環境保護署
Environmental Protection Department

Contract No. EP/SP/66/12
Integrated Waste Management Facilities, Phase 1
Monthly EM&A Report No.83

吉寶西格斯－振華聯營公司
KEPPEL SEGHERS - ZHEN HUA JOINT VENTURE

Monthly EM&A Report No.83
(Period from 1 May to 31 May 2025)

(Clause 3.3, Further Environmental Permit FEP-01/429/2012/A)

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Revision History

Rev.	DESCRIPTION OF MODIFICATION	DATE
A	First Submission	13 June 2025

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EXECUTIVE SUMMARY

Introduction

A1. The Project, Integrated Waste Management Facility (IWMF), is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and is currently governed by a Further Environmental Permit (FEP No. FEP-01/429/2012/A) for the construction and operation of the Project.

A2. In accordance with the Updated Environmental Monitoring and Audit (EM&A) Manual for the Project, EM&A works for marine water quality, noise, waste management and ecology should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Project.

A3. This is the 83rd Monthly EM&A Report, prepared by ASCL, for the Project summarizing the monitoring results and audit findings of the EM&A programme at and around Shek Kwu Chau (SKC) during the reporting period from 1 May to 31 May 2025.

Summary of Main Works Undertaken & Key Mitigation Measures Implemented

A4. Key activities carried out in this reporting period for the Project included the following:

- Reclamation Area:
  - Superstructure construction
- Seawall Portion:
  - Caisson extension works, from +3mPD to +6mPD, at Seawall A and B
  - Construction of wave wall along the vertical seawall above +3mPD

A5. The key environmental mitigation measures implemented for the Project in this reporting period associated with the construction activities include:

- Reduction of noise from equipment and machinery on-site;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site;
- Confirmation of the absence of silt content in the rock filling material and the filling work is properly conducted;
- Dust suppression measures for exposed earth surface and stockpile of dusty material; and
- Site runoff control measure during rainstorm.

Summary of Exceedance & Investigation & Follow-up

A6. The EM&A works for construction waste, noise monitoring and White-Bellied Sea Eagle (WBSE) were conducted during the reporting period in accordance with the Updated EM&A Manual.

A7. No exceedance of the Action or Limit Levels in relation to noise, construction waste and WBSE was recorded in the reporting month.

A8. Weekly site inspections of the construction work by ET were carried out on 6, 13, 20 and 28 May 2025 to audit the mitigation measures implementation status. Monthly joint site inspection was carried out on 13 May 2025 by ET and IEC. Observations were recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

Complaint Handling and Prosecution

A9. No project-related environmental complaint was received during the reporting period.

A10. Neither notifications of summons nor prosecution was received for the Project.

Reporting Change

A11. As confirmed with Contractor, no marine construction work is scheduled from December 2024 to June 2025 tentatively. An updated EM&A arrangement for temporary suspension of water quality and line-transect monitoring from February to June 2025 was submitted to EPD on 13 December 2024. EPD advised no objection on the suspension on 25 February 2025. The water quality and line-transect monitoring were then temporarily suspended from 25 February 2025 onward. A two-week advance notice will be made by the Contractor prior to resumption of marine construction works. The water quality monitoring and line-transection monitoring will be resumed upon the resumption of marine construction works. ET will notify the resumption of marine construction works with updated EM&A schedule within one day after receiving the notification from contractor.

Summary of Upcoming Key Issues and Key Mitigation Measures

A12. Key activities anticipated in the next reporting period for the Project will include the following:

- Reclamation Area:
  - Superstructure construction
- Seawall Portion:
  - Caisson extension works, from +3mPD to +6mPD, at Seawall A and B
  - Construction of wave wall along the vertical seawall above +3mPD

A13. The key environmental mitigation measures for the Project in the coming reporting period associated with the construction activities will include:

- Reduction of noise from equipment and machinery on-site;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site, especially under heavy rains and adverse weather;
- Dust control of exposed soil surface and stockpile of dusty material at reclaimed area;
- Dust suppression measures for exposed earth surface and stockpile of dusty material; and
- Site runoff control measure during construction works.

1. BASIC PROJECT INFORMATION

1.1 Background

1.1.1 The Government of Hong Kong SAR will develop the Integrated Waste Management Facilities (IWMF) Phase 1 (hereafter "the Project") with incineration to achieve substantial bulk reduction of unavoidable municipal solid waste (MSW) and to recover energy from the incineration process. The IWMF will be on an artificial island to be formed by reclamation at the south-western coast of Shek Kwu Chau. Keppel Seghers – Zhen Hua Joint Venture (KSZHJV) was awarded the contract under Contract No. EP/SP/66/12 Integrated Waste Management Facilities Phase 1 to construct and operate the Project.

1.1.2 An environmental impact assessment (EIA) study for the Project has been conducted and the EIA Report was approved under the Environmental Impact Assessment Ordinance on 17 January 2012. An Environmental Permit (EP) (EP No.: EP-429/2012) was granted to EPD on 19 January 2012 for the construction and operation of the Project. Subsequently, the EP was amended (EP No.: EP-429/2012/A) and a further EP (FEP) (EP No.: FEP-01/429/2012/A) was granted to the Keppel Seghers – Zhen Hua Joint Venture (KSZHJV) on 27 December 2017.

1.1.3 A further EP (FEP) (EP No.: FEP-02/429/2012/A) on Submarine Cable for the Development of the Project was granted to CLP Power Hong Kong Limited (CLP) on 17 January 2020.

1.1.4 The key design and construction elements of the Project include the Design and the Works including but not limited to the design, engineering procurement, construction, testing and commissioning of the Facility including:

- Ground Treatment works;
- Seawall and Breakwater construction;
- Non-dredged Reclamation;
- Other Marine works and Harbour and Port Facilities;
- Site formation;
- Municipal Solid Waste (MSW) Treatment Processes;
- Energy Recovery for Power Generation and Surplus Electricity export;
- Wastewater treatment process;
- Desalination and water treatment process;
- Civil works;
- Building and Structural works;
- Electrical and Mechanical works;
- Building Services;
- Architectural and Landscaping works; and
- All other design and works required for the operation and maintenance of the Facility according to the Contract requirements.

1.1.5 The location of the IWMF near Shek Kwu Chau (SKC) and general layout of IWMF are shown in **Figure 1.1** and **Figure 1.2** respectively.

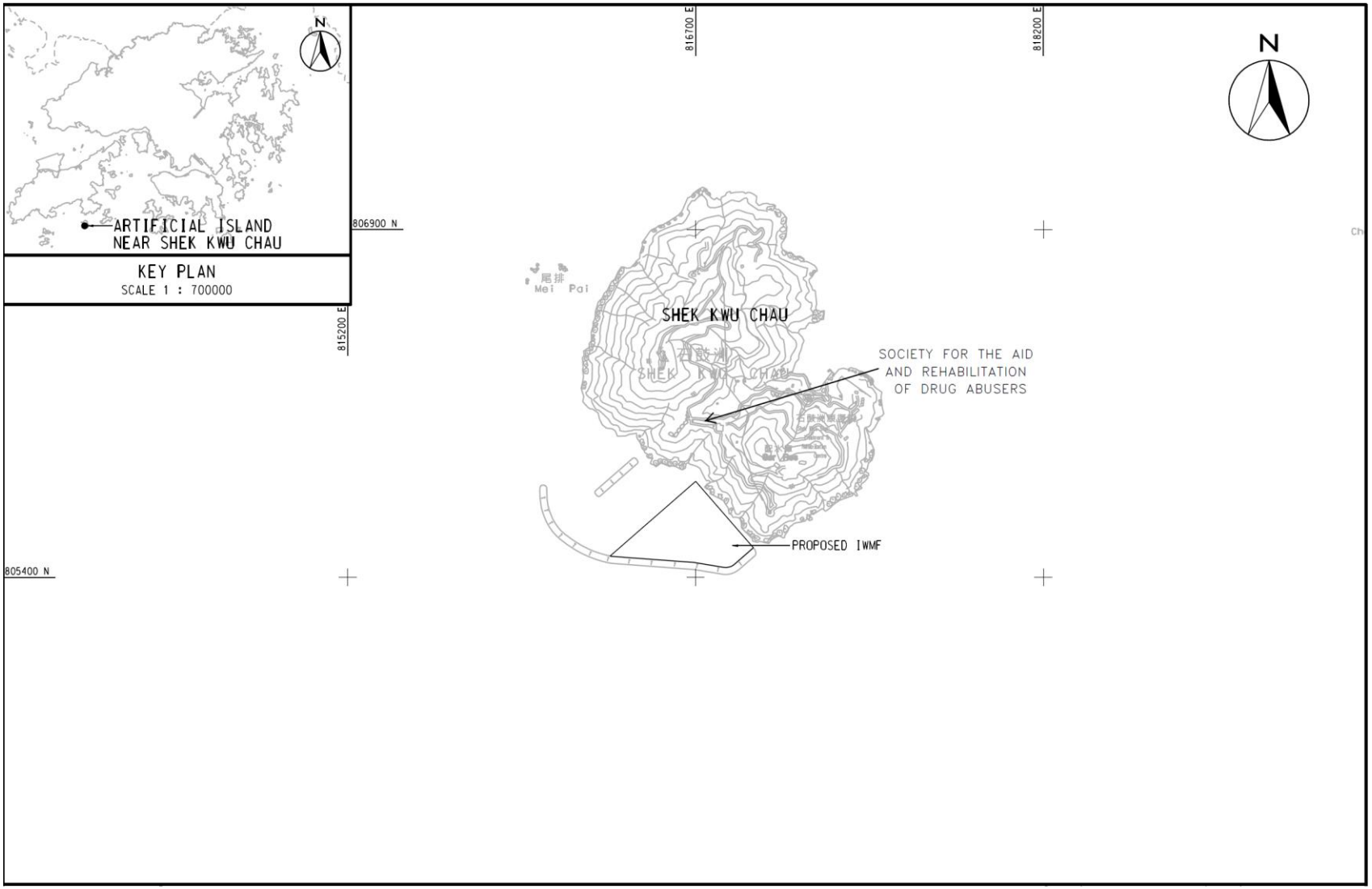


Figure 1.1 Location of the IWMF at the Artificial Island near SKC

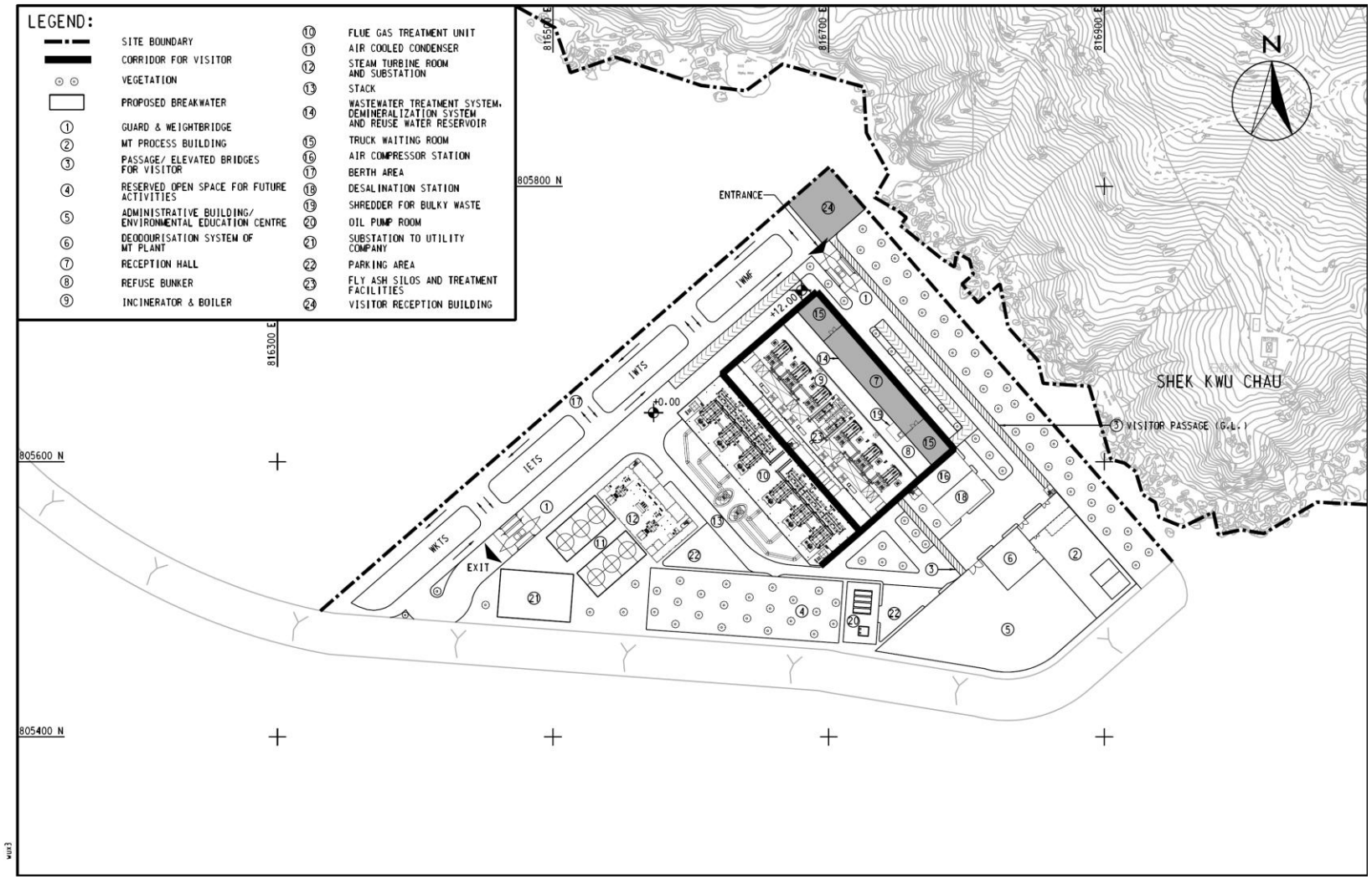


Figure 1.2 General Layout of the IWMF at the Artificial Island near SKC

1.2 The Reporting Scope

1.2.1 This is the 83rd Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 May 2025 to 31 May 2025.

1.3 Project Organization

1.3.1 The Project Organization structure for Construction Phase is presented in **Figure 1.3**.

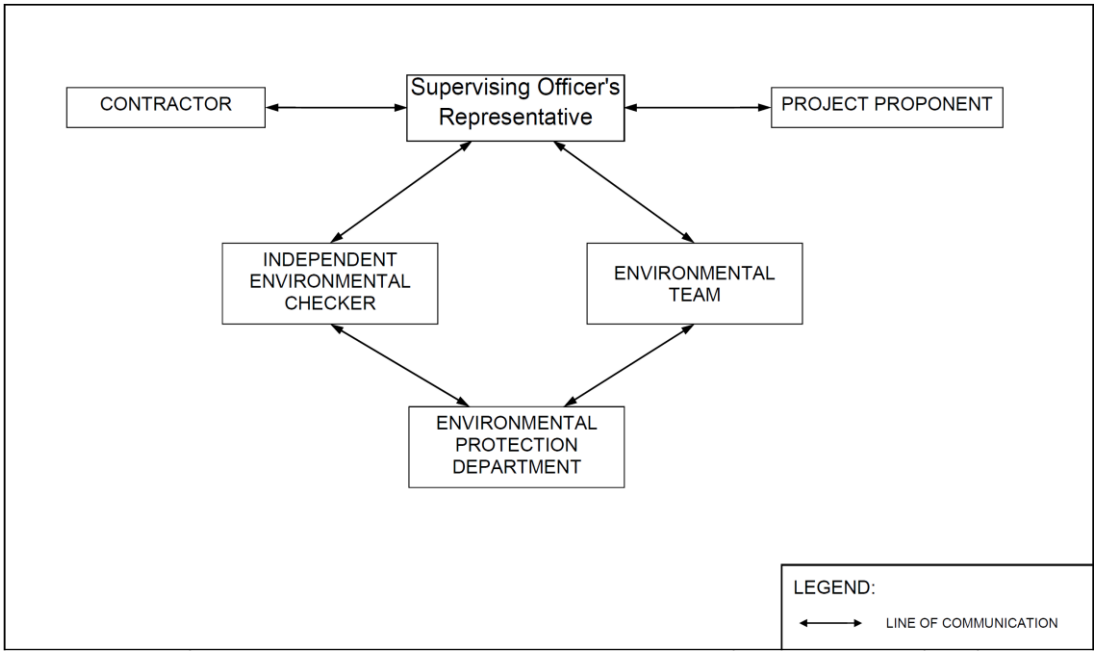


Figure 1.3 Project Organization Chart

1.3.2 Contact details of the key personnel are presented in **Table 1.1** below:

Table 1.1 Contact Details of Key Personnel

Party	Position	Name	Telephone no.
Keppel Seghers – Zhen Hua Joint Venture	Project Manager	Peter Chung	2192-0603
Acuity Sustainability Consulting Limited	Environmental Team Leader	F.C. Tsang	2698-6833
ERM-Hong Kong, Limited	Independent Environmental Checker	Mandy To	2271-3000

1.4 Summary of Construction Works

1.4.1 Details of the major construction activities undertaken in this reporting period are shown in **Table 1.2** and **Figure 1.4** below. The construction programme is presented in **Appendix A**.

Table 1.2 Summary of the Construction Activities Undertaken during the Reporting Month

Location of works	Construction activities undertaken	Remarks on progress
Reclamation area	• Superstructure construction	• On-going
Seawall portion	• Caisson extension works, from +3mPD to +6mPD, at Seawall A and B • Construction of wave wall along the vertical seawall above +3mPD	• On-going • On-going

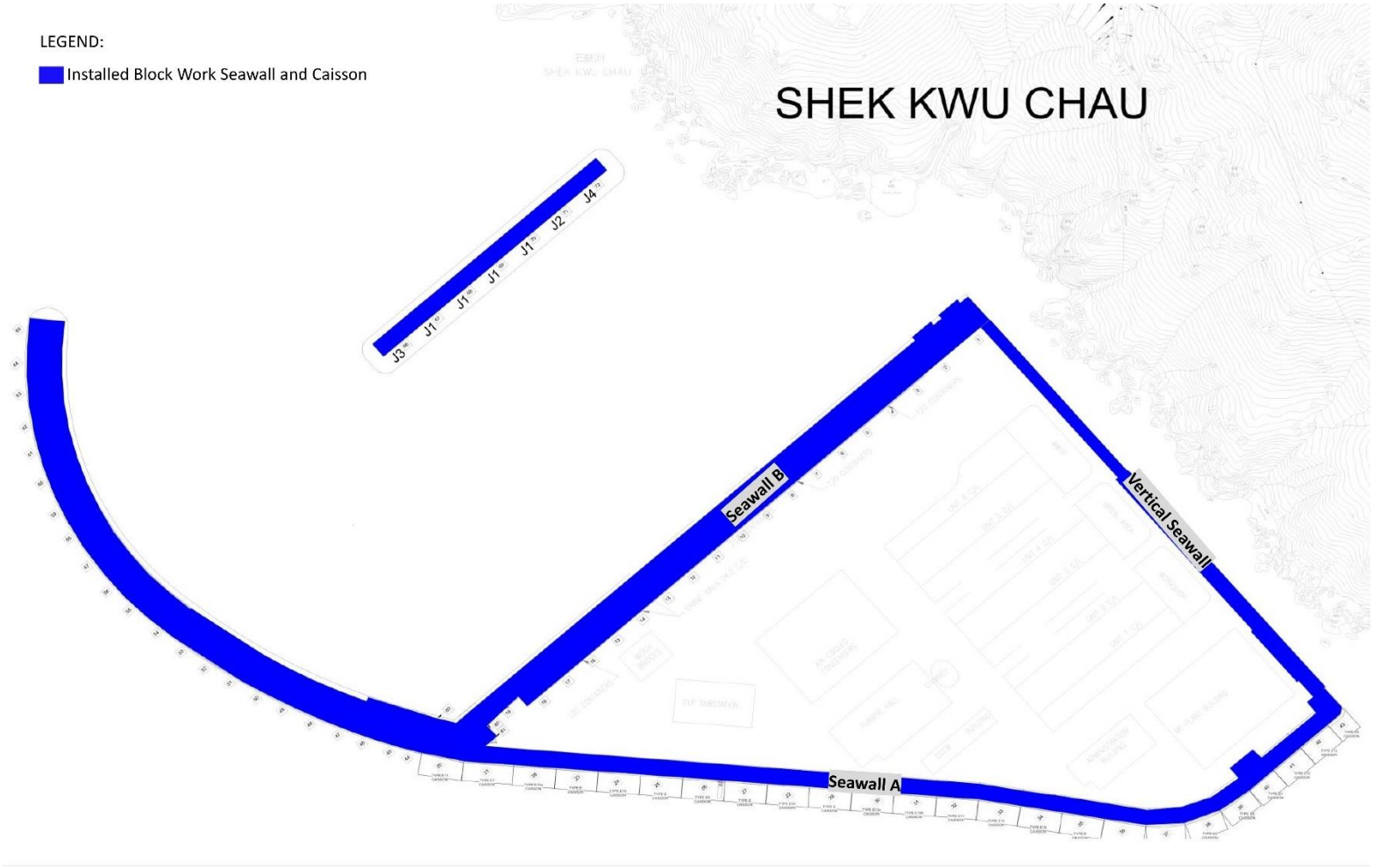


Figure 1.4 Location of Major Construction Activities Undertaken during the Reporting Month

1.5 Summary of Environmental Status

1.5.1 A summary of the valid permits, licences, and /or notifications on environmental protection for this Project is presented in **Table 1.3**

Table 1.3 Summary of the Status of Valid Environmental Licence, Notification, Permit and Documentations

Permit/ Licences/ Notification	Reference	Validity Period	Remarks
Variation of Environmental Permit	EP-429/2012/A	Throughout the Contract	
Further Environmental Permit	FEP-01/429/2012/A	Throughout the Contract	
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)	Ref No.: 10009615	30/09/2024–31/08/2025	
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)	Ref No.: 10009615	30/09/2024 – 31/08/2025	
Wastewater Discharge Licence	WT00039438-2021	15/02/2022 – 28/02/2027	
Chemical Waste Producer Registration	WPN0017-933-K3301-01	Throughout the Contract	The revised registration form was issued by EPD on 14 April 2025, the original registration form issued on 3 January 2018 was cancelled
	WPN5213-961-K3301-02	Throughout the Contract	
	WPN5296-839-K3301-03	Throughout the Contract	
Construction Noise Permit (24 hours)	GW-RS0078-25	07/02/2025–06/08/2025	Portion 1, 1A & 1B
Billing Account for Disposal of Construction Waste	A/C No.:7029768	Throughout the Contract	

1.5.2 The status for all environmental aspects is presented in **Table 1.4**.

Table 1.4 Summary of Status for Key Environmental Aspects under the Updated EM&A Manual

Parameters	Status
Water Quality	
Baseline Monitoring under Updated EM&A Manual and Detailed Plan on DCM	The baseline water quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4
Impact Monitoring	As confirmed with Contractor, no marine construction work is scheduled from December 2024 to June 2025 tentatively. An updated EM&A arrangement for temporary suspension of water quality and line-transect monitoring from February to June 2025 was submitted to EPD on 13 December 2024. EPD advised no objection on the suspension on 25 February 2025. The water quality and line-transect monitoring were then temporarily suspended from 25 February 2025 onward. A two-week advance notice will be made by the Contractor prior to resumption of marine construction works. The water quality monitoring and line-transection monitoring will be resumed upon the resumption of marine construction works. ET will notify the resumption of marine construction works with updated EM&A schedule within one day after receiving the notification from contractor.
Post DCM Monitoring	All DCM was completed on 14 October 2020, regular DCM monitoring for further 4 weeks (i.e form 16 October 2020 to 14 November 2020) was completed according to the approved Detailed Plan on Deep Cement Mixing
Initial Intensive DCM Monitoring	Conducted from 11 February 2019 to 10 March 2019, had not been resumed since there was no DCM related parameter exceeding the AL/LL.
Baseline Water Quality of wet season	Completed over 13 August 2018 to 7 September 2018
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4
Impact Monitoring	On-going
Waste Management	
Mitigation Measures in Waste Monitoring Plan	On-going
Coral	
Pre-translocation Survey and Coral Mapping	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12
Coral Translocation	Completed on 28 March 2018
Post-Translocation Coral Monitoring	Survey affected by missing of translocated and tagged coral colonies after typhoons in September 2018, completed on 28 March 2019.
Pre-construction Coral Survey and Tagging	Completed on 26 June 2018
Tagged Coral Monitoring	Survey obstructed due to missing of tagged coral colonies after typhoons in September 2018
Coral Survey and Re-tagging	Re-tagging at Indirect Impact Site was conducted on 23 November and Re-tagging at Control Site was conducted on 3

Parameters	Status
	December 2018.
Post Re-tagging Coral Monitoring	On-going
Marine Mammal	
Vessel-based Line-transect Survey Baseline Monitoring	The baseline marine mammal monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4
Vessel-based Line-transect Survey Impact Monitoring	Temporarily suspended since 25 February 2025, as no marine construction works as defined in the approved EIA report (AEIAR-163/2012) and the Updated EM&A Manual was conducted in this reporting month.
Land-based Theodolite Tracking	30 days of theodolite surveys were started on 21 February 2019 and completed in May 2019.
Passive Acoustic Monitoring	30 days of PAM surveys were started on 1 May 2019 and completed by the end of May 2019.
White-bellied Sea Eagle	
Baseline Monitoring	The baseline WBSE monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under FEP Condition 3.4
Impact Monitoring	On-going
Environmental Audit	
Site Inspection covering Measures of Air Quality, Noise Impact, Water Quality, Waste, Ecological Quality, Fisheries, Landscape and Visual	On-going
Mitigation Measures in Marine Mammal Watching Plan (MMWP)	Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.
Mitigation Measures in Detailed Monitoring Programme on Finless Porpoise (DMPFP)	Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.
Mitigation Measures in Vessel Travel Details	On-going
Daily Site Audit and Monitoring for Dredging Work	Completed

1.5.3 Other than the EM&A work by ET, environmental briefings, trainings and regular environmental management meetings were conducted, in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

1.5.4 The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the Updated EM&A Manual. A summary of implementation status of the environmental mitigation

measures for the construction phase of the Project during the reporting period is provided in **Appendix B**.

2. MARINE WATER QUALITY MONITORING

2.1 Water Quality Requirements

2.1.1 To ensure no adverse water quality impact, water quality monitoring is recommended to be carried out at the nearby water sensitive receivers (WSRs) during construction phase including proposed reclamation, breakwater construction, etc.

2.1.2 In accordance with the Updated EM&A Manual, impact water quality monitoring were conducted 3 days per week at mid-flood and mid-ebb tide to obtain impact water quality levels at the eleven monitoring stations during general water quality monitoring for the reporting period.

2.2 Water Quality Parameters, Time, Frequency

2.2.1 Dissolved Oxygen (DO), Turbidity, Suspended Solids (SS), Salinity and pH have been undertaken at the eleven monitoring stations during general water quality monitoring.

2.2.2 DO, temperature, salinity, turbidity and pH have been measured in-situ and the SS, has been assayed in a HOKLAS laboratory.

2.2.3 In associate with the water quality parameters, other relevant data were also measured, such as monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or work underway nearby were also recorded. The monitoring schedule is provided in **Appendix C**.

2.2.4 Impact water quality monitoring was conducted 3 days per week in the reporting period. All parameters were monitored during mid-flood and mid-ebb tides at three water depths for general water quality monitoring. The interval between two sets of monitoring has not been less than 36 hours.

2.2.5 **Table 2.1** summarizes the monitoring parameters, frequency and duration of the impact water quality monitoring during construction phase.

Table 2.1 Water Quality Monitoring Parameters, Frequency and Duration

Parameter, unit	Frequency	No. of Depths
• Water Depth (m) • Temperature (ºC) • Salinity (ppt) • pH (pH unit) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Turbidity (NTU) • Suspended Solids (SS), mg/L	General water quality monitoring : 3 days per week, at mid-flood and mid-ebb tides	3 water depths: 1m below sea surface, mid-depth and 1m above sea bed. If the water depth is less than 3m, mid-depth sampling only. If water depth less than 6m, mid-depth may be omitted.

2.3 Water Quality Monitoring Locations

2.3.1 Impact water quality monitoring was conducted at eleven monitoring locations (B1-B4, H1, C1, C2, F1, CR1, CR2 & M1) during general water quality monitoring in the reporting period as shown in **Figure 2.1**. As per the relocation proposal verified by IEC and approved by EPD, the monitoring location C1, C2, S2, F1 are relocated at C1A, C2A, S2A, F1A as equivalent points respectively to clear up the concerns from stakeholders.

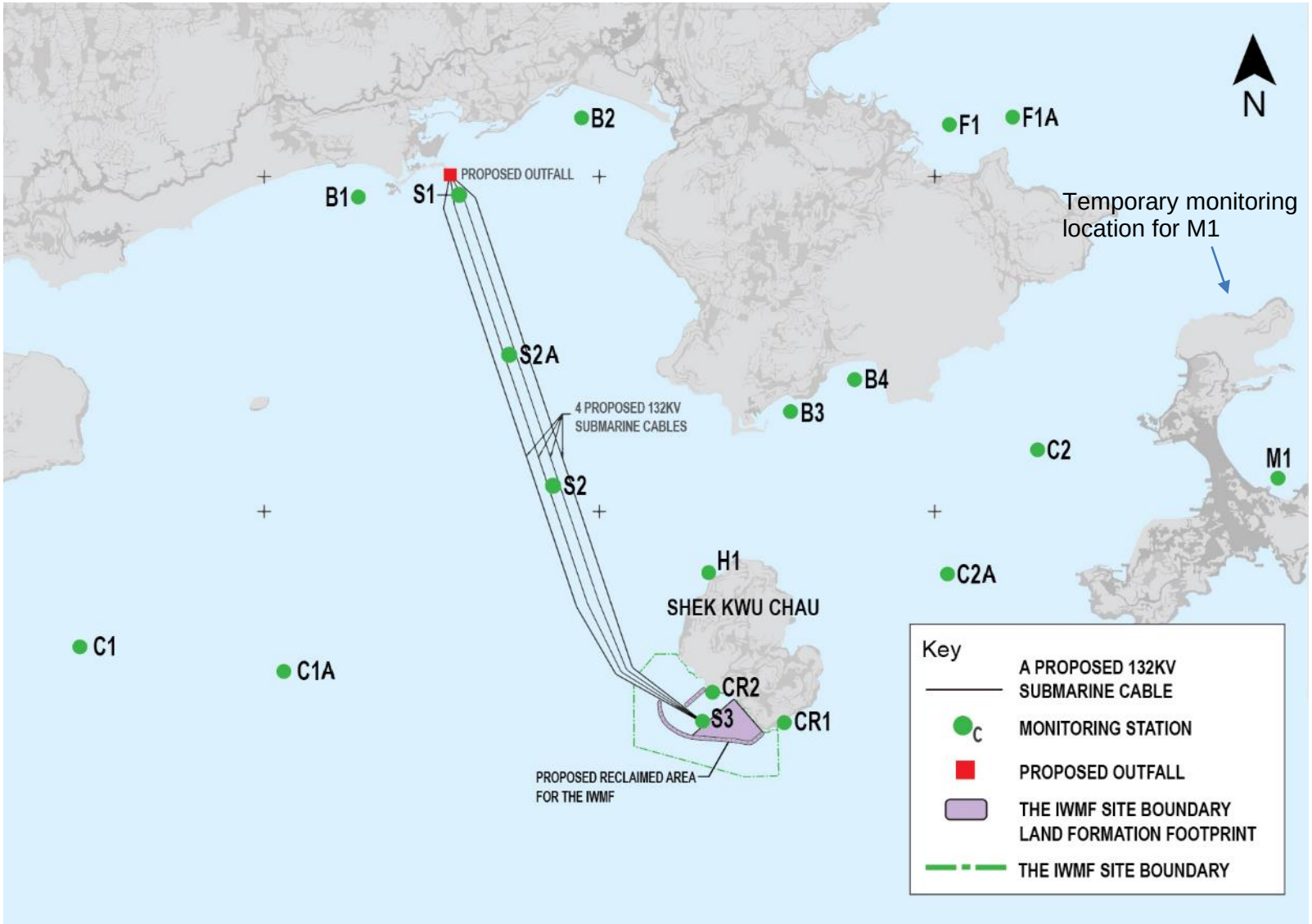


Figure 2.1 Water monitoring locations at Artificial Island near SKC

2.3.2 B1 to B4 are located at 4 beaches respectively at the southern shore of Lantau Island. Monitoring station H1 is located at the horseshoe crab habitat at northern SKC, while CR1 and CR2 are located at the coral communities at southwestern shore of SKC. Monitoring station F1 is located at the Cheung Sha Wan Fish Culture Zone while monitoring station M1 is located at Tung Wan at Cheung Chau. Monitoring station F1A is relocated for F1 at the Cheung Sha Wan Fish Culture Zone. S1, S2 and S3 are located at the northern landing site, midway and southern landing site of the proposed submarine cable, respectively. S2A is the relocated monitoring station of S2 which represents the midway landing site of the proposed submarine cable. S1, S2/S2A and S3 are required for monitoring due to the laying of submarine cable. Control stations C1 and C2 at far field locations are for comparison. Control stations C1A and C2A are relocated for C1 and C2 respectively as equivalent far field locations for comparison.

2.3.3 Fourteen monitoring stations are listed in **Table 2.2**.

Table 2.2 Locations of Marine Water Quality Stations

Monitoring station	Description	Easting	Northing
B1	Beach – Cheung Sha Lower	813342	810316
B2	Beach – Pui O	815340	811025
B3	Beach – Yi Long Wan	817210	808395
B4	Beach – Tai Long Wan	817784	808682
H1	Horseshoe Crab – Shek Kwu Chau	816477	806953
C1	Control Station (note i)	810850	806288
C1A	Relocated Control Station	812823	806300
C2	Control Station (note ii)	819421	808053
C2A	Relocated Control Station	818869	806808
F1	Cheung Sha Wan Fish Culture Zone (note iii)	818631	810966
F1A	Cheung Sha Wan Fish Culture Zone	819109	810924
S1	Submarine Cable Landing Site	814245	810335
S2	Submarine Cable (note iv)	815076	807747
S2A	Submarine Cable	814808	808515
S3	Submarine Cable Landing Site	816420	805621
CR1	Coral	817144	805597
CR2	Coral	816512	805882
M1	Tung Wan	821572	807799

Note:

i. Relocated to C1A in Mar 2019
ii. Relocated to C2A in Mar 2019
iii. Relocated to S2A in Mar 2019
iv. Relocated to F1A in Mar 2019

2.4 Impact Monitoring Methodology

2.4.1 General water quality monitoring was conducted three days per week, at mid-flood and mid-ebb tides, at the designated water quality monitoring stations during the reporting period.

2.4.2 The interval between 2 sets of monitoring was not less than 36 hours. Sampling was collected at three water depths, namely, 1m below water surface, mid-depth and 1m above seabed, except where the water depth is less than 6m, the mid-depth was omitted. If the water depth was less than 3m, only the mid-depth station was monitored.

2.4.3 Duplicate in-situ measurements and water sampling were carried out in each sampling event. The monitoring probes were retrieved out of water after the first measurement and then redeployed for the second measurement. When the difference in value between the first and second readings of DO or turbidity is more than 25% of the value of the first reading, the reading would be discarded and further readings would be taken.

In-situ Measurement

2.4.4 Levels of DO, pH, temperature, turbidity and salinity would be measured in-situ by portable and weatherproof measuring instrument, e.g. YSI ProDSS and Horiba U-53 Multiparameter complete with cable and sensor. (Refer to http://www.ysi.com/ProDSS for YSI ProDSS technical specification and https://static.horiba.com/fileadmin/Horiba/Products/Process_and_Environmental/Water_Pollution/Instruction_Manuals/U-50/U-50_SS_E.pdf for Horiba U-53 technical specification). Water current velocity and water current direction would be measured by portable and weatherproof current meter, e.g. SonTek Hydrosurveyor (Refer to https://www.sontek.com/hydrosurveyor for SonTek Hydrosurveyor M9 technical specification). Parameters measured by in-situ measurement is tabulated in **Table 2.3**

Table 2.3 Parameters Measured by In-situ Measurement

Parameter	Resolution	Range
Temperature	0.1 ºC	-5-70 ºC
Dissolved Oxygen (DO)	0.01 mg/L	0-50.0 mg/L
Turbidity	0.1 NTU	0-1000 NTU
pH	pH 0.01	pH 0-14
Salinity	0.01 ppt	0-40 ppt
Water Current Velocity	0.001m/s	±20m/s
Water Current Direction	±1º	±2º

Laboratory Analysis

2.4.5 Analysis of SS shall be carried out in a HOKLAS accredited laboratory. Sufficient water samples shall be collected at the monitoring stations for carrying out the laboratory determinations. The determination work shall be started within 24 hours after collection of the water samples. Analytical methods and detection limits for SS is presented in **Table 2.4**.

Table 2.4 Analytical Methods Applied to Water Quality Samples

Parameter	Analytical method	Detection Level
Suspended Solids, SS	APHA 2540 D[i]	1 mg/L

Footnote:
i. "APHA 2540 D" stands for American Public Health Association Standard Methods for the Examination of Water and Wastewater, 23rd Edition.

Field Log

2.4.6 Other relevant data was recorded, such as: monitoring location / position, time, water depth, weather conditions and any special phenomena underway near the monitoring station.

2.5 Monitoring Equipment

2.5.1 Equipment used in the impact water quality monitoring programme is summarized in **Table 2.5** below.

Table 2.5 Impact Water Quality Monitoring Equipment

Monitored Parameter	Equipment	Brand and Model
DO, Temperature, Salinity, pH and Turbidity	Multi-functional Meter	Horiba U-53 YSI ProDSS Multi Parameter
Coordinates	Positioning Equipment	Garmin GPSMAP 78s
Water depth	Water Depth Detector	Hummingbird 160 Portable
SS	Water Sampler	Wildco 2 L Water Sampler with messenger

2.5.2 Dissolved Oxygen and Temperature Measuring Equipment

The instrument is a portable and weatherproof DO probe mounted on the multi-functional meter complete with cable and sensor and is powered by a DC supply source. The equipment was capable of measuring:

- A DO level in the range of 0 - 50 mg/L; and
- Temperature of -5 - 70 degree Celsius.

2.5.3 Turbidity Measurement Instrument

The instrument is a portable and weatherproof turbidity-measuring probe mounted on the multi-functional meter and is powered by a DC supply source. The instrument is equipped with a photoelectric sensor which is capable of measuring turbidity between 0 – 1000 NTU.

2.5.4 pH Measurement Instrument

The probe consists of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device mounted on the multi-functional meter. It is readable to 0.1 pH in a range of 0 to 14. Standard buffer solutions of at least pH 7 and pH 10 were used for calibration of the instrument before and after use.

2.5.5 Salinity Measurement Instrument

A portable salinometer mounted on the multi-functional meter capable of measuring salinity in the range of 0-40 parts per thousand (ppt) was provided for measuring salinity of the water at each monitoring location.

2.5.6 Sampler

The water sampler comprises a transparent PVC cylinder, with a capacity of not less than 2 litres, which can be effectively sealed with latex cups at both ends. The sampler has a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth.

2.5.7 Sample Containers and Storage

Water samples for SS were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4°C without being frozen) and delivered to the laboratory and analysed as soon as possible after collection. Sufficient volume of samples was collected to achieve the detection limit stated in **Table 2.4**.

2.5.8 Water Depth Detector

A portable, battery-operated echo sounder was used for the determination of water depth at each designated monitoring station. This unit could either be hand-held or affixed to the bottom of the work boat, if the same vessel is to be used throughout the monitoring programme.

2.5.9 Monitoring Position Equipment

Hand-held digital Differential Global Positioning System (DGPS) with way point bearing indication and Radio Technical Commission for maritime (RTCM) Type 16 error message 'screen pop-up' facilities (for real-time auto-display of error messages and DGPS corrections from the Hong Kong Hydrographic Office) was provided and used to ensure that the water sampling locations were correct during the water quality monitoring work.

2.6 Maintenance and Calibration

2.6.1 The multi-functional meters were checked and calibrated before use. Multi-functional meters were certified by a laboratory accredited under HOKLAS or any other international accreditation scheme, and subsequently re-calibrated at three monthly intervals throughout all stages of the water quality monitoring. Responses of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed.

2.6.2 Sufficient stocks of spare parts were provided and maintained for replacements when necessary. Backup monitoring equipment was prepared for uninterrupted monitoring during equipment maintenance or calibration during monitoring.

2.7 Action and Limit Levels

2.7.1 The Action and Limit Levels have been set based on the derivation criteria specified in the Updated EM&A Manual and Detailed DCM Plan, as shown in **Table 2.6** below.

Table 2.6 Criteria of Action and Limit Levels for Water Quality

Parameters	Action	Limit
Construction Phase Impact Monitoring		
DO in mg/L	≤ 5 %-ile of baseline data	≤ 4
SS in mg/L	≥ 95 %-ile of baseline data or 120% of control station's SS at the same tide of the same day of measurement, whichever is higher	≥ 99 %-ile of baseline data or 130% of control station's SS at the same tide of the same day of measurement, whichever is higher
Turbidity in NTU	≥ 95 %-ile of baseline data or 120% of control station's turbidity at the same tide of the same day of measurement, whichever is higher	≥ 99 %-ile of baseline data or 130% of control station's turbidity at the same tide of the same day of measurement, whichever is higher
Temperature in°C	1.8°C above the temperature recorded at representative control station at the same tide of the same day	2°C above the temperature recorded at representative control station at the same tide of the same day

2.7.2 Based on the baseline monitoring data and the derivation criteria specified above, the Action/Limit Levels have been derived and are presented in **Table 2.7** and **Table 2.8** for both dry seasons (October – March) and wet seasons (April – September).

Table 2.7 Derived Action and Limit Levels for Water Quality Monitoring (Dry Season)

Parameters	Action	Limit
Construction Phase Impact Monitoring		
DO in mg/L	≤ 7.13	≤ 4
SS in mg/L	≥ 8 or 120% of control station's SS at the same tide of the same day of measurement, whichever is higher	≥ 10 or 130% of control station's SS at the same tide of the same day of measurement, whichever is higher
Turbidity in NTU	≥ 5.6 or 120% of control station's turbidity at the same tide of the same day of measurement, whichever is higher	≥ 12.8 or 130% of control station's turbidity at the same tide of the same day of measurement, whichever is higher
Temperature in°C	1.8°C above the temperature recorded at representative control station at the same tide of the same day	2°C above the temperature recorded at representative control station at the same tide of the same day

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

Table 2.8 Derived Action and Limit Levels for Water Quality (Wet Season)

Parameters	Action	Limit
Construction Phase Impact Monitoring		
DO in mg/L	≤ 5.28	≤ 4
SS in mg/L	≥ 12 or 120% of control station's SS at the same tide of the same day of measurement, whichever is higher	≥ 14 or 130% of control station's SS at the same tide of the same day of measurement, whichever is higher
Turbidity in NTU	≥ 4.0 or 120% of control station's turbidity at the same tide of the same day of measurement, whichever is higher	≥ 4.3 or 130% of control station's turbidity at the same tide of the same day of measurement, whichever is higher
Temperature in°C	1.8°C above the temperature recorded at representative control station at the same tide of the same day	2°C above the temperature recorded at representative control station at the same tide of the same day

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

2.7.3 If exceedances were found during water quality monitoring, the actions in accordance with the Event and Action Plan shall be carried out according to **Appendix D**.

2.8 Monitoring Results and Observations

2.8.1 As confirmed by the Contractor on 14 October 2020, all DCM works was completed on 14 October 2020, the post DCM water quality monitoring was completed for further 4 weeks (i.e. from 16 October 2020 to 14 November 2020) according to the approved Detailed Plan on Deep Cement Mixing. As all DCM work and post DCM water quality monitoring were completed, no water quality monitoring was conducted at S1, S2A and S3 during the reporting period. As marine construction works as defined in the approved EIA report (AEIAR-163/2012) and the Updated EM&A Manual was conducted in October 2024, impact water quality monitoring was resumed in October 2024.

2.8.2 As confirmed with Contractor, no marine construction work is scheduled from December 2024 to June 2025 tentatively. EPD advised no objection on the temporary suspension of water quality on 25 February 2025. The water quality monitoring was then temporarily suspended from 25 February 2025 onward.

3. NOISE MONITORING

3.1 Monitoring Requirements

3.1.1 To ensure no adverse noise impact, noise monitoring is recommended to be carried out at the nearby noise sensitive receivers (NSRs) during construction phase.

3.1.2 In accordance with the Updated EM&A Manual, baseline noise level at the noise monitoring stations was established as presented in the Baseline Monitoring Report. Impact noise monitoring was conducted once per week in the form of 30-minutes measurements L_{eq}, L_{10} and L_{90} levels recorded at each monitoring station between 0700 and 1900 hours on normal weekdays.

3.1.3 In accordance with the Updated EM&A Manual, additional weekly impact monitoring should be carried out during respective restricted hours period (1900 – 0700 hours) if the construction works were conducted at evening and night time. Additional weekly noise monitoring was conducted once per week in the form of 5-minutes measurements L_{eq}, L_{10} and L_{90} levels recorded at each monitoring station between 1900 and 0700 hours as well as public holidays and Sundays.

3.2 Noise Monitoring Parameters, Time, Frequency

3.2.1 Impact noise monitoring was conducted weekly in the reporting period between 0700 and 1900 hours on normal weekdays. Additional impact noise monitoring was conducted weekly in the reporting period between 1900-0700 hours on all days as well as public holidays and Sundays.

3.2.2 Construction noise level measured in terms of the A-weighted equivalent continuous sound pressure level (L_{Aeq}). $L_{eq\ 30min}$ was used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. $L_{eq\ 5min}$ was used as the monitoring parameter for the time period between 1900 and 0700 hours as well as public holidays and Sundays. **Table 3.1** summarizes the monitoring parameters, frequency and duration of the impact noise monitoring and additional impact noise monitoring. The monitoring schedule is provided in **Appendix C**.

Table 3.1 Noise Monitoring Parameters, Time, Frequency and Duration

Monitoring Station	Time	Duration	Parameters
M1/ N_S1, M2/ N_S2, M3/ N_S3	Day time: 0700-1900 hrs (during normal weekdays)	Once per week $L_{eq\ 5min}$/$L_{eq\ 30min}$ (average of 6 consecutive $L_{eq\ 5min}$)	L_{eq}, L_{10} & L_{90}
	Evening time: 1900-2300 hrs (including normal weekdays, also public holidays and Sundays)	Once per week $L_{eq\ 5min}$ (3 sets of $L_{eq\ 5min}$)	L_{eq}, L_{10} & L_{90}
	Night time: 2300-0700 hrs (including normal weekdays, also public holidays and Sundays)	Once per week $L_{eq\ 5min}$ (3 sets of $L_{eq\ 5min}$)	L_{eq}, L_{10} & L_{90}

3.3 Noise Monitoring Locations

3.3.1 Three noise monitoring locations for impact monitoring and additional impact monitoring at the nearby sensitive receivers are shown in **Figure 3.1.**

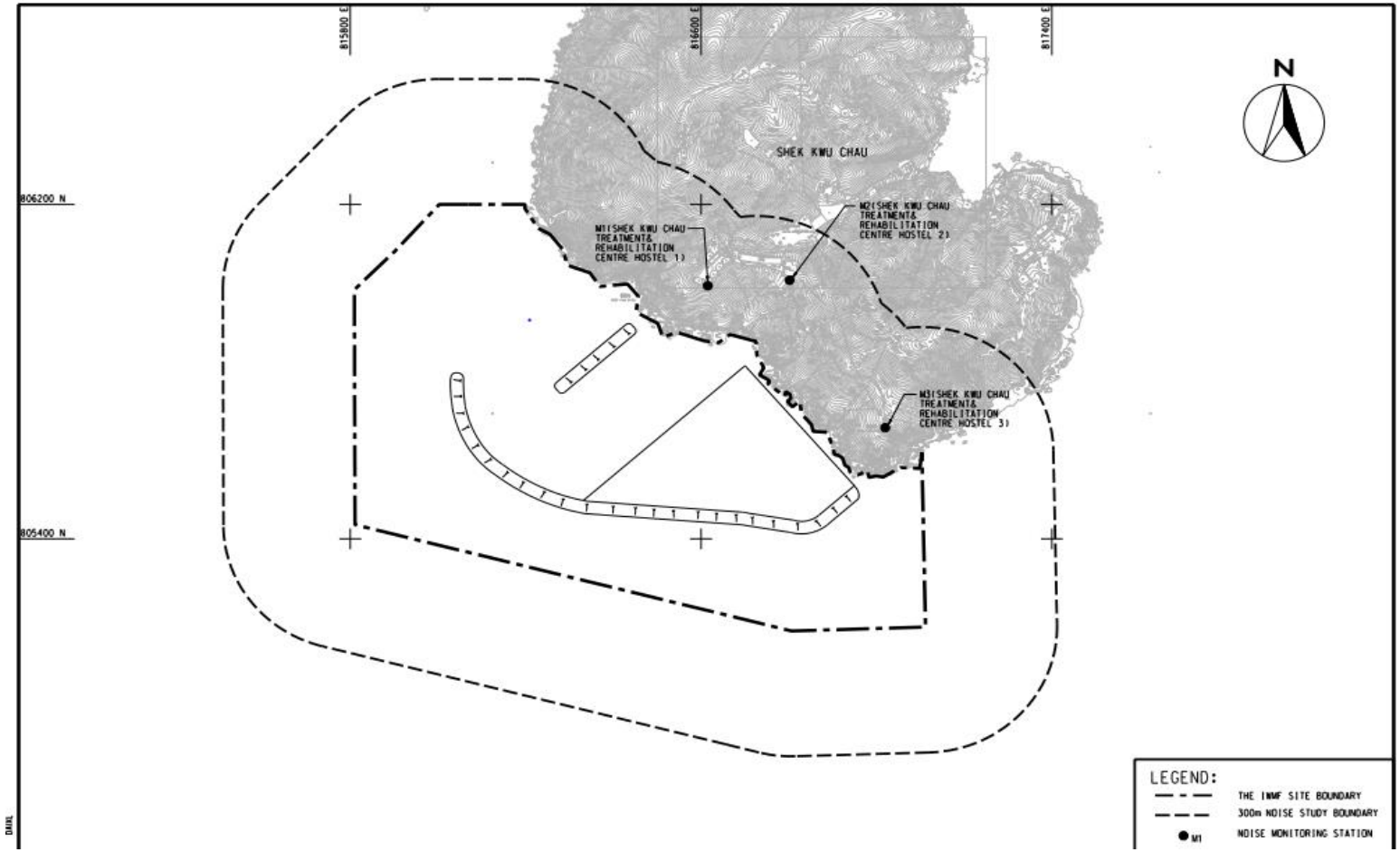


Figure 3.1 Noise monitoring locations at SKC

3.3.2 M1, M2 and M3 are Shek Kwu Chau Treatment and Rehabilitation Centre Hostel 1, 2 and 3 respectively of The Society for the Aid and Rehabilitation of Drug Abusers (SARDA) located at southern part of Shek Kwu Chau.

3.3.3 Measurements at M1 & M3 were conducted at a point 1m from the exterior of the sensitive receivers building façade and at a position 1.2m above the ground. Measurement setup at M3 has been varying with minor adjustment to minimize the disturbance to the users of Treatment Centre. Measurement at M2 was conducted at a point 1m from building façade of the ceiling of 1st floor level for avoidance of mutual disturbance with users of Treatment Centre. The minor adjustment of monitoring locations, which were in favour to mutual convenience with the users of Treatment Centre, were found with no effect on monitoring result based on on-site observation and experience from the Baseline monitoring of the Project. The noise monitoring stations are summarized in **Table 3.2** below.

Table 3.2 Noise Monitoring Location

Station	NSR ID in EIA Report	Noise Monitoring Location	Type of sensitive receiver(s)	Measurement Type
M1	N_S1	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 1	Residential	Façade
M2	N_S2	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 2	Residential	Façade
M3	N_S3	Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 3	Residential	Façade

3.4 Impact Monitoring Methodology

3.4.1 At each designated monitoring location, measurements of six 5-minute A-weighted equivalent sound pressure level [“$L_{eq\ 5min}$”] was carried out between 0700 and 1900 hours for daytime measurements on a normal weekdays (excluding Sunday or general holiday). The measured six impact noise levels at each monitoring location shall then be averaged in logarithmic scale and expressed in terms of the 30-minute A-weighted equivalent continuous sound pressure level ($L_{eq\ 30min}$) for the time period between 0700 and 1900 hours on normal weekdays.

3.4.2 At each designated monitoring location, measurements of three 5-minute A-weighted equivalent sound pressure level [“$L_{eq\ 5min}$”] was carried out between 1900 and 0700 hours for evening time and night time measurements.

3.4.3 The monitoring procedures are as follows:

- The microphone head of the sound level meter was normally positioned 1 m exterior of the noise sensitive façade and lowered sufficiently so that the building’s external wall acts as a reflecting surface.
- If there is a problem with the access to the normal monitoring position, an alternative may be chosen and appropriate correction would be applied according to acoustic principle when necessary. For reference, +3 dB(A) correction would be made for free-field measurements.
- The battery condition was checked to ensure good functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - Frequency weight: A
  - Time weighting: Fast
  - Measurement time: 5 minutes

- Prior to and after noise measurement, the meter was calibrated using the calibrator for 94.0 dB at 1000Hz. If the difference in the calibration level before and after measurement is more than 1.0 dB, the measurement was considered invalid and repeat of noise measurement was required after re-calibration or repair of the equipment.
- Noise monitoring was carried out for 30 minutes by sound level meter. At the end of the monitoring period, noise levels in terms of L_{eq}, L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded when the equipment was checked and inspected.
- All the monitoring data within the sound level meter system was downloaded through the computer software.

3.5 Monitoring Equipment

3.5.1 Integrated sound level meter was used for the noise monitoring. The meter shall comply with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications.

3.5.2 Equipment used in the impact noise monitoring programme is summarized in **Table 3.3** below. Calibration certificates for the noise monitoring equipment are attached in **Appendix E**.

Table 3.3 Impact Noise Monitoring Equipment

Equipment	**Brand and Model**
Sound Level Meter	SVANTEK 971
Sound Calibrator	RION NC-75

3.6 Maintenance and Calibration

3.6.1 The maintenance and calibration procedures were as follows:

- The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals.
- The sound level meter and calibrator were checked and calibrated at yearly intervals
- Immediately prior to and following each noise measurement, the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0dB.

3.7 Action and Limit Levels

3.7.1 The Action/Limit Levels in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities – Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 is presented in **Table 3.4**.

Table 3.4 Action and Limit Levels for Noise per Updated EM&A Manual

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

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

3.7.2 If exceedances were found during noise monitoring, actions in accordance with the Event and Action Plan shall be carried out according to **Appendix F**.

3.8 Monitoring Results and Observations

3.8.1 Impact monitoring for noise impact for daytime was carried out on 6, 7, 12, 22, 26 and 27 May 2025. Impact monitoring for noise impact for evening time and nighttime was carried out on 6&7, 7&8, 12&13, 22&23, 26&27 and 27&28 May 2025. The impact noise levels at Noise Monitoring Stations at SKC (i.e. M1/N_S1 to M3/N_S3) are summarized in **Table 3.6**, **Table 3.7** and **Table 3.8** respectively. Details of noise monitoring results are presented in **Appendix G**.

3.8.2 Major construction activity, major noise source and extreme weather which might affect the results were recorded during the impact monitoring.

3.8.3 According to our field observations, the major noise source identified at the noise monitoring station in the reporting month are summarised in **Table 3.5**. Air conditioning units and air quality monitoring station were also observed nearby monitoring stations M3.

Table 3.5 Summary of Field Observation

Monitoring Station	Major Noise Source
M1	NA
M2	NA
M3	Operation of nearby Air Quality Monitoring Station

3.8.4 No data from impact monitoring during daytime has exceeded the stipulated limit level at 75 dB(A).

Table 3.6 Summary of Impact Noise Monitoring Results during Day Time (0700 – 1900 hours)

Location	Measured Noise Level in dB(A)		
	Range of $L_{eq\ 30min}$	Range of $L_{10\ 30min}$	Range of $L_{90\ 30min}$
M1	57.3 – 58.4	58.6 – 59.6	55.3 – 56.2
M2	55.1 – 57.9	56.6 – 58.8	52.1 – 53.0
M3	53.5 – 63.1	54.5 – 65.4	51.5 – 58.0

3.8.5 Applicable mitigation measures for construction works are fully implemented as shown in **Appendix B**, where double-glazed windows and air conditioning system were also installed and confirmed operable for the NSRs (N_S1, N_S2 & N_S3).

3.8.6 During the noise monitoring event, frontline staff of ET had inquired the treatment centre users on any noise disturbance from the construction activities at evening and night time, where no complaint and adverse opinions was received.

3.8.7 Where site inspection and auditing on Contractor's record have shown that the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority for construction works during restricted hours were followed, no inappropriate practice was spotted during evening time and night time construction works. Thus, the stipulated requirement on noise impact control during night time and evening time was achieved.

Table 3.7 Summary of Additional Impact Noise Monitoring Results during Evening Time (1900 – 2300 hours)

Location	Measured Noise Level in dB(A)		
	Range of $L_{eq\ 5min}$	Range of $L_{10\ 5min}$	Range of $L_{90\ 5min}$
M1	50.0 – 57.0	51.3 – 58.5	48.5 – 55.1
M2	50.1 – 55.1	51.5 – 59.3	49.0 – 53.3
M3	36.4 – 55.8	37.9 – 58.8	34.7 – 52.4

Table 3.8 Summary of Additional Impact Noise Monitoring Results during Night Time (2300 – 0700 hours)

Location	Measured Noise Level in dB(A)		
	Range of $L_{eq\ 5min}$	Range of $L_{10\ 5min}$	Range of $L_{90\ 5min}$
M1	46.2 – 54.5	46.7 – 56.8	45.6 – 47.9
M2	47.4 – 57.6	47.7 – 58.0	47.0 – 49.3
M3	35.7 – 56.1	38.8 – 56.6	33.2 – 55.6

4. WASTE

4.1 The waste generated from this Project includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials.

4.2 As advised by the Contractor, no inert C&D materials was generated on site in the reporting month and reused in other project. No metal was generated and collected by registered recycling collector. No paper was collected by the registered recycling collector. No plastic waste was collected by registered recycling collector. 100L of chemical waste was collected by the licensed chemical waste collector. 1,664.0m^3 of other types of wastes (e.g. general refuse) was disposed of at designated landfill. No fill rock, fill sand or public fill was imported during the reporting period.

4.3 Chemical waste generated from land-based construction activities was stored in the chemical waste cabinet for temporary storage.

4.4 With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix H**.

4.5 The Contractor is advised to sort and store any solid and liquid waste on-site properly prior to disposal.

Table 4.1 Quantities of Waste Generated from the Project during May 2025

Reporting 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 (see Note 1)	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 (see Note 3)
						Sand	Public Fill	Rock						
	(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 ,000L)	(in ,000m^3)
May 2025	0	0	0	0	0	0	0	0	0	0	0	0	0.1000	1.6640

Notes: (1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor: 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: rock density = 2 T/m^3.

5. CORAL

5.1 Coral Monitoring Requirements

5.1.1 To monitor the health condition of corals during different phases, corals located within areas likely to be affected by the Project, corals located at control sites (areas unlikely to be affected by the Project), the trans-located coral colonies as well as the tagged natural coral colonies at the recipient site were chosen, in order to identify any adverse indirect impact from the marine works. The size, percentage cover and health condition of corals (i.e. any sign of abnormal appearance, such as layer of mucus, bleaching, partial mortality etc.) at representative transects should be recorded during each monitoring.

5.2 Coral Monitoring Parameters, Time, Frequency

5.2.1 Rapid Ecological Assessment (REA) survey was conducted on 26 June 2018 at the suggested control site and indirect impact site within two weeks before commencement of the construction work which was 29 June 2018. 10 selected hard coral colonies with the similar species were tagged at both control and indirect impact sites. Following coral translocation in the recipient site R3, 16 coral colonies attached to rocks less than 50 cm in diameter were translocated and tagged, as well as 10 selected natural coral colonies, at the recipient site. One additional REA survey was conducted in December 2018 to further assess the seabed condition at Indirect Impact Site after Typhoon Mangkhut.

5.2.2 Tagged coral colonies at the suggested control site and indirect impact site are being monitored weekly for the first month and followed by monthly monitoring for two months. Quarterly monitoring will be carried out after the first three-month of monthly monitoring until the completion of marine works and bi-annual monitoring will be carried out after the completion of marine works. The selected Control Site is located at Yuen Kong Chau of Soko Islands about 7 km away from the project area. Tagged coral colonies at the proposed recipient site are being monitored quarterly for one year. The selected recipient site R3 is located at the opposite side of the Project area at about 2 km away. The detailed survey of the Control Site and Impact Site were conducted before the commencement of the Construction Phase.

5.2.3 Monitoring recorded the following parameters (using the same methodology adopted during the pre-translocation survey); the size, presence, health conditions (percentage of mortality/bleaching) and percentage of sediment of each tagged coral colony. The general environmental conditions including weather, sea, and tidal conditions of impact site, control site and recipient site were monitored.

5.2.4 **Table 5.1** summarizes the monitoring locations, time and frequency of the tagged coral colonies monitoring. The monitoring schedule is provided in **Appendix C**.

Table 5.1 Tagged Coral Monitoring Locations, Time and Frequency

Monitoring Location	Monitoring Month/Year	Frequency	No. of Monitoring Survey
10 selected hard coral colonies at control site / indirect impact site	1st Month	Weekly Survey	4
	2nd to 3rd Months	Monthly Survey	2
	4th Month (postponed to 5th month due to diver accident in Shek Kwu Chau in October 2018)	Re-tagging of Coral Colonies in Indirect Impact Site after Typhoon Mangkhut	
	4th Month (postponed to 5th month due to diver accident in Shek Kwu Chau in October 2018 and further postpone to 6th month due to adverse weather)	Re-tagging of Coral Colonies in Control Site after Typhoon Mangkhut	
	5th Month (postponed to 6th month due to diver accident in Shek Kwu Chau and further postponed to 7th month due to delay of re-tagging activities at both Indirect Impact Site and Control Site)	Post Re-tagging Monthly Survey	1
	7th to 83rd Months (postponed to 8th to 84th month due to diver accident in Shek Kwu Chau in October 2018)	Quarterly Survey	24
	84th to 86th Months (The marine construction work is anticipated to be completed by June 2025, the frequency of monitoring will be changed to bi-annual with reference to the Updated EM&A Mannual (Rev.E))	Bi-annually Survey	1
16 translocated hard coral colonies and 10 selected natural hard coral colonies at recipient site R3	1st Year	Quarterly Survey	4

5.3 Coral Monitoring Locations

5.3.1 Location of the ten tagged coral colonies at each of the proposed indirect impact site (re-tagging after typhoon Mangkhut), control site (baseline) and recipient site R3 (translocation) are shown in **Figure 5.1**, **Figure 5.2** and **Figure 5.3** respectively:

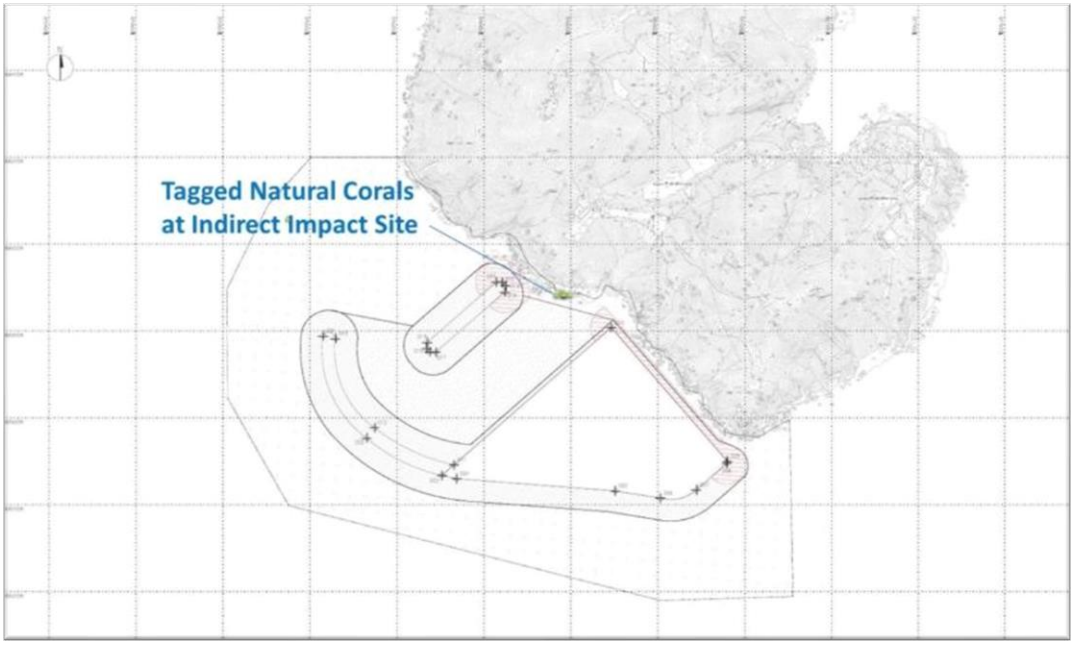


Figure 5.1 Tagged Natural Corals at Indirect Impact Site Near SKC for re-tagging after typhoon Mangkhut

Figure 5.2 Tagged Natural Corals at Control Site Near Yuen Kong Chau for re-tagging after typhoon Mangkhut

Figure 5.3 Tagged Translocation Corals at Recipient Site R3 near SKC

5.3.2 The GPS coordinates of the tagged coral colonies, retagged coral colonies and recipient site were shown in **Table 5.2**, **Table 5.3** and **Table 5.4** respectively.

Table 5.2 Tagged Natural Corals during Baseline and Re-tagged Natural Corals after Typhoon Manghkut at Control Site near Yuen Long Chau

Coral #	GPS Coordinates	
1	N22°09’45.96”	E113°54’57.81”
2R	N22°11’29.12”	E113°59’09.01”
3	N22°09’45.81”	E113°54’57.78”
4	N22°09’45.70”	E113°54’57.95”
5R	N22°11’29.10”	E113°59’09.18”
6	N22°09’45.75”	E113°54’58.02”
7R	N22°11’29.17”	E113°59’08.86”
7	N22°09’45.65”	E113°54’57.94”
8	N22°09’45.53”	E113°54’57.90”
9	N22°09’46.23”	E113°54’54.70”
10R	N22°11’29.18”	E113°59’08.91”

Notes:

i. The re-tagged corals were marked as ##**R**.

Table 5.3 Re-tagged Natural Corals after Typhoon Manghkut at Indirect Impact Site near SKC

Coral # note i	GPS Coordinates	
11R	N22°11'29.14"	E113°59'08.92"
12R	N22°11'29.12"	E113°59'09.01"
13R	N22°11'29.11"	E113°59'09.07"
14R	N22°11'29.13"	E113°59'09.12"
15R	N22°11'29.10"	E113°59'09.18"
16R	N22°11'29.07"	E113°59'09.23"
17R	N22°11'29.17"	E113°59'08.86"
18R	N22°11'29.14"	E113°59'08.94"
19R	N22°11'29.20"	E113°59'08.81"
20R	N22°11'29.18"	E113°59'08.91"

Notes:

i. The re-tagged corals were marked as ##**R**.

Table 5.4 GPS Coordinates of Recipient Site R3

Site	GPS Coordinates	
R3	N22°11'43.69"	E113°28.99"

5.4 Impact Monitoring Methodology

5.4.1 Health status of coral was assessed by the following criteria:

- Hard coral: Percentage of surface area exhibiting partial mortality and blanched/bleached area of each coral colony and degree of sedimentation.

5.5 Action and Limit Levels

5.5.1 Monitoring result was reviewed and compared against the below Action Level and Limit Level (AL/LL) as set with the below **Table 5.5** and **Table 5.6**.

Table 5.5 Action and Limit Levels for Construction Phase Coral Monitoring

Parameter	Action Level	Limit Level
Mortality	If during Impact Monitoring a 15% increase in the percentage of partial mortality on the corals occurs at more than 20% of the tagged indirect impact site coral colonies that is not recorded on the tagged corals at the control site, then the Action Level is exceeded.	If during Impact Monitoring a 25% increase in the percentage of partial mortality on the corals occurs at more than 20% of the tagged indirect impact site coral colonies that is not recorded on the tagged corals at the control site, then the Limit Level is exceeded.

Table 5.6 Action and Limit Levels for Post-Translocation Coral Monitoring

Parameter	Action Level	Limit Level
Mortality	If during Post-Translocation Monitoring a 15% increase in the percentage of partial mortality on the corals occurs at more than 20% of the translocated coral colonies that is not recorded on the original corals in the recipient site, then the Action Level is exceeded.	If during Post-Translocation Monitoring a 25% increase in the percentage of partial mortality on the corals occurs at more than 20% of the translocated coral colonies that is not recorded on the original corals in the recipient site, then the Limit Level is exceeded.

5.5.2 If exceedance was found during coral monitoring. The actions in accordance with the Event and Action Plan should be carried out according to **Appendix I.**

5.6 Monitoring Results and Observations

5.6.1 No coral monitoring survey had been done during the reporting period and the 26th quarterly coral monitoring during construction phase at both Indirect Impact Site and Control Site would be scheduled in June 2025.

6. MARINE MAMMAL

6.1 Monitoring Requirements

6.1.1 The marine mammal monitoring programme would focus on Finless Porpoise, as the study area near Shek Kwu Chau has been identified as a hotspot for this species, while the Chinese White Dolphins rarely occurred there in the past.

6.1.2 The monitoring will verify the predicted impacts on marine mammals and examine whether the mitigation measures recommended in the EIA report have been effectively implemented to protect marine mammals from negative impacts from construction activities.

6.1.3 The Vessel-based Line-transect Survey, the Passive Acoustic Monitoring and the Land-based Theodolite Tracking will be conducted to provide systematic, quantitative measurements of occurrence, encounter rate, habitat use, movement and behavioural patterns of marine mammals within or near the Project Area during construction and operational phases.

6.1.4 The mammal monitoring works during construction consist of the following three survey methods:

- Vessel-based Line-transect Survey – to monitor the occurrence of Finless Porpoises (and Chinese White Dolphins) in the study area during construction works, by comparing with the findings of the pre-construction marine mammal monitoring;
- Passive Acoustic Monitoring – to study the usage of the Project Area and two control sites in South Lantau Waters by Finless Porpoise during construction works, in reference with the baseline findings of the pre-construction marine mammal monitoring; and
- Land-based Theodolite Tracking – to study the movement and behavioral pattern of Finless Porpoise within and around the Project Area during construction works.

6.1.5 The marine mammal observation works of Marine Mammal Exclusion Zone (MMEZ) and Marine Mammal Watching as two of the specific mitigation measures recommended in the approved EIA report shall be fully and properly implemented for the Project to minimize disturbance on Finless Porpoise during construction and operational phases.

6.2 Survey Methods

6.2.1 Vessel-based Line-transect Survey

6.2.1.1 For the vessel-based marine mammal surveys, the monitoring team adopted the standard line-transect method (Buckland et al. 2001) as same as that adopted during the EIA study and pre-construction phase monitoring to allow fair comparison of marine mammal monitoring results.

6.2.1.2 Eight transect lines are set at Southeast Lantau survey area, including Shek Kwu Chau, waters between Shek Kwu Chau and the Soko Islands, inshore waters of Lantau Island (e.g. Pui O Wan) as well as southwest corner of Cheung Chau as shown in **Figure 6.1** below:

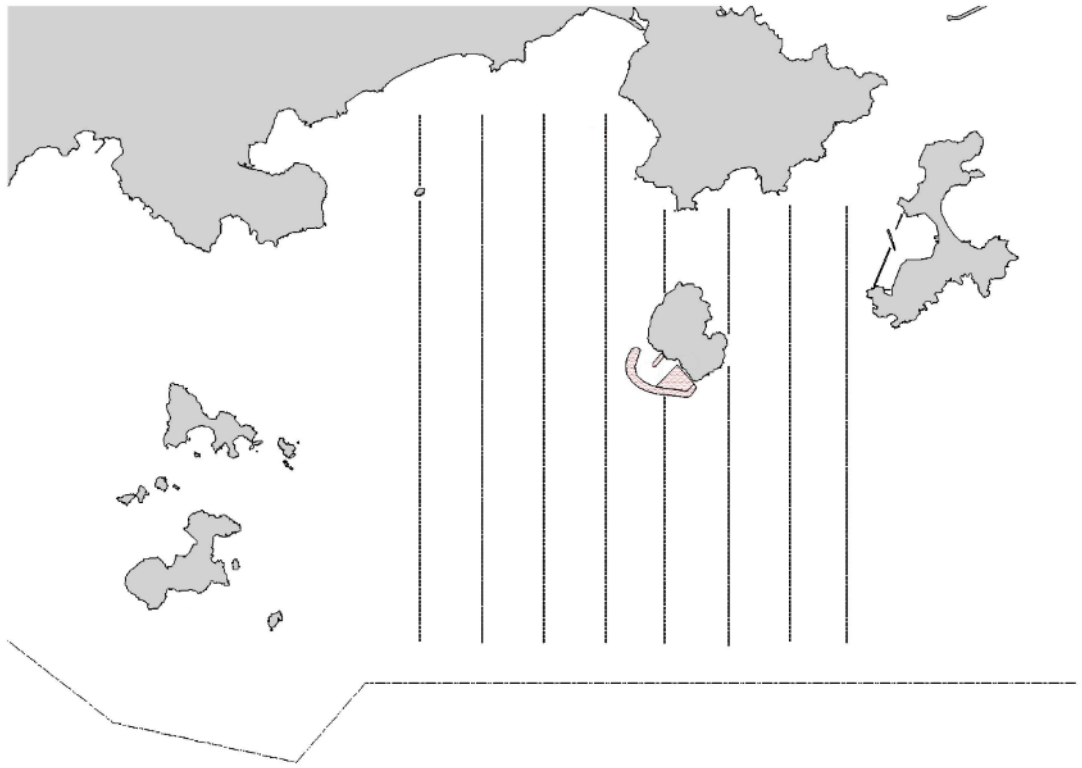


Figure 6.1 Line Transects for Marine Mammal Surveys

6.2.1.3 The surveys should cover all 4 seasons in order to take natural fluctuation and seasonal variations into account for data analysis of distribution, encounter rate, density and habitat use of both porpoises and dolphins (if any). In comparison to the baseline monitoring results, results from the analysed construction phase monitoring data would allow the detection of any changes of their usage of habitat, in response to the scheduled construction works. The monitoring surveys shall be conducted throughout the construction phase involving marine construction work with the frequency shown in **Table 6.1** below:

Table 6.1 Vessel-based Line-transect Survey Frequency

Season	Months	Frequency
Peak Season	December, January, February, March, April & May	Twice per month
Non-peak Season	June, July, August, September, October & November	Once per month

6.2.1.4 For each vessel survey, a 15-m inboard vessel with an open upper deck (about 4.5 m above water surface) would be used to make observations from the flying bridge area. Two experienced marine mammal observers (a data recorder and a primary observer) would make up the on-effort survey team, and the survey vessel would transit different transect lines at a constant speed of 13-15 km per hour. The data recorder shall search with unaided eyes and fill out the datasheets, while the primary observer shall search for dolphins and porpoises continuously through 7 x 50 marine binoculars. Both observers shall search the sea ahead of the vessel, between 270° and 90° (in relation to the bow, which is defined as 0°). Two additional experienced observers shall be available on the boat to work in shift (i.e. rotate every 30 minutes) in order to minimize fatigue of the survey team members. All observers shall be

experienced in small cetacean survey techniques and identifying local cetacean species with extensive training by marine mammal specialist of the ET.

6.2.1.5 During on-effort survey periods, the survey team shall record effort data including time, position (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance travelled in each series (a continuous period of search effort) with the assistance of a handheld GPS (Garmin eTrex Legend). Data including time, position and vessel speed would also be automatically and continuously logged by handheld GPS throughout the entire survey for subsequent review.

6.2.1.6 When porpoises or dolphins are sighted, the survey team shall end the survey effort, and immediately record the initial sighting distance and angle of the porpoise or dolphin group from the survey vessel, as well as the sighting time and position. Then the research vessel shall be diverted from its course to approach the animals for species identification, group size estimation, assessment of group composition, behavioural observations, and collection of identification photos (feasible only for Chinese White Dolphin). The perpendicular distance (PSD) of the porpoise or dolphin group to the transect line would then be calculated from the initial sighting distance and angle, which shall be used in the line-transect analysis for density and abundance estimation.

6.2.1.7 The line-transect survey data shall be integrated with a Geographic Information System (GIS) to visualize and interpret different spatial and temporal patterns of porpoise and dolphin distribution using their sighting positions collected from vessel surveys. Location data of porpoise and dolphin groups would be plotted on map layers of Hong Kong using a desktop GIS (e.g. ArcView© 3.1) to examine their distribution patterns in details. The encounter rate could be used as an indicator to determine areas or time periods of importance to porpoises within the study area. For encounter rate analysis of finless porpoises, only survey data collected under Beaufort 2 or below condition would be used for encounter rate analysis.

6.2.1.8 To take into account of the variations of survey effort across different sections within survey area, the quantitative grid analysis of habitat use would be conducted to examine finless porpoise usage among 1-km^2 grids within the Southeast Lantau survey area. For the grid analysis, SPSE (sighting density) and DPSE (porpoise density) values would be deduced for evaluation on level of porpoise usage. First, positions of on-effort porpoise sightings from the study period are plotted onto 68 grids (1 km x 1 km each) within the survey area. Sighting density grids and porpoise density grids shall then be normalized with the amount of survey effort conducted within each grid. The total amount of survey effort spent on each grid shall be calculated by examining the survey coverage on each line-transect survey to determine how many times the grid had been surveyed during study period. With the amount of survey effort calculated for each grid, the sighting density and porpoise density of each grid shall be further normalized (i.e. divided by the unit of survey effort).

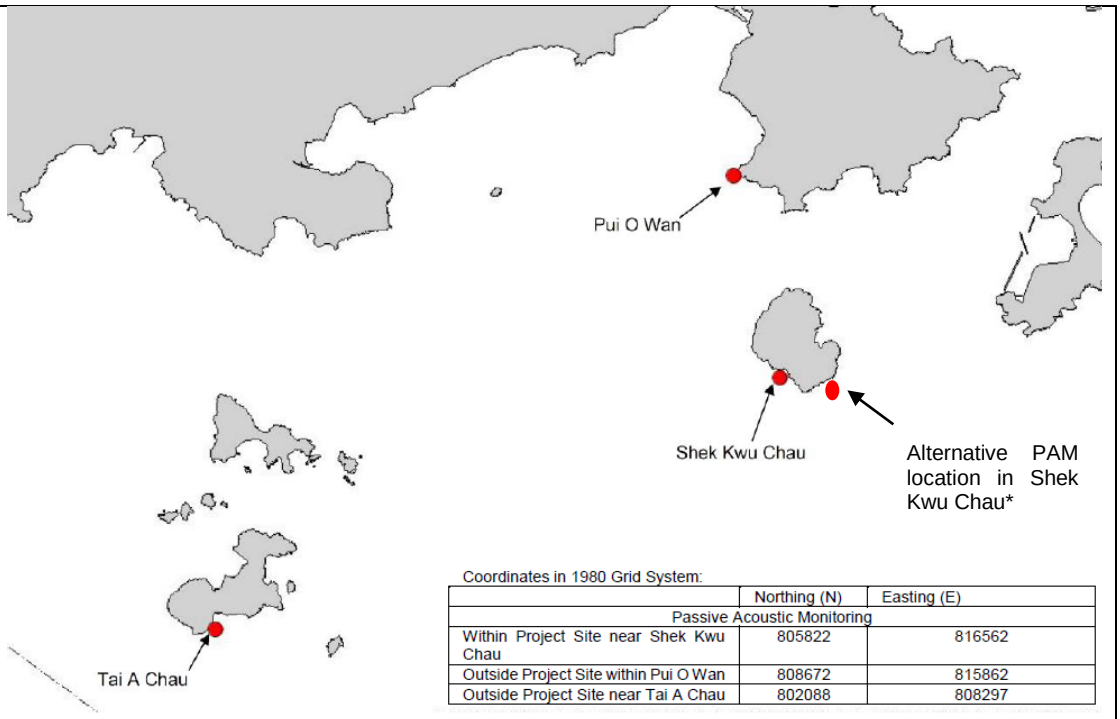
6.2.1.9 The newly-derived unit for sighting density was termed SPSE, representing the number of on-effort sightings per 100 units of survey effort. In addition, the derived unit for actual porpoise density was termed DPSE, representing the number of dolphins/porpoise per 100 units of survey effort. Among the 1-km^2 grids that were partially covered by land, the percentage of sea area was calculated using GIS tools, and their SPSE and DPSE values were adjusted accordingly. The following formulae shall be used to estimate SPSE and DPSE in each 1-km^2 grid within the study area:

$$SPSE = ((S / E) \times 100) / SA\%$$
$$DPSE = ((D / E) \times 100) / SA\%$$

where S = total number of on-effort sightings
D = total number of dolphins/porpoises from on-effort sightings
E = total number of units of survey effort
SA% = percentage of sea area

6.2.2 Passive Acoustic Monitoring (PAM)

The PAM aims to study the usage of an area by Finless Porpoise by using an array of automated static porpoise detectors (e.g. C-POD) which would be deployed at different locations to detect the unique ultra-high frequency sounds produced by Finless Porpoise. During the construction period, the PAM survey will be conducted including placement of two passive porpoise detectors outside the Project Area as control site (i.e. within Pui O Wan and to the south of Tai A Chau) and one porpoise detector within the Project Area (i.e. near Shek Kwu Chau) as shown in **Figure 6.2** below.



Coordinates in 1980 Grid System:

	Northing (N)	Easting (E)
Passive Acoustic Monitoring		
Within Project Site near Shek Kwu Chau	805822	816562
Outside Project Site within Pui O Wan	808672	815862
Outside Project Site near Tai A Chau	802088	808297

Note*: The alternative PAM device adjacent to the Project site was deployed from 5 Mar to 11 Apr 2019, which contained a full 37 days acoustic monitoring data set. After the confirmation of loss of the original PAM within the Project site, this data set was proposed to replace that of the original one, as consulted with AFCD accordingly.

Figure 6.2 Locations of Passive Acoustic Monitoring

6.2.3 These three detectors will be deployed on-site to carry out 24-hours monitoring for a period listed as **Table 6.2** below during the construction phase.

Table 6.2 PAM Deployment Period

Season	Months	Deployment Period
Peak Season	December, January, February, March, April or May	At least 30 days during the peak months of porpoise occurrence in South Lantau waters

6.2.3.1 The automated static porpoise detectors shall detect the presence and number of finless porpoise and Chinese White Dolphins respectively over the deployment period, with the false signal such as boat sonar and sediment transport noise distinguished and filtered out. The detectors shall be deployed and retrieved by professional dive team on the seabed of the three selected location shown in **Figure 6.2**. During each deployment, the C-POD unit serial numbers as well as the time and date of deployments shall be recorded. Information including the GPS positions and water depth at each of the deployment locations shall also be obtained.

6.2.3.2 The diel patterns (i.e. 24-hour activity pattern) of finless porpoise occurrence among the three sites at Shek Kwu Chau, Tai A Chau and Pui O Wan shall be analyzed. Peaks and troughs of finless porpoise occurrence per hour of day would be identified and compared with the results obtained from pre-construction monitoring.

6.2.4 Land-based Theodolite Tracking

6.2.4.1 The Land-based Theodolite Tracking study would use the same station as in the AFCD monitoring study (same as the baseline monitoring location), which is situated at the southwest side of Shek Kwu Chau (GPS position: 22°11.47' N and 113°59.33' E) as shown in below **Figure 6.3**. The station was selected based on its height above sea level (at least 20 metres), close proximity to shore, and relatively unobstructed views of the entire Project Area to the southwest of Shek Kwu Chau. The height of the Shek Kwu Chau Station established by the HKCRP team is 74.6 m high at mean low water, and only a few hundred metres to the IWMF reclamation site, which is ideal for the purpose for the present behavioural and movement monitoring of finless porpoises as well during construction phase considering there as an un-obstructed vantage point at a height above the Project Site.

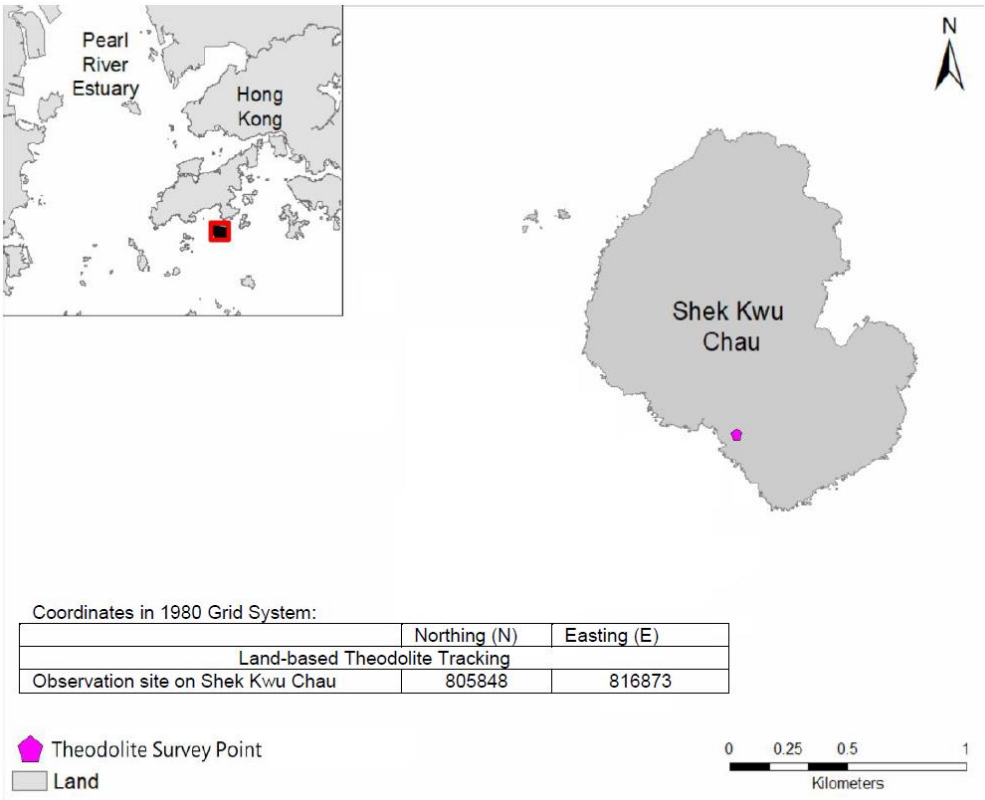


Figure 6.3 Locations of Land-based Theodolite Tracking

During the construction phase, Land-based Theodolite Tracking will be carried out for approximately six hours of tracking for each day of field work for a period listed as **Table 6.3** below, preferably at the initial stage of the construction period (i.e. December 2018 to May 2019).

Table 6.3 Land-based Theodolite Tracking Survey Period

Season	Months	Survey Period
Peak Season	December, January, February, March, April or May	30 days during the peak months of porpoise occurrence in South Lantau waters

6.2.4.2 The monitoring period for land-based theodolite tracking will be proposed to be overlapped with the PAM. The monitoring team consists of one experienced theodolite operator and at least two field observers for assistance. To conduct theodolite tracking, the observers will search systematically for Finless Porpoise using the unaided eye and 7 x 50 handheld binoculars on each survey day throughout the study area. When an individual or group of porpoises is located, a theodolite tracking session will be initiated and focal follow methods will be used to track the porpoise(s). Behavioural state data (i.e. resting, milling, travelling, feeding and socializing) shall also be recorded every 5 minutes for the focal individual or group. Positions of porpoises and boats shall be measured using a digital theodolite connected to a laptop computer. This tracking survey was conducted during the peak season between December 2018 and May 2019 for 30 surveys spanning across 15-16 weeks during the peak season to provide good temporal coverage during the initial stage of the construction period.

6.3 Specific Mitigation Measures

6.3.1 Monitored exclusion zones

6.3.1.1 A MMEZ with 250 m distance from silt curtain shall be established during the above situation. If 3 or more construction vessels are required with MMO's duty and operating in close proximity, for the purpose of avoiding accidental entrance to the works area by Marine Mammal, a cluster MMEZ plan will be implemented to form a MMEZ with 250 m distance from the boundary of a work area as indicated in Figure 1 for reference. A team of MMO (i.e. at least two MMOs per day/night shift teams) would be arranged at the out-lying construction vessels to form the cluster MMEZ. The MMEZ serves as a monitoring approach to provide appropriate and immediate actions once finless porpoise or Chinese White Dolphin is sighted within the MMEZ. All MMEZ will be monitored by competent Marine Mammal Observers (MMOs) to be provided by the Environmental Team for the IWMF and trained by the Marine Mammal Monitoring Specialist of the ET who is independent from KSZHJV. The marine mammal observer(s) shall be independent of the construction contractor and shall form part of the Environmental Team and have the power to call-off construction activities.

6.3.1.2 According to the Condition 2.25 of the FEP, MMEZ should be implemented during the installation/re-installation/relocation process of floating type silt curtains in order to avoid the accidental entrance and entrapment of marine mammals within the silt curtains. Also, marine construction works expected to produce underwater acoustic disturbance as per Condition 2.27 of the FEP, especially within December and May, would require the implementation of MMEZ, which currently all those specific construction activities have been replaced by less acoustically disturbing construction methods such as Deep Cement Mixing (DCM) and Precast Concrete

Blocks Installation as discussed in Section 5.3 of the Detailed Monitoring Programme on Finless Porpoise, however, MMEZ would also be implemented for precautionary purpose for DCM works.

6.3.1.3 A MMEZ with 250 m distance from the boundary of a work area shall be established during the above situation. A typical MMEZ is indicated in **Figure 6.4** for reference. The MMEZ serves as a monitoring approach to provide appropriate and immediate actions once finless porpoise or Chinese White Dolphin is sighted within the MMEZ. All MMEZ will be monitored by competent Marine Mammal Observers (MMOs) to be provided by the Environmental Team (ET) for the IWMF and trained by the Marine Mammal Monitoring Specialist of the ET who is independent from KSZHJV.

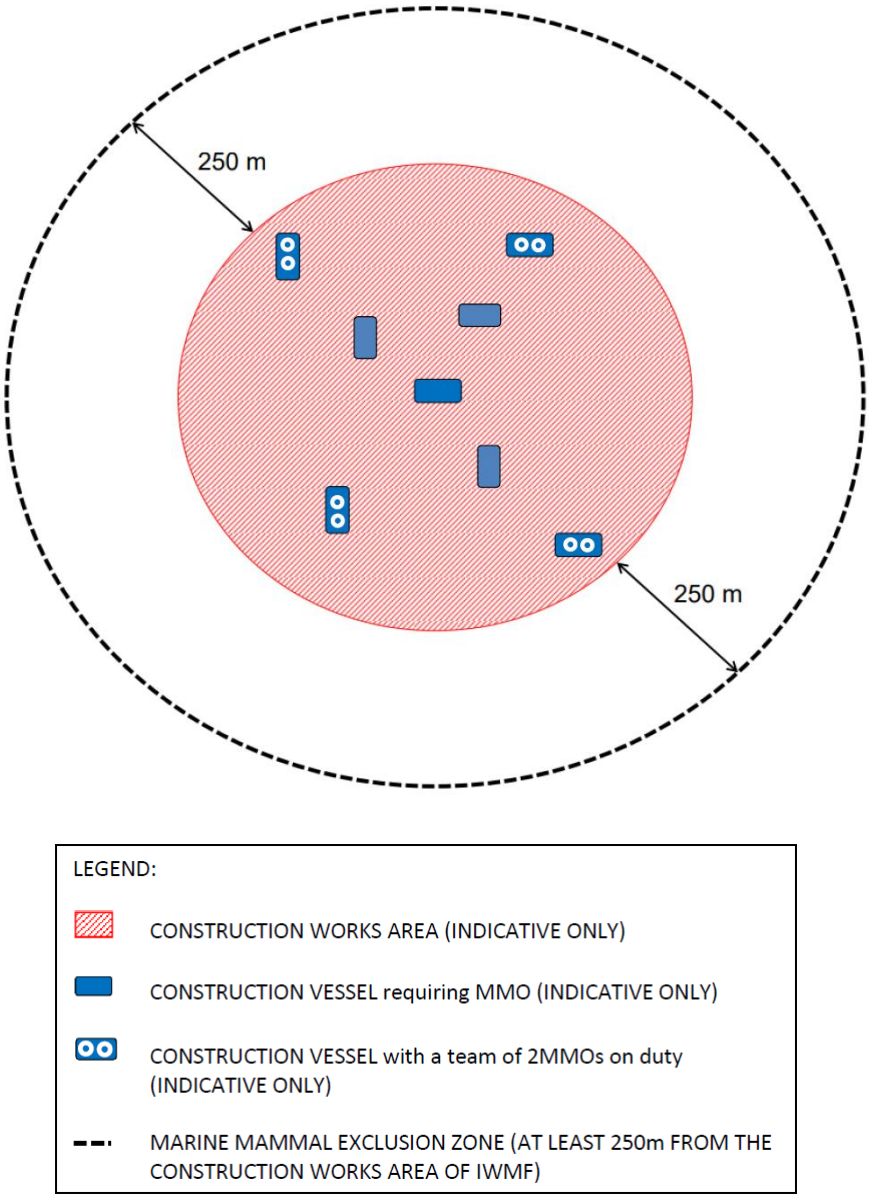


Figure 6.4 Illustration of Typical MMEZ

6.3.1.4 Prior to the commencement of construction activity, our MMOs shall ensure the boundary of a marine work area and setting up of the MMEZ for the work area and get access to the monitoring location on a barge or a lookout point where there is no obstructed views for monitoring the MMEZ during the construction activity. The MMEZ shall be scanned thoroughly by a MMO for any presence of marine mammal e.g. finless porpoise for an initial period of 30 minutes. Construction activity shall only be commenced after the MMO has confirmed that the MMEZ is clear of the marine mammal for the initial period of 30 minutes. The MMO shall then inform the construction superintendent through mobile phone or handheld transceivers to certify the commencement of construction activity. The MMEZ monitoring shall be carried on throughout the period for all active construction activities requiring implementation of MMEZ.

6.3.1.5 When any mammal marine, e.g. Finless Porpoise, is detected by the MMO within the MMEZ during construction, the MMO shall inform the construction superintendent immediately through mobile phone or handheld transceivers to cease construction activity within the MMEZ. Construction activity shall not be re-commenced until the MMO confirms that the MMEZ is continuously clear of marine mammal for a period of 30 minutes. The MMO shall then inform the construction superintendent through mobile phone or handheld transceivers to certify the re-commencement of construction activity.

6.3.1.6 As there could be a number of Contractors working at the same time within a work area for the IWMF project, a full contact list of MMEZ monitoring team members of the ET and the relevant responsible construction superintendents of the Contractor at the site shall be prepared, updated regularly and circulated to all parties involved in the MMEZ monitoring. With a full contact list, our MMOs shall be able to find out the contacts of corresponding persons in case of marine mammal sighting within and near the MMEZ or emergent occurrence of any unpredictable impact on marine mammal.

6.3.1.7 If a marine mammal is still observed in close vicinity but outside the MMEZ, the MMO shall inform the construction superintendent about the presence of marine mammal. The MMO shall remain in position and closely observe the movement of the marine mammal as well as searching for the appearance of any other marine mammal within the MMEZ. No matter the marine mammal is observed within or in close vicinity but outside the MMEZ, the construction superintendent or relevant persons shall inform all vessel captains involved in construction activities around the MMEZ to pay special attention of the presence of the marine mammal in order to reduce chance of collision with them. In case of injury or live-stranded marine mammal being found within the MMEZ, the marine mammal observer shall immediately inform the construction superintendent to suspend construction activities within the works area and contact AFCD through “1823” marine mammal stranding hotline.

6.3.2 Marine mammal watching plan

6.3.2.1 Upon the completion of silt curtain installation/re-installation/relocation, the marine works would be conducted within an enclosed environment within the silt curtain. Subsequently, Visual Inspection of the Waters Surrounded by Silt Curtains (Section 2.1, MMWP) and Regular Inspection of Deployed Silt Curtain (Section 2.2, MMWP) inspection under Marine Mammal Watching Plan would be implemented (where applicable, Marine Mammal Exclusion Zone shall be conducted at the meantime).

6.3.2.2 Before commencement of dredging/sand blanket laying work at each designated area, a trained MMO shall check whether position frame silt curtains are ready, well prepared and operated without any obvious damage. Also, the MMO shall confirm the presence of the relevant frontline staff of the main contractor or its sub-contractors and engineers on board to ensure the effective communication, coordination and implementation of the response plan in relation to any incidents involving marine mammals within the waters surrounded by the position frame type silt curtains and the work areas. Also, there are lookout points at an elevated level on each barge, clear and safe access at the edges of the derrick lighter/ flag-top barge for inspection during dredging/sand blanket laying works, provision of sufficient lighting is required if working at night.

6.3.2.3 During the operation, the inspection will be conducted daily. The MMO will walk along the edge of derrick lighter (DL) and flag-top barge (FB) along the position frame silt curtain or proper location without obstacles where appropriate to inspect the position frame silt curtain with naked eyes, the MMO will check that the position frame silt curtains are maintained in the correct positions with no obvious defects / entanglement and there is no observable muddy water passing through the position frame silt curtain system. Any floating refuse trapped by the silt curtain shall be removed as part of the regular inspection. For night inspection, spotlight will be used to provide sufficient brightness to assist the inspection in dark condition.

6.3.2.4 For the re-deployment of the localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains), MMO will conduct visual inspection to confirm that there is no presence of marine mammal within the localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains). Visual inspection will be conducted every hour by MMO for confirming that there is no marine mammal observed in the surrounding area of the deployed silt curtain during re-deployment of localized silt curtains (frame-type, cage-type or enclosed floating-type silt curtains). The duration will be subject to various conditions, e.g. weather or angle of observation. The works can only commence after confirming that the surrounding waters of the localized silt curtains do not contain any marine mammal. Thereafter, frontline staff, i.e. foremen, site agent, superintendents and engineers will assist our MMO in implementing the plan from the active work fronts within the waters surrounded by the silt curtains throughout the work period. The MMO will conduct regular check to observe the presence of any marine mammal around the localized silt curtain or being trapped by the localized silt curtain daily. The MMOs will also check if the localized silt curtains are in correct positions.

6.3.2.5 The MMO shall fill up our Marine Mammal Sighting Record Sheet. After inspection, those records should be kept properly and submitted to the project team. In case there is any marine mammal being found, the MMO should carry out the response actions and communicate with relevant parties to stop and then resume work after the discovered marine mammal leaves. After lifting up and mobilization of silt curtain, the MMO will repeat the procedures of regular and visual inspection until the end of the construction works.

6.3.2.6 Each lookout point will have an unobstructed view to waters around the DL and FB. The MMO will move around the DL and FB to establish a clear and unobstructed view as much as they can without compromising the safety concern. When appropriate, the lookout point can be replaced by a proper location if unobstructed view can be assured.

6.3.2.7 Installation of caisson No.19 was completed on 18 March 2021, which the reclamation area had been totally enclosed by permanent structure. Floating type silt curtain at marine access was removed on 18 March 2021. No enclosed area shall be formed by deployment of silt curtain for the remaining works programme.

6.4 Results and Observations

6.4.1 Vessel-based Line-transect Survey

6.4.1.1 As confirmed with Contractor, no marine construction work will be carried out from December 2025 to June 2025 tentatively. EPD advised no objection on the temporary suspension of water quality and line-transect monitoring on 25 February 2025. The line-transect monitoring was then temporarily suspended from 25 February 2025 onward.

6.4.2 PAM and Land-based Theodolite Tracking

6.4.2.1 30 days of PAM surveys were started on 1 May 2019 and completed in the end of May 2019. Multiple PAM systems were deployed at three sites. The PAM system located at the IWMF was lost, however, an alternative data set had been identified. The PAM systems at the two control sites Tai A Chau and Pui O were recovered on 3 August 2019. A summary of marine mammal detections showed that porpoise were recorded every day of deployment at each site, but at varying frequencies. The detailed theodolite result was presented in 17th Monthly EM&A report (November 2019) while detailed PAM result was presented in 18th Monthly EM&A report (December 2019).

6.4.2.2 For the baseline study, the Detection Positive Minutes (DPM) for each site was 11,160 (Shek Kwu Chau), 16,089 (Tai A Chau) and 3645 (Pui O Wan), totalling 30,894 DPM across all three sites, compared to DPMs of 4740 (Shek Kwu Chau), 7725 (Tai A Chau) and 23,986 (Pui O Wan), totalling 36,451 DPM, for the impact phase study. As the impact phase study was longer than the baseline study, it is not appropriate to directly compare total counts of DPM. However, the DPM rate (the average number of detections per day) for each site can be more directly compared. During the baseline study, Shek Kwu Chau averaged 338.2 DPM per day compared with 124.8 DPM per day during the impact phase study. This showed a decrease in the daily average of porpoise detection at Shek Kwu Chau. During the baseline study, Tai A Chau averaged 487.6 DPM per day compared with 179.7 DPM per day, during the impact phase study. This showed a decrease in the daily average of porpoise detection at Tai A Chau. During the baseline study, Pui O Wan averaged 98.5 DPM per day compared with 557.8 DPM per day during the impact phase study. This showed a significant increase in the daily average of porpoise detections at Pui O Wan.

6.4.2.3 Overall, the PAM study showed that porpoise continue to consistently utilise the Shek Kwu Chau habitat immediately adjacent to the IWMF construction activities, although to a lesser degree than that prior to construction activities. In addition, the Pui O Wan site, which is 2.5 km away from the IWMF construction area, was also consistently utilised during the impact phase PAM study. A continued assessment of fine scale habitat use, particularly through PAM which yielded large quantities of data, would allow a more comprehensive assessment of the EIA predictions.

6.4.2.4 Theodolite surveys were completed in May 2019. In total, 34 days of theodolite tracking were completed between February and May 2019, comprising 167 hours and 49 minutes of observation. No Chinese white dolphin was observed and only

one finless was recorded. The finless porpoise encounter rate was calculated as 0.006 finless porpoise per hour, in all weather conditions.

6.4.2.5 A total of 2620 vessels of ten different types were observed and tracked within or in the proximity of the IWMF construction site. These comprised fishing boats (236), speed boats (29), container boats (155), government boats (22), high speed ferries (53), others (13) and IWMF-Related construction platforms (974), tug boats (240), transportation boats (363), construction boats (531) and approximately 8 buoys were present marking the site boundary.

6.4.2.6 The baseline theodolite tracking was conducted immediately prior to and during the site preparation activities of the site. The baseline data records a decrease in porpoise sightings as site preparation activities commenced and notes that the decrease was most likely due to the onset of site preparation activities. The impact theodolite tracking conducted for this study records a marked increase in the number of Project related vessels and platforms and, in agreement with baseline conclusions, shows a concomitant decrease in finless porpoise sightings.

6.4.3 Specific Mitigation Measures

6.4.3.1 Trainings for the MMO were provided by the ET prior to the monitoring of the Marine Mammal Exclusion Zone (MMEZ) for installation/ re-installation/ relocation process of silt curtains, with a cumulative total of 98 individuals being trained and the training records kept by the ET.

7. WHITE-BELLIED SEA EAGLE

7.1 Monitoring Requirement

7.1.1 On Shek Kwu Chau Island, a nest of WBSE is located about 60 m above ground within a hillside shrubland habitat, 130 m in-land from shore, about 550 m away from the proposed reclaimed land, with no human access. 3 phases monitoring programme will be comprised of pre-construction phase, construction phase and operation phase.

7.1.2 The Pre-Construction WBSE monitoring was started on 30 January 2018 and the location of WBSE nest was confirmed on 21 February 2018 and it is located at the western part of SKC Island (**Figure 7.1**). Two adults and two chicks were also recorded on 5 March 2018 survey till the end of the Pre-construction monitoring on 15 May 2018. Construction Phase monitoring were carried out followed by the commencement of the Construction Phase on 28 June 2018.

7.2 WBSE Monitoring Parameters, Time, Frequency

7.2.1 The objective of the construction phase monitoring should be to verify the utilisation of the area by WBSE, their responses to construction disturbance, as well as the effectiveness of the proposed mitigation measures. Throughout the construction phase, field surveys should be conducted twice per month during their core breeding season (from December to May), and once per month outside their core breeding season (from June to November). The monitoring frequency should be increased to weekly during the incubation period of each year. In order to confirm their foraging ground near the construction site, it is necessary to conduct daily monitoring during the first week of nestling period in each year.

7.2.2 Since the location of the WBSE nest was located at the southwest of SKC within the hillside shrubland, it is impossible to observe the eggs during incubation period. Therefore, monitoring with increased frequency during incubation period will be continued until chick was seen in the nest. Daily monitoring of 7-day consecutive monitoring will be carried out once any chick is recorded during the monitoring day. The monitoring schedule during the reporting period is provided in **Appendix C**.

7.3 Monitoring Location

7.3.1 Since there are no suitable land footings along the coast of SKC, only boat surveys were conducted. On Shek Kwu Chau Island, a nest of WBSE is located about 60 m above ground within a hillside shrubland habitat, 130 m in-land from shore, about 550 m away from the proposed reclaimed land, with no human access.

7.4 Monitoring Methodology

7.4.1 Information to be collected included feeding, perching/roosting, preening, soaring, flying, nesting and territorial guarding and the time spent on each activity. The responses and reactions to any disturbance to the WBSEs were also recorded and examined in conjunction with the construction noise and/or other events in the vicinity. Other disturbances such as weather condition, or invasion by other fauna species were also recorded.

7.4.2 Binocular, scope, camera, lens and GPS device used are summarized as **Table 7.1** below:

Table 7.1 List of Equipment Used during Construction Phase Monitoring

Equipment	Quantity
Swarovski EL 8.5 x 42 Binocular	1
Swarovski EL Range 8 x 42 Binocular	1
Swarovski ATX 25-60 x 85 Spotting Scope	1
Canon 1Dx Mark II Camera	1
Canon EF300mm F2.8 Lens with Canon 2x Teleconverter	1
Canon PowerShot G7X Camera	1
Garmin GPSMAP 64S	1

7.4.3 If event such as absence of White-bellied Sea Eagle during a whole day of monitoring was found during WBSE monitoring, the actions in accordance with the Event and Action Plan should be carried out according to **Appendix J.**

7.5 Results and Observations

7.5.1 The twice per month monitoring for incubation period during the construction phase monitoring was conducted on 14 and 28 May 2025 to verify the utilization of the area by WBSE, their responses to construction disturbance, as well as the effectiveness of the proposed mitigation measures. Since there is no landing point long the western part of SKC, boat survey was used for the monitoring survey. The WBSE, monitoring survey was carried out in the morning. The weather conditions of monitoring surveys were shown in **Table 7.2**.

Table 7.2 Weather Conditions during the WBSE Monitoring

Date	Condition	Temperature (℃)
14th May 2025	- East wind force 4 to 5 - Sunny Day	27
28th May 2025	- Southeast wind force 3 to 4 - Sunny Day	28

7.5.2 During the whole monitoring survey period, the two adult WBSEs were recorded staying around the nest during the monitoring period and two chicks were record in the nest. No abnormal behaviors of the adults and chicks were recorded.

7.5.3 The juvenile recorded in 2022 and 2023 has not been observed since monitoring event in September 2022 and September 2023 respectively, it is suggested that the juvenile left the nest at SKC and nesting in other area outside our monitoring boundary.

7.5.4 All construction works during the monitoring period did not show any effect to the WBSE.

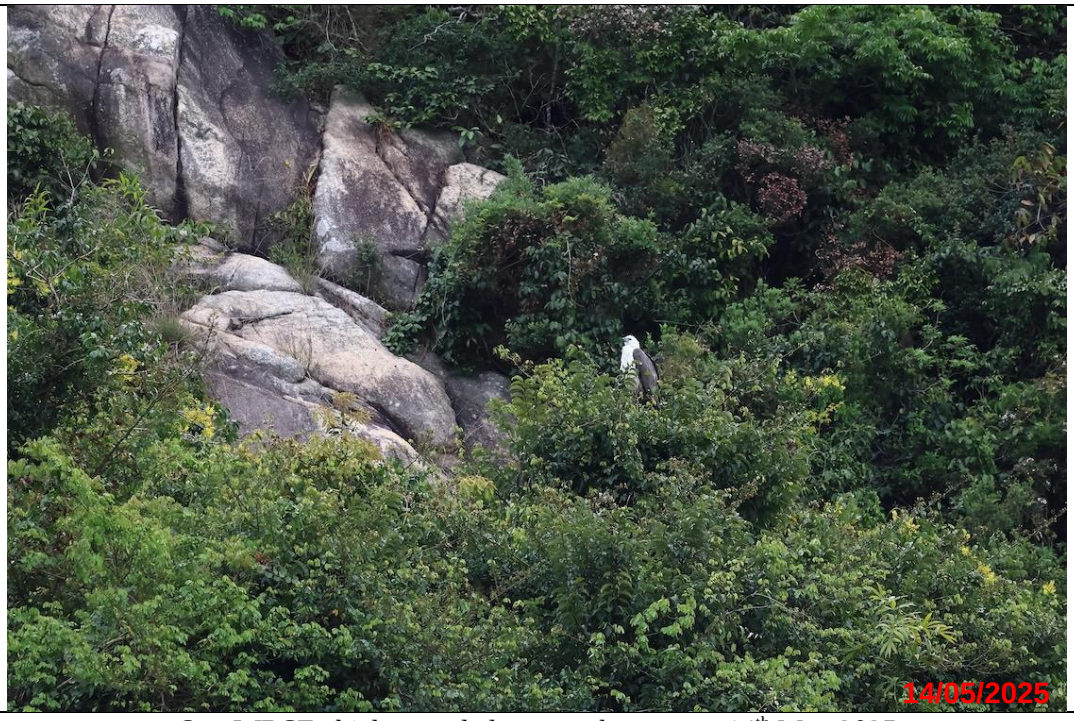
7.5.5 Any disturbances from anthropogenic activities on the island were not recorded during the monitoring survey. However, there were fishing boats moving close the shore was recorded. Since the nesting tree is about 160m away from the shore and it is not accessible, fishing boat activities didn't show any direct disturbance to the WBSE nest. No invasion of other faun species was recorded as well.

7.5.6 There was no sign of using the construction site as a foraging ground.

7.5.7 Twice per month construction phase monitoring will be continued in May 2025 during the breeding season (between December to May).

Figure 7.1 Location of WBSE Nest on SKC

7.5.8 Photo record of WBSE from the survey in this reporting month is shown below:



One WBSE chick recorded next to the nest on 14th May 2025

Two WBSE chick recorded inside the nest on 28th May 2025

8. SUMMARY OF MONITORING EXCEEDANCE, COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

8.1 The Environmental Complaint Handling Procedure is shown in **Figure 8.1**.

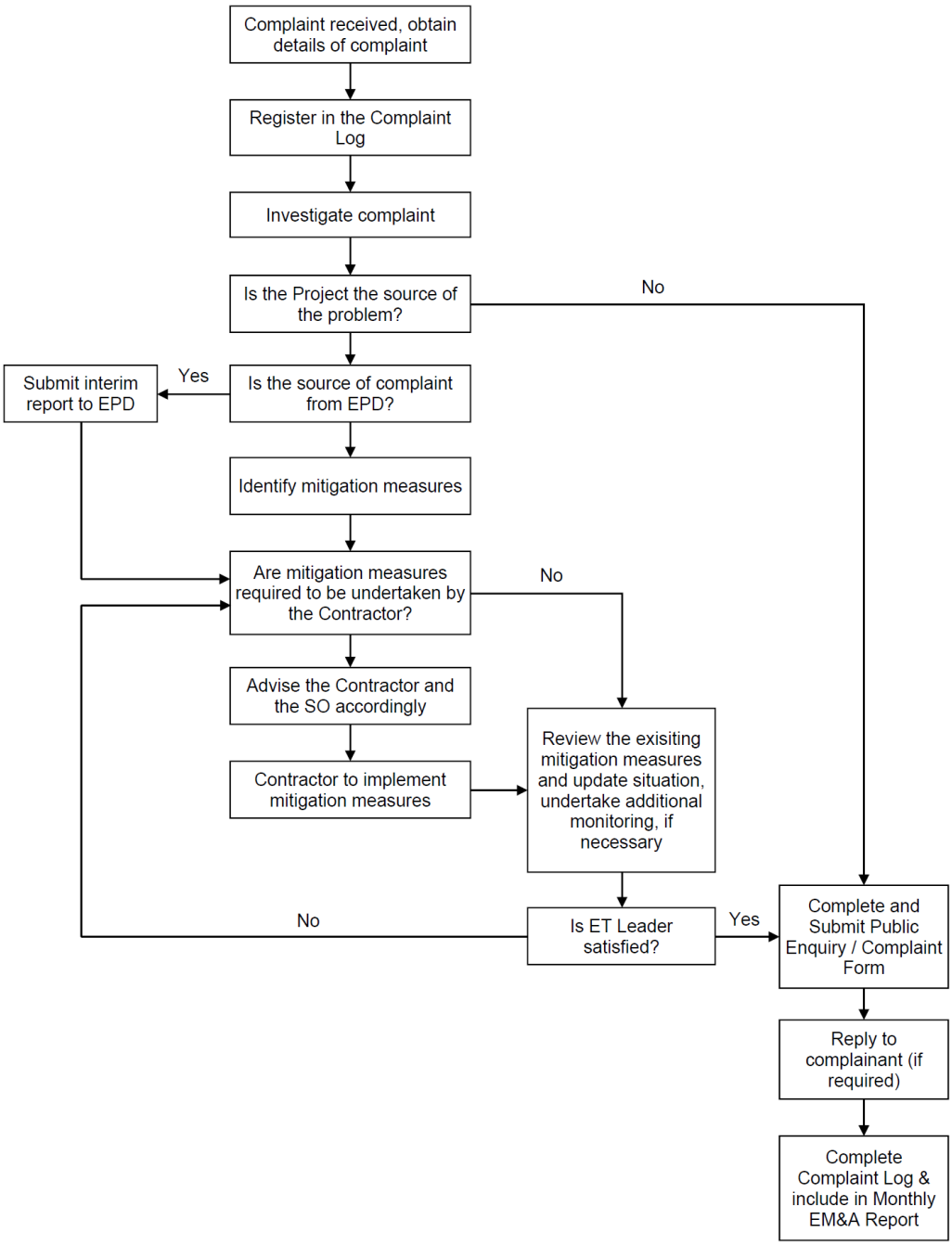


Figure 8.1 Environmental Complaint Handling Procedures

8.2 No exceedance of the Action and Limit Levels of the regular WBSE and noise monitoring was recorded during the reporting period as shown in **Appendix K**.

8.3 No environmental complaint was received in the reporting period.

8.4 No notification of summons and prosecution was received in the reporting period.

8.5 Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix L**.

9. EM&A SITE INSPECTION

9.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, site inspections were carried out on 6, 13, 20 and 28 May 2025 at the site portions listed in **Table 9.1** below.

Table 9.1 Site Inspection Record

Date	Inspected Site Portion	Time
6 May 2025	Portion 1, 1A & 1B (near SKC)	10:30 AM – 11:15 AM
13 May 2025	Portion 1, 1A & 1B (near SKC)	10:30 AM – 11:25 AM
20 May 2025	Portion 1, 1A & 1B (near SKC)	10:30 AM – 11:15 AM
28 May 2025	Portion 1, 1A & 1B (near SKC)	10:30 AM – 11:15 AM

9.2 One joint site inspection with IEC was carried out on 13 May 2025.

9.3 Environmental deficiencies were observed during weekly site inspection. Key observations during the site inspections of the reporting period are summarized in **Table 9.2**.

Table 9.2 Site Observations

Date	Environmental Observations	Follow-up Status
6 May 2025 (Site inspection)	Observation(s) and Recommendation(s) 1. Oil stain was observed at near Caisson 19, remediate clean-up action should be taken. 2. Chemical containers were observed without drip trays at near the Turbine Hall and MTP, drip trays should be provided.	1. Oil stain at Caisson 19 had been immediately cleaned up as chemical waste. 2. Chemical containers observed near Turbine Hall and MTP had been removed and stored in designated area.
13 May 2025 (Site inspection)	Observation(s) and Recommendation(s) 1. Geotextile lining should be deployed properly, and housekeeping should be enhanced at the vertical seawall. 2. Chemical containers at seawall A2/A3 and vertical seawall B5/B6 were observed without drip tray, drip trays should be provided. 3. The crawler crane (TC07) and a generator near MTP were observed without NRMM labels, NRMM labels should be displayed properly.	1. Geotextile lining had been repaired at the vertical seawall. Housekeeping at vertical seawall had been enhanced and all general waste had been removed regularly. 2. Chemical containers at seawall A2/A3 and vertical seawall B5/B6 had been removed and stored in designated area. 3. The NRMM Label of crawler crane (TC07) and a generator near MTP had been replaced properly.

Date	Environmental Observations	Follow-up Status
20 May 2025 (Site inspection)	Observation(s) and Recommendation(s) 1. Fuel tanks were observed without drip trays at Caisson No.19, near turbine hall and near the outfall. Drip trays should be provided, and any emptied tanks should be handled properly for disposal. Oil stains observed near fuel tanks near Caisson No.19 should be cleaned up.	1. Near Caisson No.19, oil stains had been cleaned up and oil drums had been removed to designated area. Near turbine hall, drip trays had been provided for the oil drums.
28 May 2025 (Site inspection)	Observation(s) and Recommendation(s) 1. Housekeeping should be enhanced at and opposite the substation area. 2. Chemical containers were observed without drip tray at opposite the Substation area and Turbine Hall, drip trays should be provided.	1. Housekeeping had been enhanced and all the general waste had been removed regularly. 2. Chemical containers at opposite the Substation and at opposite the Turbine Hall had been removed and stored in designated area.

9.4 The Contractor had rectified all the observations identified during environmental site inspections in the reporting period.

9.5 According to the EIA Study Report, Environmental Permit, contract documents and Updated EM&A Manual, the mitigation measures detailed in the documents are implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix B**.

10. FUTURE KEY ISSUES

10.1 Works to be undertaken in the next reporting month are:

- Reclamation Area:
  - Superstructure construction
- Seawall Portion:
  - Caisson extension works, from +3mPD to +6mPD, at Seawall A and B
  - Construction of wave wall along the vertical seawall above +3mPD

10.2 Potential environmental impacts arising from the above construction activities are mainly associated with construction noise, waste management and ecology.

10.3 The key environmental mitigation measures for the Project in the coming reporting period expected to be associated with the construction activities include:

- Reduction of noise from equipment and machinery on-site;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site, especially under heavy rains and adverse weather;
- Dust control of exposed soil surface and stockpile of dusty material at reclaimed area;
- Dust suppression measures for exposed earth surface and stockpile of dusty material; and
- Site runoff control measure during construction works.

10.4 The tentative schedule of regular construction noise and ecology monitoring in the next reporting period is presented in **Appendix M**. The regular construction noise and ecology monitoring will be conducted at the same monitoring locations in the next reporting period.

11. CONCLUSION AND RECOMMENDATIONS

11.1 This 83rd monthly Environmental Monitoring and Audit (EM&A) Report presents the EM&A works undertaken during the period from 1 May to 31 May 2025, in accordance with the Updated EM&A Manual and the requirement under EP-429/2012/A and FEP-01/429/2012/A.

11.2 Construction noise, construction waste and WBSE monitoring were carried out in the reporting period. No project-related exceedance of the Action and Limit Level was recorded from 1 May to 31 May 2025.

11.3 Weekly environmental site inspections were conducted during the reporting period. Environmental deficiencies were observed during site inspection and were rectified.

11.4 According to the environmental site inspections performed in the reporting month, the Contractor was reminded to pay attention on proper measure for preventing site runoff, proper storage of chemicals, proper storage of general waste and the maintenance of deployed geotextile.

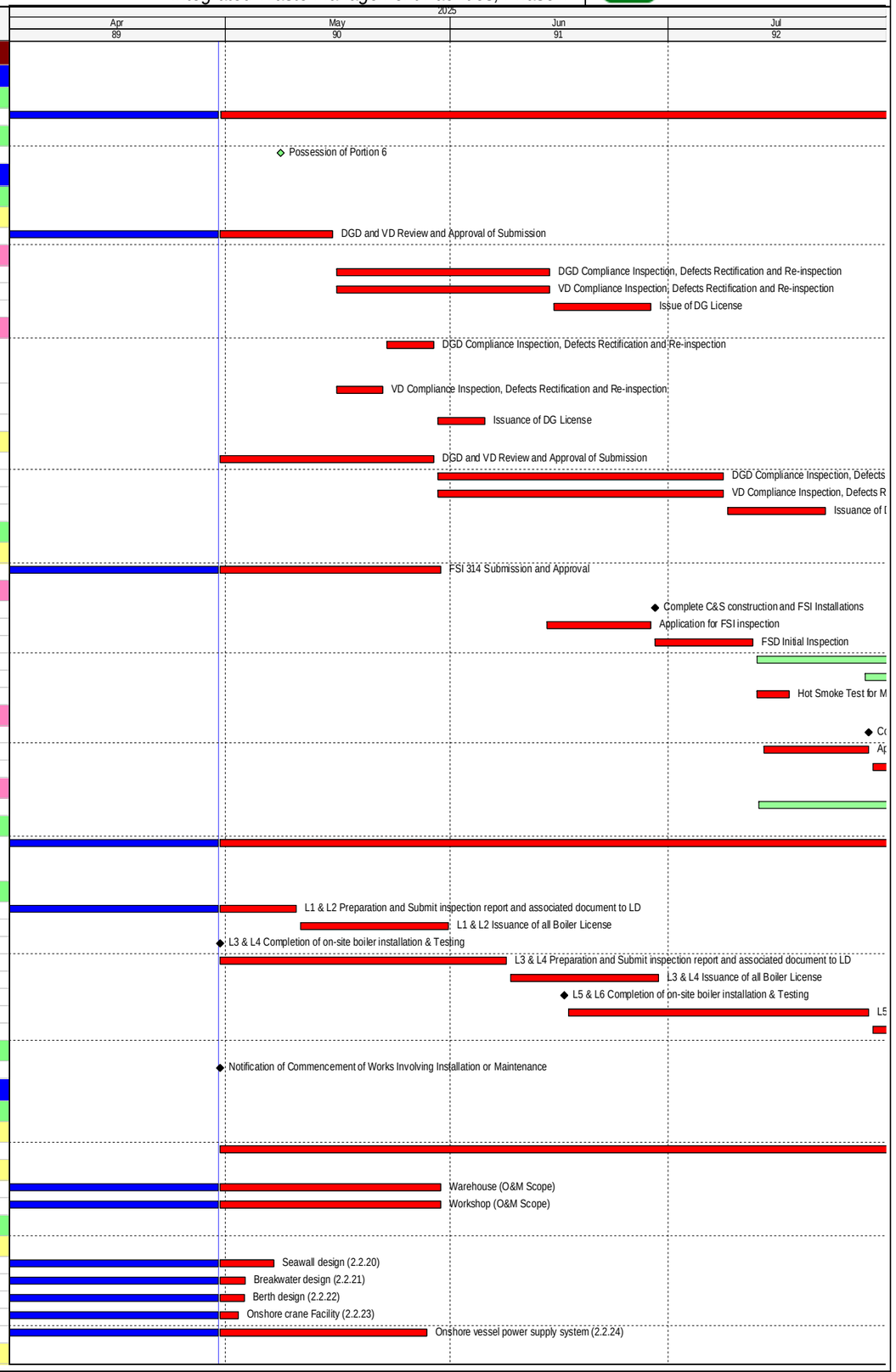
11.5 No environmental complaint was received in the reporting period.

11.6 No notification of summon or prosecution was received since commencement of the Contract.

11.7 The ET will keep track of the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A Master Programme

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
Programme for Design and Construction Works WP7E-M89 - 3-Month		2542	250		20-Jan-19 A	04-Jan-26	09-Nov-24	21-Apr-26	107	
Key Dates		462	186		28-Jul-24 A	01-Nov-25	29-Apr-25	31-Oct-25	-1	
Contractual Key Dates		376	153		28-Jul-24 A	01-Nov-25	29-Apr-25	31-Oct-25	-1	
01-1020(7A)	Extension of Time (EOT) Granted (in working days)	376	153	59.31%	28-Jul-24 A	01-Nov-25	29-Apr-25	31-Oct-25	-1	
Dates of Site Possession		0	0		08-May-25	08-May-25	26-May-25	26-May-25	17	
01-1190	Possession of Portion 6	0	0	0%	08-May-25		26-May-25		17	
License/Permit Applications		262	111		06-Dec-24 A	18-Aug-25	06-Jan-25	01-Nov-25	75	
DG Licence		235	84		03-Jan-25 A	22-Jul-25	06-Jan-25	30-Mar-25	-114	
Day Tank & Fuel Oil Storage (Cat 5)		211	60		03-Jan-25 A	28-Jun-25	07-Jan-25	07-Mar-25	-113	
03-1410	DGD and VD Review and Approval of Submission	90	16	82.22%	03-Jan-25 A	15-May-25	07-Jan-25	22-Jan-25	-113	
E. Gen RM for IWMF Substation		44	44		16-May-25	28-Jun-25	23-Jan-25	07-Mar-25	-113	
03-1420	DGD Compliance Inspection, Defects Rectification and Re-inspection	30	30	0%	16-May-25	14-Jun-25	23-Jan-25	21-Feb-25	-113	Update Original Duration from 60d to 30d
03-1430	VD Compliance Inspection, Defects Rectification and Re-inspection	30	30	0%	16-May-25	14-Jun-25	23-Jan-25	21-Feb-25	-113	Update Original Duration from 60d to 30d
03-1440	Issue of DG License	14	14	0%	15-Jun-25	28-Jun-25	22-Feb-25	07-Mar-25	-113	
Fuel Oil System		21	21		16-May-25	05-Jun-25	24-Jan-25	13-Feb-25	-112	
03-3850	DGD Compliance Inspection, Defects Rectification and Re-inspection	7	7	0%	23-May-25	29-May-25	31-Jan-25	06-Feb-25	-112	Changed relationship to Act 03-3860 from successor to predecessor, changed dur from 14 to 7
03-3860	VD Compliance Inspection, Defects Rectification and Re-inspection	7	7	0%	16-May-25	22-May-25	24-Jan-25	30-Jan-25	-112	Add precedessor 03-1410, Changed dur from 14 to 7
03-3870	Issuance of DG License	7	7	0%	30-May-25	05-Jun-25	07-Feb-25	13-Feb-25	-112	Changed dur from 14 to 7
Chemical Stores (all Cat)		84	84		30-Apr-25	22-Jul-25	06-Jan-25	30-Mar-25	-114	
03-1490	DGD and VD Review and Approval of Submission	30	30	0%	30-Apr-25*	29-May-25	06-Jan-25	04-Feb-25	-114	
03-1500	DGD Compliance Inspection, Defects Rectification and Re-inspection	40	40	0%	30-May-25	08-Jul-25	05-Feb-25	16-Mar-25	-114	
03-1510	VD Compliance Inspection, Defects Rectification and Re-inspection	40	40	0%	30-May-25	08-Jul-25	05-Feb-25	16-Mar-25	-114	
03-1520	Issuance of DG License	14	14	0%	09-Jul-25	22-Jul-25	17-Mar-25	30-Mar-25	-114	
Fire Services Installations (FSI) Certificate		193	104		06-Dec-24 A	11-Aug-25	21-Jan-25	01-Nov-25	82	
Fire Services Installations Certificate Inspection		193	104		06-Dec-24 A	11-Aug-25	21-Jan-25	01-Nov-25	82	
03-1555-1(7C)	FSI 314 Submission and Approval	90	31	65.56%	06-Dec-24 A	30-May-25	21-Jan-25	20-Feb-25	-99	
FSI Phase 1 (Bunker and IWMF Substation with associated Pump Rms)		59	59		14-Jun-25	11-Aug-25	21-Feb-25	18-Oct-25	68	
03-3880(7C)	Complete C&S construction and FSI Installations	0	0	0%		29-Jun-25		07-Mar-25	-113	
03-3890(7C)	Application for FSI inspection	15	15	0%	14-Jun-25	28-Jun-25	21-Feb-25	07-Mar-25	-113	
03-3910(7C)	FSD Initial Inspection	14	14	0%	29-Jun-25	12-Jul-25	08-Mar-25	21-Mar-25	-113	
03-3920(7C)	Defect Rectifications	30	30	0%	13-Jul-25	11-Aug-25	19-Sep-25	18-Oct-25	68	
03-3930(7C)	Request for FSD Reinspection	15	15	0%	28-Jul-25	11-Aug-25	04-Oct-25	18-Oct-25	68	
03-3945(7C)	Hot Smoke Test for Module 1 and Bunker Compartment	5	5	0%	13-Jul-25	17-Jul-25	22-Mar-25	26-Mar-25	-113	
FSI Phase 2 (TH, CCCW and Chimney)		29	29		14-Jul-25	11-Aug-25	08-Jun-25	06-Jul-25	-36	
03-3950(7C)	Complete C&S construction and FSI Installations	0	0	0%		28-Jul-25		22-Jun-25	-36	
03-3960(7C)	Application for FSI inspection	15	15	0%	14-Jul-25	28-Jul-25	08-Jun-25	22-Jun-25	-36	
03-3970(7C)	FSD Initial Inspection	14	14	0%	29-Jul-25	11-Aug-25	23-Jun-25	06-Jul-25	-36	
FSI Phase 4 (PB M2&3 and Admin Bld)		29	29		13-Jul-25	11-Aug-25	04-Oct-25	01-Nov-25	82	
03-4125(7C)	Hot Smoke Test for PB Module 2 & 3 Compartment	29	29	0%	13-Jul-25	11-Aug-25	04-Oct-25	01-Nov-25	82	
Air Pollution Control (Specified Processes) License		90	93		19-Mar-25 A	31-Jul-25	19-Mar-25	19-Jun-25	-42	
03-1790(3)	Review and approval of Trial Plan by EPD Licensing Department	90	93	31.11%	19-Mar-25 A	31-Jul-25	19-Mar-25	19-Jun-25	-42	Remove Successor 03-1830(3) FS0; Add Successor 16-1680 FS0; Update Actual Start Date
Boilers and Pressure Vessels License		231	111		10-Dec-24 A	18-Aug-25	08-Jan-25	01-Apr-25	-139	
03-1930(3)	L1 & L2 Preparation and Submit inspection report and associated document to LD	53	11	79.05%	10-Dec-24 A	10-May-25	23-Feb-25	05-Mar-25	-66	
03-1940(3)	L1 & L2 Issuance of all Boiler License	21	21	0%	11-May-25	31-May-25	06-Mar-25	26-Mar-25	-66	
03-1950(M83)	L3 & L4 Completion of on-site boiler installation & Testing	0	0	0%		30-Apr-25		08-Jan-25	-111	
03-1960(M83)	L3 & L4 Preparation and Submit inspection report and associated document to LD	40	40	0%	30-Apr-25	08-Jun-25	09-Jan-25	17-Feb-25	-111	
03-1970(M83)	L3 & L4 Issuance of all Boiler License	21	21	0%	09-Jun-25	29-Jun-25	18-Feb-25	10-Mar-25	-111	
03-1980(M83)	L5 & L6 Completion of on-site boiler installation & Testing	0	0	0%		16-Jun-25		28-Jan-25	-139	
03-1980(M83)10	L5 & L6 Preparation and Submit inspection report and associated document to LD	42	42	0%	17-Jun-25	28-Jul-25	29-Jan-25	11-Mar-25	-139	
03-1980(M83)20	L5 & L6 Issuance of all Boiler License	21	21	0%	29-Jul-25	18-Aug-25	12-Mar-25	01-Apr-25	-139	
Lifts or Escalators		0	0		30-Apr-25	30-Apr-25	08-Mar-25	08-Mar-25	-53	
03-1060	Notification of Commencement of Works Involving Installation or Maintenance	0	0	0%	30-Apr-25		08-Mar-25		-53	
Design Submissions		2504	212		20-Jan-19 A	27-Nov-25	16-Nov-24	21-Apr-26	145	
AIP Design Package Submissions		1109	105		04-Jul-22 A	12-Aug-25	29-Nov-24	16-Mar-25	-149	
AIP Testing and Commissioning (2.12)		105	105		30-Apr-25	12-Aug-25	02-Dec-24	16-Mar-25	-149	
05-2680	Plant commissioning plan (2.12.04)	105	105	0%	30-Apr-25	12-Aug-25	02-Dec-24	16-Mar-25	-149	
AIP O&M Packages		699	31		04-Jul-22 A	30-May-25	29-Nov-24	29-Dec-24	-152	
05-8010(6E)	Warehouse (O&M Scope)	185	31	83.24%	04-Jul-22 A	30-May-25	29-Nov-24	29-Dec-24	-152	
05-8020(6E)	Workshop (O&M Scope)	150	31	79.33%	04-Jul-22 A	30-May-25	29-Nov-24	29-Dec-24	-152	
DDA Design Package Submissions		2504	212		20-Jan-19 A	27-Nov-25	16-Nov-24	21-Apr-26	145	
DDA Ground Treatment, Reclamation, Seawall, Breakwater, Berth (2.2)		1956	29		20-Jan-19 A	28-May-25	11-Jan-25	18-Apr-25	-40	
05-3450	Seawall design (2.2.20)	60	8	87%	20-Jan-19 A	07-May-25	10-Apr-25	18-Apr-25	-19	
05-3460	Breakwater design (2.2.21)	105	4	96.19%	12-Apr-19 A	03-May-25	01-Mar-25	04-Mar-25	-60	
05-3470	Berth design (2.2.22)	60	4	94%	30-Jan-19 A	03-May-25	11-Jan-25	14-Jan-25	-109	
05-3480	Onshore crane Facility (2.2.23)	60	3	95%	01-Feb-24 A	02-May-25	12-Jan-25	14-Jan-25	-108	
05-3490	Onshore vessel power supply system (2.2.24)	90	29	67.78%	29-Feb-24 A	28-May-25	25-Jan-25	22-Feb-25	-95	
DDA Incineration Plant Buildings (2.3)		90	29		13-Jul-23 A	28-May-25	08-May-25	05-Jun-25	8	

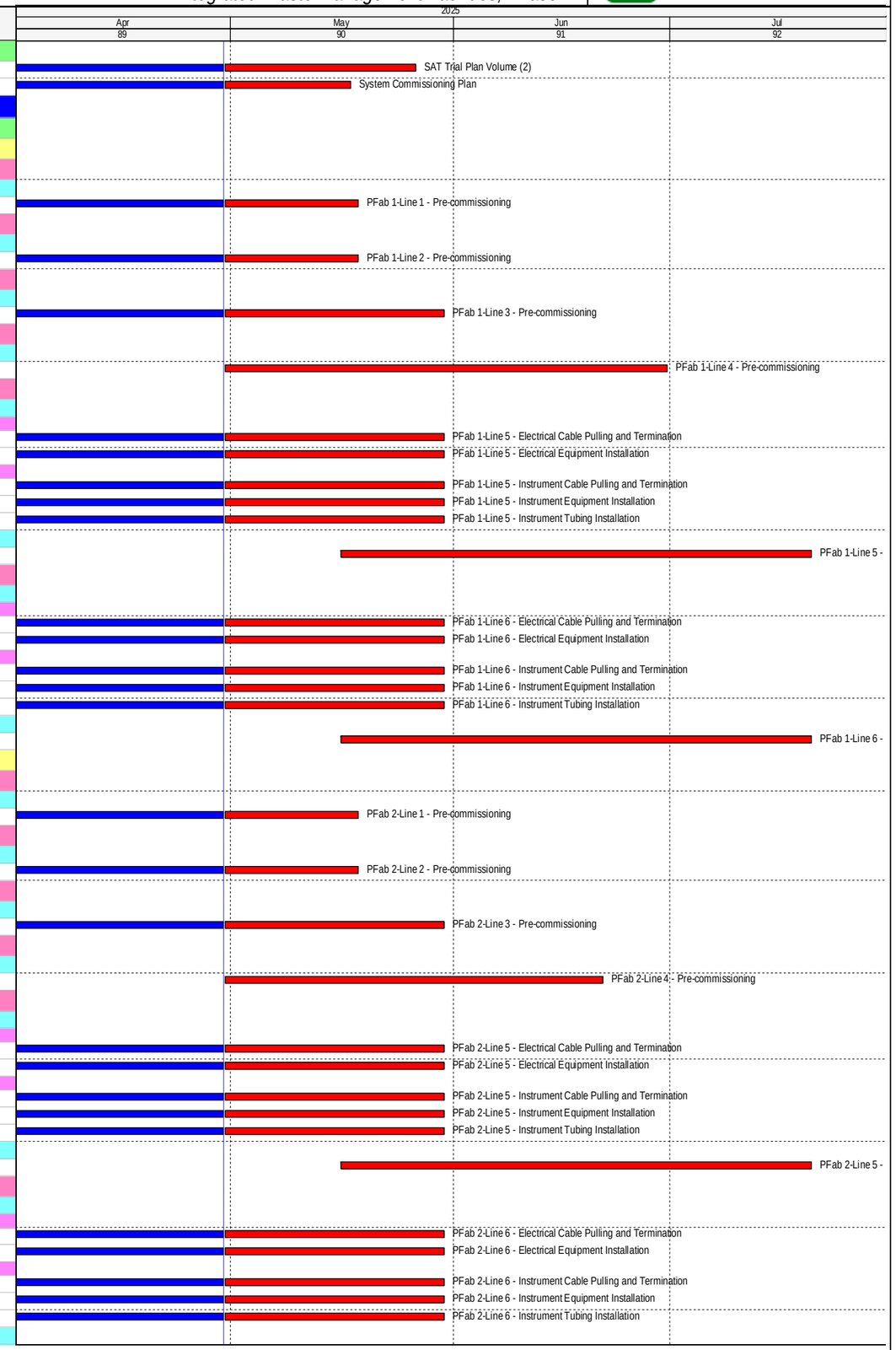


Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
Building services design (excluding fire services installation design) (2.3.18)		90	29		13-Jul-23 A	28-May-25	08-May-25	05-Jun-25	8	
05-3750	Lifts and Escalators (2.3.18.07.07.01)	90	29	67.78%	13-Jul-23 A	28-May-25	08-May-25	05-Jun-25	8	
DDA Mechanical Treatment Plant Building (2.4)		456	31		13-Jul-23 A	30-May-25	16-Nov-24	05-Jun-25	6	
05-5190	Electrical and instrumentation works design	121	13	89.26%	18-Nov-24 A	12-May-25	05-Dec-24	17-Dec-24	-146	
05-5200	Mechanical works design (2.4.16)	135	31	77.04%	14-Aug-23 A	30-May-25	16-Nov-24	16-Dec-24	-165	
Building services design (excluding fire services installation design) (2.4.18)		90	7		13-Jul-23 A	06-May-25	30-May-25	05-Jun-25	30	
05-3910	Lifts and Escalators (2.4.18.08.01)	90	7	92.22%	13-Jul-23 A	06-May-25	30-May-25	05-Jun-25	30	
DDA Wastewater Treatment Plant (2.5)		232	31		31-May-22 A	30-May-25	25-Nov-24	26-Dec-24	-156	
05-3960	Mechanical works design (2.5.16) (5 Packages)	232	31	86.64%	31-May-22 A	30-May-25	25-Nov-24	26-Dec-24	-156	
DDA Water Treatment Plant Building (2.6)		942	31		02-May-22 A	30-May-25	14-Jan-25	01-Mar-25	-90	
05-4090	Mechanical works design (2.6.16)	90	31	65.56%	02-May-22 A	30-May-25	30-Jan-25	01-Mar-25	-90	
Electrical and instrumentation works design (2.6.15)		90	31		16-Jan-24 A	30-May-25	14-Jan-25	13-Feb-25	-106	
05-7450(7B)	WTP Process Control Philosophy (2.6.15.05.03)	90	31	65.56%	16-Jan-24 A	30-May-25	14-Jan-25	13-Feb-25	-106	
DDA Administration Building (2.7)		90	7		13-Jul-23 A	06-May-25	30-Apr-25	06-May-25	0	
Building services design (excluding fire services installation design) (2.7.15)		90	7		13-Jul-23 A	06-May-25	30-Apr-25	06-May-25	0	
05-4280	Lifts and Escalators (2.7.15.06.01)	90	7	92.22%	13-Jul-23 A	06-May-25	30-Apr-25	06-May-25	0	
DDA IWMF Substation (2.8)		90	6		16-Oct-21 A	05-May-25	23-Feb-25	28-Feb-25	-66	
Electrical and instrumentation works design (2.8.15)		90	6		16-Oct-21 A	05-May-25	23-Feb-25	28-Feb-25	-66	
2.8.15.06		90	6		16-Oct-21 A	05-May-25	23-Feb-25	28-Feb-25	-66	
05-4320	Electrical and instrumentation works design (2.8.15.06.01 to 40)	90	6	93.33%	16-Oct-21 A	05-May-25	23-Feb-25	28-Feb-25	-66	
DDA Chimney		516	60		13-Jul-23 A	28-Jun-25	24-Feb-25	18-Jun-25	-10	
05-5540-3(7C)	BMU Design	90	60	33.33%	07-Nov-24 A	28-Jun-25	24-Feb-25	24-Apr-25	-65	Update Actual Start Date
Building services design (excluding fire services installation design)		90	6		13-Jul-23 A	05-May-25	13-Jun-25	18-Jun-25	44	
05-6050-1(5a)	Lift	90	6	93.33%	13-Jul-23 A	05-May-25	13-Jun-25	18-Jun-25	44	
DDA Roads and Utilities (2.10)		1156	32		13-Jan-21 A	31-May-25	16-Nov-24	20-May-25	-11	
Permanent road works layout on the Artificial Island (2.10.13)		90	16		08-Aug-22 A	16-May-25	13-Feb-25	01-Mar-25	-75	
05-4480	Road signage and markings	90	16	82%	08-Aug-22 A	16-May-25	13-Feb-25	01-Mar-25	-75	
05-5400	Roads and hardstandings layout	90	16	82%	08-Aug-22 A	16-May-25	13-Feb-25	01-Mar-25	-75	
Sewerage design on the Artificial Island (2.10.14)		395	32		13-Jan-21 A	31-May-25	19-Apr-25	20-May-25	-11	
05-4430	Foul Sewerage	60	8	87%	14-Mar-23 A	07-May-25	22-Apr-25	30-Apr-25	-7	
05-4440	Contaminated Sewerage (Site Wide Sewerage System)	60	8	87%	14-Mar-23 A	07-May-25	22-Apr-25	30-Apr-25	-7	
05-4440-2(M55)	Ship-to-shore Sewage Transfer System for Passenger Ferry	90	32	64.91%	13-Jan-21 A	31-May-25	19-Apr-25	20-May-25	-11	
Drainage system design on the Artificial Island (2.10.15)		698	18		20-Feb-23 A	17-May-25	03-Apr-25	30-Apr-25	-18	
05-5310	Surface water Drainage System	90	5	94%	22-Feb-23 A	05-May-25	25-Apr-25	30-Apr-25	-5	
05-5340(M81)	Pipework Design and Operation for Brine Discharge (2.10.15.05)	90	18	80%	20-Feb-23 A	17-May-25	03-Apr-25	20-Apr-25	-27	
Water supply system design on the Artificial Island (2.10.16)		821	14		28-Apr-21 A	13-May-25	21-Dec-24	03-Jan-25	-130	
05-5290	Water Tanks (2.11.20.01)	60	2	96.67%	28-Apr-21 A	01-May-25	02-Jan-25	03-Jan-25	-118	
05-5300-1(M24)	E&M system for seawater intake (2.10.16.07)	105	14	86.67%	04-Apr-22 A	13-May-25	21-Dec-24	03-Jan-25	-130	
Design of telecommunication and other utilities (2.10.18)		60	16		14-Dec-24 A	15-May-25	16-Nov-24	01-Dec-24	-165	
05-4650	Fuel Handling System concept / schematics (2.10.18.08)	60	16	73.33%	14-Dec-24 A	15-May-25	16-Nov-24	01-Dec-24	-165	
DDA Architectural, Finishes and Landscaping Works (2.11)		516	22		15-Jun-21 A	22-May-25	07-Jan-25	03-Jun-25	13	
External and internal finishes design		516	22		15-Jun-21 A	22-May-25	07-Jan-25	03-Jun-25	13	
05-4670	External and internal finishes design for Incineration Plant Building (2.11.15.01)	90	22	75.08%	19-Sep-22 A	22-May-25	18-Mar-25	09-Apr-25	-42	
05-4720	External and internal finishes design for Reception Pavilion (2.11.01.05)	90	5	95%	10-Nov-22 A	04-May-25	26-Feb-25	02-Mar-25	-63	
05-4730	External and internal finishes design for MT Plant Building (2.11.16)	60	18	69.68%	16-Aug-23 A	18-May-25	28-Mar-25	15-Apr-25	-32	
05-4740	External and internal finishes design for the Wastewater Treatment Plant (2.11.17)	60	17	71.33%	06-Jun-23 A	17-May-25	26-Feb-25	15-Mar-25	-62	
05-4750	External and internal finishes design for the Water Treatment Plant Building (2.11.08)	60	19	68.89%	16-Aug-23 A	18-May-25	07-Jan-25	25-Jan-25	-113	
05-4760	External and internal finishes design for the Administration Building (2.11.19)	60	3	95%	21-Sep-23 A	02-May-25	01-Jun-25	03-Jun-25	32	
05-5430	External and internal finishes design for Elevated Driveway	90	22	75.72%	15-Jun-21 A	21-May-25	31-Jan-25	21-Feb-25	-89	
Landscaping Works (2.11.21)		105	2		26-Jan-23 A	02-May-25	02-May-25	04-May-25	3	
05-4780	Landscape Masterplan & Landscape Design for Water Feature (2.11.19.01)	105	2	98%	26-Jan-23 A	02-May-25	02-May-25	04-May-25	3	
DDA Testing and Commissioning (2.12)		105	10		19-May-22 A	09-May-25	17-Mar-25	26-Mar-25	-44	
05-4810-2(M55)	FAT of DCS - Software SIL FAT Plant for Process Island (2.12.09.03.01)	105	10	90.48%	19-May-22 A	09-May-25	17-Mar-25	26-Mar-25	-44	
DDA Transportation Facilities for the Operation (2.13)		705	82		30-Jun-23 A	20-Jul-25	12-Aug-25	01-Nov-25	104	
05-4850	Design of vehicles for MSW and Ash and Residues delivery (2.13.05)	186	82	55.91%	17-Dec-24 A	20-Jul-25	12-Aug-25	01-Nov-25	104	
05-4860	Design of marine vessels for the use of the Employer and visitors (2.13.06)	240	61	74.58%	30-Jun-23 A	29-Jun-25	02-Sep-25	01-Nov-25	125	
DDA Miscellaneous Works (2.14)		274	122		20-Oct-24 A	29-Aug-25	03-May-25	21-Apr-26	235	
05-4870	Process Related CCTV and Existing onshore crane replacement works at Portion 2 (2.14.05)	220	58	73.64%	20-Oct-24 A	26-Jun-25	23-Feb-26	21-Apr-26	299	
05-4880	Design of visitors and environmental education facilities (2.14.06)	123	122	0.81%	30-Mar-25 A	29-Aug-25	03-May-25	01-Sep-25	3	
DDA Miscellaneous Detailing (2.15)		93	21		06-Sep-23 A	20-May-25	05-Jan-25	01-Mar-25	-80	
05-4890	Covered walkway at passenger berth (2.15.09)	70	21	70%	06-Sep-23 A	20-May-25	06-Jan-25	26-Jan-25	-114	
05-4900	Gatehouses (2.15.09)	60	18	70%	06-Sep-23 A	17-May-25	12-Feb-25	01-Mar-25	-77	
05-4910	Weighbridge office (2.15.08)	32	2	95%	01-Nov-24 A	01-May-25	05-Jan-25	06-Jan-25	-115	
DDA Auxiliary Plant Systems (2.16)		30	12		07-Mar-23 A	11-May-25	19-Jan-25	30-Jan-25	-101	
05-4930	Vehicle Fuel Filling Station (2.16.05)	30	12	60%	07-Mar-23 A	11-May-25	19-Jan-25	30-Jan-25	-101	
DDA O&M Packages		332	212		24-Dec-24 A	27-Nov-25	30-Dec-24	28-Jun-25	-152	
05-8070(6E)	Warehouse (O&M Scope)	181	181	0%	31-May-25	27-Nov-25	30-Dec-24	28-Jun-25	-152	
05-8080(6E)	Workshop (O&M Scope)	181	181	0%	31-May-25	27-Nov-25	30-Dec-24	28-Jun-25	-152	
05-8090(6E)	Ash & Residues Container (O&M Scope)	180	61	66.11%	24-Dec-24 A	29-Jun-25	28-Feb-25	29-Apr-25	-61	
05-8110(6E)	Other Mobile Plants (O&M Scope)	181	106	41.44%	31-Dec-24 A	13-Aug-25	14-Jan-25	29-Apr-25	-106	
05-8110-1(M55)	Design of (pilot) Electric Vehicle	180	180	0%	30-Mar-25 A	26-Oct-25	31-Dec-24	28-Jun-25	-120	

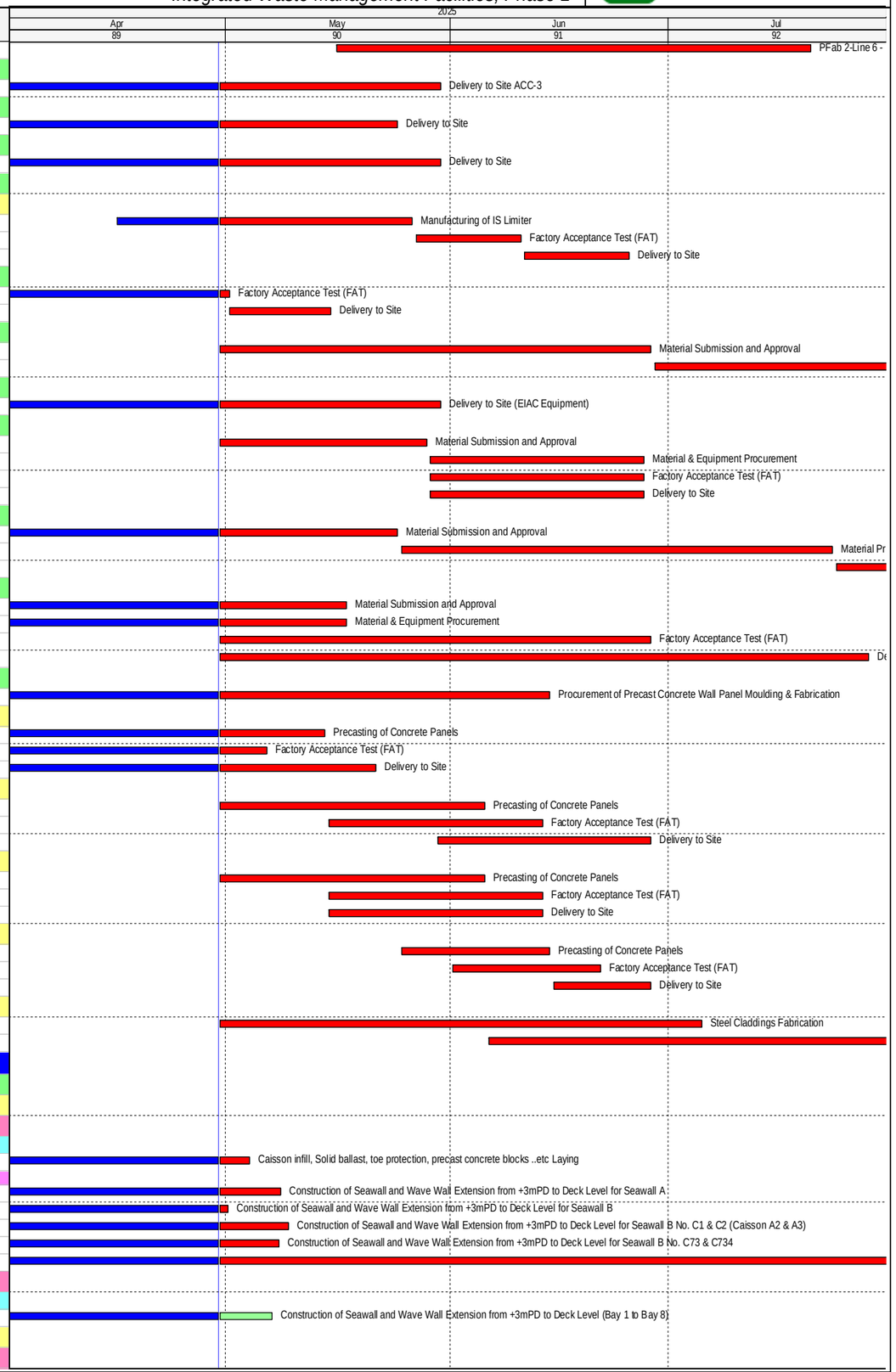
Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
System Commissioning Plan		426	27		12-Apr-24 A	26-May-25	11-Jan-25	16-Mar-25	-71	
05-4820-1(M83)	SAT Trial Plan Volume (2)	90	27	70%	12-Apr-24 A	26-May-25	11-Jan-25	06-Feb-25	-109	
05-4830	System Commissioning Plan	90	18	80%	08-Jan-25 A	17-May-25	27-Feb-25	16-Mar-25	-62	
Procurement of Major Equipment		932	140		14-Feb-23 A	16-Sep-25	16-Nov-24	29-Apr-25	-140	
Off-site Fabrication of Incineration Modules		355	82		10-Jun-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
Fabrication of Module (TPU)		355	82		10-Jun-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
PFab 1- Line 1		78	19		10-Jun-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
Precommissioning		78	19		10-Jun-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
06-TPU-1-1030	PFab 1-Line 1 - Pre-commissioning	78	19	75.64%	10-Jun-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
PFab 1- Line 2		70	19		30-Sep-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
Precommissioning		70	19		30-Sep-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
06-TPU-2-1020	PFab 1-Line 2 - Pre-commissioning	70	19	72.86%	30-Sep-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
PFab 1- Line 3		80	31		17-Feb-25 A	30-May-25	29-Dec-24	28-Jan-25	-122	
Precommissioning		80	31		17-Feb-25 A	30-May-25	29-Dec-24	28-Jan-25	-122	
06-TPU-3-1020	PFab 1-Line 3 - Pre-commissioning	80	31	61.25%	17-Feb-25 A	30-May-25	29-Dec-24	28-Jan-25	-122	
PFab 1- Line 4		62	62		30-Apr-25	30-Jun-25	08-Jan-25	10-Mar-25	-112	
Precommissioning		62	62		30-Apr-25	30-Jun-25	08-Jan-25	10-Mar-25	-112	
06-TPU-4-1020	PFab 1-Line 4 - Pre-commissioning	62	62	0%	30-Apr-25	30-Jun-25	08-Jan-25	10-Mar-25	-112	
PFab 1- Line 5		354	82		01-Aug-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
E&I Installation		224	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
Electrical		194	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
06-TPU-5-1270	PFab 1-Line 5 - Electrical Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	27-Feb-25	29-Mar-25	-62	
06-TPU-5-1280	PFab 1-Line 5 - Electrical Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Instrument		193	31		01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-TPU-5-1300	PFab 1-Line 5 - Instrument Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-TPU-5-1310	PFab 1-Line 5 - Instrument Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-TPU-5-1320	PFab 1-Line 5 - Instrument Tubing Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Precommissioning		66	66		16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
06-TPU-5-1020	PFab 1-Line 5 - Pre-commissioning	66	66	0%	16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
PFab 1- Line 6		354	82		01-Aug-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
E&I Installation		224	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
Electrical		194	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
06-TPU-6-1270	PFab 1-Line 6 - Electrical Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	27-Feb-25	29-Mar-25	-62	
06-TPU-6-1280	PFab 1-Line 6 - Electrical Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Instrument		193	31		01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-TPU-6-1300	PFab 1-Line 6 - Instrument Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-TPU-6-1310	PFab 1-Line 6 - Instrument Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-TPU-6-1320	PFab 1-Line 6 - Instrument Tubing Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Precommissioning		66	66		16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
06-TPU-6-1020	PFab 1-Line 6 - Pre-commissioning	66	66	0%	16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
Fabrication of Module (FGC)		355	82		10-Jun-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
PFab 2 - Line 1		78	19		10-Jun-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
Precommissioning		78	19		10-Jun-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
06-FGC-1-1190	PFab 2-Line 1 - Pre-commissioning	78	19	75.64%	10-Jun-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
PFab 2 - Line 2		70	19		30-Sep-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
Precommissioning		70	19		30-Sep-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
06-FGC-2-1020	PFab 2-Line 2 - Pre-commissioning	70	19	72.86%	30-Sep-24 A	18-May-25	10-Jan-25	28-Jan-25	-110	
PFab 2 - Line 3		60	31		17-Feb-25 A	30-May-25	29-Dec-24	28-Jan-25	-122	
Precommissioning		60	31		17-Feb-25 A	30-May-25	29-Dec-24	28-Jan-25	-122	
06-FGC-3-1180	PFab 2-Line 3 - Pre-commissioning	60	31	48.33%	17-Feb-25 A	30-May-25	29-Dec-24	28-Jan-25	-122	
PFab 2 - Line 4		53	53		30-Apr-25	21-Jun-25	17-Jan-25	10-Mar-25	-103	
Precommissioning		53	53		30-Apr-25	21-Jun-25	17-Jan-25	10-Mar-25	-103	
06-FGC-4-1020	PFab 2-Line 4 - Pre-commissioning	53	53	0%	30-Apr-25	21-Jun-25	17-Jan-25	10-Mar-25	-103	
PFab 2 - Line 5		354	82		01-Aug-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
E&I Installation		210	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
Electrical		197	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
06-FGC-5-1250	PFab 2-Line 5 - Electrical Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	27-Feb-25	29-Mar-25	-62	
06-FGC-5-1260	PFab 2-Line 5 - Electrical Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Instrument		193	31		01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-FGC-5-1280	PFab 2-Line 5 - Instrument Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-FGC-5-1290	PFab 2-Line 5 - Instrument Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-FGC-5-1300	PFab 2-Line 5 - Instrument Tubing Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Precommissioning		66	66		16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
06-FGC-5-1210	PFab 2-Line 5 - Pre-commissioning	66	66	0%	16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
PFab 2 - Line 6		354	82		01-Aug-24 A	20-Jul-25	18-Nov-24	29-Mar-25	-113	
E&I Installation		224	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
Electrical		194	31		01-Aug-24 A	30-May-25	18-Nov-24	29-Mar-25	-62	
06-FGC-6-1260	PFab 2-Line 6 - Electrical Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	27-Feb-25	29-Mar-25	-62	
06-FGC-6-1270	PFab 2-Line 6 - Electrical Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Instrument		193	31		01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-FGC-6-1290	PFab 2-Line 6 - Instrument Cable Pulling and Termination	180	31	82.78%	14-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-FGC-6-1300	PFab 2-Line 6 - Instrument Equipment Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
06-FGC-6-1310	PFab 2-Line 6 - Instrument Tubing Installation	180	31	82.78%	01-Aug-24 A	30-May-25	18-Nov-24	18-Dec-24	-163	
Precommissioning		66	66		16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	



Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
06-FGC-6-1030	PFab 2-Line 6 - Pre-commissioning	66	66	0%	16-May-25	20-Jul-25	04-Dec-24	07-Feb-25	-163	
Procurement for ACC Units		13	31		19-Jan-25 A	30-May-25	07-Jan-25	06-Feb-25	-113	
06-1190	Delivery to Site ACC-3	13	31	0%	19-Jan-25 A	30-May-25	07-Jan-25	06-Feb-25	-113	
Procurement for Mechanical Treatment Plant Building Plant Equipment		61	25		01-May-24 A	24-May-25	23-Nov-24	17-Dec-24	-158	
06-1180	Delivery to Site	61	25	59.02%	01-May-24 A	24-May-25	23-Nov-24	17-Dec-24	-158	
Procurement for Wastewater Treatment Plant Equipment		90	31		15-Jan-24 A	30-May-25	28-Nov-24	29-Dec-24	-153	
06-1220	Delivery to Site	90	31	65.56%	15-Jan-24 A	30-May-25	28-Nov-24	29-Dec-24	-153	
Procurement for HV Transformers and Associated Equipment		57	57		16-Apr-25 A	25-Jun-25	04-Dec-24	29-Jan-25	-147	
Procurement of IS Limiter		57	57		16-Apr-25 A	25-Jun-25	04-Dec-24	29-Jan-25	-147	
06-1280(7)	Manufacturing of IS Limiter	30	27	10%	16-Apr-25 A	26-May-25	04-Dec-24	30-Dec-24	-147	Update Actual Start Date
06-1290(7)	Factory Acceptance Test (FAT)	15	15	0%	27-May-25	10-Jun-25	31-Dec-24	14-Jan-25	-147	
06-1300(7)	Delivery to Site	15	15	0%	11-Jun-25	25-Jun-25	15-Jan-25	29-Jan-25	-147	
Procurement for Onshore Crane at Berth		105	16		01-Oct-24 A	15-May-25	13-Feb-25	28-Feb-25	-76	
06-1370	Factory Acceptance Test (FAT)	30	2	95%	01-Oct-24 A	01-May-25	13-Feb-25	14-Feb-25	-76	
06-1380	Delivery to Site	14	14	0%	01-May-25	15-May-25	15-Feb-25	28-Feb-25	-76	
Procurement for Soft Landscape Materials		140	140		30-Apr-25	16-Sep-25	16-Nov-24	04-Apr-25	-165	
06-1790	Material Submission and Approval	60	60	0%	30-Apr-25	28-Jun-25	16-Nov-24	14-Jan-25	-165	
06-1800	Material Procurement & Nursery	80	80	0%	29-Jun-25	16-Sep-25	15-Jan-25	04-Apr-25	-165	Update Original Duration from 94d to 80d
Procurement for Weighbridge System		40	31		29-Oct-24 A	30-May-25	13-Jan-25	12-Feb-25	-107	
06-2240(1)	Delivery to Site (EIAC Equipment)	40	31	22.5%	29-Oct-24 A	30-May-25	13-Jan-25	12-Feb-25	-107	
Procurement for Truck Wash System		59	59		30-Apr-25	27-Jun-25	22-Jan-25	21-Mar-25	-98	
06-2290(1)	Material Submission and Approval	29	29	0%	30-Apr-25	28-May-25	22-Jan-25	19-Feb-25	-98	
06-2300(1)	Material & Equipment Procurement	30	30	0%	29-May-25	27-Jun-25	20-Feb-25	21-Mar-25	-98	
06-2310(1)	Factory Acceptance Test (FAT)	30	30	0%	29-May-25	27-Jun-25	20-Feb-25	21-Mar-25	-98	
06-2320(1)	Delivery to Site	30	30	0%	29-May-25	27-Jun-25	20-Feb-25	21-Mar-25	-98	
Procurement for Hard Landscape Materials (Paving, Greening, Furniture and Lighting)		226	106		20-Sep-23 A	13-Aug-25	16-Nov-24	01-Mar-25	-165	
06-7000(6)	Material Submission and Approval	60	25	58.33%	20-Sep-23 A	24-May-25	16-Nov-24	10-Dec-24	-165	
06-7010(6)	Material Procurement	60	60	0%	25-May-25	23-Jul-25	11-Dec-24	08-Feb-25	-165	
06-7030(6)	Delivery to Site	21	21	0%	24-Jul-25	13-Aug-25	09-Feb-25	01-Mar-25	-165	
Procurement for Curtain Wall Materials		424	90		30-Apr-24 A	28-Jul-25	30-Jan-25	29-Apr-25	-90	
06-8200(6D)	Material Submission and Approval	60	18	70%	30-Apr-24 A	17-May-25	30-Jan-25	16-Feb-25	-90	
06-8210(6D)	Material & Equipment Procurement	90	18	15%	18-Oct-24 A	17-May-25	30-Jan-25	16-Feb-25	-90	
06-8220(6D)	Factory Acceptance Test (FAT)	60	60	0%	30-Apr-25	28-Jun-25	30-Jan-25	30-Mar-25	-90	
06-8230(6D)	Delivery to Site	90	90	0%	30-Apr-25	28-Jul-25	30-Jan-25	29-Apr-25	-90	
Off-site Precasting of Facade Panels		889	97		14-Feb-23 A	04-Aug-25	05-Dec-24	04-Apr-25	-122	
06-8040(6D)	Procurement of Precast Concrete Wall Panel Moulding & Fabrication	205	46	77.56%	14-Feb-23 A	14-Jun-25	05-Dec-24	19-Jan-25	-146	
Process Building		90	22		21-Oct-24 A	21-May-25	10-Jan-25	01-Feb-25	-110	
06-8160	Precasting of Concrete Panels	60	15	75%	21-Oct-24 A	14-May-25	10-Jan-25	25-Jan-25	-110	
06-8170	Factory Acceptance Test (FAT)	60	7	88.33%	05-Nov-24 A	06-May-25	10-Jan-25	17-Jan-25	-110	
06-8180	Delivery to Site	60	22	63.33%	20-Nov-24 A	21-May-25	10-Jan-25	01-Feb-25	-110	
Mechanical Treatment Plant		60	60		30-Apr-25	28-Jun-25	04-Feb-25	04-Apr-25	-85	
06-8190	Precasting of Concrete Panels	37	37	0%	30-Apr-25	05-Jun-25	04-Feb-25	12-Mar-25	-85	
06-8200	Factory Acceptance Test (FAT)	30	30	0%	15-May-25	13-Jun-25	19-Feb-25	20-Mar-25	-85	
06-8210	Delivery to Site	30	30	0%	30-May-25	28-Jun-25	06-Mar-25	04-Apr-25	-85	
Water Treatment Plant		45	45		30-Apr-25	13-Jun-25	26-Jan-25	11-Mar-25	-94	
06-8310(M82)	Precasting of Concrete Panels	37	37	0%	30-Apr-25	05-Jun-25	26-Jan-25	03-Mar-25	-94	
06-8320(M82)	Factory Acceptance Test (FAT)	30	30	0%	15-May-25	13-Jun-25	10-Feb-25	11-Mar-25	-94	
06-8330(M82)	Delivery to Site	30	30	0%	15-May-25	13-Jun-25	10-Feb-25	11-Mar-25	-94	
Administration Building		35	35		25-May-25	28-Jun-25	31-Dec-24	03-Feb-25	-145	
06-8250	Precasting of Concrete Panels	21	21	0%	25-May-25	14-Jun-25	31-Dec-24	20-Jan-25	-145	
06-8260	Factory Acceptance Test (FAT)	21	21	0%	01-Jun-25	21-Jun-25	07-Jan-25	27-Jan-25	-145	
06-8270	Delivery to Site	14	14	0%	15-Jun-25	28-Jun-25	21-Jan-25	03-Feb-25	-145	
Chimney		97	97		30-Apr-25	04-Aug-25	05-Dec-24	11-Mar-25	-146	
06-8280	Steel Claddings Fabrication	67	67	0%	30-Apr-25	05-Jul-25	05-Dec-24	09-Feb-25	-146	
06-8290	Factory Acceptance Test (FAT)	60	60	0%	06-Jun-25	04-Aug-25	11-Jan-25	11-Mar-25	-146	
Maritime Works		2121	143		30-Nov-19 A	19-Sep-25	16-Nov-24	01-Sep-25	-18	
Marine Construction		2121	143		30-Nov-19 A	19-Sep-25	16-Nov-24	01-Sep-25	-18	
Phase I - Construction of Perimeter Seawalls		2078	131		30-Nov-19 A	08-Sep-25	21-Nov-24	01-Sep-25	-6	
Seawall and Berth at DCM Area		2078	131		30-Nov-19 A	08-Sep-25	21-Nov-24	18-Apr-25	-143	
Seawall Structural Works		2078	131		30-Nov-19 A	08-Sep-25	21-Nov-24	18-Apr-25	-143	
08-1115(3)	Caisson infill, Solid ballast, toe protection, precast concrete blocks ..etc Laying	250	4	98.38%	30-Nov-19 A	04-May-25	04-Dec-24	08-Dec-24	-147	
Remain Works		1398	131		10-Oct-21 A	08-Sep-25	21-Nov-24	18-Apr-25	-143	
08-1120	Construction of Seawall and Wave Wall Extension from +3mPD to Deck Level for Seawall A	220	9	96.05%	10-Oct-21 A	08-May-25	29-Nov-24	08-Dec-24	-151	
08-1120-1(6)	Construction of Seawall and Wave Wall Extension from +3mPD to Deck Level for Seawall B	220	1	99.51%	10-Oct-21 A	01-May-25	07-Dec-24	08-Dec-24	-144	
08-1120-2(M55)	Construction of Seawall and Wave Wall Extension from +3mPD to Deck Level for Seawall B No. C1 & C2 (Caisson A2 & A	60	10	83.75%	28-Jun-23 A	09-May-25	25-Nov-24	04-Dec-24	-156	
08-1120-4(M55)	Construction of Seawall and Wave Wall Extension from +3mPD to Deck Level for Seawall B No. C73 & C734	60	8	86.51%	01-Dec-23 A	08-May-25	21-Nov-24	29-Nov-24	-159	
08-1320(6)	Construction of Rear Wall Buttress & Panel for Seawall A	150	131	12.6%	10-Feb-25 A	08-Sep-25	08-Dec-24	18-Apr-25	-143	
Seawall at Dredging Area		160	7		20-Jan-23 A	07-May-25	25-Aug-25	01-Sep-25	118	
Remain Works		160	7		20-Jan-23 A	07-May-25	25-Aug-25	01-Sep-25	118	
08-1170	Construction of Seawall and Wave Wall Extension from +3mPD to Deck Level (Bay 1 to Bay 8)	160	7	95.5%	20-Jan-23 A	07-May-25	25-Aug-25	01-Sep-25	118	
Phase II - Reclamation, Breakwater and Berth Construction		416	143		10-May-24 A	19-Sep-25	16-Nov-24	01-Sep-25	-18	
Breakwater		120	120		22-May-25	19-Sep-25	05-May-25	01-Sep-25	-18	

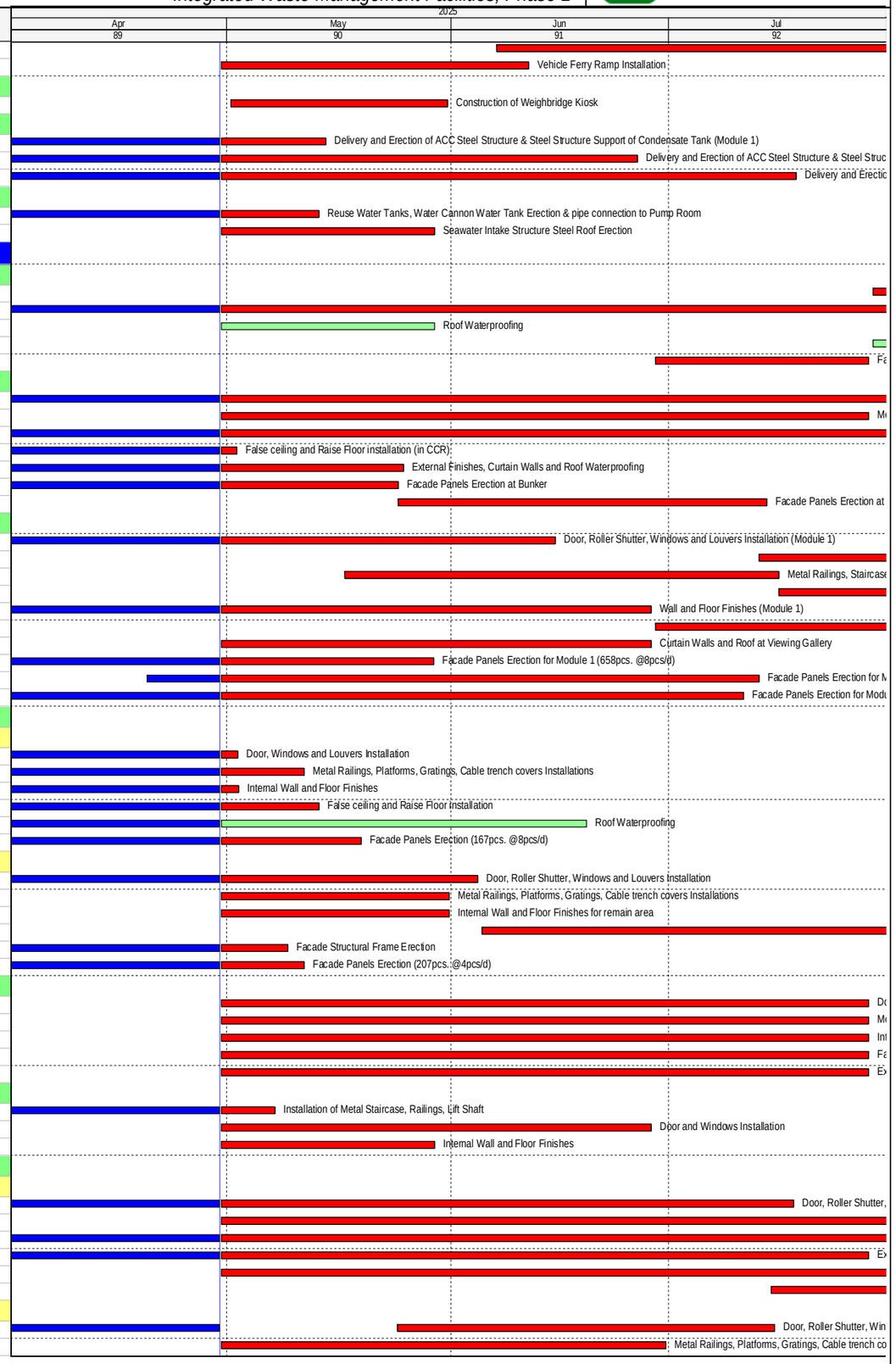


Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
Remain Works		120	120		22-May-25	19-Sep-25	05-May-25	01-Sep-25	-18	
08-1310(7)	Breakwater Profile Barrier and Pavement Road	120	120	0%	22-May-25	19-Sep-25	05-May-25	01-Sep-25	-18	
Seawall and Berth at Marine Access		373	100		10-May-24 A	07-Aug-25	16-Nov-24	04-Mar-25	-156	
Remain Works		30	23		10-May-24 A	22-May-25	16-Nov-24	08-Dec-24	-165	
08-1330(2)	Construction of Seawall and Wave Wall Extension from +3mPD to Deck Level	30	23	25%	10-May-24 A	22-May-25	16-Nov-24	08-Dec-24	-165	
Fire Boat Access		90	90		09-May-25	07-Aug-25	04-Dec-24	04-Mar-25	-156	
08-2500(6D)	Construction of Fire Boat Access	90	90	0%	09-May-25	07-Aug-25	04-Dec-24	04-Mar-25	-156	
Foundation Works		311	38		23-Jun-24 A	07-Jun-25	30-Nov-24	12-Feb-25	-114	
Sky Deck Foundation		82	20		23-Jun-24 A	20-May-25	10-Dec-24	30-Dec-24	-140	
Sky Deck Pile Caps Construction		82	20		23-Jun-24 A	20-May-25	10-Dec-24	30-Dec-24	-140	
09-2730(M62)	Excavation to Pile Cap Formation	21	6	70%	23-Jun-24 A	06-May-25	10-Dec-24	16-Dec-24	-140	
09-2740(M62)	Pile Cut-off & Capping Plate (2 Welders @ 2nr/d)	21	7	66%	03-Jul-24 A	13-May-25	16-Dec-24	23-Dec-24	-140	
09-2750(M62)	Pile Caps Construction	30	15	50%	27-Aug-24 A	20-May-25	16-Dec-24	30-Dec-24	-140	
ACC Equipment Foundation		22	22		30-Apr-25	21-May-25	17-Dec-24	07-Jan-25	-134	
ACC Pile Cap Construction		22	22		30-Apr-25	21-May-25	17-Dec-24	07-Jan-25	-134	
09-1720-1(M58)	On-grade Slab Construction Grid ACA-ACG, AC3-AC4	22	22	0%	30-Apr-25	21-May-25	17-Dec-24	07-Jan-25	-134	
Reception Pavilion Foundation		30	30		08-May-25	07-Jun-25	30-Nov-24	29-Dec-24	-159	
09-2100	Formation, Compaction & Raft Foundation Construction	30	30	0%	08-May-25	07-Jun-25	30-Nov-24	29-Dec-24	-159	
Weighbridge Foundation		14	14		17-May-25	31-May-25	30-Jan-25	12-Feb-25	-108	
09-2710(6F)	Excavation & Construction of Weighbridge Bays and Cast-in bolts	14	14	0%	17-May-25	31-May-25	30-Jan-25	12-Feb-25	-108	
Superstructure Works		556	158		25-Oct-23 A	05-Oct-25	16-Nov-24	03-Jul-25	-93	
Administration & Viewing Gallery Bld Structure		60	60		30-Apr-25	28-Jun-25	06-Dec-24	03-Feb-25	-145	
10-1080(M63)	Facade Structural Frame Installation	60	60	0%	30-Apr-25	28-Jun-25	06-Dec-24	03-Feb-25	-145	
Sky Deck Structure		110	110		30-Apr-25	17-Aug-25	16-Nov-24	05-Mar-25	-165	
10-2310 (M55)	Construction of RC Column (16nr, 0.9m Dia x 11m, 3 pours @ 5d/pour with 4 formwork sets)	45	45	0%	30-Apr-25	13-Jun-25	16-Nov-24	30-Dec-24	-165	
10-2315 (7)	Beam & Slab to Deck Level app.+18mPD (appx. 600m3)	30	30	0%	05-Jun-25	04-Jul-25	22-Dec-24	20-Jan-25	-165	
10-2320 (M55)	Sky Deck Steel Structure Erection	44	44	0%	05-Jul-25	17-Aug-25	21-Jan-25	05-Mar-25	-165	Update Original Duration from 50d to 44d
Process Building - Waste Bunker & Tipping Hall Bld Structure		146	57		24-Feb-25 A	25-Jun-25	20-Jan-25	21-Mar-25	-96	
Waste & Ash Bunker Bld Structure		146	57		24-Feb-25 A	25-Jun-25	20-Jan-25	21-Mar-25	-96	
Process Building Waste & Ash Bunker Bld Structural Steel Roof		119	18		24-Feb-25 A	17-May-25	28-Feb-25	21-Mar-25	-57	
10-2080-05(M89)	Module 3 Bunker Steel Roof Modification Works	30	16	55%	25-Apr-25 A	15-May-25	06-Mar-25	21-Mar-25	-55	New Activity
10-2220-1(M81)	Module 2 Bunker Roof Cladding Installation	30	4	87%	24-Feb-25 A	03-May-25	28-Feb-25	03-Mar-25	-61	
10-2220-2(M81)	Module 3 Bunker Roof Cladding Installation	30	18	40%	31-Mar-25 A	17-May-25	04-Mar-25	21-Mar-25	-57	Update Actual Start Date
Process Building Waste & Ash Bunker Bld Structure Between Bunker 1 and 2		11	11		30-Apr-25	10-May-25	17-Feb-25	27-Feb-25	-72	
10-2410 (M78)	Beam & Slab to +11.58mPD and +12.4mPD	11	11	0%	30-Apr-25	10-May-25	17-Feb-25	27-Feb-25	-72	Add Successor 16-1540 FF0
Process Building Waste & Ash Bunker Bld Structure Between Bunker 2 and 3		11	11		30-Apr-25	10-May-25	17-Feb-25	27-Feb-25	-72	
10-2480 (M78)	Beam & Slab to +11.58mPD and +12.4mPD	11	11	0%	30-Apr-25	10-May-25	17-Feb-25	27-Feb-25	-72	Remove Successor 10-2490 (M78) FF0; Add Successor 16-1540 FF0
Process Building Waste & Ash Bunker Bld Misc. Steel Structure		36	36		21-May-25	25-Jun-25	20-Jan-25	24-Feb-25	-121	
10-2360-6(M81)	Ash Crane Runway Beam at Module 3	36	36	0%	21-May-25*	25-Jun-25	20-Jan-25	24-Feb-25	-121	
Process Building - Boiler & Flue Gas Treatment Bld Structure		467	62		25-Oct-23 A	01-Jul-25	18-Nov-24	04-Apr-25	-87	
Steel Structure		120	12		25-Oct-23 A	11-May-25	18-Nov-24	26-Dec-24	-136	
Boiler Building Steel Structure		120	12		25-Oct-23 A	11-May-25	18-Nov-24	26-Dec-24	-136	
Process Building (Module 2) Steel Structure Erection		60	8		25-Oct-23 A	08-May-25	18-Nov-24	26-Nov-24	-162	
10-1680	Roof Cladding Installation	60	8	86.33%	25-Oct-23 A	08-May-25	18-Nov-24	26-Nov-24	-162	
Process Building (Module 3) Process Building Steel Structure Erection		60	12		12-Dec-23 A	11-May-25	15-Dec-24	26-Dec-24	-136	
10-1720	Roof Cladding Installation	60	12	80%	12-Dec-23 A	11-May-25	15-Dec-24	26-Dec-24	-136	
Process Building Internal Partition Wall and Staircase		220	62		09-Nov-24 A	01-Jul-25	01-Feb-25	04-Apr-25	-87	
10-1850	RC Partition and Staircase at Module 1	90	17	81%	09-Nov-24 A	17-May-25	07-Feb-25	24-Feb-25	-81	
10-1860	RC Partition and Staircase at Module 2	69	52	25%	08-Mar-25 A	20-Jun-25	03-Feb-25	26-Mar-25	-86	
10-1870	RC Partition and Staircase at Module 3	69	62	10%	31-Mar-25 A	01-Jul-25	01-Feb-25	04-Apr-25	-87	Update Actual Start Date
Chimney Structure		40	40		07-May-25	16-Jun-25	25-Mar-25	04-May-25	-44	
10-2060-1	Chimney Roof Slab (47th Pour)	40	40	0%	07-May-25	16-Jun-25	25-Mar-25	04-May-25	-44	
Mechanical Treatment Plant Bld Structure		25	25		17-Mar-25 A	24-May-25	14-Feb-25	04-Apr-25	-50	
10-2135(7C)	Heli Pad @+26.5mPD	21	21	0%	30-Apr-25	20-May-25	15-Mar-25	04-Apr-25	-46	Add Successor 10-2160 FF0
10-2150	Roof Slab @+27.28mPD	21	4	83%	17-Mar-25 A	03-May-25	14-Feb-25	17-Feb-25	-75	Update Actual Start Date
10-2160	Roof Parapet Wall	21	21	0%	03-May-25	24-May-25	15-Mar-25	04-Apr-25	-50	
Elevated Drive Way and Associated Structures		279	70		22-Sep-24 A	08-Jul-25	11-Jan-25	03-Jul-25	-5	
Elevated Drive Way RSA to RSG (FS Control Rm & Vehicle Washing Facility)		190	70		14-Dec-24 A	08-Jul-25	11-Jan-25	03-Jul-25	-5	
10-2270(M57)	Truck Washing Facility House Column and Roof Slab to +28mPD	70	70	0%	30-Apr-25	08-Jul-25	11-Jan-25	21-Mar-25	-109	
10-2300(M57)	Parapet Wall	30	15	50%	14-Dec-24 A	14-May-25	19-Jun-25	03-Jul-25	50	
Elevated Drive Way RSG to RSX (Transform Room)		95	2		22-Sep-24 A	02-May-25	24-Feb-25	01-Mar-25	-62	
10-2320(M57)	Wall & Column to +12.5mPD Mezzanine Level	21	2	90%	22-Sep-24 A	02-May-25	27-Feb-25	01-Mar-25	-62	
10-2340(M57)	Wall & Column to +17.5 Ramp Level	21	2	90%	19-Nov-24 A	02-May-25	24-Feb-25	27-Feb-25	-64	
Elevated Drive Way RSX to RSAB		14	32		28-Jan-25 A	31-May-25	21-Mar-25	22-Apr-25	-40	
10-2440(M81)	Wall & Column to +17.5 Ramp Level	14	32	85%	28-Jan-25 A	31-May-25	21-Mar-25	22-Apr-25	-40	
Reception Pavilion Structure		63	63		07-Jun-25	09-Aug-25	30-Dec-24	02-Mar-25	-159	
10-2280	Reception Pavilion RC Structure Construction	30	30	0%	07-Jun-25	07-Jul-25	30-Dec-24	28-Jan-25	-159	
10-2290	Roof	30	30	0%	10-Jul-25	09-Aug-25	01-Feb-25	02-Mar-25	-159	
Vessel Offloading Point		158	158		30-Apr-25	05-Oct-25	06-Jan-25	22-Jun-25	-104	

Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

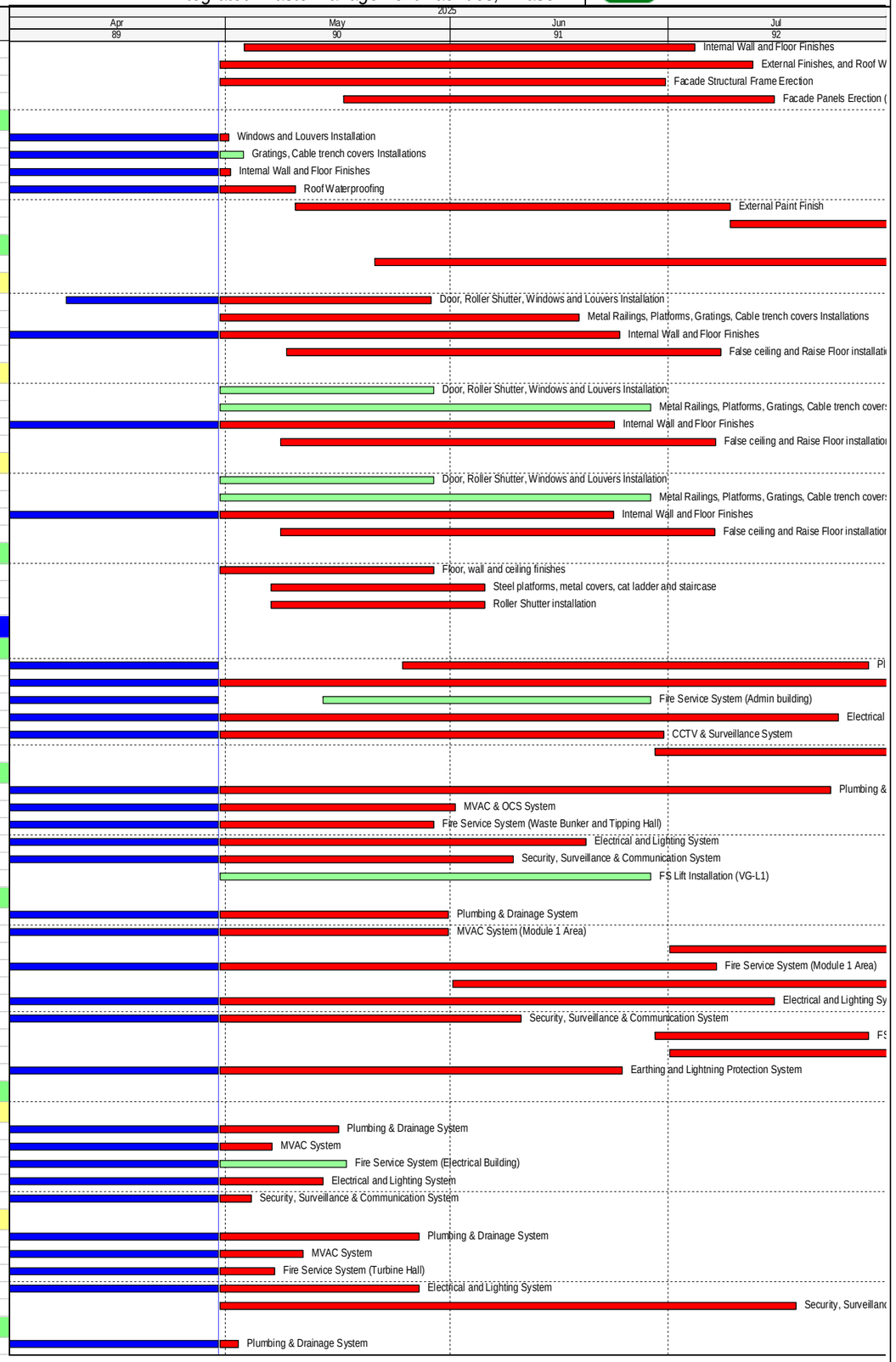
Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
08-2410(6D)	Construction of Passenger Vessel Berth	120	120	0%	07-Jun-25	05-Oct-25	23-Feb-25	22-Jun-25	-104	
08-2420(7)	Vehicle Ferry Ramp Installation	43	43	0%	30-Apr-25	11-Jun-25	06-Jan-25	17-Feb-25	-114	
Weighbridge Kiosk		30	30		01-May-25	31-May-25	07-Jan-25	05-Feb-25	-115	
08-2430(M79)	Construction of Weighbridge Kiosk	30	30	0%	01-May-25	31-May-25	07-Jan-25	05-Feb-25	-115	
ACC Yard		430	80		31-Mar-24 A	18-Jul-25	19-Nov-24	06-Feb-25	-162	
13-2000	Delivery and Erection of ACC Steel Structure & Steel Structure Support of Condensate Tank (Module 1)	90	15	83.33%	31-Mar-24 A	14-May-25	19-Nov-24	03-Dec-24	-162	
13-2040	Delivery and Erection of ACC Steel Structure & Steel Structure Support of Condensate Tank (Module 2)	90	58	35.56%	24-Oct-24 A	26-Jun-25	19-Nov-24	15-Jan-25	-162	
13-2080	Delivery and Erection of ACC Steel Structure & Steel Structure Support of Condensate Tank (Module 3)	80	80	0%	31-Mar-25 A	18-Jul-25	19-Nov-24	06-Feb-25	-162	Update Actual Start Date
Misc. External Structures		60	30		28-Feb-25 A	29-May-25	21-Dec-24	26-Mar-25	-64	
10-2440	Reuse Water Tanks, Water Cannon Water Tank Erection & pipe connection to Pump Room	45	14	68.89%	28-Feb-25 A	13-May-25	13-Mar-25	26-Mar-25	-48	
10-2460	Seawater Intake Structure Steel Roof Erection	30	30	0%	30-Apr-25	29-May-25	21-Dec-24	19-Jan-25	-130	
Architectural Builders Works & Finishes		606	180		27-Sep-23 A	26-Oct-25	10-Dec-24	31-Oct-25	5	
Administration & Viewing Gallery Bld ABWF Works		241	180		12-Feb-25 A	26-Oct-25	04-Feb-25	31-Oct-25	5	
11-1010	External Door and Windows	90	90	0%	29-Jul-25	26-Oct-25	06-Mar-25	03-Jun-25	-145	
11-1030	Internal Wall, Door and Floor Finishes	150	120	20%	12-Feb-25 A	27-Aug-25	04-Feb-25	03-Jun-25	-85	
11-1050	Roof Waterproofing	30	30	0%	30-Apr-25	29-May-25	04-Jun-25	03-Jul-25	35	
11-1050-1(7C)	External Louver Wall, Window Wall, Curtain Wall and Cladding Wall Erection	90	90	0%	29-Jul-25	26-Oct-25	03-Aug-25	31-Oct-25	5	
11-1050-1(M63)	Facade Panels Erection (130pcs. @4pc/day)	30	30	0%	29-Jun-25	28-Jul-25	04-Feb-25	05-Mar-25	-145	
Process Building - Waste Bunker & Tipping Hall Bld ABWF Works		516	114		20-Nov-23 A	22-Aug-25	09-Jan-25	03-Jul-25	-49	
11-1060	Door, Roller Shutter, Windows and Louvers Installation	180	114	36.44%	02-Nov-24 A	22-Aug-25	11-Mar-25	03-Jul-25	-49	
11-1070	Metal Railings, Platforms, Gratings, Cable trench covers Installations	90	90	0%	30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
11-1080	Internal Wall and Floor Finishes	230	99	27%	20-Nov-23 A	06-Aug-25	09-Jan-25	17-Apr-25	-111	
11-1090	False ceiling and Raise Floor installation (in CCR)	45	2	95%	17-Dec-24 A	02-May-25	09-Jan-25	11-Jan-25	-111	
11-1100	External Finishes, Curtain Walls and Roof Waterproofing	90	25	72%	20-Feb-24 A	25-May-25	18-Feb-25	15-Mar-25	-70	
11-1530(M63)	Facade Panels Erection at Bunker	51	25	51%	27-Nov-24 A	24-May-25	10-Jan-25	03-Feb-25	-110	
11-1550(M63)	Facade Panels Erection at Tipping Hall	51	51	0%	24-May-25	14-Jul-25	04-Feb-25	26-Mar-25	-110	
Process Building - Boiler & Flue Gas Bld ABWF Works		407	165		01-Aug-24 A	11-Oct-25	07-Jan-25	03-Jul-25	-100	
11-1110	Door, Roller Shutter, Windows and Louvers Installation (Module 1)	60	46	23%	25-Feb-25 A	15-Jun-25	20-Jan-25	07-Mar-25	-99	
11-1110-1(7C)	Door, Roller Shutter, Windows and Louvers Installation (Module 2 & 3)	90	90	0%	13-Jul-25	11-Oct-25	05-Apr-25	03-Jul-25	-100	
11-1120	Metal Railings, Staircase Access Platforms & Gratings Installations (ST-5 to ST-9)	60	60	0%	17-May-25	16-Jul-25	06-Mar-25	04-May-25	-72	
11-1120-1(7C)	Metal Railings, Staircase Access Platforms & Gratings Installations (ST-1 to ST-4)	60	60	0%	16-Jul-25	14-Sep-25	05-May-25	03-Jul-25	-72	
11-1130	Wall and Floor Finishes (Module 1)	180	60	66.67%	01-Aug-24 A	28-Jun-25	09-Feb-25	09-Apr-25	-80	
11-1130-1(7C)	Wall and Floor Finishes (Module 2&3)	60	60	0%	29-Jun-25	27-Aug-25	05-May-25	03-Jul-25	-55	
11-1140	Curtain Walls and Roof at Viewing Gallery	60	60	0%	30-Apr-25	28-Jun-25	07-Jan-25	07-Mar-25	-113	Update Original Duration from 90d to 60d
11-1530 (M63)	Facade Panels Erection for Module 1 (658pcs. @8pcs/d)	83	30	64.2%	27-Dec-24 A	29-May-25	06-Feb-25	07-Mar-25	-83	
11-1540 (M63)	Facade Panels Erection for Module 2 (344pcs. @4pcs/d)	86	75	13%	20-Apr-25 A	13-Jul-25	20-Jan-25	04-Apr-25	-100	Update Actual Start Date
11-1550 (M63)	Facade Panels Erection for Module 3 (658pcs. @8pcs/d)	83	72	13%	23-Mar-25 A	11-Jul-25	23-Mar-25	03-Jun-25	-37	
Turbine Hall Bld ABWF Works		461	96		09-Dec-23 A	03-Aug-25	10-Dec-24	03-Jul-25	-31	
Electrical Bld ABWF Works		381	51		09-Dec-23 A	19-Jun-25	10-Dec-24	03-Jul-25	14	
11-1150	Door, Windows and Louvers Installation	50	3	95%	05-Dec-24 A	02-May-25	11-Dec-24	13-Dec-24	-140	
11-1160	Metal Railings, Platforms, Gratings, Cable trench covers Installations	90	12	86.78%	15-Apr-24 A	11-May-25	11-Dec-24	22-Dec-24	-140	
11-1170	Internal Wall and Floor Finishes	90	3	97%	09-Dec-23 A	02-May-25	13-Dec-24	15-Dec-24	-138	
11-1180	False ceiling and Raise Floor installation	40	14	65%	24-Feb-25 A	13-May-25	18-Dec-24	31-Dec-24	-133	
11-1190	Roof Waterproofing	60	51	15%	17-Jan-25 A	19-Jun-25	14-May-25	03-Jul-25	14	
11-1540	Facade Panels Erection (167pcs. @8pcs/d)	23	20	14%	27-Sep-24 A	19-May-25	10-Dec-24	29-Dec-24	-141	
Turbine Hall ABWF Works		277	96		30-Sep-24 A	03-Aug-25	20-Dec-24	03-Jul-25	-31	
11-1200	Door, Roller Shutter, Windows and Louvers Installation	60	36	40%	07-Mar-25 A	04-Jun-25	19-Feb-25	26-Mar-25	-70	
11-1210	Metal Railings, Platforms, Gratings, Cable trench covers Installations	32	32	0%	30-Apr-25	31-May-25	04-Jan-25	04-Feb-25	-116	
11-1220	Internal Wall and Floor Finishes for remain area	32	32	0%	30-Apr-25	31-May-25	04-Jan-25	04-Feb-25	-116	Update Original Duration from 47d to 32d
11-1240	Roof Waterproofing	60	60	0%	05-Jun-25	03-Aug-25	05-May-25	03-Jul-25	-31	
11-1540-1(M63)	Facade Structural Frame Erection	22	9	57%	30-Sep-24 A	09-May-25	20-Dec-24	29-Dec-24	-130	
11-1550	Facade Panels Erection (207pcs. @4pcs/d)	51	12	23%	16-Jan-25 A	11-May-25	01-Mar-25	12-Mar-25	-60	
Compressor & CCCW Bld ABWF Works		90	90		30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
11-1250	Door, Roller Shutter, Windows and Louvers Installation	90	90	0%	30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
11-1260	Metal Railings, Platforms, Gratings, Cable trench covers Installations	90	90	0%	30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
11-1270	Internal Wall and Floor Finishes	90	90	0%	30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
11-1280	False ceiling and Raise Floor installation	90	90	0%	30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
11-1290	External Finishes and Roof Waterproofing	90	90	0%	30-Apr-25	28-Jul-25	05-Apr-25	03-Jul-25	-25	
Chimney ABWF Works		132	60		13-Jan-25 A	28-Jun-25	09-Jan-25	09-Mar-25	-111	
11-1000	Installation of Metal Staircase, Railings, Lift Shaft	26	8	70%	13-Jan-25 A	07-May-25	02-Mar-25	09-Mar-25	-59	
11-1490	Door and Windows Installation	60	60	0%	30-Apr-25	28-Jun-25	09-Jan-25	09-Mar-25	-111	
11-1500	Internal Wall and Floor Finishes	30	30	0%	30-Apr-25	29-May-25	25-Jan-25	23-Feb-25	-95	
Mechanical Treatment Plant & Water Treatment Plant Bld ABWF Works		227	166		06-Jan-25 A	12-Oct-25	24-Dec-24	03-Jul-25	-101	
Mechanical Treatment Plant ABWF Works		227	166		06-Jan-25 A	12-Oct-25	24-Dec-24	03-Jul-25	-101	
11-1300	Door, Roller Shutter, Windows and Louvers Installation	90	79	12%	27-Feb-25 A	18-Jul-25	09-Feb-25	29-Apr-25	-79	
11-1310	Metal Railings, Platforms, Gratings, Cable trench covers Installations	120	120	0%	30-Apr-25	27-Aug-25	31-Dec-24	29-Apr-25	-120	
11-1320	Internal Wall and Floor Finishes	120	113	6%	26-Feb-25 A	20-Aug-25	24-Dec-24	15-Apr-25	-127	
11-1330	External Finishes, Curtain Walls and Roof Waterproofing	90	90	6%	06-Jan-25 A	28-Jul-25	30-Jan-25	29-Apr-25	-90	
11-1330-1(M63)	Facade Structural Frame Erection	136	136	0%	30-Apr-25	12-Sep-25	19-Jan-25	03-Jun-25	-101	
11-1330-2(M63)	Facade Panels Erection (272pcs. @8pcs/d)	90	90	0%	15-Jul-25	12-Oct-25	05-Apr-25	03-Jul-25	-101	
Water Treatment Plant ABWF Works		101	77		27-Feb-25 A	15-Jul-25	10-Jan-25	12-Apr-25	-94	
11-1600(7)	Door, Roller Shutter, Windows and Louvers Installation	60	52	13%	27-Feb-25 A	15-Jul-25	19-Feb-25	12-Apr-25	-94	
11-1610(7)	Metal Railings, Platforms, Gratings, Cable trench covers Installations	62	62	0%	30-Apr-25	30-Jun-25	11-Jan-25	13-Mar-25	-109	



3-Month Rolling Programme (April 2025)

Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
11-1620(7)	Internal Wall and Floor Finishes	62	62	0%	03-May-25	04-Jul-25	10-Jan-25	13-Mar-25	-113	
11-1630(7)	External Finishes, and Roof Waterproofing	74	74	0%	30-Apr-25	12-Jul-25	29-Jan-25	12-Apr-25	-91	
11-1640(7)	Facade Structural Frame Erection	62	62	0%	30-Apr-25	30-Jun-25	10-Feb-25	12-Apr-25	-79	
11-1650(7)	Facade Panels Erection (272pcs. @8pcs/d)	60	60	0%	17-May-25	15-Jul-25	12-Feb-25	12-Apr-25	-94	
IWMF Substation ABWF Works		557	131		27-Sep-23 A	07-Sep-25	16-Dec-24	03-Jul-25	-66	
11-1340	Windows and Louvers Installation	60	1	97.67%	18-Dec-23 A	01-May-25	06-Mar-25	07-Mar-25	-54	
11-1350	Gratings, Cable trench covers Installations	90	3	96.33%	27-Dec-23 A	03-May-25	30-Jun-25	03-Jul-25	62	
11-1360	Internal Wall and Floor Finishes	90	2	98%	27-Sep-23 A	01-May-25	16-Dec-24	17-Dec-24	-135	
11-1380	Roof Waterproofing	86	11	87.33%	06-May-24 A	10-May-25	23-Feb-25	05-Mar-25	-66	
11-1380-1(7C)	External Paint Finish	60	60	0%	10-May-25	09-Jul-25	06-Mar-25	04-May-25	-66	
11-1380-2(7C)	Green Wall Planter Installation	60	60	0%	09-Jul-25	07-Sep-25	05-May-25	03-Jul-25	-66	
Elevated Drive Way and Associated Structures ABWF Works		184	154		08-Mar-25 A	30-Sep-25	05-Feb-25	03-Jul-25	-89	
11-1430	External Finishes and Roof Waterproofing	132	132	0%	21-May-25	30-Sep-25	22-Feb-25	03-Jul-25	-89	
Elevated Drive Way RSA to RSG		77	69		08-Mar-25 A	08-Jul-25	05-Feb-25	03-Jul-25	-4	
11-1390	Door, Roller Shutter, Windows and Louvers Installation	30	29	3%	09-Apr-25 A	29-May-25	05-Apr-25	04-May-25	-24	Update Actual Start Date
11-1400	Metal Railings, Platforms, Gratings, Cable trench covers Installations	50	50	0%	30-Apr-25	18-Jun-25	05-Feb-25	26-Mar-25	-84	
11-1410	Internal Wall and Floor Finishes	60	55	8%	08-Mar-25 A	24-Jun-25	09-Mar-25	03-May-25	-51	
11-1420	False ceiling and Raise Floor installation	60	60	0%	09-May-25	08-Jul-25	05-May-25	03-Jul-25	-4	
Elevated Drive Way RSG to RSU		69	69		01-Apr-25 A	07-Jul-25	06-Feb-25	03-Jul-25	-4	
11-1390-1(M76)	Door, Roller Shutter, Windows and Louvers Installation	30	30	0%	30-Apr-25	29-May-25	04-Jun-25	03-Jul-25	35	
11-1400-1(M76)	Metal Railings, Platforms, Gratings, Cable trench covers Installations	60	60	0%	30-Apr-25	28-Jun-25	05-May-25	03-Jul-25	5	
11-1410-1(M76)	Internal Wall and Floor Finishes	57	55	4%	01-Apr-25 A	23-Jun-25	06-Feb-25	01-Apr-25	-83	Update Actual Start Date
11-1420-1(M76)	False ceiling and Raise Floor installation	60	60	0%	08-May-25	07-Jul-25	05-May-25	03-Jul-25	-4	
Elevated Drive Way RSU to RSAF		99	69		08-Mar-25 A	07-Jul-25	21-Feb-25	03-Jul-25	-4	
11-1390-2(M76)	Door, Roller Shutter, Windows and Louvers Installation	30	30	0%	30-Apr-25	29-May-25	04-Jun-25	03-Jul-25	35	
11-1400-2(M76)	Metal Railings, Platforms, Gratings, Cable trench covers Installations	60	60	0%	30-Apr-25	28-Jun-25	05-May-25	03-Jul-25	5	
11-1410-2(M76)	Internal Wall and Floor Finishes	60	55	9%	08-Mar-25 A	23-Jun-25	21-Feb-25	16-Apr-25	-68	
11-1420-2(M76)	False ceiling and Raise Floor installation	60	60	0%	08-May-25	07-Jul-25	05-May-25	03-Jul-25	-4	
Seawater Intake Chamber ABWF Works		37	37		30-Apr-25	05-Jun-25	28-Dec-24	26-Jan-25	-130	
11-1670(7)	Floor, wall and ceiling finishes	30	30	0%	30-Apr-25	29-May-25	28-Dec-24	26-Jan-25	-123	
11-1680(7)	Steel platforms, metal covers, cat ladder and staircase	30	30	0%	07-May-25	05-Jun-25	28-Dec-24	26-Jan-25	-130	
11-1690(7)	Roller Shutter installation	30	30	0%	07-May-25	05-Jun-25	28-Dec-24	26-Jan-25	-130	
Building Services Installation		578	151		20-May-22 A	27-Sep-25	13-Dec-24	17-Aug-25	-41	
Administration & Viewing Gallery Bld BS Works		332	120		15-Sep-24 A	27-Aug-25	12-Jan-25	22-Jul-25	-36	
12-1000	Plumbing & Drainage System	120	65	46%	21-Oct-24 A	28-Jul-25	28-Feb-25	03-May-25	-86	
12-1010	MVAC System	120	109	9%	28-Jan-25 A	17-Aug-25	12-Jan-25	01-May-25	-107	
12-1020	Fire Service System (Admin building)	120	46	62%	15-Sep-24 A	28-Jun-25	07-Jun-25	22-Jul-25	24	
12-1030	Electrical and Lighting System	150	86	43%	15-Sep-24 A	24-Jul-25	07-Feb-25	03-May-25	-82	
12-1040	CCTV & Surveillance System	150	62	59%	05-Nov-24 A	30-Jun-25	03-Mar-25	03-May-25	-58	
12-1050	FS Lift & Escalator Installation	60	60	0%	29-Jun-25	27-Aug-25	07-May-25	05-Jul-25	-53	
Process Building - Waste Bunker & Tipping Hall Bld BS Works		333	85		11-Oct-23 A	23-Jul-25	16-Jan-25	05-Jul-25	-18	
12-1060	Plumbing & Drainage System	180	85	53%	11-Oct-23 A	23-Jul-25	08-Feb-25	03-May-25	-81	
12-1070	MVAC & OCS System	120	33	50%	14-Oct-23 A	01-Jun-25	16-Jan-25	17-Feb-25	-104	
12-1080	Fire Service System (Waste Bunker and Tipping Hall)	180	30	49%	11-Oct-23 A	29-May-25	30-Jan-25	28-Feb-25	-90	
12-1090	Electrical and Lighting System	180	51	62%	18-Oct-23 A	19-Jun-25	11-Mar-25	30-Apr-25	-50	
12-1100	Security, Surveillance & Communication System	180	41	53%	25-Apr-24 A	09-Jun-25	11-Mar-25	20-Apr-25	-50	
12-1680(7C)	FS Lift Installation (VG-L1)	60	60	0%	30-Apr-25	28-Jun-25	07-May-25	05-Jul-25	7	
Process Building - Boiler & Flue Gas Bld BS Works		549	122		20-May-22 A	30-Aug-25	17-Jan-25	22-Jul-25	-38	
12-1110	Plumbing & Drainage System	180	32	82.22%	11-Oct-23 A	31-May-25	19-Jan-25	19-Feb-25	-101	
12-1120	MVAC System (Module 1 Area)	180	32	65.56%	14-Oct-23 A	31-May-25	28-Jan-25	28-Feb-25	-92	
12-1120-1(7C)	MVAC System (Module 2 & 3 Area)	60	60	0%	01-Jul-25	30-Aug-25	24-May-25	22-Jul-25	-38	
12-1130	Fire Service System (Module 1 Area)	180	69	45%	11-Oct-23 A	07-Jul-25	17-Jan-25	26-Mar-25	-103	
12-1130-1(7C)	Fire Service System (Module 2 & 3 Areas)	90	90	0%	01-Jun-25	30-Aug-25	24-Apr-25	22-Jul-25	-38	
12-1140	Electrical and Lighting System	180	77	57.22%	18-Oct-23 A	15-Jul-25	30-Jan-25	16-Apr-25	-90	
12-1150	Security, Surveillance & Communication System	180	42	43.89%	25-Apr-24 A	10-Jun-25	10-Mar-25	20-Apr-25	-51	
12-1160	FS Lift Installation (PB-L3, L4 & L5)	30	30	0%	29-Jun-25	28-Jul-25	06-Jun-25	05-Jul-25	-23	
12-1160-1(7C)	FS Lift Installation (PB-L1 & L2)	30	30	0%	01-Jul-25	31-Jul-25	06-Jun-25	05-Jul-25	-25	
12-1580(6E)	Earthing and Lightning Protection System	180	56	21.11%	20-May-22 A	24-Jun-25	30-Jan-25	26-Mar-25	-90	
Turbine Hall Bld BS Works		475	80		11-Oct-23 A	18-Jul-25	22-Jan-25	23-May-25	-56	
Electrical Bld BS Works		150	18		11-Oct-23 A	17-May-25	16-Apr-25	23-May-25	6	
12-1270	Plumbing & Drainage System	60	17	72%	11-Oct-23 A	16-May-25	16-Apr-25	03-May-25	-14	
12-1280	MVAC System	120	7	94%	25-Feb-24 A	07-May-25	16-Apr-25	23-Apr-25	-14	
12-1290	Fire Service System (Electrical Building)	120	18	85%	31-Mar-24 A	17-May-25	06-May-25	23-May-25	6	
12-1300	Electrical and Lighting System	120	14	88%	11-Oct-23 A	14-May-25	16-Apr-25	30-Apr-25	-14	
12-1310	Security, Surveillance & Communication System	90	5	95%	25-Feb-24 A	04-May-25	16-Apr-25	20-Apr-25	-14	
Turbine Hall BS Works		442	80		11-Oct-23 A	18-Jul-25	22-Jan-25	15-May-25	-64	
12-1320	Plumbing & Drainage System	90	28	68.89%	11-Oct-23 A	27-May-25	22-Jan-25	18-Feb-25	-98	
12-1330	MVAC System	60	12	80%	31-May-24 A	11-May-25	22-Jan-25	02-Feb-25	-98	
12-1340	Fire Service System (Turbine Hall)	90	8	91.11%	31-May-24 A	07-May-25	04-Apr-25	12-Apr-25	-26	
12-1350	Electrical and Lighting System	90	28	68.89%	11-Oct-23 A	27-May-25	04-Apr-25	01-May-25	-26	
12-1360	Security, Surveillance & Communication System	80	80	0%	30-Apr-25	18-Jul-25	25-Feb-25	15-May-25	-64	
Compressor & CCCW Bld BS Works		192	41		20-Mar-24 A	09-Jun-25	17-Feb-25	23-May-25	-17	
12-1370	Plumbing & Drainage System	60	3	95%	31-Mar-24 A	02-May-25	17-Feb-25	19-Feb-25	-72	



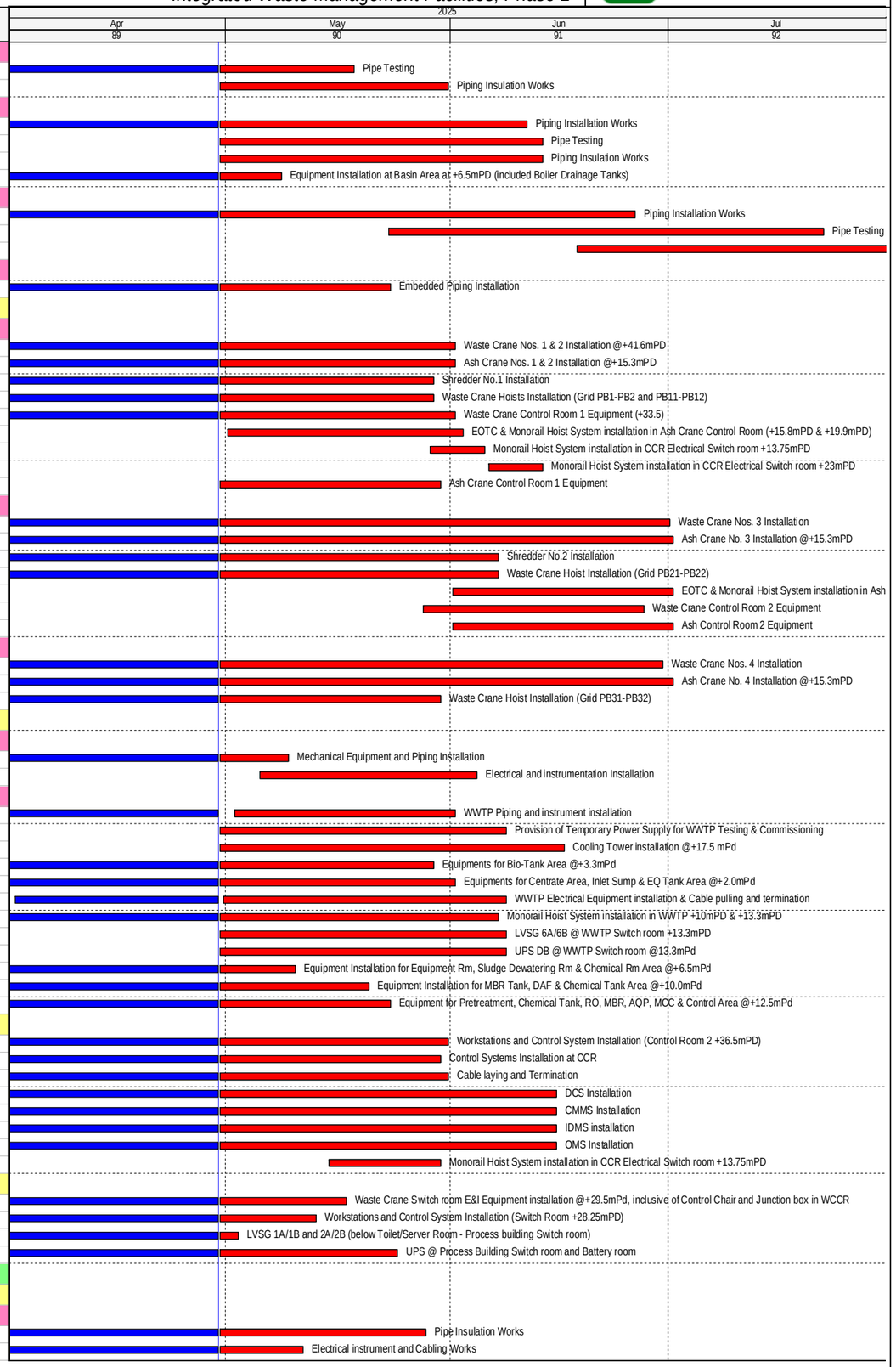
3-Month Rolling Programme (April 2025)

Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
12-1380	MVAC System	120	6	95%	15-May-24 A	05-May-25	26-Apr-25	01-May-25	-4	
12-1390	Fire Service System (CCCW Bld)	120	11	91%	27-Apr-24 A	10-May-25	13-May-25	23-May-25	13	
12-1400	Electrical and Lighting System	120	41	66%	20-Mar-24 A	09-Jun-25	24-Mar-25	03-May-25	-37	
12-1410	Security, Surveillance & Communication System	90	5	95%	20-Mar-24 A	04-May-25	16-Apr-25	20-Apr-25	-14	
Chimney BS Works		120	120		30-Apr-25	27-Aug-25	23-Feb-25	17-Aug-25	-10	
12-1520	Plumbing & Drainage System	14	14	0%	30-May-25	12-Jun-25	24-Feb-25	09-Mar-25	-95	
12-1530	MVAC System	30	30	0%	30-May-25	28-Jun-25	02-Apr-25	01-May-25	-58	
12-1540	Fire Service System (Chimney)	30	30	0%	30-May-25	28-Jun-25	24-Apr-25	23-May-25	-36	
12-1550	Electrical and Lighting System	30	30	0%	30-May-25	28-Jun-25	04-Apr-25	03-May-25	-56	
12-1560	Security, Surveillance & Communication System	57	57	0%	30-Apr-25	25-Jun-25	23-Feb-25	20-Apr-25	-66	
12-1570	Lift Installation (Chimney)	60	60	0%	29-Jun-25	27-Aug-25	19-Jun-25	17-Aug-25	-10	
Mechanical Treatment Plant & Water Treatment Plant Bld BS Works		424	151		30-Jun-24 A	27-Sep-25	13-Dec-24	05-Jul-25	-84	
Mechanical Treatment BS Works		151	151		31-Mar-25 A	27-Sep-25	04-Jan-25	05-Jul-25	-84	
12-1420	Plumbing & Drainage System	40	39	3%	31-Mar-25 A	07-Jun-25	12-Jan-25	19-Feb-25	-108	Update Actual Start Date
12-1430	MVAC & OCS System	35	33	6%	31-Mar-25 A	01-Jun-25	16-Jan-25	17-Feb-25	-104	Update Actual Start Date
12-1440	Fire Service System	77	77	0%	30-Apr-25	15-Jul-25	09-Jan-25	26-Mar-25	-111	
12-1450	Electrical and Lighting System	120	120	0%	31-May-25	27-Sep-25	04-Jan-25	03-May-25	-147	
12-1460	Security, Surveillance & Communication System	80	75	6%	31-Mar-25 A	14-Jul-25	01-Mar-25	15-May-25	-59	Update Actual Start Date
12-1460-1(6C)	Lift Installation (LT-1 - 4)	30	30	0%	29-Jun-25	28-Jul-25	06-Jun-25	05-Jul-25	-23	
Water Treatment Plant BS Works		151	43		30-Jun-24 A	12-Jun-25	13-Dec-24	22-Jun-25	11	
12-1580(7)	Plumbing & Drainage System	120	33	48%	30-Jun-24 A	01-Jun-25	13-Dec-24	15-Jan-25	-138	
12-1590(7)	MVAC & OCS System	120	34	72%	27-Jul-24 A	02-Jun-25	13-Dec-24	15-Jan-25	-138	
12-1600(7)	Fire Service System	107	43	60%	28-Jul-24 A	11-Jun-25	11-May-25	22-Jun-25	11	
12-1610(7)	Electrical and Lighting System	120	43	64%	15-Aug-24 A	12-Jun-25	21-Mar-25	03-May-25	-39	
12-1620(7)	Security, Surveillance & Communication System	90	23	74%	30-Jul-24 A	23-May-25	28-Mar-25	20-Apr-25	-32	
IWMF Substation BS Works		120	6		10-Oct-23 A	06-May-25	27-Feb-25	20-Apr-25	-15	
12-1470	Plumbing & Drainage System	90	6	93%	10-Oct-23 A	06-May-25	27-Feb-25	05-Mar-25	-62	
12-1480	MVAC System	90	2	98%	11-Oct-23 A	05-May-25	27-Feb-25	28-Feb-25	-66	
12-1490	Fire Service System (IWMF Substation)	90	2	98%	12-Oct-23 A	05-May-25	27-Feb-25	28-Feb-25	-66	
12-1500	Electrical and Lighting System	90	2	98%	10-Oct-23 A	05-May-25	19-Apr-25	20-Apr-25	-15	
12-1510	Security, Surveillance & Communication System	90	2	98%	20-Nov-23 A	05-May-25	19-Apr-25	20-Apr-25	-15	
Elevated Drive Way and Associated Structures Bld BS Works		175	85		15-Sep-24 A	23-Jul-25	24-Dec-24	22-Jul-25	-1	
Elevated Drive Way RSA to RSG		150	58		15-Sep-24 A	26-Jun-25	24-Dec-24	20-May-25	-37	
12-1170	Plumbing & Drainage System	60	58	4%	15-Sep-24 A	26-Jun-25	24-Dec-24	19-Feb-25	-127	
12-1180	MVAC System	60	20	66.67%	05-Apr-25 A	19-May-25	12-Apr-25	01-May-25	-18	Update Actual Start Date
12-1190	Fire Service System (Elevated Driveway)	60	30	50%	15-Sep-24 A	29-May-25	30-Jan-25	28-Feb-25	-90	
12-1200	Electrical and Lighting System	60	56	6%	23-Jan-25 A	25-Jun-25	08-Mar-25	03-May-25	-52	
12-1210	CCTV & Surveillance System	60	42	30%	21-Jan-25 A	24-Jun-25	09-Apr-25	20-May-25	-34	
Elevated Drive Way RSG to RSU		84	84		30-Apr-25	23-Jul-25	26-Feb-25	22-Jul-25	-1	
12-1580	Plumbing & Drainage System	60	60	0%	24-May-25	23-Jul-25	05-Mar-25	03-May-25	-81	
12-1590	MVAC System	60	60	0%	24-May-25	23-Jul-25	03-Mar-25	01-May-25	-83	
12-1600	Fire Service System (Elevated Driveway)	60	60	0%	24-May-25	23-Jul-25	24-May-25	22-Jul-25	-1	
12-1610	Electrical and Lighting System	60	60	0%	24-May-25	23-Jul-25	05-Mar-25	03-May-25	-81	
12-1620	CCTV & Surveillance System	54	54	0%	30-Apr-25	23-Jun-25	26-Feb-25	20-Apr-25	-64	
Elevated Drive Way RSU to RSAF		60	60		09-May-25	08-Jul-25	03-Mar-25	22-Jul-25	14	
12-1630	Plumbing & Drainage System	60	60	0%	09-May-25	08-Jul-25	05-Mar-25	03-May-25	-66	
12-1640	MVAC System	60	60	0%	09-May-25	08-Jul-25	03-Mar-25	01-May-25	-68	
12-1650	Fire Service System (Elevated Driveway)	60	60	0%	09-May-25	08-Jul-25	24-May-25	22-Jul-25	14	
12-1660	Electrical and Lighting System	60	60	0%	09-May-25	08-Jul-25	05-Mar-25	03-May-25	-66	
12-1670	CCTV & Surveillance System	60	60	0%	09-May-25	08-Jul-25	05-Mar-25	03-May-25	-66	
ACC Equipment Structure BS Works		97	97		15-May-25	19-Aug-25	26-Jan-25	05-Aug-25	-14	
12-1580(5a)	Plumbing & Drainage System	60	60	0%	22-May-25	20-Jul-25	05-Mar-25	03-May-25	-78	
12-1590(5a)	MVAC System	90	90	0%	22-May-25	19-Aug-25	01-Feb-25	01-May-25	-110	
12-1600(5a)	Fire Service System (Equipment/Appliance)	60	60	0%	22-May-25	20-Jul-25	07-Jun-25	05-Aug-25	16	
12-1610(5a)	Electrical and Lighting System	60	60	0%	15-May-25	13-Jul-25	26-Jan-25	26-Mar-25	-109	
12-1620(5a)	Security, Surveillance & Communication System	60	60	0%	22-May-25	20-Jul-25	22-Mar-25	20-May-25	-61	
Vehicle Fuel Filling Station BS Works		64	64		12-May-25	14-Jul-25	05-Mar-25	28-Jun-25	-16	
12-2020(6D)	Fire Service System (Vehicle Filling Station)	60	60	0%	12-May-25	10-Jul-25	05-Mar-25	03-May-25	-68	
12-2030(6D)	Electrical and Lighting System (Vehicle Filling Station)	60	60	0%	12-May-25	10-Jul-25	05-Mar-25	03-May-25	-68	
12-2040(6D)	Security, Surveillance & Communication System (Vehicle Filling Station)	30	30	0%	12-May-25	10-Jun-25	22-Mar-25	20-Apr-25	-51	
12-2050(6D)	Install Fuel Filling Kiosk	60	60	0%	16-May-25	14-Jul-25	30-Apr-25	28-Jun-25	-16	
Fire Boat Access BS System		60	60		08-Jul-25	06-Sep-25	05-Mar-25	03-May-25	-126	
12-2130(6D)	Diesel Generator & Electrical System (Berth)	60	60	0%	08-Jul-25	06-Sep-25	05-Mar-25	03-May-25	-126	
12-2140(6D)	Microwave Transmission System (Berth)	60	60	0%	08-Jul-25	06-Sep-25	05-Mar-25	03-May-25	-126	
Seawater Intake Chamber BS Works		60	60		30-Apr-25	28-Jun-25	23-Feb-25	05-Aug-25	38	
12-1630(7)	Plumbing & Drainage System	60	60	0%	30-Apr-25	28-Jun-25	23-Feb-25	23-Apr-25	-66	
12-1640(7)	MVAC System	60	60	0%	30-Apr-25	28-Jun-25	03-Mar-25	01-May-25	-58	
12-1650(7)	Fire Service System (Equipment/Appliance)	60	60	0%	30-Apr-25	28-Jun-25	07-Jun-25	05-Aug-25	38	
12-1660(7)	Electrical and Lighting System	57	57	0%	30-Apr-25	25-Jun-25	23-Feb-25	20-Apr-25	-66	
12-1670(7)	Security, Surveillance & Communication System	57	57	0%	30-Apr-25	25-Jun-25	23-Feb-25	20-Apr-25	-66	
Process Equipment Installation		670	184		01-Mar-23 A	30-Oct-25	09-Nov-24	14-Jun-25	-138	
Process Building - Waste Bunker & Tipping Hall Bld Process Equipment Installation		596	110		01-Mar-23 A	17-Aug-25	09-Nov-24	15-Apr-25	-124	
Equipment, Piping and Instrument Installation and Connection Works		596	110		20-Sep-23 A	17-Aug-25	09-Nov-24	01-Apr-25	-138	

Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

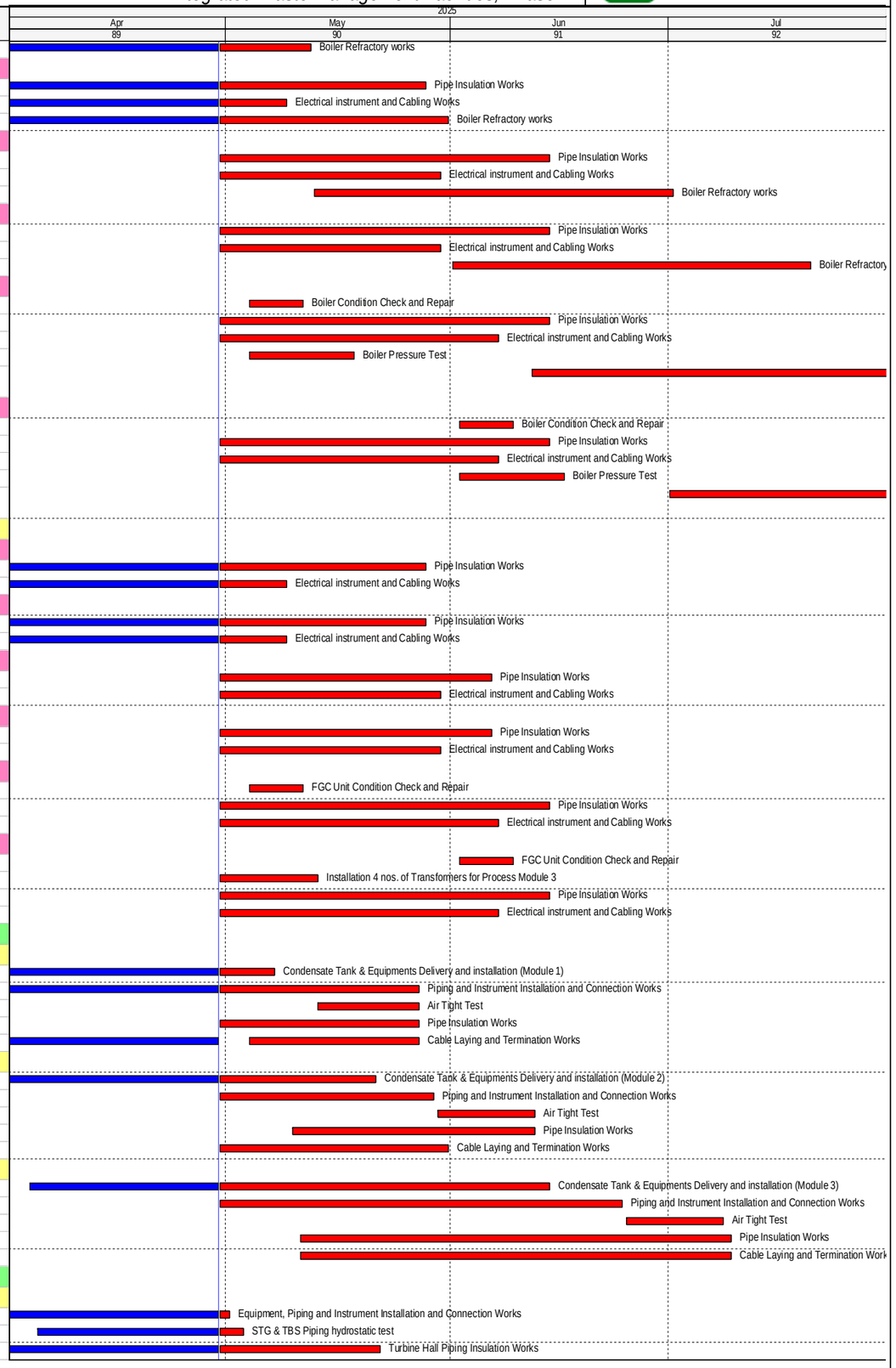
Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
Process Building (Module 1)		38	32		31-Mar-25 A	31-May-25	06-Jan-25	06-Feb-25	-114	
12-3020(6F)	Pipe Testing	38	19	50%	31-Mar-25 A	18-May-25	06-Jan-25	24-Jan-25	-114	Update Actual Start Date
12-3030(6F)	Piping Insulation Works	32	32	0%	30-Apr-25	31-May-25	06-Jan-25	06-Feb-25	-114	
Process Building (Module 2)		257	45		15-Aug-24 A	13-Jun-25	09-Nov-24	11-Feb-25	-122	
12-3050(6F)	Piping Installation Works	45	43	5%	20-Mar-25 A	11-Jun-25	31-Dec-24	11-Feb-25	-120	
12-3060(6F)	Pipe Testing	45	45	0%	30-Apr-25	13-Jun-25	29-Dec-24	11-Feb-25	-122	
12-3070(6F)	Piping Insulation Works	45	45	0%	30-Apr-25	13-Jun-25	29-Dec-24	11-Feb-25	-122	
12-3075(M71)	Equipment Installation at Basin Area at +6.5mPD (included Boiler Drainage Tanks)	90	9	90%	15-Aug-24 A	08-May-25	09-Nov-24	17-Nov-24	-172	
Process Building (Module 3)		140	110		20-Mar-25 A	17-Aug-25	13-Dec-24	01-Apr-25	-138	
12-3090(6F)	Piping Installation Works	60	58	4%	20-Mar-25 A	26-Jun-25	13-Dec-24	08-Feb-25	-138	
12-3100(6F)	Pipe Testing	60	60	0%	23-May-25	22-Jul-25	06-Jan-25	06-Mar-25	-138	
12-3110(6F)	Piping Insulation Works	60	60	0%	18-Jun-25	17-Aug-25	01-Feb-25	01-Apr-25	-138	
Process Building (WWTP)		60	24		20-Sep-23 A	23-May-25	27-Nov-24	21-Dec-24	-154	
12-3160(6F)	Embedded Piping Installation	60	24	60%	20-Sep-23 A	23-May-25	27-Nov-24	21-Dec-24	-154	
Process Building (Cranes and Shredder)		214	63		31-Oct-24 A	01-Jul-25	24-Dec-24	15-Apr-25	-77	
Process Building (Module 1)		196	45		31-Oct-24 A	13-Jun-25	08-Jan-25	15-Apr-25	-59	
13-1000(M81)	Waste Crane Nos. 1 & 2 Installation @+41.6mPD	40	33	95%	08-Dec-24 A	01-Jun-25	16-Jan-25	17-Feb-25	-104	
13-1000-1(6)	Ash Crane Nos. 1 & 2 Installation @+15.3mPD	70	33	90%	20-Dec-24 A	01-Jun-25	16-Jan-25	17-Feb-25	-104	
13-1000-2(6)	Shredder No.1 Installation	39	30	70%	06-Jan-25 A	29-May-25	08-Jan-25	06-Feb-25	-112	
13-1000-3(6)	Waste Crane Hoists Installation (Grid PB1-PB2 and PB11-PB12)	30	30	80%	02-Dec-24 A	29-May-25	19-Jan-25	17-Feb-25	-101	
13-1000-5(6B)	Waste Crane Control Room 1 Equipment (+33.5)	70	33	50%	31-Oct-24 A	01-Jun-25	16-Jan-25	17-Feb-25	-104	
13-1000-6(6B)	EOTC & Monorail Hoist System installation in Ash Crane Control Room (+15.8mPD & +19.9mPD)	33	33	0%	01-May-25*	02-Jun-25	16-Jan-25	17-Feb-25	-105	
13-1000-8(6B)	Monorail Hoist System installation in CCR Electrical Switch room +13.75mPD	8	8	0%	29-May-25*	05-Jun-25	31-Mar-25	07-Apr-25	-59	Update Original Duration from 60d to 8d
13-1000-9(6B)	Monorail Hoist System installation in CCR Electrical Switch room +23mPD	8	8	0%	06-Jun-25	13-Jun-25	08-Apr-25	15-Apr-25	-59	Update Original Duration from 60d to 8d
13-1020(M81)	Ash Crane Control Room 1 Equipment	31	31	0%	30-Apr-25	30-May-25	18-Jan-25	17-Feb-25	-102	Update Original Duration from 4d to 31d
Process Building (Module 2)		183	63		06-Dec-24 A	01-Jul-25	24-Dec-24	03-Mar-25	-120	
13-1004(M81)	Waste Crane Nos. 3 Installation	30	62	90%	11-Dec-24 A	01-Jul-25	31-Dec-24	03-Mar-25	-119	Remove Successor 13-1004-3(M71) FF0
13-1004-1(M71)	Ash Crane No. 3 Installation @+15.3mPD	70	63	80%	21-Dec-24 A	01-Jul-25	24-Dec-24	24-Feb-25	-127	
13-1004-2(M71)	Shredder No.2 Installation	41	39	50%	22-Jan-25 A	07-Jun-25	13-Jan-25	20-Feb-25	-107	
13-1004-3(M71)	Waste Crane Hoist Installation (Grid PB21-PB22)	30	39	80%	06-Dec-24 A	07-Jun-25	24-Jan-25	03-Mar-25	-96	
13-1004-6(M71)	EOTC & Monorail Hoist System installation in Ash Crane Control Room (+15.8mPD & +19.9mPD)	31	31	0%	01-Jun-25*	01-Jul-25	25-Jan-25	24-Feb-25	-127	Update Original Duration from 51d to 31d
13-1008-5(M71)	Waste Crane Control Room 2 Equipment	31	31	0%	28-May-25*	27-Jun-25	01-Feb-25	03-Mar-25	-116	Update Original Duration from 70d to 31d
13-1008-8(M81)	Ash Control Room 2 Equipment	31	31	0%	01-Jun-25*	01-Jul-25	25-Jan-25	24-Feb-25	-127	Update Original Duration from 30d to 31d
Process Building (Module 3)		124	63		10-Dec-24 A	01-Jul-25	24-Dec-24	03-Mar-25	-120	
13-1008-0(M81)	Waste Crane Nos. 4 Installation	30	61	90%	13-Dec-24 A	30-Jun-25	01-Jan-25	03-Mar-25	-118	Remove Successor 13-1008-3(M71) FS0
13-1008-1(M71)	Ash Crane No. 4 Installation @+15.3mPD	70	63	80%	21-Dec-24 A	01-Jul-25	24-Dec-24	24-Feb-25	-127	
13-1008-3(M71)	Waste Crane Hoist Installation (Grid PB31-PB32)	30	31	0%	10-Dec-24 A	30-May-25	01-Feb-25	03-Mar-25	-88	
Process Building (WWTP Equipment Installation)		326	48		01-Mar-23 A	16-Jun-25	18-Nov-24	26-Jan-25	-141	
Stage 1 (WWTP Pre-Treatment)		248	36		07-Jul-24 A	04-Jun-25	04-Dec-24	08-Jan-25	-147	
13-1009-1(M82)	Mechanical Equipment and Piping Installation	30	10	67%	07-Jul-24 A	09-May-25	04-Dec-24	13-Dec-24	-147	
13-1009-2(M82)	Electrical and instrumentation Installation	30	30	0%	05-May-25	04-Jun-25	10-Dec-24	08-Jan-25	-147	Update Original Duration from 43d to 30d
Stage 2 (WWTP Remaining)		326	48		01-Mar-23 A	16-Jun-25	18-Nov-24	26-Jan-25	-141	
13-1010-1(6)	WWTP Piping and instrument installation	120	31	60.04%	01-Mar-23 A	01-Jun-25	27-Nov-24	27-Dec-24	-156	
13-1010-10(6E)	Provision of Temporary Power Supply for WWTP Testing & Commissioning	40	40	0%	30-Apr-25	08-Jun-25	18-Nov-24	27-Dec-24	-163	Update Original Duration from 56d to 40d
13-1010-11(M63)	Cooling Tower installation @+17.5 mPd	48	48	0%	30-Apr-25	16-Jun-25	10-Dec-24	26-Jan-25	-141	
13-1010-12(M63)	Equipments for Bio-Tank Area @+3.3mPd	120	30	75.04%	07-Jul-24 A	29-May-25	28-Nov-24	27-Dec-24	-153	
13-1010-13(M63)	Equipments for Centrate Area, Inlet Sump & EQ Tank Area @+2.0mPd	60	33	45%	02-Jan-25 A	01-Jun-25	25-Nov-24	27-Dec-24	-156	
13-1010-2(6)	WWTP Electrical Equipment installation & Cable pulling and termination	54	39	10%	02-Apr-25 A	08-Jun-25	18-Nov-24	27-Dec-24	-163	Update Actual Start Date
13-1010-6(6B)	Monorail Hoist System installation in WWTP +10mPD & +13.3mPD	60	39	90%	14-Jan-25 A	07-Jun-25	19-Nov-24	27-Dec-24	-162	
13-1010-7(6B)	LVSG 6A/6B @ WWTP Switch room +13.3mPD	40	40	0%	30-Apr-25	08-Jun-25	18-Nov-24	27-Dec-24	-163	Update Original Duration from 54d to 40d
13-1010-8(6B)	UPS DB @ WWTP Switch room @13.3mPd	40	40	0%	30-Apr-25	08-Jun-25	18-Nov-24	27-Dec-24	-163	Update Original Duration from 54d to 40d
13-1020(6F)	Equipment Installation for Equipment Rm, Sludge Dewatering Rm & Chemical Rm Area @+6.5mPd	90	11	88%	21-Aug-24 A	10-May-25	17-Dec-24	27-Dec-24	-134	
13-1030(6F)	Equipment Installation for MBR Tank, DAF & Chemical Tank Area @+10.0mPd	60	21	65%	02-Dec-24 A	20-May-25	07-Dec-24	27-Dec-24	-144	
13-1040(6F)	Equipment for Pretreatment, Chemical Tank, RO, MBR, AQP, MCC & Control Area @+12.5mPd	60	24	60%	20-Aug-24 A	23-May-25	04-Dec-24	27-Dec-24	-147	
Process Building (Central Control System Installation)		151	47		01-Dec-24 A	15-Jun-25	09-Jan-25	15-Apr-25	-61	
13-1010-3(6B)	Workstations and Control System Installation (Control Room 2 +36.5mPD)	58	32	30%	01-Dec-24 A	31-May-25	24-Jan-25	24-Feb-25	-96	
13-1980	Control Systems Installation at CCR	30	31	0%	31-Mar-25 A	30-May-25	09-Jan-25	08-Feb-25	-111	Update Actual Start Date
13-1990	Cable laying and Termination	30	32	0%	31-Mar-25 A	31-May-25	24-Jan-25	24-Feb-25	-96	Update Actual Start Date
13-2160(6B)	DCS Installation	30	47	20%	31-Mar-25 A	15-Jun-25	09-Jan-25	24-Feb-25	-111	Update Actual Start Date
13-2210(6B)	CMMS Installation	30	47	15%	31-Mar-25 A	15-Jun-25	09-Jan-25	24-Feb-25	-111	Update Actual Start Date
13-2260(6B)	IDMS installation	30	47	15%	31-Mar-25 A	15-Jun-25	09-Jan-25	24-Feb-25	-111	Update Actual Start Date
13-2270(6B)	OMS Installation	30	47	15%	31-Mar-25 A	15-Jun-25	09-Jan-25	24-Feb-25	-111	Update Actual Start Date
13-2280(6D)	Monorail Hoist System installation in CCR Electrical Switch room +13.75mPD	16	16	0%	15-May-25	30-May-25	31-Mar-25	15-Apr-25	-45	Update Original Duration from 30d to 16d
Process Building (Switch Room)		166	25		20-Aug-24 A	24-May-25	01-Dec-24	30-Dec-24	-145	
13-1000-4(6B)	Waste Crane Switch room E&I Equipment installation @+29.5mPd, inclusive of Control Chair and Junction box in WCCR	60	18	70%	15-Nov-24 A	17-May-25	01-Dec-24	18-Dec-24	-150	
13-1010-4(6B)	Workstations and Control System Installation (Switch Room +28.25mPD)	45	14	70%	04-Dec-24 A	13-May-25	17-Dec-24	30-Dec-24	-134	
13-2280-1(6B)	LVSG 1A/1B and 2A/2B (below Toilet/Server Room - Process building Switch room)	60	3	95%	21-Oct-24 A	02-May-25	13-Dec-24	15-Dec-24	-138	
13-2280-2(6B)	UPS @ Process Building Switch room and Battery room	90	25	75%	20-Aug-24 A	24-May-25	05-Dec-24	29-Dec-24	-146	
Process Building - Boiler House & Flue Gas Treatment Bld Process Equipment Installation		232	112		01-Dec-24 A	19-Aug-25	09-Nov-24	12-Mar-25	-160	
Process Building (Installation TPU Module)		232	112		01-Dec-24 A	19-Aug-25	09-Nov-24	28-Feb-25	-172	
TPU Train 1		152	29		01-Dec-24 A	28-May-25	14-Nov-24	06-Feb-25	-111	
13-1070	Pipe Insulation Works	32	29	10%	31-Mar-25 A	28-May-25	06-Jan-25	03-Feb-25	-114	Update Actual Start Date
13-1080	Electrical instrument and Cabling Works	60	12	80%	01-Dec-24 A	11-May-25	26-Jan-25	06-Feb-25	-94	



3-Month Rolling Programme (April 2025)

Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
13-1100	Boiler Refractory works	60	13	78.33%	21-Feb-25 A	12-May-25	14-Nov-24	26-Nov-24	-167	
TPU Train 2		121	32		31-Dec-24 A	31-May-25	09-Nov-24	06-Feb-25	-114	
13-1160	Pipe Insulation Works	32	29	10%	31-Mar-25 A	28-May-25	06-Jan-25	03-Feb-25	-114	
13-1170	Electrical instrument and Cabling Works	46	9	80%	31-Dec-24 A	09-May-25	28-Jan-25	06-Feb-25	-91	
13-1190	Boiler Refractory works	60	32	46.67%	24-Feb-25 A	31-May-25	09-Nov-24	10-Dec-24	-172	
TPU Train 3		63	63		30-Apr-25	01-Jul-25	27-Nov-24	11-Feb-25	-140	
13-1250	Pipe Insulation Works	46	46	0%	30-Apr-25	14-Jun-25	28-Dec-24	11-Feb-25	-123	
13-1260	Electrical instrument and Cabling Works	31	31	0%	30-Apr-25	30-May-25	03-Jan-25	02-Feb-25	-117	
13-1280	Boiler Refractory works	50	50	0%	13-May-25	01-Jul-25	27-Nov-24	15-Jan-25	-167	
TPU Train 4		82	82		30-Apr-25	20-Jul-25	11-Dec-24	11-Feb-25	-159	
13-1340	Pipe Insulation Works	46	46	0%	30-Apr-25	14-Jun-25	28-Dec-24	11-Feb-25	-123	
13-1350	Electrical instrument and Cabling Works	31	31	0%	30-Apr-25	30-May-25	03-Jan-25	02-Feb-25	-117	
13-1370	Boiler Refractory works	50	50	0%	01-Jun-25	20-Jul-25	11-Dec-24	29-Jan-25	-172	
TPU Train 5		93	93		30-Apr-25	31-Jul-25	21-Nov-24	14-Feb-25	-167	
13-1490	Boiler Condition Check and Repair	8	8	0%	04-May-25	11-May-25	24-Jan-25	31-Jan-25	-100	
13-1520	Pipe Insulation Works	46	46	0%	30-Apr-25	14-Jun-25	17-Dec-24	31-Jan-25	-134	
13-1530	Electrical instrument and Cabling Works	39	39	0%	30-Apr-25	07-Jun-25	21-Nov-24	29-Dec-24	-160	
13-1540	Boiler Pressure Test	15	15	0%	04-May-25	18-May-25	09-Dec-24	23-Dec-24	-146	
13-1550	Boiler Refractory works	50	50	0%	12-Jun-25	31-Jul-25	27-Dec-24	14-Feb-25	-167	Changed relationship to Predecessor 13-1280 from FS-10 to FS-20
TPU Train 6		112	112		30-Apr-25	19-Aug-25	21-Nov-24	28-Feb-25	-172	
13-1400	Boiler Condition Check and Repair	8	8	0%	02-Jun-25	09-Jun-25	24-Jan-25	31-Jan-25	-129	
13-1430	Pipe Insulation Works	46	46	0%	30-Apr-25	14-Jun-25	17-Dec-24	31-Jan-25	-134	
13-1440	Electrical instrument and Cabling Works	39	39	0%	30-Apr-25	07-Jun-25	21-Nov-24	29-Dec-24	-160	
13-1450	Boiler Pressure Test	15	15	0%	02-Jun-25	16-Jun-25	07-Jan-25	21-Jan-25	-146	
13-1460	Boiler Refractory works	50	50	0%	01-Jul-25	19-Aug-25	10-Jan-25	28-Feb-25	-172	Changed relationship to Predecessor 13-1370 from FS-10 to FS-20
Process Building (Installation of Flue Gas Module)		135	46		31-Dec-24 A	14-Jun-25	21-Nov-24	12-Mar-25	-94	
FGC Train 1		121	29		31-Dec-24 A	28-May-25	09-Jan-25	06-Feb-25	-111	
13-1610	Pipe Insulation Works	32	29	10%	31-Mar-25 A	28-May-25	09-Jan-25	06-Feb-25	-111	Update Actual Start Date
13-1620	Electrical instrument and Cabling Works	46	9	80%	31-Dec-24 A	09-May-25	28-Jan-25	06-Feb-25	-91	
FGC Train 2		121	29		31-Dec-24 A	28-May-25	06-Jan-25	06-Feb-25	-111	
13-1680	Pipe Insulation Works	32	29	10%	31-Mar-25 A	28-May-25	06-Jan-25	03-Feb-25	-114	Update Actual Start Date
13-1690	Electrical instrument and Cabling Works	46	9	80%	31-Dec-24 A	09-May-25	28-Jan-25	06-Feb-25	-91	
FGC Train 3		38	38		30-Apr-25	06-Jun-25	22-Dec-24	02-Feb-25	-124	
13-1750	Pipe Insulation Works	38	38	0%	30-Apr-25	06-Jun-25	22-Dec-24	28-Jan-25	-129	
13-1760	Electrical instrument and Cabling Works	31	31	0%	30-Apr-25	30-May-25	03-Jan-25	02-Feb-25	-117	
FGC Train 4		38	38		30-Apr-25	06-Jun-25	22-Dec-24	02-Feb-25	-124	
13-1820	Pipe Insulation Works	38	38	0%	30-Apr-25	06-Jun-25	22-Dec-24	28-Jan-25	-129	
13-1830	Electrical instrument and Cabling Works	31	31	0%	30-Apr-25	30-May-25	03-Jan-25	02-Feb-25	-117	
FGC Train 5		46	46		30-Apr-25	14-Jun-25	21-Nov-24	02-Mar-25	-104	
13-1860	FGC Unit Condition Check and Repair	8	8	0%	04-May-25	11-May-25	23-Feb-25	02-Mar-25	-70	Update Original Duration from 70d to 8d
13-1890	Pipe Insulation Works	46	46	0%	30-Apr-25	14-Jun-25	17-Dec-24	31-Jan-25	-134	
13-1900	Electrical instrument and Cabling Works	39	39	0%	30-Apr-25	07-Jun-25	21-Nov-24	29-Dec-24	-160	
FGC Train 6		46	46		30-Apr-25	14-Jun-25	21-Nov-24	12-Mar-25	-94	
13-1930	FGC Unit Condition Check and Repair	8	8	0%	02-Jun-25	09-Jun-25	05-Mar-25	12-Mar-25	-89	Update Original Duration from 70d to 8d
13-1935(6A)	Installation 4 nos. of Transformers for Process Module 3	14	14	0%	30-Apr-25	13-May-25	16-Dec-24	29-Dec-24	-135	
13-1960	Pipe Insulation Works	46	46	0%	30-Apr-25	14-Jun-25	17-Dec-24	31-Jan-25	-134	
13-1970	Electrical instrument and Cabling Works	39	39	0%	30-Apr-25	07-Jun-25	21-Nov-24	29-Dec-24	-160	
ACC Equipment Installation		405	71		15-May-24 A	09-Jul-25	19-Nov-24	26-Mar-25	-105	
ACC Equipment 1 Installation		362	28		15-May-24 A	27-May-25	19-Nov-24	26-Mar-25	-62	
13-2000-1(M63)	Condensate Tank & Equipments Delivery and installation (Module 1)	80	8	90%	15-May-24 A	07-May-25	19-Nov-24	26-Nov-24	-162	
13-2010	Piping and Instrument Installation and Connection Works	31	28	10%	20-Mar-25 A	27-May-25	16-Feb-25	15-Mar-25	-73	
13-2010-1(6E)	Air Tight Test	14	14	0%	13-May-25	27-May-25	02-Mar-25	15-Mar-25	-73	
13-2020	Pipe Insulation Works	28	28	0%	30-Apr-25	27-May-25	27-Feb-25	26-Mar-25	-62	
13-2030	Cable Laying and Termination Works	28	24	15%	31-Mar-25 A	27-May-25	03-Mar-25	26-Mar-25	-62	Update Actual Start Date
ACC Equipment 2 Installation		225	44		26-Oct-24 A	12-Jun-25	19-Nov-24	08-Feb-25	-124	
13-2040-1(M63)	Condensate Tank & Equipments Delivery and installation (Module 2)	90	22	40%	26-Oct-24 A	21-May-25	19-Nov-24	10-Dec-24	-162	
13-2050	Piping and Instrument Installation and Connection Works	30	30	0%	30-Apr-25	29-May-25	19-Dec-24	17-Jan-25	-132	Update Original Duration from 46d to 30d
13-2050-1(6E)	Air Tight Test	14	14	0%	30-May-25	12-Jun-25	26-Jan-25	08-Feb-25	-124	
13-2060	Pipe Insulation Works	34	34	0%	10-May-25	12-Jun-25	06-Jan-25	08-Feb-25	-124	Update Original Duration from 52d to 34d
13-2070	Cable Laying and Termination Works	32	32	0%	30-Apr-25	31-May-25	25-Dec-24	25-Jan-25	-126	Update Original Duration from 52d to 32d
ACC Equipment 3 Installation		71	71		04-Apr-25 A	09-Jul-25	19-Nov-24	28-Jan-25	-162	
13-2080-1(M63)	Condensate Tank & Equipments Delivery and installation (Module 3)	60	46	10%	04-Apr-25 A	14-Jun-25	19-Nov-24	03-Jan-25	-162	Update Actual Start Date
13-2090	Piping and Instrument Installation and Connection Works	56	56	0%	30-Apr-25	24-Jun-25	19-Nov-24	13-Jan-25	-162	Update Original Duration from 60d to 56d
13-2090-1(6E)	Air Tight Test	14	14	0%	25-Jun-25	08-Jul-25	15-Jan-25	28-Jan-25	-161	
13-2100	Pipe Insulation Works	60	60	0%	11-May-25	09-Jul-25	30-Nov-24	28-Jan-25	-162	
13-2110	Cable Laying and Termination Works	60	60	0%	11-May-25	09-Jul-25	30-Nov-24	28-Jan-25	-162	
Turbine Hall Bld Equipment Installation		238	57		15-Sep-24 A	25-Jun-25	21-Nov-24	15-Apr-25	-71	
Turbine Hall Module 1 Installation		207	22		07-Oct-24 A	22-May-25	24-Dec-24	15-Jan-25	-126	
13-2130	Equipment, Piping and Instrument Installation and Connection Works	52	2	97%	07-Oct-24 A	01-May-25	12-Jan-25	14-Jan-25	-108	
13-2130-1(6E)	STG & TBS Piping hydrostatic test	7	4	50%	05-Apr-25 A	03-May-25	12-Jan-25	15-Jan-25	-108	Update Actual Start Date
13-2140	Turbine Hall Piping Insulation Works	26	22	15%	31-Mar-25 A	22-May-25	24-Dec-24	15-Jan-25	-126	Update Actual Start Date



3-Month Rolling Programme (April 2025)

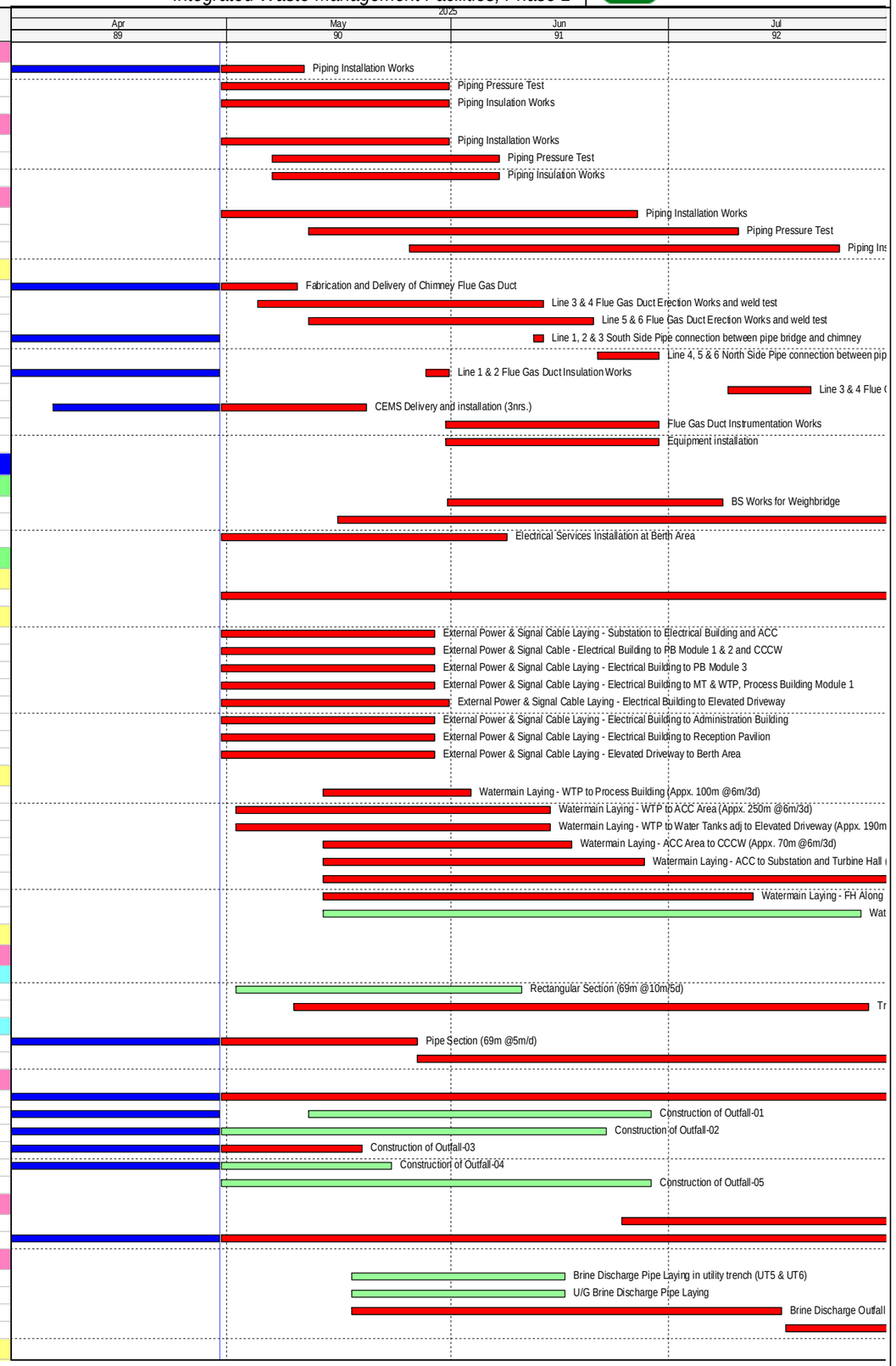
Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
13-2150	Turbine Electrical installation and instrumentation Works	32	18	45%	13-Dec-24 A	17-May-25	29-Dec-24	15-Jan-25	-122	
Turbine Hall Module 2 Installation		212	31		07-Oct-24 A	30-May-25	20-Dec-24	19-Jan-25	-131	
13-2180	Equipment, Piping and Instrument Installation and Connection Works	60	24	60%	07-Oct-24 A	23-May-25	20-Dec-24	12-Jan-25	-131	
13-2180-1(6E)	STG & TBS Piping hydrostatic test	7	7	0%	24-May-25	30-May-25	13-Jan-25	19-Jan-25	-131	
13-2190	Turbine Hall Piping Insulation Works	31	31	0%	30-Apr-25	30-May-25	20-Dec-24	19-Jan-25	-131	
13-2200	Turbine Electrical installation and instrumentation Works	46	30	15%	02-Jan-25 A	29-May-25	21-Dec-24	19-Jan-25	-130	
Turbine Hall Module 3 Installation		194	43		13-Nov-24 A	11-Jun-25	21-Nov-24	08-Jan-25	-154	
13-2230	Equipment, Piping and Instrument Installation and Connection Works	60	36	40%	13-Nov-24 A	04-Jun-25	24-Nov-24	29-Dec-24	-157	
13-2230-1(6E)	STG & TBS Piping hydrostatic test	7	7	0%	05-Jun-25	11-Jun-25	02-Jan-25	08-Jan-25	-154	
13-2240	Turbine Hall Piping Insulation Works	38	38	0%	05-May-25	11-Jun-25	02-Dec-24	08-Jan-25	-154	Update Original Duration from 60d to 38d
13-2250	Turbine Electrical installation and instrumentation Works	77	39	10%	31-Dec-24 A	07-Jun-25	21-Nov-24	29-Dec-24	-160	
Turbine Hall Electrical Room Equipment Installation		238	57		15-Sep-24 A	25-Jun-25	04-Dec-24	15-Apr-25	-71	
13-2310	Cable Laying and Termination for Module 1	79	16	60%	15-Sep-24 A	17-May-25	31-Dec-24	15-Jan-25	-122	
13-2730(7)	Cable Laying and Termination for Module 2	36	36	0%	30-Apr-25	04-Jun-25	14-Jan-25	18-Feb-25	-106	Update Original Duration from 46d to 36d
13-2740(7)	Cable Laying and Termination for Module 3	36	36	0%	03-May-25	07-Jun-25	04-Dec-24	08-Jan-25	-150	Update Original Duration from 46d to 36d
Turbine Hall Electrical Room @+15.00mPD		16	16		10-Jun-25	25-Jun-25	31-Mar-25	15-Apr-25	-71	
13-2290-5(6B)	Monorail Hoist System installation in Turbine Hall (1st Floor @+15)	16	16	0%	10-Jun-25*	25-Jun-25	31-Mar-25	15-Apr-25	-71	Update Original Duration from 60d to 16d
Turbine Hall Electrical Room @+23.50mPD		16	16		10-Jun-25	25-Jun-25	31-Mar-25	15-Apr-25	-71	
13-2290-6(6B)	Monorail Hoist System installation in Turbine Hall (3rd Floor @+23.5)	16	16	0%	10-Jun-25*	25-Jun-25	31-Mar-25	15-Apr-25	-71	Update Original Duration from 60d to 16d
Compressor & CCCW Bld Equipment Installation		290	27		01-May-24 A	26-May-25	20-Jan-25	24-Feb-25	-91	
Air Compressor Equipment Installation		90	27		01-Jun-24 A	26-May-25	20-Jan-25	15-Feb-25	-100	
13-2720(M62)	Cable Laying and Termination Works for Air Compressor	90	27	95%	01-Jun-24 A	26-May-25	20-Jan-25	15-Feb-25	-100	
CCCW Bld Equipment Installation		290	27		01-May-24 A	26-May-25	27-Jan-25	24-Feb-25	-91	
13-2330	CCCW Equipment Installation	100	2	98%	01-May-24 A	01-May-25	29-Jan-25	31-Jan-25	-91	
13-2340	Piping installation and connections	90	5	95%	01-Jun-24 A	04-May-25	27-Jan-25	31-Jan-25	-93	
13-2350	Electrical Instrumentation and Insulation Installations	45	18	60%	31-Dec-24 A	17-May-25	27-Jan-25	13-Feb-25	-93	
13-2360	Cable Laying and Termination Works	45	27	40%	31-Dec-24 A	26-May-25	29-Jan-25	24-Feb-25	-91	
Mechanical Treatment Plant Bld Process Equipment Installation		135	135		16-May-25	27-Sep-25	17-Dec-24	15-Apr-25	-165	
13-2370	MT Plant Process Mechanical Equipment Installation	120	120	0%	31-May-25	27-Sep-25	17-Dec-24	15-Apr-25	-165	Update Original Duration from 150d to 120
13-2370-1(6A)	Installation 5 nos. of Transformers @+6.5mPD	60	60	0%	16-May-25	14-Jul-25	15-Feb-25	15-Apr-25	-90	
13-2380	MT Plant Process Electrical Installation	119	119	0%	25-May-25	20-Sep-25	18-Dec-24	15-Apr-25	-158	
13-2650(6D)	Transformers & MT Plant Bldg. Switchroom+6.5mPD	90	90	0%	16-May-25	13-Aug-25	16-Jan-25	15-Apr-25	-120	
Water Treatment Bld Process Equipment Installation		415	184		11-Aug-24 A	30-Oct-25	08-Jan-25	14-Jun-25	-138	
Stage 2 (WTP Remaining)		415	184		11-Aug-24 A	30-Oct-25	08-Jan-25	14-Jun-25	-138	
13-2410	Electrical and instrumentation Installation	62	4	93%	05-Nov-24 A	04-May-25	25-Jan-25	29-Jan-25	-94	
13-2410-2(6D)	Laboratory furniture installation @ WTP Bldg @+13.5mPD	120	120	0%	02-Jun-25	30-Sep-25	16-Jan-25	15-May-25	-138	
13-2410-3(6E)	Laboratory Equipment installation @ WTP Bldg @+13.5mPD	120	120	0%	02-Jul-25	30-Oct-25	15-Feb-25	14-Jun-25	-138	
13-2410-4(6B)	EOTC & Monorail Hoist System installation in WTP +6.5mPD	90	41	90%	11-Aug-24 A	09-Jun-25	08-Jan-25	17-Feb-25	-112	
13-2410-5(6B)	Monorail Hoist System installation in WTP +13.5mPD	90	60	80%	31-Dec-24 A	28-Jun-25	15-Feb-25	15-Apr-25	-74	
13-2410-6(6B)	MCC-12 @ WTP Switch Room	62	3	95%	05-Nov-24 A	03-May-25	26-Jan-25	29-Jan-25	-93	
13-2410-7(6B)	DB for MCC-12 @ WTP Switch Room	47	2	95%	11-Dec-24 A	02-May-25	27-Jan-25	29-Jan-25	-92	
13-2410-8(6B)	UPS DB @ WTP Switch room @+6.5mPd	47	2	95%	11-Dec-24 A	02-May-25	27-Jan-25	29-Jan-25	-92	
IWMF Substation Bld Equipment Installation		30	30		26-Jun-25	25-Jul-25	27-Apr-25	26-May-25	-60	
13-2470(7C)	IS Limiter Delivery and Installation (include cable termination)	30	30	0%	26-Jun-25	25-Jul-25	27-Apr-25	26-May-25	-60	
Elevated Drive Way & Storage Bld Equipment Installation		103	103		30-Apr-25	10-Aug-25	08-Jan-25	20-Apr-25	-112	
13-2490	Vehicle Washing Facilities	30	30	0%	09-Jul-25	07-Aug-25	22-Mar-25	20-Apr-25	-109	
13-2500	Workshop Equipment	103	103	0%	30-Apr-25	10-Aug-25	08-Jan-25	20-Apr-25	-112	
13-2630(7)	Electrical Cable laying and termination	51	51	0%	30-Apr-25	19-Jun-25	23-Feb-25	14-Apr-25	-66	
13-2630-2(6D)	EOTC Hoist System installation in Vehicle Workshop +6.5mPD	41	41	0%	30-Apr-25*	09-Jun-25	08-Jan-25	17-Feb-25	-112	
Seawater Intake Chamber		77	52		30-Jan-25 A	20-Jun-25	05-Feb-25	15-Apr-25	-66	
13-2540-1(6B)	Monorail Hoist System installation in Sea Water Intake Pump Area	15	15	0%	06-Jun-25	20-Jun-25	01-Apr-25	15-Apr-25	-66	Update Original Duration from 90d to 15d
13-2540-2(7)	Seawater Intake Pumps and Associated equipment installation	30	24	20%	30-Jan-25 A	23-May-25	05-Feb-25	28-Feb-25	-84	
Equipment Installation at External Area		179	90		15-Jan-25 A	28-Jul-25	15-Jan-25	25-May-25	-64	
13-2510	Installation of Container Cranes at Berth Area	45	45	0%	09-May-25	23-Jun-25	15-Jan-25	28-Feb-25	-115	
13-2520	Fuel Oil Reception and Distribution System Installation at Berth Area	30	15	10%	15-Jan-25 A	15-May-25	23-Jan-25	06-Feb-25	-98	
13-2525	Weighbridge Equipment Installation (Inside Kiosk)	21	21	0%	31-May-25	21-Jun-25	06-Feb-25	26-Feb-25	-115	
13-2530	Weighbridge System & Equipment Installation (External)	14	14	0%	31-May-25	14-Jun-25	13-Feb-25	26-Feb-25	-108	
13-2540	Traffic Control System Installation & Testing	90	90	0%	30-Apr-25	28-Jul-25	25-Feb-25	25-May-25	-64	
External Process Pipe Works		328	86		25-Jun-24 A	24-Jul-25	18-Nov-24	26-Mar-25	-120	
Process and Non-process Piping Works		247	86		20-Oct-24 A	24-Jul-25	18-Nov-24	26-Mar-25	-120	
Piping from Module 1 to Turbine Bld		32	16		31-Mar-25 A	15-May-25	20-Jan-25	04-Feb-25	-100	
13-2560	Piping Pressure Test	32	16	50%	31-Mar-25 A	15-May-25	20-Jan-25	04-Feb-25	-100	Update Actual Start Date
13-2570	Piping Insulation Works	30	15	50%	02-Apr-25 A	15-May-25	21-Jan-25	04-Feb-25	-100	Update Actual Start Date
Pipe Rack Piping from Module 2 & 3 to Turbine Bld		60	30		31-Mar-25 A	30-May-25	14-Feb-25	15-Mar-25	-76	
13-2590	Piping Pressure Test	60	30	50%	31-Mar-25 A	30-May-25	14-Feb-25	15-Mar-25	-76	Update Actual Start Date
13-2600	Piping Insulation Works	60	30	50%	02-Apr-25 A	30-May-25	14-Feb-25	15-Mar-25	-76	Update Actual Start Date
Pipe Bridge B Piping from Turbine Bld 1 to CCCW Bld		60	30		31-Mar-25 A	29-May-25	12-Feb-25	13-Mar-25	-77	
13-2680	Piping Pressure Test	60	30	50%	31-Mar-25 A	29-May-25	12-Feb-25	13-Mar-25	-77	Update Actual Start Date
13-2690	Piping Insulation Works	60	30	50%	02-Apr-25 A	29-May-25	12-Feb-25	13-Mar-25	-77	Update Actual Start Date
Pipe Bridge B Piping from Turbine Bld 2&3 to CCCW Bld		67	36		31-Mar-25 A	04-Jun-25	04-Jan-25	08-Feb-25	-116	
13-2710	Piping Pressure Test	60	36	40%	31-Mar-25 A	04-Jun-25	04-Jan-25	08-Feb-25	-116	Update Actual Start Date
13-2720	Piping Insulation Works	60	36	40%	07-Apr-25 A	04-Jun-25	04-Jan-25	08-Feb-25	-116	Update Actual Start Date

3-Month Rolling Programme (April 2025)

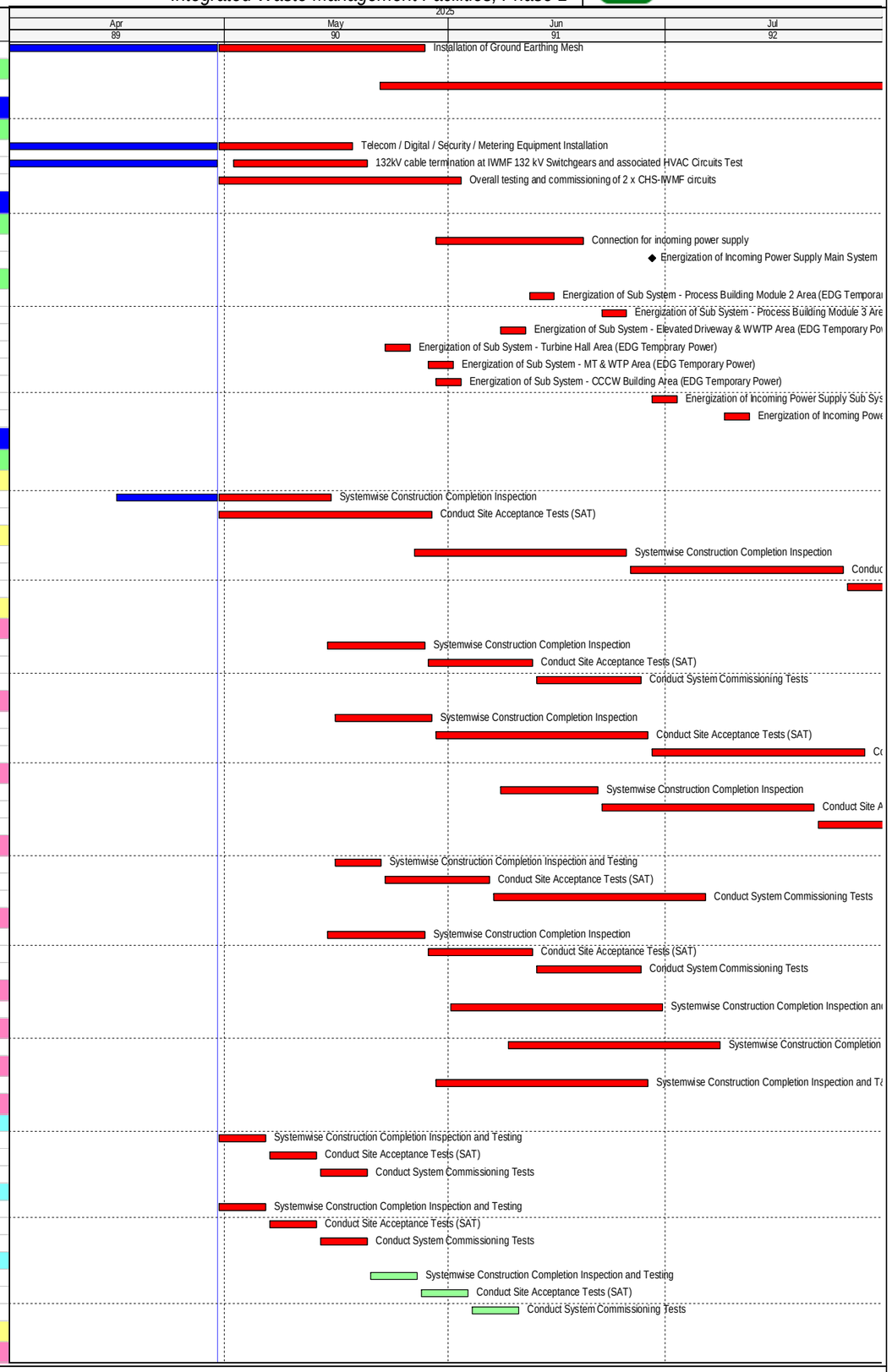
Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
Pipe Bridge C Piping from Turbine Bld to ACC 1		193	32		20-Oct-24 A	31-May-25	23-Feb-25	26-Mar-25	-66	
13-2640	Piping Installation Works	60	12	80%	20-Oct-24 A	11-May-25	15-Mar-25	26-Mar-25	-46	
13-2650	Piping Pressure Test	32	32	0%	30-Apr-25	31-May-25	23-Feb-25	26-Mar-25	-66	
13-2660	Piping Insulation Works	32	32	0%	30-Apr-25	31-May-25	23-Feb-25	26-Mar-25	-66	
Pipe Bridge C Piping from Turbine Bld to ACC 2		39	39		30-Apr-25	07-Jun-25	19-Dec-24	26-Jan-25	-132	
13-2700(M64)	Piping Installation Works	32	32	0%	30-Apr-25	31-May-25	19-Dec-24	19-Jan-25	-132	Update Original Duration from 42d to 32d
13-2710(M64)	Piping Pressure Test	32	32	0%	07-May-25	07-Jun-25	26-Dec-24	26-Jan-25	-132	Update Original Duration from 40d to 32d
13-2720(M64)	Piping Insulation Works	32	32	0%	07-May-25	07-Jun-25	26-Dec-24	26-Jan-25	-132	Update Original Duration from 40d to 32d
Pipe Bridge C Piping from Turbine Bld to ACC 3		86	86		30-Apr-25	24-Jul-25	18-Nov-24	11-Feb-25	-163	
13-2730(M64)	Piping Installation Works	58	58	0%	30-Apr-25	26-Jun-25	18-Nov-24	14-Jan-25	-163	Update Original Duration from 60d to 58d
13-2740(M64)	Piping Pressure Test	60	60	0%	12-May-25	10-Jul-25	30-Nov-24	28-Jan-25	-163	
13-2750(M64)	Piping Insulation Works	60	60	0%	26-May-25	24-Jul-25	14-Dec-24	11-Feb-25	-163	
Chimney Flue Gas Ducting Works		324	82		25-Jun-24 A	20-Jul-25	01-Jan-25	19-Mar-25	-123	
13-2510(7)	Fabrication and Delivery of Chimney Flue Gas Duct	110	11	90%	25-Jun-24 A	10-May-25	01-Jan-25	11-Jan-25	-119	
13-2610-0(M81)	Line 3 & 4 Flue Gas Duct Erection Works and weld test	40	40	0%	05-May-25	13-Jun-25	06-Jan-25	14-Feb-25	-119	Update Original Duration from 50d to 40d
13-2610-0(M81)10	Line 5 & 6 Flue Gas Duct Erection Works and weld test	40	40	0%	12-May-25	20-Jun-25	13-Jan-25	21-Feb-25	-119	Update Original Duration from 50d to 40d
13-2610-1(6F)	Line 1, 2 & 3 South Side Pipe connection between pipe bridge and chimney	9	2	80%	21-Feb-25 A	13-Jun-25	06-Mar-25	07-Mar-25	-98	
13-2610-2(6F)	Line 4, 5 & 6 North Side Pipe connection between pipe bridge and chimney	9	9	0%	21-Jun-25	29-Jun-25	22-Feb-25	02-Mar-25	-119	
13-2620	Line 1 & 2 Flue Gas Duct Insulation Works	12	4	70%	22-Jan-25 A	31-May-25	10-Feb-25	13-Feb-25	-107	
13-2625-0(M81)	Line 3 & 4 Flue Gas Duct Insulation Works	12	12	0%	09-Jul-25	20-Jul-25	08-Mar-25	19-Mar-25	-123	
13-2630	CEMS Delivery and installation (3nrs.)	30	20	33.3%	07-Apr-25 A	20-May-25	17-Feb-25	09-Mar-25	-71	Update Actual Start Date
13-2700 (6F)	Flue Gas Duct Instrumentation Works	30	30	0%	31-May-25	29-Jun-25	08-Feb-25	09-Mar-25	-112	
13-2710 (6F)	Equipment installation	30	30	0%	31-May-25	29-Jun-25	08-Feb-25	09-Mar-25	-112	
Landscape, External Road and Drains Works		1254	250		28-Apr-22 A	04-Jan-26	30-Nov-24	01-Oct-25	-95	
Site Wide/External BS System		216	216		30-Apr-25	01-Dec-25	02-Dec-24	19-Jun-25	-165	
14-1000(M81)	BS Works for Weighbridge	38	38	0%	31-May-25	08-Jul-25	06-Feb-25	15-Mar-25	-115	
14-1100(6D)	Site Wide and External BS System	200	200	0%	16-May-25	01-Dec-25	02-Dec-24	19-Jun-25	-165	
14-3030(7)	Electrical Services Installation at Berth Area	40	40	0%	30-Apr-25	08-Jun-25	16-Jan-25	24-Feb-25	-104	Update Original Duration from 59d to 40d
External Utilities Works		1254	250		28-Apr-22 A	04-Jan-26	30-Nov-24	01-Oct-25	-95	
External Utilities C&S Works		250	250		30-Apr-25	04-Jan-26	07-Jan-25	14-Sep-25	-113	
14-1055(7)	Cable Duct and Drawpit	250	250	0%	30-Apr-25	04-Jan-26	07-Jan-25	14-Sep-25	-113	
External Power & Signal Cable Laying in Utility Trench		32	32		30-Apr-25	31-May-25	30-Nov-24	25-May-25	-6	
14-4100(7)	External Power & Signal Cable Laying - Substation to Electrical Building and ACC	30	30	0%	30-Apr-25	29-May-25	01-Dec-24	30-Dec-24	-150	
14-4110(7)	External Power & Signal Cable - Electrical Building to PB Module 1 & 2 and CCCW	30	30	0%	30-Apr-25	29-May-25	30-Nov-24	29-Dec-24	-151	
14-4120(7)	External Power & Signal Cable Laying - Electrical Building to PB Module 3	30	30	0%	30-Apr-25	29-May-25	30-Nov-24	29-Dec-24	-151	
14-4130(7)	External Power & Signal Cable Laying - Electrical Building to MT & WTP, Process Building Module 1	30	30	0%	30-Apr-25	29-May-25	01-Dec-24	30-Dec-24	-150	
14-4140(7)	External Power & Signal Cable Laying - Electrical Building to Elevated Driveway	32	32	0%	30-Apr-25	31-May-25	12-Feb-25	15-Mar-25	-77	
14-4150(7)	External Power & Signal Cable Laying - Electrical Building to Administration Building	30	30	0%	30-Apr-25	29-May-25	26-Apr-25	25-May-25	-4	Update Original Duration from 60d to 30d
14-4160(7)	External Power & Signal Cable Laying - Electrical Building to Reception Pavilion	30	30	0%	30-Apr-25	29-May-25	25-Feb-25	26-Mar-25	-64	Update Original Duration from 60d to 30d
14-4170(7)	External Power & Signal Cable Laying - Elevated Driveway to Berth Area	30	30	0%	30-Apr-25	29-May-25	26-Jan-25	24-Feb-25	-94	Update Original Duration from 60d to 30d
External Watermains Laying		132	132		02-May-25	10-Sep-25	04-Jan-25	05-Aug-25	-36	
14-4180(7)	Watermain Laying - WTP to Process Building (Appx. 100m @6m/3d)	21	21	0%	14-May-25	03-Jun-25	30-Jan-25	19-Feb-25	-104	
14-4190(7)	Watermain Laying - WTP to ACC Area (Appx. 250m @6m/3d)	44	44	0%	02-May-25	14-Jun-25	07-Jan-25	19-Feb-25	-115	
14-4200(7)	Watermain Laying - WTP to Water Tanks adj to Elevated Driveway (Appx. 190m @6m/3d)	44	44	0%	02-May-25	14-Jun-25	07-Jan-25	19-Feb-25	-115	
14-4210(7)	Watermain Laying - ACC Area to CCCW (Appx. 70m @6m/3d)	35	35	0%	14-May-25	17-Jun-25	16-Jan-25	19-Feb-25	-118	
14-4220(7)	Watermain Laying - ACC to Substation and Turbine Hall (Appx. 90m @6m/3d)	45	45	0%	14-May-25	27-Jun-25	06-Jan-25	19-Feb-25	-128	
14-4230(7)	Watermain Laying - Substation to Reception Pavilion (Approx. 240m @6m/3d)	120	120	0%	14-May-25	10-Sep-25	04-Jan-25	03-May-25	-130	
14-4240(7)	Watermain Laying - FH Along UT9 (approx. 350m @6m/d)	60	60	0%	14-May-25	12-Jul-25	24-Apr-25	22-Jun-25	-20	
14-4250(7)	Watermain Laying - FH Along UT8 (approx. 450m @6m/d)	75	75	0%	14-May-25	27-Jul-25	23-May-25	05-Aug-25	9	
Drainage Works		308	143		25-Oct-24 A	19-Sep-25	08-Dec-24	01-Oct-25	12	
Overtopping Drain System		188	127		17-Feb-25 A	04-Sep-25	02-Feb-25	01-Oct-25	28	
East Culvert (3.5m x 2.5m x 118m)		88	88		02-May-25	28-Jul-25	11-Apr-25	01-Oct-25	65	
14-2020	Rectangular Section (69m @10m/5d)	40	40	0%	02-May-25	10-Jun-25	23-Aug-25	01-Oct-25	113	
14-2030	Trapezoidal Section (159m @10m/5d)	80	80	0%	10-May-25	28-Jul-25	11-Apr-25	29-Jun-25	-29	Update Original Duration from 60d to 80d
West Culvert (2.5m x 2.5m x 102m)		188	127		17-Feb-25 A	04-Sep-25	02-Feb-25	09-Jun-25	-86	
14-3010	Pipe Section (69m @5m/d)	32	27	15%	17-Feb-25 A	27-May-25	02-Feb-25	01-Mar-25	-86	
14-3020	Rectangular Section (184m @10m/5d)	100	100	0%	27-May-25	04-Sep-25	02-Mar-25	09-Jun-25	-86	
U/G Storm Drainage System		268	143		25-Oct-24 A	19-Sep-25	08-Dec-24	19-Jul-25	-62	
14-1000(6D)	External Drainage System Construction Works (Common trench construction Utility Trench)	220	143	35%	14-Nov-24 A	19-Sep-25	08-Dec-24	30-Apr-25	-143	
14-1010(M81)	Construction of Outfall-01	60	48	20%	10-Feb-25 A	28-Jun-25	02-Jun-25	19-Jul-25	21	
14-1020(M81)	Construction of Outfall-02	60	53	11%	30-Dec-24 A	22-Jun-25	27-May-25	19-Jul-25	28	
14-1030(M81)	Construction of Outfall-03	60	20	66.67%	01-Dec-24 A	19-May-25	10-Apr-25	30-Apr-25	-20	
14-1040(M81)	Construction of Outfall-04	60	24	60%	25-Oct-24 A	23-May-25	26-Jun-25	19-Jul-25	57	
14-1050(7C)	Construction of Outfall-05	60	60	0%	30-Apr-25*	28-Jun-25	21-May-25	19-Jul-25	21	
U/G Wastewater Drainage System		205	116		02-Jan-25 A	23-Aug-25	26-Mar-25	19-Jul-25	-35	
14-1000-1(M55)	Sewage Transfer System for IWMF Vessels (Caisson 13)	60	60	0%	24-Jun-25	23-Aug-25	21-May-25	19-Jul-25	-35	
14-1000-1(M55)10	External Sewage Drainage System Construction Works (Common trench construction Utility Trench)	133	116	13%	02-Jan-25 A	23-Aug-25	26-Mar-25	19-Jul-25	-35	
Brine Discharge Pipe		90	90		18-May-25	15-Aug-25	21-Apr-25	19-Jul-25	-27	
14-1050(M81)	Brine Discharge Pipe Laying in utility trench (UT5 & UT6)	30	30	0%	18-May-25	16-Jun-25	20-Jun-25	19-Jul-25	33	
14-1060(M81)	U/G Brine Discharge Pipe Laying	30	30	0%	18-May-25	16-Jun-25	20-Jun-25	19-Jul-25	33	
14-1070(M81)	Brine Discharge Outfall Prefabrication	60	60	0%	18-May-25	16-Jul-25	21-Apr-25	19-Jun-25	-27	
14-1080(M81)	Brine Discharge Outfall construction	30	30	0%	17-Jul-25	15-Aug-25	20-Jun-25	19-Jul-25	-27	
Earthing System		180	29		28-Apr-22 A	28-May-25	24-Dec-24	21-Jan-25	-127	



Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

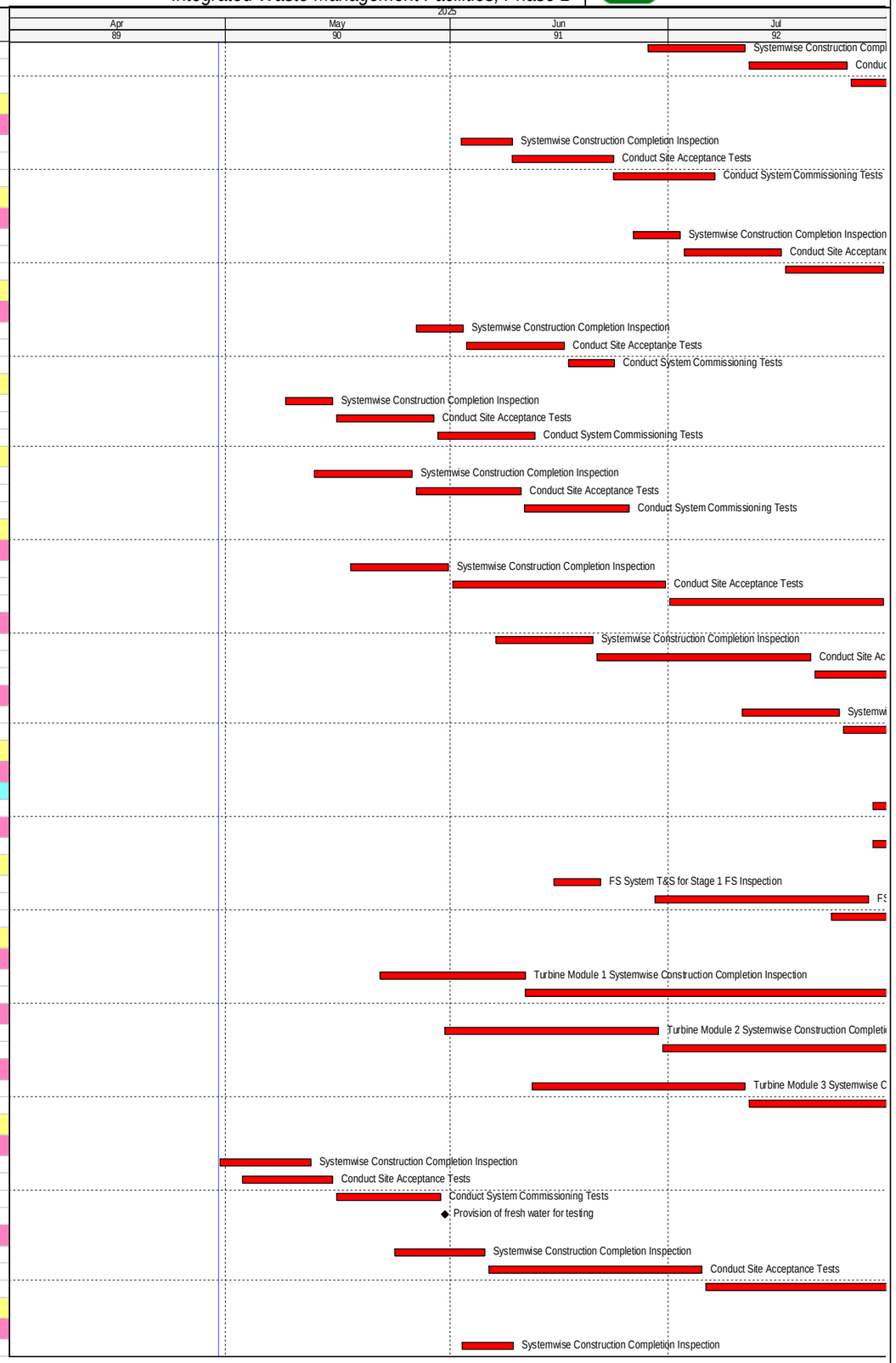
Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
16-1900-2(6)	Installation of Ground Earthing Mesh	180	29	60.39%	28-Apr-22 A	28-May-25	24-Dec-24	21-Jan-25	-127	
External Road Works		204	204		22-May-25	11-Dec-25	08-Dec-24	29-Jun-25	-165	
14-1010-2(6D)	Road Works (including high mast lighting)	204	204	0%	22-May-25	11-Dec-25	08-Dec-24	29-Jun-25	-165	
Works By CLP		276	34		20-Jul-24 A	02-Jun-25	27-Mar-25	29-Apr-25	-34	
Remaining Installation Works by CLP		276	34		20-Jul-24 A	02-Jun-25	27-Mar-25	29-Apr-25	-34	
15-1007	Telecom / Digital / Security / Metering Equipment Installation	210	19	90.95%	20-Jul-24 A	18-May-25	27-Mar-25	14-Apr-25	-34	
15-1010	132kV cable termination at IWMF 132 kV Switchgears and associated HVAC Circuits Test	60	19	68.33%	02-Feb-25 A	20-May-25	29-Mar-25	16-Apr-25	-34	
15-1010-1(6)	Overall testing and commissioning of 2 x CHS-IWMF circuits	34	34	0%	30-Apr-25	02-Jun-25	27-Mar-25	29-Apr-25	-34	
Metering & Energization		51	51		23-May-25	12-Jul-25	28-Jan-25	28-Jun-25	-14	
Energization of IWMF Substation		30	30		30-May-25	29-Jun-25	15-Feb-25	07-Mar-25	-113	
15-1027(7)	Connection for incoming power supply	21	21	0%	30-May-25	19-Jun-25	15-Feb-25	07-Mar-25	-104	
15-1030	Energization of Incoming Power Supply Main System	0	0	0%	29-Jun-25		07-Mar-25		-113	
Energization of Submain		51	51		23-May-25	12-Jul-25	28-Jan-25	28-Jun-25	-14	
15-1040-2(7)	Energization of Sub System - Process Building Module 2 Area (EDG Temporary Power)	4	4	0%	12-Jun-25	15-Jun-25	05-Feb-25	08-Feb-25	-127	
15-1040-3(7)	Energization of Sub System - Process Building Module 3 Area (EDG Temporary Power)	4	4	0%	22-Jun-25	25-Jun-25	28-Jan-25	31-Jan-25	-145	
15-1040-4(7)	Energization of Sub System - Elevated Driveway & WWTP Area (EDG Temporary Power)	4	4	0%	08-Jun-25	11-Jun-25	23-Mar-25	26-Mar-25	-77	
15-1040-6(7)	Energization of Sub System - Turbine Hall Area (EDG Temporary Power)	4	4	0%	23-May-25	26-May-25	07-Apr-25	10-Apr-25	-46	
15-1040-7(7)	Energization of Sub System - MT & WTP Area (EDG Temporary Power)	4	4	0%	29-May-25	01-Jun-25	10-Mar-25	13-Mar-25	-80	
15-1040-8(7)	Energization of Sub System - CCCW Building Area (EDG Temporary Power)	4	4	0%	30-May-25	02-Jun-25	19-Feb-25	22-Feb-25	-100	
15-1040-9(7)	Energization of Incoming Power Supply Sub System - Administration Building Area	4	4	0%	29-Jun-25	02-Jul-25	25-Jun-25	28-Jun-25	-4	
15-1042-11(7)	Energization of Incoming Power Supply Sub System - Berth Area	4	4	0%	09-Jul-25	12-Jul-25	25-Jun-25	28-Jun-25	-14	
Testing & Commissioning		428	155		15-May-24 A	01-Oct-25	16-Dec-24	22-Jul-25	-71	
SAT & System Commissioning Tests		428	155		15-May-24 A	01-Oct-25	16-Dec-24	22-Jul-25	-71	
132kV Incoming Power Supply System T&C		46	30		16-Apr-25 A	29-May-25	16-Jan-25	14-Feb-25	-104	
16-1000	Systemwise Construction Completion Inspection	30	16	46.67%	16-Apr-25 A	15-May-25	23-Jan-25	07-Feb-25	-97	Update Actual Start Date
16-1010	Conduct Site Acceptance Tests (SAT)	30	30	0%	30-Apr-25	29-May-25	16-Jan-25	14-Feb-25	-104	
132kV Export Power System T&C		120	120		27-May-25	23-Sep-25	31-Dec-24	29-Apr-25	-147	
16-1600	Systemwise Construction Completion Inspection	30	30	0%	27-May-25	25-Jun-25	31-Dec-24	29-Jan-25	-147	
16-1610	Conduct Site Acceptance Tests (SAT)	30	30	0%	26-Jun-25	25-Jul-25	30-Jan-25	28-Feb-25	-147	
16-1615(3)	Final Testing Before Connection	60	60	0%	26-Jul-25	23-Sep-25	01-Mar-25	29-Apr-25	-147	
11kV Electrical System T&C		113	113		30-Apr-25	20-Aug-25	16-Dec-24	28-Jun-25	-53	
Process Building Module 1 11kV T&C		44	44		15-May-25	27-Jun-25	16-Dec-24	15-Mar-25	-104	
16-1850(1)	Systemwise Construction Completion Inspection	14	14	0%	15-May-25	28-May-25	16-Dec-24	29-Dec-24	-150	
16-1850(7)	Conduct Site Acceptance Tests (SAT)	15	15	0%	29-May-25	12-Jun-25	14-Feb-25	28-Feb-25	-104	
16-1860(7)	Conduct System Commissioning Tests	15	15	0%	13-Jun-25	27-Jun-25	01-Mar-25	15-Mar-25	-104	
Process Building Module 2 11kV T&C		74	74		16-May-25	28-Jul-25	19-Jan-25	02-Apr-25	-117	
16-1880(1)	Systemwise Construction Completion Inspection	14	14	0%	16-May-25	29-May-25	19-Jan-25	01-Feb-25	-117	
16-1880(7)	Conduct Site Acceptance Tests (SAT)	30	30	0%	30-May-25	28-Jun-25	02-Feb-25	03-Mar-25	-117	
16-1890(7)	Conduct System Commissioning Tests	30	30	0%	29-Jun-25	28-Jul-25	04-Mar-25	02-Apr-25	-117	
Process Building Module 3 11kV T&C		74	74		08-Jun-25	20-Aug-25	30-Dec-24	13-Mar-25	-160	
16-1910(1)	Systemwise Construction Completion Inspection	14	14	0%	08-Jun-25	21-Jun-25	30-Dec-24	12-Jan-25	-160	
16-1910(7)	Conduct Site Acceptance Tests (SAT)	30	30	0%	22-Jun-25	21-Jul-25	13-Jan-25	11-Feb-25	-160	
16-2000(7)	Conduct System Commissioning Tests	30	30	0%	22-Jul-25	20-Aug-25	12-Feb-25	13-Mar-25	-160	
Turbine Hall & CCCW Building 11kV T&C		52	52		16-May-25	06-Jul-25	03-Feb-25	26-Mar-25	-102	
16-1940(1)	Systemwise Construction Completion Inspection and Testing	7	7	0%	16-May-25	22-May-25	03-Feb-25	09-Feb-25	-102	
16-1940(7)	Conduct Site Acceptance Tests (SAT)	15	15	0%	23-May-25	06-Jun-25	10-Feb-25	24-Feb-25	-102	
16-1950(7)	Conduct System Commissioning Tests	30	30	0%	07-Jun-25	06-Jul-25	25-Feb-25	26-Mar-25	-102	
Mechanical Treatment and Water Treatment Plant 11kV T&C		44	44		15-May-25	27-Jun-25	31-Jan-25	15-Mar-25	-104	
16-2200(M61)	Systemwise Construction Completion Inspection	14	14	0%	15-May-25	28-May-25	31-Jan-25	13-Feb-25	-104	
16-2210(7)	Conduct Site Acceptance Tests (SAT)	15	15	0%	29-May-25	12-Jun-25	14-Feb-25	28-Feb-25	-104	
16-2220(7)	Conduct System Commissioning Tests	15	15	0%	13-Jun-25	27-Jun-25	01-Mar-25	15-Mar-25	-104	
Elevated Driveway and WWTP 11kV T&C		30	30		01-Jun-25	30-Jun-25	16-Mar-25	14-Apr-25	-77	
16-2230(7)	Systemwise Construction Completion Inspection and T&C	30	30	0%	01-Jun-25	30-Jun-25	16-Mar-25	14-Apr-25	-77	
Berth Area		30	30		09-Jun-25	08-Jul-25	25-Feb-25	26-Mar-25	-104	
16-2240(7)	Systemwise Construction Completion Inspection and T&C	30	30	0%	09-Jun-25	08-Jul-25	25-Feb-25	26-Mar-25	-104	
Administration Building		30	30		30-May-25	28-Jun-25	26-May-25	24-Jun-25	-4	
16-2250(7)	Systemwise Construction Completion Inspection and T&C	30	30	0%	30-May-25	28-Jun-25	26-May-25	24-Jun-25	-4	
IWMF Substation 11kV T&C		42	42		30-Apr-25	10-Jun-25	07-Jan-25	28-Jun-25	18	
11kV System T&C		21	21		30-Apr-25	20-May-25	07-Jan-25	27-Jan-25	-113	
16-1940-1(7C)	Systemwise Construction Completion Inspection and Testing	7	7	0%	30-Apr-25	06-May-25	07-Jan-25	13-Jan-25	-113	
16-1940-2(7C)	Conduct Site Acceptance Tests (SAT)	7	7	0%	07-May-25	13-May-25	14-Jan-25	20-Jan-25	-113	
16-1940-3(7C)	Conduct System Commissioning Tests	7	7	0%	14-May-25	20-May-25	21-Jan-25	27-Jan-25	-113	
G/F 3 nr. EDG T&C		21	21		30-Apr-25	20-May-25	07-Jan-25	27-Jan-25	-113	
16-1950-1(7C)	Systemwise Construction Completion Inspection and Testing	7	7	0%	30-Apr-25	06-May-25	07-Jan-25	13-Jan-25	-113	
16-1950-2(7C)	Conduct Site Acceptance Tests (SAT)	7	7	0%	07-May-25	13-May-25	14-Jan-25	20-Jan-25	-113	
16-1950-3(7C)	Conduct System Commissioning Tests	7	7	0%	14-May-25	20-May-25	21-Jan-25	27-Jan-25	-113	
1/F 3 nr. EDG T&C		21	21		21-May-25	10-Jun-25	08-Jun-25	28-Jun-25	18	
16-1960-1(7C)	Systemwise Construction Completion Inspection and Testing	7	7	0%	21-May-25	27-May-25	08-Jun-25	14-Jun-25	18	
16-1960-2(7C)	Conduct Site Acceptance Tests (SAT)	7	7	0%	28-May-25	03-Jun-25	15-Jun-25	21-Jun-25	18	
16-1960-3(7C)	Conduct System Commissioning Tests	7	7	0%	04-Jun-25	10-Jun-25	22-Jun-25	28-Jun-25	18	
Water Supply System T&C		49	49		28-Jun-25	15-Aug-25	20-Feb-25	09-Apr-25	-128	
Process Water Supply Pipe System T&C		49	49		28-Jun-25	15-Aug-25	20-Feb-25	09-Apr-25	-128	



3-Month Rolling Programme (April 2025)

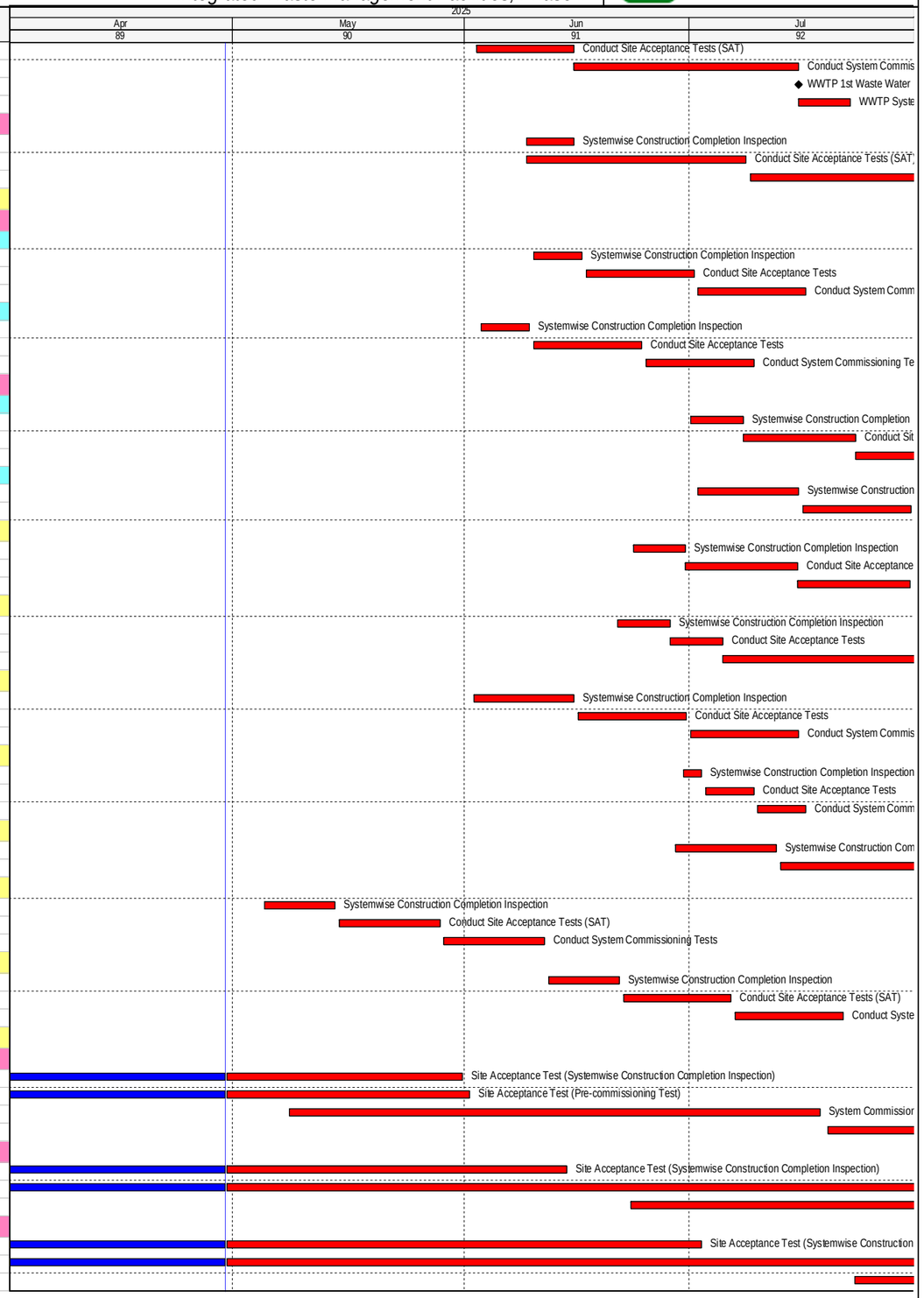
Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
16-1060	Systemwise Construction Completion Inspection	14	14	0%	28-Jun-25	11-Jul-25	20-Feb-25	05-Mar-25	-128	
16-1070	Conduct Site Acceptance Tests	14	14	0%	12-Jul-25	25-Jul-25	06-Mar-25	19-Mar-25	-128	
16-1080	Conduct System Commissioning Tests	21	21	0%	26-Jul-25	15-Aug-25	20-Mar-25	09-Apr-25	-128	
MVAC & OCS System T&C		35	35		02-Jun-25	07-Jul-25	18-Feb-25	26-Mar-25	-103	
OCS System T&C		35	35		02-Jun-25	07-Jul-25	18-Feb-25	26-Mar-25	-103	
16-1150	Systemwise Construction Completion Inspection	7	7	0%	02-Jun-25	09-Jun-25	18-Feb-25	24-Feb-25	-105	Update Original Duration from 14d to 7d
16-1160	Conduct Site Acceptance Tests	14	14	0%	09-Jun-25	23-Jun-25	27-Feb-25	12-Mar-25	-103	Update Original Duration from 30d to 14d
16-1170	Conduct System Commissioning Tests	14	14	0%	23-Jun-25	07-Jul-25	13-Mar-25	26-Mar-25	-103	Update Original Duration from 30d to 14d
Security, Surveillance & Communication System T&C		35	35		26-Jun-25	30-Jul-25	21-Apr-25	25-May-25	-66	
Process related CCTV & Communication System T&C		35	35		26-Jun-25	30-Jul-25	21-Apr-25	25-May-25	-66	
16-1180	Systemwise Construction Completion Inspection	7	7	0%	26-Jun-25	02-Jul-25	21-Apr-25	27-Apr-25	-66	
16-1190	Conduct Site Acceptance Tests	14	14	0%	03-Jul-25	16-Jul-25	28-Apr-25	11-May-25	-66	
16-1200	Conduct System Commissioning Tests	14	14	0%	17-Jul-25	30-Jul-25	12-May-25	25-May-25	-66	
Compressor & CCCW Bld T&C		28	28		27-May-25	23-Jun-25	16-Feb-25	15-Mar-25	-100	
Air Compressor		28	28		27-May-25	23-Jun-25	16-Feb-25	15-Mar-25	-100	
16-1210	Systemwise Construction Completion Inspection	7	7	0%	27-May-25	02-Jun-25	16-Feb-25	22-Feb-25	-100	
16-1220(7)	Conduct Site Acceptance Tests	14	14	0%	03-Jun-25	16-Jun-25	23-Feb-25	08-Mar-25	-100	
16-1230(7)	Conduct System Commissioning Tests	7	7	0%	17-Jun-25	23-Jun-25	09-Mar-25	15-Mar-25	-100	
Fuel Oil System T&C		35	35		09-May-25	12-Jun-25	09-Feb-25	15-Mar-25	-89	
16-1240	Systemwise Construction Completion Inspection	7	7	0%	09-May-25	15-May-25	09-Feb-25	15-Feb-25	-89	
16-1250(7)	Conduct Site Acceptance Tests	14	14	0%	16-May-25	29-May-25	16-Feb-25	01-Mar-25	-89	
16-1260(7)	Conduct System Commissioning Tests	14	14	0%	30-May-25	12-Jun-25	02-Mar-25	15-Mar-25	-89	
CCCW System T&C		44	44		13-May-25	25-Jun-25	11-Feb-25	26-Mar-25	-91	
16-1270	Systemwise Construction Completion Inspection	14	14	0%	13-May-25	26-May-25	11-Feb-25	24-Feb-25	-91	
16-1280(7)	Conduct Site Acceptance Tests	15	15	0%	27-May-25	10-Jun-25	25-Feb-25	11-Mar-25	-91	Update Original Duration from 30d to 15d
16-1290(7)	Conduct System Commissioning Tests	15	15	0%	11-Jun-25	25-Jun-25	12-Mar-25	26-Mar-25	-91	Update Original Duration from 30d to 15d
ACC Equipment T&C		98	98		18-May-25	23-Aug-25	26-Jan-25	25-May-25	-90	
ACC Equipment 1 T&C		74	74		18-May-25	30-Jul-25	13-Mar-25	25-May-25	-66	
16-2000(M62)	Systemwise Construction Completion Inspection	14	14	0%	18-May-25	31-May-25	13-Mar-25	26-Mar-25	-66	
16-2010(7)	Conduct Site Acceptance Tests	30	30	0%	01-Jun-25	30-Jun-25	27-Mar-25	25-Apr-25	-66	
16-2020(7)	Conduct System Commissioning Tests	30	30	0%	01-Jul-25	30-Jul-25	26-Apr-25	25-May-25	-66	
ACC Equipment 2 T&C		74	74		07-Jun-25	19-Aug-25	26-Jan-25	09-Apr-25	-132	
16-2030(M62)	Systemwise Construction Completion Inspection	14	14	0%	07-Jun-25	20-Jun-25	26-Jan-25	08-Feb-25	-132	
16-2040(7)	Conduct Site Acceptance Tests	30	30	0%	21-Jun-25	20-Jul-25	09-Feb-25	10-Mar-25	-132	
16-2050(7)	Conduct System Commissioning Tests	30	30	0%	21-Jul-25	19-Aug-25	11-Mar-25	09-Apr-25	-132	
ACC Equipment 3 T&C		44	44		11-Jul-25	23-Aug-25	29-Jan-25	13-Mar-25	-163	
16-2060(M62)	Systemwise Construction Completion Inspection	14	14	0%	11-Jul-25	24-Jul-25	29-Jan-25	11-Feb-25	-163	
16-2070(7)	Conduct Site Acceptance Tests	30	30	0%	25-Jul-25	23-Aug-25	12-Feb-25	13-Mar-25	-163	
Lift System T&C		3	3		29-Jul-25	31-Jul-25	06-Jul-25	08-Jul-25	-23	
Process Building Lift T&C		3	3		29-Jul-25	31-Jul-25	06-Jul-25	08-Jul-25	-23	
Process Building Lift T&C Stage 1		3	3		29-Jul-25	31-Jul-25	06-Jul-25	08-Jul-25	-23	
16-2120	Systemwise Construction Completion Inspection	3	3	0%	29-Jul-25	31-Jul-25	06-Jul-25	08-Jul-25	-23	
MT & WTP Lift T&C		3	3		29-Jul-25	31-Jul-25	06-Jul-25	08-Jul-25	-23	
16-2150	Systemwise Construction Completion Inspection	3	3	0%	29-Jul-25	31-Jul-25	06-Jul-25	08-Jul-25	-23	
FS & FS MVAC System T&C		69	69		15-Jun-25	22-Aug-25	01-Mar-25	22-Jul-25	-31	
16-1505	FS System T&S for Stage 1 FS Inspection	7	7	0%	15-Jun-25	21-Jun-25	01-Mar-25	07-Mar-25	-106	
16-1510	FS System T&S for Stage 2 FS Inspection	30	30	0%	29-Jun-25	28-Jul-25	24-May-25	22-Jun-25	-36	
16-1520	FS System T&S for Stage 3 FS Inspection	30	30	0%	23-Jul-25	22-Aug-25	23-Jun-25	22-Jul-25	-31	
Turbine Hall Process T&C		111	111		22-May-25	09-Sep-25	09-Jan-25	09-Apr-25	-153	
Turbine Hall Module 1		70	70		22-May-25	31-Jul-25	16-Jan-25	26-Mar-25	-126	
16-1300(7)	Turbine Module 1 Systemwise Construction Completion Inspection	20	20	0%	22-May-25	11-Jun-25	16-Jan-25	04-Feb-25	-126	
16-1310(7)	Turbine Module 1 Conduct Site Acceptance Tests	50	50	0%	11-Jun-25	31-Jul-25	05-Feb-25	26-Mar-25	-126	Update Original Duration from 60d to 50d
Turbine Hall Module 2		80	80		31-May-25	18-Aug-25	20-Jan-25	09-Apr-25	-131	
16-1330(7)	Turbine Module 2 Systemwise Construction Completion Inspection	30	30	0%	31-May-25	29-Jun-25	20-Jan-25	18-Feb-25	-131	
16-1340(7)	Turbine Module 2 Conduct Site Acceptance Tests	50	50	0%	30-Jun-25	18-Aug-25	19-Feb-25	09-Apr-25	-131	Update Original Duration from 60d to 50d
Turbine Hall Module 3		90	90		12-Jun-25	09-Sep-25	09-Jan-25	08-Apr-25	-154	
16-1360(7)	Turbine Module 3 Systemwise Construction Completion Inspection	30	30	0%	12-Jun-25	11-Jul-25	09-Jan-25	07-Feb-25	-154	
16-1370(7)	Turbine Module 3 Conduct Site Acceptance Tests	60	60	0%	12-Jul-25	09-Sep-25	08-Feb-25	08-Apr-25	-154	
Desalination & Demineralization Process T&C		97	97		30-Apr-25	04-Aug-25	14-Jan-25	12-Apr-25	-114	
Stage 1 (WTP Potable to Demin)		31	31		30-Apr-25	31-May-25	14-Jan-25	13-Feb-25	-106	
16-1295-1(M82)	Systemwise Construction Completion Inspection	13	13	0%	30-Apr-25	12-May-25	14-Jan-25	26-Jan-25	-106	
16-1295-2(M82)	Conduct Site Acceptance Tests	13	13	0%	03-May-25	15-May-25	17-Jan-25	29-Jan-25	-106	
16-1295-3(M82)	Conduct System Commissioning Tests	15	15	0%	16-May-25	30-May-25	30-Jan-25	13-Feb-25	-106	
16-2000(6D)	Provision of fresh water for testing	0	0	0%	31-May-25		13-Feb-25		-106	
Stage 2 (WTP Remaining)		73	73		24-May-25	04-Aug-25	30-Jan-25	12-Apr-25	-114	
16-1300	Systemwise Construction Completion Inspection	13	13	0%	24-May-25	05-Jun-25	30-Jan-25	11-Feb-25	-114	
16-1310	Conduct Site Acceptance Tests	30	30	0%	06-Jun-25	05-Jul-25	12-Feb-25	13-Mar-25	-114	
16-1320	Conduct System Commissioning Tests	30	30	0%	06-Jul-25	04-Aug-25	14-Mar-25	12-Apr-25	-114	
WWTP Process T&C		66	66		02-Jun-25	07-Aug-25	28-Dec-24	25-Feb-25	-163	
Stage 1 (WWTP Pre-Treatment)		50	50		02-Jun-25	22-Jul-25	07-Jan-25	25-Feb-25	-147	
16-1625-1(M82)	Systemwise Construction Completion Inspection	7	7	0%	02-Jun-25	09-Jun-25	07-Jan-25	13-Jan-25	-147	



Actual Work
Critical Remaining Work
Actrual Milestone
Remaining Work
Milestone
Critical Milestone

Activity ID	Activity Name	Original Duration	Remaining Duration	Activity % Complete	Current Start	Current Finish	Late Start	Late Finish	Total Float	M89 Remarks
16-1625-2(M82)	Conduct Site Acceptance Tests (SAT)	13	13	0%	02-Jun-25	15-Jun-25	07-Jan-25	19-Jan-25	-147	
16-1625-3(M82)	Conduct System Commissioning Tests (with temporary power)	30	30	0%	15-Jun-25	15-Jul-25	20-Jan-25	18-Feb-25	-147	
16-1640	WWTP 1st Waste Water In for T&C	0	0	0%	15-Jul-25		19-Feb-25		-147	
16-1645	WWTP System Seeding	7	7	0%	15-Jul-25	22-Jul-25	19-Feb-25	25-Feb-25	-147	
Stage 2 (WWTP Remaining)		60	60		09-Jun-25	07-Aug-25	28-Dec-24	25-Feb-25	-163	
16-1330	Systemwise Construction Completion Inspection	7	7	0%	09-Jun-25	15-Jun-25	28-Dec-24	03-Jan-25	-163	
16-1340	Conduct Site Acceptance Tests (SAT)	30	30	0%	09-Jun-25	08-Jul-25	28-Dec-24	26-Jan-25	-163	
16-1350	Conduct System Commissioning Tests	30	30	0%	09-Jul-25	07-Aug-25	27-Jan-25	25-Feb-25	-163	
Crane System T&C		65	65		03-Jun-25	07-Aug-25	18-Feb-25	09-Apr-25	-119	
Crane System T&C for Module 1 Hot Comissioning		44	44		03-Jun-25	16-Jul-25	18-Feb-25	26-Mar-25	-112	
Waste Crane System T&C		37	37		10-Jun-25	16-Jul-25	18-Feb-25	26-Mar-25	-112	
16-1390	Systemwise Construction Completion Inspection	7	7	0%	10-Jun-25	16-Jun-25	18-Feb-25	24-Feb-25	-112	
16-1400	Conduct Site Acceptance Tests	15	15	0%	17-Jun-25	01-Jul-25	25-Feb-25	11-Mar-25	-112	
16-1410	Conduct System Commissioning Tests	15	15	0%	02-Jul-25	16-Jul-25	12-Mar-25	26-Mar-25	-112	
Ash Crane System T&C		37	37		03-Jun-25	09-Jul-25	18-Feb-25	26-Mar-25	-105	
16-1970	Systemwise Construction Completion Inspection	7	7	0%	03-Jun-25	09-Jun-25	18-Feb-25	24-Feb-25	-105	Update Original Duration from 14d to 7d
16-1980	Conduct Site Acceptance Tests	15	15	0%	10-Jun-25	24-Jun-25	25-Feb-25	11-Mar-25	-105	Update Original Duration from 30d to 15
16-1990	Conduct System Commissioning Tests	15	15	0%	25-Jun-25	09-Jul-25	12-Mar-25	26-Mar-25	-105	Update Original Duration from 30d to 15
Crane System T&C for Module 2 & 3 Hot Comissioning		37	37		01-Jul-25	07-Aug-25	25-Feb-25	09-Apr-25	-119	
Waste Crane System T&C		37	37		01-Jul-25	07-Aug-25	04-Mar-25	09-Apr-25	-119	
16-2000	Systemwise Construction Completion Inspection	7	7	0%	01-Jul-25	08-Jul-25	04-Mar-25	10-Mar-25	-119	
16-2010	Conduct Site Acceptance Tests	15	15	0%	08-Jul-25	23-Jul-25	11-Mar-25	25-Mar-25	-119	
16-2020	Conduct System Commissioning Tests	15	15	0%	23-Jul-25	07-Aug-25	26-Mar-25	09-Apr-25	-119	
Ash Crane System T&C		29	29		02-Jul-25	30-Jul-25	25-Feb-25	25-Mar-25	-127	
16-2030	Systemwise Construction Completion Inspection	14	14	0%	02-Jul-25	15-Jul-25	25-Feb-25	10-Mar-25	-127	
16-2040	Conduct Site Acceptance Tests	15	15	0%	16-Jul-25	30-Jul-25	11-Mar-25	25-Mar-25	-127	Update Original Duration from 30d to 15
On-shore Crane System T&C		37	37		23-Jun-25	30-Jul-25	01-Mar-25	06-Apr-25	-115	
16-2030(M58)	Systemwise Construction Completion Inspection	7	7	0%	23-Jun-25	30-Jun-25	01-Mar-25	07-Mar-25	-115	
16-2040(M58)	Conduct Site Acceptance Tests	15	15	0%	30-Jun-25	15-Jul-25	08-Mar-25	22-Mar-25	-115	
16-2050(M58)	Conduct System Commissioning Tests	15	15	0%	15-Jul-25	30-Jul-25	23-Mar-25	06-Apr-25	-115	
Weighbridge System T&C		44	44		21-Jun-25	04-Aug-25	27-Feb-25	11-Apr-25	-115	
16-1420	Systemwise Construction Completion Inspection	7	7	0%	21-Jun-25	28-Jun-25	27-Feb-25	05-Mar-25	-115	
16-1430	Conduct Site Acceptance Tests	7	7	0%	28-Jun-25	05-Jul-25	06-Mar-25	12-Mar-25	-115	
16-1440	Conduct System Commissioning Tests	30	30	0%	05-Jul-25	04-Aug-25	13-Mar-25	11-Apr-25	-115	
Control SCADA Systems T&C		44	44		02-Jun-25	15-Jul-25	11-Feb-25	26-Mar-25	-111	
16-1780	Systemwise Construction Completion Inspection	14	14	0%	02-Jun-25	15-Jun-25	11-Feb-25	24-Feb-25	-111	
16-1790	Conduct Site Acceptance Tests	15	15	0%	16-Jun-25	30-Jun-25	25-Feb-25	11-Mar-25	-111	Update Original Duration from 30d to 15d
16-1800	Conduct System Commissioning Tests	15	15	0%	01-Jul-25	15-Jul-25	12-Mar-25	26-Mar-25	-111	Update Original Duration from 30d to 15d
CEMS Systems T&C		17	17		30-Jun-25	16-Jul-25	10-Mar-25	26-Mar-25	-112	
16-1970(6G)	Systemwise Construction Completion Inspection	3	3	0%	30-Jun-25	02-Jul-25	10-Mar-25	12-Mar-25	-112	
16-1980(6G)	Conduct Site Acceptance Tests	7	7	0%	03-Jul-25	09-Jul-25	13-Mar-25	19-Mar-25	-112	
16-1990(6G)	Conduct System Commissioning Tests	7	7	0%	10-Jul-25	16-Jul-25	20-Mar-25	26-Mar-25	-112	
Monorail Hoist System T&C		44	44		29-Jun-25	11-Aug-25	16-Apr-25	29-May-25	-74	
16-2030(M61)	Systemwise Construction Completion Inspection	14	14	0%	29-Jun-25	12-Jul-25	16-Apr-25	29-Apr-25	-74	
16-2040(M61)	Conduct Site Acceptance Tests	30	30	0%	13-Jul-25	11-Aug-25	30-Apr-25	29-May-25	-74	
Earthing & Lightning Protection System T&C		38	38		05-May-25	11-Jun-25	29-Dec-24	04-Feb-25	-127	
16-1970(6D)	Systemwise Construction Completion Inspection	10	10	0%	05-May-25	14-May-25	29-Dec-24	07-Jan-25	-127	
16-1980(6D)	Conduct Site Acceptance Tests (SAT)	14	14	0%	15-May-25	28-May-25	08-Jan-25	21-Jan-25	-127	
16-1990(6D)	Conduct System Commissioning Tests	14	14	0%	29-May-25	11-Jun-25	22-Jan-25	04-Feb-25	-127	
Vehicle Ferry Ramp T&C		40	40		12-Jun-25	21-Jul-25	18-Feb-25	29-Mar-25	-114	
16-1540(7)	Systemwise Construction Completion Inspection	10	10	0%	12-Jun-25	21-Jun-25	18-Feb-25	27-Feb-25	-114	
16-1550(7)	Conduct Site Acceptance Tests (SAT)	15	15	0%	22-Jun-25	06-Jul-25	28-Feb-25	14-Mar-25	-114	
16-1560(7)	Conduct System Commissioning Tests	15	15	0%	07-Jul-25	21-Jul-25	15-Mar-25	29-Mar-25	-114	
Incineration Processing T&C		428	155		15-May-24 A	01-Oct-25	19-Dec-24	25-May-25	-129	
Module 1 & Equipments (Train 1 & 2)		414	141		15-May-24 A	17-Sep-25	06-Jan-25	25-May-25	-115	
16-1540	Site Acceptance Test (Systemwise Construction Completion Inspection)	120	32	73.33%	15-May-24 A	31-May-25	06-Jan-25	06-Feb-25	-114	
16-1550	Site Acceptance Test (Pre-commissioning Test)	120	33	72.5%	10-Jun-24 A	01-Jun-25	21-Jan-25	22-Feb-25	-99	
16-1660	System Commissioning Test (Hot Commissioning Phase 1)	71	71	0%	08-May-25	18-Jul-25	15-Jan-25	26-Mar-25	-114	
16-1665(5a)	System Commissioning Test (Hot Commissioning Phase 2)	60	60	0%	19-Jul-25	17-Sep-25	27-Mar-25	25-May-25	-115	
Module 2 & Equipments (Train 3 & 4)		276	125		30-Oct-24 A	01-Sep-25	19-Dec-24	09-Apr-25	-145	
16-1560	Site Acceptance Test (Systemwise Construction Completion Inspection)	120	46	61.67%	30-Oct-24 A	14-Jun-25	06-Jan-25	20-Feb-25	-114	
16-1570	Site Acceptance Test (Pre-commissioning Test)	90	94	43.37%	17-Feb-25 A	01-Aug-25	19-Dec-24	22-Mar-25	-132	
16-1720	System Commissioning Test (Hot Commissioning Phase 1)	71	71	0%	23-Jun-25	01-Sep-25	29-Jan-25	09-Apr-25	-145	
Module 3 & Equipments (Train 5 & 6)		185	155		01-Mar-25 A	01-Oct-25	22-Dec-24	12-Apr-25	-172	
16-1580	Site Acceptance Test (Systemwise Construction Completion Inspection)	92	64	30.43%	01-Mar-25 A	02-Jul-25	18-Jan-25	22-Mar-25	-102	
16-1590	Site Acceptance Test (Pre-commissioning Test)	90	112	0%	23-Mar-25 A	19-Aug-25	22-Dec-24	12-Apr-25	-129	
16-1750	System Commissioning Test (Hot Commissioning Phase 1)	71	71	0%	23-Jul-25	01-Oct-25	01-Feb-25	12-Apr-25	-172	



Actual Work | Critical Remaining Work | Actrual Milestone
Remaining Work | Milestone | Critical Milestone

Appendix B Summary of Implementation Status of Environmental Mitigation

Appendix B

Table B.1 Implementation Schedule for Air Quality Measures for the IWMF at the artificial island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S3b.8.1	Air Pollution Control (Construction Dust) Regulation & Good Site Practices • Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. • Use of frequent watering for particularly dusty construction areas and areas close to ASRs. • Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines. • Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. • Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. • Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading	Work site / During the construction period	Contractor		✓			Air Pollution Control (Construction Dust) Regulation	Implemented N/A for dust control measures for transportation outside site boundary

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods. • Imposition of speed controls for vehicles on unpaved site roads. Ten kilometers per hour is the recommended limit. • Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs • Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.								
S3b.6.3	<u>Odour Removal by Deodorizers</u> • Deodorizers with 95% odour removal efficiency would be installed for the air ventilated from the mechanical treatment plant before discharge to the atmosphere	Waste reception halls, the waste storage area, the mechanical treatment plant / During design & operation phase	IWMF Operator	✓		✓		EIAO-TM	N/A
S3b.8.2	<u>Air Pollution Control and Stack Monitoring</u>	IWMF stack emissions / During	IWMF Operator	✓		✓		EIAO-TM, Supporting Document for	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	• Air pollution control and stack monitoring system will be installed for the IWMF to ensure that the emissions from the IWMF stack will meet the proposed target emission limits. • Voluntary Enhancement Measures in Flue Gas Cleaning and Emission Monitoring: 1. Two-stage bag filter system with reagent recirculation; 2. In addition to SCR, provide SNCR for removal of NO_x; tighten emission limit for half-hourly and daily NO_x to 160 mg/m^3 and 80 mg/m_3 respectively; 3. Well-mixed feed waste: to minimize the fluctuation of pollutant loading on the flue gas treatment system; 4. Two more AQMSs would be set up at South Lantau and Shek Kwu Chau respectively; 5. Limit levels will be set under the IWMF DBO contract to require that waste feed shall cease if any of the air pollutant has exceeded 95% of the emission concentration limit as stipulated in the Special Process license; and	design & operation phase						Application for Variation of Environmental Permit (EP-429/2012)	

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	6. Each incineration chamber shall be fitted with auxiliary burners to ensure complete burn out of the combustion gases.								
-	Treated Fly Ash and Air Pollution Control Residues: • During testing and commissioning, the Contractor shall sample and test every container of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria shown in Table 2 of the Environmental Permit. If a test result confirms that any one of the samples does not conform to the limits and the criteria, the Contractor shall be required to sample and test every container of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria for the next six months. • During the first six months of operation, if the requirements in (a) could be fully conformed with, the Contractor shall sample and test every shipload of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria shown in Table 2	IWMF stack emissions / During design & operation phase	IWMF Operator	✓		✓		Supporting Document for Application for Variation of Environmental Permit (EP-429/2012)	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	of the Environmental Permit. The Contractor shall take two samples from each shipload for testing and the Contractor shall not dispose of any of that shipload of treated fly ash and air pollution control residues until the test results confirm that the two samples conform to the limits and the criteria. If a test result confirms that any one of the two samples does not conform to the limits and the criteria, the Contractor shall be required to sample and test every shipload of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria for the next six months. The Contractor shall make due allowance in the Design and the Operation for the time to sample and test treated fly ash and air pollution control residues before disposal. • Provided that there is no non-conformance to the Incineration Residue Pollution Control Limits and leachability criteria shown in Table 2 of the Environmental Permit throughout a continuous sixmonth period in the Operation Period, the testing frequency shall be reduced to monthly interval.Two samples from one shipload of treated fly ash and air								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	pollution control residues shall be collected and tested for conformance to the Incineration Residue Pollution Control Limits and leachability criteria. The Contractor shall not dispose of any of the treated fly ash and air pollution control residues in the shipload which the samples are taken until the test results confirm that the samples conform to the limits and the criteria. If the test result confirm that any one of the samples does not conform to the limits and the criteria, the Contractor shall be required to sample and test every shipload of treated fly ash and air pollution control residues for conformance to the Incineration Residue Pollution Control Limits and leachability criteria shown in Table 2 of the Environmental Permit for the next six months.								
-	<u>Bottom Ash:</u> • During testing and commissioning, the Contractor shall sample and test every container of bottom ash for conformance to the leachability criteria shown in Table 2 of the Environmental Permit. If a test result confirms that any one of the samples does not conform to the criteria, the Contractor shall be required to sample and test every	IWMF stack emissions / During design & operation phase	IWMF Operator	✓		✓		Supporting Document for Application for Variation of Environmental Permit (EP-429/2012)	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	container of bottom ash for conformance to the leachability criteria for the next six months. • During the first six months of operation, if the requirements in (d) could be fully conformed with, the Contractor shall sample and test one shipload of bottom ash each month for conformance to the leachability criteria shown in Table 2 of the Environmental Permit. The Contractor shall take two samples from the shipload for testing and the Contractor shall not dispose of any of that shipload of bottom ash until the test results confirm that the two samples conform to the criteria. If a test result confirms that any one of the two samples does not conform to the criteria, the Contractor shall be required to sample and test each shipload of bottom ash for conformance to the leachability criteria for the next six months. The Contractor shall make due allowance in the Design and the Operation for the time to sample and test bottom ash before disposal. • Provided that there is no non-conformance to the leachability criteria shown in Table 2 of the Environmental Permit throughout a continuous six month period in the								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	Operation Period, the Contractor shall be allowed to take two samples from any one shipload of bottom ash once every six months for conformance to the leachability criteria. The Contractor shall not dispose of any of the bottom ash in the shipload which the samples are taken until the test results confirm that the samples conform to the criteria. If the test result confirm that any one of the samples does not conform to the criteria, the Contractor shall be required to sample and test one shipload of bottom ash each month for conformance to the leachability criteria shown in Table 2 of the Environmental Permit for the next six months as stipulated above.								

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table B.2 Implementation Schedule for Noise Impact Measures for the IWMF at the artificial island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S4b.8	Good site practices to limit noise emissions at source and use of quiet plant and working methods, whenever practicable.	Work Sites / Construction Period	EPD and its contractors		✓			EIAO-TM	Implemented
S4b.6 & S4b.8	All the ventilation fans installed in the below will be provided with silencers or acoustics treatment. (i) Stack of the incinerator (ii) Ventilation systems within the IWMF Enclosure and discharge silencer or other acoustic treatment equipment should be installed in the air-cooled chillers Other than provision of silencer or other acoustic treatment equipment for the stack of the incinerator and ventilation system, the detailed design should incorporate the following good practice in order to minimize the nuisance on the neighboring NSRs. (i) The exhaust of the ventilation system and any opening of the building should be located facing away from any NSRs; and (ii) Louver or other acoustic treatment equipment could also be applied to the exhaust of the ventilation system.	Within IWMF area / Construction Period	EPD and its contractors	✓		✓		EIAO-TM	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
-	Voluntary Enhancement Measure • Provision of air-conditioner and double glazed windows to nearby NSR at Shek Kwu Chau (i.e. SARDA) as precautionary measures.	IWMF site	Design team, contractor, IWMF operator	✓	✓			Supporting Document for Application for Variation of Environmental Permit (EP-429/2012)	Implemented

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table B.3 Implementation Schedule for Water Quality Measures for the Artificial Island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S5b.8.1.1	Drainage and Construction Site Runoff The site practices outlined in ProPECC PN 2/23 "Construction Site Drainage" should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. These practices include the following items: • At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction. • Boundaries of earthworks should be surrounded by dykes or embankments for flood protection, as necessary. • Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS. The	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO	Deficiency of Mitigation Measures but rectified by the Contractor

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 2/23, which states that the retention time for silt/sand traps should be 5 minutes under maximum flow conditions. The detailed design of the sand/silt traps shall be undertaken by the contractor prior to the commencement of construction. • Water pumped out from foundation piles must be discharged into silt removal facilities. • Measures should be taken to minimize the ingress of site runoff and drainage into excavations. Drainage water pumped out from excavations should be discharged into storm drains via silt removal facilities. • During rainstorms, exposed slope/soil surfaces should be covered by a tarpaulin or other means, as far as practicable. Other measures that need to be implemented before, during and after rainstorms are summarized in ProPECC PN 2/23. • Exposed soil areas should be minimized to reduce potential for increased siltation and contamination of runoff. • Earthwork final surfaces should be well compacted and subsequent permanent								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
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	work or surface protection should be immediately performed. • Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms.								
S5b.8.1.2	General Construction Activities Construction solid waste should be collected, handled and disposed of properly to avoid entering to the nearby watercourses and public drainage system. Rubbish and litter from construction sites should also be collected to prevent spreading of rubbish and litter from the site area. It is recommended to clean the construction sites on a regular basis.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S5b.8.1.3	There is a need to apply to EPD for a discharge license for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge license. All the run-off and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression and general cleaning etc., can minimize water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO license which is under the ambit of regional office of EPD.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO	Implemented Discharge License was issued on 15/02/2022
S5b.8.1.4	<u>Accidental Spillage</u> Contractor must register as a chemical waste producer if chemical wastes would be produced from construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO; WDO	Deficiency of Mitigation Measures but rectified by the Contractor
S5b.8.1.5	Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas which	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO; WDO	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	appropriately equipped to control these discharges.								
S5b.8.1.6	Oils and fuels should only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas should be sited on sealed areas in order to prevent spillage of fuels and solvents to the nearby watercourses. All waste oils and fuels should be collected in designated tanks prior to disposal.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO; WDO	Deficiency of Mitigation Measures but rectified by the Contractor
S5b.8.1.7	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. • Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO; WDO	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S5b.8.1.8	Sewage Effluent Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor would be responsible. For appropriate disposal and maintenance of these facilities.	Work site / During the construction period	Contractor		✓			EIAO-TM; ProPECC PN 2/23; WPCO	Implemented
S5b.8.1.9	Reclamation and Construction of Breakwaters • The proposed dredging and reclamation should be commenced in phases. The breakwaters and seawalls should be constructed and the reclamation should be started within the enclosed breakwaters after the completion of the breakwater. Silt curtain should be applied around caissons / blockwork during the filling of the cell to prevent the loss of fine in the filling material. • The maximum production rate for dredging for the anti-scouring protection layer shall not exceed the permitted maximum daily dredging rate and carried out within its respective distance from the nearest non-translocatable coral community by the dredging contractor as specified in S.2.18 of the Further Environmental Permit (no.:FEP-01/429/2012/A). It is recommended to employ closed grab with small capacity of 2 m^3 to control the dredging rate. • Any gap that may need to be provided for marine access will be located at the middle	Work site / During the marine construction period	Contractor		✓			EIAO-TM; WPCO, Supporting Document for Application for Variation of Environmental Permit (EP-429/2012) Further Environmental Permit No. FEP-01/429/2012/A	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	of the North Western seawall, away from the identified coral communities and will be shielded by silt curtains systems to control sediment plume dispersion. • The silt curtain system at marine access opening should be closed as soon as the barges passes through the marine access opening in order to minimize the period of curtain opening. Filling should only be carried out behind the silt curtain when the silt curtain is completely closed. • To enhance the effectiveness of the silt curtain at the marine access, the northern breakwater would be built before the commencement of the reclamation to reduce the current velocity towards the marine access opening. • The silt curtain system at marine access opening should be regularly checked and maintained to ensure proper functioning. • Where public fill is proposed for filling below +2.5mPD, the fine content in the public fill will be controlled to 25% which is in line with the CEDD's General Specification; • The filling for reclamation should be carried out behind the seawall. The filling material should only consist of public fill, rock and sand. The filling composition and filling rates at each filling area should follow those delineated in Table 1 of the FEP-01/429/2012/. The filling above high watermark is not restricted;								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	• No dredging should be carried out within 16m to the nearest non-translocatable coral community; • Daily site audit including full-time on-site monitoring by the ET is recommended during the dredging for anti-scouring protection layer for checking the compliance with the permitted no. of grab; • Closed grab dredger should be used to minimize the loss of sediment during the raising of the loaded grabs through the water column; • Frame-type silt curtains should be deployed around the dredging operations; • Floating-type silt curtains should be used to surround the circular cell during the sheetpiling work; • The descent speed of grabs should be controlled to minimize the seabed impact speed; • Barges should be loaded carefully to avoid splashing of material; • All barges used for the transport of dredged materials should be fitted with tight bottom seals in order to prevent leakage of material during loading and transport; • All barges should be filled to a level which ensures that material does not spill over during loading and transport to the disposal site and that adequate freeboard is								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
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	maintained to ensure that the decks are not washed by wave action. • No DCM works should be carried out within 100m to the nearest non-translocatable coral colony / colonies. • Silt curtains should be employed to enclose DCM field trial and any full scale DCM work to minimize the potential impacts on water aspect. • A sand blanket is to be placed on top of the marine deposit using tremie pipes prior to the DCM ground treatment to avoid seabed sediment disturbance.								
S5b.8.2.3	Operational Phase Discharges A pipeline drainage system will serve the development area collecting surface runoff from paved areas, roof, etc. Sustainable drainage principle would be adopted in the drainage system design to minimize peak surface runoff, maximize permeable surface and maximize beneficial use of rainwater.	Within IWMF site / During the operational phase	IWMF Operator	✓		✓		WPCO	N/A
S5b.8.2.4	Oil interceptors should be provided in the drainage system of any potentially contaminated areas (such as truck parking area and maintenance workshop) and regularly cleaned to prevent the release of oil products into the storm water drainage system in case of accidental spillages. Accidental spillage should be cleaned up as soon as practicable and all waste oils and fuels should be collected and handled in	Within IWMF site / During the operational phase	IWMF Operator	✓		✓		WPCO; WDO	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	compliance with the Waste Disposal Ordinance.								
S5b.8.2.5	Refuse Entrapment Collection and removal of floating refuse should be performed at regular intervals for keeping the water within the Project site boundary and the neighboring water free from rubbish.	Within the Project site / During the operational phase	IWMF Operator			✓		WPCO	N/A
S5b.8.2.6	Transportation of bottom ash, fly ash and APC residues to WENT Landfill for disposal Covered container should be used in the shipping of the incineration waste to limit the contact between the incineration waste and the marine water. A comprehensive emergency response plan for any accidental spillage should be submitted by the operation contractor to the EPD for agreement before the operation of the facilities. Salvage and cleanup action to recover the spilled incineration waste containers following the spillage should be carried out according to the emergency response plan to mitigate the environmental impact in case of spillage.	Transportation of Incineration Ash / During the operational phase	IWMF Operator			✓			N/A

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table B.4 Implementation Schedule for Waste Management Measures for the IWMF at the artificial island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
6b.5.1.2	Good Site Practices Adverse environmental impacts in relation to waste management are not expected, provided that good site practices are strictly followed. Recommendations for good site practices during the construction activities would include: • Obtain relevant waste disposal permits from appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354) and subsidiary Regulations and the Land (Miscellaneous Provisions) Ordinance (Cap. 28); • Provide staff training for proper waste management and chemical handling procedures; • Provide sufficient waste disposal points and regular waste collection; • Provide appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; and • Carry out regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; • Separate chemical wastes for special handling and disposed of to licensed facility for treatment; and • Employ licensed waste collector to collect waste.	Work Site/ During Construction Period	Contractor		✓			WDO; LDO; ETWB TCW No. 19/2005; EIAO-TM	Deficiency of Mitigation Measures but rectified by the Contractor

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
6b.5.1.3	<u>Waste Reduction Measures</u> Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: • Design foundation works that could minimize the amount of excavated material to be generated. • Provide training to workers on the importance of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling; • Sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.); • Segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; • Encourage the collection of aluminum cans by providing separate labelled bins to enable this waste to be segregated from other general refuse generated by the work force; • Proper storage and site practices to minimize the potential for damage or contamination of construction materials; and	Work Site/ During Design & Construction Period	Contractor	✓	✓				Implemented N/A for demolition items

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	• Plan and stock construction materials carefully to minimize amount of waste to be generated and to avoid unnecessary generation of waste.								
6b.5.1.7	Dredged Sediment – Application of Dumping Permit The project proponent should agree in advance with MFC of CEDD on the site allocation. The project proponent or contractor for the dredging works shall then apply for the site allocations of marine sediment disposal based on the prior agreement with MFC/CEDD. The project proponent or contractor should also be responsible for the application of all necessary permits from relevant authorities, including the dumping permit as required under DASO from EPD, for the disposal of dredged sediment prior to the commencement of the dredging works.	Seawall and Reclamation site / Construction Period	EPD and its contractor	✓	✓			DASO ETWB TCW 34/2002	Implemented
6b.5.1.8	Dredged Sediment – Sediment Quality Report The project proponent or contractor will need to satisfy the appropriate authorities that the quality of the marine sediment to be dredged has been identified according to the requirements of ETWB TCW 34/2002. This should be completed well before the dredging works and would include at least the submission of a formal Sediment Quality Report under Tier I of ETWB TCW No. 34/2002 to DEP for approval. Subject to advice from DEP, it is possible that further marine SI in	Seawall and Reclamation site / Construction Period	EPD and its contractor	✓				DASO ETWB TCW 34/2002	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	accordance with ETWB TCW 34/2002 might be necessary for the application of dumping permit under DASO. In such case, a sediment sampling and testing proposal shall be submitted to and approved by DEP before the additional marine SI works.								
6b.5.1.9	<u>Dredged Sediment – Sediment Transportation</u> The barge transporting the sediments to the designated disposal sites should be equipped with tight fitting seals to prevent leakage and should not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.	Seawall and Reclamation site / Construction Period	EPD and its contractor		✓			DASO ETWB TCW 34/2002	Implemented
6b.5.1.10	<u>Construction and Demolition Materials</u> In order to minimize the impact resulting from collection and transportation of C&D materials for off-site disposal, the excavated material arising from site formation and foundation works should be reused on-site as backfilling material and for landscaping works as far as practicable. Other mitigation requirements are listed below: • A Waste Management Plan (WMP), which becomes part of the Environmental Management Plan	Work Site/ During Design & Construction Period	Contractor	✓	✓			ETWB TCW No. 19/2005	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
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	(EMP), should be prepared in accordance with ETWB TCW No.19/2005; • A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be adopted for easy tracking; and • In order to monitor the disposal of C&D materials at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be adopted (refer to *ETWB TCW No. 31/2004*).								
6b.5.1.11 – 6b.5.1.12	The Contactor should prepare and implement an EMP in accordance with ETWB TCW No.19/2005, which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from construction activities. Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP should be submitted to the Engineer for approval. The Contractor should implement waste management practices in the EMP throughout the construction stage of the Project. The EMP should be reviewed regularly and updated by the Contractor, preferably on a monthly basis.	Work Site/ During Design & Construction Period	Contractor	✓	✓			ETWB TCW No. 19/2005	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	All surplus C&D materials arising from or in connection with construction works should become the property of the Contractor when it is removed unless otherwise stated. The Contractor would be responsible for devising a system to work for on-site sorting of C&D materials and promptly removing all sorted and process materials arising from the construction activities to minimize temporary stockpiling on-site. The system should be included in the EMP identifying the source of generation, estimated quantity, arrangement for on-site sorting, collection, temporary storage areas and frequency of collection by recycling Contractors or frequency of removal off-site.								
6b.5.1.13	Chemical Wastes Should chemical wastes be produced at the construction site, the Contractor would be required to register with EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste (such as explosive, flammable, oxidizing, irritant, toxic, harmful, or corrosive). The Contractor should employ a licensed collector to transport and dispose	Work Site/ During Construction Period	Contractor		✓			Waste Disposal (Chemical Waste) (General) Regulation	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.								
6b.5.1.14	General Refuse General refuse should be stored in enclosed bins or compaction units separate from C&D materials. A licensed waste collector should be employed by the Contractor to remove general refuse from the site, separately from C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Work Site/ During Construction Period	Contractor		✓			Public Health and Municipal Services Ordinance	Deficiency of Mitigation Measures but rectified by the Contractor
6b.5.1.16 – 6b.5.1.33	Biogas Generation The Contractor shall review the data and analysis results, and the data from further Site Investigation, if any. Subject to the review findings, the following gas protection measures may be considered if necessary: - gas monitoring after reclamation; - passive ventilation; - gas impermeable membrane; - ventilation with "at risk" rooms; - protection of utilities or below ground services;	Reclamation site (if dredging at the reclamation site is not required) / Design & Construction Period	Designer and/or contractor	✓	✓			EPD/TR8/97	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	- precautions during construction works; - precautions prior to entry of belowground services								
6b.5.2.1	<u>Good Site Practices</u> It is recommended that the following good operational practices should be adopted to minimise waste management impacts: • Obtain the necessary waste disposal permits from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354) and Waste Disposal (Chemical Waste) (General) Regulation; • Nomination of an approved person to be responsible for good site practice, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site; • Use of a waste haulier licensed to collect specific category of waste; • A trip-ticket system should be included as one of the contractual requirements and implemented by the Environmental Team to monitor the disposal of solid wastes at landfills, and to control fly tipping. Reference should be made to ETWB TCW No. 31/2004. • Training of site personnel in proper waste management and chemical waste handling procedures;	IWMF Site/During Operation Period	IWMF Operator			✓		Waste Disposal Ordinance (Cap.354); Waste Disposal (Chemical Waste) (General) Regulation; ETWB TCW No. 1/2004	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	• Separation of chemical wastes for special handling and appropriate treatment at a licensed facility; • Routine cleaning and maintenance programme for drainage systems, sumps and oil interceptors; • Provision of sufficient waste disposal points and regular collection for disposal; • Adoption of appropriate measures to minimize windblown litter and dust during transportation of waste, such as covering trucks or transporting wastes in enclosed containers; and • Implementation of a recording system for the amount of wastes generated, and disposed of (including recycled the disposal sites).								
6b.5.2.2	<u>Waste Reduction Measures</u> Good management and control can prevent the generation of significant amounts of waste. It is recommended that the following good operational practices should be adopted to ensure waste reduction: • Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; • Encourage collection of aluminum cans, plastic bottles and packaging material (e.g. carton boxes) and office	IWMF Site/ During Operation Period	IWMF Operator			✓			Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
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	paper by individual collectors. Separate labelled bins should be provided to help segregate this waste from other general refuse generated by the work force; and • Any unused chemicals or those with remaining functional capacity should be reused as far as practicable.								
6b.5.2.3	<u>Storage, Handling, Treatment, Collection and Disposal of Incineration By-Products</u> The following measures are recommended for the storage, handling and collection of the incineration by-products: • Ash should be stored in storage silos; • Ash should be handled and conveyed in closed systems fully segregatedfrom the ambient environment; • Ash should be wetted with water to control fugitive dust, where necessary; • All fly ash and APC residues should be treated, e.g. by cement solidification or chemical stabilization, for compliance with the proposed Incineration Residue Pollution Control Limits and leachability criteria prior to disposal;	IWMF Site/ During Operation Period	IWMF Operator			✓		Incineration Residue Pollution Control Limits	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
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	• The ash should be transported in covered trucks or containers to the designated landfill site. The Contractor should provide EPD with chemical analysis results of the bottom ash, and treated fly ash and APC residues to confirm that the ash/residue can comply with the proposed Incineration Residue Pollution Control Limits before disposal.								
6b.6.3.1	<u>Fuel Oil Tank Construction and Test</u> • The fuel tank to be installed should be of specified durability. • Double skin tanks are preferred. • Underground fuel storage tank should be placed within a concrete pit. • The concrete pit shall be accessible to allow regular tank integrity tests to be carried out at regular intervals. • Tank integrity tests should be conducted by an independent qualified surveyor or structural engineer. • Any potential problems identified in the test should be rectified as soon as possible.	Fuel Oil Storage Tank/ During Design, Construction and Operation Periods	IWMF Contractor	✓	✓	✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
6b.6.3.1	Fuel Oil Pipeline Construction and Test • Installation of aboveground fuel oil pipelines is preferable; if underground pipelines are unavoidable, concrete lined trenches should be constructed to contain the pipelines. • Double skin pipelines are preferred. • Distance between the fuel oil refuelling points and the fuel oil storage tank shall be minimized. • Integrity tests for the pipelines should be conducted by an independent qualified surveyor or structural engineer at regular intervals. • Any potential problems identified in the test should be rectified as soon as possible.	Fuel Oil Pipelines/ During Design, Construction and Operation Periods	IWMF Contractor	✓	✓	✓			N/A
6b.6.3.1	Fuel Oil Leakage Detection • Installation of leak detection device at storage tank and pipelines. • Installation and use of pressure gauges (e.g. at the two ends of a filling line) in fuel filling, which allows unexpected pressure drop or difference and sign of leakage to be detected.	Fuel Oil Storage Tank and Pipelines/ During Design, Construction and Operation Periods	IWMF Contractor	✓	✓	✓			N/A
6b.6.3.1	Fuel Oil Storage Tank Refuelling	Fuel Oil Refuelling Point/	IWMF Operator			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	• Storage tank refuelling (from road tanker) should only be conducted by authorized staff of the oil company using the company's standard procedures.	During Operation Period							
6b.6.3.1	<u>Fuel Oil Spillage Response</u> An Oil Spill Response Plan should be prepared by the operator to document the appropriate response procedures for oil spillage incidents in detail. General procedures to be taken in case of fuel oil spillage are presented below. • Training - Training on oil spill response actions should be given to relevant staff. The training shall cover the followings: ➢Tools & resources to combat oil spillage and fire, e.g. locations of oil spill handling equipment and fire fighting equipment; ➢General methods to deal with oil spillage and fire incidents; ➢Procedures for emergency drills in the event of oil spills and fire; and ➢Regular drills shall be carried out. • Communication -Establish communication channel with the Fire Services Department (FSD) and EPD to report any oil spillage incident	IWMF Site/ During Operation Period	IWMF Operator			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	so that necessary assistance from relevant department can be quickly sought. • Response Procedures -Any fuel oil spillage within the IWMF site should be immediately reported to the Plant Manager with necessary details including location, source, possible cause and extent of the spillage. -Plant Manager should immediately attend to the spillage and initiate any appropriate action to confine and clean up the spillage. The response procedures shall include the following: ➢Identify and isolate the source of spillage as soon as possible. ➢Contain the oil spillage and avoid infiltration into soil/ groundwater and discharge to storm water channels. ➢Remove the oil spillage. ➢Clean up the contaminated area. ➢If the oil spillage occurs during storage tank refuelling, the refueling operation should immediately be stopped. ➢Recovered contaminated fuel oil and the associated material to remove the spilled oil should be considered as chemical waste. The handling and disposal								

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	procedures for chemical wastes are discussed in the following paragraphs.								
6b.6.3.2	<u>Chemicals and Chemical Wastes Handling & Storage</u> • Chemicals and chemical wastes should only be stored in suitable containers in purpose-built areas. • The storage of chemical wastes should comply with the requirements of the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. • The storage areas for chemicals and chemical wastes shall have an impermeable floor or surface. The impermeable floor/ surface shall possess the following properties: - Not liable to chemically react with the materials and their containers to be stored. - Able to withstand normal loading and physical damage caused by container handling - The integrity and condition of the impermeable floor or surface should be inspected at regular intervals to ensure that it is satisfactorily maintained ➢ For liquid chemicals and chemical wastes storage, the	Chemicals and Chemical Wastes Storage Area / During Operation Period	IWMF Operator			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	storage area should be bunded to contain at least 110% of the storage capacity of the largest containers or 20% of the total quantity of the chemicals/chemical wastes stored, whichever is the greater. ➢ Storage containers shall be checked at regular intervals for their structural integrity and to ensure that the caps or fill points are tightly closed. ➢ Chemical handling shall be conducted by trained workers under supervision.								
6b.6.3.2	<u>Chemicals and Chemical Wastes Spillage Response</u> A Chemicals and/ or Chemical Wastes Spillage Response Plan shall be prepared by the operator to document in detail the appropriate response procedures for chemicals or chemical wastes spillage incidents. General procedures to be undertaken in case of chemicals/ chemical waste spillages are presented below. • Training - Training on spill response actions should be given to relevant staff. The training shall cover the followings:	IWMF Site/ During Operation Period	IWMF Operator			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	➢ Tools & resources to handle spillage, e.g. locations of spill handling equipment; ➢ General methods to deal with spillage; and ➢ Procedures for emergency drills in the event of spills. • Communication - Establish communication channel with FSD and EPD to report the spillage incident so that necessary assistance from relevant department can be quickly sought. • Response Procedures - Any spillage within the IWMF site should be reported to the Plant Manager. - Plant Manager shall attend to the spillage and initiate any appropriate actions needed to confine and clean up the spillage. The response procedures shall include the followings: ➢ Identify and isolate the source of spillage as soon as possible; ➢ Contain the spillage and avoid infiltration into soil/								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	groundwater and discharge to storm water channels (in case the spillage occurs at locations out of the designated storage areas); ➢ Remove the spillage; the removal method/ procedures documented in the Material Safety Data Sheet (MSDS) of the chemicals spilled should be observed; ➢ Clean up the contaminated area (in case the spillage occurs at locations out of the designated storage areas); and ➢ The waste arising from the cleanup operation should be considered as chemical wastes.								
6b.6.3.3	<u>Preventive Measures for Incineration By-products Handling</u> The recommended measures listed below can minimize the potential contamination to the surrounding environment due to the incineration by-products: • Ash should be stored in storage silos; • Ash should be handled and conveyed in closed systems fully segregated	Storage, Handling & Collection of Incineration Ash at IWMF/ During Operation Period	IWMF Operator			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	from the ambient environment; • Ash should be wetted with water to control fugitive dust, where necessary; • All fly ash and APC residues should be treated, e.g. by cement solidification or chemical stabilization, for compliance with the proposed Incineration Residue Pollution Control Limits and leachability criteria prior to disposal; • The ash should be transported in covered trucks or containers to the designated landfill site.								
6b.6.3.4 -6b.6.3.6	<u>Incident Record</u> After any spillage, an incident report should be prepared by the Plant Manager. The incident report should contain details of the incident including the cause of the incident, the material spilled and estimated spillage amount, and also the response actions undertaken. The incident record should be kept carefully and able to be retrieved when necessary. The incident report should provide sufficient details for the evaluation of any environmental impacts due to the spillage and assessment of the effectiveness of measures taken.	IWMF Site/ During Operation Period	IWMF Operator			✓		Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management and the Guidance Note for Contaminated Land and Remediation.	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	In case any spillage or accidents results in significant land contamination, EPD should be informed immediately and the IWMF operator should be responsible for the cleanup of the affected area. The responses procedures described in **Section 6b.6.3.1** and **Section 6b.6.3.2** of EIA report should be followed accordingly together with the land contamination assessment and remediation guidelines stipulated in the *Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management and the Guidance Note for Contaminated Land and Remediation.*								

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table B.5 Implementation Schedule for Ecological Quality Measures for the IWMF at the artificial island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
7b.8.2.1	Measures to avoid direct loss of intertidal habitat • The site boundary has been proposed to avoid direct contact with the intertidal natural rocky shore of Shek Kwu Chau. It avoids direct loss of intertidal communities and the existing natural rocky shore habitat, where Reef Egret and White-bellied Sea Eagle have been recorded within and in the vicinity of this habitat.	IWMF site	Design team	✓				EIAO-TM	N/A
7b.8.2.2	Measures to minimise loss of coastal subtidal habitat • Extensive coral colonies were recorded at the coastal hard bottom habitat at Shek Kwu Chau. To avoid and minimise the extensive direct impact on the coral colonies, the proposed reclamation area has been moved further offshore to minimise loss of subtial habitat near shore.	IWMF site	Design team	✓				EIAO-TM	N/A
7b.8.2.3	Zero Discharge Scheme • The design scheme of the Project has avoided discharge of wastewater into the marine environment. A zero discharge scheme would be adopted during the operation of the Project. An on-site wastewater treatment plant would be	IWMF site	Design team, IWMF operator	✓		✓		WPCO	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	provided to treat the wastewater generated from the IWMF (mainly human sewage). The treated effluent would be re-used in the incineration plant and mechanical treatment plant, or for onsite washdown and landscape.								
7b.8.2.4	<u>Measures to avoid loss of plant species of conservation importance</u> • Landing portal construction works would not cause direct lost to the recorded individual of protected plant species, • *Aquilaria sinensis*, at the coastal shrubland habitat at Cheung Sha. As a precautionary measure, the plant should be tagged with eye-catching tape and fenced off prior to works, in order to avoid any damage by workers.	Cheung Sha landing portal	Design team, Contractor	✓	✓		✓	EIAO-TM	N/A
7b.8.3.1 - 7b.8.3.15	<u>Measures to minimise water quality impact</u> • Measures for water quality as recommended in **Section 5b** of the EIA Report should be implemented.	Work site	Design team, contractor, IWMF operator	✓	✓	✓	✓	EIAO-TM; ProPECC PN 2/23; WPCO	Implemented
7b.8.3.16 - 7b.8.3.30	<u>Measures to minimise disturbance on Finless Porpoise</u> *Minimisation of Habitat Loss for Finless Porpoise*	IWMF site, work site, marine traffic route	Design team, contractor, IWMF operator	✓	✓	✓	✓	EIAO-TM, Supporting Document for Application for Variation of the Environmental	Implemented for avoidance of construction works that may produce underwater acoustic disturbance, Vessel Travel Route implementation, training of staff; N/A for others

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	• Substantial revision has been made on the layout plan and form of the breakwater, in order to minimise the potential loss of important habitat for Finless Porpoise. The revision has greatly reduced the size of the embayment area, as well as the Project footprint. As a result, the size of habitat loss for Finless Porpoise has reduced from the original ~50 ha, down to ~31 ha. *Avoidance of peak season for finless porpoise occurrence* • To minimise potential acoustic disturbance from construction activities on Finless Porpoise, construction works that may produce underwater acoustic disturbance should be scheduled outside the months with peak Finless Porpoise occurrence (December to May), including: - sheet piling works for construction of cofferdam surrounding the reclamation area (Phase 1); - sheet piling works for construction of the shorter section of breakwater (Phase 1);							Permit (EP-429/2012)	

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	- sheet piling works for construction of the remaining section of breakwater (Phase 3) and - bored piling works for berth area (Phase 3) Such works should be restricted within June to November. This approach would not only avoid the peak season for Finless Porpoise occurrence, the magnitude of impacts arise from acoustic disturbance would also be minimised. • Since the DCM ground treatment and the installation of precast seawalls and breakwaters should generate no underwater acoustic disturbance to Finless Porpoise, no specific mitigation measures are required. *Opt for quieter construction methods and plants* • Considering the sensitivity of marine mammals to underwater acoustic disturbance, instead of the previously proposed conventional breakwater and reclamation peripheral structure, which requires noisy piling works, the current circular cells structure for								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	breakwater and reclamation peripheral structure is proposed. A quieter sheet piling method using vibratory hammer or hydraulic impact hammer, should be adopted for the installation of circular cells for cellular cofferdam and northern breakwater during Phase 1, and southern breakwater Phase 3; • Non-percussive bore piling method would be adopted for the installation of tubular piles for the berth construction during Phase 3. *Monitored exclusion zones* • During the installation/re-installation/relocation process of floating type silt curtains, in order to avoid the accidental entrance and entrapment of marine mammals within the silt curtains, a monitored exclusion zone of 250 m radius from silt curtain should be implemented. The exclusion zone should be closely monitored by an experienced marine mammal observer at least 30 minutes before the start of installation/re-installation/relocation process. If a marine mammal is noted within the exclusion zone, all marine works should stop immediately and remain idle for 30 minutes, or until the								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	exclusion zone is free from marine mammals. • The experienced marine mammal observer should be well trained to detect marine mammals. Binoculars should be used to search the exclusion zone from an elevated platform with unobstructed visibility. The observer should also be independent from the project proponent and has the power to call-off construction activities. • In addition, as marine mammals cannot be effectively monitored within the proposed monitored exclusion zone at night, or during adverse weather conditions (i.e. Beaufort 5 or above, visibility of 300 meters or below), marine works should be avoided under weather conditions with low visibility. *Marine mammal watching plan* • Upon the completion of the installation/re-installation/relocation of floating type silt curtain, all marine works would be conducted within a fully enclosed environment within the silt curtain, hence exclusion zone monitoring would no longer								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	be required. Subsequently, a marine mammal watching plan should be implemented. The plan should include regular inspection of silt curtains, and visual inspection of the waters surrounded by the curtains. Special attention should be paid to Phase 2 (reclamation) where the floating type still curtain would be opened occasionally for vessel access, leaving a temporary 50 m opening. An action plan should be devised to cope with any unpredicted incidents such as the case when marine mammals are found within the waters surrounded by the silt curtains. *Small openings at silt curtains* • The openings for vessel access at the silt curtains should be as small as possible to minimise the risk of accidental entrance. *Adoption of regular travel route* • During construction and operation, captains of all vessels should adopt regular travel route, in order to minimize the chance of vessel collision with								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	marine mammals, which may otherwise result in damage to health or mortality. The regular travel route should avoid areas with high sighting density of Finless Porpoise as much as possible. *Vessel speed limit* • The frequent vessel traffic in the vicinity of works area may increase the chance of mammal mammals being killed or seriously injured by vessel collision. A speed limit of ten knots should be strictly enforced within areas with high density of Finless Porpoise. • Passive acoustic monitoring and land-based theodolite monitoring surveys should be adopted to verify the predicted impacts and effectiveness of the proposed mitigation measures. *Training of Staff* • Staff, including captains of vessels, should be aware of the guidelines for safe vessel operations in the presence of cetaceans during construction and operation phases. Adequate trainings should be provided								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
7b.8.3.31 - 7b.8.3.34	<u>Measures to minimise impact on corals</u> *Coral translocation* • Coral communities within and in proximity to the proposed dredging sites would be disturbed by the Project due to the dredging operations. In order to minimise direct loss of coral communities, translocation of corals that are attached to movable rocks with diameter less than 50 cm are recommended. In order to avoid disturbance to corals during the spawning period, the spawning season of corals (June to August) should be avoided; and that translocation should be carried out during the winter season (November- March). • The REA survey results suggest that the 198 directly affected coral colonies were attached to movable rocks (less than 50 cm in diameter). It is technically feasible to translocate them to avoid direct loss. • Prior to coral translocation, a more detailed baseline survey, including a coral mapping survey, is recommended to further confirm the	IWMF site	Design team, contractor, IWMF operator	✓	✓	✓	✓	EIAO-TM	Implemented, tagged coral found missing after hitting by typhoons Re-tagging of 10 coral colonies at indirect impact site and control site were conducted in November and December 2018 respectively.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	exact number and location of coral colonies within the potentially affected area. A more detailed coral translocation plan, including selection of suitable recipient site, plan for coral translocation, and event / action plan for coral monitoring should be submitted upon approval of this Project, prior to commencement of construction works. Advice from relevant governmental departments (i.e. AFCD) and professionals would be sought after, in order to identify a desirable location for the relocation of coral communities. Post-translocation monitoring on the translocated corals should also be considered. *Coral monitoring programme* • A coral monitoring programme is recommended to assess any adverse and unacceptable impacts to the coral communities at the coasts of Shek Kwu Chau during construction of the Project. *Phasing of Works* • To minimize environmental impacts, the proposed phasing of construction works has been carefully designed to								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	reduce the amount of concurrent works, hence minimize SS elevation and the associated impacts on corals.								
7b.8.3.35 - 7b.8.3.41	Specific measures to minimize disturbance on breeding White-bellied Sea Eagle *Avoidance of noisy works during the breeding season of White-bellied Sea Eagle* • To minimize potential noise disturbance from construction activities on WBSE, noisy construction works should be scheduled outside their breeding season (December to May) to minimise potential degradation in breeding ground quality and breeding activities, including: - sheet piling works for construction of cofferdam surrounding the reclamation area (Phase 1); - sheet piling works for construction of the shorter section of breakwater (Phase 1); - sheet piling works for construction of the remaining section of breakwater (Phase 3); and - bored piling works for berth area (Phase 3).	IWMF site, marine traffic route	Design Team, Contractor, IWMF operator	✓	✓	✓	✓	EIAO-TM	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	Opt for quieter construction methods and plants • To minimise potential construction noise disturbance on WBSE, quieter construction methods and plants should be adopted. The recommended noise mitigation measures in the **Noise** chapter (**Section 4b.8** of the EIA Report) should be implemented to minimise potential noise disturbance to acceptable levels. *Restriction on vessel access near the nest of White-bellied Sea Eagle* • During construction and operation, in order to minimize disturbance on the existing WBSE nest, a pre-defined practical route to restrict vessel access near the nest should be adopted to keep vessels and boats as far away from the nest as possible. *White-bellied Sea Eagle monitoring programme* • A WBSE monitoring programme is recommended to assess any adverse and unacceptable impacts to the breeding activities of WBSE during construction and operation of the								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	Project. Monitoring surveys for WBSE would include pre-construction phase (twice per month for duration of three months during their breeding season -between December and May, immediately before the commencement of works), construction phase, and operation phase (two years after the completion of construction works). • Surveys should be conducted twice per month during their breeding season (from December to May); and once per month outside breeding season (June to November). More details on monitoring for WBSE are presented in the EM&A Manual. *Education of staff* • Staff, including captains of all vessels during construction and operation phases, should be aware of the ecological importance of WBSE. Awareness should be raised among staff to minimise any intentional or unintentional disturbance to the nest. *Minimisation of Glare Disturbance*								

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				Des	C	O	Dec		
	• To minimise glare disturbance on WBSE, which may cause disorientation of birds by interfering with their magnetic compass, and disruption in behavioural patterns such as reproduction, fat storage and foraging pattern, any un-necessary outdoor lighting should be avoided, and in-ward and down-ward pointing of lights should be adopted.								
-	Construction of Seawall/Breakwaters • To widen the open channel between the Artificial Island and Shek Kwu Chau. • To design the precast concrete seawall with environmental friendly features.	IWMF site	Design team, contractor, IWMF operator	✓	✓			Supporting Document for Application for Variation of Environmental Permit (EP-429/2012)	N/A
7b.8.3.42	Opt for Quieter Construction Methods and Plants • Quieter construction methods and plants should be used to minimise disturbance to the nearby terrestrial habitat and the associated wildlife.	Work site	Design team, contractor, IWMF operator	✓	✓	✓	✓	EIAO-TM	Implemented
7b.8.3.43	Measures to minimize impacts from artificial lighting • Unnecessary lighting should be avoided, and shielding of lights should be provided to minimize disturbance from light pollution on fauna groups.	IWMF site	Design team, contractor, IWMF operator	✓	✓	✓		EIAO-TM	Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
7b.8.3.44 - 7b.8.3.45	Measures to minimize accidental spillage • Regular maintenance of vessels, vehicles and equipment that may cause leakage and spillage should only be undertaken within pre-designated areas, which are appropriately equipped to control the associated discharges. • Oils, fuels and chemicals should be contained in suitable containers, and only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas should be sited on sealed areas in order to prevent spillage of fuels and solvents to the nearby watercourses. All waste oils and fuels should be collected in designated tanks prior to disposal.	Work site	Contractor, IWMF operator		✓	✓	✓	EIAO-TM	Deficiency of Mitigation Measures but rectified by the Contractor.
7b.8.3.46	Measures to minimise sewage effluent • Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce.	Work site	Contractor		✓			EIAO-TM	N/A
7b.8.3.47	Measures to minimise drainage and construction runoff • Potential ecological impacts resulted from potential degradation of water quality due to unmitigated surface	Work site	Contractor		✓		✓	EIAO-TM	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	runoff could be minimised via the detailed mitigation measures in **Section 5b.8** of the EIA Report. The following presents some of the mitigation measures: - On-site drainage system with implemented sedimentation control facilities. - Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. - Provision of embankment at boundaries of earthworks for flood protection. - Water pumped out from foundation piles must be discharged into silt removal facilities. - During rainstorms, exposed slope/soil surfaces should be covered by tarpaulin or other means, as far as practicable. - Exposed soil surface should be minimized to reduce siltation and runoff. - Earthwork final surfaces should be well compacted. Subsequent permanent surface protection should be immediately performed. - Open stockpiles of construction materials, and construction wastes on-								

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	site should be covered with tarpaulin or similar fabric during rainstorms.								
7b.8.3.48	Measures to minimise impacts from general construction activities • To avoid the entering of construction solid waste into the nearby habitats, construction solid waste should be collected, handled and disposed of properly to avoid entering to the nearby habitats. It is recommended to clean the construction sites on a regular basis.	Work site	Contractor		✓			EIAO-TM	Implemented
7b.8.3.49	Pest Control Good waste management practices should be adopted at the IWMF in order to minimise the risk of introduction of pest to the island: - Transportation of wastes in enclosed containers - Waste storage area should be well maintained and cleaned - Waste should only be disposed of at designated areas - Timely removal of the newly arrived waste - Removal of items that are capable of retaining water - Rapid clean up of any waste spillages	IWMF site	IWMF operator			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	- Maintenance of a tidy and clean site environment - Regular application of pest control - Education of staff the importance of site cleanliness								
7b.8.3.50	Control of Marine Habitat Quality during Operation Phase • Depending on the seabed condition of the approach channel for marine vessels during operation phase of the IWMF, maintenance dredging may be required to ensure safe access. In order to avoid degradation in water quality due to elevation in SS and dispersion of sediment plume due to dredging works, it is recommended that any future maintenance dredging works should not be carried out within 100 m from the shore, similar to that of the dredging for anti-scouring protection layer during construction phase. All maintenance dredging works should be carried out with the implementation of silt curtain to control the dispersion of SS. The production rate should comply with the permit dredging rate and number of grab per hour.	IWMF site	IWMF operator			✓		EIAO-TM; WPCO	N/A
7b.8.4.1 –	Compensation of loss of important habitat of Finless Porpoise	Waters between Shek	Project Proponent	✓		✓		EIAO-TM	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
7b.8.4.8	*Designation of Marine Park* • The Project Proponent has made a firm commitment to seek to designate a marine park of approximately 700 ha in the waters between Soko Islands and Shek Kwu Chau, in accordance with the statutory process stipulated in the Marine Parks Ordinance, as a compensation measure for the habitat loss arising from the construction of the IWMF at the artificial island near SKC. • The Project Proponent shall seek to complete the designation by 2018 to tie in with the operation of the IWMF at the artificial island near SKC. • A further study should be carried out to review relevant previous studies and collate available information on the ecological characters of the proposed area for marine park designation; and review available survey data for Finless Porpoise, water quality, fisheries, marine traffic and planned development projects in the vicinity. Based on the findings, ecological profiles of the proposed area for marine park designation should be established, and the extent and	Kwu Chau and Soko Islands							

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	location of the proposed marine park be determined. The adequacy of enhancement measures should also be reviewed. • In addition, a management plan for the proposed marine park should be proposed, covering information on the responsible departments for operation and management (O&M) of the marine park, as well as the O&M duties of each of the departments involved. Consultation with relevant government departments and stakeholders should be conducted under the study. The study should be submitted to Director of Environmental Protection (DEP) for approval before the commencement of construction works. • The Project Proponent should provide assistance to AFCD during the process of the marine park designation. .								
7b.8.5.1 – 7b.8.5.4	<u>Additional Enhancement or Precautionary Measures</u> *Deployment of Artificial Reefs* • Deployment of artificial reefs (ARs) is an enhancement measure for the marine habitats. ARs are proposed to be deployed within the proposed	Within the proposed marine park under this study	Project Proponent	✓		✓		EIAO-TM	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
	marine park under this Project. The exact location, dimension and type of ARs to be deployed are to be further investigated along with the further study of the proposed marine park under this Project. The proposed ARs would be deployed at the same time as the complete designation of marine park. *Release of Fish Fry at Artificial Reefs and Marine Park* • Release of fish fry at the proposed ARs, as well as the proposed marine park under this study, should enhance the fish resources in the nearby waters, and subsequently food sources for Finless Porpoise. The proposed ARs with various micro-habitats would have the potential to provide shelter and nursery ground for the released fish fry. The frequency and quantity of fry to be released should be agreed by AFCD.								

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Table B.6 Implementation Schedule for Fisheries Measures for the IWMF at the artificial island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
8b.8.1.2	Measure to minimize loss of and disturbance on fisheries resources • Alteration to the phasing of works, construction method, and layout plan of the IWMF at the artificial island near SKC has been made. The total fishing ground to be permanently lost due to the project has been significantly reduced from ~50 ha to ~31 ha. By adopting the current circular cells instead of the conventional seawall construction method, SS elevation would be greatly reduced, minimizing adverse impact on the health of fisheries resources.	IWMF site	Design team, contractor	✓	✓		✓	EIAO-TM	N/A
8b.8.1.3	Measure to minimize impingement and entrainment • Provision of a screen at the water intake point for desalination plant would be essential to minimize the risk of impingement and entrainment of fisheries resources (including fish, larvae and egg) through the intake point.	IWMF site	Design team, contractor, IWMF operator	✓	✓	✓		EIAO-TM	N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
8b.8.1.4-8b.8.1.6	Measures to control water quality • No wastewater effluent, anti-fouling agent, heavy metals and other contaminants would be released during operation phase of the Project. • Mitigation measures recommended in the water quality impact assessment during construction and operation would serve to protect fisheries resources from indirect impacts resulted from the Project	Work site, IWMF site	Design team, contractor, IWMF operator	✓	✓	✓	✓	EIAO-TM	Implemented
8b.8.1.7 – 8b.8.1.8	Additional Enhancement / Precautionary Measures • Artificial Reefs (ARs) are proposed to be deployed within the proposed marine park under this Project as an enhancement measure for the marine habitats. This enhancement feature would bring positive impacts to the previously identified important spawning and nursery ground for fisheries resources. *Release of Fish Fry at Artificial Reefs* • Release of fish fry has been proposed under this Project. The proposed deployment of ARs within the proposed marine park would provide shelter and nursery ground for the released fish fry. The frequency and quantity of fry to be released should be agreed by AFCD.	Within the proposed marine park in the waters between Soko Islands and Shek Kwu Chau	Project Proponent	✓		✓		EIAO-TM	N/A

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Table B.7 Implementation Schedule for Landscape and Visual Measures for the IWMF at the artificial island near SKC

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S10b.10 MLVC- 01	Grass-hydroseeded bare soil surface and stock pile area	Work site / During construction phase	Contractor		✓				N/A
S10b.10 MLVC-02	<u>Landscape Design</u> 1) Early planting using fast grow trees and tall shrubs at strategic locations within site as buffer to block view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works. 2) Use of tree species of dense tree crown to serve as visual barrier. 3) Hard and soft landscape treatment (e.g. trees and shrubs) of open areas within development to provide a background for the outdoor containers from open view, shade and shelter, and a green appearance from surrounding viewpoints. 4) Planting strip along the periphery of the project site. 5) Selected tree species suitable for the coastal condition.	Work site / During design & construction phases	Contractor	✓	✓				N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S10b.10 MLVC-03	Adoption of Natural Features of the Existing Shoreline 1) Use of boulders in different sizes and with the similar textures of the existing rocky shores for the construction of breakwater and artificial shoreline in order to blend into the existing natural shoreline. 2) Use of cellular cofferdam together with the natural boulders to form a curvature shoreline for the reclamation area to echo with the natural shoreline of SKC.	Work site / During construction phase	Contractor		✓				N/A
S10b.10 MLVC-04	Greening Design (Rooftop & Vertical Greening) 1) Implementation of rooftop and vertical greening (vertical building envelope) along the periphery of each building block to increase the amenity value of the work, moderate temperature extremes and enhance building energy performance. The greening appearance of the building shall enhance its visual harmony with the natural surroundings as well as reduce the apparent visual mass of the structure. 2) Sufficient space between concrete enclosure and stack to minimize heat transfer. 3) Introduction of landscape decks at the stack to further enhance the overall natural and green concept unique for this site.	Work site / During design & construction phases	Contractor	✓	✓				N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S10b.10 MVC-01	Visual Mitigation and Aesthetic Design 1) Use of natural materials with recessive color to minimize the bulkiness of the building. 2) Adoption of innovative aesthetic design to the chimney to minimize or visually mitigate the massing of the chimney so as to reduce its visual impact to the surroundings. 3) Color of the chimney in a gradual changing manner to match with the color of the sky. 4) Provision of observation deck for public enjoyment at the top of the chimney to diminish the feeling of chimney. 5) Provision of sky gardens between the two stacks to allow additional greening for enhancing the aesthetic quality. Maintenance access (elevator and staircase) from the ground floor to the sky gardens will be provided to allow maintenance of the sky gardens. 6) Integration of the visitor's walkway with different material façade design of incinerator plant to enhance the aesthetic quality.	Structures in IWMF / During design & constructio n phases	Contractor	✓	✓				N/A
S10b.10 MVC-02	Control of the security floodlight for construction areas at night to avoid excessive glare to the surrounding receiver.	Work site / During construction phase	Contractor		✓				Implemented

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S10b.10 MVC-03	Optimization of the construction sequence and construction programme to minimize the duration of impact.	Work site / During design & construction phases	Contractor	✓	✓				Implemented
S10b.10 MVC-04	Storage of the backfilling materials for site formation & construction materials / wastes on site at a maximum height of 2m, covered with an impermeable material of visually un-obtrusive material (in earth tone).	Work site / During construction phase	Contractor		✓				N/A
S10b.10 MVC-05	Reduction of the number of construction traffic at the site to practical minimum.	Work site / During construction phase	Contractor		✓				Implemented
S10b.10 MLVO-01	Planting Maintenance Provision of proper planting maintenance and replacement of defective plant species on the new planting areas to enhance aesthetic and landscape quality.	Project site / During Operation phase	Contractor			✓			N/A
S10b.10 MVO-01	Environmental Education Centre Development of an Environmental Education Center, in which regular exhibitions and lectures to promote environmental awareness and waste reduction concept would be provided, as a part of the IWMF for the general public to alleviate negative public perceptions of the development.	Project site / During Operation phase	Contractor			✓			N/A
S10b.10 MVO-02	Control of Light Control the numbers of lights and their intensity to a level that is good enough to meet the safety requirements at night but not excessive.	Project site / During Operation phase	Contractor			✓			N/A

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	Implementation Status and Remarks
				Des	C	O	Dec		
S10b.10 MVO-03	Control of Operation Time Minimization of the frequency of waste transportation to practical minimum (e.g. limit the reception of MSW from 8 am to 8 pm)	Project site / During Operation phase	Contractor			✓			N/A

* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Appendix C Impact Monitoring Schedule of the Reporting Month

Impact Monitoring Schedule for IWMF

May-25

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
				Impact Ecology monitoring for WBSE		
4	5	6	7	8	9	10
		Impact Daytime & Evening Noise monitoring for M1 & M2	Impact Night time Noise monitoring for M1 & M2 Daytime & Evening Noise monitoring for M3	Impact Night time Noise monitoring for M3		
11	12	13	14	15	16	17
	Impact Daytime & Evening Noise monitoring for M1, M2 & M3	Impact Night time Noise monitoring for M1, M2 & M3	Impact Ecology monitoring for WBSE			
18	19	20	21	22	23	24
				Impact Daytime & Evening Noise monitoring for M1, M2 & M3	Impact Night time Noise monitoring for M1, M2 & M3	
25	26	27	28	29	30	31
	Impact Daytime & Evening Noise monitoring for M1 & M2	Impact Daytime & Evening Noise monitoring for M3 Night time Noise monitoring for M1 & M2	Impact Night time Noise monitoring for M3 Ecology monitoring for WBSE			

Remarks:
1.Daytime Noise Monitoring (07:00-1900), Evening Time Noise Monitoring (1900-2300), Night Time Noise Monitoring (2300-0700).
2.Water Quality Monitoring for S1,S2 and S3 will only conduct during DCM works, refer to Detailed DCM Plan.
3.No marine construction work is tentatively scheduled to be carried out in May 2025.

Appendix D Event / Action Plan for Water Quality Exceedance

Event	Action			
	ET	IEC	SO	Contractor
Action level being exceeded by one sampling day	Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Repeat measurement on next day of exceedance. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)
Action level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC and Contractor; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC and Contractor; Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; Repeat measurement on next working day of exceedance. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)	Discuss with IEC on the proposed mitigation measures; Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET and IEC and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after Action Level being exceeded by two consecutive sampling days)

Event	Action			
	ET	IEC	SO	Contractor
Limit level being exceeded by one sampling day	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with Contractor, IEC and SO and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented measures. (The above actions should be taken within 1 working day after the exceedance is identified)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and SO and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures. (The above actions should be taken within 1 working day after the exceedance is identified)

Event	Action			
	ET	IEC	SO	Contractor
Limit level being exceeded by more than one consecutive sampling days	Identify source(s) of impact; Inform IEC, Contractor and EPD; Check monitoring data, all plant, equipment and Contractor's working methods. Discuss mitigation measures with IEC, SO and Contractor. Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)	Discuss with ET and Contractor on the mitigation measures; Review proposals on mitigation measures submitted by Contractor and advise the SO accordingly; Assess the effectiveness of the implemented mitigation measures. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented measures. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit level. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)	Inform the SO and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment; Consider changes of working methods; Discuss with ET, IEC and SO and propose mitigation measures to IEC and SO within 3 working days; Implement the agreed mitigation measures; As directed by the SOR, to slow down or to stop all or part of the marine work or construction activities. (The above actions should be taken within 1 working day after Limit Level being exceeded by two consecutive sampling days)

Appendix E Noise Monitoring Equipment Calibration Certificate

Certificate of Calibration

for

Description:	***Sound Level Meter***
Manufacturer:	***SVANTEK***
Type No.:	***SVAN 971 (Serial No.: C132269)***
Microphone:	***ACO 7052E (Serial No.: 90332)***
Preamplifier:	***SV-18 (Serial No.: 103808)***

Submitted by:

Customer:	*Aurecon Hong Kong Limited*
Address:	*Unit 1608, 16/F, Tower B,Manulife Financial Centre,*
	223-231 Wai Yip Street,
	Kwun Tong,Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

☑ **Within (31.5Hz – 4kHz)**
☐ **Outside**

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 22 July 2024

Date of calibration: 24 July 2024

Date of NEXT calibration: 23 July 2025

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: **24 July 2024**

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

Certificate No.: APJ23-155-CC003

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

1. *Calibration Precaution:*

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. *Calibration Conditions:*

Air Temperature:	23.4 °C
Air Pressure:	1005 hPa
Relative Humidity:	56.7 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS

4. *Calibration Results*

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-138.8	dBA SPL	Fast	94	1000	94.0	±0.4

Linearity

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-138.8	dBA SPL	Fast	94	1000	94.0	Ref
			104		104.0	±0.3
			114		114.0	±0.3

Time Weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-138.8	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A) *L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-138.8	dB SPL	Fast	94	31.5	94.5	±2.0
				63	94.4	±1.5
				125	94.3	±1.5
				250	94.4	±1.4
				500	94.2	±1.4
				1000	94.0	Ref
				2000	93.5	±1.6
				4000	93.3	±1.6

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-138.8	dBA SPL	Fast	94	31.5	55.2	-39.4 ±2.0
				63	68.2	-26.2 ±1.5
				125	78.2	-16.1 ±1.5
				250	85.6	-8.6 ±1.4
				500	91.0	-3.2 ±1.4
				1000	94.0	Ref
				2000	94.7	+1.2 ±1.6
				4000	94.4	+1.0 ±1.6

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-138.8	dBC SPL	Fast	94	31.5	91.5	-3.0 ±2.0
				63	93.6	-0.8 ±1.5
				125	94.1	-0.2 ±1.5
				250	94.2	-0.0 ±1.4
				500	94.2	-0.0 ±1.4
				1000	94.0	Ref
				2000	93.3	-0.2 ±1.6
				4000	92.6	-0.8 ±1.6

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A) *L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

5. *Calibration Results Applied*

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.05
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:
The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A) *L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

Certificate of Calibration

for

Description:	***Sound Level Meter***
Manufacturer:	***SVANTEK***
Type No.:	***971 (Serial No.: C132261)***
Microphone:	***ACO 7052E (Serial No.: 79778)***
Preamplifier:	***SV 18 (Serial No.:97276)***

Submitted by:

Customer:	*Aurecon Hong Kong Limited*
Address:	*Unit 1608, 16/F, Tower B,Manulife Financial Centre,*
	223-231 Wai Yip Street,
	Kwun Tong,Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

☑ **Within (31.5Hz – 8kHz)**
☐ **Outside**

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 23 October 2024

Date of calibration: 24 October 2024

Date of NEXT calibration: 23 October 2025

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 24 October 2024

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

Certificate No.: APJ23-155-CC005

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

1. *Calibration Precaution:*

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. *Calibration Conditions:*

Air Temperature:	24.8 °C
Air Pressure:	1007 hPa
Relative Humidity:	54.9 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS

4. *Calibration Results*

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting		Time Weighting	Level, dB	Frequency, Hz		
35-137	dBA	SPL	Fast	94	1000	94.0	±0.4

Linearity

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting		Time Weighting	Level, dB	Frequency, Hz		
35-137	dBA	SPL	Fast	94	1000	94.0	Ref
				104		104.0	±0.3
				114		114.0	±0.3

Time Weighting

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting		Time Weighting	Level, dB	Frequency, Hz		
35-137	dBA	SPL	Fast	94	1000	94.0	Ref
			Slow			94.0	±0.3

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

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Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137	dB SPL	Fast	94	31.5	94.6	±2.0
				63	94.5	±1.5
				125	94.4	±1.5
				250	94.3	±1.4
				500	94.2	±1.4
				1000	94.0	Ref
				2000	93.9	±1.6
				4000	95.5	±1.6
				8000	92.3	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137	dBA SPL	Fast	94	31.5	55.3	-39.4 ±2.0
				63	68.4	-26.2 ±1.5
				125	78.3	-16.1 ±1.5
				250	85.7	-8.6 ±1.4
				500	91.0	-3.2 ±1.4
				1000	94.0	Ref
				2000	95.2	+1.2 ±1.6
				4000	96.5	+1.0 ±1.6
				8000	91.4	-1.1+2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137	dBC SPL	Fast	94	31.5	91.6	-3.0 ±2.0
				63	93.7	-0.8 ±1.5
				125	94.3	-0.2 ±1.5
				250	94.3	-0.0 ±1.4
				500	94.3	-0.0 ±1.4
				1000	94.0	Ref
				2000	93.8	-0.2 ±1.6
				4000	94.7	-0.8 ±1.6
				8000	89.5	–3.0 +2.1: –3.1

ACOUSTICS AND AIR TESTING LABORATORY CO LTD. (A+A)*L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

5. *Calibration Results Applied*

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.10
	125 Hz	± 0.10
	250 Hz	± 0.10
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:
The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

Certificate of Calibration

for

Description:	***Sound Level Meter***
Manufacturer:	***SVANTEK***
Type No.:	***SVAN 971 (Serial No.: 103482)***
Microphone:	***ACO 7052E (Serial No.: 90365)***
Preamplifier:	***SV-18 (Serial No.: 149618)***

Submitted by:

Customer:	*Aurecon Hong Kong Limited*
Address:	*Unit 1608, 16/F, Tower B,Manulife Financial Centre,*
	223-231 Wai Yip Street,
	Kwun Tong,Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

☑ **Within (31.5Hz – 4kHz)**
☐ **Outside**

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 22 July 2024

Date of calibration: 24 July 2024

Date of NEXT calibration: 23 July 2025

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: **24 July 2024**

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A) *L

Certificate No.: APJ24-043-CC001

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

1. *Calibration Precaution:*

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. *Calibration Conditions:*

Air Temperature: 23.4 °C
Air Pressure: 1005 hPa
Relative Humidity: 56.7 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS

4. *Calibration Results*

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137.2	dBA SPL	Fast	94	1000	94.0	±0.4

Linearity

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137.2	dBA SPL	Fast	94	1000	94.0	Ref
			104		104.0	±0.3
			114		114.0	±0.3

Time Weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137.2	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

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Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137.2	dB SPL	Fast	94	31.5	94.6	±2.0
				63	94.5	±1.5
				125	94.4	±1.5
				250	94.3	±1.4
				500	94.2	±1.4
				1000	94.0	Ref
				2000	93.4	±1.6
				4000	93.0	±1.6

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137.2	dBA SPL	Fast	94	31.5	55.3	-39.4 ±2.0
				63	68.3	-26.2 ±1.5
				125	78.3	-16.1 ±1.5
				250	85.7	-8.6 ±1.4
				500	91.0	-3.2 ±1.4
				1000	94.0	Ref
				2000	94.6	+1.2 ±1.6
				4000	94.0	+1.0 ±1.6

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
35-137.2	dBC SPL	Fast	94	31.5	91.6	-3.0 ±2.0
				63	93.6	-0.8 ±1.5
				125	94.2	-0.2 ±1.5
				250	94.3	-0.0 ±1.4
				500	94.2	-0.0 ±1.4
				1000	94.0	Ref
				2000	93.3	-0.2 ±1.6
				4000	92.2	-0.8 ±1.6

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5. *Calibration Results Applied*

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:
The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.

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Certificate of Calibration

for

Description:	***Sound Level Calibrator***
Manufacturer:	***RION***
Type No.:	***NC-75***
Serial No.:	***34524163***

Submitted by:

Customer:	*Aurecon Hong Kong Limited*
Address:	*Unit 1608, 16/F, Tower B, Manulife Financial Centre,*
	223-231 Wai Yip Street, Kwun Tong,
	Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

☑ **Within**
☐ **Outside**

the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 22 July 2024

Date of calibration: 24 July 2024

Date of NEXT calibration: 23 July 2025

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: **24 July 2024**

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

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1. *Calibration Precautions:*

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. *Calibration Specifications:*

Calibration check

3. *Calibration Conditions:*

Air Temperature:	23.4 °C
Air Pressure:	1005 hPa
Relative Humidity:	56.7 %

4. *Calibration Equipment:*

Test Equipment	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV230128	HOKLAS

5. *Calibration Results*

5.1 Sound Pressure Level

Nominal value dB	Accept lower level dB	Accept upper level dB	Measured value dB
94.0	93.6	94.4	93.9

Note:
The values given in this certification only related to the values measured at the time of the calibration.

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Appendix F Event / Action Plan for Noise Exceedance

Event	Actions to be taken by Environmental Team as immediate as practicable	Actions to be taken by Independent Environmental Checker as immediate as practicable	Actions to be taken by Supervising Officer's Representative as immediate as practicable	Actions to be taken by Contractor as immediate as practicable
Action Level being exceeded	1. Notify IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, SO and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working .days after the exceedance is identified)	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the SO accordingly; 3. Advise the SO on the effectiveness of the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified).	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified).	1. Submit noise mitigation proposals to IEC and SO; 2. Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified)
Limit Level being exceeded	1. Inform IEC, SO, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and SO on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and SO informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Discuss amongst SO, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the SO accordingly. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and SO within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the SO until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)

Appendix G Noise Monitoring Data

Location: Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 1 (M1 / N_S1)

Monitoring date: 06, 12, 22 and 26 May 2025 (Daytime)

06&07, 12&13, 22&23 and 26&27 May 2025 (Evening & Nighttime)

Parameter: $L_{eq\ 30min}$ (Daytime), $L_{eq\ 5min}$ (Evening & Night time)

Noise source other than construction activities from the Project: Nil

Noise Monitoring Data:

Date	Start time		End time	Weather	$L_{eq\ 30min}$ dB(A) / $L_{eq\ 5min}$ dB(A)	Sound Level Meter Used	Calibrator Used
06 May 2025	14:10	-	14:40	Fine	58.1	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
06 May 2025	19:10	-	19:15	Fine	54.2	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	20:10	-	20:15		55.5		
	21:05	-	21:10		51.9		
07 May 2025	1:05	-	1:10	Fine	49.8	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	3:10	-	3:15		49.4		
	5:05	-	5:10		49.7		
12 May 2025	14:20	-	14:50	Fine	57.3	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
12 May 2025	19:05	-	19:10	Fine	52.6	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	20:15	-	20:20		52.8		
	21:15	-	21:20		50.0		
13 May 2025	1:15	-	1:20	Fine	46.2	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	3:30	-	3:35		48.9		
	5:20	-	5:25		54.5		
22 May 2025	14:14	-	14:44	Sunny	58.4	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
22 May 2025	19:14	-	19:19	Fine	57.0	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	20:09	-	20:14		56.4		
	21:14	-	21:19		56.5		
23 May 2025	1:19	-	1:24	Fine	48.8	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	3:14	-	3:19		48.7		
	5:14	-	5:19		49.7		
26 May 2025	14:21	-	14:51	Cloudy	58.2	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
26 May 2025	19:16	-	19:21	Fine	55.0	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	20:16	-	20:21		54.9		
	21:26	-	21:31		50.5		
27 May 2025	1:41	-	1:46	Fine	46.9	SVAN 971 (Serial No. 103482)	Rion NC-75 (No.34524163)
	3:21	-	3:26		47.8		
	5:31	-	5:36		53.0		

Location: Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 2 (M2 / N_S2)

Monitoring date: 06, 12, 22 and 26 May 2025 (Daytime)

06&07, 12&13, 22&23 and 26&27 May 2025 (Evening & Nighttime)

Parameter: $L_{eq\ 30min}$ (Daytime), $L_{eq\ 5min}$ (Evening & Night time)

Noise source other than construction activities from the Project: Nil

Noise Monitoring Data:

Date	Start time		End time	Weather	$L_{eq\ 30min}$ dB(A) / $L_{eq\ 5min}$ dB(A)	Sound Level Meter Used	Calibrator Used
06 May 2025	14:18	-	14:48	Fine	55.1	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
06 May 2025	19:13	-	19:18	Fine	53.5	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	20:18	-	20:23		52.3		
	21:18	-	21:23		51.3		
07 May 2025	1:08	-	1:13	Fine	49.5	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	3:18	-	3:23		48.9		
	5:03	-	5:08		49.2		
12 May 2025	14:30	-	15:00	Fine	57.9	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
12 May 2025	19:10	-	19:15	Fine	51.2	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	20:15	-	20:20		51.2		
	21:15	-	21:20		50.2		
13 May 2025	1:20	-	1:25	Fine	47.4	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	3:30	-	3:35		49.5		
	5:35	-	5:40		53.1		
22 May 2025	14:26	-	14:56	Sunny	56.3	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
22 May 2025	19:16	-	19:21	Fine	54.1	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	20:06	-	20:11		54.0		
	21:11	-	21:16		55.1		
23 May 2025	1:11	-	1:16	Fine	50.6	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	3:16	-	3:21		50.8		
	5:11	-	5:16		57.6		
26 May 2025	14:04	-	14:34	Cloudy	57.8	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
26 May 2025	19:14	-	19:19	Fine	52.9	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	20:14	-	20:19		53.4		
	21:24	-	21:29		50.1		
27 May 2025	1:44	-	1:49	Fine	48.4	SVAN 971 (Serial No. C132261)	Rion NC-75 (No.34524163)
	3:24	-	3:29		48.1		
	5:34	-	5:39		56.9		

Location: Shek Kwu Chau Treatment & Rehabilitation Centre Hostel 3 (M3 / N_S3)

Monitoring date: 07, 12, 22 and 27 May 2025 (Daytime)

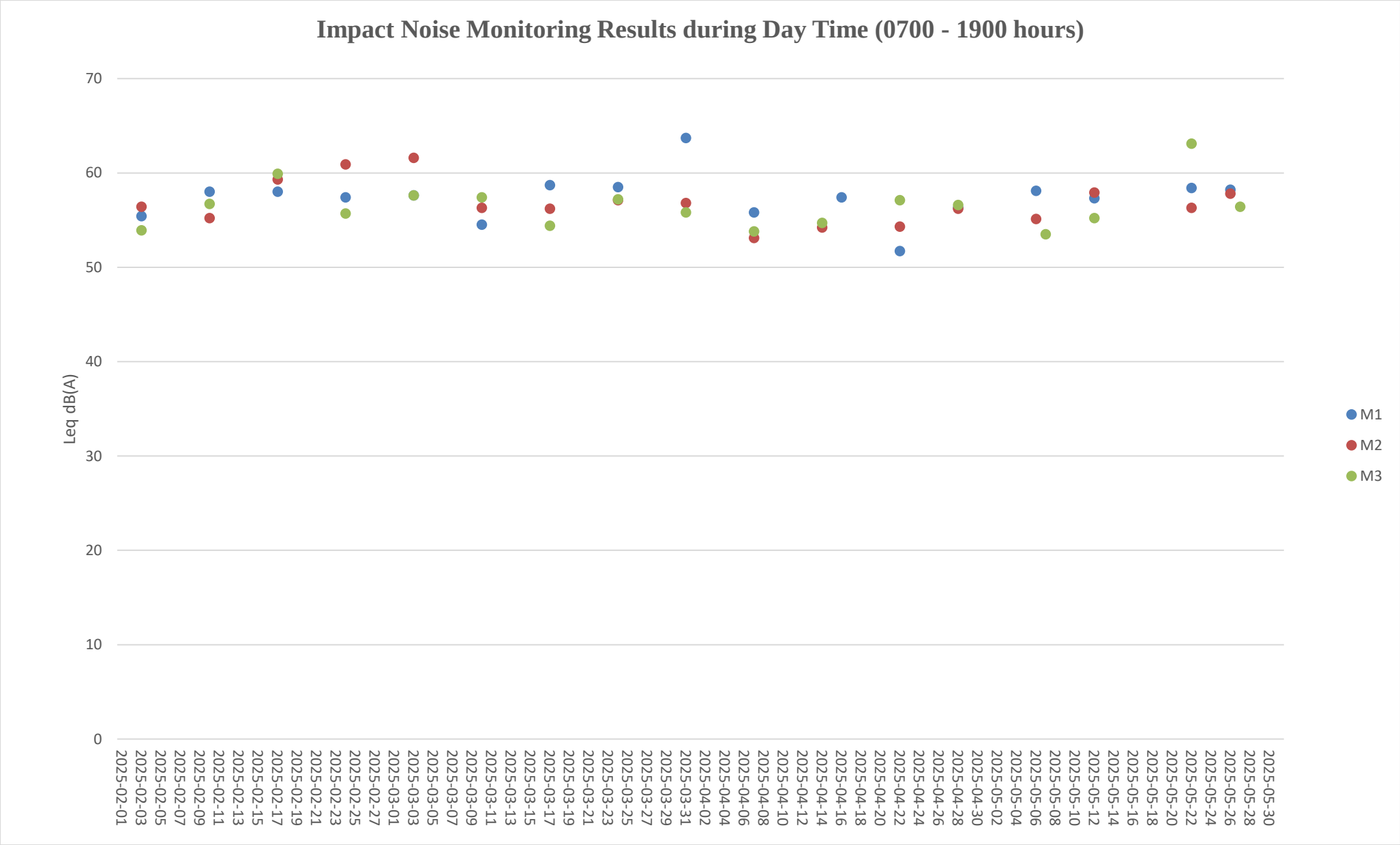
07&08, 12&13, 22&23 and 27&28 May 2025 (Evening & Nighttime)

Parameter: $L_{eq\ 30min}$ (Daytime), $L_{eq\ 5min}$ (Evening & Night time)

Noise source other than construction activities from the Project: Operation of nearby Air Quality Monitoring Station

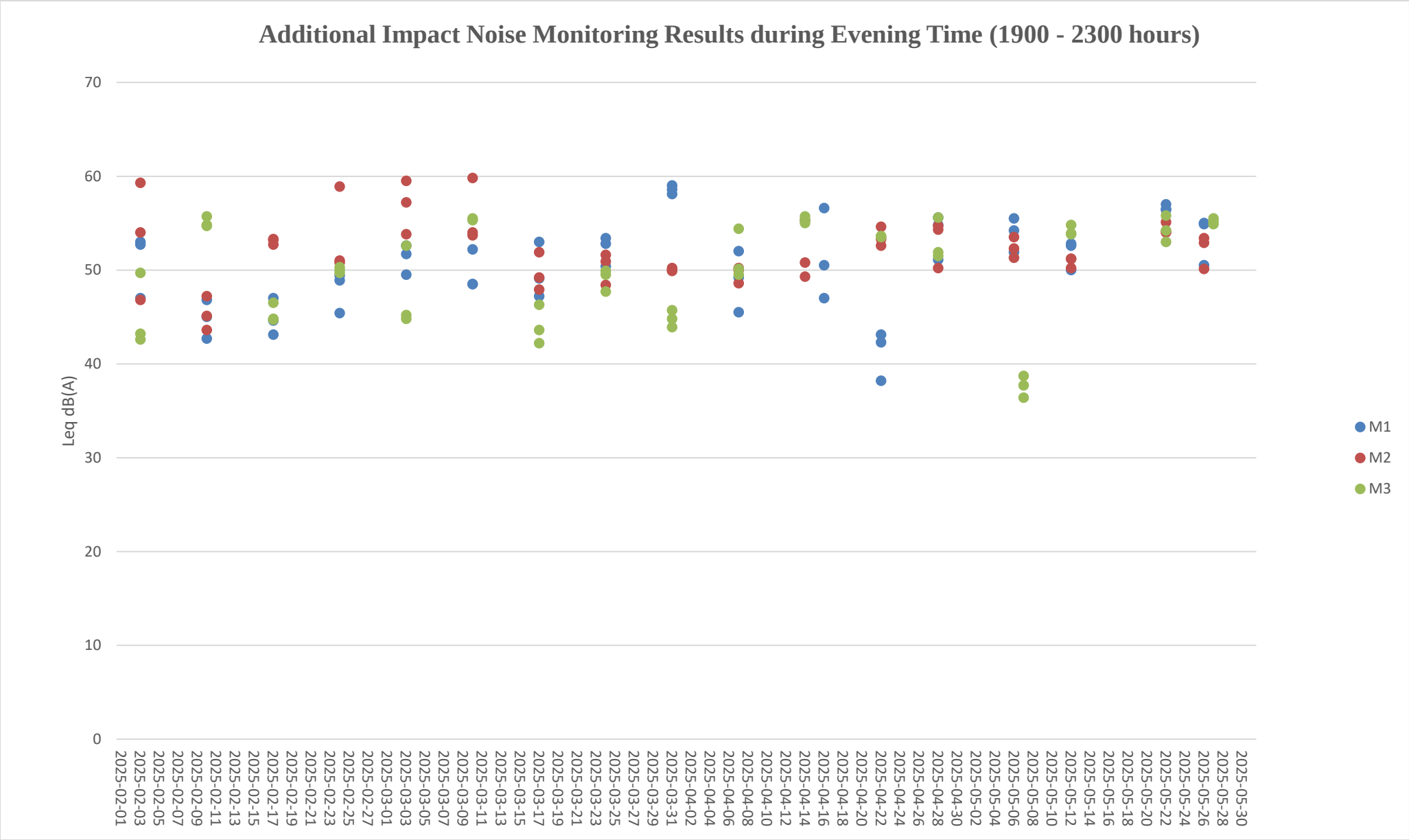
Noise Monitoring data:

Date	Start time		End time	Weather	$L_{eq\ 30min}$ dB(A) / $L_{eq\ 5min}$ dB(A)	Sound Level Meter Used	Calibrator Used
07 May 2025	14:24	-	14:54	Fine	53.5	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
07 May 2025	19:09	-	19:14	Fine	36.4	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	20:14	-	20:19		37.7		
	21:19	-	21:24		38.7		
08 May 2025	1:09	-	1:14	Fine	37.9	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	3:19	-	3:24		36.6		
	5:09	-	5:14		35.7		
12 May 2025	14:19	-	14:49	Fine	55.2	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
12 May 2025	19:09	-	19:14	Fine	53.9	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	20:14	-	20:19		54.8		
	21:14	-	21:19		53.8		
13 May 2025	1:24	-	1:29	Fine	56.1	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	3:24	-	3:29		55.3		
	5:39	-	5:44		53.8		
22 May 2025	14:13	-	14:43	Sunny	63.1	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
22 May 2025	19:18	-	19:23	Fine	55.8	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	20:08	-	20:13		53.0		
	21:13	-	21:18		54.2		
23 May 2025	1:13	-	1:18	Fine	51.7	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	3:13	-	3:18		54.2		
	5:13	-	5:18		55.3		
27 May 2025	14:16	-	14:46	Cloudy	56.4	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
27 May 2025	19:26	-	19:31	Fine	55.5	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	20:16	-	20:21		54.9		
	21:26	-	21:31		55.2		
28 May 2025	1:46	-	1:51	Fine	55.5	SVAN 971 (Serial No. C132269)	Rion NC-75 (No. 34524163)
	3:16	-	3:21		55.5		
	5:26	-	5:31		55.6		



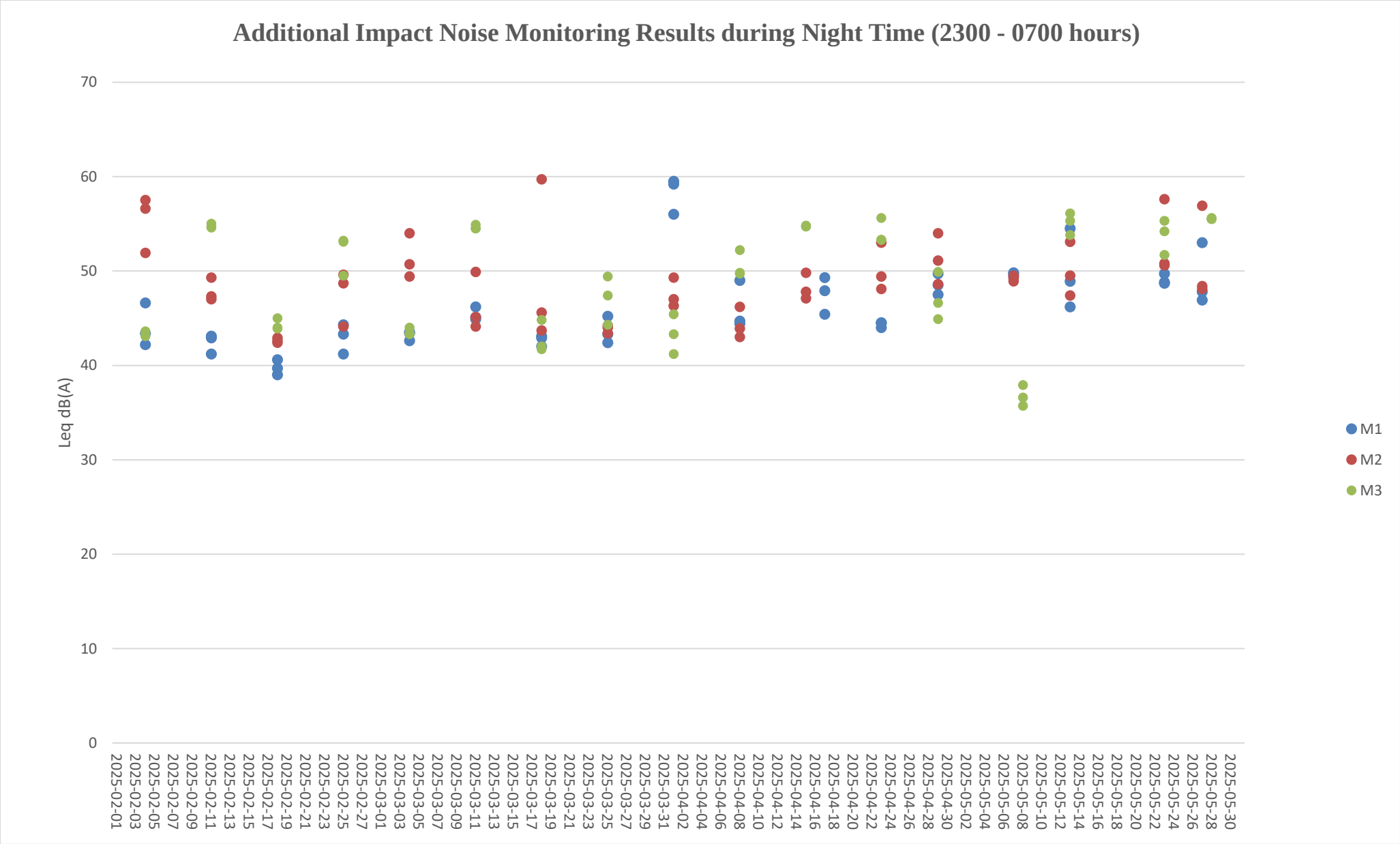
Remark:

1. Construction works carried out during reporting month refer to **Table 1.2**.
2. Weather condition recorded and noise source other than construction activities from the Project observed during the monitoring events refer to noise monitoring data summary in **Appendix G**.



Remark:

1. Construction works carried out during reporting month refer to **Table 1.2**.
2. Weather condition recorded and noise source other than construction activities from the Project observed during the monitoring events refer to noise monitoring data summary in **Appendix G**.



Remark:

1. Construction works carried out during reporting month refer to **Table 1.2**.
2. Weather condition recorded and noise source other than construction activities from the Project observed during the monitoring events refer to noise monitoring data summary in **Appendix G**.

Appendix H Waste Flow Table

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2018 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0065
Sep	0	0	0	0	0	2.9619	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	3.0771	0	0	0	0	0	0	0	0.0130
Nov	0	0	0	0	0	6.7871	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	59.0709	0	0	0	0	0	0.2000	0.8700	0
Total	0	0	0	0	0	71.8970	0	0	0	0	0	0.2000	0.8700	0.0195

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2019 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	82.6139	0	0	0	0	0	0	0	0.0065
Feb	0	0	0	0	0	46.7821	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	97.1000	0	0.7552	0	0.2560	0	0	0	0
Apr	0	0	0	0	0	58.0413	0	0	0	0	0	0	0	0
May	0	0	0	0	0	14.5625	0	1.4648	0	0	0	0	0	0.0065
Jun	0	0	0	0	0	0	0	6.8421	0	0	0	0	0	0
Sub-total	0	0	0	0	0	299.0998	0	9.0621	0	0.2560	0	0	0	0.0130
Jul	0	0	0	0	0	0	0	0.4289	0	0	0	0	8.4000	0.0130
Aug	0	0	0	0	0	2.5775	0	10.5600	0	0	0	0	0	0
Sep	0	0	0	0	0	6.1081	0	8.4704	0	0.3530	0	0	0	0.0065
Oct	0	0	0	0	0	9.8875	0	7.1900	0	0	0	0	0	0
Nov	0	0	0	0	0	38.3088	0	19.3105	0	0	0	0	0	0.0195
Dec	0	0	0	0	0	54.3469	0	26.9807	0	0	0	0	0	0.0910
Total	0	0	0	0	0	410.3286	0	82.0026	0	0.6090	0	0	8.4000	0.1430

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2020 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	37.1550	0	25.0812	0	0	0	0	0	0.0065
Feb	0	0	0	0	0	27.7910	0	18.8300	0	0	0	0	0	0.0065
Mar	0	0	0	0	0	22.5669	0	26.1586	0	0	0	0	7.2000	0.0065
Apr	0	0	0	0	0	12.7800	0	10.1825	0	0	0	0	0	0.0195
May	0	0	0	0	0	16.1138	0	24.3740	0	0.4220	0	0	0	0.0195
Jun	0	0	0	0	0	31.5177	0	28.3030	0	0	0	0	0	0.0065
Sub-total	0	0	0	0	0	147.9244	0	132.9293	0	0.4220	0	0	7.2000	0.0650
Jul	0	0	0	0	0	34.7856	17.0606	35.1800	0	0	0	0	0	0.0195
Aug	0	0	0	0	0	27.1375	65.5667	27.9335	0	0	0	0	0	0
Sep	0	0	0	0	0	11.9813	110.1328	43.5435	0	0	0	0	0	0.0195
Oct	0	0	0	0	0	2.8213	131.6600	22.5415	0	0	0	0	0	0.0130
Nov	0	0	0	0	0	0	162.1811	44.6475	0	0.4090	0	0	0.4000	0.0130
Dec	0	0	0	0	0	0	174.9800	57.8380	0	0	0	0	0	0.0130
Total	0	0	0	0	0	224.6501	661.5812	364.6133	0	0.8310	0	0	7.6000	0.1430

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2021 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	0	198.1311	36.4775	0	0	0	0	0	0.0065
Feb	0	0	0	0	0	0	143.9511	20.9960	0	0	0	0	0	0.6305
Mar	0	0	0	0	0	0	103.1833	23.4510	0	0	0	0	0	0.0130
Apr	0	0	0	0	0	0	161.2956	27.2810	0	0	0	0	0	0.0130
May	0	0	0	0	0	0	193.3300	20.5265	0	0	0	0	0	0.0715
Jun	0	0	0	0	0	0	141.5728	23.7825	0	0.2440	0	0	0	0.0455
Sub-total	0	0	0	0	0	0	941.4639	152.5145	0	0.2440	0	0	0	0.7800
Jul	0	0	0	0	0	0	105.1083	30.6065	0	0	0	0	0	0.0195
Aug	0	0	0	0	0	0	11.1822	7.5180	0	0	0	0	0	0.0130
Sep	0	0	0	0	0	0	0	5.7575	0	0	0	0	0.6000	0.0390
Oct	0	0	0	0	0	0	0	6.8885	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	6.2975	0	0.1610	0	0	0	0.0130
Dec	0	0	0	0	0	0	0	5.9235	0	0	0	0	0	0
Total	0	0	0	0	0	0	1057.7544	215.5060	0	0.4050	0	0	0.6000	0.8645

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3.
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2022 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	0	4.9389	2.7070	0	0.1550	0	0	0	0.0715
Feb	0	0	0	0	0	0	3.2478	4.0290	0	0	0	0.4000	0.2250	0
Mar	0	0	0	0	0	0	2.3422	2.7820	0	0	0	0	0	0.0780
Apr	0	0	0	0	0	0	18.2189	5.8100	0	0.3120	0	0	0	0.1495
May	0.0648	0	0	0	0.0648	0	16.7711	17.2320	0	0	0	0	0	0.0975
Jun	0.0037	0	0	0	0.0037	0.2115	1.1128	14.1470	36.3000	0.3890	0	0	1.7250	0.0975
Sub-total	0.0685	0	0	0	0.0685	0.2115	46.6317	46.7070	36.3000	0.8560	0	0.4000	1.9500	0.4940
Jul	25.7183	0	0	25.7183	0	0.1125	0.8333	17.5210	0	0.6400	0.0060	0	0	0.1235
Aug	13.2494	0	0	13.2494	0	0	0	24.5210	76.0300	1.8870	0	0	0	0.1170
Sep	24.9072	0	0	24.8494	0.0578	0	0	16.2815	72.0600	0.3060	0	0	0	0.1885
Oct	13.3139	0	0	13.3006	0.0133	0	0	11.8665	78.1000	0.5800	0	0	0	0.2405
Nov	26.5583	0	0	26.5583	0	0	0	7.2055	0	0	0	0	0	0.1105
Dec	29.1411	0	0	29.1411	0	0	0	3.5174	0	0	0	0	0	0.2535
Total	132.9567	0	0	132.8171	0.1396	0.3240	47.4650	127.6199	262.4900	4.2690	0.0060	0.4000	1.9500	1.5275

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3.
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2023 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	24.6728	0	0	24.6728	0	0	0	1.3545	0	0.3150	0	0	0	0.1365
Feb	26.7206	0	0	26.7206	0	0	0	1.8990	11.1501	0	0.0007	0	0	0.1235
Mar	22.1089	0	0	22.1089	0	0	0	0.9025	0	0	0	0	0	0.1105
Apr	36.0011	0	0	36.0011	0	0	0	0	0	0.2150	0	0	0	0.1365
May	21.8900	0	0	21.8900	0	0	0	0	0	0.3160	0	0	0	0.1495
Jun	8.8878	0	0	8.8878	0	0	0	0	0	0	0	0	0	0.1950
Sub-total	140.2812	0	0	140.2812	0	0	0	4.1560	11.1501	0.8460	0.0007	0	0	0.8515
Jul	2.2233	0	0	2.2233	0	0	0	0	0	0.3870	0	0	0	0.1495
Aug	4.4200	0	0	4.4200	0	0	0	0	0	0	0	0	0	0.2015
Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2860
Oct	0	0	0	0	0	0	0	0.4025	0	0.3770	0	0	0	0.2405
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3510
Dec	0	0	0	0	0	0	0	0.4960	0	0	0	0	0	0.3835
Total	146.9245	0	0	146.9245	0	0	0	5.0545	11.1501	1.6100	0.0007	0	0	2.4635

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3.
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2024 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	0	0	0	22.8700	0	0	0	0	0.4940
Feb	1.9433	0	0	1.9433	0	0	0	0	0	0.3190	0	0	0	0.2665
Mar	4.4367	0	0	4.4367	0	0	0	0	0	0	0	0	0	0.3640
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5915
May	0	0	0	0	0	0	0	0	0	0.6530	0	0	0	0.7410
Jun	5.0453	0	0	0	5.0453	0	0	0.5120	0	0	0	0	0	0.4940
Sub-total	11.4253	0	0	6.3800	5.0453	0	0	0.5120	22.8700	0.9720	0	0	0	2.9510
Jul	5.5519	0	0	2.1883	3.3636	0	0	0	0	0.6060	0	0	0	0.7215
Aug	2.1000	0	0	2.1000	0	0	0	0	0	0	0	0	0	0.6955
Sep	2.1894	0	0	2.1894	0	0	0	0	0	0	0	0	0	0.7540
Oct	0	0	0	0	0	0	0	0	0	0.2860	0	0	0	0.8775
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7995
Dec	0.0033	0	0	0	0.0033	0	0	0	0	0.4950	0	0	0	1.0985
Total	21.2699	0	0	12.8577	8.4122	0	0	0.5120	22.8700	2.3590	0	0	0	7.8975

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3.
(5) Materials recycled.

吉寶西格斯 - 振華聯營公司
Keppel Seghers - Zhen Hua Joint Venture

Monthly Summary Waste Flow Table for 2025 (year)

Project : Integrated Waste Management Facilities, Phase 1

Contract No.: EP/SP/66/12

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 (see Note 1)	Reused in the Contract	Reused in other Projects (see Note 4)	Disposed as Public Fill (see Note 4)	Imported Fill Sand (see Note 4)	Imported Fill Public fill (see Note 4)	Imported Fill Rock (see Note 4)	Metals (see Note 5)	Paper/ cardboard packaging (see Note 5)	Plastics (see Note 2, 5)	Chemical Waste		Others, e.g. general refuse (see Note 3)
	(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 ,000L)	(in ,000 m^3)
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8645
Feb	2.8956	0	0	0	2.8956	0	0	0	0	0.5800	0	0	0	0.8125
Mar	1.6508	0	0	0	1.6508	0	0	0	0	0.6090	0	0	0	1.3715
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2805
May	0	0	0	0	0	0	0	0	0	0	0	0	0.1000	1.6640
Jun														
Sub-total	4.5464	0	0	0	4.5464	0	0	0	0	1.1890	0	0	0.1000	5.9930
Jul														
Aug														
Sep														
Oct														
Nov														
Dec														
Total	4.5464	0	0	0	4.5464	0	0	0	0	1.1890	0	0	0.1000	5.9930

Notes:
(1) Broken concrete for recycling into aggregates.
(2) Plastics refer to plastic bottles/ containers, plastic sheets/ foam from packaging materials.
(3) Use the conversion factor : 1 full load of dumping truck being equivalent to 6.5m^3 by volume.
(4) Use the conversion factor: sand density = 1.6T/m^3, public fill density = 1.8T/m^3 and rock density = 2T/m^3.
(5) Materials recycled.

Appendix I Event / Action Plan for Coral Monitoring

Event	Action			
	ET Leader	**IEC**	**SO**	**Contractor**
Action Level Exceedance	1. Check monitoring data 2. Inform the IEC, SO ,and Contractor of the findings; 3. Increase the monitoring to at least once a month to confirm findings; 4. Propose mitigation measures for consideration	1. Discuss monitoring with the ET and the Contractor; 2. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise the SO accordingly.	1. Discuss with the IEC additional monitoring requirements and any other measures proposed by the ET; 2. Make the agreement on the measures to be implemented.	1. Inform the SO and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.
Limit Level Exceedance	1. Undertake Steps 1-4 as in the Action Level Exceedance. If further exceedance of Limit Level, propose enhancement measures for consideration.	1. Discuss monitoring with the ET and the Contractor; 2. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise the SO accordingly.	1. Discuss with the IEC additional monitoring requirements and any other measures proposed by the ET; 2. Make the agreement on the measures to be implemented.	1. Inform the SO and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

Appendix J Event / Action Plan for White-Bellied Sea Eagle

Event	Action		
	Environmental Team	**Audit Team**	**Contractor**
Absence of White-bellied Sea Eagle during a whole day of monitoring.	Inform audit team. Increase monitoring frequency to daily.	Inform site engineer and contractor. If the absence remains: • Review construction activities and noise monitoring records of the associated period; • Identify potential causes of the absence; • Propose remedial measures, such as change of construction method and sequence; • Confirm the feasibility of the proposed remedial measures with site engineer and contractor; • Discuss with environmental team about the effectiveness of the proposed remedial measures.	Implement the agreed remedial measures.

Appendix K Exceedance Report

Statistical Summary of Exceedances in the Reporting Period

Noise (Day Time)			
Location	**Action Level**	**Limit Level**	**Total**
M1	0	0	0
M2	0	0	0
M3	0	0	0
Noise (Evening Time)			
Location	**Action Level**	**Limit Level**	**Total**
M1	0	0	0
M2	0	0	0
M3	0	0	0
Noise (Night Time)			
Location	**Action Level**	**Limit Level**	**Total**
M1	0	0	0
M2	0	0	0
M3	0	0	0

Appendix L Complaint Log

Statistical Summary of Environmental Complaints

Reporting Period	**Environmental Complaint Statistics**		
	Frequency	**Cumulative**	**Complaint Nature**
1 May 2025 - 31 May 2025	0	4	N/A

Statistical Summary of Environmental Summons

Reporting Period	**Environmental Summons Statistics**		
	Frequency	**Cumulative**	**Details**
1 May 2025 - 31 May 2025	0	0	N/A

Statistical Summary of Environmental Prosecution

Reporting Period	**Environmental Prosecution Statistics**		
	Frequency	**Cumulative**	**Details**
1 May 2025 - 31 May 2025	0	0	N/A

Appendix M Impact Monitoring Schedule of Next Reporting Month

Impact Monitoring Schedule for IWMF

Jun-25

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
	Impact Daytime & Evening Noise monitoring for M2 & M3	Impact Night time Noise monitoring for M2 & M3 Daytime & Evening Noise monitoring for M1	Impact Night time Noise monitoring for M1			
8	9	10	11	12	13	14
	Impact Daytime & Evening Noise monitoring for M1, M2 & M3	Impact Night time Noise monitoring for M1, M2 & M3			Impact Ecology monitoring for WBSE 26th Quarterly Coral Monitoring at Indirect Impact Site and Control Site	
15	16	17	18	19	20	21
	Impact Daytime & Evening Noise monitoring for M1, M2 & M3	Impact Night time Noise monitoring for M1, M2 & M3				
22	23	24	25	26	27	28
		Impact Daytime & Evening Noise monitoring for M1, M2 & M3	Impact Night time Noise monitoring for M1, M2 & M3			
29	30					

Remarks:
1.Daytime Noise Monitoring (07:00-1900), Evening Time Noise Monitoring (1900-2300), Night Time Noise Monitoring (2300-0700).
2.Water Quality Monitoring for S1,S2 and S3 will only conduct during DCM works, refer to Detailed DCM Plan.
3.No marine construction work is tentatively scheduled to be carried out in June 2025.