	**Thu 10/2/22**	**NA**	**NA**	**10**	**420FF-3 emons**	**-117 days**	**5**	**0%**
416	**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**	**NA**	**NA**		**419SS**	**-117 days**		**0%**
417	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	NA	NA	414,131,413	418	-117 days		0%
418	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	417	422	-117 days		0%
419	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	NA	NA	416SS	423,429	1 day		0%
420	CMF-6900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Fri 12/11/21	Fri 12/11/21	NA	NA	415FF-3 emons	421SS-3 emons	29 days		0%
421	**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**	**10,420SS-3 emons**		**-117 days**	**5**	**0%**
422	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	135,182,183,186,184,418	423SS+30 days,424,426	-117 days		0%
423	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	422SS+30 days,419	425,426	-117 days		0%
424	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	422	427,428	-87 days		0%
425	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	423	427,428	-117 days		0%
426	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	422,423	47FF	-115 days		0%
427	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	424,425	48FF	-117 days		0%
428	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	185,424,425	56FF	121 days		0%
429	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 utilities			0 days	NA	NA	176 days	Mon 25/10/21	Tue 31/5/22	NA	NA	419	57FF,551	43 days		0%
430	**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**		**73%**
431	**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**		**96%**
432	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%



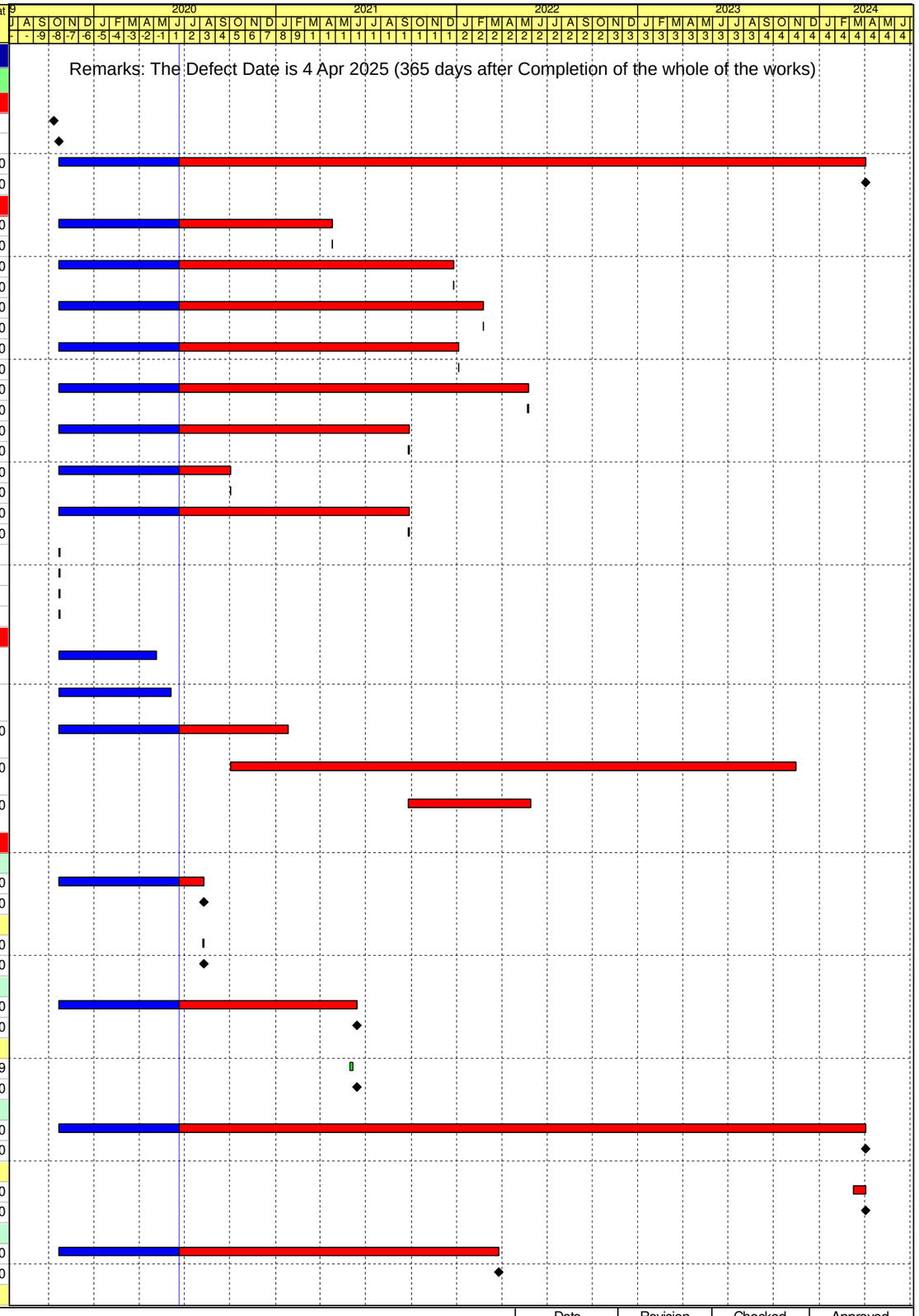
ID	Activity ID	Key Date	Task Name	Inclement Weather CE no. (NCE no.)	PMI & CE no. (NCE no.)	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
433	CSA-1030		Installation of standpipes		71	0 days	NA	NA	13 days	Mon 14/9/20	Mon 28/9/20	Mon 14/9/20	Mon 28/9/20			0 days		100%
434	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		449	0 days		100%
435	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	142	449	0 days		100%
436	CSA-1300		Construction of Cable trough for CLP 11kv Cable Diversion	75, 76, 77, '61	0 days	NA	NA	NA	54 days	Mon 19/10/20	Mon 21/12/20	Mon 19/10/20	Mon 21/12/20		449	0 days		100%
437	CSA-1400		Demolition of Existing Pillar box and its concrete plinth	144, 212, 3(	30	0 days	NA	NA	53 days	Wed 12/8/20	Sat 14/11/20	Wed 12/8/20	Sat 14/11/20	145	449	0 days		100%
438	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		449	0 days		100%
439	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		449	0 days		100%
440	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		449	0 days		100%
441	CSA-1700		Relocation of Oil Interceptor Near Existing Compressor House	144, 212, 3(	70	0 days	NA	NA	50 days	Mon 9/11/20	Fri 8/1/21	Mon 9/11/20	Fri 8/1/21		449	0 days		100%
442	CSA-1900		Diversion of pumping system sewerage	212, 309, 3	83	0 days	NA	NA	36 days	Wed 13/1/21	Fri 26/2/21	Wed 13/1/21	Fri 26/2/21	147	451,449,443	0 days		100%
443	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	442	449	0 days		100%
444	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		78%
445	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%
446	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%
447	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%
448	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	123	338,449	0 days		100%
449	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	128,448,144,434,435,437,438,439,441,44	339,450	0 days	2	100%
450	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	449	452,451	0 days		100%
451	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	129,450,442	452	0 days		100%
452	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	451,131,450	454,453FF-3 emons	-121 days	2	28%
453	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	452FF-3 emons	454SS-3 emons	0 days		100%
454	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	452,453SS-3 emons	455,456,49FF	-121 days	5	0%
455	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	454	49FF	-121 days		0%
456	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	454,185,137,518SS	56FF	405 days		0%
457	**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**		**2%**
458	**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	118,156,158	493	48 days		20%
459	**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**		**4%**
460	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		461	0 days		100%
461	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	NA	460	462,475	-101 days		42%
462	CFS-1100		Provision of Flowmeter chamber, gate valve chamber and associated sewerage		85	0 days	NA	NA	90 days	Sat 19/6/21	Tue 5/10/21	NA	NA	461	463,465FF	-101 days		0%
463	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	462	466	-101 days		0%
464	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	465SF	476	18 days		0%
465	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	462FF	466,464SF	-61 days		0%
466	CFS-2000		Excavation for Raft Footing (800cu.m)			65 days	NA	NA	44 days	Tue 23/11/21	Sat 15/1/22	NA	NA	465,463	467	-101 days		0%
467	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	466	468	-101 days		0%
468	CFS-2900		Soil Replacement (14 layers SRT)			0 days	NA	NA	42 edays	Mon 24/1/22	Mon 7/3/22	NA	NA	467	469	-124.42 edays		0%
469	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	468	470FF-3 mons,471	-101 days		0%
470	CFS-3900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Tue 23/11/21	Tue 23/11/21	NA	NA	469FF-3 mons	471SS-3 emons	59 days		0%
471	CFS-4000	KD1J	R.C. structure works			120 days	NA	NA	70 days	Wed 16/3/22	Mon 13/6/22	NA	NA	469,470SS-3 emons	473,472,51FF,517FF,516FF	-101 days	2	0%
472	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	471	51FF	-101 days		0%
473	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	471	56FF	405 days		0%
474	**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**	**NA**	**NA**			**59 days**		**0%**
475	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	NA	NA	461	477	54 days		0%
476	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	464	477	18 days		0%
477	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	476,475	481FF-3 emons,482,478	18 days		0%
478	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	477	479	18 days		0%
479	CCS-1090		Soil Replacement (10 layers SRT)			0 days	NA	NA	30 edays	Thu 23/9/21	Sat 23/10/21	NA	NA	478	480	23.58 edays		0%
480	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	479	482,489	19 days		0%
481	CCS-1190		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Sat 12/6/21	Sun 13/6/21	NA	NA	477FF-3 emons	482SS-3 emons	194 days		0%
482	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	477,481SS-3 emons,480	51FF,484,483	20 days	2	0%
483	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	482	51FF	20 days		0%
484	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	185,137,482,518SS	56FF	405 days		0%
485	**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%**
486	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	487SF		1205 days		0%
487	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	488SF	486SF	1195 days		0%
488	CDS-2100		Soil Replacement (14 layers SRT)			0 days	NA	NA	42 edays	Sat 18/9/21	Sat 30/10/21	NA	NA	489SF	487SF	1425.42 edays		0%
489	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	480	490FF-3 emons,491,488SF,496FS-	19 days		0%
490	CDS-3900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 5/8/21	Thu 5/8/21	NA	NA	489FF-3 emons	491SS-3 emons	150 days		0%
491	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	489,490SS-3 emons	492,51FF	46 days		0%
492	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	491	51FF	46 days		0%
493	**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**	**458**		**48 days**		**0%**
494	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	495SF		1177 days		0%
495	CCS-2110		Soil Replacement (8 layers SRT)			0 days	NA	NA	24 edays	Wed 6/10/21	Sat 30/10/21	NA	NA	496SF	494SF	1425.42 edays		0%
496	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	489FS-4 days	497FF-3 emons,498,495SF,506FS-	19 days		0%
497	CCS-2290		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Fri 24/9/21	Fri 24/9/21	NA	NA	496FF-3 emons	498SS-3 emons	108 days		0%
498	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	496,497SS-3 emons	499,51FF,500,501	20 days	2	0%
499	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	498	51FF	20 days		0%
500	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	185,137,498,518SS	56FF	405 days		0%
501	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	498	56FF	556 days		0%
502	**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%**
503	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	504SF		1185 days		0%
504	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	505SF	503SF	1176 days		0%
505	CTC-2100		Soil Replacement (10 layers SRT)			0 days	NA	NA	30 edays	Wed 13/10/21	Fri 12/11/21	NA	NA	506SF	504SF	1412.42 edays		0%
506	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	496FS-4 days	505SF,507FF-3 emons,508	19 days		0%
507	CTC-2900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Thu 19/8/21	Thu 19/8/21	NA	NA	506FF-3 emons	508SS-3 emons	138 days		0%
508	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	507SS-3 emons,506	509,51FF,510	19 days	1	0%
509	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	508	51FF	19 days		0%
510	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	185,137,508,518SS	56FF	405 days		0%
511	**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%**
512	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	513SF		1039 days		0%
513	CFB-1100		Soil Replacement (7 layers SRT)			0 days	NA	NA	21 edays	Wed 30/3/22	Wed 20/4/22	NA	NA	514SF	512SF	1253.42 edays		0%
514	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	516SF	515FF-3 emons,513SF	1011 days		0%
515	CFB-2900		Receiving of Civil Requirements from PM			0 days	NA	NA	1 day	Sat 5/2/22	Sun 6/2/22	NA	NA	514FF-3 emons		1083 days		0%
516	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	471FF	517,518,51FF,514SF	-101 days	1	0%
517	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	516,471FF	51FF	-101 days		0%
518	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	516,185,137	56FF,510SS,500SS,484SS,456SS	405 days		0%
519	**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%**
520	CDS1-1000		Excavation for Raft Footing (400cu.m)			20 days	NA	NA	20 days	Wed 8/6/22	Thu 30/6/22	NA	NA	318	521	420 days		0%
521	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	520	522	420 days		0%
522	CDS1-1100		Soil Replacement (7 layers SRT)			0 days	NA	NA	21 edays	Wed 13/7/22	Wed 3/8/22	NA	NA	521	523	513.58 edays		0%
523	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	522	525,524FF-3 emons	418 days		0%
524	CDS1-2900		Receiving of Civil Requirements from PM			0 days	NA	NA	0 days	Tue 10/5/22	Tue 10/5/22	NA	NA	523FF-3 emons	525SS-3 emons	523 days		0%
525	CDS1-3000	SW1	Footing works			30 days	NA	NA	30 days	Tue 9/8/22	Tue 13/9/22	NA	NA	523,524SS-3 emons	526,56FF	418 days		0%
526	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	525	56FF	418 days		0%
527	**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%**
528	**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**	**15,138,180**	**53FF**	**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
529	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		532,533,534	0 days		100%
530	CAA-1200		Additional inspection pit to verilfy 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		532,533,534	0 days		100%
531	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		532,533,534	0 days		100%
532	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	529,530,531	53FF	0 days		100%
533	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	529,530,531	53FF	0 days		100%
534	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	529,530,531	53FF,535	0 days		100%
535	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,118,156,158,172,534	50FF,536FS+356 days	0 days		100%
536	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	535FS+356 days	58FF	570 days		0%
537	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,171	58FF	269 days		0%
538	**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**		**38%**
539	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	180,138	550SS+48 days,548SS+48 days,54	-39 days		86%
540	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%
541	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%
542	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%
543	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%
544	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		545FF	0 days		100%
545	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	180,138,544FF,539SS+48 days	57FF,551,546SS+250 days	63 days		40%
546	CUU-2100	SW2	Remaining Process Pipes			0 days	NA	NA	270 days	Mon 23/8/21	Fri 22/7/22	NA	NA	545SS+250 days	57FF	0 days		0%
547	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	180,138	551,57FF	0 days	5	35%
548	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	180,138,539SS+48 days	551,57FF	0 days	5	35%
549	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	180,138,539SS+48 days	553FS+2 days,57FF	0 days	5	35%
550	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	180,138,539SS+48 days	551,57FF	0 days	5	35%
551	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	550,547,548,545,348,395,330,429	54FF,554SS+123 days	-88 days	5	0%
552	**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%**
553	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	549FS+2 days,180	554,54FF	1 day		0%
554	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	553,551SS+123 days	555,58FF	-88 days	5	0%
555	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	554,139	556,58FF	-88 days	5	0%
556	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	555,139	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		20-Jun-20		
AS000020	Starting Date	0	23-Oct-19 A		20-Jun-20		
AS000110	Whole Contract Period (1626 days from starting date)	1626	23-Oct-19 A	04-Apr-24	20-Jun-20	04-Apr-24	0
AS000220	Completion Date for the whole of the Works	0		04-Apr-24		04-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	20-Jun-20	24-Apr-21	0
AS001120	Planned Access Date for Portion C-1A	1	24-Apr-21	24-Apr-21*	24-Apr-21	24-Apr-21	0
AS001200	Portion C-2A (within 705 to 795 days from starting date)	795	23-Oct-19 A	25-Dec-21	20-Jun-20	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	20-Jun-20	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	20-Jun-20	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	20-Jun-20	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	20-Jun-20	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	01-Oct-20	20-Jun-20	01-Oct-20	0
AS001720	Planned Access Date for Portion B-1	1	01-Oct-20	01-Oct-20*	01-Oct-20	01-Oct-20	0
AS001800	Portion B-2 (within 615 to 705 days from starting date)	705	23-Oct-19 A	26-Sep-21	20-Jun-20	26-Sep-21	0
AS001820	Planned Access Date for Portion B-2	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	21-Jun-20	21-Jun-20	
AS001910	Planned Access Date for Works Area WA1-B	1	23-Oct-19 A	23-Oct-19 A	21-Jun-20	21-Jun-20	
AS001920	Works Area WA3 (starting date)	1	23-Oct-19 A	23-Oct-19 A	21-Jun-20	21-Jun-20	
AS001930	Planned Access Date for Works Area WA3	1	23-Oct-19 A	23-Oct-19 A	21-Jun-20	21-Jun-20	
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	03-Dec-20	03-Dec-20	
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	20-Jun-20	20-Jun-20	
AS002040	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	461	23-Oct-19 A	25-Jan-21*	20-Jun-20	25-Jan-21	0
AS002050	KD3A Completion of Phase 1 Commissioning of Sidestream Treatment Facilities (1140d after Portion B-1 Access)	1141	01-Oct-20	15-Nov-23*	01-Oct-20	15-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	20-Jun-20	08-Aug-20	0
AS003110	Completion date - Section 1 (290 days after starting date)	0		08-Aug-20*		08-Aug-20	0
Time Risk Allowance and Planned Completion							
AS003105	Time Risk Allowance for Section 1	1	08-Aug-20	08-Aug-20	08-Aug-20	08-Aug-20	0
AS003130	Planned Completion for Section 1	0		08-Aug-20*		08-Aug-20	0
Section 2 - Complete All Designs (exclude Sec. 1 & 3)							
AS003200	Contract Duration of Section 2	601	23-Oct-19 A	14-Jun-21	20-Jun-20	14-Jun-21	0
AS003210	Completion date - Section 2 (600 days after starting date)	0		14-Jun-21*		14-Jun-21	0
Time Risk Allowance and Planned Completion							
AS003220	Time Risk Allowance for Section 2	7	30-May-21	05-Jun-21	08-Jun-21	14-Jun-21	9
AS003230	Planned Completion for Section 2	0		14-Jun-21*		14-Jun-21	0
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities							
AS003300	Contract Duration of Section 3	1626	23-Oct-19 A	04-Apr-24	20-Jun-20	04-Apr-24	0
AS003310	Completion date - Section 3 (1625 days after starting date)	0		04-Apr-24*		04-Apr-24	0
Time Risk Allowance and Planned Completion							
AS003320	Time Risk Allowance for Section 3	26	10-Mar-24	04-Apr-24	10-Mar-24	04-Apr-24	0
AS003330	Planned Completion for Section 3	0		04-Apr-24*		04-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	20-Jun-20	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							



JEC

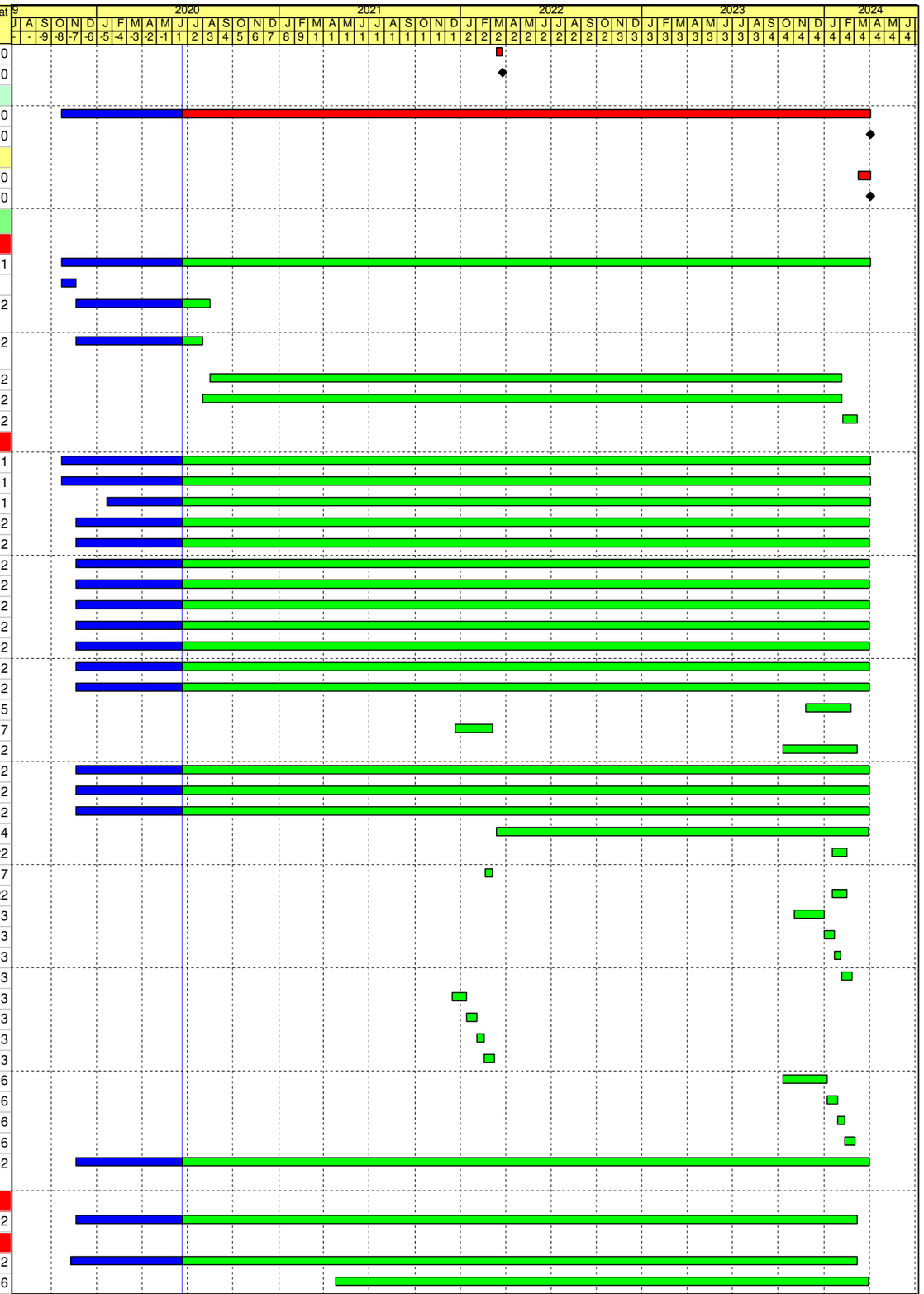
File Name: DE/2018/03 RP RH
Layout: DE1803 RP (Jun 2020) - WBS
TASK filter: All Activities

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 - Jun 2020

Date	Revision	Checked	Approved
20-Feb-20	Rev. D	LT	KM
20-Mar-20	Rev. E	LT	KM
20-Apr-20	Rev. F	LT	KM
20-May-20	Rev. G	LT	KM
20-Jun-20	Rev. H	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
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	20-Jun-20	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
Preliminaries							
Mobilisation							
AS010100	Provison of Equipment / Facilities for the PM's Office	1625	23-Oct-19 A	03-Apr-24	21-Jun-20	04-Apr-24	1
AS010200	Mobilisation	28	23-Oct-19 A	19-Nov-19 A	20-Jun-20	20-Jun-20	
AS010205a	Design, Procurement & PO & Construction of Contractor's Site Office (Works Area WA1 -B)	270	20-Nov-19 A	15-Aug-20	22-Jun-20	17-Aug-20	2
AS010210	Design, Procurement & PO & Construction of Contractor's Storage Area (Works Area WA3)	255	20-Nov-19 A	31-Jul-20	22-Jun-20	02-Aug-20	2
AS010220	Maintain Contractor's Site Office	1270	16-Aug-20	06-Feb-24	18-Aug-20	08-Feb-24	2
AS010230a	Maintain Contractor's Storage Area	1285	01-Aug-20	06-Feb-24	03-Aug-20	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	21-Jun-20	04-Apr-24	1
AS010400	Provision of 2 Contract Car for the Use of the PM & Supervisor	1625	23-Oct-19 A	03-Apr-24	21-Jun-20	04-Apr-24	1
AS010420a	Provision of 1 Electric Car for the Use of the PM & Supervisor	1534	22-Jan-20 A	03-Apr-24	21-Jun-20	04-Apr-24	1
AS010600	Provision of Photographs	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS010700	Provision of Environmental Mitigation Measures	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS010800	Provision of Air Pollution Abatment	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS010900	Provision of Noise Pollution Abatment	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011000	Provision of Wastewater Pollution Abatement	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011100	Provision of Wastement Management	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011200	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011300	Provision of Environmental Management	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011400	Provision of Site Management Plan for Trip Ticket System	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011500	Provision of As-constructed Drawings for Section 3	90	26-Nov-23	23-Feb-24	11-Dec-23	09-Mar-24	15
AS011520a	Provision of As-constructed Drawings for Section 4	75	21-Dec-21	06-Mar-22	28-Dec-21	12-Mar-22	7
AS011540a	Provision of As-constructed Drawings for Section 5	150	10-Oct-23	08-Mar-24	12-Oct-23	09-Mar-24	2
AS011600	Provision of Systematic Risk Management	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011700	Provision of Site Liaison Group & Community Liaison Group	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS011800	Provision of 24-Hour Telephone Line	1596	20-Nov-19 A	02-Apr-24	22-Jun-20	04-Apr-24	2
AS012000	Provision of Upkeeping and Protection of Completed Works	750	13-Mar-22	31-Mar-24	17-Mar-22	04-Apr-24	4
AS012100	Provision of Training for Employer's Staff for Section 3	30	18-Jan-24	16-Feb-24	09-Feb-24	09-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	02-Nov-23	31-Dec-23	15-Nov-23	13-Jan-24	13
AS012302a	PM Reivew & Comment O&M Manual for Section 3	21	01-Jan-24	21-Jan-24	14-Jan-24	03-Feb-24	13
AS012304a	Revise & Re-submit O&M Manual for Section 3	14	22-Jan-24	04-Feb-24	04-Feb-24	17-Feb-24	13
AS012306a	PM Reivew & Approval of O&M Manual for Section 3	21	05-Feb-24	25-Feb-24	18-Feb-24	09-Mar-24	13
AS012320a	Prepare & Submit O&M Manual for Section 4	30	14-Dec-21	13-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
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	22-Jun-20	04-Apr-24	2
Site Upkeeping							
AS013100	General Site Upkeeping of the Site	1570	20-Nov-19 A	07-Mar-24	22-Jun-20	09-Mar-24	2
Safety and Environmental Management							
AS013200	Construction Health and Safety Plan	1580	10-Nov-19 A	07-Mar-24	22-Jun-20	09-Mar-24	2
AS013300	Site Traffic Safety Management Plan	1070	25-Apr-21	29-Mar-24	01-May-21	04-Apr-24	6



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Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
Compliance with BEAM Requirements							
AS013400	BEAM Plus	1580	10-Nov-19 A	07-Mar-24	22-Jun-20	09-Mar-24	2
BIM							
AS011820a	Prepare & Submit Construction Stage BIM Execution Plan	30	24-Oct-19 A	22-Nov-19 A	22-Jun-20	22-Jun-20	
AS011830a	PM Reivew & Comment Construction Stage BIM Execution Plan	21	23-Nov-19 A	13-Dec-19 A	22-Jun-20	22-Jun-20	
AS011840a	Revise & Re-submit Construction Stage BIM Execution Plan	14	14-Dec-19 A	27-Dec-19 A	22-Jun-20	22-Jun-20	
AS011850a	PM Reivew & Approval of Construction Stage BIM Execution Plan	21	28-Dec-19 A	17-Jan-20 A	22-Jun-20	22-Jun-20	
AS011880b	Contractor Review & Study Design Stage BIM	92	24-Oct-19 A	23-Jan-20 A	22-Jun-20	22-Jun-20	
AS011900	Contractor Develop 1st Construction Stage BIM	60	24-Jan-20 A	23-Mar-20 A	22-Jun-20	22-Jun-20	
AS011920a	Review & Update BIM Execution Plan & BIM Model	1415	24-Mar-20 A	06-Feb-24	22-Jun-20	08-Feb-24	2
AS011960	Prepare & Submit the Fully Coordinated BIM	60	09-Dec-23	06-Feb-24	11-Dec-23	08-Feb-24	2
AS011961	PM Reivew & Comment Fully Coordinated BIM	21	07-Feb-24	27-Feb-24	09-Feb-24	29-Feb-24	2
AS011962	Revise & Re-submit Fully Coordinated BIM	14	28-Feb-24	12-Mar-24	01-Mar-24	14-Mar-24	2
AS011963	PM Reivew & Approval of Fully Coordinated BIM	21	13-Mar-24	02-Apr-24	15-Mar-24	04-Apr-24	2
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	20-Nov-19 A	17-Apr-20 A	20-Jun-20	20-Jun-20	
AS103120	Procurement & PO for Lift-up Pumps (S11)	150	20-Nov-19 A	17-Apr-20 A	20-Jun-20	20-Jun-20	
AS103140	Procurement & PO for Transfer Pumps (S13)	150	20-Nov-19 A	17-Apr-20 A	20-Jun-20	20-Jun-20	
AS103160	Procurement & PO for FRP Cover (S11)	90	18-Apr-20 A	16-Jul-20	12-Jul-20	07-Aug-20	22
AS103180	Procurement & PO for EOT Cranes (2T & 5T) (S19)	150	19-Jan-20 A	16-Jun-20 A	08-Aug-20	08-Aug-20	
AS103200	Procurement & PO for Stoplogs (S21)	90	18-Apr-20 A	16-Jul-20	12-Jul-20	07-Aug-20	22
AS103220	Procurement & PO for Penstocks (S21)	90	18-Apr-20 A	16-Jul-20	12-Jul-20	07-Aug-20	22
Design & Submission							
General Arrangement Drawings							
AS101100	Prepare & Submit General Arrangement Drawings	90	26-Jan-20 A	24-Apr-20 A	20-Jun-20	20-Jun-20	
AS101110	Review & Comment on General Arrangement Drawings by PM	21	25-Apr-20 A	15-May-20 A	02-Jul-20	02-Jul-20	
AS101120	Revise & Re-submit General Arrangement Drawings	14	16-May-20 A	29-May-20 A	02-Jul-20	02-Jul-20	
AS101130	Review & Accept of General Arrangement Drawings by PM	21	30-May-20 A	19-Jun-20 A	02-Jul-20	02-Jul-20	
Civil & Dimensional / Tolerance Requirement Drawings							
AS102100	Prepare & Submit Civil Requirement Drawings	60	07-Mar-20 A	05-May-20 A	28-Jun-20	28-Jun-20	
AS102110	Review & Comment on Civil Requirement Drawings by PM	21	06-May-20 A	26-May-20 A	28-Jun-20	28-Jun-20	
AS102120	Revise & Re-submit Civil Requirement Drawings	14	27-May-20 A	09-Jun-20 A	28-Jun-20	28-Jun-20	
AS102130	Review & Accept of Civil Requirement Drawings by PM	21	10-Jun-20 A	30-Jun-20	28-Jun-20	08-Jul-20	8
Electrical Schematic Drawings							
AS102150	Prepare & Submit Elec. Schematic Drawings	60	25-Feb-20 A	24-Apr-20 A	20-Jun-20	20-Jun-20	
AS102160	Review & Comment on Elec. Schematic Drawings by PM	21	25-Apr-20 A	15-May-20 A	08-Aug-20	08-Aug-20	
AS102170	Revise & Re-submit Elec. Schematic Drawings	14	16-May-20 A	29-May-20 A	08-Aug-20	08-Aug-20	
AS102180	Review & Accept of Elec. Schematic Drawings by PM	21	30-May-20 A	19-Jun-20 A	08-Aug-20	08-Aug-20	
UV System No. 1							
AS102200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20 A	22-May-20 A	20-Jun-20	20-Jun-20	
AS102210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	23-May-20 A	12-Jun-20 A	21-Jun-20	21-Jun-20	
AS102220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	13-Jun-20 A	26-Jun-20	21-Jun-20	27-Jun-20	1
AS102230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	27-Jun-20	17-Jul-20	28-Jun-20	18-Jul-20	1
AS102300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20 A	13-Jun-20 A	20-Jun-20	20-Jun-20	
AS102310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jun-20 A	04-Jul-20	20-Jun-20	04-Jul-20	0
AS102320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	05-Jul-20	18-Jul-20	05-Jul-20	18-Jul-20	0
AS102330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	19-Jul-20	08-Aug-20	19-Jul-20	08-Aug-20	0
Effluent Pumping Station No. 1							
AS112200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20 A	22-May-20 A	20-Jun-20	20-Jun-20	
AS112210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	23-May-20 A	12-Jun-20 A	21-Jun-20	21-Jun-20	
AS112220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	13-Jun-20 A	26-Jun-20	21-Jun-20	27-Jun-20	1
AS112230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	27-Jun-20	17-Jul-20	28-Jun-20	18-Jul-20	1
AS112300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	60	15-Apr-20 A	13-Jun-20 A	20-Jun-20	20-Jun-20	
AS112310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jun-20 A	04-Jul-20	20-Jun-20	04-Jul-20	0
AS112320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	14	05-Jul-20	18-Jul-20	05-Jul-20	18-Jul-20	0
AS112330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	19-Jul-20	08-Aug-20	19-Jul-20	08-Aug-20	0
Building Services							
AS113100	Prepare & Submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	90	15-Mar-20 A	12-Jun-20 A	21-Jun-20	21-Jun-20	

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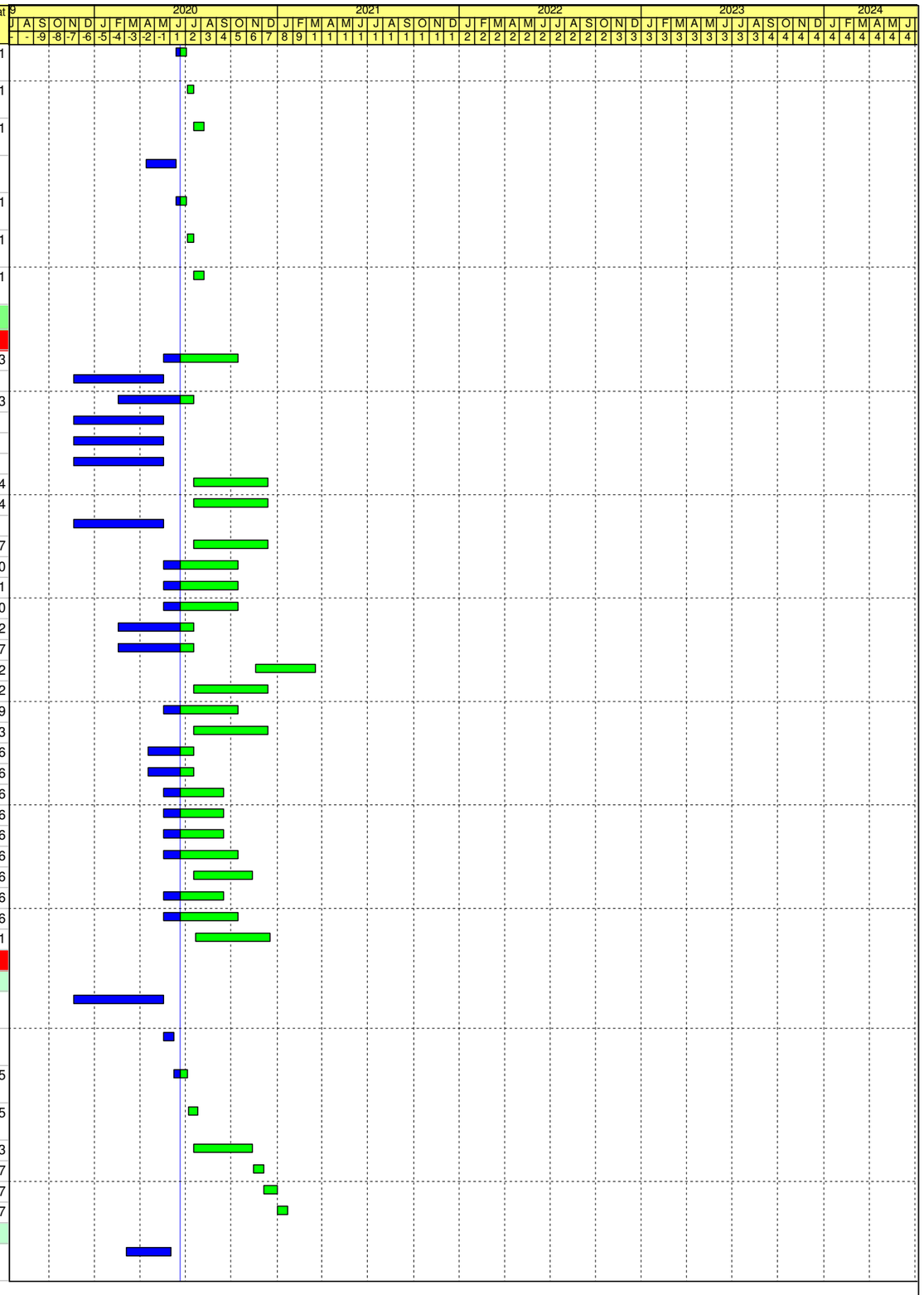
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS113120c	Review & Comment on BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	21	13-Jun-20 A	03-Jul-20	21-Jun-20	04-Jul-20	1
AS113140c	Revise & Re-submit BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	14	04-Jul-20	17-Jul-20	05-Jul-20	18-Jul-20	1
AS113160c	Review & Accept of BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	21	18-Jul-20	07-Aug-20	19-Jul-20	08-Aug-20	1
AS113200	Prepare & Submit FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	60	14-Apr-20 A	12-Jun-20 A	21-Jun-20	21-Jun-20	
AS113220c	Review & Comment on FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	21	13-Jun-20 A	03-Jul-20	21-Jun-20	04-Jul-20	1
AS113240c	Revise & Re-submit FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	14	04-Jul-20	17-Jul-20	05-Jul-20	18-Jul-20	1
AS113260c	Review & Accept of FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	21	18-Jul-20	07-Aug-20	19-Jul-20	08-Aug-20	1
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	14-Oct-20	23-Jun-20	17-Oct-20	3
AS023120	Procurement & PO for Sludge Thickening System (S3)	180	20-Nov-19 A	17-May-20 A	13-Nov-20	13-Nov-20	
AS023140	Procurement & PO for Sludge Digestion System (S5)	150	18-Feb-20 A	16-Jul-20	23-Jun-20	19-Jul-20	3
AS023160	Procurement & PO for Sludge Dewatering System (S6)	180	20-Nov-19 A	17-May-20 A	13-Nov-20	13-Nov-20	
AS023180	Procurement & PO for THP System (S4)	180	20-Nov-19 A	17-May-20 A	23-Jun-20	23-Jun-20	
AS023190a	Procurement & PO for Biogas Holding Tanks(S7)	180	20-Nov-19 A	17-May-20 A	09-Sep-20	09-Sep-20	
AS023200	Procurement & PO for Biogas Booster and Transfer Pumps (S7)	150	17-Jul-20	13-Dec-20	10-Aug-20	06-Jan-21	24
AS023210	Procurement & PO for H2S Removal System (S7)	150	17-Jul-20	13-Dec-20	10-Aug-20	06-Jan-21	24
AS023220	Procurement & PO for CHP System (S8)	180	20-Nov-19 A	17-May-20 A	22-Jun-20	22-Jun-20	
AS023240	Procurement & PO for Waste Gas Burning System (S9)	150	17-Jul-20	13-Dec-20	03-Aug-20	30-Dec-20	17
AS023260	Procurement & PO for Plant Service Water System (S12)	150	18-May-20 A	14-Oct-20	30-Jun-20	24-Oct-20	10
AS023270	Procurement & PO for Reclaimed Water Utilisation (S13)	150	18-May-20 A	14-Oct-20	21-Jul-20	14-Nov-20	31
AS023280	Procurement & PO for SAS Pumping System (S14)	150	18-May-20 A	14-Oct-20	30-Jun-20	24-Oct-20	10
AS023300	Procurement & PO for Transfomers (S17)	150	18-Feb-20 A	16-Jul-20	22-Jun-20	18-Jul-20	2
AS023320	Procurement & PO for 11 kV Switchboard (S17)	150	18-Feb-20 A	16-Jul-20	14-Dec-20	09-Jan-21	177
AS023340	Procurement & PO for 380V Switchboard (S17)	120	19-Nov-20	18-Mar-21	10-Jan-21	09-May-21	52
AS023380	Procurement & PO for Control & Monitoring System (S18)	150	17-Jul-20	13-Dec-20	19-Jul-20	15-Dec-20	2
AS023400	Procurement & PO for Lifting Appliances (S19)	150	18-May-20 A	14-Oct-20	29-Jul-20	22-Nov-20	39
AS023420	Procurement & PO for DO System (S21)	150	17-Jul-20	13-Dec-20	20-Jul-20	16-Dec-20	3
AS023440	Procurement & PO for Stoplog (S21)	90	18-Apr-20 A	16-Jul-20	12-May-21	07-Jun-21	326
AS023460	Procurement & PO for Penstock (S21)	90	18-Apr-20 A	16-Jul-20	12-May-21	07-Jun-21	326
AS023480	Procurement & PO for Sewage Pump (S21)	120	18-May-20 A	14-Sep-20	13-Nov-20	07-Feb-21	146
AS023500	Procurement & PO for Process Water Pump (S21)	120	18-May-20 A	14-Sep-20	14-Oct-20	08-Jan-21	116
AS023520	Procurement & PO for External Sludge Transfer Pump (S21)	120	18-May-20 A	14-Sep-20	13-Dec-20	09-Mar-21	176
AS023540	Procurement & PO for THP Cooling Pump (S21)	150	18-May-20 A	14-Oct-20	13-Nov-20	09-Mar-21	146
AS023560	Procurement & PO for Ferric Chloride Storage Tank (S21)	120	17-Jul-20	13-Nov-20	11-Oct-20	07-Feb-21	86
AS023580	Procurement & PO for Ferric Chloride Dosing Pump (S21)	120	18-May-20 A	14-Sep-20	13-Nov-20	07-Feb-21	146
AS023600	Procurement & PO for Temporary Primary Sludge Pump (S21)	150	18-May-20 A	14-Oct-20	13-Nov-20	09-Mar-21	146
AS023620b	Procurement & PO for Genset	150	22-Jul-20	18-Dec-20	09-Jan-21	07-Jun-21	171
Design & Submission							
General Arrangement Drawings							
AS020100	Prepare & Submit General Arrangement Drawings (from formation level up to +8mPD)	180	20-Nov-19 A	17-May-20 A	20-Jun-20	20-Jun-20	
AS020110	Review & Comment on General Arrangement Drawings by PM (from formation level up to +8mPD)	21	18-May-20 A	07-Jun-20 A	05-Jul-20	05-Jul-20	
AS020120	Revise & Re-submit General Arrangement Drawings (from formation level up to +8mPD)	28	08-Jun-20 A	05-Jul-20	05-Jul-20	20-Jul-20	15
AS020130	Review & Accept of General Arrangement Drawings by PM (from formation level up to +8mPD)	21	06-Jul-20	26-Jul-20	21-Jul-20	10-Aug-20	15
AS020140a	Prepare & Submit General Arrangement Drawings (remaining)	120	17-Jul-20	13-Nov-20	30-Jul-20	26-Nov-20	13
AS020150a	Review & Comment on General Arrangement Drawings by PM (remaining)	21	14-Nov-20	04-Dec-20	01-Dec-20	21-Dec-20	17
AS020160a	Revise & Re-submit General Arrangement Drawings (remaining)	28	05-Dec-20	01-Jan-21	22-Dec-20	18-Jan-21	17
AS020170a	Review & Accept of General Arrangement Drawings by PM (remaining)	21	02-Jan-21	22-Jan-21	19-Jan-21	08-Feb-21	17
Civil & Dimensional / Tolerance Requirement Drawings							
AS020200	Prepare & Submit Civil Requirement Drawings (from formation level up to +8mPD) -KD2A	90	04-Mar-20 A	01-Jun-20 A	20-Jun-20	20-Jun-20	



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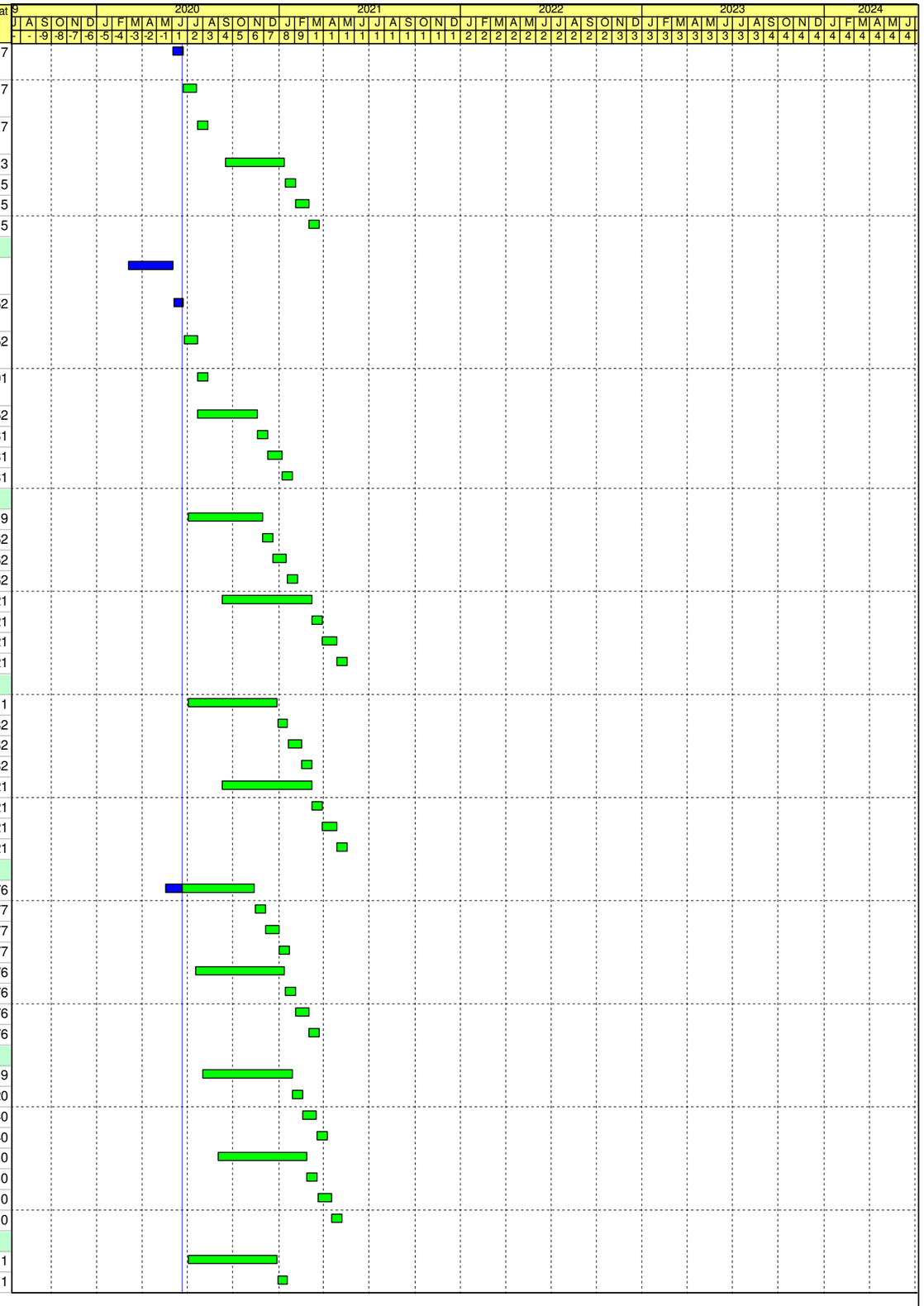
AS020210	Review & Comment on Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	02-Jun-20 A	22-Jun-20	27-Jun-20	29-Jun-20	7
AS020220	Revise & Re-submit Civil Requirement Drawings (from formation level up to +8mPD)	28	23-Jun-20	20-Jul-20	30-Jun-20	27-Jul-20	7
AS020230	Review & Accept of Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	21-Jul-20	10-Aug-20*	28-Jul-20	17-Aug-20	7
AS020300	Prepare & Submit Civil Requirement Drawings (remaining) -KD2B	120	15-Sep-20	12-Jan-21	28-Sep-20	25-Jan-21	13
AS020310	Review & Comment on Civil Requirement Drawings by PM (remaining)	21	13-Jan-21	02-Feb-21	28-Jan-21	17-Feb-21	15
AS020320	Revise & Re-submit Civil Requirement Drawings (remaining)	28	03-Feb-21	02-Mar-21	18-Feb-21	17-Mar-21	15
AS020330	Review & Accept of Civil Requirement Drawings by PM (remaining)	21	03-Mar-21	23-Mar-21*	18-Mar-21	07-Apr-21	15
Electrical Schematic Drawings							
AS021200	Prepare & Elec. Schematic Drawings (from formation level up to +8mPD) -KD2A	90	05-Mar-20 A	02-Jun-20 A	20-Jun-20	20-Jun-20	
AS021210	Review & Comment on Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	03-Jun-20 A	23-Jun-20	11-Aug-20	14-Aug-20	52
AS021220	Revise & Re-submit Elec. Schematic Drawings (from formation level up to +8mPD)	28	24-Jun-20	21-Jul-20	15-Aug-20	11-Sep-20	52
AS021230	Review & Accept of Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	22-Jul-20	11-Aug-20	21-Oct-20	10-Nov-20	91
AS021300	Prepare & Submit Elec. Schematic Drawings (remaining) -KD2B	120	22-Jul-20	18-Nov-20	12-Sep-20	09-Jan-21	52
AS021310	Review & Comment on Elec. Schematic Drawings by PM (remaining)	21	19-Nov-20	09-Dec-20	30-Mar-21	19-Apr-21	131
AS021320	Revise & Re-submit Elec. Schematic Drawings (remaining)	28	10-Dec-20	06-Jan-21	20-Apr-21	17-May-21	131
AS021330	Review & Accept of Elec. Schematic Drawings by PM (remaining)	21	07-Jan-21	27-Jan-21	18-May-21	07-Jun-21	131
Sludge Screening (SSc)							
AS022200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	02-Jul-20	28-Nov-20	11-Jul-20	07-Dec-20	9
AS022210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Nov-20	19-Dec-20	30-Jan-21	19-Feb-21	62
AS022220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	20-Dec-20	16-Jan-21	20-Feb-21	19-Mar-21	62
AS022230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	17-Jan-21	06-Feb-21	20-Mar-21	09-Apr-21	62
AS022300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	10-Sep-20	08-Mar-21	01-Oct-20	29-Mar-21	21
AS022310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	09-Mar-21	29-Mar-21	30-Mar-21	19-Apr-21	21
AS022320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	30-Mar-21	26-Apr-21	20-Apr-21	17-May-21	21
AS022330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	27-Apr-21	17-May-21	18-May-21	07-Jun-21	21
Sludge Thickening (STh)							
AS032200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	02-Jul-20	28-Dec-20	13-Jul-20	08-Jan-21	11
AS032210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Dec-20	18-Jan-21	30-Jan-21	19-Feb-21	32
AS032220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	19-Jan-21	15-Feb-21	20-Feb-21	19-Mar-21	32
AS032230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	16-Feb-21	08-Mar-21	20-Mar-21	09-Apr-21	32
AS032300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	10-Sep-20	08-Mar-21	01-Oct-20	29-Mar-21	21
AS032310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	09-Mar-21	29-Mar-21	30-Mar-21	19-Apr-21	21
AS032320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	30-Mar-21	26-Apr-21	20-Apr-21	17-May-21	21
AS032330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	27-Apr-21	17-May-21	18-May-21	07-Jun-21	21
Thermal Hydrolysis Process (THP)							
AS042200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	18-May-20 A	13-Nov-20	04-Sep-20	28-Jan-21	76
AS042210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	14-Nov-20	04-Dec-20	30-Jan-21	19-Feb-21	77
AS042220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	05-Dec-20	01-Jan-21	20-Feb-21	19-Mar-21	77
AS042230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	02-Jan-21	22-Jan-21	20-Mar-21	09-Apr-21	77
AS042300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	17-Jul-20	12-Jan-21	01-Oct-20	29-Mar-21	76
AS042310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	13-Jan-21	02-Feb-21	30-Mar-21	19-Apr-21	76
AS042320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	03-Feb-21	02-Mar-21	20-Apr-21	17-May-21	76
AS042330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	03-Mar-21	23-Mar-21	18-May-21	07-Jun-21	76
Sludge Digestion (SDi)							
AS052200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	01-Aug-20	27-Jan-21	10-Aug-20	05-Feb-21	9
AS052210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	28-Jan-21	17-Feb-21	17-Feb-21	09-Mar-21	20
AS052220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	18-Feb-21	17-Mar-21	30-Mar-21	26-Apr-21	40
AS052230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Mar-21	07-Apr-21	27-Apr-21	17-May-21	40
AS052300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	31-Aug-20	26-Feb-21	10-Sep-20	08-Mar-21	10
AS052310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	27-Feb-21	19-Mar-21	09-Mar-21	29-Mar-21	10
AS052320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	20-Mar-21	16-Apr-21	30-Mar-21	26-Apr-21	10
AS052330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	17-Apr-21	07-May-21	27-Apr-21	17-May-21	10
Sludge Dewatering (SDe)							
AS062200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	02-Jul-20	28-Dec-20	13-Jul-20	08-Jan-21	11
AS062210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Dec-20	18-Jan-21	09-Jan-21	29-Jan-21	11



JEC

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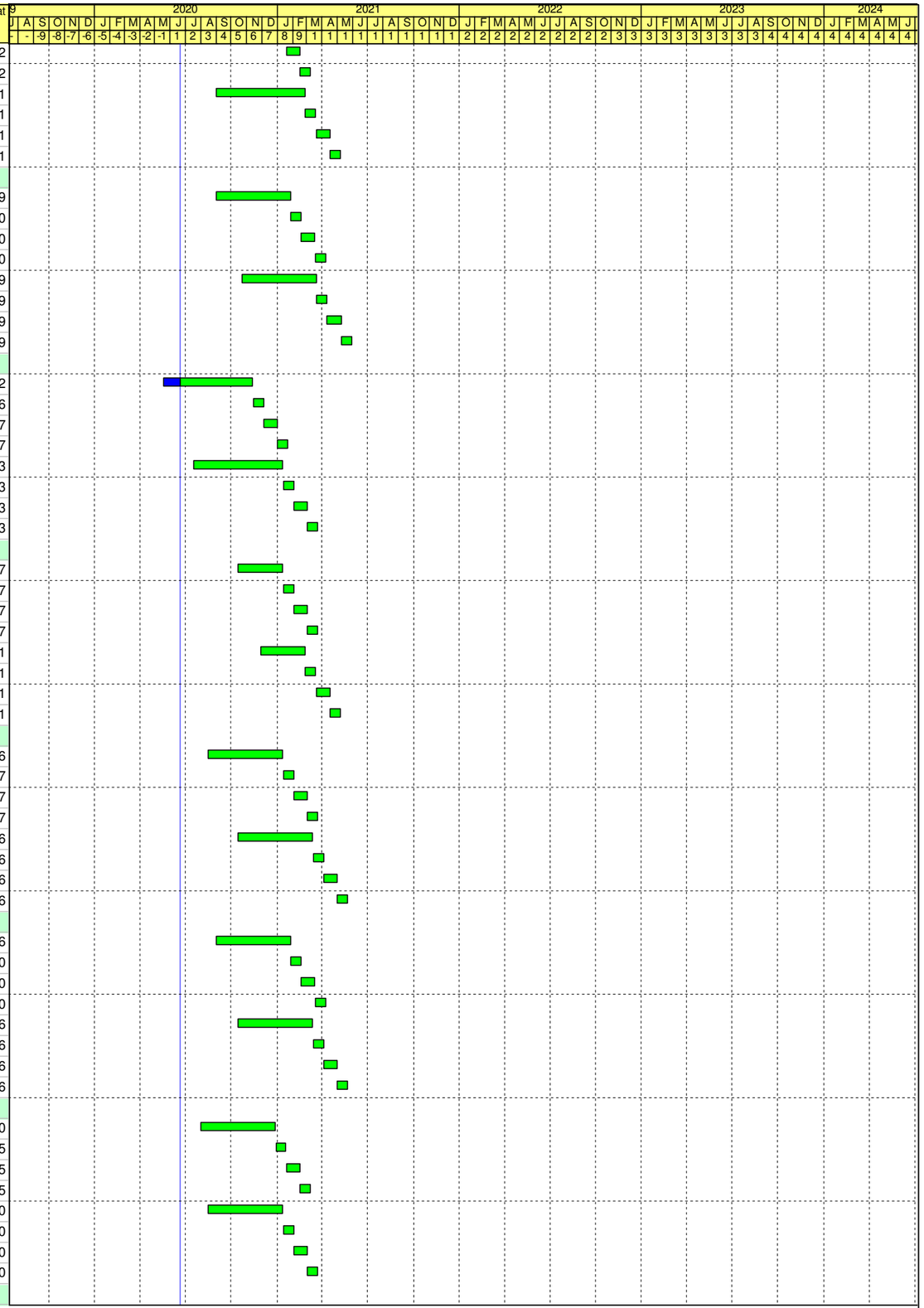
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS062220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	19-Jan-21	15-Feb-21	20-Feb-21	19-Mar-21	32
AS062230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	16-Feb-21	08-Mar-21	20-Mar-21	09-Apr-21	32
AS062300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	31-Aug-20	26-Feb-21	01-Oct-20	29-Mar-21	31
AS062310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	27-Feb-21	19-Mar-21	30-Mar-21	19-Apr-21	31
AS062320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	20-Mar-21	16-Apr-21	20-Apr-21	17-May-21	31
AS062330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	17-Apr-21	07-May-21	18-May-21	07-Jun-21	31
Biogas Storage & Pre-Treatment (BSPT)							
AS072200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	31-Aug-20	27-Jan-21	09-Sep-20	05-Feb-21	9
AS072210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	28-Jan-21	17-Feb-21	09-Mar-21	29-Mar-21	40
AS072220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	18-Feb-21	17-Mar-21	30-Mar-21	26-Apr-21	40
AS072230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Mar-21	07-Apr-21	27-Apr-21	17-May-21	40
AS072300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	22-Oct-20	20-Mar-21	31-Oct-20	29-Mar-21	9
AS072310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	21-Mar-21	10-Apr-21	30-Mar-21	19-Apr-21	9
AS072320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	11-Apr-21	08-May-21	20-Apr-21	17-May-21	9
AS072330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	09-May-21	29-May-21	18-May-21	07-Jun-21	9
Combined Heat & Power Generation (CHP)							
AS082200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	180	18-May-20 A	13-Nov-20	22-Jul-20	15-Dec-20	32
AS082210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	14-Nov-20	04-Dec-20	09-Jan-21	29-Jan-21	56
AS082220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	05-Dec-20	01-Jan-21	20-Feb-21	19-Mar-21	77
AS082230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	02-Jan-21	22-Jan-21	20-Mar-21	09-Apr-21	77
AS082300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	180	17-Jul-20	12-Jan-21	28-Sep-20	26-Mar-21	73
AS082310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	13-Jan-21	02-Feb-21	27-Mar-21	16-Apr-21	73
AS082320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	03-Feb-21	02-Mar-21	17-Apr-21	14-May-21	73
AS082330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	03-Mar-21	23-Mar-21	15-May-21	04-Jun-21	73
Waste Gas Burning System (WGB)							
AS092200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	90	15-Oct-20	12-Jan-21	01-Nov-20	29-Jan-21	17
AS092210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	13-Jan-21	02-Feb-21	30-Jan-21	19-Feb-21	17
AS092220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	03-Feb-21	02-Mar-21	20-Feb-21	19-Mar-21	17
AS092230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	03-Mar-21	23-Mar-21	20-Mar-21	09-Apr-21	17
AS092300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	90	29-Nov-20	26-Feb-21	30-Dec-20	29-Mar-21	31
AS092310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	27-Feb-21	19-Mar-21	30-Mar-21	19-Apr-21	31
AS092320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	20-Mar-21	16-Apr-21	20-Apr-21	17-May-21	31
AS092330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	17-Apr-21	07-May-21	18-May-21	07-Jun-21	31
Plant Service Water System (PSW)							
AS122200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	16-Aug-20	12-Jan-21	01-Sep-20	28-Jan-21	16
AS122210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	13-Jan-21	02-Feb-21	30-Jan-21	19-Feb-21	17
AS122220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	03-Feb-21	02-Mar-21	20-Feb-21	19-Mar-21	17
AS122230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	03-Mar-21	23-Mar-21	20-Mar-21	09-Apr-21	17
AS122300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	15-Oct-20	13-Mar-21	31-Oct-20	29-Mar-21	16
AS122310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Mar-21	03-Apr-21	30-Mar-21	19-Apr-21	16
AS122320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	04-Apr-21	01-May-21	20-Apr-21	17-May-21	16
AS122330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	02-May-21	22-May-21	18-May-21	07-Jun-21	16
Reclaimed Water Facility (RWF)							
AS132200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	31-Aug-20	27-Jan-21	16-Sep-20	12-Feb-21	16
AS132210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	28-Jan-21	17-Feb-21	09-Mar-21	29-Mar-21	40
AS132220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	18-Feb-21	17-Mar-21	30-Mar-21	26-Apr-21	40
AS132230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Mar-21	07-Apr-21	27-Apr-21	17-May-21	40
AS132300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	15-Oct-20	13-Mar-21	31-Oct-20	29-Mar-21	16
AS132310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Mar-21	03-Apr-21	30-Mar-21	19-Apr-21	16
AS132320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	04-Apr-21	01-May-21	20-Apr-21	17-May-21	16
AS132330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	02-May-21	22-May-21	18-May-21	07-Jun-21	16
Surplus Activated Sludge Pumping Station (SAS)							
AS142200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	150	01-Aug-20	28-Dec-20	11-Aug-20	07-Jan-21	10
AS142210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	29-Dec-20	18-Jan-21	23-Jan-21	12-Feb-21	25
AS142220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	19-Jan-21	15-Feb-21	13-Feb-21	12-Mar-21	25
AS142230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	16-Feb-21	08-Mar-21	13-Mar-21	02-Apr-21	25
AS142300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	16-Aug-20	12-Jan-21	26-Aug-20	22-Jan-21	10
AS142310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	13-Jan-21	02-Feb-21	23-Jan-21	12-Feb-21	10
AS142320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	03-Feb-21	02-Mar-21	13-Feb-21	12-Mar-21	10
AS142330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	03-Mar-21	23-Mar-21	13-Mar-21	02-Apr-21	10
Control and Monitoring System							



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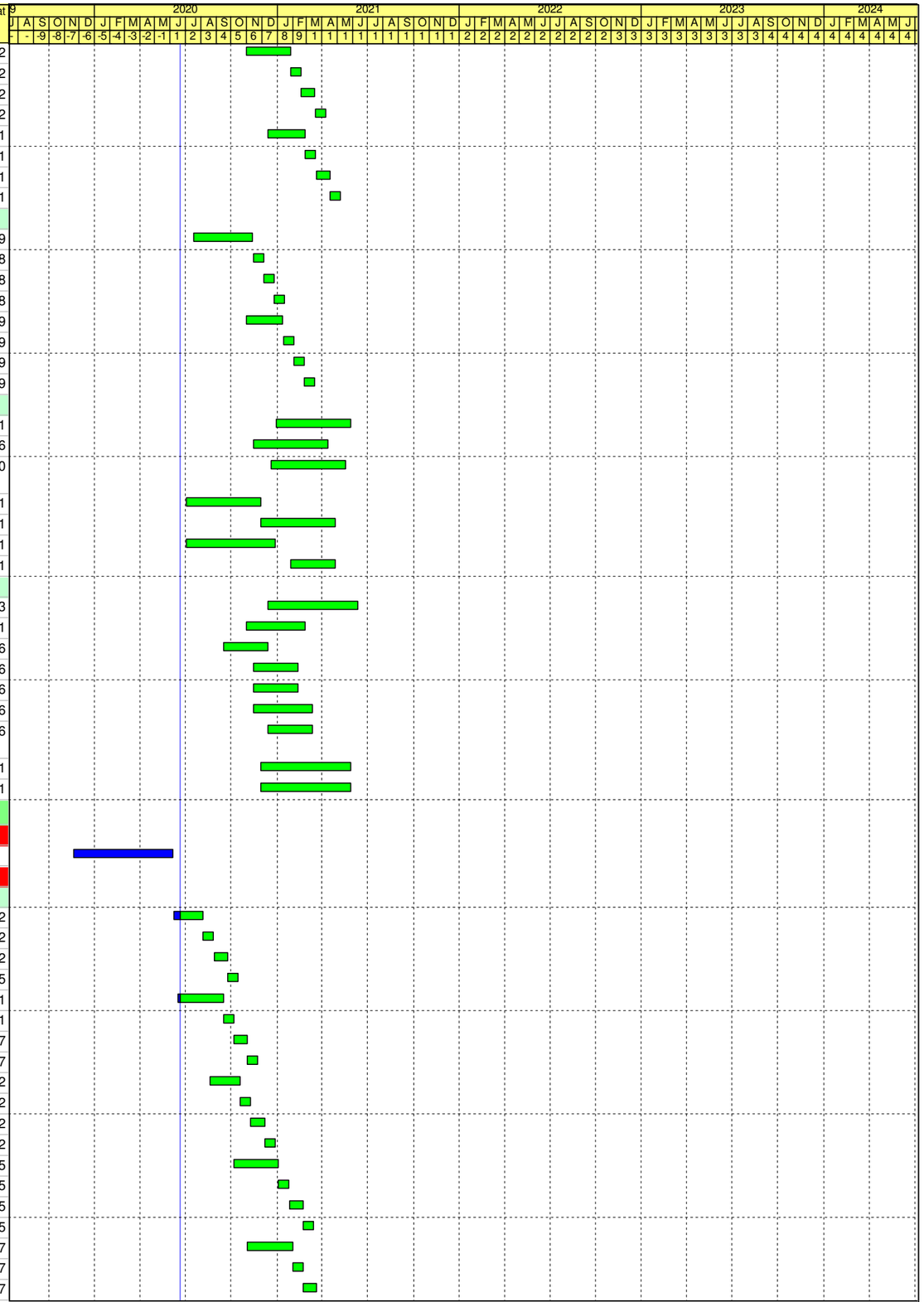
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS182200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	90	30-Oct-20	27-Jan-21	01-Nov-20	29-Jan-21	2
AS182210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	28-Jan-21	17-Feb-21	30-Jan-21	19-Feb-21	2
AS182220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	28	18-Feb-21	17-Mar-21	20-Feb-21	19-Mar-21	2
AS182230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	18-Mar-21	07-Apr-21	20-Mar-21	09-Apr-21	2
AS182300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	75	14-Dec-20	26-Feb-21	14-Jan-21	29-Mar-21	31
AS182310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	27-Feb-21	19-Mar-21	30-Mar-21	19-Apr-21	31
AS182320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	20-Mar-21	16-Apr-21	20-Apr-21	17-May-21	31
AS182330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	17-Apr-21	07-May-21	18-May-21	07-Jun-21	31
Lifting Appliances							
AS192200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	120	17-Jul-20	13-Nov-20	25-Aug-20	22-Dec-20	39
AS192210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	14-Nov-20	04-Dec-20	31-Jan-21	20-Feb-21	78
AS192220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	21	05-Dec-20	25-Dec-20	21-Feb-21	13-Mar-21	78
AS192230	Review & Accept of Wiring Dwgs, Cable Schedule & Design Cal.	21	26-Dec-20	15-Jan-21	14-Mar-21	03-Apr-21	78
AS192300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	75	30-Oct-20	12-Jan-21	08-Dec-20	20-Feb-21	39
AS192310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	13-Jan-21	02-Feb-21	21-Feb-21	13-Mar-21	39
AS192320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	21	03-Feb-21	23-Feb-21	14-Mar-21	03-Apr-21	39
AS192330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	24-Feb-21	16-Mar-21	04-Apr-21	24-Apr-21	39
Building Services							
AS201100	Submit & Accept BS Works Design & Dwgs for Sludge Dewatering Building	150	29-Dec-20	27-May-21	09-Jan-21	07-Jun-21	11
AS201200	Submit & Accept BS Works Design & Dwgs for CHP Building	150	14-Nov-20	12-Apr-21	09-Jan-21	07-Jun-21	56
AS201300	Submit & Accept BS Works Design & Dwgs for Sludge Digester & Distribution Chamber	150	20-Dec-20	18-May-21	09-Jan-21	07-Jun-21	20
AS201500	Submit & Accept BS Works Design & Dwgs for Workshop No. 2	150	02-Jul-20	28-Nov-20	12-Aug-20	08-Jan-21	41
AS201700	Submit & Accept BS Works Design & Dwgs for Other Facilities	150	29-Nov-20	27-Apr-21	09-Jan-21	07-Jun-21	41
AS201800	Submit & Accept BS Works Design & Dwgs for FS Installation	180	02-Jul-20	28-Dec-20	10-Dec-20	07-Jun-21	161
AS201900	Submit & Accept BS Works Design & Dwgs for Outdoor Lighting Installation	90	28-Jan-21	27-Apr-21	10-Mar-21	07-Jun-21	41
Miscellaneous							
AS211100	Submit & Accept Design & Dwgs for DO System	180	14-Dec-20	11-Jun-21	17-Dec-20	14-Jun-21	3
AS211200	Submit & Accept Design & Dwgs for Sewage Pumping Station	120	30-Oct-20	26-Feb-21	08-Feb-21	07-Jun-21	101
AS211300	Submit & Accept Design & Dwgs for Process Water Pumping System	90	15-Sep-20	13-Dec-20	09-Jan-21	08-Apr-21	116
AS211400	Submit & Accept Design & Dwgs for External Sludge Transfer Pumping System	90	14-Nov-20	11-Feb-21	10-Mar-21	07-Jun-21	116
AS211500	Submit & Accept Design & Dwgs for THP Cooling Water Pumping Station	90	14-Nov-20	11-Feb-21	10-Mar-21	07-Jun-21	116
AS211600	Submit & Accept Design & Dwgs for Ferric Chloride Dosing System	120	14-Nov-20	13-Mar-21	08-Feb-21	07-Jun-21	86
AS211700	Submit & Accept Design & Dwgs for Temporary Primary Sludge Pumping Facility	90	14-Dec-20	13-Mar-21	10-Mar-21	07-Jun-21	86
AS211800	Submit & Accept Design & Dwgs for Gas Detection System	180	29-Nov-20	27-May-21	10-Dec-20	07-Jun-21	11
AS211900	Submit & Accept Design & Dwgs for CCTV System	180	29-Nov-20	27-May-21	10-Dec-20	07-Jun-21	11
Section 3 - Complete Design, Construction & T&C for Sidestream Facilities							
Major Subcontractor / Supplier Procurement							
AS160020	Procurement & PO for Deammonification Sidestream Treatment Facilities	200	20-Nov-19 A	06-Jun-20 A	22-Jun-20	22-Jun-20	
Design & Submission							
Civil Works Design							
AS160100	Prepare & Submit General Layout Plan	60	07-Jun-20 A	05-Aug-20	22-Jun-20	07-Aug-20	2
AS160110	Review & Comment on General Layout Plan by PM	21	06-Aug-20	26-Aug-20	08-Aug-20	28-Aug-20	2
AS160120	Revise & Re-submit General Layout Plan	28	27-Aug-20	23-Sep-20	29-Aug-20	25-Sep-20	2
AS160130	Review & Accept of General Layout Plan by PM	21	24-Sep-20	14-Oct-20	08-Nov-20	28-Nov-20	45
AS160200	Prepare & Submit Architectural Design / Drawings	90	17-Jun-20 A	14-Sep-20	01-Jul-20	25-Sep-20	11
AS160210	Review & Comment on Architectural Design / Drawings by PM	21	15-Sep-20	05-Oct-20	26-Sep-20	16-Oct-20	11
AS160220	Revise & Re-submit Architectural Design / Drawings	28	06-Oct-20	02-Nov-20	23-Oct-20	19-Nov-20	17
AS160230	Review & Accept of Architectural Design / Drawings by PM	21	03-Nov-20	23-Nov-20	20-Nov-20	10-Dec-20	17
AS160300	Prepare & Submit Foundation Design / Drawings	60	20-Aug-20	18-Oct-20	22-Aug-20	20-Oct-20	2
AS160310	Review & Comment on Foundation Design / Drawings by PM	21	19-Oct-20	08-Nov-20	21-Oct-20	10-Nov-20	2
AS160320	Revise & Re-submit Foundation Design / Drawings	28	09-Nov-20	06-Dec-20	11-Nov-20	08-Dec-20	2
AS160330	Review & Accept of Foundation Design / Drawings by PM	21	07-Dec-20	27-Dec-20	09-Dec-20	29-Dec-20	2
AS160400	Prepare & Submit Structural & Civil Design / Drawings	90	06-Oct-20	03-Jan-21	20-Nov-20	17-Feb-21	45
AS160410	Review & Comment on Structural & Civil Design / Drawingsby PM	21	04-Jan-21	24-Jan-21	18-Feb-21	10-Mar-21	45
AS160420	Revise & Re-submit Structural & Civil Design / Drawings	28	25-Jan-21	21-Feb-21	11-Mar-21	07-Apr-21	45
AS160430	Review & Accept of Structural & Civil Design / Drawings by PM	21	22-Feb-21	14-Mar-21	08-Apr-21	28-Apr-21	45
AS160500	Prepare & Submit Builder's Works Drawings	90	03-Nov-20	31-Jan-21	20-Nov-20	17-Feb-21	17
AS160510	Review & Comment on Builder's Works Drawings by PM	21	01-Feb-21	21-Feb-21	18-Feb-21	10-Mar-21	17
AS160520	Revise & Re-submit Builder's Works Drawings	28	22-Feb-21	21-Mar-21	11-Mar-21	07-Apr-21	17



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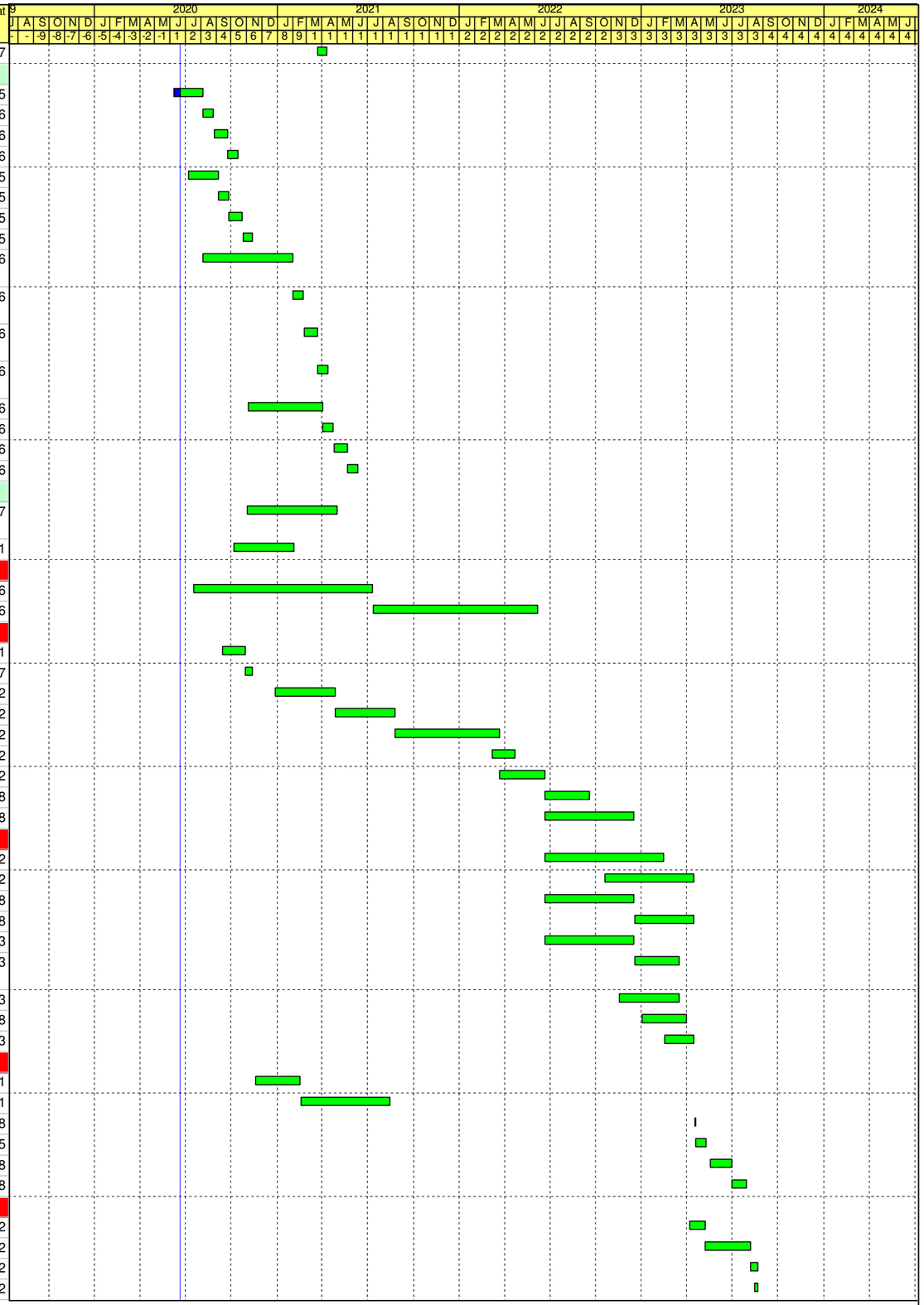
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS160530	Review & Accept of Builder's Works Drawings by PM	21	22-Mar-21	11-Apr-21	08-Apr-21	28-Apr-21	17
E&M Design							
AS151100	Prepare & Submit General Arrangement Drawings	60	07-Jun-20 A	05-Aug-20	15-Jul-20	30-Aug-20	25
AS151110	Review & Comment on General Arrangement Drawings by PM	21	06-Aug-20	26-Aug-20	11-Sep-20	01-Oct-20	36
AS151120	Revise & Re-submit General Arrangement Drawings	28	27-Aug-20	23-Sep-20	02-Oct-20	29-Oct-20	36
AS151130	Review & Accept of General Arrangement Drawings by PM	21	24-Sep-20	14-Oct-20	30-Oct-20	19-Nov-20	36
AS152100	Prepare & Submit Civil Requirement Drawings	60	07-Jul-20	04-Sep-20	01-Aug-20	29-Sep-20	25
AS152110	Review & Comment on Civil Requirement Drawings by PM	21	05-Sep-20	25-Sep-20	30-Sep-20	20-Oct-20	25
AS152120	Revise & Re-submit Civil Requirement Drawings	28	26-Sep-20	23-Oct-20	21-Oct-20	17-Nov-20	25
AS152130	Review & Accept of Civil Requirement Drawings by PM	21	24-Oct-20	13-Nov-20	18-Nov-20	08-Dec-20	25
AS152200	Prepare & Submit Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	180	06-Aug-20	01-Feb-21	21-Sep-20	19-Mar-21	46
AS152210	Review & Comment on Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	21	02-Feb-21	22-Feb-21	14-Apr-22	04-May-22	436
AS152220	Revise & Re-submit Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	28	23-Feb-21	22-Mar-21	05-May-22	01-Jun-22	436
AS152230	Review & Accept of Ele. Schematic Dwgs, Wiring Dwgs, Cable Schedule & Design Cal.	21	23-Mar-21	12-Apr-21	02-Jun-22	22-Jun-22	436
AS152300	Prepare & Submit the Schedule, Design Cal. & Fixing Details of Equipment	150	04-Nov-20	02-Apr-21	20-Dec-20	18-May-21	46
AS152310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	03-Apr-21	23-Apr-21	19-May-21	08-Jun-21	46
AS152320	Revise & Re-submit the Schedule, Design Cal. & Fixing Details of Equipment	28	24-Apr-21	21-May-21	09-Jun-21	06-Jul-21	46
AS152330	Review & Accept of the Schedule, Design Cal. & Fixing Details of Equipment	21	22-May-21	11-Jun-21	07-Jul-21	27-Jul-21	46
Building Services							
AS201400	Prepare & Submit BS Works Design & Dwgs for Sidestream Treatment Facilities	180	03-Nov-20	01-May-21	28-Feb-21	26-Aug-21	117
AS201420	Prepare & Submit FS Works Design & Dwgs for Sidestream Treatment Facilities	120	06-Oct-20	02-Feb-21	17-Oct-20	13-Feb-21	11
Major Plant & Materials Procurement							
AS153100	Procurement & PO for Deammonification Sidestream Treatment Facilities	360	17-Jul-20	11-Jul-21	02-Aug-20	27-Jul-21	16
AS153120	Fabrication & Delivery of Deammonification Sidestream Treatment Facilities	330	12-Jul-21	06-Jun-22	28-Jul-21	22-Jun-22	16
Civil Works Construction							
AS161100	Ground Investigation	45	14-Sep-20	28-Oct-20	25-Oct-20	08-Dec-20	41
AS161120	Site Clearance	15	29-Oct-20	12-Nov-20	15-Dec-20	29-Dec-20	47
AS161140	Foundation / Pilings	120	28-Dec-20	26-Apr-21	30-Dec-20	28-Apr-21	2
AS161160	ELS / Substructure	120	27-Apr-21	24-Aug-21	29-Apr-21	26-Aug-21	2
AS161180	Superstructure	210	25-Aug-21	22-Mar-22	27-Aug-21	24-Mar-22	2
AS161200	Waterproofing	45	08-Mar-22	21-Apr-22	10-Mar-22	23-Apr-22	2
AS161220	External & Internal Finishes - 1st Fix	90	23-Mar-22	20-Jun-22	25-Mar-22	22-Jun-22	2
AS161240	External & Internal Finishes - 2nd Fix	90	21-Jun-22	18-Sep-22	11-Dec-23	09-Mar-24	538
AS161260	Landscaping & Establishment Works	180	21-Jun-22	17-Dec-22	12-Sep-23	09-Mar-24	448
E&M Installation							
AS154100	E&M Installation of Deammonification Sidestream Treatment Facilities	240	21-Jun-22	15-Feb-23	23-Jun-22	17-Feb-23	2
AS154120	Installation of Electrical Supply Systems	180	19-Oct-22	16-Apr-23	21-Oct-22	18-Apr-23	2
AS154160	FS Installation - Conduits, Trunking, & Pipeworks	180	21-Jun-22	17-Dec-22	09-Jul-22	04-Jan-23	18
AS154180	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	18-Dec-22	16-Apr-23	05-Jan-23	04-May-23	18
AS154200	BS Fitting Installation - Conduits, Trunking, & Ductworks	180	21-Jun-22	17-Dec-22	14-Jul-22	09-Jan-23	23
AS154220	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	18-Dec-22	17-Mar-23	10-Jan-23	09-Apr-23	23
AS154240	Installation of Control & Monitoring System	120	18-Nov-22	17-Mar-23	11-Dec-22	09-Apr-23	23
AS154260	Installation of CCTV System	90	02-Jan-23	01-Apr-23	09-Feb-23	09-May-23	38
AS154280	Installation of Gas Detection System	60	16-Feb-23	16-Apr-23	11-Mar-23	09-May-23	23
Statutory Submission / Inspection (FSD)							
AS201440	Prepare & Submit GBP for FSD approval	90	19-Nov-20	16-Feb-21	30-Nov-20	27-Feb-21	11
AS201460	FSD Review & Approval of GBP	180	17-Feb-21	15-Aug-21	28-Feb-21	26-Aug-21	11
AS201510a	Prepare & Submit FSI/314 & FSI/501	3	17-Apr-23	19-Apr-23	05-May-23	07-May-23	18
AS201520a	FSD Review & Approval of FSI/314 & FSI/501	21	20-Apr-23	10-May-23	15-May-23	04-Jun-23	25
AS201540a	F.S. Inspection, Defects Rectification & Re-inspection	45	18-May-23	01-Jul-23	05-Jun-23	19-Jul-23	18
AS201560a	Issuance of Acceptance Letter	28	02-Jul-23	29-Jul-23	20-Jul-23	16-Aug-23	18
Testing & Commissioning							
AS155100	SAT for Deammonification Sidestream Treatment Facilities	30	08-Apr-23	07-May-23	10-Apr-23	09-May-23	2
AS155120a	Process Start Up	92	08-May-23	07-Aug-23	10-May-23	09-Aug-23	2
AS155140a	Submission & Acceptance of Process Start Up Report	14	08-Aug-23	21-Aug-23	10-Aug-23	23-Aug-23	2
AS155160a	Notice for Commencement of Phase 1 Commissioning Tests	7	15-Aug-23	21-Aug-23	17-Aug-23	23-Aug-23	2



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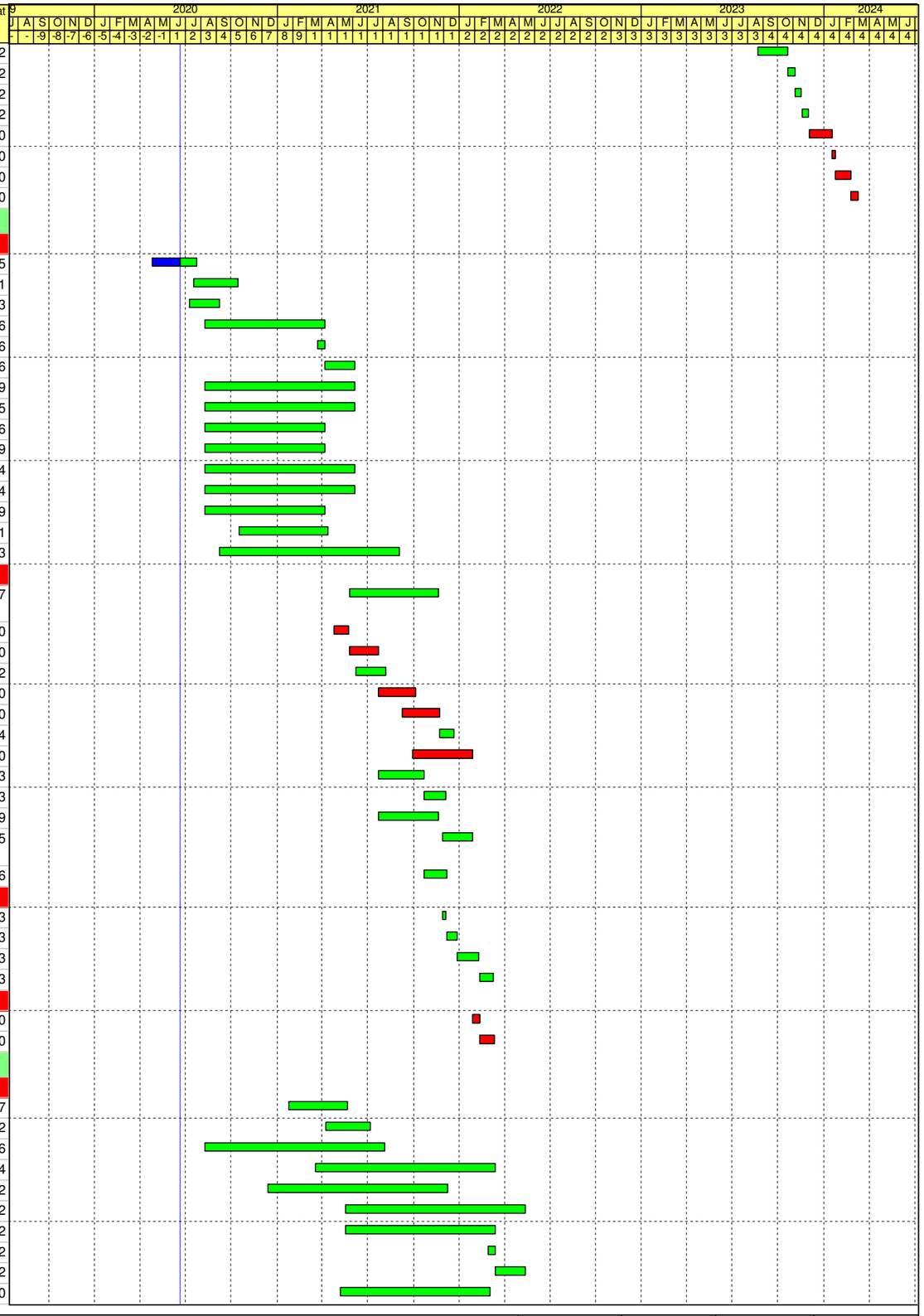
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS155200	Phase 1 Commissioning Tests	60	22-Aug-23	20-Oct-23	24-Aug-23	22-Oct-23	2
AS155220a	Submission & Acceptance of Phase 1 Commissioning Tests Report	14	21-Oct-23	03-Nov-23	23-Oct-23	05-Nov-23	2
AS155240a	Phase 1 Post Commissioning	14	04-Nov-23	17-Nov-23	06-Nov-23	19-Nov-23	2
AS155260a	Submission & Acceptance of Phase 1 Post Commissioning Report	14	18-Nov-23	01-Dec-23	20-Nov-23	03-Dec-23	2
AS155300	Phase 2 Commissioning Tests	45	04-Dec-23	17-Jan-24	04-Dec-23	17-Jan-24	0
AS155320a	Acceptance of Phase 2 Commissioning Tests Results	7	18-Jan-24	24-Jan-24	18-Jan-24	24-Jan-24	0
AS155340a	Phase 3 Commissioning Tests	30	25-Jan-24	23-Feb-24	25-Jan-24	23-Feb-24	0
AS155360a	Submission & Acceptance of Phase 3 Commissioning Report	15	24-Feb-24	09-Mar-24	24-Feb-24	09-Mar-24	0
Section 4 - Complete Construction & T&C for UV System No.1 & EP Station No. 1							
Major Plant & Materials Fabrication & Delivery							
AS103300	Procurement & PO for Pipeworks & Associated Valves	90	25-Apr-20 A	23-Jul-20	23-Oct-20	25-Nov-20	125
AS103320	Procurement & PO for Elec. Materials	90	18-Jul-20	15-Oct-20	28-Aug-20	25-Nov-20	41
AS103400	Procurement & PO for FS System (S20)	60	09-Jul-20	06-Sep-20	31-Aug-20	29-Oct-20	53
AS104100	Fabrication of UV Disinfection System (S10)	240	09-Aug-20	05-Apr-21	03-Dec-20	30-Jul-21	116
AS104105c	FAT for UV Disinfection System (S10)	14	23-Mar-21	05-Apr-21	17-Jul-21	30-Jul-21	116
AS104110c	Delivery of UV Disinfection System (S10)	60	06-Apr-21	04-Jun-21	31-Jul-21	28-Sep-21	116
AS104120	Fabrication & Delivery of Lift-up Pumps (S11)	300	09-Aug-20	04-Jun-21	27-Sep-20	23-Jul-21	49
AS104140	Fabrication & Delivery of Transfer Pumps (S13)	300	09-Aug-20	04-Jun-21	12-Nov-20	07-Sep-21	95
AS104160	Fabrication & Delivery of FRP Cover (S11)	240	09-Aug-20	05-Apr-21	01-Feb-21	28-Sep-21	176
AS104180	Fabrication & Delivery of EOT Cranes (2T & 5T) (S19)	240	09-Aug-20	05-Apr-21	27-Sep-20	24-May-21	49
AS104200	Fabrication & Delivery of Stoplogs (S21)	300	09-Aug-20	04-Jun-21	01-Mar-21	25-Dec-21	204
AS104220	Fabrication & Delivery of Penstocks (S21)	300	09-Aug-20	04-Jun-21	01-Mar-21	25-Dec-21	204
AS104300	Fabrication & Delivery of Pipeworks & Associated Valves	240	09-Aug-20	05-Apr-21	26-Nov-20	23-Jul-21	109
AS104320	Fabrication & Delivery of Elec. Materials	180	16-Oct-20	13-Apr-21	26-Nov-20	24-May-21	41
AS104400	Fabrication & Delivery of FS System (S20)	360	07-Sep-20	01-Sep-21	30-Oct-20	24-Oct-21	53
E&M Installation							
AS105100	Provision of Temporary Power for UV System No.1 & Effluent Transfer Pumping Station	180	25-May-21	20-Nov-21	31-Jul-21	26-Jan-22	67
AS106100	Mobilisation	30	25-Apr-21	24-May-21	25-Apr-21	24-May-21	0
AS106120	E&M Installation of EOT Cranes (5T)	60	25-May-21	23-Jul-21	25-May-21	23-Jul-21	0
AS106140	E&M Installation of EOT Cranes (2T)	60	08-Jun-21	06-Aug-21	10-Jul-21	07-Sep-21	32
AS106160	E&M Installation of Lift-up Pumps & Associated Pipeworks / Valves	75	24-Jul-21	06-Oct-21	24-Jul-21	06-Oct-21	0
AS106180	E&M Installation of Transfer Pumps & Associated Pipeworks / Valves	75	08-Sep-21	21-Nov-21	08-Sep-21	21-Nov-21	0
AS106200	E&M Installation of Penstocks & Stoplogs	30	22-Nov-21	21-Dec-21	26-Dec-21	24-Jan-22	34
AS106210	E&M Installation of UV System	120	29-Sep-21	26-Jan-22	29-Sep-21	26-Jan-22	0
AS106220	FS Installation - Conduits, Trunking, & Pipeworks	90	24-Jul-21	21-Oct-21	27-Jul-21	24-Oct-21	3
AS106240	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	45	22-Oct-21	05-Dec-21	25-Oct-21	08-Dec-21	3
AS106260	BS Fitting Installation - Conduits, Trunking, & Ductworks	120	24-Jul-21	20-Nov-21	21-Sep-21	18-Jan-22	59
AS106280	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	60	28-Nov-21	26-Jan-22	12-Jan-22	12-Mar-22	45
AS106320	Installation of CCTV System	45	23-Oct-21	06-Dec-21	28-Dec-21	10-Feb-22	66
Statutory Submission / Inspection (FSD)							
AS107100	Prepare & Submit FSI/314 & FSI/501	7	29-Nov-21	05-Dec-21	02-Dec-21	08-Dec-21	3
AS107110a	FSD Review & Approval of FSI/314 & FSI/501	21	06-Dec-21	26-Dec-21	09-Dec-21	29-Dec-21	3
AS107200	F.S. Inspection, Defects Rectification & Re-inspection	45	27-Dec-21	09-Feb-22	30-Dec-21	12-Feb-22	3
AS107300	Issuance of Acceptance Letter	28	10-Feb-22	09-Mar-22	13-Feb-22	12-Mar-22	3
Testing & Commissioning							
AS107400	SAT for UV System No. 1 & Effluent Transfer Pumping Station No. 1	15	27-Jan-22	10-Feb-22	27-Jan-22	10-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							
AS023290	Procurement & PO for Pipeworks & Associated Valves	120	23-Jan-21	22-May-21	09-Feb-21	08-Jun-21	17
AS023620	Procurement & PO for Elec. Materials	90	08-Apr-21	06-Jul-21	10-Apr-21	08-Jul-21	2
AS104240	Fabrication & Delivery of Transfomers -UV (Tx 07 & 08) (S17)	360	09-Aug-20	03-Aug-21	08-Nov-21	02-Nov-22	456
AS104260	Fabrication & Delivery of LVSB -UV (S17)	360	19-Mar-21	13-Mar-22	07-Jan-22	01-Jan-23	294
AS104280	Fabrication & Delivery of Control & Monitoring System -UV (S18)	360	14-Dec-20	08-Dec-21	10-Apr-22	04-Apr-23	482
AS501100	Fabrication & Delivery of Sludge Screening System (S2)	360	18-May-21	12-May-22	26-Nov-21	20-Nov-22	192
AS501120	Fabrication of Sludge Thickening System (S3)	300	18-May-21	13-Mar-22	29-Jun-21	24-Apr-22	42
AS501125c	FAT for Sludge Thickening System (S3)	14	28-Feb-22	13-Mar-22	11-Apr-22	24-Apr-22	42
AS501130c	Delivery of Sludge Thickening System (S3)	60	14-Mar-22	12-May-22	25-Apr-22	23-Jun-22	42
AS501140	Fabrication & Delivery of Sludge Digestion System (S5)	300	08-May-21	03-Mar-22	17-Jul-21	12-May-22	70



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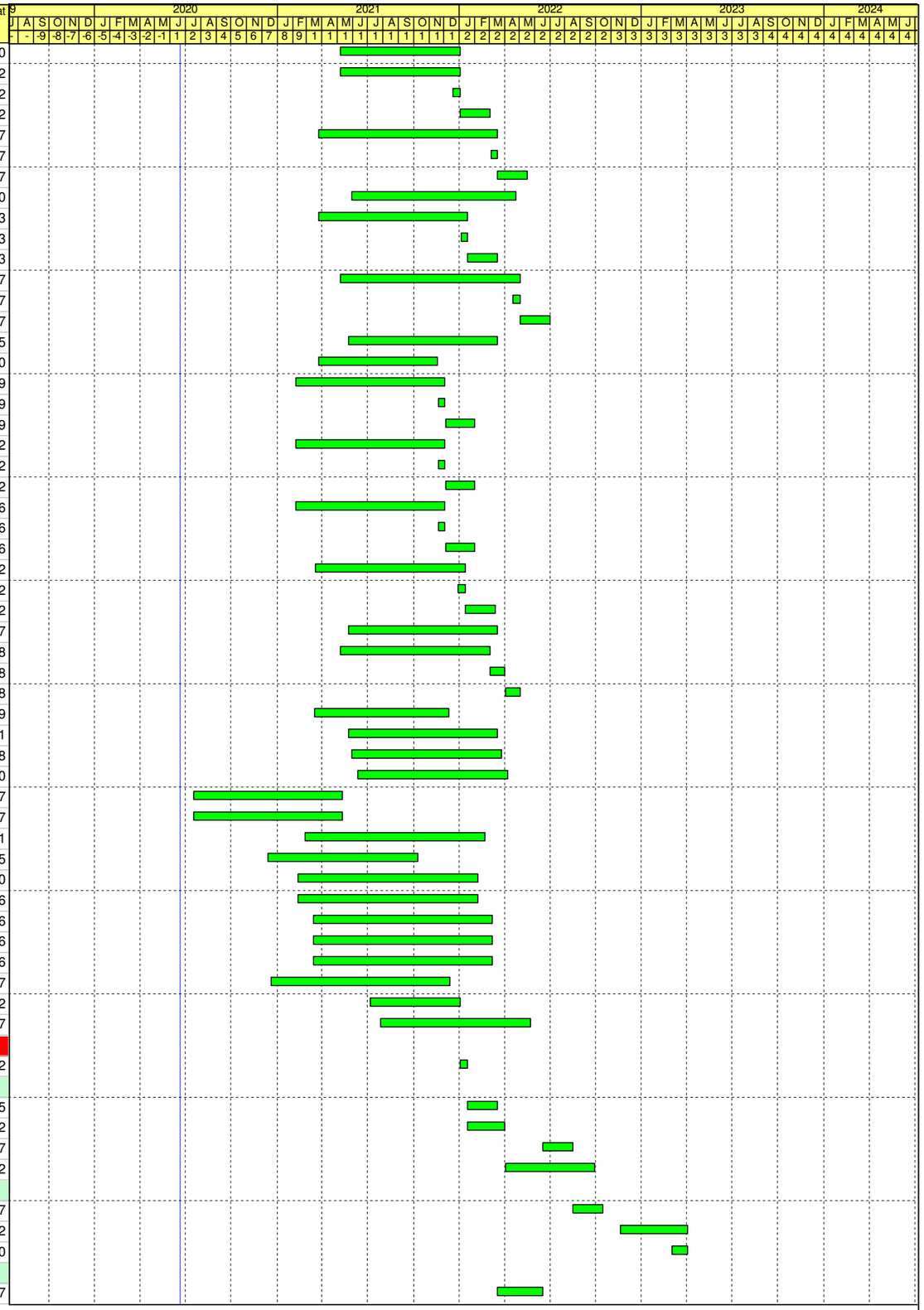
AS501150a	Fabrication & Delivery of FRP Walkway / Cover (S5)	240	08-May-21	02-Jan-22	18-May-21	12-Jan-22	10
AS501160	Fabrication of Sludge Dewatering System (S6)	240	08-May-21	02-Jan-22	09-Jun-21	03-Feb-22	32
AS501165c	FAT for Sludge Dewatering System (S6)	14	20-Dec-21	02-Jan-22	21-Jan-22	03-Feb-22	32
AS501170c	Delivery of Sludge Dewatering System (S6)	60	03-Jan-22	03-Mar-22	04-Feb-22	04-Apr-22	32
AS501180	Fabrication of THP System (S4)	360	24-Mar-21	18-Mar-22	28-Aug-21	22-Aug-22	157
AS501200	FAT for THP System (S4)	14	05-Mar-22	18-Mar-22	09-Aug-22	22-Aug-22	157
AS501220	Delivery of THP System (S4)	60	19-Mar-22	17-May-22	23-Aug-22	21-Oct-22	157
AS501240	Fabrication & Delivery of Biogas Storage & Pre-Treatment (S7)	330	30-May-21	24-Apr-22	29-Jun-21	24-May-22	30
AS501260	Fabrication of CHP System (S8)	300	24-Mar-21	17-Jan-22	05-Jun-21	31-Mar-22	73
AS501280	FAT for CHP Generators (S8)	14	04-Jan-22	17-Jan-22	18-Mar-22	31-Mar-22	73
AS501300	Delivery of CHP Generators (S8)	60	18-Jan-22	18-Mar-22	01-Apr-22	30-May-22	73
AS501320	Fabrication of Waste Gas Burning System (S9)	360	08-May-21	02-May-22	11-Nov-21	05-Nov-22	187
AS501340	FAT for Waste Gas Steam Generation Boiler (S9)	14	19-Apr-22	02-May-22	23-Oct-22	05-Nov-22	187
AS501360	Delivery of Waste Gas Burning System (S9)	60	03-May-22	01-Jul-22	06-Nov-22	04-Jan-23	187
AS501380	Fabrication & Delivery of Plant Service Water System (S12)	300	23-May-21	18-Mar-22	06-Aug-21	01-Jun-22	75
AS501400	Fabrication & Delivery of SAS Pumping System (S14)	240	24-Mar-21	18-Nov-21	03-Apr-21	28-Nov-21	10
AS501420	Fabrication of 11kV Transfomers (S17)	300	07-Feb-21	03-Dec-21	23-Dec-21	18-Oct-22	319
AS501440	FAT for 11kV Transfomers (S17)	14	20-Nov-21	03-Dec-21	05-Oct-22	18-Oct-22	319
AS501460	Delivery of 11kV Transfomers (S17)	60	04-Dec-21	01-Feb-22	19-Oct-22	17-Dec-22	319
AS501480	Fabrication of 380V Transfomers (S17)	300	07-Feb-21	03-Dec-21	06-Dec-21	01-Oct-22	302
AS501500	FAT for 380V Transfomers (S17)	14	20-Nov-21	03-Dec-21	18-Sep-22	01-Oct-22	302
AS501520	Delivery of 380V Transfomers (S17)	60	04-Dec-21	01-Feb-22	02-Oct-22	30-Nov-22	302
AS501540	Fabrication of 11 kV Switchboard (S17)	300	07-Feb-21	03-Dec-21	11-Oct-21	06-Aug-22	246
AS501560	FAT for 11 kV Switchboard (S17)	14	20-Nov-21	03-Dec-21	24-Jul-22	06-Aug-22	246
AS501580	Delivery of 11 kV Switchboard (S17)	60	04-Dec-21	01-Feb-22	07-Aug-22	05-Oct-22	246
AS501600	Fabrication of 380V Switchboard (S17)	300	19-Mar-21	12-Jan-22	09-Jul-21	04-May-22	112
AS501620	FAT for 380V Switchboard (S17)	14	30-Dec-21	12-Jan-22	21-Apr-22	04-May-22	112
AS501640	Delivery of 380V Switchboard (S17)	60	13-Jan-22	13-Mar-22	05-May-22	03-Jul-22	112
AS501660b	Fabrication & Delivery of Pipeworks & Associated Valves	300	23-May-21	18-Mar-22	09-Jun-21	04-Apr-22	17
AS501680	Fabrication of Control & Monitoring System (S18)	300	08-May-21	03-Mar-22	22-Dec-21	17-Oct-22	228
AS501700	FAT for SCADA System (S18)	30	04-Mar-22	02-Apr-22	18-Oct-22	16-Nov-22	228
AS501720	Delivery of SCADA System (S18)	30	03-Apr-22	02-May-22	17-Nov-22	16-Dec-22	228
AS501740	Fabrication & Delivery of Lifting Appliances (S19)	270	17-Mar-21	11-Dec-21	25-Apr-21	19-Jan-22	39
AS501760	Fabrication & Delivery of Reclaimed Water Utilisation (S13)	300	23-May-21	18-Mar-22	31-Oct-21	26-Aug-22	161
AS501780	Fabrication & Delivery of H2S Removal System (S7)	300	30-May-21	25-Mar-22	14-Dec-21	09-Oct-22	198
AS501800	Fabrication & Delivery of DO System (S21)	300	12-Jun-21	07-Apr-22	17-Feb-22	13-Dec-22	250
AS501820	Fabrication & Delivery of Stoplog (S21)	300	17-Jul-20	12-May-21	09-Jun-21	04-Apr-22	327
AS501840	Fabrication & Delivery of Penstock (S21)	300	17-Jul-20	12-May-21	09-Jun-21	04-Apr-22	327
AS501860	Fabrication & Delivery of Sewage Pump (S21)	360	27-Feb-21	21-Feb-22	15-Nov-21	09-Nov-22	261
AS501880	Fabrication & Delivery of Process Water Pump (S21)	300	14-Dec-20	09-Oct-21	07-Jun-21	02-Apr-22	175
AS501900	Fabrication & Delivery of External Sludge Transfer Pump (S21)	360	12-Feb-21	06-Feb-22	19-Mar-22	13-Mar-23	400
AS501920	Fabrication & Delivery of THP Cooling Pump (S21)	360	12-Feb-21	06-Feb-22	15-Mar-22	09-Mar-23	396
AS501940	Fabrication & Delivery of Ferric Chloride Storage Tank (S21)	360	14-Mar-21	08-Mar-22	14-Jan-22	08-Jan-23	306
AS501960	Fabrication & Delivery of Ferric Chloride Dosing Pump (S21)	360	14-Mar-21	08-Mar-22	13-Feb-22	07-Feb-23	336
AS501980	Fabrication & Delivery of Temporary Primary Sludge Pump (S21)	360	14-Mar-21	08-Mar-22	15-Mar-22	09-Mar-23	366
AS501990b	Fabrication & Delivery of Genset	360	19-Dec-20	13-Dec-21	11-Nov-21	05-Nov-22	327
AS510060	Fabrication & Delivery of Elec. Materials	180	07-Jul-21	02-Jan-22	09-Jul-21	04-Jan-22	2
AS510080	Fabrication & Delivery of Gas Detection System	300	27-Jul-21	22-May-22	10-Apr-22	03-Feb-23	257
Sludge Dewatering Building							
AS502100	Mobilisation	15	03-Jan-22	17-Jan-22	05-Jan-22	19-Jan-22	2
Sludge Dewatering (SDe)							
AS502120	E&M Installation of Process Water Pump (S21)	60	18-Jan-22	18-Mar-22	03-Apr-22	01-Jun-22	75
AS502140	E&M Installation of EOT Crane LA-01-02	75	18-Jan-22	02-Apr-22	20-Jan-22	04-Apr-22	2
AS502150	E&M Installation of Monorail LA-01-04	60	17-Jun-22	15-Aug-22	24-Jul-22	21-Sep-22	37
AS502160	E&M Installation of Sludge Dewatering System (S6)	180	03-Apr-22	29-Sep-22	05-Apr-22	01-Oct-22	2
Sludge Screening (SSc)							
AS502180	E&M Installation of Monorail LA-01-01	60	16-Aug-22	14-Oct-22	22-Sep-22	20-Nov-22	37
AS502200	E&M Installation of Sludge Screening System (S2)	135	19-Nov-22	02-Apr-23	21-Nov-22	04-Apr-23	2
AS502220	E&M Installation of External Sludge Transfer Pump (S21)	30	04-Mar-23	02-Apr-23	14-Mar-23	12-Apr-23	10
Sludge Thickening (STh)							
AS502260	E&M Installation of EOT Crane LA-01-03	90	19-Mar-22	16-Jun-22	26-Mar-22	23-Jun-22	7



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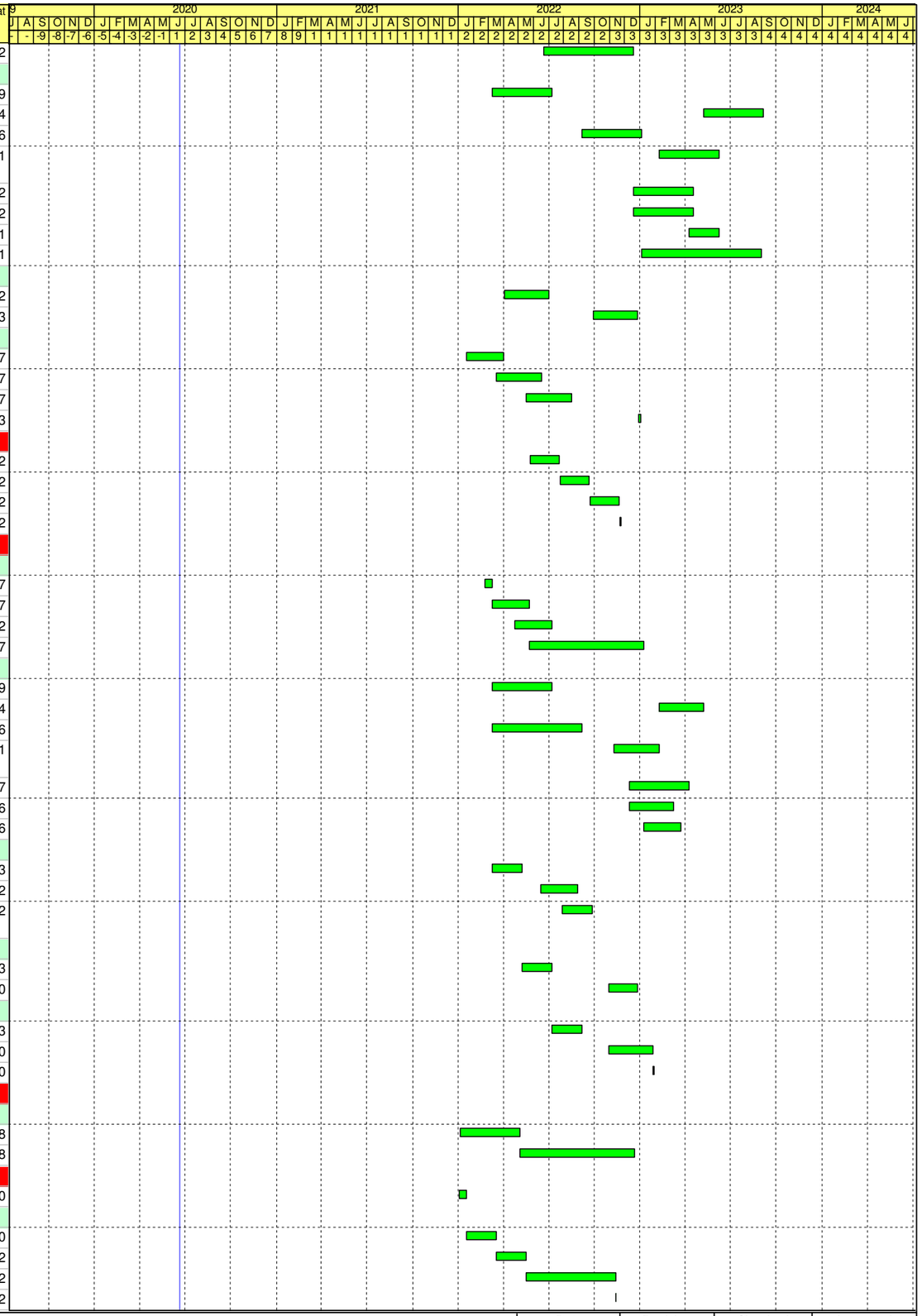
AS502280	E&M Installation of Sludge Thickening System (S3)	180	22-Jun-22	18-Dec-22	24-Jun-22	20-Dec-22	2
Building Services							
AS502300	FS Installation - Conduits, Trunking, & Pipeworks	120	10-Mar-22	07-Jul-22	02-Feb-23	01-Jun-23	329
AS502320	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	120	09-May-23	05-Sep-23	02-Jun-23	29-Sep-23	24
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	19-Dec-22	17-Apr-23	21-Dec-22	19-Apr-23	2
AS502400	Installation of CCTV System	120	19-Dec-22	17-Apr-23	21-Dec-22	19-Apr-23	2
AS502410	Installation of Gas Detection System	60	09-Apr-23	07-Jun-23	20-Apr-23	18-Jun-23	11
AS512120	Installation of Lift	240	04-Jan-23	31-Aug-23	14-Jul-23	09-Mar-24	191
Tx Rm							
AS502420	BS Fitting Intallation	90	03-Apr-22	01-Jul-22	02-Sep-22	30-Nov-22	152
AS502440	E&M Installation of 380V Transformers (S17)	90	29-Sep-22	27-Dec-22	01-Dec-22	28-Feb-23	63
LV Switchroom							
AS502460	BS Fitting Intallation	75	18-Jan-22	02-Apr-22	05-May-22	18-Jul-22	107
AS502480	E&M Installation of LVSB at G/F (S17)	90	19-Mar-22	16-Jun-22	04-Jul-22	01-Oct-22	107
AS502500	E&M Installation of LVSB at 1/F (S17)	90	18-May-22	15-Aug-22	02-Sep-22	30-Nov-22	107
AS502520	Ready for Energisation	5	28-Dec-22	01-Jan-23	01-Mar-23	05-Mar-23	63
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	03-Mar-22	16-Mar-22	7
AS503120	E&M Installation of EOT Crane No. 1	75	10-Mar-22	23-May-22	17-Mar-22	30-May-22	7
AS503140	E&M Installation of EOT Crane No. 2	75	24-Apr-22	07-Jul-22	05-Jun-22	18-Aug-22	42
AS503160	E&M Installation of CHP System (S8)	230	24-May-22	08-Jan-23	31-May-22	15-Jan-23	7
Building Services							
AS503180	FS Installation - Conduits, Trunking, & Pipeworks	120	10-Mar-22	07-Jul-22	07-Jul-22	03-Nov-22	119
AS503200	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	08-Feb-23	08-May-23	04-Mar-23	01-Jun-23	24
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	16-Jun-22	29-Aug-22	06-Oct-22	19-Dec-22	112
AS503340	Main Cables Laying between 11kV SwitchRoom of CHP Bldg to Tx Rm of Workshop No.2	60	29-Jul-22	26-Sep-22	18-Nov-22	16-Jan-23	112
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	29-Oct-22	27-Dec-22	18-Dec-22	15-Feb-23	50
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	29-Oct-22	26-Jan-23	18-Dec-22	17-Mar-23	50
AS503440	Ready for Energisation	3	27-Jan-23	29-Jan-23	18-Mar-23	20-Mar-23	50
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	03-Jan-22	16-Jan-22	22-Feb-22	07-Mar-22	50
CLP Substation							
AS504100	BS Fitting Intallation (at CLP Sub-station in Workshop No.2)	60	17-Jan-22	17-Mar-22	08-Mar-22	06-May-22	50
AS509940a	Inspections, Rectification & H/O to CLP	60	18-Mar-22	16-May-22	08-Jul-22	05-Sep-22	112
AS509960	E&M Installation of HV Transformer (By CLP)	180	17-May-22	12-Nov-22	06-Sep-22	04-Mar-23	112
AS509980	Energisation (By CLP)	1	13-Nov-22	13-Nov-22	05-Mar-23	05-Mar-23	112



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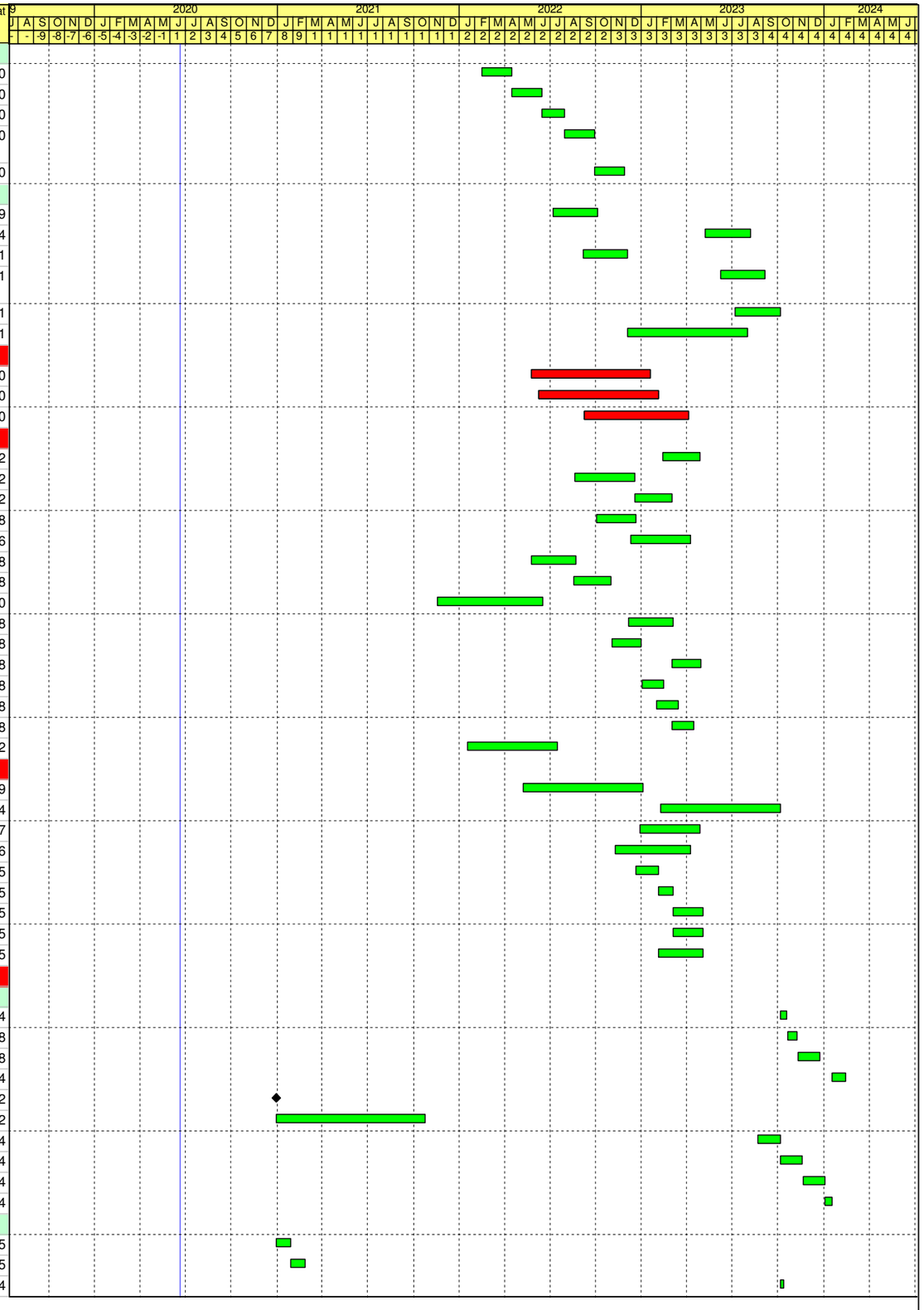
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
11kV HV Switchroom							
AS504200	BS Fitting Intallation	60	16-Feb-22	16-Apr-22	07-Apr-22	05-Jun-22	50
AS504240	E&M Installation of 11kV HVSB (at Workshop No.2)	60	17-Apr-22	15-Jun-22	06-Jun-22	04-Aug-22	50
AS504260	Main Cables Laying between Workshop No.2 & Tx Rm for UV System No.1	45	16-Jun-22	30-Jul-22	05-Aug-22	18-Sep-22	50
AS504280	Main Cables Laying between Workshop No.2 & Tx Rm for Sludge Dewatering Bldg	60	31-Jul-22	28-Sep-22	19-Sep-22	17-Nov-22	50
AS504300	Main Cables Laying between Workshop No.2 & Tx Rm for CHP Bldg	60	29-Sep-22	27-Nov-22	18-Nov-22	16-Jan-23	50
Building Services							
AS504400a	FS Installation - Conduits, Trunking, & Pipeworks	90	08-Jul-22	05-Oct-22	03-May-23	31-Jul-23	299
AS504410a	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	09-May-23	06-Aug-23	01-Aug-23	29-Oct-23	84
AS504420a	BS Fitting Installation - Conduits, Trunking, & Ductworks	90	06-Sep-22	04-Dec-22	15-Apr-23	13-Jul-23	221
AS504430a	BS Fitting Installation - Cable Laying, Termination, Associated Fitting & Field Devices	90	08-Jun-23	05-Sep-23	27-Sep-23	25-Dec-23	111
AS504450	Installation of CCTV System	90	08-Jul-23	05-Oct-23	27-Oct-23	24-Jan-24	111
AS504460	Installation of Lift	240	05-Dec-22	01-Aug-23	14-Jul-23	09-Mar-24	221
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							
AS106300	Installation of Control & Monitoring System - UV	75	12-Feb-23	27-Apr-23	05-Apr-23	18-Jun-23	52
AS505000	E&M Installation of THP System (S4)	120	21-Aug-22	18-Dec-22	22-Oct-22	18-Feb-23	62
AS505100	E&M Installation of Thickened Sludge Feed Pipe to THP System	75	19-Dec-22	03-Mar-23	20-Jan-23	04-Apr-23	32
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	02-Jun-22	30-Aug-22	8
AS505500	E&M Installation of Reclaimed Water Utilisation (S13)	75	19-Aug-22	01-Nov-22	27-Aug-22	09-Nov-22	8
AS505600	E&M Installation of SAS Pumping System (S14)	210	19-Nov-21	16-Jun-22	29-Nov-21	26-Jun-22	10
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	02-Nov-22	31-Dec-22	10-Nov-22	08-Jan-23	8
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	01-Jan-23	14-Feb-23	09-Jan-23	22-Feb-23	8
AS506300	E&M Installation of Ferric Chloride Dosing Pump (S21)	45	31-Jan-23	16-Mar-23	08-Feb-23	24-Mar-23	8
AS506400	E&M Installation of Temporary Primary Sludge Pump (S21)	45	02-Mar-23	15-Apr-23	10-Mar-23	23-Apr-23	8
AS506500b	E&M Installation of Genset	180	18-Jan-22	16-Jul-22	06-Nov-22	04-May-23	292
Building Services							
AS507000	FS Installation - Conduits, Trunking, & Pipeworks	240	09-May-22	03-Jan-23	05-Sep-22	02-May-23	119
AS507100	FS Installation - Cable Laying, Termination, Associated Fitting & Field Devices	240	08-Feb-23	05-Oct-23	04-Mar-23	29-Oct-23	24
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
Statutory Submission / Inspection							
FSD Submission / Inspection							
AS509120	Prepare & Submit FSI/314 & FSI/501	14	06-Oct-23	19-Oct-23	09-Nov-23	22-Nov-23	34
AS509120a	FSD Review & Approval of FSI/314 & FSI/501	21	20-Oct-23	09-Nov-23	07-Dec-23	27-Dec-23	48
AS509140a	F.S. Inspection, Defects Rectification & Re-inspection	45	10-Nov-23	24-Dec-23	28-Dec-23	10-Feb-24	48
AS509200	Issuance of Acceptance Letter	28	18-Jan-24	14-Feb-24	11-Feb-24	09-Mar-24	24
AS509220	Application of D.G. Licence	0	29-Dec-20		29-Jul-21		212
AS509240	Processing of D.G. Licence Application	300	29-Dec-20	24-Oct-21	29-Jul-21	24-May-22	212
AS509250b	Apply for D.G. Inspection	45	22-Aug-23	05-Oct-23	15-Sep-23	29-Oct-23	24
AS509260	D.G. Inspection, Defects Rectification & Re-inspection (Ventilation Division)	45	06-Oct-23	19-Nov-23	30-Oct-23	13-Dec-23	24
AS509280b	D.G. Inspection, Defects Rectification & Re-inspection (DG Division)	45	20-Nov-23	03-Jan-24	14-Dec-23	27-Jan-24	24
AS509300b	Issue D.G. Licence	14	04-Jan-24	17-Jan-24	28-Jan-24	10-Feb-24	24
WSD Submission / Inspection							
AS509300	Submit WWO46 Pt. I & II to WSD (FS)	30	29-Dec-20	27-Jan-21	12-Jul-21	10-Aug-21	195
AS509320	Approval of WWO46 Pt. I & II by WSD (FS)	30	28-Jan-21	26-Feb-21	11-Aug-21	09-Sep-21	195
AS509340	Submit WWO46 Pt. IV to WSD (FS)	7	06-Oct-23	12-Oct-23	09-Nov-23	15-Nov-23	34



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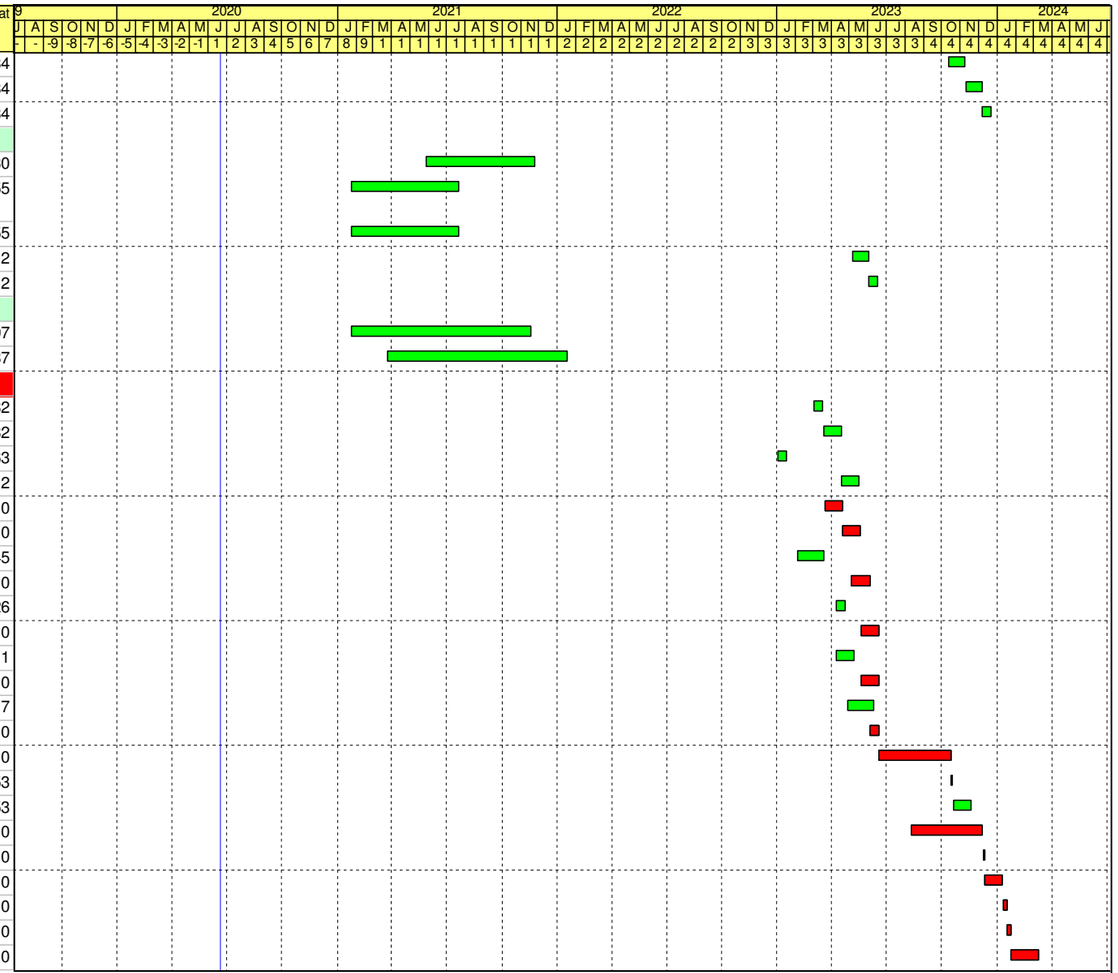
AS509360	WSD Inspection (FS)	28	13-Oct-23	09-Nov-23	16-Nov-23	13-Dec-23	34
AS509362b	Taking of Water Samples and Meter Installation & Tesing	28	10-Nov-23	07-Dec-23	14-Dec-23	10-Jan-24	34
AS509364b	Issue of WWO46 Pt. V	14	08-Dec-23	21-Dec-23	11-Jan-24	24-Jan-24	34
EMSD Submission / Inspection							
AS509370b	Application & Approval of the BEC Submission	180	28-May-21	23-Nov-21	09-Nov-22	07-May-23	530
AS509380b	Application & Approval of the Zone Classification of Hazardous Area - including Fire Risk Assessment Report	180	23-Jan-21	21-Jul-21	09-Nov-22	07-May-23	655
AS509400a	Application for Construction Approval of Notifiable Gas Installation (Form 104)	180	23-Jan-21	21-Jul-21	09-Nov-22	07-May-23	655
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
EPD Submission / Inspection							
AS509500a	EPD Submission & Approval for Air Pollution Control - Genset	300	23-Jan-21	18-Nov-21	31-Mar-23	24-Jan-24	797
AS509520a	EPD Submission & Approval for Air Pollution Control - CHP, CAPC, Flare	300	24-Mar-21	17-Jan-22	31-Mar-23	24-Jan-24	737
Testing & Commissioning							
AS510100	SAT of THP System	15	04-Mar-23	18-Mar-23	05-Apr-23	19-Apr-23	32
AS510200a	System Commissioning Tests for THP System	30	19-Mar-23	17-Apr-23	20-Apr-23	19-May-23	32
AS510300	SAT for Sludge Dewatering System	15	02-Jan-23	16-Jan-23	06-Mar-23	20-Mar-23	63
AS510400	System Commissioning Tests for Sludge Dewatering System	30	18-Apr-23	17-May-23	20-Apr-23	19-May-23	2
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



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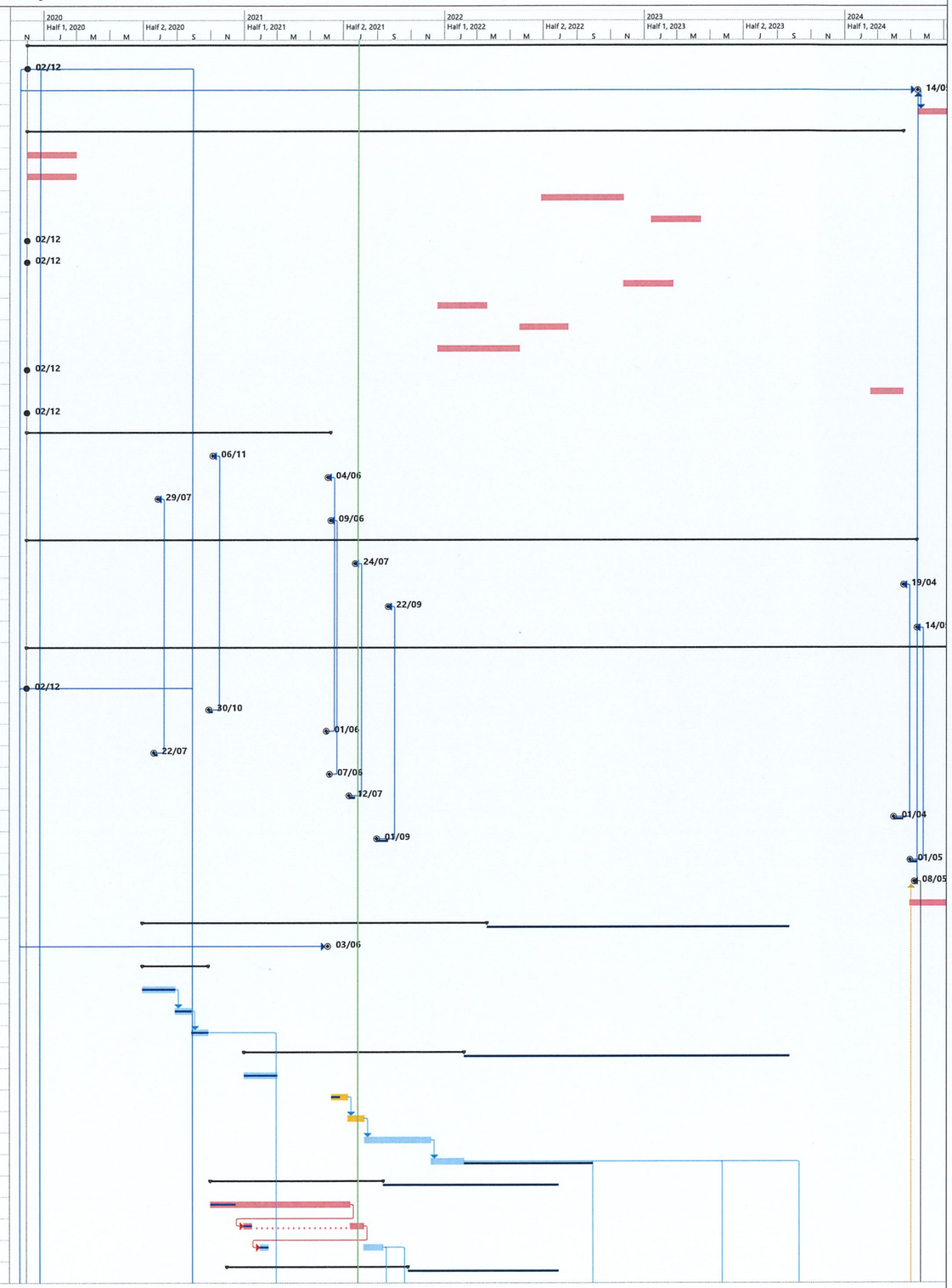
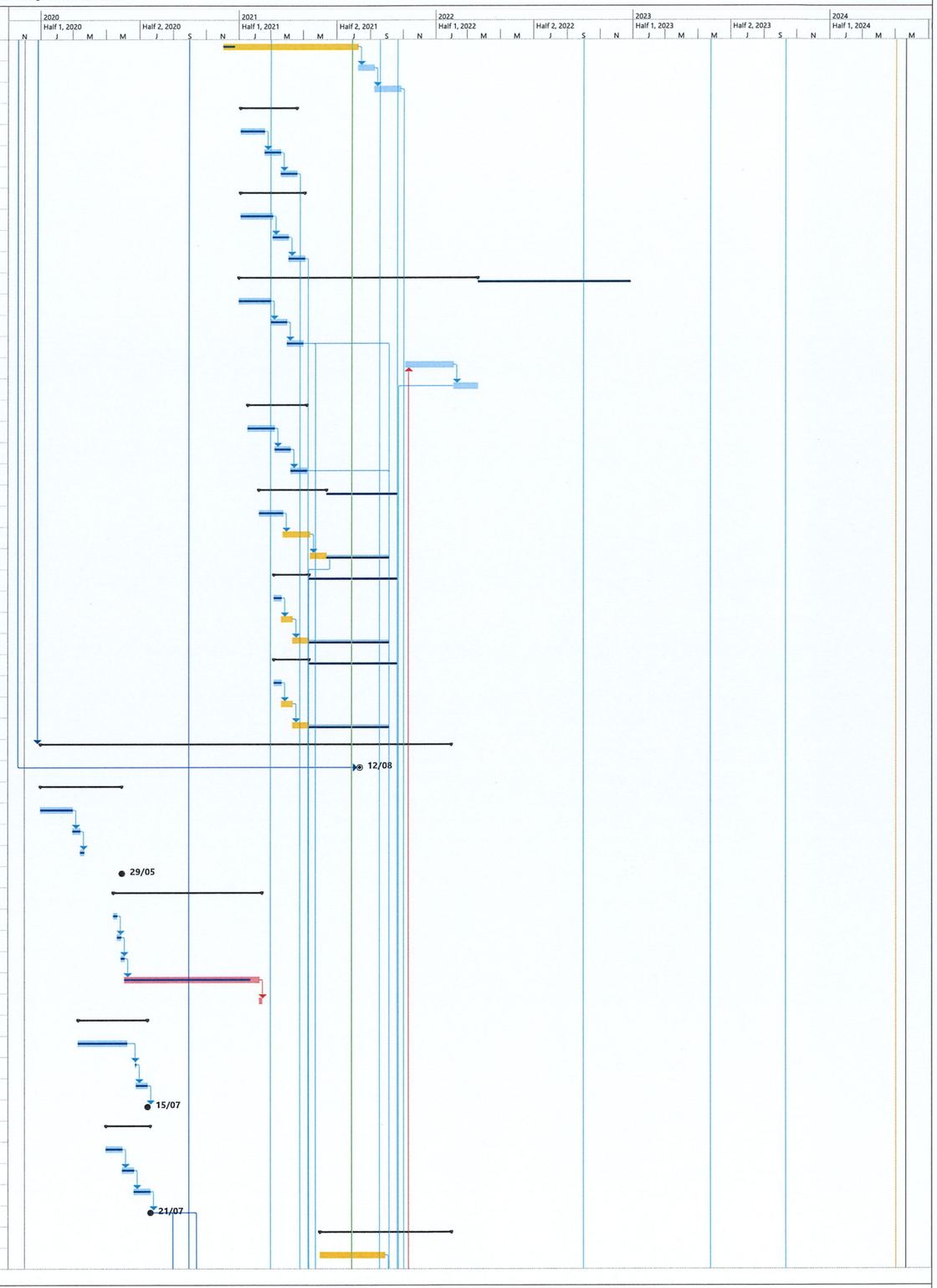
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1	1	1	**DE/2018/04 - Contract Master Programme**	**1990 days**	**Mon 02/12/19**	**Tue 13/05/25**	**Mon 02/12/19**	**Tue 13/05/25**	**0 days**			
2	2	1.1	Starting Date	0 days	Mon 02/12/19	Mon 02/12/19	Mon 02/12/19	Mon 02/12/...	0 days		3SS+1625 edays,623,197	
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 e	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		623,197SS+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	1279,1280,13		
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**	**628 days**	**Wed 01/07/20**	**Sun 20/03/22**	**Wed 01/07/20**	**Sun 20/03/22**	**552 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	248	
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	330,460,742	
53	53	5.12.4	**General - pipework and valves, C11, ref. EQT036 (Rev. 11)**	**315 days**	**Mon 02/11/20**	**Sun 12/09/21**	**Mon 02/11/20**	**Sun 12/09/21**	**321 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	274,280,424,553,676	
57	57	5.12.5	**General - Electric actuators, C11, ref. EQT042 (Rev. 11)**	**330 days**	**Wed 02/12/20**	**Wed 27/10/21**	**Wed 02/12/20**	**Wed 27/10...**	**276 days**			



Bestwise
Project: DE/2018/04
Date: 28/07/21

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	5.12.5.1	Submission for acceptance of purchasing package (Rev. 11)	250 days	Wed 02/12/20	Sun 08/08/21	Wed 02/12/20	Sun 08/08/21	0 days		59	
59	59	5.12.5.2	Invitation of quotations for purchasing package (Rev. 11)	30 days	Mon 09/08/21	Tue 07/09/21	Mon 09/08/21	Tue 07/09/21	0 days	58	60	
60	60	5.12.5.3	Acceptance of conforming quotation (Rev. 11)	50 days	Wed 08/09/21	Wed 27/10/21	Wed 08/09/21	Wed 27/10/...	0 days	59	280,424,553,676	
61	**61**	**5.12.6**	**General - HV Switchboards, C9, ref. EQT031 (Rev. 5)**	**105 days**	**Mon 04/01/21**	**Sun 18/04/21**	**Mon 04/01/21**	**Sun 18/04/21**	**0 days**			
62	62	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		63	
63	63	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	62	64	
64	64	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	63	651,252	
65	**65**	**5.12.7**	**General - LV Switchboards, C9, ref. EQT033 (Rev. 5)**	**120 days**	**Mon 04/01/21**	**Mon 03/05/21**	**Mon 04/01/21**	**Mon 03/05...**	**0 days**			
66	66	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		67	
67	67	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	66	68	
68	68	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	67	251,526,397,650	
69	**69**	**5.12.8**	**General - VSDs & Passive Type Harmonic Filters, C11, ref. EQT034 (Rev. !**	**444 days**	**Fri 01/01/21**	**Sun 20/03/22**	**Fri 01/01/21**	**Sun 20/03/22**	**282 days**			
70	70	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		71	
71	71	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	70	72	
72	72	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	71	249,395,524,647	
73	73	5.12.8.4	Manufacturing and Factory Acceptance Test of Plant	90 days	Sat 06/11/21	Thu 03/02/22	Sat 06/11/21	Thu 03/02/22	0 days	249,395,524	74	
74	74	5.12.8.5	Shipping and Delivery of Plant to LVSB Sub-Contractor	45 days	Fri 04/02/22	Sun 20/03/22	Fri 04/02/22	Sun 20/03/22	0 days	73	287SS-90 edays	
75	**75**	**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**			
76	76	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		77	
77	77	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	76	78	
78	78	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	77	249,647	
79	**79**	**5.12.10**	**General - UPS, C11, EQT061 (Rev. 10)**	**125 days**	**Mon 08/02/21**	**Sat 12/06/21**	**Mon 08/02/21**	**Sat 12/06/21**	**131 days**			
80	80	5.12.10.1	Submission for acceptance of purchasing package	45 days	Mon 08/02/21	Wed 24/03/21	Mon 08/02/21	Wed 24/03/...	0 days		81	
81	81	5.12.10.2	Invitation of quotations for purchasing package	50 days	Thu 25/03/21	Thu 13/05/21	Thu 25/03/21	Thu 13/05/21	0 days	80	82	
82	82	5.12.10.3	Acceptance of conforming quotation	30 days	Fri 14/05/21	Sat 12/06/21	Fri 14/05/21	Sat 12/06/21	116 days	81	249,395,524,647	
83	**83**	**5.12.11**	**General - HV Cables, C11, EQT041 (Rev. 5)**	**65 days**	**Mon 08/03/21**	**Tue 11/05/21**	**Mon 08/03/21**	**Tue 11/05/21**	**163 days**			
84	84	5.12.11.1	Submission for acceptance of purchasing package	14 days	Mon 08/03/21	Sun 21/03/21	Mon 08/03/21	Sun 21/03/21	0 days		85	
85	85	5.12.11.2	Invitation of quotations for purchasing package	21 days	Mon 22/03/21	Sun 11/04/21	Mon 22/03/21	Sun 11/04/21	0 days	84	86	
86	86	5.12.11.3	Acceptance of conforming quotation	30 days	Mon 12/04/21	Tue 11/05/21	Mon 12/04/21	Tue 11/05/21	148 days	85	249,647	
87	**87**	**5.12.12**	**General - LV Cables, C11, EQT042 (Rev. 5)**	**65 days**	**Mon 08/03/21**	**Tue 11/05/21**	**Mon 08/03/21**	**Tue 11/05/21**	**163 days**			
88	88	5.12.12.1	Submission for acceptance of purchasing package	14 days	Mon 08/03/21	Sun 21/03/21	Mon 08/03/21	Sun 21/03/21	0 days		89	
89	89	5.12.12.2	Invitation of quotations for purchasing package	21 days	Mon 22/03/21	Sun 11/04/21	Mon 22/03/21	Sun 11/04/21	0 days	88	90	
90	90	5.12.12.3	Acceptance of conforming quotation	30 days	Mon 12/04/21	Tue 11/05/21	Mon 12/04/21	Tue 11/05/21	148 days	89	249,395,524,647	
91	**91**	**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		
92	92	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 da		
93	**93**	**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**			
94	94	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		95	
95	95	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	94	96	
96	96	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	95		
97	97	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			
98	**98**	**5.13.3**	**General - Conduction of Pump sump physical model test**	**275 days**	**Fri 15/05/20**	**Sat 13/02/21**	**Fri 15/05/20**	**Sat 13/02/21**	**0 days**			
99	99	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		100	
100	100	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	99	101	
101	101	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	100	102	
102	102	5.13.3.4	Commencement of detailed proposal and conduction of test (Rev 10)	250 days	Thu 04/06/20	Mon 08/02/21	Thu 04/06/20	Mon 08/02/...	0 days	101	103	
103	103	5.13.3.5	Acceptance of hydraulic Report (Rev 10)	5 days	Tue 09/02/21	Sat 13/02/21	Tue 09/02/21	Sat 13/02/21	0 days	102		
104	**104**	**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**			
105	105	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		106	
106	106	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	105	107	
107	107	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	106	108	
108	108	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	107		
109	**109**	**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**			
110	110	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		111	
111	111	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	110	112	
112	112	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	111	113	
113	113	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	112	253,398,527,652,1042	
114	**114**	**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**			
115	115	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		116	



Bestwise
Project: DE/2018/04
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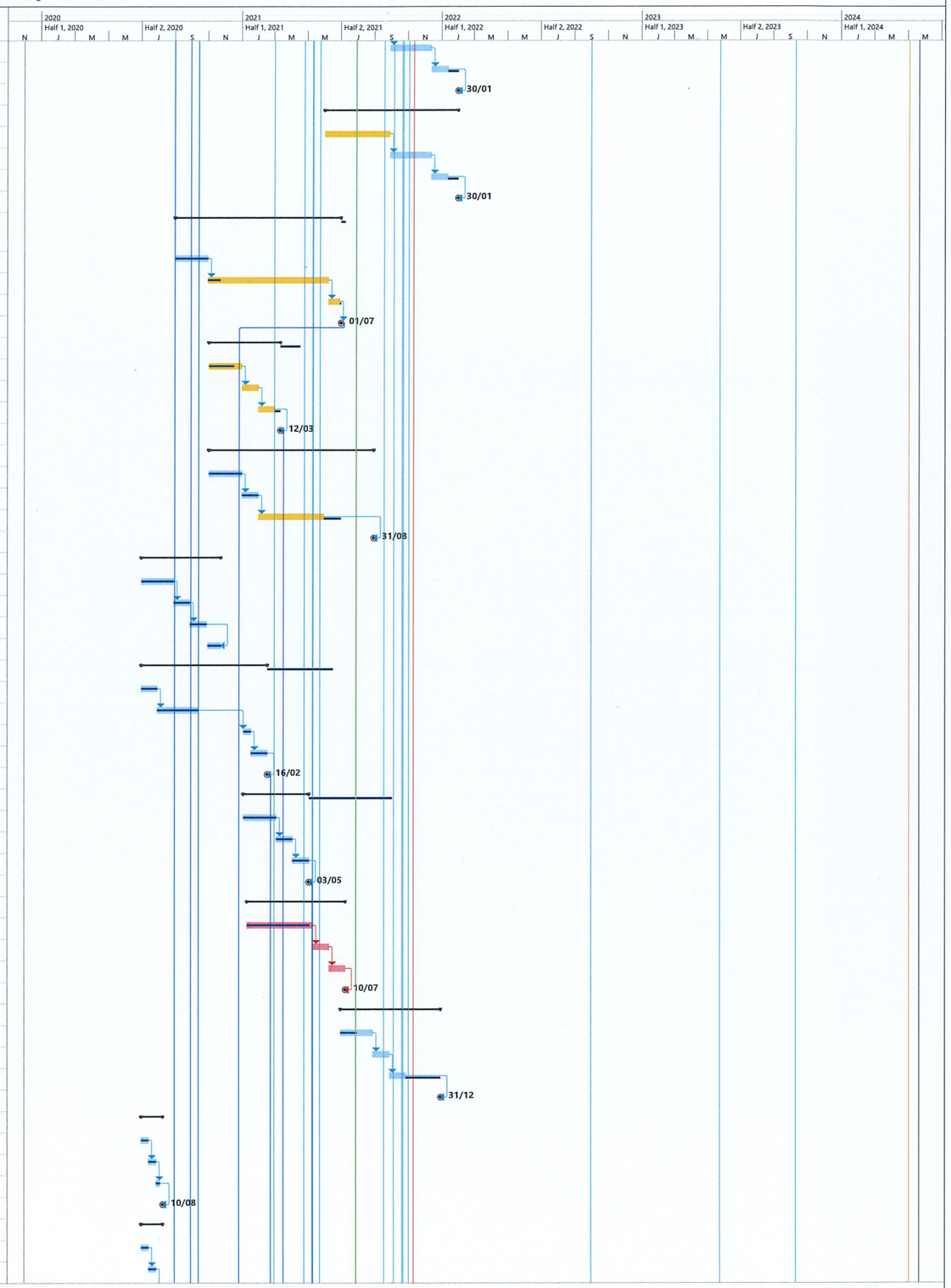
Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

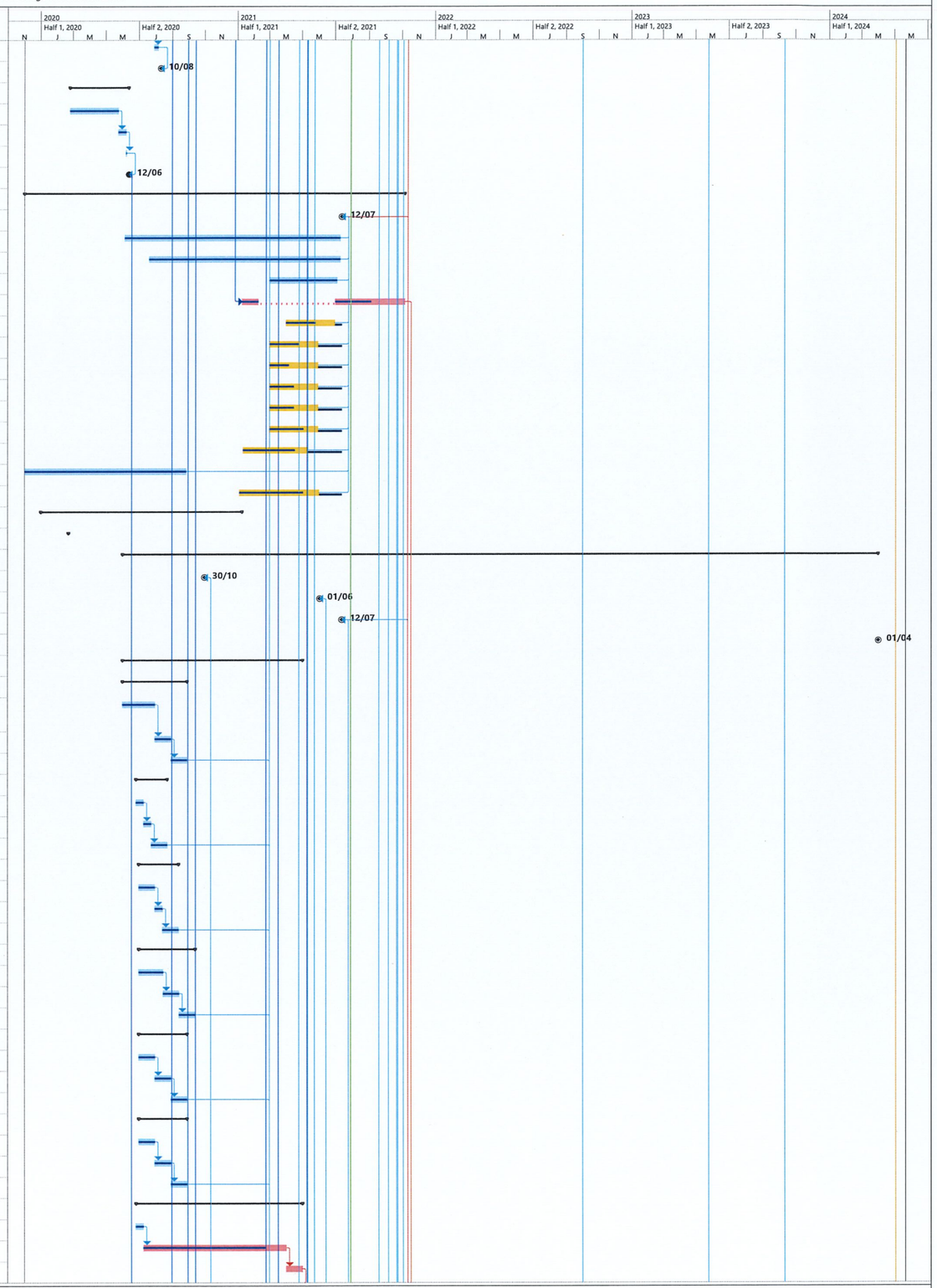
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
116	116	5.13.6.2	Invitation of tender for subcontract works	75 days	Wed 29/09/21	Sun 12/12/21	Wed 29/09/21	Sun 12/12/21	0 days	115	117	
117	117	5.13.6.3	Acceptance of conforming tender	30 days	Mon 13/12/21	Tue 11/01/22	Mon 13/12/21	Tue 11/01/22	19 days	116	118FF	
118	118	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	117FF		
119	**119**	**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**			
120	120	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		121	
121	121	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	120	122	
122	122	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	121	123FF	
123	123	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	122FF		
124	**124**	**5.13.8**	**General - Facility Computerized Systems (SCADA, CMMS, PMS, IDMS) (Rev. 10)**	**303 days**	**Tue 01/09/20**	**Thu 01/07/21**	**Tue 01/09/20**	**Thu 01/07/21**	**8 days**			
125	125	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		126	
126	126	5.13.8.2	Invitation of tender for subcontract works	220 edays	Sat 31/10/20	Tue 08/06/21	Sat 31/10/20	Tue 08/06/21	0 edays	125	127	
127	127	5.13.8.3	Acceptance of conforming tender	21 edays	Tue 08/06/21	Tue 29/06/21	Tue 08/06/21	Tue 29/06/21	2 edays	126	128	
128	128	5.13.8.4	Sub-contract work commencement date	0 days	Thu 01/07/21	Thu 01/07/21	Thu 01/07/21	Thu 01/07/21	0 days	127	185	
129	**129**	**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**			
130	130	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		131	
131	131	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	130	132	
132	132	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	131	133FF	
133	133	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	132FF	250,396,525,649,794,874	
134	**134**	**5.13.10**	**General - Mechanical Ventilation and Air Conditioning Installation (Rev.**	**302 days**	**Mon 02/11/20**	**Tue 31/08/21**	**Mon 02/11/20**	**Tue 31/08/21**	**0 days**			
135	135	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		136	
136	136	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	135	137	
137	137	5.13.10.3	Acceptance of conforming tender	120 days	Sun 31/01/21	Sun 30/05/21	Sun 31/01/21	Sun 30/05/21	31 days	136	138FF	
138	138	5.13.10.4	Sub-contract work commencement date	0 days	Tue 31/08/21	Tue 31/08/21	Tue 31/08/21	Tue 31/08/21	0 days	137FF		
139	**139**	**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**			
140	140	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		141	
141	141	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	140	142	
142	142	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	141	143FF	
143	143	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	142FF		
144	**144**	**5.13.12**	**General - Plumbing Installation (Rev. 5)**	**231 days**	**Wed 01/07/20**	**Tue 16/02/21**	**Wed 01/07/20**	**Tue 16/02/21**	**120 days**			
145	145	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		146	
146	146	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	145	147	
147	147	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	146	148	
148	148	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	147	149FF	
149	149	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	148FF	1233	
150	**150**	**5.13.13**	**General - Fire Services Installation (Rev. 5)**	**120 days**	**Mon 04/01/21**	**Mon 03/05/21**	**Mon 04/01/21**	**Mon 03/05...**	**153 days**			
151	151	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		152	
152	152	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	151	153	
153	153	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	152	154FF	
154	154	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	153FF	1184	
155	**155**	**5.13.14**	**General - Lightning Protection System and Main Earthing System (Rev. 1**	**180 days**	**Mon 11/01/21**	**Sat 10/07/21**	**Mon 11/01/21**	**Sat 10/07/21**	**0 days**			
156	156	5.13.14.1	Submission for acceptance of subcontract works package (Rev. 10)	120 edays	Mon 11/01/21	Tue 11/05/21	Mon 11/01/21	Tue 11/05/21	0 edays		157	
157	157	5.13.14.2	Invitation of tender for subcontract works (Rev. 10)	30 edays	Tue 11/05/21	Thu 10/06/21	Tue 11/05/21	Thu 10/06/21	0 edays	156	158	
158	158	5.13.14.3	Acceptance of conforming tender (Rev. 10)	30 edays	Thu 10/06/21	Sat 10/07/21	Thu 10/06/21	Sat 10/07/21	0 edays	157	159FF	
159	159	5.13.14.4	Sub-contract work commencement date (Rev. 10)	0 days	Sat 10/07/21	Sat 10/07/21	Sat 10/07/21	Sat 10/07/21	0 days	158FF		
160	**160**	**5.13.15**	**General - CCTV Installation**	**183 days**	**Thu 01/07/21**	**Fri 31/12/21**	**Thu 01/07/21**	**Fri 31/12/21**	**0 days**			
161	161	5.13.15.1	Submission for acceptance of subcontract works package	60 edays	Thu 01/07/21	Mon 30/08/21	Thu 01/07/21	Mon 30/08/...	0 edays		162	
162	162	5.13.15.2	Invitation of tender for subcontract works	30 edays	Mon 30/08/21	Wed 29/09/21	Mon 30/08/21	Wed 29/09/...	0 edays	161	163	
163	163	5.13.15.3	Acceptance of conforming tender	30 edays	Wed 29/09/21	Fri 29/10/21	Wed 29/09/21	Fri 29/10/21	63 edays	162	164FF	
164	164	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	163FF		
165	**165**	**5.13.16**	**General - Civil Construction Work for underground pipework**	**40 days**	**Wed 01/07/20**	**Mon 10/08/20**	**Wed 01/07/20**	**Mon 10/08...**	**0 days**			
166	166	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		167	
167	167	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	166	168	
168	168	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	167	169FF	
169	169	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	168FF		
170	**170**	**5.13.17**	**General - Civil Construction Work for Temp. Filtrate Eq. System**	**40 days**	**Wed 01/07/20**	**Mon 10/08/20**	**Wed 01/07/20**	**Mon 10/08...**	**0 days**			
171	171	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		172	
172	172	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	171	173	



Bestwise
Project: DE/2018/04
Date: 28/07/21

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

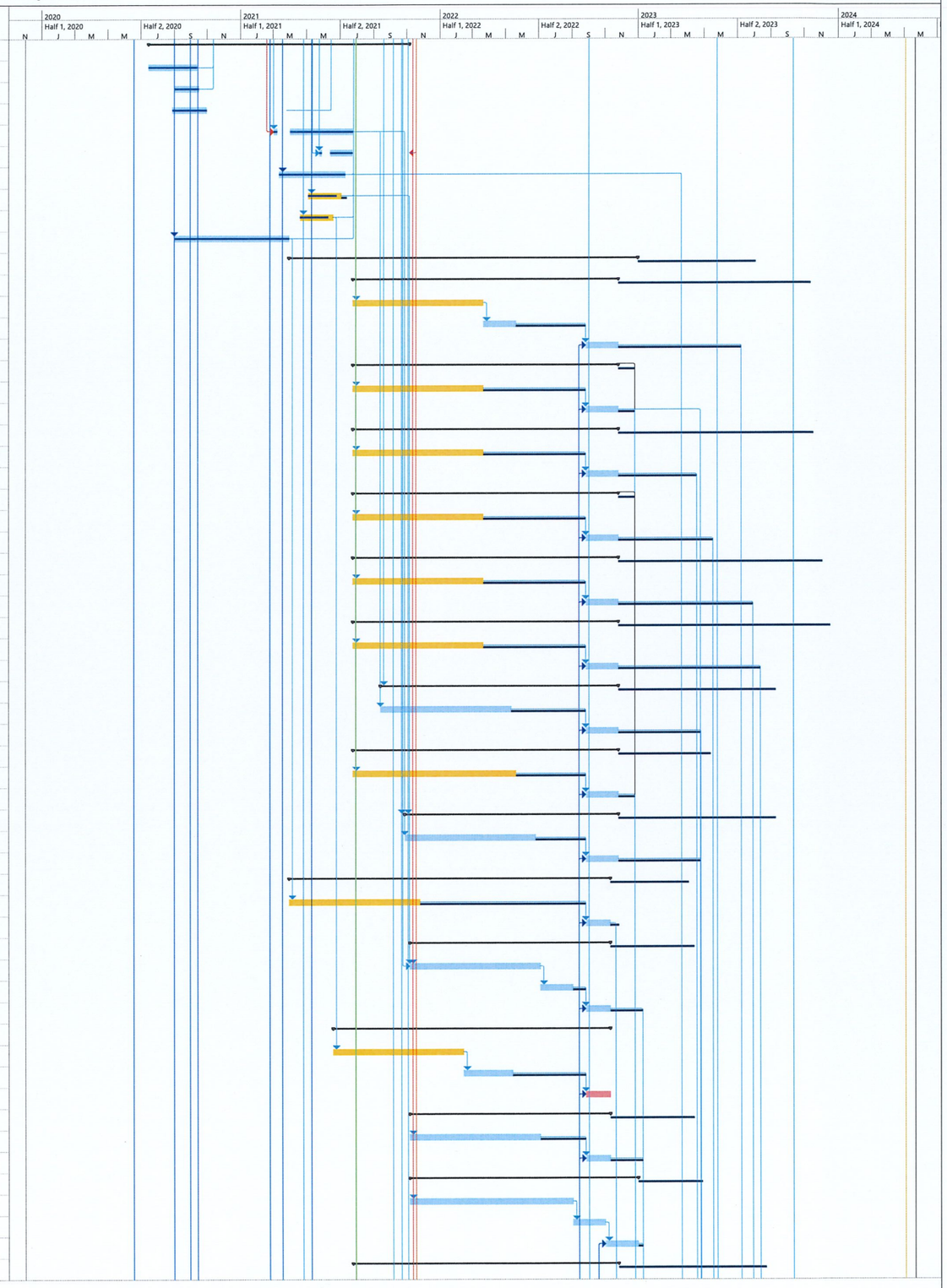
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
173	173	5.13.17.3	Acceptance of conforming tender	7 days	Wed 29/07/20	Tue 04/08/20	Wed 29/07/20	Tue 04/08/20	0 days	172	174FF	
174	174	5.13.17.4	Sub-contract work commencement date (Completed)	0 days	Mon 10/08/20	Mon 10/08/20	Mon 10/08/20	Mon 10/08/...	0 days	173FF		
175	175	5.13.18	**Mis - Modification of existing power house**	**109 days**	**Mon 24/02/20**	**Fri 12/06/20**	**Mon 24/02/20**	**Fri 12/06/20**	**0 days**			
176	176	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		177	
177	177	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	176	178	
178	178	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	177	179FF	
179	179	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	178FF	1155	
180	180	5.14	**Part C: General Design Submissions**	**705 days**	**Mon 02/12/19**	**Sat 06/11/21**	**Mon 02/12/19**	**Sat 06/11/21**	**0 days**			
181	181	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	182FF,183FF		
182	182	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		181FF	
183	183	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		181FF	
184	184	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		181FF	
185	185	5.14.5	CDS012 - Detailed Design for SCADA System	301 edays	Sat 09/01/21	Sat 06/11/21	Sat 09/01/21	Sat 06/11/21	0 edays	128	181FF,249FF,395FF,524FI	
186	186	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		181FF	
187	187	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		181FF	
188	188	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		181FF	
189	189	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		181FF	
190	190	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		181FF	
191	191	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		181FF	
192	192	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		181FF	
193	193	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		181FF	
194	194	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		181FF	
195	195	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**			
208	208	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**			
210	210	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**			
211	211	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	245FF,246FI		
212	212	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	247FF		
213	213	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	248FF,249FI		
214	214	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			
215	215	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**			
216	216	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**			
217	217	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		218	
218	218	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	217	219	
219	219	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	218	248	
220	220	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**			
221	221	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		222	
222	222	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	221	223	
223	223	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	222	248	
224	224	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**			
225	225	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		226	
226	226	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	225	227	
227	227	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	226	248	
228	228	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**			
229	229	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		230	
230	230	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	229	231	
231	231	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	230	248	
232	232	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**			
233	233	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		234	
234	234	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	233	235	
235	235	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	234	248	
236	236	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**			
237	237	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		238	
238	238	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	237	239	
239	239	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	238	248	
240	240	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**			
241	241	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		242	
242	242	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	241	243	
243	243	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	242	248	



Bestwise
Project: DE/2018/04
Date: 28/07/21

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

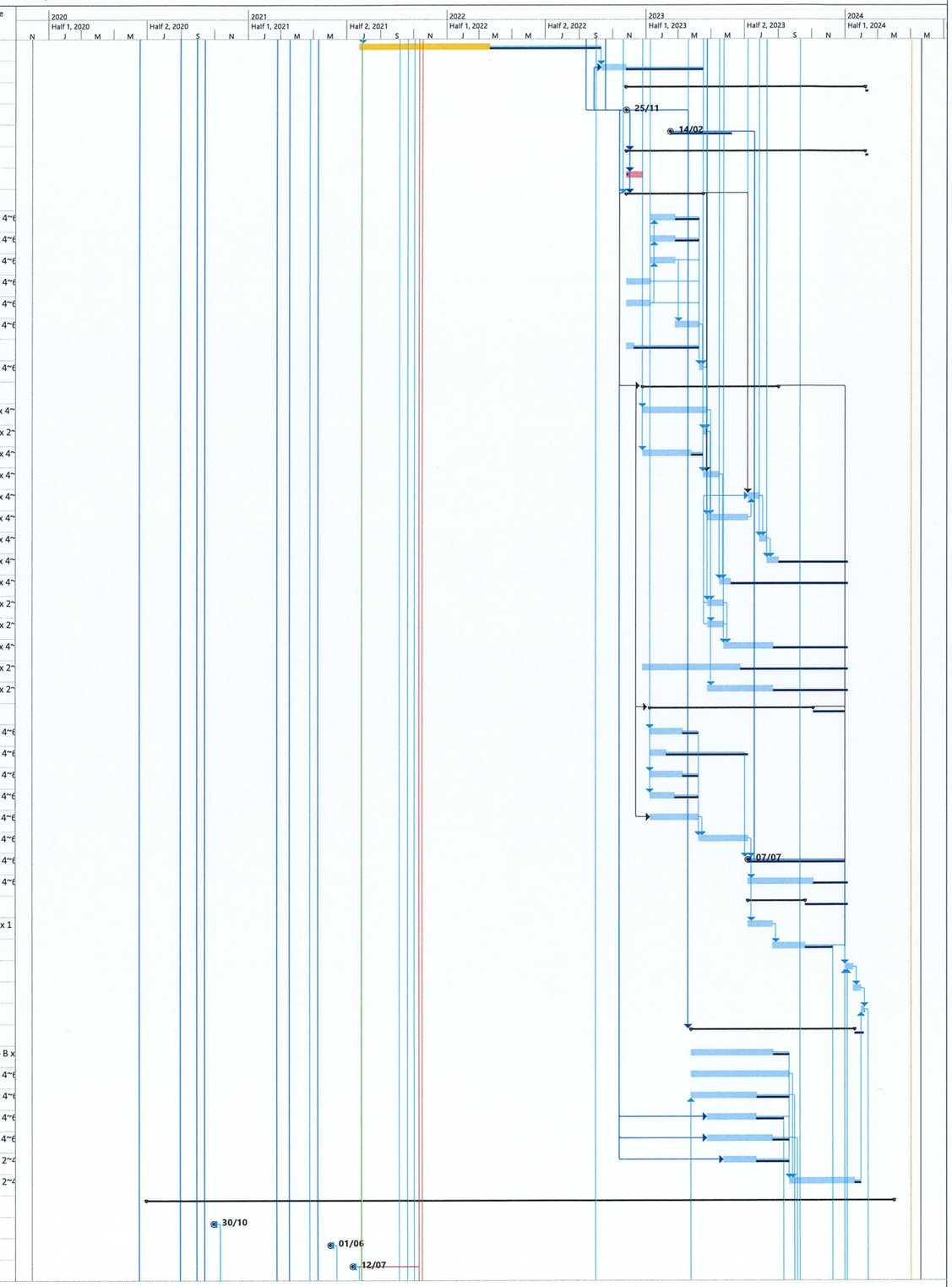
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
244	**244**	**5.17.6**	**Design Submissions for IW**	**479 days**	**Wed 15/07/20**	**Sat 06/11/21**	**Wed 15/07/20**	**Sat 06/11/21**	**0 days**			
245	245	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		211FF	
246	246	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		211FF	
247	247	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		212FF	
248	248	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	223,227,215	256,278,263,266,269,272	
249	249	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	72,78,82,86	73,295,287,298,213FF	
250	250	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	133	348,213FF	
251	251	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	68	287,213FF	
252	252	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	64	291,213FF	
253	253	5.17.6.9	CDS050-1 - Detailed Design for Lifting Appliances - Inlet Works No. 1	210 days	Tue 01/09/20	Tue 30/03/21	Tue 01/09/20	Tue 30/03/21	0 edays	113	284,213FF	
254	**254**	**5.17.7**	**Manufacturing and Delivery of Plant & Materials**	**641 days**	**Tue 30/03/21**	**Fri 30/12/22**	**Tue 30/03/21**	**Fri 30/12/22**	**215 days**			
255	**255**	**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**			
256	256	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	248	257	
257	257	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	256	258	
258	258	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	257,305SS-6	323	
259	**259**	**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**		**319**	
260	260	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	248	261	
261	261	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	260,305SS-6	321,324	
262	**262**	**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**			
263	263	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	248	264	
264	264	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	263,305SS-6	322	
265	**265**	**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**		**319**	
266	266	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	248	267	
267	267	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	266,305SS-6	327	
268	**268**	**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**			
269	269	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	248	270	
270	270	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	269,305SS-6	325	
271	**271**	**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**			
272	272	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	248	273	
273	273	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	272,305SS-6	326	
274	**274**	**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**		
275	275	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	248	276	
276	276	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	275,305SS-6	328	
277	**277**	**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**			
278	278	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	248	279	
279	279	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	278,305SS-6	319	
280	**280**	**5.17.7.9**	**Valves and Actuators, EQT036, EQT042 (Rev. 11)**	**393 days**	**Thu 28/10/21**	**Thu 24/11/22**	**Thu 28/10/21**	**Thu 24/11/22**	**288 days**	**56,60**		
281	281	5.17.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 28/10/21	Fri 24/06/22	Thu 28/10/21	Fri 24/06/22	93 days	248	282	
282	282	5.17.7.9.2	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	281,305SS-6	328	
283	**283**	**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**			
284	284	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	253	285	
285	285	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	284,305SS-6	309	
286	**286**	**5.17.7.11**	**LV Switchboards**	**369 days**	**Sat 06/11/21**	**Wed 09/11/22**	**Sat 06/11/21**	**Wed 09/11...**	**153 days**			
287	287	5.17.7.11.1	IW - Manufacturing of Plant	240 days	Sat 06/11/21	Sun 03/07/22	Sat 06/11/21	Sun 03/07/22	0 days	249,251,74	288	
288	288	5.17.7.11.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Mon 04/07/22	Thu 01/09/22	Mon 04/07/22	Thu 01/09/22	24 days	287	289	
289	289	5.17.7.11.3	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/...	60 days	305SS-60 ed	334	
290	**290**	**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**			
291	291	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	252	292	
292	292	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	291	293	
293	293	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	292,305SS-6		
294	**294**	**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**			
295	295	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	249	296	
296	296	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	295,305SS-6	336	
297	**297**	**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**			
298	298	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	249	299	
299	299	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	298	300	
300	300	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	305SS-60 ed	337	
301	**301**	**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**			



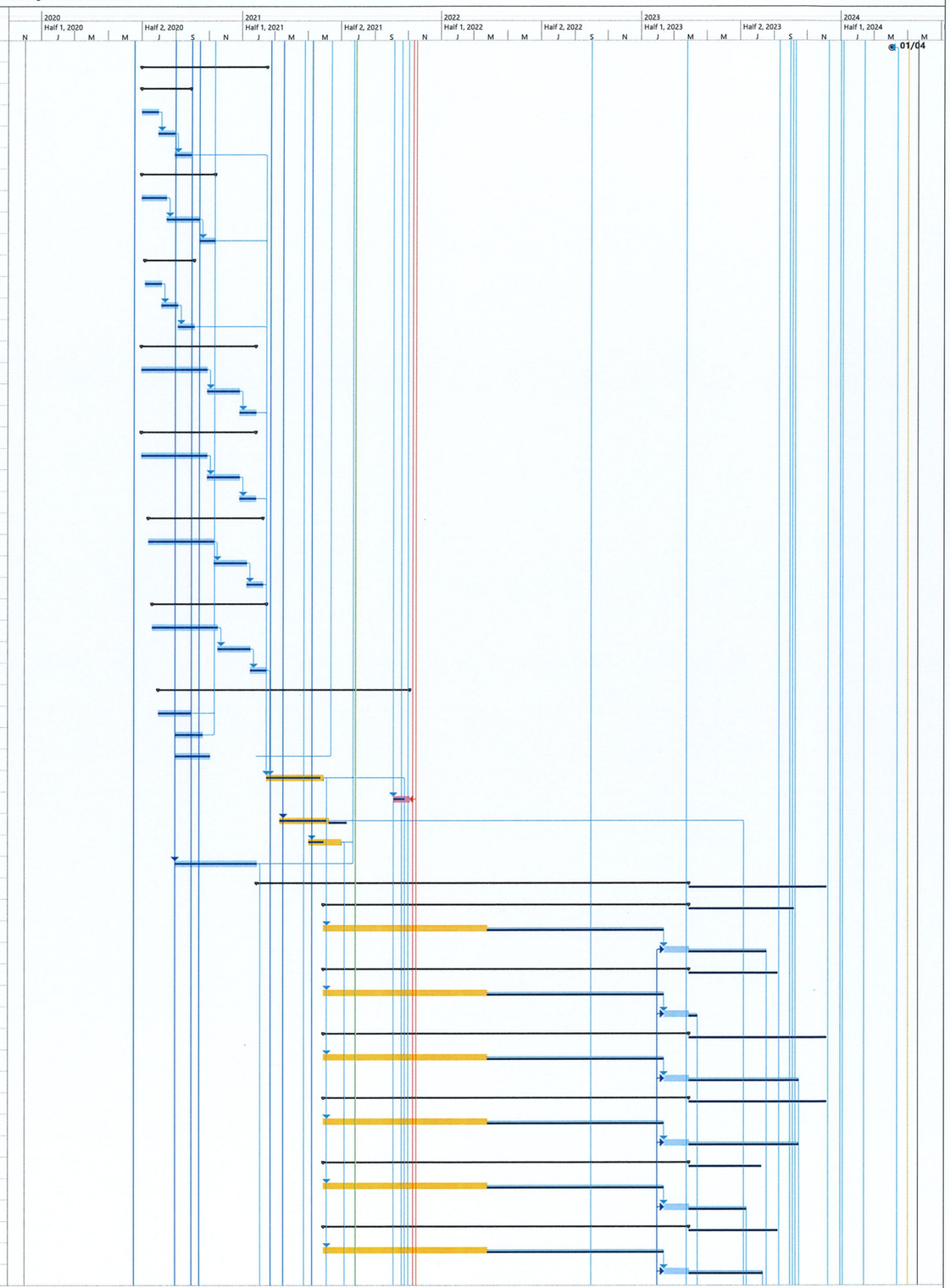
Bestwise
Project: DE/2018/04
Date: 28/07/21

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

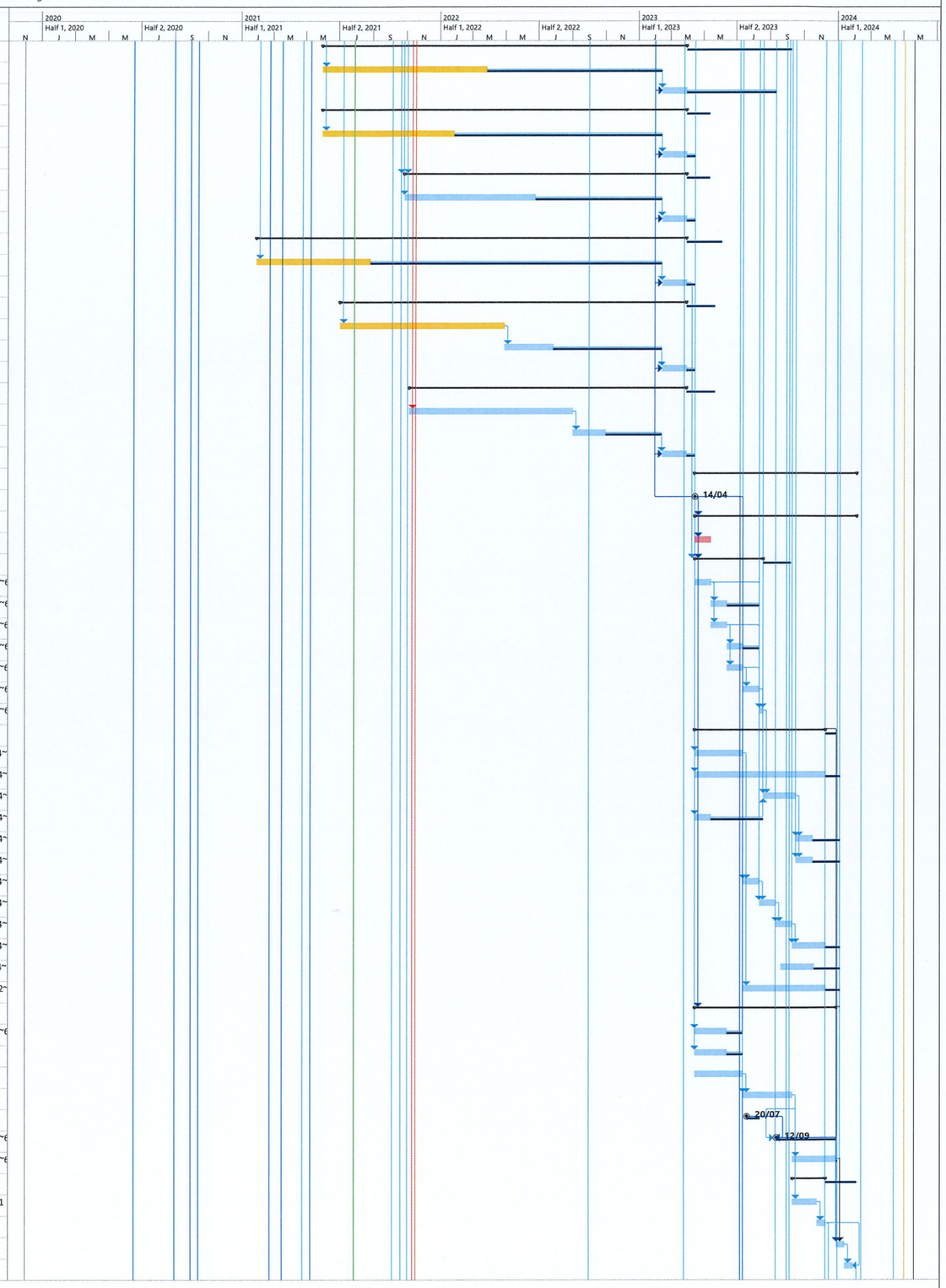
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
302	302	5.17.7.15.1	IW - Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 24/07/21	Sun 20/03/22	Sat 24/07/21	Sun 20/03/22	204 days	248	303	
303	303	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	302,305SS-4	320	
304	**304**	**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**			
305	305	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		309,307,348FS+120 days,	
306	306	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	113 days		340FF+30 days	
307	**307**	**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**	**305**		
308	308	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	305		
309	**309**	**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**	**305,285**	**318SS+30 days,322,323**	
310	310	5.17.8.3.2..	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	313,314	317	LA - A x 4~6
311	311	5.17.8.3.2..	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	313,314	317	LA - B x 4~6
312	312	5.17.8.3.2..	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	313,314	315,317	LA - C x 4~6
313	313	5.17.8.3.2..	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		310,311,312,317	LA - A x 4~6
314	314	5.17.8.3.2..	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		310,311,312,317	LA - B x 4~6
315	315	5.17.8.3.2..	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	312	317	LA - C x 4~6
316	316	5.17.8.3.2..	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		317	
317	317	5.17.8.3.2..	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	310,311,312	320	LA - B x 4~6
318	**318**	**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**	**309SS+30 d**	**333SS+14 days,345,338S**	
319	319	5.17.8.3.3..	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	265,259,275	328,329,332	ME - E x 4~
320	320	5.17.8.3.3..	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	317,303	324	ME - D x 2~
321	321	5.17.8.3.3..	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	261	322	ME - A x 4~
322	322	5.17.8.3.3..	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	309,321,264	327	ME - A x 4~
323	323	5.17.8.3.3..	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	309,328SS+	325	ME - B x 4~
324	324	5.17.8.3.3..	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	320,261	323	ME - B x 4~
325	325	5.17.8.3.3..	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	323,270	326	ME - B x 4~
326	326	5.17.8.3.3..	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	325,273		ME - B x 4~
327	327	5.17.8.3.3..	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	322,267		ME - A x 4~
328	328	5.17.8.3.3..	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	319,276,282	323SS+14 days,330	ME - D x 2~
329	329	5.17.8.3.3..	Pipework pressure tests	30 days	Tue 25/04/23	Wed 24/05/23	Tue 25/04/23	Wed 24/05/...	0 days	319	323SS+14 days,330	ME - D x 2~
330	330	5.17.8.3.3..	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	328,329,52		ME - A x 4~
331	331	5.17.8.3.3..	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~
332	332	5.17.8.3.3..	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	319		ME - D x 2~
333	**333**	**5.17.8.3.4**	**Electrical Installations for Inlet Works No. 1**	**300 days**	**Mon 09/01/23**	**Sat 04/11/23**	**Mon 09/01/23**	**Sat 04/11/23**	**58 days**	**318SS+14 d**	**345**	
334	334	5.17.8.3.4..	Installation of LV Switchboards, IW	60 days	Mon 09/01/23	Thu 09/03/23	Mon 09/01/23	Thu 09/03/23	30 days	289	339	LV - A x 4~6
335	335	5.17.8.3.4..	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	150 days		340	LV - A x 4~6
336	336	5.17.8.3.4..	Installation of Transformer, IW, EQT032	60 days	Mon 09/01/23	Thu 09/03/23	Mon 09/01/23	Thu 09/03/23	30 days	296	339	EE - A x 4~6
337	337	5.17.8.3.4..	Installation of PLC Panels, IW	45 days	Mon 09/01/23	Wed 22/02/23	Mon 09/01/23	Wed 22/02/...	45 days	300	339	EE - B x 4~6
338	338	5.17.8.3.4..	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	0 days	318SS	339	EE - C x 4~6
339	339	5.17.8.3.4..	Cables laying and terminations	90 days	Sun 09/04/23	Fri 07/07/23	Sun 09/04/23	Fri 07/07/23	0 days	334,336,337	340,343,341	EE - C x 4~6
340	340	5.17.8.3.4..	Energisation of LV Switchboards, IW	0 days	Fri 07/07/23	Fri 07/07/23	Fri 07/07/23	Fri 07/07/23	178 days	339,306FF+	345	LV - A x 4~6
341	341	5.17.8.3.4..	Site Acceptance Tests - Electrical aspects including voltage and cur	120 days	Sat 08/07/23	Sat 04/11/23	Sat 08/07/23	Sat 04/11/23	63 days	339		LV - A x 4~6
342	**342**	**5.17.8.3.5**	**SCADA Systems, Inlet Works**	**105 days**	**Sat 08/07/23**	**Fri 20/10/23**	**Sat 08/07/23**	**Fri 20/10/23**	**78 days**			
343	343	5.17.8.3.5..	Configuration of PLC System, IW	45 days	Sat 08/07/23	Mon 21/08/23	Sat 08/07/23	Mon 21/08/...	0 days	339	344	PLC - A x 1
344	344	5.17.8.3.5..	Site Acceptance Test for PLC System at Inlet Works No. 1	60 days	Tue 22/08/23	Fri 20/10/23	Tue 22/08/23	Fri 20/10/23	51 days	343	345,1270	
345	345	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	318,333,340	346	
346	346	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	345	347	
347	347	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	346,355	1266	
348	**348**	**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**	**305FS+120 d**		
349	349	5.17.8.3.9..	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		355	MVAC - B x
350	350	5.17.8.3.9..	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		355	BS - A x 4~6
351	351	5.17.8.3.9..	Plumbing Installation, IW	120 days	Sun 26/03/23	Sun 23/07/23	Sun 26/03/23	Sun 23/07/23	60 days	1237	1239,355	Pb - A x 4~6
352	352	5.17.8.3.9..	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	305SS+150 d	355,1269	BS - B x 4~6
353	353	5.17.8.3.9..	Fire Services Installation, IW	120 days	Mon 24/04/23	Mon 21/08/23	Mon 24/04/23	Mon 21/08/...	31 days	305SS+150 d	1190,1202,1203,355	FS - A x 4~6
354	354	5.17.8.3.9..	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	305SS+180 d	355	BS - C x 2~4
355	355	5.17.8.3.9..	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	349,350,351	1347	BS - C x 2~4
356	**356**	**5.17.18**	**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**			
357	357	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	391FF,392FF		
358	358	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	393FF		
359	359	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	396FF,395FF		



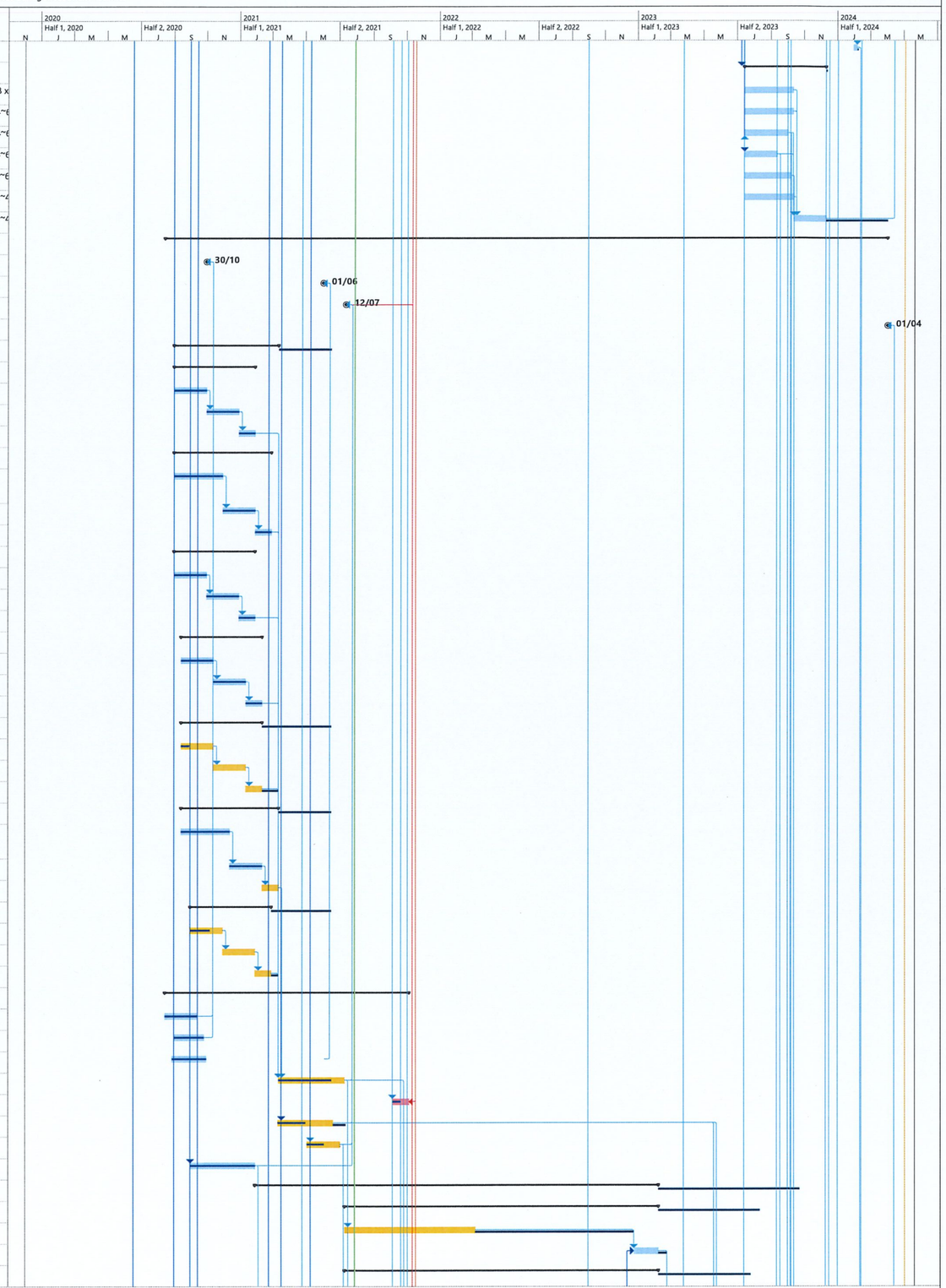
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
360	360	5.18.4	Planned Sectional Completion Date - Section 2, PST No. 1~4	0 days	Mon 01/04/24	Mon 01/04/24	Mon 01/04/24	Mon 01/04/...	0 days	484FF		
361	361	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**			
362	362	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**			
363	363	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		364	
364	364	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	363	365	
365	365	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	364	394	
366	366	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**			
367	367	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		368	
368	368	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	367	369	
369	369	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	368	394	
370	370	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**			
371	371	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		372	
372	372	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	371	373	
373	373	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	372	394	
374	374	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**			
375	375	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		376	
376	376	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	375	377	
377	377	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	376	394	
378	378	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**			
379	379	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		380	
380	380	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	379	381	
381	381	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	380	394	
382	382	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**			
383	383	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		384	
384	384	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	383	385	
385	385	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	384	394	
386	386	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**			
387	387	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		388	
388	388	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	387	389	
389	389	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	388	394	
390	390	5.18.6	**Design Submissions for PST No. 1~ 4**	**462 days**	**Sat 01/08/20**	**Sat 06/11/21**	**Sat 01/08/20**	**Sat 06/11/21**	**0 days**			
391	391	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		357FF	
392	392	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		357FF	
393	393	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		358FF	
394	394	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	365,369,37	401,404,407,410,413,41	
395	395	5.18.6.5	CDS022 - Detailed Design for Electrical Installations for PST No. 1~4	30 edays	Thu 07/10/21	Sat 06/11/21	Thu 07/10/21	Sat 06/11/21	0 edays	72,82,90,18	73,435,359FF	
396	396	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	133	477,359FF	
397	397	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	68	431,359FF	
398	398	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	113	428,359FF	
399	399	5.18.7	**Manufacturing and Delivery of Plant & Materials**	**790 days**	**Fri 29/01/21**	**Wed 29/03/23**	**Fri 29/01/21**	**Wed 29/03...**	**253 days**			
400	400	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**			
401	401	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	394	402	
402	402	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	401,439SS-6	453	
403	403	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**			
404	404	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	394	405	
405	405	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	404,439SS-6	454	
406	406	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**			
407	407	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	394	408	
408	408	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	407,439SS-6	455	
409	409	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**			
410	410	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	394	411	
411	411	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	410,439SS-6	456	
412	412	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**			
413	413	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	394	414	
414	414	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	413,439SS-6	457	
415	415	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**			
416	416	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	394	417	
417	417	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	416,439SS-6	458	



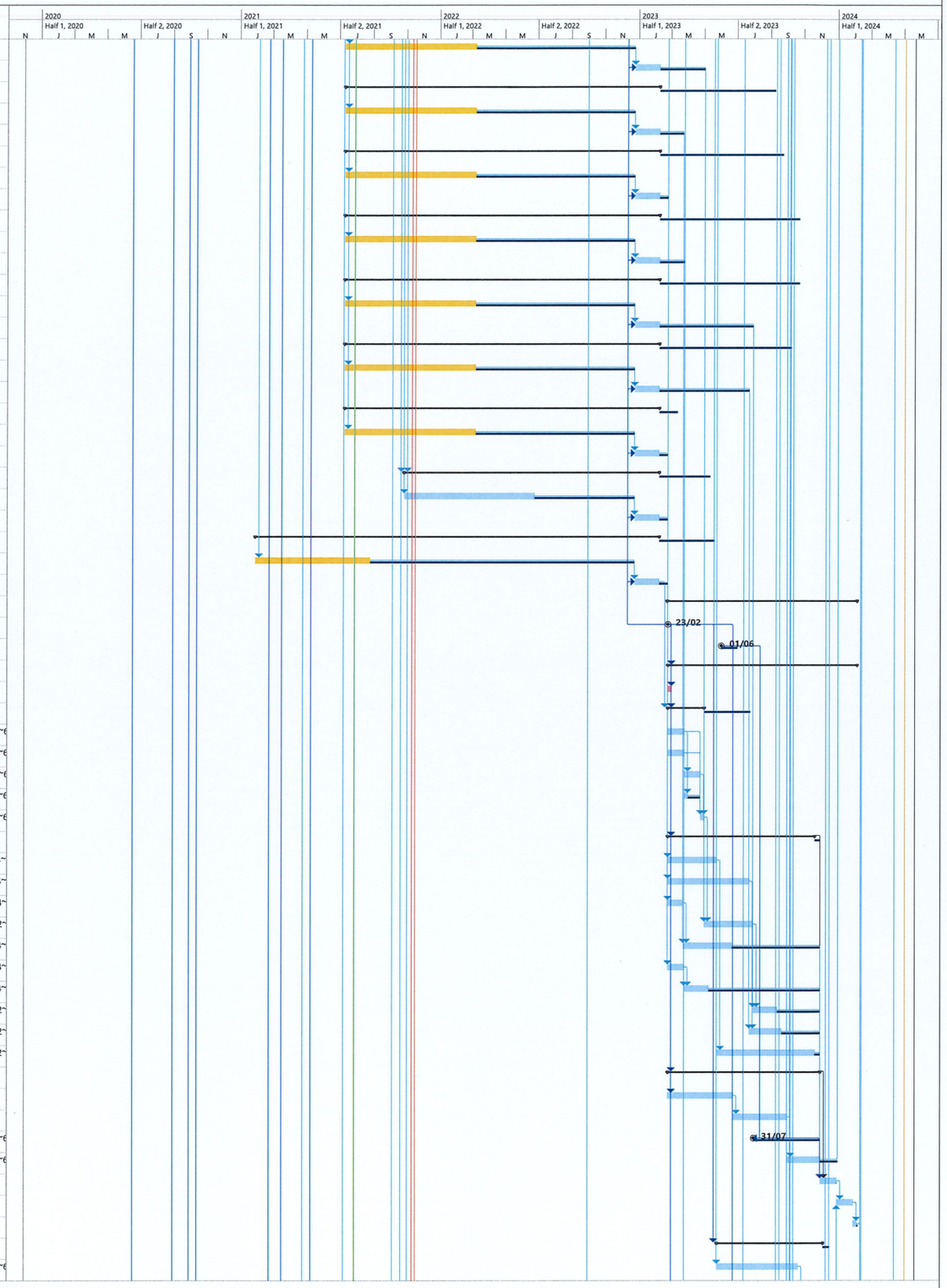
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
418	**418**	**5.18.7.7**	**Air Blower, EQT018**	**668 days**	**Mon 31/05/21**	**Wed 29/03/23**	**Mon 31/05/21**	**Wed 29/03...**	**193 days**			
419	419	5.18.7.7.1	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	394	420	
420	420	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	419,439SS-6	459	
421	**421**	**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**			
422	422	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	394	423	
423	423	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	439SS-60 ed	451	
424	**424**	**5.18.7.9**	**Pipework, Valves and Electric Actuators, EQT036, EQT042 (Rev. 11)**	**518 days**	**Thu 28/10/21**	**Wed 29/03/23**	**Thu 28/10/21**	**Wed 29/03...**	**43 days**	**56,60**		
425	425	5.18.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 28/10/21	Fri 24/06/22	Thu 28/10/21	Fri 24/06/22	233 days	394	426	
426	426	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	425,439SS-6	452	
427	**427**	**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**			
428	428	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	398	429	
429	429	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	428,439SS-6	442	
430	**430**	**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**			
431	431	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	397	432	
432	432	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	431	433	
433	433	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	432,439SS-6	464	
434	**434**	**5.18.7.12**	**PLC System**	**509 days**	**Sat 06/11/21**	**Wed 29/03/23**	**Sat 06/11/21**	**Wed 29/03...**	**53 days**			
435	435	5.18.7.12.1	Manufacturing of Plant, PLC for PST	300 days	Sat 06/11/21	Thu 01/09/22	Sat 06/11/21	Thu 01/09/22	0 days	395	436	
436	436	5.18.7.12.2	Factory Acceptance Test of Plant, PLC for PST (To be witnessed by PI	60 days	Fri 02/09/22	Mon 31/10/22	Fri 02/09/22	Mon 31/10/...	104 days	435	437	
437	437	5.18.7.12.3	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	436,439SS-6	465	
438	**438**	**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**			
439	439	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		442,477FS+90 days,440,4	
440	**440**	**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**	**439**		**403**
441	441	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	439		
442	**442**	**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**	**439,429**		
443	443	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		444,445,449	LA - A x 4~6
444	444	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	443	449	LA - A x 4~6
445	445	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	443	446,447,449	LA - B x 4~6
446	446	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	445	449	LA - A x 4~6
447	447	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	445	448,449	LA - B x 4~6
448	448	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	447	449	LA - A x 4~6
449	449	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	443,444,445	453	LA - A x 4~6
450	**450**	**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**		**474**	
451	451	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	423	457,462	ME - E x 4~
452	452	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	426		ME - B x 4~
453	453	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	454,449,402	455,456	ME - A x 4~
454	454	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	405	453	ME - A x 4~
455	455	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	453,408		ME - A x 4~
456	456	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	453,411		ME - B x 4~
457	457	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	451,414	458	ME - C x 4~
458	458	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	457,417	459	ME - C x 4~
459	459	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	458,420	460	ME - C x 4~
460	460	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	459,52		ME - C x 4~
461	461	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~
462	462	5.18.8.2.3.12	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	451		ME - D x 2~
463	**463**	**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**	**439**	**474**	
464	464	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	433	467	LV - A x 4~6
465	465	5.18.8.2.4.2	Installation of PLC Panel, PST	60 days	Sat 15/04/23	Tue 13/06/23	Sat 15/04/23	Tue 13/06/23	30 days	437	467	
466	466	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		467	
467	467	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	464,465,466	469FS-30 days,472,470	
468	468	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		469FF+30 days	
469	469	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	467FS-30 da	474	LV - A x 4~6
470	470	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	467	345	LV - A x 4~6
471	**471**	**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**			
472	472	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	467	473	PLC - B x 1
473	473	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	472	475FF,1270	
474	474	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	450,463,465	475	
475	475	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	474,473FF	476	



ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
476	476	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	475	1266	
477	**477**	**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**	**439FS+90 d**		
478	478	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		484	MVAC - B x
479	479	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		484	BS - A x 4~6
480	480	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	1237	1239,484	Pb - B x 4~6
481	481	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	439FS+60 d	484,1269	BS - B x 4~6
482	482	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		1190,1202,1203,484	FS - A x 4~6
483	483	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		484	BS - C x 2~4
484	484	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	478,479,48(	360FF	BS - C x 2~4
485	**485**	**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**			
486	486	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	520FF,521FI		
487	487	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	522FF		
488	488	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	523FF,524FI		
489	489	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	595FF,594FI		
490	**490**	**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**	**96 days**			
491	**491**	**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**			
492	492	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		493	
493	493	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	492	494	
494	494	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	493	523	
495	**495**	**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**			
496	496	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		497	
497	497	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	496	498	
498	498	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	497	523	
499	**499**	**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**			
500	500	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		501	
501	501	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	500	502	
502	502	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	501	523	
503	**503**	**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**			
504	504	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		505	
505	505	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	504	506	
506	506	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	505	523	
507	**507**	**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**	**126 days**			
508	508	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		509	
509	509	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	508	510	
510	510	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	509	523	
511	**511**	**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**	**96 days**			
512	512	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		513	
513	513	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	512	514	
514	514	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	513	523	
515	**515**	**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**	**109 days**			
516	516	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		517	
517	517	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	516	518	
518	518	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	517	523	
519	**519**	**5.19.6**	**Design Submissions for BR 2A & 2B**	**448 days**	**Sat 15/08/20**	**Sat 06/11/21**	**Sat 15/08/20**	**Sat 06/11/21**	**0 days**			
520	520	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		486FF	
521	521	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		486FF	
522	522	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		487FF	
523	523	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	494,498,502	530,533,536,539,542,545	
524	524	5.19.6.5	CDS023 - Detailed Design for Electrical Installations for BR No. 2A & 2B	30 edays	Thu 07/10/21	Sat 06/11/21	Thu 07/10/21	Sat 06/11/21	0 edays	72,82,90,18	73,488FF,697	
525	525	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	133	589,488FF,590	
526	526	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	68	683,488FF	
527	527	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	113	557,488FF	
528	**528**	**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**			
529	**529**	**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**			
530	530	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	523	531	
531	531	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	530,560	SS-6573	
532	**532**	**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**			



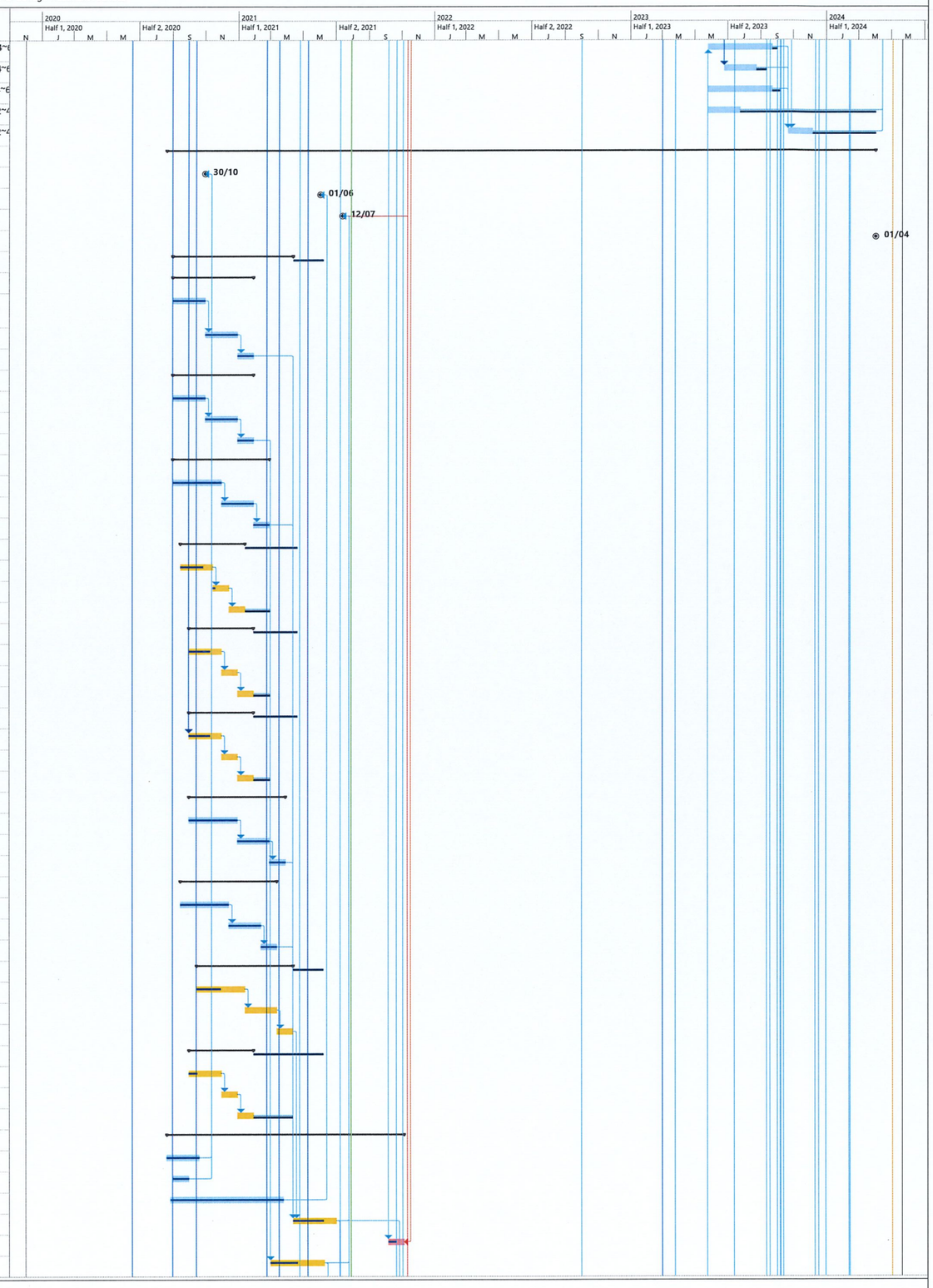
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
533	533	5.19.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/07/21	Mon 07/03/22	Sun 11/07/21	Mon 07/03/...	292 days	523	534	
534	534	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	533,560SS-6	574	
535	**535**	**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**			
536	536	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	523	537	
537	537	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	536,560SS-6	575	
538	**538**	**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**			
539	539	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	523	540	
540	540	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	539,560SS-6	576	
541	**541**	**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**			
542	542	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	523	543	
543	543	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	542,560SS-6	577	
544	**544**	**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**			
545	545	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	523	546	
546	546	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	545,560SS-6	578	
547	**547**	**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**			
548	548	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	523	549	
549	549	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	548,560SS-6	579	
550	**550**	**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**			
551	551	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	523	552	
552	552	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	551,560SS-6	571	
553	**553**	**5.19.7.9**	**Pipework, Valves and Electric Actuators, EQT036, EQT042 (Rev. 11)**	**468 days**	**Thu 28/10/21**	**Tue 07/02/23**	**Thu 28/10/21**	**Tue 07/02/23**	**93 days**	**56,60**		
554	554	5.19.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 28/10/21	Fri 24/06/22	Thu 28/10/21	Fri 24/06/22	183 days	523	555	
555	555	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	554,560SS-6	572	
556	**556**	**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**			
557	557	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	527	558	
558	558	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	557,560SS-6	564	
559	**559**	**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**			
560	560	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		564,570,581,589FS+90 ec	
561	561	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		584FF+30 days	
562	**562**	**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**	**560**		
563	563	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	560		
564	**564**	**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**	**560,558**		
565	565	5.19.8.3.2.	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		567,568,569	LA - A x 4~6
566	566	5.19.8.3.2.	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		567,568,569	LA - B x 4~6
567	567	5.19.8.3.2.	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	565,566	569	LA - A x 4~6
568	568	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	565,566	569	LA - B x 4~6
569	569	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	565,566,567	574	LA - B x 4~6
570	**570**	**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**	**560**	**586**	
571	571	5.19.8.3.3.	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	552	580	ME - E x 4~6
572	572	5.19.8.3.3.	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	555	579	ME - C x 4~6
573	573	5.19.8.3.3.	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	531	575	ME - A x 4~6
574	574	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	569,534	578	ME - D x 2~6
575	575	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	573,537	586	ME - B x 4~6
576	576	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	540	577	ME - A x 4~6
577	577	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	576,543	586	ME - B x 4~6
578	578	5.19.8.3.3.8	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	574,546	586	ME - D x 2~6
579	579	5.19.8.3.3.9	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	572,549	586	ME - D x 2~6
580	580	5.19.8.3.3.1	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	571	586	ME - D x 2~6
581	**581**	**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**	**560**	**586**	
582	582	5.19.8.3.4.1	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	560	583	
583	583	5.19.8.3.4.2	Cables laying and terminations	100 days	Sat 24/06/23	Sun 01/10/23	Sat 24/06/23	Sun 01/10/23	0 days	582	585,756	
584	584	5.19.8.3.4.3	Energisation of LV Switchboards, BR2	1 day	Mon 31/07/23	Mon 31/07/23	Mon 31/07/23	Mon 31/07/...	122 days	561FF+30 d	586	LV - A x 4~6
585	585	5.19.8.3.4.4	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	583	345	LV - A x 4~6
586	586	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	570,575,577	587	
587	587	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	586,758	588	
588	588	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	587	1266	
589	**589**	**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**	**560FS+90 ec**		
590	590	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	525	595	BS - A x 4~6



Bestwise
Project: DE/2018/04
Date: 28/07/21

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

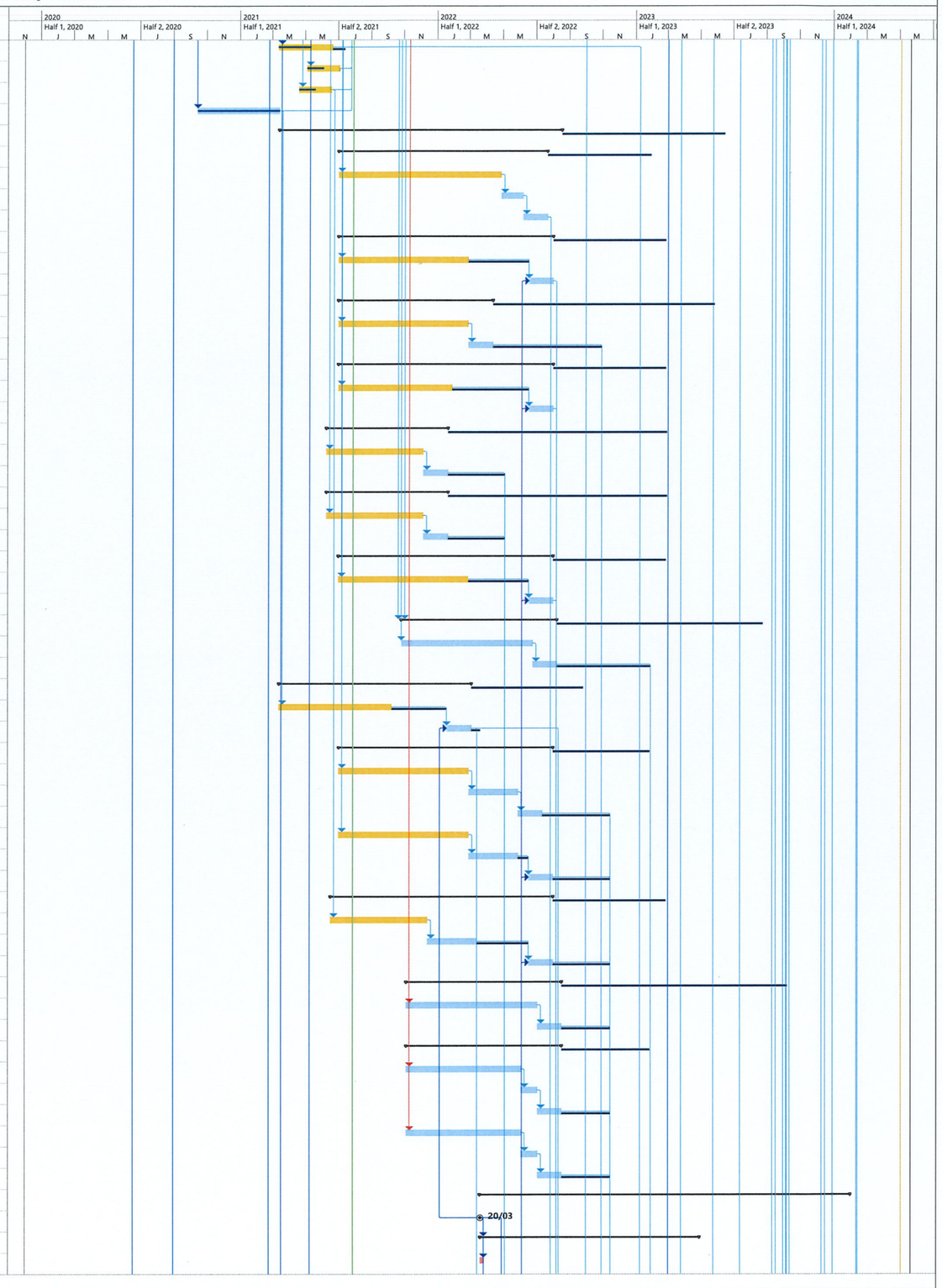
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
591	591	5.19.8.3.8.2	Plumbing Installation, BR2	120 days	Thu 25/05/23	Thu 21/09/23	Thu 25/05/23	Thu 21/09/23	10 days	1237	1239,595	Pb - A x 4~6
592	592	5.19.8.3.8.3	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	560FS+120 d	595,1269	BS - B x 4~6
593	593	5.19.8.3.8.4	Fire Services Installation, BR2	120 days	Thu 25/05/23	Thu 21/09/23	Thu 25/05/23	Thu 21/09/23	15 days		1190,1202,1203,595	FS - B x 4~6
594	594	5.19.8.3.8.5	Lightning Protection System, BR2	60 days	Thu 25/05/23	Sun 23/07/23	Thu 25/05/23	Sun 23/07/23	253 days		489FF	BS - C x 2~4
595	595	5.19.8.3.8.6	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	590,591,592	489FF	BS - C x 2~4
596	**596**	**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**			
597	597	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	643FF,644FF		
598	598	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	645FF		
599	599	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	646FF,647FF		
600	600	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			
601	**601**	**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...**	**56 days**			
602	**602**	**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**			
603	603	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		604	
604	604	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	603	605	
605	605	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	604	646	
606	**606**	**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**			
607	607	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		608	
608	608	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	607	609	
609	609	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	608	648	
610	**610**	**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**			
611	611	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		612	
612	612	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	611	613	
613	613	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	612	646	
614	**614**	**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**	**98 days**			
615	615	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		616	
616	616	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	615	617	
617	617	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	616	648	
618	**618**	**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**	**82 days**			
619	619	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		620	
620	620	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	619	621	
621	621	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	620	648	
622	**622**	**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**	**82 days**			
623	623	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	624	
624	624	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	623	625	
625	625	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	624	648	
626	**626**	**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**			
627	627	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		628	
628	628	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	627	629	
629	629	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	628	646	
630	**630**	**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**			
631	631	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		632	
632	632	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	631	633	
633	633	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	632	646	
634	**634**	**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...**	**56 days**			
635	635	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		636	
636	636	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	635	637	
637	637	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	636	646	
638	**638**	**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**	**130 days**			
639	639	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		640	
640	640	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	639	641	
641	641	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	640	646	
642	**642**	**5.20.6**	**Design Submissions for MFB No. 2**	**442 days**	**Fri 21/08/20**	**Sat 06/11/21**	**Fri 21/08/20**	**Sat 06/11/21**	**0 days**			
643	643	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		597FF	
644	644	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		597FF	
645	645	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		598FF	
646	646	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	605,613,625	655,659,662,665,674,677	
647	647	5.20.6.5	CDS024 - Detailed Design for Electrical Installations for MFB No. 2	30 edays	Thu 07/10/21	Sat 06/11/21	Thu 07/10/21	Sat 06/11/21	0 edays	72,82,78,86	73,694,700,599FF	
648	648	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	609,617,621	668,671,599FF	



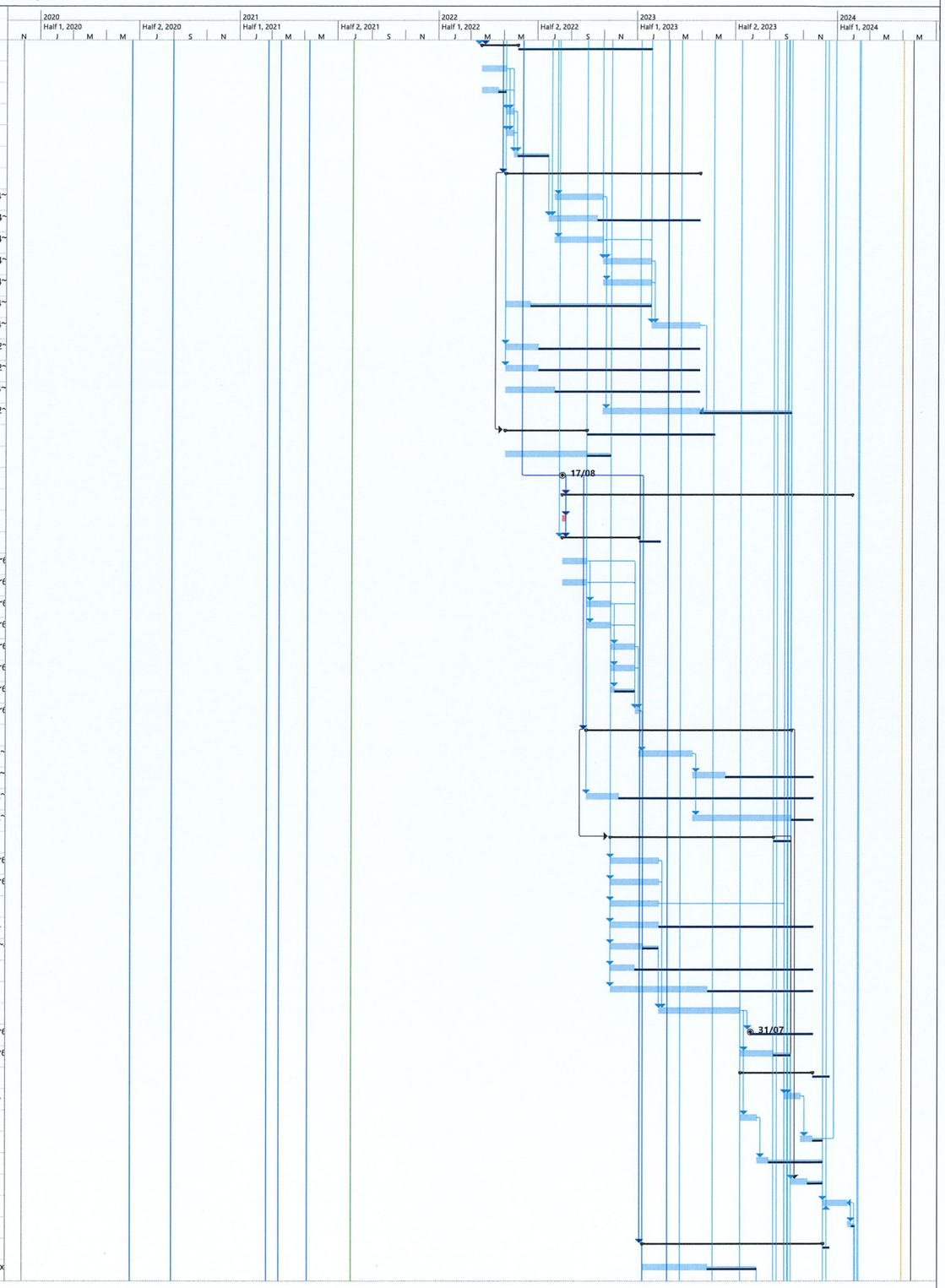
Bestwise
Project: DE/2018/04
Date: 28/07/21

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

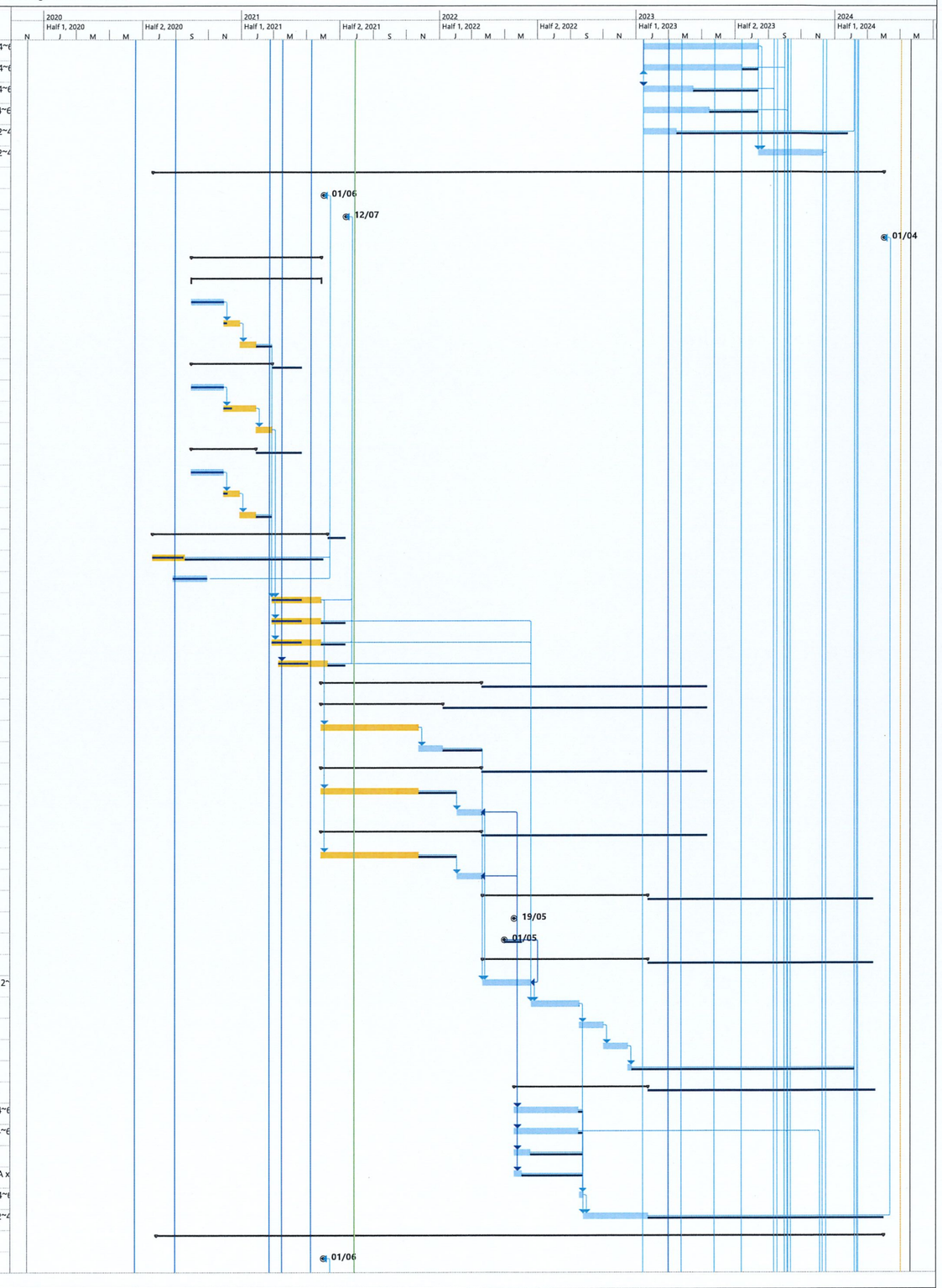
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
649	649	5.20.6.7	CDS034-4 - Detailed Design for Electrical Installations BS at MFB No. 2	100 edays	Fri 12/03/21	Sun 20/06/21	Fri 12/03/21	Sun 20/06/21	22.38 edays	133	763,599FF	
650	650	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	68	686,599FF	
651	651	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	64	599FF,690	
652	652	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	113	680,599FF	
653	**653**	**5.20.7**	**Manufacturing and Delivery of Plant & Materials**	**522 days**	**Sun 14/03/21**	**Wed 17/08/22**	**Sun 14/03/21**	**Wed 17/08...**	**301 days**			
654	**654**	**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**			
655	655	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	646	656	
656	656	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	655	657	
657	657	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	656	715	
658	**658**	**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**			
659	659	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	646	660	
660	660	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	659,727SS-67	16	
661	**661**	**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**			
662	662	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	646	663	
663	663	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	662	717	
664	**664**	**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**			
665	665	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	646	666	
666	666	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	665,727SS-67	16	
667	**667**	**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**			
668	668	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	648	669	
669	669	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	668	721	
670	**670**	**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**			
671	671	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	648	672	
672	672	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	671	722	
673	**673**	**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**			
674	674	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	646	675	
675	675	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	674,727SS-67	14	
676	**676**	**5.20.7.8**	**Pipework, Valves and Electric Actuators, EQT036 (Rev. 11)**	**285 days**	**Thu 28/10/21**	**Mon 08/08/22**	**Thu 28/10/21**	**Mon 08/08...**	**381 days**	56,60		
677	677	5.20.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 28/10/21	Fri 24/06/22	Thu 28/10/21	Fri 24/06/22	0 days	646	678	
678	678	5.20.7.8.2	Shipping and Delivery of Plant to site	45 days	Sat 25/06/22	Mon 08/08/22	Sat 25/06/22	Mon 08/08/...	173 days	677	720	
679	**679**	**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**			
680	680	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	652	681	
681	681	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	680,704SS-67	07,730	
682	**682**	**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**			
683	683	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	526	684	
684	684	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	683	685	
685	685	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	684	745	
686	686	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	650	687	
687	687	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	686	688	
688	688	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	687,727SS-67	46	
689	**689**	**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**			
690	690	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	651	691	
691	691	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	690	692	
692	692	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	691,727SS-67	49	
693	**693**	**5.20.7.12**	**11kV/380V Stepdown Power Transformers, EQT032**	**285 days**	**Sat 06/11/21**	**Wed 17/08/22**	**Sat 06/11/21**	**Wed 17/08...**	**417 days**			
694	694	5.20.7.12.1	MFS - 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	0 days	647	695	
695	695	5.20.7.12.2	MFS - Shipping and Delivery of Plant to site	45 days	Mon 04/07/22	Wed 17/08/22	Mon 04/07/22	Wed 17/08/...	90 days	694	750	
696	**696**	**5.20.7.13**	**PLC System**	**285 days**	**Sat 06/11/21**	**Wed 17/08/22**	**Sat 06/11/21**	**Wed 17/08...**	**162 days**			
697	697	5.20.7.13.1	Manufacturing of Plant, PLC for BR2A &B	210 days	Sat 06/11/21	Fri 03/06/22	Sat 06/11/21	Fri 03/06/22	0 days	524	698	
698	698	5.20.7.13.2	Factory Acceptance Test of Plant, PLC for BR2A &B (To be witnessed	30 days	Sat 04/06/22	Sun 03/07/22	Sat 04/06/22	Sun 03/07/22	0 days	697	699	
699	699	5.20.7.13.3	Shipping and Delivery of Plant to site	45 days	Mon 04/07/22	Wed 17/08/22	Mon 04/07/22	Wed 17/08/...	90 days	698	747	
700	700	5.20.7.13.4	Manufacturing of Plant, PLC for MFB2	210 days	Sat 06/11/21	Fri 03/06/22	Sat 06/11/21	Fri 03/06/22	0 days	647	701	
701	701	5.20.7.13.5	Factory Acceptance Test of Plant, PLC for MFB2 (To be witnessed by	30 days	Sat 04/06/22	Sun 03/07/22	Sat 04/06/22	Sun 03/07/22	0 days	700	702	
702	702	5.20.7.13.6	Shipping and Delivery of Plant to site	45 days	Mon 04/07/22	Wed 17/08/22	Mon 04/07/22	Wed 17/08/...	90 days	701	748	
703	**703**	**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**			
704	704	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		707,713FS+45 edays,706,	
705	**705**	**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**	**704**		
706	706	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	704		



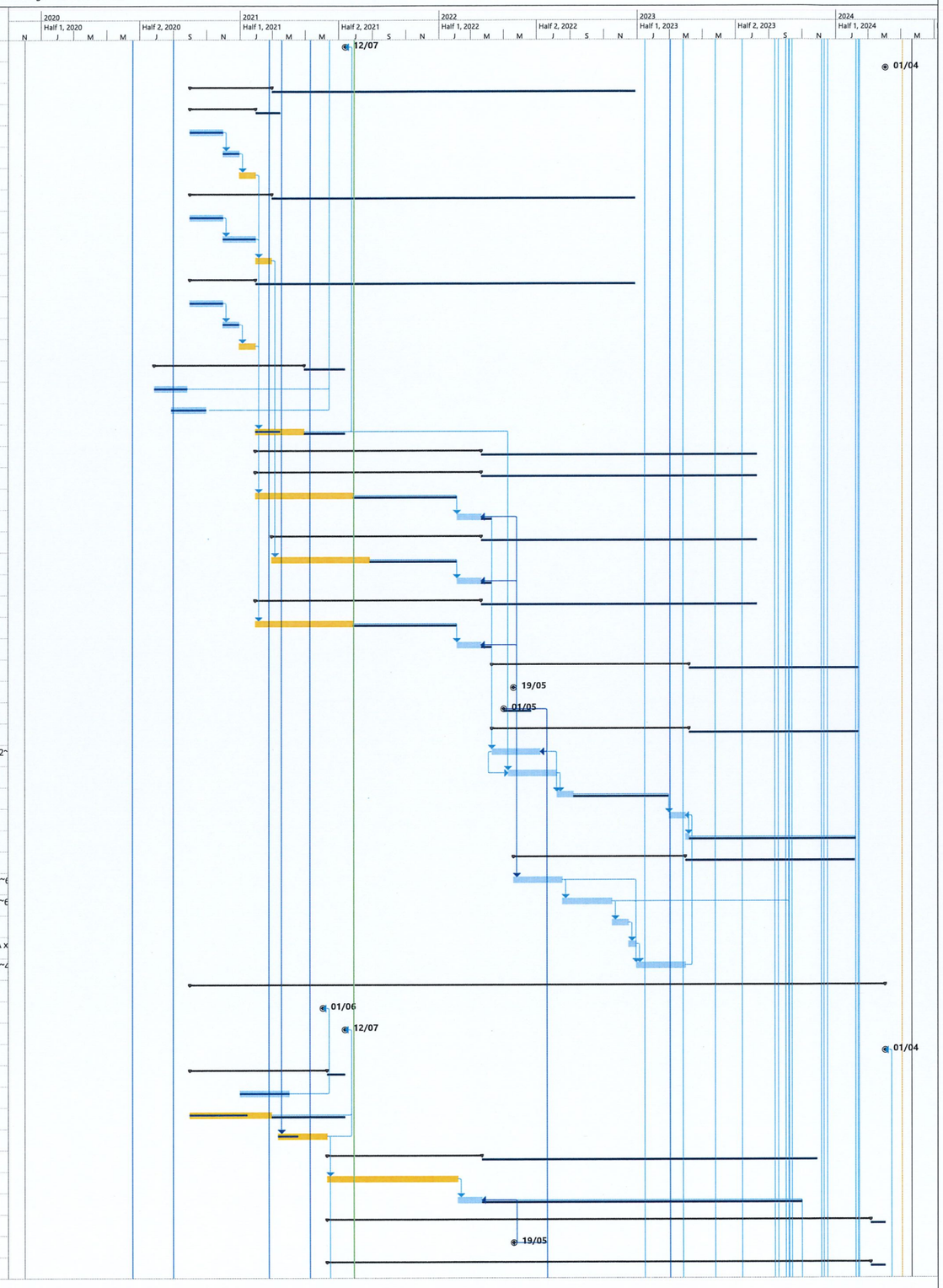
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
707	**707**	**5.20.8.2.2**	**Installation of Lifting Appliances at MFB No. 2**	**66 days**	**Mon 21/03/22**	**Wed 25/05/22**	**Mon 21/03/22**	**Wed 25/05...**	**248 days**	**704,681**		
708	708	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		710,711,712	
709	709	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		710,711,712	
710	710	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	708,709	712	
711	711	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	708,709	712	
712	712	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	708,709,71(	715	
713	**713**	**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**	**704FS+45 e(**	**725SS**	
714	714	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	675	724	ME - E x 4~
715	715	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	657,712		ME - A x 4~
716	716	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	660,666	720,717,718	ME - B x 4~
717	717	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	716,663	720	ME - A x 4~
718	718	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	716	720	ME - B x 4~
719	719	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		720	ME - C x 4~
720	720	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	716,717,71(	724FF	ME - C x 4~
721	721	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	669		ME - D x 2~
722	722	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	672		ME - D x 2~
723	723	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~
724	724	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	168 days	714,720FF	760	ME - D x 2~
725	**725**	**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**	**713SS**		
726	726	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		751	
727	727	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		730,739FS+45 edays,763I	
728	**728**	**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**	**727**		
729	729	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	727		
730	**730**	**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**	**727,681**		
731	731	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		733,734,738	LA - A x 4~6
732	732	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		733,734,738	LA - B x 4~6
733	733	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	731,732	735,736,737,738	LA - A x 4~6
734	734	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	731,732	735,736,737,738	LA - B x 4~6
735	735	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	733,734	738	LA - A x 4~6
736	736	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	733,734	738	LA - B x 4~6
737	737	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	733,734	738	LA - C x 4~6
738	738	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	731,732,733	740	LA - A x 4~6
739	**739**	**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**	**727FS+45 e(**	**744SS+45 edays,760**	
740	740	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	738	741,743	ME - A x 4~
741	741	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	740		ME - B x 4~
742	742	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~
743	743	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	740		ME - D x 2~
744	**744**	**5.20.8.4.4**	**Electrical Installations for E&M Equip. at MFB No. 2 Upper Part**	**300 days**	**Wed 16/11/22**	**Mon 11/09/23**	**Wed 16/11/22**	**Mon 11/09...**	**32 days**	**739SS+45 e(**	**760**	
745	745	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/...	0 days	685	752	LV - B x 4~6
746	746	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/...	0 days	688	752	LV - A x 4~6
747	747	5.20.8.4.4.3	Installation of PLC Panels, BR2	90 days	Wed 16/11/22	Mon 13/02/23	Wed 16/11/22	Mon 13/02/...	0 days	699	752,756	
748	748	5.20.8.4.4.4	Installation of PLC Panels, MFB No. 2	90 days	Wed 16/11/22	Mon 13/02/23	Wed 16/11/22	Mon 13/02/...	282 days	702		PLC - B x 1
749	749	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	30 days	692	752	HV - A x 4~
750	750	5.20.8.4.4.6	Installation of transformer, MFB No. 2, EQT032	45 days	Wed 16/11/22	Fri 30/12/22	Wed 16/11/22	Fri 30/12/22	327 days	695		
751	751	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	726		
752	752	5.20.8.4.4.8	Cables laying and terminations	150 days	Tue 14/02/23	Thu 13/07/23	Tue 14/02/23	Thu 13/07/23	0 days	745,746,747	757,754,753	
753	753	5.20.8.4.4.9	Energisation of LV Switchboards, MFB No. 2 (Rev. 8)	1 day	Mon 31/07/23	Mon 31/07/23	Mon 31/07/23	Mon 31/07/...	114 days	752		LA - A x 4~6
754	754	5.20.8.4.4.10	Site Acceptance Tests - Electrical aspects including voltage and cur	60 days	Fri 14/07/23	Mon 11/09/23	Fri 14/07/23	Mon 11/09/...	32 days	752	760	LV - A x 4~6
755	**755**	**5.20.8.4.5**	**SCADA Systems, BR No. 1 & No 2, MFB No. 2**	**131 days**	**Fri 14/07/23**	**Tue 21/11/23**	**Fri 14/07/23**	**Tue 21/11/23**	**31 days**			
756	756	5.20.8.4.5.1	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	747,583	758	PLC - A x 1
757	757	5.20.8.4.5.2	Configuration of PLC System for MFB No. 2	30 days	Fri 14/07/23	Sat 12/08/23	Fri 14/07/23	Sat 12/08/23	0 days	752	759	
758	758	5.20.8.4.5.3	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	756	761,587,1270	
759	759	5.20.8.4.5.4	Site Acceptance Test for PLC System at MFB No. 2	21 days	Sun 13/08/23	Sat 02/09/23	Sun 13/08/23	Sat 02/09/23	99 days	757	761,1270	
760	760	5.20.8.4.6	Site Acceptance Test for E&M Equip at MFB No. 2	30 edays	Fri 13/10/23	Sun 12/11/23	Fri 13/10/23	Sun 12/11/23	28.63 edays	739,744,754	761	
761	761	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	758,760,77(	762	
762	762	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	761	1266	
763	**763**	**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**	**727FS+150 (**		
764	764	5.20.8.4.9.1	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		770	MVAC - A x



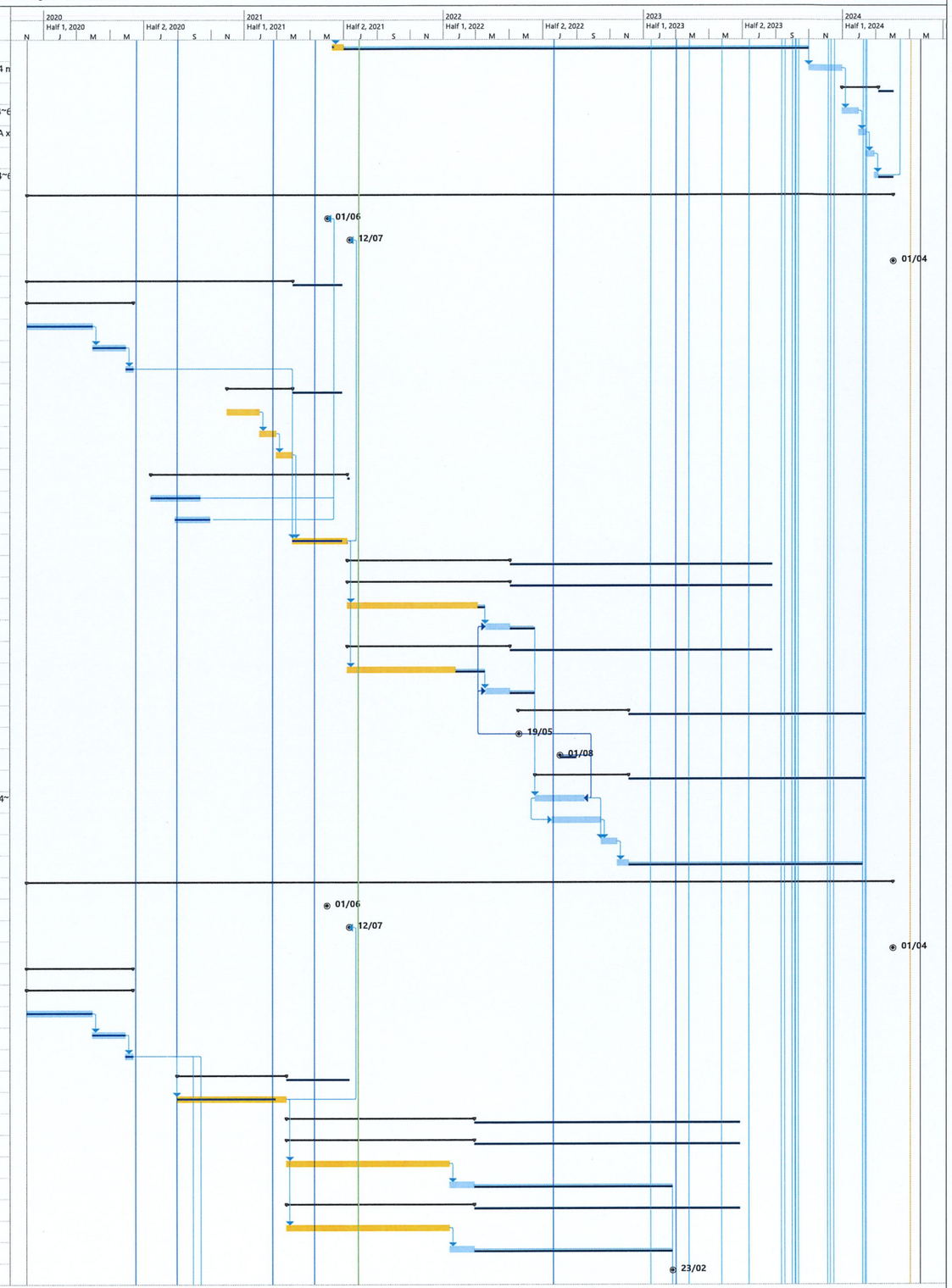
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
765	765	5.20.8.4.9.2	Lighting and Power Distribution System, MFB No. 2	210 days	Sun 15/01/23	Sat 12/08/23	Sun 15/01/23	Sat 12/08/23	0 days		770	BS - A x 4~6
766	766	5.20.8.4.9.3	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	1237	1239,770	Pb - B x 4~6
767	767	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	727FS+120 d	770,1269	BS - B x 4~6
768	768	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		1190,1202,1203,770	FS - B x 4~6
769	769	5.20.8.4.9.6	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		761FF	BS - C x 2~4
770	770	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	764,765,766	761	BS - C x 2~4
771	**771**	**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**			
772	772	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	789FF,790FF		
773	773	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	791FF,792FF		
774	774	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	820FF		
775	**775**	**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**			
776	**776**	**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**			
777	777	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		778	
778	778	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	777	779	
779	779	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	778	791	
780	**780**	**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**			
781	781	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		782	
782	782	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	781	783	
783	783	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	782	791,792,793	
784	**784**	**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**			
785	785	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		786	
786	786	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	785	787	
787	787	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	786	791	
788	**788**	**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**			
789	789	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		772FF	
790	790	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		772FF	
791	791	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	779,783,787	797,800,803,773FF	
792	792	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	783	810,773FF	
793	793	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	783	810,773FF	
794	794	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	133	810,773FF	
795	**795**	**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**			
796	**796**	**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**			
797	797	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	791	798	
798	798	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	797	809	
799	**799**	**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**			
800	800	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	791	801	
801	801	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	800,806FF-6	809	
802	**802**	**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**			
803	803	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	791	804	
804	804	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	803,806FF-6	809	
805	**805**	**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**			
806	806	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		804FF-60 edays,801FF-60	
807	807	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		809FF+50 days	
808	**808**	**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**			
809	809	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	807FF+50 d	810	ME - D x 2~
810	810	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	809,792,795	811,819	
811	811	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	810	812	
812	812	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	811	813	
813	813	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...	812	1266	
814	**814**	**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**			
815	815	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	806	820	BS - B x 4~6
816	816	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	806	1202,1203,1193,820	FS - A x 4~6
817	817	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	806	820	
818	818	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	806	820	MVAC - A x
819	819	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	810	820	Pb - A x 4~6
820	820	5.21.7.3.6.6	Testing and Commissioning of Building Services Installations, Chem	120 days	Mon 26/09/22	Mon 23/01/23	Mon 26/09/22	Mon 23/01/...	434 days	815,816,815	774FF	BS - C x 2~4
821	**821**	**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**			
822	822	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	839FF,840FF		



ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
823	823	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	841FF		
824	824	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			
825	**825**	**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**			
826	**826**	**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**			
827	827	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		828	
828	828	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	827	829	
829	829	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	828	841,844	
830	**830**	**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**			
831	831	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		832	
832	832	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	831	833	
833	833	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	832	847	
834	**834**	**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**			
835	835	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		836	
836	836	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	835	837	
837	837	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	836	850	
838	**838**	**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**			
839	839	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		822FF	
840	840	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		822FF	
841	841	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	829	857,823FF	
842	**842**	**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**			
843	**843**	**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**			
844	844	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	829	845	
845	845	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	844,853FF-6	856	
846	**846**	**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**			
847	847	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	833	848	
848	848	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	847,853FF-6	856	
849	**849**	**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**			
850	850	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	837	851	
851	851	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	850,853FF-6	856	
852	**852**	**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**			
853	853	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		845FF-60 edays,848FF-60	
854	854	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		856FF+50 days	
855	**855**	**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**			
856	856	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	854FF+50 d	857SS+30 edays,858	ME - D x 2~
857	857	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	856SS+30 e	858	
858	858	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	856,857	859	
859	859	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	858,866FF	860	
860	860	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...	859	1266	
861	**861**	**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**			
862	862	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	853	866,863	BS - A x 4~6
863	863	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	862	1202,1203,866,864	FS - A x 4~6
864	864	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	863	865	
865	865	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	864	866	MVAC - A x
866	866	5.22.7.3.6.5	Testing and Commissioning of Building Services Installations, Temp	90 days	Fri 30/12/22	Wed 29/03/23	Fri 30/12/22	Wed 29/03/...	0 days	862,863,865	859FF	BS - C x 2~4
867	**867**	**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**			
868	868	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	872FF		
869	869	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	873FF,874FF		
870	870	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	887FF		
871	**871**	**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**			
872	872	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		868FF	
873	873	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...		869FF	
874	874	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	133	876,881,869FF	
875	**875**	**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**			
876	876	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	874	877	
877	877	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	876,879FF-6	882	
878	**878**	**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**			
879	879	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		856FF+50 days,877FF-60	
880	**880**	**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**			



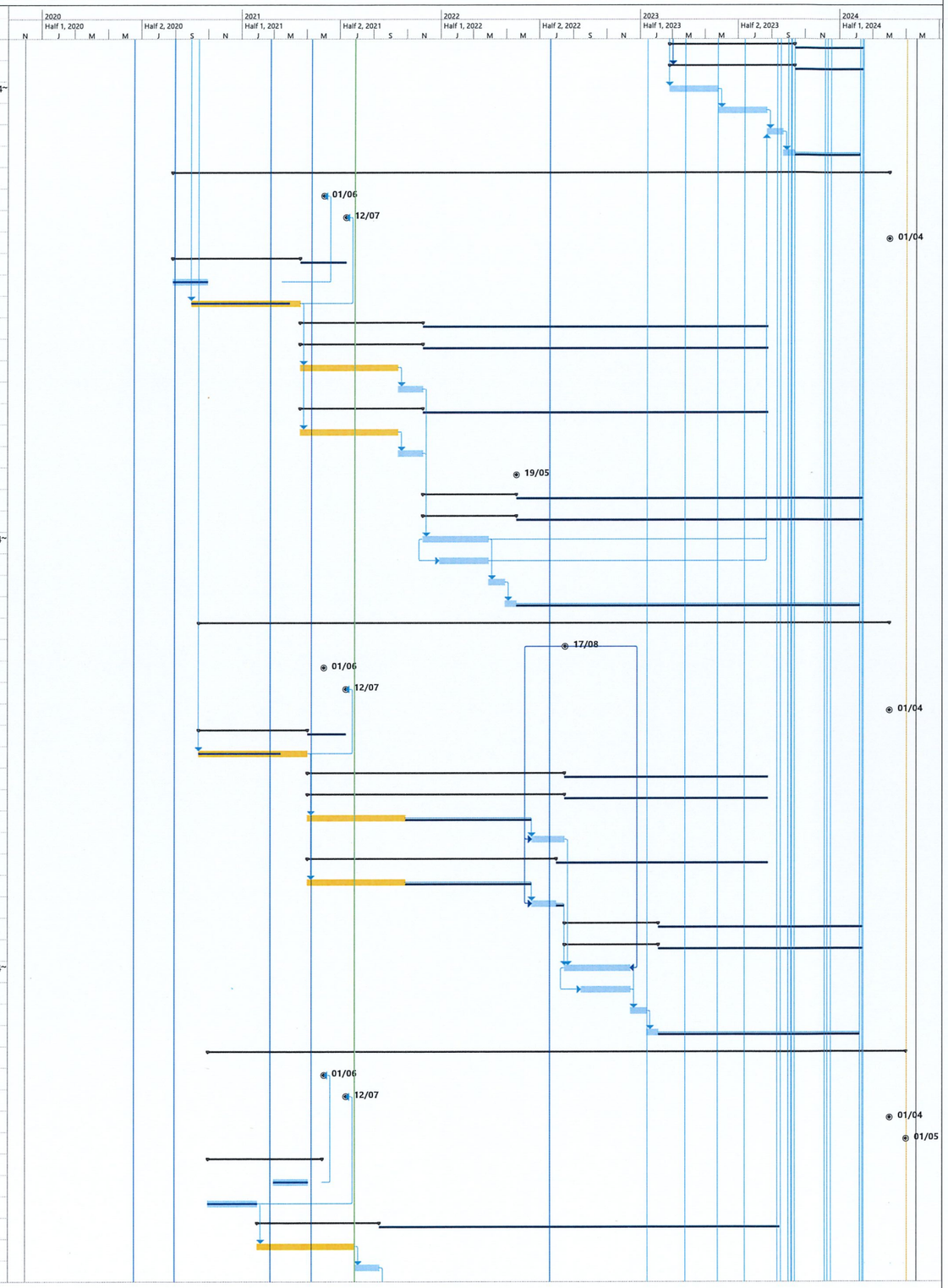
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
881	881	5.23.6.2.1	Application for EPD's Approval for Installation of Diesel Engine Gene	21 days	Thu 10/06/21	Wed 30/06/21	Thu 10/06/21	Wed 30/06/...	853 days	874	882	
882	882	5.23.6.2.2	Installation and SAT of Emergency Power Generator and associated v	60 days	Wed 01/11/23	Sat 30/12/23	Wed 01/11/23	Sat 30/12/23	0 days	881,877	884	GS - A x 4 n
883	**883**	**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**			
884	884	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	882	885	FS - A x 4~6
885	885	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	884	886	MVAC - A x
886	886	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	885	887	
887	887	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	886	870FF	BS - A x 4~6
888	**888**	**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**			
889	889	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	902FF,903FF		
890	890	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	904FF		
891	891	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			
892	**892**	**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**			
893	**893**	**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**			
894	894	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		895	
895	895	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	894	896	
896	896	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	895	904	
897	**897**	**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**			
898	898	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		899	
899	899	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	898	900	
900	900	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	899	904	
901	**901**	**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**			
902	902	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		889FF	
903	903	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		889FF	
904	904	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	896,900	907,910,890FF	
905	**905**	**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**			
906	**906**	**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**			
907	907	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	904	908	
908	908	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	907,913SS-6	916	
909	**909**	**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**			
910	910	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	904	911	
911	911	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	910,913SS-6	916	
912	**912**	**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**			
913	913	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		916FF+45 days,908SS-60	
914	914	5.24.7.2	Tentative Civil Handover Date, underground air pipework for DOU 1 (by	1 day	Mon 01/08/22	Mon 01/08/22	Mon 01/08/22	Mon 01/08/...	30 days		916FF+45 days	
915	**915**	**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**			
916	916	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	914FF+45 d	917SS+30 edays,918	ME - F x 4~
917	917	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	916SS+30 e	918	
918	918	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	916,917	919	
919	919	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...	918	1266	
920	**920**	**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**			
921	921	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			
922	922	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	930FF		
923	923	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			
924	**924**	**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**			
925	**925**	**5.25.4.1**	**DOU - activated carbon filter (DOU No. 2A, No. 3A, No. 3B), C11, ref. E**	**194 days**	**Mon 02/12/19**	**Fri 12/06/20**	**Mon 02/12/19**	**Fri 12/06/20**	**0 days**			
926	926	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		927	
927	927	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	926	928	
928	928	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	927	930,951,972	
929	**929**	**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**			
930	930	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	928	933,936,922FF	
931	**931**	**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**			
932	**932**	**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**			
933	933	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	930	934	
934	934	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	933	941	
935	**935**	**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**			
936	936	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	930	937	
937	937	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	936	941	
938	938	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			



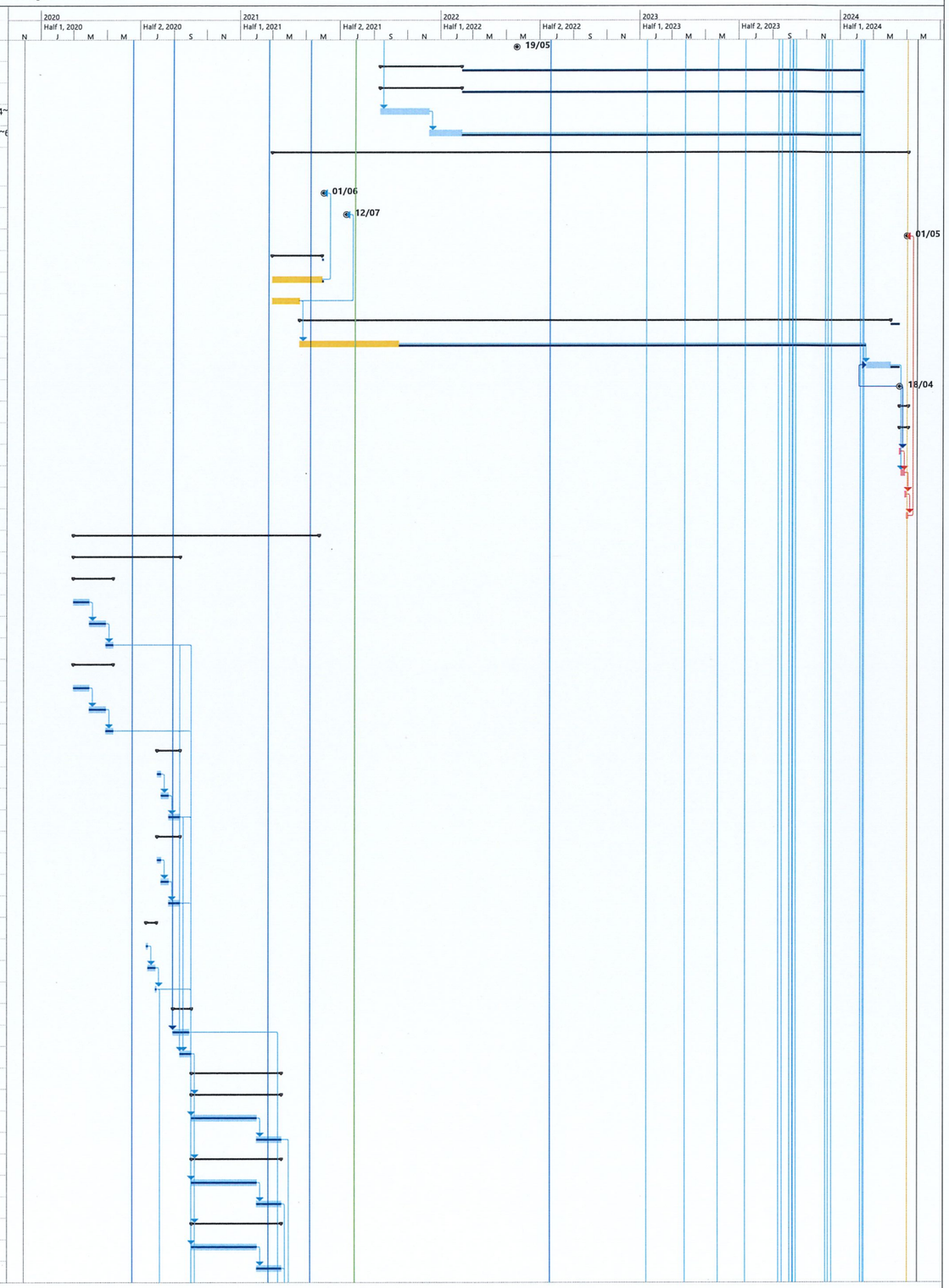
Bestwise
Project: DE/2018/04
Date: 28/07/21

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
939	**939**	**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**			
940	**940**	**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**	**560**		
941	941	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	934,937	942	ME - F x 4~
942	942	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	941	943	
943	943	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	962,963,942	944	
944	944	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...	943	1266	
945	**945**	**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**			
946	946	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	950FF		
947	947	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	951FF		
948	948	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			
949	**949**	**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**			
950	950	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		946FF	
951	951	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	928	954,957,947FF	
952	**952**	**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**			
953	**953**	**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**			
954	954	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	951	955	
955	955	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	954	962	
956	**956**	**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**			
957	957	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	951	958	
958	958	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	957	962	
959	959	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			
960	**960**	**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**			
961	**961**	**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**			
962	962	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	958,955	963SS+30 edays,964,943	ME - F x 4~
963	963	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	962SS+30 e	964,943	
964	964	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	962,963	965	
965	965	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	964	1266	
966	**966**	**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**			
967	967	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		982FF+30 days,976SS-60	
968	968	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			
969	969	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	972FF		
970	970	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			
971	**971**	**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**			
972	972	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	928	975,978,969FF	
973	**973**	**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**			
974	**974**	**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**			
975	975	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	972	976	
976	976	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	975,967SS-6	982	
977	**977**	**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**			
978	978	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	972	979	
979	979	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	978,967SS-6	982	
980	**980**	**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**			
981	**981**	**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**			
982	982	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	967FF+30 d	983SS+30 edays,984	ME - F x 4~
983	983	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	982SS+30 e	984	
984	984	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	982,983	985	
985	985	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	984	1266	
986	**986**	**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**			
987	987	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	992FF		
988	988	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	993FF		
989	989	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			
990	990	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			
991	**991**	**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**			
992	992	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		987FF	
993	993	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		995,988FF	
994	**994**	**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**			
995	995	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	993	996	
996	996	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	995	1000	



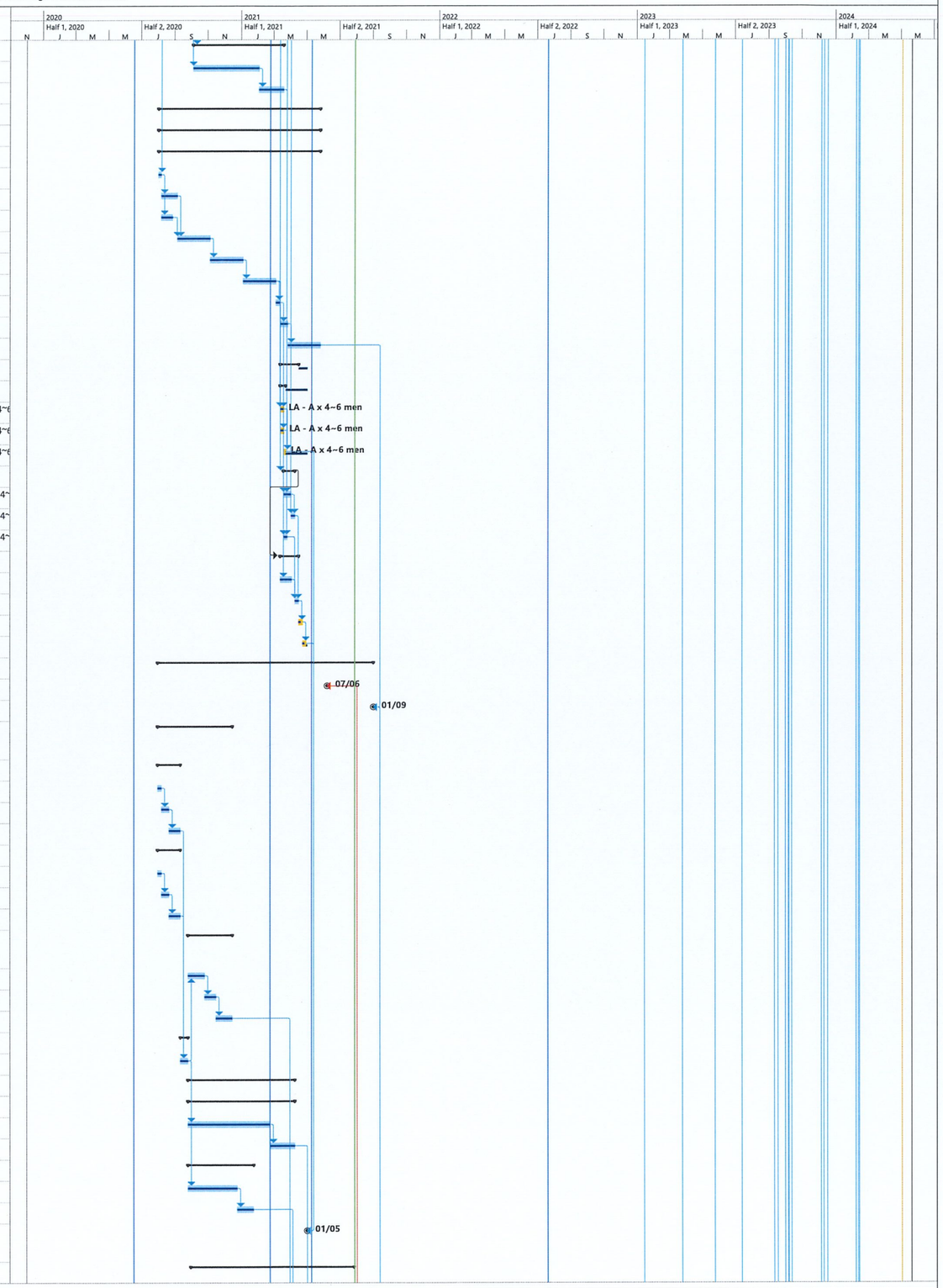
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
997	997	5.28.7	Tentative Civil Handover, Chambers (Rev. 5)	1 day	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	Thu 19/05/22	0 days			
998	**998**	**5.28.8**	**Site Installation Work**	**150 days**	**Sun 12/09/21**	**Tue 08/02/22**	**Sun 12/09/21**	**Tue 08/02/22**	**734 days**			
999	**999**	**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**			
1000	1000	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	996	1001	ME - C x 4~
1001	1001	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	1000	1266	EE - A x 4~
1002	**1002**	**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**			
1003	1003	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	1007FF		
1004	1004	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	1008FF		
1005	1005	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	1018FF		
1006	**1006**	**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**			
1007	1007	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		1003FF	
1008	1008	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		1010,1004FF	
1009	**1009**	**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**			
1010	1010	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	1008	1011	
1011	1011	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	1010,1012S	1016	
1012	1012	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		1011SS-60 edays,1015	
1013	**1013**	**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**			
1014	**1014**	**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**			
1015	1015	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	1012	1016	
1016	1016	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	1015,1011	1017	
1017	1017	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	1016	1018	
1018	1018	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	1017	1005FF	
1019	**1019**	**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**			
1020	**1020**	**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**			
1021	**1021**	**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**			
1022	1022	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		1023	
1023	1023	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	1022	1024	
1024	1024	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	1023	1043,1046	
1025	**1025**	**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**			
1026	1026	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		1027	
1027	1027	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	1026	1028	
1028	1028	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	1027	1043,1049	
1029	**1029**	**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**			
1030	1030	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		1031	
1031	1031	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	1030	1032	
1032	1032	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	1031	1043,1052	
1033	**1033**	**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**			
1034	1034	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		1035	
1035	1035	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	1034	1036	
1036	1036	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	1035	1043,1055	
1037	**1037**	**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**			
1038	1038	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		1039	
1039	1039	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	1038	1040	
1040	1040	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	1039	1046,1049,1052,1055,10	
1041	**1041**	**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**			
1042	1042	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	113	1071	
1043	1043	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	1024,1028,11	1045,1051,1048,1054	
1044	**1044**	**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**			
1045	**1045**	**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**	**1043**		
1046	1046	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	1040,1024	1047	
1047	1047	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	1046	1076	
1048	**1048**	**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**	**1043**		
1049	1049	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	1040,1028	1050	
1050	1050	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	1049	1077	
1051	**1051**	**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**	**1043**		
1052	1052	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	1040,1032	1053	
1053	1053	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	1052	1075	



Bestwise
Project: DE/2018/04
Date: 28/07/21

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

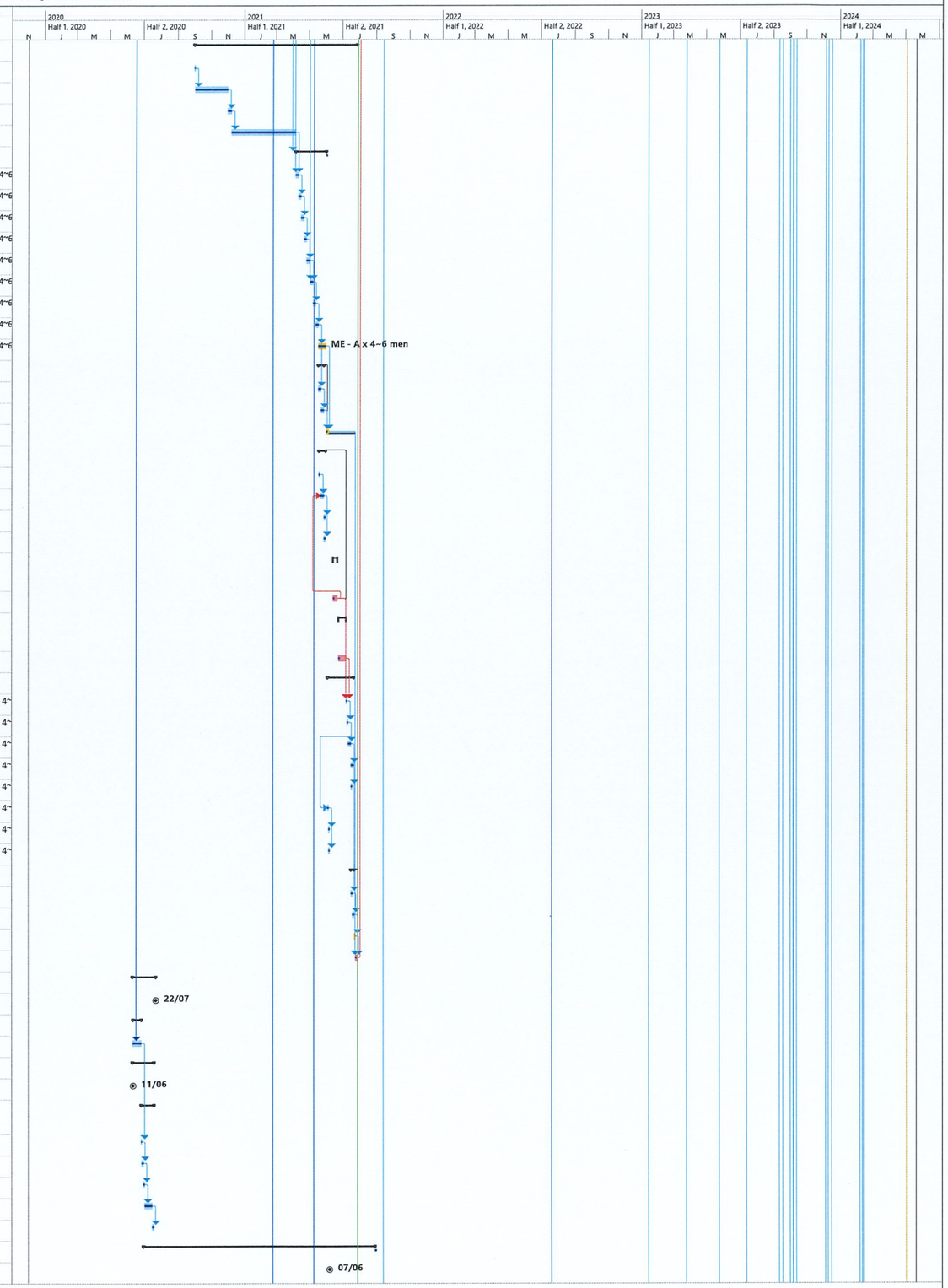
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1054	**1054**	**5.30.3.4**	**Valve**	**165 days**	**Mon 05/10/20**	**Thu 18/03/21**	**Mon 05/10/20**	**Thu 18/03/21**	**0 days**	**1043**		
1055	1055	5.30.3.4.1	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	1040,1036	1056	
1056	1056	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	1055	1075	
1057	**1057**	**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**			
1058	**1058**	**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**			
1059	**1059**	**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**			
1060	1060	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	1040	1061,1062	
1061	1061	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	1060	1063	
1062	1062	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	1060	1063	
1063	1063	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	1062,1061	1064	
1064	1064	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	1063	1065	
1065	1065	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	1064	1074,1071,1066	
1066	1066	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	1065	1071,1072,1075,1077,10	
1067	1067	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	1066	1068	
1068	1068	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	1067	1085FF	
1069	**1069**	**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**			
1070	**1070**	**5.30.4.1.2.**	**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**			
1071	1071	5.30.4.1.2.1	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	1065,1042,1	1073	LA - A x 4~6
1072	1072	5.30.4.1.2.2	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	1066	1073	LA - A x 4~6
1073	1073	5.30.4.1.2.3	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	1071,1072	1108FF	LA - A x 4~6
1074	**1074**	**5.30.4.1.2.**	**Mechanical Installations for Temp. Filtrate Lifting Well and Eq. Ta**	**21 days**	**Fri 19/03/21**	**Thu 08/04/21**	**Fri 19/03/21**	**Thu 08/04/21**	**0 days**	**1065**	**1078FS-30 days**	
1075	1075	5.30.4.1.2.1	Installation of pipework, chemical pipework and valves, EQT036	14 days	Fri 19/03/21	Thu 01/04/21	Fri 19/03/21	Thu 01/04/21	0 days	1066,1053,1	1076	ME - A x 4~
1076	1076	5.30.4.1.2.2	Installation of pumps	7 days	Fri 02/04/21	Thu 08/04/21	Fri 02/04/21	Thu 08/04/21	0 days	1075,1047	1080	ME - A x 4~
1077	1077	5.30.4.1.2.3	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	1066,1050	1080	ME - A x 4~
1078	**1078**	**5.30.4.1.2.**	**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**	**1074FS-30 d**		
1079	1079	5.30.4.1.2.4	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	1066	1080	
1080	1080	5.30.4.1.2.5	Cables laying and terminations	7 days	Fri 09/04/21	Thu 15/04/21	Fri 09/04/21	Thu 15/04/21	0 days	1079,1076,1	1081	
1081	1081	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	1080	1082	
1082	1082	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	1081	1108FF	
1083	**1083**	**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**			
1084	1084	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	1151FF		
1085	1085	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	1068FF,117		
1086	**1086**	**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**			
1087	**1087**	**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**			
1088	1088	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		1089	
1089	1089	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	1088	1090	
1090	1090	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	1089	1100	
1091	**1091**	**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**			
1092	1092	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		1093	
1093	1093	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	1092	1094	
1094	1094	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	1093	1100	
1095	**1095**	**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**			
1096	1096	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	1100	1097	
1097	1097	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	1096	1098	
1098	1098	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	1097	1115	
1099	**1099**	**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**			
1100	1100	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	1090,1094	1103,1106,1096	
1101	**1101**	**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**			
1102	**1102**	**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**			
1103	1103	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	1100	1104	
1104	1104	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	1103	1121	
1105	**1105**	**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**			
1106	1106	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	1100	1107	
1107	1107	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	1106	1116	
1108	1108	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	1082FF,107		
1109	**1109**	**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**			



Bestwise
Project: DE/2018/04
Date: 28/07/21

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

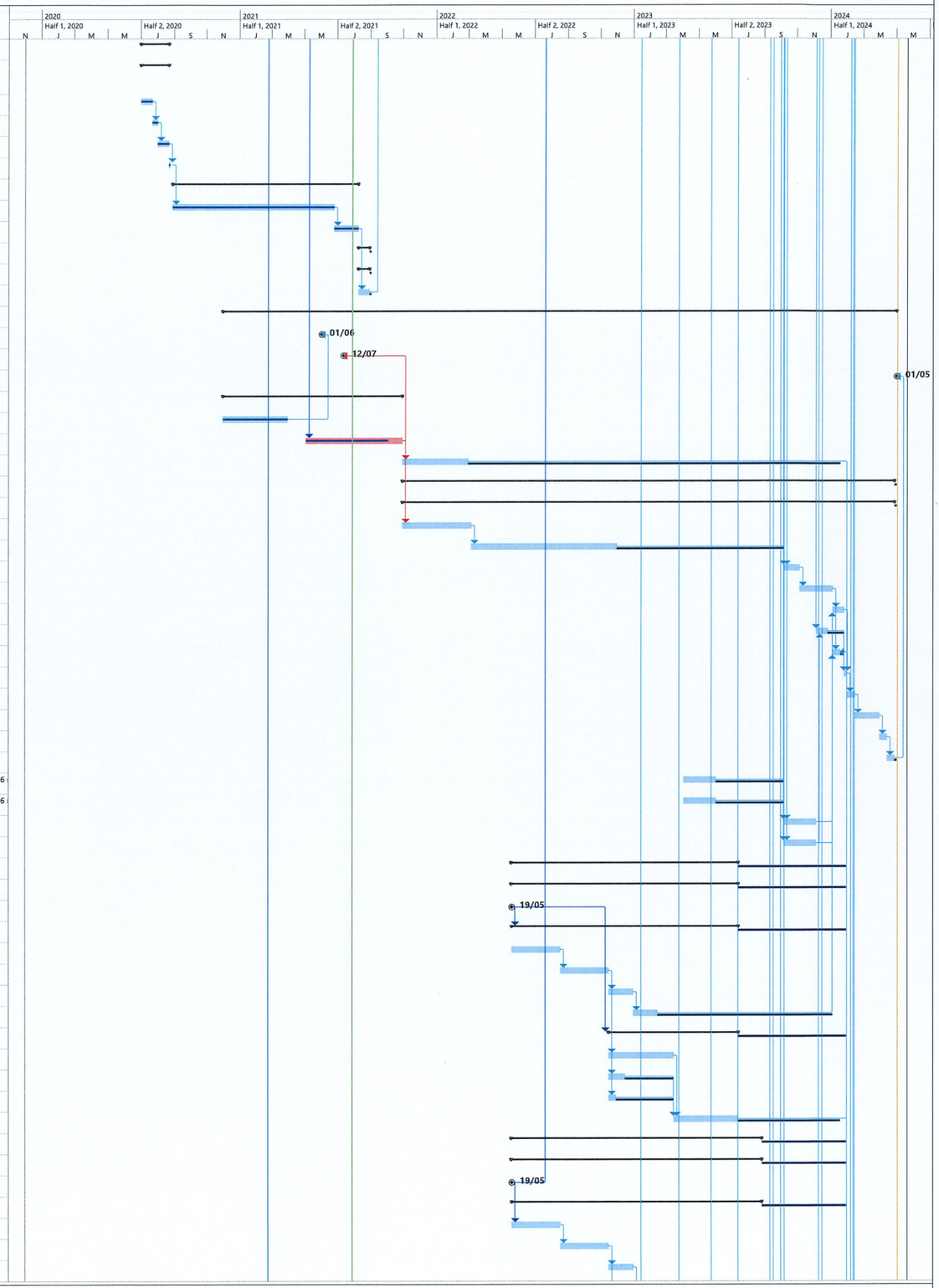
ID	ID	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Early Start	Early Finish	Free Slack	Predecessors	Successors	Resource Names
1110	**1110**	**5.31.7.1**	**Commencement of retrofitting the existing PST No. 4 and No. 6**	**300 days**	**Thu 01/10/20**	**Tue 27/07/21**	**Thu 01/10/20**	**Tue 27/07/21**	**0 days**			
1111	1111	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		1112	
1112	1112	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	1111	1113	
1113	1113	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	1112	1114	
1114	1114	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	1113	1116	
1115	**1115**	**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**	**1098**		
1116	1116	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	1114,1107	1117	ME - A x 4~6
1117	1117	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	1116	1118	ME - A x 4~6
1118	1118	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	1117	1119	ME - A x 4~6
1119	1119	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	1118	1120	ME - A x 4~6
1120	1120	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	1119	1121	ME - A x 4~6
1121	1121	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	1120,1104	1122	ME - A x 4~6
1122	1122	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	1121	1123	ME - A x 4~6
1123	1123	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	1122	1124,1126	ME - A x 4~6
1124	1124	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	1123	1128	ME - A x 4~6
1125	**1125**	**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**		**1128**	
1126	1126	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	1123	1127	
1127	1127	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	1126	1128	
1128	1128	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	1125,1124,11	1151	
1129	**1129**	**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**		**1139**	
1130	1130	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		1131	
1131	1131	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	1130,1135	1132,1133	
1132	1132	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	1131		
1133	1133	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	1131		
1134	**1134**	**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**			
1135	1135	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		1131,1139	
1136	**1136**	**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**			
1137	1137	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		1139	
1138	**1138**	**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**			
1139	1139	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	1129,1135,11	1140	ME - A x 4~
1140	1140	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	1139	1141,1144	ME - A x 4~
1141	1141	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	1140	1148,1142,1143	ME - A x 4~
1142	1142	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	1141		ME - A x 4~
1143	1143	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	1141		ME - A x 4~
1144	1144	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	1140	1145,1146	ME - A x 4~
1145	1145	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	1144		ME - A x 4~
1146	1146	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	1144		ME - A x 4~
1147	**1147**	**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**		**1150**	
1148	1148	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	1141	1149	
1149	1149	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	1148	1150	
1150	1150	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	1147,1149	1151	
1151	1151	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	1128,1150	1084FF	
1152	**1152**	**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**			
1153	1153	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			
1154	**1154**	**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**			
1155	1155	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	179	1159	
1156	**1156**	**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**			
1157	1157	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			
1158	**1158**	**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**			
1159	1159	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	1155	1160	
1160	1160	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	1159	1161	
1161	1161	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	1160	1162	
1162	1162	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	1161	1163	
1163	1163	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	1162		
1164	**1164**	**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**			
1165	1165	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			



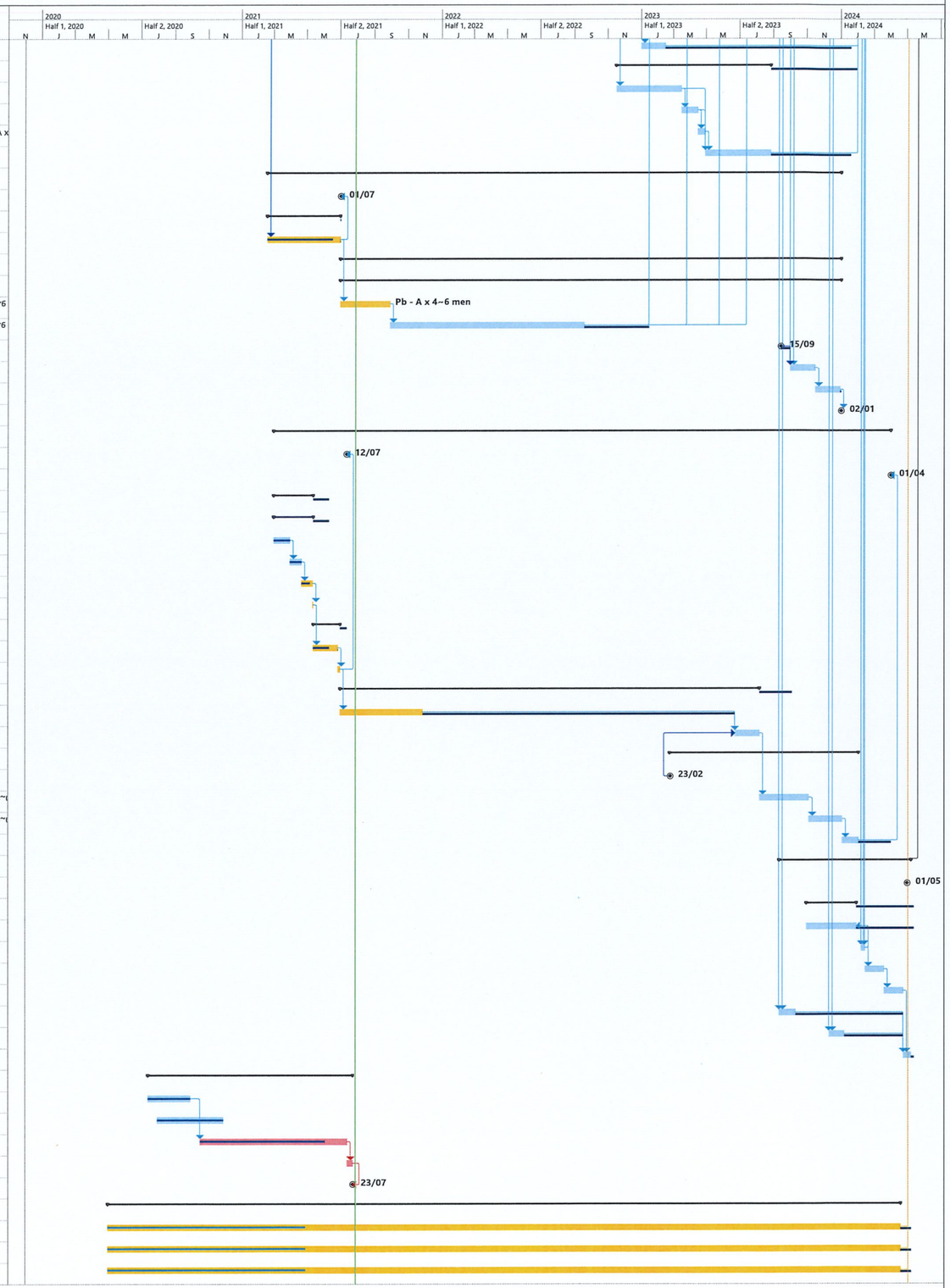
Bestwise
Project: DE/2018/04
Date: 28/07/21

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**	**5.33.2**	**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**			
1167	**1167**	**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**			
1168	1168	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		1169	
1169	1169	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	1168	1170	
1170	1170	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	1169	1171	
1171	1171	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	1170	1173	
1172	**1172**	**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**			
1173	1173	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	1171	1174	
1174	1174	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	1173	1177	
1175	**1175**	**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**			
1176	**1176**	**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**			
1177	1177	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	1174	1085FF	
1178	**1178**	**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**			
1179	1179	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	1183FF		
1180	1180	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	1184FF		
1181	1181	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	1199FF		
1182	**1182**	**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**			
1183	1183	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		1179FF	
1184	1184	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	154	1188,1185,1180FF	
1185	1185	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	1184	1194FF	
1186	**1186**	**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**			
1187	**1187**	**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**			
1188	1188	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	1184	1189	
1189	1189	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	1188	1190	
1190	1190	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	1189,353,482	1191	
1191	1191	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	1190	1194,1192	
1192	1192	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	1202,1203,11	1195	
1193	1193	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	1202,1203,81	1195	
1194	1194	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	1202,1203,11	1195	
1195	1195	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	1194,1192,11	1196	
1196	1196	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	1195	1197	
1197	1197	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	1196	1198	
1198	1198	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	1197	1199	
1199	1199	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	1198	1181FF	
1200	1200	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		1203	FS - A x 4~6
1201	1201	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		1203	FS - A x 4~6
1202	1202	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	353,482,593,	1194,1192,1193	
1203	1203	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	1200,1201,35	1194,1192,1193	
1204	**1204**	**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**			
1205	**1205**	**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**			
1206	1206	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		1207,1212	
1207	**1207**	**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**	**1206**		
1208	1208	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		1209	
1209	1209	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	1208	1210,1213,1214,1215	
1210	1210	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	1209	1211	
1211	1211	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	1210	1194	
1212	**1212**	**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**	**Wed 15/03/...**	**200 days**	**1206**		
1213	1213	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	1209	1216	
1214	1214	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	1209	1216	
1215	1215	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	1209	1216	
1216	1216	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	1213,1214,11	194FF	
1217	**1217**	**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**			
1218	**1218**	**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**			
1219	1219	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		856FF+50 days,1221	
1220	**1220**	**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**			
1221	1221	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	1219	1222	
1222	1222	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	1221	1223,1226	
1223	1223	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	1222	1224	



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	5.36.1.2.4	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	1223	1194FF	
1225	**1225**	**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**			
1226	1226	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	1222	1229,1227	
1227	1227	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	1226	1228,1229	
1228	1228	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	1227	1229	MVAC - A x
1229	1229	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	1226,1227,1	1194FF	
1230	**1230**	**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**			
1231	1231	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	1233FF		
1232	**1232**	**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**			
1233	1233	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	149	1236,1231FF	
1234	**1234**	**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**			
1235	**1235**	**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**			
1236	1236	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	1233	1237	Pb - A x 4~6
1237	1237	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	1236	351,480,591,766	Pb - B x 4~6
1238	1238	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		1239	
1239	1239	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	1238,351,48	1240	
1240	1240	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	1239	1241	
1241	1241	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	1240		
1242	**1242**	**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**			
1243	1243	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	1253FF		
1244	1244	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	1261FF		
1245	**1245**	**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**			
1246	**1246**	**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**			
1247	1247	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		1248	
1248	1248	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	1247	1249	
1249	1249	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	1248	1250	
1250	1250	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	1249	1252	
1251	**1251**	**5.38.4**	**Design Submissions**	**49 days**	**Wed 12/05/21**	**Wed 30/06/21**	**Wed 12/05/21**	**Wed 30/06...**	**12 days**			
1252	1252	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	1250	1253	
1253	1253	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	1252	1243FF,1255	
1254	**1254**	**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**			
1255	1255	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	1253	1256	
1256	1256	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	1255,1258S	1259	
1257	**1257**	**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**			
1258	1258	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		1256SS+120 edays	
1259	1259	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	1256	1260	PV - A x 4~
1260	1260	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	1259	1261	PV - A x 4~
1261	1261	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	1260	1244FF	
1262	**1262**	**5.39**	**Plant Commissioning**	**240 days**	**Tue 12/09/23**	**Wed 08/05/24**	**Tue 12/09/23**	**Wed 08/05...**	**0 days**		**39FF**	
1263	1263	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			
1264	**1264**	**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**			
1265	1265	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	1266FF-120 d		
1266	1266	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	919,965,985	1267,1265FF-120 days	
1267	1267	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	1266	1268	
1268	1268	5.39.5	Plant Commissioning	35 days	Thu 21/03/24	Wed 24/04/24	Thu 21/03/24	Wed 24/04/...	0 days	1267	1271	
1269	1269	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	352,481,592,	1271	
1270	1270	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	344,473,758,	1271	
1271	1271	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	1268,1269,12		
1272	**1272**	**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**			
1273	1273	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		1275	
1274	1274	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			
1275	1275	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	1273	1276	
1276	1276	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	1275	1277FF	
1277	1277	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	1276FF		
1278	**1278**	**6**	**Beam Plus Submissions**	**1450 days**	**Fri 01/05/20**	**Fri 19/04/24**	**Fri 01/05/20**	**Fri 19/04/24**	**0 days**			
1279	1279	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	
1280	1280	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	
1281	1281	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	



Bestwise
Project: DE/2018/04
Date: 28/07/21

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
1282	1282	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	
1283	1283	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	
1284	1284	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	
1285	1285	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	
1286	1286	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	
1287	1287	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	
1288	1288	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	
1289	1289	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	
1290	1290	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	
1291	1291	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	
1292	1292	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	
1293	1293	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	
1294	1294	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	
1295	1295	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	
1296	1296	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	
1297	1297	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	
1298	1298	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	
1299	1299	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	
1300	1300	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	
1301	1301	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	
1302	1302	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	
1303	1303	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	
1304	1304	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	
1305	1305	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	
1306	1306	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	
1307	1307	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	
1308	1308	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	
1309	1309	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	
1310	1310	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	
1311	1311	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	
1312	**1312**	**7**	**Summary of compensation events notified**	**126 days?**	**Wed 22/04/20**	**Tue 25/08/20**	**Wed 22/04/20**	**Tue 25/08/20**	**0 days?**			
1313	1313	7.1	Compensation Event (CE) No. 001, Special Arrangement in Reducing the Risk	1 day	Tue 25/08/20	Tue 25/08/20	Tue 25/08/20	Tue 25/08/20	0 days			
1314	1314	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			
1315	1315	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			
1316	1316	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			
1317	1317	7.5	Compensation Event (CE) No. 007, Employment of Temporary Staff under Ar	1 day	Fri 10/07/20	Fri 10/07/20	Fri 10/07/20	Fri 10/07/20	0 days			
1318	1318	7.6	Compensation Event (CE) No. 009, Provision of an Additional Primary Sludge	1 day	Tue 14/07/20	Tue 14/07/20	Tue 14/07/20	Tue 14/07/20	0 days			
1319	1319	7.7	Compensation Event (CE) No. 011, Dismantling, relocating, disconnecting an	1 day?	Fri 17/07/20	Fri 17/07/20	Fri 17/07/20	Fri 17/07/20	0 days?