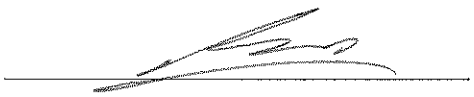
Drainage Services Department

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

Monthly EM&A Report
October 2020

(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_0078E.20.docx

13 November 2020

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 October 2020

Reference is made to the Environmental Team's submission of Monthly EM&A Report for October 2020 (Version 1) certified by the ET Leader and provided to us via e-mail on 13 November 2020.

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

Manson Yeung
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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EXECUTIVE SUMMARY

Introduction

1. This is the 10th 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 October 2020.

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	• ELS works - excavation • Sheet piling installation • Earth mat installation • Pre-drilling • Construction of tower crane
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Trial pit excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Demolition work of existing main facilities • Pre-drilling work and foundation work • Cable diversion works
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	• E&M work for site office in WA1-B • Land survey in sidestream treatment facilities • Paving work in WA3
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Construction of temporary filtrate equalisation tank

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 was removed, pumped and collected in the sedimentation tank.

Summary of Exceedances, Investigation and Follow-up

4. Exceedance of Action/Limit levels during the reporting month (October 2020) 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
- 1 Action Level and no 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	• ELS works - excavation • Sheet piling installation • Earth mat installation • Pre-drilling • Demolition of boundary wall • Demolition of profile barrier • Strut and waling installation
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Trial pit excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Demolition work of existing main facilities • Pre-drilling work and foundation work • Cable diversion works
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	• Erection of site office in WA1-B • Underground utilities detection • Ground investigation in sidestream treatment facilities
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Construction of temporary filtrate equalisation tank • Installation of temporary primary sludge thickener and its accessories • Dismantle and removal of E&M equipment of the existing primary sedimentation tank no. 4 and no. 6

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 10th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period in October 2020.

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	Mr. Henry Tai	3792 0580
Cinotech	Environmental Team	Mr. KS Lee (ETL)	2151 2091
		Ms. Betty Choi	2151 2072
Ramboll	Independent Environmental Checker	Mr. Manson Yeung	3465 2888
KLCWJV	Contractor (DC/2018/06)	Ms. Ruby Hui	6218 6408
KLCWJV	Contractor (DC/2018/07)	Mr. Jimmy Cheng	9606 5916
JEC	Contractor (DE/2018/03)	Mr. Brendan Chan	2807 4264
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	• ELS works - excavation • Sheet piling installation • Earth mat installation • Pre-drilling • Construction of tower crane
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Trial pit excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Demolition work of existing main facilities • Pre-drilling work and foundation work • Cable diversion works
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	• E&M work for site office in WA1-B • Land survey in sidestream treatment facilities • Paving work in WA3

Contract No.	Contract Title	Site Activities
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Construction of temporary filtrate equalisation tank

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 October 2020.

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	11 Mar 2024	Valid
DC/2018/06	449211 (WM1)	23 Sep 2019	11 Mar 2024	Valid
DC/2018/07	449210	23 Sep 2019	11 Mar 2024	Valid
DE/2018/03	460065 (Sidestream)	16 Sep 2020	28 Mar 2022	Valid
DE/2018/03	460585 (WA3)	5 Oct 2020	31 Dec 2020	Valid
DE/2018/04	460181	Notified EPD on 17 Sep 2020	30 Nov 2020	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

Contract No.	Permit / License No.	Valid Period		Status
		From	To	
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
Construction Noise Permit (Use of Powered Mechanical Equipment at Portion A, B and C)				
DC/2018/06 and DC/2018/07	GW-RN0753-20	30 Oct 2020	11 Apr 2021	Valid
Admission Ticket for Disposal of Special Waste				
DC/2018/07	15952	20 Oct 2020	5 Feb 2021	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 (Wellab Ltd.) 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 (October 2020), µg/m^3
AM1 - Wai Loi Tsuen	N/A	N/A(1)	20.9 - 127.6
AM2 - Fu Tei Au	FLN-E28	255	22.8 - 77.0

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 (October 2020), µg/m^3
AM1a - Site Boundary of the Shek Wu Hui STW (East)	N/A(1)	61.0 - 139.1
AM2a - Site Boundary of the Shek Wu Hui STW (North)	N/A(1)	42.5 - 99.0

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	SVAN 957	2
	SVAN 979	1
Calibrator	ST-120	1
	SV30A	1

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 (October 2020), Leq (30min) dB(A)
NM1 - Wai Loi Tsuen	N/A	N/A(1)	53.4 – 57.0
NM2 - Fu Tei Au	N/A	N/A(1)	46.5 – 67.0
NM3 – Man Kok Village	FN-18	66-75	56.0 – 67.0

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

3.14 The results at NM3 were slightly 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	35	397
Waterbirds	15	220

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	49
Ardea cinerea	Grey Heron	蒼鷺	34
Ardeola bacchus	Chinese Pond Heron	池鷺	34
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	11
Ardea alba	Great Egret	大白鷺	17
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	32

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% (-2.353)	99% (-4.541)
Abundance	Monthly	3.266	✓	✓
	Seasonal	-5.841	✕	✕

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% (-2.353)	99% (-4.541)	Seasonal	95% (-2.353)	99% (-4.541)	
Little Egret	-1.150	✓	✓	-1.099	✓	✓	✓
Grey Heron	-3.464	✕	✓	-15.944	✕	✕	Action Level
Chinese Pond Heron	-3.395	✕	✓	-0.763	✓	✓	✓
Great Cormorant	0.969	✓	✓	-2.829	✕	✓	✓
Great Egret	-4.700	✕	✕	-2.209	✓	✓	✓
Eastern Cattle Egret	1.584	✓	✓	0.767	✓	✓	✓

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.

4.15 One (1) Action Level and zero (0) limit level was triggered for ecological monitoring in the reporting month.

4.16 The decline in number is considered to be non-project-related as:

- October is a transitional month for changing from Summer to Winter and variation in numbers of winter visitors between each year is expected;
- During the monitoring, no major environmental deficiency (e.g. emitting extremely loud noise / releasing untreated wastewater) that affects the birds' behaviour had been observed throughout the reporting month;
- No significant change had been observed for Little Egret and Eastern Cattle Egret. As both species shares similar niches with Grey Heron, it is unlikely that the project activity only affect a single species only.

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

Observations

4.18 Waterbird behaviour observed during ecological monitoring are listed below:

- Flying
- Foraging
- Soaring
- Resting

4.19 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)	Excavation, sheet-piling	Fishing, excavation, crane
T2 (PC3, PC4)	Excavation, sheet-piling	N/A
PC5	N/A	N/A
T3 (PC6, PC7)	N/A	N/A

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 DC2018/07 were conducted on 8, 15, 20 & 27 October 2020 in the reporting month, whereas that for Contract No. DE/2018/03 were conducted on 15, 20 & 27 October 2020 in the reporting month. Joint site inspection with the representative of IEC was conducted on 20 October 2020. 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 - 8.3**. 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	8 Oct 2020	Stagnant water accumulated on the site area and haul road of Portion C should be removed or pumped through the sedimentation tank.	The condition was observed to be improved/rectified by the contractor during the audit session on 15 Oct 2020.
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

Parameters	Date	Observations and Recommendations	Follow-up
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

Parameters	Date	Observations and Recommendations	Follow-up
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

- 1 Action Level and no 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. The summary of environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in **Appendix O**.

Summary of Exceedance

9.2 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	• ELS works - excavation • Sheet piling installation • Earth mat installation • Pre-drilling • Demolition of boundary wall • Demolition of profile barrier • Strut and waling installation
DC/2018/07	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Civil Works for Sewage Treatment Facilities	• Trial pit excavation • Road and drainage works • Diversion of inlet works • Process pipe of CHR and CHS • Demolition work of existing main facilities • Pre-drilling work and foundation work • Cable diversion works
DE/2018/03	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis	• Erection of site office in WA1-B • Underground utilities detection • Ground investigation in sidestream treatment facilities
DE/2018/04	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 - E&M Works for Sewage Treatment Facilities	• Construction of temporary filtrate equalisation tank • Installation of temporary primary sludge thickener and its accessories • Dismantle and removal of E&M equipment of the existing primary sedimentation tank no. 4 and no. 6

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 10th 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 1 Action Level and no Limit Level exceedance was triggered for all ecological monitoring in the reporting month. The analysis concluded that the decline in Grey Heron abundance is not project related.

Site Audit

11.5 4 ET joint weekly environmental site inspections were conducted for Contract No. DC/2018/06 and DC/2018/07 in the reporting month, whereas 3 ET joint weekly environmental site inspections were conducted for Contract No. DE/2018/03 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:

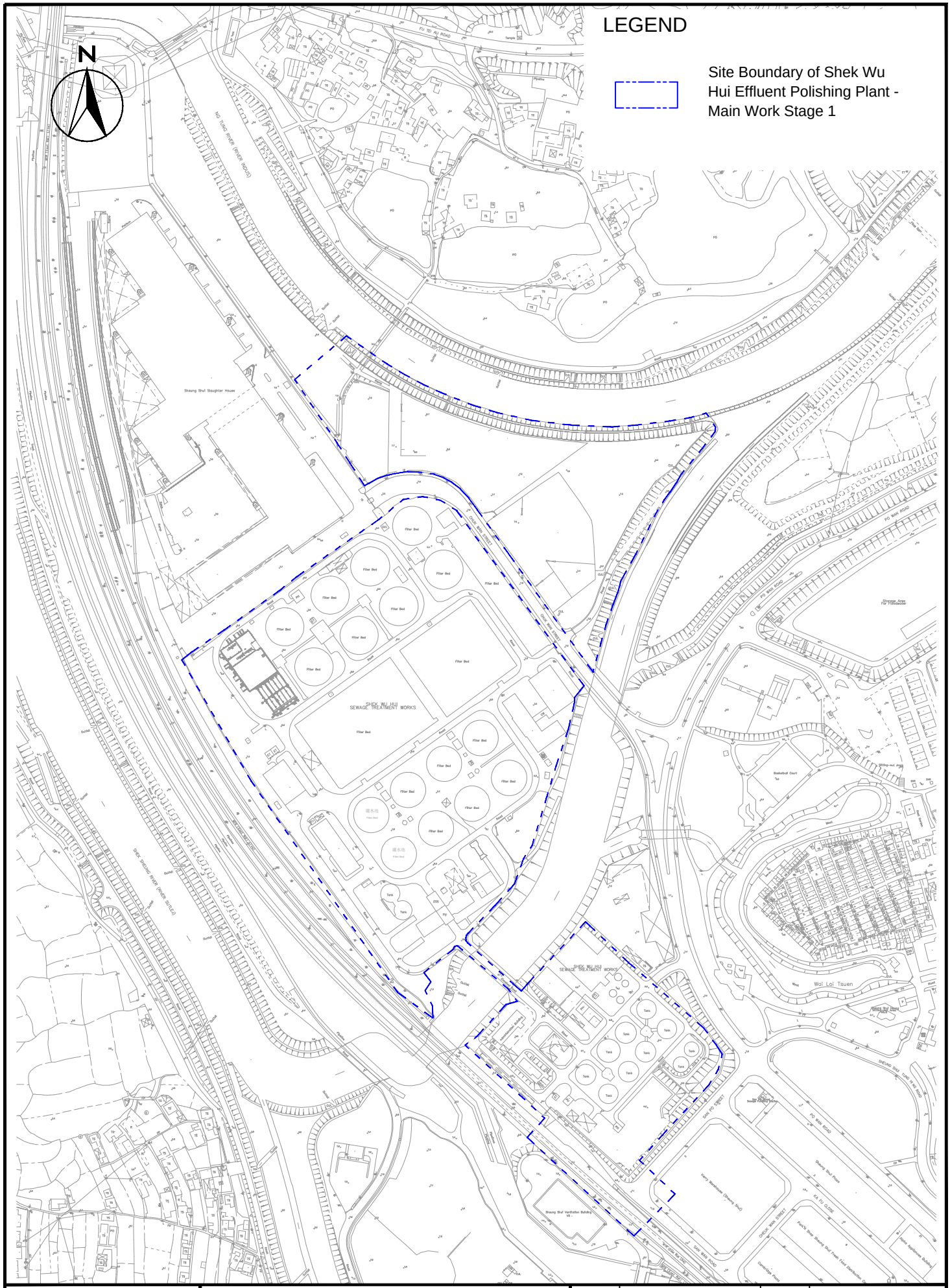
Air Quality

- 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

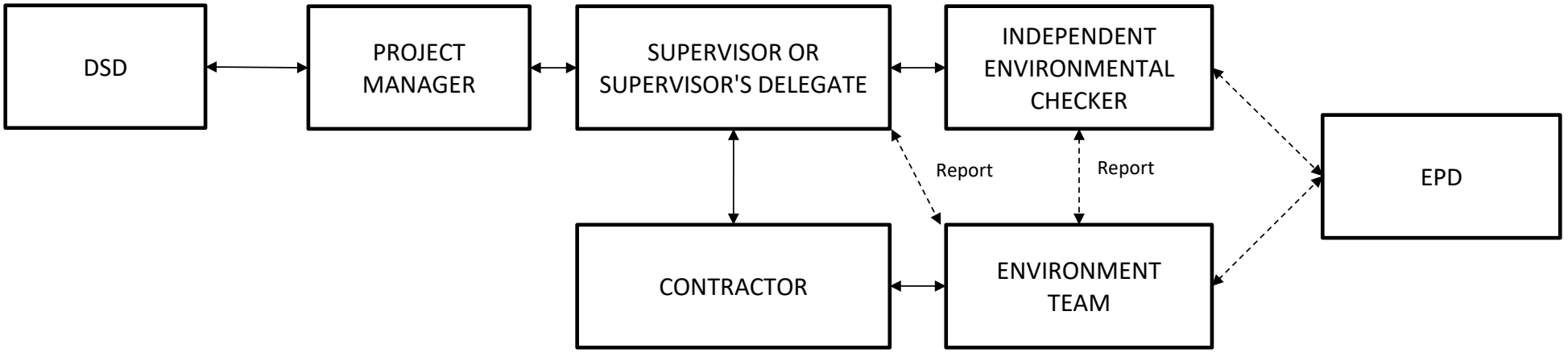
- Stagnant water should be removed and pumped through the sedimentation tank.
- Muddy water should not be discharged into the surrounding rivers.
- No slurry should be disposed of at the existing Shek Wu Hui Sewage Treatment Works.

FIGURES



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

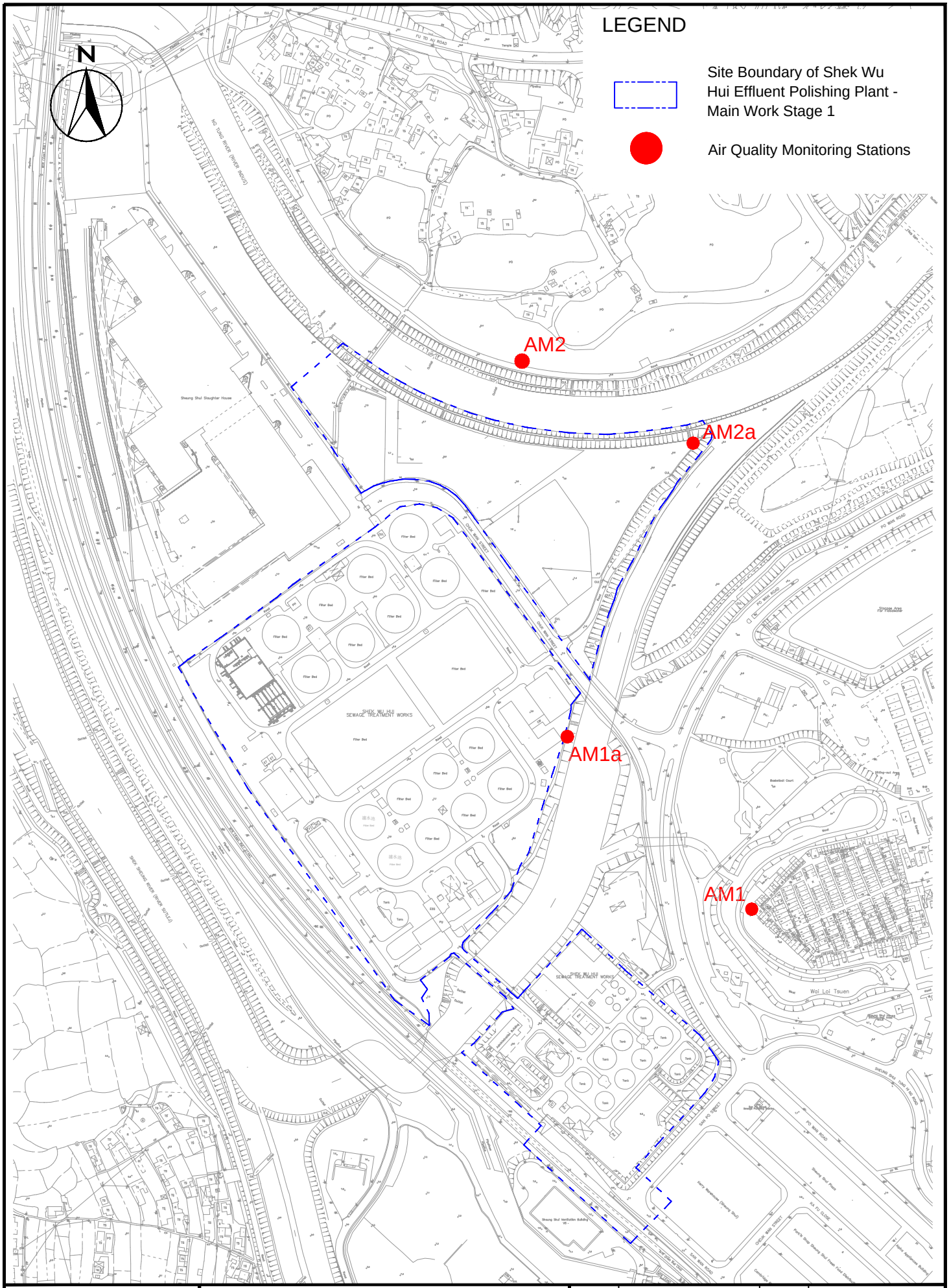


CINOTECH

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

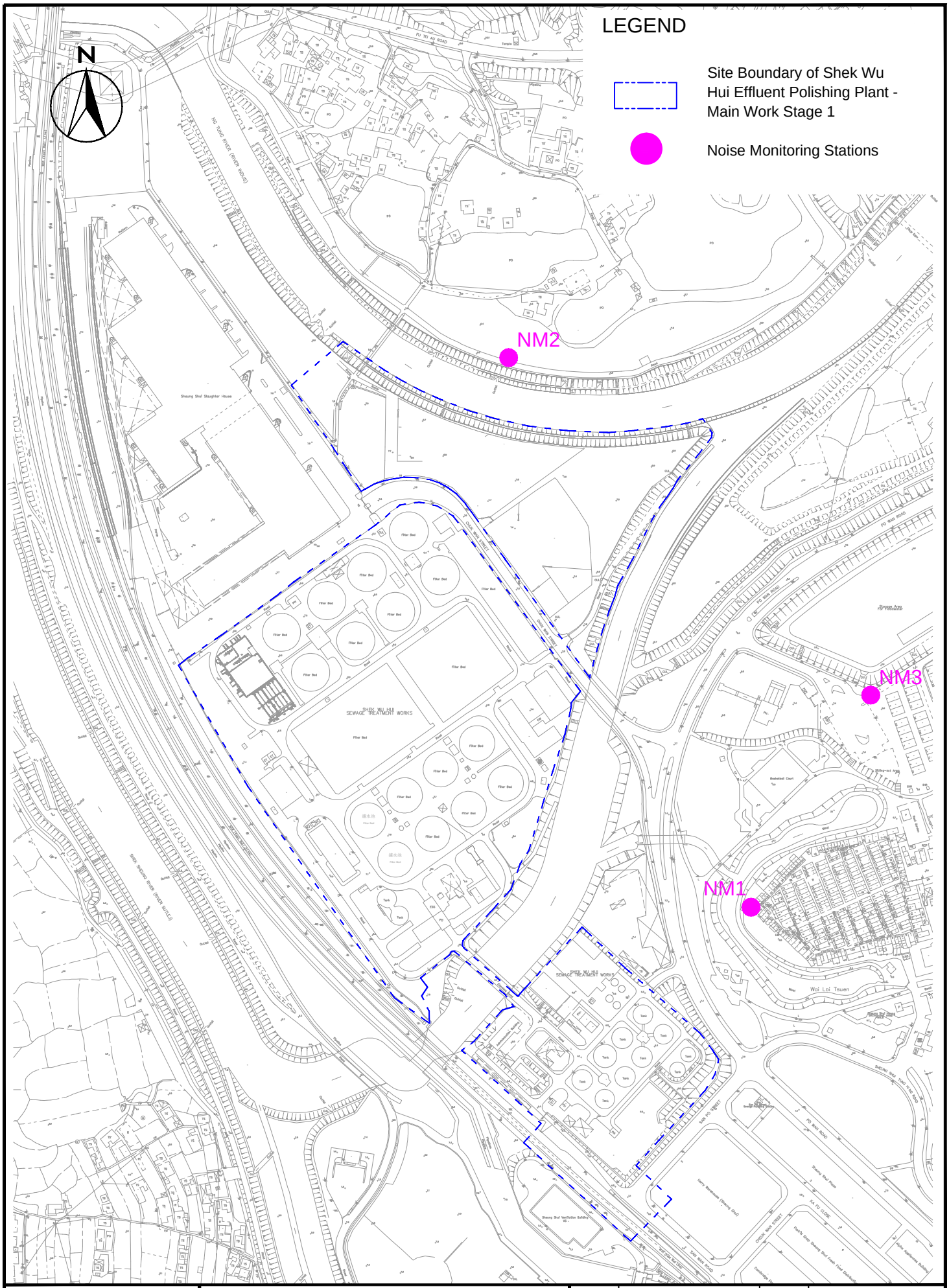
Project Organisation For Environmental Monitoring and Audit

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



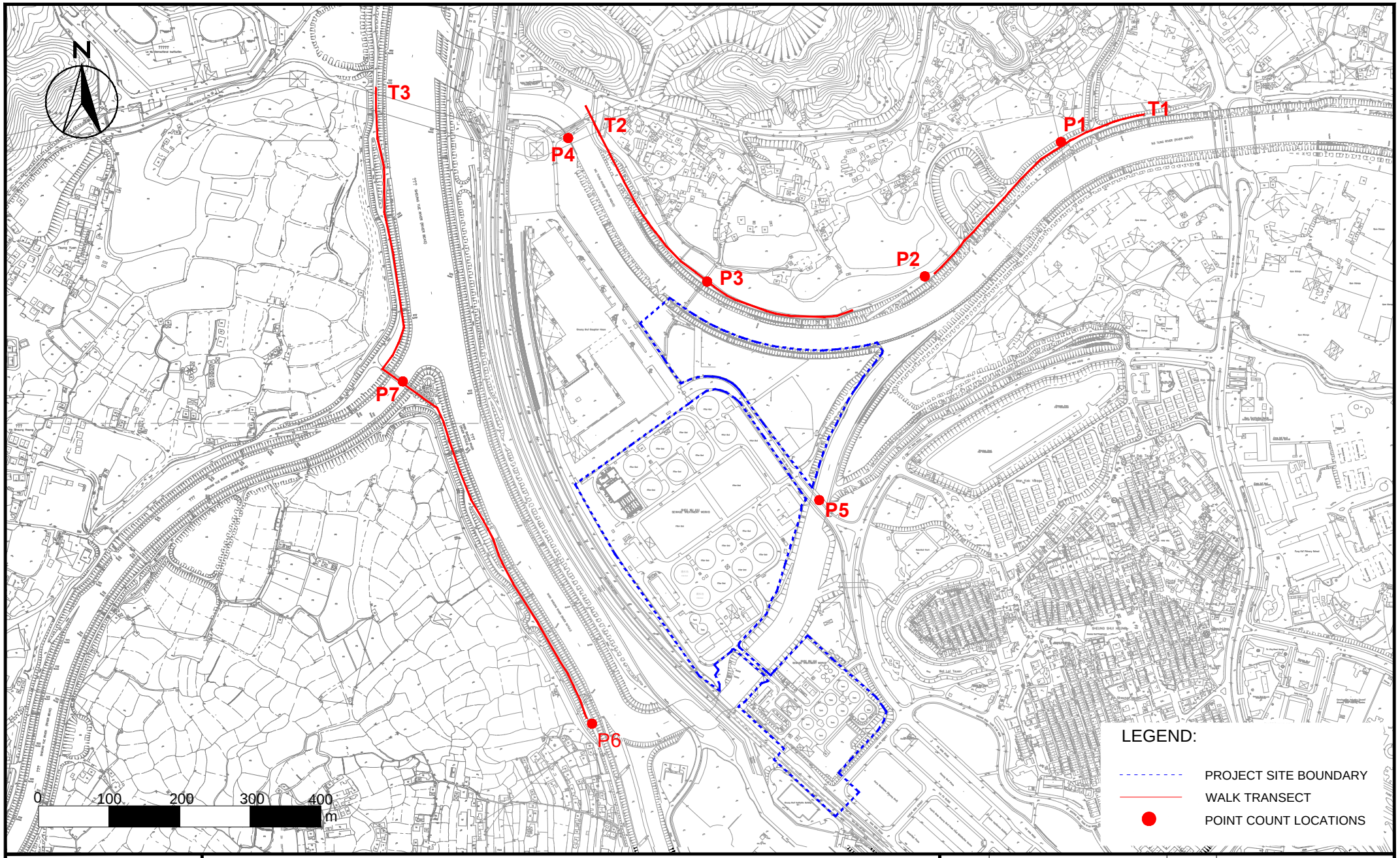
CINOTECH
Cinotech Consultants Limited

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
Cinotech Consultants Limited

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 (October 2020)

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

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)
Remarks:
*As typhoon signal no. 8 was issued on 13 October 2020, the 1 hr TSP and noise monitoring originally scheduled on that day was rescheduled to 14 October 2020.

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 (November 2020)

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

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

Cerificate 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: 5-Aug-20

Manufacturer: Sibata Scientific Technology LTD. — Validity of Calibration Record: 5-Oct-20

Model No.: LD-5R

Serial No.: 972778

Equipment No.: SA-01-07 — Sensitivity: 0.001 mg/m3

High Volume Sampler No.: A-01-01A — Before Sensitivity Adjustment: 735 CPM

Tisch Calibration Orifice No.: 3607 — 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	41.0	65.8
2	31.0	62.7
3	21.0	59.0
Average	**31.0**	**62.5**

By Linear Regression of Y on X

Slope , mw = **0.3400** **Intercept, bw =** **51.9600**

Correlation coefficient* = **0.9987**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	62.5
Particaulate Concentration by Dust Meter (µg/m^3)	31.0
Measureing time, (min)	60.0
Set Correlation Factor , SCF **SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)]**	**2.0**

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 (Wellab Litimed)

Calibrated by: Wong Shing Kwai

Approved by: Henry Leung

Cerificate 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 5-Oct-20
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 5-Dec-20
Model No.: LD-5R
Serial No.: 972778
Equipment No.: SA-01-07
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-01A
Before Sensitivity Adjustment 735 CPM
Tisch Calibration Orifice No.: 3607
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	45.0	78.9
2	34.0	75.2
3	23.0	70.8
Average	**34.0**	**75.0**

By Linear Regression of Y on X

Slope , mw = **0.3682** **Intercept, bw =** **62.4485**

Correlation coefficient* = **0.9988**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	75.0
Particaulate Concentration by Dust Meter (µg/m^3)	34.0
Measureing time, (min)	60.0
Set Correlation Factor , SCF	
SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)]	**2.2**

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 (Wellab Litimed)

Calibrated by: _____
Wong Shing Kwai

Approved by: _____
Henry Leung

Cerificate 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 5-Aug-20
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 5-Oct-20
Model No.: LD-5R
Serial No.: 972779
Equipment No.: SA-01-08
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-01A
Before Sensitivity Adjustment 744 CPM
Tisch Calibration Orifice No.: 3607
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	41.0	65.8
2	32.0	62.7
3	23.0	59.0
Average	**32.0**	**62.5**

By Linear Regression of Y on X

Slope , mw = **0.3778** **Intercept, bw =** **50.4111**

Correlation coefficient* = **0.9987**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	62.5
Particaulate Concentration by Dust Meter (µg/m^3)	32.0
Measureing time, (min)	60.0
Set Correlation Factor , SCF **SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)]**	**2.0**

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 (Wellab Litimed)

Calibrated by: Wong Shing Kwai

Approved by: Henry Leung

Cerificate 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 5-Oct-20
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 5-Dec-20
Model No.: LD-5R
Serial No.: 972779
Equipment No.: SA-01-08
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-01A
Before Sensitivity Adjustment 744 CPM
Tisch Calibration Orifice No.: 3607
After Sensitivity Adjustment 744 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor** Mass Concentration (µg/m3) **X-axis**	**HVS** Mass concentration (µg/m^3) **Y-axis**
1	49.0	78.9
2	38.0	75.2
3	28.0	70.8
Average	**38.3**	**75.0**

By Linear Regression of Y on X

Slope , mw = **0.3849** **Intercept, bw =** **60.2124**

Correlation coefficient* = **0.9970**

Set Correlation Factor	
Particaulate Concentration by High Volume Sampler (µg/m^3)	75.0
Particaulate Concentration by Dust Meter (µg/m^3)	38.3
Measureing time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **2.0**

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 (Wellab Litimed)

Calibrated by: Wong Shing Kwai

Approved by: Henry Leung

TISCH Environmental

RECALIBRATION DUE DATE:
January 17, 2021

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 17, 2020	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 744.2	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3746**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4340	3.2	2.00
2	3	4	1	1.0180	6.4	4.00
3	5	6	1	0.9080	7.9	5.00
4	7	8	1	0.8700	8.7	5.50
5	9	10	1	0.7150	12.6	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)
0.9849	0.6868	1.4066	0.9957	0.6944	0.8904
0.9807	0.9633	1.9892	0.9914	0.9739	1.2592
0.9787	1.0779	2.2240	0.9894	1.0896	1.4078
0.9776	1.1237	2.3325	0.9883	1.1360	1.4765
0.9724	1.3601	2.8131	0.9831	1.3749	1.7808
QSTD	**m=**	**2.09221**	**QA**	**m=**	**1.31010**
	b=	**-0.02779**		**b=**	**-0.01759**
	r=	**0.99994**		**r=**	**0.99994**

Calculations

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

For subsequent flow rate calculations:

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

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

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

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

RECALIBRATION

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

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

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

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/17/0006

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

Date: 7-Sep-20 Next Due Date: 7-Nov-20 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	302.4	Pressure, Pa (mmHg)	755.4

Orifice Transfer Standard Information					
Serial No.	3746	Slope, mc	0.0592	Intercept, bc	-0.02740
Last Calibration Date:	17-Jan-20	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	17-Jan-21	**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	12.8	3.54	60.27	9.2	3.00
2	10.1	3.15	53.59	6.9	2.60
3	8.0	2.80	47.75	5.5	2.32
4	5.2	2.26	38.59	3.2	1.77
5	2.6	1.60	27.42	1.8	1.33

By Linear Regression of Y on X

Slope , mw = 0.0514 **Intercept, bw = -0.1349**

Correlation coefficient* = 0.9969

*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) = **4.39**

Remarks:

Conducted by: SK Wong Signature: Date: 7 September 2020

Checked by: Henry Leung Signature: Date: 7 September 2020

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA19019/24/0006

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

Date: 7-Sep-20 Next Due Date: 7-Nov-20 Operator: SK

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

Ambient Condition			
Temperature, Ta (K)	302.4	Pressure, Pa (mmHg)	755.4

Orifice Transfer Standard Information					
Serial No.	3746	Slope, mc	0.0592	Intercept, bc	-0.02740
Last Calibration Date:	17-Jan-20	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	17-Jan-21	**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	13.3	3.61	61.43	10.3	3.18
2	10.8	3.25	55.40	8.2	2.83
3	8.3	2.85	48.63	6.4	2.50
4	6.3	2.48	42.42	4.2	2.03
5	3.2	1.77	30.37	2.0	1.40

By Linear Regression of Y on X

Slope , mw = 0.0579 **Intercept, bw = -0.3697**

Correlation coefficient* = 0.9982

*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) = **4.59**

Remarks:

Conducted by: SK Wong Signature: Date: 7 September 2020

Checked by: Henry Leung Signature: Date: 7 September 2020

Cerificate 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-2020
Next Due Date	29-Oct-2020

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
1.2	1.2	0.0
2.0	2.1	-0.1
3.8	3.8	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-Oct-20	26.7	77	0.1
2-Oct-20	27.6	75	0
3-Oct-20	28.3	75	0
4-Oct-20	28.4	78	0
5-Oct-20	28.0	79	106.1
6-Oct-20	25.9	78	2.7
7-Oct-20	24.9	70	0
8-Oct-20	25.2	67	0
9-Oct-20	26.0	64	Trace
10-Oct-20	26.1	69	Trace
11-Oct-20	27.0	73	0
12-Oct-20	28.0	72	0.6
13-Oct-20	24.9	86	26
14-Oct-20	25.5	80	1.2
15-Oct-20	26.5	73	0
16-Oct-20	27.0	71	Trace
17-Oct-20	25.6	72	0.2
18-Oct-20	24.9	73	0.7
19-Oct-20	24.6	70	0
20-Oct-20	25.0	68	0
21-Oct-20	24.5	63	0
22-Oct-20	24.7	60	0
23-Oct-20	23.5	51	0
24-Oct-20	23.8	55	Trace
25-Oct-20	24.2	69	0
26-Oct-20	24.6	76	0
27-Oct-20	25.1	73	0
28-Oct-20	24.4	78	4.7
29-Oct-20	24.7	74	0.1
30-Oct-20	24.4	78	Trace
31-Oct-20	23.4	71	0

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

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
1-Oct-20	0:00	82.8	0.5
1-Oct-20	1:00	63.1	0.3
1-Oct-20	2:00	23.0	0.2
1-Oct-20	3:00	87.1	0.2
1-Oct-20	4:00	71.5	0.3
1-Oct-20	5:00	88.3	0.2
1-Oct-20	6:00	77.0	0.2
1-Oct-20	7:00	73.2	0.3
1-Oct-20	8:00	95.9	1.8
1-Oct-20	9:00	104.1	0.4
1-Oct-20	10:00	68.9	0.5
1-Oct-20	11:00	94.7	0.4
1-Oct-20	12:00	82.6	0.3
1-Oct-20	13:00	98.8	0.4
1-Oct-20	14:00	88.4	0.4
1-Oct-20	15:00	112.3	0.2
1-Oct-20	16:00	67.6	0.2
1-Oct-20	17:00	48.0	0.2
1-Oct-20	18:00	173.8	0.2
1-Oct-20	19:00	74.2	0.3
1-Oct-20	20:00	74.3	0.3
1-Oct-20	21:00	85.0	0.3
1-Oct-20	22:00	83.1	0.3
1-Oct-20	23:00	77.0	0.3
2-Oct-20	0:00	101.7	0.4
2-Oct-20	1:00	101.3	0.2
2-Oct-20	2:00	74.5	0.2
2-Oct-20	3:00	83.2	0.2
2-Oct-20	4:00	71.5	0.2
2-Oct-20	5:00	75.8	0.2
2-Oct-20	6:00	78.5	0.2
2-Oct-20	7:00	75.6	0.2
2-Oct-20	8:00	70.5	0.2
2-Oct-20	9:00	87.2	0.2
2-Oct-20	10:00	46.0	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
2-Oct-20	11:00	352.0	0.2
2-Oct-20	12:00	89.8	0.3
2-Oct-20	13:00	118.8	0.3
2-Oct-20	14:00	74.6	0.2
2-Oct-20	15:00	125.9	0.2
2-Oct-20	16:00	153.8	0.1
2-Oct-20	17:00	184.4	0.3
2-Oct-20	18:00	155.1	0.2
2-Oct-20	19:00	69.5	0.3
2-Oct-20	20:00	98.4	0.6
2-Oct-20	21:00	73.3	0.2
2-Oct-20	22:00	87.1	0.1
2-Oct-20	23:00	108.9	0.1
3-Oct-20	0:00	92.7	0.1
3-Oct-20	1:00	60.0	0.1
3-Oct-20	2:00	58.6	0.1
3-Oct-20	3:00	67.4	0.1
3-Oct-20	4:00	31.9	0.1
3-Oct-20	5:00	78.2	0.1
3-Oct-20	6:00	60.8	0.1
3-Oct-20	7:00	84.6	0.1
3-Oct-20	8:00	44.1	0.1
3-Oct-20	9:00	48.0	0.1
3-Oct-20	10:00	90.0	0.1
3-Oct-20	11:00	72.7	0.2
3-Oct-20	12:00	62.8	0.2
3-Oct-20	13:00	76.4	0.2
3-Oct-20	14:00	246.7	0.3
3-Oct-20	15:00	181.2	0.3
3-Oct-20	16:00	157.3	0.1
3-Oct-20	17:00	115.1	0.1
3-Oct-20	18:00	114.6	0.1
3-Oct-20	19:00	56.5	0.1
3-Oct-20	20:00	47.0	0.1
3-Oct-20	21:00	64.3	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
3-Oct-20	22:00	72.8	0.1
3-Oct-20	23:00	80.0	0.1
4-Oct-20	0:00	69.0	0.1
4-Oct-20	1:00	86.7	0.1
4-Oct-20	2:00	83.5	0.1
4-Oct-20	3:00	79.7	0.1
4-Oct-20	4:00	64.2	0.1
4-Oct-20	5:00	87.5	0.1
4-Oct-20	6:00	72.6	0.1
4-Oct-20	7:00	77.9	0.1
4-Oct-20	8:00	60.1	0.1
4-Oct-20	9:00	72.4	0.1
4-Oct-20	10:00	302.7	0.1
4-Oct-20	11:00	287.6	0.1
4-Oct-20	12:00	145.2	0.1
4-Oct-20	13:00	250.2	0.7
4-Oct-20	14:00	237.5	0.3
4-Oct-20	15:00	232.5	0.5
4-Oct-20	16:00	271.9	0.1
4-Oct-20	17:00	273.3	0.1
4-Oct-20	18:00	235.2	0.1
4-Oct-20	19:00	217.3	0.1
4-Oct-20	20:00	104.6	0.1
4-Oct-20	21:00	264.2	0.1
4-Oct-20	22:00	245.7	0.1
4-Oct-20	23:00	243.0	0.1
5-Oct-20	0:00	38.6	0.1
5-Oct-20	1:00	65.6	0.1
5-Oct-20	2:00	52.1	0.1
5-Oct-20	3:00	49.3	0.1
5-Oct-20	4:00	55.1	0.1
5-Oct-20	5:00	22.1	0.1
5-Oct-20	6:00	220.4	0.1
5-Oct-20	7:00	65.5	0.1
5-Oct-20	8:00	183.5	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
5-Oct-20	9:00	52.3	0.1
5-Oct-20	10:00	171.0	0.1
5-Oct-20	11:00	116.8	0.2
5-Oct-20	12:00	56.9	0.3
5-Oct-20	13:00	77.1	0.2
5-Oct-20	14:00	73.6	0.3
5-Oct-20	15:00	88.4	0.2
5-Oct-20	16:00	91.3	0.1
5-Oct-20	17:00	69.9	0.1
5-Oct-20	18:00	112.4	0.2
5-Oct-20	19:00	79.2	0.1
5-Oct-20	20:00	131.2	0.1
5-Oct-20	21:00	50.7	0.1
5-Oct-20	22:00	68.3	0.1
5-Oct-20	23:00	82.8	0.1
6-Oct-20	0:00	103.2	0.1
6-Oct-20	1:00	59.4	0.1
6-Oct-20	2:00	40.3	0.1
6-Oct-20	3:00	42.8	0.1
6-Oct-20	4:00	38.4	0.4
6-Oct-20	5:00	54.1	0.1
6-Oct-20	6:00	24.7	0.2
6-Oct-20	7:00	66.5	0.9
6-Oct-20	8:00	109.7	0.1
6-Oct-20	9:00	128.0	0.2
6-Oct-20	10:00	321.5	0.3
6-Oct-20	11:00	57.5	0.3
6-Oct-20	12:00	65.6	0.1
6-Oct-20	13:00	71.2	0.1
6-Oct-20	14:00	43.6	0.1
6-Oct-20	15:00	44.8	0.1
6-Oct-20	16:00	39.7	0.2
6-Oct-20	17:00	77.5	0.1
6-Oct-20	18:00	90.5	0.4
6-Oct-20	19:00	56.5	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
6-Oct-20	20:00	51.4	0.2
6-Oct-20	21:00	1.9	0.2
6-Oct-20	22:00	97.0	0.8
6-Oct-20	23:00	66.2	0.2
7-Oct-20	0:00	5.5	0.5
7-Oct-20	1:00	67.9	0.9
7-Oct-20	2:00	59.9	0.4
7-Oct-20	3:00	35.7	0.2
7-Oct-20	4:00	68.6	0.3
7-Oct-20	5:00	12.4	0.2
7-Oct-20	6:00	60.5	0.4
7-Oct-20	7:00	8.6	0.1
7-Oct-20	8:00	41.6	0.4
7-Oct-20	9:00	52.9	0.2
7-Oct-20	10:00	14.4	0.6
7-Oct-20	11:00	70.7	0.5
7-Oct-20	12:00	73.9	0.2
7-Oct-20	13:00	20.8	0.3
7-Oct-20	14:00	331.4	0.7
7-Oct-20	15:00	37.5	1.0
7-Oct-20	16:00	37.2	0.1
7-Oct-20	17:00	36.4	0.3
7-Oct-20	18:00	81.0	0.1
7-Oct-20	19:00	60.8	0.4
7-Oct-20	20:00	20.5	0.7
7-Oct-20	21:00	36.6	0.2
7-Oct-20	22:00	33.6	0.1
7-Oct-20	23:00	71.4	0.1
8-Oct-20	0:00	52.5	0.1
8-Oct-20	1:00	40.0	0.2
8-Oct-20	2:00	75.6	1.5
8-Oct-20	3:00	82.9	0.1
8-Oct-20	4:00	58.5	1.5
8-Oct-20	5:00	19.1	0.9
8-Oct-20	6:00	52.5	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
8-Oct-20	7:00	61.5	0.2
8-Oct-20	8:00	145.4	0.2
8-Oct-20	9:00	96.2	0.2
8-Oct-20	10:00	83.5	0.3
8-Oct-20	11:00	74.8	0.7
8-Oct-20	12:00	352.7	2.5
8-Oct-20	13:00	38.4	0.8
8-Oct-20	14:00	77.0	0.2
8-Oct-20	15:00	32.3	0.1
8-Oct-20	16:00	48.0	0.3
8-Oct-20	17:00	45.6	0.7
8-Oct-20	18:00	81.8	0.5
8-Oct-20	19:00	79.8	0.1
8-Oct-20	20:00	31.5	0.4
8-Oct-20	21:00	86.0	0.1
8-Oct-20	22:00	19.5	0.1
8-Oct-20	23:00	39.0	0.6
9-Oct-20	0:00	102.0	0.1
9-Oct-20	1:00	22.1	0.6
9-Oct-20	2:00	129.8	0.1
9-Oct-20	3:00	61.9	0.1
9-Oct-20	4:00	70.0	0.2
9-Oct-20	5:00	85.6	2.1
9-Oct-20	6:00	93.6	0.1
9-Oct-20	7:00	75.3	1.0
9-Oct-20	8:00	22.8	0.1
9-Oct-20	9:00	17.2	1.4
9-Oct-20	10:00	46.9	0.1
9-Oct-20	11:00	23.2	0.3
9-Oct-20	12:00	4.0	0.3
9-Oct-20	13:00	20.9	0.4
9-Oct-20	14:00	8.3	0.1
9-Oct-20	15:00	67.9	0.2
9-Oct-20	16:00	60.0	0.1
9-Oct-20	17:00	67.2	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
9-Oct-20	18:00	76.8	0.1
9-Oct-20	19:00	38.9	0.1
9-Oct-20	20:00	74.1	0.3
9-Oct-20	21:00	97.5	0.2
9-Oct-20	22:00	40.3	0.1
9-Oct-20	23:00	37.3	0.2
10-Oct-20	0:00	42.5	0.1
10-Oct-20	1:00	40.7	0.1
10-Oct-20	2:00	39.0	0.1
10-Oct-20	3:00	55.5	0.1
10-Oct-20	4:00	42.2	0.1
10-Oct-20	5:00	34.4	0.2
10-Oct-20	6:00	28.5	0.1
10-Oct-20	7:00	50.3	0.1
10-Oct-20	8:00	53.4	0.1
10-Oct-20	9:00	13.7	0.4
10-Oct-20	10:00	83.9	0.1
10-Oct-20	11:00	55.0	0.1
10-Oct-20	12:00	40.4	0.1
10-Oct-20	13:00	294.8	0.3
10-Oct-20	14:00	46.9	0.1
10-Oct-20	15:00	50.6	0.1
10-Oct-20	16:00	85.6	0.1
10-Oct-20	17:00	70.6	0.1
10-Oct-20	18:00	71.9	0.1
10-Oct-20	19:00	76.0	0.1
10-Oct-20	20:00	58.6	0.1
10-Oct-20	21:00	91.7	0.1
10-Oct-20	22:00	83.8	0.1
10-Oct-20	23:00	68.2	0.1
11-Oct-20	0:00	67.9	0.1
11-Oct-20	1:00	61.9	0.1
11-Oct-20	2:00	212.8	0.1
11-Oct-20	3:00	56.5	0.1
11-Oct-20	4:00	54.9	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
11-Oct-20	5:00	59.3	0.1
11-Oct-20	6:00	82.4	0.1
11-Oct-20	7:00	86.1	0.1
11-Oct-20	8:00	95.9	0.2
11-Oct-20	9:00	13.0	0.5
11-Oct-20	10:00	120.1	0.1
11-Oct-20	11:00	74.2	0.2
11-Oct-20	12:00	1.2	0.3
11-Oct-20	13:00	57.9	0.1
11-Oct-20	14:00	83.2	0.1
11-Oct-20	15:00	166.4	0.1
11-Oct-20	16:00	99.9	0.1
11-Oct-20	17:00	77.9	0.3
11-Oct-20	18:00	69.0	0.1
11-Oct-20	19:00	63.3	0.1
11-Oct-20	20:00	75.6	0.1
11-Oct-20	21:00	51.4	0.1
11-Oct-20	22:00	68.1	0.1
11-Oct-20	23:00	76.9	0.1
12-Oct-20	0:00	74.8	0.1
12-Oct-20	1:00	72.5	0.1
12-Oct-20	2:00	64.7	0.1
12-Oct-20	3:00	106.4	0.1
12-Oct-20	4:00	98.6	0.1
12-Oct-20	5:00	42.7	0.1
12-Oct-20	6:00	68.8	0.1
12-Oct-20	7:00	64.3	0.1
12-Oct-20	8:00	59.6	0.1
12-Oct-20	9:00	39.7	0.3
12-Oct-20	10:00	84.8	0.2
12-Oct-20	11:00	54.1	0.1
12-Oct-20	12:00	70.4	0.1
12-Oct-20	13:00	68.2	0.2
12-Oct-20	14:00	81.3	0.1
12-Oct-20	15:00	99.1	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
12-Oct-20	16:00	92.0	0.3
12-Oct-20	17:00	69.5	0.5
12-Oct-20	18:00	83.5	0.1
12-Oct-20	19:00	60.1	0.1
12-Oct-20	20:00	54.6	0.1
12-Oct-20	21:00	79.6	0.1
12-Oct-20	22:00	92.5	0.1
12-Oct-20	23:00	112.6	0.1
13-Oct-20	0:00	65.4	0.1
13-Oct-20	1:00	69.6	0.3
13-Oct-20	2:00	73.4	0.1
13-Oct-20	3:00	52.3	0.1
13-Oct-20	4:00	64.0	0.2
13-Oct-20	5:00	27.1	0.1
13-Oct-20	6:00	88.9	0.2
13-Oct-20	7:00	103.0	0.2
13-Oct-20	8:00	68.8	0.3
13-Oct-20	9:00	99.9	0.2
13-Oct-20	10:00	80.7	0.2
13-Oct-20	11:00	57.6	0.3
13-Oct-20	12:00	123.4	0.3
13-Oct-20	13:00	144.9	0.4
13-Oct-20	14:00	57.4	0.3
13-Oct-20	15:00	75.4	0.7
13-Oct-20	16:00	56.8	0.3
13-Oct-20	17:00	54.9	0.3
13-Oct-20	18:00	103.0	0.5
13-Oct-20	19:00	118.8	0.6
13-Oct-20	20:00	87.4	0.3
13-Oct-20	21:00	78.3	0.3
13-Oct-20	22:00	184.2	0.4
13-Oct-20	23:00	141.3	0.3
14-Oct-20	0:00	124.2	0.3
14-Oct-20	1:00	159.4	0.3
14-Oct-20	2:00	74.9	0.3

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
14-Oct-20	3:00	114.6	0.3
14-Oct-20	4:00	72.0	0.3
14-Oct-20	5:00	101.0	0.4
14-Oct-20	6:00	61.1	1.5
14-Oct-20	7:00	91.0	0.4
14-Oct-20	8:00	112.5	0.3
14-Oct-20	9:00	82.2	0.3
14-Oct-20	10:00	127.3	0.2
14-Oct-20	11:00	82.2	0.2
14-Oct-20	12:00	69.8	0.2
14-Oct-20	13:00	142.2	0.5
14-Oct-20	14:00	112.3	0.2
14-Oct-20	15:00	128.5	0.4
14-Oct-20	16:00	65.1	0.2
14-Oct-20	17:00	87.5	0.1
14-Oct-20	18:00	92.6	0.2
14-Oct-20	19:00	351.4	0.1
14-Oct-20	20:00	71.5	0.1
14-Oct-20	21:00	17.9	0.1
14-Oct-20	22:00	85.0	0.1
14-Oct-20	23:00	90.0	0.3
15-Oct-20	0:00	104.2	0.1
15-Oct-20	1:00	97.1	0.1
15-Oct-20	2:00	74.1	0.8
15-Oct-20	3:00	69.7	0.1
15-Oct-20	4:00	92.0	0.1
15-Oct-20	5:00	41.1	0.2
15-Oct-20	6:00	84.7	0.2
15-Oct-20	7:00	83.9	0.2
15-Oct-20	8:00	71.7	0.1
15-Oct-20	9:00	128.5	0.1
15-Oct-20	10:00	63.7	0.4
15-Oct-20	11:00	67.5	1.5
15-Oct-20	12:00	83.5	0.2
15-Oct-20	13:00	97.0	1.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
15-Oct-20	14:00	260.6	0.2
15-Oct-20	15:00	13.6	0.2
15-Oct-20	16:00	245.7	0.1
15-Oct-20	17:00	57.0	0.6
15-Oct-20	18:00	64.2	0.2
15-Oct-20	19:00	153.7	0.2
15-Oct-20	20:00	61.7	0.1
15-Oct-20	21:00	51.4	0.1
15-Oct-20	22:00	49.6	0.1
15-Oct-20	23:00	73.6	0.1
16-Oct-20	0:00	58.4	0.2
16-Oct-20	1:00	68.4	0.1
16-Oct-20	2:00	92.8	0.1
16-Oct-20	3:00	106.6	0.2
16-Oct-20	4:00	45.5	0.1
16-Oct-20	5:00	107.8	0.1
16-Oct-20	6:00	37.6	0.1
16-Oct-20	7:00	88.8	0.2
16-Oct-20	8:00	62.4	0.2
16-Oct-20	9:00	122.1	0.5
16-Oct-20	10:00	41.3	0.2
16-Oct-20	11:00	162.4	0.1
16-Oct-20	12:00	88.4	0.1
16-Oct-20	13:00	69.8	0.2
16-Oct-20	14:00	108.5	0.1
16-Oct-20	15:00	72.5	0.1
16-Oct-20	16:00	70.5	0.1
16-Oct-20	17:00	74.6	0.1
16-Oct-20	18:00	133.4	0.1
16-Oct-20	19:00	137.7	0.1
16-Oct-20	20:00	101.2	0.1
16-Oct-20	21:00	118.0	0.1
16-Oct-20	22:00	87.0	0.1
16-Oct-20	23:00	45.5	0.1
17-Oct-20	0:00	72.2	0.2

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
17-Oct-20	1:00	49.1	0.4
17-Oct-20	2:00	53.2	2.8
17-Oct-20	3:00	64.9	0.5
17-Oct-20	4:00	24.2	0.1
17-Oct-20	5:00	37.8	0.1
17-Oct-20	6:00	25.5	0.1
17-Oct-20	7:00	98.0	0.4
17-Oct-20	8:00	32.6	0.2
17-Oct-20	9:00	30.7	0.6
17-Oct-20	10:00	99.7	0.1
17-Oct-20	11:00	32.0	0.2
17-Oct-20	12:00	349.3	0.2
17-Oct-20	13:00	63.6	0.1
17-Oct-20	14:00	61.8	0.1
17-Oct-20	15:00	306.5	0.1
17-Oct-20	16:00	61.2	0.1
17-Oct-20	17:00	68.2	0.1
17-Oct-20	18:00	74.9	0.1
17-Oct-20	19:00	105.4	0.1
17-Oct-20	20:00	60.3	0.1
17-Oct-20	21:00	42.7	0.6
17-Oct-20	22:00	19.9	0.2
17-Oct-20	23:00	73.4	0.2
18-Oct-20	0:00	47.7	0.2
18-Oct-20	1:00	5.9	1.6
18-Oct-20	2:00	99.3	0.4
18-Oct-20	3:00	68.3	0.3
18-Oct-20	4:00	65.7	0.4
18-Oct-20	5:00	104.0	0.3
18-Oct-20	6:00	51.1	0.3
18-Oct-20	7:00	61.2	0.2
18-Oct-20	8:00	76.7	0.1
18-Oct-20	9:00	57.9	0.2
18-Oct-20	10:00	93.5	0.2
18-Oct-20	11:00	79.0	0.7

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
18-Oct-20	12:00	348.4	0.1
18-Oct-20	13:00	50.7	0.2
18-Oct-20	14:00	50.5	0.2
18-Oct-20	15:00	23.4	0.4
18-Oct-20	16:00	87.8	0.2
18-Oct-20	17:00	75.0	0.2
18-Oct-20	18:00	126.9	0.2
18-Oct-20	19:00	76.4	0.1
18-Oct-20	20:00	121.0	0.2
18-Oct-20	21:00	39.9	1.8
18-Oct-20	22:00	51.7	0.8
18-Oct-20	23:00	43.5	0.7
19-Oct-20	0:00	45.6	0.1
19-Oct-20	1:00	54.4	0.1
19-Oct-20	2:00	59.3	0.3
19-Oct-20	3:00	67.7	0.2
19-Oct-20	4:00	120.5	0.2
19-Oct-20	5:00	160.1	0.1
19-Oct-20	6:00	57.4	0.6
19-Oct-20	7:00	56.9	0.2
19-Oct-20	8:00	89.2	0.7
19-Oct-20	9:00	68.4	0.4
19-Oct-20	10:00	127.8	1.5
19-Oct-20	11:00	55.5	0.1
19-Oct-20	12:00	0.2	0.4
19-Oct-20	13:00	62.6	0.1
19-Oct-20	14:00	336.0	0.1
19-Oct-20	15:00	48.6	0.1
19-Oct-20	16:00	73.1	0.6
19-Oct-20	17:00	331.9	0.2
19-Oct-20	18:00	79.2	0.4
19-Oct-20	19:00	337.7	0.1
19-Oct-20	20:00	47.5	0.1
19-Oct-20	21:00	66.4	0.3
19-Oct-20	22:00	72.6	0.6

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
19-Oct-20	23:00	27.3	0.2
20-Oct-20	0:00	97.6	0.1
20-Oct-20	1:00	51.2	1.0
20-Oct-20	2:00	63.7	0.7
20-Oct-20	3:00	38.0	0.1
20-Oct-20	4:00	64.0	1.4
20-Oct-20	5:00	11.9	0.1
20-Oct-20	6:00	62.7	0.3
20-Oct-20	7:00	351.9	0.9
20-Oct-20	8:00	82.6	0.2
20-Oct-20	9:00	32.1	0.2
20-Oct-20	10:00	336.4	0.3
20-Oct-20	11:00	43.5	0.1
20-Oct-20	12:00	67.4	0.1
20-Oct-20	13:00	99.5	0.1
20-Oct-20	14:00	350.6	1.0
20-Oct-20	15:00	0.5	0.1
20-Oct-20	16:00	22.6	0.3
20-Oct-20	17:00	18.6	0.1
20-Oct-20	18:00	3.3	0.5
20-Oct-20	19:00	288.0	0.6
20-Oct-20	20:00	58.6	0.3
20-Oct-20	21:00	78.1	1.7
20-Oct-20	22:00	47.2	0.1
20-Oct-20	23:00	67.2	0.2
21-Oct-20	0:00	69.5	0.1
21-Oct-20	1:00	55.0	0.2
21-Oct-20	2:00	59.2	0.3
21-Oct-20	3:00	8.3	0.4
21-Oct-20	4:00	64.8	0.3
21-Oct-20	5:00	28.0	0.1
21-Oct-20	6:00	125.8	0.2
21-Oct-20	7:00	75.0	0.2
21-Oct-20	8:00	38.7	0.1
21-Oct-20	9:00	96.9	1.4

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
21-Oct-20	10:00	22.2	0.4
21-Oct-20	11:00	81.9	1.0
21-Oct-20	12:00	88.9	0.1
21-Oct-20	13:00	42.8	0.2
21-Oct-20	14:00	45.1	1.6
21-Oct-20	15:00	17.2	0.5
21-Oct-20	16:00	53.2	0.2
21-Oct-20	17:00	29.8	0.2
21-Oct-20	18:00	77.5	0.1
21-Oct-20	19:00	12.9	0.1
21-Oct-20	20:00	333.9	0.1
21-Oct-20	21:00	10.8	0.1
21-Oct-20	22:00	42.2	0.2
21-Oct-20	23:00	45.3	0.2
22-Oct-20	0:00	80.3	0.3
22-Oct-20	1:00	47.2	0.1
22-Oct-20	2:00	35.6	1.2
22-Oct-20	3:00	36.1	0.1
22-Oct-20	4:00	30.7	0.1
22-Oct-20	5:00	58.5	1.2
22-Oct-20	6:00	139.4	0.1
22-Oct-20	7:00	48.6	0.1
22-Oct-20	8:00	183.1	0.3
22-Oct-20	9:00	71.8	0.2
22-Oct-20	10:00	51.3	1.0
22-Oct-20	11:00	105.3	1.4
22-Oct-20	12:00	24.4	0.9
22-Oct-20	13:00	-0.1	4.2
22-Oct-20	14:00	66.2	0.9
22-Oct-20	15:00	67.6	0.9
22-Oct-20	16:00	29.4	1.4
22-Oct-20	17:00	16.5	0.7
22-Oct-20	18:00	70.1	0.7
22-Oct-20	19:00	17.6	0.1
22-Oct-20	20:00	77.9	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
22-Oct-20	21:00	91.0	0.1
22-Oct-20	22:00	37.3	0.4
22-Oct-20	23:00	20.2	0.4
23-Oct-20	0:00	40.3	0.3
23-Oct-20	1:00	83.3	0.1
23-Oct-20	2:00	93.2	2.3
23-Oct-20	3:00	53.4	0.3
23-Oct-20	4:00	72.7	0.1
23-Oct-20	5:00	91.0	1.2
23-Oct-20	6:00	50.4	0.1
23-Oct-20	7:00	84.6	0.3
23-Oct-20	8:00	49.4	1.6
23-Oct-20	9:00	96.9	0.4
23-Oct-20	10:00	46.0	0.5
23-Oct-20	11:00	47.9	1.1
23-Oct-20	12:00	81.9	1.7
23-Oct-20	13:00	64.8	0.7
23-Oct-20	14:00	111.7	0.1
23-Oct-20	15:00	65.0	0.5
23-Oct-20	16:00	97.5	0.8
23-Oct-20	17:00	109.0	0.4
23-Oct-20	18:00	37.8	0.2
23-Oct-20	19:00	26.9	1.3
23-Oct-20	20:00	113.3	0.2
23-Oct-20	21:00	71.4	0.1
23-Oct-20	22:00	43.7	0.1
23-Oct-20	23:00	58.4	0.1
24-Oct-20	0:00	77.5	0.1
24-Oct-20	1:00	65.5	0.1
24-Oct-20	2:00	329.0	0.1
24-Oct-20	3:00	60.5	0.2
24-Oct-20	4:00	51.4	0.1
24-Oct-20	5:00	76.5	0.3
24-Oct-20	6:00	86.7	0.3
24-Oct-20	7:00	50.1	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
24-Oct-20	8:00	68.3	0.6
24-Oct-20	9:00	118.1	0.2
24-Oct-20	10:00	57.7	0.4
24-Oct-20	11:00	68.4	0.5
24-Oct-20	12:00	83.8	0.2
24-Oct-20	13:00	25.6	0.2
24-Oct-20	14:00	88.6	0.5
24-Oct-20	15:00	70.5	0.1
24-Oct-20	16:00	89.1	0.1
24-Oct-20	17:00	60.8	0.1
24-Oct-20	18:00	84.0	0.1
24-Oct-20	19:00	81.3	0.1
24-Oct-20	20:00	14.7	0.1
24-Oct-20	21:00	61.5	0.1
24-Oct-20	22:00	39.0	0.1
24-Oct-20	23:00	91.0	0.1
25-Oct-20	0:00	68.4	0.1
25-Oct-20	1:00	67.5	0.1
25-Oct-20	2:00	103.9	0.1
25-Oct-20	3:00	96.4	0.1
25-Oct-20	4:00	79.6	0.1
25-Oct-20	5:00	78.3	0.1
25-Oct-20	6:00	60.6	0.1
25-Oct-20	7:00	54.2	0.1
25-Oct-20	8:00	92.8	0.1
25-Oct-20	9:00	103.2	0.1
25-Oct-20	10:00	86.0	0.4
25-Oct-20	11:00	72.6	0.3
25-Oct-20	12:00	74.6	0.6
25-Oct-20	13:00	133.2	0.1
25-Oct-20	14:00	84.9	0.1
25-Oct-20	15:00	143.8	0.4
25-Oct-20	16:00	75.8	0.4
25-Oct-20	17:00	86.9	0.1
25-Oct-20	18:00	86.7	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
25-Oct-20	19:00	183.1	0.1
25-Oct-20	20:00	92.4	0.1
25-Oct-20	21:00	108.0	0.1
25-Oct-20	22:00	98.3	0.1
25-Oct-20	23:00	114.7	0.1
26-Oct-20	0:00	93.5	0.1
26-Oct-20	1:00	70.7	0.1
26-Oct-20	2:00	74.5	0.1
26-Oct-20	3:00	83.8	0.1
26-Oct-20	4:00	77.1	0.1
26-Oct-20	5:00	52.5	0.1
26-Oct-20	6:00	90.4	0.1
26-Oct-20	7:00	65.1	0.1
26-Oct-20	8:00	78.8	0.1
26-Oct-20	9:00	69.9	0.2
26-Oct-20	10:00	274.7	0.1
26-Oct-20	11:00	68.8	0.9
26-Oct-20	12:00	30.2	0.1
26-Oct-20	13:00	141.7	0.1
26-Oct-20	14:00	178.2	0.1
26-Oct-20	15:00	99.2	0.1
26-Oct-20	16:00	83.8	0.1
26-Oct-20	17:00	82.6	0.1
26-Oct-20	18:00	81.1	0.1
26-Oct-20	19:00	124.2	0.1
26-Oct-20	20:00	133.1	0.1
26-Oct-20	21:00	84.5	0.1
26-Oct-20	22:00	82.7	0.1
26-Oct-20	23:00	101.4	0.1
27-Oct-20	0:00	80.3	0.1
27-Oct-20	1:00	93.3	0.1
27-Oct-20	2:00	89.1	0.1
27-Oct-20	3:00	52.3	0.2
27-Oct-20	4:00	93.8	0.1
27-Oct-20	5:00	43.7	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
27-Oct-20	6:00	26.8	0.1
27-Oct-20	7:00	105.2	0.2
27-Oct-20	8:00	118.9	0.1
27-Oct-20	9:00	69.5	0.1
27-Oct-20	10:00	74.1	0.1
27-Oct-20	11:00	52.8	0.1
27-Oct-20	12:00	259.7	0.1
27-Oct-20	13:00	144.3	0.1
27-Oct-20	14:00	71.9	0.1
27-Oct-20	15:00	79.5	0.2
27-Oct-20	16:00	84.0	0.1
27-Oct-20	17:00	91.3	0.1
27-Oct-20	18:00	110.6	0.2
27-Oct-20	19:00	81.3	0.1
27-Oct-20	20:00	166.4	0.1
27-Oct-20	21:00	87.7	0.1
27-Oct-20	22:00	78.4	0.1
27-Oct-20	23:00	158.7	0.1
28-Oct-20	0:00	74.8	0.2
28-Oct-20	1:00	105.3	0.1
28-Oct-20	2:00	59.2	0.1
28-Oct-20	3:00	76.2	0.1
28-Oct-20	4:00	66.4	0.1
28-Oct-20	5:00	82.4	0.1
28-Oct-20	6:00	35.7	0.1
28-Oct-20	7:00	83.4	0.1
28-Oct-20	8:00	53.5	0.1
28-Oct-20	9:00	53.9	0.1
28-Oct-20	10:00	72.7	0.1
28-Oct-20	11:00	86.1	0.1
28-Oct-20	12:00	95.2	0.1
28-Oct-20	13:00	13.6	0.1
28-Oct-20	14:00	102.0	0.3
28-Oct-20	15:00	77.0	0.1
28-Oct-20	16:00	74.3	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
28-Oct-20	17:00	85.3	0.1
28-Oct-20	18:00	114.0	0.1
28-Oct-20	19:00	107.6	0.1
28-Oct-20	20:00	122.7	0.1
28-Oct-20	21:00	57.0	0.2
28-Oct-20	22:00	68.3	0.1
28-Oct-20	23:00	74.7	0.2
29-Oct-20	0:00	77.8	0.2
29-Oct-20	1:00	68.4	0.2
29-Oct-20	2:00	80.0	0.2
29-Oct-20	3:00	65.8	0.2
29-Oct-20	4:00	52.2	0.2
29-Oct-20	5:00	84.7	0.2
29-Oct-20	6:00	59.8	0.2
29-Oct-20	7:00	98.3	0.3
29-Oct-20	8:00	84.0	0.2
29-Oct-20	9:00	96.8	0.2
29-Oct-20	10:00	41.2	0.2
29-Oct-20	11:00	91.4	0.2
29-Oct-20	12:00	253.8	0.3
29-Oct-20	13:00	33.3	0.6
29-Oct-20	14:00	36.8	0.2
29-Oct-20	15:00	75.4	0.3
29-Oct-20	16:00	15.1	0.2
29-Oct-20	17:00	62.9	0.4
29-Oct-20	18:00	73.4	0.2
29-Oct-20	19:00	21.2	0.4
29-Oct-20	20:00	67.1	0.1
29-Oct-20	21:00	57.4	0.1
29-Oct-20	22:00	6.4	0.1
29-Oct-20	23:00	355.9	0.1
30-Oct-20	0:00	24.4	0.1
30-Oct-20	1:00	57.8	0.1
30-Oct-20	2:00	25.4	0.1
30-Oct-20	3:00	73.1	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
30-Oct-20	4:00	53.6	0.1
30-Oct-20	5:00	76.4	0.1
30-Oct-20	6:00	56.8	0.1
30-Oct-20	7:00	42.1	0.1
30-Oct-20	8:00	57.5	0.1
30-Oct-20	9:00	29.5	0.1
30-Oct-20	10:00	111.2	0.2
30-Oct-20	11:00	58.5	0.2
30-Oct-20	12:00	76.9	0.2
30-Oct-20	13:00	98.0	0.1
30-Oct-20	14:00	98.1	0.1
30-Oct-20	15:00	44.9	0.1
30-Oct-20	16:00	100.2	0.2
30-Oct-20	17:00	75.3	0.1
30-Oct-20	18:00	71.4	0.1
30-Oct-20	19:00	77.8	0.1
30-Oct-20	20:00	77.2	0.1
30-Oct-20	21:00	93.3	0.1
30-Oct-20	22:00	81.1	0.1
30-Oct-20	23:00	98.9	0.1
31-Oct-20	0:00	124.0	0.1
31-Oct-20	1:00	39.6	0.1
31-Oct-20	2:00	57.2	0.1
31-Oct-20	3:00	79.9	0.1
31-Oct-20	4:00	76.5	0.1
31-Oct-20	5:00	91.4	0.1
31-Oct-20	6:00	114.2	0.1
31-Oct-20	7:00	57.2	0.1
31-Oct-20	8:00	155.1	0.1
31-Oct-20	9:00	61.7	0.2
31-Oct-20	10:00	40.0	0.1
31-Oct-20	11:00	92.3	0.1
31-Oct-20	12:00	94.7	0.3
31-Oct-20	13:00	153.1	0.1
31-Oct-20	14:00	181.5	0.1

APPENDIX D –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Direction (°)	Wind Speed (m/s)
31-Oct-20	15:00	142.4	0.5
31-Oct-20	16:00	73.3	0.1
31-Oct-20	17:00	109.6	0.1
31-Oct-20	18:00	113.5	0.1
31-Oct-20	19:00	81.2	0.1
31-Oct-20	20:00	166.0	0.1
31-Oct-20	21:00	125.1	0.1
31-Oct-20	22:00	90.7	0.1
31-Oct-20	23:00	24.8	0.1

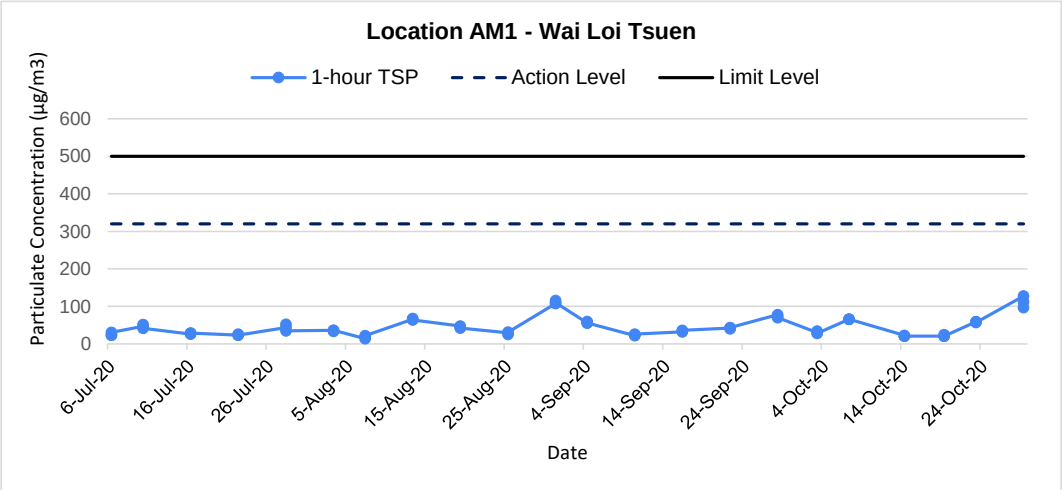
APPENDIX E
1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

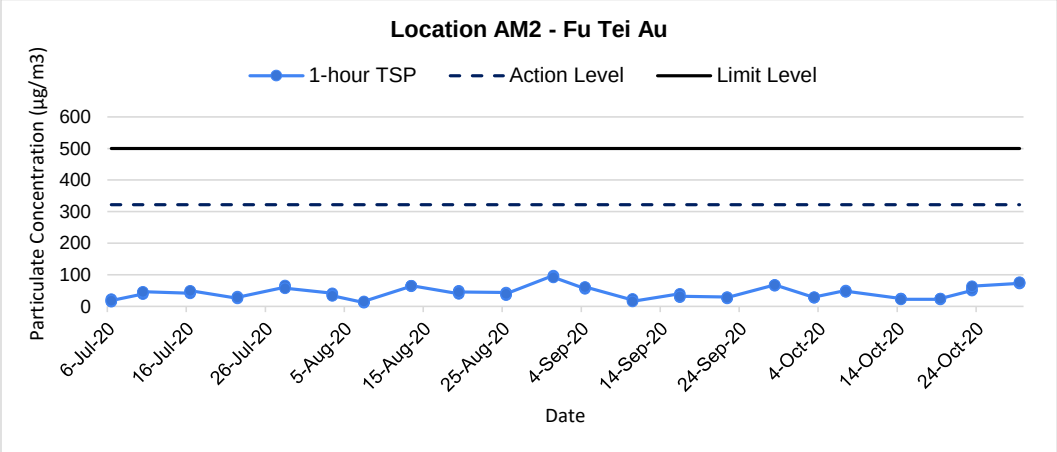
Appendix E - 1-hour TSP Monitoring Results

Location AM1 - Wai Loi Tsuen			
Date	Time	Weather	Particulate Concentration (μg/m^3)
3-Oct-20	9:15	Sunny	30.0
3-Oct-20	10:15	Sunny	34.0
3-Oct-20	11:15	Sunny	28.0
7-Oct-20	10:20	Cloudy	66.0
7-Oct-20	11:20	Cloudy	66.0
7-Oct-20	12:20	Cloudy	66.0
14-Oct-20	9:30	Cloudy	22.8
14-Oct-20	10:30	Cloudy	20.9
14-Oct-20	11:30	Cloudy	20.9
19-Oct-20	9:05	Cloudy	20.9
19-Oct-20	10:05	Cloudy	24.7
19-Oct-20	11:05	Cloudy	20.9
23-Oct-20	9:15	Cloudy	59.4
23-Oct-20	10:15	Cloudy	59.4
23-Oct-20	11:15	Cloudy	57.2
29-Oct-20	9:00	Cloudy	127.6
29-Oct-20	10:00	Cloudy	112.2
29-Oct-20	11:00	Cloudy	96.8
		Average	51.9
		Maximum	127.6
		Minimum	20.9

Location AM2 - Fu Tei Au			
Date	Time	Weather	Particulate Concentration (μg/m^3)
3-Oct-20	13:00	Sunny	28.0
3-Oct-20	14:00	Sunny	28.0
3-Oct-20	15:00	Sunny	30.0
7-Oct-20	13:35	Cloudy	50.6
7-Oct-20	14:35	Cloudy	46.2
7-Oct-20	15:35	Cloudy	48.4
14-Oct-20	13:15	Cloudy	24.7
14-Oct-20	14:15	Cloudy	24.7
14-Oct-20	15:15	Cloudy	22.8
19-Oct-20	13:20	Cloudy	22.8
19-Oct-20	14:20	Cloudy	24.7
19-Oct-20	15:20	Cloudy	24.7
23-Oct-20	13:30	Cloudy	50.6
23-Oct-20	14:30	Cloudy	55.0
23-Oct-20	15:30	Cloudy	63.8
29-Oct-20	13:35	Cloudy	72.6
29-Oct-20	14:35	Cloudy	74.8
29-Oct-20	15:35	Cloudy	77.0
		Average	42.7
		Maximum	77.0
		Minimum	22.8

1-hr TSP Concentration Levels





Title: Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date: Oct 2020	Project No.: 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

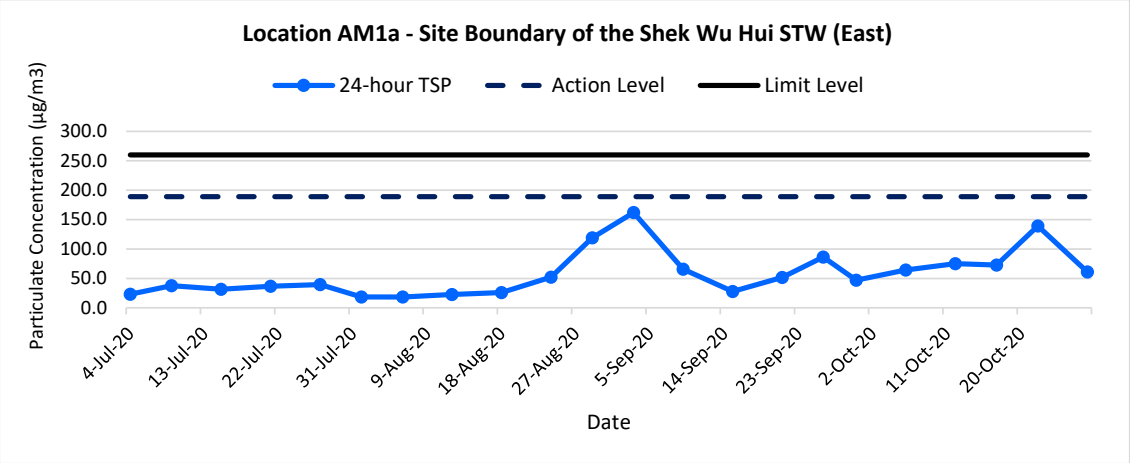
Location AM1a - Site Boundary of the Shek Wu Hui STW (East)

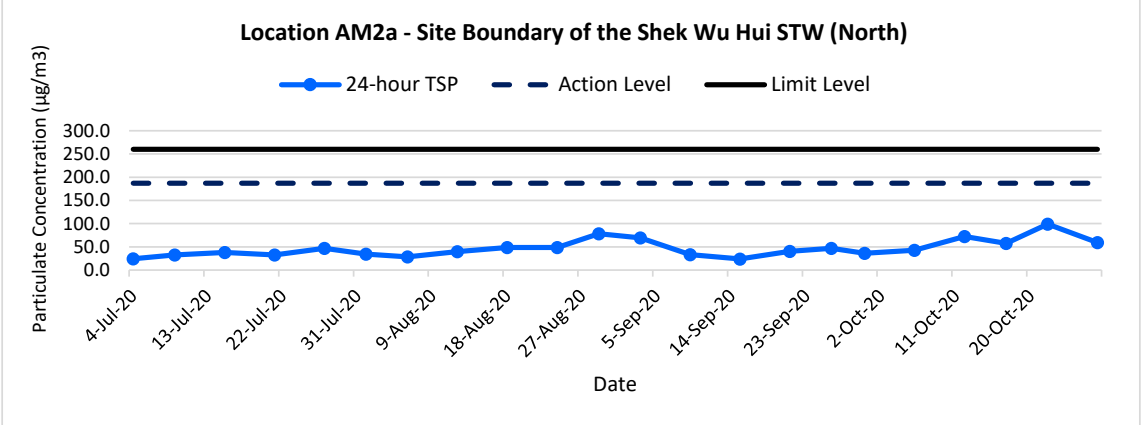
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time (hrs.)	Flow Rate (m^3/min.)		Av. Flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
				Initial	Final		Initial	Final		Initial	Final			
6-Oct-20	Cloudy	298.4	761.7	3.5312	3.6451	0.1139	9282.7	9306.7	24.0	1.23	1.23	1.23	1768.9	64.4
12-Oct-20	Cloudy	299.5	757.9	3.5011	3.6337	0.1326	9306.7	9330.7	24.0	1.22	1.23	1.22	1761.8	75.3
17-Oct-20	Cloudy	298.3	762.5	3.5012	3.6296	0.1284	9330.7	9354.7	24.0	1.23	1.23	1.23	1770.1	72.5
22-Oct-20	Cloudy	297.1	758.8	3.4869	3.7331	0.2462	9354.7	9378.7	24.0	1.23	1.23	1.23	1769.3	139.1
28-Oct-20	Cloudy	297.6	763.1	3.5033	3.6114	0.1081	9378.7	9402.7	24.0	1.23	1.23	1.23	1772.8	61.0
													Min	61.0
													Max	139.1
													Average	82.5

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. ($\mu g/m^3$)
				Initial	Final		Initial	Final		Initial	Final			
6-Oct-20	Cloudy	298.4	761.7	3.5276	3.6027	0.0751	19476.7	19500.7	24.0	1.23	1.23	1.23	1768.8	42.5
12-Oct-20	Cloudy	299.5	757.9	3.4869	3.6140	0.1271	19500.7	19524.7	24.0	1.22	1.23	1.22	1762.4	72.1
17-Oct-20	Cloudy	298.3	762.5	3.5138	3.6159	0.1021	19524.7	19548.7	24.0	1.23	1.23	1.23	1769.9	57.7
22-Oct-20	Cloudy	297.1	758.8	3.4990	3.6741	0.1751	19548.7	19572.7	24.0	1.23	1.23	1.23	1769.2	99.0
28-Oct-20	Cloudy	297.6	763.1	3.5016	3.6067	0.1051	19572.7	19596.7	24.0	1.23	1.23	1.23	1772.3	59.3
													Min	42.5
													Max	99.0
													Average	66.1

24-hr TSP Concentration Levels





Title	Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1	Date	Project No.	CINOTECH
		Oct 2020	MA19019	
	Graphical Presentation of 24-hour TSP Monitoring Results		Appendix	
			F	

APPENDIX G
COPIES OF CALIBRATION CERTIFICATES FOR NOISE MONITORING

Calibration Certificate

0023000

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : SVAN957 SLM Serial No. /Ref. No. : 23852 / N-08-11 Object 2 : Microphone Serial No. /Ref. No. : 35989 Manufacturer : Svantek
Date of calibration: 19/12/2019 Date of the recommended re-calibration: 19/12/2020	Certificate No.: 0023000 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.4dB	-0.6dB	+/- 1.5dB	1
114.0dB	113.4dB	-0.6dB	+/- 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

Approved by

Quality Manager

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

Calibration Certificate

0022999

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : SVAN957 SLM Serial No. /Ref. No. : 23851 / N-08-12 Object 2 : Microphone Serial No. /Ref. No. : 43676 Manufacturer : Svantek
Date of calibration: 19/12/2019 Date of the recommended re-calibration: 19/12/2020	Certificate No.: 0022999 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 1.5dB	1
114.0dB	114.0dB	0.0dB	+/- 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

Approved by

Quality Manager

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

Calibration Certificate

0023155

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : SVAN979 SLM Serial No. /Ref. No. : 27189 / SN-01-01 Object 2 : Microphone Serial No. /Ref. No. : 25204 Manufacturer : BSWAtech
Date of calibration: 08/01/2020 Date of the recommended re-calibration: 08/01/2021	Certificate No.: 0023155 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.7dB	-0.3dB	+/- 1.5dB	1
114.0dB	113.6dB	-0.4dB	+/- 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

Approved by

Quality Manager

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

Calibration Certificate

0022673

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: 24/10/2019 Date of the recommended re-calibration: 24/10/2020	Certificate No.: 0022673 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	94.0dB	0.0dB	+/- 0.3dB	1
114.0dB	114.1dB	+0.1dB	+/- 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

Approved by

Quality Manager

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

Calibration Certificate

0023002

Customer : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005	Object 1 : SV30A sound calibrator Serial No. /Ref. No. : 10965 / N-09-02 Object 2 : Serial No. /Ref. No. : Manufacturer : Svantek
Date of calibration: 19/12/2019 Date of the recommended re-calibration: 19/12/2020	Certificate No.: 0023002 Handle by: E0002

Measuring results

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.9dB	-0.1dB	+/- 0.3dB	1
114.0dB	114.2dB	+0.2dB	+/- 0.3dB	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

Approved by

Quality Manager

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

APPENDIX H
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATIONS

Appendix H - Noise Monitoring Results

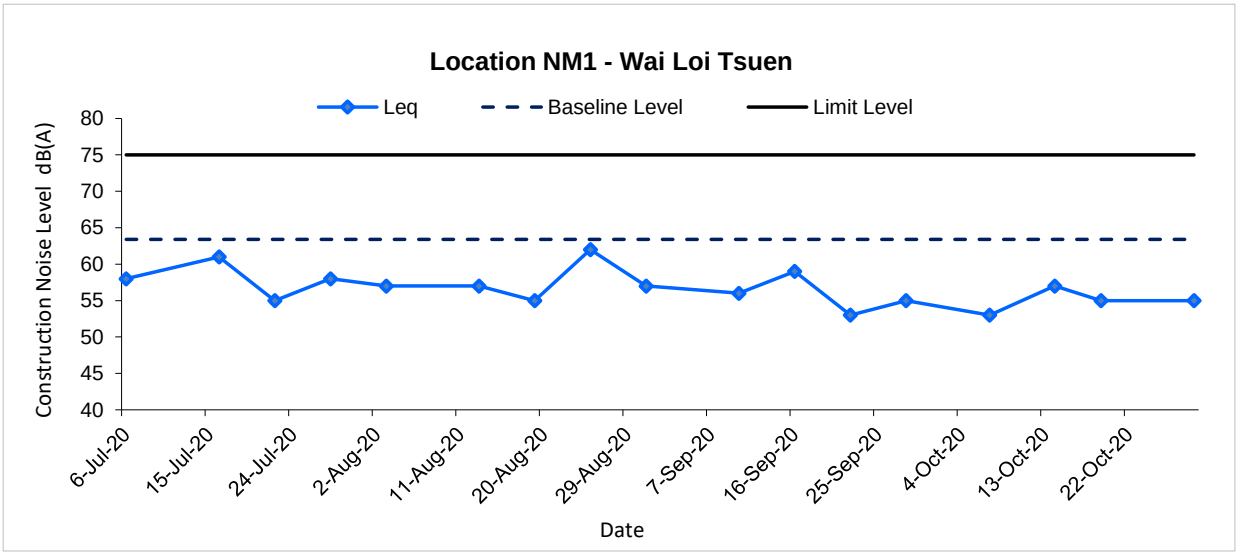
(0700-1900 hrs on Normal Weekdays)

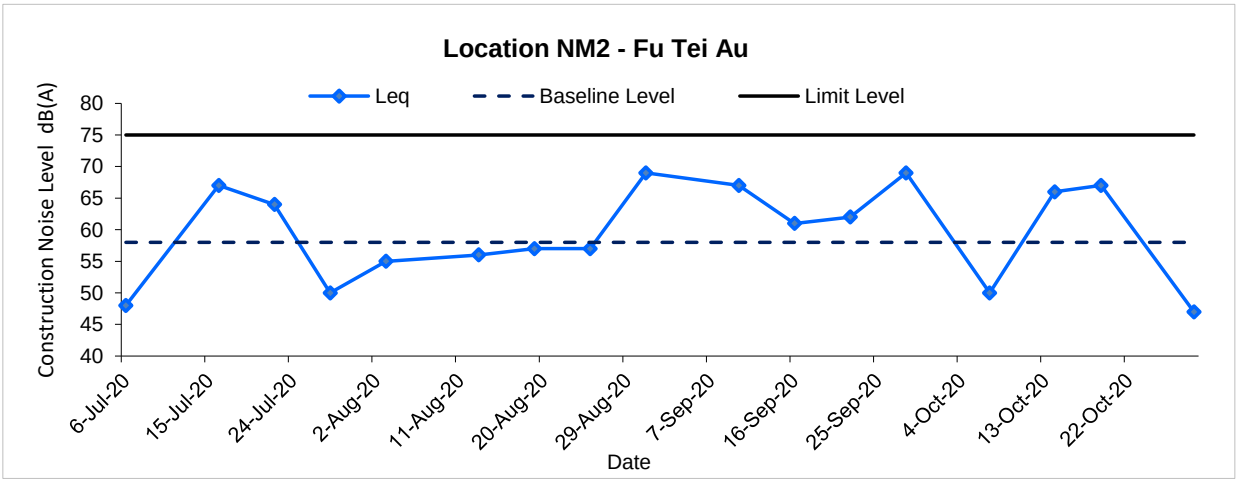
Location NM1 - Wai Loi Tsuen							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
7-Oct-20	10:20	Cloudy	53.4	55.3	48.4	63.4	53.4 Measured ≦ Baseline
14-Oct-20	9:00	Cloudy	57.0	58.6	52.4	63.4	57 Measured ≦ Baseline
19-Oct-20	9:05	Cloudy	54.5	56.4	50.9	63.4	54.5 Measured ≦ Baseline
29-Oct-20	13:15	Cloudy	55.4	56.9	52.0	63.4	55.4 Measured ≦ Baseline

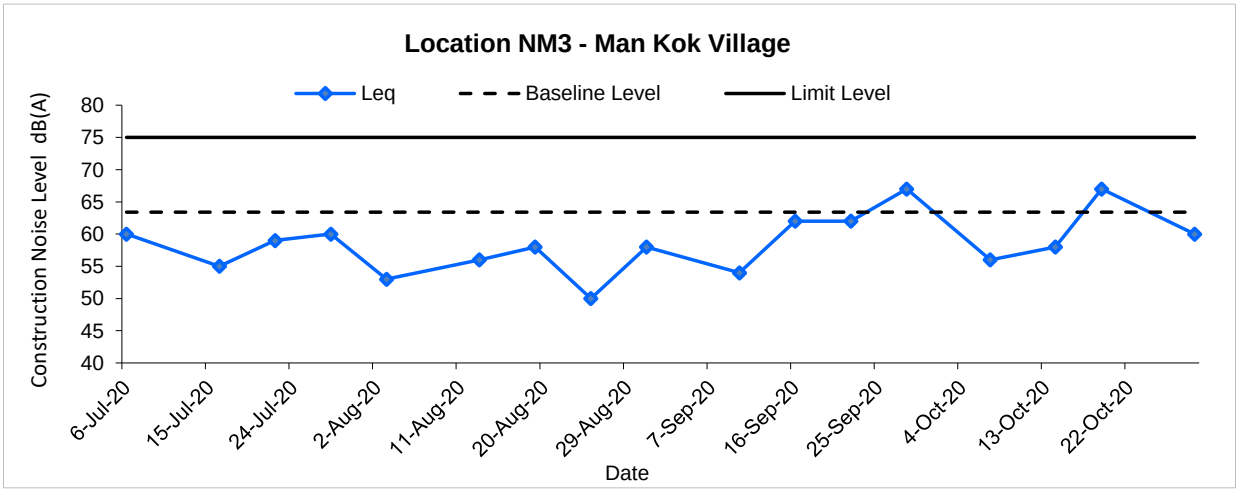
Location NM2 - Fu Tei Au							
Date	Time	Weather	Unit: dB (A) (30-min)				
			Measured Noise Level			Baseline Level	Construction Noise Level
			L_{eq}	L_{10}	L_{90}	L_{eq}	L_{eq}
7-Oct-20	11:30	Cloudy	50.3	50.7	44.2	58.0	50.3 Measured ≦ Baseline
14-Oct-20	13:05	Cloudy	66.4	71.0	59.5	58.0	65.7
19-Oct-20	13:05	Cloudy	67.5	69.0	56.5	58.0	67.0
29-Oct-20	15:45	Cloudy	58.3	59.7	51.4	58.0	46.5

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}
7-Oct-20	11:00	Cloudy	56.0	57.5	48.5	63.4	56 Measured ≦ Baseline
14-Oct-20	9:50	Cloudy	64.4	65.8	61.1	63.4	57.5
19-Oct-20	9:50	Cloudy	68.6	69.8	60.6	63.4	67.0
29-Oct-20	14:15	Cloudy	65.1	67.7	53.6	63.4	60.2

Noise Levels







Title Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1 Graphical Presentation of Construction Noise Monitoring Results	Date Oct 2020	Project 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		69	+++++
Actitis hypoleucos	Common Sandpiper	磯鷸	*	11	+
Alcedo atthis	Common Kingfisher	普通翠鳥	*	1	
Ardea alba	Great Egret	大白鷺	*	17	+
Ardea cinerea	Grey Heron	蒼鷺	*	34	+++
Ardeola bacchus	Chinese Pond Heron	池鷺	*	34	++
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	*	32	+
Centropus sinensis	Greater Coucal	褐翅鴉鵑		1	
Ceryle rudis	Pied Kingfisher	斑魚狗	*	0	+
Charadrius dubius	Little Ringed Plover	金眶鴴	*	3	
Copsychus saularis	Magpie Robin	鵲鴝		0	+
Corvus macrorhynchus	Jungle Crow	大嘴烏鴉		6	+
Corvus torquatus	Collared Crow	白頸鴉	*	0	+
Egretta garzetta	Little Egret	小白鷺	*	49	+++
Garrulax perspicillatus	Masked Laughing Thrush	黑臉噪鶥		9	
Halcyon smyrnensis	White-throated Kingfisher	白胸翡翠	*	1	+
Himantopus himantopus	Black-winged Stilt	黑翅長腳鷸	*	26	++++
Lanius cristatus	Brown Shrinke	紅尾伯勞		1	
Lonchura punctulata	Spotted Munia	斑文鳥		24	
Motacilla alba	White Wagtail	白鶺鴒		23	++
Muscicapa latirostris	Asian Brown Flycatcher	北灰鶲		0	+
Orthotomus sutorius	Common Tailorbird	長尾縫葉鶯		1	+
Passer montanus	Eurasian Tree Sparrow	樹麻雀		7	++
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	*	11	+
Phylloscopus fuscatus	Dusky Warbler	褐柳鶯		0	+
Phylloscopus inornatus	Yellow-browed Warbler	黃眉柳鶯		0	+
Pica pica	Magpie	喜鵲		1	+
Prinia inornata	Plain Prinia	純色鱧鶯		1	+
Pycnonotus jocosus	Crested bulbul	紅耳鵯		8	+++
Streptopelia chinensis	Spotted Dove	珠頸斑鳩		23	++
Sturnus nigricollis	Black-necked Starling	黑領椋鳥		0	++++
Tachybaptus ruficollis	Little Grebe	小鸊鷉	*	1	
Tringa nebularia	Common Greenshank	青腳鷸	*	0	+
Urocissa erythrorhyncha	Red-billed Blue Magpie	紅咀藍鵲		1	+
Zosterops japonicus	Japanese White-eye	暗綠繡眼鳥		2	+
			Total Point Count Abundance	397	
			Total Waterbirds	220	

*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 Oct
Season Winter

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	5 Oct 2020	11:00	High	33	**101**	9
		16:00	Low	68		11
#2	16 Oct 2020	9:00	High	35	**83**	9
		16:00	Low	48		12
#3	20 Oct 2020	13:00	High	44	**93**	7
		8:00	Low	49		11
#4	28 Oct 2020	12:00	High	42	**120**	10
		8:00	Low	78		16
				Overall Total	**397**	

Table III: Total Waterbird Abundance from Point Count					
Survey Information				Numbers of Waterbirds	
No.	Date	Time	Tide Level	Individuals Recorded	Total
#1	5 Oct 2020	11:00	High	7	**54**
		16:00	Low	47	
#2	16 Oct 2020	9:00	High	21	**57**
		16:00	Low	36	
#3	20 Oct 2020	13:00	High	20	**57**
		8:00	Low	37	
#4	28 Oct 2020	12:00	High	14	**52**
		8:00	Low	38	
				Overall Total	**220**
				Average	**44**

Table IV: T-Test Analysis for All Waterbirds

Baseline Data
Monthly Average Abundance (Oct) 51.00
Seasonal Average Abundance (Winter) 62.15

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 = -2.353 (95% Confidence Level)
Crit. Value = -4.541 (99% Confidence Level)

			Confidence Level	
T-values of Data in Reporting Month			95%	99%
Abundance	Monthly	3.266	✓	✓
	Season	***-5.841***	✕	✕
		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 Oct
Season Winter

Table V: Abundance of Representative Waterbirds from Point Count

Representative Species			Recorded Abundance							Baseline Data	
Species Name	**Common Name**	**Chinese Name**	**5 Oct 2020**	**16 Oct 2020**	**20 Oct 2020**	**28 Oct 2020**		**Total**	**Average**	**Avg (Oct)**	**Avg (Winter)**
Egretta garzetta	Little Egret	小白鷺	8	16	9	16		49	12	15	15
Ardea cinerea	Grey Heron	蒼鷺	8	9	8	9		34	9	10	13
Ardeola bacchus	Chinese Pond Heron	池鷺	7	7	11	9		34	9	12	9
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0	1	3	7		11	3	1	7
Ardea alba	Great Egret	大白鷺	4	5	3	5		17	4	7	5
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	0	11	21	0		32	8	0	4

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 = -2.353 (95% Confidence Level)
Crit. Value = -4.541 (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	-1.150	✓	✓	-1.099	✓	✓	✓
Ardea cinerea	Grey Heron	蒼鷺	-3.464	✗	✓	-15.944	✗	✗	Action Level
Ardeola bacchus	Chinese Pond Heron	池鷺	-3.395	✗	✓	-0.763	✓	✓	✓
Phalacrocorax carbo	Great Cormorant	普通鸕鷀	0.969	✓	✓	-2.829	✗	✓	✓
Ardea alba	Great Egret	大白鷺	-4.700	✗	✗	-2.209	✓	✓	✓
Bubulcus coromandus	Eastern Cattle Egret	牛背鷺	1.584	✓	✓	0.767	✓	✓	✓

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.

APPENDIX J
PHOTO RECORDS OF ECOLOGICAL MONITORING

Appendix J - Photo Records of Ecological Monitoring

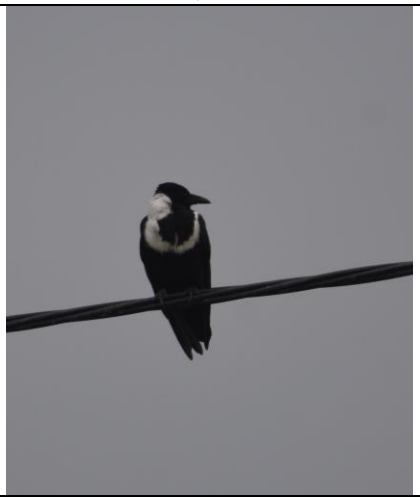
Part A - Conditions of Rivers

Sheung Yue River (Taken on 20 Oct 20)

Ng Tung River (Taken on 16 Oct 20)

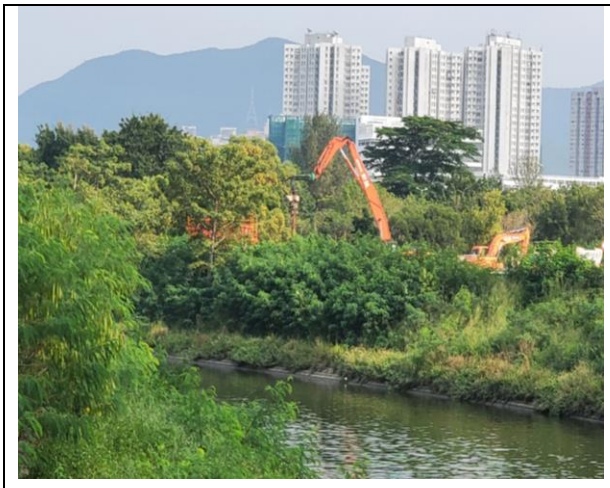
Shek Sheung River (Taken on 20 Oct 20)

Part B – Waterbird Species

	
Ardea alba (Taken on 16 Oct 20)	*Ardea cinerea* (Taken on 16 Oct 20)
	
Ardeola bacchus (Taken on 28 Oct 20)	*Bubulcus coromandus* (Taken on 28 Oct 20)
	
Corvus torquatus (Taken on 16 Oct 20)	*Egretta garzetta* (Taken on 5 Oct 20)

	
Halcyon smyrnensis (Taken on 20 Oct 20)	*Tachybaptus ruficollis* (Taken on 16 Oct 20)

Part C – Human Activities & Site Conditions

	
Sheet Piling (Taken on 16 Oct 20)	Fishing (Taken on 20 Oct 20)
	
Excavation & Crane (Non project-related, taken on 20 Oct 20)	Excavation (Project-related, taken on 28 Oct 20)

APPENDIX K
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201008
Date	8 October 2020 (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	
201008-R1	• Stagnant water accumulated on the site area and haul road of Portion C should be removed or pumped through the sedimentation tank.	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.: 200929).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		8 October 2020
Checked by	Mr. Eric Yan		9 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201015
Date	15 October 2020 (Thursday)
Time	9:30 – 11:45

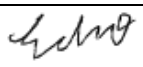
Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	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.: 201008): Item 201008-R1 was rectified/improved by the Contractor.	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		15 October 2020
Checked by	Mr. Eric Yan		15 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201020
Date	20 October 2020 (Tuesday)
Time	9:30 – 11:00

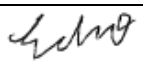
Ref. No.	**Non-Compliance**	**Related Item No.**
-	None identified	-
Ref. No.	**Remarks/Observations**	**Related Item No.**
	B. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	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.: 201015).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		20 October 2020
Checked by	Mr. Eric Yan		21 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201027
Date	27 October 2020 (Tuesday)
Time	10:00 – 11:45

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.: 201020).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 October 2020
Checked by	Mr. Eric Yan		28 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201008
Date	8 October 2020 (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.: 200929).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		8 October 2020
Checked by	Mr. Eric Yan		9 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201015
Date	15 October 2020 (Thursday)
Time	9:30 – 11:45

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.: 201008).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		15 October 2020
Checked by	Mr. Eric Yan		15 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201020
Date	20 October 2020 (Tuesday)
Time	9:30 – 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.: 201015).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		20 October 2020
Checked by	Mr. Eric Yan		21 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201027
Date	27 October 2020 (Tuesday)
Time	10:00 – 11:45

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.: 201020).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 October 2020
Checked by	Mr. Eric Yan		28 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201015
Date	15 October 2020 (Thursday)
Time	10:00 – 10:20

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	
	N/A	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		15 October 2020
Checked by	Mr. Eric Yan		15 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201020
Date	20 October 2020 (Tuesday)
Time	10:00 – 10:20

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.: 201015).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		20 October 2020
Checked by	Mr. Eric Yan		21 October 2020

Weekly Site Inspection Record Summary
Inspection Information

Checklist Reference Number	201027
Date	27 October 2020 (Tuesday)
Time	10:00 – 10:20

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.: 201020).	

	Name	Signature	Date
Recorded by	Ms. Echo Hung		27 October 2020
Checked by	Mr. Eric Yan		28 October 2020

APPENDIX L
WASTE FLOW TABLE

Name of Department: DSD

Contract No. DC/2018/06

Monthly Summary Waste Flow Table for 2020 (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	Chemical Waste	Others, e.g. general refuse
	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)
Jan	0.376	0.000	0.000	0.000	0.376	0.000	0.000	0.000	0.000	0.000	0.083
Feb	1.168	0.000	0.000	0.332	0.836	0.000	0.000	0.000	0.000	0.000	0.052
Mar	2.436	0.000	0.000	0.497	1.939	0.000	0.000	0.000	0.000	0.000	0.134
Apr	2.660	0.000	0.000	0.126	2.534	0.000	0.000	0.000	0.000	0.000	0.018
May	2.260	0.000	0.000	0.161	2.100	0.000	0.000	0.000	0.000	0.060	0.138
Jun	2.271	0.000	0.000	0.000	2.271	0.000	0.000	0.000	0.000	0.000	0.018
Sub-total	11.171	0.000	0.000	1.115	10.056	0.000	0.000	0.000	0.000	0.060	0.443
Jul	1.227	0.000	0.000	0.076	1.151	0.000	0.000	0.000	0.000	0.000	0.070
Aug	2.587	0.000	0.000	0.140	2.408	0.000	0.000	0.000	0.016	0.000	0.022
Sep	3.354	0.000	0.000	0.046	3.283	0.000	0.000	0.000	0.008	0.000	0.018
Oct	9.601	0.000	0.000	5.444	4.143	0.000	0.000	0.000	0.000	0.000	0.015
Nov											
Dec											
Total	27.940	0.000	0.000	6.820	21.041	0.000	0.000	0.000	0.024	0.060	0.567

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 each truck of C&D wastes is 5m3
4. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
5. The slurry and bentonite are disposed at Tseung Kwun O 137
6. The non-inert C&D wastes are disposed at NENT.
7. Assume the density of metal is 7.850 kg/m3
8. Assume the density of plastic is 941 kg/m3
9. Assume the density of general refuse is 0.9 kg/l
10. Density of waste oil is assued to be 0.001 m3/l & 0.8 kg/l. Chemical waste includes waste oil.

Name of Department: DSD

Contract No. DC/2018/07

Monthly Summary Waste Flow Table for 2020 (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	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	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.006
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.005
Mar	0.143	0.000	0.000	0.000	0.143	0.000	0.00	0.000	0.000	0.000	0.000
Apr	0.121	0.000	0.000	0.000	0.121	0.000	31.23	0.000	0.000	0.000	0.003
May	0.372	0.000	0.000	0.000	0.372	0.000	19.71	0.000	0.000	0.000	0.005
Jun	0.227	0.000	0.000	0.000	0.227	0.000	151.78	0.000	0.000	0.000	0.009
Sub-total	0.862	0.000	0.000	0.000	0.862	0.000	202.72	0.000	0.000	0.000	0.028
Jul	0.180	0.000	0.000	0.056	0.124	0.076	92.86	0.000	0.000	9.600	0.006
Aug	0.847	0.000	0.000	0.000	0.847	0.104	115.29	0.000	0.016	0.000	0.010
Sep	0.455	0.000	0.000	0.000	0.455	0.000	0.000	0.000	0.008	0.000	0.009
Oct	1.507	0.000	0.000	0.000	1.507	0.000	0.000	0.000	0.000	0.000	0.008
Nov											
Dec											
Total	3.851	0.000	0.000	0.056	3.794	0.180	410.87	0.000	0.024	9.600	0.062

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. The inert C&D materials except slurry and bentonite are disposed at Tuen Mun 38
4. The slurry and bentonite are disposed at Tseung Kwun O 137
5. The non-inert C&D wastes are disposed at NENT
6. Assume the density of general refuse is 0.9 ton/m3
7. Density of waste oil is assued to be 0.8 kg/l. Chemical waste includes waste oil.

Environmental Aspect Evaluation Form

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

Monthly Summary Waste Flow Table for 2020 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	12.46 T
June	0	0	0	0	0	0	0	0	0	0	51.46 T
Sub-total	0	0	0	0	0	0	0	0	0	0	63.92 T
July	0	0	0	0	0	0	0	0	0	0	0
Aug	92.45 T	0	0	0	92.45 T	0	0	0	0	0	0
Sept	0	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0	0
Nov											
Dec											
Total	92.45 T	0	0	0	92.45 T	0	0	0	0	0	63.92 T

Environmental Aspect Evaluation Form

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) refers)

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

Monthly Summary Waste Flow Table for 2020 (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	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0	0
Sept	0	0	0	0	0	0	0	0	0	0	0
Oct	69.27	0	0	0	69.27	0	0	0	0	0	0
Nov											
Dec											
Total	69.27	0	0	0	69.27	0	0	0	0	0	0

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;						^
	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: October 2020

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	Complaint Investigation Report was submitted in April 2020

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: October 2020

(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
One (1) Action Level of ecological monitoring was triggered in the reporting month.
No Limit Level of ecological monitoring was triggered in the reporting month.

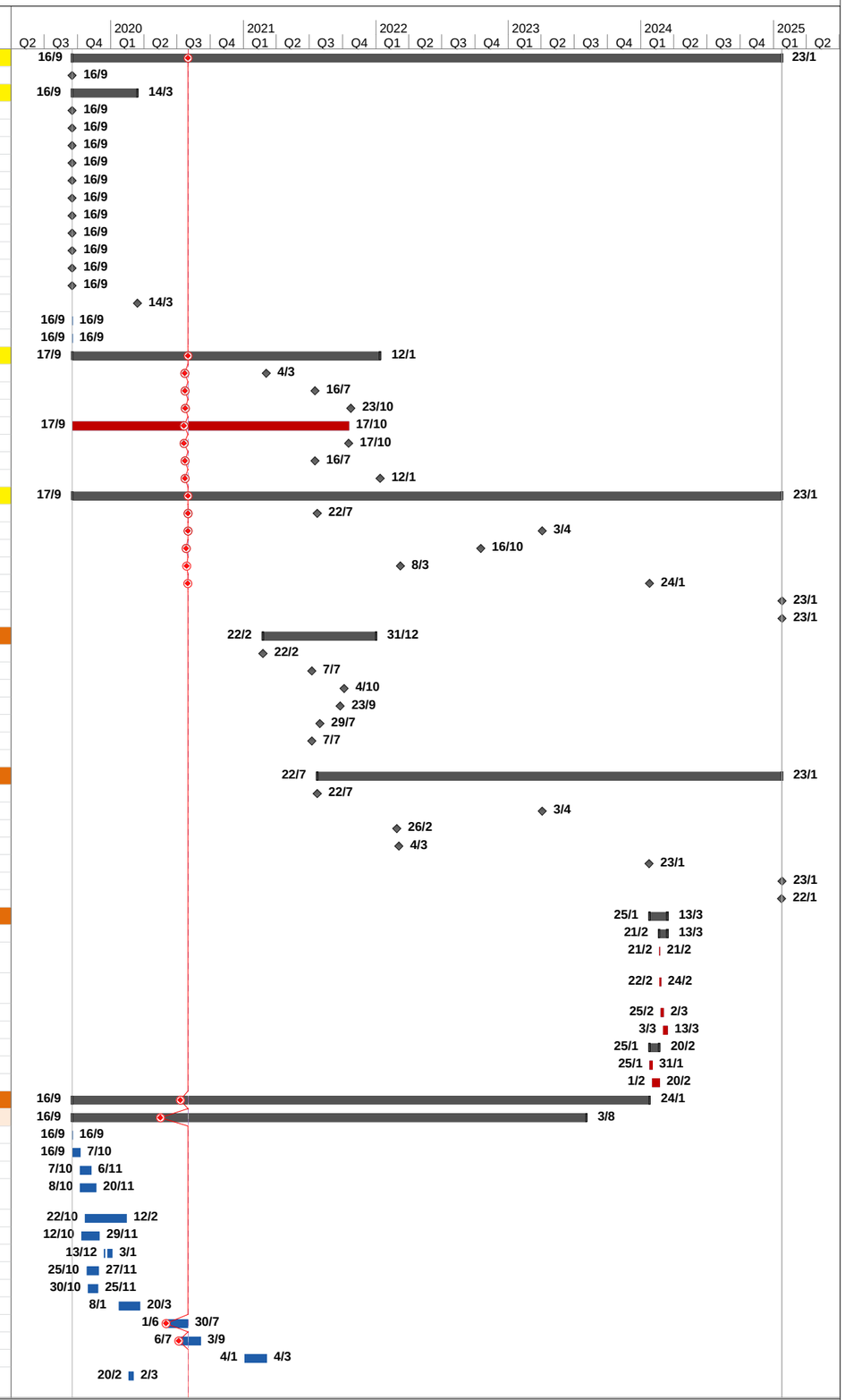
APPENDIX Q
TENTATIVE CONSTRUCTION PROGRAMME

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: 31/07/2020)

群利－俊和聯營體
KL－CW JV

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowance
1		**Contract Dates**	**1957 day**	**Mon 16/9/19**	**Thu 23/1/25**	**Mon 16/9/19**	**NA**	**0 days**			**35%**	
2		Starting Date	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days		4,5FS+181 days,6,7,8,9,11,12,10	100%	
3		**Access Date (cal. day)**	**180 days**	**Mon 16/9/19**	**Sat 14/3/20**	**Mon 16/9/19**	**Sat 14/3/20**	**0 days**			**100%**	
4		Portion A-1	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
5		Portion A-2	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2FS+181 days		100%	
6		Portion C-1A	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
7		Portion C-1B	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
8		Portion C-2A	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
9		Portion C-2B	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
10		Portion C-2C	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
11		Portion C-2D	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
12		Portion C-3	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
13		Portion C-4	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
14		Portion C-5	0 days	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
15		Portion C-6	0 days	Sat 14/3/20	Sat 14/3/20	Sat 14/3/20	Sat 14/3/20	0 days	2FS+181 days	376,351	100%	
16		Works Area WA1	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
17		Works Area WA2-A	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2		100%	
18		**Key Date (cal. day)**	**848.2 da**	**Tue 17/9/19**	**Wed 12/1/22**	**Tue 17/9/19**	**NA**	**0 days**			**44%**	
19		KD1A (525 days after starting date)	525 days	Tue 17/9/19	Thu 4/3/21	Tue 17/9/19	NA	0 days	2FS+1 day		59%	
20		KD2A (660 days after starting date)	660 days	Tue 17/9/19	Fri 16/7/21	Tue 17/9/19	NA	0 days	2FS+1 day		47%	
21		KD3A (760 days after starting date)	760 days	Tue 17/9/19	Sat 23/10/21	Tue 17/9/19	NA	0 days	2FS+1 day		41%	
22		KD3B (750 days after starting date)	750 days	Tue 17/9/19	Sun 17/10/21	Tue 17/9/19	NA	0 days	2FS+1 day		41%	
23		KD3C (750 days after starting date)	750 days	Tue 17/9/19	Sun 17/10/21	Tue 17/9/19	NA	0 days	2FS+1 day		41%	
24		KD3D (660 days after starting date)	660 days	Tue 17/9/19	Fri 16/7/21	Tue 17/9/19	NA	0 days	2FS+1 day		47%	
25		KD3E (840 days after starting date)	840 days	Tue 17/9/19	Wed 12/1/22	Tue 17/9/19	NA	0 days	2FS+1 day		37%	
26		**Completion Date (cal. day)**	**1956 day**	**Tue 17/9/19**	**Thu 23/1/25**	**Tue 17/9/19**	**NA**	**0 days**			**29%**	
27		Section 1 of Works (675 days after starting date)	675 days	Tue 17/9/19	Thu 22/7/21	Tue 17/9/19	NA	0 days	2FS+1 day		82%	
28		Section 2 of Works (1,295 days after starting date)	1295 day	Tue 17/9/19	Mon 3/4/23	Tue 17/9/19	NA	0 days	2FS+1 day		25%	
29		Section 3 of Works (1,120 days after starting date)	1120 day	Tue 17/9/19	Sun 16/10/22	Tue 17/9/19	NA	0 days	2FS+1 day		28%	
30		Section 4 of Works (900 days after starting date)	900 days	Tue 17/9/19	Tue 8/3/22	Tue 17/9/19	NA	0 days	2FS+1 day		35%	
31		Section 5 of Works (1,590 days after starting date)	1590 day	Tue 17/9/19	Wed 24/1/24	Tue 17/9/19	NA	0 days	2FS+1 day	32,33,57	20%	
32		Defect Liability Period	365 days	Thu 25/1/24	Thu 23/1/25	NA	NA	0 days	31,48FF		0%	
33		Soft Landscape Establishment Works	365 days	Thu 25/1/24	Thu 23/1/25	NA	NA	0 days	31,49FF		0%	
34	*	**Planned Completion - Key Date (cal. day)**	**312 days**	**Mon 22/2/21**	**Fri 31/12/21**	**NA**	**NA**	**0 days**			**0%**	
35	KD1A	KD1A (525 days after starting date)	0 days	Mon 22/2/21	Mon 22/2/21	NA	NA	0 days	184FF,182FF,403,404,154		0%	
36	KD2A	KD2A (660 days after starting date)	0 days	Wed 7/7/21	Wed 7/7/21	NA	NA	-98 days	448FF,449FF,446FF,444FF,44		0%	
37	KD3A	KD3A (760 days after starting date)	0 days	Mon 4/10/21	Mon 4/10/21	NA	NA	11 days	207FF,208FF		0%	
38	KD3B	KD3B (750 days after starting date)	0 days	Thu 23/9/21	Thu 23/9/21	NA	NA	12 days	227FF,228FF		0%	
39	KD3C	KD3C (750 days after starting date)	0 days	Thu 29/7/21	Thu 29/7/21	NA	NA	68 days	240FF,241FF		0%	
40	KD3D	KD3D (660 days after starting date)	0 days	Wed 7/7/21	Wed 7/7/21	NA	NA	0 days	268FF,269FF		0%	
41	KD3E	KD3E (840 days after starting date)	0 days	Fri 31/12/21	Fri 31/12/21	NA	NA	0 days	288FF,282FF,326FF,331FF,34		0%	
42	*	**Planned Completion - Section of the Works (cal. day)**	**1281 day**	**Thu 22/7/21**	**Thu 23/1/25**	**NA**	**NA**	**0 days**			**0%**	
43	SW1	Section 1 of Works (675 days after starting date)	0 days	Thu 22/7/21	Thu 22/7/21	NA	NA	-56 days	186FF,372FF,185FF		0%	
44	SW2	Section 2 of Works (1,295 days after starting date)	0 days	Mon 3/4/23	Mon 3/4/23	NA	NA	0 days	451FF,465FF,452FF,454FF,46		0%	
45	SW3	Section 3 of Works (1,120 days after starting date)	0 days	Sat 26/2/22	Sat 26/2/22	NA	NA	226 days	242FF,243FF,270FF,271FF,21	419	0%	
46	SW4	Section 4 of Works (900 days after starting date)	0 days	Fri 4/3/22	Fri 4/3/22	NA	NA	0 days	307FF,312FF,409FF,406FF,40	419	0%	
47	SW5	Section 5 of Works (1,590 days after starting date)	0 days	Tue 23/1/24	Tue 23/1/24	NA	NA	-1 day	414FF,412FF,413FF,415FF,41	48FS+1 day	0%	
48		Defect Liability Period	365 days	Thu 25/1/24	Thu 23/1/25	NA	NA	-1 day	47FS+1 day	32FF	0%	
49		Soft Landscape Establishment Works	365 days	Wed 24/1/24	Wed 22/1/25	NA	NA	1 day	420FF	33FF	0%	
50		**Effects from Inclement Weather and Other Time Affected Events**	**39 days**	**Thu 25/1/24**	**Wed 13/3/24**	**NA**	**NA**	**0 days**			**0%**	
51		**Inclement Weather**	**19 days**	**Wed 21/2/24**	**Wed 13/3/24**	**NA**	**NA**	**0 days**			**0%**	
52		Delay and Disruption of Works for the month of February and March 2020 (NCE no. 0018A)	1 day	Wed 21/2/24	Wed 21/2/24	NA	NA	0 days	58	53	0%	
53		Delay and Disruption of Works for the month of April 2020 (NCE no. 0025)	3 days	Thu 22/2/24	Sat 24/2/24	NA	NA	0 days	52	54	0%	
54		Delay and Disruption of Works for the month of May 2020 (NCE no. 0027)	7 days	Sun 25/2/24	Sat 2/3/24	NA	NA	0 days	53	55	0%	
55		Delay and Disruption of Works for the month of June 2020 (NCE no. 0032)	11 days	Sun 3/3/24	Wed 13/3/24	NA	NA	0 days	54		0%	
56		**Other Time Affected Events**	**20 days**	**Thu 25/1/24**	**Tue 20/2/24**	**NA**	**NA**	**0 days**			**0%**	
57		Unforeseen Social Activities in Hong Kong in November 2019 (NCE no. 0002)	6 days	Thu 25/1/24	Wed 31/1/24	NA	NA	0 days	31	58	0%	
58		Disruption from Coronaviarus Outbreak in February 2020 (NCE no. 0022)	14 days	Thu 1/2/24	Tue 20/2/24	NA	NA	0 days	57	52	0%	
59		**Submissions (cal. day)**	**1592 day**	**Mon 16/9/19**	**Wed 24/1/24**	**Mon 16/9/19**	**NA**	**-1 day**			**69%**	
60		**Subletting Package**	**1418 day**	**Mon 16/9/19**	**Thu 3/8/23**	**Mon 16/9/19**	**NA**	**173 days**			**67%**	
61		Prepare & Submit Subletting Procedures	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2	62	100%	
62		PM Review & Accept Subletting Procedures	21 days	Mon 16/9/19	Mon 7/10/19	Mon 16/9/19	Mon 7/10/19	0 days	61	64,66,63,65,73,79,74,69,78,77	100%	
63		Subletting for Preliminary Works (Instrumentation Monitoring etc.)	30 days	Mon 7/10/19	Wed 6/11/19	Mon 7/10/19	Wed 6/11/19	0 days	62		100%	
64		Subletting for Drainage Diversion Works for UV System no.1& Effluent Pumping Station No.1	44 days	Tue 8/10/19	Wed 20/11/19	Tue 8/10/19	Wed 20/11/19	0 days	62	369	100%	
65		Subletting for the Temporary Site accommodation	114 days	Tue 22/10/19	Wed 12/2/20	Tue 22/10/19	Wed 12/2/20	0 days	62	154	100%	
66		Subletting for Pre-drilling Works	49 days	Sat 12/10/19	Fri 29/11/19	Sat 12/10/19	Fri 29/11/19	0 days	62	67SS+15 days,68SS+15 days,21	100%	
67		Subletting for Pre-bored Socketed Steel H-Pile	13.98 day	Fri 13/12/19	Fri 3/1/20	Fri 13/12/19	Fri 3/1/20	0 days	66SS+15 days	431,196,220,237,250,262,279,16	100%	
68		Subletting for Contractor's Designer for Temporary Works	32 days	Fri 25/10/19	Wed 27/11/19	Fri 25/10/19	Wed 27/11/19	0 days	66SS+15 days	71,70,84,76	100%	
69		Subletting for Independent Checking Engineer	27 days	Wed 30/10/19	Mon 25/11/19	Wed 30/10/19	Mon 25/11/19	0 days	62	171,199,206,222,239,253,264,43	100%	
70		Subletting for Sheetpile and ELS Works	58 days	Wed 8/1/20	Fri 20/3/20	Wed 8/1/20	Fri 20/3/20	0 days	68	171,199,206,222,239,253,264,28	100%	
71		Subletting for R.C Works	60 days	Mon 1/6/20	Thu 30/7/20	NA	NA	7 days	68	172,223,240,254,437,311,287,29	0%	
72		Subletting for Waterproofing	60 days	Mon 6/7/20	Thu 3/9/20	NA	NA	42 days	2	175,178,181,200,255,294	0%	
73		Subletting for ABWF & BS Works	60 days	Mon 4/1/21	Thu 4/3/21	NA	NA	27 days	62	186,211,230,243,255,271,289,29	0%	
74		Subletting for External Works including pipeworks and road works for UV System no.1 (Diversion)	12 days	Thu 20/2/20	Mon 2/3/20	Thu 20/2/20	Mon 2/3/20	0 days	62	369,75,402	100%	



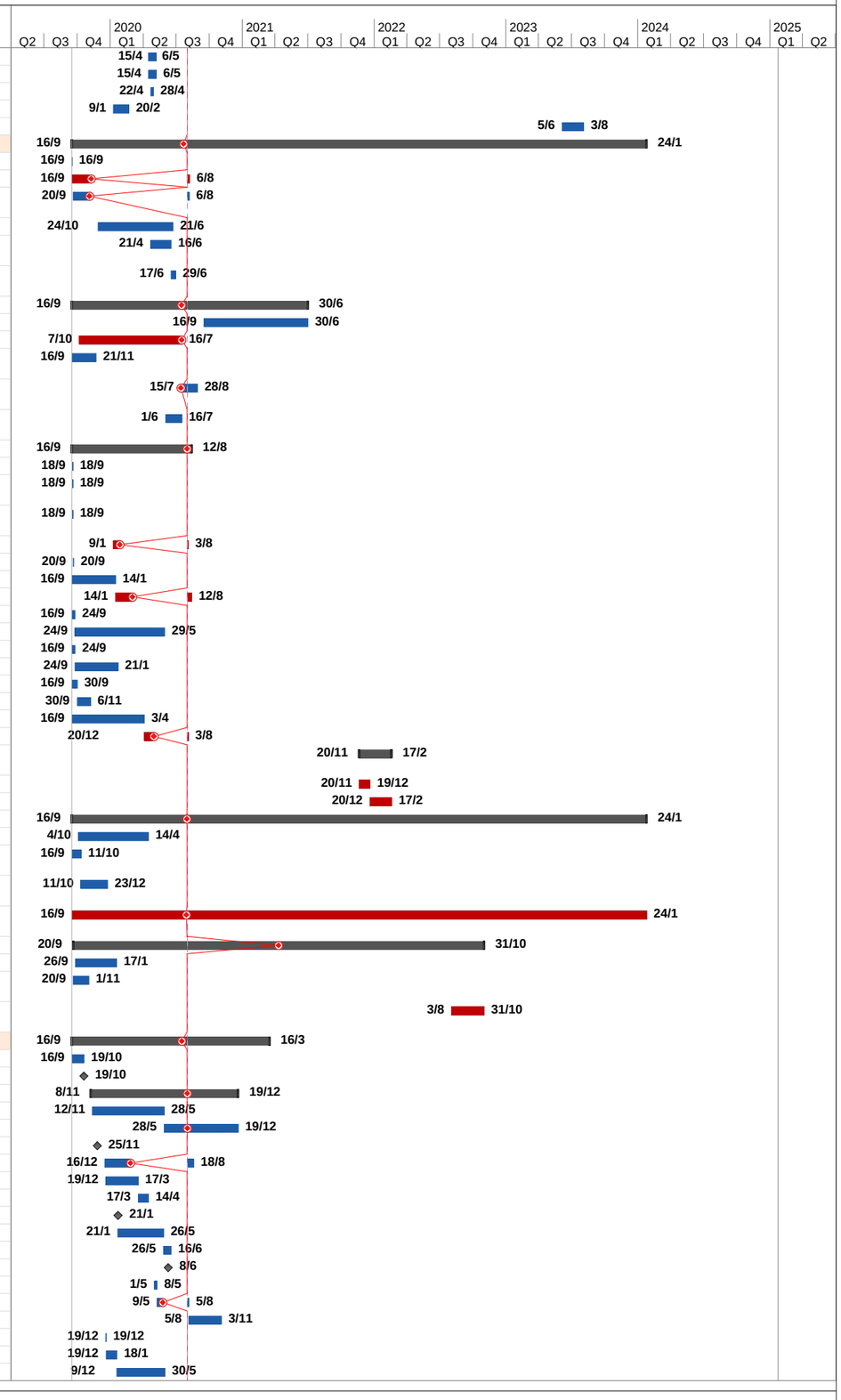
Task Milestone Summary Critical

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: 31/07/2020)

群利－俊和聯營體
KL－CW JV

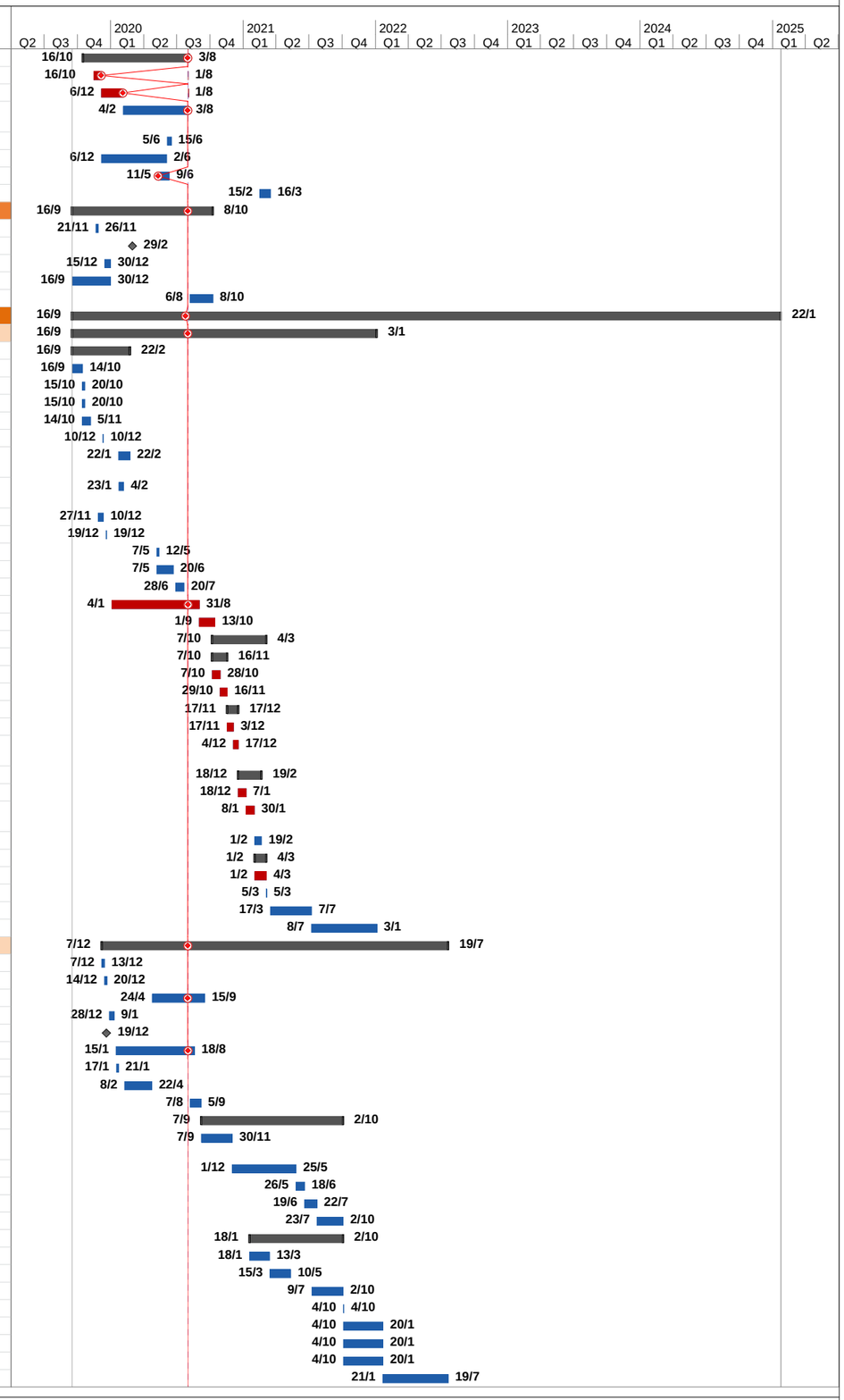
ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowance
75		Subletting for Drainage and Pipe works at UV System no.1	22 days	Wed 15/4/20	Wed 6/5/20	Wed 15/4/20	Wed 6/5/20	0 days	74	372	100%	
76		Subletting for Pipeworks, Utilities, and Roadworks	22 days	Wed 15/4/20	Wed 6/5/20	Wed 15/4/20	Wed 6/5/20	0 days	68	409,406,407,408,405	100%	
77		Subletting for trenchless construction	7 days	Wed 22/4/20	Tue 28/4/20	Wed 22/4/20	Tue 28/4/20	0 days	62	376	100%	
78		Subletting for Traffic Management Consultant	43 days	Thu 9/1/20	Thu 20/2/20	Thu 9/1/20	Thu 20/2/20	0 days	62	91,92	100%	
79		Subletting for Hard Landscape and Soft Landscape	60 days	Mon 5/6/23	Thu 3/8/23	NA	NA	173 days	62	420	0%	
80		**Statutory Submission, Submission & Approval**	**1592 day**	**Mon 16/9/19**	**Wed 24/1/24**	**Mon 16/9/19**	**NA**	**-2 days**			**62%**	
81		Prepare and Submit Subcontractor Management Plan (SMP)	1 day	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	Mon 16/9/19	0 days	2	192	100%	
82		Prepare and Submit Interface Management Plan	60 days	Mon 16/9/19	Thu 6/8/20	Mon 16/9/19	NA	0 days	2	192	90%	
83		Prepare, submit & approve the layout plan of the Temporary Site accommodation	51 days	Fri 20/9/19	Thu 6/8/20	Fri 20/9/19	NA	132.9 days	2	154	90%	
84		Prepare, submit & accept the ELS design for deep excavation	207 days	Thu 24/10/19	Sun 21/6/20	Thu 24/10/19	Sun 21/6/20	0 days	68	171,199,206,222,239,253,264,28	100%	
85		Prepare, submit & accept the Method Statement for Drainage Diversion Works	57 days	Tue 21/4/20	Tue 16/6/20	Tue 21/4/20	Tue 16/6/20	0 days	2	86,369	100%	
86		PM approve the Method Statement for Drainage Diversion Works	13 days	Wed 17/6/20	Mon 29/6/20	Wed 17/6/20	Mon 29/6/20	0 days	85	369	100%	
87		TTA Management	654 days	Mon 16/9/19	Wed 30/6/21	Mon 16/9/19	NA	151 days		459	86%	
88		Excavation Permit Application for San Wan Road (Portion A)	288 days	Wed 16/9/20	Wed 30/6/21	Wed 16/9/20	NA	151 days		455	99%	
89		Excavation Permit Application for Chuk Wan Street (Portion C)	284 days	Mon 7/10/19	Thu 16/7/20	Mon 7/10/19	NA	0 days	2FS+21 days	92FS-45 days	80%	
90		Prepare TTA Plan, submit & approve for footpath for Stage 1 - Drainage Diversion	67 days	Mon 16/9/19	Thu 21/11/19	Mon 16/9/19	Thu 21/11/19	0 days	2	369	100%	
91		Prepare TTA Plan, submit & approve for carriageway at San Wan Road for CLP 13kV substation	45 days	Wed 15/7/20	Fri 28/8/20	Wed 15/7/20	NA	457 days	78	457	0%	
92		Prepare TTA Plan, submit & approve for carriageway at Chuk Wan Street for trenchless works	45 days	Mon 1/6/20	Thu 16/7/20	Mon 1/6/20	Thu 16/7/20	0 days	89FS-45 days,78	375	100%	
93		**Environmental Aspect Submissions**	**332 days**	**Mon 16/9/19**	**Wed 12/8/20**	**Mon 16/9/19**	**NA**	**0 days**	**2**		**98%**	
94		Notification to EPD for Works Commencement	1 day	Wed 18/9/19	Wed 18/9/19	Wed 18/9/19	Wed 18/9/19	0 days	2	192	100%	
95		Apply & approve for Registration as a Chemical Waste Producer	1 day	Wed 18/9/19	Wed 18/9/19	Wed 18/9/19	Wed 18/9/19	0 days	2	192	100%	
96		Apply & approve for a Billing Account for Disposal of Construction Waste	1 day	Wed 18/9/19	Wed 18/9/19	Wed 18/9/19	Wed 18/9/19	0 days	2	192	100%	
97		Apply & approve for Effluent Discharge Licence	21 days	Thu 9/1/20	Mon 3/8/20	Thu 9/1/20	NA	0 days	2	192	90%	
98		Prepare & submit of Project Layout Plan & O-Chart for EP	1 day	Fri 20/9/19	Fri 20/9/19	Fri 20/9/19	Fri 20/9/19	0 days	2	192	100%	
99		Prepare & submit Construction Noise Permits	121 days	Mon 16/9/19	Tue 14/1/20	Mon 16/9/19	Tue 14/1/20	0 days	2	100	100%	
100		Approval of Construction Noise Permits	60 days	Tue 14/1/20	Wed 12/8/20	Tue 14/1/20	NA	0 days	99	192	80%	
101		Prepare, submit Site Management Plan for Trip Ticket System	9 days	Mon 16/9/19	Tue 24/9/19	Mon 16/9/19	Tue 24/9/19	0 days	2		100%	
102		Approval of Site Management Plan for Trip Ticket System	249 days	Tue 24/9/19	Fri 29/5/20	Tue 24/9/19	Fri 29/5/20	0 days		192	100%	
103		Prepare & submit approve Waste Management Plan	9 days	Mon 16/9/19	Tue 24/9/19	Mon 16/9/19	Tue 24/9/19	0 days	2	104	100%	
104		Approval of Waste Management Plan	119 days	Tue 24/9/19	Tue 21/1/20	Tue 24/9/19	Tue 21/1/20	0 days	103	192	100%	
105		Prepare & submit Environmental Management Plan	15 days	Mon 16/9/19	Mon 30/9/19	Mon 16/9/19	Mon 30/9/19	0 days	2	106	100%	
106		Approval of Environmental Management Plan	37 days	Mon 30/9/19	Wed 6/11/19	Mon 30/9/19	Wed 6/11/19	0 days	105	192	100%	
107		Prepare& submit for Temporary Drainage and Management Plan	201 days	Mon 16/9/19	Fri 3/4/20	Mon 16/9/19	Fri 3/4/20	0 days	2	108	100%	
108		Approval of Temporary Drainage and Management Plan	30 days	Fri 20/12/19	Mon 3/8/20	Fri 20/12/19	NA	0 days	107	369	90%	
109		**Prepare, submit & approve for the FSD submissions for CLP 132kV Substation**	**90 days**	**Sat 20/11/21**	**Thu 17/2/22**	**NA**	**NA**	**0 days**			**0%**	
110		Prepare and submit arrangement and schedule to FSD	30 days	Sat 20/11/21	Sun 19/12/21	NA	NA	0 days		111	0%	
111		FSD approve the arrangement and schedule	60 days	Mon 20/12/21	Thu 17/2/22	NA	NA	0 days	110		0%	
112		**Trees Related Submissions**	**1592 day**	**Mon 16/9/19**	**Wed 24/1/24**	**Mon 16/9/19**	**NA**	**-2 days**			**36%**	
113		Initial Tree survey and report submission	194 days	Fri 4/10/19	Tue 14/4/20	Fri 4/10/19	Tue 14/4/20	0 days	2	151	100%	
114		Prepare and submit and approve the Method Statement of Erection of the protective fencing	26 days	Mon 16/9/19	Fri 11/10/19	Mon 16/9/19	Fri 11/10/19	0 days	2	151	100%	
115		Prepare and submit and approve the Method Statement of Tree felling, Preservation, Prunning works & Transplanting	74 days	Fri 11/10/19	Mon 23/12/19	Fri 11/10/19	Mon 23/12/19	0 days	2	151,191	100%	
116		Submit Yearly Tree Risk Assessment and Inspection Report	1590 days	Mon 16/9/19	Wed 24/1/24	Mon 16/9/19	NA	-2 days	2	47FF	20%	
117		**Others**	**1138 day**	**Fri 20/9/19**	**Mon 31/10/22**	**Fri 20/9/19**	**NA**	**0 days**			**64%**	
118		Approval for Lighting Removal at Portion C-1A of the Site from Hyd	114 days	Thu 26/9/19	Fri 17/1/20	Thu 26/9/19	Fri 17/1/20	0 days	2	164	100%	
119		Prepare, submit & approve for commencement of Works near MTRCL protection zone at Sun Wan Road from MTRCL	43 days	Fri 20/9/19	Fri 1/11/19	Fri 20/9/19	Fri 1/11/19	0 days	2	428	100%	
120		Prepare, submit & approve for commencement Works along the riverbank by DSD	90 days	Wed 3/8/22	Mon 31/10/22	NA	NA	0 days		415,416,418,417FS+124 days	0%	
121		**Procurement**	**548 days**	**Mon 16/9/19**	**Tue 16/3/21**	**Mon 16/9/19**	**NA**	**15 days**			**89%**	
122		Prepare and submit the Procurement Procedure	34 days	Mon 16/9/19	Sat 19/10/19	Mon 16/9/19	Sat 19/10/19	0 days	2	123	100%	
123		PM Review & Accept Procurement Procedure	0 days	Sat 19/10/19	Sat 19/10/19	Sat 19/10/19	Sat 19/10/19	0 days	122	124,141,145,146,147,148,152	100%	
124		**Pipe works material**	**408 days**	**Fri 8/11/19**	**Sat 19/12/20**	**Fri 8/11/19**	**NA**	**9 days**	**123**		**89%**	
125		Prepare & submit concrete pipe material particular	199 days	Tue 12/11/19	Thu 28/5/20	Tue 12/11/19	Thu 28/5/20	0 days	2	126	100%	
126		Approval of concrete pipe material	205 days	Thu 28/5/20	Sat 19/12/20	Thu 28/5/20	Sat 19/12/20	0 days	125	127	100%	
127		Procurement, deliver & testing of concrete pipe material (1st batch)	0 days	Fri 8/11/19	Mon 25/11/19	Fri 8/11/19	Mon 25/11/19	0 days	126	368,369	100%	
128		Procurement, deliver & testing of concrete pipe material (remaining)	90 days	Mon 16/12/19	Tue 18/8/20	Mon 16/12/19	NA	131 days		406	80%	
129		Prepare & submit ductile iron pipe material particular	90 days	Thu 19/12/19	Tue 17/3/20	Thu 19/12/19	Tue 17/3/20	0 days	2	130	100%	
130		Approval of ductile iron pipe material	28 days	Tue 17/3/20	Tue 14/4/20	Tue 17/3/20	Tue 14/4/20	0 days	129	131	100%	
131		Procurement, deliver & testing of ductile iorn pipe material	0 days	Wed 18/12/19	Tue 21/1/20	Wed 18/12/19	Tue 21/1/20	0 days	130	408	100%	
132		Prepare & submit HDPE pipe material particular	127 days	Tue 21/1/20	Tue 26/5/20	Tue 21/1/20	Tue 26/5/20	0 days	2FS+120 days	133	100%	
133		Approval of HDPE pipe material	21 days	Tue 26/5/20	Tue 16/6/20	Tue 26/5/20	Tue 16/6/20	0 days	132	134	100%	
134		Procurement, deliver & testing of HDPE pipe material	0 days	Fri 8/5/20	Mon 8/6/20	Fri 8/5/20	Mon 8/6/20	0 days	133	407,408	100%	
135		Prepare & submit stainless steel pipe material particular	8 days	Fri 1/5/20	Fri 8/5/20	Fri 1/5/20	Fri 8/5/20	0 days	2	136	100%	
136		Approval of stainless steel pipe material	21 days	Sat 9/5/20	Wed 5/8/20	Sat 9/5/20	NA	55.8 days	135	137	80%	
137		Procurement, deliver & testing of stainless steel pipe material	90 days	Wed 5/8/20	Tue 3/11/20	NA	NA	55.8 days	136	405	0%	
138		Prepare & submit mild steel steel pipe material particular	1 day	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	0 days	2	139	100%	
139		Approval of mild steel pipe material	30 days	Thu 19/12/19	Sat 18/1/20	Thu 19/12/19	Sat 18/1/20	0 days	138	140	100%	
140		Procurement, deliver & testing of mild steel pipe material	133 days	Mon 9/12/19	Sat 30/5/20	Mon 9/12/19	Sat 30/5/20	0 days	139	405	100%	



Task ▬ Milestone ◆ Summary ▬ Critical ▬

Updated Programme (Status Date: 31/07/2020)

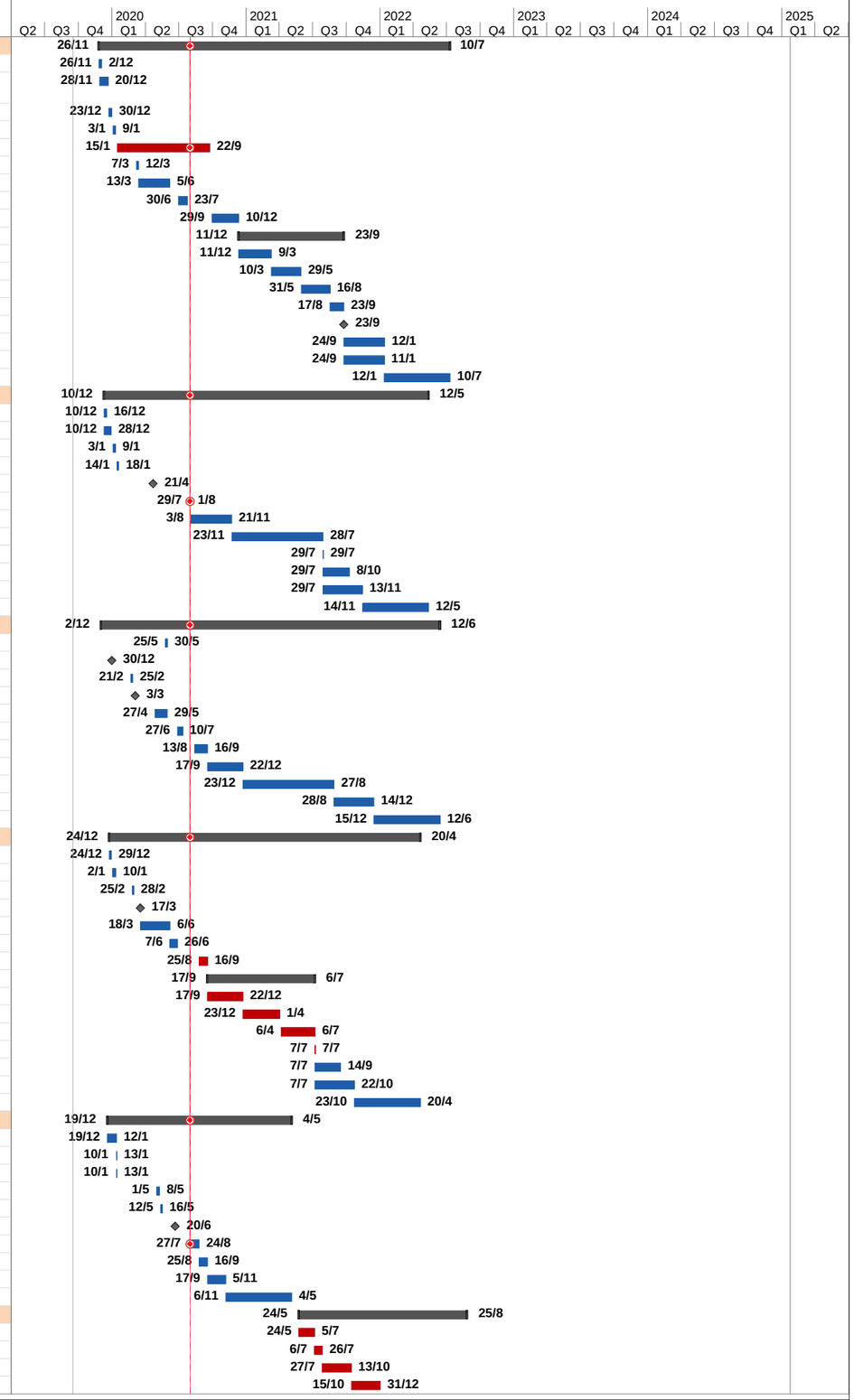
ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowance
141		**Prefabricated steel reinforcement**	**292.61 da**	**Wed 16/10/19**	**Mon 3/8/20**	**Wed 16/10/19**	**NA**	**3.39 days**	**123**		**99%**	
142		Prepare & submit steel reinforcement material particular	21 days	Wed 16/10/19	Sat 1/8/20	Wed 16/10/19	NA	0 days	2FS+60 days	143	99%	
143		Approval of prefabricated steel reinforcement material supplier	60 days	Fri 6/12/19	Sat 1/8/20	Fri 6/12/19	NA	0 days	142	144	99%	
144		Procurement, deliver & testing of prefabricated steel reinforcement material	180 days	Tue 4/2/20	Mon 3/8/20	Tue 4/2/20	NA	3.39 days	143	437,352,316,311,306,300,294,28	99%	
145		Prepare, submit and approve the water proofing material	11 days	Fri 5/6/20	Mon 15/6/20	Fri 5/6/20	Mon 15/6/20	0 days	123	172,223,240,254,437,438	100%	
146		Prepare, submit and approve the concrete mix	180 days	Fri 6/12/19	Tue 2/6/20	Fri 6/12/19	Tue 2/6/20	0 days	123	172,223,240,254,437,438	100%	
147		Prepare, submit and approve the metal works material	30 days	Mon 11/5/20	Tue 9/6/20	NA	NA	58 days	123	148,172,223,240,254,437,438	0%	
148		Prepare, submit and approve the ABWF works material	30 days	Mon 15/2/21	Tue 16/3/21	NA	NA	15 days	147,123	186,211,230,243,255,271,289,29	0%	
149		**Site Preliminary Works**	**315.1 day**	**Mon 16/9/19**	**Thu 8/10/20**	**Mon 16/9/19**	**NA**	**110.9 days**			**66%**	
150		Mobilization for Hoarding	5 days	Thu 21/11/19	Tue 26/11/19	Thu 21/11/19	Tue 26/11/19	0 days	2	151	100%	
151		Hoarding Erection at Portion C	0 days	Wed 27/11/19	Sat 29/2/20	Wed 27/11/19	Sat 29/2/20	0 days	150,113,114,115,152,69		100%	
152		Project Signboard Erection	11 days	Sun 15/12/19	Mon 30/12/19	Sun 15/12/19	Mon 30/12/19	0 days	123	151	100%	
153		Utility applications and Connection	87 days	Mon 16/9/19	Mon 30/12/19	Mon 16/9/19	Mon 30/12/19	0 days	2	154FF	100%	
154		Construction of Site Accommodation in Works Area	52 days	Thu 6/8/20	Thu 8/10/20	NA	NA	110.9 days	83,153FF,65	35	0%	
155	*	**Construction Works of Portion C of the Site**	**1582 day**	**Mon 16/9/19**	**Wed 22/1/25**	**Mon 16/9/19**	**NA**	**1 day**			**8%**	
156	*	**UV System No. 1 & Effluent Pumping Station No. 1**	**683 days**	**Mon 16/9/19**	**Mon 3/1/22**	**Mon 16/9/19**	**NA**	**608 days**			**42%**	
157		**Preliminary Works**	**130 days**	**Mon 16/9/19**	**Sat 22/2/20**	**Mon 16/9/19**	**Sat 22/2/20**	**0 days**			**100%**	
158		Site Clearance & Site Set Up (NCE no. 0005, 0006)	23 days	Mon 16/9/19	Mon 14/10/19	Mon 16/9/19	Mon 14/10/19	0 days	2	159	100%	
159		Tree Felling Works	6 days	Tue 15/10/19	Sun 20/10/19	Tue 15/10/19	Sun 20/10/19	0 days	158	160	100%	
160		Trial Pit Excavation & UU Detection Works	5 days	Tue 15/10/19	Sun 20/10/19	Tue 15/10/19	Sun 20/10/19	0 days	159	161	100%	
161		Temporary Footpath Diversion	20 days	Mon 14/10/19	Tue 5/11/19	Mon 14/10/19	Tue 5/11/19	0 days	160	162,165	100%	
162		Temporary diverted foorpath open to public	1 day	Tue 10/12/19	Tue 10/12/19	Tue 10/12/19	Tue 10/12/19	0 days	161	164,163	100%	
163		Additional Liaison and diversion of HyD Street Light Cables (NCE no. 0007)	25 days	Wed 22/1/20	Sat 22/2/20	Wed 22/1/20	Sat 22/2/20	0 days	162	164	100%	
164		Removal of Existing Street light and Provision of Temporary Street light	8 days	Thu 23/1/20	Tue 4/2/20	Thu 23/1/20	Tue 4/2/20	0 days	118,162,163	368	100%	
165		Predrilling Works (8no, 1rig, 3days/drillhole/rig) (NCE no. 10)	12 days	Wed 27/11/19	Tue 10/12/19	Wed 27/11/19	Tue 10/12/19	0 days	161	166	100%	
166		Installation of Monitoring Points	1 day	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	0 days	165	167,170	100%	
167		Setting up plant for pre-bored socked H-pile Installation	5 days	Thu 7/5/20	Tue 12/5/20	Thu 7/5/20	Tue 12/5/20	0 days	166,168SS-5 days		100%	
168		Pre-bored Socketed H-Pile Installation (34 Nos, 1 Rig, 3days/rig/pile)	39 days	Thu 7/5/20	Sat 20/6/20	Thu 7/5/20	Sat 20/6/20	0 days	67,370,371	169,261,167SS-5 days	100%	6
169		Pile Loading Test	18 days	Sun 28/6/20	Mon 20/7/20	Sun 28/6/20	Mon 20/7/20	0 days	168,251FS+5 days	280FS+5 days	100%	
170		Sheetpile Installation (FSP IV, 2200sq.m, 1 Rig) (NCE no. 10)	195 days	Sat 4/1/20	Mon 31/8/20	Sat 4/1/20	NA	-10 days	166	172,171	90%	
171		ELS Works (incl. Strut (4-layers) Installation & Excavation (3,700 cu.m)	35 days	Tue 1/9/20	Tue 13/10/20	NA	NA	-10 days	84,70,170,69	174FS-6 days	0%	
172		**R.C. Structure (370sq.m)**	**121 days**	**Wed 7/10/20**	**Thu 4/3/21**	**NA**	**NA**	**-10 days**	**145,146,147,71,144,170**		**0%**	
173		**Below Ground Level Stage no.1 @ -1.10mPD**	**34 days**	**Wed 7/10/20**	**Mon 16/11/20**	**NA**	**NA**	**-10 days**			**0%**	**5**
174		Base slab Construction (162 sq.m)	18 days	Wed 7/10/20	Wed 28/10/20	NA	NA	-10 days	171FS-6 days	175	0%	
175		Walls and Slabs Construction @-1.10mPD to +2.50mPD	16 days	Thu 29/10/20	Mon 16/11/20	NA	NA	-10 days	174,72	177	0%	
176		**Below Ground Level Stage no.2 @ +1.50mPD**	**27 days**	**Tue 17/11/20**	**Thu 17/12/20**	**NA**	**NA**	**-10 days**			**0%**	**5**
177		Base slab Construction (170sq.m)	15 days	Tue 17/11/20	Thu 3/12/20	NA	NA	-10 days	175	178	0%	
178		Walls and Slabs Construction @+1.5mPD to +4.9mPD & waterproofing works	12 days	Fri 4/12/20	Thu 17/12/20	NA	NA	-10 days	177,72	180	0%	
179		**Below Ground Level Stage no.3 @ +3.80mPD**	**49 days**	**Fri 18/12/20**	**Fri 19/2/21**	**NA**	**NA**	**-10 days**			**0%**	**5**
180		Base slab Construction (15 sq.m + 40 sq.m)	15 days	Fri 18/12/20	Thu 7/1/21	NA	NA	-10 days	178	181	0%	
181		Walls and Slabs Construction @+3.80mPD to +7.4mPD & waterproofing works	20 days	Fri 8/1/21	Sat 30/1/21	NA	NA	-10 days	180,72	182,184	0%	
182		Extraction of Sheetpiles	14 days	Mon 1/2/21	Fri 19/2/21	NA	NA	2 days	181	35FF	0%	
183		**Above Ground Level @ +7.4mPD**	**25 days**	**Mon 1/2/21**	**Thu 4/3/21**	**NA**	**NA**	**-10 days**			**0%**	**4**
184	KD1A	Walls, Slabs and staircase Construction @+7.4mPD to 16.4mPD	25 days	Mon 1/2/21	Thu 4/3/21	NA	NA	-10 days	181	35FF,185,186,324	0%	
185		**Allow access to Contarctor DE/2018/03 for E&M Installation**	**1 day**	**Fri 5/3/21**	**Fri 5/3/21**	**NA**	**NA**	**112 days**	**184**	**43FF**	**0%**	
186	SW1	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining	90 days	Wed 17/3/21	Wed 7/7/21	NA	NA	13 days	148,73,184	43FF,187	0%	
187	SW5	Surrounding Site formation works and road works	180 days	Thu 8/7/21	Mon 3/1/22	NA	NA	749 days	186	47FF	0%	
188	*	**Sludge Digesters and Distribution Chamber**	**772 days**	**Sat 7/12/19**	**Tue 19/7/22**	**Sat 7/12/19**	**NA**	**450 days**			**25%**	
189		Site Clearance & Site Set Up	6 days	Sat 7/12/19	Fri 13/12/19	Sat 7/12/19	Fri 13/12/19	0 days	190SF		100%	
190		Trial Pit Excavation & UU Detection Works	6 days	Sat 14/12/19	Fri 20/12/19	Sat 14/12/19	Fri 20/12/19	0 days	192SF	189SF	100%	
191		Tree Transplanting Works (TC080)	120 days	Fri 24/4/20	Tue 15/9/20	Fri 24/4/20	NA	9 days	115	199FS-8 days	70%	
192		Predrilling Works (50no., 4rig, 3 days/drillhole/rig)(NCE no. 10)	10 days	Sat 28/12/19	Thu 9/1/20	Sat 28/12/19	Thu 9/1/20	0 days	66,81,82,94,95,96,98,97,100,10	193,190SF,194	100%	
193		Installation of Monitoring Points	0 days	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	Thu 19/12/19	0 days	192	196	100%	
194		Sheetpile Installation (NCE no. 10, 24)	175 days	Wed 15/1/20	Tue 18/8/20	Wed 15/1/20	NA	103 days	192	196SS+20 days,205,252FS-5 day	95%	
195		Setting up plant for pre-bored socked H-pile Installation	4 days	Fri 17/1/20	Tue 21/1/20	Fri 17/1/20	Tue 21/1/20	0 days		196	100%	
196		Pre-bored Sockedted H-Pile Installation (127nos, 3rig, 3days/rig/pile)	60 days	Sat 8/2/20	Wed 22/4/20	Sat 8/2/20	Wed 22/4/20	0 days	67,193,194SS+20 days,195	197,351	100%	6
197		Pile Loading Test	26 days	Fri 7/8/20	Sat 5/9/20	NA	NA	9 days	196,280SS+10 days	199	0%	
198		Construction of Digestors	318 days	Mon 7/9/20	Sat 2/10/21	NA	NA	9 days			0%	
199		ELS Works (incl. Strut (4-layers) Installation & Excavation (17,600 cu.m))	70 days	Mon 7/9/20	Mon 30/11/20	NA	NA	9 days	84,70,197,69,191FS-8 days	200,206	0%	6
200		Construction of Digesters & waterproofing works	140 days	Tue 1/12/20	Tue 25/5/21	NA	NA	9 days	199,144,72	201,207	0%	10
201		Water Test	20 days	Wed 26/5/21	Fri 18/6/21	NA	NA	9 days	200	202	0%	
202		Apply Internal Anti-corrosion Protective Lining	28 days	Sat 19/6/21	Thu 22/7/21	NA	NA	9 days	201	203	0%	
203		Construction of Roof Slab	60 days	Fri 23/7/21	Sat 2/10/21	NA	NA	9 days	202	207FF	0%	
204		Construction of Distribution Chamber	210 days	Mon 18/1/21	Sat 2/10/21	NA	NA	9 days			0%	
205	SP	Sheet Pile Installation	45 days	Mon 18/1/21	Sat 13/3/21	NA	NA	39 days	194	206	0%	
206		ELS Works (incl. Strut (3-layers) Installation & Excavation)	45 days	Mon 15/3/21	Mon 10/5/21	NA	NA	39 days	84,70,205,69,199	207,315	0%	10
207	KD3A	Construction of Distribution Chamber	72 days	Fri 9/7/21	Sat 2/10/21	NA	NA	9 days	206,200,203FF	211,208,37FF,210,209	0%	10
208	KD3A	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**1 day**	**Mon 4/10/21**	**Mon 4/10/21**	**NA**	**NA**	**9 days**	**207**	**37FF**	**0%**	
209		Drainage System (within Bldg/ Structure) Installation	90 days	Mon 4/10/21	Thu 20/1/22	NA	NA	211 days	207	45FF	0%	
210		FRP Walkway & Miscellanous Installation	90 days	Mon 4/10/21	Thu 20/1/22	NA	NA	211 days	207	45FF	0%	
211	SW3	ABWF Works & BS Works, incl. External Linning	90 days	Mon 4/10/21	Thu 20/1/22	NA	NA	210 days	207,148,73	45FF,212	0%	
212	SW5	Surrounding Site formation works and road works	180 days	Fri 21/1/22	Tue 19/7/22	NA	NA	552 days	211	47FF	0%	



Task | Milestone | Summary | Critical

Updated Programme (Status Date: 31/07/2020)

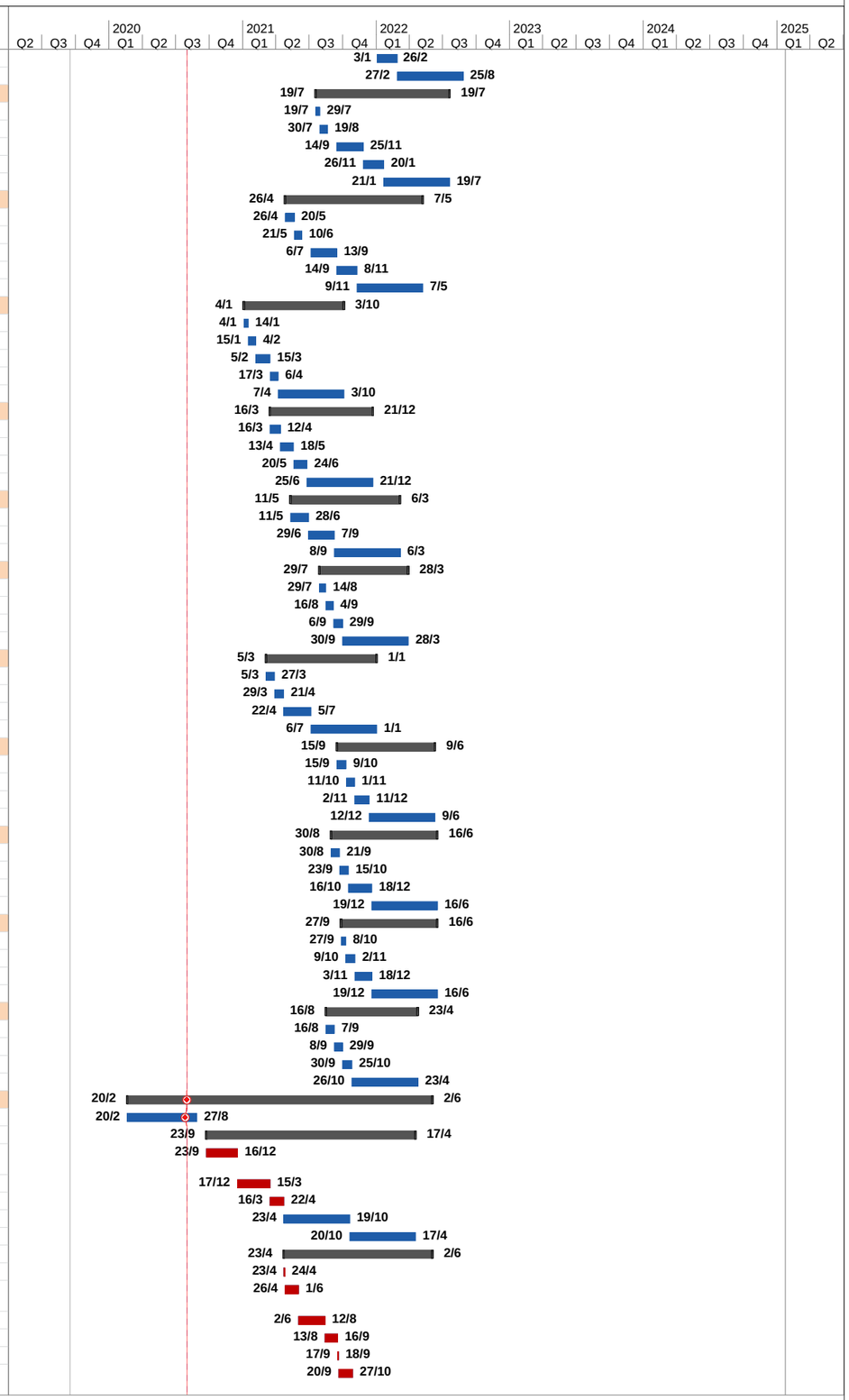
ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowance
213	*	**Sludge Dewatering Building**	**774 days**	**Tue 26/11/19**	**Sun 10/7/22**	**Tue 26/11/19**	**NA**	**458 days**			**30%**	
214		Site Clearance & Site Set Up	6 days	Tue 26/11/19	Mon 2/12/19	Tue 26/11/19	Mon 2/12/19	0 days	2	215	100%	
215		Predrilling Works (39no.4rig, 3days/drillhole/rig)(additional length NCE no.10)	20 days	Thu 28/11/19	Fri 20/12/19	Thu 28/11/19	Fri 20/12/19	0 days	66,214	217	100%	
216		Additional Predrilling Works (11no.)	8 days	Mon 23/12/19	Mon 30/12/19	Mon 23/12/19	Mon 30/12/19	0 days			100%	
217		Installation of Monitoring Points	6 days	Fri 3/1/20	Thu 9/1/20	Fri 3/1/20	Thu 9/1/20	0 days	215	218	100%	
218		Sheet Pile Installation (NCE no. 10, 14, 24)	205 days	Wed 15/1/20	Tue 22/9/20	Wed 15/1/20	NA	0 days	217	351,219SS+15 days,222FS+5 da	80%	
219		Setting up plant for pre-bored socked H-pile Installation	5 days	Sat 7/3/20	Thu 12/3/20	Sat 7/3/20	Thu 12/3/20	0 days	218SS+15 days	220,349SS-14 days	100%	
220		Pre-bored Socketed H-Pile Installation (202 Nos, 4 Rig, 3days/rig/pile)	67 days	Fri 13/3/20	Fri 5/6/20	Fri 13/3/20	Fri 5/6/20	0 days	67,219	249,221	100%	6
221		Pile Loading Test	20 days	Tue 30/6/20	Thu 23/7/20	Tue 30/6/20	Thu 23/7/20	0 days	220	222,238FS+5 days	100%	
222		ELS Works (incl. Strut (3-layers) Installation & Excavation (25,000 cu.m))	60 days	Tue 29/9/20	Thu 10/12/20	NA	NA	9 days	84,70,221,69,218FS+5 days	223,224,405,406,407,409,408	0%	10
223		R.C. Structure	232 days	Fri 11/12/20	Thu 23/9/21	NA	NA	9 days	145,146,147,71,222,144	230,229	0%	10
224		Basement Consturction & waterproofing works	70 days	Fri 11/12/20	Tue 9/3/21	NA	NA	9 days	222	225	0%	
225		Ground Floor Construction @ +7.55mpD	65 days	Wed 10/3/21	Sat 29/5/21	NA	NA	9 days	224	226	0%	
226		1/F Construction @ +15.3m mPD	65 days	Mon 31/5/21	Mon 16/8/21	NA	NA	9 days	225	227	0%	
227	KD3B	Roof Construction @ +25.65mPD	32 days	Tue 17/8/21	Thu 23/9/21	NA	NA	9 days	226	38FF,329FS-7 days,228	0%	
228	**KD3B**	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**0 days**	**Thu 23/9/21**	**Thu 23/9/21**	**NA**	**NA**	**9 days**	**227**	**38FF**	**0%**	
229		Allow access to Contarctor DE/2018/03 for E&M Installation	90 days	Fri 24/9/21	Wed 12/1/22	NA	NA	218 days	223	45FF	0%	
230	SW5	ABWF Works & BS Works	89 days	Fri 24/9/21	Tue 11/1/22	NA	NA	218 days	223,148,73	45FF,231	0%	
231	SW5	Surrounding Site formation works and road works	180 days	Wed 12/1/22	Sun 10/7/22	NA	NA	561 days	230	47FF	0%	
232	*	**Combined Heat Power Building**	**714 days**	**Tue 10/12/19**	**Thu 12/5/22**	**Tue 10/12/19**	**NA**	**506 days**			**5%**	
233		Site Clearance & Site Set Up	6 days	Tue 10/12/19	Mon 16/12/19	Tue 10/12/19	Mon 16/12/19	0 days	2,234SF		100%	
234		Predrilling Works (15no. 2rig, 3days/drillhole/rig) (NCE no. 10)	15 days	Tue 10/12/19	Sat 28/12/19	Tue 10/12/19	Sat 28/12/19	0 days	66FS+28 days	235,233SF	100%	
235		Installation of Monitoring Points	6 days	Fri 3/1/20	Thu 9/1/20	Fri 3/1/20	Thu 9/1/20	0 days	234	237	100%	
236		Setting up plant for pre-bored socked H-pile Installation (NCE no. 10)	5 days	Tue 14/1/20	Sat 18/1/20	Tue 14/1/20	Sat 18/1/20	0 days		237	100%	
237		Pre-bored Socketed H-Pile Installation (50 Nos, 2 Rig 3days/rig/pile)	0 days	Wed 15/1/20	Tue 21/4/20	Wed 15/1/20	Tue 21/4/20	0 days	67,235,236,431	238	100%	6
238		Pile Loading Test	4 days	Wed 29/7/20	Sat 1/8/20	Wed 29/7/20	Sat 1/8/20	0 days	237,221FS+5 days	239	100%	
239		Excavation for Pile Cap (2,060 cu.m)	93 days	Mon 3/8/20	Sat 21/11/20	NA	NA	56 days	84,70,238,69	240	0%	10
240	KD3C	R.C. Structure	200 days	Mon 23/11/20	Wed 28/7/21	NA	NA	56 days	145,146,147,71,239,144	39FF,242,243,241,319	0%	10
241	**KD3C**	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**1 day**	**Thu 29/7/21**	**Thu 29/7/21**	**NA**	**NA**	**56 days**	**240**	**39FF**	**0%**	
242		Drainage System (within Bldg/ Structure) Installation	60 days	Thu 29/7/21	Fri 8/10/21	NA	NA	296 days	240	45FF	0%	
243	SW3	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining	90 days	Thu 29/7/21	Sat 13/11/21	NA	NA	265 days	240,148,73	45FF,244	0%	
244	SW5	Surrounding Site formation works and road works	180 days	Sun 14/11/21	Thu 12/5/22	NA	NA	620 days	243	47FF	0%	
245	*	**Sewage Pumping Station**	**746 days**	**Mon 2/12/19**	**Sun 12/6/22**	**Mon 2/12/19**	**NA**	**481 days**			**8%**	
246		Site Clearance & Site Set Up	6 days	Mon 25/5/20	Sat 30/5/20	Mon 25/5/20	Sat 30/5/20	0 days	2	247	100%	
247		Predrilling Works (4no.1rig, 3days/drillhole/rig)	0 days	Mon 2/12/19	Mon 30/12/19	Mon 2/12/19	Mon 30/12/19	0 days	66FS+14 days,246	248	100%	
248		Installation of Monitoring Points	4 days	Fri 21/2/20	Tue 25/2/20	Fri 21/2/20	Tue 25/2/20	0 days	247		100%	
249		Setting up plant for pre-bored socked H-pile Installation	0 days	Thu 27/2/20	Tue 3/3/20	Thu 27/2/20	Tue 3/3/20	0 days	220	250	100%	
250		Pre-bored Socketed H-Pile Installation (22 Nos, 1 Rig, 3days/rig/pile)	27 days	Mon 27/4/20	Fri 29/5/20	Mon 27/4/20	Fri 29/5/20	0 days	67,249	251	100%	6
251		Pile Loading Test	11 days	Sat 27/6/20	Fri 10/7/20	Sat 27/6/20	Fri 10/7/20	0 days	250,263FS+5 days	253,169FS+5 days,252	100%	
252		Sheet Pile Installation	30 days	Thu 13/8/20	Wed 16/9/20	NA	NA	103 days	251,194FS-5 days	253	0%	
253		ELS Works (incl. Strut (3-layers) Installation & Excavation (1,440 cu.m))	80 days	Thu 17/9/20	Tue 22/12/20	NA	NA	103 days	84,70,251,69,252	254	0%	10
254	KD3E	R.C. Structure & waterproofing works	200 days	Wed 23/12/20	Fri 27/8/21	NA	NA	103 days	145,146,147,71,282,253,144	41FF,255	0%	10
255	SW3	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining	90 days	Sat 28/8/21	Tue 14/12/21	NA	NA	239 days	148,73,254,72	45FF,256	0%	
256	SW5	Surrounding Site formation works and road works	180 days	Wed 15/12/21	Sun 12/6/22	NA	NA	589 days	255	47FF	0%	
257	*	**Workshop No. 2**	**685 days**	**Tue 24/12/19**	**Wed 20/4/22**	**Tue 24/12/19**	**NA**	**523 days**			**14%**	
258		Site Clearance & Site Set Up	3 days	Tue 24/12/19	Sun 29/12/19	Tue 24/12/19	Sun 29/12/19	0 days	2	259	100%	
259		Predrilling Works (10no.1rig, 3days/drillhole/rig) (NCE no. 10)	8 days	Thu 2/1/20	Fri 10/1/20	Thu 2/1/20	Fri 10/1/20	0 days	66,258	260	100%	
260		Installation of Monitoring Points	4 days	Tue 25/2/20	Fri 28/2/20	Tue 25/2/20	Fri 28/2/20	0 days	259	262,261	100%	
261		Setting up plant for pre-bored socked H-pile Installation	0 days	Tue 10/3/20	Tue 17/3/20	Tue 10/3/20	Tue 17/3/20	0 days	260,168	262	100%	
262		Pre-bored Socketed H-Pile Installation (36 Nos, 2 Rig, 3days/rig/pile)	64 days	Wed 18/3/20	Sat 6/6/20	Wed 18/3/20	Sat 6/6/20	0 days	67,260,261	263,279	100%	6
263		Pile Loading Test	16 days	Sun 7/6/20	Fri 26/6/20	Sun 7/6/20	Fri 26/6/20	0 days	262,432FS+5 days	264,251FS+5 days	100%	
264		Excavation for Pile Cap (1,800 cu.m)	20 days	Tue 25/8/20	Wed 16/9/20	NA	NA	0 days	84,70,263,69	266,405,406,407,409,408	0%	
265		**R.C. Structure**	**235 days**	**Thu 17/9/20**	**Tue 6/7/21**	**NA**	**NA**	**0 days**			**0%**	**10**
266		Ground Floor Construction @ +6.30mpD	80 days	Thu 17/9/20	Tue 22/12/20	NA	NA	0 days	264,144	267	0%	
267		First Floor Construction @ +13.50mpD	80 days	Wed 23/12/20	Thu 1/4/21	NA	NA	0 days	266	268	0%	
268	KD3D	Roof Construction @+19.00mPD	75 days	Tue 6/4/21	Tue 6/7/21	NA	NA	0 days	267	270,271,40FF,269,285FS-36 day	0%	
269	**KD3D**	**Allow access to Contarctor DE/2018/03 for E&M Installation**	**1 day**	**Wed 7/7/21**	**Wed 7/7/21**	**NA**	**NA**	**0 days**	**268**	**40FF**	**0%**	
270		Drainage System (within Bldg/ Structure) Installation	60 days	Wed 7/7/21	Tue 14/9/21	NA	NA	315 days	268	45FF	0%	
271	SW3	ABWF Works & BS Works & Apply Internal Anti-corrosion Protective Lining	90 days	Wed 7/7/21	Fri 22/10/21	NA	NA	284 days	148,73,268	45FF,272	0%	
272	SW5	Surrounding Site formation works and road works	180 days	Sat 23/10/21	Wed 20/4/22	NA	NA	642 days	271	47FF	0%	
273	*	**Thermal Hydrolysis Pretreatment**	**404 days**	**Thu 19/12/19**	**Tue 4/5/21**	**Thu 19/12/19**	**NA**	**808 days**			**12%**	
274		Site Clearance & Site Set Up	18 days	Thu 19/12/19	Sun 12/1/20	Thu 19/12/19	Sun 12/1/20	0 days	2	275,276	100%	
275		Predrilling Works (3no.1rig, 3days/drillhole/rig) (NCE no. 10)	1 day	Fri 10/1/20	Mon 13/1/20	Fri 10/1/20	Mon 13/1/20	0 days	66FS+24 days,274	277	100%	
276		Additional Predrilling Works (4no.) (NCE no. 12)	1 day	Fri 10/1/20	Mon 13/1/20	Fri 10/1/20	Mon 13/1/20	0 days	274	277	100%	
277		Installation of Monitoring Points	6 days	Fri 1/5/20	Fri 8/5/20	Fri 1/5/20	Fri 8/5/20	0 days	275,276	279	100%	
278		Setting up plant for pre-bored socked H-pile Installation	5 days	Tue 12/5/20	Sat 16/5/20	Tue 12/5/20	Sat 16/5/20	0 days		279	100%	
279		Pre-bored Socketed H-Pile Installation (15 Nos, 1 Rig, 3days/rig/pile)	0 days	Mon 18/5/20	Sat 20/6/20	Mon 18/5/20	Sat 20/6/20	0 days	67,277,278,262	280	100%	6
280		Pile Loading Test	25 days	Mon 27/7/20	Mon 24/8/20	Mon 27/7/20	NA	143 days	279,169FS+5 days	281,197SS+10 days	20%	
281		Excavation for Pile Cap (160 cu.m)	20 days	Tue 25/8/20	Wed 16/9/20	NA	NA	143 days	84,70,280	282	0%	
282	KD3E	R.C. Plinth	40 days	Thu 17/9/20	Thu 5/11/20	NA	NA	143 days	281	41FF,254,283	0%	
283	SW5	Surrounding Site formation works and road works	180 days	Fri 6/11/20	Tue 4/5/21	NA	NA	993 days	282	47FF	0%	
284	*	**Ferric Chloride Dosing Facilities**	**375 days**	**Mon 24/5/21**	**Thu 25/8/22**	**NA**	**NA**	**0 days**			**0%**	
285		Excavation for Raft Footing (105 cu.m)	35 days	Mon 24/5/21	Mon 5/7/21	NA	NA	0 days	2,268FS-36 days	286	0%	
286		Plate Load Test	18 days	Tue 6/7/21	Mon 26/7/21	NA	NA	0 days	285	287	0%	
287		R.C. Structure	66 days	Tue 27/7/21	Wed 13/10/21	NA	NA	0 days	286,71,144	288	0%	5
288	KD3E	Steel Roof Structure (On-site Fabrication)	65 days	Fri 15/10/21	Fri 31/12/21	NA	NA	0 days	287	41FF,289	0%	



Task ▬ Milestone ◆ Summary ▬ Critical ▬

Updated Programme (Status Date: 31/07/2020)

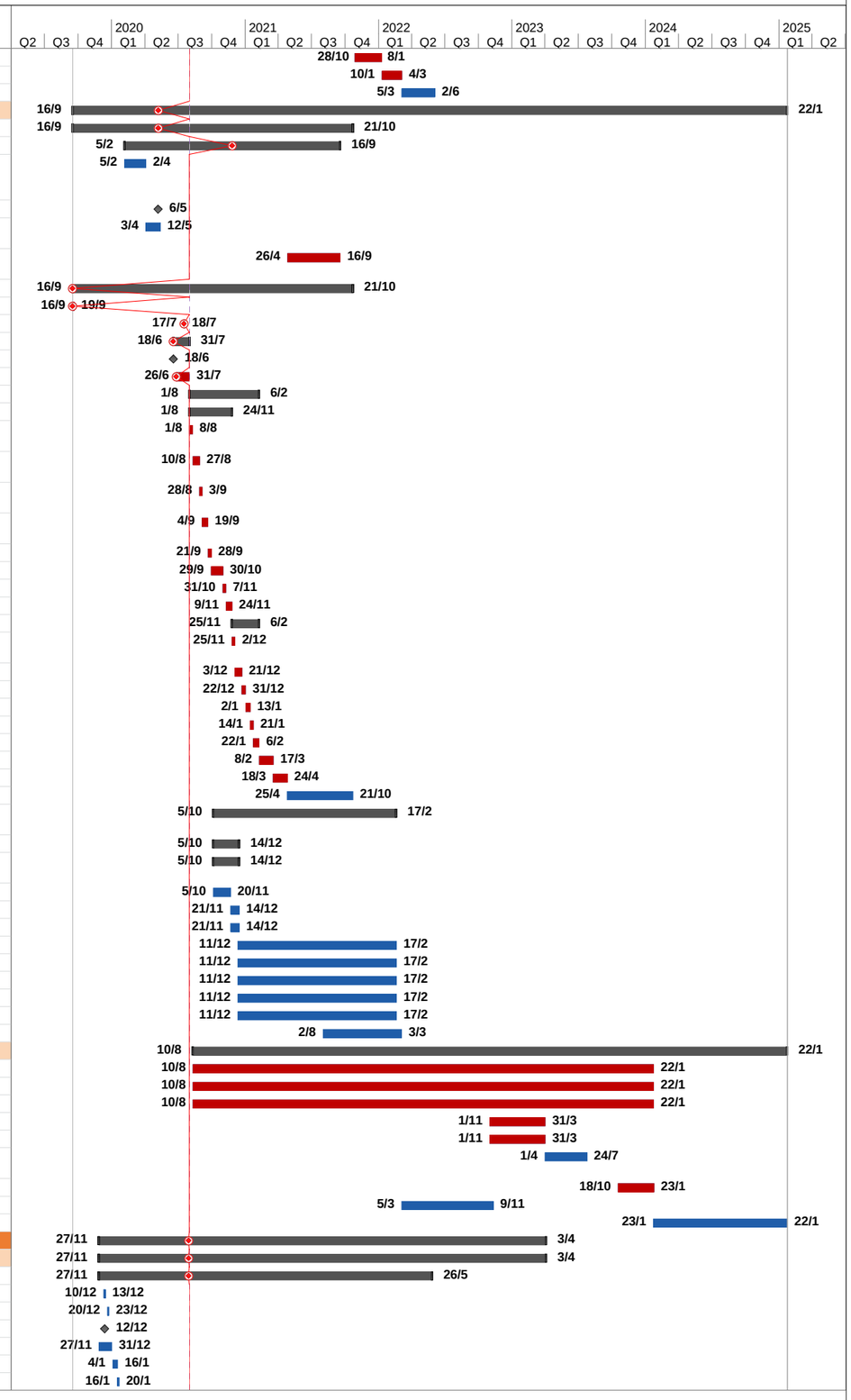
ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowance
289	SW3	ABWF Works & BS Works	45 days	Mon 3/1/22	Sat 26/2/22	NA	NA	181 days	288,148,73	45FF,290	0%	
290	SW5	Surrounding Site formation works and road works	180 days	Sun 27/2/22	Thu 25/8/22	NA	NA	515 days	289	47FF	0%	
291	*	**Fire Hydrant and Booster Pump Room**	**297 days**	**Mon 19/7/21**	**Tue 19/7/22**	**NA**	**NA**	**50 days**			**0%**	
292		Excavation for Raft Footing (160 cu.m)	10 days	Mon 19/7/21	Thu 29/7/21	NA	NA	50 days	2,298	293,339	0%	
293		Plate Load Test	18 days	Fri 30/7/21	Thu 19/8/21	NA	NA	50 days	292	294	0%	
294	KD3E	R.C. Structure & waterproofing works	60 days	Tue 14/9/21	Thu 25/11/21	NA	NA	29 days	293,71,300,144,72	295,41FF	0%	5
295	SW3	ABWF Works & BS Works	45 days	Fri 26/11/21	Thu 20/1/22	NA	NA	210 days	294,148,73	45FF,296	0%	
296	SW5	Surrounding Site formation works and road works	180 days	Fri 21/1/22	Tue 19/7/22	NA	NA	552 days	295	47FF	0%	
297	*	**Transformer and Switchroom**	**306 days**	**Mon 26/4/21**	**Sat 7/5/22**	**NA**	**NA**	**48 days**			**0%**	
298		Excavation for Raft Footing (310 cu.m)	20 days	Mon 26/4/21	Thu 20/5/21	NA	NA	48 days	2,324	299,292	0%	
299		Plate Load Test	18 days	Fri 21/5/21	Thu 10/6/21	NA	NA	48 days	298	300	0%	
300	KD3E	R.C. Structure	60 days	Tue 6/7/21	Mon 13/9/21	NA	NA	29 days	299,71,326,144	301,41FF,294	0%	5
301	SW3	ABWF Works & BS Works	45 days	Tue 14/9/21	Mon 8/11/21	NA	NA	270 days	300,148,73	45FF,302	0%	
302	SW5	Surrounding Site formation works and road works	180 days	Tue 9/11/21	Sat 7/5/22	NA	NA	625 days	301	47FF	0%	
303	*	**Water Meter Cabinet**	**222 days**	**Mon 4/1/21**	**Sun 3/10/21**	**NA**	**NA**	**206 days**			**0%**	
304		Excavation for Raft Footing (6 cu.m)	10 days	Mon 4/1/21	Thu 14/1/21	NA	NA	206 days	2	305	0%	
305		Plate Load Test	18 days	Fri 15/1/21	Thu 4/2/21	NA	NA	206 days	304	306	0%	
306		R.C. Structure	30 days	Fri 5/2/21	Mon 15/3/21	NA	NA	206 days	305,71,144	307,310	0%	3
307	SW4	ABWF Works & BS Works	15 days	Wed 17/3/21	Tue 6/4/21	NA	NA	271 days	306,148,73	46FF,308	0%	
308	SW5	Surrounding Site formation works and road works	180 days	Wed 7/4/21	Sun 3/10/21	NA	NA	841 days	307	47FF	0%	
309	*	**Guard House**	**231 days**	**Tue 16/3/21**	**Tue 21/12/21**	**NA**	**NA**	**206 days**			**0%**	
310		Excavation to Formation	21 days	Tue 16/3/21	Mon 12/4/21	NA	NA	206 days	2,306	311	0%	
311		R.C. Structure	30 days	Tue 13/4/21	Tue 18/5/21	NA	NA	206 days	71,310,144	312	0%	3
312	SW4	ABWF Works & BS Works	30 days	Thu 20/5/21	Thu 24/6/21	NA	NA	206 days	311,148,73	46FF,313	0%	
313	SW5	Surrounding Site formation works and road works	180 days	Fri 25/6/21	Tue 21/12/21	NA	NA	762 days	312	47FF	0%	
314	*	**Coolers Pumping Station**	**245 days**	**Tue 11/5/21**	**Sun 6/3/22**	**NA**	**NA**	**39 days**			**0%**	
315		Excavation for Raft Footing (185 cu.m)	40 days	Tue 11/5/21	Mon 28/6/21	NA	NA	39 days	2,206	316,334	0%	
316	SW4	R.C. Structure	60 days	Tue 29/6/21	Tue 7/9/21	NA	NA	39 days	315,71,144	41FF,336,317	0%	5
317	SW5	Surrounding Site formation works and road works	180 days	Wed 8/9/21	Sun 6/3/22	NA	NA	687 days	316	47FF	0%	
318	*	**Waste Gas Buner**	**199 days**	**Thu 29/7/21**	**Mon 28/3/22**	**NA**	**NA**	**56 days**			**0%**	
319		Excavation for Raft Rooting (75cu.m)	15 days	Thu 29/7/21	Sat 14/8/21	NA	NA	56 days	2,240	320,344	0%	
320		Plate Load Test	18 days	Mon 16/8/21	Sat 4/9/21	NA	NA	56 days	319	321	0%	
321	KD3E	R.C. Plinth	20 days	Mon 6/9/21	Wed 29/9/21	NA	NA	56 days	320,71	41FF,346,322	0%	
322	SW5	Surrounding Site formation works and road works	180 days	Thu 30/9/21	Mon 28/3/22	NA	NA	665 days	321	47FF	0%	
323	*	**Plant Services Water System**	**247 days**	**Fri 5/3/21**	**Sat 1/1/22**	**NA**	**NA**	**29 days**			**0%**	
324		Excavation for Raft Footing (800 cu.m)	20 days	Fri 5/3/21	Sat 27/3/21	NA	NA	29 days	2,184	325,298	0%	
325		Plate Load Test	18 days	Mon 29/3/21	Wed 21/4/21	NA	NA	29 days	324	326	0%	
326	KD3E	Basement Construction @+1.20mPD	60 days	Thu 22/4/21	Mon 5/7/21	NA	NA	29 days	325,71	41FF,300,327	0%	
327	SW5	Surrounding Site formation works and road works	180 days	Tue 6/7/21	Sat 1/1/22	NA	NA	751 days	326	47FF	0%	
328	*	**Deodorization System No. 11**	**214 days**	**Wed 15/9/21**	**Thu 9/6/22**	**NA**	**NA**	**15 days**			**0%**	
329		Excavation for Raft Footing (1,280 cu.m)	20 days	Wed 15/9/21	Sat 9/10/21	NA	NA	15 days	2,227FS-7 days	330	0%	
330		Plate Load Test	18 days	Mon 11/10/21	Mon 1/11/21	NA	NA	15 days	329	331	0%	
331	KD3E	R.C. Plinth	35 days	Tue 2/11/21	Sat 11/12/21	NA	NA	15 days	330,71	41FF,332	0%	
332	SW5	Surrounding Site formation works and road works	180 days	Sun 12/12/21	Thu 9/6/22	NA	NA	592 days	331	47FF	0%	
333	*	**Biogas Holder**	**234 days**	**Mon 30/8/21**	**Thu 16/6/22**	**NA**	**NA**	**9 days**			**0%**	
334		Excavation for Raft Footing (1,120 cu.m)	20 days	Mon 30/8/21	Tue 21/9/21	NA	NA	9 days	2,315	335	0%	
335		Plate Load Test	18 days	Thu 23/9/21	Fri 15/10/21	NA	NA	9 days	334	336	0%	
336	KD3E	R.C. Plinth	55 days	Sat 16/10/21	Sat 18/12/21	NA	NA	9 days	335,71,316	41FF,337	0%	
337	SW5	Surrounding Site formation works and road works	180 days	Sun 19/12/21	Thu 16/6/22	NA	NA	585 days	336	47FF	0%	
338	*	**H2S Removal System**	**211 days**	**Mon 27/9/21**	**Thu 16/6/22**	**NA**	**NA**	**9 days**			**0%**	
339		Excavation for Raft Footing (396 cu.m)	10 days	Mon 27/9/21	Fri 8/10/21	NA	NA	9 days	2,292	340	0%	
340		Plate Load Test	20 days	Sat 9/10/21	Tue 2/11/21	NA	NA	9 days	339	341	0%	
341	KD3E	R.C. Plinth	40 days	Wed 3/11/21	Sat 18/12/21	NA	NA	9 days	340	41FF,342	0%	
342	SW5	Surrounding Site formation works and road works	180 days	Sun 19/12/21	Thu 16/6/22	NA	NA	585 days	341	47FF	0%	
343	*	**Deodorization System No. 12**	**203 days**	**Mon 16/8/21**	**Sat 23/4/22**	**NA**	**NA**	**56 days**			**0%**	
344		Excavation to Formation	20 days	Mon 16/8/21	Tue 7/9/21	NA	NA	56 days	2,319	345	0%	
345		Plate Load Test	18 days	Wed 8/9/21	Wed 29/9/21	NA	NA	56 days	344	346	0%	
346	KD3E	R.C. Plinth	20 days	Thu 30/9/21	Mon 25/10/21	NA	NA	56 days	345,71,321	41FF,347	0%	
347	SW5	Surrounding Site formation works and road works	180 days	Tue 26/10/21	Sat 23/4/22	NA	NA	639 days	346	47FF	0%	
348	*	**Underpass & Pump House**	**676 days**	**Thu 20/2/20**	**Thu 2/6/22**	**Thu 20/2/20**	**NA**	**488 days**			**12%**	
349		Temporary Storage for H pile works and access for DSD	150 days	Thu 20/2/20	Thu 27/8/20	Thu 20/2/20	NA	22.5 days	219SS-14 days	351	85%	
350		**Stage 1 (Bay A1 - B2)**	**462 days**	**Wed 23/9/20**	**Sun 17/4/22**	**NA**	**NA**	**0 days**			**0%**	
351		Sheet Pile Installation + ELS Works (incl. Strut (2-layers) Installation & Excavation	70 days	Wed 23/9/20	Wed 16/12/20	NA	NA	0 days	15,218,196,349	352	0%	
352		R.C. Structure	70 days	Thu 17/12/20	Mon 15/3/21	NA	NA	0 days	351,71,144	353	0%	10
353	SW4	Backfilling and Road works reinstatement	30 days	Tue 16/3/21	Thu 22/4/21	NA	NA	0 days	352	357,46FF,354	0%	
354		Surrounding Site formation works and road works	180 days	Fri 23/4/21	Tue 19/10/21	NA	NA	645 days	353	355	0%	
355	SW5	ABWF & BS Works	180 days	Wed 20/10/21	Sun 17/4/22	NA	NA	645 days	354	47FF	0%	
356		**Stage 2 (Bay B3)**	**329 days**	**Fri 23/4/21**	**Thu 2/6/22**	**NA**	**NA**	**0 days**			**0%**	
357		TTA implementation at Chuk Wan Street southeast bound	2 days	Fri 23/4/21	Sat 24/4/21	NA	NA	0 days	353	358	0%	
358		Sheet Pile Installation + ELS Works (incl. Strut (2-layers) Installation & Excavation (300 cu.m))	30 days	Mon 26/4/21	Tue 1/6/21	NA	NA	0 days	357	359	0%	
359		R.C. Structure	60 days	Wed 2/6/21	Thu 12/8/21	NA	NA	0 days	358	360	0%	
360		Backfilling and Reinstatement Works	30 days	Fri 13/8/21	Thu 16/9/21	NA	NA	0 days	359	361	0%	
361		TTA Implementation at Chuk Wan Street northwest bound	2 days	Fri 17/9/21	Sat 18/9/21	NA	NA	0 days	360	362	0%	
362		Sheet Pile Installation + ELS Works (incl. Strut (2-layers) Installation & Excavation	30 days	Mon 20/9/21	Wed 27/10/21	NA	NA	0 days	361	363	0%	



Task — Milestone ◆ — Summary — Critical

Updated Programme (Status Date: 31/07/2020)

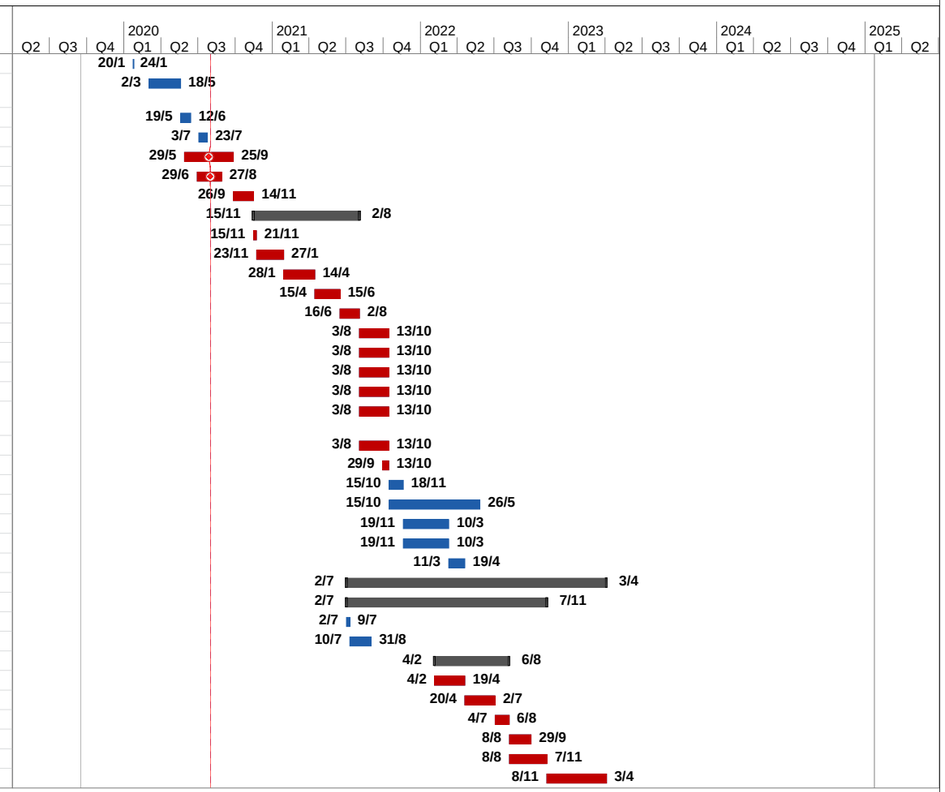
ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Comple	Time Risk Allowance
363		R.C. Structure	60 days	Thu 28/10/21	Sat 8/1/22	NA	NA	0 days	362	364	0%	
364	SW4	Backfilling and Road works reinstatement	44 days	Mon 10/1/22	Fri 4/3/22	NA	NA	0 days	363	46FF,365	0%	
365	SW5	ABWF & BS Works	90 days	Sat 5/3/22	Thu 2/6/22	NA	NA	599 days	364	47FF	0%	
366	*	**Pipe Works and Utility Installation**	**1582 day**	**Mon 16/9/19**	**Wed 22/1/25**	**Mon 16/9/19**	**NA**	**1 day**			**1%**	
367		**Pipe Works At Chuk Wan Street**	**623 days**	**Mon 16/9/19**	**Thu 21/10/21**	**Mon 16/9/19**	**NA**	**668 days**			**12%**	
368		**Drainage Diversion (Existing Drainage Culvert)**	**482 days**	**Wed 5/2/20**	**Thu 16/9/21**	**Wed 5/2/20**	**NA**	**-48 days**	**164,127**		**39%**	
369		Stage 1 - Drainage Diversion of Drainage btw Reconstructed Storm Water Manhole SMH1003177A and Reconstructed Storm Water Manhole MHD33	50 days	Wed 5/2/20	Thu 2/4/20	Wed 5/2/20	Thu 2/4/20	0 days	64,85,90,86,74,108,127	370	100%	
370		Stage 1 - Backfilling Works for Drainage Diversion	0 days	Tue 28/4/20	Wed 6/5/20	Tue 28/4/20	Wed 6/5/20	0 days	369	168,371	100%	
371		Stage 1 - Additional concrete surround at MH18, MH16 and additional manhole (Type 1) (NCE no. 8, 17))	28 days	Fri 3/4/20	Tue 12/5/20	Fri 3/4/20	Tue 12/5/20	0 days	370	168	100%	
372	KD1A	Stage 2 - Drainage Diversion of Drainage b/w MHD26 and SMHH1003177A, to Abandon of Exisitng Drainage Culvert (1 Cell,	120 days	Mon 26/4/21	Thu 16/9/21	NA	NA	-48 days	397,75	43FF	0%	
373	SW4	**Trenchless Work for Pipe Installation**	**623 days**	**Mon 16/9/19**	**Thu 21/10/21**	**Mon 16/9/19**	**NA**	**668 days**			**0%**	
374		Installation of Monitoring Points	4 days	Mon 16/9/19	Thu 19/9/19	NA	NA	0 days		377	0%	
375		Implementation of TTA	2 days	Fri 17/7/20	Sat 18/7/20	NA	NA	0 days	92	377	0%	
376		**Construction of Temporary Jacking Pit**	**36 days**	**Thu 18/6/20**	**Fri 31/7/20**	**Thu 18/6/20**	**NA**	**0 days**	**15,77**		**0%**	
377		Trial Pit Excavation & UU Detection Works	0 days	Thu 18/6/20	Thu 18/6/20	Thu 18/6/20	Thu 18/6/20	0 days	2,374,375	378	100%	
378		Pit Construction (11m x 9m)	30 days	Fri 26/6/20	Fri 31/7/20	Fri 26/6/20	NA	-47 days	377	381	0%	
379		**Pipe Jacking Operation**	**157 days**	**Sat 1/8/20**	**Sat 6/2/21**	**NA**	**NA**	**-48 days**			**0%**	
380		**Twin DN900 DI pipe (CHAT & CHAU)**	**96 days**	**Sat 1/8/20**	**Tue 24/11/20**	**NA**	**NA**	**-48 days**			**0%**	
381		Setting Up of Entrance Ring & Gantry, and Trenchless Equipment	7 days	Sat 1/8/20	Sat 8/8/20	NA	NA	-47 days	378	382	0%	
382		Pipe Jacking Operation for CHAT DN900 DI pipe (30m, 3m/day)	16 days	Mon 10/8/20	Thu 27/8/20	NA	NA	-47 days	381	385,384,383	0%	6
383		Setting Up of Entrance Ring & Gantry, and Trenchless Equipment	7 days	Fri 28/8/20	Thu 3/9/20	NA	NA	-55 days	382	384	0%	
384		Pipe Jacking Operation for CHAU DN900 DI pipe (30m, 3m/day)	16 days	Fri 4/9/20	Sat 19/9/20	NA	NA	-55 days	382,383	385	0%	
385		Installation of grouting pipe and rail	7 days	Mon 21/9/20	Mon 28/9/20	NA	NA	-48 days	382,384	386	0%	
386		Pipe Laying Works	25 days	Tue 29/9/20	Fri 30/10/20	NA	NA	-48 days	385	387	0%	
387		Formwork Erection and grouting works	7 days	Sat 31/10/20	Sat 7/11/20	NA	NA	-48 days	386	388	0%	
388		Backfilling works	14 days	Mon 9/11/20	Tue 24/11/20	NA	NA	-48 days	387	390	0%	
389		**Pipe Jacking Operation for DN2200 MS pipe (CHAV)**	**61 days**	**Wed 25/11/20**	**Sat 6/2/21**	**NA**	**NA**	**-48 days**			**0%**	
390		Setting Up of Entrance Ring & Gantry, and Trenchless Equipment	7 days	Wed 25/11/20	Wed 2/12/20	NA	NA	-48 days	388	391	0%	
391		Pipe Jacking Operation for twin DN900 DI pipe (30m, 3m/day)	16 days	Thu 3/12/20	Mon 21/12/20	NA	NA	-48 days	390	392	0%	6
392		Installation of grouting pipe and rail	7 days	Tue 22/12/20	Thu 31/12/20	NA	NA	-48 days	391	393	0%	
393		Pipe Laying Works	10 days	Sat 2/1/21	Wed 13/1/21	NA	NA	-48 days	392	394	0%	
394		Formwork Erection and grouting works	7 days	Thu 14/1/21	Thu 21/1/21	NA	NA	-48 days	393	396,395	0%	
395		Backfilling works	14 days	Fri 22/1/21	Sat 6/2/21	NA	NA	-48 days	394	396	0%	
396		Reinstatement of Temporary Launching Pit	30 days	Mon 8/2/21	Wed 17/3/21	NA	NA	-48 days	394,395	397	0%	
397		Reinstatement of Temporary Receiving Pit	30 days	Thu 18/3/21	Sat 24/4/21	NA	NA	-48 days	396	372,398	0%	
398	SW5	Surrounding Site formation works and road works	180 days	Sun 25/4/21	Thu 21/10/21	NA	NA	823 days	397	47FF	0%	
399		**Process Pipeworks, All Sewerage, Utilities & Roadworks in Portion C of the Site**	**407 days**	**Mon 5/10/20**	**Thu 17/2/22**	**NA**	**NA**	**13 days**			**0%**	
400		**Process Pipeworks**	**60 days**	**Mon 5/10/20**	**Mon 14/12/20**	**NA**	**NA**	**53 days**			**0%**	
401	KD1A	**Connection pipe at UV System no.1 & Effluent Pumping Stataion no.1**	**60 days**	**Mon 5/10/20**	**Mon 14/12/20**	**NA**	**NA**	**53 days**			**0%**	
402		Effluent Pipe (aprox. 70m, dia 300 - 1600)	40 days	Mon 5/10/20	Fri 20/11/20	NA	NA	53 days	74	404,403	0%	
403		Effluent Pipe Flowmeter Chamber (3.8mx3.95mx3.42m(D))	20 days	Sat 21/11/20	Mon 14/12/20	NA	NA	53 days	402	35	0%	
404		Plant Services Water Pipe (approx. 15m, dia 150-350)	20 days	Sat 21/11/20	Mon 14/12/20	NA	NA	54 days	402	35	0%	
405	SW4	Remaining Effluent Pipes & testing works	350 days	Fri 11/12/20	Thu 17/2/22	NA	NA	13 days	76,222,264,137,140	46FF	0%	
406	SW4	Stormdrain Pipeworks & testing works	350 days	Fri 11/12/20	Thu 17/2/22	NA	NA	12 days	76,222,264,128	46FF	0%	
407	SW4	Sewerage Pipeworks, manhole, protective lining & testing works	350 days	Fri 11/12/20	Thu 17/2/22	NA	NA	12 days	76,222,264,134	46FF	0%	
408	SW4	Watermain Pipeworks & testing works	350 days	Fri 11/12/20	Thu 17/2/22	NA	NA	12 days	76,222,264,131,134	46FF	0%	
409	SW4	Cable & Other Underground Utility Pipeworks	350 days	Fri 11/12/20	Thu 17/2/22	NA	NA	12 days	76,222,264	46FF	0%	
410	SW4	Pipe Bridge No.1	175 days	Mon 2/8/21	Thu 3/3/22	NA	NA	1 day	2	46FF	0%	
411	*	**Remaining Works & Landscape Works**	**1316 day**	**Mon 10/8/20**	**Wed 22/1/25**	**NA**	**NA**	**0 days**			**0%**	
412	SW5	Irrigation System	1025 day	Mon 10/8/20	Mon 22/1/24	NA	NA	0 days	2FS+266 days	47FF	0%	
413	SW5	Hard Landscape Works	1025 day	Mon 10/8/20	Mon 22/1/24	NA	NA	0 days	2FS+266 days	47FF	0%	
414	SW5	Soft Landscape Works	1025 day	Mon 10/8/20	Mon 22/1/24	NA	NA	0 days	2FS+266 days	420,47FF	0%	
415		Outfall for Effluent Pipes	124 days	Tue 1/11/22	Fri 31/3/23	NA	NA	0 days	120	47FF	0%	
416		Slope Formation Works near Outfall	124 days	Tue 1/11/22	Fri 31/3/23	NA	NA	0 days	120	47FF	0%	
417		Removal of invasive trees along River Embankment (NCE no. 37)	90 days	Sat 1/4/23	Mon 24/7/23	NA	NA	71 days	120FS+124 days	418	0%	
418	SW5	Retaining Wall along River Embankment, street furniture & road works	80 days	Wed 18/10/23	Tue 23/1/24	NA	NA	0 days	120,417	47FF	0%	
419	SW5	Remaining Site formation works, road works and boundary fence wall	250 days	Sat 5/3/22	Wed 9/11/22	NA	NA	439 days	45,46	47FF	0%	
420		Establishment Works (365 Calendar Days)	291 days	Tue 23/1/24	Wed 22/1/25	NA	NA	1 day	414,79	49FF	0%	
421	*	**Construction of Portion A of the Site**	**993 days**	**Wed 27/11/19**	**Mon 3/4/23**	**Wed 27/11/19**	**NA**	**0 days**			**14%**	
422	*	**CLP 132kV Substation**	**993 days**	**Wed 27/11/19**	**Mon 3/4/23**	**Wed 27/11/19**	**NA**	**0 days**			**14%**	
423		**Internal Works**	**737 days**	**Wed 27/11/19**	**Thu 26/5/22**	**Wed 27/11/19**	**NA**	**256 days**			**18%**	
424		Site Clearance & Site Set Up	4 days	Tue 10/12/19	Fri 13/12/19	Tue 10/12/19	Fri 13/12/19	0 days		426	100%	
425		Additional Tree Felling Works (NCE no.29)	4 days	Fri 20/12/19	Mon 23/12/19	Fri 20/12/19	Mon 23/12/19	0 days			100%	
426		Trial Pit Excavation & UU Detection Works	0 days	Mon 2/12/19	Thu 12/12/19	Mon 2/12/19	Thu 12/12/19	0 days	424	428	100%	
427		Additional Demolition of existing warehouse structure (NCE no.002)	35 days	Wed 27/11/19	Tue 31/12/19	Wed 27/11/19	Tue 31/12/19	0 days			100%	
428		Predrilling Works (11no., 1rig, 3days/drillhole/rig) (NCE no. 10)	11 days	Sat 4/1/20	Thu 16/1/20	Sat 4/1/20	Thu 16/1/20	0 days	66,426,119	429	100%	
429		Installation of Monitoring Points	3 days	Thu 16/1/20	Mon 20/1/20	Thu 16/1/20	Mon 20/1/20	0 days	428	430	100%	



Task ▬ Milestone ◆ Summary ▬ Critical ▬

Updated Programme (Status Date: 31/07/2020)

ID	KD	Task Name	Duration	Start	Finish	Actual Start	Actual Finish	Total Slack	Predecessors	Successors	% Complete	Time Risk Allowance
430		Setting up plant for pre-bored socked H-pile Installation	2 days	Mon 20/1/20	Fri 24/1/20	Mon 20/1/20	Fri 24/1/20	0 days	429	431	100%	
431		Pre-bored Socketed H-Pile Installation (41 Nos, 2 Rig, 3days/rig/pile) (NCE no. 19)	61 days	Mon 2/3/20	Mon 18/5/20	Mon 2/3/20	Mon 18/5/20	0 days	67,430	432,237,434	100%	6
432		Pile Load Test	22 days	Tue 19/5/20	Fri 12/6/20	Tue 19/5/20	Fri 12/6/20	0 days	431	433,263FS+5 days,435	100%	
433		Sheetpile Installation (NCE no. 10, 23, 36)	18 days	Fri 3/7/20	Thu 23/7/20	Fri 3/7/20	Thu 23/7/20	0 days	432,69	438,436FS+14 days	100%	6
434		CHP Cable Diversion Works (NCE no.23, 36)	120 days	Fri 29/5/20	Fri 25/9/20	Fri 29/5/20	NA	-100 days	431	436	50%	
435		Watermain diversion and relocation of water meter (NCE no. 15, 36)	60 days	Mon 29/6/20	Thu 27/8/20	Mon 29/6/20	NA	-71 days	432	436	55%	
436		Excavation Works (NCE no.16)	50 days	Sat 26/9/20	Sat 14/11/20	NA	NA	-100 days	433FS+14 days,434,435	437	0%	
437		R.C. Structure (880 sq.m)	210 days	Sun 15/11/20	Mon 2/8/21	NA	NA	-83 days	145,146,147,71,144,436		0%	10
438		Installation of earthmat	7 days	Sun 15/11/20	Sat 21/11/20	NA	NA	-100 days	145,146,147,71,144,433	439	0%	
439		Basement	54 days	Mon 23/11/20	Wed 27/1/21	NA	NA	-83 days	438	440	0%	
440		Ground Floor	60 days	Thu 28/1/21	Wed 14/4/21	NA	NA	-83 days	439	441	0%	
441		First Floor	50 days	Thu 15/4/21	Tue 15/6/21	NA	NA	-83 days	440	442	0%	
442		Roof Floor (461sq.m)	40 days	Wed 16/6/21	Mon 2/8/21	NA	NA	-83 days	441	443,448,444,449FS+48 days,446	0%	
443		ABWF Works	60 days	Tue 3/8/21	Wed 13/10/21	NA	NA	-82 days	442,148,73	36FF	0%	
444		BS Works	60 days	Tue 3/8/21	Wed 13/10/21	NA	NA	-82 days	442,73	36FF	0%	
445		Backfilling reinstatement & road works	60 days	Tue 3/8/21	Wed 13/10/21	NA	NA	-82 days	442	36FF	0%	
446		Installation of telephone line/ direct link for FSD Inspection	60 days	Tue 3/8/21	Wed 13/10/21	NA	NA	-82 days	442	36FF	0%	
447		Building Services Installation Works (incl. Fire Services, Plumbing, Drainage, etc.) & FSD Inspection	60 days	Tue 3/8/21	Wed 13/10/21	NA	NA	-82 days	442	36FF	0%	
448	KD2A	Architectual Works	60 days	Tue 3/8/21	Wed 13/10/21	NA	NA	-83 days	442	450,36FF,451	0%	
449		Prehandover to CLP	12 days	Wed 29/9/21	Wed 13/10/21	NA	NA	-82 days	442FS+48 days	36FF	0%	
450		**Handover to CLP for Electrical System Installation**	30 days	Fri 15/10/21	Thu 18/11/21	NA	NA	166 days	448	453,452	0%	
451		**E&M Installation, Testing & Commissioning by CLP**	180 days	Fri 15/10/21	Thu 26/5/22	NA	NA	256 days	448	44FF	0%	
452		Testing & Commissioning of the E&M Works	90 days	Fri 19/11/21	Thu 10/3/22	NA	NA	316 days	450	44FF	0%	
453		ABWF Works - External Finishing	90 days	Fri 19/11/21	Thu 10/3/22	NA	NA	166 days	450,148,73	454	0%	
454	SW2	Inspection and Handover to CLP	30 days	Fri 11/3/22	Tue 19/4/22	NA	NA	166 days	453	44FF,465	0%	
455		**External Works**	**523 days**	**Fri 2/7/21**	**Mon 3/4/23**	**NA**	**NA**	**0 days**	**88**		**0%**	
456		**Road Widening Works (NCE no. 20)**	403 days	Fri 2/7/21	Mon 7/11/22	NA	NA	0 days			0%	
457		Trial Pit Excavation & UU Detection Works	7 days	Fri 2/7/21	Fri 9/7/21	NA	NA	125 days	91	458	0%	
458		Diversion of existing UU (i.e. 3no. Street light)	45 days	Sat 10/7/21	Tue 31/8/21	NA	NA	125 days	457	460	0%	
459		**Drainage Works**	**150 days**	**Fri 4/2/22**	**Sat 6/8/22**	**NA**	**NA**	**0 days**	**87**		**0%**	
460		Trench Excavation and ELS works	60 days	Fri 4/2/22	Tue 19/4/22	NA	NA	0 days	458	461	0%	
461		Pipe Laying Works	60 days	Wed 20/4/22	Sat 2/7/22	NA	NA	0 days	460	462	0%	
462		Backfilling and Reinstatement Works	30 days	Mon 4/7/22	Sat 6/8/22	NA	NA	0 days	461	464,463	0%	
463		Cable & Other Underground Utility Pipeworks	45 days	Mon 8/8/22	Thu 29/9/22	NA	NA	0 days	462		0%	
464		Road Works	76 days	Mon 8/8/22	Mon 7/11/22	NA	NA	0 days	462	44FF,465	0%	
465	SW2	Construction of New Boundary Wall	120 days	Tue 8/11/22	Mon 3/4/23	NA	NA	0 days	454,464	44FF	0%	

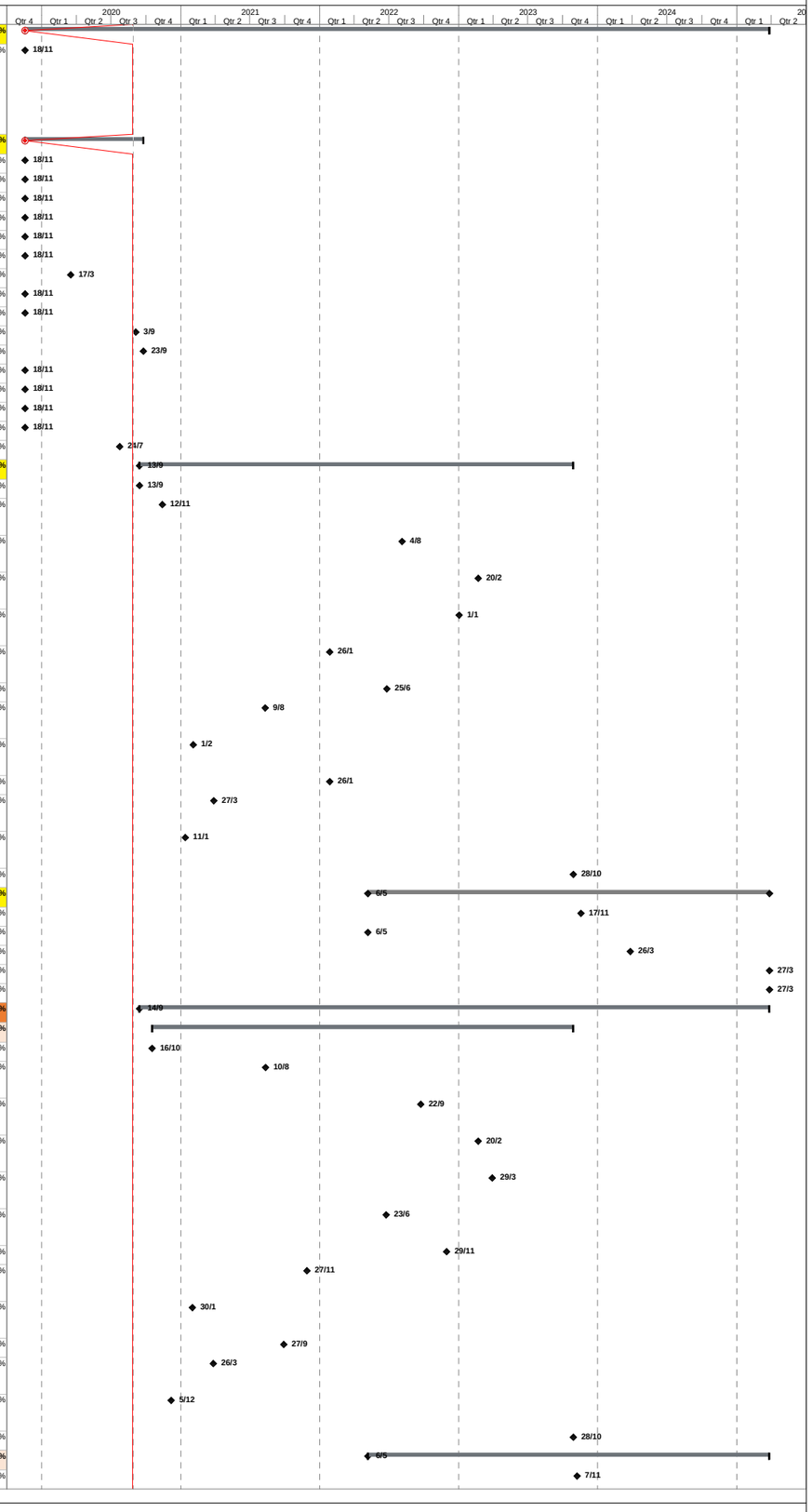


Task Milestone Summary Critical

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

Revised Works Programme (Status Date: 26/8/2020) (Rev. 01)
[Delay of the works due to some, but not all of, NCE/CE/EWN are shown in this programme]

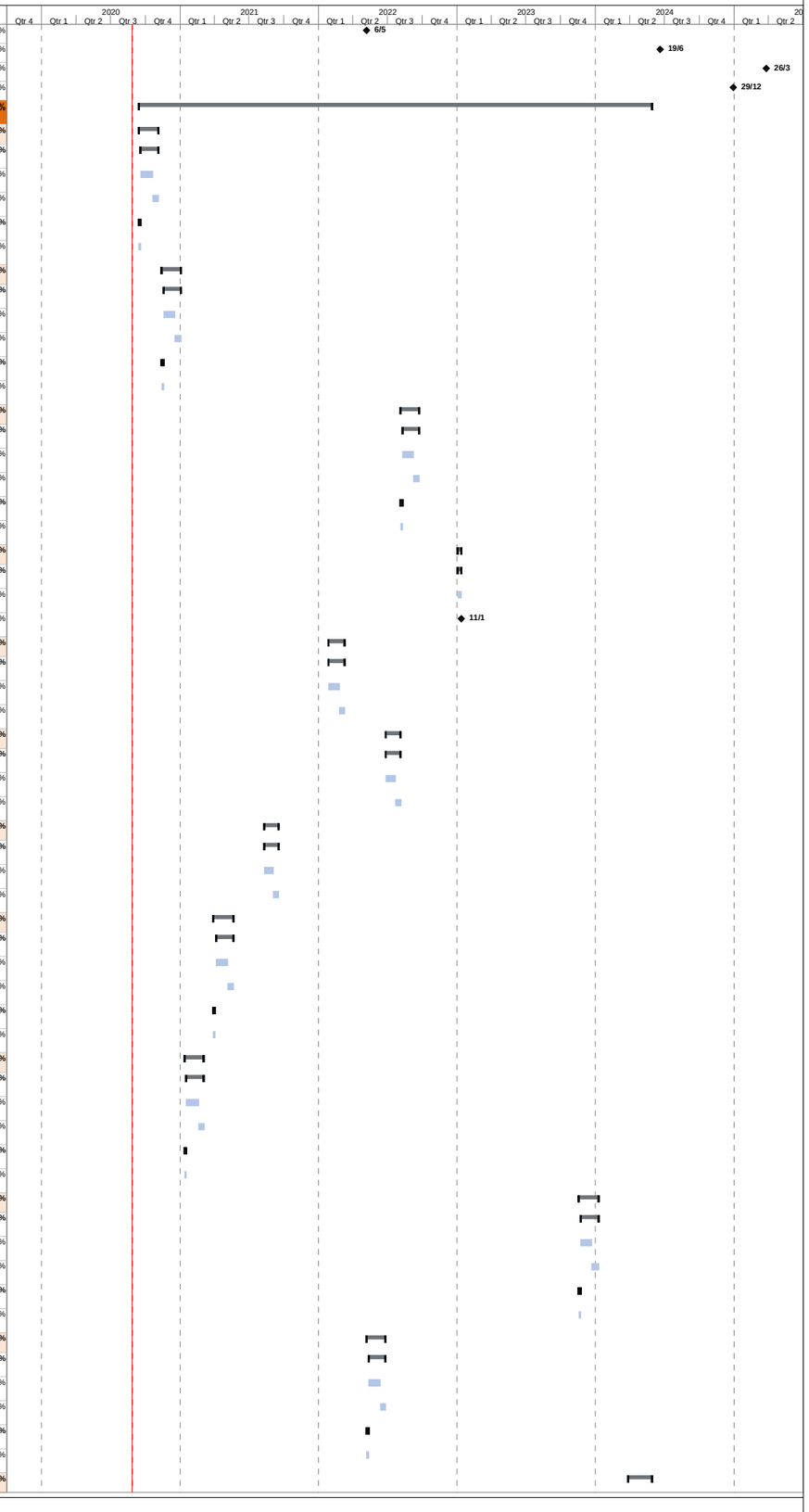
ID	Activity ID	Key Date	Task Name	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
1	**CD-1000**		**Contract Dates**	**1585 days**	**Mon 18/11/19**	**Thu 27/3/25**	**1585 days**	**Mon 18/11/19**	**Thu 27/3/25**	**Mon 18/11/19**	**NA**			**0 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		35FS+1461 days,36FS+901 days,37FS+1591 days,8,9,13FS+291 days,14FS+311 days,4,6,10,11,12,16,128,156,157,1 days,176,154,155,5,7,160,161,172, days,153,162,21FS+301 days,22FS+361 days,23FS+991 days,2...	0 days		100%
3	**CAD-1000**		**Access Dates (cal. day)**	**311 days**	**Mon 18/11/19**	**Wed 23/9/20**	**311 days**	**Mon 18/11/19**	**Wed 23/9/20**	**Mon 18/11/19**	**NA**			**1200 days**		**0%**
4	CAD-1010		Portion B-1 (Access Road AR3)	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	194	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	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	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	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	2	243,251	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	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	Mon 18/11/19	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	275	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	288	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	306	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	334	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	352	0 days		100%
13	CAD-1100		Portion B-7A (Alternation works for existing Power House)	0 days	Thu 3/9/20	Thu 3/9/20	0 days	Thu 3/9/20	Thu 3/9/20	NA	NA	2FS+291 days	399FS-1 day,29FS+151 days	-1 day		0%
14	CAD-1110		Portion B-8 (Alternation for existing Membrane Facilities Building No.1)	0 days	Wed 23/9/20	Wed 23/9/20	0 days	Wed 23/9/20	Wed 23/9/20	NA	NA	2FS+311 days	400FS-1 day	1200 days		0%
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	398	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	401,409	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	Thu 16/4/20	Thu 16/4/20	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**	**1140 days**	**Sun 13/9/20**	**Sat 28/10/23**	**NA**	**NA**			**60 days**		**0%**
21	CKD-1010		KD1A completion of AR3 in Portion B-1 (300days after starting date)	300 days	Tue 19/11/19	Sun 13/9/20	0 days	Sun 13/9/20	Sun 13/9/20	NA	NA	2FS+301 days	67	1608 days		0%
22	CKD-1020		KD1B completion of utilities diversion for commencement of Inlet Works No.1 in Portion B-2 (360days after starting date)	360 days	Tue 19/11/19	Thu 12/11/20	0 days	Thu 12/11/20	Thu 12/11/20	NA	NA	2FS+361 days	73	0 days		0%
23	CKD-1030		KD1C completion of civil and structural works of Inlet Works No.1 in Portion B-2 (990days after starting date)	990 days	Tue 19/11/19	Thu 4/8/22	0 days	Thu 4/8/22	Thu 4/8/22	NA	NA	2FS+991 days	79	0 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		0 days		0%
25	CKD-1050		KD1E completion of civil and structural works of Bioreactor in Portion B-4 (1,140days 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	82	0 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 (800days after starting date)	800 days	Tue 19/11/19	Wed 26/1/22	0 days	Wed 26/1/22	Wed 26/1/22	NA	NA	2FS+801 days	86	0 days		0%
27	CKD-1070		KD1G completion of civil and structural works of MFB in Portion B-5 (950days after starting date)	950 days	Tue 19/11/19	Sat 25/6/22	0 days	Sat 25/6/22	Sat 25/6/22	NA	NA	2FS+951 days	90	0 days		0%
28	CKD-1080		KD1H completion of civil and structural works of SAS Pumping Station in Portion B-6 (630days after starting date)	630 days	Tue 19/11/19	Mon 9/8/21	0 days	Mon 9/8/21	Mon 9/8/21	NA	NA	2FS+631 days	94	0 days		0%
29	CKD-1090		KD1I completion alternation works for existing Power House in Portion B-7A (150days after access date of B-7A)	150 days	Fri 4/9/20	Sun 31/1/21	0 days	Mon 1/2/21	Mon 1/2/21	NA	NA	13FS+151 days		-1 day		0%
30	CKD-1100		KD1J completion of auxiliary facilites in Portion B-7 (800days after starting date)	800 days	Tue 19/11/19	Wed 26/1/22	0 days	Wed 26/1/22	Wed 26/1/22	NA	NA	2FS+801 days		0 days		0%
31	CKD-1110		KD2A completion of effluent pipes to UV system and connection to its downstream in Portion B-9 (495days after starting date)	495 days	Tue 19/11/19	Sat 27/3/21	0 days	Sat 27/3/21	Sat 27/3/21	NA	NA	2FS+496 days	101	0 days		0%
32	CKD-1120		KD2B completion of air supply main alternation to existing air blower house No.2 in Portion B-8A (420days after starting date)	420 days	Tue 19/11/19	Mon 11/1/21	0 days	Mon 11/1/21	Mon 11/1/21	NA	NA	2FS+421 days	107	0 days		0%
33	CKD-1130		KD3A completion of all utilities and road works (1440days after starting date)	1440 days	Tue 19/11/19	Sat 28/10/23	0 days	Sat 28/10/23	Sat 28/10/23	NA	NA	2FS+1441 days		0 days		0%
34	**CCD-1000**		**Completion Date (cal. Day)**	**1956 days**	**Tue 19/11/19**	**Thu 27/3/25**	**1056 days**	**Fri 6/5/22**	**Thu 27/3/25**	**NA**	**NA**			**0 days**		**0%**
35	CCD-1010		Section 1 of the Works (1,460 after starting date)	1460 days	Tue 19/11/19	Fri 17/11/23	0 days	Fri 17/11/23	Fri 17/11/23	NA	NA	2FS+1461 days	113	0 days		0%
36	CCD-1020		Section 2 of the Works (900 after starting date)	900 days	Tue 19/11/19	Fri 6/5/22	0 days	Fri 6/5/22	Fri 6/5/22	NA	NA	2FS+901 days	119	0 days		0%
37	CCD-1030		Section 3 of the Works (1,590 after starting date)	1590 days	Tue 19/11/19	Tue 26/3/24	0 days	Tue 26/3/24	Tue 26/3/24	NA	NA	2FS+1591 days	39FS+366 days,125,38FS+366 day	0 days		0%
38	CCD-1040		Defects Liability Period	365 days	Wed 27/3/24	Thu 27/3/25	0 days	Thu 27/3/25	Thu 27/3/25	NA	NA	37FS+366 days		0 days		0%
39	CCD-1050		Landscape Establishment Works	365 days	Wed 27/3/24	Thu 27/3/25	0 days	Thu 27/3/25	Thu 27/3/25	NA	NA	37FS+366 days		0 days		0%
40	**PD-1000**	*	**Planned Completion**	**1656 days**	**Sat 12/9/20**	**Wed 26/3/25**	**1655 days**	**Mon 14/9/20**	**Wed 26/3/25**	**NA**	**NA**			**-1 day**		**0%**
41	**PCD-1000**	*	**Planned Completion - Key Dates (cal. day)**	**1141 days**	**Sat 12/9/20**	**Sat 28/10/23**	**1107 days**	**Fri 16/10/20**	**Sat 28/10/23**	**NA**	**NA**			**-34 days**		**0%**
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	Fri 16/10/20	Fri 16/10/20	NA	NA	197FF		-34 days		0%
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	Thu 12/11/20	Thu 12/11/20	0 days	Tue 10/8/21	Tue 10/8/21	NA	NA	199FF,242FF,238FF,240FF,235FF,		-271 days		0%
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 22/9/22	Thu 22/9/22	NA	NA	272FF,271FF,263FF,267FF		-49 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	284FF,283FF		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	Wed 29/3/23	Wed 29/3/23	NA	NA	299FF,300FF		-88 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 11/1/22	Tue 11/1/22	0 days	Thu 23/6/22	Thu 23/6/22	NA	NA	326FF,330FF,327FF		-149 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	Tue 29/11/22	Tue 29/11/22	NA	NA	328FF,331FF,329FF		-157 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 27/11/21	Sat 27/11/21	NA	NA	350FF,349FF		-110 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	0 days	Sat 30/1/21	Sat 30/1/21	NA	NA	399FF		0 days		0%
51	PCD-1100	KD1J	KD1J completion of auxiliary facilites in Portion B-7 (800days after starting date)	0 days	Mon 27/9/21	Mon 27/9/21	0 days	Mon 27/9/21	Mon 27/9/21	NA	NA	396FF,395FF,389FF,388FF,383FF,		121 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	Fri 26/3/21	Fri 26/3/21	NA	NA	402FF		1.2 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	Mon 11/1/21	Mon 11/1/21	0 days	Sat 5/12/20	Sat 5/12/20	NA	NA	398FF		37 days		0%
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	Sat 28/10/23	Sat 28/10/23	NA	NA	408FF		0 days		0%
55	**PCD-1000**	*	**Planned Completion Date (cal. Day)**	**1055 days**	**Fri 6/5/22**	**Wed 26/3/25**	**1055 days**	**Fri 6/5/22**	**Wed 26/3/25**	**NA**	**NA**			**1 day**		**0%**
56	PCD-1010	SW1	Section 1 of the Works (1,460 after starting date)	0 days	Fri 15/9/23	Fri 15/9/23	0 days	Tue 7/11/23	Tue 7/11/23	NA	NA	390FF,384FF,378FF,372FF,365FF,		506 days		0%



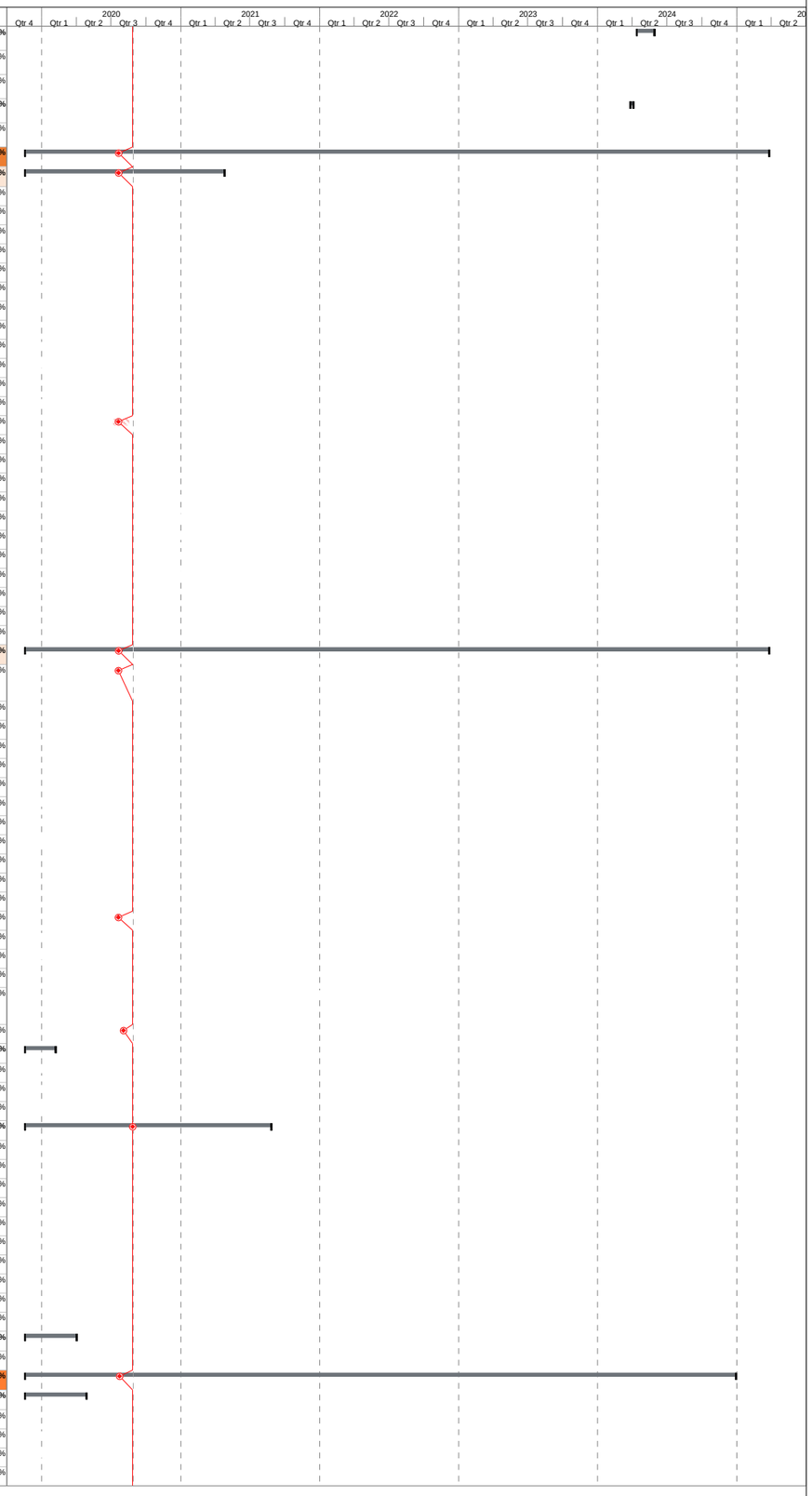
File: DC201807_First Programme_202 | Critical Split | Task | Milestone | Summary | Critical

Revised Works Programme (Status Date: 26/8/2020) (Rev. 01)
[Delay of the works due to some, but not all of, NCE/CE/EWN are shown in this programme]

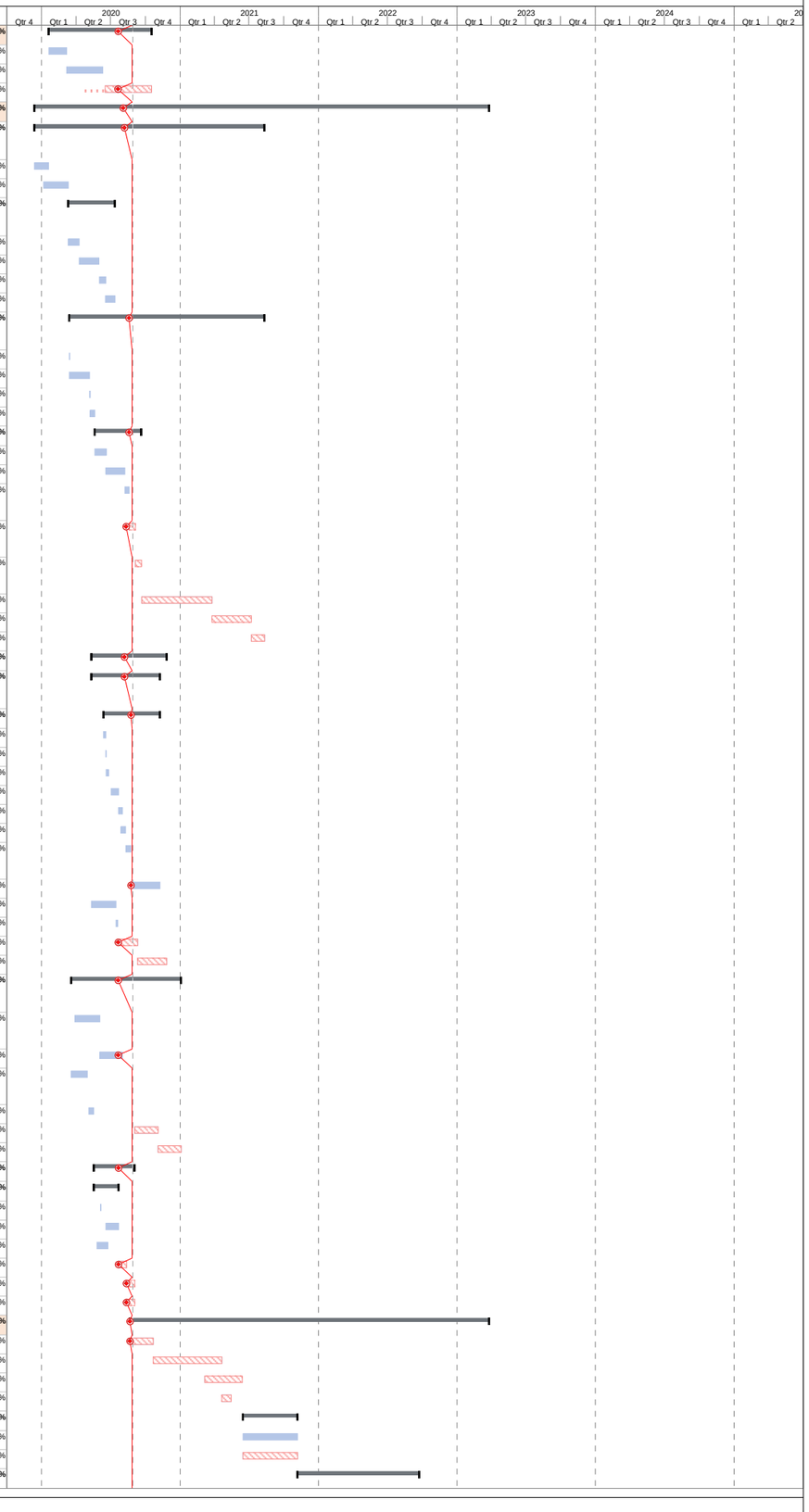
ID	Activity ID	Key Date	Task Name	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
57	PCD-1020	SW2	Section 2 of the Works (900 after starting date)	0 days	Fri 6/5/22	Fri 6/5/22	0 days	Fri 6/5/22	Fri 6/5/22	NA	NA	403FF,406FF,407FF,405FF,404FF,		1056 days		0%
58	PCD-1030	SW3	Section 3 of the Works (1,590 after starting date)	0 days	Sat 30/12/23	Sat 30/12/23	0 days	Wed 19/6/24	Wed 19/6/24	NA	NA	400FF,410FF,411FF,412FF,305FF,		281 days		0%
59	PCD-1040	DLP	Defects Liability Period	0 days	Wed 26/3/25	Wed 26/3/25	0 days	Wed 26/3/25	Wed 26/3/25	NA	NA	413FF,153FF		1 day		0%
60	PCD-1050		Landscape Establishment Works	0 days	Sun 29/12/24	Sun 29/12/24	0 days	Sun 29/12/24	Sun 29/12/24	NA	NA	413FF		88 days		0%
61	**ET-1000**		**Effects from Inclement Weather and Other Time Affected Events**	**0 days**	**NA**	**NA**	**1088 days**	**Mon 14/9/20**	**Tue 28/5/24**	**NA**	**NA**			**253 days**		**0%**
62	**ET1A-1000**		**Effects to KD1A**	**0 days**	**NA**	**NA**	**41 days**	**Mon 14/9/20**	**Tue 3/11/20**	**NA**	**NA**			**1300 days**		**0%**
63	**ET1A-1100**		**Inclement Weather to KD1A**	**0 days**	**NA**	**NA**	**37 days**	**Fri 18/9/20**	**Tue 3/11/20**	**NA**	**NA**			**1300 days**		**0%**
64	ET1A-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Fri 18/9/20	Mon 19/10/20	NA	NA	67	65	1300 days		0%
65	ET1A-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Tue 20/10/20	Tue 3/11/20	NA	NA	64		1300 days		0%
66	**ET1A-1200**		**Other Time Affected Events to KD1A**	**0 days**	**NA**	**NA**	**4 days**	**Mon 14/9/20**	**Thu 17/9/20**	**NA**	**NA**			**1300 days**		**0%**
67	ET1A-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Mon 14/9/20	Thu 17/9/20	NA	NA	21	64	1300 days		0%
68	**ET1B-1000**		**Effects to KD1B**	**0 days**	**NA**	**NA**	**41 days**	**Fri 13/11/20**	**Sat 2/1/21**	**NA**	**NA**			**1251 days**		**0%**
69	**ET1B-1100**		**Inclement Weather to KD1B**	**0 days**	**NA**	**NA**	**37 days**	**Wed 18/11/20**	**Sat 2/1/21**	**NA**	**NA**			**1251 days**		**0%**
70	ET1B-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Wed 18/11/20	Wed 16/12/20	NA	NA	73	71	1251 days		0%
71	ET1B-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Thu 17/12/20	Sat 2/1/21	NA	NA	70		1251 days		0%
72	**ET1B-1200**		**Other Time Affected Events to KD1B**	**0 days**	**NA**	**NA**	**4 days**	**Fri 13/11/20**	**Tue 17/11/20**	**NA**	**NA**			**1251 days**		**0%**
73	ET1B-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Fri 13/11/20	Tue 17/11/20	NA	NA	22	70	1251 days		0%
74	**ET1C-1000**		**Effects to KD1C**	**0 days**	**NA**	**NA**	**41 days**	**Fri 5/8/22**	**Thu 22/9/22**	**NA**	**NA**			**741 days**		**0%**
75	**ET1C-1100**		**Inclement Weather to KD1C**	**0 days**	**NA**	**NA**	**37 days**	**Wed 10/8/22**	**Thu 22/9/22**	**NA**	**NA**			**741 days**		**0%**
76	ET1C-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Wed 10/8/22	Wed 7/9/22	NA	NA	79	77	741 days		0%
77	ET1C-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Thu 8/9/22	Thu 22/9/22	NA	NA	76		741 days		0%
78	**ET1C-1200**		**Other Time Affected Events to KD1C**	**0 days**	**NA**	**NA**	**4 days**	**Fri 5/8/22**	**Tue 9/8/22**	**NA**	**NA**			**741 days**		**0%**
79	ET1C-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Fri 5/8/22	Tue 9/8/22	NA	NA	23	76	741 days		0%
80	**ET1E-1000**		**Effects to KD1E**	**0 days**	**NA**	**NA**	**8 days**	**Tue 3/1/23**	**Wed 11/1/23**	**NA**	**NA**			**651 days**		**0%**
81	**ET1E-1100**		**Inclement Weather to KD1E**	**0 days**	**NA**	**NA**	**8 days**	**Tue 3/1/23**	**Wed 11/1/23**	**NA**	**NA**			**651 days**		**0%**
82	ET1E-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	8 days	Tue 3/1/23	Wed 11/1/23	NA	NA	25	83	651 days		0%
83	ET1E-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	0 days	Wed 11/1/23	Wed 11/1/23	NA	NA	82		651 days		0%
84	**ET1F-1000**		**Effects to KD1F**	**0 days**	**NA**	**NA**	**33 days**	**Thu 27/1/22**	**Wed 9/3/22**	**NA**	**NA**			**901 days**		**0%**
85	**ET1F-1100**		**Inclement Weather to KD1F**	**0 days**	**NA**	**NA**	**33 days**	**Thu 27/1/22**	**Wed 9/3/22**	**NA**	**NA**			**901 days**		**0%**
86	ET1F-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	21 days	Thu 27/1/22	Wed 23/2/22	NA	NA	26	87	901 days		0%
87	ET1F-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Thu 24/2/22	Wed 9/3/22	NA	NA	86		901 days		0%
88	**ET1G-1000**		**Effects to KD1G**	**0 days**	**NA**	**NA**	**33 days**	**Mon 27/6/22**	**Thu 4/8/22**	**NA**	**NA**			**782 days**		**0%**
89	**ET1G-1100**		**Inclement Weather to KD1G**	**0 days**	**NA**	**NA**	**33 days**	**Mon 27/6/22**	**Thu 4/8/22**	**NA**	**NA**			**782 days**		**0%**
90	ET1G-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	21 days	Mon 27/6/22	Thu 21/7/22	NA	NA	27	91	782 days		0%
91	ET1G-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Fri 22/7/22	Thu 4/8/22	NA	NA	90		782 days		0%
92	**ET1H-1000**		**Effects to KD1H**	**0 days**	**NA**	**NA**	**33 days**	**Tue 10/8/21**	**Thu 16/9/21**	**NA**	**NA**			**1041 days**		**0%**
93	**ET1H-1100**		**Inclement Weather to KD1H**	**0 days**	**NA**	**NA**	**33 days**	**Tue 10/8/21**	**Thu 16/9/21**	**NA**	**NA**			**1041 days**		**0%**
94	ET1H-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	21 days	Tue 10/8/21	Thu 2/9/21	NA	NA	28	95	1041 days		0%
95	ET1H-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Fri 3/9/21	Thu 16/9/21	NA	NA	94		1041 days		0%
96	**ET2A-1000**		**Effects to KD2A**	**0 days**	**NA**	**NA**	**41 days**	**Mon 29/3/21**	**Thu 20/5/21**	**NA**	**NA**			**1141 days**		**0%**
97	**ET2A-1100**		**Inclement Weather to KD2A**	**0 days**	**NA**	**NA**	**37 days**	**Tue 6/4/21**	**Thu 20/5/21**	**NA**	**NA**			**1141 days**		**0%**
98	ET2A-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Tue 6/4/21	Wed 5/5/21	NA	NA	101	99	1141 days		0%
99	ET2A-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Thu 6/5/21	Thu 20/5/21	NA	NA	98		1141 days		0%
100	**ET2A-1200**		**Other Time Affected Events to KD2A**	**0 days**	**NA**	**NA**	**4 days**	**Mon 29/3/21**	**Thu 1/4/21**	**NA**	**NA**			**1141 days**		**0%**
101	ET2A-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Mon 29/3/21	Thu 1/4/21	NA	NA	31	98	1141 days		0%
102	**ET3A-1000**		**Effects to KD3A**	**0 days**	**NA**	**NA**	**41 days**	**Tue 12/1/21**	**Wed 3/3/21**	**NA**	**NA**			**1203 days**		**0%**
103	**ET3A-1100**		**Inclement Weather to KD3A**	**0 days**	**NA**	**NA**	**37 days**	**Sat 16/1/21**	**Wed 3/3/21**	**NA**	**NA**			**1203 days**		**0%**
104	ET3A-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Sat 16/1/21	Wed 17/2/21	NA	NA	107	105	1203 days		0%
105	ET3A-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Thu 18/2/21	Wed 3/3/21	NA	NA	104		1203 days		0%
106	**ET3A-1200**		**Other Time Affected Events to KD3A**	**0 days**	**NA**	**NA**	**4 days**	**Tue 12/1/21**	**Fri 15/1/21**	**NA**	**NA**			**1203 days**		**0%**
107	ET3A-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Tue 12/1/21	Fri 15/1/21	NA	NA	32	104	1203 days		0%
108	**ETS1-1000**		**Effects to Section 1 of the Works**	**0 days**	**NA**	**NA**	**41 days**	**Sat 18/11/23**	**Mon 8/1/24**	**NA**	**NA**			**358 days**		**0%**
109	**ETS1-1100**		**Inclement Weather to Section 1 of the Works**	**0 days**	**NA**	**NA**	**37 days**	**Thu 23/11/23**	**Mon 8/1/24**	**NA**	**NA**			**358 days**		**0%**
110	ETS1-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Thu 23/11/23	Thu 21/12/23	NA	NA	113	111	358 days		0%
111	ETS1-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Fri 22/12/23	Mon 8/1/24	NA	NA	110		358 days		0%
112	**ETS1-1200**		**Other Time Affected Events to Section 1 of the Works**	**0 days**	**NA**	**NA**	**4 days**	**Sat 18/11/23**	**Wed 22/11/23**	**NA**	**NA**			**358 days**		**0%**
113	ETS1-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Sat 18/11/23	Wed 22/11/23	NA	NA	35	110	358 days		0%
114	**ETS2-1000**		**Effects to Section 2 of the Works**	**0 days**	**NA**	**NA**	**41 days**	**Sat 7/5/22**	**Sat 25/6/22**	**NA**	**NA**			**815 days**		**0%**
115	**ETS2-1100**		**Inclement Weather to Section 2 of the Works**	**0 days**	**NA**	**NA**	**37 days**	**Fri 13/5/22**	**Sat 25/6/22**	**NA**	**NA**			**815 days**		**0%**
116	ETS2-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Fri 13/5/22	Sat 11/6/22	NA	NA	119	117	815 days		0%
117	ETS2-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Mon 13/6/22	Sat 25/6/22	NA	NA	116		815 days		0%
118	**ETS2-1200**		**Other Time Affected Events to KD2A**	**0 days**	**NA**	**NA**	**4 days**	**Sat 7/5/22**	**Thu 12/5/22**	**NA**	**NA**			**815 days**		**0%**
119	ETS2-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Sat 7/5/22	Thu 12/5/22	NA	NA	36	116	815 days		0%
120	**ETS3-1000**		**Effects to Section 3 of the Works**	**0 days**	**NA**	**NA**	**41 days**	**Wed 27/3/24**	**Tue 28/5/24**	**NA**	**NA**			**253 days**		**0%**



ID	Activity ID	Key Date	Task Name	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
121	**ETS3-1100**		**Inclement Weather to Section 3 of the Works**	**0 days**	**NA**	**NA**	**37 days**	**Sat 13/4/24**	**Tue 28/5/24**	**NA**	**NA**			**253 days**		**0%**
122	ETS3-1110		Delay and Disruption of Works before July 2020	0 days	NA	NA	25 days	Sat 13/4/24	Mon 13/5/24	NA	NA	125	123	253 days		0%
123	ETS3-1120		Delay and Disruption of Works for the month of July 2020	0 days	NA	NA	12 days	Tue 14/5/24	Tue 28/5/24	NA	NA	122		253 days		0%
124	**ETS3-1200**		**Other Time Affected Events to KD2A**	**0 days**	**NA**	**NA**	**4 days**	**Wed 27/3/24**	**Wed 3/4/24**	**NA**	**NA**			**253 days**		**0%**
125	ETS3-1210		Special working arrangement due to COVID-19 in January 2020	0 days	NA	NA	4 days	Wed 27/3/24	Wed 3/4/24	NA	NA	37	122	253 days		0%
126	**SUB-1000**		**Submissions (cal.day)**	**1956 days**	**Mon 18/11/19**	**Wed 26/3/25**	**1956 days**	**Mon 18/11/19**	**Wed 26/3/25**	**Mon 18/11/19**	**NA**			**1 day**		**48%**
127	**SUBS-1000**		**Subletting Package**	**354 days**	**Mon 18/11/19**	**Thu 5/11/20**	**525 days**	**Mon 18/11/19**	**Sun 25/4/21**	**Mon 18/11/19**	**NA**			**611 days**		**49%**
128	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	129	0 days		100%
129	SUBS-1020		PM review and accept subletting procedure	15 days	Sat 30/11/19	Sat 14/12/19	12 days	Sat 30/11/19	Wed 11/12/19	Sat 30/11/19	Wed 11/12/19	128	150,130,133,132,131	0 days		100%
130	SUBS-1030		Subletting for demolition works	22 days	Sun 15/12/19	Sun 5/1/20	93 days	Tue 17/12/19	Wed 18/3/20	Tue 17/12/19	Wed 18/3/20	129,154	277,293,353,243,307,399	0 days		100%
131	SUBS-1040		Subletting for UU diversion for Inlet Works No.1	24 days	Sun 15/12/19	Tue 7/1/20	78 days	Fri 10/1/20	Fri 27/3/20	Fri 10/1/20	Fri 27/3/20	129	199	0 days		100%
132	SUBS-1050		Subletting for Inspection pit excavation	24 days	Sun 15/12/19	Tue 7/1/20	56 days	Thu 19/12/19	Wed 12/2/20	Thu 19/12/19	Wed 12/2/20	129,154	201,134	0 days		100%
133	SUBS-1060		Subletting for Preliminary Works (topographic surveying)	45 days	Sun 15/12/19	Tue 28/1/20	54 days	Fri 20/12/19	Tue 11/2/20	Fri 20/12/19	Tue 11/2/20	129,154	159,191,137,138,139,135	0 days		100%
134	SUBS-1070		Subletting for AR3 access road	30 days	Wed 8/1/20	Thu 6/2/20	0 days	Fri 13/12/19	Tue 11/2/20	Fri 13/12/19	Tue 11/2/20	132	135,197	0 days		100%
135	SUBS-1080		Subletting for pre-drilling works	24 days	Fri 7/2/20	Sun 1/3/20	38 days	Thu 6/2/20	Fri 20/3/20	Thu 6/2/20	Fri 20/3/20	133,134	344,252,278,294,318,136	0 days		100%
136	SUBS-1090		Subletting for Contractor designer for temporary works and ICE	30 days	Mon 2/3/20	Tue 31/3/20	71 days	Mon 16/12/19	Mon 24/2/20	Mon 16/12/19	Mon 24/2/20	135	282,298,348,355,361,368,374,380,	0 days		100%
137	SUBS-1100		Subletting for independent BIM consultant	30 days	Wed 29/1/20	Thu 27/2/20	0 days	Wed 11/12/19	Thu 23/1/20	Wed 11/12/19	Thu 23/1/20	133	187	0 days		100%
138	SUBS-1110		Subletting for independent BIM services	30 days	Wed 29/1/20	Thu 27/2/20	15 days	Tue 14/1/20	Wed 26/2/20	Tue 14/1/20	Wed 26/2/20	133	187	0 days		100%
139	SUBS-1120		Subletting for Design, Supply & Install of Temporary Activated Carbon Deodorization Units (E&M Works)	45 days	Wed 29/1/20	Fri 13/3/20	0 days	Fri 13/12/19	Tue 11/2/20	Fri 13/12/19	Tue 11/2/20	133	140,141	0 days		100%
140	SUBS-1130		Subletting for pre-bored H pile works	45 days	Sat 14/3/20	Mon 27/4/20	45 days	Sun 5/7/20	Tue 18/8/20	Sun 5/7/20	NA	139	253,279,295,319,345	-85 days		36%
141	SUBS-1140		Subletting for Sheetpile installation works	45 days	Sat 14/3/20	Mon 27/4/20	45 days	Tue 1/9/20	Thu 15/10/20	NA	NA	139	254,280,296,347,142,143	35 days		0%
142	SUBS-1150		Subletting for ELS works for Inlet Works No.1	48 days	Tue 28/4/20	Sun 14/6/20	48 days	Fri 16/10/20	Wed 2/12/20	NA	NA	141	256	142 days		0%
143	SUBS-1160		Subletting for ELS works for Membrance Facilities Building and other buildings	48 days	Tue 28/4/20	Sun 14/6/20	48 days	Fri 16/10/20	Wed 2/12/20	NA	NA	141	282,298,348,144,145,146,147,148,	35 days		0%
144	SUBS-1170		Subletting for structural works for Inlet Works Building	48 days	Mon 15/6/20	Sat 1/8/20	48 days	Thu 3/12/20	Tue 19/1/21	NA	NA	143	259	239 days		0%
145	SUBS-1180		Subletting for structural works for Primary Sedimentation Tanks	48 days	Mon 15/6/20	Sat 1/8/20	48 days	Thu 3/12/20	Tue 19/1/21	NA	NA	143	283	633 days		0%
146	SUBS-1190		Subletting for structural works for Bioreactors	48 days	Mon 15/6/20	Sat 1/8/20	48 days	Thu 3/12/20	Tue 19/1/21	NA	NA	143	299	462 days		0%
147	SUBS-1200		Subletting for structural works for Membrance Facilities Building	48 days	Mon 15/6/20	Sat 1/8/20	48 days	Thu 3/12/20	Tue 19/1/21	NA	NA	143	326	210 days		0%
148	SUBS-1210		Subletting for structural works for SAS pumping house and ancillary structures	48 days	Mon 15/6/20	Sat 1/8/20	48 days	Thu 3/12/20	Tue 19/1/21	NA	NA	143	349,149	61 days		0%
149	SUBS-1220		Subletting for ABWF works	48 days	Sun 2/8/20	Fri 18/9/20	48 days	Wed 20/1/21	Mon 8/3/21	NA	NA	148	273,285,304,332,351,359,365,372,	611 days		0%
150	SUBS-1230		Subletting for Process Pipeworks, Utilities and Roadworks	48 days	Sun 15/3/20	Fri 1/5/20	48 days	Fri 22/5/20	Wed 8/7/20	Fri 22/5/20	Wed 8/7/20	129	398,402,403,404,405,406,407	0 days		100%
151	SUBS-1240		Subletting for Landscape Hardworks and Softworks	48 days	Sat 19/9/20	Thu 5/11/20	48 days	Tue 9/3/21	Sun 25/4/21	NA	NA	149	411,412,413	611 days		0%
152	**SUBA-1000**		**Statutory Submission, Submission and Approval**	**1956 days**	**Mon 18/11/19**	**Wed 26/3/25**	**1956 days**	**Mon 18/11/19**	**Wed 26/3/25**	**Mon 18/11/19**	**NA**			**1 day**		**47%**
153	SUBA-1010		Liaison with operator of SWHSTW and obtain their consent of associated method statement of major activities	1584 days	Mon 18/11/19	Wed 26/3/25	1584 days	Mon 18/11/19	Wed 26/3/25	Mon 18/11/19	NA	2	59FF	1 day		12%
154	SUBA-1020		Prepare and submit Subcontractor Management Plan (SMP)	24 days	Mon 18/11/19	Wed 11/12/19	24 days	Mon 18/11/19	Wed 11/12/19	Mon 18/11/19	Wed 11/12/19	2	130,133,132	0 days		100%
155	SUBA-1030		Prepare and submit Interface Management Plan	36 days	Mon 18/11/19	Mon 23/12/19	36 days	Mon 18/11/19	Mon 23/12/19	Mon 18/11/19	Mon 23/12/19	2		0 days		100%
156	SUBA-1040		Prepare and submit the TTA plans inside Treatment Plant for UU diversion and buildings construction	24 days	Mon 18/11/19	Wed 11/12/19	24 days	Mon 18/11/19	Wed 11/12/19	Mon 18/11/19	Wed 11/12/19	2	194	0 days		100%
157	SUBA-1050		Prepare and submit method statement for UU diversion for Inlet Works No.1	12 days	Mon 18/11/19	Fri 29/11/19	12 days	Mon 18/11/19	Fri 29/11/19	Mon 18/11/19	Fri 29/11/19	2	158	0 days		100%
158	SUBA-1060		PM review and accept the method statement	12 days	Sat 30/11/19	Wed 11/12/19	0 days	Sat 30/11/19	Wed 11/12/19	Sat 30/11/19	Wed 11/12/19	157	200,201	0 days		100%
159	SUBA-1070		Prepare and submit combine underground services drawing for PM's review the alignment	24 days	Wed 29/1/20	Fri 21/2/20	23 days	Thu 26/12/19	Sat 18/1/20	Thu 26/12/19	Sat 18/1/20	133		0 days		100%
160	SUBA-1080		Prepare and submit method statement for demolition existing structures	24 days	Mon 18/11/19	Wed 11/12/19	66 days	Mon 18/11/19	Wed 22/1/20	Mon 18/11/19	Wed 22/1/20	2	307,277,293,353,243,399	0 days		100%
161	SUBA-1090		Prepare and submit method statement for structural works for buildings	24 days	Mon 18/11/19	Wed 11/12/19	197 days	Mon 18/11/19	Mon 1/6/20	Mon 18/11/19	Mon 1/6/20	2		0 days		100%
162	SUBA-1100		Prepare and submit method statements to MTRC regarding the works within railing protection boundary	56 days	Sat 1/2/20	Tue 7/4/20	92 days	Sat 1/2/20	Mon 25/5/20	Sat 1/2/20	Mon 25/5/20	2	277,293,353,399,243	0 days		100%
163	SUBA-1110		Prepare and submit & approve Safety Management Plan	24 days	Mon 18/11/19	Wed 11/12/19	3 days	Mon 18/11/19	Wed 20/11/19	Mon 18/11/19	Wed 20/11/19	2		0 days		100%
164	SUBA-1120		Prepare and submit Excavation and lateral support (ELS) proposal	24 days	Mon 10/2/20	Wed 4/3/20	128 days	Mon 10/2/20	Tue 16/6/20	Mon 10/2/20	Tue 16/6/20	2		0 days		100%
165	SUBA-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	NA	2		1708 days		98%
166	SUBA-1140		Prepare and submit Pre-construction condition survey of existing structures/ services	24 days	Sat 15/2/20	Mon 9/3/20	0 days	Mon 18/11/19	Fri 6/3/20	Mon 18/11/19	Fri 6/3/20	191		0 days		100%
167	SUBA-1150		Prepare and submit Settlement and movement monitoring proposal of existing structures/ services	24 days	Sat 15/2/20	Mon 9/3/20	110 days	Mon 18/11/19	Fri 6/3/20	Mon 18/11/19	Fri 6/3/20	191		0 days		100%
168	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%
169	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		400	630 days		0%
170	SUBA-1180		Prepare of RSE and structural design for alternation and additional (A&A) works at Main Power House	60 days	Mon 3/8/20	Thu 1/10/20	60 days	Mon 3/8/20	Thu 1/10/20	NA	NA		399	1 day		0%
171	**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%**
172	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%
173	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%
174	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%
175	**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**			**1058 days**		**56%**
176	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	177	0 days		100%
177	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	176	178,179,180,181,182,183,184,185	0 days		100%
178	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	177	199,398,404,405,407,406,403,402,	0 days		100%
179	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	177	266,270	144 days		0%
180	SUBP-1050		Prepare, submit and approve the concrete mix material	90 days	Sat 1/8/20	Thu 29/10/20	90 days	Mon 3/2/20	Sat 2/5/20	Mon 3/2/20	Sat 2/5/20	177	259,299,326,349	0 days		100%
181	SUBP-1060		Prepare, submit and approve the rebar material	48 days	Thu 1/10/20	Tue 17/11/20	49 days	Sat 23/5/20	Fri 10/7/20	Sat 23/5/20	Fri 10/7/20	177	259,299,326,349	0 days		100%
182	SUBP-1070		Prepare, submit and approve the metal works material	48 days	Tue 1/9/20	Sun 18/10/20	48 days	Tue 1/9/20	Sun 18/10/20	NA	NA	177	259,299,326,349	154 days		0%
183	SUBP-1080		Prepare, submit and approve the ABWF works material	48 days	Mon 1/3/21	Sat 17/4/21	48 days	Mon 1/3/21	Sat 17/4/21	NA	NA	177	273,285,304,332,351,359,365,372,	1189 days		0%
184	SUBP-1090		Prepare, submit and approve the protective lining to concrete	48 days	Tue 1/9/20	Sun 18/10/20	48 days	Tue 1/9/20	Sun 18/10/20	NA	NA	177	259,299,326,349	154 days		0%
185	SUBP-1100		Prepare, submit and approve the multi-part covers	48 days	Fri 1/10/21	Wed 17/11/21	21 days	Tue 5/5/20	Mon 25/5/20	Tue 5/5/20	Mon 25/5/20	177	408	0 days		100%
186	**SUBB-1000**		**BIM**	**37 days**	**Fri 28/2/20**	**Wed 15/4/20**	**111 days**	**Mon 18/11/19**	**Wed 1/4/20**	**Mon 18/11/19**	**Wed 1/4/20**			**0 days**		**100%**
187	SUBB-1010		Prepare, submit and approve the proposal of details of Common data environment (CDE)	48 days	Fri 28/2/20	Wed 15/4/20	37 days	Mon 18/11/19	Wed 1/4/20	Mon 18/11/19	Wed 1/4/20	137,138		0 days		100%
188	**C-1000**	*	**Construction Works**	**1869 days**	**Mon 18/11/19**	**Sun 29/12/24**	**1869 days**	**Mon 18/11/19**	**Sun 29/12/24**	**Mon 18/11/19**	**NA**			**88 days**		**12%**
189	**CPW-1000**		**Preliminary Works**	**136 days**	**Mon 18/11/19**	**Wed 1/4/20**	**162 days**	**Mon 18/11/19**	**Mon 27/4/20**	**Mon 18/11/19**	**Mon 27/4/20**			**0 days**		**100%**
190	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	191	0 days		100%
191	CPW-2000		Condition Survey	15 days	Wed 29/1/20	Fri 14/2/20	89 days	Mon 18/11/19	Fri 6/3/20	Mon 18/11/19	Fri 6/3/20	133,190	192,166,167,193	0 days		100%
192	CPW-3000		Installation of Monitoring Markers	18 days	Sat 15/2/20	Fri 6/3/20	78 days	Fri 29/11/19	Thu 5/3/20	Fri 29/11/19	Thu 5/3/20	191		0 days		100%
193	CPW-4000		Tree Felling Works	40 days	Sat 15/2/20	Wed 1/4/20	40 days	Sat 7/3/20	Mon 27/4/20	Sat 7/3/20	Mon 27/4/20	191		0 days		100%

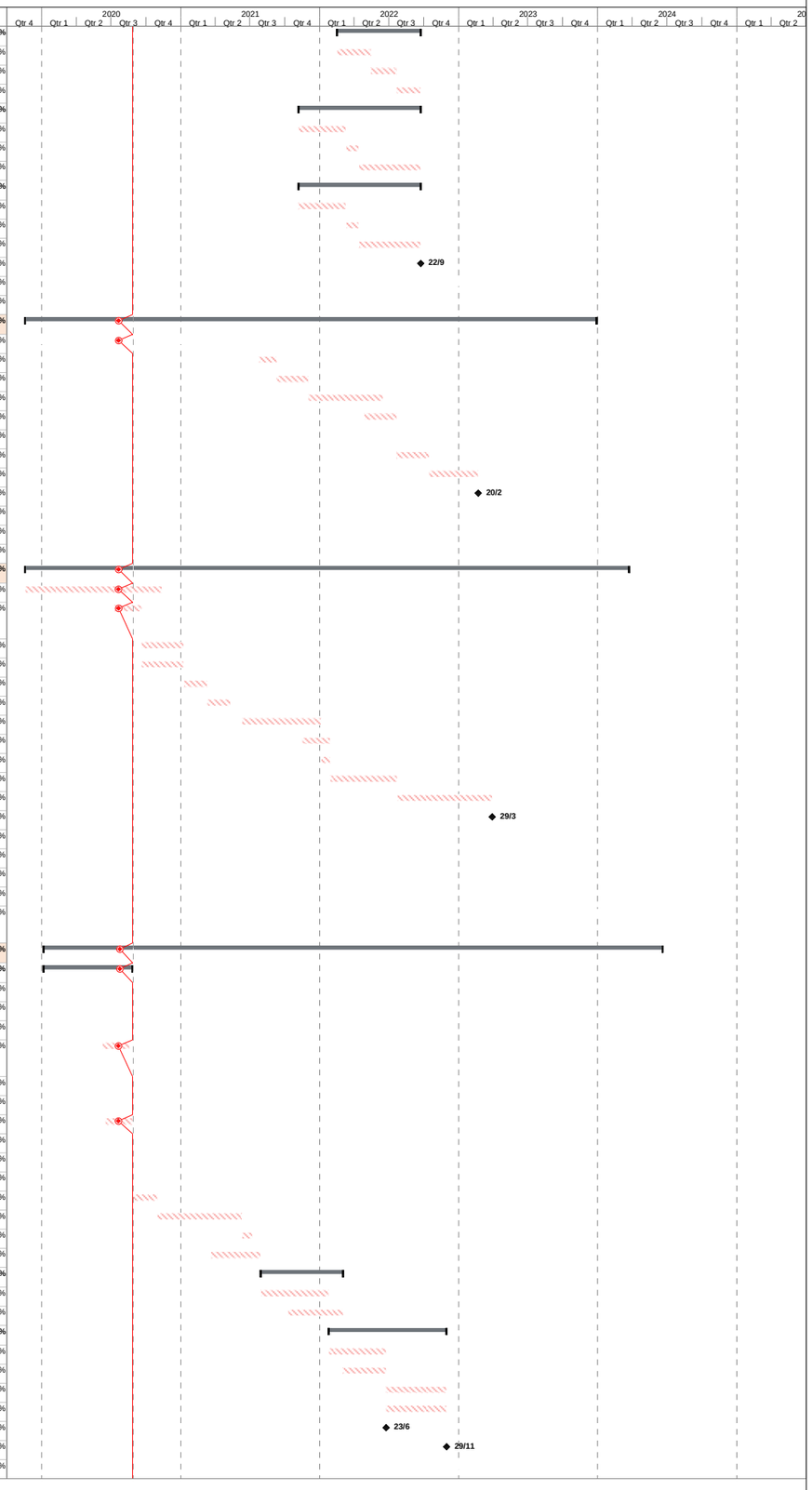


ID	Activity ID	Key Date	Task Name	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
194	**CAR-0000**	*	**Access Road (AR3), B-1**	**223 days**	**Thu 12/12/19**	**Sat 12/9/20**	**220 days**	**Mon 20/1/20**	**Fri 16/10/20**	**Mon 20/1/20**	**NA**	**4,156**		**0 days**		**71%**
195	CAR-1000		Site setup and clearance wroks	28 days	Thu 12/12/19	Thu 16/1/20	38 days	Mon 20/1/20	Fri 6/3/20	Mon 20/1/20	Fri 6/3/20		196	0 days		100%
196	CAR-2000		Drainage and Utilities Works	75 days	Fri 17/1/20	Tue 21/4/20	75 days	Sat 7/3/20	Tue 9/6/20	Sat 7/3/20	Tue 9/6/20	195	197	0 days		100%
197	CAR-3000	KD1A	Roadworks (NCEs)	120 days	Wed 22/4/20	Sat 12/9/20	145 days	Fri 24/4/20	Fri 16/10/20	Fri 24/4/20	NA	196,134	42FF	-27 days		49%
198	**CIW-0000**	*	**Inlet Works No.1, B-2**	**897 days**	**Wed 29/1/20**	**Mon 6/2/23**	**972 days**	**Fri 13/12/19**	**Sat 25/3/23**	**Fri 13/12/19**	**NA**			**591 days**		**20%**
199	**CIW-1000**		**Diversion Works (1. Inlet Trunk Sewer, Leachate Rising Mains, Sludge Pipes, Tank Drains and Pipelines near Primary Sludge Thinkeners)**	**237 days**	**Wed 29/1/20**	**Thu 12/11/20**	**490 days**	**Fri 13/12/19**	**Tue 10/8/21**	**Fri 13/12/19**	**NA**	**178,131**	**43FF**	**-219 days**		**46%**
200	CIW-1100		Utilities scanning to idenify existing UU arrangement	12 days	Wed 29/1/20	Tue 11/2/20	0 days	Fri 13/12/19	Sat 18/1/20	Fri 13/12/19	Sat 18/1/20	158	201SS,203	0 days		100%
201	CIW-1200		Trial pits to locate the collection points	24 days	Wed 29/1/20	Tue 25/2/20	0 days	Mon 6/1/20	Tue 10/3/20	Mon 6/1/20	Tue 10/3/20	158,200SS,132	212,237FS+13 days,222	0 days		100%
202	**CIW-1300**		**Installation and Commissioning of Temporary Activated Carbon Deodorization Unit for the Existing Inlet Works**	**84 days**	**Mon 17/2/20**	**Sat 30/5/20**	**98 days**	**Wed 11/3/20**	**Sat 11/7/20**	**Wed 11/3/20**	**Sat 11/7/20**			**0 days**		**100%**
203	CIW-1310		Construction of concrete plinth	24 days	Mon 17/2/20	Sat 14/3/20	24 days	Wed 11/3/20	Wed 8/4/20	Wed 11/3/20	Wed 8/4/20	200	204	0 days		100%
204	CIW-1320		Installation of Deodorizer	26 days	Mon 16/3/20	Sat 18/4/20	40 days	Thu 9/4/20	Sat 30/5/20	Thu 9/4/20	Sat 30/5/20	203	205	0 days		100%
205	CIW-1330		Testing & commissioning	15 days	Mon 20/4/20	Fri 8/5/20	15 days	Mon 1/6/20	Wed 17/6/20	Mon 1/6/20	Wed 17/6/20	204	206FS-1 day	0 days		100%
206	CIW-1340		Demolishment of the existing carbon deodorization unit	20 days	Fri 8/5/20	Sat 30/5/20	20 days	Wed 17/6/20	Sat 11/7/20	Wed 17/6/20	Sat 11/7/20	205	FS-1 day	0 days		100%
207	**CIW-1400**		**Diversion of Inlet Trunk Sewer (approx. 40m 1800mm dia concrete pipe, 4 deep manholes and Inlet Reception Chamber)**	**213 days**	**Wed 26/2/20**	**Thu 12/11/20**	**417 days**	**Sat 14/3/20**	**Tue 10/8/21**	**Sat 14/3/20**	**NA**			**-219 days**		**31%**
208	CIW-1410		Remedial Works for uncharted sludge Pipe leakage (CE030)	0 days	NA	NA	1 day	Sat 14/3/20	Sat 14/3/20	Sat 14/3/20	Sat 14/3/20		209	0 days		100%
209	CIW-1420		Diversion of uncharted DN250 sludge pipe (CE 030)	0 days	NA	NA	39 days	Sat 14/3/20	Tue 5/5/20	Sat 14/3/20	Tue 5/5/20	208	210	0 days		100%
210	CIW-1430		Removal of concrete surround and uncharted sludge pipe (CE 030)	0 days	NA	NA	2 days	Wed 6/5/20	Thu 7/5/20	Wed 6/5/20	Thu 7/5/20	209	211	0 days		100%
211	CIW-1440		Remedial works for uncharted pipe and unforeseen water seepage (NCE 0021)	0 days	NA	NA	10 days	Fri 8/5/20	Tue 19/5/20	Fri 8/5/20	Tue 19/5/20	210	212,213	0 days		100%
212	**CIW-1450**		**Trench Excavation for 1800mm dia pipeline and manholes**	**68 days**	**Wed 26/2/20**	**Thu 21/5/20**	**104 days**	**Wed 20/5/20**	**Sat 19/9/20**	**Wed 20/5/20**	**NA**	**201,211**		**-14 days**		**73%**
213	CIW-1451		Sheetpile installation (on hold due to identification of uncharted obstruction) (EWN 0045)	0 days	NA	NA	26 days	Wed 20/5/20	Thu 18/6/20	Wed 20/5/20	Thu 18/6/20	211	214	0 days		100%
214	CIW-1452		Identification of uncharted concrete surround and pipes near MHA01 (EWN 0045)	0 days	NA	NA	41 days	Thu 18/6/20	Thu 6/8/20	Thu 18/6/20	Thu 6/8/20	213	215	0 days		100%
215	CIW-1453		Removal of uncharted concrete surround and pipes near MHA01 (EWN 0045) and Sheetpile installation	0 days	NA	NA	10 days	Fri 7/8/20	Tue 18/8/20	Fri 7/8/20	Tue 18/8/20	214	216	0 days		100%
216	CIW-1454		Removal of top 500mm soil and replace with rockfill at MHA01, MHA02, IRC, trench MHA01 to MHA02 (NCE 0073 & 78)	0 days	NA	NA	14 days	Tue 11/8/20	Thu 3/9/20	Tue 11/8/20	NA	215	217	-219 days		0%
217	CIW-1455		Removal of existing DSD drawpits near IRC & exposure of CLP calbes with installation of additional temporary support (EWN 0051)	0 days	NA	NA	14 days	Fri 4/9/20	Sat 19/9/20	NA	NA	216	218	-219 days		0%
218	CIW-1460		Construct M/H MHA01, MHA02, MHA03, MHA04 and Inlet Reception Chamber (NCE 0022)	88 days	Fri 22/5/20	Wed 3/6/20	150 days	Mon 21/9/20	Wed 24/3/21	NA	NA	217	219	-219 days		0%
219	CIW-1470		Lay 1800mm dia concretre pipe (NCE 0022)	45 days	Fri 4/9/20	Thu 29/10/20	82 days	Thu 25/3/21	Tue 6/7/21	NA	NA	218	220	-219 days		0%
220	CIW-1480	KD1B	Collection to existing Inlet Chamber -->10/8/21	12 days	Fri 30/10/20	Thu 12/11/20	30 days	Wed 7/7/21	Tue 10/8/21	NA	NA	219	43FF	-219 days		0%
221	**CIW-1500**		**Diversion of Leachate Rising Main, Sludge Pipes and Tank Drain**	120 days	Wed 1/4/20	Thu 27/8/20	**166 days**	**Mon 11/5/20**	**Wed 25/11/20**	**Mon 11/5/20**	**NA**			**-11 days**		**41%**
222	**CIW-1510**		**Diversion of Tank Drain MHD9.5 to MHA04 (approx. 70m 675mm dia conrete pipe, 24m DN250 DI leachate rising main, 90m CHES1&S2 DN250 CI)**	63 days	Fri 28/8/20	Thu 12/11/20	**151 days**	**Mon 11/5/20**	**Sat 7/11/20**	**Mon 11/5/20**	**NA**	**201**		**4 days**		**53%**
223	**CIW-1511**		**Tank Drain Diversion near MTRCL track**	**0 days**	**NA**	**NA**	**123 days**	**Fri 12/6/20**	**Sat 7/11/20**	**Fri 12/6/20**	**NA**			**4 days**		**49%**
224	CIW-1511a		Excavation of trial pit near MHD9.5 (EWN 044)	0 days	NA	NA	5 days	Fri 12/6/20	Wed 17/6/20	Fri 12/6/20	Wed 17/6/20		225	0 days		100%
225	CIW-1511c		Uncharted cables found near MTRC track and identification(EWN 044)	0 days	NA	NA	1 day	Thu 18/6/20	Thu 18/6/20	Thu 18/6/20	Thu 18/6/20	224	226	0 days		100%
226	CIW-1511d		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	225	227	0 days		100%
227	CIW-1511e		Lower the ground surface, opening and additional trial pit (TP38) (EWN 046)	0 days	NA	NA	17 days	Thu 2/7/20	Tue 21/7/20	Thu 2/7/20	Tue 21/7/20	226	228	0 days		100%
228	CIW-1511f		Trial excavation near MTRCL track (NCE0044)	0 days	NA	NA	9 days	Wed 22/7/20	Fri 31/7/20	Wed 22/7/20	Fri 31/7/20	227	229	0 days		100%
229	CIW-1511g		Excavation of additional trial pit (TP45 & 47) (NCE0044)	0 days	NA	NA	11 days	Tue 28/7/20	Sat 8/8/20	Tue 28/7/20	Sat 8/8/20	228	230	0 days		100%
230	CIW-1511h		Awaiting for AECOM instruction for alignment confirmation for sludge pipe, tank drain & drainage works (NCE0044)	0 days	NA	NA	12 days	Mon 10/8/20	Sat 22/8/20	Mon 10/8/20	Sat 22/8/20	229	231	0 days		100%
231	CIW-1511i	KD1B	Utilities diversion works	63 days	Fri 28/8/20	Thu 12/11/20	63 days	Mon 24/8/20	Sat 7/11/20	NA	NA	230	43FF	4 days		0%
232	CIW-1512		Excavation of trial pit and identification of connection point (NCE 0064)	0 days	NA	NA	54 days	Mon 11/5/20	Tue 14/7/20	Mon 11/5/20	Tue 14/7/20		233	0 days		100%
233	CIW-1513		Trench excavation for twin DN250 sludge pipe and stopped by AECOM (NCE 0064)	0 days	NA	NA	4 days	Wed 15/7/20	Sat 18/7/20	Wed 15/7/20	Sat 18/7/20	232	234	0 days		100%
234	CIW-1514		Additional hole drilling works and identification of connetion point (NCE 0064)	0 days	NA	NA	45 days	Mon 20/7/20	Wed 9/9/20	Mon 20/7/20	NA	233	235	-11 days		2%
235	CIW-1520	KD1B	Diversion of Tank Drain MHD8.5 (approx. 70m CHES1 & CHES2)	63 days	Fri 28/8/20	Thu 12/11/20	63 days	Thu 10/9/20	Wed 25/11/20	NA	NA	234	43FF	-11 days		0%
236	**CIW-1600**	*	**Diversion of pipelines near Primary Sludge Thickeners (approx. 180m long 150mm to 375mm concrete pipes)**	**200 days**	**Thu 12/3/20**	**Thu 12/11/20**	**235 days**	**Thu 19/3/20**	**Sat 2/1/21**	**Thu 19/3/20**	**NA**			**-41 days**		**55%**
237	CIW-1610		Trench Excavation from M/H MHD1E to MHD5 (approx. 90m long with M/Hs MHD1A, 1B, 1C, 1D & 1E)	50 days	Thu 12/3/20	Fri 15/5/20	50 days	Sat 28/3/20	Mon 1/6/20	Sat 28/3/20	Mon 1/6/20	201FS+13 days	238,239	0 days		100%
238	CIW-1620		Manholes construction and Pipe laying	50 days	Sat 16/5/20	Wed 15/7/20	50 days	Tue 2/6/20	Fri 31/7/20	Tue 2/6/20	NA	237	43FF,240	86 days		80%
239	CIW-1630		Trench Excavation from M/H MHD1E to MHD5 (approx. 90m long with M/Hs M1A to M3B) (NCE 0012)	50 days	Sat 16/5/20	Wed 15/7/20	32 days	Thu 19/3/20	Wed 29/4/20	Thu 19/3/20	Wed 29/4/20	237	240,241	0 days		100%
240	CIW-1640		Manholes construction and Pipe laying (NCE 0012)	50 days	Thu 16/7/20	Fri 11/9/20	12 days	Mon 4/5/20	Sat 16/5/20	Mon 4/5/20	Sat 16/5/20	239,238	43FF,242	0 days		100%
241	CIW-1650		Trench Excavation from MHD5 to MHD9.5 (approx. 90m long with M/Hs MHD5A & 5B)	50 days	Thu 16/7/20	Fri 11/9/20	50 days	Wed 2/9/20	Mon 2/11/20	NA	NA	239,244,248,249,250	242,274SS	-41 days		0%
242	CIW-1660	KD1B	Manholes construction and Pipe laying	50 days	Sat 12/9/20	Thu 12/11/20	50 days	Tue 3/11/20	Sat 2/1/21	NA	NA	241,240	43FF	-41 days		0%
243	**CIW-2000**		**Decommission and Demolition of Existing Faciliates and Structures**	**78 days**	**Wed 8/4/20**	**Wed 15/7/20**	**90 days**	**Mon 18/5/20**	**Tue 1/9/20**	**Mon 18/5/20**	**NA**	**6,130,160,162**		**-36 days**		**49%**
244	**CIW-2100**		**Primary Sludge Thickening Tank No.1 and No.2**	**42 days**	**Wed 8/4/20**	**Mon 1/6/20**	**54 days**	**Mon 18/5/20**	**Tue 21/7/20**	**Mon 18/5/20**	**Tue 21/7/20**		**241**	**0 days**		**100%**
245	CIW-2110		Removal of E&M equipment of primary sludge thickening tank (NCE 0020)	0 days	NA	NA	1 day	Thu 4/6/20	Thu 4/6/20	Thu 4/6/20	Thu 4/6/20		246	0 days		100%
246	CIW-2120		Decommission and Demolition the tank (NCE 0052)	0 days	NA	NA	27 days	Thu 18/6/20	Tue 21/7/20	Thu 18/6/20	Tue 21/7/20	245	248	0 days		100%
247	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%
248	CIW-2200		Primary Sludge Pump Pit	18 days	Tue 2/6/20	Mon 22/6/20	18 days	Wed 22/7/20	Tue 11/8/20	NA	NA	246	249,250,241	-41 days		0%
249	CIW-2300		Septic Tank	18 days	Tue 23/6/20	Wed 15/7/20	18 days	Wed 12/8/20	Tue 1/9/20	NA	NA	248	241	-41 days		0%
250	CIW-2400		Diesel Tank	18 days	Tue 23/6/20	Wed 15/7/20	18 days	Wed 12/8/20	Tue 1/9/20	NA	NA	248	241,252FS-10 days	-41 days		0%
251	**CIW-3000**	*	**Inlet Works No.1 Building**	**770 days**	**Sat 4/7/20**	**Mon 6/2/23**	**770 days**	**Fri 21/8/20**	**Sat 25/3/23**	**NA**	**NA**	**6**		**-41 days**		**0%**
252	CIW-3100		Predrilling (59nrs, 3rigs, 2.5days/drillhole/rig)	50 days	Sat 4/7/20	Mon 31/8/20	50 days	Fri 21/8/20	Tue 20/10/20	NA	NA	135,250FS-10 days	253	-41 days	1	0%
253	CIW-3200		Pre-bored H piles (186nos, 4rigs, 3days/rig/pile)	145 days	Tue 1/9/20	Fri 26/2/21	145 days	Wed 21/10/20	Mon 19/4/21	NA	NA	140,252	254SS+110 days,256,255	-41 days	5	0%
254	CIW-3300		Sheetpile Installation (3,840sq.m, 1rigs, 50sqm/rig/day)	80 days	Thu 14/1/21	Fri 23/4/21	80 days	Sat 6/3/21	Sat 12/6/21	NA	NA	253SS+110 days,141	256	-41 days		0%
255	CIW-3400		Pile Load Test	21 days	Sat 27/2/21	Tue 23/3/21	21 days	Tue 20/4/21	Fri 14/5/21	NA	NA	253	256,257,258	-17 days		0%
256	CIW-3500		**ELS works (strutting 4 layers, excavate soil 7445cu.m)**	**120 days**	**Sat 24/4/21**	**Wed 15/9/21**	**120 days**	**Tue 15/6/21**	**Fri 5/11/21**	**NA**	**NA**	**254,253,142,255**		**-41 days**	**5**	**0%**
257	CIW-3510		Phrase C (Grid G3 to L7) - Excavation to -3.3mPD and blinding	120 days	Sat 24/4/21	Wed 15/9/21	120 days	Tue 15/6/21	Fri 5/11/21	NA	NA	255		1001 days		0%
258	CIW-3520		Phrase B (Grid A1 to G3) - Excavation to -7.5mPD and blinding	120 days	Sat 24/4/21	Wed 15/9/21	120 days	Tue 15/6/21	Fri 5/11/21	NA	NA	255	265,269	-41 days		0%
259	CIW-3600		**R.C. Structure works**	**260 days**	**Thu 16/9/21**	**Thu 4/8/22**	**260 days**	**Sat 6/11/21**	**Thu 22/9/22**	**NA**	**NA**	**144,180,181,184,182**		**-41 days**	**5**	**0%**



Revised Works Programme (Status Date: 26/8/2020) (Rev. 01)
[Delay of the works due to some, but not all of, NCE/CE/EWN are shown in this programme]

ID	Activity ID	Key Date	Task Name	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
260	CIW-3610		**Phase A (Grid G1 to L3)**	**180 days**	**Wed 22/12/21**	**Thu 4/8/22**	**180 days**	**Tue 15/2/22**	**Thu 22/9/22**	**NA**	**NA**	**NA**		**-41 days**		**0%**
261	CIW-3611		Rebar fix and formwork and concreting for the pile cap (G/F)	70 days	Wed 22/12/21	Sat 19/3/22	70 days	Tue 15/2/22	Fri 13/5/22	NA		NA 264SS+80 days	262	-41 days		0%
262	CIW-3612		Rebar fix and formwork and concreting upto +13.45mPD (1/F)	55 days	Mon 21/3/22	Mon 30/5/22	55 days	Sat 14/5/22	Tue 19/7/22	NA		NA 261	263	-41 days		0%
263	CIW-3613		Rebar fix and formwork and concreting upto +25.80mPD (R/F)	55 days	Tue 31/5/22	Thu 4/8/22	55 days	Wed 20/7/22	Thu 22/9/22	NA		NA 262	44FF	-41 days		0%
264	CIW-3620		**Phase B (621 sqm) and**	**260 days**	**Thu 16/9/21**	**Thu 4/8/22**	**260 days**	**Sat 6/11/21**	**Thu 22/9/22**	**NA**		**NA**	**261SS+80 days**	**-41 days**		**0%**
265	CIW-3621		Rebar fix and formwork and concreting for the Inlet Works structure upto Ground Level	100 days	Thu 16/9/21	Mon 17/1/22	100 days	Sat 6/11/21	Wed 9/3/22	NA		NA 258	266	-41 days		0%
266	CIW-3622		Apply waterproofing membrance and backfilling	28 days	Tue 18/1/22	Tue 22/2/22	28 days	Thu 10/3/22	Tue 12/4/22	NA		NA 265,179	267	-41 days		0%
267	CIW-3623		Rebar fix and formwork and concreting for the Inlet Works structure upto Roof Level	132 days	Wed 23/2/22	Thu 4/8/22	132 days	Wed 13/4/22	Thu 22/9/22	NA		NA 266	272,273,44FF	-41 days		0%
268	CIW-3630		**Phase C (662 sqm)**	**260 days**	**Thu 16/9/21**	**Thu 4/8/22**	**260 days**	**Sat 6/11/21**	**Thu 22/9/22**	**NA**		**NA**		**-41 days**		**0%**
269	CIW-3631		Rebar fix and formwork and concreting for the Inlet Works structure upto Ground Level	100 days	Thu 16/9/21	Mon 17/1/22	100 days	Sat 6/11/21	Wed 9/3/22	NA		NA 258	270	-41 days		0%
270	CIW-3632		Apply waterproofing membrance and backfilling	28 days	Tue 18/1/22	Tue 22/2/22	28 days	Thu 10/3/22	Tue 12/4/22	NA		NA 269,179	271	-41 days		0%
271	CIW-3633	KD1C	Rebar fix and formwork and concreting for the Inlet Works structure upto Roof Level	132 days	Wed 23/2/22	Thu 4/8/22	132 days	Wed 13/4/22	Thu 22/9/22	NA		NA 270	273,44FF,272	-41 days		0%
272	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 22/9/22	Thu 22/9/22	NA		NA 271,267	44FF	-41 days		0%
273	CIW-3800	SW1	ABWF works + BS works	150 days	Fri 5/8/22	Mon 6/2/23	150 days	Fri 23/9/22	Sat 25/3/23	NA		NA 271,183,149,267	56FF	591 days		0%
274	CIW-3900	SW2	Process Pipe CHE chainage 0-20 & CHF chainage 0-20	180 days	Thu 16/7/20	Sat 20/2/21	180 days	Wed 2/9/20	Tue 13/4/21	NA		NA 241SS	57FF	1171 days		0%
275	**CPS-0000**	*	**Primary Sedimentation Tanks, B-3**	**1220 days**	**Mon 18/11/19**	**Fri 29/12/23**	**1220 days**	**Mon 18/11/19**	**Fri 29/12/23**	**Mon 18/11/19**		**NA 8**		**365 days**		**15%**
276	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	277	1 day		40%
277	CPS-2000		Demolition of existing primary sedimentation tanks no. 1 & 2	40 days	Mon 26/7/21	Thu 9/9/21	40 days	Mon 26/7/21	Thu 9/9/21	NA		NA 130,160,162,276	278	0 days		0%
278	CPS-3000		Predrilling (68nrs, 3rigs, 3days/drillhole/rig)	68 days	Fri 10/9/21	Wed 1/12/21	68 days	Fri 10/9/21	Wed 1/12/21	NA		NA 277,135,344	279	0 days	1	0%
279	CPS-4000		Pre-bored H piles (205nos, 4rigs, 3days/pile/rig)	155 days	Thu 2/12/21	Wed 15/6/22	155 days	Thu 2/12/21	Wed 15/6/22	NA		NA 278,140,345	280FS-40 days,282,281	0 days	5	0%
280	CPS-5000		Sheetpile Installation (FSP-II, 3360sq.m, 1rigs, 50sqm/rig/day)	70 days	Wed 27/4/22	Thu 21/7/22	70 days	Wed 27/4/22	Thu 21/7/22	NA		NA 279FS-40 days,141	282	0 days		0%
281	CPS-6000		Pile Load Test	21 days	Thu 16/6/22	Mon 11/7/22	21 days	Thu 16/6/22	Mon 11/7/22	NA		NA 279	282	9 days		0%
282	CPS-7000		ELS works (20000cu.m soil with 2 layers wailing / strutting)	70 days	Fri 22/7/22	Fri 14/10/22	70 days	Fri 22/7/22	Fri 14/10/22	NA		NA 279,143,281,280,136	283	0 days	3	0%
283	CPS-8000	KD1D	R.C. Structure works	104 days	Sat 15/10/22	Mon 20/2/23	104 days	Sat 15/10/22	Mon 20/2/23	NA		NA 282,145	284,285,45FF,286,287	0 days	3	0%
284	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 283	45FF	0 days		0%
285	CPS-10000	SW1	ABWF works + BS works	170 days	Tue 21/2/23	Fri 15/9/23	170 days	Tue 21/2/23	Fri 15/9/23	NA		NA 283,183,149	56FF	450 days		0%
286	CPS-11000	SW1	Flowmeter Chamber no.1	60 days	Tue 21/2/23	Sat 6/5/23	60 days	Tue 21/2/23	Sat 6/5/23	NA		NA 283	56FF	560 days		0%
287	CPS-12000	SW3	Process Pipe CHG chainage 0-50, CHH chainage 0-80, CHI chainage 0-95 & CHJ chianage 0-40	255 days	Tue 21/2/23	Fri 29/12/23	255 days	Tue 21/2/23	Fri 29/12/23	NA		NA 283	58FF	365 days		0%
288	**CBR-0000**	*	**Bioreactors No.2A & 2B, B-4**	**1218 days**	**Mon 18/11/19**	**Wed 27/12/23**	**1289 days**	**Mon 18/11/19**	**Sat 23/3/24**	**Mon 18/11/19**		**NA 9**		**296 days**		**11%**
289	CBR-1000		Operation of 2no. Existing 800mm air mains over bioreactor no.2	360 days	Mon 18/11/19	Wed 11/11/20	360 days	Mon 18/11/19	Wed 11/11/20	Mon 18/11/19		NA 2	292FF	0 days		68%
290	CBR-2000		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	60 days	Fri 10/7/20	Thu 17/9/20	Fri 10/7/20		NA	291	-46 days		15%
291	CBR-3000		Temporary Diversion of drainage, sewage, airmains before termination	90 days	Mon 27/7/20	Wed 11/11/20	90 days	Fri 18/9/20	Thu 7/1/21	NA		NA 290	293,292SS	-46 days		0%
292	CBR-4000		Diversion of rising main, drainage pipes, and foam collection & surplus activated sludge pipes	90 days	Mon 27/7/20	Wed 11/11/20	90 days	Fri 18/9/20	Thu 7/1/21	NA		NA 289FF,291SS	293	-46 days		0%
293	CBR-5000		Demolition of existing bioreactor no.2	50 days	Thu 12/11/20	Tue 12/1/21	50 days	Fri 8/1/21	Wed 10/3/21	NA		NA 130,160,162,292,291	294	-46 days		0%
294	CBR-6000		Predrilling (76nrs, 4rigs, 2.5days/drillhole/rig)	48 days	Wed 13/1/21	Fri 12/3/21	48 days	Thu 11/3/21	Mon 10/5/21	NA		NA 293,135	295	-46 days	1	0%
295	CBR-7000		Pre-bored H piles (157nos, 3rigs, 3days/pile/rig)	170 days	Sat 13/3/21	Thu 7/10/21	170 days	Thu 10/6/21	Mon 3/1/22	NA		NA 294,140,319	296FS-39 days,298,297	-71 days	5	0%
296	CBR-8000		Sheetpile Installation (3000sq.m, 1rigs, 50sqm/rig/day)	60 days	Sat 21/8/21	Tue 2/11/21	60 days	Tue 16/11/21	Thu 27/1/22	NA		NA 295FS-39 days,141	298	-71 days		0%
297	CBR-9000		Pile Load Test	21 days	Fri 8/10/21	Tue 2/11/21	21 days	Tue 4/1/22	Thu 27/1/22	NA		NA 295	298	-71 days		0%
298	CBR-10000		ELS works (18100cu.m soil with 4 layers wailing / strutting)	140 days	Wed 3/11/21	Tue 26/4/22	140 days	Fri 28/1/22	Fri 22/7/22	NA		NA 295,296,143,297,136	299	-71 days	3	0%
299	CBR-11000	KD1E	R.C. Structure works	205 days	Wed 27/4/22	Sat 31/12/22	205 days	Sat 23/7/22	Wed 29/3/23	NA		NA 146,180,181,298,184,182	300,304,46FF,301,302,303,305	-71 days	5	0%
300	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	Wed 29/3/23	Wed 29/3/23	NA		NA 299	46FF	-71 days		0%
301	CBR-13000	SW1	Flowmeter no. 2-4	180 days	Tue 3/1/23	Sat 12/8/23	180 days	Thu 30/3/23	Tue 7/11/23	NA		NA 299	56FF	408 days		0%
302	CBR-14000	SW1	Gate Valve Chamber no.1-3	180 days	Tue 3/1/23	Sat 12/8/23	180 days	Thu 30/3/23	Tue 7/11/23	NA		NA 299	56FF	408 days		0%
303	CBR-15000	SW1	Plug Valve Chamber no.1-2	180 days	Tue 3/1/23	Sat 12/8/23	180 days	Thu 30/3/23	Tue 7/11/23	NA		NA 299	56FF	408 days		0%
304	CBR-16000	SW1	ABWF works + BS works	180 days	Tue 3/1/23	Sat 12/8/23	180 days	Thu 30/3/23	Tue 7/11/23	NA		NA 299,183,149	56FF	408 days		0%
305	CBR-17000	SW3	Process Pipe CHQ chainage 65-170, CHP chainage 60-130, CHO chainage 65-140, CHL chainage 0-35 & CHK chianage 0-50	292 days	Tue 3/1/23	Wed 27/12/23	292 days	Thu 30/3/23	Sat 23/3/24	NA		NA 299	58FF	296 days		0%
306	**CMF-0000**	*	**Membrane Facilities Building, B-5**	**1181 days**	**Mon 6/1/20**	**Fri 29/12/23**	**1311 days**	**Mon 6/1/20**	**Wed 19/6/24**	**Mon 6/1/20**		**NA 10**		**235 days**		**16%**
307	**CMF-1000**		**Demolition of existing final sedimentation tanks no. 3 & 4**	**60 days**	**Mon 6/1/20**	**Wed 18/3/20**	**190 days**	**Mon 6/1/20**	**Wed 26/8/20**	**Mon 6/1/20**		**NA 160,130**		**0 days**		**85%**
308	CMF-1100		Confirmation of Decommission Schedule (CE 030)	0 days	NA	NA	58 days	Mon 6/1/20	Mon 16/3/20	Mon 6/1/20	Mon 16/3/20		309	0 days		100%
309	CMF-1200		Provision of new submersed pump (CE 026)	0 days	NA	NA	27 days	Wed 4/3/20	Fri 3/4/20	Wed 4/3/20	Fri 3/4/20	308	310	0 days		100%
310	CMF-1300		Additional dismantling works to retain specified electrical and mechanical equipment (NCE 013)	0 days	NA	NA	21 days	Tue 7/4/20	Wed 6/5/20	Tue 7/4/20	Wed 6/5/20	309	311	0 days		100%
311	CMF-1400		Additional pluging works for DN 1200 Conc. S&S pipe at wash water pumping station chamber (NCE 015)	0 days	NA	NA	60 days	Mon 8/6/20	Tue 18/8/20	Mon 8/6/20	NA	310	312,318	-123 days		58%
312	CMF-1500		Diversion of wash water main (EWN026)	0 days	NA	NA	21 days	Mon 15/6/20	Fri 10/7/20	Mon 15/6/20	Fri 10/7/20	311		0 days		100%
313	CMF-1600		Isolation wall for RAS Channel No.1 (NCE 003)	0 days	NA	NA	40 days	Mon 1/6/20	Sat 18/7/20	Mon 1/6/20	Sat 18/7/20			0 days		100%
314	CMF-1700		Removal of DN1400 Bioreactor No.2 Effluent Pipe (PMI 043)	0 days	NA	NA	60 days	Tue 16/6/20	Wed 26/8/20	Tue 16/6/20	NA		318	-130 days		47%
315	CMF-1800		Exposed and disconnet uncharted existing cable between FST3 and FST 4 (NCE 007)	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%
316	CMF-1900		Removal of Existing DN150 SAS Rising Main at RAS Channel No. 1 (EWN 032)	0 days	NA	NA	14 days	Wed 15/7/20	Thu 30/7/20	Wed 15/7/20	Thu 30/7/20			0 days		100%
317	CMF-1110		Demolition of structure no. 3 & 4	0 days	NA	NA	71 days	Wed 1/4/20	Tue 30/6/20	Wed 1/4/20	Tue 30/6/20			0 days		100%
318	CMF-2000		Predrilling (83nrs, 4rigs, 2.5days/drillhole/rig)	52 days	Thu 19/3/20	Mon 25/5/20	52 days	Thu 27/8/20	Thu 29/10/20	NA		NA 135,311,314	319	-130 days	1	0%
319	CMF-3000		Pre-bored H piles (224nos, 4rigs, 3days/pile/rig)	180 days	Tue 26/5/20	Tue 29/12/20	180 days	Fri 30/10/20	Wed 9/6/21	NA		NA 318,140	320,295,321FS-65 days	-130 days	5	0%
320	CMF-4000		Pile Load Test	21 days	Wed 30/12/20	Sat 23/1/21	21 days	Thu 10/6/21	Tue 6/7/21	NA		NA 319	323	-111 days		0%
321	CMF-5000		Installation of sheetpile (5200sq.m, 1rigs, 50sqm/rig/day)	105 days	Mon 12/10/20	Thu 18/2/21	105 days	Sat 20/3/21	Wed 28/7/21	NA		NA 319FS-65 days	323	-130 days		0%
322	CMF-6000		**ELS works**	**177 days**	**Fri 19/2/21**	**Tue 21/9/21**	**177 days**	**Thu 29/7/21**	**Wed 2/3/22**	**NA**		**NA**		**-130 days**	**5**	**0%**
323	CMF-6100		Pharse A (A1 to N6) - Excavation to -11mPD and blinding	147 days	Fri 19/2/21	Tue 17/8/21	147 days	Thu 29/7/21	Sat 22/1/22	NA		NA 321,143,320	324SS+60 days,326	-130 days		0%
324	CMF-6200		Pharse B (A6 to N10) - Excavation to -1.9mPD and blinding	117 days	Wed 5/5/21	Tue 21/9/21	117 days	Sat 9/10/21	Wed 2/3/22	NA		NA 323SS+60 days	327	-130 days		0%
325	CMF-7000		**RC Structure works**	**252 days**	**Wed 18/8/21**	**Sat 25/6/22**	**252 days**	**Mon 24/1/22**	**Tue 29/11/22**	**NA**		**NA**		**-130 days**	**5**	**0%**
326	CMF-7100	KD1F	Pharse A - from B2 - Level 1	120 days	Wed 18/8/21	Tue 11/1/22	120 days	Mon 24/1/22	Thu 23/6/22	NA		NA 147,180,181,184,182,323	47FF,328,327SS+30 days,330	-130 days		0%
327	CMF-7200	KD1F	Pharse B - from B1 - Level 1	90 days	Thu 23/9/21	Tue 11/1/22	90 days	Thu 3/3/22	Thu 23/6/22	NA		NA 326SS+30 days,324	330,47FF,329	-130 days		0%
328	CMF-7300	KD1G	Pharse A - from Level 1 to Roof	132 days	Wed 12/1/22	Sat 25/6/22	132 days	Fri 24/6/22	Tue 29/11/22	NA		NA 326	332,48FF,333,331	-130 days		0%
329	CMF-7400	KD1G	Pharse B - from Level 1 to Roof	132 days	Wed 12/1/22	Sat 25/6/22	132 days	Fri 24/6/22	Tue 29/11/22	NA		NA 327	48FF,331,332,333	-130 days		0%
330	CMF-8000	KD1F	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Tue 11/1/22	Tue 11/1/22	0 days	Thu 23/6/22	Thu 23/6/22	NA		NA 327,326	47FF,331	-118 days		0%
331	CMF-9000	KD1G	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Sat 25/6/22	Sat 25/6/22	0 days	Tue 29/11/22	Tue 29/11/22	NA		NA 330,329,328	48FF	-130 days		0%
332	CMF-10000	SW1	ABWF works + BS works	210 days	Mon 27/6/22	Thu 9/3/23	210 days	Wed 30/11/22	Thu 17/8/23	NA		NA 328,183,149,329	56FF	475 days		0%



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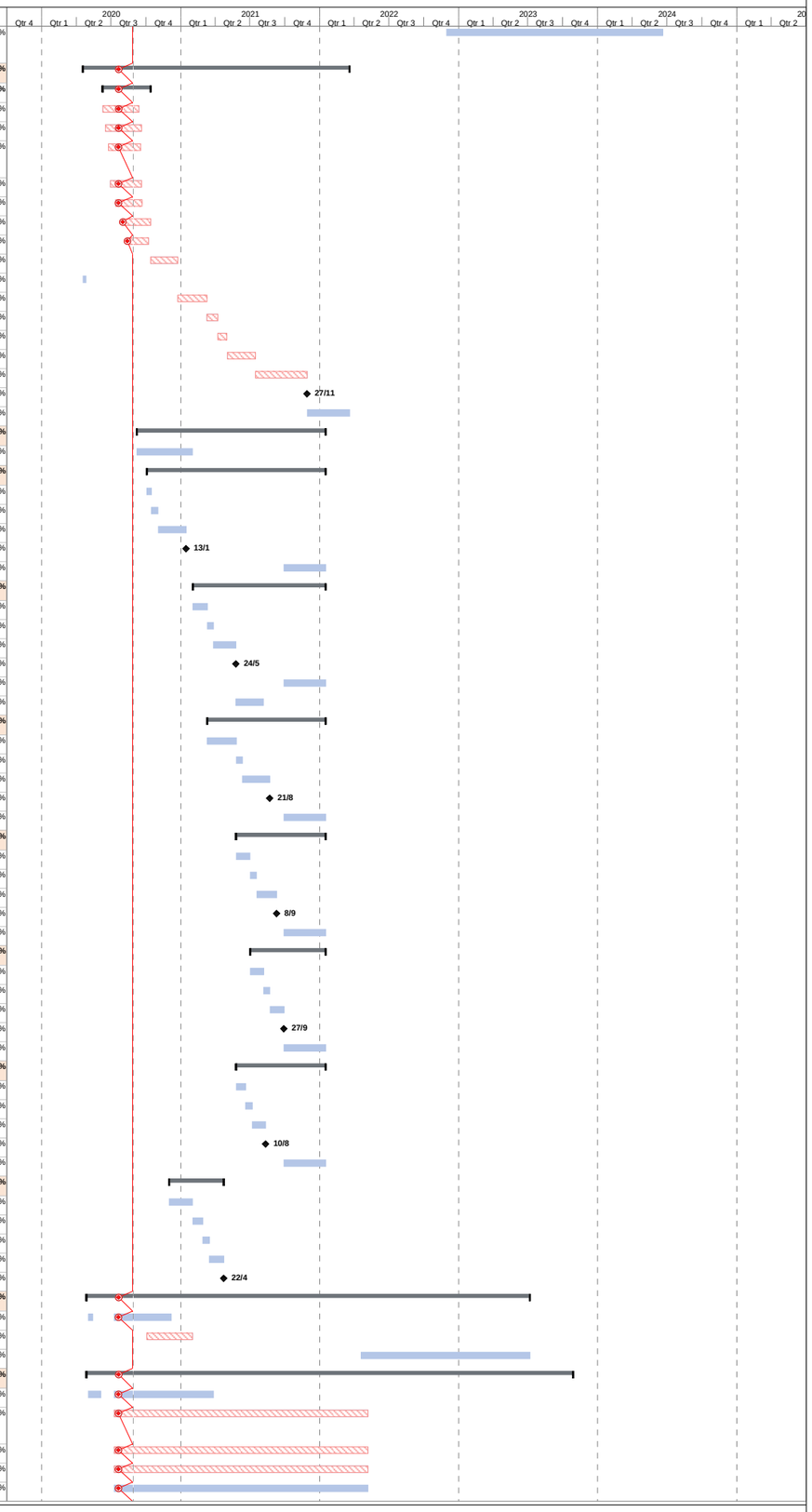
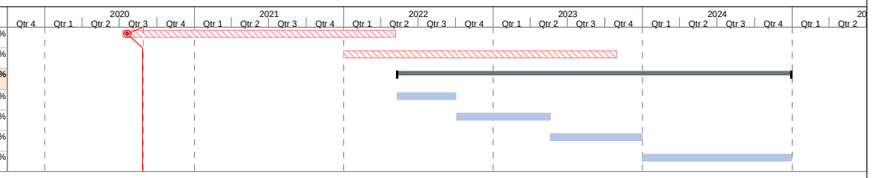
333	CMF-11000	SW3	Process Pipe CHQ chainage 0-65, CHM chainage 0-120, CHN chainage 0-125, CHO chainage 0-65, CHP chainage 0-60 & CHV chaiange 0-50	450 days	Mon 27/6/22	Fri 29/12/23	450 days	Wed 30/11/22	Wed 19/6/24	NA	NA	328,329	58FF	235 days		0%
334	**CSA-0000**	*	**SAS Pumping Station, B-6**	**496 days**	**Wed 20/5/20**	**Sat 15/1/22**	**572 days**	**Sat 18/4/20**	**Sat 19/3/22**	**Sat 18/4/20**	**NA**	**11**		**892 days**		**13%**
335	**CSA-1000**		**Additional Preliminary Works**	**0 days**	**NA**	**NA**	**104 days**	**Tue 9/6/20**	**Mon 12/10/20**	**Tue 9/6/20**	**NA**			**0 days**		**23%**
336	CSA-1100		Diversion of Existing DN150 SAS Raising Main (PPMI 025)	0 days	NA	NA	80 days	Tue 9/6/20	Fri 11/9/20	Tue 9/6/20	NA		343	-68 days		43%
337	CSA-1200		Diversion of Power supply for existing Slaghter House pump station (PPMI 034)	0 days	NA	NA	80 days	Tue 16/6/20	Fri 18/9/20	Tue 16/6/20	NA		343	-74 days		35%
338	CSA-1300		Decommission of exisiting power and signal systems in leachate Pump station switch room (PPMI 039)	0 days	NA	NA	70 days	Wed 24/6/20	Tue 15/9/20	Wed 24/6/20	NA		343	-71 days		30%
339	CSA-1400		Diversion of Existing DN250 Leachate Raising Main (PPMI 025)	0 days	NA	NA	70 days	Mon 29/6/20	Fri 18/9/20	Mon 29/6/20	NA		343	-74 days		26%
340	CSA-1500		Construction of Cable trough for CLP 11kv Cable Diversion (PPMI 041)	0 days	NA	NA	60 days	Mon 13/7/20	Sat 19/9/20	Mon 13/7/20	NA		343	-75 days		12%
341	CSA-1600		Demolition of Existing Pillar box and its concrete plinth (CE 030)	0 days	NA	NA	60 days	Sat 1/8/20	Mon 12/10/20	Sat 1/8/20	NA		343	-92 days		0%
342	CSA-1700		Excavation to locate existing underground cable near SAS Pump Station (PPMI 038)	0 days	NA	NA	45 days	Thu 13/8/20	Tue 6/10/20	Thu 13/8/20	NA		343	-87 days		0%
343	CSA-2000		Tank Drain Diversion Near SAS Pumping Station	60 days	Tue 23/6/20	Wed 2/9/20	60 days	Tue 13/10/20	Tue 22/12/20	NA	NA	336,337,338,339,340,341,342	345	-92 days		0%
344	CSA-3000		Predrilling (4nrs, 1rig, 4days/drillhole/rig)	15 days	Wed 20/5/20	Fri 5/6/20	7 days	Sat 18/4/20	Sat 25/4/20	Sat 25/4/20	Sat 25/4/20	135	278,345	0 days		100%
345	CSA-4000		Pre-bored H piles (12nos, 1rigs, 5days/pile/rig)	60 days	Thu 3/9/20	Sat 14/11/20	60 days	Wed 23/12/20	Tue 9/3/21	NA	NA	140,343,344	279,346	-92 days	2	0%
346	CSA-5000		Pile Load Test	21 days	Mon 16/11/20	Wed 9/12/20	21 days	Wed 10/3/21	Tue 6/4/21	NA	NA	345	348,347	-92 days		0%
347	CSA-6000		Sheetpile Installation (FSP-II, 690sq.m, 40sqm/day)	21 days	Thu 10/12/20	Wed 6/1/21	21 days	Wed 7/4/21	Fri 30/4/21	NA	NA	141,346	348	-92 days		0%
348	CSA-7000		ELS works (1300cu.m soil with 2 layers wailing / strutting)	60 days	Thu 7/1/21	Sat 20/3/21	60 days	Mon 3/5/21	Wed 14/7/21	NA	NA	347,143,346,136	349	-92 days	2	0%
349	CSA-8000	KD1H	R.C. Structure works	114 days	Mon 22/3/21	Mon 9/8/21	114 days	Thu 15/7/21	Sat 27/11/21	NA	NA	148,180,181,348,184,182	350,351,49FF	-92 days	5	0%
350	CSA-9000	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 27/11/21	Sat 27/11/21	NA	NA	349	49FF	-92 days		0%
351	CSA-10000	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Mon 29/11/21	Sat 19/3/22	NA	NA	349,183,149,384SS	56FF	892 days		0%
352	**CAS-0000**	*	**Ancillary Structures, B-7**	**404 days**	**Mon 7/9/20**	**Sat 15/1/22**	**404 days**	**Mon 7/9/20**	**Sat 15/1/22**	**NA**	**NA**	**12**		**99 days**		**0%**
353	**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 7/9/20	Sat 30/1/21	NA	NA	130,160,162	360,367,373,379,385	99 days		0%
354	**CCS-1000**	*	**Chemical System No.1**	**383 days**	**Sat 3/10/20**	**Sat 15/1/22**	**383 days**	**Sat 3/10/20**	**Sat 15/1/22**	**NA**	**NA**			**188 days**		**0%**
355	CCS-1100		Excavation for Raft Footing (20cu.m)	10 days	Sat 3/10/20	Wed 14/10/20	10 days	Sat 3/10/20	Wed 14/10/20	NA	NA	136	356,361	188 days		0%
356	CCS-1200		Plate load test	14 days	Thu 15/10/20	Sat 31/10/20	14 days	Thu 15/10/20	Sat 31/10/20	NA	NA	355	357	308 days		0%
357	CCS-1300	KD1J	R.C. structure works	60 days	Mon 2/11/20	Wed 13/1/21	60 days	Mon 2/11/20	Wed 13/1/21	NA	NA	356	358,51FF,359	308 days	2	0%
358	CCS-1400	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Wed 13/1/21	Wed 13/1/21	0 days	Wed 13/1/21	Wed 13/1/21	NA	NA	357	51FF	308 days		0%
359	CCS-1500	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Tue 28/9/21	Sat 15/1/22	NA	NA	183,149,357,384SS	56FF	943 days		0%
360	**CCS-2000**	*	**Chemical System No.2**	**284 days**	**Mon 1/2/21**	**Sat 15/1/22**	**284 days**	**Mon 1/2/21**	**Sat 15/1/22**	**NA**	**NA**	**353**		**99 days**		**0%**
361	CCS-2100		Excavation for Raft Footing (100cu.m)	30 days	Mon 1/2/21	Wed 10/3/21	30 days	Mon 1/2/21	Wed 10/3/21	NA	NA	136,355	362,368	99 days		0%
362	CCS-2200		Plate load test	14 days	Thu 11/3/21	Fri 26/3/21	14 days	Thu 11/3/21	Fri 26/3/21	NA	NA	361	363	204 days		0%
363	CCS-2300	KD1J	R.C. structure works	45 days	Sat 27/3/21	Mon 24/5/21	45 days	Sat 27/3/21	Mon 24/5/21	NA	NA	362	364,51FF,365,366	204 days	2	0%
364	CCS-2400	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 24/5/21	Mon 24/5/21	0 days	Mon 24/5/21	Mon 24/5/21	NA	NA	363	51FF	204 days		0%
365	CCS-2500	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Tue 28/9/21	Sat 15/1/22	NA	NA	183,149,363,384SS	56FF	943 days		0%
366	CCS-2600	SW1	Demolition of existing chemical room	60 days	Tue 25/5/21	Wed 4/8/21	60 days	Tue 25/5/21	Wed 4/8/21	NA	NA	363	56FF	1078 days		0%
367	**CFS-1000**	*	**Fire Services Sprinkler Pumping Room**	**254 days**	**Thu 11/3/21**	**Sat 15/1/22**	**254 days**	**Thu 11/3/21**	**Sat 15/1/22**	**NA**	**NA**	**353**		**99 days**		**0%**
368	CFS-2000		Excavation for Raft Footing (800cu.m)	60 days	Thu 11/3/21	Tue 25/5/21	60 days	Thu 11/3/21	Tue 25/5/21	NA	NA	136,361	369,374,386	99 days		0%
369	CFS-3000		Plate load test	14 days	Wed 26/5/21	Thu 10/6/21	14 days	Wed 26/5/21	Thu 10/6/21	NA	NA	368	370	129 days		0%
370	CFS-4000	KD1J	R.C. structure works	60 days	Fri 11/6/21	Sat 21/8/21	60 days	Fri 11/6/21	Sat 21/8/21	NA	NA	369	372,371,51FF	129 days	2	0%
371	CFS-5000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Sat 21/8/21	Sat 21/8/21	0 days	Sat 21/8/21	Sat 21/8/21	NA	NA	370	51FF	129 days		0%
372	CFS-6000	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Tue 28/9/21	Sat 15/1/22	NA	NA	183,149,370,384SS	56FF	943 days		0%
373	**CTC-0000**	*	**Temporary Chemical Dosing System**	**194 days**	**Wed 26/5/21**	**Sat 15/1/22**	**194 days**	**Wed 26/5/21**	**Sat 15/1/22**	**NA**	**NA**	**353**		**99 days**		**0%**
374	CTC-1000		Excavation for Raft Footing (300cu.m)	30 days	Wed 26/5/21	Wed 30/6/21	30 days	Wed 26/5/21	Wed 30/6/21	NA	NA	136,368	375,380	99 days		0%
375	CTC-2000		Plate load test	14 days	Fri 2/7/21	Sat 17/7/21	14 days	Fri 2/7/21	Sat 17/7/21	NA	NA	374	376	114 days		0%
376	CTC-3000	KD1J	R.C. structure works	45 days	Mon 19/7/21	Wed 8/9/21	45 days	Mon 19/7/21	Wed 8/9/21	NA	NA	375	377,51FF,378	114 days	1	0%
377	CTC-4000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Wed 8/9/21	Wed 8/9/21	0 days	Wed 8/9/21	Wed 8/9/21	NA	NA	376	51FF	114 days		0%
378	CTC-5000	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Tue 28/9/21	Sat 15/1/22	NA	NA	183,149,376,384SS	56FF	943 days		0%
379	**CFB-0000**	*	**Fire Hydrant and Booster Pump Room**	**164 days**	**Fri 2/7/21**	**Sat 15/1/22**	**164 days**	**Fri 2/7/21**	**Sat 15/1/22**	**NA**	**NA**	**353**		**99 days**		**0%**
380	CFB-1000		Excavation for Raft Footing (200cu.m)	30 days	Fri 2/7/21	Thu 5/8/21	30 days	Fri 2/7/21	Thu 5/8/21	NA	NA	136,374	381	99 days		0%
381	CFB-2000		Plate load test	14 days	Fri 6/8/21	Sat 21/8/21	14 days	Fri 6/8/21	Sat 21/8/21	NA	NA	380	382	99 days		0%
382	CFB-3000	KD1J	R.C. structure works	30 days	Mon 23/8/21	Mon 27/9/21	30 days	Mon 23/8/21	Mon 27/9/21	NA	NA	381	383,384,51FF	99 days	1	0%
383	CFB-4000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Mon 27/9/21	Mon 27/9/21	0 days	Mon 27/9/21	Mon 27/9/21	NA	NA	382	51FF	99 days		0%
384	CFB-5000	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Tue 28/9/21	Sat 15/1/22	NA	NA	382,183,149	56FF,390SS,378SS,372SS,365SS,	943 days		0%
385	**CEG-0000**	*	**Emergency Generator House**	**194 days**	**Wed 26/5/21**	**Sat 15/1/22**	**194 days**	**Wed 26/5/21**	**Sat 15/1/22**	**NA**	**NA**	**353**		**139 days**		**0%**
386	CEG-1000		Excavation for Raft Footing (100cu.m)	20 days	Wed 26/5/21	Fri 18/6/21	20 days	Wed 26/5/21	Fri 18/6/21	NA	NA	136,368	387	139 days		0%
387	CEG-2000		Plate load test	14 days	Sat 19/6/21	Tue 6/7/21	14 days	Sat 19/6/21	Tue 6/7/21	NA	NA	386	388	139 days		0%
388	CEG-3000	KD1J	R.C. structure works	30 days	Wed 7/7/21	Tue 10/8/21	30 days	Wed 7/7/21	Tue 10/8/21	NA	NA	387	389,51FF,390	139 days	1	0%
389	CEG-4000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Tue 10/8/21	Tue 10/8/21	0 days	Tue 10/8/21	Tue 10/8/21	NA	NA	388	51FF	139 days		0%
390	CEG-5000	SW1	ABWF works + BS works	90 days	Tue 28/9/21	Sat 15/1/22	90 days	Tue 28/9/21	Sat 15/1/22	NA	NA	183,149,388,384SS	56FF	943 days		0%
391	**CDS-0000**	*	**Deodorization System No.1 and No.3A**	**114 days**	**Tue 1/12/20**	**Thu 22/4/21**	**114 days**	**Tue 1/12/20**	**Thu 22/4/21**	**NA**	**NA**			**229 days**		**0%**
392	CDS-1000		Demolition of Existing Leachate Pump Pit	50 days	Tue 1/12/20	Sat 30/1/21	50 days	Tue 1/12/20	Sat 30/1/21	NA	NA		393	229 days		0%
393	CDS-2000		Excavation for Raft Footing (400cu.m)	20 days	Mon 1/2/21	Fri 26/2/21	20 days	Mon 1/2/21	Fri 26/2/21	NA	NA	136,392,399	394	229 days		0%
394	CDS-3000		Plate load test	14 days	Sat 27/2/21	Mon 15/3/21	14 days	Sat 27/2/21	Mon 15/3/21	NA	NA	393	395	229 days		0%
395	CDS-4000	KD1J	Footing works	30 days	Tue 16/3/21	Thu 22/4/21	30 days	Tue 16/3/21	Thu 22/4/21	NA	NA	394	396,51FF	229 days		0%
396	CDS-5000	KD1J	Allow access to Contractor DE/2018/04 for E&M installation and T&C works	0 days	Thu 22/4/21	Thu 22/4/21	0 days	Thu 22/4/21	Thu 22/4/21	NA	NA	395	51FF	229 days		0%
397	**CAA-0000**	*	**Additional and Alternation Works for Existing Facilities (B-7A, B-8, B-8A)**	**918 days**	**Mon 1/6/20**	**Thu 6/7/23**	**946 days**	**Mon 27/4/20**	**Thu 6/7/23**	**Mon 27/4/20**	**NA**			**511 days**		**11%**
398	CAA-1000	KD2B	B-8A Alternation works for existing Air Blower House No.2 (Pipeline CHTA, approx. 133m DN800 D.I.)	185 days	Mon 1/6/20	Mon 11/1/21	185 days	Mon 27/4/20	Sat 5/12/20	Mon 27/4/20	NA	15,150,178	53FF	28 days		37%
399	CAA-2000	KD1I	B7-A Alternation works for exisiting Power House	99 days	Sat 3/10/20	Sat 30/1/21	99 days	Sat 3/10/20	Sat 30/1/21	NA	NA	13FS-1 day,130,160,162,170	50FF,393	0 days		0%
400	CAA-3000	SW3	Alternation works for existing Membrane Facilities Building No.1	360 days	Tue 19/4/22	Thu 6/7/23	360 days	Tue 19/4/22	Thu 6/7/23	NA	NA	14FS-1 day,169	58FF	511 days		0%
401	**CUU-0000**	*	**External Underground Service, Utilities, Road/Drain**	**1038 days**	**Sat 2/5/20**	**Sat 28/10/23**	**1041 days**	**Mon 27/4/20**	**Sat 28/10/23**	**Mon 27/4/20**	**NA**	**16**		**0 days**		**2%**
402	CUU-1000	KD2A	Process Pipes CHR and CHS (approx. 100m twin DN900 D.I.)	272 days	Sat 2/5/20	Sat 27/3/21	242 days	Mon 27/4/20	Fri 26/3/21	Mon 27/4/20	NA	178,150	408,407SS+48 days,405SS+48 day	1.2 days		15%
403	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	542 days	Thu 9/7/20	Fri 6/5/22	Thu 9/7/20	NA	178,402SS+48 days,150	408FS-100 days,57FF	0 days		2%
404	CUU-3000	SW2	Drainage	550 days	Mon 29/6/20	Fri 6/5/22	542 days	Thu 9/7/20	Fri 6/5/22	Thu 9/7/20	NA	178,402SS+48 days,150	408FS-100 days,57FF	0 days	5	2%
405	CUU-4000	SW2	Sewerage	550 days	Mon 29/6/20	Fri 6/5/22	542 days	Thu 9/7/20	Fri 6/5/22	Thu 9/7/20	NA	402SS+48 days,178,150	408FS-100 days,57FF	0 days	5	2%
406	CUU-5000	SW2	Waterworks	550 days	Mon 29/6/20	Fri 6/5/22	542 days	Thu 9/7/20	Fri 6/5/22	Thu 9/7/20	NA	402SS+48 days,178,150	410FS+2 days,57FF	71 days	5	2%

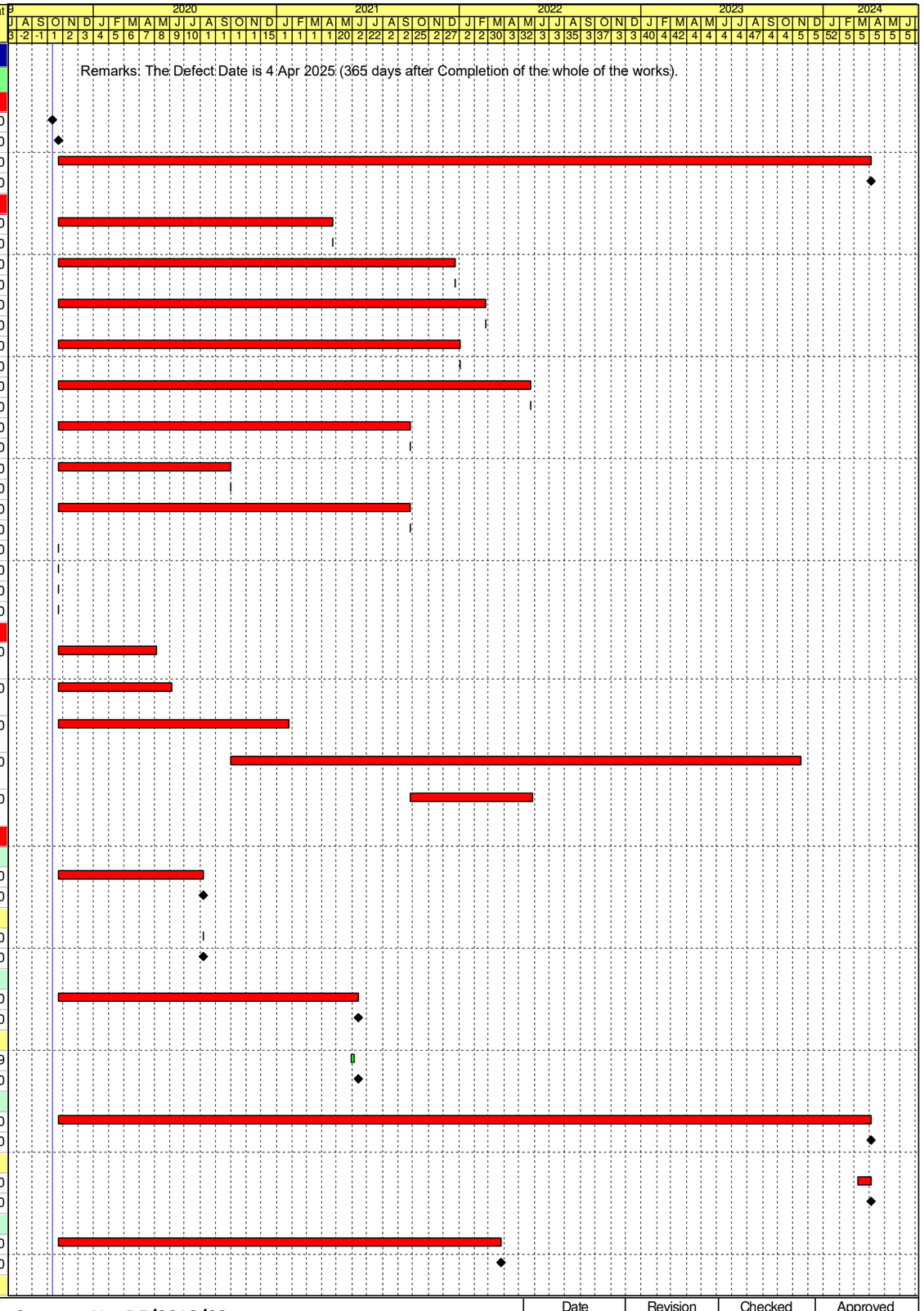


Revised Works Programme (Status Date: 26/8/2020) (Rev. 01)
[Delay of the works due to some, but not all of, NCE/CE/EWN are shown in this programme]

ID	Activity ID	Key Date	Task Name	Baseline Duration	Baseline Start	Baseline Finish	Duration	Start	Finish	Actual Start	Actual Finish	Predecessors	Successors	Total Slack	Risk Allowance	% Complete
407	CUU-6000	SW2	Cable Ducts	550 days	Mon 29/6/20	Fri 6/5/22	542 days	Thu 9/7/20	Fri 6/5/22	Thu 9/7/20	NA	402SS+48 days,178,150	408FS-100 days,57FF	0 days	5	2%
408	CUU-7000	KD3A	Roadworks	540 days	Fri 31/12/21	Sat 28/10/23	540 days	Fri 31/12/21	Sat 28/10/23	NA	NA	404FS-100 days,405FS-100 days,4	54FF	0 days	5	0%
409	**CLW-0000**	*	**Landscaping Works**	**778 days**	**Wed 11/5/22**	**Sun 29/12/24**	**778 days**	**Wed 11/5/22**	**Sun 29/12/24**	**NA**	**NA**	**16**		**71 days**		**0%**
410	CLW-1000	SW3	Irrigation System	120 days	Wed 11/5/22	Fri 30/9/22	120 days	Wed 11/5/22	Fri 30/9/22	NA	NA	406FS+2 days,178	411,58FF	71 days		0%
411	CLW-2000	SW3	Hard Landscaping Works	185 days	Mon 3/10/22	Fri 19/5/23	185 days	Mon 3/10/22	Fri 19/5/23	NA	NA	410,151	412,58FF	71 days	5	0%
412	CLW-3000	SW3	Soft Landscaping Works	185 days	Sat 20/5/23	Sat 30/12/23	185 days	Sat 20/5/23	Sat 30/12/23	NA	NA	411,151	413,58FF	71 days	5	0%
413	CLW-4000	DLP	Establishment Works (365 days)	365 days	Sun 31/12/23	Sun 29/12/24	365 days	Sun 31/12/23	Sun 29/12/24	NA	NA	412,151	59FF,60FF	88 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		11-Oct-19		0
AS000020	Starting Date	0	23-Oct-19		23-Oct-19		0
AS000110	Whole Contract Period (1626 days from starting date)	1626	23-Oct-19	04-Apr-24	23-Oct-19	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	24-Apr-21	23-Oct-19	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	25-Dec-21	23-Oct-19	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	23-Feb-22	23-Oct-19	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	04-Jan-22	23-Oct-19	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	24-May-22	23-Oct-19	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	26-Sep-21	23-Oct-19	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	01-Oct-20	23-Oct-19	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	26-Sep-21	23-Oct-19	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	23-Oct-19	23-Oct-19	23-Oct-19	0
AS001910	Planned Access Date for Works Area WA1-B	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
AS001920	Works Area WA3 (starting date)	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
AS001930	Planned Access Date for Works Area WA3	1	23-Oct-19	23-Oct-19	23-Oct-19	23-Oct-19	0
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	05-May-20	23-Oct-19	05-May-20	0
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	04-Jun-20	23-Oct-19	04-Jun-20	0
AS002040	KD2B Submission of Remaining Civil Requirement Dwgs, Elec. Schematic Dwgs of SD Bldg, SD & DC, CHP Bldg, etc.	461	23-Oct-19	25-Jan-21	23-Oct-19	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	08-Aug-20	23-Oct-19	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	14-Jun-21	23-Oct-19	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	04-Apr-24	23-Oct-19	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	26-Mar-22	23-Oct-19	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

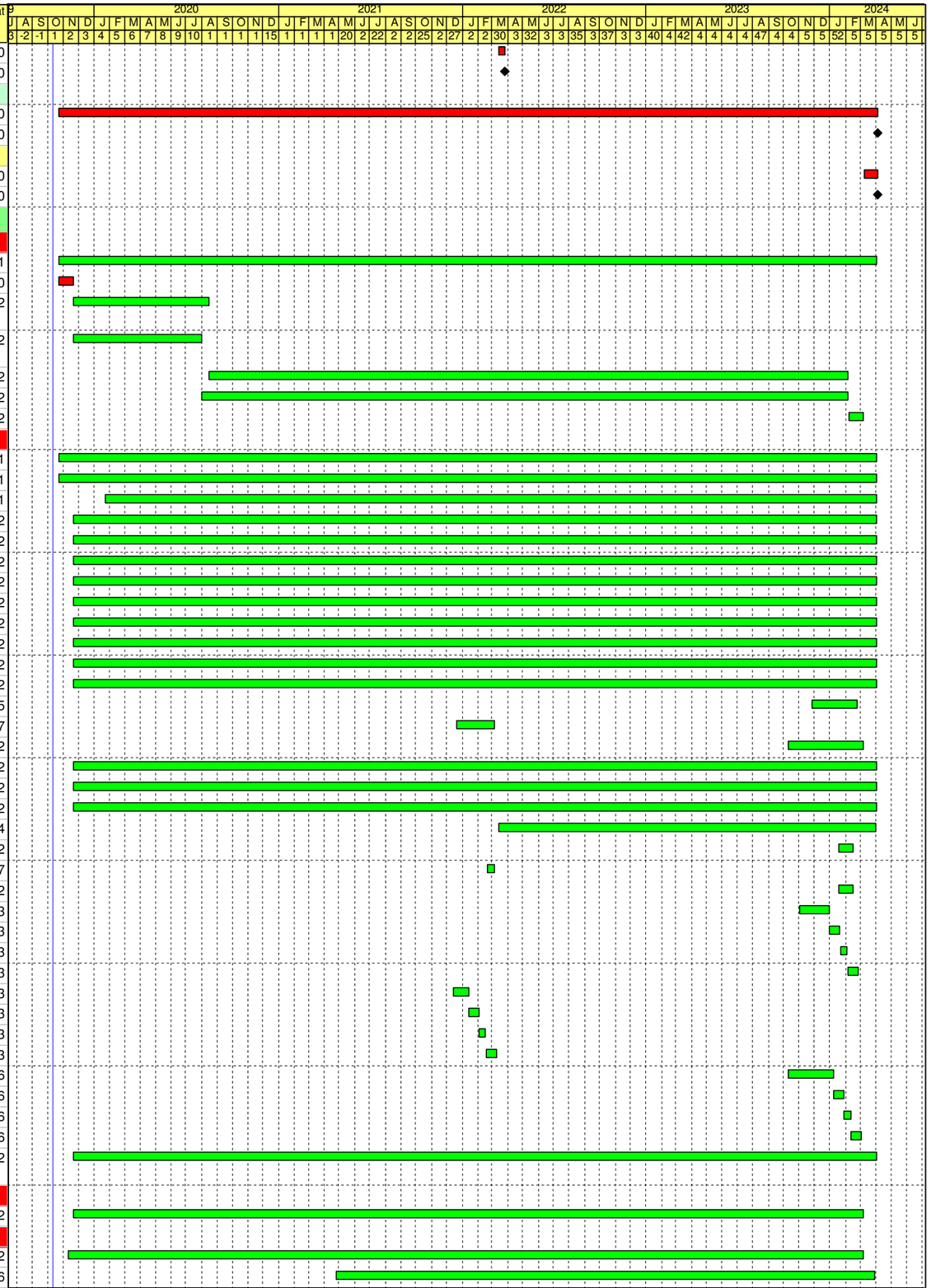
File Name: DE/2018/03 R3-1
Layout: DE1803 (R) - WBS
TASK filter: All Activities

Remaining Work
Critical Activity
Milestone

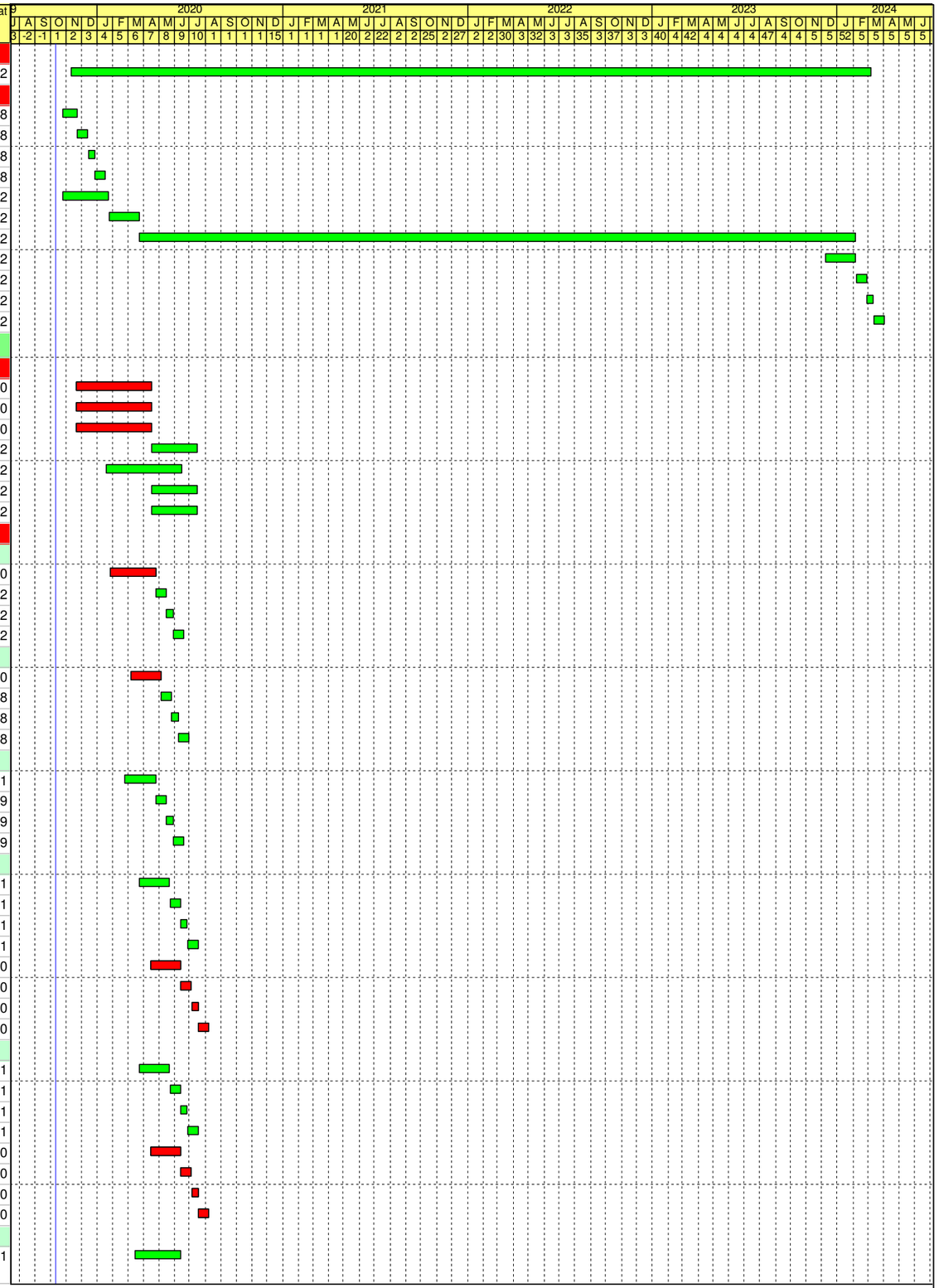
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM
21-Apr-20	Rev. 2	AI	KM
09-Jun-20	Rev.3	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	04-Apr-24	23-Oct-19	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	03-Apr-24	24-Oct-19	04-Apr-24	1
AS010200	Mobilisation	28	23-Oct-19	19-Nov-19	23-Oct-19	19-Nov-19	0
AS010205a	Design, Procurement & PO & Construction of Contractor's Site Office (Works Area WA1 -B)	270	20-Nov-19	15-Aug-20	22-Nov-19	17-Aug-20	2
AS010210	Design, Procurement & PO & Construction of Contractor's Storage Area (Works Area WA3)	255	20-Nov-19	31-Jul-20	22-Nov-19	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	03-Apr-24	24-Oct-19	04-Apr-24	1
AS010400	Provision of 2 Contract Car for the Use of the PM & Supervisor	1625	23-Oct-19	03-Apr-24	24-Oct-19	04-Apr-24	1
AS010420a	Provision of 1 Electric Car for the Use of the PM & Supervisor	1534	22-Jan-20	03-Apr-24	23-Jan-20	04-Apr-24	1
AS010600	Provision of Photographs	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS010700	Provision of Environmental Mitigation Measures	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS010800	Provision of Air Pollution Abatment	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS010900	Provision of Noise Pollution Abatment	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011000	Provision of Wastewater Pollution Abatement	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011100	Provision of Wastement Management	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011200	Provision of Monitoring the Use of Ultra Low Sulphur Diesel	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011300	Provision of Environmental Management	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011400	Provision of Site Management Plan for Trip Ticket System	1596	20-Nov-19	02-Apr-24	22-Nov-19	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	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011700	Provision of Site Liaison Group & Community Liaison Group	1596	20-Nov-19	02-Apr-24	22-Nov-19	04-Apr-24	2
AS011800	Provision of 24-Hour Telephone Line	1596	20-Nov-19	02-Apr-24	22-Nov-19	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	02-Apr-24	22-Nov-19	04-Apr-24	2
Site Upkeeping							
AS013100	General Site Upkeeping of the Site	1570	20-Nov-19	07-Mar-24	22-Nov-19	09-Mar-24	2
Safety and Environmental Management							
AS013200	Construction Health and Safety Plan	1580	10-Nov-19	07-Mar-24	12-Nov-19	09-Mar-24	2
AS013300	Site Traffic Safety Management Plan	1070	25-Apr-21	29-Mar-24	01-May-21	04-Apr-24	6

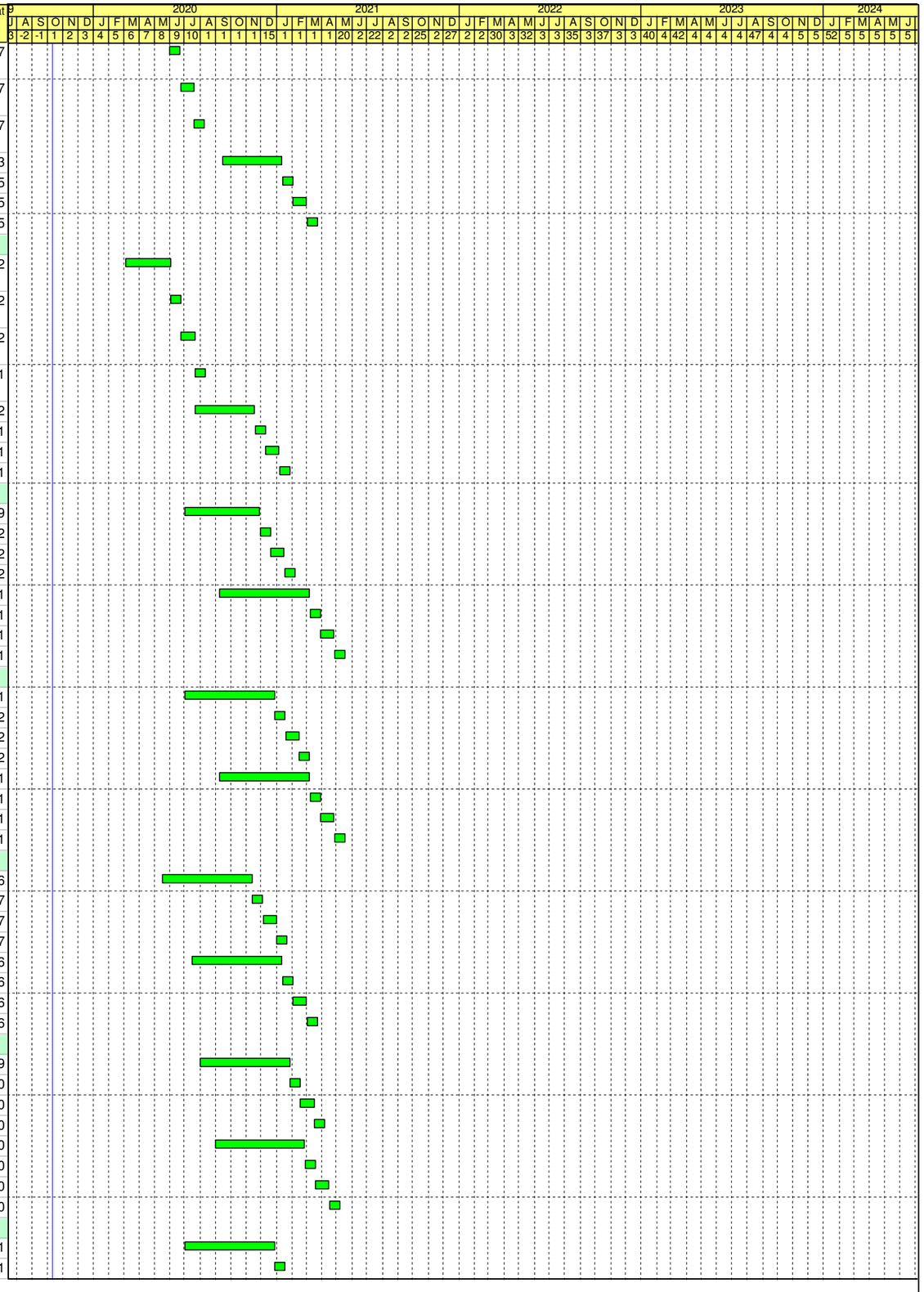


Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
Compliance with BEAM Requirements							
AS013400	BEAM Plus	1580	10-Nov-19	07-Mar-24	12-Nov-19	09-Mar-24	2
BIM							
AS011820a	Prepare & Submit Construction Stage BIM Execution Plan	30	24-Oct-19	22-Nov-19	01-Nov-19	30-Nov-19	8
AS011830a	PM Reivew & Comment Construction Stage BIM Execution Plan	21	23-Nov-19	13-Dec-19	01-Dec-19	21-Dec-19	8
AS011840a	Revise & Re-submit Construction Stage BIM Execution Plan	14	14-Dec-19	27-Dec-19	22-Dec-19	04-Jan-20	8
AS011850a	PM Reivew & Approval of Construction Stage BIM Execution Plan	21	28-Dec-19	17-Jan-20	05-Jan-20	25-Jan-20	8
AS011880b	Contractor Review & Study Design Stage BIM	92	24-Oct-19	23-Jan-20	26-Oct-19	25-Jan-20	2
AS011900	Contractor Develop 1st Construction Stage BIM	60	24-Jan-20	23-Mar-20	26-Jan-20	25-Mar-20	2
AS011920a	Review & Update BIM Execution Plan & BIM Model	1415	24-Mar-20	06-Feb-24	26-Mar-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	17-Apr-20	20-Nov-19	17-Apr-20	0
AS103120	Procurement & PO for Lift-up Pumps (S11)	150	20-Nov-19	17-Apr-20	20-Nov-19	17-Apr-20	0
AS103140	Procurement & PO for Transfer Pumps (S13)	150	20-Nov-19	17-Apr-20	20-Nov-19	17-Apr-20	0
AS103160	Procurement & PO for FRP Cover (S11)	90	18-Apr-20	16-Jul-20	10-May-20	07-Aug-20	22
AS103180	Procurement & PO for EOT Cranes (2T & 5T) (S19)	150	19-Jan-20	16-Jun-20	11-Mar-20	07-Aug-20	52
AS103200	Procurement & PO for Stoplogs (S21)	90	18-Apr-20	16-Jul-20	10-May-20	07-Aug-20	22
AS103220	Procurement & PO for Penstocks (S21)	90	18-Apr-20	16-Jul-20	10-May-20	07-Aug-20	22
Design & Submission							
General Arrangement Drawings							
AS101100	Prepare & Submit General Arrangement Drawings	90	26-Jan-20	24-Apr-20	26-Jan-20	24-Apr-20	0
AS101110	Review & Comment on General Arrangement Drawings by PM	21	25-Apr-20	15-May-20	07-May-20	27-May-20	12
AS101120	Revise & Re-submit General Arrangement Drawings	14	16-May-20	29-May-20	28-May-20	10-Jun-20	12
AS101130	Review & Accept of General Arrangement Drawings by PM	21	30-May-20	19-Jun-20	11-Jun-20	01-Jul-20	12
Civil & Dimensional / Tolerance Requirement Drawings							
AS102100	Prepare & Submit Civil Requirement Drawings	60	07-Mar-20	05-May-20	07-Mar-20	05-May-20	0
AS102110	Review & Comment on Civil Requirement Drawings by PM	21	06-May-20	26-May-20	14-May-20	03-Jun-20	8
AS102120	Revise & Re-submit Civil Requirement Drawings	14	27-May-20	09-Jun-20	04-Jun-20	17-Jun-20	8
AS102130	Review & Accept of Civil Requirement Drawings by PM	21	10-Jun-20	30-Jun-20	18-Jun-20	08-Jul-20	8
Electrical Schematic Drawings							
AS102150	Prepare & Submit Elec. Schematic Drawings	60	25-Feb-20	24-Apr-20	26-Feb-20	25-Apr-20	1
AS102160	Review & Comment on Elec. Schematic Drawings by PM	21	25-Apr-20	15-May-20	13-Jun-20	03-Jul-20	49
AS102170	Revise & Re-submit Elec. Schematic Drawings	14	16-May-20	29-May-20	04-Jul-20	17-Jul-20	49
AS102180	Review & Accept of Elec. Schematic Drawings by PM	21	30-May-20	19-Jun-20	18-Jul-20	07-Aug-20	49
UV System No. 1							
AS102200	Prepare & Submit Wiring Dwgs, Cable Schedule & Design Cal.	60	24-Mar-20	22-May-20	25-Mar-20	23-May-20	1
AS102210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	23-May-20	12-Jun-20	24-May-20	13-Jun-20	1
AS102220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	13-Jun-20	26-Jun-20	14-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	13-Jun-20	15-Apr-20	13-Jun-20	0
AS102310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jun-20	04-Jul-20	14-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	22-May-20	25-Mar-20	23-May-20	1
AS112210	Review & Comment on Wiring Dwgs, Cable Schedule & Design Cal.	21	23-May-20	12-Jun-20	24-May-20	13-Jun-20	1
AS112220	Revise & Re-submit Wiring Dwgs, Cable Schedule & Design Cal.	14	13-Jun-20	26-Jun-20	14-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	13-Jun-20	15-Apr-20	13-Jun-20	0
AS112310	Review & Comment on the Schedule, Design Cal. & Fixing Details of Equipment	21	14-Jun-20	04-Jul-20	14-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	12-Jun-20	16-Mar-20	13-Jun-20	1

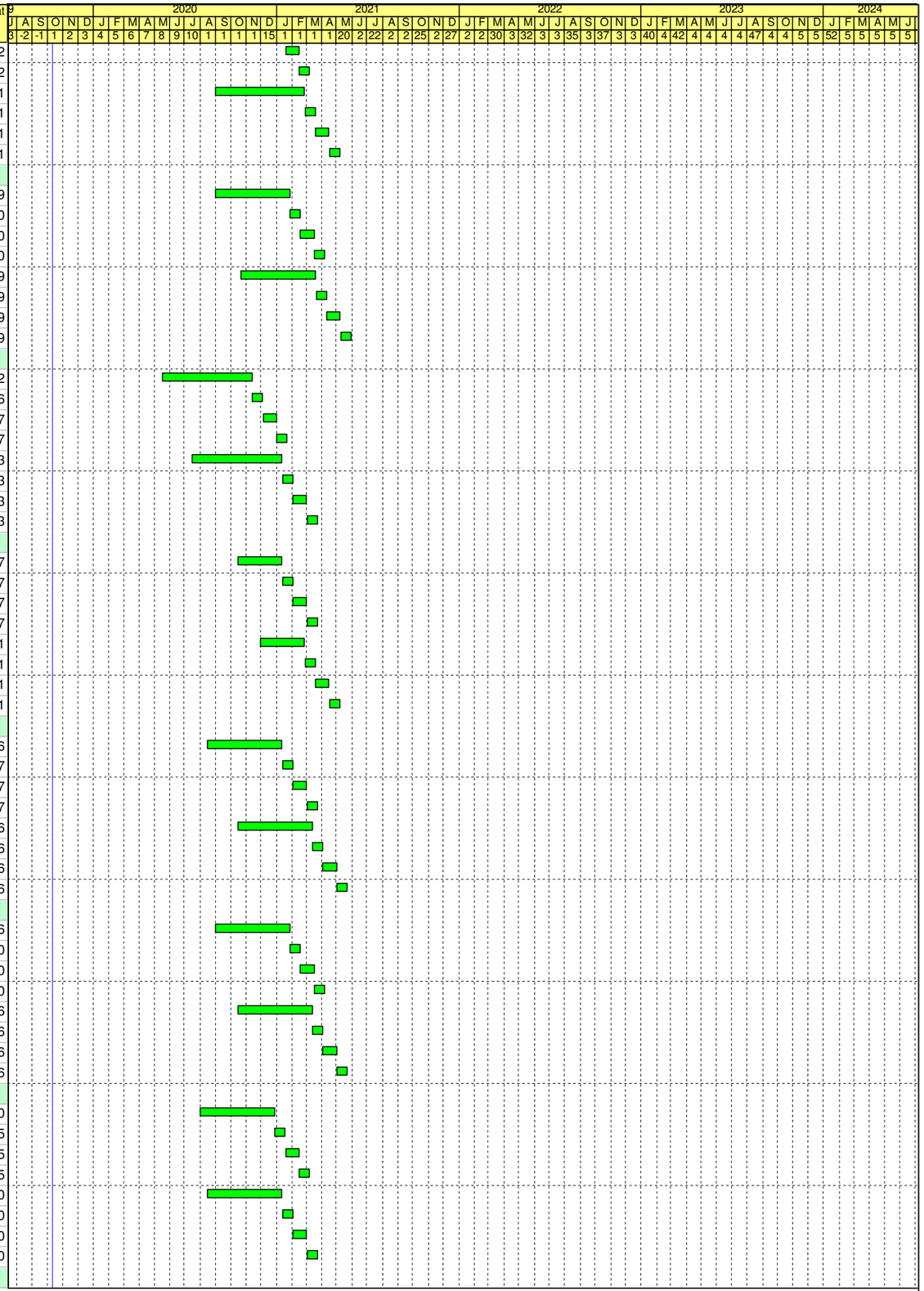


Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS113120c	Review & Comment on BS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	21	13-Jun-20	03-Jul-20	14-Jun-20	04-Jul-20	1
AS113140c	Revise & Re-submit BS Works Design & Dwgs 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	12-Jun-20	15-Apr-20	13-Jun-20	1
AS113220c	Review & Comment on FS Works Design & Dwgs UV System No.1 & Effluent Pumping Station No.1	21	13-Jun-20	03-Jul-20	14-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	14-Oct-20	27-May-20	23-Oct-20	9
AS023120	Procurement & PO for Sludge Thickening System (S3)	180	20-Nov-19	17-May-20	14-Apr-20	10-Oct-20	146
AS023140	Procurement & PO for Sludge Digestion System (S5)	150	18-Feb-20	16-Jul-20	27-Feb-20	25-Jul-20	9
AS023160	Procurement & PO for Sludge Dewatering System (S6)	180	20-Nov-19	17-May-20	14-Apr-20	10-Oct-20	146
AS023180	Procurement & PO for THP System (S4)	180	20-Nov-19	17-May-20	29-Nov-19	26-May-20	9
AS023190a	Procurement & PO for Biogas Holding Tanks(S7)	180	20-Nov-19	17-May-20	13-Mar-20	08-Sep-20	114
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	17-May-20	22-Nov-19	19-May-20	2
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	14-Oct-20	28-May-20	24-Oct-20	10
AS023270	Procurement & PO for Reclaimed Water Utilisation (S13)	150	18-May-20	14-Oct-20	18-Jun-20	14-Nov-20	31
AS023280	Procurement & PO for SAS Pumping System (S14)	150	18-May-20	14-Oct-20	28-May-20	24-Oct-20	10
AS023300	Procurement & PO for Transfomers (S17)	150	18-Feb-20	16-Jul-20	20-Feb-20	18-Jul-20	2
AS023320	Procurement & PO for 11 kV Switchboard (S17)	150	18-Feb-20	16-Jul-20	13-Aug-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	14-Oct-20	26-Jun-20	22-Nov-20	39
AS023420	Procurement & PO for DO System (S21)	150	17-Jul-20	13-Dec-20	09-Jan-21	07-Jun-21	176
AS023440	Procurement & PO for Stoplog (S21)	90	18-Apr-20	16-Jul-20	10-Mar-21	07-Jun-21	326
AS023460	Procurement & PO for Penstock (S21)	90	18-Apr-20	16-Jul-20	10-Mar-21	07-Jun-21	326
AS023480	Procurement & PO for Sewage Pump (S21)	120	18-May-20	14-Sep-20	08-Feb-21	07-Jun-21	266
AS023500	Procurement & PO for Process Water Pump (S21)	120	18-May-20	14-Sep-20	09-Nov-20	08-Mar-21	175
AS023520	Procurement & PO for External Sludge Transfer Pump (S21)	120	18-May-20	14-Sep-20	08-Feb-21	07-Jun-21	266
AS023540	Procurement & PO for THP Cooling Pump (S21)	150	18-May-20	14-Oct-20	09-Jan-21	07-Jun-21	236
AS023560	Procurement & PO for Ferric Chloride Storage Tank (S21)	120	17-Jul-20	13-Nov-20	08-Feb-21	07-Jun-21	206
AS023580	Procurement & PO for Ferric Chloride Dosing Pump (S21)	120	18-May-20	14-Sep-20	08-Feb-21	07-Jun-21	266
AS023600	Procurement & PO for Temporary Primary Sludge Pump (S21)	150	18-May-20	14-Oct-20	09-Jan-21	07-Jun-21	236
AS023620b	Procurement & PO for Genset	150	22-Jul-20	18-Dec-20	14-Jun-21	10-Nov-21	327
Design & Submission							
General Arrangement Drawings							
AS020100	Prepare & Submit General Arrangement Drawings (from formation level up to +8mPD)	180	20-Nov-19	17-May-20	22-Nov-19	19-May-20	2
AS020110	Review & Comment on General Arrangement Drawings by PM (from formation level up to +8mPD)	21	18-May-20	07-Jun-20	02-Jun-20	22-Jun-20	15
AS020120	Revise & Re-submit General Arrangement Drawings (from formation level up to +8mPD)	28	08-Jun-20	05-Jul-20	23-Jun-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	01-Jun-20	07-Mar-20	04-Jun-20	3

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS020210	Review & Comment on Civil Requirement Drawings by PM (from formation level up to +8mPD)	21	02-Jun-20	22-Jun-20	09-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	02-Jun-20	07-Mar-20	04-Jun-20	2
AS021210	Review & Comment on Elec. Schematic Drawings by PM (from formation level up to +8mPD)	21	03-Jun-20	23-Jun-20	25-Jul-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	13-Nov-20	02-Aug-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



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	13-Nov-20	19-Jun-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							

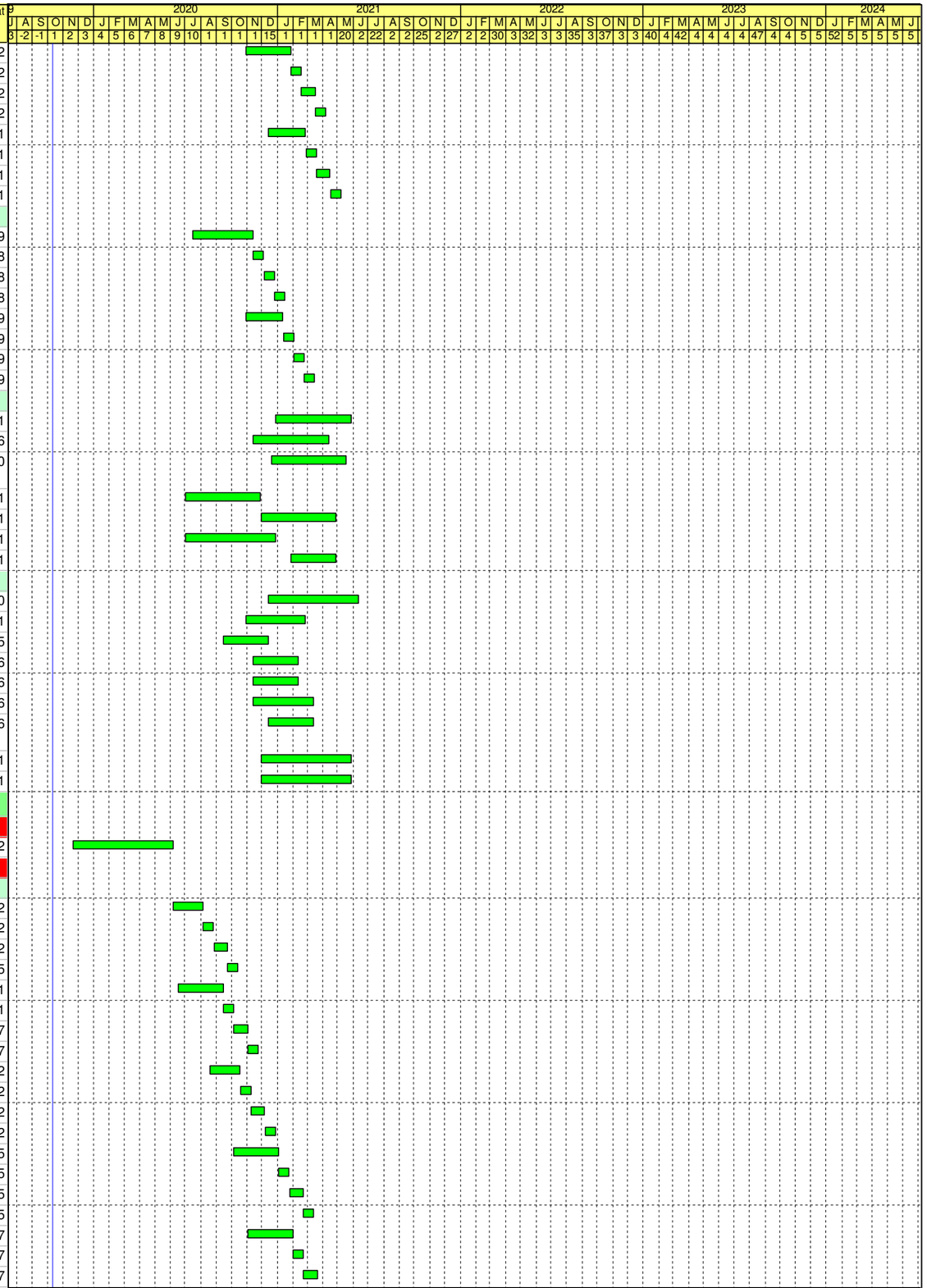


Remaining Work
Critical Activity
Milestone

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM
21-Apr-20	Rev. 2	AI	KM
09-Jun-20	Rev.3	LT	KM

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	21-Aug-21	16-Feb-22	250
AS211200	Submit & Accept Design & Dwgs for Sewage Pumping Station	120	30-Oct-20	26-Feb-21	18-Jul-21	14-Nov-21	261
AS211300	Submit & Accept Design & Dwgs for Process Water Pumping System	90	15-Sep-20	13-Dec-20	09-Mar-21	06-Jun-21	175
AS211400	Submit & Accept Design & Dwgs for External Sludge Transfer Pumping System	90	14-Nov-20	11-Feb-21	15-Dec-21	14-Mar-22	396
AS211500	Submit & Accept Design & Dwgs for THP Cooling Water Pumping Station	90	14-Nov-20	11-Feb-21	15-Dec-21	14-Mar-22	396
AS211600	Submit & Accept Design & Dwgs for Ferric Chloride Dosing System	120	14-Nov-20	13-Mar-21	16-Sep-21	13-Jan-22	306
AS211700	Submit & Accept Design & Dwgs for Temporary Primary Sludge Pumping Facility	90	14-Dec-20	13-Mar-21	15-Dec-21	14-Mar-22	366
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	06-Jun-20	22-Nov-19	08-Jun-20	2
Design & Submission							
Civil Works Design							
AS160100	Prepare & Submit General Layout Plan	60	07-Jun-20	05-Aug-20	09-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	14-Sep-20	28-Jun-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

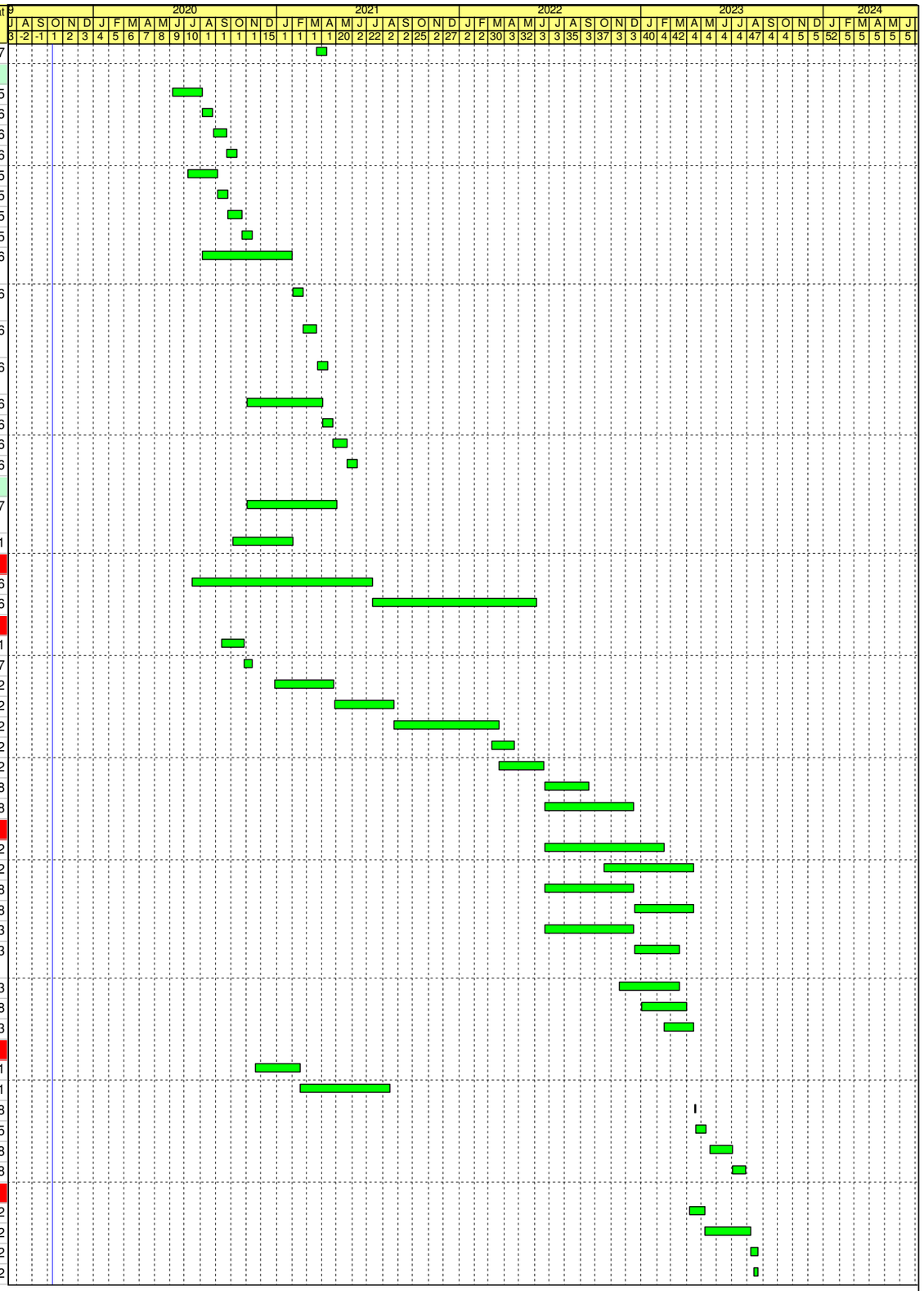


Remaining Work
Critical Activity
Milestone

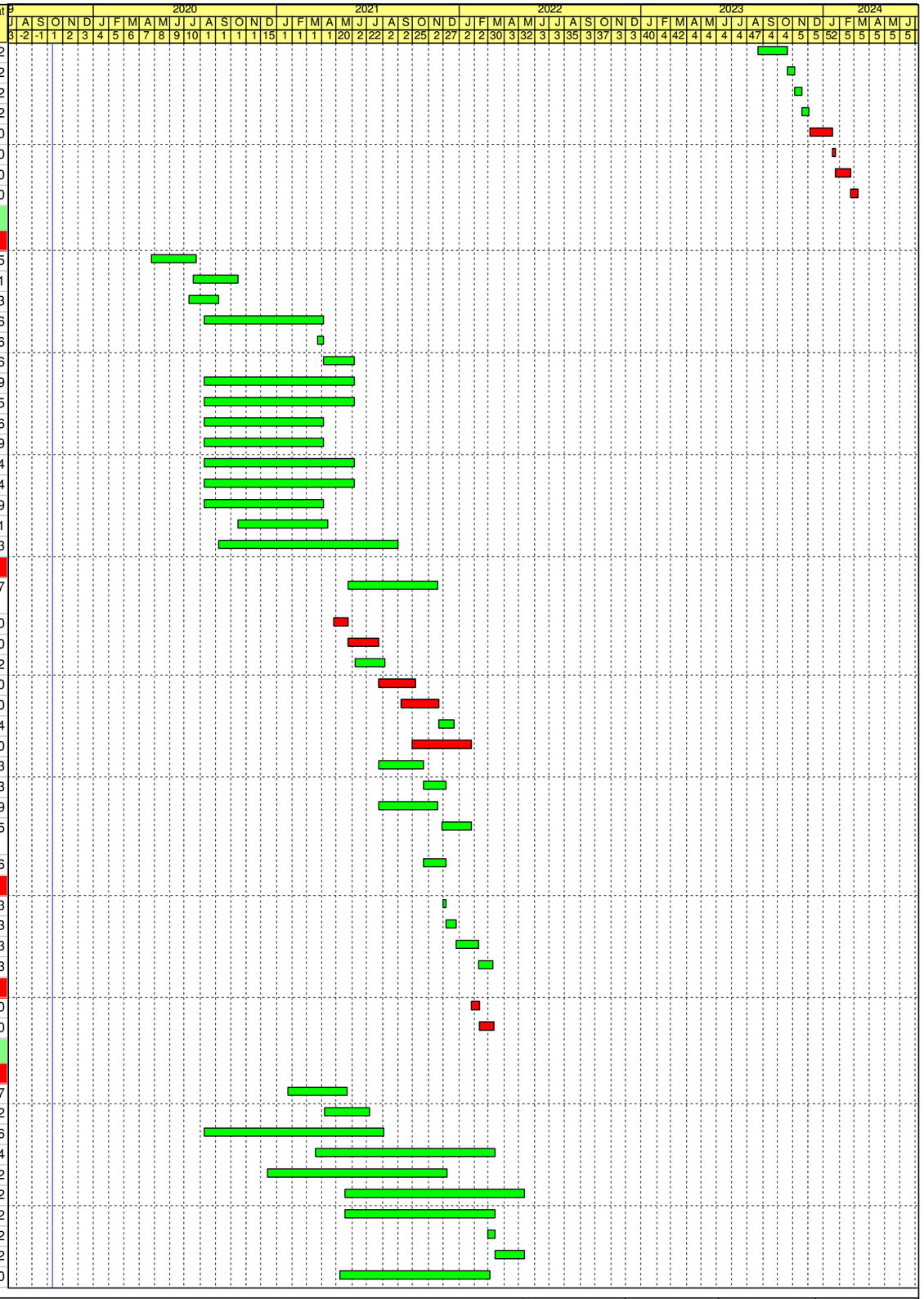
Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM
21-Apr-20	Rev. 2	AI	KM
09-Jun-20	Rev.3	LT	KM

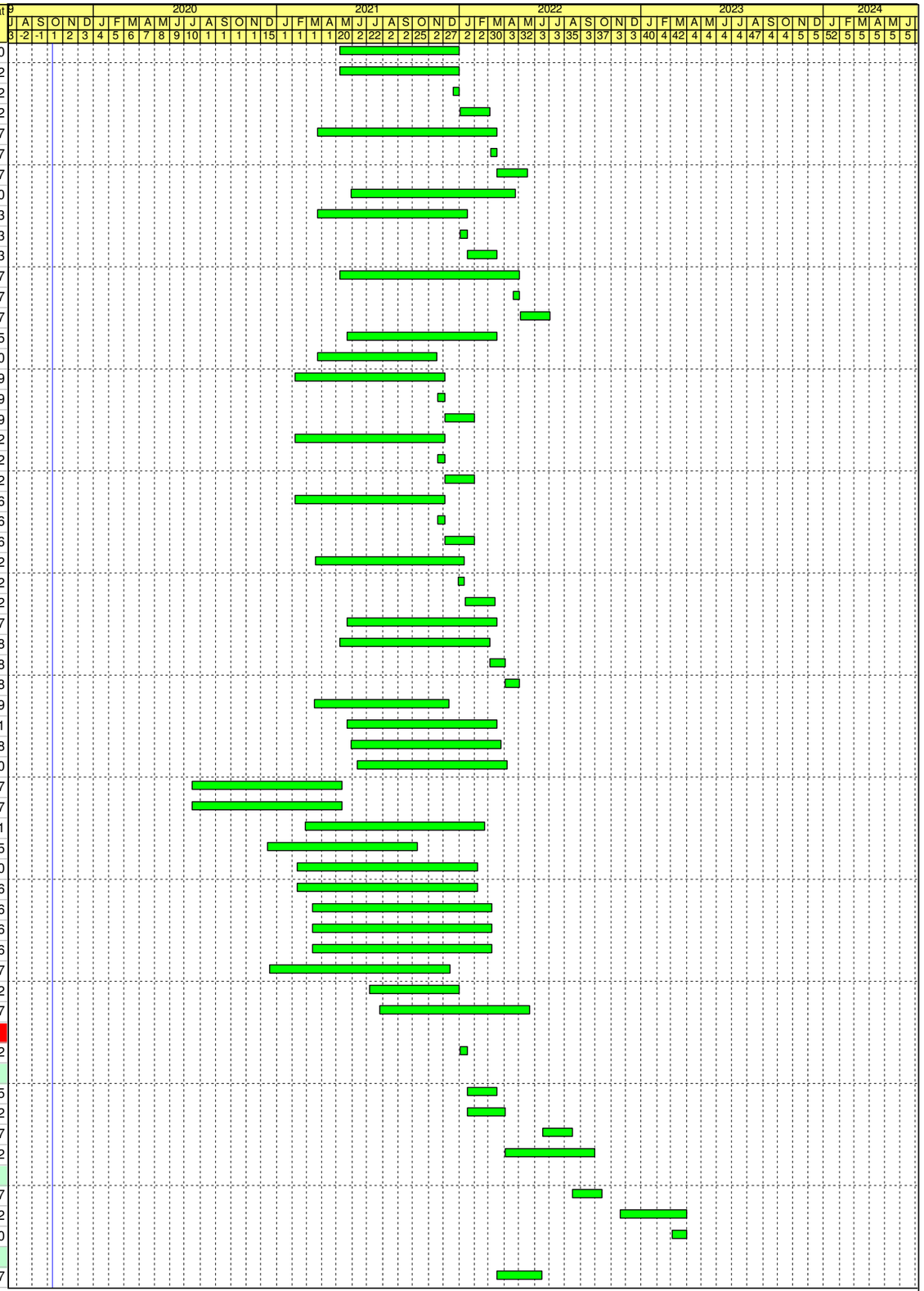
Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
AS160530	Review & Accept of Builder's Works Drawings by PM	21	22-Mar-21	11-Apr-21	08-Apr-21	28-Apr-21	17
E&M Design							
AS151100	Prepare & Submit General Arrangement Drawings	60	07-Jun-20	05-Aug-20	02-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



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	23-Jul-20	28-Aug-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



Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
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

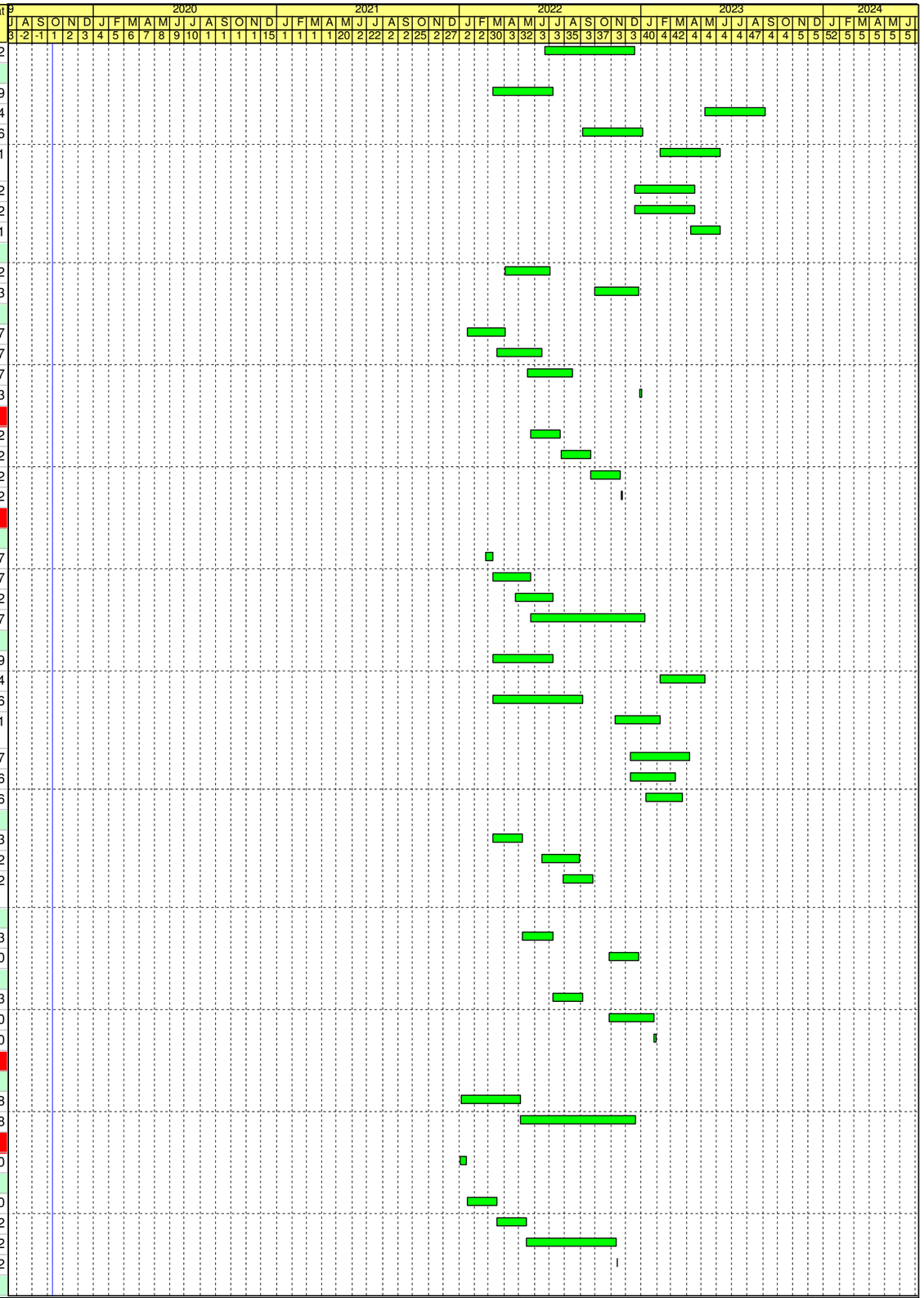


Remaining Work
Critical Activity
Milestone

Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
Sidestream Treatment Facilities and E&M Works for Sluge Treatment Faciliteis
Master Programme

Date	Revision	Checked	Approved
24-Oct-19	Rev. 0	AI	KM
10-Feb-20	Rev. 1	AI	KM
21-Apr-20	Rev. 2	AI	KM
09-Jun-20	Rev.3	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
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
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
11kV HV Switchroom							



Remaining Work
Critical Activity
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Contract No. DE/2018/03
Shek Wu Hui Effluent Polishing Plant - Main Works Stage 1
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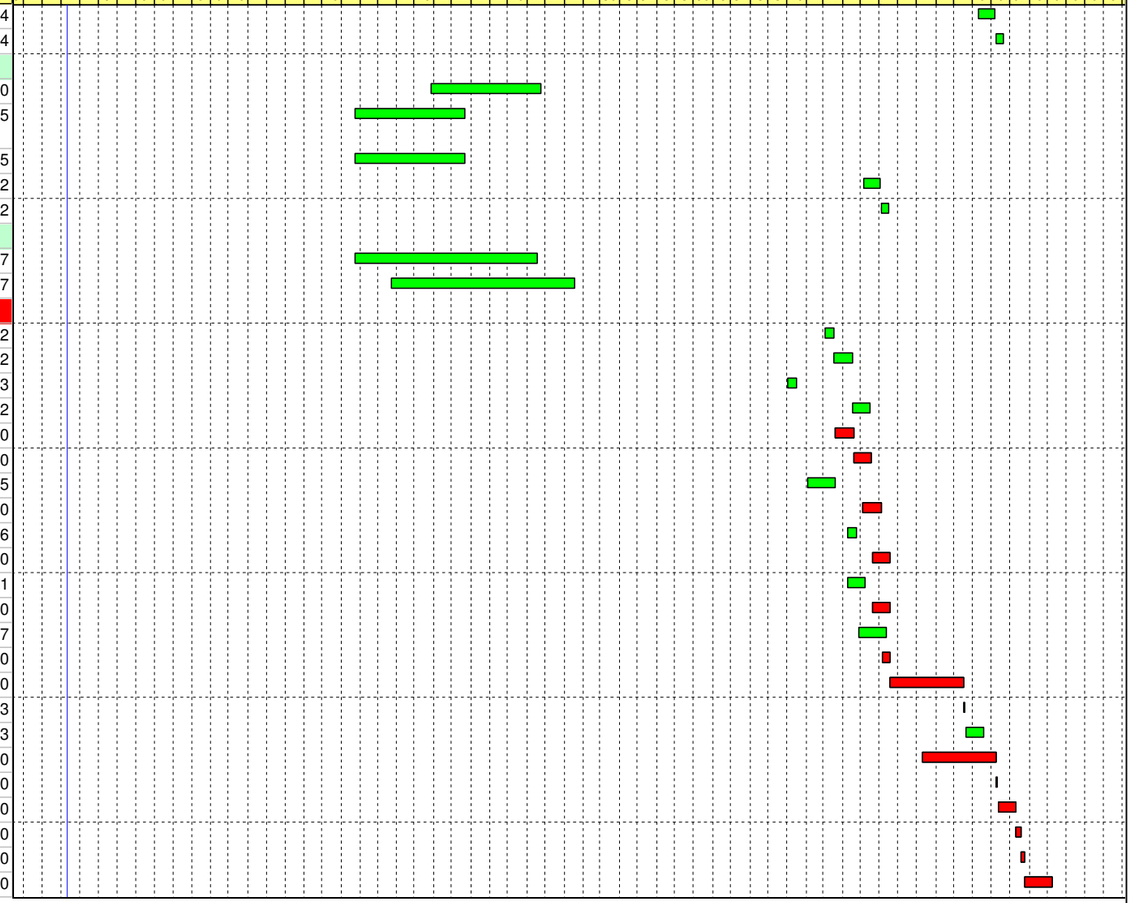
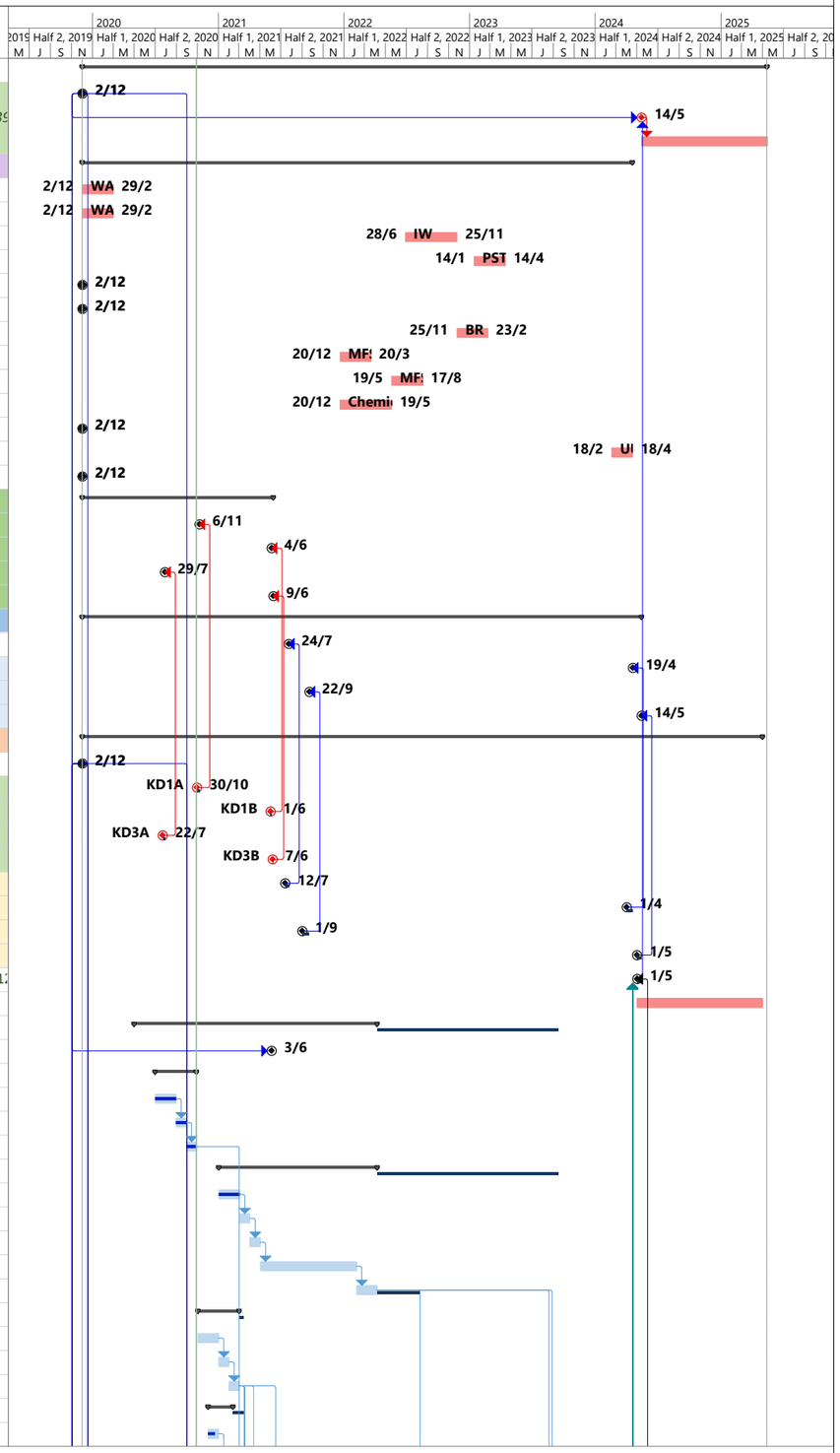
09-Jun-20	Rev.3	LT	KM

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
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
AS509360	WSD Inspection (FS)	28	13-Oct-23	09-Nov-23	16-Nov-23	13-Dec-23	34

Activity ID	Activity Name	Original Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
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



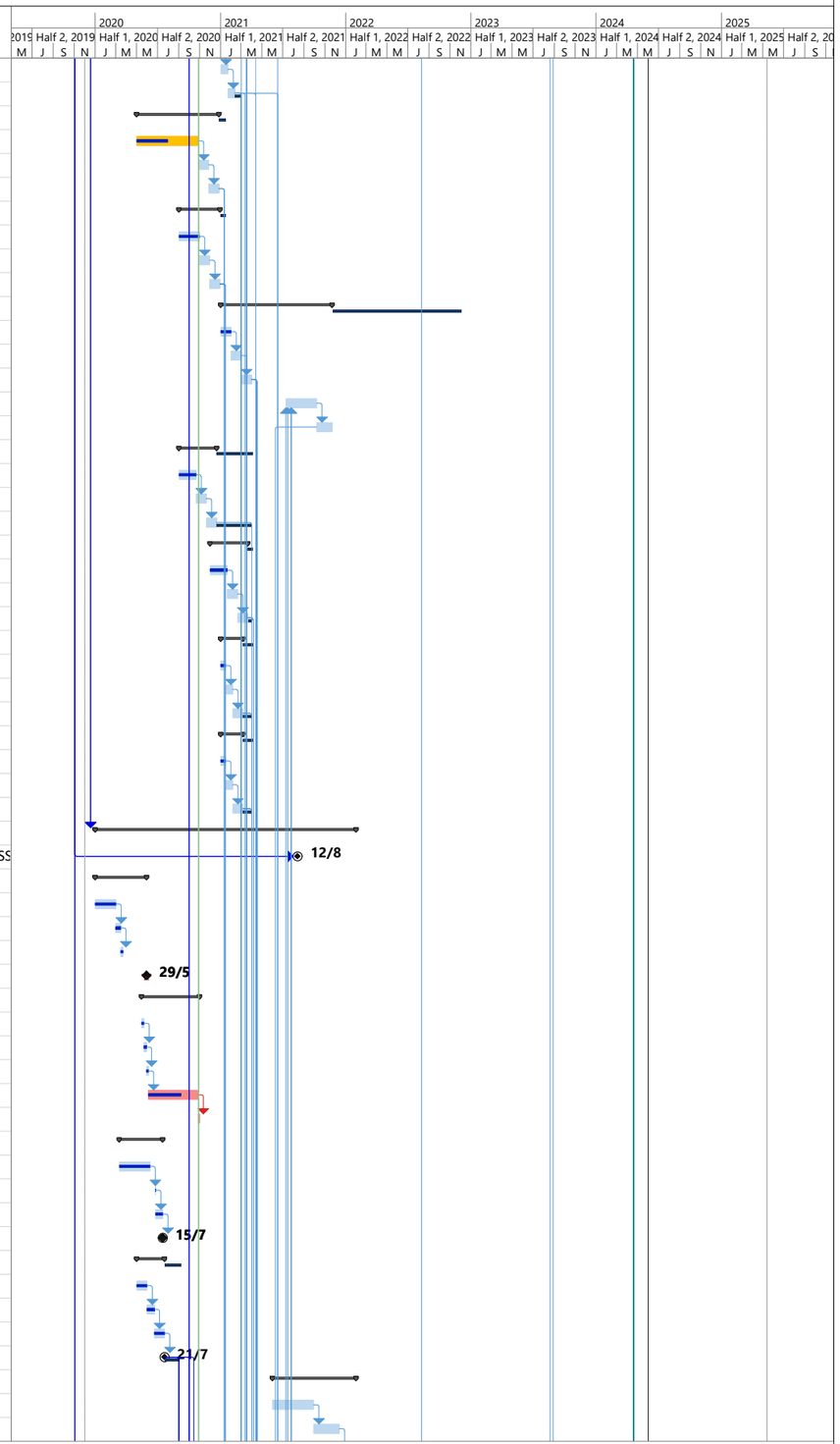
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
1	**1**		**1**	**DE/2018/04 - Contract Master Programme**	**1990 days**	**Mon 2/12/19**	**Tue 13/5/25**	**0 days**	
2	*2*		*1.1*	*Starting Date*	*0 days*	*Mon 2/12/19*	*Mon 2/12/19*	*0 days*	
3	*3*		*1.2*	*Completion Date*	*0 days*	*Tue 14/5/24*	*Tue 14/5/24*	*0 days*	*2SS+1625 edays,3*
4	*4*		*1.3*	*Defect Dates with respect to Completion Date*	*365 days*	*Tue 14/5/24*	*Tue 13/5/25*	*0 days*	*3*
5	**5**		**2**	**Access Dates**	**1599 days**	**Mon 2/12/19**	**Thu 18/4/24**	**0 days**	
6	6	WA1-C	2.1	Access Date for Works Area WA1-C	90 days	Mon 2/12/19	Sat 29/2/20	0 days	
7	7	WA2-C	2.2	Access Date for Works Area WA2-C	90 days	Mon 2/12/19	Sat 29/2/20	0 days	
8	8	IW	2.3	Access Date for Portion B-2, Inlet Works No. 1	150 edays	Tue 28/6/22	Fri 25/11/22	0 edays	
9	9	PST	2.4	Access Date for Portion B-3, PST No. 1~4	90 edays	Sat 14/1/23	Fri 14/4/23	0 edays	
10	10	PST No. 4 ~ 6	2.5	Access Date for Portion B-3A, Existing PST No. 4 and No. 6	0 days	Mon 2/12/19	Mon 2/12/19	0 days	
11	11	Temp Filtrate	2.6	Access Date for Portion B-3B, Temporary Filtrate Lifting Well and Eq. Tank	0 days	Mon 2/12/19	Mon 2/12/19	0 days	
12	12	BR	2.7	Access Date for Portion B-4, BR 2A & 2B	90 edays	Fri 25/11/22	Thu 23/2/23	0 edays	
13	13	MFS	2.8	Access Date for Portion B-5A, MFB No. 2 below 1st floor level	90 edays	Mon 20/12/2	Sun 20/3/22	0 edays	
14	14	MFS	2.9	Access Date for Portion B-5B, MFB No. 2 remaining portion	90 edays	Thu 19/5/22	Wed 17/8/22	0 edays	
15	15	Chemical	2.10	Access Date for Portion B-7 & 7B, Chemical Dosing, Concrete Plinth for DOs, Chemical Sys 1 & 2	150 edays	Mon 20/12/2	Thu 19/5/22	0 edays	
16	16	Gensest	2.11	Access Date for Portion B-7A & 7B, area for modification of existing emergency generator elect	0 edays	Mon 2/12/19	Mon 2/12/19	0 edays	
17	17	UU	2.12	Access Date for Portion B-9B, underground pipework	60 edays	Sun 18/2/24	Thu 18/4/24	0 edays	
18	18	SAS	2.13	Access Date for B-10, existing sludge thickening building	0 edays	Mon 2/12/19	Mon 2/12/19	0 edays	
19	**19**		**3**	**Key Dates**	**555 days**	**Mon 2/12/19**	**Wed 9/6/21**	**0 days**	
20	20	Key Date, KD1A	3.1	KD1A - Submission of civil and dimensional requirement drawings, electrical schematic drawing	340 edays	Mon 2/12/19	Fri 6/11/20	0 edays	31FF
21	21	Key Date, KD1B	3.2	KD1B - Submission of remaining civil and dimensional requirement drawings, electrical schema	550 edays	Mon 2/12/19	Fri 4/6/21	0 edays	32FF
22	22	Key Date, KD3A	3.3	KD3A - Completion of E&M Installation works of existing power house in Portions B-7A and B-7	240 edays	Mon 2/12/19	Wed 29/7/20	0 edays	33FF
23	23	Key Date, KD3B	3.4	KD3B - Completion of all work for reprovision of the existing Primary Sedimentation Tanks No.	555 edays	Mon 2/12/19	Wed 9/6/21	0 edays	34FF
24	**24**		**4**	**Sectional Completion Dates**	**1625 days**	**Mon 2/12/19**	**Tue 14/5/24**	**0 days**	
25	25	Section 1	4.1	Section 1 - Completion of the design of E&M Works for all works as defined in WI_GP Cl. 10.1(a	600 edays	Mon 2/12/19	Sat 24/7/21	0 edays	35FF
26	26	Section 2	4.2	Section 2 - Completion of all works for Inlet Works, PST No. 1~4, BR No. 2A & 2B, MFB No. 2, te	1600 edays	Mon 2/12/19	Fri 19/4/24	0 edays	36FF
27	27	Section 3	4.3	Section 3 - Completion of all works for retrofitting of the existing PST...etc (660 days after starti	660 edays	Mon 2/12/19	Wed 22/9/21	0 edays	37FF
28	28	Section 4	4.4	Section 4 - Completion of Work for remainder of the works (1625 days after starting date)	1625 edays	Mon 2/12/19	Tue 14/5/24	0 edays	38FF
29	**29**		**5**	**DE/2018/04 - the Contractor's Programme (w/ Defects Date of Planned Completion Date)**	**1977 days**	**Mon 2/12/19**	**Wed 30/4/25**	**0 days**	
30	*30*	*Main*	*5.1*	*Starting Date*	*0 days*	*Mon 2/12/19*	*Mon 2/12/19*	*0 days*	
31	31	KD1A	5.2	Planned Key Date Completion Date - KD1A	0 days	Fri 30/10/20	Fri 30/10/20	7 days	
32	32	KD1B	5.3	Planned Key Date Completion Date - KD1B	0 days	Tue 1/6/21	Tue 1/6/21	3 days	
33	33	KD3A	5.4	Planned Key Date Completion Date - KD3A	0 days	Wed 22/7/20	Wed 22/7/20	7 days	
34	34	KD3B	5.5	Planned Key Date Completion Date - KD3B	0 days	Mon 7/6/21	Mon 7/6/21	2 days	
35	35	Section 1, Main	5.6	Planned Sectional Completion Date - Section 1	0 days	Mon 12/7/21	Mon 12/7/21	11 days	
36	36	Section 2, Main	5.7	Planned Sectional Completion Date - Section 2	0 days	Mon 1/4/24	Mon 1/4/24	18 days	
37	37	Section 3, Main	5.8	Planned Sectional Completion Date - Section 3	0 days	Wed 1/9/21	Wed 1/9/21	21 days	
38	38	Section 4, Main	5.9	Planned Sectional Completion Date - Section 4	0 days	Wed 1/5/24	Wed 1/5/24	13 days	
39	39	IW, PST, BR, MFS, LA, PV, CCTV, D	5.10	Planned Completion Date	0 days	Wed 1/5/24	Wed 1/5/24	12 days	1270,1271,1272,1
40	*40*		*5.11*	*Defect Dates with respect to planned completion date*	*365 days*	*Wed 1/5/24*	*Wed 30/4/25*	*0 days*	
41	**41**		**5.12**	**Part A: Procurement and Delivery of Major Plant and Materials**	**706 days**	**Fri 1/5/20**	**Wed 6/4/22**	**525 days**	
42	42		5.12.1	Planned Completion Date for Procurement of major plant and materials	0 days	Thu 3/6/21	Thu 3/6/21	0 days	30SS+550 days
43	**43**	**IW, PST, BR, MFS, EQT013**	**5.12.2**	**General - stoplogs and penstocks, C11, EQT013**	**120 days**	**Wed 1/7/20**	**Wed 28/10/2**	**0 days**	
44	44	IW, PST, BR, MFS, EQT013	5.12.2.1	Submission for acceptance of purchasing package	60 days	Wed 1/7/20	Sat 29/8/20	0 days	
45	45	IW, PST, BR, MFS, EQT013	5.12.2.2	Invitation of quotations for purchasing package	30 days	Sun 30/8/20	Mon 28/9/20	0 days	44
46	46	IW, PST, BR, MFS, EQT013	5.12.2.3	Acceptance of conforming quotation	30 days	Tue 29/9/20	Wed 28/10/2	0 days	45
47	**47**	**IW, PST, MFS, EQT035-1**	**5.12.3**	**General - Instrumentations except use at BR, C11, EQT035-1**	**460 days**	**Sat 2/1/21**	**Wed 6/4/22**	**525 days**	
48	48	IW, PST, MFS, EQT035-1	5.12.3.1	Submission for acceptance of purchasing package	60 days	Sat 2/1/21	Tue 2/3/21	0 days	
49	49	IW, PST, MFS, EQT035-1	5.12.3.2	Invitation of quotations for purchasing package	30 days	Wed 3/3/21	Thu 1/4/21	0 days	48
50	50	IW, PST, MFS, EQT035-1	5.12.3.3	Acceptance of conforming quotation	30 days	Fri 2/4/21	Sat 1/5/21	0 days	49
51	51	IW, PST, MFS, EQT035-1	5.12.3.4	Manufacturing and Factory Acceptance Test of Plant	280 days	Sun 2/5/21	Sat 5/2/22	0 days	50
52	52	IW, PST, MFS, EQT035-1	5.12.3.5	Shipping and Delivery of Plant	60 days	Sun 6/2/22	Wed 6/4/22	125 days	51
53	**53**	**PST, BR, MFS, Chamber, EQT036**	**5.12.4**	**General - pipework and valves, C11, ref. EQT036**	**120 days**	**Mon 2/11/2**	**Mon 1/3/21**	**13 days**	
54	54	IW, PST, BR, MFS, Chamber, EQT(	5.12.4.1	Submission for acceptance of purchasing package	60 days	Mon 2/11/20	Thu 31/12/20	0 days	
55	55	IW, PST, BR, MFS, Chamber, EQT(	5.12.4.2	Invitation of quotations for purchasing package	30 days	Fri 1/1/21	Sat 30/1/21	0 days	54
56	56	IW, PST, BR, MFS, Chamber, EQT(	5.12.4.3	Acceptance of conforming quotation	30 days	Sun 31/1/21	Mon 1/3/21	0 days	55
57	**57**	**PST, BR, MFS, EQT042**	**5.12.5**	**General - electric actuators, C11, ref. EQT042**	**72 days**	**Wed 2/12/2**	**Thu 11/2/21**	**31 days**	
58	58	PST, BR, MFS, EQT042	5.12.5.1	Submission for acceptance of purchasing package	30 days	Wed 2/12/20	Thu 31/12/20	0 days	



Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

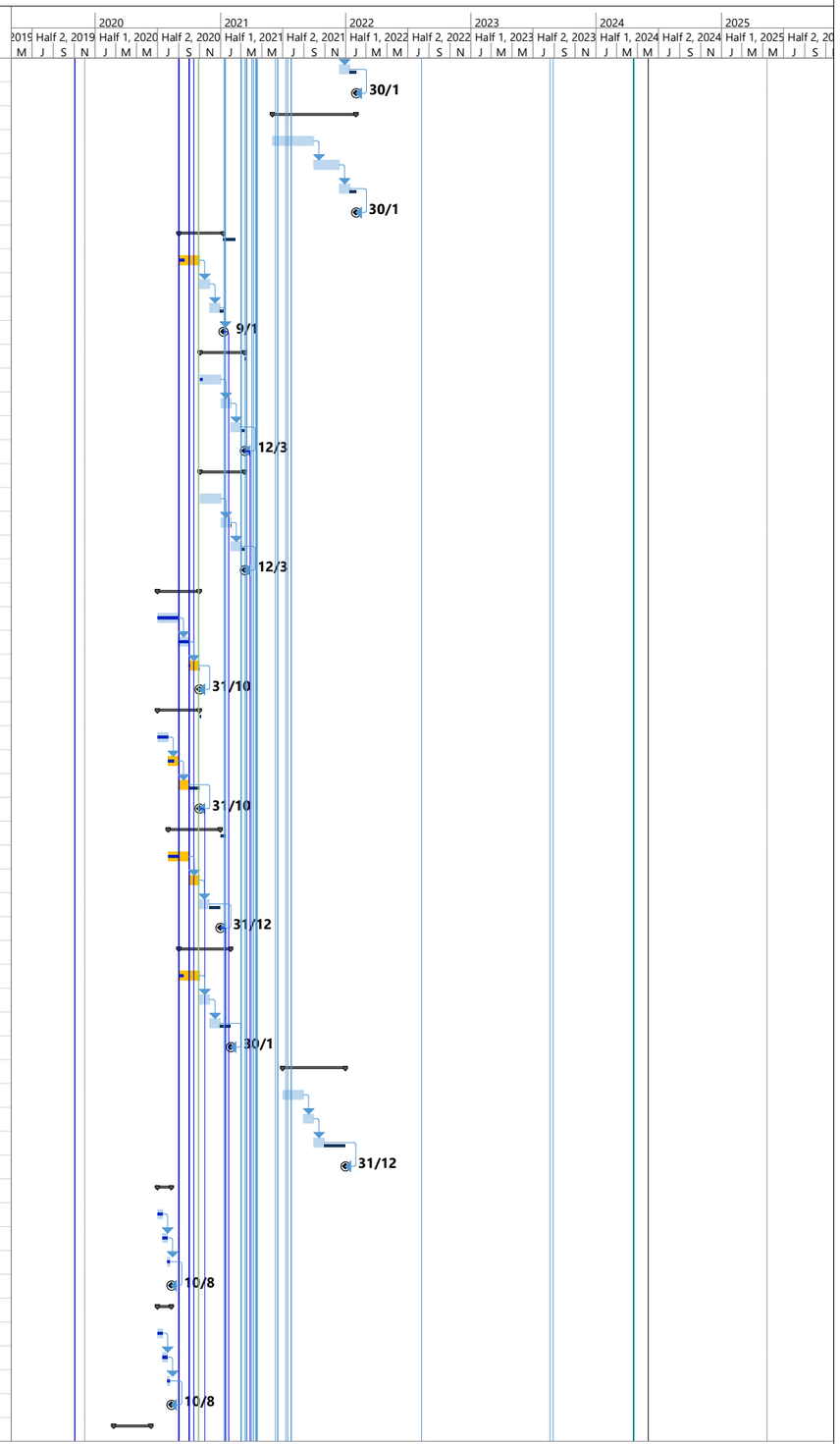
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
59	59	PST, BR, MFS, EQT042	5.12.5.2	Invitation of quotations for purchasing package	21 days	Fri 1/1/21	Thu 21/1/21	0 days	58
60	60	PST, BR, MFS, EQT042	5.12.5.3	Acceptance of conforming quotation	21 days	Fri 22/1/21	Thu 11/2/21	18 days	59
61	**61**	**MFS, HVSB, EQT031**	**5.12.6**	**General - HV Switchboards, C9, ref. EQT031**	**240 days**	**Fri 1/5/20**	**Sat 26/12/20**	**18 days**	
62	62	MFS, HVSB, EQT031	5.12.6.1	Submission for acceptance of purchasing package	180 days	Fri 1/5/20	Tue 27/10/20	0 days	
63	63	MFS, HVSB, EQT031	5.12.6.2	Invitation of quotations for purchasing package	30 days	Wed 28/10/2	Thu 26/11/20	0 days	62
64	64	MFS, HVSB, EQT031	5.12.6.3	Acceptance of conforming quotation	30 days	Fri 27/11/20	Sat 26/12/20	0 days	63
65	**65**	**IW,PST, BR, MFS, LVSB**	**5.12.7**	**General - LV Switchboards, C9, ref. EQT033**	**120 days**	**Tue 1/9/20**	**Tue 29/12/20**	**15 days**	
66	66	IW,PST, BR, MFS, LVSB	5.12.7.1	Submission for acceptance of purchasing package	60 days	Tue 1/9/20	Fri 30/10/20	0 days	
67	67	IW,PST, BR, MFS, LVSB	5.12.7.2	Invitation of quotations for purchasing package	30 days	Sat 31/10/20	Sun 29/11/20	0 days	66
68	68	IW,PST, BR, MFS, LVSB	5.12.7.3	Acceptance of conforming quotation	30 days	Mon 30/11/2	Tue 29/12/20	0 days	67
69	**69**	**IW,PST, BR, MFS, EQT034**	**5.12.8**	**General - VSDs & Passive Type Harmonic Filters, C11, ref. EQT034**	**325 days**	**Fri 1/1/21**	**Sun 21/11/21**	**376 days**	
70	70	IW,PST, BR, MFS, EQT034	5.12.8.1	Submission for acceptance of purchasing package	30 days	Fri 1/1/21	Sat 30/1/21	0 days	
71	71	IW,PST, BR, MFS, EQT034	5.12.8.2	Invitation of quotations for purchasing package	30 days	Sun 31/1/21	Mon 1/3/21	0 days	70
72	72	IW,PST, BR, MFS, EQT034	5.12.8.3	Acceptance of conforming quotation	30 days	Tue 2/3/21	Wed 31/3/21	0 days	71
73	73	IW,PST, BR, MFS, EQT034	5.12.8.4	Manufacturing and Factory Acceptance Test of Plant	90 days	Sat 10/7/21	Thu 7/10/21	0 days	248,394,523,646
74	74	IW,PST, BR, MFS, EQT034	5.12.8.5	Shipping and Delivery of Plant to LVSB Sub-Contractor	45 days	Fri 8/10/21	Sun 21/11/21	0 days	73
75	**75**	**MFS,IW, EQT032**	**5.12.9**	**General - 11kV/380V Stepdown Power Transformers, C11, EQT032**	**110 days**	**Tue 1/9/20**	**Sat 19/12/20**	**105 days**	
76	76	MFS,IW, EQT032	5.12.9.1	Submission for acceptance of purchasing package	50 days	Tue 1/9/20	Tue 20/10/20	0 days	
77	77	MFS,IW, EQT032	5.12.9.2	Invitation of quotations for purchasing package	30 days	Wed 21/10/2	Thu 19/11/20	0 days	76
78	78	MFS,IW, EQT032	5.12.9.3	Acceptance of conforming quotation	30 days	Fri 20/11/20	Sat 19/12/20	102 days	77
79	**79**	**IW,PST, BR, MFS, EQT061**	**5.12.10**	**General - UPS, C11, EQT061**	**110 days**	**Tue 1/12/20**	**Sat 20/3/21**	**14 days**	
80	80	IW,PST, BR, MFS, EQT061	5.12.10.1	Submission for acceptance of purchasing package	50 days	Tue 1/12/20	Tue 19/1/21	0 days	
81	81	IW,PST, BR, MFS, EQT061	5.12.10.2	Invitation of quotations for purchasing package	30 days	Wed 20/1/21	Thu 18/2/21	0 days	80
82	82	IW,PST, BR, MFS, EQT061	5.12.10.3	Acceptance of conforming quotation	30 days	Fri 19/2/21	Sat 20/3/21	11 days	81
83	**83**	**IW,PST, BR, MFS, EQT041**	**5.12.11**	**General - HV Cables, C11, EQT041**	**65 days**	**Fri 1/1/21**	**Sat 6/3/21**	**28 days**	
84	84	IW,PST, BR, MFS, EQT041	5.12.11.1	Submission for acceptance of purchasing package	14 days	Fri 1/1/21	Thu 14/1/21	0 days	
85	85	IW,PST, BR, MFS, EQT041	5.12.11.2	Invitation of quotations for purchasing package	21 days	Fri 15/1/21	Thu 4/2/21	0 days	84
86	86	IW,PST, BR, MFS, EQT041	5.12.11.3	Acceptance of conforming quotation	30 days	Fri 5/2/21	Sat 6/3/21	25 days	85
87	**87**	**IW,PST, BR, MFS, EQT042**	**5.12.12**	**General - LV Cables, C11, EQT042**	**65 days**	**Fri 1/1/21**	**Sat 6/3/21**	**28 days**	
88	88	IW,PST, BR, MFS, EQT042	5.12.12.1	Submission for acceptance of purchasing package	14 days	Fri 1/1/21	Thu 14/1/21	0 days	
89	89	IW,PST, BR, MFS, EQT042	5.12.12.2	Invitation of quotations for purchasing package	21 days	Fri 15/1/21	Thu 4/2/21	0 days	88
90	90	IW,PST, BR, MFS, EQT042	5.12.12.3	Acceptance of conforming quotation	30 days	Fri 5/2/21	Sat 6/3/21	25 days	89
91	**91**		**5.13**	**Part B: Subletting of major sub-contract works**	**761 days**	**Wed 1/1/20**	**Sun 30/1/22**	**0 days**	**2,30**
92	92		5.13.1	Planned Completion Date for major sub-contract works	0 days	Thu 12/8/21	Thu 12/8/21	0 days	2SS+620 days,30SS
93	**93**	**BEAM**	**5.13.2**	**General - Independent BEAM Plus Consultant (04SC007)**	**150 days**	**Wed 1/1/20**	**Fri 29/5/20**	**0 days**	
94	94	BEAM	5.13.2.1	Submission for acceptance of proposed Independent BEAM Plus Consultant	60 edays	Wed 1/1/20	Sun 1/3/20	0 edays	
95	95	BEAM	5.13.2.2	Acceptance of proposed Independent BEAM Plus Consultant	14 edays	Sun 1/3/20	Sun 15/3/20	0 edays	94
96	96	BEAM	5.13.2.3	Engagement with an Independent BEAM Plus Consultant	7 days	Sun 15/3/20	Sat 21/3/20	0 days	95
97	97	BEAM	5.13.2.4	Actual Date for engagement with an independent BEAM Plus Consultant	0 days	Fri 29/5/20	Fri 29/5/20	0 days	
98	**98**	**Model**	**5.13.3**	**General - Conduction of Pump sump physical model test**	**170 days**	**Fri 15/5/20**	**Sat 31/10/20**	**0 days**	
99	99	Model	5.13.3.1	Submission for acceptance of proposed hydraulic laboratory to conduct the test	7 edays	Fri 15/5/20	Fri 22/5/20	0 edays	
100	100	Model	5.13.3.2	Invitation to quotations for provision of service	7 edays	Fri 22/5/20	Fri 29/5/20	0 edays	99
101	101	Model	5.13.3.3	Acceptance of proposed hydraulic laboratory	6 days	Fri 29/5/20	Wed 3/6/20	0 days	100
102	102	Model	5.13.3.4	Commencement of detailed proposal and conduction of test	145 days	Thu 4/6/20	Mon 26/10/2(	0 days	101
103	103	Model, KD1A	5.13.3.5	Acceptance of hydraulic Report	5 days	Tue 27/10/2(	Sat 31/10/20	0 days	102
104	**104**	**ICE**	**5.13.4**	**General - Independent Checking Engineer (04SC004)**	**127 days**	**Wed 11/3/2(**	**Wed 15/7/20**	**0 days**	
105	105	ICE	5.13.4.1	Submission for acceptance of proposed Independent Checking Engineer	90 edays	Wed 11/3/20	Tue 9/6/20	0 edays	
106	106	ICE	5.13.4.2	Acceptance of proposed Independent Checking Engineer	1 eday	Wed 24/6/20	Thu 25/6/20	0 edays	105
107	107	ICE	5.13.4.3	Engagement with an Independent Checking Engineer	21 days	Thu 25/6/20	Wed 15/7/20	0 days	106
108	108	ICE	5.13.4.4	Actual Date for engagement with an ICE	0 days	Wed 15/7/20	Wed 15/7/20	0 days	107
109	**109**	**IW, PST, BR, MFB, LA**	**5.13.5**	**General - Lifting Appliances (04SC008)**	**81 days**	**Fri 1/5/20**	**Tue 21/7/20**	**48 days**	
110	110	IW, PST, BR, MFB, LA	5.13.5.1	Submission for acceptance of subcontract works package	30 edays	Fri 1/5/20	Sun 31/5/20	0 edays	
111	111	IW, PST, BR, MFB, LA	5.13.5.2	Invitation of tender for subcontract works	21 edays	Sun 31/5/20	Sun 21/6/20	0 edays	110
112	112	IW, PST, BR, MFB, LA	5.13.5.3	Acceptance of conforming tender	30 edays	Sun 21/6/20	Tue 21/7/20	0 edays	111
113	113	IW, PST, BR, MFB, LA	5.13.5.4	Sub-contract work commencement date	0 days	Tue 21/7/20	Tue 21/7/20	42 days	112
114	**114**	**Mech**	**5.13.6**	**General - Mechanical Installations**	**244 days**	**Tue 1/6/21**	**Sun 30/1/22**	**0 days**	
115	115	Mech	5.13.6.1	Submission for acceptance of subcontract works package	120 days	Tue 1/6/21	Tue 28/9/21	0 days	
116	116	Mech	5.13.6.2	Invitation of tender for subcontract works	75 days	Wed 29/9/21	Sun 12/12/21	0 days	115



Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

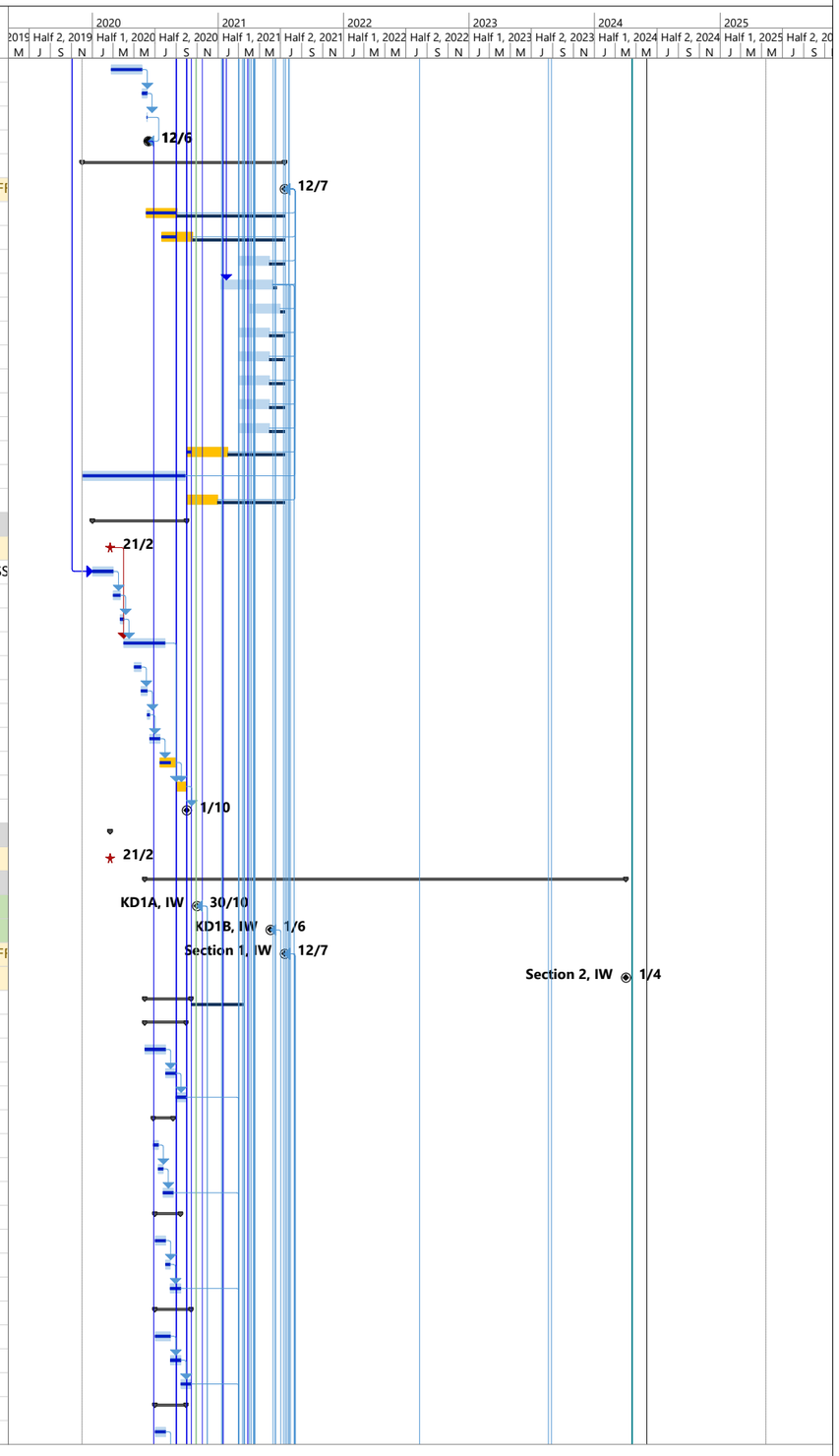
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
117	117	Mech	5.13.6.3	Acceptance of conforming tender	30 days	Mon 13/12/2	Tue 11/1/22	19 days	116
118	118	Mech	5.13.6.4	Sub-contract work commencement date	1 day	Sun 30/1/22	Sun 30/1/22	0 days	117FF
119	**119**	**Elec**	**5.13.7**	**General - Electrical Installations**	**244 days**	**Tue 1/6/21**	**Sun 30/1/22**	**0 days**	
120	120	Elec	5.13.7.1	Submission for acceptance of subcontract works package	120 edays	Tue 1/6/21	Wed 29/9/21	0 edays	
121	121	Elec	5.13.7.2	Invitation of tender for subcontract works	75 edays	Wed 29/9/21	Mon 13/12/21	0 edays	120
122	122	Elec	5.13.7.3	Acceptance of conforming tender	30 edays	Mon 13/12/2	Wed 12/1/22	18.38 edays	121
123	123	Elec	5.13.7.4	Sub-contract work commencement date	1 day	Sun 30/1/22	Sun 30/1/22	0 days	122FF
124	**124**	**SCADA, CMMS, PMS, IDMS**	**5.13.8**	**General - Facility Computerized Systems (SCADA, CMMS, PMS, IDMS)**	**130 days**	**Tue 1/9/20**	**Sat 9/1/21**	**35 days**	
125	125	SCADA	5.13.8.1	Submission for acceptance of subcontract works package	60 edays	Tue 1/9/20	Sat 31/10/20	0 edays	
126	126	SCADA	5.13.8.2	Invitation of tender for subcontract works	30 edays	Sat 31/10/20	Mon 30/11/2(	0 edays	125
127	127	SCADA	5.13.8.3	Acceptance of conforming tender	30 edays	Mon 30/11/2	Wed 30/12/2(	10 edays	126
128	128	SCADA	5.13.8.4	Sub-contract work commencement date	0 days	Sat 9/1/21	Sat 9/1/21	0 days	127
129	**129**	**BS**	**5.13.9**	**General - Building Services Installations**	**130 days**	**Mon 2/11/2(**	**Fri 12/3/21**	**3 days**	
130	130	BS	5.13.9.1	Submission for acceptance of subcontract works package	60 edays	Mon 2/11/20	Fri 1/1/21	0 edays	
131	131	BS	5.13.9.2	Invitation of tender for subcontract works	30 edays	Fri 1/1/21	Sun 31/1/21	0 edays	130
132	132	BS	5.13.9.3	Acceptance of conforming tender	30 edays	Sun 31/1/21	Tue 2/3/21	10 edays	131
133	133	BS	5.13.9.4	Sub-contract work commencement date	0 days	Fri 12/3/21	Fri 12/3/21	0 days	132FF
134	**134**	**MVAC**	**5.13.10**	**General - Mechanical Ventilation and Air Conditioning Installation**	**130 days**	**Mon 2/11/2(**	**Fri 12/3/21**	**0 days**	
135	135	MVAC	5.13.10.1	Submission for acceptance of subcontract works package	60 days	Mon 2/11/20	Thu 31/12/20	0 days	
136	136	MVAC	5.13.10.2	Invitation of tender for subcontract works	30 edays	Thu 31/12/2(	Sat 30/1/21	0.63 edays	135
137	137	MVAC	5.13.10.3	Acceptance of conforming tender	30 days	Sun 31/1/21	Mon 1/3/21	10 days	136
138	138	MVAC	5.13.10.4	Sub-contract work commencement date	0 days	Fri 12/3/21	Fri 12/3/21	0 days	137FF
139	**139**	**Genset**	**5.13.11**	**General - Emergency Power Generator Set (04SC006)**	**122 days**	**Wed 1/7/20**	**Sat 31/10/20**	**0 days**	
140	140	Genset	5.13.11.1	Submission for acceptance of subcontract works package	60 edays	Wed 1/7/20	Sun 30/8/20	0 edays	
141	141	Genset	5.13.11.2	Invitation of tender for subcontract works	30 edays	Sun 30/8/20	Tue 29/9/20	0 edays	140
142	142	Genset	5.13.11.3	Acceptance of conforming tender	30 edays	Tue 29/9/20	Thu 29/10/20	2 edays	141
143	143	Genset	5.13.11.4	Sub-contract work commencement date	0 days	Sat 31/10/20	Sat 31/10/20	0 days	142FF
144	**144**	**Pb**	**5.13.12**	**General - Plumbing Installation**	**122 days**	**Wed 1/7/20**	**Sat 31/10/20**	**4 days**	
145	145	Pb	5.13.12.1	Submission for acceptance of subcontract works package	30 edays	Wed 1/7/20	Fri 31/7/20	0 edays	
146	146	Pb	5.13.12.2	Invitation of tender for subcontract works	30 edays	Fri 31/7/20	Sun 30/8/20	0 edays	145
147	147	Pb	5.13.12.3	Acceptance of conforming tender	30 edays	Sun 30/8/20	Tue 29/9/20	32 edays	146
148	148	Pb	5.13.12.4	Sub-contract work commencement date	0 days	Sat 31/10/20	Sat 31/10/20	1 day	147FF
149	**149**	**FSI**	**5.13.13**	**General - Fire Services Installation**	**152 days**	**Sat 1/8/20**	**Thu 31/12/20**	**14 days**	
150	150	FSI	5.13.13.1	Submission for acceptance of subcontract works package	60 days	Sat 1/8/20	Tue 29/9/20	0 days	
151	151	FSI	5.13.13.2	Invitation of tender for subcontract works	30 days	Wed 30/9/20	Thu 29/10/20	0 days	150
152	152	FSI	5.13.13.3	Acceptance of conforming tender	30 days	Fri 30/10/20	Sat 28/11/20	32 days	151
153	153	FSI	5.13.13.4	Sub-contract work commencement date	0 days	Thu 31/12/2(	Thu 31/12/20	0 days	152FF
154	**154**	**Earth**	**5.13.14**	**General - Lightning Protection System and Main Earthing System**	**151 days**	**Tue 1/9/20**	**Sat 30/1/21**	**0 days**	
155	155	Earth	5.13.14.1	Submission for acceptance of subcontract works package	60 edays	Tue 1/9/20	Sat 31/10/20	0 edays	
156	156	Earth	5.13.14.2	Invitation of tender for subcontract works	30 edays	Sat 31/10/20	Mon 30/11/2(	0 edays	155
157	157	Earth	5.13.14.3	Acceptance of conforming tender	30 edays	Mon 30/11/2	Wed 30/12/2(	31 edays	156
158	158	Earth	5.13.14.4	Sub-contract work commencement date	0 days	Sat 30/1/21	Sat 30/1/21	0 days	157FF
159	**159**	**CCTV**	**5.13.15**	**General - CCTV Installation**	**183 days**	**Thu 1/7/21**	**Fri 31/12/21**	**0 days**	
160	160	CCTV	5.13.15.1	Submission for acceptance of subcontract works package	60 edays	Thu 1/7/21	Mon 30/8/21	0 edays	
161	161	CCTV	5.13.15.2	Invitation of tender for subcontract works	30 edays	Mon 30/8/21	Wed 29/9/21	0 edays	160
162	162	CCTV	5.13.15.3	Acceptance of conforming tender	30 edays	Wed 29/9/21	Fri 29/10/21	63 edays	161
163	163	CCTV	5.13.15.4	Sub-contract work commencement date	0 days	Fri 31/12/21	Fri 31/12/21	0 days	162FF
164	**164**	**Civil**	**5.13.16**	**General - Civil Construction Work for underground pipework**	**40 days**	**Wed 1/7/20**	**Mon 10/8/20**	**0 days**	
165	165	Civil	5.13.16.1	Submission for acceptance of subcontract works package	14 days	Wed 1/7/20	Tue 14/7/20	0 days	
166	166	Civil	5.13.16.2	Invitation of tender for subcontract works	14 days	Wed 15/7/20	Tue 28/7/20	0 days	165
167	167	Civil	5.13.16.3	Acceptance of conforming tender	7 days	Wed 29/7/20	Tue 4/8/20	0 days	166
168	168	Civil	5.13.16.4	Sub-contract work commencement date	0 days	Mon 10/8/20	Mon 10/8/20	0 days	167FF
169	**169**	**Temp Filtrate**	**5.13.17**	**General - Civil Construction Work for Temp. Filtrate Eq. System**	**40 days**	**Wed 1/7/20**	**Mon 10/8/20**	**0 days**	
170	170	Temp Filtrate	5.13.17.1	Submission for acceptance of subcontract works package	14 days	Wed 1/7/20	Tue 14/7/20	0 days	
171	171	Temp Filtrate	5.13.17.2	Invitation of tender for subcontract works	14 days	Wed 15/7/20	Tue 28/7/20	0 days	170
172	172	Temp Filtrate	5.13.17.3	Acceptance of conforming tender	7 days	Wed 29/7/20	Tue 4/8/20	0 days	171
173	173	Temp Filtrate	5.13.17.4	Sub-contract work commencement date	0 days	Mon 10/8/20	Mon 10/8/20	0 days	172FF
174	**174**	**existing genset**	**5.13.18**	**Mis - Modification of existing power house**	**109 days**	**Mon 24/2/2(**	**Fri 12/6/20**	**0 days**	



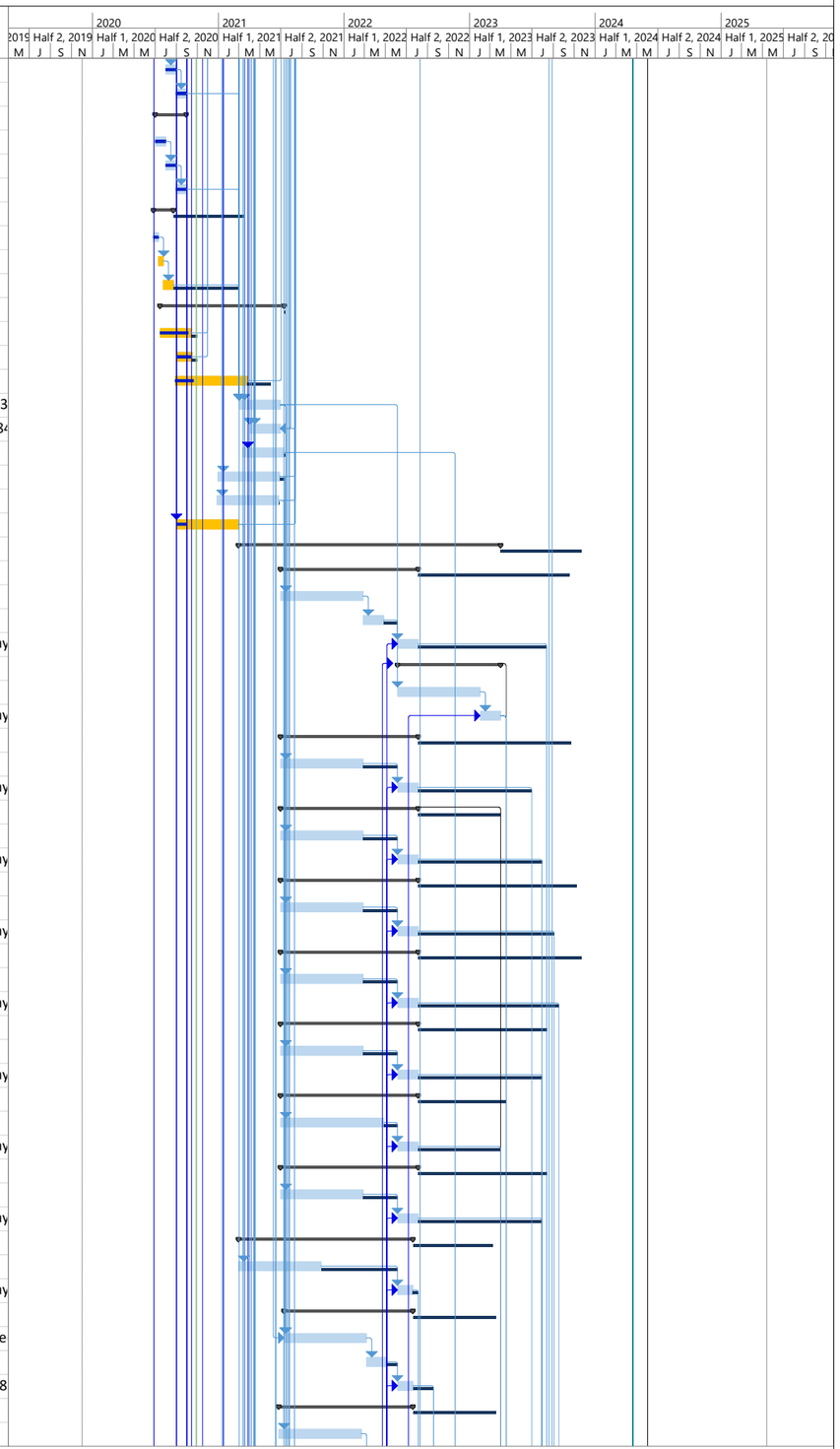
Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

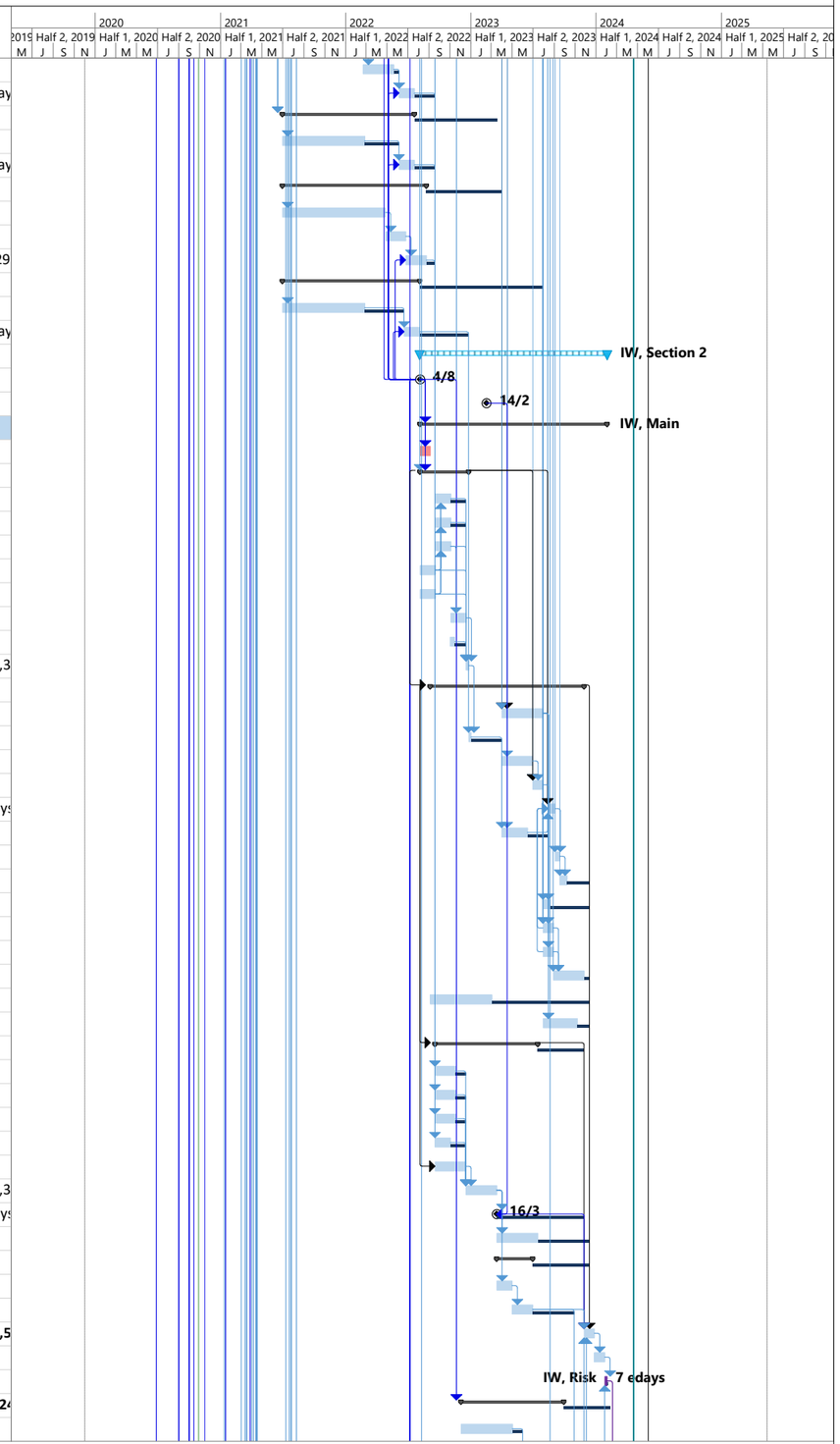
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
175	175	existing genset	5.13.18.1	Submission for acceptance of subcontract works package	90 days	Mon 24/2/20	Sat 23/5/20	0 days	
176	176	existing genset	5.13.18.2	Invitation of tender for subcontract works	14 days	Sun 24/5/20	Sat 6/6/20	0 days	175
177	177	existing genset	5.13.18.3	Acceptance of conforming tender	1 day	Sun 7/6/20	Sun 7/6/20	0 days	176
178	178	existing genset	5.13.18.4	Sub-contract work commencement date	0 days	Fri 12/6/20	Fri 12/6/20	0 days	177FF
179	**179**		**5.14**	**Part C: General Design Submissions**	**589 days**	**Mon 2/12/19**	**Mon 12/7/21**	**0 days**	
180	180	Section 1, Main	5.14.1	Planned Sectional Completion Date - Section 1	0 days	Mon 12/7/21	Mon 12/7/21	0 days	181FF,182FF,183FF
181	181	GN, Section 1	5.14.2	CDS001 - General Design Parameters	90 edays	Fri 5/6/20	Thu 3/9/20	312.38 edays	
182	182	GN, Section 1	5.14.3	CDS020 - Electrical Installation Typical Details	90 edays	Mon 20/7/20	Sun 18/10/20	267.38 edays	
183	183	GN, Section 1	5.14.4	CDS009 - Detailed Design for Plant Service Water System	90 edays	Mon 1/3/21	Sun 30/5/21	43.38 edays	
184	184	GN, Section 1, SCADA	5.14.5	CDS012 - Detailed Design for SCADA System	150 edays	Sat 9/1/21	Tue 8/6/21	11.38 edays	128
185	185	GN, Section 1	5.14.6	CDS13-1 - Detailed Design for CCTV System	90 edays	Thu 1/4/21	Wed 30/6/21	12.38 edays	
186	186	Gas, Section 1	5.14.7	CDS13-2 - Detailed Design for Gas Detection and Monitoring System	90 edays	Mon 1/3/21	Sun 30/5/21	43.38 edays	
187	187	PMS, Section 1	5.14.8	CDS14-1 - Detailed Design for Power monitoring system (PMS)	90 edays	Mon 1/3/21	Sun 30/5/21	43.38 edays	
188	188	CMMS, Section 1	5.14.9	CDS14-2 - Detailed Design for Computerized maintenance and management (CMMS)	90 edays	Mon 1/3/21	Sun 30/5/21	43.38 edays	
189	189	IDMS, Section 1	5.14.10	CDS14-3 - Detailed Design for Information and documents management system (IDMS)	90 edays	Mon 1/3/21	Sun 30/5/21	43.38 edays	
190	190	MVAC, Section 1	5.14.11	CDS031 - Detailed Design for MVAC System	90 edays	Mon 1/3/21	Sun 30/5/21	43.38 edays	
191	191	LN, Section 1	5.14.12	CDS042 - Detailed Design for Lightning Protection System	120 edays	Thu 1/10/20	Fri 29/1/21	164.38 edays	
192	192	Filter Press	5.14.13	Design submissions for E&M installation works of existing sludge thickening building	300 edays	Mon 2/12/19	Sun 27/9/20	0 edays	
193	193	Earth, Section 1	5.14.14	Design Submission for Earthing and Lightning	90 edays	Thu 1/10/20	Wed 30/12/20	194.38 edays	
194	**194**		**5.15**	**Works Area WA1-C**	**274 days**	**Wed 1/1/20**	**Thu 1/10/20**	**0 days**	
195	195	WA1-C	5.15.1	Actual Access / Handover Date	1 day	Fri 21/2/20	Fri 21/2/20	0 days	
196	196	WA1-C	5.15.2	Submission for acceptance of subcontract works package (Site Office) (04SC003)	60 days	Wed 1/1/20	Sat 29/2/20	0 days	2SS+30 edays,30SS
197	197	WA1-C	5.15.3	Invitation of quotations for subcontract works (Site Office)	21 days	Sun 1/3/20	Sat 21/3/20	0 days	196
198	198	WA1-C	5.15.4	Acceptance of conforming quotation (Site Office)	10 days	Sun 22/3/20	Tue 31/3/20	0 days	197
199	199	WA1-C	5.15.5	Design and Fabrication of the Contractor's Site Accommodations	120 days	Wed 1/4/20	Wed 29/7/20	0 days	195,198
200	200	WA1-C	5.15.6	Submission for acceptance of subcontract works package (Site Office Foundation)	20 days	Fri 1/5/20	Wed 20/5/20	0 days	
201	201	WA1-C	5.15.7	Invitation of quotations for subcontract works (Site Office Foundation)	18 days	Thu 21/5/20	Sun 7/6/20	0 days	200
202	202	WA1-C	5.15.8	Acceptance of conforming quotation (Site foundation)	7 days	Mon 8/6/20	Sun 14/6/20	0 days	201
203	203	WA1-C	5.15.9	Design and Construction of the Contractor's Site Office foundation	30 days	Mon 15/6/20	Tue 14/7/20	0 days	202
204	204	WA1-C	5.15.10	Construction of Contractor's Site Office foundation	47 days	Wed 15/7/20	Sun 30/8/20	0 days	203
205	205	WA1-C	5.15.11	Site Installation of the Contractor's Site Accommodations (MiC)	30 days	Mon 31/8/20	Tue 29/9/20	1 day	199,204
206	206	WA1-C	5.15.12	Anticipated date of working at site	0 days	Thu 1/10/20	Thu 1/10/20	0 days	205
207	**207**		**5.16**	**Works Area WA2-C**	**1 day**	**Fri 21/2/20**	**Fri 21/2/20**	**0 days**	
208	208	WA2-C	5.16.1	Actual Access / Handover Date	1 day	Fri 21/2/20	Fri 21/2/20	0 days	
209	**209**	**IW**	**5.17**	**Inlet Works No. 1, Portion B-2 (PS 6B.2.1)**	**1400 days**	**Mon 1/6/20**	**Mon 1/4/24**	**0 days**	
210	210	KD1A, IW	5.17.1	Planned Key Date Completion Date - KD1A, IW	0 days	Fri 30/10/20	Fri 30/10/20	0 days	244FF,245FF
211	211	KD1B, IW	5.17.2	Planned Key Date Completion Date - KD1B, IW	0 days	Tue 1/6/21	Tue 1/6/21	0 days	246FF
212	212	Section 1, IW	5.17.3	Planned Sectional Completion Date - Section 1, IW	0 days	Mon 12/7/21	Mon 12/7/21	0 days	247FF,248FF,249FF
213	213	Section 2, IW	5.17.4	Planned Sectional Completion Date - Section 2, IW	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
214	**214**	**IW**	**5.17.5**	**Selection of Suppliers for major plant and materials for Inlet Works No. 1**	**135 days**	**Mon 1/6/20**	**Tue 13/10/20**	**152 days**	
215	**215**	**IW, EQT006**	**5.17.5.1**	**Inlet Works - inlet Pumps (Marking Scheme Approach), C11, ref. EQT006**	**120 days**	**Mon 1/6/20**	**Mon 28/9/20**	**0 days**	
216	216	IW, EQT006	5.17.5.1.1	Submission for acceptance of purchasing package including proposed marking scheme	60 days	Mon 1/6/20	Thu 30/7/20	0 days	
217	217	IW, EQT006	5.17.5.1.2	Invitation of quotations for purchasing package	30 days	Fri 31/7/20	Sat 29/8/20	0 days	216
218	218	IW, EQT006	5.17.5.1.3	Acceptance of conforming quotation	30 days	Sun 30/8/20	Mon 28/9/20	0 days	217
219	**219**	**IW, EQT052**	**5.17.5.2**	**Inlet Works - mechanical raked bar screens, C11, ref. EQT052**	**58 days**	**Fri 26/6/20**	**Sat 22/8/20**	**0 days**	
220	220	IW, EQT052	5.17.5.2.1	Submission for acceptance of purchasing package	14 days	Fri 26/6/20	Thu 9/7/20	0 days	
221	221	IW, EQT052	5.17.5.2.2	Invitation of quotations for purchasing package	14 days	Fri 10/7/20	Thu 23/7/20	0 days	220
222	222	IW, EQT052	5.17.5.2.3	Acceptance of conforming quotation	30 days	Fri 24/7/20	Sat 22/8/20	0 days	221
223	**223**	**IW, EQT053**	**5.17.5.3**	**Inlet Works - screening conveyors and Diverters, C11, ref. EQT053**	**74 days**	**Wed 1/7/20**	**Sat 12/9/20**	**0 days**	
224	224	IW, EQT053	5.17.5.3.1	Submission for acceptance of purchasing package	30 days	Wed 1/7/20	Thu 30/7/20	0 days	
225	225	IW, EQT053	5.17.5.3.2	Invitation of quotations for purchasing package	14 days	Fri 31/7/20	Thu 13/8/20	0 days	224
226	226	IW, EQT053	5.17.5.3.3	Acceptance of conforming quotation	30 days	Fri 14/8/20	Sat 12/9/20	0 days	225
227	**227**	**IW, EQT003**	**5.17.5.4**	**Inlet Works - screening screw type compactors, C11, ref. EQT003**	**105 days**	**Wed 1/7/20**	**Tue 13/10/20**	**0 days**	
228	228	IW, EQT003	5.17.5.4.1	Submission for acceptance of purchasing package	45 days	Wed 1/7/20	Fri 14/8/20	0 days	
229	229	IW, EQT003	5.17.5.4.2	Invitation of quotations for purchasing package	30 days	Sat 15/8/20	Sun 13/9/20	0 days	228
230	230	IW, EQT003	5.17.5.4.3	Acceptance of conforming quotation	30 days	Mon 14/9/20	Tue 13/10/20	0 days	229
231	**231**	**IW, EQT004**	**5.17.5.5**	**Inlet Works - grit removal system, C11, ref. EQT004**	**90 days**	**Wed 1/7/20**	**Mon 28/9/20**	**0 days**	
232	232	IW, EQT004	5.17.5.5.1	Submission for acceptance of purchasing package	30 days	Wed 1/7/20	Thu 30/7/20	0 days	



ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
233	233	IW, EQT004	5.17.5.5.2	Invitation of quotations for purchasing package	30 days	Fri 31/7/20	Sat 29/8/20	0 days	232
234	234	IW, EQT004	5.17.5.5.3	Acceptance of conforming quotation	30 days	Sun 30/8/20	Mon 28/9/20	0 days	233
235	**235**	**IW, EQT005**	**5.17.5.6**	**Inlet Works - grit classifiers, C11, ref. EQT005**	**90 days**	**Wed 1/7/20**	**Mon 28/9/20**	**0 days**	
236	236	IW	5.17.5.6.1	Submission for acceptance of purchasing package	30 days	Wed 1/7/20	Thu 30/7/20	0 days	
237	237	IW	5.17.5.6.2	Invitation of quotations for purchasing package	30 days	Fri 31/7/20	Sat 29/8/20	0 days	236
238	238	IW	5.17.5.6.3	Acceptance of conforming quotation	30 days	Sun 30/8/20	Mon 28/9/20	0 days	237
239	**239**	**IW, EQT046**	**5.17.5.7**	**Inlet Works - Fixed Bar Screen, C11, ref. EQT046**	**58 days**	**Fri 26/6/20**	**Sat 22/8/20**	**204 days**	
240	240	IW, EQT046	5.17.5.7.1	Submission for acceptance of purchasing package	14 days	Fri 26/6/20	Thu 9/7/20	0 days	
241	241	IW, EQT046	5.17.5.7.2	Invitation of quotations for purchasing package	14 days	Fri 10/7/20	Thu 23/7/20	0 days	240
242	242	IW, EQT046	5.17.5.7.3	Acceptance of conforming quotation	30 days	Fri 24/7/20	Sat 22/8/20	191 days	241
243	**243**	**IW, KD1A, KD1B, Section 1**	**5.17.6**	**Design Submissions for IW**	**360 days**	**Wed 15/7/2(**	**Sat 10/7/21**	**3 days**	
244	244	IW, KD1A, Elec	5.17.6.1	Electrical schematic drawings for Inlet Works No. 1	90 days	Wed 15/7/20	Mon 12/10/2(	18 days	
245	245	IW, KD1A, CW,	5.17.6.2	CDS080-1 - Civil and dimensional requirements drawings for Inlet Works No. 1 up to +8.0 r	45 days	Tue 1/9/20	Thu 15/10/20	15 days	
246	246	IW, KD1B, CW	5.17.6.3	CDS081-1 - Civil and dimensional requirements drawings for Inlet Works No. 1	210 days	Fri 28/8/20	Thu 25/3/21	68 days	
247	247	IW, Section 1, Mech	5.17.6.4	CDS002 - Detailed Design for Inlet Works No. 1	120 edays	Mon 1/3/21	Tue 29/6/21	0.63 edays	56,222,226,218,23
248	248	IW, Section 1, Elec, SCADA	5.17.6.5	CDS021 - Detailed Design for Electrical Installations for Inlet Works No. 1	90 edays	Thu 1/4/21	Wed 30/6/21	0 edays	72,78,82,86,90,184
249	249	IW, Section 1, BS	5.17.6.6	CDS034-1 - Detailed Design for Electrical Installations BS at Inlet Works No. 1	120 edays	Fri 12/3/21	Sat 10/7/21	2.38 edays	133
250	250	IW, Section 1, LVSB	5.17.6.7	CDS025-1 - Detailed Design for LV Switchboards for Inlet Works No. 1	180 edays	Tue 29/12/2(	Sun 27/6/21	12.63 edays	68
251	251	IW, Section 1, HVSB, EQT031	5.17.6.8	CDS026-1 - Detailed Design for HV Switchboards for Inlet Works No. 1	180 edays	Sat 26/12/20	Thu 24/6/21	0.63 edays	64
252	252	IW, Section 1, LA	5.17.6.9	CDS050-1 - Detailed Design for Lifting Appliances - Inlet Works No. 1	180 edays	Tue 1/9/20	Sun 28/2/21	0 edays	113
253	**253**	**IW**	**5.17.7**	**Manufacturing and Delivery of Plant & Materials**	**762 days**	**Sun 28/2/21**	**Fri 31/3/23**	**235 days**	
254	**254**	**IW, EQT006**	**5.17.7.1**	**Inlet Pumps, EQT006**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**440 days**	
255	255	IW, EQT006	5.17.7.1.1	Manufacturing of Inlet Pumps, EQT006	240 days	Wed 30/6/21	Thu 24/2/22	0 days	247
256	256	IW, EQT006, FAT	5.17.7.1.2	Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Fri 25/2/22	Mon 25/4/22	40 days	255
257	257	IW, EQT006	5.17.7.1.3	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	374 days	256,304SS-60 eday
258	**258**	IW, EQT052	**5.17.7.2**	**Mechanical Raked Bar Screen, EQT052**	300 days	Sun 5/6/22	Fri 31/3/23	0 days	304SS-60 edays
259	259	**IW, EQT052**	5.17.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 5/6/22	Mon 30/1/23	0 days	247
260	260	**IW, EQT052**	5.17.7.2.2	Shipping and Delivery of Plant to site	60 days	Tue 31/1/23	Fri 31/3/23	0 days	259,304SS-60 eday
261	**261**	**IW, EQT053**	**5.17.7.3**	**Screening Conveyors and Diverters, EQT053**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**445 days**	
262	262	IW, EQT053	5.17.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	247
263	263	IW, EQT053	5.17.7.3.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	330 days	262,304SS-60 eday
264	**264**	IW, EQT003	**5.17.7.4**	**Screening Screw Type Compactors, EQT003**	400 days	Wed 30/6/21	Wed 3/8/22	240 days	
265	265	IW, EQT003	5.17.7.4.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	247
266	266	IW, EQT003	5.17.7.4.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	360 days	265,304SS-60 eday
267	**267**	**IW, EQT004**	**5.17.7.5**	**Grit Removal System, EQT004**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**461 days**	
268	268	IW, EQT004	5.17.7.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	247
269	269	IW, EQT004	5.17.7.5.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	395 days	268,304SS-60 eday
270	**270**	**IW, EQT005**	**5.17.7.6**	**Grit Classifiers, EQT005**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**475 days**	
271	271	IW, EQT005	5.17.7.6.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	247
272	272	IW, EQT005	5.17.7.6.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	409 days	271,304SS-60 eday
273	**273**	**IW, EQT036**	**5.17.7.7**	**DI Pipework, EQT036**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**376 days**	
274	274	IW, EQT036	5.17.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	247
275	275	IW, EQT036	5.17.7.7.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	360 days	274,304SS-60 eday
276	**276**	**IW, EQT013**	**5.17.7.8**	**Stoplogs and Penstocks, EQT013**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**256 days**	
277	277	IW, EQT013	5.17.7.8.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Wed 30/6/21	Mon 25/4/22	40 days	247
278	278	IW, EQT004	5.17.7.8.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	240 days	277,304SS-60 eday
279	**279**	**IW, EQT036**	**5.17.7.9**	**Valves, EQT036**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**376 days**	
280	280	IW, EQT036	5.17.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	247
281	281	IW, EQT036	5.17.7.9.2	Shipping and Delivery of Plant to site	60 days	Sun 5/6/22	Wed 3/8/22	360 days	280,304SS-60 eday
282	**282**	**IW, LA**	**5.17.7.10**	**Lifting Appliances**	**507 days**	**Sun 28/2/21**	**Tue 19/7/22**	**231 days**	
283	283	**IW, LA**	5.17.7.10.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 28/2/21	Mon 25/10/21	222 days	252
284	284	**IW, LA**	5.17.7.10.2	Shipping and Delivery of Plant to site	45 days	Sun 5/6/22	Tue 19/7/22	16 days	283,304SS-60 eday
285	**285**	**IW, LVSB**	**5.17.7.11**	**LV Switchboards**	**375 days**	**Sat 10/7/21**	**Tue 19/7/22**	**241 days**	
286	286	IW, LVSB	5.17.7.11.1	IW - Manufacturing of Plant	240 days	Sat 10/7/21	Sun 6/3/22	0 days	248,250,74SS-90 e
287	287	IW, FAT, LVSB	5.17.7.11.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	60 days	Mon 7/3/22	Thu 5/5/22	30 days	286
288	288	IW, LVSB	5.17.7.11.3	IW - Shipping and Delivery of Plant to site	45 days	Sun 5/6/22	Tue 19/7/22	60 days	304SS-60 edays,28
289	**289**	**IW, HVSB, EQT031**	**5.17.7.12**	**HV Switchboards, EQT031**	**390 days**	**Fri 25/6/21**	**Tue 19/7/22**	**241 days**	
290	290	IW, HVSB, EQT031	5.17.7.12.1	IW - Manufacturing of Plant	240 days	Fri 25/6/21	Sat 19/2/22	0 days	251



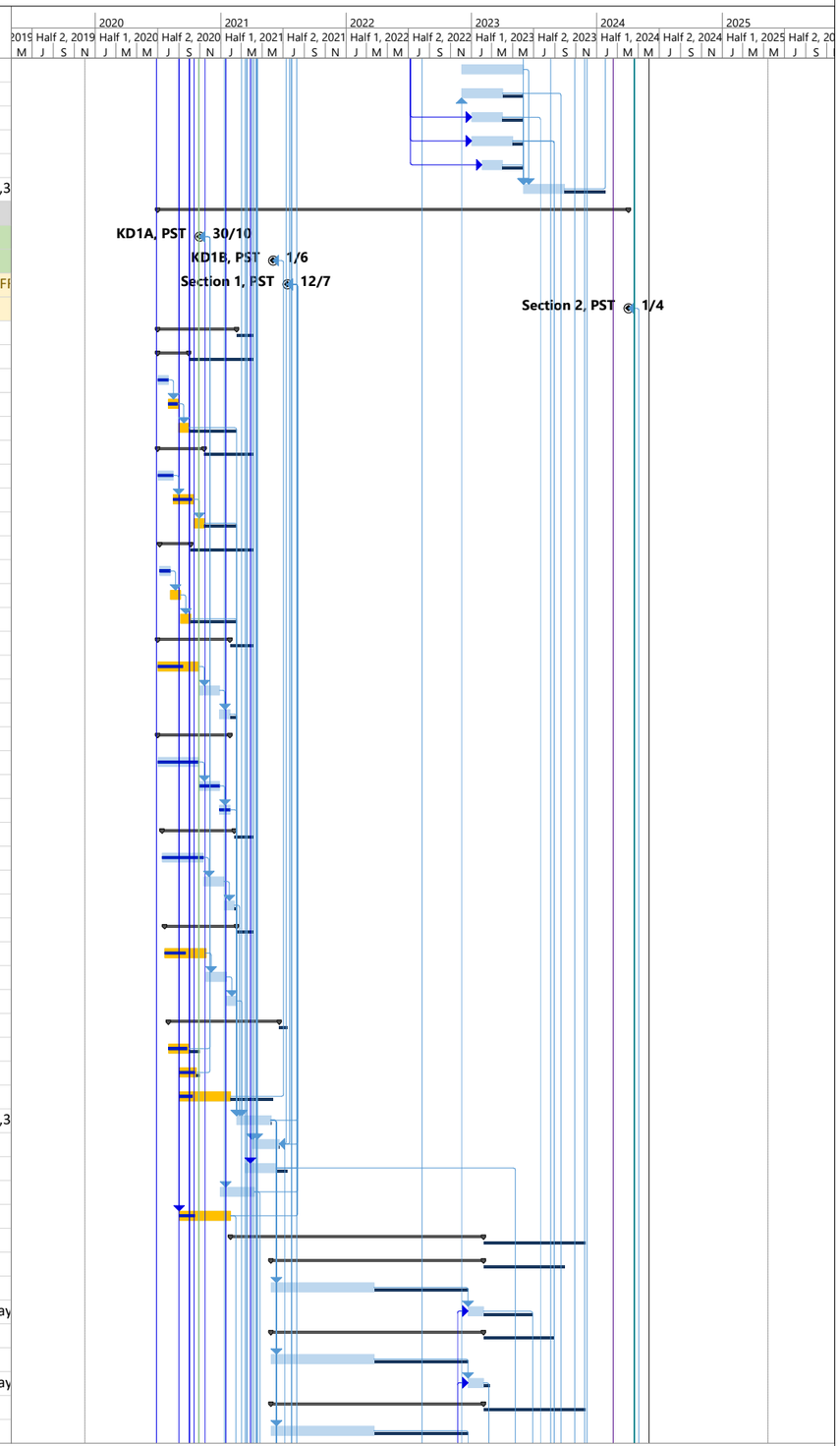
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
291	291	IW, HVSB, EQT031	5.17.7.12.2	IW - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Sun 20/2/22	Fri 20/5/22	15 days	290
292	292	IW, HVSB, EQT031	5.17.7.12.3	IW - Shipping and Delivery of Plant to site	45 days	Sun 5/6/22	Tue 19/7/22	60 days	291,304SS-60 eday
293	**293**	**IW, EQT032**	**5.17.7.13**	**11kV/380V Stepdown Power Transformers, EQT032**	**385 days**	**Wed 30/6/21**	**Tue 19/7/22**	**241 days**	**56,60**
294	294	IW, EQT032	5.17.7.13.1	IW - Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	100 days	248
295	295	IW, EQT032	5.17.7.13.2	IW - Shipping and Delivery of Plant to site	45 days	Sun 5/6/22	Tue 19/7/22	60 days	294,304SS-60 eday
296	**296**	**IW, SCADA**	**5.17.7.14**	**PLC System**	**420 days**	**Wed 30/6/21**	**Tue 23/8/22**	**221 days**	
297	297	IW, SCADA	5.17.7.14.1	Manufacturing of Plant, PLC for IW	300 days	Wed 30/6/21	Mon 25/4/22	0 days	248
298	298	IW, SCADA, FAT	5.17.7.14.2	Factory Acceptance Test of Plant, PLC for IW (To be witnessed by PM)	60 days	Tue 26/4/22	Fri 24/6/22	0 days	297
299	299	IW, SCADA	5.17.7.14.3	Shipping and Delivery of Plant to site	60 days	Sat 25/6/22	Tue 23/8/22	25 days	304SS-60 edays,29
300	**300**	**IW, EQT046**	**5.17.7.15**	**Fixed Bar Screen, EQT046**	**400 days**	**Wed 30/6/21**	**Wed 3/8/22**	**358 days**	
301	301	IW, EQT046	5.17.7.15.1	IW - Manufacturing and Factory Acceptance Test of Plant	240 days	Wed 30/6/21	Thu 24/2/22	115 days	247
302	302	IW, EQT046	5.17.7.15.2	IW - Shipping and Delivery of Plant to site	45 days	Mon 20/6/22	Wed 3/8/22	143 days	301,304SS-45 eday
303	**303**	**IW, Section 2**	**5.17.8**	**Site Installation Work**	**547 days**	**Thu 4/8/22**	**Thu 1/2/24**	**0 days**	
304	304	IW, LA, BS,FSI, Elec, Others	5.17.8.1	Tentative Civil Handover Date, Portion B-2, Inlet Works No. 1	1 day	Thu 4/8/22	Thu 4/8/22	0 days	
305	305	IW, Elec, Others	5.17.8.2	Tentative Civil Handover Date, HV cables draw pits from MFB2 to IW	1 day	Tue 14/2/23	Tue 14/2/23	0 days	
306	**306**	**IW, Main**	**5.17.8.3**	**Commencement of E&M Installation at Inlet Works No. 1**	**546 days**	**Fri 5/8/22**	**Thu 1/2/24**	**0 days**	**304**
307	307	IW, H&S	5.17.8.3.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, Welfare facilities etc.,	30 days	Fri 5/8/22	Sat 3/9/22	0 days	304
308	**308**	**IW, LA**	**5.17.8.3.2**	**Installation of Lifting Appliances at Inlet Works No. 1**	**142 days**	**Fri 5/8/22**	**Sat 24/12/22**	**0 days**	**304,284**
309	309	IW, LA	5.17.8.3.2.1	1/F EOT Crane LA-01-01 SWL 5t	45 days	Mon 19/9/22	Wed 2/11/22	45 days	312,313
310	310	IW, LA	5.17.8.3.2.2	1/F EOT Crane LA-01-02 SWL 5t	45 days	Mon 19/9/22	Wed 2/11/22	45 days	312,313
311	311	IW, LA	5.17.8.3.2.3	1/F EOT Crane LA-01-03 SWL 5t	45 days	Mon 19/9/22	Wed 2/11/22	0 days	312,313
312	312	IW, LA	5.17.8.3.2.4	UG EOT Crane LA-01-04 SWL 10t	45 days	Fri 5/8/22	Sun 18/9/22	0 days	
313	313	IW, LA	5.17.8.3.2.5	UG EOT Crane LA-01-05 SWL 10t	45 days	Fri 5/8/22	Sun 18/9/22	0 days	
314	314	IW, LA	5.17.8.3.2.6	1/F Retractable Crane LA-01-06 SWL 10t	45 days	Thu 3/11/22	Sat 17/12/22	0 days	311
315	315	IW, LA	5.17.8.3.2.7	Submission of T&C Plan and Procedures of LA for acceptance	14 days	Tue 1/11/22	Mon 14/11/22	33 days	
316	316	IW, LA	5.17.8.3.2.8	T&C, Loading Test for Lifting Appliances	7 days	Sun 18/12/22	Sat 24/12/22	0 days	309,310,311,312,3
317	**317**	**IW, Mech**	**5.17.8.3.3**	**Mechanical Installations for Inlet Works No. 1**	**449 days**	**Sun 4/9/22**	**Sun 26/11/23**	**0 days**	**308SS+30 days**
318	318	IW, Mech, EQT013	5.17.8.3.3.1	Installation of penstocks and stoplogs (Penstock 35nos, Stoplogs 37 nos), EQT013	120 days	Sat 1/4/23	Sat 29/7/23	0 days	264,258,278
319	319	IW, Mech, EQT046	5.17.8.3.3.2	Installation of fixed bar screen (x1), EQT046	7 days	Sun 25/12/22	Sat 31/12/22	90 days	316,302
320	320	IW, Mech, EQT052	5.17.8.3.3.3	Installation of mechanical raked coarse bar screens (x4), EQT052	90 days	Sat 1/4/23	Thu 29/6/23	0 days	260
321	321	IW, Mech, EQT053	5.17.8.3.3.4	Installation of screening conveyors (x6), EQT053	30 days	Fri 30/6/23	Sat 29/7/23	0 days	308,320,263
322	322	IW, Mech, EQT006	5.17.8.3.3.5	Installation of inlet pumps (x5), EQT006	21 days	Sun 13/8/23	Sat 2/9/23	0 days	308,327SS+14 days
323	323	IW, Mech, EQT052	5.17.8.3.3.6	Installation of mechanical raked fine bar screens (x4), EQT052	75 days	Sat 1/4/23	Wed 14/6/23	59 days	319,260
324	324	IW, Mech, EQT004	5.17.8.3.3.7	Installation of grit removal system (x3), EQT004	14 days	Sun 3/9/23	Sat 16/9/23	0 days	322,269
325	325	IW, Mech, EQT005	5.17.8.3.3.8	Installation of grit classifiers (x2), EQT005	21 days	Sun 17/9/23	Sat 7/10/23	66 days	324,272
326	326	IW, Mech, EQT003	5.17.8.3.3.9	Installation of compactors (x2), EQT003	21 days	Sun 30/7/23	Sat 19/8/23	115 days	321,266
327	327	IW, Mech, EQT036	5.17.8.3.3.10	Installation of pipework and valves, EQT036	30 days	Sun 30/7/23	Mon 28/8/23	0 days	318,275,281
328	328	IW, Mech	5.17.8.3.3.11	Pipework pressure tests	30 days	Sun 30/7/23	Mon 28/8/23	0 days	318
329	329	IW, Mech, EQT035-1	5.17.8.3.3.12	Installation of instrumentations, EQT035-1	90 days	Tue 29/8/23	Sun 26/11/23	16 days	327,328,52
330	330	IW, Mech, EQT050	5.17.8.3.3.13	Installation of Platforms, Covers etc, EQT050	180 days	Sun 4/9/22	Thu 2/3/23	285 days	
331	331	IW, Mech	5.17.8.3.3.14	Site Acceptance Tests - mechanical aspects including alignment and levels checks, leal	100 days	Sun 30/7/23	Mon 6/11/23	36 days	318
332	**332**	**IW, Elec**	**5.17.8.3.4**	**Electrical Installations for Inlet Works No. 1**	**300 days**	**Sun 18/9/22**	**Fri 14/7/23**	**135 days**	**317SS+14 days**
333	333	IW, Elec	5.17.8.3.4.1	Installation of LV Switchboards, IW	60 days	Sun 18/9/22	Wed 16/11/22	30 days	288
334	334	IW, Elec, EQT031	5.17.8.3.4.2	Installation of HV Switchboards, IW	60 days	Sun 18/9/22	Wed 16/11/22	30 days	292
335	335	IW, Elec, EQT032	5.17.8.3.4.3	Installation of Transformer, IW, EQT032	60 days	Sun 18/9/22	Wed 16/11/22	30 days	295
336	336	IW, Elec, SCADA	5.17.8.3.4.4	Installation of PLC Panels, IW	45 days	Sun 18/9/22	Tue 1/11/22	45 days	299
337	337	IW, Elec	5.17.8.3.4.5	Installation of cable trays and cable containments	90 days	Sun 18/9/22	Fri 16/12/22	0 days	317SS
338	338	IW, Elec, SCADA	5.17.8.3.4.6	Cables laying and terminations	90 days	Sat 17/12/22	Thu 16/3/23	0 days	333,335,336,337,3
339	339	IW, Elec	5.17.8.3.4.7	Energisation of LV Switchboards, IW	0 days	Thu 16/3/23	Thu 16/3/23	255 days	338,305FF+30 days
340	340	IW, Elec	5.17.8.3.4.8	Site Acceptance Tests - Electrical aspects including voltage and current tests, equipme	120 days	Fri 17/3/23	Fri 14/7/23	151 days	338
341	**341**	**IW, SCADA**	**5.17.8.3.5**	**SCADA Systems, Inlet Works**	**105 days**	**Fri 17/3/23**	**Thu 29/6/23**	**166 days**	
342	342	IW, SCADA	5.17.8.3.5.1	Configuration of PLC System, IW	45 days	Fri 17/3/23	Sun 30/4/23	0 days	338
343	343	IW, SCADA	5.17.8.3.5.2	Site Acceptance Test for PLC System at Inlet Works No. 1	60 days	Mon 1/5/23	Thu 29/6/23	121 days	342
344	**344**	**IW, SCADA**	**5.17.8.3.6**	**Site Acceptance Test for E&M Equip & Instrumentations calibration, IW**	**30 days**	**Mon 27/11/2**	**Tue 26/12/23**	**0 days**	**317,332,339,469,5**
345	**345**	**IW, SCADA**	**5.17.8.3.7**	**System Commissioning for E&M Equip at Inlet Works No. 1**	**30 edays**	**Tue 26/12/2**	**Thu 25/1/24**	**0 edays**	**344**
346	**346**	**IW, Risk**	**5.17.8.3.8**	**Risk Allowances for completion of Processing Plant at Inlet Works No. 1**	**7 edays**	**Thu 25/1/24**	**Thu 1/2/24**	**0.63 edays**	**345,354**
347	**347**	**BS, IW**	**5.17.8.3.9**	**Building Services Installations for Inlet Works No. 1**	**300 days**	**Sat 3/12/22**	**Thu 28/9/23**	**135 days**	**304FS+120 days,2**
348	348	BS, IW, MVAC	5.17.8.3.9.1	Mechanical Ventilation and Air Conditioning System, IW	150 days	Sat 3/12/22	Mon 1/5/23	30 days	



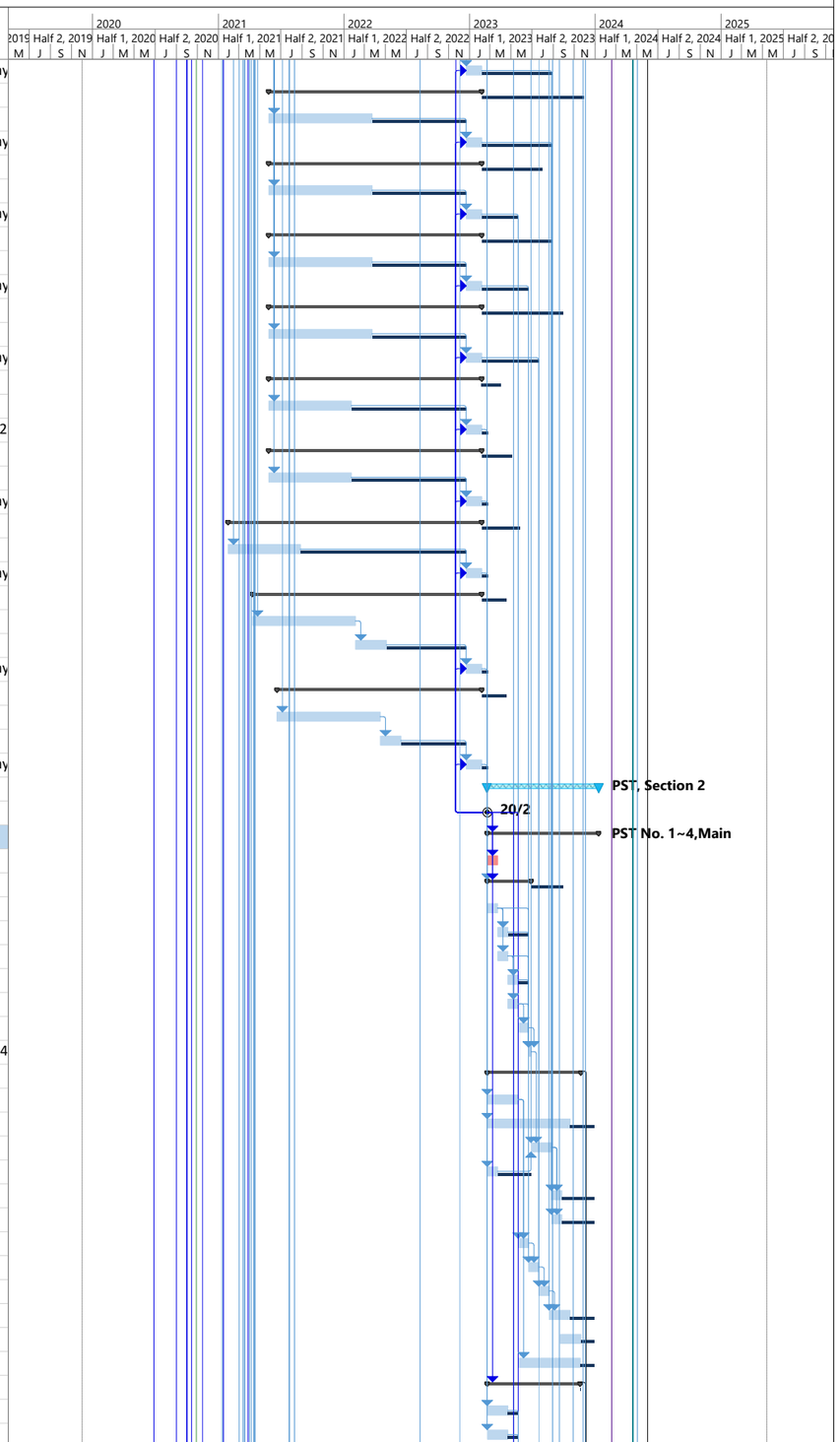
Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

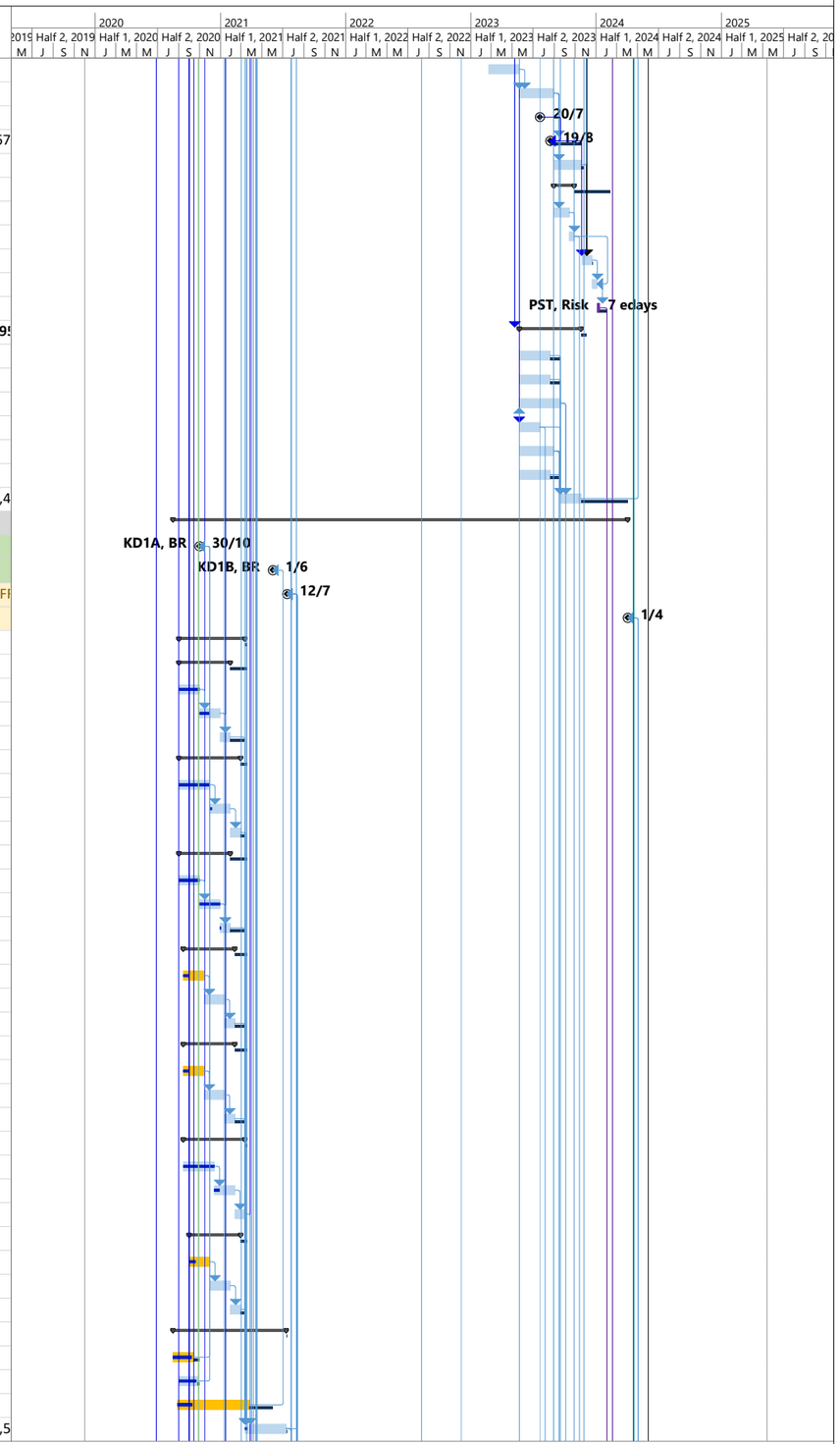
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
349	349	BS, IW	5.17.8.3.9.2	Lighting and Power Distribution System, IW	180 days	Sat 3/12/22	Wed 31/5/23	0 days	
350	350	BS, IW, Pb	5.17.8.3.9.3	Plumbing Installation, IW	120 days	Sat 3/12/22	Sat 1/4/23	60 days	1228
351	351	BS, IW, CCTV	5.17.8.3.9.4	CCTV Installation (5 indoor +5 outdoor Cameras), IW	90 days	Sun 1/1/23	Fri 31/3/23	61 days	304SS+150 days
352	352	BS, IW, FSI	5.17.8.3.9.5	Fire Services Installation, IW	120 days	Sun 1/1/23	Sun 30/4/23	31 days	304SS+150 days
353	353	BS,IW,Earth	5.17.8.3.9.6	Earthing and Lightning Protection System, IW	60 days	Tue 31/1/23	Fri 31/3/23	61 days	304SS+180 days
354	354	BS, IW	5.17.8.3.9.7	Testing and Commissioning of Building Services Installations, IW	120 days	Thu 1/6/23	Thu 28/9/23	119 days	348,349,350,351,3
355	355	**PST**	**5.18**	**Primary Sedimentation Tanks No. 1 ~ 4, Portion B-3 (PS 6B2.2)**	**1371 days**	**Wed 1/7/20**	**Mon 1/4/24**	**0 days**	
356	356	KD1A, PST	5.18.1	Planned Key Date Completion Date - KD1A, PST No. 1~4	0 days	Fri 30/10/20	Fri 30/10/20	0 days	390FF,391FF
357	357	KD1B, PST	5.18.2	Planned Key Date Completion Date - KD1B, PST No. 1~4	1 day	Tue 1/6/21	Tue 1/6/21	0 days	392FF
358	358	Section 1, PST	5.18.3	Planned Sectional Completion Date - Section 1, PST No. 1~4	0 days	Mon 12/7/21	Mon 12/7/21	0 days	395FF,394FF,393FF
359	359	Section 2, PST	5.18.4	Planned Sectional Completion Date - Section 2, PST No. 1~4	0 days	Mon 1/4/24	Mon 1/4/24	0 days	483FF
360	360	**PST**	**5.18.5**	**Selection of Suppliers for major plant and materials for PST No. 1~4**	**230 days**	**Wed 1/7/20**	**Mon 15/2/21**	**47 days**	
361	361	**PST, EQT014**	**5.18.5.1**	**PST - lamella plate settlers, C11, ref. EQT014**	**90 days**	**Wed 1/7/20**	**Mon 28/9/20**	**187 days**	
362	362	PST, EQT014	5.18.5.1.1	Submission for acceptance of purchasing package	30 days	Wed 1/7/20	Thu 30/7/20	0 days	
363	363	PST, EQT014	5.18.5.1.2	Invitation of quotations for purchasing package	30 days	Fri 31/7/20	Sat 29/8/20	0 days	362
364	364	PST, EQT014	5.18.5.1.3	Acceptance of conforming quotation	30 days	Sun 30/8/20	Mon 28/9/20	140 days	363
365	365	**PST, EQT014**	**5.18.5.2**	**PST - reciprocating type bottom scrapers, C11, ref. EQT014**	**135 days**	**Wed 1/7/20**	**Thu 12/11/20**	**142 days**	
366	366	PST, EQT014	5.18.5.2.1	Submission for acceptance of purchasing package	45 days	Wed 1/7/20	Fri 14/8/20	0 days	
367	367	PST, EQT014	5.18.5.2.2	Invitation of quotations for purchasing package	60 days	Sat 15/8/20	Tue 13/10/20	0 days	366
368	368	PST, EQT014	5.18.5.2.3	Acceptance of conforming quotation	30 days	Wed 14/10/2	Thu 12/11/20	95 days	367
369	369	**PST, EQT015**	**5.18.5.3**	**PST - surface scum skimmers, C11, ref. EQT015**	**90 days**	**Tue 7/7/20**	**Sun 4/10/20**	**181 days**	
370	370	PST, EQT015	5.18.5.3.1	Submission for acceptance of purchasing package	30 days	Tue 7/7/20	Wed 5/8/20	0 days	
371	371	PST, EQT015	5.18.5.3.2	Invitation of quotations for purchasing package	30 days	Thu 6/8/20	Fri 4/9/20	0 days	370
372	372	PST, EQT015	5.18.5.3.3	Acceptance of conforming quotation	30 days	Sat 5/9/20	Sun 4/10/20	134 days	371
373	373	**PST, EQT015**	**5.18.5.4**	**PST - scum collector pipes, C11, ref. EQT015**	**210 days**	**Wed 1/7/20**	**Tue 26/1/21**	**67 days**	
374	374	PST, EQT015	5.18.5.4.1	Submission for acceptance of purchasing package	120 days	Wed 1/7/20	Wed 28/10/2	0 days	
375	375	PST, EQT015	5.18.5.4.2	Invitation of quotations for purchasing package	60 days	Thu 29/10/2	Sun 27/12/20	0 days	374
376	376	PST, EQT015	5.18.5.4.3	Acceptance of conforming quotation	30 days	Mon 28/12/2	Tue 26/1/21	20 days	375
377	377	**PST, EQT016**	**5.18.5.5**	**PST - piston type primary sludge pumps, C11, ref. EQT016**	**210 days**	**Wed 1/7/20**	**Tue 26/1/21**	**0 days**	
378	378	PST, EQT016	5.18.5.5.1	Submission for acceptance of purchasing package	120 days	Wed 1/7/20	Wed 28/10/2	0 days	
379	379	PST, EQT016	5.18.5.5.2	Invitation of quotations for purchasing package	60 days	Thu 29/10/2	Sun 27/12/20	0 days	378
380	380	PST, EQT016	5.18.5.5.3	Acceptance of conforming quotation	30 days	Mon 28/12/2	Tue 26/1/21	0 days	379
381	381	**PST, EQT007**	**5.18.5.6**	**PST - drain pumps, C11, ref. EQT007**	**210 days**	**Tue 14/7/20**	**Mon 8/2/21**	**54 days**	
382	382	PST, EQT007	5.18.5.6.1	Submission for acceptance of purchasing package	120 days	Tue 14/7/20	Tue 10/11/20	0 days	
383	383	PST, EQT007	5.18.5.6.2	Invitation of quotations for purchasing package	60 days	Wed 11/11/2	Sat 9/1/21	0 days	382
384	384	PST, EQT007	5.18.5.6.3	Acceptance of conforming quotation	30 days	Sun 10/1/21	Mon 8/2/21	7 days	383
385	385	**PST, EQT018**	**5.18.5.7**	**PST - air blowers, C11, ref. EQT018**	**210 days**	**Tue 21/7/20**	**Mon 15/2/21**	**47 days**	
386	386	PST, EQT018	5.18.5.7.1	Submission for acceptance of purchasing package	120 days	Tue 21/7/20	Tue 17/11/20	0 days	
387	387	PST, EQT018	5.18.5.7.2	Invitation of quotations for purchasing package	60 days	Wed 18/11/2	Sat 16/1/21	0 days	386
388	388	PST, EQT018	5.18.5.7.3	Acceptance of conforming quotation	30 days	Sun 17/1/21	Mon 15/2/21	0 days	387
389	389	**PST, KD1A, KD1B, Section 1**	**5.18.6**	**Design Submissions for PST No. 1~ 4**	**323 days**	**Sat 1/8/20**	**Sat 19/6/21**	**23 days**	
390	390	PST, KD1A, Elec, KD1A	5.18.6.1	Electrical schematic drawings for PST No. 1 ~4	60 days	Sat 1/8/20	Tue 29/9/20	31 days	
391	391	PST, KD1A, CW	5.18.6.2	CDS080-2 - Civil and dimensional requirements drawings for PST No. 1~4 up to +8.0 mPD	50 days	Tue 1/9/20	Tue 20/10/20	10 days	
392	392	PST, KD1B, CW	5.18.6.3	CDS081-2 - Civil and dimensional requirements drawings for PST No. 1 ~ 4	150 days	Tue 1/9/20	Thu 28/1/21	124 days	
393	393	PST, Section 1, Mech	5.18.6.4	CDS003 - Detailed Design for Primary Sedimentation Tanks No. 1~4	100 edays	Mon 15/2/21	Wed 26/5/21	0.63 edays	364,368,372,376,3
394	394	PST, Section 1, Elec, SCADA	5.18.6.5	CDS022 - Detailed Design for Electrical Installations for PST No. 1~4	80 edays	Wed 31/3/21	Sat 19/6/21	0.63 edays	72,82,90,184FF
395	395	PST, Section 1, BS	5.18.6.6	CDS034-2 - Detailed Design for Electrical Installations BS at PST No. 1~4	90 edays	Fri 12/3/21	Thu 10/6/21	32.38 edays	133
396	396	PST, Section 1, LVSB	5.18.6.7	CDS025-2 - Detailed Design for LV Switchboards for PST No. 1~4	100 edays	Tue 29/12/2	Thu 8/4/21	0.63 edays	68
397	397	PST, Section 1, LA	5.18.6.8	CDS050-2 - Detailed Design for Lifting Appliances - PST No. 1 ~ 4	150 edays	Tue 1/9/20	Fri 29/1/21	0 edays	113
398	398		**5.18.7**	**Manufacturing and Delivery of Plant & Materials**	**737 days**	**Fri 29/1/21**	**Sat 4/2/23**	**296 days**	
399	399	**PST, EQT014**	**5.18.7.1**	**Lamella Plate Settlers, EQT014**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**236 days**	
400	400	PST, EQT014	5.18.7.1.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393
401	401	PST, EQT014	5.18.7.1.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/2	Sat 4/2/23	143 days	400,438SS-60 eday
402	402	**PST, EQT014**	**5.18.7.2**	**Reciprocating Type Bottom Scrappers, EQT014**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**206 days**	
403	403	PST, EQT014	5.18.7.2.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393
404	404	PST, EQT014	5.18.7.2.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/2	Sat 4/2/23	16 days	403,438SS-60 eday
405	405	**PST,EQT015**	**5.18.7.3**	**Surface Scum Skimmers, EQT015**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**296 days**	
406	406	PST, EQT015	5.18.7.3.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393



ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
407	407	PST, EQT015	5.18.7.3.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	203 days	406,438SS-60 eday
408	**408**	**PST, EQT015**	**5.18.7.4**	**Surface Scum Collection Pipes, EQT015**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**296 days**	
409	409	PST, EQT015	5.18.7.4.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393
410	410	PST, EQT015	5.18.7.4.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	203 days	409,438SS-60 eday
411	**411**	**PST, EQT016**	**5.18.7.5**	**Piston Type Primary Sludge Pumps, EQT016**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**176 days**	
412	412	PST, EQT016	5.18.7.5.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393
413	413	PST, EQT016	5.18.7.5.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	106 days	412,438SS-60 eday
414	**414**	**PST, EQT007**	**5.18.7.6**	**Drain Pumps, EQT007**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**206 days**	
415	415	PST, EQT007	5.18.7.6.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393
416	416	PST, EQT007	5.18.7.6.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	136 days	415,438SS-60 eday
417	**417**	**PST, EQT018**	**5.18.7.7**	**Air Blower, EQT018**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**236 days**	
418	418	PST, EQT018	5.18.7.7.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Thu 27/5/21	Tue 22/3/22	274 days	393
419	419	PST, EQT018	5.18.7.7.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	166 days	418,438SS-60 eday
420	**420**	**PST, EQT013**	**5.18.7.8**	**Stoplogs and Penstocks, EQT013**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**56 days**	
421	421	PST, EQT013	5.18.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 27/5/21	Fri 21/1/22	334 days	393
422	422	PST, EQT013	5.18.7.8.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	16 days	438SS-60 edays,42
423	**423**	**PST, EQT036**	**5.18.7.9**	**Valves, EQT036**	**619 days**	**Thu 27/5/21**	**Sat 4/2/23**	**86 days**	
424	424	PST, EQT036	5.18.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 27/5/21	Fri 21/1/22	334 days	393
425	425	PST, EQT036	5.18.7.9.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	16 days	424,438SS-60 eday
426	**426**	**PST, LA**	**5.18.7.10**	**Lifting Appliances**	**737 days**	**Fri 29/1/21**	**Sat 4/2/23**	**109 days**	
427	427	**PST, LA**	5.18.7.10.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 29/1/21	Thu 26/8/21	482 days	397
428	428	**PST, LA**	5.18.7.10.2	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	16 days	427,438SS-60 eday
429	**429**	**PST, LVSB**	**5.18.7.11**	**LV Switchboards**	**667 days**	**Fri 9/4/21**	**Sat 4/2/23**	**71 days**	
430	430	PST, LVSB	5.18.7.11.1	PST - Manufacturing of Plant	300 days	Fri 9/4/21	Wed 2/2/22	0 days	396
431	431	PST, FAT, LVSB	5.18.7.11.2	PST - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Thu 3/2/22	Tue 3/5/22	232 days	430
432	432	PST, LVSB	5.18.7.11.3	PST - Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	16 days	431,438SS-60 eday
433	**433**		**5.18.7.12**	**PLC System**	**595 days**	**Sun 20/6/21**	**Sat 4/2/23**	**71 days**	
434	434	PST, SCADA	5.18.7.12.1	Manufacturing of Plant, PLC for PST	300 days	Sun 20/6/21	Fri 15/4/22	0 days	394
435	435	PST, SCADA, FAT	5.18.7.12.2	Factory Acceptance Test of Plant, PLC for PST (To be witnessed by PM)	60 days	Sat 16/4/22	Tue 14/6/22	190 days	434
436	436	PST, SCADA	5.18.7.12.3	Shipping and Delivery of Plant to site	45 days	Thu 22/12/22	Sat 4/2/23	16 days	435,438SS-60 eday
437	**437**	**PST, Section 2**	**5.18.8**	**Site Installation Work**	**325 days**	**Mon 20/2/23**	**Wed 10/1/24**	**0 days**	
438	438	PST, LA, BS, Others	5.18.8.1	Tentative Civil Handover Date, Portion B-3, PST No. 1~4	1 day	Mon 20/2/23	Mon 20/2/23	0 days	
439	**439**	**PST No. 1~4,Main**	**5.18.8.2**	**Commencement of E&M Installation at PST No. 1~4**	**324 days**	**Tue 21/2/23**	**Wed 10/1/24**	**0 days**	**438**
440	440	PST No. 1~4	5.18.8.2.1	Provision of Temporary Water Supply, Electricity Supply, Lighting Welfare facilities etc.,	30 days	Tue 21/2/23	Wed 22/3/23	0 days	438
441	**441**	**LA, PST**	**5.18.8.2.2**	**Installation of Lifting Appliances at PST No. 1~4**	**127 days**	**Tue 21/2/23**	**Tue 27/6/23**	**93 days**	**438,428**
442	442	LA, PST	5.18.8.2.2.1	Basement EOT Crane LA-02-01 SWL 10t	30 days	Tue 21/2/23	Wed 22/3/23	0 days	
443	443	LA, PST	5.18.8.2.2.2	Coping Level EOT Crane LA-02-02 SWL 5t	30 days	Thu 23/3/23	Fri 21/4/23	60 days	442
444	444	LA, PST	5.18.8.2.2.3	Coping Level EOT Crane LA-02-03 SWL 5t	30 days	Thu 23/3/23	Fri 21/4/23	0 days	442
445	445	LA, PST	5.18.8.2.2.4	Coping Level EOT Crane LA-02-04 SWL 5t	30 days	Sat 22/4/23	Sun 21/5/23	30 days	444
446	446	LA, PST	5.18.8.2.2.5	Coping Level EOT Crane LA-02-05 SWL 5t	30 days	Sat 22/4/23	Sun 21/5/23	0 days	444
447	447	LA, PST	5.18.8.2.2.6	Coping Level EOT Crane LA-02-06 SWL 2t	30 days	Mon 22/5/23	Tue 20/6/23	0 days	446
448	448	LA, PST	5.18.8.2.2.7	T&C, Loading Test for Lifting Appliances at PST No. 1~4	7 days	Wed 21/6/23	Tue 27/6/23	0 days	442,443,444,445,4
449	**449**	**PST, Mech**	**5.18.8.2.3**	**Mechanical Installations at PST No. 1~4**	**272 days**	**Tue 21/2/23**	**Sun 19/11/23**	**0 days**	
450	450	PST, Mech, EQT013	5.18.8.2.3.1	Installation of penstocks and stoplogs (Penstock 18nos, Stoplogs 14 nos), EQT013	90 days	Tue 21/2/23	Sun 21/5/23	0 days	422
451	451	PST, Mech, EQT036	5.18.8.2.3.2	Installation of pipework and valves, EQT036	240 days	Tue 21/2/23	Wed 18/10/23	70 days	425
452	452	PST, Mech, EQT014	5.18.8.2.3.3	Installation of lamella plate settlers (x4), EQT014	60 days	Wed 28/6/23	Sat 26/8/23	0 days	453,448,401
453	453	PST, Mech, EQT014	5.18.8.2.3.4	Installation of reciprocating type bottom scrapers (x4), EQT014	30 days	Tue 21/2/23	Wed 22/3/23	97 days	404
454	454	PST, Mech, EQT015	5.18.8.2.3.5	Installation of surface scum skimmers (x1), EQT015	30 days	Sun 27/8/23	Mon 25/9/23	93 days	452,407
455	455	PST, Mech, EQT015	5.18.8.2.3.6	Installation of scum collector pipes (x1), EQT015	30 days	Sun 27/8/23	Mon 25/9/23	93 days	452,410
456	456	PST, Mech, EQT016	5.18.8.2.3.7	Installation of piston type primary sludge pumps (x3), EQT016	30 days	Mon 22/5/23	Tue 20/6/23	0 days	450,413
457	457	PST, Mech, EQT007	5.18.8.2.3.8	Installation of drain pumps (x1), EQT007	30 days	Wed 21/6/23	Thu 20/7/23	0 days	456,416
458	458	PST, Mech, EQT018	5.18.8.2.3.9	Installation of air blowers (x2), EQT018	30 days	Fri 21/7/23	Sat 19/8/23	0 days	457,419
459	459	PST, Mech, EQT035-1	5.18.8.2.3.10	Installation of instrumentations, EQT035-1	60 days	Sun 20/8/23	Wed 18/10/23	70 days	458,52
460	460	PST, Mech, EQT050	5.18.8.2.3.11	Installation of Platforms, Covers etc., PST, EQT050	60 days	Thu 21/9/23	Sun 19/11/23	38 days	
461	461	PST, Mech	5.18.8.2.3.12	Site Acceptance Tests - mechanical aspects including alignment and levels checks, leal	180 days	Mon 22/5/23	Fri 17/11/23	40 days	450
462	**462**	**PST, Elec**	**5.18.8.2.4**	**Electrical Installations for PST No. 1~4**	**270 days**	**Tue 21/2/23**	**Fri 17/11/23**	**2 days**	**438**
463	463	PST, Elec	5.18.8.2.4.1	Installation of LV Switchboards, PST	60 days	Tue 21/2/23	Fri 21/4/23	30 days	432
464	464	PST, Elec, SCADA	5.18.8.2.4.2	Installation of PLC Panel, PST	60 days	Tue 21/2/23	Fri 21/4/23	30 days	436



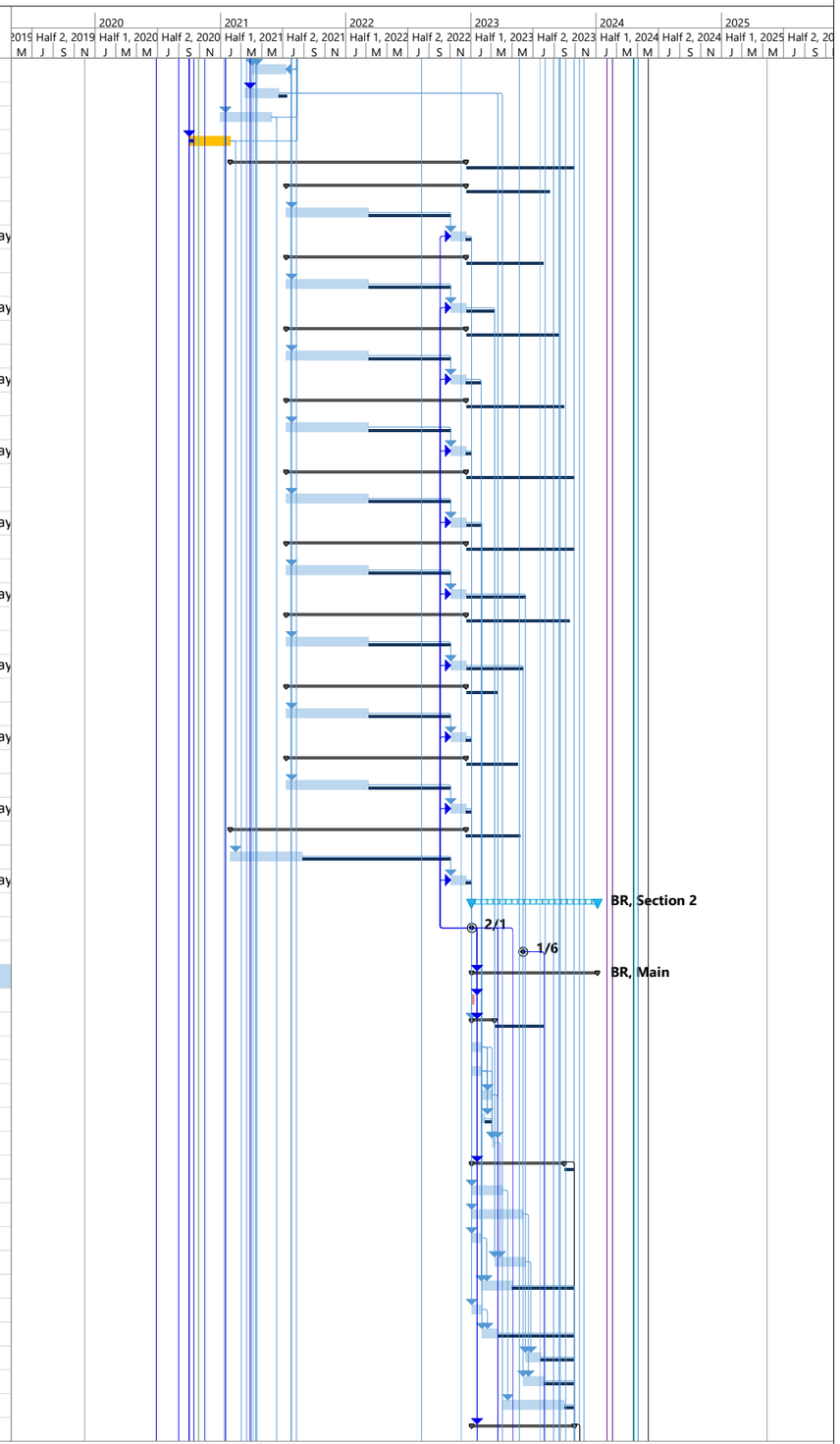
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
465	465	PST, Elec	5.18.8.2.4.3	Installation of cable trays and cable containments, PST	90 days	Tue 21/2/23	Sun 21/5/23	0 days	
466	466	PST, Elec, SCADA	5.18.8.2.4.4	Cables laying and terminations, PST	100 days	Mon 22/5/23	Tue 29/8/23	0 days	463,464,465
467	467	PST, Elec, Others	5.18.8.2.4.5	Tentative Civil Handover Date, LV cables draw pits from IW to PST	1 day	Thu 20/7/23	Thu 20/7/23	0 days	
468	468	PST, Elec	5.18.8.2.4.6	Energisation of LV Switchboards, PST	1 day	Sat 19/8/23	Sat 19/8/23	92 days	466FS-30 days,467
469	469	PST, Elec	5.18.8.2.4.7	Site Acceptance Tests - Electrical aspects including voltage and current tests, equipme	80 days	Wed 30/8/23	Fri 17/11/23	9 days	466
470	**470**	**PST, SCADA**	**5.18.8.2.5**	**SCADA Systems, PST No. 1~4**	**60 days**	**Wed 30/8/23**	**Sat 28/10/23**	**105 days**	
471	471	PST,SCADA	5.18.8.2.5.1	Configuration of PLC System	45 days	Wed 30/8/23	Fri 13/10/23	0 days	466
472	472	PST, SCADA	5.18.8.2.5.2	Site Acceptance Test for PLC System at PST No. 1~4	15 days	Sat 14/10/23	Sat 28/10/23	0 days	471
473	**473**	**PST, SCADA**	**5.18.8.2.6**	**Site Acceptance Test for E&M Equip and Instrumentations calibrations at PST No. 1~4**	**30 edays**	**Sun 19/11/23**	**Tue 19/12/23**	**0.63 edays**	**449,462,468**
474	**474**	**PST, SCADA**	**5.18.8.2.7**	**System Commissioning for E&M Equip at PST No, 1~4**	**15 days**	**Wed 20/12/23**	**Wed 3/1/24**	**0 days**	**473,472FF**
475	**475**	**PST, Risk**	**5.18.8.2.8**	**Risk Allowances for Completion of Processing Plant at PST No. 1~4**	**7 edays**	**Wed 3/1/24**	**Wed 10/1/24**	**22.63 edays**	**474**
476	**476**	**PST**	**5.18.8.2.9**	**Building Services Installations for PST No. 1~4**	**180 days**	**Mon 22/5/23**	**Fri 17/11/23**	**15 days**	**438FS+90 days,39**
477	477	BS, PST, MVAC	5.18.8.2.9.1	Mechanical Ventilation and Air Conditioning System, PST	90 days	Mon 22/5/23	Sat 19/8/23	30 days	
478	478	BS, PST	5.18.8.2.9.2	Lighting and Power Distribution System, PST	90 days	Mon 22/5/23	Sat 19/8/23	30 days	
479	479	BS, PST, Pb	5.18.8.2.9.3	Plumbing Installation, PST	120 days	Mon 22/5/23	Mon 18/9/23	0 days	1228
480	480	BS, PST, CCTV	5.18.8.2.9.4	CCTV Installation (9 indoor + 2 outdoor Cameras), PST	60 days	Mon 22/5/23	Thu 20/7/23	0 days	438FS+60 days
481	481	BS, PST, FSI	5.18.8.2.9.5	Fire Services Installation, PST	100 days	Mon 22/5/23	Tue 29/8/23	0 days	
482	482	BS, PST, Earth	5.18.8.2.9.6	Earthing and Lightning Protection System, PST	90 days	Mon 22/5/23	Sat 19/8/23	30 days	
483	483	BS, PST	5.18.8.2.9.7	Testing and Commissioning of Building Services Installations, PST	60 days	Tue 19/9/23	Fri 17/11/23	136 days	477,478,479,480,4
484	**484**		**5.19**	**Bioreactors No. 2A & 2B, Portion B-4 (PS 6B2.4)**	**1326 days**	**Sat 15/8/20**	**Mon 1/4/24**	**0 days**	
485	485	KD1A, BR	5.19.1	Planned Key Date Completion Date - KD1A, BR 2A & 2B	0 days	Fri 30/10/20	Fri 30/10/20	0 days	519FF,520FF
486	486	KD1B, BR	5.19.2	Planned Key Date Completion Date - KD1B, BR 2A & 2B	0 days	Tue 1/6/21	Tue 1/6/21	0 days	521FF
487	487	Section 1, Main, BR	5.19.3	Planned Sectional Completion Date - Section 1, BR 2A & 2B	0 days	Mon 12/7/21	Mon 12/7/21	0 days	522FF,523FF,524F
488	488	Section 2, Main, BR	5.19.4	Planned Sectional Completion Date - Section 2, BR 2A & 2B	0 days	Mon 1/4/24	Mon 1/4/24	0 days	594FF,593FF
489	**489**		**5.19.5**	**Selection of Suppliers for major plant and materials for BR 2A & 2B**	**193 days**	**Tue 1/9/20**	**Fri 12/3/21**	**6 days**	
490	**490**	**BR, EQT019**	**5.19.5.1**	**BR - pre-treatment fine screens (Marking Scheme Approach), EQT019**	**150 days**	**Tue 1/9/20**	**Thu 28/1/21**	**49 days**	
491	491	BR, EQT019	5.19.5.1.1	Submission for acceptance of purchasing package	60 days	Tue 1/9/20	Fri 30/10/20	0 days	
492	492	BR, EQT019	5.19.5.1.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	0 days	491
493	493	BR, EQT019	5.19.5.1.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	43 days	492
494	**494**	**BR, EQT017**	**5.19.5.2**	**BR - air diffusion system (Marking Scheme Approach), EQT017**	**180 days**	**Tue 1/9/20**	**Sat 27/2/21**	**19 days**	
495	495	BR, EQT017	5.19.5.2.1	Submission for acceptance of purchasing package including proposed marking scheme	90 days	Tue 1/9/20	Sun 29/11/20	0 days	
496	496	BR, EQT017	5.19.5.2.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/2	Thu 28/1/21	0 days	495
497	497	BR, EQT017	5.19.5.2.3	Acceptance of conforming quotation	30 days	Fri 29/1/21	Sat 27/2/21	13 days	496
498	**498**	**BR, EQT020**	**5.19.5.3**	**BR - submersible mixers, C11, EQT020**	**150 days**	**Tue 1/9/20**	**Thu 28/1/21**	**49 days**	
499	499	BR, EQT020	5.19.5.3.1	Submission for acceptance of purchasing package	60 days	Tue 1/9/20	Fri 30/10/20	0 days	
500	500	BR, EQT020	5.19.5.3.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	0 days	499
501	501	BR, EQT020	5.19.5.3.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	43 days	500
502	**502**	**BR, EQT008**	**5.19.5.4**	**BR - mixed liquor return pumps, C11, EQT008**	**150 days**	**Mon 14/9/20**	**Wed 10/2/21**	**36 days**	
503	503	BR, EQT008	5.19.5.4.1	Submission for acceptance of purchasing package	60 days	Mon 14/9/20	Thu 12/11/20	0 days	
504	504	BR, EQT008	5.19.5.4.2	Invitation of quotations for purchasing package	60 days	Fri 13/11/20	Mon 11/1/21	0 days	503
505	505	BR, EQT008	5.19.5.4.3	Acceptance of conforming quotation	30 days	Tue 12/1/21	Wed 10/2/21	30 days	504
506	**506**	**BR, EQT021, EQT022**	**5.19.5.5**	**BR - scum removal systems, C11, EQT021, EQT022**	**150 days**	**Mon 14/9/20**	**Wed 10/2/21**	**36 days**	
507	507	BR, EQT021, EQT022	5.19.5.5.1	Submission for acceptance of purchasing package	60 days	Mon 14/9/20	Thu 12/11/20	0 days	
508	508	BR, EQT021, EQT022	5.19.5.5.2	Invitation of quotations for purchasing package	60 days	Fri 13/11/20	Mon 11/1/21	0 days	507
509	509	BR, EQT021, EQT022	5.19.5.5.3	Acceptance of conforming quotation	30 days	Tue 12/1/21	Wed 10/2/21	30 days	508
510	**510**	**BR, EQT039**	**5.19.5.6**	**BR - aeration blowers (Marking Scheme Approach), EQT039**	**180 days**	**Mon 14/9/20**	**Fri 12/3/21**	**6 days**	
511	511	BR, EQT039	5.19.5.6.1	Submission for acceptance of purchasing package including proposed marking scheme	90 days	Mon 14/9/20	Sat 12/12/20	0 days	
512	512	BR, EQT039	5.19.5.6.2	Invitation of quotations for purchasing package	60 days	Sun 13/12/20	Wed 10/2/21	0 days	511
513	513	BR, EQT039	5.19.5.6.3	Acceptance of conforming quotation	30 days	Thu 11/2/21	Fri 12/3/21	0 days	512
514	**514**	**BR, EQT035-2**	**5.19.5.7**	**BR - instrumentations, C11, EQT035-2**	**150 days**	**Thu 1/10/20**	**Sat 27/2/21**	**19 days**	
515	515	BR, EQT035-2	5.19.5.7.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
516	516	BR, EQT035-2	5.19.5.7.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/2	Thu 28/1/21	0 days	515
517	517	BR, EQT035-2	5.19.5.7.3	Acceptance of conforming quotation	30 days	Fri 29/1/21	Sat 27/2/21	13 days	516
518	**518**	**BR, , KD1A, KD1B, Section 1**	**5.19.6**	**Design Submissions for BR 2A & 2B**	**330 days**	**Sat 15/8/20**	**Sat 10/7/21**	**2 days**	
519	519	BR, KD1A, Elec, KD1A	5.19.6.1	Electrical schematic drawings for BR No. 2A & 2B	60 days	Sat 15/8/20	Tue 13/10/20	17 days	
520	520	BR, KD1A, CW	5.19.6.2	CDS080-3 - Civil and dimensional requirements drawings for BR 2A&2B up to +8.0 mPD	55 days	Tue 1/9/20	Sun 25/10/20	5 days	
521	521	BR, KD1B, CW	5.19.6.3	CDS081-3 - Civil and dimensional requirements drawings for BR 2A & 2B	210 days	Fri 28/8/20	Thu 25/3/21	68 days	
522	522	BR, Section 1, Mech	5.19.6.4	CDS004 - Detailed Design for Bioreactor 2A and 2B	120 edays	Fri 12/3/21	Sat 10/7/21	0.63 edays	493,497,501,505,5



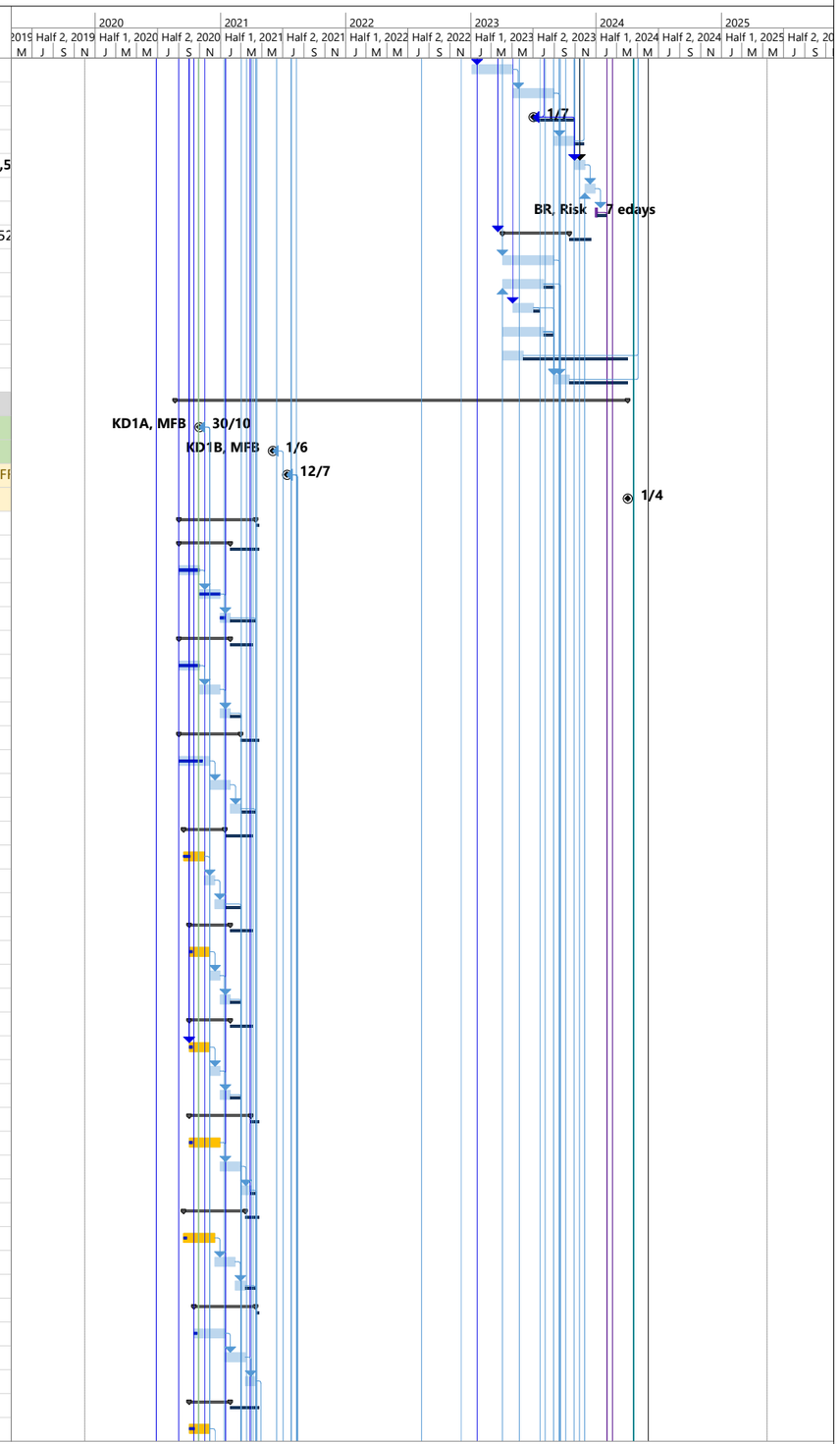
Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
523	523	BR, Section 1, Elec, SCADA	5.19.6.5	CDS023 - Detailed Design for Electrical Installations for BR No. 2A & 2B	100 edays	Wed 31/3/21	Fri 9/7/21	0.63 edays	72,82,90,184FF
524	524	BR, Section 1, BS	5.19.6.6	CDS034-3 - Detailed Design for Electrical Installations BS at BR No. 2A & 2B	100 edays	Fri 12/3/21	Sun 20/6/21	22.38 edays	133
525	525	BR, Section 1, LVSB	5.19.6.7	CDS025-3 - Detailed Design for LV Switchboards for BR 2A and 2B	150 edays	Tue 29/12/2(	Fri 28/5/21	0.63 edays	68
526	526	BR, Section 1, LA	5.19.6.8	CDS050-3 - Detailed Design for Lifting Appliances - BR 2A & 2B	120 edays	Thu 1/10/20	Fri 29/1/21	0 edays	113
527	**527**		**5.19.7**	**Manufacturing and Delivery of Plant & Materials**	**688 days**	**Fri 29/1/21**	**Sat 17/12/22**	**315 days**	
528	**528**	**BR,EQT 019**	**5.19.7.1**	**Pre-treatment Fine Screens, EQT019**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**242 days**	
529	529	BR,EQT 019	5.19.7.1.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
530	530	BR,EQT 019	5.19.7.1.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	16 days	529,559SS-60 eday
531	**531**	**BR, EQT017**	**5.19.7.2**	**Air Diffusion System, EQT017**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**225 days**	
532	532	BR, EQT017	5.19.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
533	533	BR, EQT017	5.19.7.2.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	83 days	532,559SS-60 eday
534	**534**	**BR, EQT020**	**5.19.7.3**	**Submersible Mixer, EQT020**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**270 days**	
535	535	BR, EQT020	5.19.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
536	536	BR, EQT020	5.19.7.3.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	44 days	535,559SS-60 eday
537	**537**	**BR, EQT008**	**5.19.7.4**	**Mixed Liquor Return Pumps, EQT008**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**285 days**	
538	538	BR, EQT008	5.19.7.4.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
539	539	BR, EQT008	5.19.7.4.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	16 days	538,559SS-60 eday
540	**540**	**BR, EQT021, EQT022**	**5.19.7.5**	**Sum Removal System, EQT021, EQT022**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**315 days**	
541	541	BR, EQT021, EQT022	5.19.7.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
542	542	BR, EQT021, EQT022	5.19.7.5.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	46 days	541,559SS-60 eday
543	**543**	**BR, EQT039**	**5.19.7.6**	**Aeration Blowers, EQT039**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**315 days**	
544	544	BR, EQT039	5.19.7.6.1	Manufacturing and Factory Acceptance Test of Plant (to be witnessed by PM)	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
545	545	BR, EQT039	5.19.7.6.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	173 days	544,559SS-60 eday
546	**546**	**BR, EQT035-2**	**5.19.7.7**	**Instrumentations, EQT035-2**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**300 days**	
547	547	BR, EQT035-2	5.19.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
548	548	BR, EQT035-2	5.19.7.7.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	166 days	547,559SS-60 eday
549	**549**	**BR, EQT013**	**5.19.7.8**	**Stoplogs and Penstocks, EQT013**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**90 days**	
550	550	BR, EQT013	5.19.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
551	551	BR, EQT013	5.19.7.8.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	16 days	550,559SS-60 eday
552	**552**	**BR, EQT036**	**5.19.7.9**	**Valves, EQT036**	**525 days**	**Sun 11/7/21**	**Sat 17/12/22**	**150 days**	
553	553	BR, EQT036	5.19.7.9.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Sun 11/7/21	Mon 7/3/22	240 days	522
554	554	BR, EQT036	5.19.7.9.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	16 days	553,559SS-60 eday
555	**555**	**BR, LA**	**5.19.7.10**	**Lifting Appliances**	**688 days**	**Fri 29/1/21**	**Sat 17/12/22**	**158 days**	
556	556	**BR, LA**	5.19.7.10.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 29/1/21	Thu 26/8/21	433 days	526
557	557	**BR, LA**	5.19.7.10.2	Shipping and Delivery of Plant to site	45 days	Thu 3/11/22	Sat 17/12/22	16 days	556,559SS-60 eday
558	**558**	**BR, Section 2**	**5.19.8**	**Site Installation Work**	**368 days**	**Mon 2/1/23**	**Thu 4/1/24**	**0 days**	
559	559	BR, LA, BS, Others	5.19.8.1	Tentative Civil Handover Date, Portion B-4, BR2A & 2B	1 day	Mon 2/1/23	Mon 2/1/23	0 days	
560	560	BR, Elec, Others	5.19.8.2	Tentative Civil Handover Date, LV cables draw pits from MFB2 to BR2	1 day	Thu 1/6/23	Thu 1/6/23	0 days	
561	561	**BR, Main**	**5.19.8.3**	**Commencement of E&M Installation at Bioreactor No. 2A & 2B**	**367 days**	**Tue 3/1/23**	**Thu 4/1/24**	**0 days**	559
562	562	BR	5.19.8.3.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, Welfare facilities etc.,	7 days	Tue 3/1/23	Mon 9/1/23	0 days	559
563	**563**	**BR, LA**	**5.19.8.3.2**	**Installation of Lifting Appliances at BR 2A & 2B**	**67 days**	**Tue 3/1/23**	**Fri 10/3/23**	**142 days**	**559,557**
564	564	BR, LA	5.19.8.3.2.1	Coping Level EOT Crane LA-03-01 SWL 5t	30 days	Tue 3/1/23	Wed 1/2/23	0 days	
565	565	BR, LA	5.19.8.3.2.2	Coping Level EOT Crane LA-03-02 SWL 5t	30 days	Tue 3/1/23	Wed 1/2/23	0 days	
566	566	BR, LA	5.19.8.3.2.3	Coping Level EOT Crane LA-03-03 SWL 5t	30 days	Thu 2/2/23	Fri 3/3/23	0 days	564,565
567	567	BR, LA	5.19.8.3.2.4	Coping Level Mobile A-frame LA-03-04 SWL 4t	7 days	Thu 2/2/23	Wed 8/2/23	23 days	564,565
568	568	BR, LA	5.19.8.3.2.5	T&C, Loading Test for Lifting Appliances at Bioreactor No. 2A & 2B	7 days	Sat 4/3/23	Fri 10/3/23	0 days	564,565,566,567
569	**569**	**BR, Mech**	**5.19.8.3.3**	**Mechanical Installations for E&M Equip at BR 2A & 2B**	**270 days**	**Tue 3/1/23**	**Fri 29/9/23**	**30 days**	**559**
570	570	BR, Mech, EQT013	5.19.8.3.3.1	Installation of penstocks and stoplogs (Penstocks 8nos, Stoplogs 8nos), EQT013	90 days	Tue 3/1/23	Sun 2/4/23	0 days	551
571	571	BR, Mech, EQT036	5.19.8.3.3.2	Installation of pipework and valves, EQT036	150 days	Tue 3/1/23	Thu 1/6/23	0 days	554
572	572	BR, Mech	5.19.8.3.3.3	Installation of pre-treatment fine screens (x4)	28 days	Tue 3/1/23	Mon 30/1/23	0 days	530
573	573	BR, Mech, EQT017	5.19.8.3.3.4	Installation of air diffusion system (x2), EQT017	90 days	Sat 11/3/23	Thu 8/6/23	0 days	568,533
574	574	BR, Mech, EQT020	5.19.8.3.3.5	Installation of submersible mixers (x16), EQT020	90 days	Tue 31/1/23	Sun 30/4/23	182 days	572,536
575	575	BR, Mech, EQT008	5.19.8.3.3.6	Installation of mixed liquor return pumps (x6), EQT008	30 days	Tue 3/1/23	Wed 1/2/23	0 days	539
576	576	BR, Mech, EQT022	5.19.8.3.3.7	Installation of scum removal systems (x2), EQT022	45 days	Thu 2/2/23	Sat 18/3/23	225 days	575,542
577	577	BR, Mech, EQT039	5.19.8.3.3.8	Installation of aeration blowers (x4), EQT039	45 days	Fri 9/6/23	Sun 23/7/23	98 days	573,545
578	578	BR, Mech, EQT035-2	5.19.8.3.3.9	Installation of instrumentations, EQT035-2	60 days	Fri 2/6/23	Mon 31/7/23	90 days	571,548
579	579	BR, Mech	5.19.8.3.3.10	Site Acceptance Tests - mechanical aspects including alignment and levels checks, leal	180 days	Mon 3/4/23	Fri 29/9/23	30 days	570
580	**580**	**BR, Elec**	**5.19.8.3.4**	**Electrical Installations for E&M Equip at BR 2A & 2B**	**300 days**	**Tue 3/1/23**	**Sun 29/10/23**	**0 days**	**559**



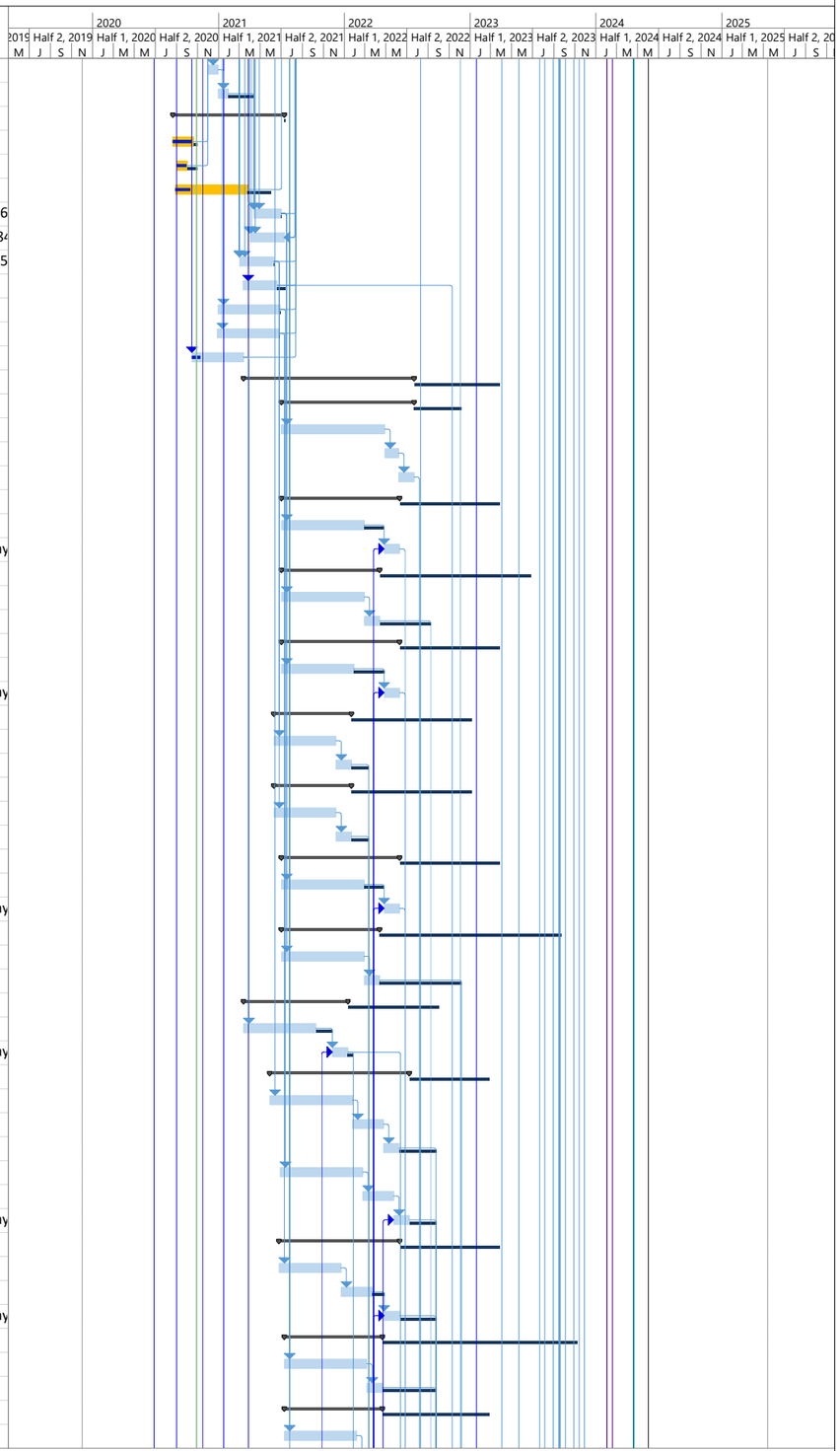
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
581	581	BR, Elec	5.19.8.3.4.1	Installation of cable trays and cable containments	120 days	Tue 3/1/23	Tue 2/5/23	0 days	559
582	582	BR, Elec, SCADA	5.19.8.3.4.2	Cables laying and terminations	120 days	Wed 3/5/23	Wed 30/8/23	0 days	581
583	583	BR, Elec	5.19.8.3.4.3	Energisation of LV Switchboards, BR2	1 day	Sat 1/7/23	Sat 1/7/23	120 days	560FF+30 days
584	584	BR, Elec	5.19.8.3.4.4	Site Acceptance Tests - Electrical aspects including voltage and current tests, equipme	60 days	Thu 31/8/23	Sun 29/10/23	28 days	582
585	**585**	**BR, SCADA**	**5.19.8.3.5**	**Site Acceptance Test for E&M Equip at BR 2A & 2B**	**30 edays**	**Sun 29/10/2**	**Tue 28/11/23**	**0.63 edays**	**569,574,576,577,5**
586	**586**	**BR,SCADA**	**5.19.8.3.6**	**System Commissioning for E&M Equip at BR 2A & 2B**	**30 days**	**Wed 29/11/2**	**Thu 28/12/23**	**0 days**	**585,757**
587	**587**	**BR, Risk**	**5.19.8.3.7**	**Risk Allowances for Completion of Processing Plant at BR 2A & 2B**	**7 edays**	**Thu 28/12/2**	**Thu 4/1/24**	**28.63 edays**	**586**
588	588	BR	5.19.8.3.8	Building Services Installations for BR 2A & 2B	195 days	Mon 3/4/23	Sat 14/10/23	64 days	559FS+90 edays,52
589	589	BS, BR	5.19.8.3.8.1	Lighting and Power Distribution System, BR2	150 days	Mon 3/4/23	Wed 30/8/23	0 days	524
590	590	BS, BR, Pb	5.19.8.3.8.2	Plumbing Installation, BR2	120 days	Mon 3/4/23	Mon 31/7/23	30 days	1228
591	591	BS, BR, CCTV	5.19.8.3.8.3	CCTV Installation (7 indoor + 2 outdoor Cameras), BR2	60 days	Wed 3/5/23	Sat 1/7/23	19 days	559FS+120 days
592	592	BS, BR, FSI	5.19.8.3.8.4	Fire Services Installation, BR2	120 days	Mon 3/4/23	Mon 31/7/23	29 days	
593	593	BS,BR,Earth	5.19.8.3.8.5	Lightning Protection System, BR2	60 days	Mon 3/4/23	Thu 1/6/23	305 days	
594	594	BS, BR	5.19.8.3.8.6	Testing and Commissioning of Building Services Installations, BR2	45 days	Thu 31/8/23	Sat 14/10/23	170 days	589,590,591,592
595	**595**		**5.20**	**Membrane Facilities Building, Portion B-5 (PS 6B.2.4)**	**1320 days**	**Fri 21/8/20**	**Mon 1/4/24**	**0 days**	
596	596	KD1A, MFB	5.20.1	Planned Key Date Completion Date - KD1A, MFB No. 2	0 days	Fri 30/10/20	Fri 30/10/20	0 days	642FF,643FF
597	597	KD1B, MFB	5.20.2	Planned Key Date Completion Date - KD1B, MFB No. 2	0 days	Tue 1/6/21	Tue 1/6/21	0 days	644FF
598	598	Section 1, Main, MFB	5.20.3	Planned Sectional Completion Date - Section 1, MFB No. 2	0 days	Mon 12/7/21	Mon 12/7/21	0 days	645FF,646FF,647FF
599	599	Section 2, Main. MFB	5.20.4	Planned Sectional Completion Date - Section 2, MFB No. 2	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
600	**600**		**5.20.5**	**Selection of Suppliers for major plant and materials for MFB**	**224 days**	**Tue 1/9/20**	**Mon 12/4/21**	**11 days**	
601	**601**	**MFS, EQT023**	**5.20.5.1**	**MFS - hollow fibre membrane modules (Marking Scheme Approach), ref. EQT023**	**150 days**	**Tue 1/9/20**	**Thu 28/1/21**	**85 days**	
602	602	MFS, EQT023	5.20.5.1.1	Submission for acceptance of purchasing package including proposed marking scheme	60 days	Tue 1/9/20	Fri 30/10/20	0 days	
603	603	MFS, EQT023	5.20.5.1.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	0 days	602
604	604	MFS, EQT023	5.20.5.1.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	74 days	603
605	**605**	**MFS, EQT040**	**5.20.5.2**	**MFS - air scour blowers, C11, ref. EQT040**	**150 days**	**Tue 1/9/20**	**Thu 28/1/21**	**65 days**	
606	606	MFS, EQT040	5.20.5.2.1	Submission for acceptance of purchasing package	60 days	Tue 1/9/20	Fri 30/10/20	0 days	
607	607	MFS, EQT040	5.20.5.2.2	Invitation of quotations for purchasing package	60 days	Sat 31/10/20	Tue 29/12/20	0 days	606
608	608	MFS, EQT040	5.20.5.2.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	32 days	607
609	**609**	**MFS, EQT024**	**5.20.5.3**	**MFS - permeate pumps, C11, ref. EQT024**	**180 days**	**Tue 1/9/20**	**Sat 27/2/21**	**55 days**	
610	610	MFS, EQT024	5.20.5.3.1	Submission for acceptance of purchasing package	90 days	Tue 1/9/20	Sun 29/11/20	0 days	
611	611	MFS, EQT024	5.20.5.3.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/2	Thu 28/1/21	0 days	610
612	612	MFS, EQT024	5.20.5.3.3	Acceptance of conforming quotation	30 days	Fri 29/1/21	Sat 27/2/21	44 days	611
613	**613**	**MFS, EQT029**	**5.20.5.4**	**MFS - compressed air system, C11, ref. EQT029**	**120 days**	**Tue 15/9/20**	**Tue 12/1/21**	**81 days**	
614	614	MFS, EQT029	5.20.5.4.1	Submission for acceptance of purchasing package	60 days	Tue 15/9/20	Fri 13/11/20	0 days	
615	615	MFS, EQT029	5.20.5.4.2	Invitation of quotations for purchasing package	30 days	Sat 14/11/20	Sun 13/12/20	0 days	614
616	616	MFS, EQT029	5.20.5.4.3	Acceptance of conforming quotation	30 days	Mon 14/12/2	Tue 12/1/21	48 days	615
617	**617**	**MFS, EQT025**	**5.20.5.5**	**MFS - chemical storage tanks, C11, ref. EQT025**	**120 days**	**Thu 1/10/20**	**Thu 28/1/21**	**65 days**	
618	618	MFS, EQT025	5.20.5.5.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
619	619	MFS, EQT025	5.20.5.5.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	618
620	620	MFS, EQT025	5.20.5.5.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	32 days	619
621	**621**	**MFS, EQT026**	**5.20.5.6**	**MFS - chemical dosing pumps, C11, ref. EQT026**	**120 days**	**Thu 1/10/20**	**Thu 28/1/21**	**65 days**	
622	622	MFS, EQT026	5.20.5.6.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	2,30
623	623	MFS, EQT026	5.20.5.6.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	622
624	624	MFS, EQT026	5.20.5.6.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	32 days	623
625	**625**	**MFS, EQT010**	**5.20.5.7**	**MFS - return activated sludge pumps (Marking Scheme Approach), ref. EQT010**	**180 days**	**Thu 1/10/20**	**Mon 29/3/21**	**25 days**	
626	626	MFS, EQT010	5.20.5.7.1	Submission for acceptance of purchasing package	90 days	Thu 1/10/20	Tue 29/12/20	0 days	
627	627	MFS, EQT010	5.20.5.7.2	Invitation of quotations for purchasing package	60 days	Wed 30/12/2	Sat 27/2/21	0 days	626
628	628	MFS, EQT010	5.20.5.7.3	Acceptance of conforming quotation	30 days	Sun 28/2/21	Mon 29/3/21	14 days	627
629	**629**	**MFS, EQT009**	**5.20.5.8**	**MFS - membrane tank drain pumps, C11, ref. EQT009**	**180 days**	**Tue 15/9/20**	**Sat 13/3/21**	**41 days**	
630	630	MFS, EQT009	5.20.5.8.1	Submission for acceptance of purchasing package	90 days	Tue 15/9/20	Sun 13/12/20	0 days	
631	631	MFS, EQT009	5.20.5.8.2	Invitation of quotations for purchasing package	60 days	Mon 14/12/2	Thu 11/2/21	0 days	630
632	632	MFS, EQT009	5.20.5.8.3	Acceptance of conforming quotation	30 days	Fri 12/2/21	Sat 13/3/21	30 days	631
633	**633**	**MFS, EQT030**	**5.20.5.9**	**Plant Service Water System - booster pumps, C11, ref. EQT030**	**180 days**	**Thu 15/10/2**	**Mon 12/4/21**	**11 days**	
634	634	MFS, EQT030	5.20.5.9.1	Submission for acceptance of purchasing package	90 days	Thu 15/10/2	Tue 12/1/21	0 days	
635	635	MFS, EQT030	5.20.5.9.2	Invitation of quotations for purchasing package	60 days	Wed 13/1/21	Sat 13/3/21	0 days	634
636	636	MFS, EQT030	5.20.5.9.3	Acceptance of conforming quotation	30 days	Sun 14/3/21	Mon 12/4/21	0 days	635
637	**637**	**MFS, EQT030**	**5.20.5.10**	**Plant Service Water System - hydro-pneumatic pressure tanks, C11, ref. EQT030**	**120 days**	**Thu 1/10/20**	**Thu 28/1/21**	**85 days**	
638	638	MFS, EQT030	5.20.5.10.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	



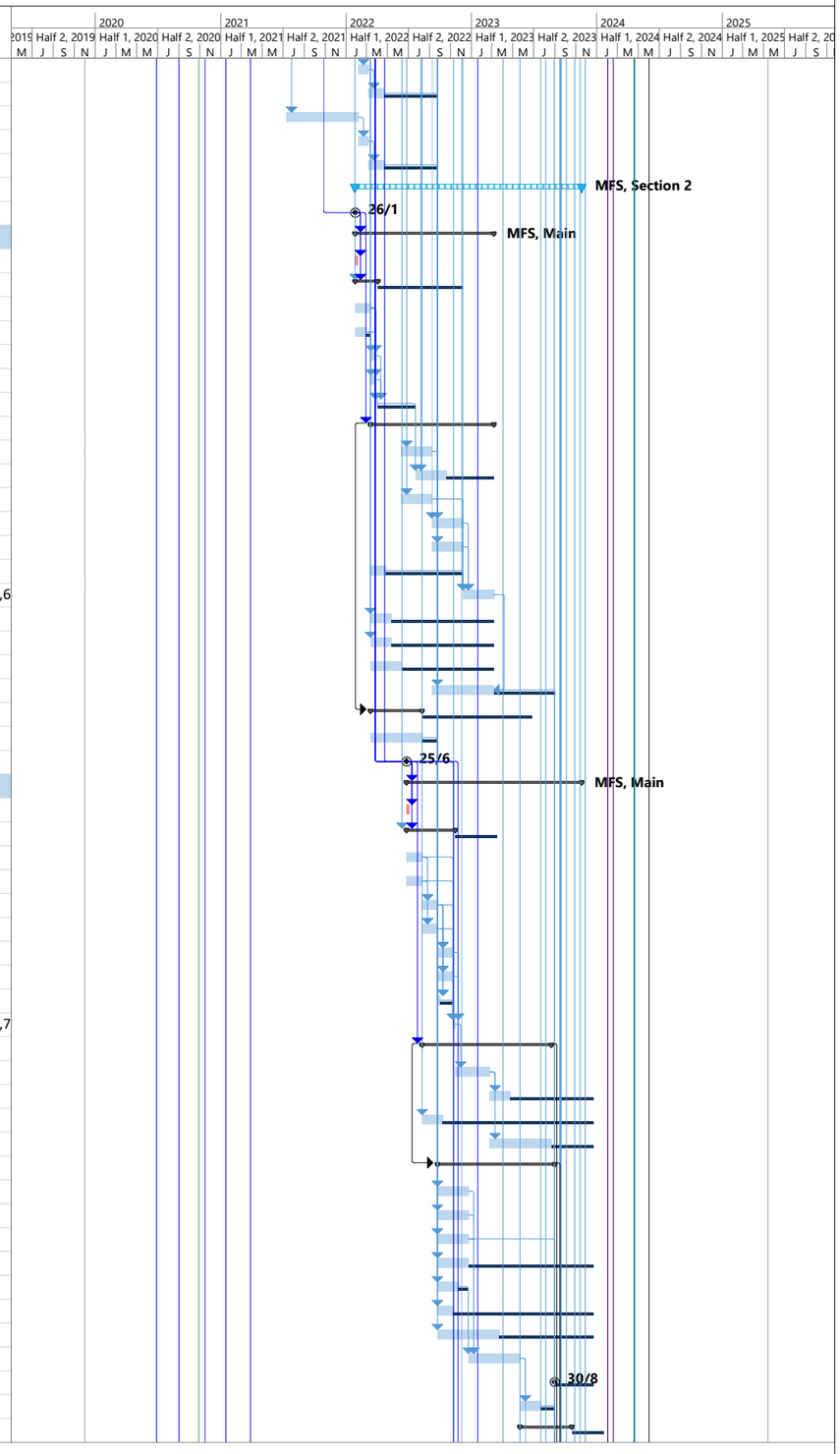
Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
639	639	MFS, EQT030	5.20.5.10.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	638
640	640	MFS, EQT030	5.20.5.10.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	74 days	639
641	**641**	**MFS, KD1A, KD1B, Section 1**	**5.20.6**	**Design Submissions for MFB No. 2**	**323 days**	**Fri 21/8/20**	**Fri 9/7/21**	**3 days**	
642	642	MFS, KD1A, Elec, KD1A	5.20.6.1	Electrical schematic drawings for MFB No. 2	60 days	Fri 21/8/20	Mon 19/10/2(	11 days	
643	643	MFS, KD1A, CW	5.20.6.2	CDS080-4 - Civil and dimensional requirements drawigns for MFB no. 2 up to +8.0 mPD	30 days	Tue 1/9/20	Wed 30/9/20	30 days	
644	644	MFS, KD1B, CW	5.20.6.3	CDS081-4 - Civil and dimensional requirements drawings for MFB No. 2	210 days	Fri 28/8/20	Thu 25/3/21	68 days	
645	645	MFS, Section 1, Mech	5.20.6.4	CDS005 - Detailed Design for Membrane Filtration System, Pumps and Membrane Module	80 edays	Mon 12/4/21	Thu 1/7/21	0.63 edays	604,612,628,632,6
646	646	MFS, Section 1, Elec, SCADA	5.20.6.5	CDS024 - Detailed Design for Electrical Installations for MFB No. 2	100 edays	Wed 31/3/21	Fri 9/7/21	0.63 edays	72,82,78,86,90,184
647	647	MFS, Section 1, Mech	5.20.6.6	CDS008 - Detailed Design for Membrane Filtration System, Air Blowers, Dosing Systems et	100 edays	Mon 1/3/21	Wed 9/6/21	0.63 edays	608,616,620,624,5
648	648	MFS, Section 1, BS	5.20.6.7	CDS034-4 - Detailed Design for Electrical Installations BS at MFB No. 2	100 edays	Fri 12/3/21	Sun 20/6/21	22.38 edays	133
649	649	MFS, Section 1, LVSB	5.20.6.8	CDS025-4 - Detailed Design for LV Switchboards for Membrane Filtration System	180 edays	Tue 29/12/2(	Sun 27/6/21	0.63 edays	68
650	650	MFS, Section 1, HVSB, EQT031	5.20.6.9	CDS026-2 - Detailed Design for HV Switchboards for MFB No. 2	180 edays	Sat 26/12/20	Thu 24/6/21	0.63 edays	64
651	651	MFS, Section 1, LA	5.20.6.10	CDS050-4 - Detailed Design for Lifting Appliances - MFB No. 2	150 edays	Thu 15/10/2(	Sun 14/3/21	0 edays	113
652	**652**		**5.20.7**	**Manufacturing and Delivery of Plant & Materials**	**495 days**	**Sun 14/3/21**	**Thu 21/7/22**	**248 days**	
653	**653**		**5.20.7.1**	**Hollow Fibre Membrane Modules, EQT023**	**385 days**	**Fri 2/7/21**	**Thu 21/7/22**	**138 days**	
654	654	MFS, EQT023	5.20.7.1.1	MFS - Manufacturing of Plant	300 days	Fri 2/7/21	Wed 27/4/22	0 days	645
655	655	MFS, EQT023	5.20.7.1.2	MFS - Factory Acceptance Test of Plant (to be witnessed by PM)	40 days	Thu 28/4/22	Mon 6/6/22	0 days	654
656	656	MFS, EQT023	5.20.7.1.3	MFS - Shipping and Delivery of Plant to site	45 days	Tue 7/6/22	Thu 21/7/22	0 days	655
657	**657**		**5.20.7.2**	**Air Scour Blowers, EQT040**	**343 days**	**Fri 2/7/21**	**Thu 9/6/22**	**290 days**	
658	658	MFS, EQT013	5.20.7.2.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 2/7/21	Sat 26/2/22	58 days	645
659	659	MFS, EQT013	5.20.7.2.2	Shipping and Delivery of Plant to site	45 days	Tue 26/4/22	Thu 9/6/22	0 days	658,726SS-60 eday
660	**660**	**MFS, EQT024**	**5.20.7.3**	**Permeate Pump, EQT024**	**285 days**	**Fri 2/7/21**	**Tue 12/4/22**	**438 days**	
661	661	MFS, EQT024	5.20.7.3.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 2/7/21	Sat 26/2/22	0 days	645
662	662	MFS, EQT024	5.20.7.3.2	Shipping and Delivery of Plant to site	45 days	Sun 27/2/22	Tue 12/4/22	148 days	661
663	**663**	**MFS. EQT029**	**5.20.7.4**	**Compressed Air System, EQT029**	**343 days**	**Fri 2/7/21**	**Thu 9/6/22**	**290 days**	
664	664	MFS, EQT029	5.20.7.4.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Fri 2/7/21	Thu 27/1/22	88 days	645
665	665	MFS, EQT029	5.20.7.4.2	Shipping and Delivery of Plant to site	45 days	Tue 26/4/22	Thu 9/6/22	0 days	664,726SS-60 eday
666	**666**	**Chem, EQT025**	**5.20.7.5**	**Chemical Storage Tanks, EQT025**	**225 days**	**Thu 10/6/21**	**Thu 20/1/22**	**350 days**	
667	667	Chem, EQT025	5.20.7.5.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Thu 10/6/21	Mon 6/12/21	0 days	647
668	668	Chem, EQT025	5.20.7.5.2	Shipping and Delivery of Plant to site	45 days	Tue 7/12/21	Thu 20/1/22	51 days	667
669	**669**	**Chemical, EQT026**	**5.20.7.6**	**Chemical Dosing Pumps, EQT026**	**225 days**	**Thu 10/6/21**	**Thu 20/1/22**	**350 days**	
670	670	Chemical, EQT026	5.20.7.6.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Thu 10/6/21	Mon 6/12/21	0 days	647
671	671	Chemical, EQT026	5.20.7.6.2	Shipping and Delivery of Plant to site	45 days	Tue 7/12/21	Thu 20/1/22	51 days	670
672	**672**	**MFS, EQT013**	**5.20.7.7**	**Stoplogs and Penstocks, EQT013**	**343 days**	**Fri 2/7/21**	**Thu 9/6/22**	**290 days**	
673	673	MFS, EQT013	5.20.7.7.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 2/7/21	Sat 26/2/22	58 days	645
674	674	MFS, EQT013	5.20.7.7.2	Shipping and Delivery of Plant to site	45 days	Tue 26/4/22	Thu 9/6/22	0 days	673,726SS-60 eday
675	**675**	**MFS, EQT036**	**5.20.7.8**	**Valves, EQT036**	**285 days**	**Fri 2/7/21**	**Tue 12/4/22**	**528 days**	
676	676	MFS, EQT036	5.20.7.8.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 2/7/21	Sat 26/2/22	0 days	645
677	677	MFS, EQT036	5.20.7.8.2	Shipping and Delivery of Plant to site	45 days	Sun 27/2/22	Tue 12/4/22	238 days	676
678	**678**	**MFS, LA**	**5.20.7.9**	**Lifting Appliances**	**303 days**	**Sun 14/3/21**	**Mon 10/1/22**	**264 days**	
679	679	**MFS, LA**	5.20.7.9.1	Manufacturing and Factory Acceptance Test of Plant	210 days	Sun 14/3/21	Sat 9/10/21	48 days	651
680	680	**MFS, LA**	5.20.7.9.2	Shipping and Delivery of Plant to site	45 days	Sat 27/11/21	Mon 10/1/22	16 days	679,703SS-60 eday
681	**681**	**MFS, LVSB**	**5.20.7.10**	**LV Switchboards**	**405 days**	**Sat 29/5/21**	**Thu 7/7/22**	**232 days**	
682	682	BR,MFS, LVSB	5.20.7.10.1	BR - Manufacturing of Plant	240 days	Sat 29/5/21	Sun 23/1/22	0 days	525
683	683	BR, FAT, LVSB	5.20.7.10.2	BR - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Mon 24/1/22	Sat 23/4/22	0 days	682
684	684	BR,MFS, LVSB	5.20.7.10.3	BR - Shipping and Delivery of Plant to site	45 days	Sun 24/4/22	Tue 7/6/22	108 days	683
685	685	MFS, LVSB	5.20.7.10.4	MFS - Manufacturing of Plant	240 days	Mon 28/6/21	Tue 22/2/22	0 days	649
686	686	MFS, FAT, LVSB	5.20.7.10.5	MFS - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Wed 23/2/22	Mon 23/5/22	0 days	685
687	687	MFS, LVSB	5.20.7.10.6	MFS - Shipping and Delivery of Plant to site	45 days	Tue 24/5/22	Thu 7/7/22	78 days	686,726SS-60 eday
688	**688**	**MFS, HVSB, EQT031**	**5.20.7.11**	**HV Switchboards, EQT031**	**350 days**	**Fri 25/6/21**	**Thu 9/6/22**	**290 days**	
689	689	MFS, HVSB, EQT031	5.20.7.11.1	MFS - Manufacturing of Plant	180 days	Fri 25/6/21	Tue 21/12/21	0 days	650
690	690	MFS, HVSB, EQT031	5.20.7.11.2	MFS - Factory Acceptance Test of Plant (to be witnessed by PM)	90 days	Wed 22/12/2	Mon 21/3/22	35 days	689
691	691	MFS, HVSB, EQT031	5.20.7.11.3	MFS - Shipping and Delivery of Plant to site	45 days	Tue 26/4/22	Thu 9/6/22	106 days	690,726SS-60 eday
692	**692**	**MFS, EQT032**	**5.20.7.12**	**11kV/380V Stepdown Power Transformers, EQT032**	**285 days**	**Sat 10/7/21**	**Wed 20/4/22**	**565 days**	
693	693	MFS, EQT032	5.20.7.12.1	MFS - Manufacturing and Factory Acceptance Test of Plant	240 days	Sat 10/7/21	Sun 6/3/22	0 days	646
694	694	MFS, EQT032	5.20.7.12.2	MFS - Shipping and Delivery of Plant to site	45 days	Mon 7/3/22	Wed 20/4/22	156 days	693
695	**695**	**BR, SCADA**	**5.20.7.13**	**PLC System**	**285 days**	**Sat 10/7/21**	**Wed 20/4/22**	**310 days**	
696	696	BR, SCADA	5.20.7.13.1	Manufacturing of Plant, PLC for BR2A &B	210 days	Sat 10/7/21	Fri 4/2/22	0 days	523



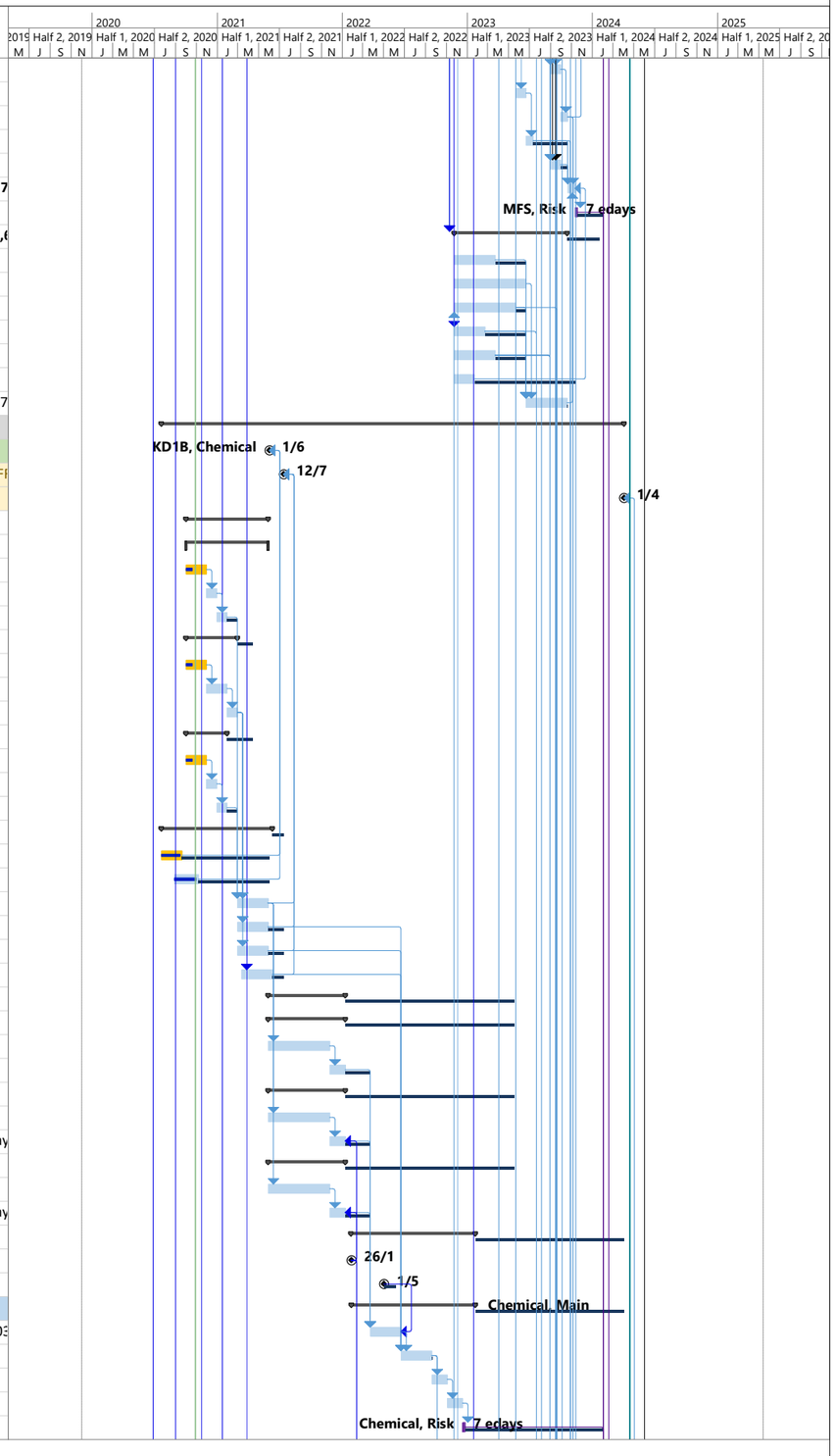
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
697	697	BR SCADA, FAT	5.20.7.13.2	Factory Acceptance Test of Plant, PLC for BR2A &B (To be witnessed by PM)	30 days	Sat 5/2/22	Sun 6/3/22	0 days	696
698	698	BR, SCADA	5.20.7.13.3	Shipping and Delivery of Plant to site	45 days	Mon 7/3/22	Wed 20/4/22	156 days	697
699	699	MFB, SCADA	5.20.7.13.4	Manufacturing of Plant, PLC for MFB2	210 days	Sat 10/7/21	Fri 4/2/22	0 days	646
700	700	MFB, SCADA, FAT	5.20.7.13.5	Factory Acceptance Test of Plant, PLC for MFB2 (To be witnessed by PM)	30 days	Sat 5/2/22	Sun 6/3/22	0 days	699
701	701	MFB, SCADA	5.20.7.13.6	Shipping and Delivery of Plant to site	45 days	Mon 7/3/22	Wed 20/4/22	156 days	700
702	**702**	**MFS, Section 2**	**5.20.8**	**Site Installation Work**	**661 days**	**Wed 26/1/22**	**Fri 17/11/23**	**0 days**	
703	703	MFS, LA, BS, Others	5.20.8.1	Tentative Civil Handover Date, Portion B-5A, MFB No. 2 below 1st floor level	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
704	**704**	**MFS, Main**	**5.20.8.2**	**Commencement of E&M Installation at MFB No. 2 Lower Part**	**404 days**	**Thu 27/1/22**	**Mon 6/3/23**	**0 days**	**703**
705	705	MFS	5.20.8.2.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, Welfare facilities etc.,	7 days	Thu 27/1/22	Wed 2/2/22	0 days	703
706	**706**	**MFS, LA**	**5.20.8.2.2**	**Installation of Lifting Appliances at MFB No. 2**	**66 days**	**Thu 27/1/22**	**Sat 2/4/22**	**248 days**	**703,680**
707	707	MFS, LA	5.20.8.2.2.1	B2 EOT Crane LA-04-01 SWL 5t	45 days	Thu 27/1/22	Sat 12/3/22	0 days	
708	708	MFS, LA	5.20.8.2.2.2	B2 EOT Crane LA-04-02 SWL 5t	30 days	Thu 27/1/22	Fri 25/2/22	15 days	
709	709	MFS, LA	5.20.8.2.2.3	B2 MR LA-04-03 SWL 5t	14 days	Sun 13/3/22	Sat 26/3/22	0 days	707,708
710	710	MFS, LA	5.20.8.2.2.4	B1 MR LA-04-04 SWL 3t	14 days	Sun 13/3/22	Sat 26/3/22	0 days	707,708
711	711	MFS,LA	5.20.8.2.2.5	T&C, Loading Test for Lifting Appliances	7 days	Sun 27/3/22	Sat 2/4/22	110 days	707,708,709,710
712	**712**	**MFS, Mech**	**5.20.8.2.3**	**Mechanical Installations for E&M Equip. at MFB No. 2 Lower Part**	**359 days**	**Sun 13/3/22**	**Mon 6/3/23**	**0 days**	**703FS+45 edays**
713	713	MFS, Mech, EQT013	5.20.8.2.3.1	Installation of penstocks and stoplogs (Penstocks 18nos, Stoplogs 11nos), EQT013	90 days	Fri 10/6/22	Wed 7/9/22	0 days	674
714	714	MFS, Mech, EQT023	5.20.8.2.3.2	Installation of hollow fibre membrane modules (x9), EQT023	90 days	Fri 22/7/22	Wed 19/10/22	138 days	656,711
715	715	MFS, Mech, EQT040	5.20.8.2.3.3	Installation of air scour blowers (x3), EQT040	90 days	Fri 10/6/22	Wed 7/9/22	0 days	659,665
716	716	MFS, Mech, EQT024	5.20.8.2.3.4	Installation of permeate pumps (x10), EQT024	90 days	Thu 8/9/22	Tue 6/12/22	0 days	715,662
717	717	MFS, Mech, EQT010	5.20.8.2.3.5	Installation of return activated sludge pumps (x5), EQT010	90 days	Thu 8/9/22	Tue 6/12/22	0 days	715
718	718	MFS, Mech, EQT009	5.20.8.2.3.6	Installation of membrane tank drain pumps (x2), EQT009	45 days	Sun 13/3/22	Tue 26/4/22	224 days	
719	719	MFS, Mech, EQT036	5.20.8.2.3.7	Installation of pipework and valves, EQT036	90 days	Wed 7/12/22	Mon 6/3/23	0 days	715,716,717,718,6
720	720	MFS, Mech, EQT025	5.20.8.2.3.8	Installation of chemical storage tank, EQT025	60 days	Sun 13/3/22	Wed 11/5/22	299 days	668
721	721	MFS, Mech, EQT026	5.20.8.2.3.9	Installation of chemical dosing pumps, EQT026	60 days	Sun 13/3/22	Wed 11/5/22	299 days	671
722	722	MFS, Mech	5.20.8.2.3.10	Installation of plant service water system	90 days	Sun 13/3/22	Fri 10/6/22	269 days	
723	723	MFS, Mech	5.20.8.2.3.11	Site Acceptance Tests - mechanical aspects including alignment and levels checks, leal	180 days	Thu 8/9/22	Mon 6/3/23	177 days	713,719FF
724	724	MFS, Elec	5.20.8.2.4	Electrical Installations for E&M Equip. at MFB No. 2 Lower Part	150 days	Sun 13/3/22	Tue 9/8/22	319 days	712SS
725	725	MFS, Elec	5.20.8.2.4.1	Installation of cable trays and cable containments	150 days	Sun 13/3/22	Tue 9/8/22	45 days	
726	726	MFS, LA, BS, Others	5.20.8.3	Tentative Civil Handover Date, Portion B-5B, MFB No. 2 remaining portion	1 day	Sat 25/6/22	Sat 25/6/22	0 days	
727	**727**	**MFS, Main**	**5.20.8.4**	**Commencement of E&M Installation at MFB No. 2 Upper Part**	**510 days**	**Sun 26/6/22**	**Fri 17/11/23**	**0 days**	**726**
728	728	MFS	5.20.8.4.1	Provision of Temporary Water Supply, Electricity Supply, Lighting, Welfare facilities etc.,	7 days	Sun 26/6/22	Sat 2/7/22	0 days	726
729	**729**	**MFS, LA**	**5.20.8.4.2**	**Installation of Lifting Appliances at MFB No. 2**	**142 days**	**Sun 26/6/22**	**Mon 14/11/22**	**122 days**	**726,680**
730	730	MFS, LA	5.20.8.4.2.1	GF EOT Crane LA-04-05 SWL 5t	45 days	Sun 26/6/22	Tue 9/8/22	0 days	
731	731	MFS, LA	5.20.8.4.2.2	GF Gantry Crane LA-04-06 SWL 6t	45 days	Sun 26/6/22	Tue 9/8/22	0 days	
732	732	MFS, LA	5.20.8.4.2.3	1F EOT Crane LA-04-07 SWL 15t	45 days	Wed 10/8/22	Fri 23/9/22	0 days	730,731
733	733	MFS, LA	5.20.8.4.2.4	1F EOT Crane LA-04-08 SWL 15t	45 days	Wed 10/8/22	Fri 23/9/22	0 days	730,731
734	734	MFS, LA	5.20.8.4.2.5	RF EOT Crane LA-04-09 SWL 2t	45 days	Sat 24/9/22	Mon 7/11/22	0 days	732,733
735	735	MFS, LA	5.20.8.4.2.6	RF Retractable MR LA-04-10 SWL 2t	45 days	Sat 24/9/22	Mon 7/11/22	0 days	732,733
736	736	MFS, LA	5.20.8.4.2.7	Mobile A-frame LA-04-11 SWL 2t	7 days	Sat 24/9/22	Fri 30/9/22	38 days	732,733
737	737	MFS, LA	5.20.8.4.2.8	T&C, Loading Test for Lifting Appliances	7 days	Tue 8/11/22	Mon 14/11/22	0 days	730,731,732,733,7
738	**738**	**MFS, Mech**	**5.20.8.4.3**	**Mechanical Installations for E&M Equip. at MFB No. 2 Upper Part**	**377 days**	**Wed 10/8/22**	**Mon 21/8/23**	**0 days**	**726FS+45 edays**
739	739	MFS, Mech	5.20.8.4.3.1	Installation of air scour blowers (x3)	100 days	Tue 15/11/22	Wed 22/2/23	0 days	737
740	740	MFS, Mech	5.20.8.4.3.2	Installation of compressed air system (x1)	60 days	Thu 23/2/23	Sun 23/4/23	242 days	739
741	741	MFS, Mech, EQT035-1	5.20.8.4.3.3	Installation of instrumentations, EQT035-1	60 days	Wed 10/8/22	Sat 8/10/22	439 days	52
742	742	MFS, Mech	5.20.8.4.3.4	Site Acceptance Tests - mechanical aspects including alignment and levels checks, leal	180 days	Thu 23/2/23	Mon 21/8/23	122 days	739
743	**743**	**MFS, Elec**	**5.20.8.4.4**	**Electrical Installations for E&M Equip. at MFB No. 2 Upper Part**	**341 days**	**Sat 24/9/22**	**Wed 30/8/23**	**0 days**	**738SS+45 edays**
744	744	MFS, Elec	5.20.8.4.4.1	Installation of LV Switchboards, BR2	90 days	Sat 24/9/22	Thu 22/12/22	0 days	684
745	745	MFS, Elec	5.20.8.4.4.2	Installation of LV Switchboards, MFB No. 2	90 days	Sat 24/9/22	Thu 22/12/22	0 days	687
746	746	MFS, Elec, SCADA	5.20.8.4.4.3	Installation of PLC Panels, BR2	90 days	Sat 24/9/22	Thu 22/12/22	0 days	698
747	747	MFS, Elec, SCADA	5.20.8.4.4.4	Installation of PLC Panels, MFB No. 2	90 days	Sat 24/9/22	Thu 22/12/22	364 days	701
748	748	MFS, Elec, HVSB, EQT031	5.20.8.4.4.5	Installation of HV Switchboards, MFB No. 2	60 days	Sat 24/9/22	Tue 22/11/22	30 days	691
749	749	MFS, Elec, EQT032	5.20.8.4.4.6	Installation of transformer, MFB No. 2, EQT032	45 days	Sat 24/9/22	Mon 7/11/22	409 days	694
750	750	MFS, Elec	5.20.8.4.4.7	Installation of cable trays and cable containments	180 days	Sat 24/9/22	Wed 22/3/23	274 days	725
751	751	MFS, Elec, SCADA	5.20.8.4.4.8	Cables laying and terminations	150 days	Fri 23/12/22	Sun 21/5/23	0 days	744,745,746,748
752	752	MFS, Elec	5.20.8.4.4.9	Energisation of LV Switchboards, MFB	1 day	Wed 30/8/23	Wed 30/8/23	113 days	
753	753	MFS, Elec	5.20.8.4.4.10	Site Acceptance Tests - Electrical aspects including voltage and current tests, equipme	60 days	Mon 22/5/23	Thu 20/7/23	41 days	751
754	**754**	**MFS, SCADA**	**5.20.8.4.5**	**SCADA Systems, BR No. 1 & No 2, MFB No. 2**	**152 days**	**Mon 22/5/23**	**Fri 20/10/23**	**92 days**	



Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

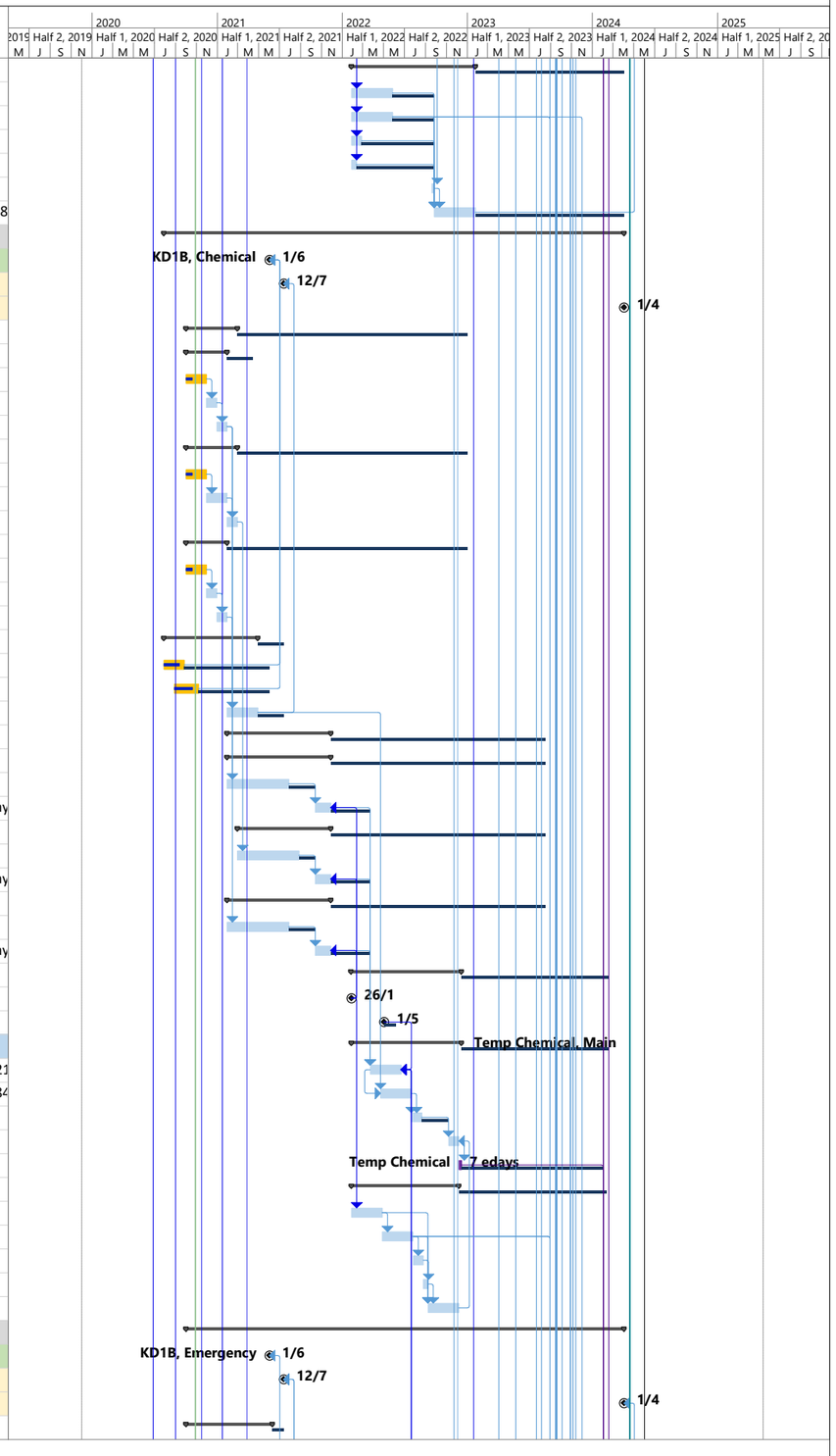
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
755	755	MFS, SCADA	5.20.8.4.5.1	Configuration of PLC System for BR No. 1 & No. 2	30 days	Thu 31/8/23	Fri 29/9/23	0 days	746,582
756	756	MFS, SCADA	5.20.8.4.5.2	Configuration of PLC System for MFB No. 2	30 days	Mon 22/5/23	Tue 20/6/23	0 days	751
757	757	MFS, SCADA	5.20.8.4.5.3	Site Acceptance Test for PLC System at BR No. 1 and No. 2	21 days	Sat 30/9/23	Fri 20/10/23	0 days	755
758	758	MFS, SCADA	5.20.8.4.5.4	Site Acceptance Test for PLC System at MFB No. 2	21 days	Wed 21/6/23	Tue 11/7/23	101 days	756
759	**759**	**MFS,SCADA**	**5.20.8.4.6**	**Site Acceptance Test for E&M Equip at MFB No. 2**	**30 edays**	**Wed 30/8/23**	**Fri 29/9/23**	**21.63 edays**	**738,743,753,723**
760	**760**	**MFS,SCADA**	**5.20.8.4.7**	**System Commissioning for E&M Equip at MFB No. 2**	**21 days**	**Sat 21/10/23**	**Fri 10/11/23**	**0 days**	**757,759,769,758,7**
761	761	MFS, Risk	5.20.8.4.8	Risk Allowances for Completion of Processing Plant at MFB No. 2	7 edays	Fri 10/11/23	Fri 17/11/23	76.63 edays	760
762	**762**	**MFS**	**5.20.8.4.9**	**Building Services Installations for MFB No. 2**	**330 days**	**Wed 23/11/2**	**Wed 18/10/23**	**94 days**	**726FS+150 edays,(**
763	763	BS, MFS, MVAC	5.20.8.4.9.1	Mechanical Ventilation and Air Conditioning System, MFB No. 2	120 days	Wed 23/11/2	Wed 22/3/23	90 days	
764	764	BS, MFS	5.20.8.4.9.2	Lighting and Power Distribution System, MFB No. 2	210 days	Wed 23/11/2	Tue 20/6/23	0 days	
765	765	BS, MFS, Pb	5.20.8.4.9.3	Plumbing Installation, MFB No. 2	180 days	Wed 23/11/2	Sun 21/5/23	30 days	1228
766	766	BS, MFS, CCTV	5.20.8.4.9.4	CCTV Installation (10 indoor + 3 outdoor Cameras), MFB No. 2	90 days	Wed 23/11/2	Mon 20/2/23	120 days	726FS+120 days
767	767	BS, MFS, FSI	5.20.8.4.9.5	Fire Services Installation, MFB No. 2	120 days	Wed 23/11/2	Wed 22/3/23	90 days	
768	768	BS, MFS, Earth	5.20.8.4.9.6	Earthing and Lightning Protection System, MFB No. 2	60 days	Wed 23/11/2	Sat 21/1/23	293 days	
769	769	BS, MFS	5.20.8.4.9.7	Testing and Commissioning of Building Services Installations, MFB No. 2	120 days	Wed 21/6/23	Wed 18/10/23	2 days	763,764,765,766,7
770	**770**		**5.21**	**Chemical System No. 1 and No. 2, Portion B-7 & B-7B (PS 6B.2.3)**	**1351 days**	**Tue 21/7/20**	**Mon 1/4/24**	**0 days**	
771	771	KD1B, Chemical	5.21.1	Planned Key Date Completion Date - KD1B, Chem Sys No. 1 & 2	0 days	Tue 1/6/21	Tue 1/6/21	0 days	788FF,789FF
772	772	Section 1, Main, Chem	5.21.2	Planned Sectional Completion Date - Section 1, Chem Sys No. 1 & 2	0 days	Mon 12/7/21	Mon 12/7/21	0 days	790FF,791FF,792FF
773	773	Section 2, Main, Chem	5.21.3	Planned Sectional Completion Date - Section 2, Chem Sys No. 1 & 2	0 days	Mon 1/4/24	Mon 1/4/24	0 days	819FF
774	**774**		**5.21.4**	**Selection of Suppliers for major plant and materials for Chemical Systems**	**240 days**	**Thu 1/10/20**	**Fri 28/5/21**	**0 days**	
775	**775**	**Chemical, EQT025**	**5.21.4.1**	**Chemical Storage and Dosing - chemical storage tanks, C11, ref. EQT025**	**240 days**	**Thu 1/10/20**	**Fri 28/5/21**	**0 days**	
776	776	Chemical, EQT025	5.21.4.1.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
777	777	Chemical, EQT025	5.21.4.1.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	776
778	778	Chemical, EQT025	5.21.4.1.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	30 days	777
779	**779**	**Chemical, EQT027**	**5.21.4.2**	**Chemical Storage and Dosing - chemical dosing pumps, C11, ref. EQT027**	**150 days**	**Thu 1/10/20**	**Sat 27/2/21**	**45 days**	
780	780	Chemical, EQT027	5.21.4.2.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
781	781	Chemical, EQT027	5.21.4.2.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/2	Thu 28/1/21	0 days	780
782	782	Chemical, EQT027	5.21.4.2.3	Acceptance of conforming quotation	30 days	Fri 29/1/21	Sat 27/2/21	0 days	781
783	**783**	**Chemical, EQT026**	**5.21.4.3**	**Chemical Storage and Dosing - transfer pumps, C11, ref. EQT026**	**120 days**	**Thu 1/10/20**	**Thu 28/1/21**	**75 days**	
784	784	Chemical, EQT026	5.21.4.3.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
785	785	Chemical, EQT026	5.21.4.3.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	784
786	786	Chemical, EQT026	5.21.4.3.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	30 days	785
787	**787**	**Chemical, , KD1A, KD1B, Section**	**5.21.5**	**Design Submissions for Chemical System No. 1 and No. 2**	**324 days**	**Tue 21/7/20**	**Thu 10/6/21**	**33 days**	
788	788	Chemical, Elec, KD1A	5.21.5.1	Electrical schematic drawings for Chemical Systems No. 1 and No. 2	60 days	Tue 21/7/20	Fri 18/9/20	256 days	
789	789	Chemical, KD1B, CW	5.21.5.2	CDS081-5 - Civil and dimensional requirements drawings for Chemical Systems	70 days	Fri 28/8/20	Thu 5/11/20	208 days	
790	790	Chemical, Section 1, Mech	5.21.5.3	CDS006 - Detailed Design for Chemical Dosing System	90 edays	Sat 27/2/21	Fri 28/5/21	0.63 edays	778,782,786
791	791	Chemical, Section 1, Elec	5.21.5.4	CDS027 - Detailed Design for Electrical Installations for Chemical System No. 1	90 edays	Sat 27/2/21	Fri 28/5/21	45 edays	782
792	792	Chemical, Section 1, Elec	5.21.5.5	CDS028 - Detailed Design for Electrical Installations for Chemical System No. 2	90 edays	Sat 27/2/21	Fri 28/5/21	45 edays	782
793	793	Chemical, Section 1, BS	5.21.5.6	CDS034-5 - Detailed Design for Electrical Installations BS at Chemical Systems	90 edays	Fri 12/3/21	Thu 10/6/21	32.38 edays	133
794	**794**	**Chemical**	**5.21.6**	**Manufacturing and Delivery of Plant & Materials**	**225 days**	**Sat 29/5/21**	**Sat 8/1/22**	**493 days**	
795	**795**	**Chemical, EQT025**	**5.21.6.1**	**Chemical Storage Tanks, EQT025**	**225 days**	**Sat 29/5/21**	**Sat 8/1/22**	**493 days**	
796	796	Chemical, EQT025	5.21.6.1.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 29/5/21	Wed 24/11/21	0 days	790
797	797	Chemical, EQT025	5.21.6.1.2	Shipping and Delivery of Plant to site	45 days	Thu 25/11/21	Sat 8/1/22	73 days	796
798	**798**	**Chemical, EQT027**	**5.21.6.2**	**Chemical Dosing Pumps, EQT027**	**225 days**	**Sat 29/5/21**	**Sat 8/1/22**	**493 days**	
799	799	Chemical, EQT027	5.21.6.2.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 29/5/21	Wed 24/11/21	0 days	790
800	800	Chemical, EQT027	5.21.6.2.2	Shipping and Delivery of Plant to site	45 days	Thu 25/11/21	Sat 8/1/22	73 days	799,805FF-60 eday
801	**801**	**Chemical, EQT027**	**5.21.6.3**	**Chemical Transfer Pumps, EQT026**	**225 days**	**Sat 29/5/21**	**Sat 8/1/22**	**493 days**	
802	802	Chemical, EQT026	5.21.6.3.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 29/5/21	Wed 24/11/21	0 days	790
803	803	Chemical, EQT026	5.21.6.3.2	Shipping and Delivery of Plant to site	45 days	Thu 25/11/21	Sat 8/1/22	73 days	802,805FF-60 eday
804	**804**	**Chemical, Section 2**	**5.21.7**	**Site Installation Work**	**363 days**	**Wed 26/1/22**	**Mon 23/1/23**	**434 days**	
805	805	Chemical, others	5.21.7.1	Tentative Civil Handover Date, Portion B-7 & B-7B	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
806	806	Chemical, others	5.21.7.2	Tentative Civil Handover Date, Chemical Pipe Trench (by others)	1 day	Sun 1/5/22	Sun 1/5/22	33 days	
807	**807**	**Chemical, Main**	**5.21.7.3**	**Commencement of E&M Installation at Chemical Dosing System 1 and System 2**	**362 days**	**Thu 27/1/22**	**Mon 23/1/23**	**434 days**	
808	808	Chemical, Mech	5.21.7.3.1	Mechanical Installations for E&M Equip. for Chemical Dosing System	90 edays	Tue 22/3/22	Mon 20/6/22	0 edays	806FF+50 days,803
809	809	Chemical, Elec	5.21.7.3.2	Electrical Installations for E&M Equip. for Chemical Dosing System	90 edays	Mon 20/6/22	Sun 18/9/22	0.63 edays	808,791,792,793
810	**810**	**Chemical, Elec**	**5.21.7.3.3**	**Site Acceptance Test for E&M Equip for Chemical Dosing System**	**45 days**	**Mon 19/9/22**	**Wed 2/11/22**	**0 days**	**809**
811	**811**	**Chemical, Elec**	**5.21.7.3.4**	**System Commissioning for E&M Equip for Chemical Dosing System**	**45 days**	**Thu 3/11/22**	**Sat 17/12/22**	**0 days**	**810**
812	812	Chemical, Risk	5.21.7.3.5	Risk Allowances for Completion of Processing Plant at Chemical Dosing System	7 edays	Sat 17/12/22	Sat 24/12/22	404.63 edays	811



Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

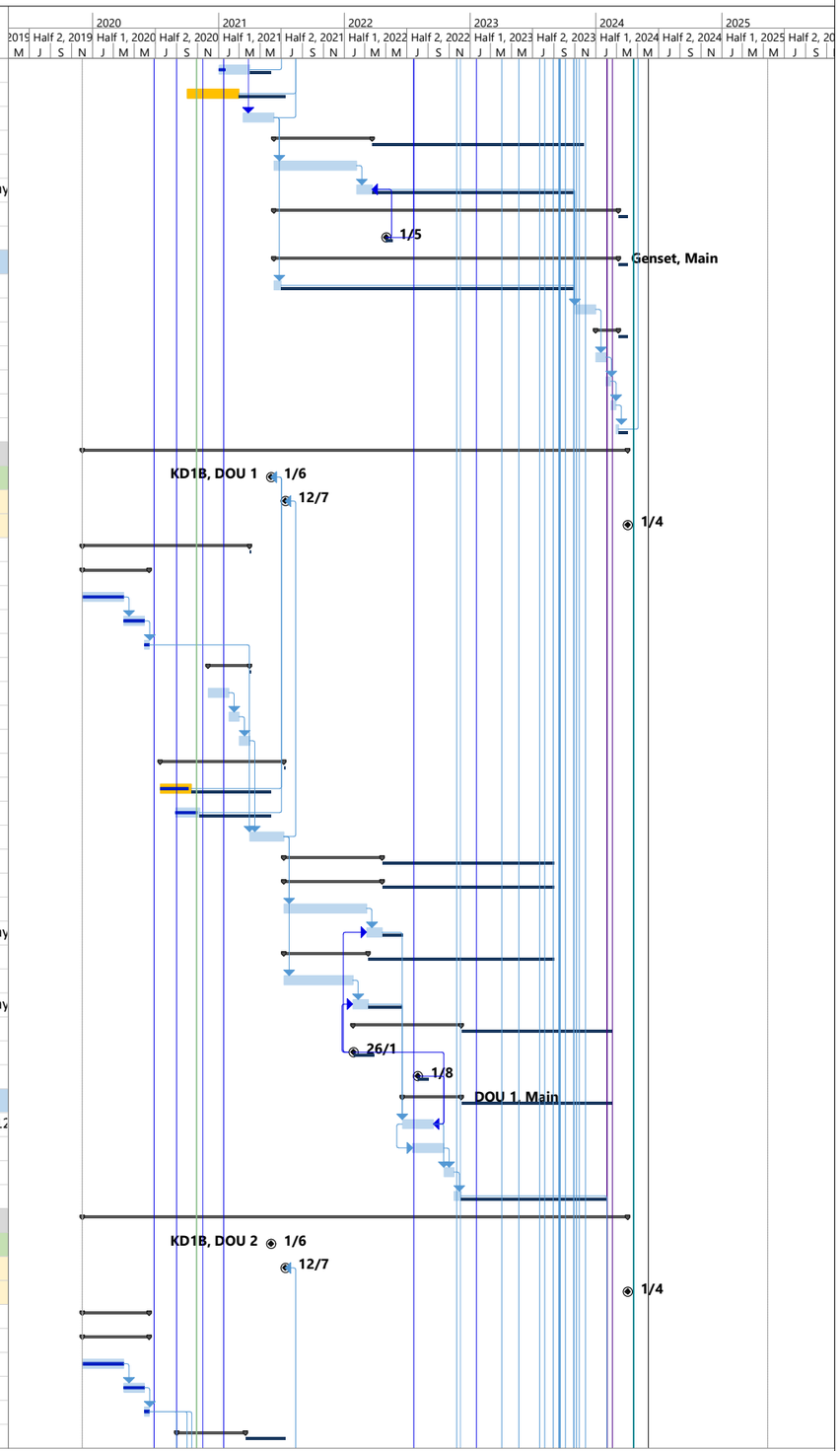
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
813	**813**	**Chemical**	**5.21.7.3.6**	**Building Services Installations at Chemical Dosing System areas**	**362 days**	**Thu 27/1/22**	**Mon 23/1/23**	**434 days**	
814	814	Chemical, BS	5.21.7.3.6.1	Lighting and Power Distribution System, Chem 1&2	120 days	Thu 27/1/22	Thu 26/5/22	122 days	805
815	815	Chemical, FSI	5.21.7.3.6.2	Fire Services Installation, DG Stores	120 days	Thu 27/1/22	Thu 26/5/22	122 days	805
816	816	Chemical, Earth	5.21.7.3.6.3	Lightning Protection System, Chem 1&2	30 days	Thu 27/1/22	Fri 25/2/22	212 days	805
817	817	Chemical, MVAC	5.21.7.3.6.4	Mechanical Ventilation System, Chem 2	14 days	Thu 27/1/22	Wed 9/2/22	228 days	805
818	818	Chemical, Pb	5.21.7.3.6.5	Plumbing Installation, Chem 1	7 days	Mon 19/9/22	Sun 25/9/22	0 days	809
819	819	Chemical, BS	5.21.7.3.6.6	Testing and Commissioning of Building Services Installations, Chem 1&2	120 days	Mon 26/9/22	Mon 23/1/23	434 days	814,815,818,817,8
820	**820**		**5.22**	**Temporary Chemical Dosing System, Portion B7 & B-7B (PS 6B.2.3)**	**1344 days**	**Tue 28/7/20**	**Mon 1/4/24**	**0 days**	
821	821	KD1B, Chemical	5.22.1	Planned Key Date Completion Date - KD1B, Temp. Chem Dosing Sys	0 days	Tue 1/6/21	Tue 1/6/21	0 days	838FF,839FF
822	822	Section 1, Main, Temp	5.22.2	Planned Sectional Completion Date - Section 1, Temp. Chem Dosing Sys	0 days	Mon 12/7/21	Mon 12/7/21	0 days	840FF
823	823	Section 2, Main, Temp	5.22.3	Planned Sectional Completion Date - Section 2, Temp. Chem Dosing Sys	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
824	**824**	**Temp Chemical**	**5.22.4**	**Selection of Suppliers for major plant and materials for Temp. Chemical Dosing System**	**150 days**	**Thu 1/10/20**	**Sat 27/2/21**	**673 days**	
825	**825**	**Chemical, EQT025**	**5.22.4.1**	**Chemical Storage and Dosing - chemical storage tanks, C11, ref. EQT025**	**120 days**	**Thu 1/10/20**	**Thu 28/1/21**	**75 days**	
826	826	Chemical, EQT025	5.22.4.1.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
827	827	Chemical, EQT025	5.22.4.1.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	826
828	828	Chemical, EQT025	5.22.4.1.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	0 days	827
829	**829**	**Chemical, EQT027**	**5.22.4.2**	**Chemical Storage and Dosing - chemical dosing pumps, C11, ref. EQT027**	**150 days**	**Thu 1/10/20**	**Sat 27/2/21**	**673 days**	
830	830	Chemical, EQT027	5.22.4.2.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
831	831	Chemical, EQT027	5.22.4.2.2	Invitation of quotations for purchasing package	60 days	Mon 30/11/2	Thu 28/1/21	0 days	830
832	832	Chemical, EQT027	5.22.4.2.3	Acceptance of conforming quotation	30 days	Fri 29/1/21	Sat 27/2/21	0 days	831
833	**833**	**Chemical, EQT026**	**5.22.4.3**	**Chemical Storage and Dosing - transfer pumps, C11, ref. EQT026**	**120 days**	**Thu 1/10/20**	**Thu 28/1/21**	**703 days**	
834	834	Chemical, EQT026	5.22.4.3.1	Submission for acceptance of purchasing package	60 days	Thu 1/10/20	Sun 29/11/20	0 days	
835	835	Chemical, EQT026	5.22.4.3.2	Invitation of quotations for purchasing package	30 days	Mon 30/11/2	Tue 29/12/20	0 days	834
836	836	Chemical, EQT026	5.22.4.3.3	Acceptance of conforming quotation	30 days	Wed 30/12/2	Thu 28/1/21	0 days	835
837	**837**	**Temp Chemical, KD1A, KD1B, Se**	**5.22.5**	**Design Submissions for Temporary Chemical Dosing System**	**275 days**	**Tue 28/7/20**	**Wed 28/4/21**	**75 days**	
838	838	Temp Chemical, Elec, KD1A	5.22.5.1	Electrical schematic drawings for Temporary Chemical Dosing System	60 days	Tue 28/7/20	Fri 25/9/20	249 days	
839	839	Temp Chemical, KD1B, CW	5.22.5.2	CDS081-6 - Civil and dimensional requirements drawings for Temporary Chemical Dosing S	70 days	Fri 28/8/20	Thu 5/11/20	208 days	
840	840	Temp Chemical, Elec, Section 1	5.22.5.3	CDS029 - Detailed Design for Electrical Installations for Temporary Chemical System	90 edays	Thu 28/1/21	Wed 28/4/21	75 edays	828
841	**841**		**5.22.6**	**Manufacturing and Delivery of Plant & Materials**	**303 days**	**Fri 29/1/21**	**Sat 27/11/21**	**625 days**	
842	**842**	**Chemical, EQT025**	**5.22.6.1**	**Chemical Storage Tanks, EQT025**	**303 days**	**Fri 29/1/21**	**Sat 27/11/21**	**625 days**	
843	843	Chemical, EQT025	5.22.6.1.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Fri 29/1/21	Tue 27/7/21	78 days	828
844	844	Chemical, EQT025	5.22.6.1.2	Shipping and Delivery of Plant to site	45 days	Thu 14/10/21	Sat 27/11/21	115 days	843,852FF-60 eday
845	**845**	**Chemical, EQT027**	**5.22.6.2**	**Chemical Dosing Pumps, EQT027**	**273 days**	**Sun 28/2/21**	**Sat 27/11/21**	**625 days**	
846	846	Chemical, EQT027	5.22.6.2.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sun 28/2/21	Thu 26/8/21	48 days	832
847	847	Chemical, EQT027	5.22.6.2.2	Shipping and Delivery of Plant to site	45 days	Thu 14/10/21	Sat 27/11/21	115 days	846,852FF-60 eday
848	**848**	**Chemical, EQT027**	**5.22.6.3**	**Chemical Transfer Pumps, EQT026**	**303 days**	**Fri 29/1/21**	**Sat 27/11/21**	**625 days**	
849	849	Chemical, EQT026	5.22.6.3.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Fri 29/1/21	Tue 27/7/21	78 days	836
850	850	Chemical, EQT026	5.22.6.3.2	Shipping and Delivery of Plant to site	45 days	Thu 14/10/21	Sat 27/11/21	115 days	849,852FF-60 eday
851	**851**	**Temp, Section 2**	**5.22.7**	**Site Installation Work**	**322 days**	**Wed 26/1/22**	**Tue 13/12/22**	**431 days**	
852	852	Temp Chemical, others	5.22.7.1	Tentative Civil Handover Date, Temporary Chemical Dosing	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
853	853	Temp Chemical, others	5.22.7.2	Tentative Civil Handover Date, Chemical Pipe Trench (by others)	1 day	Sun 1/5/22	Sun 1/5/22	33 days	
854	**854**	**Temp Chemical, Main**	**5.22.7.3**	**Commencement of E&M Installation at Temporary Chemical Dosing System**	**321 days**	**Thu 27/1/22**	**Tue 13/12/22**	**431 days**	
855	855	Temp Chemical, Mech	5.22.7.3.1	Mechanical Installations for E&M Equip. for Chemical Dosing System	90 edays	Tue 22/3/22	Mon 20/6/22	0 edays	853FF+50 days,121
856	856	Temp Chemical, Elec	5.22.7.3.2	Electrical Installations for E&M Equip. for Chemical Dosing System	90 edays	Thu 21/4/22	Wed 20/7/22	0 edays	855SS+30 edays,84
857	**857**	**Temp Chemical**	**5.22.7.3.3**	**Site Acceptance Test for E&M Equip for Chemical Dosing System**	**30 edays**	**Wed 20/7/22**	**Fri 19/8/22**	**79 edays**	**855,856**
858	**858**	**Temp Chemical**	**5.22.7.3.4**	**System Commissioning for E&M Equip for Chemical Dosing System**	**30 edays**	**Sun 6/11/22**	**Tue 6/12/22**	**0 edays**	**857,865FF**
859	**859**	**Temp Chemical**	**5.22.7.3.5**	**Risk Allowances for Completion of Processing Plant at Chemical Dosing System**	**7 edays**	**Tue 6/12/22**	**Tue 13/12/22**	**415.63 edays**	**858**
860	**860**	**Temp Chemical**	**5.22.7.3.6**	**Building Services Installations at Temp. Chemical Dosing System areas**	**314 days**	**Thu 27/1/22**	**Tue 6/12/22**	**431 days**	
861	861	Temp Chemical, BS	5.22.7.3.6.1	Lighting and Power Distribution System, Temp. Chem	90 days	Thu 27/1/22	Tue 26/4/22	0 days	852
862	862	Temp Chemical, FSI	5.22.7.3.6.2	Fire Services Installation, DG Stores, Temp. Chem	90 days	Wed 27/4/22	Mon 25/7/22	0 days	861
863	863	Temp Chemical, Earth	5.22.7.3.6.3	Lightning Protection System, Temp. Chem	30 days	Tue 26/7/22	Wed 24/8/22	0 days	862
864	864	Temp, Chemical, MVAC	5.22.7.3.6.4	Mechanical Ventilation System, Temp. Chem	14 days	Thu 25/8/22	Wed 7/9/22	0 days	863
865	865	Temp Chemical, BS	5.22.7.3.6.5	Testing and Commissioning of Building Services Installations, Temp. Chem	90 days	Thu 8/9/22	Tue 6/12/22	0 days	861,862,864
866	**866**		**5.23**	**Emergency Generator House, Portion B7 & B-7B (PS 6B.6.6)**	**1279 days**	**Thu 1/10/20**	**Mon 1/4/24**	**0 days**	
867	867	KD1B, Emergency	5.23.1	Planned Key Date Completion Date - KD1B, Emergency Generator House	0 days	Tue 1/6/21	Tue 1/6/21	0 days	871FF
868	868	Section 1, Main	5.23.2	Planned Sectional Completion Date - Section 1, Emergency Generator House	0 days	Mon 12/7/21	Mon 12/7/21	0 days	872FF,873FF
869	869	Section 2, Main	5.23.3	Planned Sectional Completion Date - Section 2, Emergency Generator House	0 days	Mon 1/4/24	Mon 1/4/24	0 days	886FF
870	**870**	**Genset, KD1B, Section 1**	**5.23.4**	**Design Submissions for Emergency Generator Set**	**252 days**	**Thu 1/10/20**	**Thu 10/6/21**	**33 days**	



Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
871	871	Genset, KD1B	5.23.4.1	CDS081-10 - Civil and dimensional requirements drawings for Emergency Generator House	90 days	Fri 1/1/21	Wed 31/3/21	62 days	
872	872	Genset, Section 1	5.23.4.2	CDS061 - Detailed Design for Emergency Generator Set	150 edays	Thu 1/10/20	Sun 28/2/21	134.38 edays	
873	873	Genset, Section 1	5.23.4.3	CDS034-6 - Detailed Design for Electrical Installations BS at Emergency Generator House, F	90 edays	Fri 12/3/21	Thu 10/6/21	0 edays	133
874	**874**		**5.23.5**	**Manufacturing and Delivery of Plant & Materials**	**285 days**	**Thu 10/6/21**	**Mon 21/3/22**	**616 days**	
875	875		5.23.5.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Thu 10/6/21	Fri 4/2/22	0 days	873
876	876		5.23.5.2	Shipping and Delivery of Plant to Site	45 days	Sat 5/2/22	Mon 21/3/22	589 days	875,878FF-60 eday
877	**877**	**Genset, Section 2**	**5.23.6**	**Site Installation Work**	**1000 days**	**Thu 10/6/21**	**Tue 5/3/24**	**27 days**	
878	878	Genset, Others	5.23.6.1	Tentative Civil Handover Date, Emergency Generator House	1 day	Sun 1/5/22	Sun 1/5/22	19 days	
879	**879**	**Genset, Main**	**5.23.6.2**	**Commencement of E&M Installation at Emergency Generator House**	**1000 days**	**Thu 10/6/21**	**Tue 5/3/24**	**27 days**	
880	880	Genset	5.23.6.2.1	Application for EPD's Approval for Installation of Diesel Engine Generator	21 days	Thu 10/6/21	Wed 30/6/21	853 days	873
881	881	Genset	5.23.6.2.2	Installation and SAT of Emergency Power Generator and associated work, GH	60 days	Wed 1/11/23	Sat 30/12/23	0 days	880,876
882	**882**	**Genset, BS**	**5.23.6.2.3**	**Building Services Installation at Emergency Generator House**	**66 days**	**Sun 31/12/2**	**Tue 5/3/24**	**27 days**	
883	883	Genset, FSI	5.23.6.2.3.1	Fire Services Installation, GH	30 days	Sun 31/12/23	Mon 29/1/24	0 days	881
884	884	Genset, MVAC	5.23.6.2.3.2	Mechanical Ventilation System, GH	14 days	Tue 30/1/24	Mon 12/2/24	0 days	883
885	885	Genset, Earth	5.23.6.2.3.3	Lightning Protection System, GH	15 days	Tue 13/2/24	Tue 27/2/24	0 days	884
886	886	Genset, BS	5.23.6.2.3.4	Testing and Commissioning of Building Services Installation, GH	7 days	Wed 28/2/24	Tue 5/3/24	27 days	885
887	**887**		**5.24**	**Deodorization System, DOU 1, Portion B7 & B-7B (PS 6B.2.6)**	**1583 days**	**Mon 2/12/1**	**Mon 1/4/24**	**0 days**	
888	888	KD1B, DOU 1	5.24.1	Planned Key Date Completion Date - KD1B, DOU 1	0 days	Tue 1/6/21	Tue 1/6/21	0 days	901FF,902FF
889	889	Section 1, Main, DOU	5.24.2	Planned Sectional Completion Date - Section 1, DOU 1	0 days	Mon 12/7/21	Mon 12/7/21	0 days	903FF
890	890	Section 2, Main, DOU	5.24.3	Planned Sectional Completion Date - Section 2, DOU 1	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
891	**891**		**5.24.4**	**Selection of Plant and Materials**	**485 days**	**Mon 2/12/1**	**Tue 30/3/21**	**4 days**	
892	**892**	**DOU, EQT001**	**5.24.4.1**	**DOU - biotrickling filter (DOU No. 1), C11, ref. EQT001**	**194 days**	**Mon 2/12/1**	**Fri 12/6/20**	**0 days**	
893	893	DOU, EQT001	5.24.4.1.1	Submission for acceptance of purchasing package	120 days	Mon 2/12/19	Mon 30/3/20	0 days	
894	894	DOU, EQT001	5.24.4.1.2	Invitation of quotations for purchasing package	60 days	Tue 31/3/20	Fri 29/5/20	0 days	893
895	895	DOU, EQT001	5.24.4.1.3	Acceptance of conforming quotation	14 days	Sat 30/5/20	Fri 12/6/20	0 days	894
896	**896**	**DOU, EQT047**	**5.24.4.2**	**DOU - FRP air ductwork, C11, EQT047**	**120 days**	**Tue 1/12/20**	**Tue 30/3/21**	**4 days**	
897	897	DOU, EQT047	5.24.4.2.1	Submission for acceptance of purchasing package	60 days	Tue 1/12/20	Fri 29/1/21	0 days	
898	898	DOU, EQT047	5.24.4.2.2	Invitation of quotations for purchasing package	30 days	Sat 30/1/21	Sun 28/2/21	0 days	897
899	899	DOU, EQT047	5.24.4.2.3	Acceptance of conforming quotation	30 days	Mon 1/3/21	Tue 30/3/21	0 days	898
900	**900**	**DOU, , KD1A, KD1B, Section 1**	**5.24.5**	**Design Submissions for DOU No. 1**	**359 days**	**Wed 15/7/2**	**Thu 8/7/21**	**4 days**	
901	901	DOU, KD1A	5.24.5.1	Electrical schematic drawings for Deodorisation Systems	90 days	Wed 15/7/20	Mon 12/10/2	232 days	
902	902	DOU, KD1B, CW	5.24.5.2	CDS081-7 - Civil and dimensional requirements drawings for DOU No. 1	70 days	Fri 28/8/20	Thu 5/11/20	208 days	
903	903	DOU, Section 1, Mech, Elec	5.24.5.3	CDS007-1 - Detailed Design for Deodorisation System, DOU No. 1	100 edays	Tue 30/3/21	Thu 8/7/21	0.63 edays	895,899
904	**904**		**5.24.6**	**Manufacturing and Delivery of Plant & Materials**	**285 days**	**Fri 9/7/21**	**Tue 19/4/22**	**498 days**	
905	**905**	**DOU**	**5.24.6.1**	**DOU 1**	**285 days**	**Fri 9/7/21**	**Tue 19/4/22**	**498 days**	
906	906	DOU	5.24.6.1.1	Manufacturing and Factory Acceptance Test of Plant	240 days	Fri 9/7/21	Sat 5/3/22	0 days	903
907	907	DOU	5.24.6.1.2	Shipping and Delivery of Plant to site	45 days	Sun 6/3/22	Tue 19/4/22	59 days	906,912SS-60 eday
908	**908**	**DOU**	**5.24.6.2**	**FRP Air Ductwork**	**245 days**	**Fri 9/7/21**	**Thu 10/3/22**	**538 days**	
909	909	DOU	5.24.6.2.1	Manufacturing and Factory Acceptance Test of Plant	200 days	Fri 9/7/21	Mon 24/1/22	0 days	903
910	910	DOU	5.24.6.2.2	Shipping and Delivery of Plant to Site	45 days	Tue 25/1/22	Thu 10/3/22	99 days	909,912SS-60 eday
911	**911**	**DOU, Section 2**	**5.24.7**	**Site Installation Work**	**314 days**	**Wed 26/1/22**	**Mon 5/12/22**	**439 days**	
912	912	DOU, Others	5.24.7.1	Tentative Civil Handover, DOU 1	1 day	Wed 26/1/22	Wed 26/1/22	59 days	
913	913	DOU, Others	5.24.7.2	Tentative Civil Handover Date, underground air pipework for DOU 1 (by others)	1 day	Mon 1/8/22	Mon 1/8/22	30 days	
914	**914**	**DOU 1, Main**	**5.24.7.3**	**Commencement of E&M Installation at DOU 1**	**171 days**	**Fri 17/6/22**	**Mon 5/12/22**	**439 days**	
915	915	DOU, Mech	5.24.7.3.1	Mechanical Installations for DOU 1	90 edays	Fri 17/6/22	Thu 15/9/22	0 edays	913FF+45 days,912
916	916	DOU, Elec	5.24.7.3.2	Electrical Installations for DOU 1	90 edays	Sun 17/7/22	Sat 15/10/22	0 edays	915SS+30 edays
917	917	DOU	5.24.7.3.3	Site Acceptance Test for DOU1	30 edays	Sat 15/10/22	Mon 14/11/22	0 edays	915,916
918	918	DOU	5.24.7.3.4	System Commissioning for DOU 1	21 edays	Mon 14/11/2	Mon 5/12/22	423.63 edays	917
919	**919**	**Section 2**	**5.25**	**Deodorization System, DOU 2A, Portion B-4 (PS 6B.2.6)**	**1583 days**	**Mon 2/12/1**	**Mon 1/4/24**	**0 days**	
920	920	KD1B, DOU 2	5.25.1	Planned Key Date Completion Date - KD1B, DOU 2A	0 days	Tue 1/6/21	Tue 1/6/21	0 days	
921	921	Section 1, Main, DOU	5.25.2	Planned Sectional Completion Date - Section 1, DOU 2A	0 days	Mon 12/7/21	Mon 12/7/21	0 days	929FF
922	922	Section 2, Main, DOU	5.25.3	Planned Sectional Completion Date - Section 2, DOU 2A	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
923	**923**	**DOU**	**5.25.4**	**Selection of Plant and Materials**	**194 days**	**Mon 2/12/1**	**Fri 12/6/20**	**0 days**	
924	**924**	**DOU, EQT028**	**5.25.4.1**	**DOU - activated carbon filter (DOU No. 2A, No. 3A, No. 3B), C11, ref. EQT028**	**194 days**	**Mon 2/12/1**	**Fri 12/6/20**	**0 days**	
925	925	DOU, EQT028	5.25.4.1.1	Submission for acceptance of purchasing package	120 days	Mon 2/12/19	Mon 30/3/20	0 days	
926	926	DOU, EQT028	5.25.4.1.2	Invitation of quotations for purchasing package	60 days	Tue 31/3/20	Fri 29/5/20	0 days	925
927	927	DOU, EQT028	5.25.4.1.3	Acceptance of conforming quotation	14 days	Sat 30/5/20	Fri 12/6/20	0 days	926
928	**928**	**DOU, KD1B, Section 1**	**5.25.5**	**Design Submissions for DOU No. 2A**	**200 days**	**Tue 1/9/20**	**Sat 20/3/21**	**115 days**	



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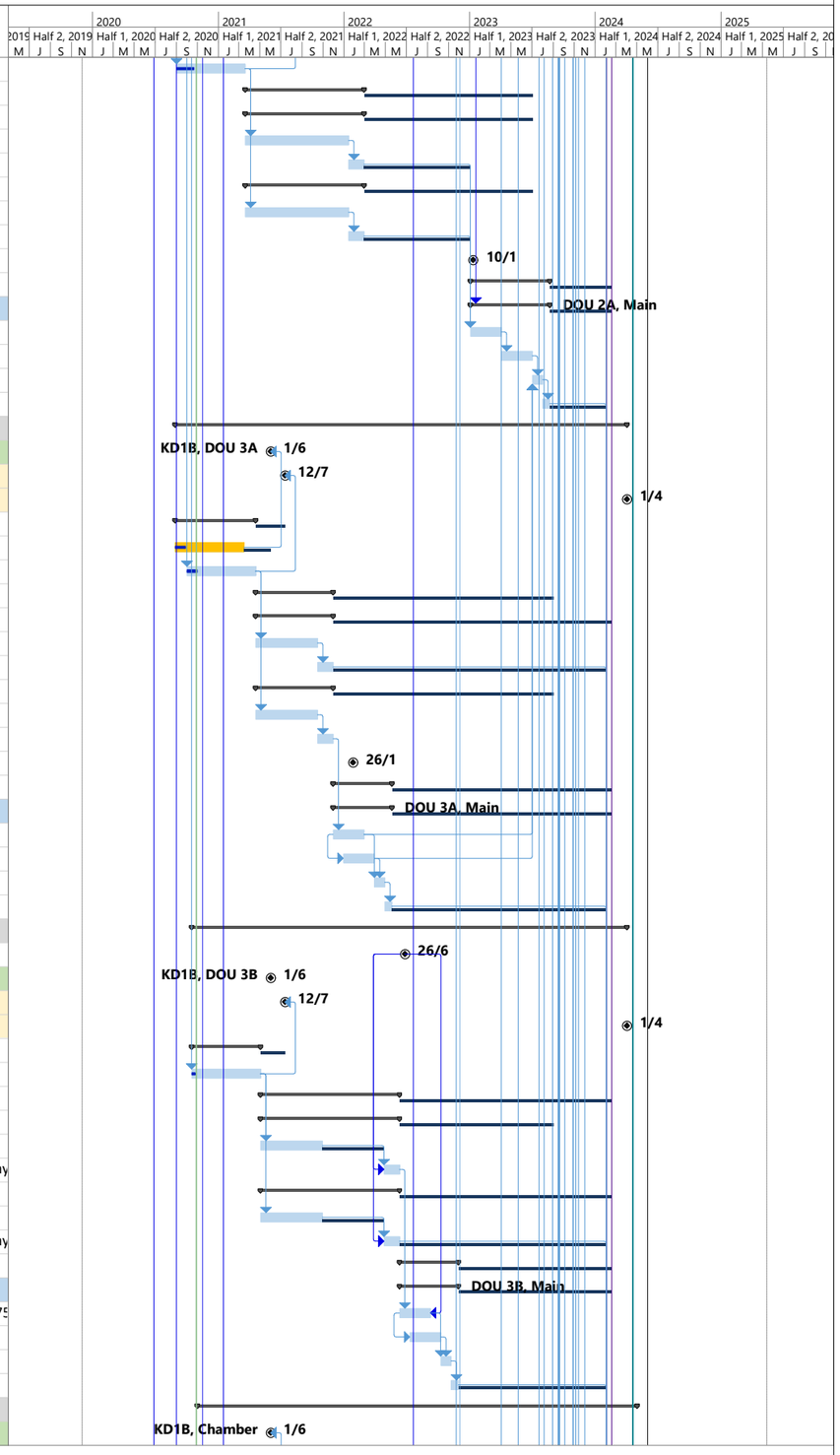
Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
929	929	DOU, Section 1, Mech, Elec	5.25.5.1	CDS007-2 - Detailed Design for Deodorisation System, DOU No. 2A	200 edays	Tue 1/9/20	Sat 20/3/21	0 edays	927
930	**930**		**5.25.6**	**Manufacturing and Delivery of Plant & Materials**	**345 days**	**Sat 20/3/21**	**Sun 27/2/22**	**489 days**	
931	**931**		**5.25.6.1**	**DOU 2A**	**345 days**	**Sat 20/3/21**	**Sun 27/2/22**	**489 days**	
932	932	DOU	5.25.6.1.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 20/3/21	Thu 13/1/22	0 days	929
933	933	DOU	5.25.6.1.2	Shipping and Delivery of Plant to site	45 days	Fri 14/1/22	Sun 27/2/22	309 days	932
934	**934**		**5.25.6.2**	**FRP Air Ductwork**	**345 days**	**Sat 20/3/21**	**Sun 27/2/22**	**489 days**	
935	935	DOU	5.25.6.2.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 20/3/21	Thu 13/1/22	0 days	929
936	936	DOU	5.25.6.2.2	Shipping and Delivery of Plant to site	45 days	Fri 14/1/22	Sun 27/2/22	309 days	935
937	937	DOU, Others	5.25.7	Tentative Civil Handover, DOU 2A	1 day	Tue 10/1/23	Tue 10/1/23	0 days	
938	**938**	**DOU, Section 2**	**5.25.8**	**Site Installation Work**	**231 days**	**Mon 2/1/23**	**Mon 21/8/23**	**180 days**	
939	**939**	**DOU 2A, Main**	**5.25.8.1**	**Commencement of E&M Installation at DOU 2A**	**231 days**	**Mon 2/1/23**	**Mon 21/8/23**	**180 days**	**559**
940	940	DOU, Mech	5.25.8.1.1	Mechanical Installations for DOU 2A	90 edays	Mon 2/1/23	Sun 2/4/23	0 edays	933,936
941	941	DOU, Elec	5.25.8.1.2	Electrical Installations for DOU 2A	90 edays	Sun 2/4/23	Sat 1/7/23	0 edays	940
942	942	DOU	5.25.8.1.3	Site Acceptance Test for E&M Equip for DOU 2A	30 edays	Sat 1/7/23	Mon 31/7/23	0 edays	961,962,941
943	943	DOU	5.25.8.1.4	System Commissioning Test for DOU 2A	21 edays	Mon 31/7/23	Mon 21/8/23	164.63 edays	942
944	**944**		**5.26**	**Deodorization System, DOU 3A, Portion B7 & B-7B (PS 6B.2.6)**	**1313 days**	**Fri 28/8/20**	**Mon 1/4/24**	**0 days**	
945	945	KD1B, DOU 3A	5.26.1	Planned Key Date Completion Date - KD1B, DOU 3A	0 days	Tue 1/6/21	Tue 1/6/21	0 days	949FF
946	946	Section 1, Main, DOU	5.26.2	Planned Sectional Completion Date - Section 1, DOU 3A	0 days	Mon 12/7/21	Mon 12/7/21	0 days	950FF
947	947	Section 2, Main, DOU	5.26.3	Planned Sectional Completion Date - Section 2, DOU 3A	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
948	**948**	**DOU, KD1B, Section 1**	**5.26.4**	**Design Submissions for DOU No. 3A**	**234 days**	**Fri 28/8/20**	**Mon 19/4/21**	**85 days**	
949	949	DOU, KD1B, CW	5.26.4.1	CDS081-8 - Civil and dimensional requirements drawings for DOU No. 3A	200 days	Fri 28/8/20	Mon 15/3/21	78 days	
950	950	DOU, Section 1, Mech, Elec	5.26.4.2	CDS007-3 - Detailed Design for Deodorisation System, DOU No. 3A	200 edays	Thu 1/10/20	Mon 19/4/21	0 edays	927
951	**951**		**5.26.5**	**Manufacturing and Delivery of Plant & Materials**	**225 days**	**Mon 19/4/21**	**Tue 30/11/21**	**639 days**	
952	**952**		**5.26.5.1**	**DOU 3A**	**225 days**	**Mon 19/4/21**	**Tue 30/11/21**	**810 days**	
953	953	DOU	5.26.5.1.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 19/4/21	Sat 16/10/21	0 edays	950
954	954	DOU	5.26.5.1.2	Shipping and Delivery of Plant to Site	45 edays	Sat 16/10/21	Tue 30/11/21	794 edays	953
955	**955**		**5.26.5.2**	**FRP Air Ductwork**	**225 days**	**Mon 19/4/21**	**Tue 30/11/21**	**639 days**	
956	956	DOU	5.26.5.2.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 19/4/21	Sat 16/10/21	0 edays	950
957	957	DOU	5.26.5.2.2	Shipping and Delivery of Plant to Site	45 edays	Sat 16/10/21	Tue 30/11/21	0 edays	956
958	958	DOU, Others	5.26.6	Tentative Civil Handover, DOU 3A	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
959	**959**	**DOU, Section 2**	**5.26.7**	**Site Installation Work**	**171 days**	**Tue 30/11/2**	**Fri 20/5/22**	**639 days**	
960	**960**	**DOU 3A, Main**	**5.26.7.1**	**Commencement of E&M Installation at DOU 3A**	**171 days**	**Tue 30/11/2**	**Fri 20/5/22**	**639 days**	
961	961	DOU, Mech	5.26.7.1.1	Mechanical Installations for DOU 3A	90 edays	Tue 30/11/21	Mon 28/2/22	0 edays	957
962	962	DOU, Elec	5.26.7.1.2	Electrical Installations for DOU 3A	90 edays	Thu 30/12/21	Wed 30/3/22	0 edays	961SS+30 edays
963	963	DOU	5.26.7.1.3	Site Acceptance Test for E&M Equip for DOU 3A	30 edays	Wed 30/3/22	Fri 29/4/22	0 edays	961,962
964	964	DOU	5.26.7.1.4	System Commissioning Test for DOU 3A	21 edays	Fri 29/4/22	Fri 20/5/22	623 edays	963
965	**965**		**5.27**	**Deodorization System, DOU 3B, Portion B-5B (PS 6B.2.6)**	**1265 days**	**Thu 15/10/2**	**Mon 1/4/24**	**0 days**	
966	966	DOU, others	5.27.1	Tentative Civil Handover Date, underground air pipework for DOU 3B (by others)	1 day	Sun 26/6/22	Sun 26/6/22	0 days	
967	967	KD1B, DOU 3B	5.27.2	Planned Key Date Completion Date - KD1B, DOU 3B	0 days	Tue 1/6/21	Tue 1/6/21	0 days	
968	968	Section 1, Main, DOU	5.27.3	Planned Sectional Completion Date - Section 1, DOU 3B	0 days	Mon 12/7/21	Mon 12/7/21	0 days	971FF
969	969	Section 2, Main, DOU	5.27.4	Planned Sectional Completion Date - Section 2, DOU 3B	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
970	**970**	**DOU Section 1**	**5.27.5**	**Design Submissions for DOU No. 3B**	**200 days**	**Thu 15/10/2**	**Mon 3/5/21**	**71 days**	
971	971	DOU, Section 1, Mech, Elec	5.27.5.1	CDS007-4 - Detailed Design for Deodorisation System, DOU No. 3B	200 edays	Thu 15/10/2	Mon 3/5/21	0 edays	927
972	**972**		**5.27.6**	**Manufacturing and Delivery of Plant & Materials**	**404 days**	**Mon 3/5/21**	**Sat 11/6/22**	**617 days**	
973	**973**		**5.27.6.1**	**DOU 3B**	**404 days**	**Mon 3/5/21**	**Sat 11/6/22**	**446 days**	
974	974	DOU	5.27.6.1.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 3/5/21	Sat 30/10/21	179 edays	971
975	975	DOU	5.27.6.1.2	Shipping and Delivery of Plant to Site	45 edays	Wed 27/4/22	Sat 11/6/22	0 edays	974,966SS-60 eday
976	**976**		**5.27.6.2**	**FRP Air Ductwork**	**404 days**	**Mon 3/5/21**	**Sat 11/6/22**	**617 days**	
977	977	DOU	5.27.6.2.1	Manufacturing and Factory Acceptance Test of Plant	180 edays	Mon 3/5/21	Sat 30/10/21	179 edays	971
978	978	DOU	5.27.6.2.2	Shipping and Delivery of Plant to Site	45 edays	Wed 27/4/22	Sat 11/6/22	601 edays	977,966SS-60 eday
979	**979**	**DOU, Section 2**	**5.27.7**	**Site Installation Work**	**171 days**	**Sat 11/6/22**	**Tue 29/11/22**	**446 days**	
980	**980**	**DOU 3B, Main**	**5.27.7.1**	**Commencement of E&M Installation at DOU 3B**	**171 days**	**Sat 11/6/22**	**Tue 29/11/22**	**446 days**	
981	981	DOU, Mech	5.27.7.1.1	Mechanical Installations for DOU 3B	90 edays	Sat 11/6/22	Fri 9/9/22	0 edays	966FF+30 days,975
982	982	DOU, Elec	5.27.7.1.2	Electrical Installations for DOU 3B	90 edays	Mon 11/7/22	Sun 9/10/22	0 edays	981SS+30 edays
983	983	DOU	5.27.7.1.3	Site Acceptance Test for E&M Equip for DOU 3B	30 edays	Sun 9/10/22	Tue 8/11/22	0 edays	981,982
984	984	DOU	5.27.7.1.4	System Commissioning Test for DOU 3B	21 edays	Tue 8/11/22	Tue 29/11/22	430 edays	983
985	**985**		**5.28**	**Flowmeter and Valve Chambers, Portion B7 & B-7B (PS 6B.2.13)**	**1278 days**	**Sun 1/11/20**	**Wed 1/5/24**	**0 days**	
986	986	KD1B, Chamber	5.28.1	Planned Key Date Completion Date - KD1B, Chambers	0 days	Tue 1/6/21	Tue 1/6/21	0 days	991FF



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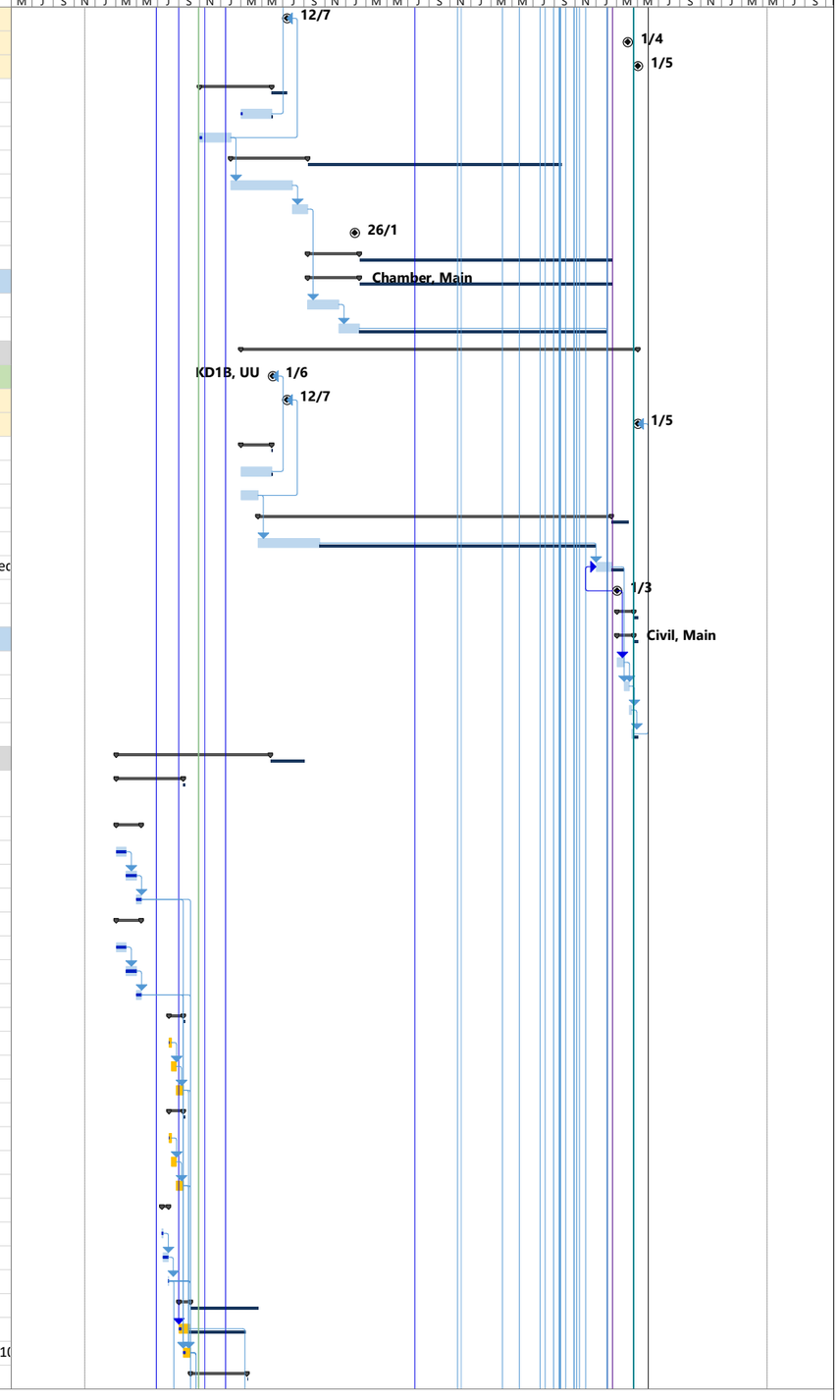
Task | Milestone | Project Summary | Late | Critical Split | Manual Progress | Milestone (Actual)
Milestone, Tentative | Summary | Manual Summary | Critical | Progress | Slack (Float) | Slack

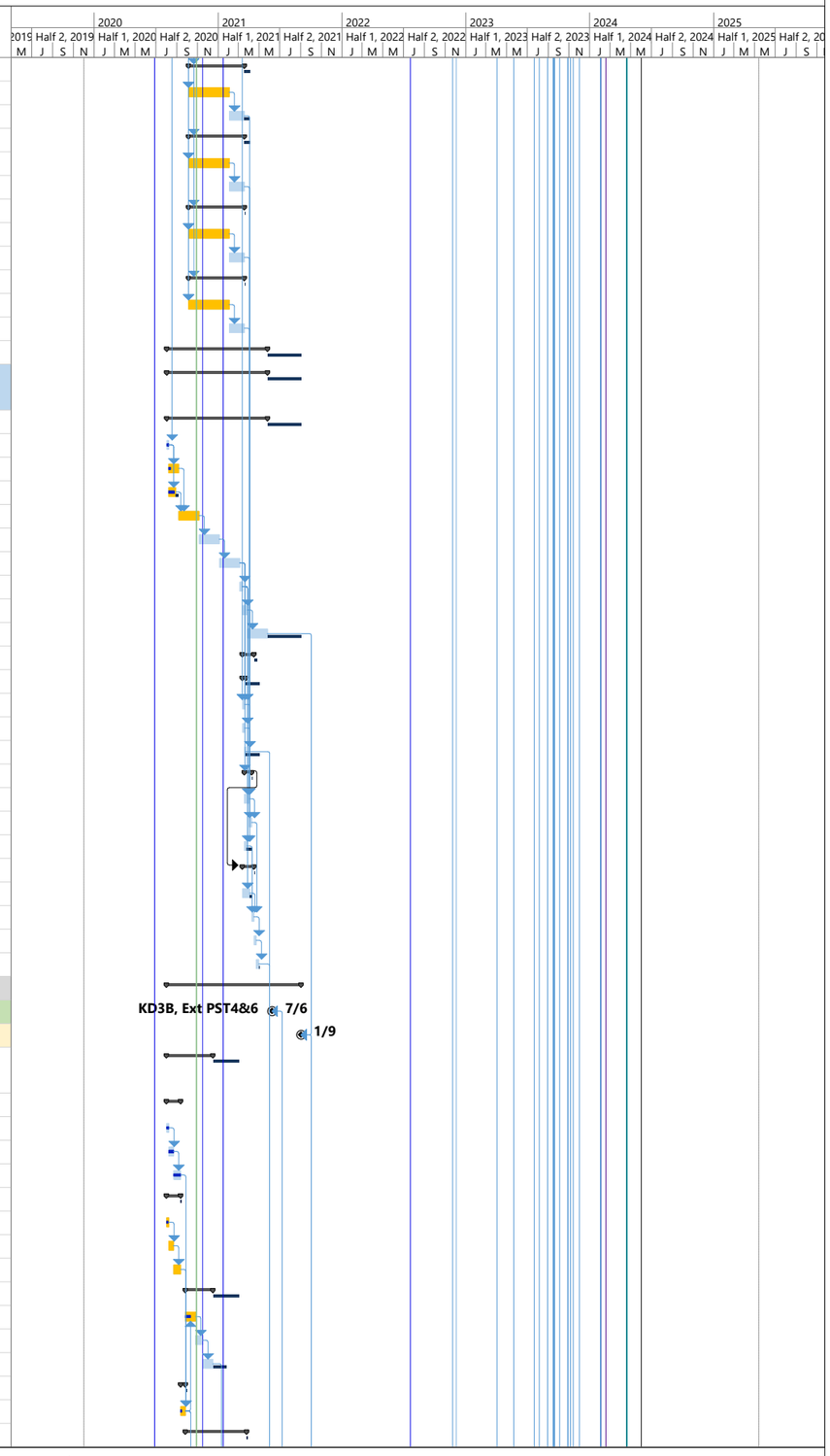
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
987	987	Section 1, Main, Chamber	5.28.2	Planned Sectional Completion Date - Section 1, Chambers	0 days	Mon 12/7/21	Mon 12/7/21	0 days	992FF
988	988	Section 2, Main, Chamber	5.28.3	Planned Sectional Completion Date - Section 2, Chambers	0 days	Mon 1/4/24	Mon 1/4/24	0 days	
989	989	Section 4, Main	5.28.4	Planned Sectional Completion Date - Section 4, Chambers	0 days	Wed 1/5/24	Wed 1/5/24	0 days	
990	**990**	**Chamber, KD1B, Section 1**	**5.28.5**	**Design Submissions for Valve and Flowmeter Chambers**	**210 days**	**Sun 1/11/20**	**Sat 29/5/21**	**44 days**	
991	991	Chamber, KD1B, CW	5.28.5.1	CDS081-9 - Civil and dimensional requirements drawings for Valve and Flowmeter Chambe	90 days	Mon 1/3/21	Sat 29/5/21	3 days	
992	992	Chamber, Section 1	5.28.5.2	CDS018 - Detailed Design for Flowmeter and Valve Chambers	90 edays	Sun 1/11/20	Sat 30/1/21	0 edays	
993	**993**		**5.28.6**	**Manufacturing and Delivery of Plant & Materials**	**225 days**	**Sat 30/1/21**	**Sat 11/9/21**	**739 days**	
994	994		5.28.6.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Sat 30/1/21	Wed 28/7/21	0 days	992
995	995		5.28.6.2	Shipping and Delivery of Plant to Site	45 days	Thu 29/7/21	Sat 11/9/21	0 days	994
996	996	DOU, Others	5.28.7	Tentative Civil Handover, Chambers	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
997	**997**	**Chamber, Section 2**	**5.28.8**	**Site Installation Work**	**150 days**	**Sun 12/9/21**	**Tue 8/2/22**	**739 days**	
998	**998**	**Chamber, Main**	**5.28.8.1**	**Commencement of Valves and Flowmeters Installation at Chambers**	**150 days**	**Sun 12/9/21**	**Tue 8/2/22**	**739 days**	
999	999	Chamber, Mech	5.28.8.1.1	Installation of valves and flowmeters	90 days	Sun 12/9/21	Fri 10/12/21	0 days	995
1000	1000	Chamber	5.28.8.1.2	cables laying and terminations	60 days	Sat 11/12/21	Tue 8/2/22	723 days	999
1001	**1001**		**5.29**	**Underground Pipework, Modification and Connection Works, Portion B-9B (PS 6B.2.22)**	**1158 days**	**Mon 1/3/21**	**Wed 1/5/24**	**0 days**	
1002	1002	KD1B, UU	5.29.1	Planned Key Date Completion Date - KD1B, UU	0 days	Tue 1/6/21	Tue 1/6/21	0 days	1006FF
1003	1003	Section 1, UU	5.29.2	Planned Sectional Completion Date - Section 1, Underground Pipework	0 days	Mon 12/7/21	Mon 12/7/21	0 days	1007FF
1004	1004	Section 4, UU	5.29.3	Planned Sectional Completion Date - Section 4, Underground Pipework	0 days	Wed 1/5/24	Wed 1/5/24	0 days	1017FF
1005	**1005**	**Civil**	**5.29.4**	**Design Submissions**	**90 days**	**Mon 1/3/21**	**Sun 30/5/21**	**3 days**	
1006	1006	Civil, Section 1	5.29.4.1	CDS015 - Detailed Design for Underground Pipework Modification and Connection with th	90 edays	Mon 1/3/21	Sun 30/5/21	2.38 edays	
1007	1007	Civil, Section 1	5.29.4.2	CDS016 - Detailed Design for Temporary Pumping System for maintaining the existing bior	50 edays	Mon 1/3/21	Tue 20/4/21	0 edays	
1008	**1008**		**5.29.5**	**Manufacturing and Delivery of Plant & Materials**	**1031 days**	**Tue 20/4/21**	**Wed 14/2/24**	**49 days**	
1009	1009		5.29.5.1	Manufacturing and Factory Acceptance Test of Plant	180 days	Tue 20/4/21	Sat 16/10/21	806 days	1007
1010	1010		5.29.5.2	Shipping and Delivery of Plant to Site	45 days	Mon 1/1/24	Wed 14/2/24	37 days	1009,1011SS-60 ec
1011	1011	DOU, Others	5.29.6	Tentative Civil Handover, Road	1 day	Fri 1/3/24	Fri 1/3/24	0 days	
1012	**1012**	**Civil, Section 4**	**5.29.7**	**Site Installation**	**49 days**	**Sat 2/3/24**	**Fri 19/4/24**	**12 days**	
1013	**1013**	**Civil, Main**	**5.29.7.1**	**Commencement of underground pipework modification and connection works**	**49 days**	**Sat 2/3/24**	**Fri 19/4/24**	**12 days**	
1014	1014	Civil	5.29.7.1.1	Temporary Flow Diversion and Road Excavation Work	21 days	Sat 2/3/24	Fri 22/3/24	0 days	1011
1015	1015	Civil	5.29.7.1.2	Pipe Laying and connection works	14 days	Sat 23/3/24	Fri 5/4/24	0 days	1014,1010
1016	1016	Civil	5.29.7.1.3	Pressure Tests	7 days	Sat 6/4/24	Fri 12/4/24	0 days	1015
1017	1017	Civil	5.29.7.1.4	Make Good	7 days	Sat 13/4/24	Fri 19/4/24	12 days	1016
1018	**1018**		**5.30**	**Temporary Filtrate Lifting Well and Eq. Tank, Portion B-3B (PS 6B.2.16)**	**450 days**	**Mon 2/3/20**	**Tue 25/5/21**	**99 days**	
1019	**1019**	**Temp Filtrate**	**5.30.1**	**Selection of Suppliers for major plant and materials and Civil Subcontractor for Temporary Filtrate Lifting Well and Eq. Tank**	**196 days**	**Mon 2/3/20**	**Sun 13/9/20**	**5.25 days**	
1020	**1020**	**Temp Filtrate, EQT011**	**5.30.1.1**	**Mis - filtrate lift pumps and filtrate transfer pumps, C11, ref. EQT011**	**73 days**	**Mon 2/3/20**	**Wed 13/5/20**	**0 days**	
1021	1021	Temp Filtrate	5.30.1.1.1	Submission for acceptance of purchasing package	29 days	Mon 2/3/20	Mon 30/3/20	0 days	
1022	1022	Temp Filtrate	5.30.1.1.2	Invitation of quotations for purchasing package	30 days	Tue 31/3/20	Wed 29/4/20	0 days	1021
1023	1023	Temp Filtrate	5.30.1.1.3	Acceptance of conforming quotation and acceptance for Manufacture	14 days	Thu 30/4/20	Wed 13/5/20	0 days	1022
1024	**1024**	**Temp Filtrate, EQT011**	**5.30.1.2**	**Mis - Instrumentations**	**73 days**	**Mon 2/3/20**	**Wed 13/5/20**	**0 days**	
1025	1025	Temp Filtrate	5.30.1.2.1	Submission for acceptance of purchasing package	29 days	Mon 2/3/20	Mon 30/3/20	0 days	
1026	1026	Temp Filtrate	5.30.1.2.2	Invitation of quotations for purchasing package	30 days	Tue 31/3/20	Wed 29/4/20	0 days	1025
1027	1027	Temp Filtrate	5.30.1.2.3	Acceptance of conforming quotation and acceptance for Manufacture	14 days	Thu 30/4/20	Wed 13/5/20	0 days	1026
1028	**1028**	**Temp Filtrate, EQT011**	**5.30.1.3**	**Mis - Pipework**	**42 days**	**Mon 3/8/20**	**Sun 13/9/20**	**5.25 days**	
1029	1029	Temp Filtrate	5.30.1.3.1	Submission for acceptance of purchasing package	7 days	Mon 3/8/20	Sun 9/8/20	0 days	
1030	1030	Temp Filtrate	5.30.1.3.2	Invitation of quotations for purchasing package	14 days	Mon 10/8/20	Sun 23/8/20	0 days	1029
1031	1031	Temp Filtrate	5.30.1.3.3	Acceptance of conforming quotation and acceptance for Manufacture	21 days	Mon 24/8/20	Sun 13/9/20	0 days	1030
1032	**1032**	**Temp Filtrate, EQT011**	**5.30.1.4**	**Mis - Valve**	**42 days**	**Mon 3/8/20**	**Sun 13/9/20**	**5.25 days**	
1033	1033	Temp Filtrate	5.30.1.4.1	Submission for acceptance of purchasing package	7 days	Mon 3/8/20	Sun 9/8/20	0 days	
1034	1034	Temp Filtrate	5.30.1.4.2	Invitation of quotations for purchasing package	14 days	Mon 10/8/20	Sun 23/8/20	0 days	1033
1035	1035	Temp Filtrate	5.30.1.4.3	Acceptance of conforming quotation and acceptance for Manufacture	21 days	Mon 24/8/20	Sun 13/9/20	0 days	1034
1036	**1036**	**Temp Filtrate, EQT011**	**5.30.1.5**	**Civil Work Subletting Package (Repeated WBS 5.13.17)**	**19 days**	**Tue 14/7/20**	**Sat 1/8/20**	**0 days**	
1037	1037	Temp Filtrate	5.30.1.5.1	Submission for acceptance of subletting package	3 days	Tue 14/7/20	Thu 16/7/20	0 days	
1038	1038	Temp Filtrate	5.30.1.5.2	Invitation of tender for subletting package	14 days	Fri 17/7/20	Thu 30/7/20	0 days	1037
1039	1039	Temp Filtrate	5.30.1.5.3	Acceptance of conforming quotation and acceptance for Manufacture	2 days	Fri 31/7/20	Sat 1/8/20	0 days	1038
1040	**1040**	**Temp Filtrate, KD3B**	**5.30.2**	**Design Submissions for Temporary Filtrate Lifting Well and Eq. Tank**	**34 days**	**Tue 1/9/20**	**Sun 4/10/20**	**199 days**	
1041	1041	Temp Filtrate, Section 3, LA	5.30.2.1	CDS050-5 - Detailed Design for Lifting Appliances - Temp. Filtrate Eq. System, Existing Slud	30 edays	Tue 1/9/20	Thu 1/10/20	163 edays	113
1042	1042	Temp Filtrate, Section 3	5.30.2.2	Design submission for E&M Installation works for temp. filtrate eq. system	21 days	Mon 14/9/20	Sun 4/10/20	0 days	1023,1027,1031,1(
1043	**1043**		**5.30.3**	**Manufacturing and Delivery of Plant & Materials**	**165 days**	**Mon 5/10/2(**	**Thu 18/3/21**	**2 days**	



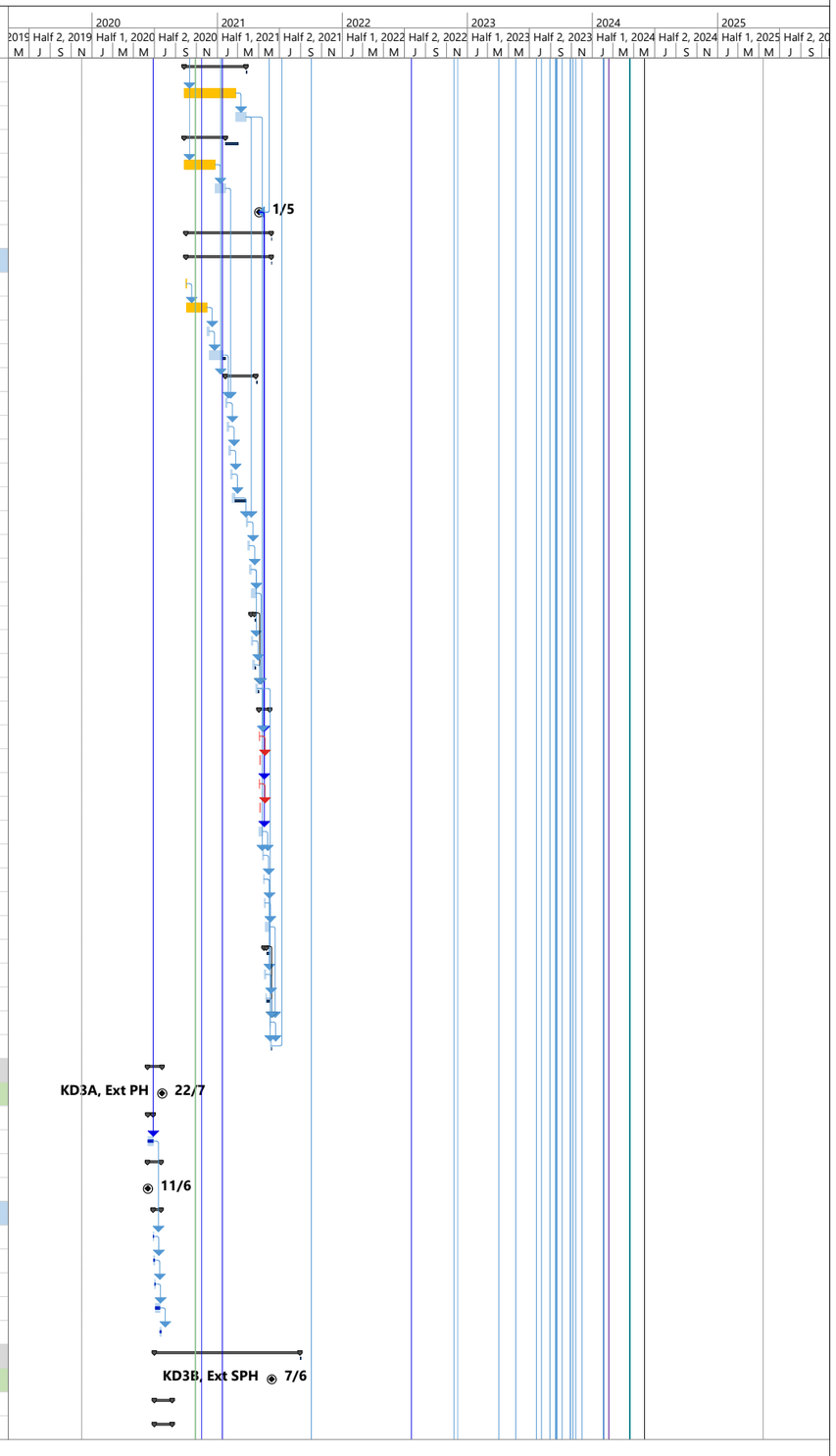
Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

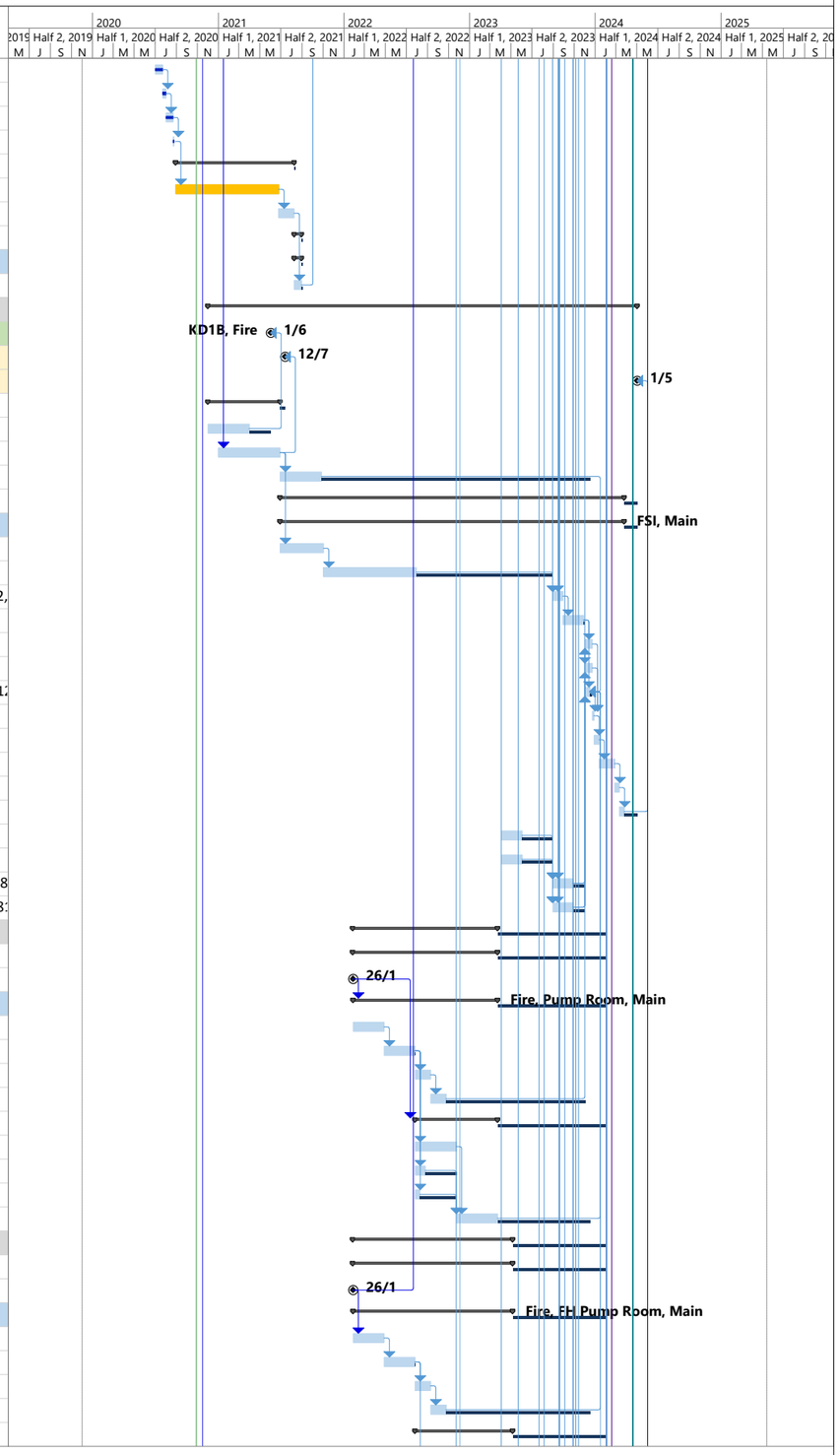
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
1044	**1044**	**Temp Filtrate,**	**5.30.3.1**	**Filtrate Lift Pumps and Filtrate Transfer Pump, EQT011**	**165 days**	**Mon 5/10/2(**	**Thu 18/3/21**	**16 days**	**1042**
1045	1045	Temp Filtrate	5.30.3.1.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 5/10/20	Mon 1/2/21	0 days	1039,1023
1046	1046	Temp Filtrate	5.30.3.1.2	Shipping and Delivery of Plant to site	45 days	Tue 2/2/21	Thu 18/3/21	14 days	1045
1047	**1047**	**Temp Filtrate,**	**5.30.3.2**	**Instrumentations**	**165 days**	**Mon 5/10/2(**	**Thu 18/3/21**	**16 days**	**1042**
1048	1048	Temp Filtrate	5.30.3.2.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 5/10/20	Mon 1/2/21	0 days	1039,1027
1049	1049	Temp Filtrate	5.30.3.2.2	Shipping and Delivery of Plant to site	45 days	Tue 2/2/21	Thu 18/3/21	0 days	1048
1050	**1050**	**Temp Filtrate,**	**5.30.3.3**	**Pipework**	**165 days**	**Mon 5/10/2(**	**Thu 18/3/21**	**2 days**	**1042**
1051	1051	Temp Filtrate	5.30.3.3.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 5/10/20	Mon 1/2/21	0 days	1039,1031
1052	1052	Temp Filtrate	5.30.3.3.2	Shipping and Delivery of Plant to site	45 days	Tue 2/2/21	Thu 18/3/21	0 days	1051
1053	**1053**	**Temp Filtrate,**	**5.30.3.4**	**Valve**	**165 days**	**Mon 5/10/2(**	**Thu 18/3/21**	**2 days**	**1042**
1054	1054	Temp Filtrate	5.30.3.4.1	Manufacturing and Factory Acceptance Test of Plant	120 days	Mon 5/10/20	Mon 1/2/21	0 days	1039,1035
1055	1055	Temp Filtrate	5.30.3.4.2	Shipping and Delivery of Plant to site	45 days	Tue 2/2/21	Thu 18/3/21	0 days	1054
1056	**1056**	**Temp Filtrate, Section 3**	**5.30.4**	**Site Installation Work**	**297 days**	**Sat 1/8/20**	**Tue 25/5/21**	**99 days**	
1057	**1057**	**Temp Filtrate, Main**	**5.30.4.1**	**Commencement of Civil Construction and E&M Installation at Temp. Filtrate Lifting Well and Eq. Tank**	**297 days**	**Sat 1/8/20**	**Tue 25/5/21**	**99 days**	
1058	**1058**		**5.30.4.1.1**	**Civil Construction Work**	**297 days**	**Sat 1/8/20**	**Tue 25/5/21**	**99 days**	
1059	1059	Temp Filtrate	5.30.4.1.1.1	Civil on-site survey and report submission for acceptance	5 edays	Sat 1/8/20	Thu 6/8/20	0 edays	1039
1060	1060	Temp Filtrate	5.30.4.1.1.2	Civil structural design and drawing submission for acceptance	30 days	Fri 7/8/20	Sat 5/9/20	0 days	1059
1061	1061		5.30.4.1.1.3	Site Clearance, UU diversion and construction of U-channel	21 days	Fri 7/8/20	Thu 27/8/20	9 days	1059
1062	1062	Temp Filtrate	5.30.4.1.1.4	ELS (Sheeting and Excavation)	60 days	Sun 6/9/20	Wed 4/11/20	0 days	1061,1060
1063	1063		5.30.4.1.1.5	Grouting Works	60 days	Thu 5/11/20	Sun 3/1/21	0 days	1062
1064	1064	Temp Filtrate	5.30.4.1.1.6	RC structure works including cast-in items	60 days	Mon 4/1/21	Thu 4/3/21	0 days	1063
1065	1065		5.30.4.1.1.7	Removal Formwork and Flasework	8 days	Fri 5/3/21	Fri 12/3/21	0 days	1064
1066	1066		5.30.4.1.1.8	Waterproofing	14 days	Sat 13/3/21	Fri 26/3/21	0 days	1065
1067	1067		5.30.4.1.1.9	Other architectual works and finishing works	60 days	Sat 27/3/21	Tue 25/5/21	99 days	1066
1068	**1068**		**5.30.4.1.2**	**E&M Installation Work**	**34 days**	**Sat 13/3/21**	**Thu 15/4/21**	**8 days**	
1069	**1069**	**Temp Filtrate**	**5.30.4.1.2.1**	**Installation of Lifting Appliances at Temporary Filtrate Lifting Well and Eq. Tank**	**10 days**	**Sat 13/3/21**	**Mon 22/3/21**	**40 days**	
1070	1070	Temp Filtrate, LA	5.30.4.1.2.1.1	GF MR LA-09-01 SWL 1t	7 days	Sat 13/3/21	Fri 19/3/21	0 days	1064,1041,1065
1071	1071	Temp Filtrate, LA	5.30.4.1.2.1.2	GF MR LA-09-02 SWL 1t	7 days	Sat 13/3/21	Fri 19/3/21	0 days	1065
1072	1072	Temp Filtrate, LA	5.30.4.1.2.1.3	Site Acceptance test and loading test of LA	3 days	Sat 20/3/21	Mon 22/3/21	40 days	1070,1071
1073	**1073**	**Temp Filtrate, Mech**	**5.30.4.1.2.2**	**Mechanical Installations for Temp. Filtrate Lifting Well and Eq. Tank**	**21 days**	**Fri 19/3/21**	**Thu 8/4/21**	**2 days**	**1064**
1074	1074	Temp Filtrate, Mech, EQT036	5.30.4.1.2.2.1	Installation of pipework, chemical pipework and valves, EQT036	14 days	Fri 19/3/21	Thu 1/4/21	0 days	1065,1052,1055
1075	1075	Temp Filtrate, Mech	5.30.4.1.2.2.2	Installation of pumps	7 days	Fri 2/4/21	Thu 8/4/21	0 days	1074,1046
1076	1076	Temp Filtrate, Mech, EQT035-3	5.30.4.1.2.2.3	Installation of instrumentations, EQT035-3	7 days	Fri 19/3/21	Thu 25/3/21	14 days	1065,1049
1077	**1077**	**Temp Filtrate**	**5.30.4.1.2.3**	**Electrical Installations for Temp. Filtrate Lifting Well and Eq. Tank**	**34 days**	**Sat 13/3/21**	**Thu 15/4/21**	**2 days**	**1073FS-30 days**
1078	1078	Temp Filtrate, Elec	5.30.4.1.2.3.1	Installation of cable trays and cable containments	21 days	Sat 13/3/21	Fri 2/4/21	6 days	1065
1079	1079	Temp Filtrate, Elec	5.30.4.1.2.3.2	Cables laying and terminations	7 days	Fri 9/4/21	Thu 15/4/21	0 days	1078,1075,1076
1080	**1080**	**Temp Filtrate**	**5.30.4.1.3**	**Site Acceptance Test for E&M Equip at Filtrate Lifting Well and Eq. Tank**	**7 days**	**Fri 16/4/21**	**Thu 22/4/21**	**0 days**	**1079**
1081	**1081**	**Temp Filtrate**	**5.30.4.1.4**	**System Commissioning for E&M Equip at Temp. Filtrate Lifting Well and Eq. Tank**	**7 days**	**Fri 23/4/21**	**Thu 29/4/21**	**2 days**	**1080**
1082	**1082**		**5.31**	**Existing PST No. 4 and No. 6, Portion B-3A (PS 6B.2.15)**	**397 days**	**Sat 1/8/20**	**Wed 1/9/21**	**0 days**	
1083	1083	KD3B, Ext PST4&6	5.31.1	Planned Key Date Completion Date - KD3B	0 days	Mon 7/6/21	Mon 7/6/21	0 days	1142FF
1084	1084	Section 3, Main	5.31.2	Planned Sectional Completion Date - Section 3, PST No. 4 and No. 6	0 days	Wed 1/9/21	Wed 1/9/21	0 days	1067FF,1168FF
1085	**1085**	**PST No. 4 & No. 6**	**5.31.3**	**Selection of Suppliers for major plant and materials and Subcontractor for PST No. 4 and No. 6**	**137 days**	**Sat 1/8/20**	**Tue 15/12/20**	**76 days**	
1086	**1086**	**PST No. 4 & No. 6, EQT037-1**	**5.31.3.1**	**Mis - Rotating Bridge Scrapers and associated materials, C11, ref. EQT037-1**	**42 days**	**Sat 1/8/20**	**Fri 11/9/20**	**0 days**	
1087	1087	PST No. 4 & No. 6	5.31.3.1.1	Submission for acceptance of purchasing package	7 days	Sat 1/8/20	Fri 7/8/20	0 days	
1088	1088	PST No. 4 & No. 6	5.31.3.1.2	Invitation of quotations for purchasing package	14 days	Sat 8/8/20	Fri 21/8/20	0 days	1087
1089	1089	PST No. 4 & No. 6	5.31.3.1.3	Acceptance of conforming quotation	21 days	Sat 22/8/20	Fri 11/9/20	0 days	1088
1090	**1090**	**PST No. 4 & No. 6, EQT037-2**	**5.31.3.2**	**Mis - Pipework, C11, ref. EQT037-2**	**42 days**	**Sat 1/8/20**	**Fri 11/9/20**	**2.8 days**	
1091	1091	PST No. 4 & No. 6	5.31.3.2.1	Submission for acceptance of purchasing package	7 days	Sat 1/8/20	Fri 7/8/20	0 days	
1092	1092	PST No. 4 & No. 6	5.31.3.2.2	Invitation of quotations for purchasing package	14 days	Sat 8/8/20	Fri 21/8/20	0 days	1091
1093	1093	PST No. 4 & No. 6	5.31.3.2.3	Acceptance of conforming quotation	21 days	Sat 22/8/20	Fri 11/9/20	0 days	1092
1094	**1094**	**PST No. 4 & No. 6, EQT037-2**	**5.31.3.3**	**Subletting of Electrical and Mechanical Installation Work w/ supply of LCP**	**81 days**	**Sat 26/9/20**	**Tue 15/12/20**	**76 days**	
1095	1095	PST No. 4 & No. 6	5.31.3.3.1	Submission for Subletting Package	30 days	Sat 26/9/20	Sun 25/10/20	0 days	1099
1096	1096	PST No. 4 & No. 6	5.31.3.3.2	Invitation to tender	21 days	Mon 26/10/2	Sun 15/11/20	0 days	1095
1097	1097	PST No. 4 & No. 6	5.31.3.3.3	Acceptance of conforming tender	30 days	Mon 16/11/2	Tue 15/12/20	39 days	1096
1098	**1098**	**PST No. 4 & No. 6**	**5.31.4**	**Design Submissions**	**14 days**	**Sat 12/9/20**	**Fri 25/9/20**	**4 days**	
1099	1099	PST No. 4 & No. 6	5.31.4.1	Design submissions for retrofitting the existing PST No. 4 and No. 6	14 days	Sat 12/9/20	Fri 25/9/20	0 days	1089,1093
1100	**1100**		**5.31.5**	**Manufacturing and Delivery of Plant & Materials**	**180 days**	**Sat 26/9/20**	**Wed 24/3/21**	**4 days**	



ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
1101	**1101**	**Temp Filtrate, EQT011**	**5.31.5.1**	**Rotating Bridge Scrapers and associated materials**	**180 days**	**Sat 26/9/20**	**Wed 24/3/21**	**4 days**	
1102	1102	Temp Filtrate	5.31.5.1.1	Manufacturing and Factory Acceptance Test of Plant	150 days	Sat 26/9/20	Mon 22/2/21	0 days	1099
1103	1103	Temp Filtrate	5.31.5.1.2	Shipping and Delivery of Plant to site	30 days	Tue 23/2/21	Wed 24/3/21	0 days	1102
1104	**1104**	**Temp Filtrate, EQT011**	**5.31.5.2**	**Pipework**	**120 days**	**Sat 26/9/20**	**Sat 23/1/21**	**37 days**	
1105	1105	Temp Filtrate	5.31.5.2.1	Manufacturing and Factory Acceptance Test of Plant	90 days	Sat 26/9/20	Thu 24/12/20	0 days	1099
1106	1106	Temp Filtrate	5.31.5.2.2	Shipping and Delivery of Plant to site	30 days	Fri 25/12/20	Sat 23/1/21	0 days	1105
1107	1107	Temp. Filtrate,	5.31.6	Tentative Civil Handover, Filtrate Lifting Well and Eq. Tank (Completion of work)	1 day	Sat 1/5/21	Sat 1/5/21	0 days	1081FF,1072FF
1108	**1108**	**PST No. 4 & No. 6, Section 3**	**5.31.7**	**Site Installation Work**	**249 days**	**Thu 1/10/20**	**Sun 6/6/21**	**1 day**	
1109	**1109**	**PST No. 4 & No. 6, Main**	**5.31.7.1**	**Commencement of retrofitting the existing PST No. 4 and No. 6**	**249 days**	**Thu 1/10/20**	**Sun 6/6/21**	**1 day**	
1110	1110	PST No. 4 & No. 6	5.31.7.1.1	Temporary flow diversion of Filtrate from PST No. 4,	1 day	Thu 1/10/20	Thu 1/10/20	0 days	
1111	1111		5.31.7.1.2	Dismantle and Removal of E&M Equipment at PST No. 6	60 days	Fri 2/10/20	Mon 30/11/20	0 days	1110
1112	1112		5.31.7.1.3	Temporary flow diversion of Filtrate from PST No. 6	7 days	Tue 1/12/20	Mon 7/12/20	0 days	1111
1113	1113		5.31.7.1.4	Dismantle and Removal of E&M Equipment at PST No. 4	40 days	Tue 8/12/20	Sat 16/1/21	7 days	1112
1114	**1114**	**PST No. 4 & No. 6, Mech**	**5.31.7.1.5**	**Mechanical Installations of existing PSTs No. 4**	**89 days**	**Sun 24/1/21**	**Thu 22/4/21**	**4 days**	**1097**
1115	1115	PST No. 4 & No. 6, Mech	5.31.7.1.5.1	Installation of PST influent feed pipe	5 days	Sun 24/1/21	Thu 28/1/21	0 days	1113,1106
1116	1116	PST No. 4 & No. 6, Mech	5.31.7.1.5.2	Installation of circular baffle diffuser box	5 days	Fri 29/1/21	Tue 2/2/21	0 days	1115
1117	1117	PST No. 4 & No. 6, Mech	5.31.7.1.5.3	Installation of scum baffle plates	5 days	Wed 3/2/21	Sun 7/2/21	0 days	1116
1118	1118	PST No. 4 & No. 6, Mech	5.31.7.1.5.4	Installation of scum box with collection valve and pipework	5 days	Mon 8/2/21	Fri 12/2/21	0 days	1117
1119	1119	PST No. 4 & No. 6, Mech	5.31.7.1.5.5	Installation of v-notched weir plate	7 days	Sat 13/2/21	Fri 19/2/21	33 days	1118
1120	1120	PST No. 4 & No. 6, Mech	5.31.7.1.5.6	Installation of center bearing and slip ring assembly for rotating bridge	5 days	Thu 25/3/21	Mon 29/3/21	0 days	1119,1103
1121	1121	PST No. 4 & No. 6, Mech	5.31.7.1.5.7	Installation of motor and gearbox assembly for rotating bridge	5 days	Tue 30/3/21	Sat 3/4/21	0 days	1120
1122	1122	PST No. 4 & No. 6, Mech	5.31.7.1.5.8	Installation of rotating bridge sludge and scum scraper assembly	5 days	Sun 4/4/21	Thu 8/4/21	0 days	1121
1123	1123	PST No. 4 & No. 6, Mech	5.31.7.1.5.9	installation of removable FRP covers for effluent channel	14 days	Fri 9/4/21	Thu 22/4/21	0 days	1122
1124	**1124**	**PST No. 4 & No. 6, Elec**	**5.31.7.1.6**	**Electrical Installations of existing PSTs No. 4**	**10 days**	**Fri 9/4/21**	**Sun 18/4/21**	**4 days**	
1125	1125	PST No. 4 & No. 6, Elec	5.31.7.1.6.1	Installation of local control panels	5 days	Fri 9/4/21	Tue 13/4/21	0 days	1122
1126	1126	PST No. 4 & No. 6, Elec	5.31.7.1.6.2	cable laying and terminations	5 days	Wed 14/4/21	Sun 18/4/21	4 days	1125
1127	**1127**	**PST No. 4 & No. 6**	**5.31.7.1.7**	**Site Acceptance Test for E&M Equip at existing PST No. 4**	**5 days**	**Fri 23/4/21**	**Tue 27/4/21**	**4 days**	**1124,1123,1126**
1128	**1128**	**PST No. 4 & No. 6, Mech**	**5.31.7.1.8**	**Mechanical Installations of existing PSTs No. 6**	**32 days**	**Sun 2/5/21**	**Wed 2/6/21**	**0 days**	
1129	1129	PST No. 4 & No. 6, Mech	5.31.7.1.8.1	Installation of PST influent feed pipe	2 days	Sun 2/5/21	Mon 3/5/21	0 days	1127,1107
1130	1130	PST No. 4 & No. 6, Mech	5.31.7.1.8.2	Installation of circular baffle diffuser box	2 days	Tue 4/5/21	Wed 5/5/21	0 days	1129
1131	1131	PST No. 4 & No. 6, Mech	5.31.7.1.8.3	Installation of scum baffle plates	2 days	Sun 2/5/21	Mon 3/5/21	0 days	1107
1132	1132	PST No. 4 & No. 6, Mech	5.31.7.1.8.4	Installation of scum box with collection valve and pipework	2 days	Tue 4/5/21	Wed 5/5/21	0 days	1131
1133	1133	PST No. 4 & No. 6, Mech	5.31.7.1.8.5	Installation of v-notched weir plate	10 days	Sun 2/5/21	Tue 11/5/21	0 days	1107
1134	1134	PST No. 4 & No. 6, Mech	5.31.7.1.8.6	Installation of center bearing and slip ring assembly for rotating bridge	3 days	Wed 12/5/21	Fri 14/5/21	0 days	1133,1103
1135	1135	PST No. 4 & No. 6, Mech	5.31.7.1.8.7	Installation of motor and gearbox assembly for rotating bridge	2 days	Sat 15/5/21	Sun 16/5/21	0 days	1134
1136	1136	PST No. 4 & No. 6, Mech	5.31.7.1.8.8	Installation of rotating bridge sludge and scum scraper assembly	3 days	Mon 17/5/21	Wed 19/5/21	0 days	1135
1137	1137	PST No. 4 & No. 6, Mech	5.31.7.1.8.9	installation of removable FRP covers for effluent channel	14 days	Thu 20/5/21	Wed 2/6/21	0 days	1136
1138	**1138**	**PST No. 4 & No. 6, Elec**	**5.31.7.1.9**	**Electrical Installations of existing PSTs No. 6**	**7 days**	**Mon 17/5/21**	**Sun 23/5/21**	**10 days**	
1139	1139	PST No. 4 & No. 6, Elec	5.31.7.1.9.1	Installation of local control panels	5 days	Mon 17/5/21	Fri 21/5/21	0 days	1135
1140	1140	PST No. 4 & No. 6, Elec	5.31.7.1.9.2	cable laying and terminations	2 days	Sat 22/5/21	Sun 23/5/21	10 days	1139
1141	**1141**	**PST No. 4 & No. 6**	**5.31.7.1.10**	**Site Acceptance Test for E&M Equip at existing PST No. 6**	**1 day**	**Thu 3/6/21**	**Thu 3/6/21**	**0 days**	**1137,1138,1140**
1142	**1142**	**PST No. 4 & No. 6**	**5.31.7.1.11**	**System Commissioning for E&M Equip at existing PST No. 4 and No. 6**	**3 days**	**Fri 4/6/21**	**Sun 6/6/21**	**1 day**	**1127,1141**
1143	**1143**		**5.32**	**Existing Main Power House Electrical, Portion B-7A and B-7B (PS 6B.3.17)**	**42 days**	**Thu 11/6/20**	**Wed 22/7/20**	**0 days**	
1144	1144	KD3A, Ext PH	5.32.1	Planned Key Date Completion Date - KD3A	0 days	Wed 22/7/20	Wed 22/7/20	0 days	
1145	**1145**	**KD3A**	**5.32.2**	**Design Submissions for Existing Emergency Generator House**	**15 days**	**Fri 12/6/20**	**Fri 26/6/20**	**0 days**	
1146	1146	Genset, Section 3	5.32.2.1	Design submissions for E&M installation works of existing power house	15 days	Fri 12/6/20	Fri 26/6/20	0 days	178
1147	**1147**	**Genset, Section 3**	**5.32.3**	**Site Installation Work**	**39 days**	**Thu 11/6/20**	**Sun 19/7/20**	**0 days**	
1148	1148	existing genset, Others	5.32.3.1	Tentative Civil Handover Date, Portion B-7A & 7B area for modification of existing emerge	1 day	Thu 11/6/20	Thu 11/6/20	0 days	
1149	**1149**	**existing genset, Main**	**5.32.3.2**	**Commencement of Modification of existing emergency generator Electrical Works**	**23 days**	**Sat 27/6/20**	**Sun 19/7/20**	**0 days**	
1150	1150	existing genset	5.32.3.2.1	Site survey and preparation work	1 day	Sat 27/6/20	Sat 27/6/20	0 days	1146
1151	1151	existing genset	5.32.3.2.2	Modification of existing emergency generator electrical works	3 days	Sun 28/6/20	Tue 30/6/20	0 days	1150
1152	1152	existing genset	5.32.3.2.3	Test the new switchboard for on-site mobile generator	2 days	Wed 1/7/20	Thu 2/7/20	0 days	1151
1153	1153	existing genset	5.32.3.2.4	Dismantling and removal the existing power & control cables	14 days	Fri 3/7/20	Thu 16/7/20	0 days	1152
1154	1154	existing genset	5.32.3.2.5	Take down existing generator to DSD	3 days	Fri 17/7/20	Sun 19/7/20	0 days	1153
1155	**1155**		**5.33**	**Existing Sludge Press House, Portion B-10 (PS 6B.2.11)**	**425 days**	**Wed 1/7/20**	**Sun 29/8/21**	**3 days**	
1156	1156	KD3B, Ext SPH	5.33.1	Planned Key Date Completion Date - KD3B	0 days	Mon 7/6/21	Mon 7/6/21	0 days	
1157	**1157**		**5.33.2**	**Selection of Suppliers for major plant and materials for Filter Presses**	**52 days**	**Wed 1/7/20**	**Fri 21/8/20**	**0 days**	
1158	**1158**	**Filter Plates**	**5.33.2.1**	**Mis - new replacement filter plates and provision of filter cloths, C11, ref. EQT038**	**52 days**	**Wed 1/7/20**	**Fri 21/8/20**	**0 days**	



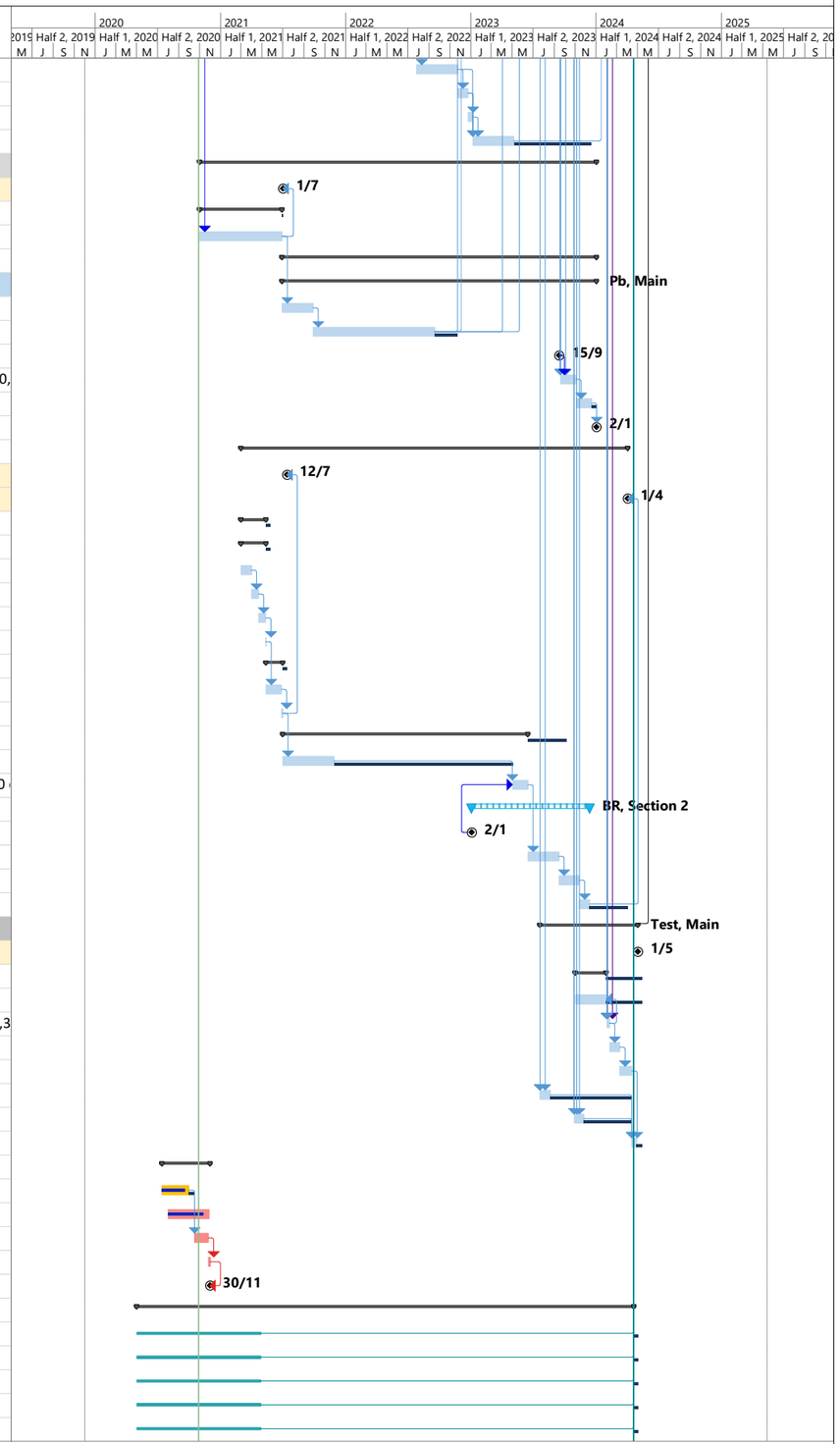
ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
1159	1159	Filter Plates	5.33.2.1.1	Submission for acceptance of purchasing package	21 days	Wed 1/7/20	Tue 21/7/20	0 days	
1160	1160	Filter Plates	5.33.2.1.2	Invitation of quotations for purchasing package	10 days	Wed 22/7/20	Fri 31/7/20	0 days	1159
1161	1161	Filter Plates	5.33.2.1.3	Acceptance of conforming quotation	21 days	Sat 1/8/20	Fri 21/8/20	0 days	1160
1162	**1162**	**Filter Plates**	**5.33.3**	**Design submission for replacement of filter plates**	**7 edays**	**Fri 21/8/20**	**Fri 28/8/20**	**0 edays**	**1161**
1163	**1163**		**5.33.4**	**Manufacturing and Delivery of Plant & Materials**	**345 days**	**Sat 29/8/20**	**Sun 8/8/21**	**3 days**	
1164	1164	Filter Plates	5.33.4.1	Manufacturing and Factory Acceptance Test of Plant	300 days	Sat 29/8/20	Thu 24/6/21	0 days	1162
1165	1165	Filter Plates	5.33.4.2	Shipping and Delivery of Plant to site	45 days	Fri 25/6/21	Sun 8/8/21	0 days	1164
1166	**1166**	**Filter Plates, Section 3**	**5.33.5**	**Site Installation Work**	**21 days**	**Mon 9/8/21**	**Sun 29/8/21**	**3 days**	
1167	**1167**	**Filter Plates, Main**	**5.33.5.1**	**Commencement of replacement of filter plates**	**21 days**	**Mon 9/8/21**	**Sun 29/8/21**	**3 days**	
1168	1168	Filter Plates	5.33.5.1.1	Replacement of filter plates	21 days	Mon 9/8/21	Sun 29/8/21	3 days	1165
1169	**1169**		**5.34**	**Fire Services Installation (PS 6B.6.9)**	**1248 days**	**Tue 1/12/20**	**Wed 1/5/24**	**0 days**	
1170	1170	KD1B, Fire	5.34.1	Planned Key Date Completion Date - KD1B, Fire	0 days	Tue 1/6/21	Tue 1/6/21	0 days	1174FF
1171	1171	Section 1, Main, FSI	5.34.2	Planned Sectional Completion Date - Section 1, FSI	0 days	Mon 12/7/21	Mon 12/7/21	0 days	1175FF
1172	1172	Section 4, Main	5.34.3	Planned Sectional Completion Date - Section 4, FSI	0 days	Wed 1/5/24	Wed 1/5/24	0 days	1190FF
1173	**1173**	**FSI, KD1A, KD1B, Section 1**	**5.34.4**	**Design Submissions for FSI**	**210 days**	**Tue 1/12/20**	**Tue 29/6/21**	**14 days**	
1174	1174		5.34.4.1	CDS081-11 - Civil and dimensional requirements drawings for Fire Services Sprinkler Pump	120 days	Tue 1/12/20	Tue 30/3/21	63 days	
1175	1175	FSI, Section 1	5.34.4.2	CDS049 - Detailed Design for Fire Services include AFA, FS, FH, Sprinkler etc.	180 edays	Thu 31/12/2(	Tue 29/6/21	0 edays	153
1176	1176	FSI	5.34.5	DG Stores Submissions to FSD for approval	120 days	Tue 29/6/21	Tue 26/10/21	780 days	1175
1177	**1177**	**FSI, Section 2**	**5.34.6**	**Site Installation Work**	**1000 days**	**Tue 29/6/21**	**Sun 24/3/24**	**38 days**	
1178	**1178**	**FSI, Main**	**5.34.6.1**	**Commencement of Fire Services Installation**	**1000 days**	**Tue 29/6/21**	**Sun 24/3/24**	**38 days**	
1179	1179	FSI	5.34.6.1.1	Design Review of Approved General Building Plan	126 days	Tue 29/6/21	Mon 1/11/21	0 days	1175
1180	1180	FSI	5.34.6.1.2	Submission of WWO542 for WSD's approval	270 days	Tue 2/11/21	Fri 29/7/22	396 days	1179
1181	1181	FSI	5.34.6.1.3	Submission of WWO46 for WSD's Inspection	30 days	Wed 30/8/23	Thu 28/9/23	0 days	1180,352,481,592,
1182	1182	FSI	5.34.6.1.4	Obtain WWO46 Part V	60 days	Fri 29/9/23	Mon 27/11/23	4 days	1181
1183	1183	FSI	5.34.6.1.5	FSD Inspection and Approval for MVAC	21 days	Sat 2/12/23	Fri 22/12/23	0 days	1193,1194,1182
1184	1184	FSI	5.34.6.1.6	FSD Inspection and Approval for DG Stores	21 days	Sat 2/12/23	Fri 22/12/23	0 days	1193,1194,815
1185	1185	FSI	5.34.6.1.7	Submission of (FSI/314 & FSI/501) to FSD	14 days	Sat 2/12/23	Fri 15/12/23	7 days	1193,1194,1182,1
1186	1186	FSI	5.34.6.1.8	Pre-inspection meeting with FSD	5 days	Sat 23/12/23	Wed 27/12/23	0 days	1185,1183,1184
1187	1187	FSI	5.34.6.1.9	Initial Inspection with FSD	15 days	Thu 28/12/2	Thu 11/1/24	0 days	1186
1188	1188	FSI	5.34.6.1.10	Document Checking	45 days	Fri 12/1/24	Sun 25/2/24	0 days	1187
1189	1189	FSI	5.34.6.1.11	Re-inspections with FSD	14 days	Mon 26/2/24	Sun 10/3/24	0 days	1188
1190	1190	FSI	5.34.6.1.12	Issue of acceptance memo by FSD	14 days	Mon 11/3/24	Sun 24/3/24	38 days	1189
1191	1191	FSI	5.34.6.1.13	Installation of FS Pumps and Sprinkler Pumps	60 days	Mon 3/4/23	Thu 1/6/23	89 days	
1192	1192	FSI	5.34.6.1.14	Installation of Fire Hydrant and Booster Pumps	60 days	Mon 3/4/23	Thu 1/6/23	89 days	
1193	1193	FSI	5.34.6.1.15	SAT for Manual and automatic fire detection and alarm system	60 days	Wed 30/8/23	Sat 28/10/23	34 days	352,481,592,767,8
1194	1194	FSI	5.34.6.1.16	SAT for Fire hydrants, hose reels and street fire hydrant system	60 days	Wed 30/8/23	Sat 28/10/23	34 days	1191,1192,352,48
1195	**1195**		**5.35**	**Fire Services Sprinkler Pumping Room, Portion B-7 & B-7B (PS 6B.6.9)**	**421 days**	**Wed 26/1/22**	**Wed 22/3/23**	**313 days**	
1196	**1196**	**FS, Section 2**	**5.35.1**	**Site Installation Work**	**421 days**	**Wed 26/1/22**	**Wed 22/3/23**	**313 days**	
1197	1197	FS, others	5.35.1.1	Tentative Civil Handover Date, FS Sprinkler Pump Room	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
1198	**1198**	**Fire, Pump Room, Main**	**5.35.1.2**	**Commencement of E&M Installation at FS & Sprinkler Pump Room**	**420 days**	**Wed 26/1/22**	**Wed 22/3/23**	**313 days**	**1197**
1199	1199	Fire	5.35.1.2.1	Mechanical Installations for FS & Sprinkler Pumps	90 edays	Wed 26/1/22	Tue 26/4/22	0 edays	
1200	1200	Fire	5.35.1.2.2	Electrical Installations for FS & Sprinkler Pumps	90 edays	Tue 26/4/22	Mon 25/7/22	0.63 edays	1199
1201	1201	Fire	5.35.1.2.3	Site Acceptance Test for FS & Sprinkler Pumps	45 days	Tue 26/7/22	Thu 8/9/22	0 days	1200
1202	1202	Fire	5.35.1.2.4	System Commissioning for FS & Sprinkler Pumps	45 days	Fri 9/9/22	Sun 23/10/22	404 days	1201
1203	**1203**	**Fire**	**5.35.1.2.5**	**Building Services Installations at FS & Sprinkler Pump Room**	**240 days**	**Tue 26/7/22**	**Wed 22/3/23**	**313 days**	**1197**
1204	1204	Fire	5.35.1.2.5.1	Lighting and Power Distribution System, Chem 1&2	120 days	Tue 26/7/22	Tue 22/11/22	0 days	1200
1205	1205	Fire	5.35.1.2.5.2	Lightning Protection System, FS & Sprinkler Pump Room	30 days	Tue 26/7/22	Wed 24/8/22	90 days	1200
1206	1206	Fire	5.35.1.2.5.3	Mechanical Ventilation System, FS & Sprinkler PR	14 days	Tue 26/7/22	Mon 8/8/22	106 days	1200
1207	1207	Fire	5.35.1.2.5.4	Testing and Commissioning of Building Services Installations, FS & Sprinkler PR	120 days	Wed 23/11/2	Wed 22/3/23	268 days	1204,1205,1206
1208	**1208**	**Fire, FH Pump Room**	**5.36**	**Fire Hydrant and Booster Pumping Room, Portion B7 & B-7B (PS 6B.6.9)**	**465 days**	**Wed 26/1/22**	**Fri 5/5/23**	**269 days**	
1209	**1209**	**FS, Section 2**	**5.36.1**	**Site Installation Work**	**465 days**	**Wed 26/1/22**	**Fri 5/5/23**	**269 days**	
1210	1210	Fire, FH Pump Room, others	5.36.1.1	Tentative Civil Handover Date, Fire Hydrant and Booster Pumping Room	1 day	Wed 26/1/22	Wed 26/1/22	0 days	
1211	**1211**	**Fire, FH Pump Room, Main**	**5.36.1.2**	**Commencement of E&M Installation at Street FH Pump Room**	**464 days**	**Wed 26/1/22**	**Fri 5/5/23**	**269 days**	
1212	1212	Fire	5.36.1.2.1	Mechanical Installations for Street FH Pumps	90 edays	Wed 26/1/22	Tue 26/4/22	0 edays	1210
1213	1213	Fire	5.36.1.2.2	Electrical Installations for Street FH Pump	90 edays	Tue 26/4/22	Mon 25/7/22	0.63 edays	1212
1214	1214	Fire	5.36.1.2.3	Site Acceptance Test for Street FH Pump	45 days	Tue 26/7/22	Thu 8/9/22	0 days	1213
1215	1215	Fire	5.36.1.2.4	System Commissioning for Street FH Pumps	45 days	Fri 9/9/22	Sun 23/10/22	418 days	1214
1216	**1216**	**Fire**	**5.36.1.2.5**	**Building Services Installations at Street FH Pump Room**	**284 days**	**Tue 26/7/22**	**Fri 5/5/23**	**269 days**	



Bestwise
Project: DE/2018/04
Date: Thu 29/10/20

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

ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
1217	1217	Fire	5.36.1.2.5.1	Lighting and Power Distribution System, Street FH PR	120 days	Tue 26/7/22	Tue 22/11/22	0 days	1213
1218	1218	Fire	5.36.1.2.5.2	Lightning Protection System, Street FH PR	30 days	Wed 23/11/2	Thu 22/12/22	0 days	1217
1219	1219	Fire, MVAC	5.36.1.2.5.3	Mechanical Ventilation System, Street FH PR	14 days	Fri 23/12/22	Thu 5/1/23	0 days	1218
1220	1220	Fire	5.36.1.2.5.4	Testing and Commissioning of Building Services Installations, FH PR	120 days	Fri 6/1/23	Fri 5/5/23	224 days	1217,1218,1219
1221	**1221**		**5.37**	**Plumbing Installation (PS 6B.6.8)**	**1157 days**	**Sun 1/11/20**	**Tue 2/1/24**	**0 days**	
1222	1222	Section 1, Main, Pb	5.37.1	Planned Sectional Completion Date - Section 1, Plumbing	0 days	Thu 1/7/21	Thu 1/7/21	0 days	1224FF
1223	**1223**	**Pb, KD1A, KD1B, Section 1**	**5.37.2**	**Design Submissions for Plumbing**	**240 days**	**Sun 1/11/20**	**Tue 29/6/21**	**3 days**	
1224	1224	Pb, Section 1	5.37.2.1	CDS033 - Detailed Design for Plumbing System	240 edays	Sun 1/11/20	Tue 29/6/21	0 edays	148
1225	**1225**	**Pb, Section 2**	**5.37.3**	**Site Installation Work**	**917 days**	**Tue 29/6/21**	**Tue 2/1/24**	**0 days**	
1226	**1226**	**Pb, Main**	**5.37.3.1**	**Commencement of Plumbing Installation**	**917 days**	**Tue 29/6/21**	**Tue 2/1/24**	**0 days**	
1227	1227	Pb	5.37.3.1.1	Submission of detail design for acceptance	90 days	Tue 29/6/21	Sun 26/9/21	0 days	1224
1228	1228	Pb	5.37.3.1.2	Submission of WWO542 for WSD's approval	355 days	Mon 27/9/21	Fri 16/9/22	67 days	1227
1229	1229	Pb, others	5.37.3.1.3	Connection of External Pumping System (By others)	0 days	Fri 15/9/23	Fri 15/9/23	4 days	
1230	1230	Pb	5.37.3.1.4	Submission of WWO46 for WSD's Inspection	45 days	Tue 19/9/23	Thu 2/11/23	0 days	1229,350,479,590,
1231	1231	Pb	5.37.3.1.5	Obtain WWO46 Part V	45 days	Fri 3/11/23	Sun 17/12/23	15 days	1230
1232	1232	Pb, Others	5.37.3.1.6	Tentative Date for connection of external water pipework (by others)	0 days	Tue 2/1/24	Tue 2/1/24	0 days	1231
1233	**1233**	**PV**	**5.38**	**Photovoltaic Power System (PS 6B.6.11)**	**1128 days**	**Mon 1/3/21**	**Mon 1/4/24**	**0 days**	
1234	1234	Section 1, Main, BR	5.38.1	Planned Sectional Completion Date - Section 1, BR 2A & 2B	0 days	Mon 12/7/21	Mon 12/7/21	0 days	1244FF
1235	1235	Section 2, Main, BR	5.38.2	Planned Sectional Completion Date - Section 2, BR 2A & 2B	0 days	Mon 1/4/24	Mon 1/4/24	0 days	1252FF
1236	**1236**	**PV, EQT041**	**5.38.3**	**Selection of Suppliers for major plant and materials for BR 2A & 2B**	**73 days**	**Mon 1/3/21**	**Wed 12/5/21**	**12 days**	
1237	**1237**	PV, EQT041	**5.38.3.1**	**PV System (EQT041)**	**73 days**	**Mon 1/3/21**	**Wed 12/5/21**	**12 days**	
1238	1238	PV, EQT041	5.38.3.1.1	Submission for acceptance of purchasing package	30 days	Mon 1/3/21	Tue 30/3/21	0 days	
1239	1239	PV, EQT041	5.38.3.1.2	Invitation of quotations for purchasing package	21 days	Wed 31/3/21	Tue 20/4/21	0 days	1238
1240	1240	PV, EQT041	5.38.3.1.3	Acceptance of conforming quotation	21 days	Wed 21/4/21	Tue 11/5/21	0 days	1239
1241	1241	PV, EQT041	5.38.3.1.4	Commencement of Design Work	1 day	Wed 12/5/21	Wed 12/5/21	0 days	1240
1242	**1242**		**5.38.4**	**Design Submissions**	**49 days**	**Wed 12/5/21**	**Wed 30/6/21**	**12 days**	
1243	1243	BR, Section 1, PV, EQT041	5.38.4.1	CDS060 - Detailed Design for PV System	45 edays	Wed 12/5/21	Sat 26/6/21	0.63 edays	1241
1244	1244	BR, PV, EQT041	5.38.4.2	Complete the CLP's Electronic Application Form and Upload Required Documents	4 days	Sun 27/6/21	Wed 30/6/21	0 days	1243
1245	**1245**	**BR, PV, EQT041**	**5.38.5**	**Material ordering and delivery to site**	**715 days**	**Thu 1/7/21**	**Thu 15/6/23**	**111 days**	
1246	1246	BR, EQT041	5.38.5.1	Manufacturing and Factory Acceptance Test of Plant	150 days	Thu 1/7/21	Sat 27/11/21	520 days	1244
1247	1247	BR, EQT041	5.38.5.2	Shipping and Delivery of Plant to site	45 days	Tue 2/5/23	Thu 15/6/23	0 days	1246,1249SS+120
1248	**1248**	**BR, Section 2**	**5.38.6**	**Site Installation Work**	**345 days**	**Mon 2/1/23**	**Tue 12/12/23**	**0 days**	
1249	1249	BR, LA, BS, Others	5.38.6.1	Tentative Civil Handover Date, Portion B-4, BR2A & 2B	1 day	Mon 2/1/23	Mon 2/1/23	0 days	
1250	1250		5.38.6.2	Commencement of Site Installation Work	90 days	Fri 16/6/23	Wed 13/9/23	0 days	1247
1251	1251	BR, PV, EQT041	5.38.6.3	Technical Assessment, System Test and Installation	60 days	Thu 14/9/23	Sun 12/11/23	0 days	1250
1252	1252	BR, PV, EQT041	5.38.6.4	CLP's smart meter installation and Final on-grid test with CLP	30 days	Mon 13/11/2	Tue 12/12/23	111 days	1251
1253	1253	Test, Main	5.39	Plant Commissioning	286 days	Fri 21/7/23	Wed 1/5/24	0 days	
1254	1254	Section 4, Main	5.39.1	Planned Sectional Completion Date - Section 4, Plant Commissioning	0 days	Wed 1/5/24	Wed 1/5/24	0 days	
1255	**1255**		**5.39.2**	**Design Submission for Treatment Process Plant Testing & Commissioning**	**90 days**	**Wed 1/11/23**	**Mon 29/1/24**	**105 days**	
1256	1256	Test	5.39.2.1	Document Submission and Resubmission for T&C procedures	90 days	Wed 1/11/23	Mon 29/1/24	105 days	1257FF-120 days
1257	1257	Test, Main	5.39.3	System Commissioning Tests of the E&M systems at IW, PST, BR 2A&2B, MFB No. 2, Chemica	7 days	Fri 2/2/24	Thu 8/2/24	0 days	918,954,964,984,3
1258	1258	Test, Main	5.39.4	MBR System Process Startup	30 days	Fri 9/2/24	Sat 9/3/24	0 days	1257
1259	1259	Test, Main	5.39.5	Plant Commissioning	35 days	Sun 10/3/24	Sat 13/4/24	0 days	1258
1260	1260	CCTV	5.39.6	Overall commissioning of CCTV system	30 days	Fri 21/7/23	Sat 19/8/23	238 days	351,480,591,766
1261	1261	SCADA	5.39.7	Overall commissioning of Facility Computerized Systems (SCADA, CMMS, PMS, IDMS)	28 days	Sun 29/10/23	Sat 25/11/23	140 days	343,472,757,758
1262	1262	Others, Main	5.39.8	Overall Plant Commissioning and DSD pre-handover inspections	14 days	Sun 14/4/24	Sat 27/4/24	16 days	1259,1260,1261
1263	**1263**		**5.40**	**CE No. 009 - Provision of an Additional Primary Sludge Thickening System**	**140 days**	**Tue 14/7/20**	**Mon 30/11/20**	**0 days**	
1264	1264		5.40.1	Detail Design Submission and Approval	77 days	Tue 14/7/20	Mon 28/9/20	18 days	
1265	1265		5.40.2	Subletting, Procurement, Manufacturing and Delivery	120 days	Fri 31/7/20	Fri 27/11/20	0 days	
1266	1266		5.40.3	Site Installation	40 days	Sat 17/10/20	Wed 25/11/20	0 days	1264
1267	1267		5.40.4	Testing and Commissioning	5 days	Thu 26/11/20	Mon 30/11/20	0 days	1266
1268	1268		5.40.5	Planned Completion Date	1 day	Mon 30/11/2	Mon 30/11/20	0 days	1267FF
1269	**1269**		**6**	**Beam Plus Submissions**	**1450 days**	**Fri 1/5/20**	**Fri 19/4/24**	**0 days**	
1270	1270		6.1	SA10 - Environmental Management Plan	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1271	1271		6.2	SA11 - Air Pollution During Construction	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1272	1272		6.3	SA12 - Noise During Construction	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1273	1273		6.4	SA14 - Noise from Building Equipment	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1274	1274		6.5	SA15 - Light Pollution	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	



ID	ID	Text1	WBS	Task Name	Duration between Task Start and Finish	Start	Finish	Float Time	Predecessors
1275	1275		6.6	MAP1 - Timber used for Temporary Works	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1276	1276		6.7	MAP2 - Use of Non-CFC Based Refrigerants	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1277	1277		6.8	MAP3 - Waste Management Plan	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1278	1278		6.9	MA2 - Modular and Standardized Design	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1279	1279		6.10	MA8 - Ozone Depleting Substances	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1280	1280		6.11	MA11 - Construction Waste Reduction	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1281	1281		6.12	EUP1 - Minimum Energy Performance	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1282	1282		6.13	EU1 - Reduction of CO2 Emissions	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1283	1283		6.14	EU2 - Peak Electricity Demand Reduction	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1284	1284		6.15	EU6 - Renewable Energy Systems	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1285	1285		6.16	EU9 - Energy Efficient Appliances	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1286	1286		6.17	EU10 - Testing and Commissioning	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1287	1287		6.18	EU11 - Operation and Maintenance	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1288	1288		6.19	EU12 - Meter and Monitoring	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1289	1289		6.20	WUP1 - Water Quality Survey	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1290	1290		6.21	WUP2 - Minimum Water Saving Performance	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1291	1291		6.22	WU1 / WU6 - Annual Water Use / Effluent Discharge to Foul Sewers	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1292	1292		6.23	IEQP1 - Minimum Ventilation Performance	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1293	1293		6.24	IEQ1 - Security	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1294	1294		6.25	IEQ2 - Plumbing and Drainage	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1295	1295		6.26	IEQ3 - Biological Contamination	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1296	1296		6.27	IEQ5 - Construction IAQ Management	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1297	1297		6.28	IEQ6 / IEQ7 - IAQ	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1298	1298		6.29	IEQ9 - Increased Ventilation	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1299	1299		6.30	IEQ11 - Localised Ventilation	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1300	1300		6.31	IEQ12 - Ventilation in Common Areas	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1301	1301		6.32	IEQ13 - Thermal Comfort in Air - Conditioned Premises	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1302	1302		6.33	IEQ16 / IEQ17 - Interior Lighting in Normally Occupied Area / Interior Lighting in Areas not Norr	1450 days	Fri 1/5/20	Fri 19/4/24	12 days	
1303	**1303**		**7**	**Summary of compensation events notified**	**126 days?**	**Wed 22/4/2(**	**Tue 25/8/20**	**0 days?**	
1304	1304		7.1	Compensation Event (CE) No. 001, Special Arrangement in Reducing the Risk of the Spread of Novel Cor	1 day	Tue 25/8/20	Tue 25/8/20	0 days	
1305	1305		7.2	Compensation Event (CE) No. 002, the Contractor's Site Accommodation by Modular Integrated Constru	1 day	Mon 8/6/20	Mon 8/6/20	0 days	
1306	1306		7.3	Compensation Event (CE) No. 003, Designated Area for the Contractor's Site Accommodation in Works /	1 day	Wed 22/4/20	Wed 22/4/20	0 days	
1307	1307		7.4	Compensation Event (CE) No. 005, Designated Area for the Contractor's Storage Area in Works Area WA2-C	1 day	Wed 22/4/20	Wed 22/4/20	0 days	
1308	1308		7.5	Compensation Event (CE) No. 007, Employment of Temporary Staff under Anti-Epidemic Fund	1 day	Fri 10/7/20	Fri 10/7/20	0 days	
1309	1309		7.6	Compensation Event (CE) No. 009, Provision of an Additional Primary Sludge Thickening System and Deletion of Provision of a Membrane Filter Press System	1 day	Tue 14/7/20	Tue 14/7/20	0 days	
1310	1310		7.7	Compensation Event (CE) No. 011, Dismantling, relocating, disconnecting and re-installing of the existing building services (BS) equipment, supervisory control and data acquisition (SCADA) panel at existing main power house	1 day?	Fri 17/7/20	Fri 17/7/20	0 days?