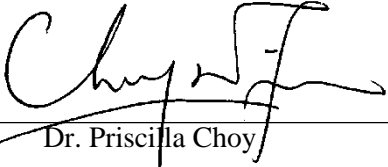


Civil Engineering and Development Department

**Service Contract No. NDO 04/2019
Environmental Team for Environmental
Monitoring and Audit Works in
Construction Phase for the First Phase
Development of Kwu Tung North and
Fanling North New Development Areas**

**Monthly Environmental Monitoring and
Audit Report for February 2023**

(Version 1.0)

| |
|--|
| <p>Certified By</p> <p> Dr. Priscilla Choy (Environmental Team Leader)</p> |
|--|

REMARKS:

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

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

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Agreement No. CE 33/2019 (EP)

Independent Environmental Checker for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas – Investigation

Monthly Environmental Monitoring and Audit Report No. 40 (February 2023)

16 March 2023

BY EMAIL

Dear Sir,

We refer to email of 15 March 2023 attaching the Monthly Environmental Monitoring and Audit Report No. 40 prepared by the Environmental Team (ET) of the captioned.

We would like to inform you that we have no adverse comment on the captioned submission. Therefore, we write to verify the captioned submission in accordance with the Condition 3.4 of the Environmental Permit no. EP-466/2013/A, EP-467/2013/A, EP-468/2013/A, EP-469/2013, EP-470/2013A, EP-473/2013/A, EP-475/2013/A and EP-546/2017.

Should you have any queries, please contact the undersigned or our Ms. Liz Lo at 2828 5751.

Yours faithfully,
For and on behalf of the
Mott MacDonald Hong Kong Limited



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EXECUTIVE SUMMARY**Introduction**

1. This is the 40th monthly Environmental Monitoring and Audit (EM&A) Report for the First Phase Development of Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs), comprising the Advance Works and First Stage Works (hereinafter called the “the Project”). This report is prepared by Wellab Limited under “Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of KTN and FLN NDAs” (hereinafter called the “Service Contract”). This report documents the findings of EM&A works conducted in February 2023.
2. During the reporting month, the following Works Contracts under relevant Environmental Permit(s) were undertaken for the Project:

Table I Works Contracts under relevant Environmental Permit(s) in the Reporting Month

| Works Contracts | Environmental Permit No. | Designated Project (DP) | Commencement date of construction |
|--|--------------------------|--|-----------------------------------|
| Contract No. ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Works | EP-466/2013/A | Castle Peak Road Diversion | 12 August 2020 |
| | EP-467/2013/A | Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement | 12 August 2020 |
| | EP-468/2013/A | Kwu Tung North New Development Area Road D1 to D5 | 1 June 2020 |
| | EP-470/2013/A | Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works | 23 March 2020 |
| Contract No. ND/2019/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development Area and Shek Wu Hui | EP-469/2013 | Sewage Pumping Stations in Kwu Tung North New Development Area | 28 October 2020 |
| Contract No. ND/2019/03 – Kwu Tung North and Fanling North New Development Areas, Phase 1: Development of Long Valley Nature Park | EP-468/2013/A | Kwu Tung North New Development Area Road D1 to D5 | 3 July 2020 |
| | EP-473/2013/A | Fanling Bypass Eastern Section (New Road) | 6 October 2020 |
| Contract No. ND/2019/04 – Fanling North New Development Area, | EP-473/2013/A | Fanling Bypass Eastern Section (New Road) | 23 February 2021 |

| Works Contracts | Environmental Permit No. | Designated Project (DP) | Commencement date of construction |
|--|--|---|--|
| Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau) | EP-546/2017 | Fanling North Temporary Sewage Pumping Station | 16 February 2021 |
| Contract No. ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shung Him Tong to Kau Lung Hang) | EP-473/2013/A | Fanling Bypass Eastern Section (New Road) | 1 August 2020 |
| Contract No. ND/2019/06 – Fanling North New Development Area, Phase 1: Re-provisioning of North District Temporary Wholesale Market for Agricultural Products | EP-475/2013/A | Reprovision of temporary Wholesale Market in Fanling North New Development Area | 29 October 2019 |
| Contract No. ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works | Works area not under relevant Environmental Permit for Phase 1 of the Project. | | 1 March 2021 |

Environmental Monitoring and Audit Progress

3. A summary of the EM&A activities in this reporting month is listed in **Table II** below:

Table II Summary Table for EM&A Activities in the Reporting Month

| EM&A Activities | Monitoring Station (s) | Works Contracts | | | | | | | |
|---|--|----------------------------|----------------------------|---|--------------------------------|--------------------------------|------------|------------|-------------------------------|
| | | ND/2019/01 | ND/2019/02 | ND/2019/03 | ND/2019/04 | ND/2019/05 | ND/2019/06 | ND/2019/07 | |
| 1-hr Suspended Particulates Monitoring | Total | N/A | N/A | 1, 7, 13, 17 and 23 Feb 23 | 1, 7, 13, 17 and 23 Feb 23 | N/A | N/A | N/A | |
| | (TSP) | | | FLN-DMS3 | N/A | N/A | | | 1, 7, 13, 17 and 23 Feb 23 |
| | FLN-DMS5 | | | 6, 10, 16, 22 and 28 Feb 23 | 6, 10, 16, 22 and 28 Feb 23 | N/A | | | |
| | KTN-DMS4(B) | | | 6, 10, 16, 22 and 28 Feb 23 | N/A | | | | |
| 24-hr Monitoring | TSP | N/A | N/A | 6, 10, 16, 22 and 28 Feb 23 | 6, 10, 16, 22 and 28 Feb 23 | N/A | N/A | N/A | |
| | FLN-DMS3 | | | N/A | N/A | 6, 10, 16, 22 and 28 Feb 23 | | | |
| | FLN-DMS5A | | | 6, 10, 16, 22 and 28 Feb 23 | 6, 10, 16, 22 and 28 Feb 23 | N/A | | | |
| | KTN-DMS4(B) | | | 6, 10, 16, 22 and 28 Feb 23 | N/A | | | | |
| Noise Monitoring | CP-FLN-NMS1 | N/A | | | 1, 7, 13 and 23 Feb 23 | | | N/A | |
| | CP-FLN-NMS2 | N/A | | | | 1, 7, 13 and 23 Feb 23 | N/A | | |
| | CP-KTN-NMS2 | 6, 16, 22 and 28 Feb 23 | N/A | N/A | | | | | |
| | CP-KTN-NMS3 | | | | | | | | |
| | CP-KTN-NMS5 | | | | | | | | |
| | CP-KTN-NMS6 | N/A | 6, 16, 22 and 28 Feb 23 | | | | | | |
| Ecological Survey | Monitoring of Measures to Minimise Disturbance to Water Birds on Ng Tung River, Sheung Yue River, and Long Valley | N/A* | N/A* | 2, 3, 9, 10, 16, 17, 23 and 24 February 23 | 2, 9, 16 and 23 February 23 | N/A* | N/A* | N/A* | |

| | | | | | | | | |
|---|--|----------------------------|--|----------------------------|---|---|------------------------|-------------------------|
| | Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Siu Hang San Tsuen Stream | N/A* | N/A* | N/A* | N/A* | N/A* | N/A* | N/A* |
| | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution | 15 and 20 February 23 | 15 and 20 February 23 | 20 February 23 | 20 February 23 | 20 February 23 | N/A* | N/A* |
| 24-hr RSP (Ambient Arsenic) Monitoring for Land Contamination | | 2, 8, 14, 20 and 24 Feb 23 | N/A | 2, 8, 14, 20 and 24 Feb 23 | N/A | N/A | N/A | N/A |
| Water Quality Monitoring | | N/A | 1, 3, 6, 8, 10, 13, 15, 17, 20, 22, 24 and 27 Feb 23 | N/A | 1, 3, 6, 8, 10, 13, 15, 17, 20, 22, 24 and 27 Feb 23 | N/A | N/A | N/A |
| Landfill Gas Monitoring | | 15 Feb 23 | N/A | N/A | N/A | N/A | N/A | N/A |
| Built Heritage Monitoring | | N/A | N/A | N/A | Daily assessment subject to construction works conducted within assessment area | Daily assessment subject to construction works conducted within assessment area | N/A | N/A |
| Environmental Site Inspection | | 7, 16, 21 and 28 Feb 23 | 1, 8, 15 and 20 Feb 23 | 3, 10, 17 and 21 Feb 23 | 2, 9, 17 and 24 Feb 23 | 6, 16, 21 and 27 Feb 23 | 2, 9, 17 and 24 Feb 23 | 3, 10, 17 and 24 Feb 23 |

Remarks:

N/A – No relevant monitoring is required according to the updated EM&A Manual

N/A* – No relevant monitoring is required according to the Baseline Ecological Monitoring Plan (Table 3.1)

[1] Since the distance between monitoring station CP-KTN-NMS2 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03

[2] Since the distance between monitoring station CP-KTN-NMS3 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03

[3] Since the distance between monitoring station CP-KTN-NMS1 and site boundary of ND/2019/02 under EP-469/2013 exceeds 300m, the monitoring station is not applicable to ND/2019/02

[4] Since the distance between monitoring station FLN-DMS1 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05

[5] Since the distance between monitoring station FLN-DMS3 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04

[6] Since the distance between monitoring station FLN-DMS5 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05

[7] Since the distance between monitoring station CP-FLN-NMS2 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04

[8] Since the distance between monitoring station CP-FLN-NMS1 and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03

Breaches of Action and Limit Levels

4. Summary of the environmental exceedances of the reporting month is tabulated in **Table III**.

Table III Summary Table for Events Recorded in the Reporting Month

| Environmental Monitoring | Parameter | No. of non-project related Exceedances | | Total No. of non-project related Exceedances | No. of Exceedance related to the Construction Works of the Contract | | Total No. of Exceedance related to the Construction Works of the Contract |
|------------------------------|-----------------------------|--|-------------|--|---|-------------|---|
| | | Action Level | Limit Level | | Action Level | Limit Level | |
| Air Quality | 1-hr TSP | 0 | 0 | 0 | 0 | 0 | 0 |
| | 24-hr TSP | 0 | 0 | 0 | 0 | 0 | 0 |
| | 24-hr RSP (Ambient Arsenic) | 0 | 0 | 0 | 0 | 0 | 0 |
| Noise | L _{eq} (30min) | 1 | 0 | 1 | 0 | 0 | 0 |
| Water Quality ^[1] | DO | 0 | 1 | 1 | 0 | 0 | 0 |
| | Turbidity | 0 | 0 | 0 | 0 | 0 | 0 |
| | SS | 0 | 0 | 0 | 0 | 0 | 0 |
| | Arsenic | 0 | 0 | 0 | 0 | 0 | 0 |
| Landfill Gas | O ₂ | 0 | 0 | 0 | 0 | 0 | 0 |
| | CH ₄ | | | | | | |
| | CO ₂ | | | | | | |
| Cultural heritage | Built Heritage Monitoring | 0 | 0 | 0 | 0 | 0 | 0 |

Air Quality

5. All construction air quality monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Construction Noise

6. All construction noise monitoring was conducted as scheduled in the reporting month. One Action Level exceedance was recorded.

Water Quality

7. All additional water quality monitoring was conducted as scheduled in the reporting month. One (1) Limit Level for DO of impact water quality monitoring was recorded. No construction of channel for alternation of natural streams was carried out in the reporting month. Therefore, no water quality

monitoring was conducted according to the Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA). Relevant details are given in Section 5.

Land Contamination

8. All ambient arsenic monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.

Landfill Gas Monitoring

9. Monitoring of landfill gas in the reporting month was carried out by the Contractor under ND/2019/01 at excavation location Portion 6b. No Limit Level exceedance was recorded.

Built Heritage Monitoring

10. Built heritage monitoring was carried out in the reporting month by the Contractor under ND/2019/05 for surveyed cultural heritage. No Limit Level exceedance was recorded.

Ecological Monitoring

11. All ecological monitoring was conducted as scheduled in the reporting month. The monitoring result is shown in **Appendix L** and will be compared with the Action/Limit level after the issuance of Final Baseline Ecological Report.

Complaint Log

12. One environmental complaint was received in the reporting month. The complaint regarding piling noise is for ND/2019/01, which was referred by EPD on 8 Feb 2023 for the complaint case received by EPD on 6 Feb 2023. The investigation of the complaint regarding polluting effluent discharged for ND/2019/05 in the last report was completed in February. Both environmental complaints mentioned are investigated and reported in this report.

Notification of Summons and Successful Prosecutions

13. No notification of summons or successful prosecutions was received in the reporting month.

Reporting Changes

14. This report has been prepared in compliance with the reporting requirements for the subsequent monthly EM&A Report as required by the “Updated Environmental Monitoring and Audit Manual for Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas” (Updated EM&A Manual).

Future Key Issues

15. The major site activities for the coming three months are shown in **Table IV**.

Table IV Summary Table for Site Activities in the coming Three Months

| Contract No. | Site Activities (March to May 2023) |
|---------------------|--|
| ND/2019/01 | <ul style="list-style-type: none"> (a) Site Clearance, tree felling, removal of existing structures, site formation and G.I works in Portion 1a (b) Excavation, backfilling, drainage works, construction of hoarding/fencing, road works and noise barrier in Portion 1b (c) Site clearance, site formation and socket H piling in Portion 1c (d) Temporary storage of material and site formation in Portion 1e (e) Site clearance, tree felling, site formation work and construction of subway in Portion 2 (f) Excavation, backfilling and drainage works in Portion 3 (g) Drainage works, watermain, excavation, backfilling, road works, sheet piling and pipe jacking in Portion 5 (h) Drainage works, backfilling, road works and watermain work in Portion 6a (i) Operation of HAC treatment facility in Portion 6b (j) Site formation, sheet piling, excavation and drainage works in Portion 7 (k) Construction of retaining wall, RC construction of flushing water service reservoir and fresh water reservoir, pipe pile wall of WSD's maintenance access and backfilling works in Portion 8a (l) ELS for jacking pit at LWSC's car park and trenchless work, excavation and watermain construction and trial pit in Portion 8b (m) Sheet piling, excavation, drainage works and construction of retaining wall, soil nail and watermain construction in Portion 9b (n) Stockpile of soil in Portion 9c (o) Utilities works in Portion 10a (p) Sheet piling, excavation and drainage works in Portion 10b (q) Site clearance, tree felling, remove of existing structure in Portion 13 |
| ND/2019/02 | <ul style="list-style-type: none"> (a) Pipe Jacking (b) Backfilling (c) Concreting (d) Bedding & Pipe Laying (e) ELS (f) Sheet Pile Installation (g) Cut and Fill of Slope |
| ND/2019/03 | <ul style="list-style-type: none"> (a) Portion 1 & Portion 1A <ul style="list-style-type: none"> - Road work at Yin Kong Road - Construction of Dwarf Wall (b) Portion 2 to Portion 20C <ul style="list-style-type: none"> - Erection of Permanent Boundary Structure - Construction of Type 1 Storage House - Construction of Type 2 Storage House - Construction of Tea House - Construction of Composting Facility - Construction works of Bird Hide - Construction works of Outdoor Classroom - Wetland Creation & Restoration works - Construction of Compacted Earth Path/ Walkway - Construction of Wetland Boardwalk |

| Contract No. | Site Activities (March to May 2023) |
|--------------|--|
| ND/2019/04 | <ul style="list-style-type: none"> (a) Tree Felling (b) Pile Cap (c) Bored Piling (d) Excavation (e) Sheet Piling (f) Drainage Works (g) Grouting (h) Road works (i) ELS (j) Pre-drill |
| ND/2019/05 | <ul style="list-style-type: none"> (a) <u>North Team Works</u> <ul style="list-style-type: none"> - ELS works and Pile cap construction at B2-01, B2-02, B2-03, C1-01a, C2-03b, C2-04b, C3-01b & D2-01 - Pier construction at C1-01a, C3-01b, C2-03b, C2-04b, D2-01 & E2-01. - Pier head construction at C3-01b, C1-01a & E2-01 - Cross head construction at C2-02, C3-02. - Slope works, road works and drainage work at Jockey Club Road (3SW-C/F63), Tong Hang Junction and Portion VI (FS28 & 29) (b) <u>Viaduct Works</u> <ul style="list-style-type: none"> - Segment fabrication for bridge C2 & D1 & E1. - Segments erection for bridges C3, D1 and E1. - 3rd set FT design and fabrication. To be used in Feb-2023. - 4th set FT design and fabrication. To be used in May-2023. - Complete construction of pile cap D2-01 and installation of cast-in rotation bridge components. - Complete erection of tower crane at E2-02. - Complete segment erection for C4-02 T-Span. - Complete segment casting for E2-02 and E3-03. (b) <u>South Team Works</u> <ul style="list-style-type: none"> - TWSRW – Road work (section ch 250 to 450). - TWSR (West) – Slope work for FS06. Soil nail for FS04. 132KV ducts laying at FS04. Outage of 132 kv. - TWSR (East) – Form D300 new road, BBI footing - HKY FB (East) – Erection of stair case - HKY FB (West) – Construction of LT2 - E2-03 – Pier construction. - E3-05M and E4-01 – cap construction. - NB109 – bay 5~8, base slab construction. |
| ND/2019/06 | The construction phase has been completed and handed over to AFCD since 4 April 2022. |
| ND/2019/07 | <ul style="list-style-type: none"> (a) Road works at Portion 1, 4 and 5 (b) C&D waste disposal at Portion 1, 2, 4 and 5 (c) Construction of box culvert at Portion 2 (d) Filling works at Portion 2 and 4 (e) Construction of site haul road at Portion 4 (f) Drainage works, Sewerage works at Portion 1, 3, 4 and 5 (g) Mini piling works at Portion 4 (h) Construction of noise barrier at Portion 4 and 5 (i) Waterworks at Portion 1 |

1 INTRODUCTION

- 1.1 Wellab Limited was commissioned by Civil Engineering and Development Department (CEDD) as the Environmental Team to undertake the Environmental Monitoring and Audit (EM&A) services for the Works Contracts involved in the implementation of the First Phase Development of Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs) Project to ensure that the environmental performance of the Works Contracts complies with the requirements specified in the Environmental Permits (EPs), Updated EM&A Manual, Environmental Impact Assessment (EIA) Report of the KTN FLN NDAs project and other relevant statutory requirements.

Purpose of the report

- 1.2 This is the 40th EM&A Report which summarises the key findings of the EM&A programme in February 2023.

Structure of the report

- 1.3 The structure of the report is as follows:

- Section 1: **Introduction** - purpose and structure of the report.
- Section 2: **Project Information** - summarises background and scope of the Project, site description, project organisation and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licences during the reporting month.
- Section 3: **Air Quality Monitoring** - summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
- Section 4: **Noise Monitoring** - summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
- Section 5: **Water Quality Monitoring** - summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels and Event / Action Plans.
- Section 6: **Land Contamination (Ambient Arsenic Monitoring)** - summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequencies, monitoring locations, Action and Limit Levels, monitoring results and Event / Action Plans.
- Section 7: **Landfill Gas Monitoring** - summarises the monitoring requirement, monitoring parameters and frequency, monitoring locations, Action and Limit Levels, monitoring results and observation, and Event / Action Plans.
- Section 8: **Built Heritage Monitoring** – summarises the monitoring requirement, monitoring parameters and frequency, monitoring locations, Action and Limit Levels, monitoring results and observation.
- Section 9: **Ecological Monitoring** – summarises the details of monitoring of measures to minimise disturbance to waterbirds in Ng Tung River, Sheung Yue River, Shek Sheung River and Long Valley, monitoring of measures to

minimise impacts on ecological sensitive habitats from disturbance and pollution during the reporting month.

- Section 10: **Environmental Site Inspection** - summarises the audit findings of the weekly site inspections undertaken within the reporting month.
- Section 11: **Environmental Non-conformance** - summarises any monitoring exceedance, environmental complaints, environmental summons and successful prosecutions within the reporting month.
- Section 12: **Future Key Issues** - summarises the impact forecast, proposed mitigation measures and monitoring schedule for the upcoming months.
- Section 13: **Conclusions and Recommendations**

2 PROJECT INFORMATION

Background

- 2.1 The Kwu Tung North (KTN) and Fanling North (FLN) New Development Areas (NDAs) are one of the important sources of land and housing supply in the medium and long term. The development of the KTN and FLN NDAs will be implemented in phase for full completion by 2031. The Phase 1 of the NDAs development, comprising the Advance Works and First Stage Works, is targeted to be implemented from the second half of 2019 progressively. The Advance and First Stage Works would include site formation, engineering infrastructure works (including roads, drainage, sewerage, waterworks, landscaping works, pumping stations, and fresh water and flushing water service reservoirs), soil remediation, reprovisioning of North District Temporary Wholesale Market, development of a nature park at Long Valley and implementation of environmental mitigation measures.
- 2.2 The scope of works under the Advance and First Stage Works comprises the following:
- a) The Advance Works (PWP item No. 7747CL-2) consist of:
 - i) site formation of land (including soil remediation) in KTN and FLN NDAs for housing, community facilities and engineering infrastructure;
 - ii) construction of roads including the eastern section of Fanling Bypass (FLBP(E)) connecting the FLN NDA to Fanling Highway and other roads with footpaths and cycle tracks, and associated junction/ road improvements;
 - iii) engineering infrastructure works including drainage. Sewerage (including two sewage pumping stations), waterworks (including a fresh water service reservoir and a flushing water service reservoir in the KTN NDA), landscape works and slopeworks;
 - iv) part expansion and upgrading of Shek Wu Hui Sewage Treatment Works (SWHSTW);
 - v) reprovisioning works; and
 - vi) implementation of environmental mitigation measures and environmental monitoring and audit (EM&A) programme for the works mentioned in (i) to (v) above.
 - b) The First Stage Works (PWP item No. 7759CL) consist of:
 - i) development of a nature park at Long Valley including provision of a visitor centre and a footbridge spanning across Sheung Yue River for connection between these two facilities;
 - ii) reprovisioning of two egret sites in the FLN NDA and enhancement works to an existing egret site in the KTN NDA;
 - iii) site formation of land for a village resite area and a district police station in the KTN NDA;
 - iv) engineering infrastructure works including roads, drainage, sewerage, waterbirds, and landscape works; and
 - v) implementation of environmental mitigation measures and environmental monitoring and audit (EM&A) programme for the works mentioned in (i) to (iv) above.

- 2.3 The Project which covers KTN and FLN NDAs is a designated project (DP) under Schedule 3 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). In October 2013, the EIA Report (AEIAR-175/2013) for the Project was approved by the Director of Environmental Protection pursuant to the EIA Ordinance. The relevant EPs under the Project and the respective Work Contracts are summarised in **Tables 2.1a** and **2.1b**.

Table 2.1a Summary of EPs under the Project and the Respective Work Contracts

| EP No. | Designated Project | C1 | C2 | C3 | C5 A | C5 B | C6 | C7 |
|---------------|--|----|----|----|------|------|----|----|
| EP-466/2013/A | Castle Peak Road Diversion | ✓ | | | | | | |
| EP-467/2013/A | Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement | ✓ | | | | | | |
| EP-468/2013/A | Kwu Tung North New Development Area Road D1 to D5 | ✓ | | ✓ | | | | |
| EP-469/2013 | Sewage Pumping Stations in Kwu Tung North New Development Area | | ✓ | | | | | |
| EP-470/2013/A | Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works | ✓ | | | | | | |
| EP-473/2013/A | Fanling Bypass Eastern Section | | | ✓ | ✓ | ✓ | | |
| EP-475/2013/A | Reprovision of temporary Wholesale Market in Fanling North New Development Area | | | | | | ✓ | |
| EP-546/2017 | Fanling North Temporary Sewage Pumping Station | | | | ✓ | | | |

Notes: C1: ND/2019/01 C2: ND/2019/02 C3: ND/2019/03 C5A: ND/2019/04
C5B: ND/2019/05 C6: ND/2019/06 C7: ND/2019/07

Table 2.1b Summary of Scope of Works under concerned EP

| Environmental Permit (EP) No. | Work Contract(s) | Scope of Works under concerned EP(s) | Site Layout Plan under concerned EP(s) |
|-------------------------------|------------------|---|--|
| EP-466/2013/A(Part) | C1 | Realign Castle Peak Road and join with the Pak Shek Au Interchange at the western end | Figure 12 |
| EP-467/2013/A(Part) | C1 | Construction of new primary distributor road (P1) within Kwu Tung North New Development Area | Figure 13 |
| EP-468/2013/A(Part) | C1 | Construction of new primary distributor roads (D1, D3, D4 and part of D5) within Kwu Tung North New Development Area | Figure 14 |
| | C3 | Development of a nature park at Long Valley and ecological mitigation and enhancement works for the nature park (Condition 2.9) | Figure 15 |
| EP-469/2013(Part) | C2 | Construction of one sewage pumping station in Kwu Tung North with installed capacity of more than 2,000 m3 per day | Figure 16 |

| Environmental Permit (EP) No. | Work Contract(s) | Scope of Works under concerned EP(s) | Site Layout Plan under concerned EP(s) |
|-------------------------------|------------------|--|--|
| EP-470/2013/A(Part) | C1 | Construction of service reservoir and watermain for the reuse of treated sewage effluent for reuse in Kwu Tung North Development Areas | Figure 17 |
| EP-473/2013/A(Part) | C3 | Establishment of alternative egretry sites and enhance the existing egretry site at Ho Sheung Heung and/or its vicinity (Condition 2.7) | Figure 18 |
| EP-473/2013/A(Part) | C5A | Construction of new district distributor inside FLN NDA, which provides a linkage between the Man Kam To Road and the proposed Fanling Bypass Eastern Section | Figure 19 |
| EP-473/2013/A(Part) | C5B | | Figure 20 |
| EP-475/2013/A | C6 | The re-provisioned wholesale market will have approximately 1,000 market stalls within a site area of around 1.3 ha | Figure 21 |
| EP-546/2017 | C5A | Construct and operate a temporary sewage pumping station in Fanling North with installed capacity (average dry weather flow) of about 3,600m ³ /day | Figure 22 |

Remark: The EP(s) not related to the Project of the First Phase of the Kwu Tung North (KTN) and Fanling North (FLN) New Development Area (NDA) Development Areas are not included in the Table.

- 2.4 The site boundary of the Project and all Works Contracts are shown in **Drawing No. 1**.
- 2.5 The required submissions and submission status under Environmental Permits are shown in **Appendix U**.
- 2.6 The site layout plans under concerned Environmental Permits are shown in Figures 12 - 22.

Project Organization

- 2.7 Different parties with different levels of involvement in the Project organisation include:
- Project Proponent – Civil Engineering and Development Department (CEDD)
 - *Supervisor / Supervisor's Representative* – AECOM Asia Co. Ltd.
 - Environmental Team (ET) – Wellab Limited
 - Independent Environmental Checker (IEC) – Mott MacDonald Hong Kong Ltd (MottMac)
- 2.8 The names and contact numbers of key personnel are summarised in **Table 2.2**.

Table 2.2 Key Contacts of the Project

| Party | Role | Contact Person | Phone No. | Fax No. |
|---|-----------------------------------|-----------------------|------------------|----------------|
| Civil Engineering and Development Department, HKSAR (CEDD) | Project Proponent | Mr. Raymond Cheng | 3619 3919 | 3547 1658 |
| <i>Supervisor / Supervisor's Representative</i> (AECOM Asia Co. Ltd.) | Chief Resident Engineer | Mr. Alan Lee | 6398 5982 | 2680 9515 |
| | Senior Resident Engineer | Mr. King-man Chan | 9651 2635 | 2680 9515 |
| Environmental Team (Wellab Limited) | Environmental Team Leader | Dr. Priscilla Choy | 2898 7388 | 2898 7076 |
| Independent Environmental Checker (MottMac) | Independent Environmental Checker | Mr. Thomas Chan | 2828 5967 | 2827 1823 |
| <u>Contract No. ND/2019/01</u> Contractor (Build King – Richwell Engineering Joint Venture) | Site Agent | Mr. Ivan Leung | 9640 8340 | -- |
| | Environmental Officer | Mr. Edward Tam | 9287 8270 | |
| <u>Contract No. ND/2019/02</u> Contractor (Chun Wo – Kwan Lee Joint Venture.) | Site Agent | Mr. Andy Chan | 3485 9780 | -- |
| | Environmental Officer | Mr. Wesley So | 9144 1643 | |
| <u>Contract No. ND/2019/03</u> Contractor (Sang Hing Kuly Joint Venture) | Site Agent | Mr. Tang Wing Kai | 9300 7037 | -- |
| | Environmental Officer | Mr. Ken Cheung | 9803 5297 | |
| <u>Contract No. ND/2019/04</u> Contractor (Daewoo – Chun Wo – Kwan Lee Joint Venture) | Site Agent | Mr. Eric Wu | 9786 8630 | -- |
| | Environmental Manager | Mr. Jimmy Cheng | 9609 5916 | |
| | Environmental Officer | Mr. Sam Lam | 6178 3179 | |
| <u>Contract No. ND/2019/05</u> Contractor (CRCC – Paul Y. Joint Venture) | Site Agent | Mr. Darwin Lo | 9467 5891 | -- |
| | Environmental Manager | Mr. Pan Fong | 9436 9435 | |
| | Environmental Officer | Ms. Louise Poon | 5272 5709 | |
| <u>Contract No. ND/2019/06</u> Contractor (New Concepts Engineering Development Ltd.) | Project Manager | Mr. Joe Cheng | 9861 0060 | -- |
| | Environmental Officer | Mr. Alex Choy | 6360 3236 | |
| <u>Contract No. ND/2019/07</u> Contractor (China Road and Bridge Corporation) | Site Agent | Mr. Daniel Wong | 5335 9572 | -- |
| | Environmental Officer | Mr. K. M. Lui | 5113 8223 | |
| | Environmental Supervisor | Mr. Attlee Chau | 6386 9018 | |

Summary of Construction Works Undertaken During Reporting Month

2.9 The major site activities undertaken in the reporting month are shown in **Table 2.3**.

Table 2.3 Summary Table for Major Site Activities in the Reporting Month

| Contract No. | Site Activities (February 2023) |
|---------------------|---|
| ND/2019/01 | <ul style="list-style-type: none"> (a) Site clearance, removal of existing structures at Portion 1a (b) Excavation, backfilling and drainage works at Portion 1b (c) Site clearance and site formation at Portion 1c (d) Temporary storage of material at Portion 1e (e) Site clearance, site formation and construction of subway at Portion 2 (f) Site clearance, excavation, sheet piling and drainage works at Portion 3 (g) Drainage works, excavation, backfilling and sheet piling at Portion 5 (h) Drainage works and backfilling at Portion 6a (i) Operation of HAC soil treatment facility at Portion 6b (j) Drainage works, excavation and backfilling at Portion 7 (k) Construction of retaining wall, RC construction of flushing & fresh water service reservoir and backfilling works at Portion 8a (l) ELS for jacking pit at LWSC's car park, excavation for jacking pit, trenchless work, watermain construction and trial pit at Portion 8b (m) Sheet piling, excavation, drainage works, construction of retaining wall, watermain construction and soil nail at Portion 9b (n) Stockpile of soil at Portion 9c (o) Excavation and road works at Portion 10b |
| ND/2019/02 | <ul style="list-style-type: none"> (a) Pipe Jacking (b) Backfilling (c) Concreting (d) Bedding and pipe laying (e) ELS (f) Sheet Pile Installation (g) Cut and Fill of Slope |
| ND/2019/03 | <ul style="list-style-type: none"> (a) Portion 1 & Portion 1A <ul style="list-style-type: none"> - Road work at Yin Kong Road - Construction of Pai Lau (b) Portion 2 to Portion 20C <ul style="list-style-type: none"> - Erection of Permanent Boundary Structure - Construction of Type 1 Storage House - Construction of Type 2 Storage House - Construction of Tea House - Construction of Composting Facility - Construction works of Bird Hide - Construction works of Outdoor Classroom - Wetland Creation & Restoration works - Construction of Compacted Earth Path/ Walkway - Construction of Wetland Boardwalk |

| Contract No. | Site Activities (February 2023) |
|--------------|---|
| ND/2019/04 | (a) Tree Felling and transplant (b) Pile Cap (c) Excavation (d) Sheet Piling (e) Road works (f) Pre-drill (g) Grouting (h) ELS |
| ND/2019/05 | (a) The segment erection using launching gantry is critical to completion of section 4. (b) The pier D2-01 and E2-01 construction with bridge rotation system is critical to completion of section 5. (c) The in-situ T-span construction by form traveler at E2-02 and E3-03 is also critical to section 5 completion. |
| ND/2019/06 | The construction phase was completed and handed over to AFCD since 4 April 2022. |
| ND/2019/07 | (a) Road works at Portion 1, 4 and 5 (b) C&D waste disposal at Portion 1, 2, 4 and 5 (c) Drainage works, Sewerage works at Portion 1, 3 and 4 (d) Construction of box culvert at Portion 2 (e) Filling works at Portion 2 and 4 (f) Construction of site haul road at Portion 4 (g) Waterworks at Portion 1 |

Construction Programme

2.10 Copies of Contractors' construction programmes are provided in **Appendix A**.

Status of Environmental Licences, Notifications and Permits

2.11 A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project is presented in **Table 2.4**.

Table 2.4 Status of Environmental Licences, Notifications and Permits

| Contract No. | Permit / Licence No. | Valid Period | | Status |
|---------------------------|----------------------|--------------|-----|--------|
| | | From | To | |
| Environmental Permit (EP) | | | | |
| ND/2019/01 | EP-466/2013/A | 21/11/2013 | N/A | Valid |
| | EP-467/2013/A | 27/01/2017 | N/A | Valid |
| | EP-468/2013/A | 27/01/2017 | N/A | Valid |
| | EP-470/2013/A | 21/11/2013 | N/A | Valid |
| ND/2019/02 | EP-469/2013 | 21/11/2013 | N/A | Valid |
| ND/2019/03 | EP-468/2013/A | 27/01/2017 | N/A | Valid |
| | EP-473/2013/A | 27/01/2017 | N/A | Valid |
| ND/2019/04 | EP/473/2013/A | 27/01/2017 | N/A | Valid |
| | EP/546/2017 | 16/11/2017 | N/A | Valid |
| ND/2019/05 | EP-473/2013/A | 27/01/2017 | N/A | Valid |
| ND/2019/06 | EP-475/2013/A | 13/01/2017 | N/A | Valid |

| Contract No. | Permit / Licence No. | Valid Period | | Status |
|---|----------------------|--------------|------------|---|
| | | From | To | |
| Construction Noise Permit (CNP) | | | | |
| ND/2019/01 | GW-RN1227-22 | 26/12/2022 | 28/02/2023 | Expired in reporting month |
| | GW-RN1059-22 | 09/11/2022 | 08/03/2023 | Valid |
| | GW-RN0867-22 | 25/09/2022 | 24/03/2023 | Valid |
| | GW-RN0063-23 | 26/01/2023 | 25/04/2023 | Valid |
| | GW-RN1250-22 | 05/01/2023 | 04/04/2023 | Valid |
| | GW-RN0144-23 | 13/02/2023 | 12/05/2023 | Valid |
| | GW-RN1196-22 | 19/12/2022 | 18/05/2023 | Valid |
| ND/2019/02 | GW-RN1063-22 | 08/11/2022 | 07/02/2023 | Expired in reporting month |
| | GW-RN1199-22 | 15/12/2022 | 14/03/2023 | Valid |
| | GW-RN1130-22 | 22/11/2022 | 10/05/2023 | Valid |
| ND/2019/03 | GW-RN0878-22 | 20/09/2022 | 28/02/2023 | Expired in reporting month |
| ND/2019/04 | GW-RN1091-22 | 11/11/2022 | 10/02/2023 | Expired in reporting month |
| | GW-RN1083-22 | 18/11/2022 | 17/02/2023 | Expired in reporting month |
| | GW-RN1085-22 | 01/12/2022 | 28/02/2023 | Expired in reporting month |
| | GW-RN1193-22 | 19/12/2022 | 18/03/2023 | Valid |
| | GW-RN0069-23 | 18/02/2023 | 17/06/2023 | Valid |
| | GW-RN0074-23 | 01/02/2023 | 31/03/2023 | Valid |
| | GW-RN0097-23 | 11/02/2023 | 10/05/2023 | Valid |
| | GW-RN0099-23 | 06/02/2023 | 12/04/2023 | Valid |
| | GW-RN0164-23 | 15/02/2023 | 31/03/2023 | Valid |
| | GW-RN0168-23 | 15/02/2023 | 31/03/2023 | Valid |
| | GW-RN0175-23 | 16/02/2023 | 28/02/2023 | Expired in reporting month |
| | GW-RN0183-23 | 27/02/2023 | 26/05/2023 | Valid |
| | GW-RN0184-23 | 27/02/2023 | 14/04/2023 | Valid |
| | GW-RN0188-23 | 27/02/2023 | 10/04/2023 | Valid |
| ND/2019/05 | GW-RN1220-22 | 28/12/2022 | 17/02/2023 | Expired in reporting month |
| | GW-RN1158-22 | 01/12/2022 | 28/02/2023 | Cancelled and Superseded by GW-RN0134-23 in reporting month |
| | GW-RN1195-22 | 19/12/2022 | 18/03/2023 | Valid |
| | GW-RN0886-22 | 30/09/2022 | 29/03/2023 | Valid |
| | GW-RN0134-23 | 15/02/2023 | 14/05/2023 | Valid |
| Notification pursuant to Air Pollution Control (Construction Dust) Regulation | | | | |
| ND/2019/01 | 451792 | 11/12/2019 | N/A | Valid |
| ND/2019/02 | 454012 | 05/03/2020 | N/A | Valid |
| ND/2019/03 | 452216 | 24/12/2019 | N/A | Valid |
| | 452332 | 31/12/2019 | N/A | Valid |
| | 452333 | 31/12/2019 | N/A | Valid |
| ND/2019/04 | 461184 | 23/10/2020 | N/A | Valid |
| ND/2019/05 | 454323 | 13/03/2020 | N/A | Valid |
| ND/2019/06 | 449369 | 24/09/2019 | N/A | Valid |
| ND/2019/07 | 459393 | 28/08/2020 | N/A | Valid |

| Contract No. | Permit / Licence No. | Valid Period | | Status |
|--|----------------------|--------------|------------|--------|
| | | From | To | |
| Billing Account for Disposal of Construction Waste | | | | |
| ND/2019/01 | 7036265 | 17/01/2020 | N/A | Valid |
| ND/2019/02 | 7036898 | 01/04/2020 | N/A | Valid |
| ND/2019/03 | 7036378 | 22/01/2020 | N/A | Valid |
| ND/2019/04 | 7038391 | 22/09/2020 | N/A | Valid |
| ND/2019/05 | 7036901 | 01/04/2020 | N/A | Valid |
| ND/2019/06 | 7035473 | 17/10/2019 | N/A | Valid |
| ND/2019/07 | 7038309 | 14/09/2020 | N/A | Valid |
| Registration of Chemical Waste Producer | | | | |
| ND/2019/01 | 5213-545-B2578-01 | 10/01/2020 | N/A | Valid |
| ND/2019/02 | 5213-548-C4439-01 | 06/05/2020 | N/A | Valid |
| ND/2019/03 | 5213-623-S4231-01 | 14/04/2020 | N/A | Valid |
| ND/2019/04 | 5211-624-D2709-01 | 26/11/2020 | N/A | Valid |
| ND/2019/05 | 5213-625-C4464-01 | 20/05/2020 | N/A | Valid |
| ND/2019/06 | 5213-625-N2716-01 | 02/10/2019 | N/A | Valid |
| ND/2019/07 | 5213-625-C4498-01 | 21/09/2020 | N/A | Valid |
| Effluent Discharge License under Water Pollution Control Ordinance | | | | |
| ND/2019/01 | WT00036071-2020 | 22/06/2020 | 30/06/2025 | Valid |
| | WT00036073-2020 | 22/06/2020 | 30/06/2025 | Valid |
| | WT00036067-2020 | 22/06/2020 | 30/06/2025 | Valid |
| | WT00036075-2020 | 22/06/2020 | 30/06/2025 | Valid |
| | WT00036076-2020 | 22/06/2020 | 30/06/2025 | Valid |
| | WT00037191-2020 | 21/04/2022 | 28/02/2026 | Valid |
| | WT00037204-2020 | 02/02/2021 | 28/02/2025 | Valid |
| | WT00037412-2021 | 15/04/2021 | 30/04/2026 | Valid |
| | WT00037564-2021 | 19/04/2021 | 30/04/2026 | Valid |
| | WT00037886-2021 | 28/06/2021 | 30/06/2026 | Valid |
| ND/2019/02 | WT00036584-2020 | 21/10/2020 | 31/10/2025 | Valid |
| | WT00036952-2020 | 17/12/2020 | 31/12/2025 | Valid |
| ND/2019/03 | WT00035847-2020 | 12/08/2020 | 31/08/2025 | Valid |
| | WT00036414-2020 | 25/02/2021 | 28/02/2026 | Valid |
| | WT00037771-2021 | 08/07/2021 | 31/07/2026 | Valid |
| | WT00035984-2020 | 25/02/2021 | 28/02/2026 | Valid |
| ND/2019/04 | WT00037539-2021 | 16/04/2021 | 30/04/2026 | Valid |
| ND/2019/05 | WT00036996-2020 | 22/12/2020 | 31/12/2025 | Valid |
| ND/2019/06 | WT00035415-2019 | 20/03/2020 | 31/03/2025 | Valid |
| ND/2019/07 | WT00037526-2021 | 21/04/2022 | 31/05/2026 | Valid |

3 AIR QUALITY MONITORING

Monitoring Requirements

- 3.1 In accordance with the Updated EM&A Manual, impact 1-hour TSP and 24-hr TSP monitoring shall be conducted to monitor the air quality for the Works Contracts. **Appendix B** shows the established Action/Limit Level for the air quality monitoring works.
- 3.2 Impact 1-hour TSP monitoring was conducted for at least three times every 6 days, while the impact 24-hour TSP monitoring was conducted for at least once every 6 days at the designated air quality monitoring stations.

Monitoring Location

- 3.3 Impact air quality monitoring was conducted at the monitoring stations under the Works Contracts, as shown in **Figure 1 and Figure 2** according to Table 1.1 of Updated EM&A Manual and Baseline Air Quality Monitoring Report (KTN & FLN NDA).

Alternative Monitoring Station for KTN-DMS4

- 3.4 As KTN-DMS4 - Temporary structure near Fanling Highway (near Pak Shek Au) is no longer as existing ASR, air quality monitoring station should be relocated to the alternative dust monitoring location according to the updated EM&A Manual, Section 2.6.2. According to Figure 3.1 of Approved EIA report and site visits conducted in June 2022, ASR at near KTN-E70 – Temporary Structure near Fanling Highway near Pak Shek Au is considered as the most representative alternative station **KTN-DMS4(B)** for air quality monitoring for KTN-DMS4 (i.e. KTNE162).
- 3.5 The alternative monitoring location **KTN-DMS4(B)** is agreed by EPD on 17 August 2022. The 1-hr and 24-hrs TSP monitoring commenced starting from **24 August 2022**. **Table 3.1** describes the location of the air quality monitoring stations.

Table 3.1 Location for Air Quality Monitoring Locations

| EP No. | Contract No. | Monitoring Station | Location |
|---|--------------|----------------------------|--|
| EP-473/2013/A | ND/2019/03 | FLN-DMS1 ^[2] | Scattered Village Houses North of Proposed Potential Ecopark |
| | ND/2019/04 | | |
| | ND/2019/05 | FLN-DMS3 ^[3] | House near Tong Hang |
| | ND/2019/03 | FLN-DMS5 ^[4] | Noble Hill |
| | ND/2019/04 | FLN-DMS5A | Good View New Village |
| EP-466/2013/A EP-467/2013/A EP-468/2013/A | ND/2019/01 | KTN-DMS4(B) ^[5] | Temporary Structure near Fanling Highway (near Pak Shek Au) |
| EP-468/2013/A | ND/2019/03 | | |

Remarks:

[1]: Noting that construction phase air quality monitoring at the other proposed monitoring stations (e.g. planned), where access is permitted, will be conducted during construction phase of relevant works contract(s).

[2]: Since the distance between monitoring station and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05.

[3]: Since the distance between monitoring station and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04.

[4]: Since the distance between monitoring station and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m, the monitoring station is not applicable to ND/2019/05

[5] KTN-DMS4(B) commenced starting from 24 August 2022 as an alternative monitoring station of KTN-DMS4.

Monitoring Equipment

- 3.6 As the power supply for High Volume Sampler (HVS) for TSP monitoring at FLN-DMS 5A, KTN-DMS 4 and KTN-DMS 4(B) were rejected, direct reading dust meter was used to measure both 1-hour and 24-hour TSP levels:-
- The proposal for alternative monitoring equipment (i.e. direct reading dust meter) for TSP monitoring was approved by EPD according to the approved Baseline Air Quality Monitoring Report (KTN & FLN NDA); and
 - Same measurement methodology (i.e. direct reading dust meter) was adopted as baseline monitoring for a reliable comparison.
- 3.7 The proposed use of portable direct reading dust meters was also submitted to IEC and agreement was obtained from the IEC in accordance with Section 2.4.5 of the Updated EM&A Manual.
- 3.8 HVS for 24-hour TSP monitoring will be adopted once secured supply of electricity become available at FLN-DMS 5A and KTN-DMS 4(B).
- 3.9 **Table 3.2** summarises the equipment used in the impact air monitoring programme. Copies of calibration certificates are attached in **Appendix C**.

Table 3.2 Air Quality Monitoring Equipment

| Monitoring Station | Equipment | Manufacturer | Model and Make | Quantity |
|--------------------------------------|--|---------------------|-------------------------|----------|
| FLN-DMS5 FLN-DMS5A KTN-DMS4(B) | Dust Monitor (1-hour and 24-hour TSP) | Met One Instruments | AEROCET-831 | 6 |
| FLN-DMS1 FLN-DMS3 | Dust Monitor (1-hour TSP) | | | |
| | HVS Sampler (TSP) (24-hour TSP) | Tisch | TISCH Model: TE-5170 | 2 |

- 3.10 Meteorological information extracted from “Hong Kong Observatory - Ta Kwu Ling Weather Station” was proposed as the alternative method to obtain representative wind data. For Ta Kwu Ling Weather Station, it is located nearby the Project site and situated at approximately 15m above mean sea level. The station’s wind data monitoring equipment is set above the existing ground 10 meters in compliance with the general setting up requirements. Furthermore, this station also provides other meteorological information, such as humidity, rainfall, air pressure and temperature etc.
- 3.11 The general weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staffs during the monitoring days.

Monitoring Parameters, Frequency and Duration

- 3.12 **Table 3.3** summarises the monitoring parameters and frequencies of impact dust monitoring

during the Works Contracts activities. The air quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 3.3 Impact Dust Monitoring Parameters, Frequency and Duration

| Parameters | Frequency |
|-------------|---------------------|
| 1-hour TSP | Three times/ 6 days |
| 24-hour TSP | Once / 6 days |

Monitoring Methodology and QA/QC Procedure

1-hour and 24-hour TSP Air Quality Monitoring

Instrumentation

- 3.13 Direct reading dust meter was deployed for the air quality monitoring as shown in **Table 3.2**.
- 3.14 The measuring procedures of the dust meters were in accordance with the Manufacturer's Instruction Manual as follows:

(AEROCET-831)

- Place the 1-hour dust meter at least 1.3 meters above ground.
- Press and hold the Power key momentarily to power on the unit and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 second to display the Sample Screen minutes.
- Press the START / STOP key to run the internal vacuum pump for 1 minute and be ready to use.
- Use the select dial to select the PM range and press the START / STOP key to start a measurement.
- Finally, push the START/STOP key to stop the measurement after 1 hour sampling.
- Information such as sampling date, time, value and site condition were recorded during the monitoring period.
- All data were recorded in the data logger for further data processing.

Maintenance/Calibration

- 3.15 The following maintenance/calibration was required for the direct dust meters:
- Check and calibrate the meters by HVS to check the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout all stages of the air quality monitoring.

24-hour TSP Air Quality Monitoring

Instrumentation

(TISCH Model: TE-5170)

- 3.16 High volume Samplers (HVS) completed with appropriate sampling inlets were employed for 24-hour TSP monitoring. Each sampler was composed of a motor, a filter holder, a flow

controller and a sampling inlet and its performance specification complies with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

HVS Installation

3.17 The following guidelines were adopted during the installation of HVS:

- A horizontal platform with appropriate support was provided to secure the samplers against gusty wind.
- No two samplers were placed less than 2 meters apart.
- The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
- A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
- A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
- No furnaces or incineration flues were nearby.
- Airflow around the sampler was unrestricted.
- The samplers were more than 20 meters from the drip line.
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- Permission and access to the monitoring stations have been obtained to set up the samplers.
- A secured supply of electricity was provided to operate the samplers.

Filters Preparation

3.18 Wellab Limited (HOKLAS Registration No. HOKLAS083) is a HOKLAS accredited laboratory and responsible for the preparation of 24-hour conditioned and pre-weighed filter papers for the monitoring team.

3.19 All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25°C and not variable by more than $\pm 3^\circ\text{C}$; the relative humidity (RH) was $< 50\%$ and not variable by more than $\pm 5\%$. A convenient working RH was 40%.

Operating/Analytical Procedures

3.20 Operating/analytical procedures for the air quality monitoring were highlighted as follows:

- Prior to the commencement of dust sampling, the flow rate of the HVS was properly set (between 1.1 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50;
- The power supply was checked to ensure the sampler worked properly;
- On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air quality monitoring station;
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a

supporting screen;

- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. The filter holding frame was then tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges;
- The shelter lid was closed and secured with the aluminum strip;
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number);
- After sampling, the filter was removed and kept in a clean and tightly sealed plastic bag. The filter paper was then returned to the HOKLAS accredited laboratory (Wellab Ltd.) for reconditioning in the humidity-controlled chamber followed by accurate weighting by an electronic balance with a readout down to 0.1mg. The elapsed time was also recorded; and
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and did not vary by more than $\pm 3^\circ\text{C}$; the RH should be $< 50\%$ and did not vary by more than $\pm 5\%$. A convenient working RH is 40%. Weighing results were returned for further analysis of TSP concentrations collected by each filter.

Maintenance/Calibration

3.21 The following maintenance/calibration was required for the HVS:

- The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working conditions; and
- All HVS were calibrated (five point calibration) using Calibration Kit prior to the commencement of baseline monitoring and thereafter at bi-monthly intervals.

Results and Observations

3.22 The monitoring results for 1-hour TSP and 24-hour TSP are summarised in **Tables 3.4** and **3.5** respectively. Detailed monitoring results and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendix E**.

Table 3.4 Summary Table of 1-hour TSP Monitoring Results during the Reporting Month

| Monitoring Station | Concentration ($\mu\text{g}/\text{m}^3$) | | Action Level, $\mu\text{g}/\text{m}^3$ | Limit Level, $\mu\text{g}/\text{m}^3$ |
|--------------------|--|--------------|--|---------------------------------------|
| | Average | Range | | |
| FLN-DMS1 | 89.9 | 42.9 – 166.4 | 303 | 500 |
| FLN-DMS3 | 80.6 | 40.7 – 147.1 | 301 | 500 |
| FLN-DMS5 | 102.4 | 48.1 – 133.8 | 279 | 500 |
| KTN-DMS4(B) | 81.5 | 28.2 – 165.3 | 297 | 500 |

Table 3.5 Summary Table of 24-hour TSP Monitoring Results during the Reporting Month

| Monitoring Station | Concentration ($\mu\text{g}/\text{m}^3$) | | Action Level, $\mu\text{g}/\text{m}^3$ | Limit Level, $\mu\text{g}/\text{m}^3$ |
|--------------------|--|--------------|--|---------------------------------------|
| | Average | Range | | |
| FLN-DMS1 | 80.2 | 35.9 – 116.1 | 150 | 260 |
| FLN-DMS3 | 55.2 | 28.8 – 92.5 | 165 | 260 |
| FLN-DMS5A | 87.3 | 57.0 – 114.2 | 153 | 260 |
| KTN-DMS4(B) | 69.2 | 48.4 – 94.1 | 192 | 260 |

- 3.23 All 1-hour and 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedances were recorded.
- 3.24 According to our field observations, the major dust sources identified at the designated air quality monitoring stations in the reporting month are shown in **Table 3.6**:

Table 3.6 Observation at Dust Monitoring Stations

| Monitoring Station | Major Dust Sources |
|--------------------|---|
| FLN DMS1 | Mobile crane, Excavator, piling, road traffic |
| FLN-DMS3 | Excavator, piling, mobile crane, road traffic |
| FLN-DMS5 | Road traffic |
| KTN-DMS4(B) | Excavator, piling, mobile crane, dump truck, road traffic |

Event and Action Plan

- 3.25 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

4 NOISE MONITORING

Monitoring Requirements

- 4.1 In accordance with the Updated EM&A Manual, construction noise monitoring shall be conducted in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}) to monitor the construction noise arising from the construction activities. The regular monitoring frequency for each monitoring station was on a weekly basis and one set of measurements between 0700 and 1900 hours on normal weekdays was conducted. **Appendix B** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Location

- 4.2 Impact noise monitoring was conducted at the monitoring stations, as shown in **Figures 3** and **4** according to Table 1.1 of the Updated EM&A Manual. **Table 4.1** describes the locations of the noise monitoring stations.

Table 4.1 Location of Noise Monitoring Stations

| Contract No. | Monitoring Station(s) | Location(s) |
|--------------|----------------------------|--|
| ND/2019/06 | CP-FLN-NMS1 ^[2] | Belair Monte |
| ND/2019/04 | | |
| ND/2019/05 | CP-FLN-NMS2 ^[3] | Scattered Village Houses in Tong Hang |
| ND/2019/01 | CP-KTN-NMS2 ^[4] | Residential Buildings at Ma Tso Lung |
| | CP-KTN-NMS3 ^[5] | Fung Kong Garden |
| ND/2019/01 | CP-KTN-NMS5 | N/A |
| ND/2019/02 | CP-KTN-NMS6 | Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery |

Remarks:

[1]: Noting that construction phase noise monitoring at the other proposed monitoring stations (e.g. planned), where access is permitted, will be conducted during construction phase of relevant works contract(s).

[2]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[3]: Since the distance between monitoring station and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04.

[4],[5]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

Monitoring Equipment

- 4.3 Integrating Sound Level Meters were used for impact noise monitoring. The meters were Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x) that complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. **Table 4.2** summarises the noise monitoring equipment used. Copies of calibration certificates are attached in **Appendix C**.

Table 4.2 Noise Monitoring Equipment

| Equipment | Manufacturer | Model | Quantity |
|-----------------------|--------------|----------|----------|
| Sound Level Meter | BSWA | BSWA 308 | 4 |
| Acoustical Calibrator | SVANTEK | SV30A | 2 |

Monitoring Parameters, Frequency and Duration

- 4.4 **Table 4.3** summarises the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix D**.

Table 4.3 Noise Monitoring Parameters, Duration and Frequency

| Contract No. | Monitoring Stations | Parameters ^[2] | Duration | Frequency | Measurement |
|--------------|----------------------------|--|------------------------------------|---------------|---------------------------|
| ND/2019/06 | CP-FLN-NMS1 ^[3] | $L_{10}(30 \text{ min.}) \text{ dB(A)}$ $L_{90}(30 \text{ min.}) \text{ dB(A)}$ $L_{eq}(30 \text{ min.}) \text{ dB(A)}$ (as six consecutive $L_{eq, 5 \text{ min}}$ readings) | 0700-1900 hours on normal weekdays | Once per week | Façade |
| ND/2019/04 | | | | | |
| ND/2019/05 | CP-FLN-NMS2 ^[4] | | | | |
| ND/2019/01 | CP-KTN NMS2 ^[5] | | | | Free-field ^[1] |
| | CP-KTN NMS3 ^[6] | | | | |
| ND/2019/01 | CP-KTN NMS5 | | | | Façade |
| ND/2019/02 | CP-KTN-NMS6 | | | | |

Remarks:

[1]: Correction of +3dB (A) for free-field measurement.

[2]: A-weighted equivalent continuous sound pressure level (L_{eq}). It is the constant noise level which, under a given situation and time period, contains the same acoustic energy as the actual time-varying noise level.
 L_{10} is the level exceeded for 10% of the time. For 10% of the time, the sound or noise has a sound pressure level above L_{10} .
 L_{90} is the level exceeded for 90% of the time. For 90% of the time, the noise level is above this level.

[3]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[4]: Since the distance between monitoring station and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03 and ND/2019/04.

[5],[6]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

Monitoring Methodology and QA/QC Procedures

- The microphone head of the sound level meter was positioned at 1m from the exterior of the noise sensitive I and lowered sufficiently so that the building's external wall acted as a reflecting surface;
- The battery condition was checked to ensure the correct functioning of the meter;
- Parameters such as frequency weighting, time weighting and measurement time were set as follows:
 - frequency weighting : A
 - time weighting : Fast
 - time measurement : $L_{eq}(30 \text{ min.}) \text{ dB(A)}$
(as six consecutive $L_{eq, 5\text{min}}$ readings) during non-restricted hours (i.e. 0700-1900 hours on normal weekdays)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment;
- During the monitoring period, the values of L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were also recorded on a standard record sheet;
- Noise measurement was paused temporarily during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible and observation records during measurement period should be provided; and
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s. The wind speed should be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

Maintenance and Calibration

- 4.5 The microphone heads of the sound level meters and calibrators were cleaned with a soft cloth at quarterly intervals.
- 4.6 The sound level meters and calibrators were checked and calibrated at yearly intervals.
- 4.7 Immediately prior to and following each noise measurement, the accuracy of the sound level meter should be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements would be accepted as valid only if the calibration levels before and after the noise measurement agreed to within 1.0 dB.

Results and Observations

- 4.8 The noise monitoring results are summarised in **Table 4.4**. Detailed monitoring results and graphical presentations of noise monitoring are shown in **Appendix F**. The weather information for the reporting month is summarised in **Appendix M**.

Table 4.4 Summary Table of Noise Monitoring Results during the Reporting Month

| Contract No. | Monitoring Station | Noise Level Leq (30 min), dB(A) | Baseline Level, dB(A) | Limit Level, dB(A) |
|--------------|----------------------------|------------------------------------|--------------------------|-----------------------|
| ND/2019/06 | CP-FLN-NMS1 ^[1] | 66.1 – 69.8 | 69.9 | 75 |
| ND/2019/04 | | | | |
| ND/2019/05 | CP-FLN-NMS2 ^[2] | 59.1 – 66.9 | 59.6 | |
| ND/2019/01 | CP-KTN-NMS2 ^[3] | 52.2 – 58.9 | 58.6 | |
| | CP-KTN-NMS3 ^[4] | 55.7 – 61.9 | 51.6 | |
| ND/2019/01 | CP-KTN-NMS5 | 53.4 – 59.0 | 57.2 | |
| ND/2019/02 | CP-KTN-NMS6 | 56.1 – 63.1 | 55.1 | |

Remarks:

[1]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[2]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[3],[4]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

- 4.9 All noise monitoring was conducted as scheduled in the reporting month. One complaint about construction noise were received during the reporting month, therefore One (1) Action Level exceedances was recorded. The summary of exceedance record in reporting month is shown in **Appendix O**.
- 4.10 According to our field observations, the major noise sources identified at the designated noise monitoring stations in the reporting month are as follows:

Table 4.5 Observation at Noise Monitoring Stations

| Contract No. | Monitoring Station | Location | Major Noise Source |
|--------------|----------------------------|---|---|
| ND/2019/06 | CP-FLN-NMS1 ^[1] | Belair Monte (Existing) | Excavator, dump truck, mobile crane, piling, road traffic |
| ND/2019/04 | | | |
| ND/2019/05 | CP-FLN-NMS2 ^[2] | Scattered Village House in Tong Hang (Existing) | Excavator, piling, dump truck, road traffic |
| ND/2019/01 | CP-KTN-NMS2 ^[3] | Residential Buildings at Ma Tso Lung (Existing) | Dump truck, excavator, road traffic |
| ND/2019/01 | CP-KTN-NMS3 ^[4] | Fung Kong Garden (Existing) | Road traffic |
| ND/2019/01 | CP-KTN-NMS5 | N/A | Road traffic |
| ND/2019/02 | CP-KTN-NMS6 | Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery (Existing) | Road traffic |

Remarks:

[1]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[2]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m, the monitoring station is not applicable to ND/2019/03.

[3],[4]: Since the distance between monitoring station and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03.

Event and Action Plan

- 4.11 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

5 WATER QUALITY MONITORING

Monitoring Requirements

- 5.1 In accordance with the Updated EM&A Manual, impact water quality monitoring shall be carried out three days per week at all the designated monitoring stations during the construction period. The measurement periods are during the construction of channel specified in Table 4.1 of the Updated EM&A Manual. The interval between two sets of monitoring shall not be less than 36 hours.
- 5.2 Replicate in-situ measurements of Dissolved Oxygen (DO), temperature, turbidity, pH, Suspended Solids (SS) and samples for Suspended Solids (SS), ammonia nitrogen, unionized ammonia, nitrate nitrogen and orthophosphate from each independent sampling event were collected to ensure a robust statistically interpretable database.
- 5.3 **Appendix B** shows the established Action and Limit Levels for the water quality monitoring work according to the Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA).

Monitoring Parameters, Frequency

- 5.4 **Table 5.1** summarises the monitoring parameters, monitoring periods and frequencies of the water quality monitoring.

Table 5.1 Water Quality Monitoring Parameters and Frequency

| Parameters, unit | Depth | Frequency |
|---|--|--|
| <ul style="list-style-type: none"> Temperature(°C) pH(pH unit) turbidity (NTU) water depth (m) salinity (ppt) DO (mg/L and % of saturation) SS (mg/L) Ammonia Nitrogen (NH₃-N) (mg NH₃-N/L) Unionized Ammonia (UIA) (mg/L) Nitrate-nitrogen (NO₃-N) (mg NO₃⁻-N/L) Ortho-phosphate (PO₄) (mg PO₄³⁻-P/L) | <ul style="list-style-type: none"> 3 water depths: 1m below water surface, mid-depth and 1m above river bed. If the water depth was less than 3m, mid-depth sampling only. If water depth was less than 6m, mid-depth may be omitted. | 3 days per week during construction of channel |

Results and Observations

- 5.5 According to Section 5.6.1.2 of the approved EIA Report, the potential water quality impact during construction is due to the alternation of natural streams (i.e. channelization of Ma Tso Lung Stream and Siu Hang San Tsuen Stream) as these two streams are the ecologically important streams.

- 5.6 No construction of channel was carried out at Ma Tso Lung Stream and Siu Hang San Tsuen Stream during the reporting month. Therefore, no water quality monitoring was conducted.

Additional Water Quality Monitoring

Monitoring Requirements

- 5.7 Additional Water Quality Monitoring shall be carried out at River Beas, River Indus and near Siu Hang San Tsuen Stream three days per week at all designated monitoring stations during the construction period. The measurement period are during the construction site drainage along River Beas, construction of footbridge across River Beas and during construction of bridge across River Indus.
- 5.8 Replicate in-situ measurement and samples from each independent sampling event were collected to ensure a robust statistically interpretable database. DO, temperature, turbidity and pH were measured in-situ whereas SS and arsenic were determined by an accredited laboratory. Other relevant data, including monitoring location / position, time, water depth, weather conditions and any special phenomena or work underway at the construction site were recorded.
- 5.9 For all the monitoring stations, sampling were taken at 3 water depths, namely 1m below the water surface, mid depth and 1m above the river bed. For stations that were less than 3m in depth, only the mid depth sample was taken. Should the water depth was less than 6m, in which case the mid-depth station may have been omitted. The interval between two sampling surveys was not less than 36 hours.
- 5.10 **Appendix B** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 5.11 Additional impact water quality monitoring was conducted at 6 monitoring stations (SYR-CS1, SYR-IS1, NTR-CS1, NTR-IS1, SHST-IS2, MWR-IS3) which are summarised in **Table 5.2**. The location of monitoring stations is shown in **Figures 5 and 6**.

Table 5.2 Additional Water Quality Monitoring Stations

| Station | Description | Locations | Measurement Periods |
|--|-----------------|--|---|
| River Beas | | | |
| SYR-CS1 | Control Station | Upstream of river | During the construction site drainage along River Beas and construction of the footbridge across River Beas |
| SYR-IS1 | Impact Station | Downstream of river | |
| River Indus and near Siu Hang San Tsuen Stream | | | |
| NTR-CS1 | Control Station | Upstream of river | During construction of the bridge across River Indus |
| NTR-IS1 | Impact Station | Downstream of river | |
| SHST-IS2 | Impact Station | Water sensitive receiver at near Siu Hang San Tsuen Stream | |
| MWR-IS3 | Impact Station | Water sensitive receiver at near Ma Wat River | |

Monitoring EquipmentInstrumentation

- 5.12 Multi-parameter meters (Model YSI EXO) were used to measure DO, turbidity, salinity, pH and temperature.

Dissolved Oxygen (DO) and Temperature Measuring Equipment

- 5.13 The instrument for measuring dissolved oxygen and temperature should be portable and weatherproof complete with cable, sensor, and use DC power source. The equipment was capable of measuring:
- A dissolved oxygen level in the range of 0-20mg/L and 0-200% saturation; and
 - The temperature within 0-45 degree Celsius.
- 5.14 The equipment had a membrane electrode with automatic temperature compensation complete with a cable.
- 5.15 Sufficient stocks of spare electrodes and cables were available for replacement where necessary.
- 5.16 Salinity compensation was built-in in the DO equipment. *In-situ* salinity was measured to calibrate the DO equipment prior to each DO measurement.

Turbidity

- 5.17 Turbidity was measured *in situ* by using the nephelometric method. The instrument was portable and weatherproof using a DC power sources complete with cable, sensor and comprehensive operation manuals. The equipment was capable of measuring turbidity between 0-1000 NTU. The probe cable was not less than 25m in length. The meter was calibrated in order to establish the relationship between NTU units and the levels of Suspended Solids.

Salinity

- 5.18 A portable salinometer capable of recording salinity within the range of 0-40 parts per thousand (ppt) was used for salinity measurement.

Water Depth Detector

- 5.19 A portable, battery-operated and hand held echo sounder was used for the determination of water depth at each designated monitoring station.

pH

- 5.20 The instrument consisted of a potentiometer, a glass electrode, a reference electrode and a temperature-compensating device. It was readable to 0.1pH 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.

Water Sampling for Laboratory Analysis

- 5.21 A water sampler, consisting of a transparent Polyvinyl Chloride (PVC) of a capacity of not less than two litres which can be effectively sealed with cups at both ends was used. The water sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth. In addition, a sampling cup attached to a fixed or extendable rod was also used for sampling at the monitoring stations with swallow water.

Sample Container and Storage

- 5.22 Following collection, water samples for laboratory analysis were stored in high density polyethylene bottles with appropriate preservatives added, packed in the ice (cooled to 4°C without being frozen). The samples were delivered to WELLAB Limited (HOKLAS Registration No. HOKLAS083) and analysed as soon as possible after collection of the water samples. Sufficient volume of samples was collected to achieve the detection limit.

Calibration of In Situ Instruments

- 5.23 The pH meter, DO meter and turbidimeter were checked and calibrated before use. DO meter and turbidimeter were certified by WELLAB Limited before use and subsequently re-calibrated at quarterly basis throughout all stage of water quality monitoring programme. Response of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring station.
- 5.24 For on-site calibration of field equipment (Multi-parameter Water Quality System), the standard BS 1427:2009 “Guide to on-site test methods for analysis of waters” was observed.

Back-up Equipment

- 5.25 Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was also be made available so that monitoring could proceed uninterrupted even when some equipment was under maintenance, calibration, etc.

5.26 **Table 5.3** summarises the equipment used in the water quality monitoring programme. Copies of the calibration certificates of the multi-parameter water quality systems are shown in **Appendix C**.

Table 5.3 Water Quality Monitoring Equipment

| Equipment | Model and Make | Qty. |
|--------------------------------------|---|------|
| Water sampler and sampling cup | A 2-Litre transparent PVC cylinder with latex cups at both ends and sampling cup for monitoring stations with swallow water | 1 |
| Sonar Water Depth Detector | Garmin Striker plus 4 | 1 |
| Multi-parameter Water Quality System | YSI EXO 1 | 2 |

Monitoring Parameters and Frequency

5.27 **Table 5.4** summarises the monitoring parameters and frequencies of the additional water quality monitoring. The water quality monitoring schedule for the reporting month is shown in **Appendix D**.

Table 5.4 Additional Water Quality Monitoring Parameters and Frequency

| Monitoring Station(s) | Parameters, unit | Depth | Frequency |
|--|---|--|-----------------|
| River Beas | <ul style="list-style-type: none"> • Temperature (°C) • pH (pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Suspended Solids (SS) (mg/L) • Arsenic (As) (µg/L) | <ul style="list-style-type: none"> • 3 water depths: 1m below water surface, mid-depth and 1m above river bed. • If the water depth was less than 3m, mid-depth sampling only. • If water depth was less than 6m, mid-depth might be omitted. | 3 days per week |
| River Indus and near Siu Hang San Tsuen Stream | <ul style="list-style-type: none"> • Temperature (°C) • pH (pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Suspended Solids (SS) (mg/L) | | |

5.28 Monitoring location and position, time, sampling depth, weather conditions and any special phenomena or work underway nearby was also recorded.

Monitoring Methodology

Instrumentation

- 5.29 Multi-parameter meters (Model YSI EXO) were used to measure DO, turbidity, salinity, pH and temperature.

Operating/Analytical Procedures

- 5.30 At each measurement, two consecutive measurements of DO concentration, DO saturation, salinity, turbidity, pH and temperature were taken. The probes were retrieved out of the water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.

Laboratory Analytical Methods

- 5.31 Duplicate samples from each independent sampling event were required for all parameters. Analysis of suspended solids and arsenic were carried out by WELLAB Ltd. and comprehensive quality assurance and control procedures were in place in order to ensure the quality and consistency in results. The analysis methods and limits of reporting are provided in **Table 5.5**.

Table 5.5 Method for Laboratory Analysis for Water Samples

| Determinant | Proposed Method | Limit of Reporting |
|---------------------------|--|--------------------|
| Total Suspend Solids (SS) | APHA 17ed 2540 D | 2.5 mg/L |
| Arsenic (As) | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

QA/QC Requirements

Decontamination Procedures

- 5.32 Water sampling equipment used during the course of the monitoring process was decontaminated by manual washing and rinsed with distilled water after each sampling event. All of the disposal equipment was discarded after the sampling.

Sampling Management and Supervision

- 5.33 All sampling bottles were labelled with the sample I.D. (including sampling station), laboratory number and sampling date. Water samples were dispatched to the testing laboratory for analysis as soon as possible. All the collected samples were stored in a cool box to keep the temperature less than 4°C but without frozen. All water samples were handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory.

Quality Control Measures for Sample Testing

5.34 The samples testing and following QC programmes were performed by WELLAB Ltd. for every batch of 20 samples:

- One method blank; and
- One set of QC sample.

Results and Observations

5.35 All additional water quality monitoring was conducted as scheduled in the reporting month. The water quality monitoring schedule for this reporting month is shown in **Appendix D**.

5.36 The monitoring results and graphical presentation of additional water quality monitoring are shown in **Appendix G**.

5.37 The summary of exceedance record in the reporting month is shown in **Appendix O** and summarized in the **Table 5.6**.

Table 5.6 Summary of Water Quality Exceedances

| Station | Exceedance Level | DO | Turbidity | SS | Arsenic | Total number of Non-project Related Exceedances | Total number of project Related Exceedances |
|----------|------------------|----|-----------|----|---------|---|---|
| SYR-IS1 | Action Level | 0 | 0 | 0 | 0 | 0 | 0 |
| | Limit Level | 1 | 0 | 0 | 0 | 1 | 0 |
| NTR-IS1 | Action Level | 0 | 0 | 0 | N/A | 0 | 0 |
| | Limit Level | 0 | 0 | 0 | | 0 | 0 |
| SHST-IS2 | Action Level | 0 | 0 | 0 | | 0 | 0 |
| | Limit Level | 0 | 0 | 0 | | 0 | 0 |
| MWR-IS3 | Action Level | 0 | 0 | 0 | | 0 | 0 |
| | Limit Level | 0 | 0 | 0 | | 0 | 0 |
| Total | Action Level | 0 | 0 | 0 | 0 | 0 | 0 |
| | Limit Level | 1 | 0 | 0 | 0 | 1 | 0 |

* Exceedances record date: 22/02/2023

One (1) Limit Level for DO of impact water quality monitoring was recorded. Exceedance was recorded on 22 February 2023. After investigation, the exceedance was considered due to the other external factors rather than the contract works due to the following reasons:

1. No pollution discharged was observed from land-based site area;
2. Water quality mitigation measures at the nearby construction site (Contract No. ND/2019/02) was observed properly maintained including silt curtain were deployed for the construction of cofferdam around the works area, and green barriers with impervious sheeting to direct site runoff to water pump to the treatment facilities etc.

Event and Action Plan

5.38 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

6 LAND CONTAMINATION (AMBIENT ARSENIC MONITORING)**Monitoring Requirements**

- 6.1 According to Section 7.5 of the updated EM&A Manual, an ambient arsenic monitoring is required to be conducted in KTN during the clean-up processes of arsenic containing soil and the construction phase.
- 6.2 The Respirable Suspended Particulate (RSP, or PM10) was measured by High Volume Sampler (HVS) equipped with PM10 selector following the "Reference Method for the Determination of Particulate Matter as PM10 in the Atmosphere" Part 50 Chapter 1 Appendix J, Title 40 of the Code of Federal Regulations of the USEPA.
- 6.3 The Dust-laden air was drawn through PM10 HVS fitted with a conditioned pre-weighting filter paper, at a controlled rate. After sampling for 24-hour (details on measurement period are provided in Section 9.5.5), the filter paper with retained PM10 particulates was collected and returned to the laboratory for drying in a desiccators followed by accurate weighting. 24-hour average RSP levels were calculated from the ratio of the mass of PM10 particulates retained on the filter paper to the total volume of air sampled.
- 6.4 The weighted filter paper was prepared for arsenic testing through a "Hot Acid Extraction Procedure". The extracted material was tested for arsenic by using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS). The extraction and testing was referenced to the following methods:
- Compendium Method 10-3.1 Selection, Preparation and Extraction of Filter Material, Center for Environmental Research Information, Office of Research and Development, USEPA, June 1999; and
 - Compendium Method 10-3.5 determination of Metals in Ambient Particulate Matter using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS), Center for Environmental Research Information, Office of Research and Development, USEPA, June 1999.

Monitoring Location

- 6.5 Ambient arsenic monitoring was conducted at the monitoring station(s) under the Work Contract(s), as shown in **Figure 5**. **Table 6.1** describes the location of the ambient arsenic monitoring station.

Table 6.1 Location of Ambient Arsenic Monitoring station

| EP. No | Contract No. | Monitoring Stations | Location |
|---|--------------|---------------------------|------------------------------------|
| EP-466/2013/A EP-467/2013/A EP-468/2013/A | ND/2019/01 | KTN-DMS-4A ^[1] | Temporary Structure at Pak Shek Au |
| EP-468/2013/A | ND/2019/03 | | |

Remark:

[1]: Monitoring at the original location of KTN-DMS-4 (originally proposed in the approved EM&A Manual) was denied as there was no electricity supply. An alternative location (KTN-DMS-4A) was proposed.

Monitoring Equipment

- 6.6 **Table 6.2** summarises the equipment used in the ambient arsenic monitoring. Copies of calibration certificates are attached in **Appendix C**.

Table 6.2 Ambient Arsenic Monitoring Equipment

| Monitoring Stations | Equipment | Model and Make | Quantity |
|---------------------|-------------------|-----------------------|----------|
| KTN-DMS-4A | Calibrator | TISCH Model: TE-5025A | 1 |
| | HVS Sampler (RSP) | TISCH Model: TE-6070X | 1 |

Monitoring Parameters, Frequency and Duration

- 6.7 **Table 6.3** summarises the monitoring parameters and frequencies of ambient arsenic during the clean-up processes of arsenic-containing soil and construction. The ambient arsenic monitoring schedule for the reporting month is shown in **Appendix D**.

Table 6.3 Impact Ambient Arsenic Monitoring Parameters, Frequency and Duration

| Parameters | Frequency |
|-----------------------------|--------------|
| 24-hr RSP (Ambient Arsenic) | Once/ 6 days |

Monitoring Methodology and QA/QC Procedure**24-hour RSP Monitoring**Instrumentation

- 6.8 High volume samplers (HVS) (GMW PM10 (TE6070X)) complete with appropriate sampling inlets was employed for 24-hour RSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).
- 6.9 The following guidelines were adopted during the installation of HVS:
- a horizontal platform with appropriate support to secure the samplers against gusty wind was provided;
 - no two samplers was placed less than 2 meters apart;
 - the distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler;
 - a minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samplers;
 - a minimum of 2 meters separation from any supporting structure, measured horizontally was required;
 - no furnace or incinerator flue was nearby;
 - airflow around the sampler was unrestricted;
 - the sampler was more than 20 meters from the dripline;
 - any wire fence and gate, to protect the sampler, were not cause any obstruction during monitoring;
 - permission was obtained to set up the samplers and to obtain access to the monitoring stations; and
 - a secured supply of electricity was needed to operate the samplers.

Operating/analytical procedures for the operation of HVS

- Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m³/min. and 1.4 m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. The filter holding frame was then tightened to the filter holder with swing bolts. The applied pressure was sufficient to avoid air leakage at the edges.
- The shelter lid was closed and secured with the aluminum strip.
- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- After sampling, the filter was removed and sent to the Wellab Ltd. for weighing. The elapsed time was also recorded.
- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature was between 25°C and 30°C and did not vary by more than $\pm 3^{\circ}\text{C}$; the relative humidity (RH) was $< 50\%$ and did not vary by more than $\pm 5\%$. A convenient working RH was 40%. Weighing results were further analysis of RSP concentrations collected by each filter.

Maintenance/Calibration

6.10 The following maintenance/calibration was required for the HVS:

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

Laboratory Measurement / Analysis

- 6.11 Quartz filters of size 8" x 10" were labelled before sampling. A HOKLAS accredited laboratory, Wellab Ltd., was responsible for the preparation of 24-hour conditioned and pre-weighed filter papers for the monitoring team. The balance for weighting filter paper was regularly calibrated against a traceable standard.
- 6.12 All filters, which were prepared by Wellab Ltd., were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than $\pm 3^{\circ}\text{C}$; the relative humidity (RH) was $< 50\%$ and not variable by more than $\pm 5\%$. A convenient working RH was 40%.
- 6.13 Wellab Ltd. (HOKLAS Registration No. HOKLAS083), was responsible for the extraction and testing procedure for Arsenic and comprehensive quality assurance and quality control programmes were conducted.

Results and Observations

- 6.14 The ambient arsenic monitoring results are summarised in **Table 6.4**. Detailed monitoring results and test report are shown in **Appendix E**.

Table 6.4 Summary Table of 24-hour RSP Monitoring Results (Ambient Arsenic) during the Reporting Month

| Monitoring Date | Monitoring Station | Concentration (ng/m ³) | Action Level (ng/m ³) | Limit Level, (ng/m ³) |
|-----------------|--------------------|------------------------------------|-----------------------------------|-----------------------------------|
| 02/02/2023 | KTN-DMS4(A) | 6.18 | 9.36 | 11.7 |
| 08/02/2023 | | 6.29 | | |
| 14/02/2023 | | 6.21 | | |
| 20/02/2023 | | 5.79 | | |
| 24/02/2023 | | 5.95 | | |

- 6.15 All ambient arsenic monitoring was conducted as scheduled in the reporting month. During the reporting month, around 737.81m³ of arsenic soil transported to soil treatment plant and 0m³ treated. No Action/Limit Level exceedances were recorded.

Event and Action Plan

- 6.16 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** shall be carried out.

7 LANDFILL GAS MONITORING

Monitoring Requirement

- 7.1 In accordance with the updated EM&A Manual, monitoring of landfill gas (LFG) is required for the construction works within the Ma Tso Lung Landfill (MTLL, close to KTN NDA) during the construction phase. This section presents the results of landfill gas measurements performed by the Contractor. **Appendix B** shows the Limit Levels for the monitoring works.
- 7.2 The MTLL is situated in the vicinity of the KTN NDA. A portion of the development falls within the MTLL and its 250m Consultation Zone.

Monitoring Parameters and Frequency

- 7.3 Monitoring parameters for Landfill gas monitoring include Methane, Carbon dioxide and Oxygen.
- 7.4 According to the mitigation measures of the updated EM&A Manual, measurements of the following frequencies should be carried out according to the monitoring requirements and procedures specified in Paragraphs 8.23 to 8.28 of EPD's Guidance Note, "LANDFILL GAS HAZARD ASSESSMENT GUIDANCE NOTE".
- 7.5 The frequency of monitoring of LFG was made reference to the updated EM&A Manual - Monitoring of any LFG which may be migrated to the site should be undertaken during construction of the infrastructure and the development within the Consultation Zone and within MTLL when the works involve confined spaces. Routine gas monitoring should be undertaken during groundwork construction and in all excavations. Monthly gas monitoring should also be conducted for set up on site such as offices, stores etc.

Monitoring Locations

- 7.6 Monitoring of oxygen, methane and carbon dioxide was performed for the construction of infrastructure and the development within the Consultation Zone and within MTLL when the works involved confined spaces. In this reporting month, the area required to be monitored for landfill gas are shown below and **Figure 6** shows the landfill gas monitoring locations.

- Excavation Locations: Portion 6b
- Manholes and Chambers: N/A
- Relocation of monitoring wells: N/A
- Any other Confined Spaces: Containers in Portion 6b

Monitoring Equipment

- 7.7 **Table 7.1** summarises the equipment employed by the Contractor for the landfill gas monitoring.

Table 7.1 Landfill Gas Monitoring Equipment

| Equipment | Model and Make | Quantity |
|-----------------------|-------------------------------------|----------|
| Portable gas detector | Rasi 700 BIO (Serial No. 330055) | 1 |

Results and Observations

- 7.8 In the reporting month, landfill gas monitoring was carried out by the Contractor on 1 occasion

at 6 monitoring stations. No Limit Level exceedance for landfill gas monitoring was recorded in the reporting month. The monitoring results are provided in **Appendix J**. Copies of calibration certificates are attached in **Appendix C**.

Event and Action Plan

- 7.9 Should any non-compliance of the criteria occur, actions in accordance with the Event/Action Plan in **Appendix N** would be carried out.

8 BUILT HERITAGE MONITORING

Monitoring Requirement

- 8.1 In accordance with the updated EM&A Manual, baseline condition survey and baseline vibration impact assessment shall be conducted for identified built heritage prior to the commencement of construction works. Baseline condition survey and baseline vibration impact assessment shall be conducted by a qualified building surveyor or qualified structural engineer to define the vibration limit (a vibration limit at 7.5mm/s and 15mm/s could be adopted for graded historical buildings and historical buildings respectively) and to evaluate if construction vibration monitoring and structural strengthening measures are required during construction phase to ensure the construction performance meets the vibration standard stated in the EIA report.
- 8.2 According to the condition survey report from cultural heritage condition survey for Fanling Bypass Eastern Section under EP-473/2013/A, a vibration monitoring plan was proposed for the surveyed cultural heritage based on the Buildings Department's Practice Note (PNAP) APP-137. This section presents the results of built heritage monitoring performed by the Contractor according to the proposed monitoring plan in baseline condition survey report. **Appendix B** shows the Limit Levels for the monitoring works.

Monitoring Location

- 8.3 In the reporting month, construction vibration monitoring was conducted for built heritage features at FL02 and FL27 when pile driving operation was conducted within assessment area of the construction works. The location of the construction vibration monitoring stations was summarised in **Table 8.1** and shown in **Appendix K**.

Table 8.1 Location of Construction Vibration Monitoring

| EP. No | Contract No. | Monitoring Station (s) | Nature of Cultural Heritage | Location (s) |
|---------------|--------------|------------------------|-----------------------------|--|
| EP-473/2013/A | ND/2019/05 | FL02 | Grave | Northwest side of Shung Him Tong Tsuen, at the hillside behind On Lok Garden |
| | | FL27 | Monument | Opposite to Shung Him Tong Public Toilet, at the bottom of slope feature |

Monitoring Parameters and Frequency

- 8.4 **Table 8.2** summarises the vibration monitoring plan for surveyed cultural heritage under the Works Contracts. Vibration monitoring was conducted for surveyed built heritage when pile driving operation was conducted within the assessment area of construction works.

Table 8.2 Vibration Monitoring Plan

| EP. No | Contract No. | Monitoring Stations | Distance with Construction Works | Monitoring Plan |
|---------------|--------------|---------------------|----------------------------------|---------------------------------|
| EP-473/2013/A | ND/2019/05 | FL02 and FL27 | Within 50m | Daily assessment is required |
| | | | Within 75m | Bi-daily assessment is required |
| | | | Within 100m | Weekly assessment is required |

Remark:

[1] Baseline condition survey was conducted for built heritage features at HFL08, FL05, FL07, FL08, FL10, FL11, FL17, FL19, FL31 and FL33 under ND/2019/04, also HFL05, FL02, FL04, FL24, FL27 and FL36 under ND/2019/05 for EP-473/2013/A. As HFL05, HFL08, FL04, FL05, FL07, FL08, FL10, FL11, FL17, FL19, FL24, FL31, FL33 and FL36 were not within the assessment area of the related construction work, no construction vibration monitoring was conducted for the built heritage in the reporting month.

- 8.5 The construction vibration monitoring was conducted throughout each event of the pile driving operation on a daily basis. The effect of ground-borne vibration from piling works on the surveyed built heritage was assessed by the maximum peak particle velocity (ppv), which was obtained from the maximum value of measurement of all pile driving operation events.

Monitoring Equipment

- 8.6 Copies of calibration certificates of the monitoring equipment employed by the Contractor of the construction vibration monitoring are attached in **Appendix C**.

Results and Observations

- 8.7 In the reporting month, construction vibration monitoring was carried out by the Contractor for the built heritage features at FL02 and FL27 on a daily basis when pile driving operation was conducted within 50m of the construction work. No Limit Level exceedance for construction vibration monitoring was recorded in the reporting month. The monitoring results are provided in **Appendix K**.

Event and Action Plan

- 8.8 **Table 8.3** summarises the vibration limits for construction vibration monitoring for surveyed cultural heritage.

Table 8.3 Vibration Limits for Construction Vibration Monitoring

| Type of Building | Guide Values of Maximum ppv* (mm/Sec) | |
|--|---------------------------------------|----------------------|
| | Transient Vibration | Continuous Vibration |
| Vibration-sensitive / dilapidated buildings# | 7.5 | 3.0 |
| Declared monuments/ Historical structures | 3.0 | |

Remarks:

* peak particle velocity

as cultural heritages are sensitive receivers, vibration monitoring should be classified as vibration-sensitive

- 8.9 If any exceedance of limits is found or damage to either structural or non-structural elements of the historic buildings is identified, the construction works should be stopped immediately and structural engineer's advices should be sought for any remedial work.

9 ECOLOGICAL MONITORING

Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, Sheung Yue River, Shek Sheung River and Long Valley

Monitoring Requirements and Protocol

- 9.1 As required under Section 12.3.2.5 of the Updated EM&A Manual, where development under the NDAs project is undertaken within 200m (the maximum distance at which it is predicted there may be some disturbance, and hence a reduction in numbers of large waterbirds) of Sheung Yue River and Long Valley, weekly transect at both high and low tides should be followed (It is considered high tide when the tidal levels are above 1.5m and low tide when the tidal levels are below 1.5m at Tsim Bei Tsui Station).
- 9.2 The purpose of the survey is to identify and enumerate all bird species utilizing the river channels and Long Valley Nature Park (LVNP) and identify any sources of actual or potential disturbance to birds due to construction activities throughout the construction period according to the methodology specified in Table 12.1 in the Updated EM&A Manual.
- 9.3 Monitoring in Long Valley followed the methodology adopted by the regular HKBWS bird monitoring programme in order to obtain comparable results and a complete coverage of the area in the shortest possible time.

Monitoring Frequency

- 9.4 High tide and low tide avifauna monitoring was required to be carried out on a weekly basis. Additional night-time avifauna monitoring in Long Valley was required to be carried out twice monthly from September to April.

Date of avifauna monitoring: 2, 3, 9, 10, 16, 17, 23 and 24 February 2023

Date of night-time monitoring: 3 and 24 February 2023

Monitoring Location

- 9.5 The avifauna monitoring was carried out at Ng Tung River, Sheung Yue River and Long Valley in the reporting month according to the construction programme. The transect routes in the reporting month were as follows:

- T1. Ng Tung River
- T2. Ng Tung River
- T3. Sheung Yue River
- T5. Long Valley

- 9.6 As the sensitive receivers (large waterbirds) were easily visible, the transect route only needed to follow one bank of the rivers. The location of Transects T1, T2, T3 and T5 is shown in **Figure 9** for reference.

Monitoring Parameters

- 9.7 The monitoring parameters and survey methodology for each transect are described below:
- Abundance of birds
 - Types of habitat of which birds in use
 - Notable bird behaviours such as roosting, feeding, nesting and presence of juveniles
 - Birds heard through birdcalls that could not be located were marked as “heard”, while birds flying over the survey area were marked as “flight”. Species of conservation significance were specified.
- 9.8 Other information at the time of survey such as weather condition, tidal condition, tide level and noticeable natural or anthropogenic activities were documented.
- 9.9 For Avifauna survey, Ornithological nomenclature would make reference to The Avifauna of Hong Kong (Carey *et al.* 2001), The Birds of Hong Kong and South China (Viney *et al.* 2005), and the most recent updated list from other sources (e.g. Hong Kong Bird Watching Society).

Monitoring Results

- 9.10 In total, 85 species of birds were recorded during the bird surveys within assessment area. Among the recorded birds, there were 28 species of waterbirds. The detailed list of waterbirds and all recorded birds are shown in **Appendices L1k and L1l** respectively.
- 9.11 Among the four transects, transect T5 had a higher species diversity and abundance due to its diverse habitat types within Long Valley. Species such as *Ardeola bacchus* and *Egretta garzetta* were commonly found roosting and foraging at wetland habitats such as agricultural lands and shallow water habitats.
- 9.12 Along transect T5 in Long Valley, species with conservation interest such as *Himantopus himantopus*, which is a passage migrant, was commonly observed in shallow water habitats.
- 9.13 Construction works were observed in T5 in the reporting month.
- 9.14 Transect T3 was conducted along Sheung Yue River. Bird species such as *Ardeola bacchus* and *Egretta garzetta* were commonly observed feeding and roosting on the river bank and river bed. Construction works were observed beside Sheung Yue River.
- 9.15 Transects T1 and T2 are located at Ng Tung River. *Ardeola bacchus* and *Egretta garzetta* were commonly found feeding and roosting along the Ng Tung River. Fishing activities were observed at both T1 and T2. Potential anthropogenic sources of disturbance observed along T1 and T2 including the usage of remote control boats.
- 9.16 Avifauna monitoring in construction phase was conducted during the reporting month and the detailed results are attached in **Appendix L1**.

Monitoring of Measures to Minimise Impacts to Ma Tso Lung Stream and Siu Hang San Tsuen Stream, and Long Valley

Monitoring Requirements and Protocol

- 9.17 As required under Section 12.3.2.14 of the Updated EM&A Manual, aquatic faunal monitoring should be carried out during the construction phase.
- 9.18 Larger organisms such as fish should be monitored by direct counting, while kick-netting and

sweep-netting should be used for invertebrate sampling. There should be three replicates for invertebrate sampling at each sampling point. For kick-netting, the net should be placed with the opening facing the water current, and the substrate should be disturbed by kicking to dislodge organisms from the stream bed. Sweep-netting should be conducted when kick-netting is not feasible, such as in area with no water current. Small organisms that could not be identified with naked eye should be brought to the laboratory for identification under the dissecting microscope.

Monitoring Frequency

- 9.19 Quantitative aquatic fauna replicate surveys of stream fauna was required to be carried out on a monthly basis only during wet season. Three replicates for invertebrates sampling and direct counting of fish fauna should be performed respectively.

Monitoring Location

- 9.20 During wet season, the monitoring locations required to be carried out in Ma Tso Lung Stream are as follow:

- | | | | | |
|---------|---------|---------|---------|---------|
| • MS_01 | • MS_02 | • MS_03 | • MS_04 | • MS_05 |
| • MS_06 | • MS_07 | • MS_08 | • MS_09 | • MS_10 |
| • MS_11 | • MS_12 | • MS_13 | • MS_14 | • MS_15 |

- 9.21 The location of monitoring stations is shown in **Figure 10** for reference.

Monitoring Parameters

- 9.22 The monitoring parameters and survey methodology for each monitoring station are described below:
- Species composition
 - Abundance
 - Distribution for invertebrates and fish fauna
 - Species of conservation significance would be specified

- 9.23 Other information at the time of survey such as weather conditions and noticeable natural or anthropogenic activities were recorded.

Monitoring Status

- 9.24 According to the Updated EM&A Manual, quantitative aquatic fauna replicate surveys of stream fauna is required to be carried out on monthly basis during wet season. During the reporting Month, no aquatic fauna replicate surveys was carried out.

Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution

Monitoring Requirements and Protocol

- 9.25 As required under Section 12.3.2.17 of the Updated EM&A Manual, monitoring of measures to minimise impacts should be carried out during the construction phase.
- 9.26 The purpose of survey is to monitor the effectiveness of measures to minimise impacts on ecologically sensitive habitats from disturbance and pollution by standard faunal transect

surveys.

Mammal survey

- 9.27 Mammal survey should be performed during both day and night times, in areas along the transect routes which may potentially be utilized by terrestrial mammals. Field signs such as droppings, footprints, diggings and burrows left by larger terrestrial mammals should be observed. Mammals directly observed should be recorded, and identification should be made as accurate as possible from the field signs observed.
- 9.28 Bat survey should be conducted along the transect routes shortly after sunset, with the use of a bat detector to record the echolocation calls. The relative abundance of the species encountered should be estimated with reference to the baseline monitoring results, i.e. using a scale from one (species recorded within transect routes) to three (dominant species within transect routes), for comparison between baseline results and the current monitoring results. Nomenclature of mammal should be based on Shek (2006).

Herpetofauna survey (Amphibians and Reptiles)

- 9.29 Amphibian surveys should be conducted whenever possible on evenings following or during periods of rainfall, focusing on areas suitable for amphibians (e.g. forest, shrublands, grasslands, streams, ponds, marshes, etc.). Calling amphibians should be recorded, supplemented by visual observation of eggs, tadpoles, adult frogs, and toads.
- 9.30 Active searching of appropriate microhabitats such as stones, pond bunds, crevices and leaf debris should be performed mainly. Observation of exposed, basking and foraging reptiles should also be conducted. Nomenclature of amphibian and reptile should be based on Chan et al. (2005) and Karsen et al. (1998), respectively.

Insect survey (Butterfly and Dragonfly)

- 9.31 Butterflies and dragonflies observed along the transects should be identified and counted. Preferable habitats of the insects such as watercourses, fishponds, and vegetated areas should be observed with special attention. Nomenclature and protection status of the species should be based on Lo et al. (2005) for butterflies and Tam et al. (2011) for dragonflies.

Monitoring Frequency

- 9.32 Monitoring surveys of ecological sensitive receivers such as mammals, insects (butterflies and dragonflies), and herpetofauna was undertaken on a monthly bases.

Date of monitoring surveys of ecological sensitive receivers: 15, 20 February 2023

Monitoring Location

- 9.33 The transect routes in the reporting month according to the construction works are as follows:
- T1. Ma Tso Lung riparian zone and associated wetland habitats;
 - T1. Green belt areas E1-8, D1-8 and G1-3 in KTN NDA;
 - T1. AGR one C2-4 and C2-2 in KTN NDA;
 - T1. Area north of Ng Tung River;
 - T3. Area west of Siu Hang San Tsuen Stream;
 - T4. South side of Fanling Highway and Castle Peak Road in the vicinity of Pak Shek Au;
 - T5. Area west and east of the southern limit of the FLN NDA work area; and
 - T6. Areas in the western part of KTN.

9.34 The location of Transects is shown in **Figure 11** for reference.

Monitoring Parameters

9.35 The monitoring parameters and survey methodology for each transect are described below:-

- Species composition
- Abundance
- Distribution for fauna observed
- Species of conservation significance would be specified

Monitoring Results

Mammal

- 9.36 During the survey, a total of 3 mammal species were recorded from transects. One species of conservation importance was recorded, namely bat species *Pipistrellus abramus*.
- 9.37 Domestic dogs, *Canis lupus familiaris*, were commonly found at transect T1, T4 and T6, where associated with human settlements.
- 9.38 Echolocation calls of bats were recorded with a bat detector. The bat detector would list out possible bat species having similar echolocation calls in pattern and frequency. The structure of the echolocation calls from the recordings was later analysed to identify species as far as possible (the lack of literature on echolocation call structure makes the field identification of some bat species in Hong Kong difficult, and some species could only be identified to genus level, or remain unidentified from the recordings).
- 9.39 Identification of bat species encountered in the surveys was made with consideration of the possible bat species suggested by the bat detector, the distribution of suggested bat species in Hong Kong, previous records of bat species in the EIA Report and Baseline Monitoring Report, and the structure of echolocation calls of the recordings (including call structure, frequency, duration, inter pulse interval etc., with reference to relevant literatures).
- 9.40 *Pipistrellus abramus* was recorded with FM/QCF call structure and frequency around 45 kHz to 68 kHz (Ma et al., 2010, p.319). The above characteristics were further compared with data from relevant literatures to confirm the identities. References were also made to Tong (2016).
- 9.41 Bat species, *Pipistrellus abramus* was recorded in flight at nighttime at T1, T4, T5 and T6.

Herpetofauna (Amphibians and Reptiles)

- 9.42 Along the transects, a total of 5 herpetofauna species was observed. No species of conservation importance was recorded. Species including toads, skinks and geckos were recorded near wetland habitats and watercourse. Transects T5 had the highest species diversity among all transects.

Insects (Butterfly and Dragonfly)

- 9.43 During the insect survey, a total of 28 butterfly species were recorded from transects. No odonata species were recorded in the reporting month. A species of butterfly recorded was of particular conservation interest, namely *Graphium cloanthus*. Transect T1 and T5 both had higher butterfly species diversity than other transects.
- 9.44 2 species of odonata were recorded in the reporting month. No species recorded was of

particular conservation interest.

- 9.45 Ecological sensitive receivers such as mammals, insects (butterflies and dragonflies), and herpetofauna monitoring during construction phase was conducted in the reporting month and the results are attached in **Appendices L2 to L5**.
- 9.46 For the monitoring conducted on 20 February 2023 at Transect T5, a section of the transect route was found located within a private property and hence not accessible. Another section of transect T5 was found blocked by a new accumulation of fallen trees. The inaccessible part are shown in **Photo 1** and **Photo 2** below. The adjusted accessible transect route is shown in **Figure 11**.



Photo 1. Inaccessible part of transect T5 located within a private property.



Photo 2. Inaccessible part of transect T5 blocked by fallen trees.

Results and Observation

Details of the Influencing Factors

Major Activities

- 9.47 During the survey of Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley, anthropogenic activities including soil turning with excavator and other construction activities were observed in Long Valley. Construction works were observed beside Sheung Yue River.
- 9.48 The anthropogenic activities affected only a small area of the habitat in Long Valley during monitoring and would only pose minor disturbances to the birds..
- 9.49 During the survey of Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, anthropogenic activities including construction works beside T2, recreational usage of remote control boats and helicopters at both T1 and T2, and recreational fishing by fishing rod at both T1 and T2 were observed.
- 9.50 During the survey of Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution, construction activities NOT under this Project were observed at T5.

Weather Conditions

- 9.51 According to the observation during survey, temperature and the rain flow records in the reporting month (Reference: <http://www.weather.gov.hk/wxinfo/pastwx/metob202302.htm>), weather conditions might pose influence towards the monitoring results.
- 9.52 The detailed ecological monitoring results are attached in **Appendix L**.

References

- Ma, J., Jones, G., Zhu, G. J., & Metzner, W. (2010). Echolocation behaviours of the Japanese pipistrelle bat *Pipistrellus abramus* during foraging flight. *Acta Theriologica*, 55(4), 315-332.
- Tong, C. F. (2016). Distribution and preference of landscape features and foraging sites of insectivorous bats in Hong Kong urban parks. (Master dissertation)

10 ENVIRONMENTAL SITE INSPECTION**Site Audits**

- 10.1 Site audits were carried out by ET on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures on the Contract site. Summary of the site audits are presented in **Table 10.1** and **Appendix P**.

Table 10.1 Summary of Site Audits

| Environmental Site Inspection | Works Contracts | | | | | | |
|--|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| | ND/2019/01 | ND/2019/02 | ND/2019/03 | ND/2019/04 | ND/2019/05 | ND/2019/06 | ND/2019/07 |
| Weekly site audit with representative of the <i>Supervisor's</i> Representative and the Contractor | 7, 16, 21 and 28 Feb 23 | 1, 8, 15 and 20 Feb 23 | 3, 10, 17 and 21 Feb 23 | 2, 9, 17 and 24 Feb 23 | 6, 16, 21 and 27 Feb 23 | 2, 9, 17 and 24 Feb 23 | 3, 10, 17 and 24 Feb 23 |
| Joint Site Audit with representative of the <i>Supervisor's</i> Representative, the Contractor and IEC | 16 Feb 23 | 20 Feb 23 | 21 Feb 23 | 24 Feb 23 | 16 Feb 23 | N/A | 17 Feb 23 |

- 10.2 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations made during the audit sessions are summarised in **Table 10.2**.
- 10.3 All construction activities with significant environmental impact undertaken by Contract No. ND/2019/06 was substantially completed in March 2022 and the majority of outstanding works were also completed in April 2022 with defect rectification works remained. The outstanding installation works were the short-duration works which would be completed within 2 months during the 1-year defect correction period. ET would record the environmental deficiency, if any, for NDTWM (EP-475/2013/A) during the 1-year defect correction period under Contract ND/2019/04 site inspection and would email weekly those inspection records to the Project Team of Contract ND/2019/06 for information.

Table 10.2 Observations and Recommendations during Site Audits

| Parameters | Date | Observations and Recommendations | Follow-up |
|------------------------------------|------------|---|--|
| Contract No.: ND/2019/01 | | | |
| -- | -- | -- | -- |
| Contract No.: ND/2019/02 | | | |
| Water Quality | 26/01/2023 | Broken silt-curtain should be replaced. | Improvement/Rectification was observed during follow-up audit session on 1 February 2023. |
| | 20/02/2023 | Drainage should be cleared and maintained properly. | Follow-up action is needed to be reported in the following month. |
| Landscape and Visual | 26/01/2023 | To remove construction material leaning onto retained trees and set up tree protection zone. | Item remarked as 230201-R01. Follow-up action is needed to be review. |
| | 01/02/2023 | | Item remarked as 230208-R01. Follow-up action is needed to be review. |
| | 08/02/2023 | | Improvement/Rectification was observed during follow-up audit session on 15 February 2023. |
| | 20/02/2023 | Tree protection zone should be enhanced. | Follow-up action is needed to be reported in the following month. |
| Contract No.: ND/2019/03 | | | |
| Air Quality | 27/01/2023 | Dusty debris were observed at the site exit of Yin Kong. Contractor was reminded to clear the dusty debris immediately, and enhance water and dust mitigation measures around the boundary of Yin Kong Road works area. | Item remarked as 230203-O01. Follow-up action is needed to be review. |
| | 03/02/2023 | | Improvement/Rectification was observed during follow-up audit session on 10 February 2023. |
| Water Quality | 27/01/2023 | Dusty debris were observed at the site exit of Yin Kong. Contractor was reminded to clear the dusty debris immediately, and enhance water and dust mitigation measures around the boundary of Yin Kong Road works area. | Item remarked as 230203-O01. Follow-up action is needed to be review. |
| | 03/02/2023 | | Improvement/Rectification was observed during follow-up audit session on 10 February 2023. |
| Waste / Chemical Management | 27/01/2023 | Provide drip tray for chemical/fuel containers. | Item remarked as 230203-R01. Follow-up action is needed to be review. |
| | 03/02/2023 | | Item remarked as 230210-R01. Follow-up action is needed to be review. |
| | 10/02/2023 | | Item remarked as 230217-R01. Follow-up action is needed to be review. |
| | 17/02/2023 | | Improvement/Rectification was observed during follow-up audit session on 21 February 2023. |





| Parameters | Date | Observations and Recommendations | Follow-up |
|----------------------------------|------------|---|--|
| Contract No.: ND/2019/04 | | | |
| Air Quality | 17/02/2023 | Stockpile should be covered or sprayed by water. | Improvement/Rectification was observed during follow-up audit session on 24 February 2023. |
| | 24/02/2023 | Provide impervious sheeting or water spraying for dusty stockpile in whole sale market. | Follow-up action is needed to be reported in the following month. |
| Water Quality | 26/01/2023 | Covering of stockpile is required to minimize the muddy runoff during rainstorm. | Item remarked as 230202-R01. Follow-up action is needed to be review. |
| | 02/02/2023 | | Item remarked as 230209-R01. Follow-up action is needed to be review. |
| | 09/02/2023 | | Item remarked as 230217-R01. Follow-up action is needed to be review. |
| | 17/02/2023 | | Item remarked as 230224-R01. Follow-up action is needed to be review. |
| | 24/02/2023 | | Follow-up action is needed to be reported in the following month. |
| | 09/02/2023 | Discharge of muddy water was observed. Contractor was reminded to enhance the water mitigation measure. | Improvement/Rectification was observed during follow-up audit session on 24 February 2023. |
| | 24/02/2023 | Provide barrier (e.g., sandbag) for G.I. operation. | Follow-up action is needed to be reported in the following month. |
| Waste/Chemical Management | 26/01/2023 | Drip tray should be provided for chemical storage. | Item remarked as 230202-R02. Follow-up action is needed to be review. |
| | 02/02/2023 | | Item remarked as 230209-R02. Follow-up action is needed to be review. |
| | 09/02/2023 | | Item remarked as 230217-R02. Follow-up action is needed to be review. |
| | 17/02/2023 | | Item remarked as 230224-R01. Follow-up action is needed to be review. |
| | 24/02/2023 | | Follow-up action is needed to be reported in the following month. |
| Ecology | 09/02/2023 | 2m high solid barrier for the Siu Hang San Tsun should be maintain regularly. | Improvement/Rectification was observed during follow-up audit session on 17 February 2023. |



| Parameters | Date | Observations and Recommendations | Follow-up |
|----------------------------------|------------|---|--|
| Contract No.: ND/2019/05 | | | |
| <i>Air Quality</i> | 21/02/2023 | Provide impervious sheeting to cover the dusty stockpile. | Improvement/Rectification was observed during follow-up audit session on 27 February 2023. |
| | 27/02/2023 | Provide impervious sheeting to cover the dusty stockpile in JCR. | Follow-up action is needed to be reported in the following month. |
| Contract No.: ND/2019/06 | | | |
| -- | -- | -- | -- |
| Contract No.: ND/2019/07 | | | |
| <i>Air Quality</i> | 17/02/2023 | Stockpile of dusty material should be covered by impervious sheeting. | Improvement/Rectification was observed during follow-up audit session on 24 February 2023. |
| <i>Construction Noise Impact</i> | 03/02/2023 | Compressor should be operated with door closed. | Improvement/Rectification was observed during follow-up audit session on 10 February 2023. |

Implementation Status of Environmental Mitigation Measures

- 10.4 According to the EIA Report, EPs and the Updated EM&A Manual, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the Environmental Mitigation Implementation Schedule is provided in **Appendix Q**. The photographic records of measures as stipulated in EPs to mitigate environmental impacts in the reporting month are presented in **Table 10.3**.

Table 10.3 Photographic Records and Implementation Status of Measures

| EP No. | Condition | Photographic Record | Implementation Status |
|-----------------------|-----------|---|-----------------------|
| EP- 466/2013/ A | 2.9 |  <p>To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas.</p> | Λ _[1] |
| EP- 467/2013/ A | 2.9 |  <p>To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas.</p> | Λ _[1] |
| EP- 468/2013/ A | 2.11 |  <p>To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas.</p> | Λ _[1] |
| EP- 469/2013 | 2.7 |  <p>To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas.</p> | Λ _[1] |

| | | | |
|---------------------------------|------|---|------------------|
| <u>EP-473/2013/</u> <u>A</u> | 2.13 |  <p>To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas.</p> | ^ _[1] |
| <u>EP-475/2013/</u> <u>A</u> | 2.7 |  <p>To minimise adverse impacts on habitats of ecological importance in the vicinity of the Project, 2m high solid dull green site barrier fences shall be erected around all active works areas.</p> | ^ _[1] |
| Implementation status: | | ^ Mitigation measure was fully implemented * Observation/reminder was made during site audit but improved/rectified by the contractor # Observation/reminder was made during site audit but not yet improved/ rectified by the contractor X Non-compliance of mitigation measure • Non-compliance but rectified by the contractor N/A Not Applicable at this stage as no such site activities were conducted in the reporting period | |




Remark:

[1]: Barrier fences might be subjected to change according to the phasing plan designed at detailed design stage

Implementation Status of Water Quality Mitigation Measures

10.5 The water quality mitigation measures detailed in the EIA Report and the Updated EM&A Manual are recommended to be implemented during the construction phase. Water quality mitigation measures implemented by the contractors were closely monitored to prevent water pollution, especially during rainy season. An updated summary of the Environmental Mitigation Implementation Schedule is provided in **Appendix Q**. Specific water quality mitigation measures for major construction works in the reporting month are presented in **Table 10.4**.

Table 10.4 Specific Water Quality Mitigation Measures for Major Construction Works in the Reporting Month

| Works Contracts | Photographic Records | |
|-----------------|---|---|
| ND/2019/01 |  <p>Hard paved exposed slope surface</p> |  <p>Hydroseeding for slope area</p> |
| ND/2019/02 |  <p>Hard paved exposed haul road</p> |  <p>Hard paved exposed slope surface</p> |
| ND/2019/03 |  <p>Hard paved exposed haul road</p> |  <p>Regular clearance of water for wheel washing facility</p> |
| ND/2019/04 |  <p>Hard paved exposed slope surface</p> |  <p>Deployment of silt curtain around works area in Ng Tung River</p> |

| | | |
|---|---|--|
| ND/2019/05 |  <p>Covering dusty stockpile</p> |  <p>Provision of sand bags around works area</p> |
| ND/2019/07 |  <p>Covering exposed slope surface with tarpaulin</p> |  <p>De-silting waste water before discharge</p> |
| Water quality mitigation measures for site(s) in operation phase, remaining defect works | | |
| ND/2019/06 |  <p>Hard paved exposed haul road</p> |  <p>Hard paved exposed haul road</p> |

Solid and Liquid Waste Management Status








- 10.6 Waste generated from Contract Nos. ND/2019/01, ND/2019/02, ND/2019/03, ND/2019/04, ND/2019/05 and ND/2019/07 included inert construction and demolition (C&D) materials and non-inert C&D wastes in the reporting month. The site of ND/2019/06 was handed over to AFCD for operation since 4 April 2022.
- 10.7 The amount of wastes generated by the construction works of the Contract Nos. ND/2019/01, ND/2019/02, ND/2019/03, ND/2019/04, ND/2019/05 and ND/2019/07 during the reporting month are shown in **Appendix R**. The site of ND/2019/06 was handed over to AFCD for operation since 4 April 2022.
- 10.8 The Contractors are advised to minimise the wastes generated through recycling or reusing. All mitigation measures stipulated in the Updated EM&A Manual and waste management plans shall be fully implemented. The status of implementation of waste management and

reduction measures are summited in **Appendix Q**.

Ecological Mitigation Measures – Creation of Long Valley Nature Park (LVNP)

- 10.9 Based on the findings of the EIA Report, the area of Long Valley has been assessed as of high to very high ecological value and is the largest contiguous area of freshwater wetland habitats in Hong Kong. To safeguard the ecological value of Long Valley, about 37 hectares of land in Long Valley has been proposed to develop into Long Valley Nature Park (LVNP) for conserving and enhancing the ecologically important environment as well as for compensation of the wetland loss due to the NDA development.
- 10.10 LVNP is developed according to the approved Habitat Creation and Management Plan (HCMP) submitted under EP-468/2013/A. HCMP provides a framework and specifications for development and management of LVNP and guides the development to maintain and enhance the 37 hectares of low-lying wetland habitats.
- 10.11 Regarding the design, the zoning of land use in LVNP is intended to maintain the existing mosaic pattern of wet and dry agriculture, while controlling the activities that could potentially disturb target habitats and species. LVNP will be divided into three broad zones of land use as below:
- Biodiversity Zone of about 21 hectares largely designated for biodiversity conservation through cultivation of specified crops and habitat management.
 - Agricultural Zone of about 11 hectares designated for commercially focuses crop production and eco-friendly agricultural practice for farming.
 - Visitor Zone of about 5 hectares designed to accommodate visitors as well as storage and other facilities and for educational purposes.
- 10.12 The construction of LVNP started in late 2019 and was expected to be completed in 2023. During the construction period, the progress of construction and wetland enhancement works has been under observation by different stakeholders including AFCD and green groups. Close communication between AFCD and CEDD were conducted to exchange views on conservation, restoration and management of habitats as well as on the planning and design of the park. In addition, advices from green groups, Hong Kong Bird Watching Society (HKBWS) and The Conservancy Association (CA), have been taken on habitat management of Long Valley and potential effects on habitat and wildlife of each individual work conducted in Long Valley. The last meeting was held on 18 November 2022 to share the progress of LVNP with different stakeholders, including CEDD, AFCD, CA, HKBWS, Contractor, ET, IEC and farmers.
- 10.13 Proposals on wetland creation and restoration, dry agricultural land creation, pond creation, water treatment wetland and design of irrigation channel were submitted by the Contractor to achieve the objectives stated in HCMP and accepted by the Engineer with consent from AFCD before implementation. The Contractor would consult the stakeholders for recommendations and suggestions on mitigation measures to minimise the environmental impacts arising from construction works. The progress of works would be arranged to minimise impacts to avifauna and maintain the habitat for avifauna. The photographic records of site activities in LVNP are presented in **Table 10.5**.

Table 10.5 Photographic Records of Site Activities in LVNP

| | |
|--|--|
|  | |
| Continuing agricultural practice in existing farmland to maintain habitats in Long Valley | |
|  |  |
| Open water Habitat | Open water Habitat |
| Creation of wetland with designated habitat for biodiversity conservation | |
|  |  |
| Planting of paddy rice to provide foraging ground for Yellow-breasted Bunting | |
|  |  |
| Enhancement of irrigation channel to provide reliable water source for farmland in Long Valley | |



Provision of bird island (hidden area)



Restoring of water flea pond to provide food source to water birds



Construction of storage sheds for farmers



An *Elanus caeruleus* was recorded



Wet agricultural land



Provision of noise barrier for noisy works in Long Valley

11 ENVIRONMENTAL NON-CONFORMANCE

Summary of Exceedances

- 11.1 One (1) Limit Level for DO of impact water quality monitoring was recorded. After investigation, the exceedance was considered due to the other external factors rather than the contract works.
- 11.2 One (1) Action Level for construction noise was recorded as one complaint about construction noise was received during the reporting month. No Action/Limit Level exceedance for air quality, ambient arsenic, landfill gas monitoring and build heritage monitoring was recorded in the reporting month. The summary of exceedance recorded in the reporting month is shown in Appendix O.
- 11.3 Ecological monitoring was carried out in the reporting month. The results will be compared with Action and Limit Levels after issuance of the Final Baseline Ecological Report.
- 11.4 Should the monitoring results of the environmental monitoring parameters at any designated monitoring stations indicate that Action / Limit Levels are exceeded, the actions in accordance with the Event/Action Plan in **Appendix N** would be carried out.

Summary of Environmental Non-Compliance

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

Summary of Environmental Complaint

- 11.6 One environmental complaint was received in the reporting month. The complaint is for ND/2019/01. The investigation of the environmental complaint regarding polluting effluent discharge for ND/2019/05 in the last report was completed. The Cumulative Complaint Log since the commencement of the Project is presented in **Appendix S**.

Summary of Environmental Summon and Successful Prosecution

- 11.7 There was no successful environmental prosecution or notification of summons received since the Project commencement. The Cumulative Log for environmental summon and successful prosecution since the commencement of the Project is presented in **Appendix T**.

12 FUTURE KEY ISSUES

Key Issues in the Coming Three Months

12.1 The major site activities, potential environmental impacts and recommended mitigation measures for the coming three months are shown in **Table 12.1**.

Table 12.1 Summary Table for Site Activities, Potential Environmental Impacts and Recommended Mitigation Measures in the Coming Months

| Contract No. | Major Site Activities (March to May 2023) | Location/ Working Period | Potential Environmental Impact | Recommended Mitigation Measures |
|--------------|---|--|---|--|
| ND/2019/01 | (a) Site clearance / tree felling | Portions 1a, 1c, 2, 13 | - Construction Dust impact - Noise Impact (Construction Phase) - Water Quality Impact (Construction Phase) - Waste Management (Construction Waste) | Air - Watering on exposed earth and haul road. - Cover the stockpiles or dusty materials. - Deploy water bowsers to water the haul road. - Deploy mist-cannon on site - Provide shelter with top and 3-sides for cement production activities. - Cover the Arsenic-containing soil. - Store the bulk cement in enclosed silo tank for soil treatment. - Close the mechanical cover of the vehicles used for transporting dusty materials. - Establish vehicle wheel washing facilities at vehicle exit points. - Speed control of site vehicles. Noise - Regular inspect of construction plants in good condition. |
| | (b) GI works | Portions 1a | | |
| | (c) Excavation | Portions 1b, 3, 5, 7, 8b, 9b, 10a, 10b | | |
| | (d) Construction of retaining wall | Portions 8a, 9b | | |
| | (e) Construction of hoarding | Portion 1b | | |
| | (f) Construction of noise barrier | Portion 1b | | |
| | (g) Site Formation | Portions 1a, 1c, 1e, 2, 7 | | |
| | (h) Removal of existing structure | Portions 1a, 13 | | |
| | (i) Construction of subway | Portions 2 | | |
| | (j) Operation of HAC treatment facility | Portions 6b | | |

| | | | | |
|--|------------------------------------|--|--|---|
| | (k) Drainage works | Portions 1b, 3, 5, 6a, 7, 8b, 9b, 10a, 10b | | <ul style="list-style-type: none"> - Provide temporary noise screens if necessary. - Use of Quiet plants (QPME) and working methods if possible. - Sequencing operation of construction plants where practicable. - Shut down the machines and plant if not in use. - Only well-maintained plant to be operated on-site - Mobile plant to be sited as far away from NSRs as possible practicable. - Conduct noise monitoring regularly. - Erect silent-up noise barrier at portion 6b. <p>Water</p> <ul style="list-style-type: none"> - Set up wastewater treatment system (AquaSed) on site - Erect soil bund / temporary drain to divert /collect surface runoff. - Maintain the drainage and wastewater treatment facilities. <p>Waste / Chemical Management</p> <ul style="list-style-type: none"> - Sort out demolition debris and excavated materials from demolition works to recover reusable / recyclable portions - Provide recycling bins on site, encourage reuse and recycle as much as possible. - Provide drip trays for chemical containers. - Chemical spill kit available on site. - Chemical waste cabinet available on site. |
| | (l) Road Construction | Portion 1b, 5, 6a, 10a | | |
| | (m) Trenchless | Portion 5, 8b | | |
| | (n) Construction of reservoir | Portions 8a | | |
| | (o) Soil nail | Portion 9b | | |
| | (p) Sheet piling / Pipe Pile / ELS | Portion 1c, 5, 7, 8b, 9b, 10a, 10b | | |

| | | | | |
|-------------------|-----------------------------|---------------------------------------|---|--|
| | | | | <ul style="list-style-type: none"> - Chemical wastes to be stored in appropriate containers and collected by a licensed chemical waste collector. - Delivery of yard waste to tree shredding facility for upcycling. |
| ND/2019/02 | (a) Pipe Jacking | Portions 1, 2 & 3 | Air, Noise, Waste | <ul style="list-style-type: none"> - Dusty works should be spray water. Idle stockpile or slop should be covered by Tarpaulin sheet properly. - Wheel washing should be carried out at every exit. - Plants should be well maintained to prevent dark smoke and oil leakage. Idle plant should be turned off. - Drip tray should be provided for all chemical and stationary plants. - No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is obtained. - Erect noise screen along site boundary. - Waste should be sorted and dispose according to the Waste Management Plan - No direct discharge of wastewater into storm drains is allowed. Wastewater must be de-silted before discharged in accordance with the water discharge license. - Dull green barrier and ecological measures should be implemented according to the Ecological protection plan. |
| | (b) Backfilling | Portion 2, 3 & 4 | Air, Noise, Waste | |
| | (c) Concreting | Portions 4, 7, 8, 9 & 10 | Air, Noise, Water, Waste, Ecology | |
| | (d) Bedding & Pipe Laying | Portion 2, 3 & 5 | Air, Noise, Water, Waste, Ecology | |
| | (e) ELS | Portions 4 & 10 | Air, Noise, Water, Waste, Ecology | |
| | (f) Sheet Pile Installation | Portions 3, 4 | Air, Noise, Water, Waste | |
| | (g) Cut and Fill of Slope | Portion 8 | Air, Noise, Water, Waste | |
| ND/2019/03 | (a) Excavation & ELS | Portion 1, 1A, 2, 3, 4, 4A, 4B, 5, 5A | <ul style="list-style-type: none"> - Waste - Air pollution - Noise pollution | <ul style="list-style-type: none"> - Dusty works should be sprayed with water or stockpile should be covered by Tarpaulin properly. |
| | (b) Site Clearance | Sections 7, 8 and 9 | <ul style="list-style-type: none"> - Waste | |

| | | | | |
|-------------------|----------------------|---|---|---|
| | | | <ul style="list-style-type: none"> - Air pollution - Noise pollution | <ul style="list-style-type: none"> - Plants should have maintenance to prevent dark smoke and oil leakage. Idle plant should be turned off. |
| | (c) Tree Felling | Sections 6, 7, 8 and 9 | <ul style="list-style-type: none"> - Waste - Air pollution - Noise pollution | <ul style="list-style-type: none"> - Drip tray should be provided for all chemical and stationary plants. - No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is granted. - Waste should be sorted and disposed according to Waste Management Plan. - No direct discharge of wastewater into storm water drains is allowed. Wastewater must be desilted before discharging according to water discharge license. |
| ND/2019/04 | (a) Sheet piling | Portion H | - Air, Noise, Waste | <ul style="list-style-type: none"> - Dusty works should be sprayed with water or stockpile should be covered by tarpaulin properly. - Plants should have maintenance to prevent dark smoke and oil leakage. Idle plant should be turned off. - Drip tray should be provided for all chemical and stationary plants. - No construction works shall be carried out in restricted hours (7:00 pm to 7:00 am) unless CNP is granted. - Waste should be sorted and disposed according to Waste Management Plan. - No direct discharge of wastewater into storm water drains is allowed. Wastewater must be desilted before discharging according to water discharge license. |
| | (b) Pile cap | Bridge A1, A2 and A3 | - Air, Noise, Water, Waste | |
| | (c) Grouting | Bridge F, A2, A3 and Portion H | - Air, Noise, Water, Waste | |
| | (d) Excavation & ELS | Portion F, H, K Bridge A1, A2, A3, F | - Air, Noise, Waste | |
| | (e) Road works | Portion J, H, Q, R, S, U and VY | - Air, Noise, Waste | |
| | (f) Pre-drilling | Portion K | - Air, Noise, Water, Waste | |
| | (g) Tree felling | Portion A | - Air, Noise, Waste | |

| | | | | |
|-------------------|--------------------------------------|---|---|--|
| | (h) Tree transplant | Portion A | - Air, Noise, Waste | |
| ND/2019/05 | (a) Pre-drilling | B2-03-P3, P5, P6, E3-04b, E3-05M and E4-01 | <ul style="list-style-type: none"> - Construction Dust Impact - Noise Impact - Water Quality Impact (Construction Phase) - Waste Management (Construction Waste) - Landscape and Visual - Cultural Heritage | <ul style="list-style-type: none"> - Regular watering on exposed worksites and haul road. - Stockpiling area should be provided with covers and water spraying system. - Only well maintained plant to be operated on site. - plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs. - mobile plant to be sited as far away from NSRs as possible practicable. - All open stockpiles of construction materials of more than 50m³ to be covered with tarpaulin. - Manholes to be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system. - All vehicles and plant to be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. - Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal. |
| | (b) Bored piling (Rotary type / RCD) | B1, B2 & C1(Portion II) and D2-01. | | |
| | (c) Piling | E3-04b, E3-05M and E4-01 | | |
| | (d) Erection of steel bridge | HKY FB (East) | | |
| | (e) ELS & Pile Cap Construction | B1-01m, B1-02ab, C1-01b, C1-02b, C1-03ab, C2-01, C2-02, C2-03a, C2-04a, C3-01a, C3-02, D1-02 and E2-01, E2-03 | | |
| | (f) Base slab Construction | NB109 | | |
| | (g) Duct Works and backfilling | Portion 13, Portion 17 and 18, TWSR (West), TWSR (East) | | |
| | (h) Pier/Pier head Construction | B1-02ab, C1-01ab, C1-02ab, C1-03ab, C1-04ab, C2-01, C2-02, D1-02, E1-04 & E2-01, E3- | | |

| | | | | |
|--|---|--------------------------|--|--|
| | | 02, E2-03, D2-02, D2-03 | | |
| | (i) Road Construction | Venton Area | | |
| | (j) Segment Fabrication | bridge C2 & C3 & D1 & E1 | | |
| | (k) Segments Erection | bridges D1 and E1 | | |
| | (l) SOP & Segment construction (precast & in-situ cast in syte) | C4-04, E3-03, E2-02 | | <ul style="list-style-type: none"> - Sort out demolition debris and ex cavated materials from demolition works to recover reusable/recyclable portions. - Provide training to workers on appropriate waste management procedures, including waste reduction, reuse and recycling. - To adopt other good site practice, such as arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site and regular cleaning and maintenance programme for drainage. - Chemical wastes to be stored in appropriate containers and collected by a licensed chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that ca nnot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. - Conducting Construction Vibration Monitoring - Tree Protection & Preservation Exiting trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. |

| | | | | |
|-------------------|------------------------------------|--------------------|--|---|
| | | | | <ul style="list-style-type: none"> - Tree Transplantation Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. - Erect 2m high dull green site boundary fence. |
| ND/2019/06 | N/A | N/A | N/A | N/A |
| ND/2019/07 | (a) Road works | Portion 1, 4, 5 | <ul style="list-style-type: none"> - Construction Dust Impact - Noise Impact - Water Quality Impact (Construction Phase) - Waste Management (Construction Waste) - Landscape and Visual | <ul style="list-style-type: none"> - Regular watering on exposed worksites and haul road. - Stockpiling area should be provided with covers and water spraying system. - Only well-maintained plant to be operated on-site. - plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs. - mobile plant to be sited as far away from NSRs as possible practicable. - All open stockpiles of construction materials of more than 50m3 to be covered with tarpaulin. |
| | (b) C&D waste disposal | Portion 1, 2, 4, 5 | | |
| | (c) Construction of box culvert | Portions 2 | | |
| | (d) Filling works | Portions 1, 2, 4 | | |
| | (e) Construction of site haul road | Portions 4 | | |
| | (f) Drainage Works | Portion 1, 3, 4, 5 | | |
| | (g) Sewerage works | Portion 1, 3, 4, 5 | | |

| | | | | |
|--|-----------------------------------|--------------|--|---|
| | (h) Construction of Noise Barrier | Portion 5 | | <ul style="list-style-type: none"> - Manholes to be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system. - All vehicles and plant to be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. - Segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal. - Sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions. - Provide training to workers on appropriate waste management procedures, including waste reduction, reuse and recycling. - To adopt other good site practice, such as arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site and regular cleaning and maintenance programme for drainage. - Chemical wastes to be stored in appropriate containers and collected by a licensed chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or |
| | (i) Waterworks | Portion 1, 4 | | |

| | | | | |
|--|--|--|--|---|
| | | | | <p>another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.</p> <ul style="list-style-type: none"> - Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. - Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. - Erect 2m high dull green site boundary fence. - Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. |
|--|--|--|--|---|

12.2 The major site activities in coming three months are shown in **Table IV**.

Monitoring Schedule for the Next Month

12.3 The tentative environmental monitoring schedule for the next month is shown in **Appendix D**.

Construction Programme for the Next Month

12.4 A tentative construction programme is provided in **Appendix A**.

13 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 13.1 This monthly EM&A Report presents the EM&A work undertaken in February 2023 in accordance with the Updated EM&A Manual.
- 13.2 One (1) Limit Level for DO of impact water quality monitoring exceedance was recorded. One (1) Action Level of construction noise was recorded.
- 13.3 No Action/Limit Level exceedance for air quality, ambient arsenic, landfill gas monitoring and build heritage monitoring was recorded in the reporting month.

Contract No. ND/2019/01

- 13.4 Environmental site inspections were conducted on 7, 16, 21 and 28 Feb 23 by ET in the reporting month.

Contract No. ND/2019/02

- 13.5 Environmental site inspections were conducted on 1, 8, 15 and 20 Feb 23 by ET in the reporting month.

Contract No. ND/2019/03

- 13.6 Environmental site inspections were conducted on 3, 10, 17 and 21 Feb 23 by ET in the reporting month.

Contract No. ND/2019/04

- 13.7 Environmental site inspections were conducted on 2, 9, 17 and 24 Feb 23 by ET in the reporting month.

Contract No. ND/2019/05

- 13.8 Environmental site inspections were conducted on 6, 16, 21 and 27 Feb 23 by ET in the reporting month.

Contract No. ND/2019/06

- 13.9 Environmental site inspections were conducted on 2, 9, 17 and 24 Feb 23 by ET in the reporting month.

Contract No. ND/2019/07

- 13.10 Environmental site inspections were conducted on 3, 10, 17 and 24 Feb 23 by ET in the reporting month.

- 13.11 One environmental complaint was received in the reporting month. The investigation of the environmental complaint regarding polluting effluent discharge for ND/2019/05 in the last report was completed. No notification of summons or successful prosecutions was received in the reporting month.

- 13.12 The ET would keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Recommendations

13.13 According to the environmental audits performed in the reporting month, the following recommendations were made:

Air Quality Impact

- To regular water haul roads;
- To provide vehicle washing facilities with high pressure water jet at every discernible or designated vehicle exit point;
- To maintain the impervious material to entirely cover the stockpile of dusty materials; and
- To ensure all regulated machines displayed with valid Non-road Mobile Machinery (NRMM) labels.

Construction Noise Impact

- To ensure compressor operated with doors closed.

Water Impact

- To review and implement temporary drainage system;
- To prevent any surface runoff discharge into Sheung Yuen River, Ma Wat River or public road;
- To provide sandbags or construct berm to prevent any outflow of muddy water from site area;
- To ensure all vehicle clear of earth and mud before leaving the site areas;
- To ensure the drainage facilities would not be clogged with waste or sediment to avoid overflow;
- To regularly check the condition of desilting materials for proper function;
- To regularly maintain and ensure water treatment facilities proper operation and function;
- To divert all the water generated from the construction site to de-silting facilities with sufficient handling capacity before discharge; and
- To avoid or regularly clear the stagnant water in drip trays;

Waste/Chemical Management

- To dispose of general refuse properly;
- To clear and avoid oil stains at site areas;
- To provide proper storage areas for chemical; and
- To maintain drip trays for chemical storage well.

Landfill Gas Hazard

- “No Smoking” and “No Naked Flame” notices in Chinese and English should be posted prominently around the construction site.

Land Contamination

- Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be properly covered by impermeable sheeting to reduce dust emission during dry season or contaminated run-off during rainy season. Watering should be avoided on stockpiles of soil to minimise runoff.

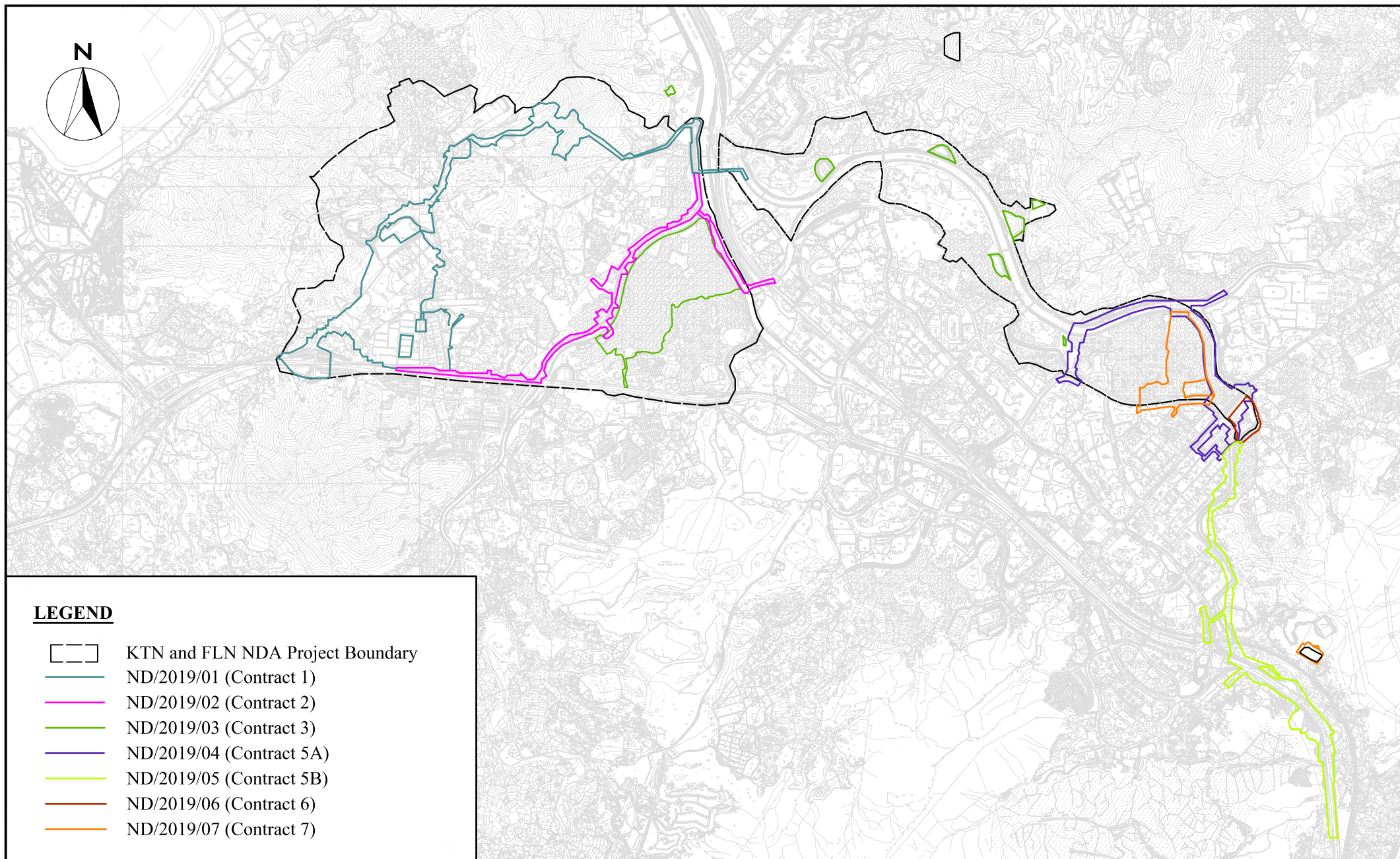
Ecology

- Properly erect and maintain 2m high solid barriers for protecting Siu Hang San Tsuen Stream.

Permit/ Licences

- To display valid Permit or Licences at the site entrances.

DRAWING(S)

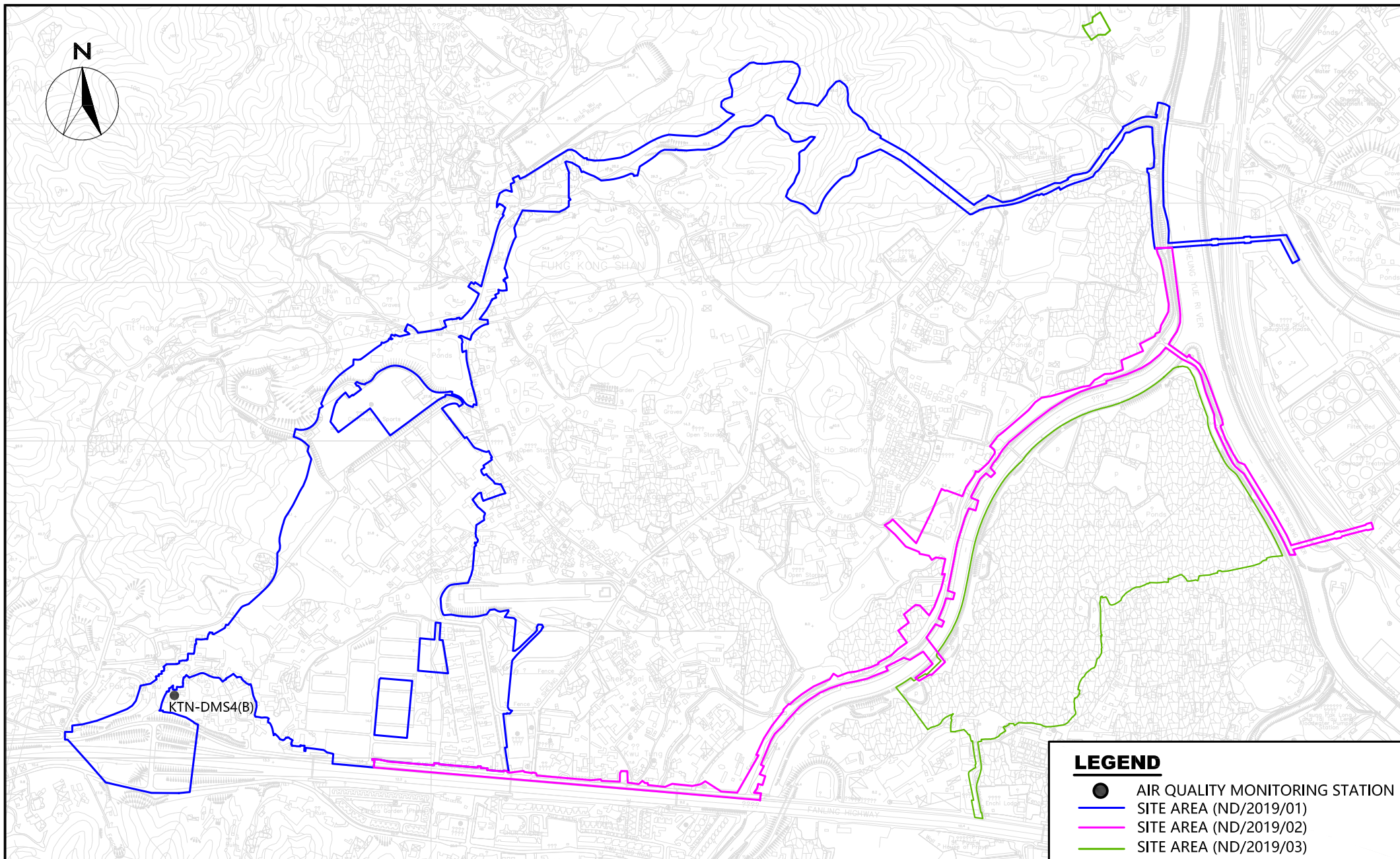


LEGEND

- KTN and FLN NDA Project Boundary
- ND/2019/01 (Contract 1)
- ND/2019/02 (Contract 2)
- ND/2019/03 (Contract 3)
- ND/2019/04 (Contract 5A)
- ND/2019/05 (Contract 5B)
- ND/2019/06 (Contract 6)
- ND/2019/07 (Contract 7)

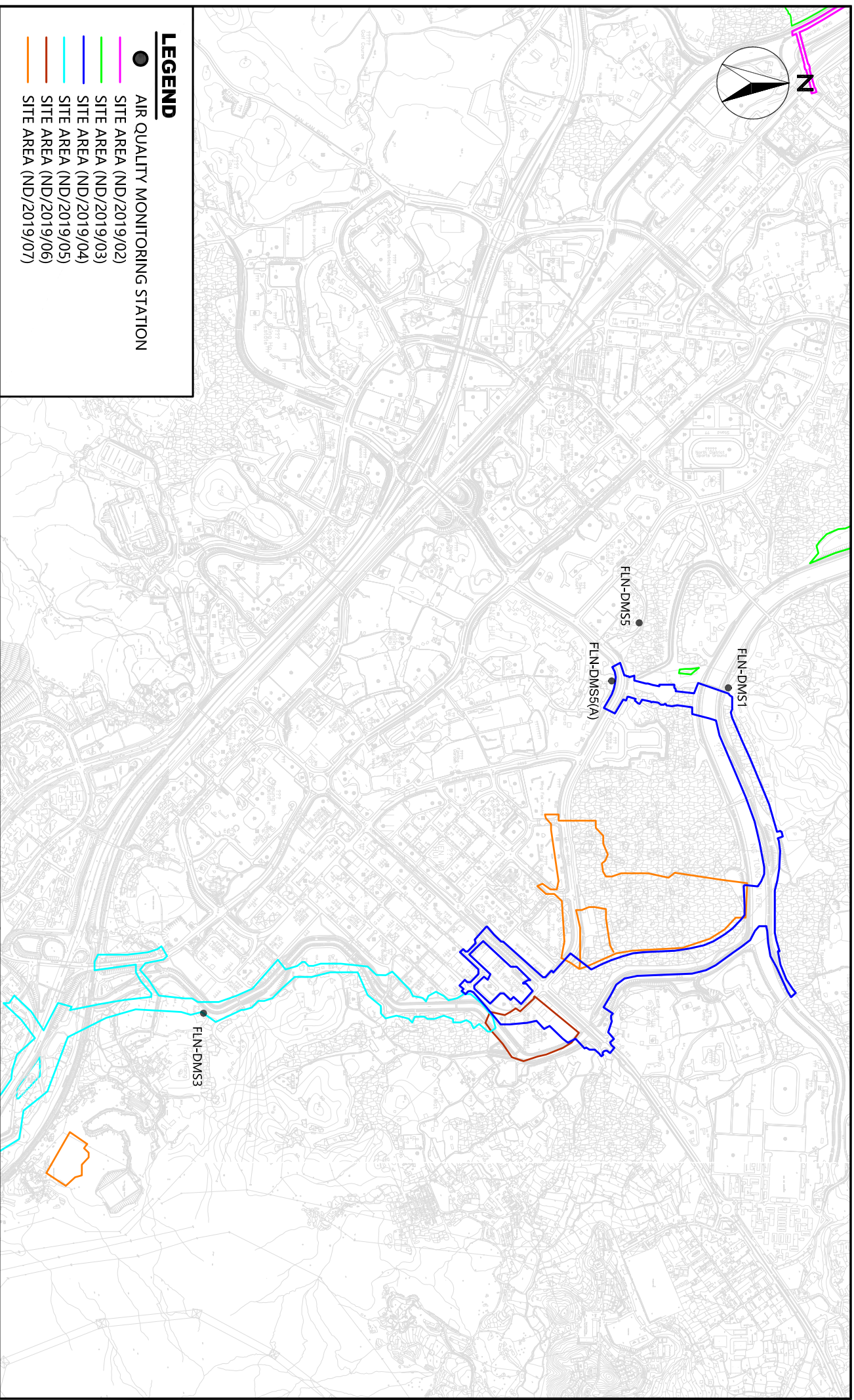
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|-------------|--------------|-------------|-----------|-------|
| SCALE | A4 @ 1:80000 | DATE | July 2020 | |
| CHECK | KL | DRAWN | ML | |
| Project No. | WMA20002 | Drawing No. | 1 | REV - |

FIGURE(S)



LEGEND

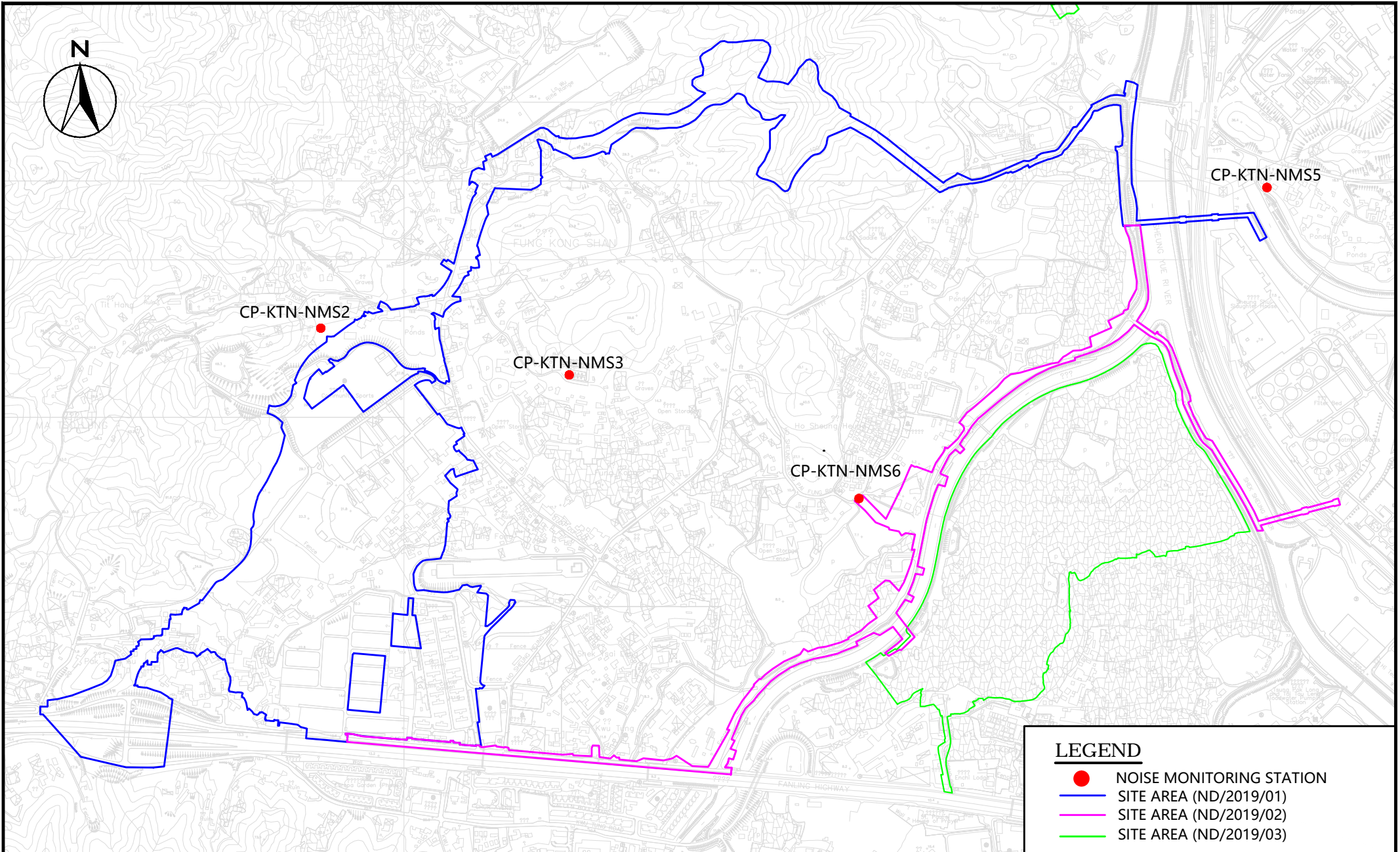
- AIR QUALITY MONITORING STATION
- SITE AREA (ND/2019/01)
- SITE AREA (ND/2019/02)
- SITE AREA (ND/2019/03)



LEGEND

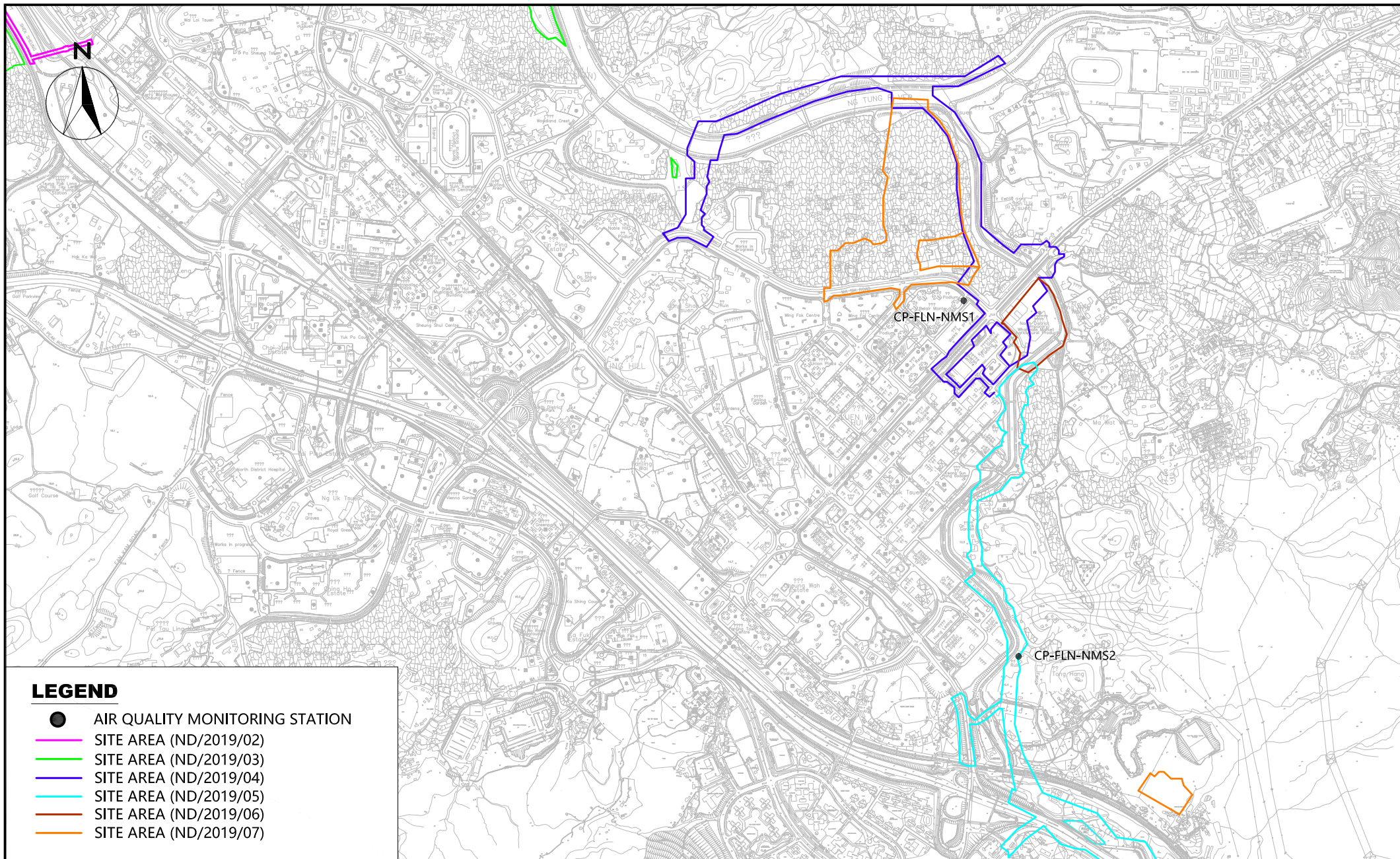
- AIR QUALITY MONITORING STATION
- SITE AREA (ND/2019/02)
- SITE AREA (ND/2019/03)
- SITE AREA (ND/2019/04)
- SITE AREA (ND/2019/05)
- SITE AREA (ND/2019/06)
- SITE AREA (ND/2019/07)

| | | | |
|-------------|--------------|------------|----------|
| SCALE | A4 @ 1:40000 | | |
| CHECK | IT | DATE | DEC 2021 |
| PROJECT No. | WMA20002 | FIGURE NO. | 2 |
| | | REV | — |



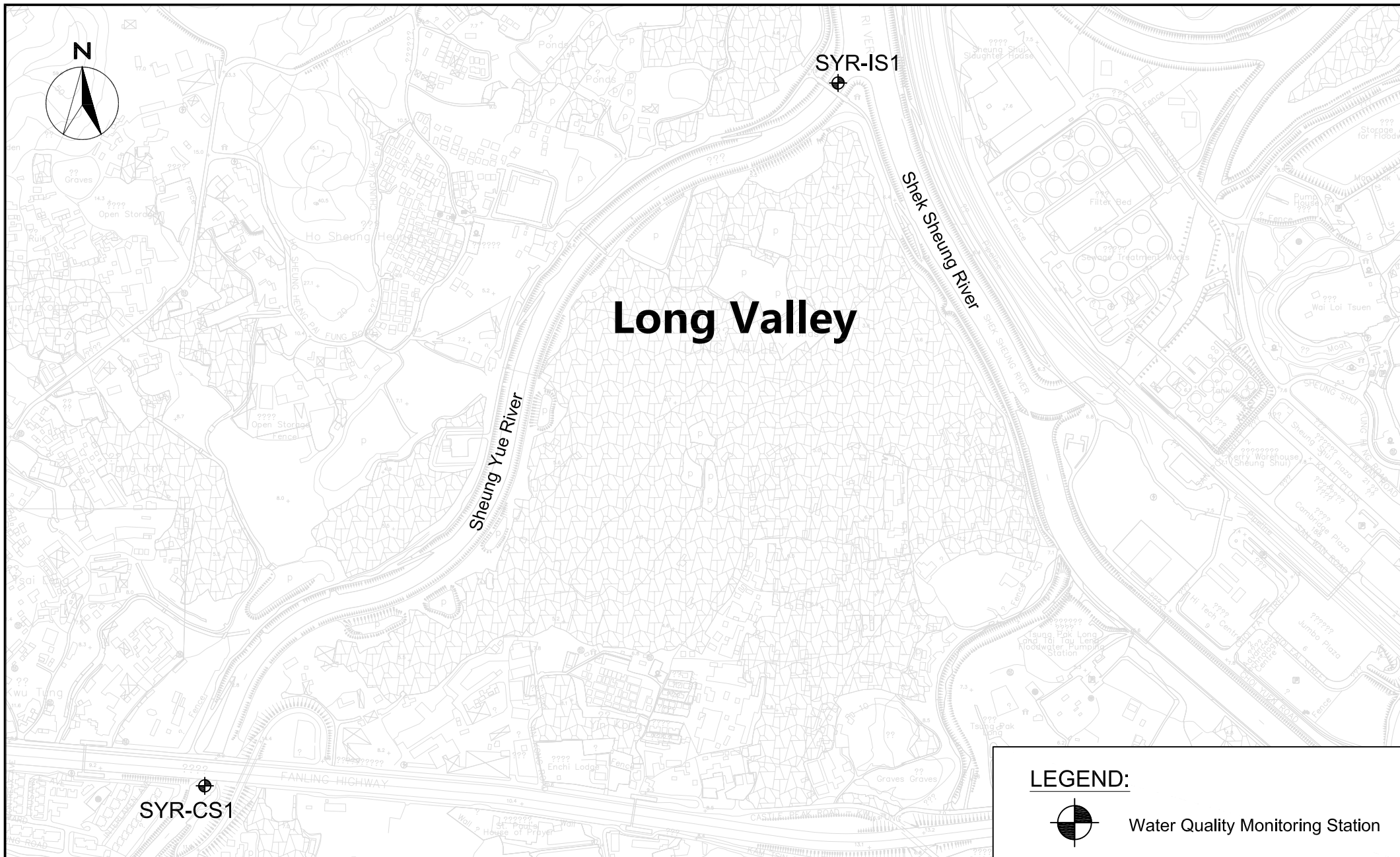
LEGEND

- NOISE MONITORING STATION
- SITE AREA (ND/2019/01)
- SITE AREA (ND/2019/02)
- SITE AREA (ND/2019/03)



LEGEND

- AIR QUALITY MONITORING STATION
- SITE AREA (ND/2019/02)
- SITE AREA (ND/2019/03)
- SITE AREA (ND/2019/04)
- SITE AREA (ND/2019/05)
- SITE AREA (ND/2019/06)
- SITE AREA (ND/2019/07)



LEGEND:



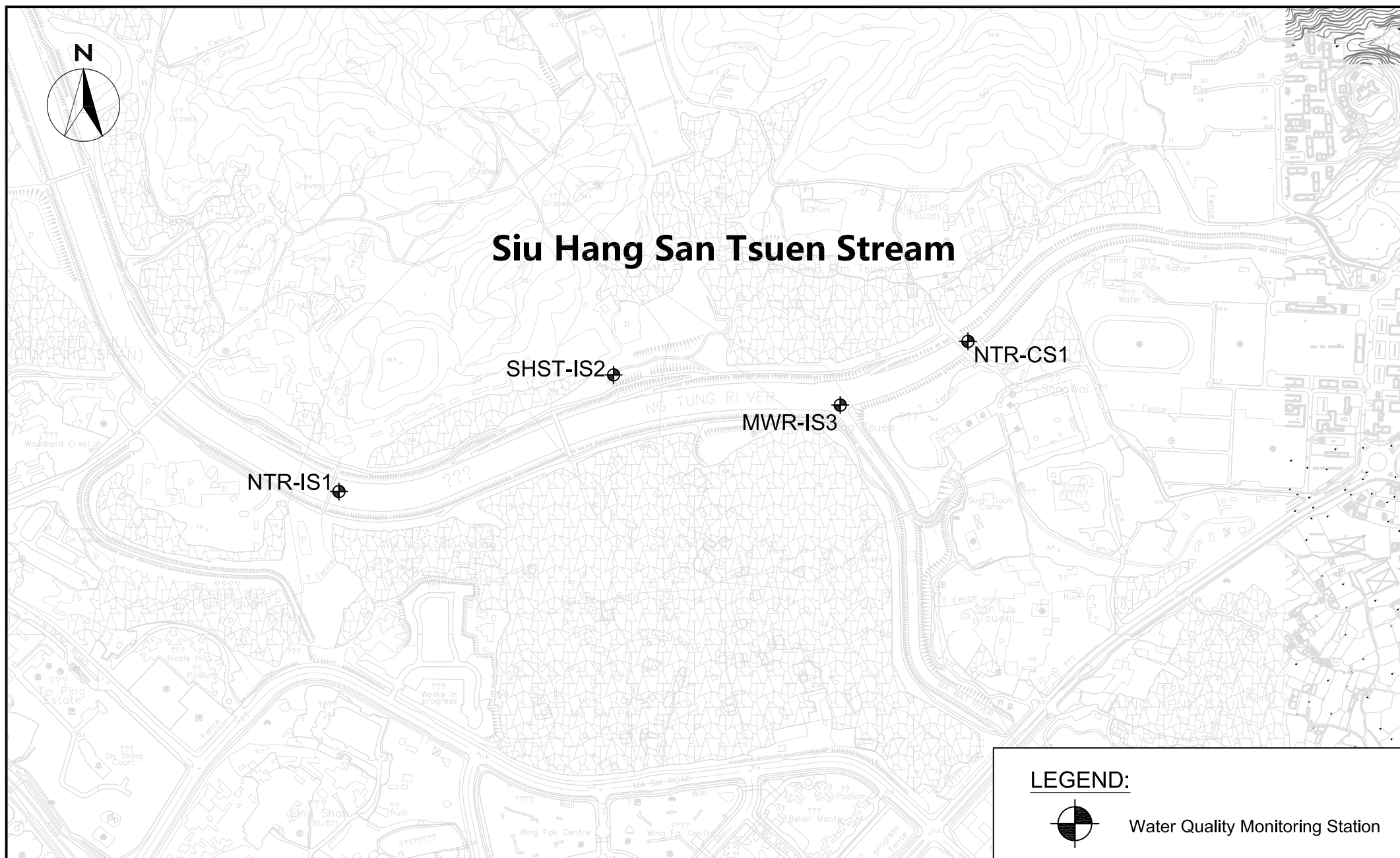
Water Quality Monitoring Station

WELLAB 匯力
consulting . testing . research

Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction
Phase for the First Phase Development of KTN and FLN NDAs

Location of Additional Water Quality Monitoring Stations at River Beas

| | | | | |
|-------------|--------------|------------|----------|----------|
| SCALE | A4 @ 1:20000 | DATE | FEB 2021 | |
| CHECK | KL | DRAWN | NL | |
| PROJECT No. | WMA20002 | FIGURE NO. | 5 | REV — |

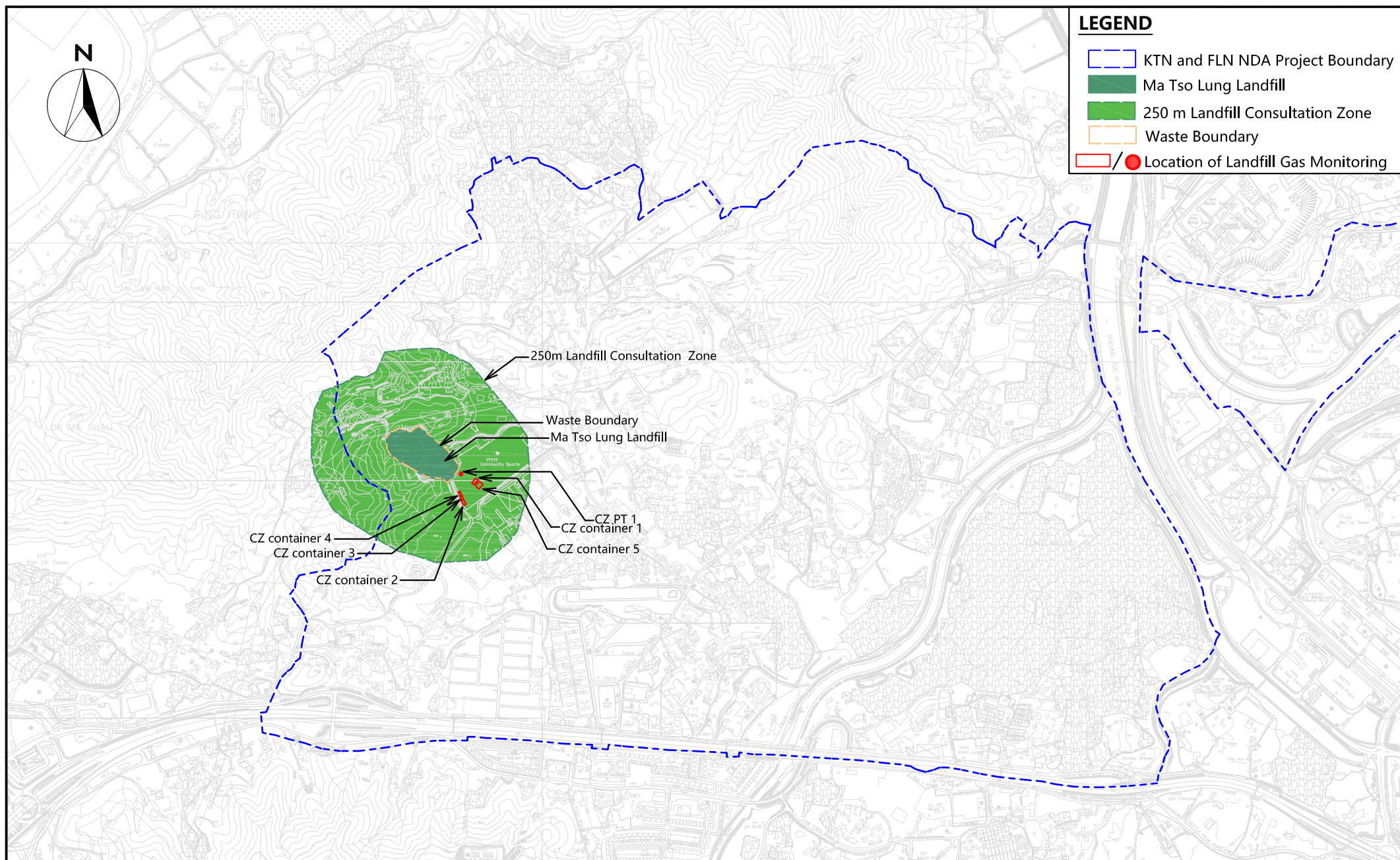


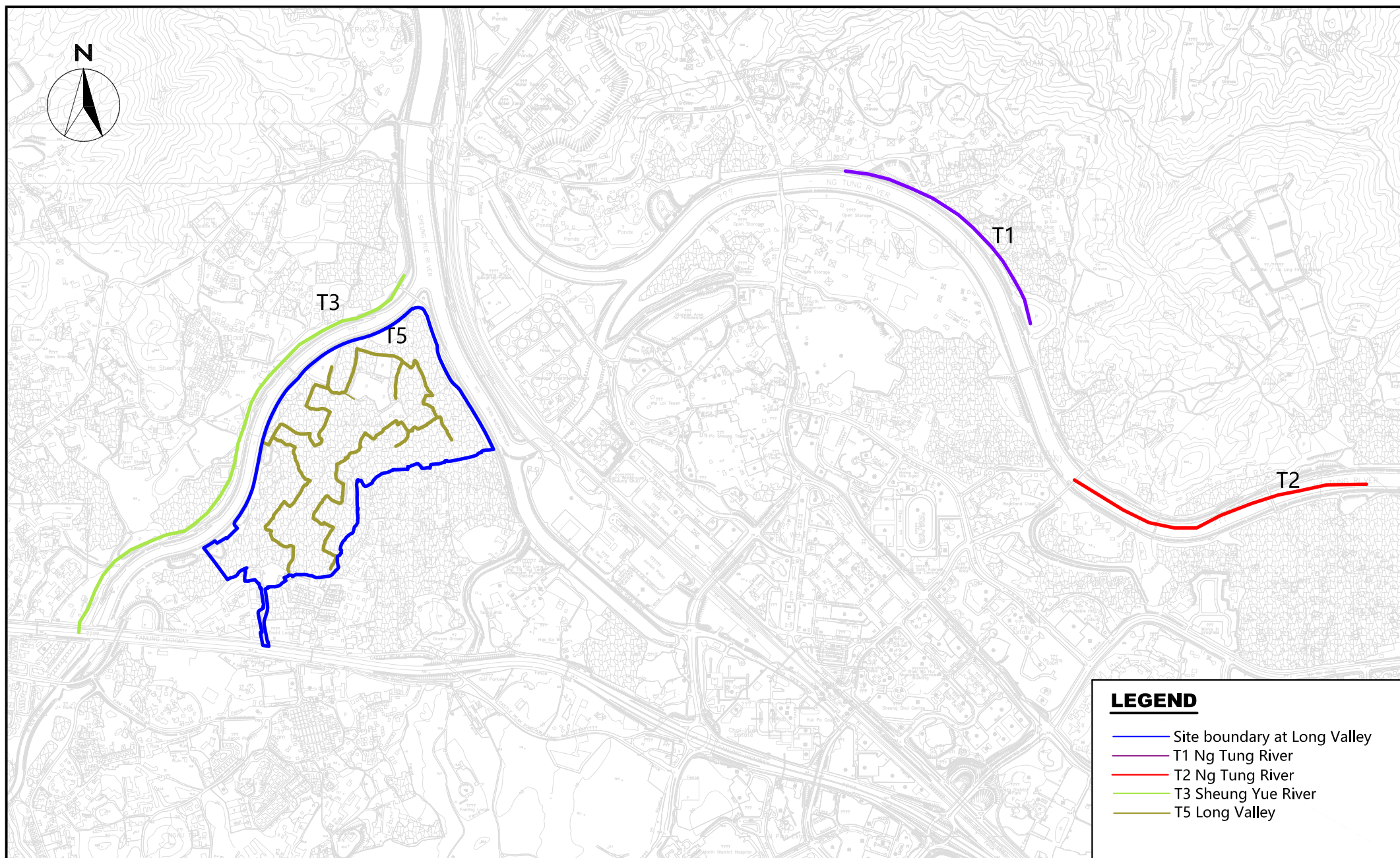
LEGEND:



Water Quality Monitoring Station

| | | | |
|-------------|--------------|------------|----------|
| SCALE | A4 @ 1:20000 | DATE | FEB 2021 |
| CHECK | KL | DRAWN | NL |
| PROJECT No. | WMA20002 | FIGURE NO. | 6 |
| | | REV | — |









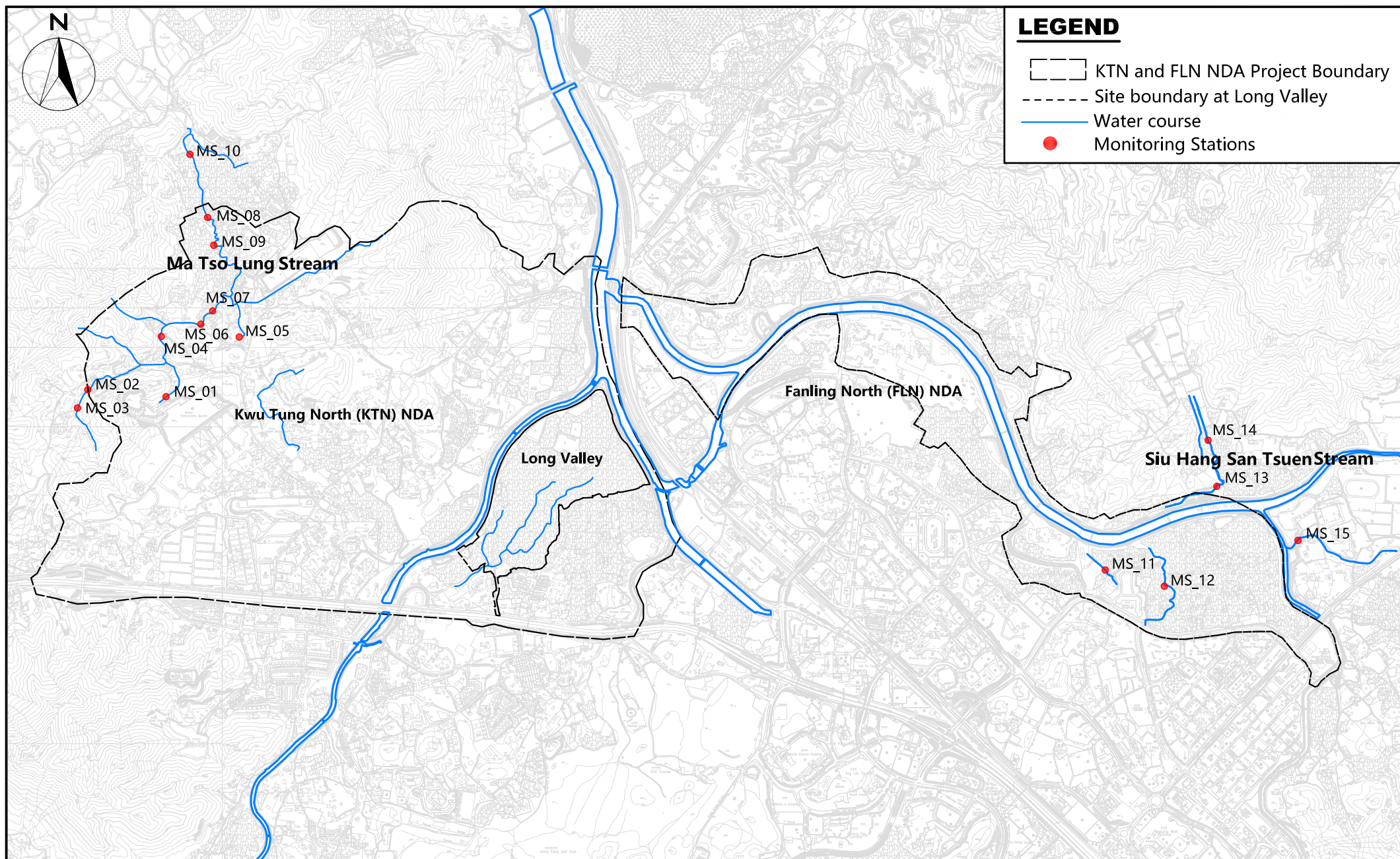
LEGEND

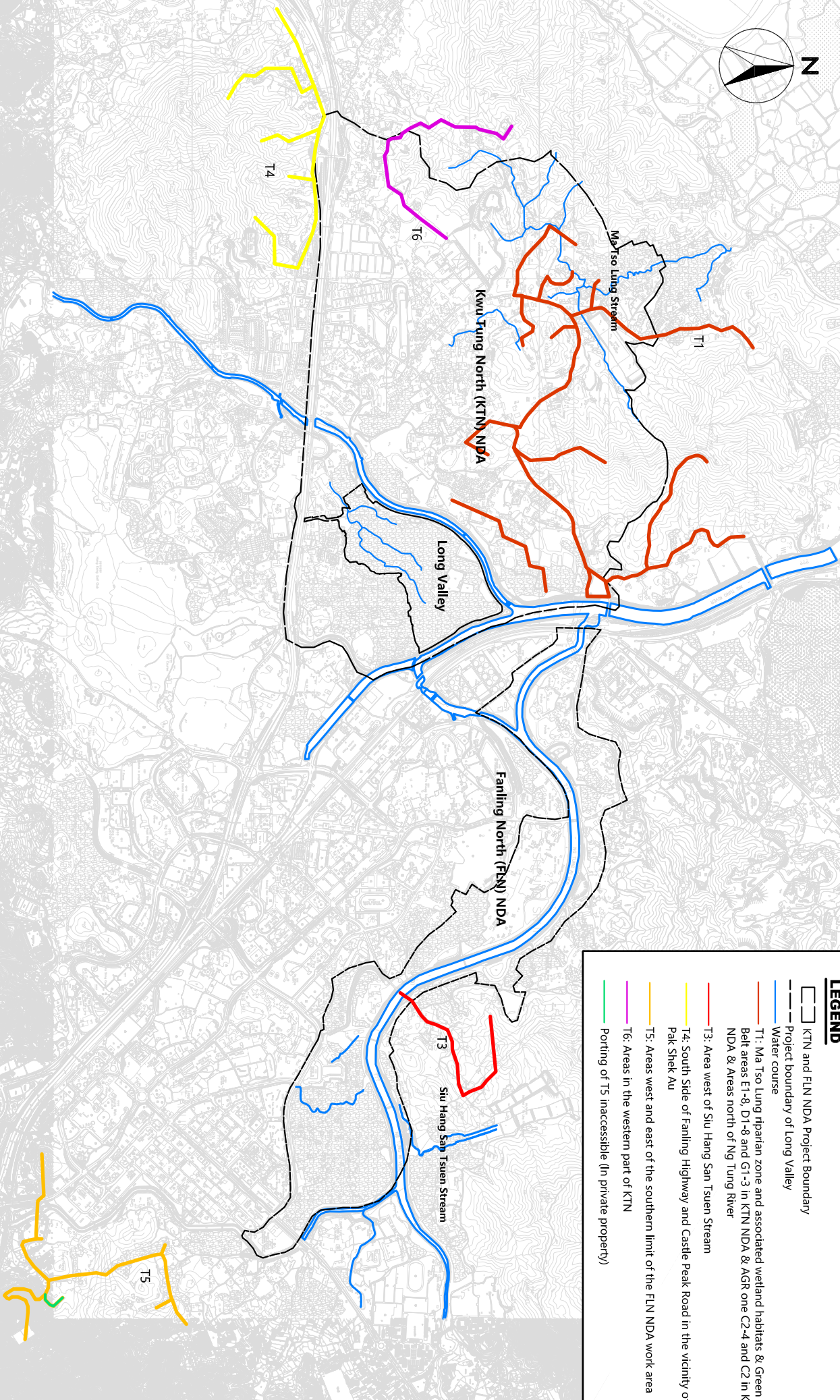
- Site boundary at Long Valley
- T1 Ng Tung River
- T2 Ng Tung River
- T3 Sheung Yue River
- T5 Long Valley



LEGEND

-  KTN and FLN NDA Project Boundary
-  Site boundary at Long Valley
-  Water course
-  Monitoring Stations





LEGEND

- KTN and FLN NDA Project Boundary
- Project boundary of Long Valley
- Water course
- T1: Ma Tso Lung riparian zone and associated wetland habitats & Green Belt areas E1-8, D1-8 and G1-3 in KTN NDA & AGR one C2-4 and C2 in KTN NDA & Areas north of Ng Tung River
- T3: Area west of Siu Hang San Tsuen Stream
- T4: South Side of Fanling Highway and Castle Peak Road in the vicinity of Pak Shek Au
- T5: Areas west and east of the southern limit of the FLN NDA work area
- T6: Areas in the western part of KTN
- Porting of T5 inaccessible (in private property)

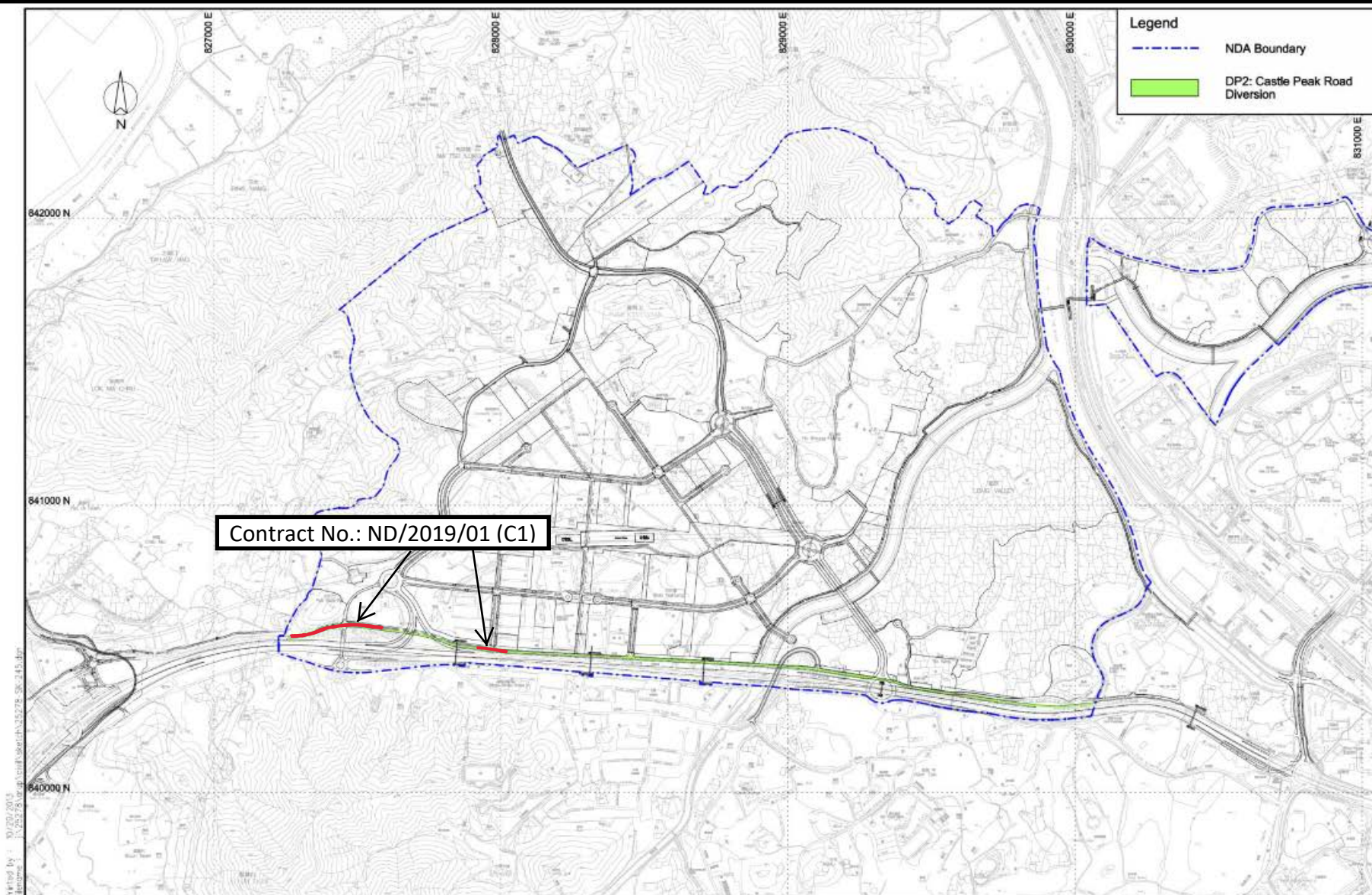
Service Contract No. NDO 04/2019 Environmental Team for EM&A Works in Construction
Phase for the First Phase Development of KTN and FLN NDAs
**Location of Transect Route of Ecological Sensitive Habitats
(Non-Aquatic Fauna) Transects (T1, T3-T6)**

| | | | |
|-------------|--------------|------------|----------|
| SCALE | A4 @ 1:70000 | DATE | JUL 2021 |
| CHECK | KL | DRAWN | ML |
| PROJECT No. | WMA20002 | FIGURE NO. | 11 |
| | | REV | — |

Figure 12

Site Layout Plan of Contract ND/2019/01

under EP-466-2013-A



Project Title: Castle Peak Road Diversion

Figure 1: Location Plan for Castle Peak Road Diversion Project

(Extracted from Drawing No. SK/245 of North East New Territories New Development Area Planning and Engineering Study)

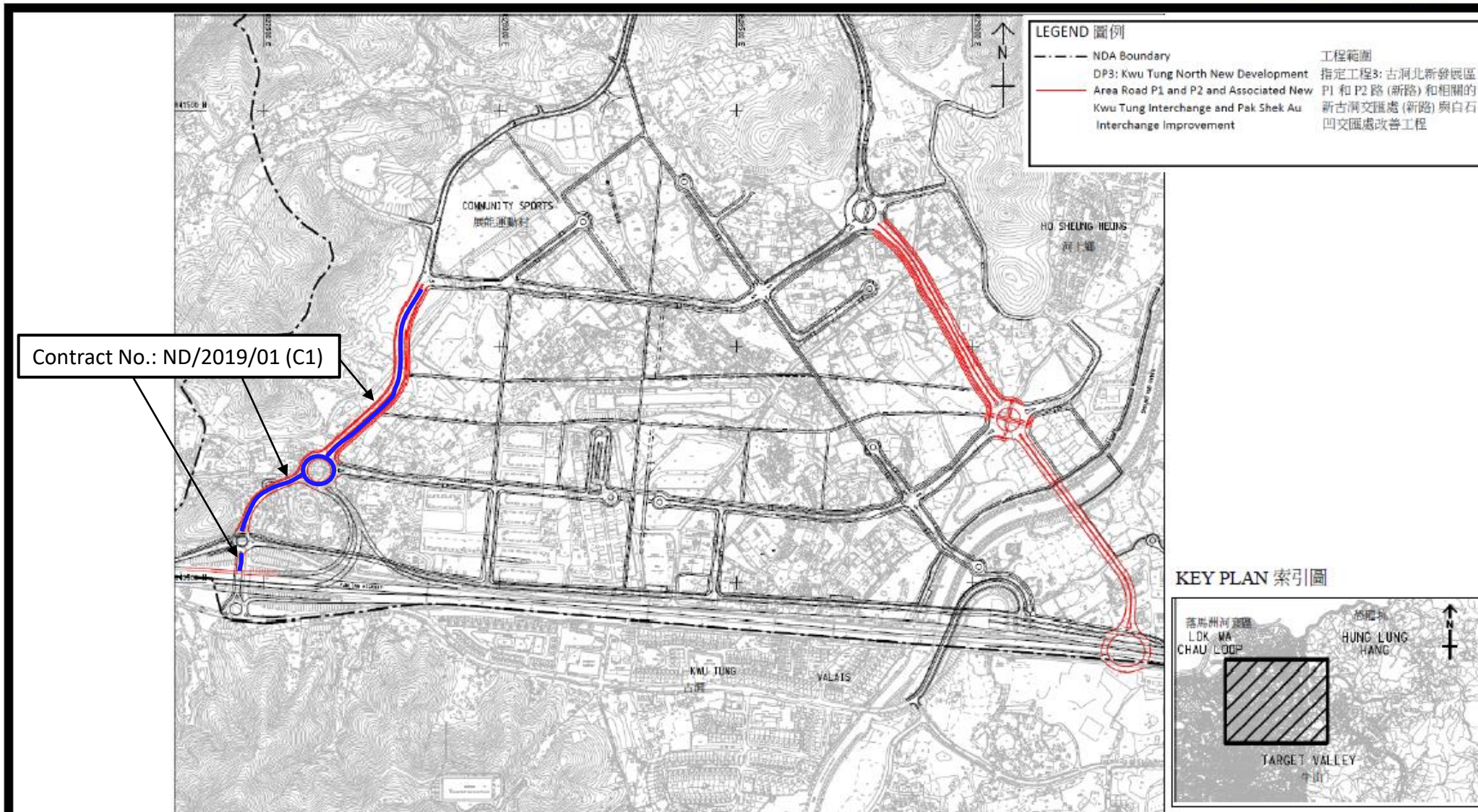
**Environmental Permit No:
EP-466/2013/A**



Figure 13

Site Layout Plan of Contract ND/2019/01

under EP-467-2013-A



Project Title: Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement
工程名稱: 古洞北新發展區P1和P2路 (新路) 和相關的新古洞交匯處 (新路) 與白石凹交匯處改善工程

Environmental Permit No:
EP-467/2013/A
環境許可證編號:
EP-467/2013/A



Figure 1: Location Plan for Interchange Improvement (Indicative)

(This figure was prepared based on Figure 1.2 of VEP application (No.: VEP-523/2016))

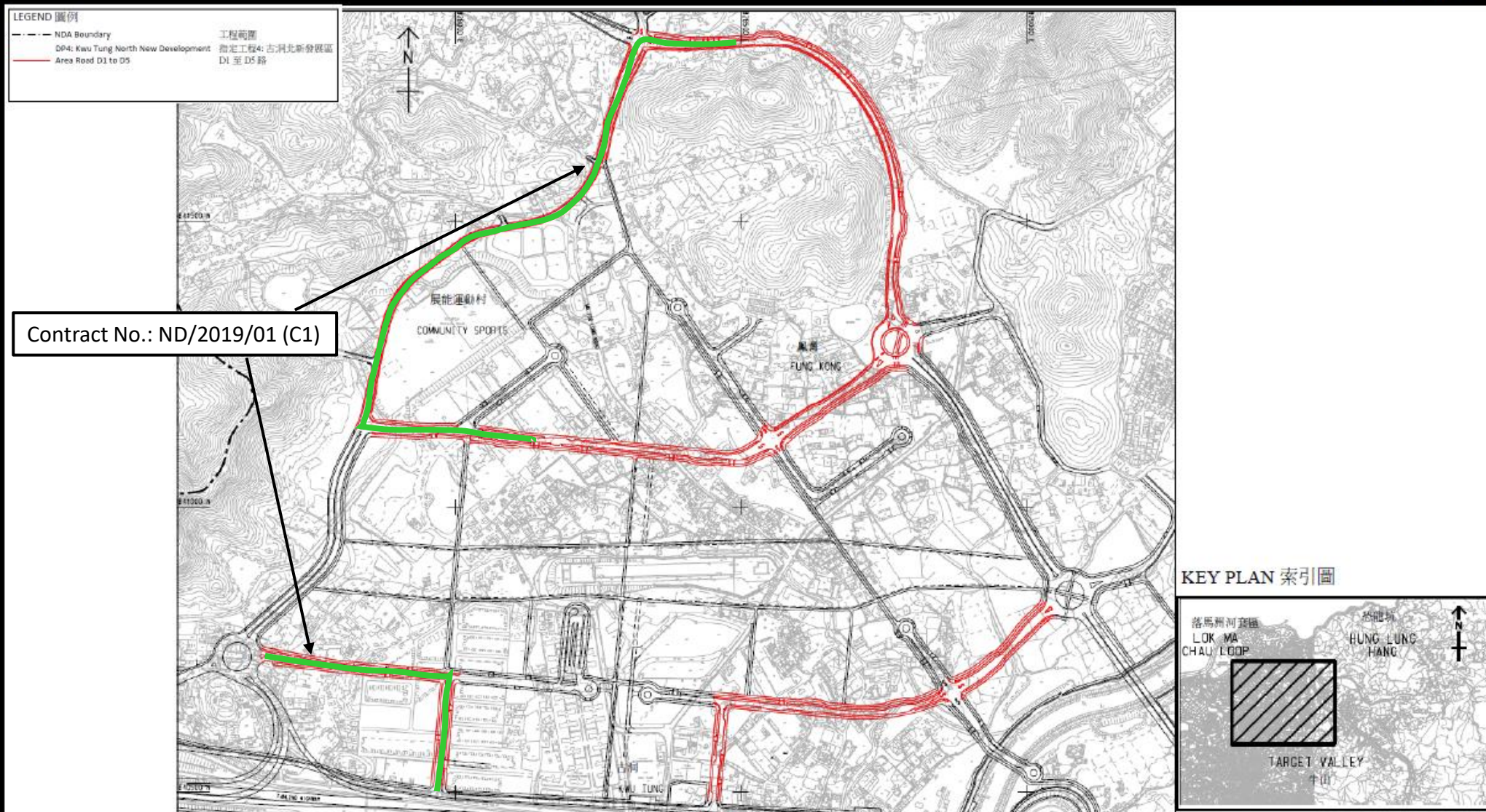
圖1: 交匯處改善工程位置 (示意圖)

(本圖是根據申請更改環境許可證(編號: VEP-523/2016)圖1.2編制)

Figure 14

Site Layout Plan of Contract ND/2019/01

under EP-468-2013-A



Project Title: Kwu Tung North New Development Area Road D1 to D5
工程名稱: 古洞北新發展區D1至D5路

Environmental Permit No:
 EP-468/2013/A
環境許可證編號:
 EP-468/2013/A



Figure 1: Location Plan for The Project (Indicative)

(This figure was prepared based on Figure 1.4 of VEP application (No.: VEP-524/2016))

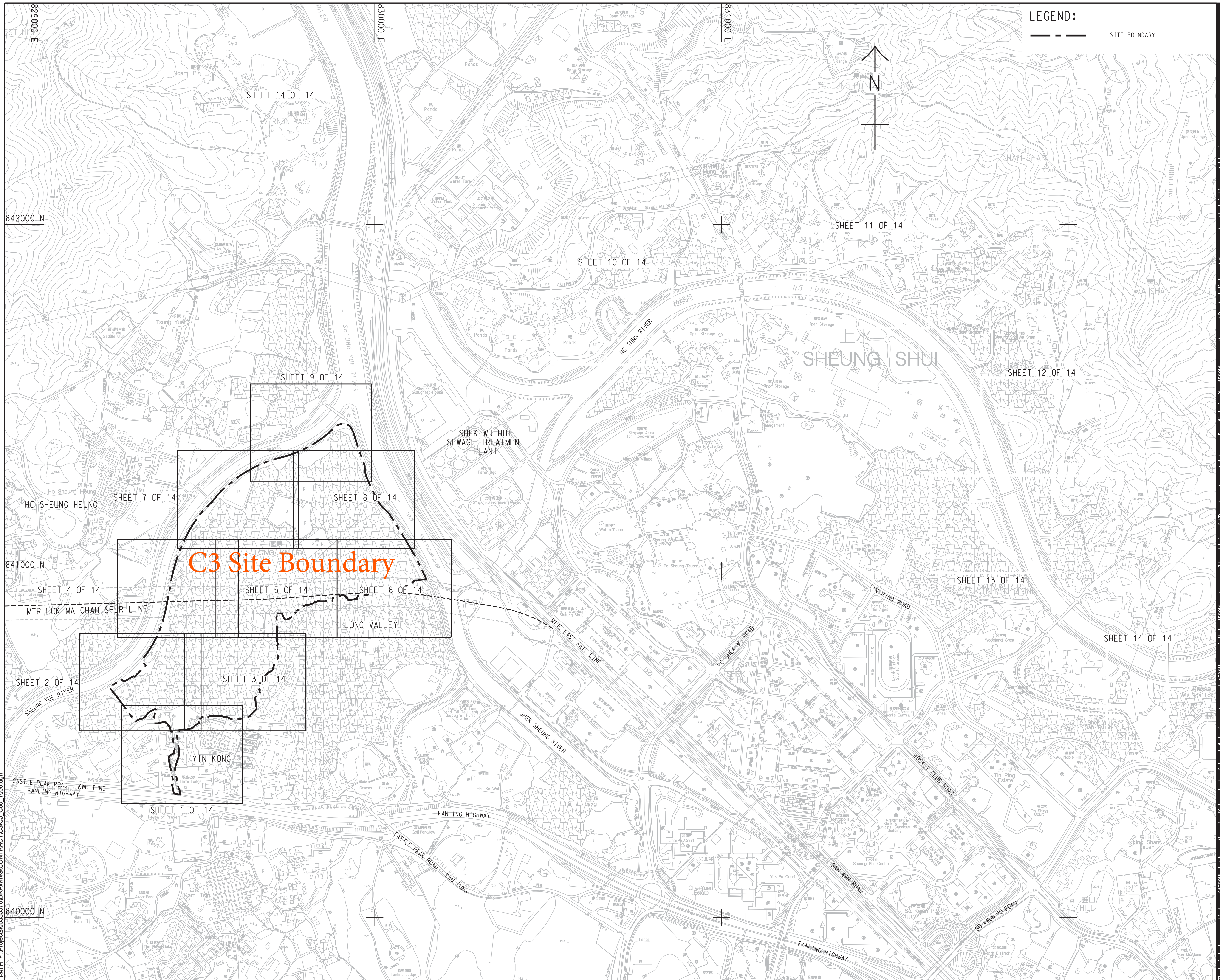
圖1：工程項目位置 (示意圖)

(本圖是根據申請更改環境許可證(編號: VEP-524/2016)圖1.4編制)

Figure 15

Site Layout Plan of Contract ND/2019/03

under EP-468-2013-A



Sang Hing - Kuly Venture

Title of Designated Project
Kwu Tung North New
Development Area Road
D1 to D5

CLIENT
業主



土木工程拓展署
Civil Engineering and
Development Department

CONSULTANT
工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION
修訂

| | | | |
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| | | | |
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| | | | |
| | | | |
| - | JUN-19 | TENDER DRAWING | CYCH |
| I/R 修訂 | DATE 日期 | DESCRIPTION 內容摘要 | CHK 複核 |

STATUS
階段

SCALE
比例

A1 1 : 5000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN

PROJECT NO.
項目編號

60335576

CONTRACT NO
合約編號

ND/2019/03

SHEET TITLE
圖紙名稱

KEY PLAN OF GENERAL LAYOUT

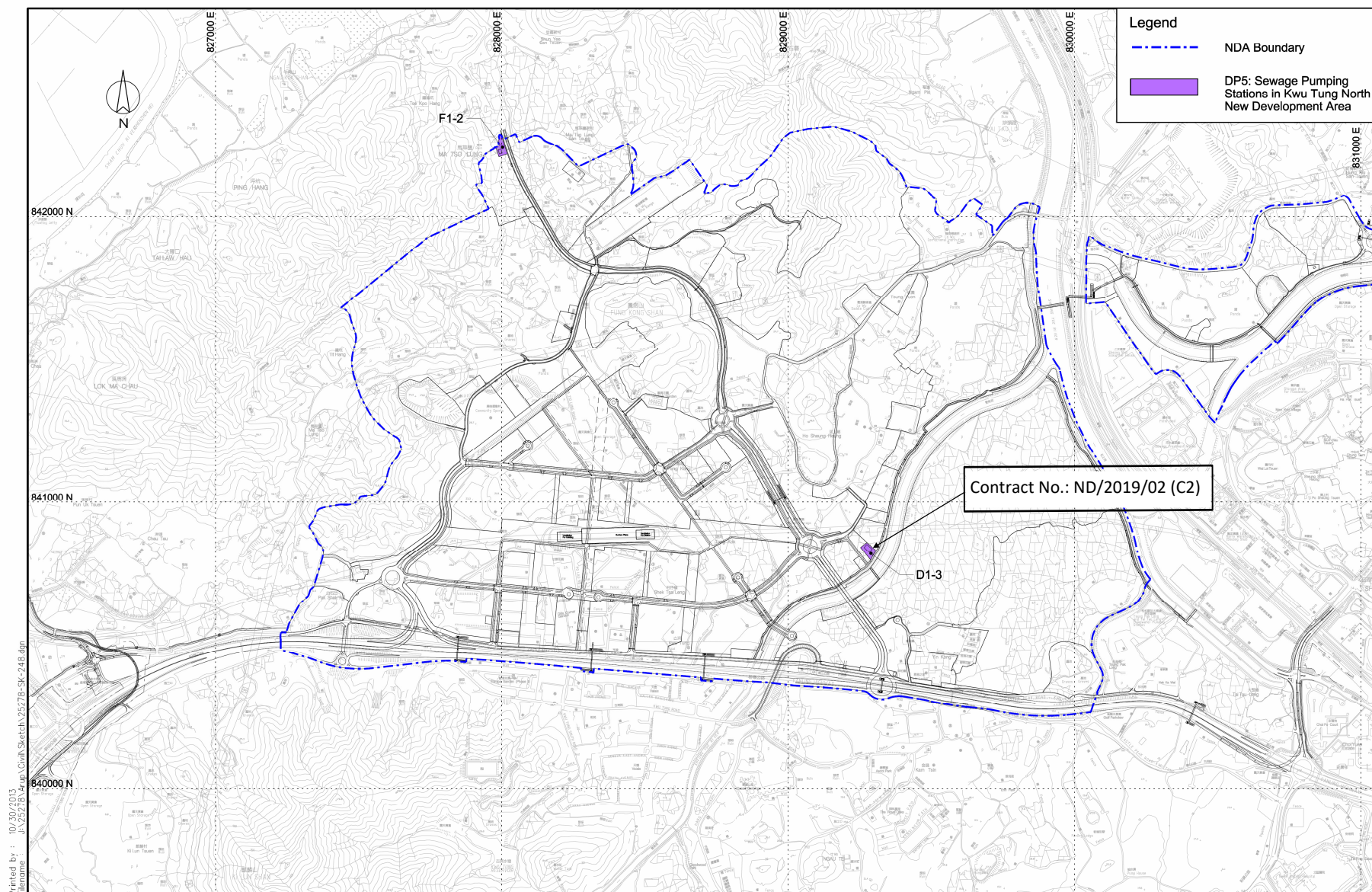
SHEET NUMBER
圖紙編號

60335576/C3/C00/1000

Figure 16

Site Layout Plan of Contract ND/2019/02

under EP-469-2013



Project Title: Sewage Pumping Stations in Kwu Tung North New Development Area

Figure 1: Location Plan for the Proposed Pumping Stations

(Extracted from Drawing No. SK/248 of North East New Territories New Development Area Planning and Engineering Study)

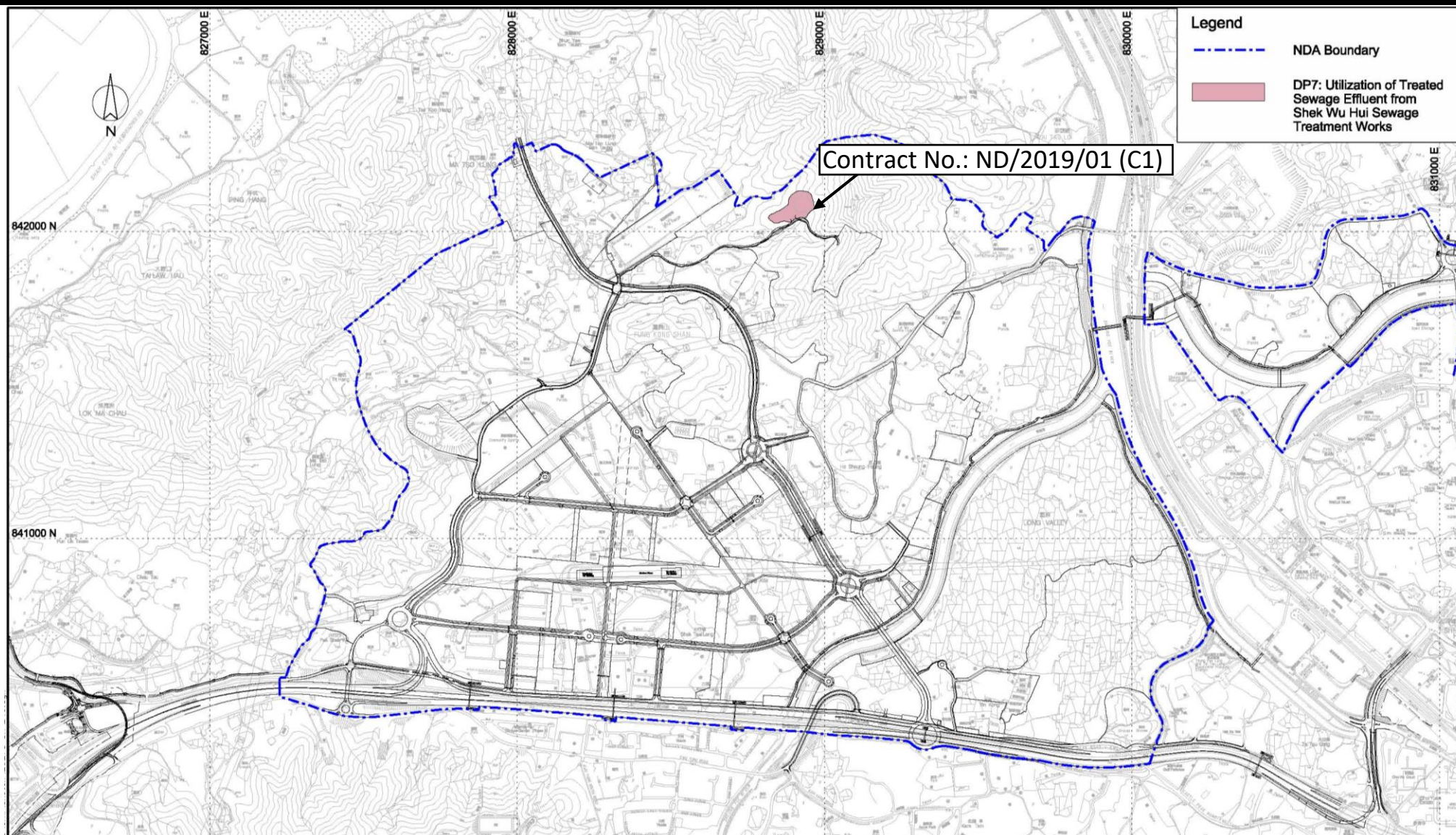
**Environmental Permit No:
EP-469/2013**



Figure 17

Site Layout Plan of Contract ND/2019/01

under EP-470-2013-A



Project Title: Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works

Figure 1: Location Plan for the Project

(Extracted from Drawing No. SK/249 of North East New Territories New Development Area Planning and Engineering Study)

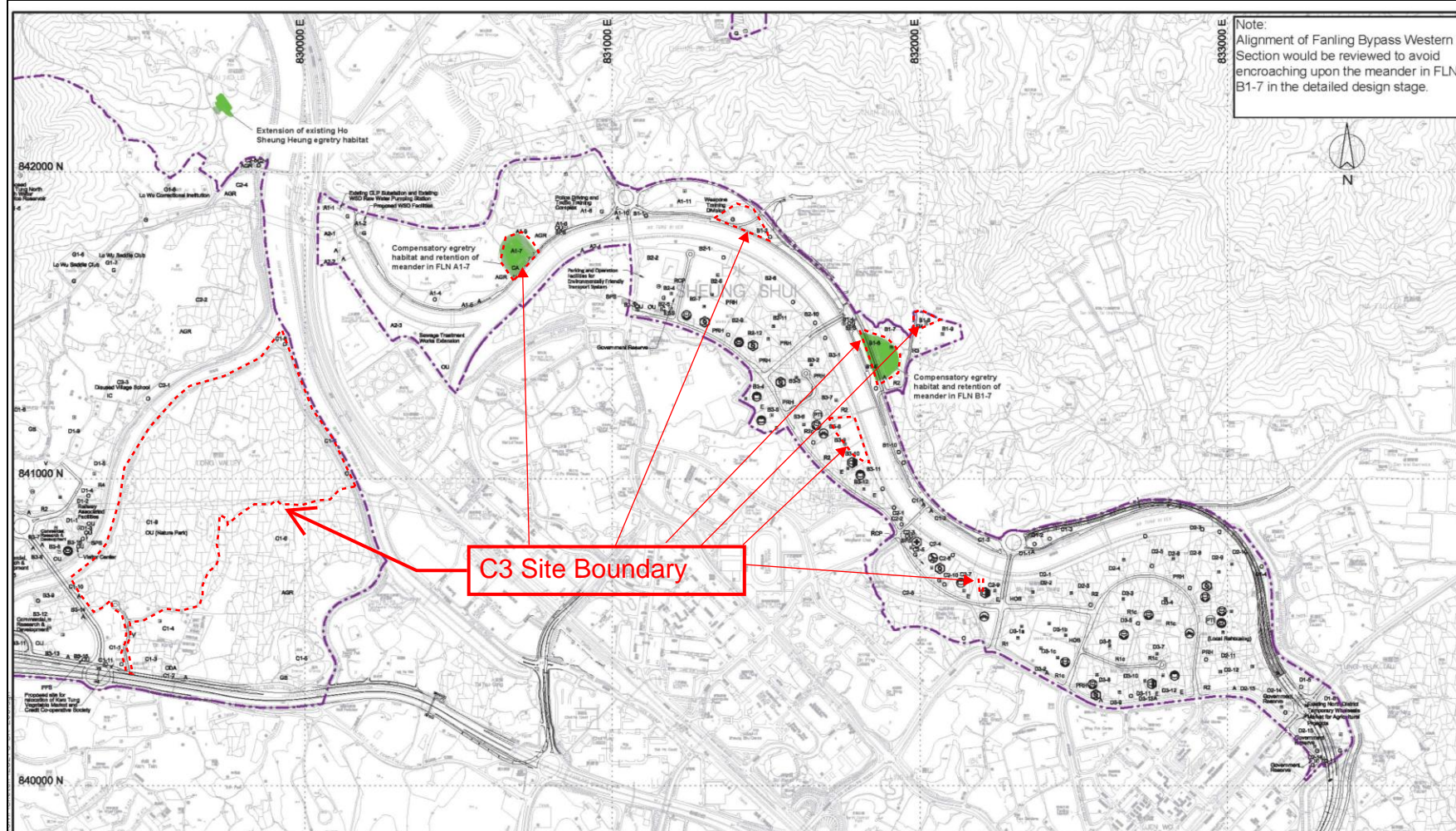
**Environmental Permit No:
EP-470/2013/A**



Figure 18

Site Layout Plan of Contract ND/2019/03

under EP-473-2013-A



Project Title: Fanling Bypass Eastern Section

工程名稱: 粉嶺繞道東段

Figure 2: Location of Alternative Egretty Sites and Retained Meanders

圖 2: 替代鷺鳥林選址和保留河曲的位置

(Extracted from Drawing No. SK/254 of North East New Territories New Development Area Planning and Engineering Study)

(摘錄自新界東北新發展區規劃及工程研究 圖: SK/254)

Environmental Permit No:

EP-473/2013/A

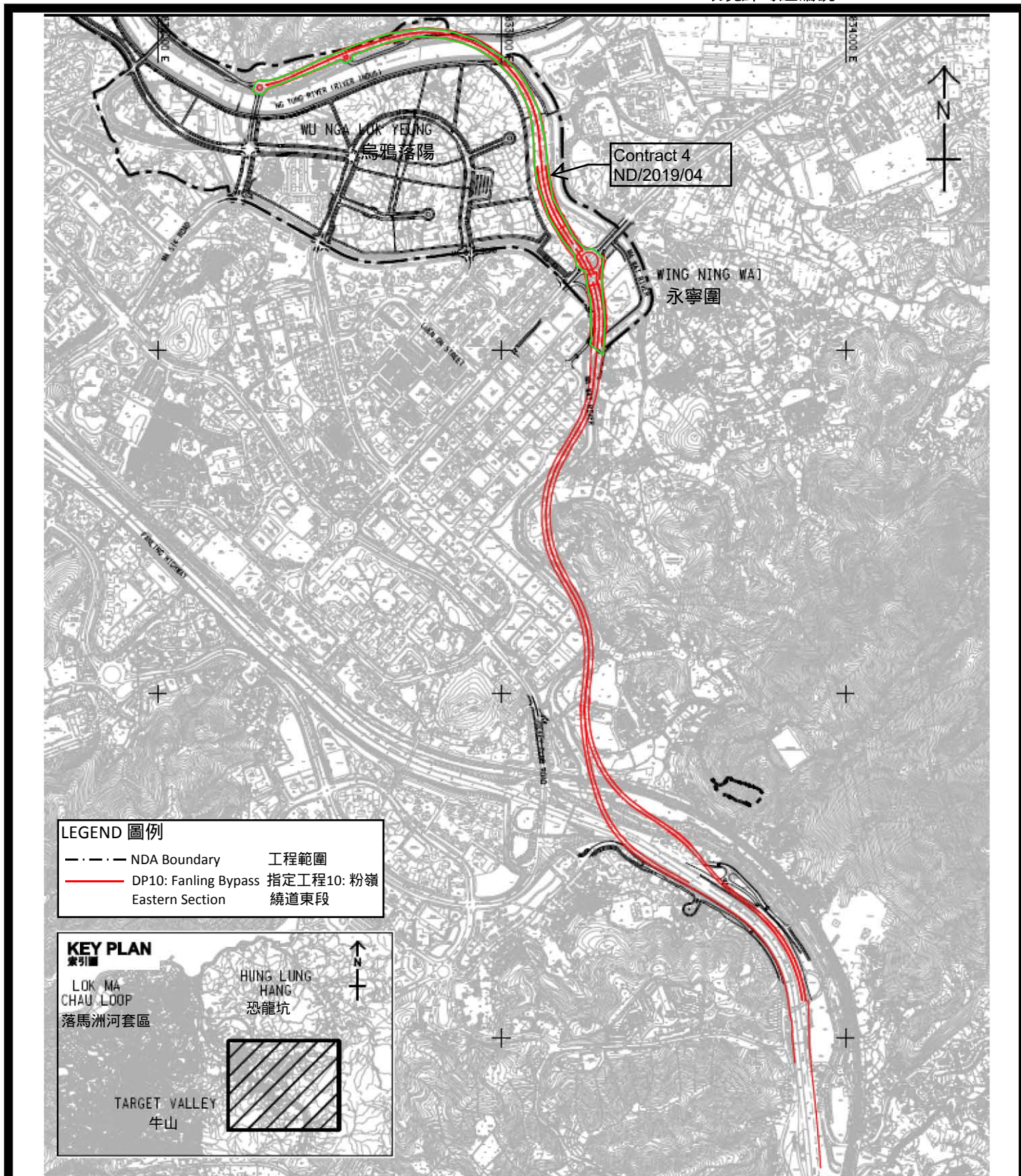
環境許可證編號: EP-473/2013/A



Figure 19

Site Layout Plan of Contract ND/2019/04

under EP-473-2013-A



Project Title: Fanling Bypass Eastern Section

工程名稱: 粉嶺繞道東段

Figure 1: Location Plan for the Project (Indicative)

圖 1: 工程項目位置 (示意圖)

This figure was prepared based on Figure 1.1 of VEP application (No.: VEP-526/2016)
本圖是根據申請更改環境許可證(編號: VEP-526/2016)圖1.1編制

Environmental Permit No:

EP-473/2013/A

環境許可證編號:

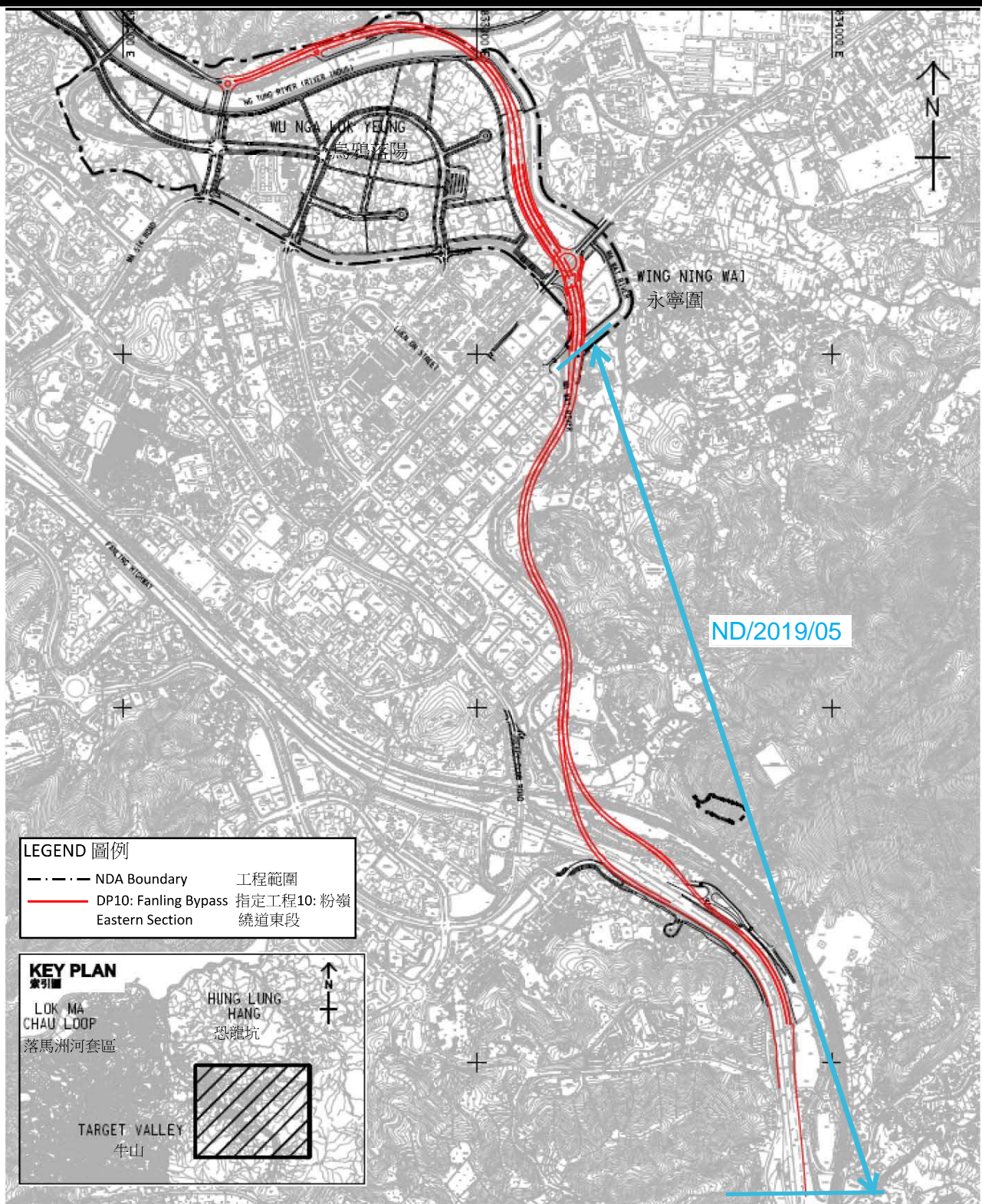
EP-473/2013/A



Figure 20

Site Layout Plan of Contract ND/2019/05

under EP-473-2013-A



Project Title: Fanling Bypass Eastern Section

工程名稱： 粉嶺繞道東段

Figure 1: Location Plan for the Project (Indicative)

圖 1： 工程項目位置 (示意圖)

This figure was prepared based on Figure 1.1 of VEP application (No.: VEP-526/2016)
本圖是根據申請更改環境許可證(編號: VEP-526/2016)圖1.1編制

Environmental Permit No:

EP-473/2013/A

環境許可證編號:

EP-473/2013/A

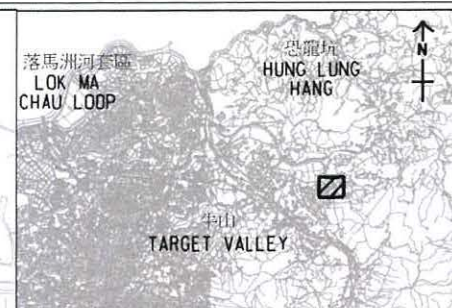
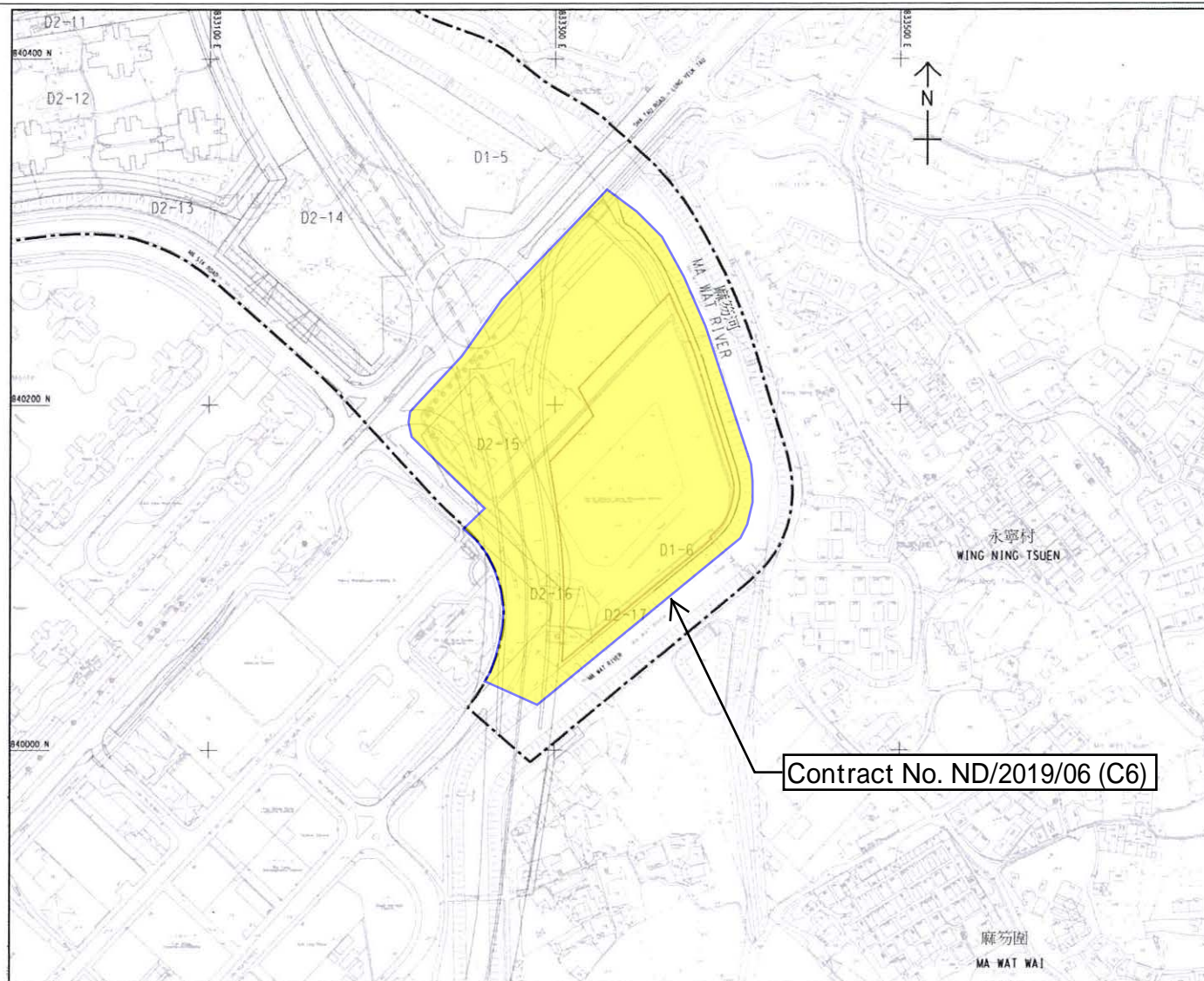
EP-473/2013/A



Figure 21

Site Layout Plan of Contract ND/2019/06

under EP-475-2013-A



圖例:

LEGEND:

- 新發展區項目邊界
NDA PROJECT BOUNDARY
- 最新位置邊界
LATEST SITE BOUNDARY

Contract No. ND/2019/06 (C6)



Project Title: NENT - Reprovision of temporary Wholesale Market in Fanling North New Development Area
工程名稱：粉嶺北新發展區重置臨時批發市場

Environmental Permit No.: EP-475/2013/A
環境許可證編號：EP-475/2013/A

Figure 1: Project Location Plan (Indicative)

圖 1：工程項目位置圖（示意圖）

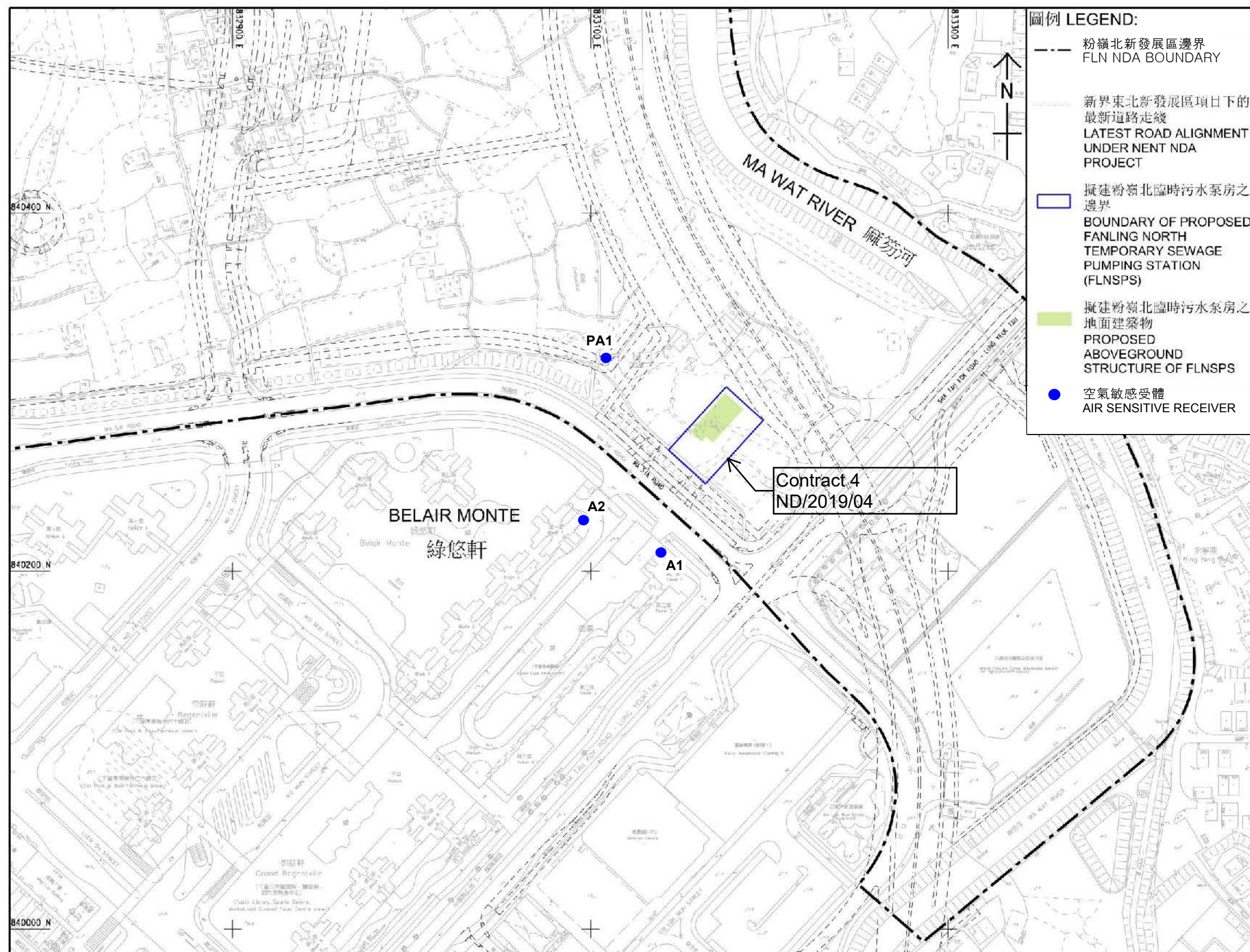
(This figure was prepared based on Figure 1.1 of VEP application (No.: VEP-516/2016))
 (本圖是根據申請更改環境許可證(編號 VEP-516/2016) 圖 1.1 編制)



Figure 22

Site Layout Plan of Contract ND/2019/04

under EP-546-2017



Project Title: Fanling North Temporary Sewage Pumping Station
工程名稱：粉嶺北臨時污水泵房

Environmental Permit No.: EP-546/2017
環境許可證編號：EP-546/2017

Figure 1: Project Location Plan (Indicative)
圖 1：工程項目位置圖（示意圖）

(This figure was prepared based on Figure 1.1 of Project Profile No: PP-557/2017
 (本圖是根據工程項目簡介編號: PP-557/2017 圖 1.1 編制))



APPENDIX A
CONSTRUCTION PROGRAMME

Construction Programme of ND/2019/01

| Activity ID | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | | | | | | | | | |
|---|--|--------------------|-------------|-------------|-------------|----------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|--|--|--|--|--|--|
| Revised Programme (2023-01-25) Rev.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 - Prelimiaries and General Requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.2 - General Submissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GS-1290 | Preparation and Submission of Fully Corodinated BIM | 1069 | 21-Aug-20 A | 28-Jan-26* | 8 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GS-1230 | Submission of Major Method Statements | 42 | 06-Dec-19 A | 07-Apr-23 | 534 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Section 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 10a in Area H, H1, H2 (Soil Treatment & Provision of Site Access & EVA to MWSC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KD1 - Provision of Site Access and EVA to MWSC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civil Works | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Road D1 (Stage 2) Castle Peak road junction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-3024 | Reconstruct Sewerage FMH KT 1.22 and lay pipe | 16 | 08-Feb-23 A | 15-Mar-23 | -146 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-3022 | Remove 2100 mm Replace Drainage SMH KT2002 to Contract 2 MH | 0 | 19-Dec-22 A | 04-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-2036 | Road works - Formation & Sub base | 16 | 01-Mar-23* | 18-Mar-23 | -143 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-2040 | Road works - Laying bituminous paving | 3 | 27-Mar-23 | 29-Mar-23 | -144 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-2038 | Road works - Road kerb | 8 | 16-Mar-23 | 24-Mar-23 | -143 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Smart Road Lightings System Installation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-3030 | Installation of smart road lighting system | 4 | 02-Dec-22 A | 01-Mar-23 | -139 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1K1-3040 | Testing and Commissioning (T&C) for road lighting system | 30 | 25-Feb-23 | 26-Mar-23 | -171 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remaining Road works in Area H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-4000 | DCS Works by Others | 288 | 01-Apr-23* | 21-Mar-24 | 530 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2200 | Footpath Construction - RD L1 North Side - Laying Paving Blocks | 12 | 07-Mar-23 | 20-Mar-23 | -138 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2190 | Footpath Construction - RD L1 North Side - Site Formation | 8 | 27-Jan-23 A | 06-Mar-23 | -138 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2170 | Footpath Construction - RD L1 South Side - Laying Paving Blocks | 12 | 06-Mar-23 | 18-Mar-23 | -143 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2160 | Footpath Construction - RD L1 South Side - Site Formation | 4 | 27-Jan-23 A | 01-Mar-23 | -143 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2140 | Footpath Construction Rd D1 East Side (Stage 1) - Laying Paving Blocks | 10 | 13-Feb-23 A | 08-Mar-23 | -140 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2130 | Footpath Construction Rd D1 East Side (Stage 1) - Site Formation | 0 | 10-Jan-23 A | 11-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2250 | Footpath Construction Rd D1 East Side (Stage 2) - Laying Paving Blocks | 8 | 23-Mar-23 | 31-Mar-23 | -146 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2240 | Footpath Construction Rd D1 East Side (Stage 2) - Site Formation | 6 | 16-Mar-23 | 22-Mar-23 | -146 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2110 | Footpath Construction Rd D1 West Side (Stage 1) - Laying Paving Blocks | 0 | 06-Feb-23 A | 18-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2100 | Footpath Construction Rd D1 West Side (Stage 1) - Site Formation | 0 | 03-Jan-23 A | 04-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2230 | Footpath Construction Rd D1 West Side (Stage 2) - Laying Paving Blocks | 8 | 23-Mar-23 | 31-Mar-23 | -146 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2220 | Footpath Construction Rd D1 West Side (Stage 2) - Site Formation | 6 | 16-Mar-23 | 22-Mar-23 | -146 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2012 | Road D1 & L1 Cycle Track - Laying bitumen | 6 | 23-Mar-23 | 29-Mar-23 | -144 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2005 | Road D1 Cycle Track - Road Formation (Stage 2) | 6 | 16-Mar-23 | 22-Mar-23 | -146 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2270 | Road L1 Additional Run in / out(PMI 281) - Paving | 12 | 07-Mar-23 | 20-Mar-23 | -138 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2260 | Road L1 Additional Run in / out(PMI 281) - Site Formation | 8 | 27-Jan-23 A | 06-Mar-23 | -138 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2011 | Road L1 Cycle Track - Road Formation | 8 | 07-Jan-23 A | 06-Mar-23 | -130 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1P10a-2018 | Road Works - Irrigation System Installation | 30 | 25-Feb-23 | 31-Mar-23 | 642 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Section 2B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 9a in Area C2 (Soil Treatment & Interface with HD's Contractors) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Activity ID | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | | March 2023 | | | | April 2023 | | | | May 2023 | | | | | | |
|--|---------------|--|-------|-------------|-------------|----------|---------------|----|----|----|----|----|------------|----|----|----|------------|----|----|----|----------|----|----|----|----|--|--|
| | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | | |
| | S2BP9a-2020 | Backfilling to the formation levels | 30 | 03-Jan-23 A | 31-Mar-23 | 26 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S2BP9a-2030 | Erect Chain Link Fence | 16 | 14-Mar-23 | 31-Mar-23 | 26 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1a in Area E (Soil Treatment & Interface with HKHS's Contractors) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S3P1a-1050 | Arsenic Treatment Plan | 18 | 18-Mar-23 | 12-Apr-23 | 506 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S3P1a-1040 | Prepare Arsenic Assessment Report | 18 | 25-Feb-23 | 17-Mar-23 | 506 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S3P1a-2010 | Remove soil (original assumed 17334m3) (1 / 13 EGI completed, interim soil to be excavated / treated : 1260m3 / 400m3) | 36 | 13-Apr-23 | 25-May-23 | 506 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 4A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1b in Area D1 (Soil Treatment & Interface with HD's Contractors) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2020 | Backfilling to the formation levels | 16 | 04-Jul-22 A | 15-Mar-23 | 28 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2070 | Erect Chain Link Fence | 27 | 20-Feb-23 A | 28-Mar-23 | 29 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2050 | New Feature KS56 - Construct Slope | 18 | 30-Jan-23 A | 17-Mar-23 | 26 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2065 | New Feature KS56 - Hydroseeding | 12 | 18-Mar-23 | 31-Mar-23 | 26 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2030 | New Feature KS57 - Construct Slope | 2 | 01-Dec-22 A | 27-Feb-23 | 28 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2040 | New Feature KS57 - Construct Slope Drainage | 16 | 15-Dec-22 A | 15-Mar-23 | 28 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4AP1b-2045 | New Feature KS57 - Shotcrete | 3 | 30-Jan-23 A | 28-Feb-23 | 41 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 4B | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1c in Area D2 (Soil Treatment & Interface with HD's Contractors) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S4BP1c-2020 | Backfilling to the formation levels | 16 | 01-Dec-22 A | 15-Mar-23 | 167 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4BP1c-2050 | Erect Chain Link Fence | 27 | 20-Feb-23 A | 28-Mar-23 | 168 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4BP1c-2030 | New Feature KS56 - Construct Slope | 18 | 30-Jan-23 A | 17-Mar-23 | 165 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4BP1c-2045 | New Feature KS56 - Hydroseeding | 12 | 18-Mar-23 | 31-Mar-23 | 165 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 4C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1b in Area D3 (Soil Treatment & Interface with ArchSD's Contractors) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S4CP1 b-3020 | Erect Chain Link Fence | 3 | 14-Jan-23 A | 28-Feb-23 | -19 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4CP1 b-2030 | New Feature KS36 - Construct Slope | 0 | 17-Oct-22 A | 18-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4CP1 b-2040 | New Feature KS36 - Construct Slope Drainage | 2 | 29-Dec-22 A | 27-Feb-23 | -18 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4CP1 b-2045 | New Feature KS36 - Shotcreting | 2 | 13-Jan-23 A | 27-Feb-23 | -18 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S4CP1 b-2060 | Rectangular Channel 2.5 m Width | 3 | 01-Dec-22 A | 28-Feb-23 | -19 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 6A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1e in Area G1 (Soil Treatment & Forming Hammerhead) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S6AP1e-2020 | Backfilling to the formation levels | 60 | 25-Apr-23 | 07-Jul-23 | -1 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S6AP1e-2010 | Remove soil (original assumed 14575m3) (1 / 2 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 46 | 25-Feb-23* | 24-Apr-23 | -1 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 15 in Area G1 (Soil Treatment) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S6AP15-1040 | Prepare Arsenic Assessment Report | 35 | 25-Mar-23 | 10-May-23 | -23 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S6AP15-1020 | Site clearance | 24 | 25-Feb-23 | 24-Mar-23 | -23 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S6AP15-1010 | Tree survey and prepare tree felling and transplant report | 24 | 25-Feb-23 | 24-Mar-23 | -23 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Build King – Richwell Engineering
Joint Venture

Planned Work

Critical Work

Actual Work

Milestone

Milestone Critical

Summary LOE

Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2022-12)


Data Date: 25-Feb-23Run Date: 28-Feb-2023

Project ID: ND201901-RP-35
Lauyout: ND201901-3MRP with
logo
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REVISED PROGRAMME (2023-02)

| | | | |
|-----------|----------|---------|----------|
| Date | Revision | Checked | Approved |
| 28-Feb-23 | Rev.0 | SC | BY |

[illegible]



**Build King – Richwell Engineering
Joint Venture**

Planned Work
Critical Work
Actual Work

Milestone
Milestone Critical

Summary LOE
Summary LOE Critical


ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23 Run Date: 28-Feb-2023

Project ID: ND201901-RP-35
 Layout: ND201901-3MRP with logo
 Page 3 of 12

| REVISED PROGRAMME (2023-02) | | | |
|-----------------------------|----------|---------|----------|
| Date | Revision | Checked | Approved |
| 28-Feb-23 | Rev.0 | SC | BY |

| Activity ID | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | May 2023 | | | | |
|--|---------------|--|-------|-------------|-------------|----------|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----------|----|----|----|----|
| | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 |
| | S8P5-4004.01 | Underground Fresh watermain (North bound Carriageway) CH 690 to CH 770 | 110 | 25-Feb-23 | 12-Jul-23 | -171 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P5-4010 | Underground utilities (North bound Carriageway) | 64 | 17-May-23 | 02-Aug-23 | -171 | WD(6d) | | | | | | | | | | | | | | | | | | |
| Portion 6a & 6b in Area A (Soil Treatment, Bored Pile Wall, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S8P6a-1010 | Site Clearance & Tree Felling | 18 | 15-Feb-20 A | 17-Mar-23 | 34 | WD(6d) | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S8P6a-4056 | Construction of Additional noise barrier NB02 (3 / 7 bays Slab completed, 0 / 7 byas Stem Wall completed) | 48 | 03-Oct-22 A | 26-Apr-23 | -63 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P6a-4010.06 | Road D4 (between SMH1002A and KT1001) - Underground Drainage work | 30 | 02-Jul-22 A | 31-Mar-23 | -113 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P6a-4010.08 | Road D4 (SMHKT1001A and pipe laying to KT1001) - Underground Drainage work | 42 | 01-Apr-23 | 25-May-23 | -111 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P6a-4010.10 | Road D4 - Laying DCS Pipes (CH 200 to CH 300) | 60 | 20-Feb-23 A | 11-May-23 | -77 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P6a-4020.02 | Road D4 Flushing Underground Watermains CH 100 to CH 200 (after Rd Diversion) | 48 | 01-Apr-23 | 02-Jun-23 | -113 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P6a-4062 | Road D4 Underground Fresh Watermain CH 100 to CH 220 | 80 | 01-Apr-23 | 12-Jul-23 | -68 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P6a-4060 | Road D4 Underground Fresh Watermain CH 300 to CH 400 | 46 | 27-Apr-23 | 21-Jun-23 | -63 | WD(6d) | | | | | | | | | | | | | | | | | | |
| Portion 9b & 9d in Area A (Soil Treatment, Slope, Retaining Wall, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S8P9b-1010 | Site clearance & Tree Felling | 40 | 25-Jun-22 A | 17-Apr-23 | -335 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-1025 | Verification of Ground Condition & Design Review by Project Manager | 60 | 25-Feb-23 | 25-Apr-23 | -371 | CD(7d) | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S8P9b-2010 | Remove soil (original assumed 15758m3) (0 / 8 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 40 | 18-Apr-23* | 05-Jun-23 | -335 | WD(6d) | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S8P9b-3102 | Ma Tso Lung Road D4-2 - Backfill & Implement TTA for diversion of Ma Tso Lung Road | 12 | 18-Mar-23 | 31-Mar-23 | -259 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3104 | Ma Tso Lung Road D4-2 - Break existing Road paving and Construct Pipe CulvertPC1 - Stage 2 | 30 | 01-Apr-23 | 11-May-23 | -259 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3100 | Ma Tso Lung Road D4-2 - Construct Pipe Culvert PC1 - Stage 1 | 0 | 16-Nov-22 A | 25-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3100.00 | Ma Tso Lung Road D4-2 - Construct Temporary Road | 18 | 30-Jan-23 A | 17-Mar-23 | -259 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3108 | Ma Tso Lung Road D4-2 - Construction of Underground Drainage Manhole M 3.90 to SMH KT 7108 to M.395 | 90 | 12-May-23 | 28-Aug-23 | -259 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3106 | Ma Tso Lung Road D4-2 - Construction of Underground Sewerage Manhole FMH 7.14 to 8.03 | 60 | 01-Apr-23 | 16-Jun-23 | -259 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3006.20 | New Feature KS19 - Hydroseeding | 6 | 13-Apr-23 | 19-Apr-23 | -217 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3057.08 | Road D4 (CH 400 - CH 625) - Underground Fresh Watermains | 50 | 12-Jan-23 A | 28-Apr-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3057.10 | Road D4 (CH 400 to CH 625) - Laying DCS Pipes | 110 | 29-Apr-23 | 08-Sep-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3008 | Road D4 (CH 780 to CH 994) - Construction of Underground Sewerage Manhole FMH 7.10 to 7.13 | 144 | 16-Mar-23 | 08-Sep-23 | -335 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3262 | Road D4 Across DJ Watermain - Construct Jacking Pit & Recieving Pit | 100 | 11-Mar-23 | 14-Jul-23 | -339 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3260 | Road D4 Across DJ Watermain - Implement TTA and Road Diversion (CH 670 to CH 780) | 12 | 25-Feb-23* | 10-Mar-23 | -339 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3058.04 | Road D5 - Construction of Underground Drainage Manhole SMH KT7103 to M 3.92 (3 / 4 MH completed) | 18 | 17-Jan-22 A | 17-Mar-23 | -35 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3058.06 | Road D5 - Construction of Underground Sewerage Manhole FMH 8.01 to 8.02 (1 / 2 MH completed) | 34 | 06-Feb-23 A | 02-May-23 | -35 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3058.20 | Road D5 - DCS Works by Others | 72 | 18-Apr-23 | 14-Jul-23 | -35 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3058.10 | Road D5 - Laying Watermains | 60 | 03-May-23 | 14-Jul-23 | -35 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3030.00 | Road W1 (CH100 to CH130) - Laying Watermains | 12 | 06-Feb-23 A | 10-Mar-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3032 | Road W1 (CH100 to CH310) - Underground Utilities by others | 60 | 11-Mar-23 | 25-May-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3030 | Road W1 (CH130 to CH310) - Laying Watermains | 0 | 03-Nov-22 A | 24-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3001.00 | Slopeworks for new feature KS19 - Cut Remaing Slope (Stage 2) | 0 | 22-Dec-22 A | 15-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3004 | Slopeworks for new feature KS19 - Row E (9 nos. soil nails) | 0 | 04-Feb-23 A | 07-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3004.00 | Slopeworks for new feature KS19 - Rows B (28 nos. soil nails) | 0 | 07-Feb-23 A | 09-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3006 | Slopeworks for new feature KS19 - Soil Nail Head | 0 | 07-Feb-23 A | 25-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | |
| | S8P9b-3001.02 | Slopeworks for new feature KS19 - U channel, Berm, Maintenance Access & Handrail Construction | 36 | 02-Dec-22 A | 12-Apr-23 | -217 | WD(6d) | | | | | | | | | | | | | | | | | | |
| Portion 8a in Area A (Soil Treatment, Reservoirs, Slope, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | |



Build King – Richwell Engineering
Joint Venture

Planned Work

Critical Work

Actual Work

Milestone

Milestone Critical

Summary LOE

Summary LOE Critical


ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23Run Date: 28-Feb-2023

Project ID: ND201901-RP-35
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REVISED PROGRAMME (2023-02)

| Date | Revision | Checked | Approved |
|-----------|----------|---------|----------|
| 28-Feb-23 | Rev.0 | SC | BY |



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Joint Venture**

Planned Work
 Critical Work
 Actual Work
 Milestone
 Milestone Critical
 Summary LOE
 Summary LOE Critical


ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23 Run Date: 28-Feb-2023

Project ID: ND201901-RP-35
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| REVISED PROGRAMME (2023-02) | | | |
|-----------------------------|----------|---------|----------|
| Date | Revision | Checked | Approved |
| 28-Feb-23 | Rev.0 | SC | BY |

| Activity ID | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | | May 2023 | | | | | |
|---|--|--|-------------|-------------|-------------|----------|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----|----------|----|----|----|--|--|
| | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | | |
| S8K8-4030 | Procurement of E&M equipment for KTN FWSR | 54 | 15-Aug-22 A | 18-Jun-23 | -110 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| | S8K8-4020 | Submission and Approval of E&M plants & materials for KTN FWSR | 60 | 15-Mar-22 A | 25-Apr-23 | -110 | CD(7d) | | | | | | | | | | | | | | | | | | | | |
| Remaining Civil Work in Portion 8a Area A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-2562 | Construction of retaining wall KW06 bay 1 - bay 7 (bays 0/7 completed) | 140 | 24-Mar-23 | 12-Sep-23 | -57 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-2602 | Construction of retaining wall KW05 bay 7 - bay 16 (Base Slab 3/10 bays completed, Stem Wall 1/10 bays completed) | 115 | 12-Nov-22 A | 18-Jul-23 | -48 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-2662 | Construction of retaining wall KW11 bay 1 - bay 11 (Base Slab 9/11 bays completed, Stem Wall 5/11 bays completed) | 72 | 16-Jun-22 A | 25-May-23 | -32 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-2600 | Excavation for retaining wall KW05 bay 7 - bay 16 (bays 4/10 completed) | 47 | 01-Nov-22 A | 25-Apr-23 | -57 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-2560 | Excavation for retaining wall KW06 bay 1 - bay 7 (bays 0/7 completed) | 100 | 25-Feb-23 | 29-Jun-23 | -57 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-2660 | Excavation for retaining wall KW11 bay 1 - bay 11 (bays 9/11 completed) | 36 | 31-Mar-22 A | 12-Apr-23 | -32 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8a-3050 | Underground utilities & Drairage work (605m drain and 23 M/H, 2 gang) | 400 | 25-Feb-23 | 04-Jul-24 | -294 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Portion 8b in Area A (Soil Treatment & Install Watermains by Trenchless / Open Trench Method) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-1030 | Prepare Arsenic Assessment Report | 30 | 19-May-23 | 24-Jun-23 | -16 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-1022 | Remaining Environmental ground investigation and laboratory test (2 / 4 EGI) Ho Sheung Heung Rd | 20 | 13-Feb-23 A | 20-Mar-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-1010 | Site clearance & Tree Felling | 66 | 25-Feb-23 | 18-May-23 | -16 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Construction of Watermains | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction of watermains by trenchless method | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-4012.22 | GPR & Micrometemor Survey, Reporting & Approval | 30 | 27-Dec-22 A | 31-Mar-23 | -433 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-4012.24 | Ground Treatment | 134 | 01-Apr-23 | 13-Sep-23 | -433 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-4068 | Up Hill Pipe Jacking Pit - ELS, Toe Grouting & Excavation | 48 | 18-Jun-22 A | 26-Apr-23 | -436 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-4100 | Up Hill Pipe Jacking Pit - Set Up for Pipe Jacking | 72 | 27-Apr-23 | 24-Jul-23 | -436 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Construction of watermains by open trench method | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-5002.00 | DSD Maintenance Road - Implement TTA for Stage 1 | 16 | 20-Feb-23 A | 15-Mar-23 | -277 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-5002 | DSD Maintenance Road - Stage 1 Laying flushing water main (100m Approx) (5 working day per week) | 98 | 16-Mar-23 | 17-Jul-23 | -277 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-5006 | Government Land - Laying Flushing water main (125m Approx) | 30 | 01-Nov-22 A | 31-Mar-23 | -193 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-7000 | Ho Sheung Heung Road Fresh water main - Applying Additional Land From AECOM and Apporval | 16 | 05-Sep-22 A | 12-Mar-23 | -560 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-7090 | Ho Sheung Heung Road Fresh water main - Excavation, Laying Pipes and Backfilling (CH558 to CH603) | 48 | 01-Mar-23* | 29-Apr-23 | -458 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-7100 | Ho Sheung Heung Road Fresh water main - Excavation, Laying Pipes and Backfilling (CH635 to CH660) | 48 | 02-May-23 | 28-Jun-23 | -458 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S8P8b-5016 | Ho Sheung Heung Road Fresh water main - Trial Trench (9 / 10 bcations completed) within carriageway | 16 | 06-Dec-22 A | 15-Mar-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Section 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 12 in Area F (Soil Treatment & Interface with EMSD's Contractors) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S9P12-3030 | Approval of CIA, Tunnel Monitoring Proposal and Analysis | 30 | 18-Mar-23 | 16-Apr-23 | -468 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| S9P12-3050 | Excavate to Formation Level (after set up for Tunnel Monitoring) | 48 | 02-May-23 | 28-Jun-23 | -378 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S9P12-3040 | Installation of Tunnel Monitoring Instrumentation | 12 | 17-Apr-23 | 29-Apr-23 | -378 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S9P12-3020 | Prepare & Submit CIA, Tunnel Monitoring Proposal and Analysis | 18 | 15-Jul-22 A | 17-Mar-23 | -379 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Section 10B | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 15 in Area J1 (Soil Treatment) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S10BP7-1030 | Environmental ground investigation and laboratory test (0 / 1 EGI completed) | 7 | 04-Mar-23 | 11-Mar-23 | -34 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S10BP7-1040 | Prepare Arsenic Assessment Report | 6 | 13-Mar-23 | 18-Mar-23 | -34 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S10BP7-1020 | Site clearance | 6 | 25-Feb-23 | 03-Mar-23 | -34 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S10BP7-1010 | Tree survey and prepare tree felling and transplant report | 6 | 25-Feb-23 | 03-Mar-23 | -34 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S10BP7-2020 | Backfilling to the formation levels | 25 | 21-Apr-23 | 20-May-23 | -34 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S10BP7-2010 | Remove soil (original assumed 2461m3) (0 / 1 EGI completed, interim soil to be excavated / treated : 0m3/0m3) Clean Soil | 24 | 20-Mar-23 | 20-Apr-23 | -34 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |



Build King – Richwell Engineering
Joint Venture

Planned Work

Critical Work

Actual Work

Milestone

Milestone Critical

Summary LOE

Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23

Run Date: 28-Feb-2023

Project ID: ND201901-RP-35


Lauyout: ND201901-3MRP with logo

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REVISED PROGRAMME (2023-02)

| Date | Revision | Checked | Approved |
|-----------|----------|---------|----------|
| 28-Feb-23 | Rev.0 | SC | BY |

| Activity ID | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | May 2023 | | | | | |
|---|--|--------------------|-------------|-------------|-------------|----------|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----------|----|----|----|----|--|
| | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | |
| Section 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 6b in Area B (Soil Treatment & Operation of HAC Soil Treatment Plant) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation and Dismantling of the Soil Treatment Plant | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S11P6b-3010 | Provide treatment to high arsenic-containing soil | 578 | 03-Dec-20 A | 08-Feb-25* | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S11P6b-3000 | Provide treatment to Imported high arsenic-containing soil (Estimated Qty 90,000m3) | 522 | 01-Mar-23* | 30-Nov-24 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 12A | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 10b in Area L1 (Soil Treatment, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S12P10b-2020 | Backfilling to the formation levels | 48 | 25-Mar-23 | 25-May-23 | 299 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S12P10b-2010 | Remove soil (original assumed 440m3) (2 / 2 EGI completed, interim soil to be excavated / treated : 0m3 /0m3) Clean Soil | 24 | 25-Feb-23 | 24-Mar-23 | 299 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S12P10b-4000 | DCS Works by Others | 72 | 25-Feb-23* | 25-May-23 | 299 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S12P10b-3010 | Underground utilities & Drainage work (1 / 2 SM/H, 0 / 1 FMH) | 117 | 13-Oct-21 A | 20-Jul-23 | 254 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 2 in Area N (Soil Treatment, Slope, Drainage & Pak Shek Au Junction) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P2-2020 | Backfilling to the formation levels | 50 | 20-Jan-23 A | 14-Jun-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2-2010 | Remove soil (original assumed 10854m3) (0 / 3 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 38 | 24-Aug-22 A | 14-Apr-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Works | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P2- 3170 | Revised Slope KS38 - Approval & Acceptance of tree felling and transplant report | 18 | 16-Apr-21 A | 14-Mar-23 | 470 | CD(7d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4020.00 | West Quadrant- Backfill to Formation Level (Adjacent to Roundabout) | 6 | 19-Jan-23 A | 03-Mar-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4034 | West Quadrant- Construction of Dwarf Wall DW02 | 0 | 09-Dec-22 A | 14-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4020.06 | West Quadrant- Construction of Footpath (Adjacent to Roundabout) | 12 | 17-May-23 | 31-May-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4030 | West Quadrant- Construction of Retaining Wall KW37 & reconstruction of existing slope | 50 | 20-Feb-23 A | 28-Apr-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4032 | West Quadrant- Construction of road Drainage (Remaining - 2 / 5 MH completed) | 38 | 11-Jan-23 A | 14-Jun-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4020.04 | West Quadrant- Construction of Road Kerb (Adjacent to Roundabout) | 12 | 03-May-23 | 16-May-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P2- 4020.02 | West Quadrant- Construction of Road Sub base (Adjacent to Roundabout) | 12 | 18-Apr-23 | 02-May-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 1a in Area N (Soil Treatment, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P1a-1040 | Arsenic Treatment Plan | 36 | 25-Feb-23 | 12-Apr-23 | 353 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1a-1070 | Notification and Approval of Asbestos Abatement Programme | 30 | 04-Mar-23 | 02-Apr-23 | 372 | CD(7d) | | | | | | | | | | | | | | | | | | | | |
| S13P1a-1060 | Prepare and submit Asbestos Abatement Programme | 7 | 16-Jan-23 A | 03-Mar-23 | 372 | CD(7d) | | | | | | | | | | | | | | | | | | | | |
| S13P1a-1030 | Prepare Arsenic Assessment Report | 36 | 25-Feb-23 | 12-Apr-23 | 353 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1a-1090 | Remaining Site clearance | 12 | 21-Apr-23 | 05-May-23 | 298 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1a-1080 | Set up Containment Area, Removal and Disposal of Asbestos and Clean up Works | 24 | 03-Apr-23 | 05-May-23 | 298 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P1a-2010 | Remove soil (original assumed 14182m3) (0 / 4 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 46 | 06-May-23 | 30-Jun-23 | 298 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P1a-3010 | Underground utilities & Drainage work (0 / 11 SM/H & 0 / 4 FM/H Completed) | 314 | 06-May-23 | 27-May-24 | 298 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 7 in Area N (Soil Treatment, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P7-1030 | Prepare Arsenic Assessment Report | 6 | 16-Jul-20 A | 03-Mar-23 | 420 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Underground Utilities | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P7-4000 | DCS Works by Others | 77 | 10-Feb-23 A | 08-Jun-23 | 420 | WD(6d) | | | | | | | | | | | | | | | | | | | | |




ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23 Run Date: 28-Feb-2023

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| REVISED PROGRAMME (2023-02) | | | |
|-----------------------------|----------|---------|----------|
| Date | Revision | Checked | Approved |
| 28-Feb-23 | Rev.0 | SC | BY |

| Activity ID | | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | May 2023 | | | | | |
|---|--|--|--------------------|-------------|-------------|-------------|----------|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----------|----|----|----|----|--|
| | | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | |
| S13P7-3011 | | Underground drainage (2 / 8 M/H completed) | 0 | 18-Jun-21 A | 09-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 1b in Area N (Soil Treatment, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P1b-3012 | | Construction of Sewerage | 30 | 30-Dec-22 A | 31-Mar-23 | 138 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1b-3010 | | Construction of Underground Drainage (3 / 5 M/H complete) | 30 | 10-Jun-22 A | 31-Mar-23 | 138 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1b-3014 | | Laying of Watermain | 60 | 01-Apr-23* | 16-Jun-23 | 138 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 6a & 5 in Area N (Soil Treatment, Noise Barrier, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P6a-2020 | | Backfilling to the formation levels | 60 | 01-Apr-23 | 16-Jun-23 | 549 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P6a-2010 | | Remove soil (original assumed 566m3) (1 / 1 EGI completed, interim soil to be excavated / treated : 0m3 /0m3) Clean Soil | 30 | 25-Feb-23* | 31-Mar-23 | 548 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P6a-4000 | | DCS Works by Others (Trenchless Method) | 288 | 02-May-23* | 19-Apr-24 | 390 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P6a-3012 | | Drainage works across DJ watermain (CNE 060, EC-1086) | 160 | 25-Feb-23 | 08-Sep-23 | 368 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P6a-3020 | | Underground utilities & Drainage work (0 / 5 SM/H & 0 / 3 FMH) | 265 | 04-Mar-23 | 23-Jan-24 | 368 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 1c in Area N (Soil Treatment, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P1c-2020 | | Backfilling to the formation levels | 0 | 13-Jun-22 A | 18-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P1c-3052 | | Additional Noise barrier NB04 footing - Piling Works | 120 | 25-Feb-23 | 24-Jul-23 | 415 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1c-3010 | | Construct Underground Drainage (4 / 13 MH completed) | 48 | 10-Jun-22 A | 26-Apr-23 | 53 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1c-3010.04 | | Construct Underground Sewerage (2 / 6 MH completed) | 60 | 07-Oct-22 A | 11-May-23 | 41 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1c-4000 | | DCS Works by Others | 96 | 12-May-23* | 04-Sep-23 | 41 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P1c-3010.06 | | Laying Underground Fresh Watermains | 90 | 25-Feb-23 | 16-Jun-23 | 501 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 9a in Area N (Soil Treatment, Noise Barrier, Drainage & Roadwork) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P9a-2020 | | Backfilling to the formation levels | 48 | 25-Feb-23 | 26-Apr-23 | 574 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P9a-2010 | | Remove soil (original assumed 561m3) (0 / 1 EGI completed, interim soil to be excavated / treated : 0m3 /0m3) | 0 | 06-Feb-23 A | 13-Feb-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Civil Work | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S13P9a-3010 | | Construct Underground Drainage (0 / 2 MH completed) | 60 | 20-Feb-23 A | 11-May-23 | 562 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P9a-3012 | | Construct Underground Sewerage | 72 | 12-May-23 | 07-Aug-23 | 562 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P9a-3060 | | DCS Works by Others (Trenchless Method) | 288 | 02-May-23* | 19-Apr-24 | 438 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S13P9a-3020 | | Noise barrier NB85 footing (113m, 0.89m/day) | 140 | 24-Apr-23 | 10-Oct-23 | 562 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Section 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 7 in Area P (Soil Treatment & KD3 - Tree Felling, General Site Clearance) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KD3 - Tree felling, general site clearance (including the berm removal / levelling and general site | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P7P-2020 | | Backfill with treated soil | 140 | 24-May-23 | 09-Nov-23 | 590 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| S14P7P-2010 | | Remove soil (original assumed 17368m3) (2 / 2 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 70 | 25-Feb-23* | 23-May-23 | 590 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 7 in Area S3 (Soil Treatment & Operation of HAC Soil Treatment Plant) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KD4 - Setting up and T&C of the High Arsenic-containing Soil Treatment Plant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P7S3-2010 | | Set up, testing and commissioning high arsenic-containing soil treatment plant (KD4) (CSD for Treated soil Stock pile) | 4 | 06-Oct-20 A | 01-Mar-23 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Operation and Dismantling of the Soil Treatment Plant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P7S3-3010 | | Stock Pile of Treated Soil | 461 | 20-Nov-20 A | 19-Sep-24 | 0 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 7 in Area T1, T2, T3 (Soil Treatment & Temp. Noise Barrier along Castle Peak Road) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Build King – Richwell Engineering
Joint Venture

Planned Work

Critical Work

Actual Work

Milestone

Milestone Critical

Summary LOE

Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23


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REVISED PROGRAMME (2023-02)

| Date | Revision | Checked | Approved |
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| 28-Feb-23 | Rev.0 | SC | BY |

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**Build King – Richwell Engineering
Joint Venture**

Planned Work
 Critical Work
 Actual Work
 Milestone
 Milestone Critical
 Summary LOE
 Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2022-12)


Data Date: 25-Feb-23 Run Date: 28-Feb-2023

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| REVISED PROGRAMME (2023-02) | | | |
|-----------------------------|----------|---------|----------|
| Date | Revision | Checked | Approved |
| 28-Feb-23 | Rev.0 | SC | BY |

| Activity ID | | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | May 2023 | | | | | |
|---|---|---|--------------------|-------------|-----------|-------------|----------|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----------|----|----|----|----|--|
| | | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | |
| | S14CT-1010.02 | Construct Underground Drainage in Portion 7 (0 / 6 MH completed) After Road Diversion | 48 | 01-Apr-23* | 02-Jun-23 | 644 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1040 | Construct Underground Drainage in Portion 9a (0 / 3 MH completed) | 30 | 28-Jun-22 A | 31-Mar-23 | 748 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1030 | Construct Underground Sewerage in Portion 5 - Stage 1 (3 / 5 MH completed) | 30 | 02-Jul-22 A | 31-Mar-23 | 556 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1042 | Construct Underground Sewerage in Portion 9a (0 / 1 MH completed) | 30 | 25-Oct-22 A | 31-Mar-23 | 748 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1028 | Laying Underground Watermain in Portion 5 - Stage 1 | 50 | 01-Apr-23 | 05-Jun-23 | 556 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1044 | Laying Underground Watermain in Portion 9a | 30 | 01-Apr-23 | 11-May-23 | 748 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1050 | Modify Constructed Drainage MH SMH KT3003 & KT3004 in Portion 5 (0 / 2 MH completed) | 28 | 28-Feb-23* | 31-Mar-23 | 1116 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1010.00 | Underground Utilities in Portion 7 - Temporary Road Diversion for Section 1 Works | 28 | 28-Feb-23* | 31-Mar-23 | 644 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| | S14CT-1010 | Underground Utilities in Portion 7 near Area E (0 / 6 SMH & 0 / 2 FMH completed) | 2 | 22-Dec-22 A | 27-Feb-23 | 644 | WD(6d) | | | | | | | | | | | | | | | | | | | | |
| Portion 1b (Soil Treatment & Civil Works) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-1112 | Arsenic Treatment Plan | 30 | 02-May-22 A | 31-Mar-23 | 544 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-1110 | Prepare Arsenic Assessment Report | 30 | 02-May-22 A | 31-Mar-23 | 544 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-1202 | Remove soil (original assumed 4992m3) (0 / 4 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 34 | 02-May-23 | 10-Jun-23 | 493 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Civil Works | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-4000 | DCS Works by Others | 150 | 15-Apr-23 | 13-Oct-23* | 660 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-1314 | Laying Underground Watermain | 36 | 28-Feb-23 | 14-Apr-23 | 660 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-1310 | Remaining Underground Drainage (38m Approx) Stage 2 | 0 | 02-Dec-22 A | 30-Jan-23 A | | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P1b-1304 | Underground Sewerage Works | 2 | 21-Sep-22 A | 27-Feb-23 | 660 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Portion 3 (Soil Treatment & Civil Works) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civil Works | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P3-1300 | Underground Drainage (0 / 1 MH completed) | 90 | 16-Dec-22 A | 16-Jun-23 | 568 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Portion 5 (Soil Treatment & Civil Works) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work/Tree Survey/Site Clearance/GI | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P5-1110 | Arsenic Treatment Plan | 30 | 25-Feb-23 | 31-Mar-23 | 514 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P5-1108 | Prepare Arsenic Assessment Report | 30 | 25-Feb-23 | 31-Mar-23 | 514 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P5-1202 | Backfilling to the formation levels | 90 | 17-May-23 | 01-Sep-23 | 664 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P5-1200 | Remove soil (original assumed 2796m3) (2 / 2 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 34 | 01-Apr-23 | 16-May-23 | 514 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Civil Works | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P5-1300 | Underground Drainage (0 / 1 MH completed) | 90 | 16-Dec-22 A | 13-Oct-23 | 570 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Portion 1e (Soil Treatment) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Soil Treatment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S14P1e-2080 | Backfilling to the formation levels | 90 | 11-Apr-23 | 28-Jul-23 | 724 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S14P1e-2070 | Remove soil (original assumed 860m3) (0 / 1 EGI completed, interim soil to be excavated / treated : 0m3 / 0m3) | 34 | 25-Feb-23 | 06-Apr-23 | 544 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Section 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S15-1000 | Presevation and protection of tree | 1020 | 06-Dec-19 A | 10-Dec-25 | 27 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| Section 18 (Subject to excision) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S18-1040 | Watermain laying work in Portion 5 | 140 | 20-Sep-21 A | 16-Aug-23 | -76 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S18-1050 | Watermain laying work in Portion 6a & 6b | 150 | 18-Jul-22 A | 28-Aug-23 | -90 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| S18-1075 | Watermain laying work in Portion 8a | 350 | 25-Feb-23 | 03-May-24 | -48 | WD(6d) | | | | | | | | | | | | | | | | | | | | | |
| Section 20 (Subject to excision) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction of Pedestrian Subway cum Cycle Track Stage 2 (South of Castle Peak Road) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civil and Structural Works | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Activity ID | | | Activity Name | | | Remaining Duration | Start | Finish | Total Float | Calendar | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | May 2023 | | | | | |
|--|--------------|--|---|-------------|-------------|--------------------|--------|--------|-------------|----------|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----------|----|----|----|----|--|
| | | | | | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | |
| | | S20S2-7462 | Bay No. 10 - RC Structure (Walls) | 24 | 14-Apr-23 | 12-May-23 | -277 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7470 | Bay No. 11 - Excavation, Blinding & Waterproofing | 7 | 20-Jan-23 A | 04-Mar-23 | -277 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7480 | Bay No. 11 - RC Structure | 30 | 06-Mar-23 | 13-Apr-23 | -277 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7490 | Bay No. 12 - Excavation, Blinding & Waterproofing | 10 | 13-May-23 | 24-May-23 | -277 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7730 | Bay No. 4 - Excavation, Blinding & Waterproofing | 10 | 27-Apr-23 | 09-May-23 | -220 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7740 | Bay No. 4 - RC Structure | 30 | 10-May-23 | 14-Jun-23 | -164 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7790 | Bay No. 5 - Excavation, Blinding & Waterproofing | 10 | 10-May-23 | 20-May-23 | -220 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7800 | Bay No. 5 - RC Structure | 24 | 22-May-23 | 19-Jun-23 | -220 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| | | S20S2-7320 | ELS, Excavation & UU suspension works for subway | 128 | 28-Apr-22 A | 02-Aug-23 | -174 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | |
| Section 21 (Subject to excision) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1b in Area M (Soil Treatment) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P1b-1012 | Approval & Acceptance of Tree felling Application | 30 | 01-Apr-23 | 11-May-23 | 347 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P1b-1020 | Site Clearance & Tree Felling | 60 | 12-May-23 | 24-Jul-23 | 347 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P1b-1010 | Tree survey and prepare tree felling and transplant report | 30 | 25-Feb-23 | 31-Mar-23 | 347 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 1d in Area M (Soil Treatment & Demolition of Existing CLC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P1d-1012 | Approval & Acceptance of Tree felling Application | 30 | 01-Apr-23 | 11-May-23 | 347 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P1d-1020 | Site Clearance & Tree Felling | 60 | 12-May-23 | 24-Jul-23 | 347 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P1d-1010 | Tree survey and prepare tree felling and transplant report | 30 | 25-Feb-23 | 31-Mar-23 | 347 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| Portion 11a in Area M (Soil Treatment) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparation work | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P11a-1012 | Approval & Acceptance of Tree felling Application | 30 | 01-Apr-23 | 11-May-23 | 342 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P11a-1020 | Site Clearance & Tree Felling | 60 | 12-May-23 | 24-Jul-23 | 342 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| | S21P11a-1010 | Tree survey and prepare tree felling and transplant report | 30 | 25-Feb-23 | 31-Mar-23 | 342 | WD(6d) | | | | | | | | | | | | | | | | | | | | | | | |
| 8.0 - PMI / CE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PC-1012 | Change to the Area of Area M (PMI 160, CE 168) | 0 | 22-Dec-21 A | 25-Feb-23 | 430 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | PC-1013 | Quotation for Additional Drainage & Sewerage Works at Portion 10a (PMI 202) | 0 | 25-Jul-22 A | 25-Feb-23 | -172 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| 9.0 - Major EWN / CNE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1120 | Additional Requirements for Demolition of Temporary Structures for Existing Sawmill Area S2 in Portion 1C (CNE 091) | 0 | 25-Oct-22 A | 25-Feb-23 | 699 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1111 | Additional Requirements for the Construction of Traffic Signal System at the Junction of Road D1 and L1 (CNE 085) | 0 | 30-Jul-22 A | 25-Feb-23 | -172 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1089 | Additional Sewerage Pipes clash with the Proposed Watermains along Road D4 and D5 (EWN 065) | 0 | 27-Apr-22 A | 25-Feb-23 | -147 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1087 | Change of Road Layout of Ho Sheung Heung Road after the Works by DSD Contract DC/2019/06 (CNE 072b) | 0 | 20-Apr-22 A | 25-Feb-23 | -560 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1067 | Conflict between Drainage Works and Existing Twin DN2200 Dongjiang Water Mains (CNE 051) | 0 | 29-Nov-21 A | 25-Feb-23 | -417 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1068 | Conflict between Drainage Works and Water Mains in Road W1 (CNE 052) | 0 | 02-Dec-21 A | 25-Feb-23 | 0 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1107 | Delay Diversion/Modification of Existing CLP Cables & Facilities within the Vicinity of Pak Shek Au at 1a & 2 (EWN 078) | 0 | 18-Aug-22 A | 25-Feb-23 | -375 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1079 | Delay in Supply of Precast Concrete Pipe due to the Severe Outbreak of Omicron (EWN 056) | 0 | 16-Feb-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1046 | Delay in the Access to and Use of Portions 1a & 12 of the Site (CNE 034) | 0 | 06-Jul-21 A | 25-Feb-23 | -599 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1101 | Delay to the Diversion of Existing Fresh Watermains along/near Ma Tso Lung Road at Portion 9b of the Site (EWN 076) | 0 | 19-Jul-22 A | 25-Feb-23 | -311 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1125 | Delay to the Diversion/ Modification of Existing HKT Pillar Boxes & Associated Ducts Ma Tso Lung Road Por. 9b (CNE 096) | 0 | 14-Nov-22 A | 25-Feb-23 | -394 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1100 | Delay to the Diversion/Modifcation of Existing HKT Pillar Boxes & Associated ducts in Ma Tso Lung Rd (EWN 075) (CNE 096) | 0 | 15-Jul-22 A | 25-Feb-23 | -311 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1102 | Delay to the Relocation of Existing Fire Hydrant in Ma Tso Lung Road at Portion 9b of the Site (EWN 077) | 0 | 19-Jul-22 A | 25-Feb-23 | -311 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1099 | Delayed to the Removal and or Diversion of Existing CLP Cable and Facilities in Portion 9b of the Site (EWN 073) | 0 | 31-Mar-22 A | 25-Feb-23 | -417 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1039 | Design Change on Road W1 (EWN 025) | 0 | 22-Mar-21 A | 25-Feb-23 | -361 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1088 | Design Changes to the Permanent Street Lighting Works (CNE 074) | 0 | 04-Mar-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |
| | EC-1050 | Design Layout and Profile for the Water Supply Pipework (EWN 034) | 0 | 17-Sep-21 A | 25-Feb-23 | -417 | CD(7d) | | | | | | | | | | | | | | | | | | | | | | | |



Build King – Richwell Engineering
Joint Venture

Planned Work

Critical Work

Actual Work

Milestone

Milestone Critical

Summary LOE

Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2022-12)


Data Date: 25-Feb-23Run Date: 28-Feb-2023

Project ID: ND201901-RP-35
Lauayout: ND201901-3MRP with logo
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REVISED PROGRAMME (2023-02)

| | | | |
|-----------|----------|---------|----------|
| Date | Revision | Checked | Approved |
| 28-Feb-23 | Rev.0 | SC | BY |

| Activity ID | Activity Name | Remaining Duration | Start | Finish | Total Float | Calendar | | | February 2023 | | | | | March 2023 | | | | | April 2023 | | | | May 2023 | | | | |
|-------------|--|--------------------|-------------|-------------|-------------|----------|---|----|---------------|----|----|----|----|------------|----|----|----|----|------------|----|----|----|----------|----|----|--|--|
| | | | | | | | 2 | 29 | 05 | 12 | 19 | 26 | 05 | 12 | 19 | 26 | 02 | 09 | 16 | 23 | 30 | 07 | 14 | 21 | 28 | | |
| EC-1042 | Details of DCS pipe at D4-1 & D5 Road (EWN 030) | 0 | 21-May-21 A | 25-Feb-23 | -573 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1093 | DN200 Fresh Watermain to Existing Watermain for MWSC Site between Po Lau Road and Castle Peak Road (CNE 075) | 0 | 25-May-22 A | 25-Feb-23 | -172 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1097 | Early Open Road D1-1 and Road L-1 for General Public Use and Access (EWN 071) | 0 | 19-May-22 A | 25-Feb-23 | -172 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1049 | Entrustment of Works for Installation of District Cooling System (DCS) pipelines along Road D4-1 (EWN 033) | 0 | 18-Aug-21 A | 25-Feb-23 | -573 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1030 | Excavation Permit (XP) for New Cycle Path (EWN No. 021) (CNE No. 022) | 0 | 19-Oct-20 A | 25-Feb-23 | -834 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1064 | Extra Time on Production and Delivery of Road Lighting Products (EWN 51) | 0 | 13-Dec-21 A | 25-Feb-23 | -171 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1122 | Further Changes to the Works Information for the Construction of DCS Pipes at Road D4-1 (PMI 155 CE157) (CNE 095) | 0 | 08-Nov-22 A | 25-Feb-23 | -92 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1026 | Handling of Unlawful Occupied Property Affected by the Works (CNE No. 014) | 0 | 21-Aug-20 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1027 | Handling of Unlawful Occupied Property Affected by the Works within the Site (CNE No. 015) | 0 | 31-Aug-20 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1092 | Increased Difficulty for the Construction of Pak Shek Au Pedestrian Subway Cum Cycle Track at Portion 2 (EWN 068) | 0 | 25-May-22 A | 25-Feb-23 | -254 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1086 | Increased Risk for Damages to Existing Donjiang Raw Water Mains (DJRWMs) (CNE 060) | 0 | 31-Mar-22 A | 25-Feb-23 | -417 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1118 | Increased Risk for Suspension of Pipe Jacking Flushing Watermains underneath MTRC Zone Portion 8b (EWN 080) (CNE 092) | 0 | 18-Oct-22 A | 25-Feb-23 | -332 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1117 | Insufficient Design Information and Construction Details for the Works of Tentative NB02 (EWN 079) (CNE 090) | 0 | 17-Oct-22 A | 25-Feb-23 | -17 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1070 | Insufficient Width of Road W1 for Accommodation of All Underground Utilities (CNE 056) | 0 | 04-Jan-22 A | 25-Feb-23 | -361 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1115 | Late Handover the Borrowed Zones / Portions from ArchSD's MWSC Contractor at Area H in Portion 10a of the Site (CNE 088) | 0 | 26-Sep-22 A | 25-Feb-23 | -141 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1096 | Later Supply and Installation of Traffic Signal and Ducting at the Junction of Road D1 and Road L1 in Area H (EWN 070) | 0 | 09-Jun-22 A | 25-Feb-23 A | | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1018 | Opening of Cycle Track at Portion 2 and 10a (EWN No. 017) (CNE No. 022) | 0 | 04-Aug-20 A | 25-Feb-23 | -834 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1014 | Part of Portion 2 Occupied by YL/2015/01 (EWN No. 016) (CNE No. 022) | 0 | 23-Dec-19 A | 25-Feb-23 | -834 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1090 | Part of Portion 9b of the Site (near eastern end of Road D5) occupied by the Local Villagers (EWN 066) | 0 | 03-May-22 A | 25-Feb-23 | -20 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1080 | Possible Suspension of Concrete Supply due to the Severe Outbreak of COVID-19 (EWN 059) | 0 | 02-Mar-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1094 | Potential Changes of the Scope of Noise Barriers (AECOM EWN PM-003) | 0 | 23-May-22 A | 25-Feb-23 | -171 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1123 | Potential Delay due to Aggregate Supply Chain Shortage before Chinese New Year 2023 (EWN 082) | 0 | 22-Nov-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1124 | Potential Delay due to the Increased Difficulties and Uncertainties in Concrete Supply in Coming Years (EWN 084) | 0 | 14-Dec-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1054 | Potential Delay on Production and Supply of D.I. Pipes and Fittings (EWN 041) (CNE 047) | 0 | 11-Oct-21 A | 25-Feb-23 | -198 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1055 | Potential Delay on Production and Supply of M.S. Pipes and Fittings (EWN 042) (CNE 047) | 0 | 16-Oct-21 A | 25-Feb-23 | -198 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1053 | Potential Delay on Production and Supply of Precast Concrete Pipes (EWN 040) (CNE 047) | 0 | 06-Oct-21 A | 25-Feb-23 | -172 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1076 | Potential Delay on Supply of Steel Moulds for Construction of Fresh Water Service Reservoir(FWSR) (EWN 053) | 0 | 18-Feb-22 A | 25-Feb-23 | -60 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1063 | Potential Late Access to and Use of the Site (Portions 13) (EWN 50) (CNE 057) | 0 | 13-Dec-21 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1062 | Potential Late Access to and Use of the Site (Portions 1c & 9a) (EWN 49) (CNE 058) | 0 | 13-Dec-21 A | 25-Feb-23 | 31 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1110 | Provision of Fill Materials for Contract Nos. ND/2019/05 and ND/2019/07 (CNE 084) | 0 | 17-Aug-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1085 | Requesting for Additional Concrete Vehicular Access by the Local Villager adjacent 9b of the Site (EWN 064) | 0 | 25-Apr-22 A | 25-Feb-23 | -55 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1071 | Revised Construction Drawings of Fresh Water Service Reservoir (CNE 067, 067a) | 0 | 14-Dec-21 A | 25-Feb-23 | -60 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1119 | Revised Noise Barrier Works at Road D3 in Portion 1C of the Site (EWN 081) | 0 | 19-Oct-22 A | 25-Feb-23 | 822 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1109 | Revised Sewerage System along Road D4 and D5 at Portion 9b of the Site (CNE 083) | 0 | 02-Aug-22 A | 25-Feb-23 | -394 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1066 | Shortage of Aggregate Supply before Chinese New Year 2022 (CNE 048) (EWN 001.6, 001.8) | 0 | 29-Nov-21 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1052 | Shortage of Cement Supply due to "Energy Consumption Dual Control Policy" (EWN 039) (CNE 049) | 0 | 06-Oct-21 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1043 | Strong Objection on the Construction of Fresh and Flushing Reservoir at Portions 8a and 8b (EWN 031) Maintenance Access | 0 | 09-Jun-21 A | 25-Feb-23 | -450 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1006 | Strong Objection on the Construction of Service Reservoirs at Portions 8a & 8b (CNE No. 006) (EWN No. 005) | 0 | 18-Mar-20 A | 25-Feb-23 | -450 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1061 | Suspension of Concretes Supply due to Cement Shortage (EWN 045) (CNE 046) | 0 | 02-Nov-21 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1081 | Suspension of Precast Concrete Manhole Supply due to the Severe Outbreak of COVID-19 in Mainland China (EWN 060) | 0 | 14-Mar-22 A | 25-Feb-23 | -20 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1028 | Suspension of Works at Part of Portion 2 (CNE No. 016) (EWN No. 019) | 0 | 31-Aug-20 A | 25-Feb-23 | -834 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1065 | Temporary Stockpile for High Arsenic-Containing (HAC) Soil from HKHS & HD Sites at Portion 1c (EWN 052) | 0 | 04-Jan-22 A | 25-Feb-23 | 640 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1059 | The footing detail for Roadside Directional Sign ADS30 at Portion 5 (EWN 043) | 0 | 22-Oct-21 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1072 | Unavailability of Vehicular Access and Movement towards Receiving Pit (CNE 068) | 0 | 29-Dec-21 A | 25-Feb-23 | -534 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1051 | Unstable Supply of Cement for HAC Soil Treatment (EWN 036, 038) (CNE 049) | 0 | 27-Sep-21 A | 25-Feb-23 | 573 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |
| EC-1075 | Works affected by the Sever Outbreak of Omicron (CNE 073) (EWN 058) | 0 | 25-Feb-22 A | 25-Feb-23 | 1412 | CD(7d) | | | | | | | | | | | | | | | | | | | | | |



Build King – Richwell Engineering Joint Venture

Planned Work

Critical Work

Actual Work

Milestone

Milestone Critical

Summary LOE

Summary LOE Critical

ND/2019/01 - 3 Month Rolling Programme (2022-12)

Data Date: 25-Feb-23

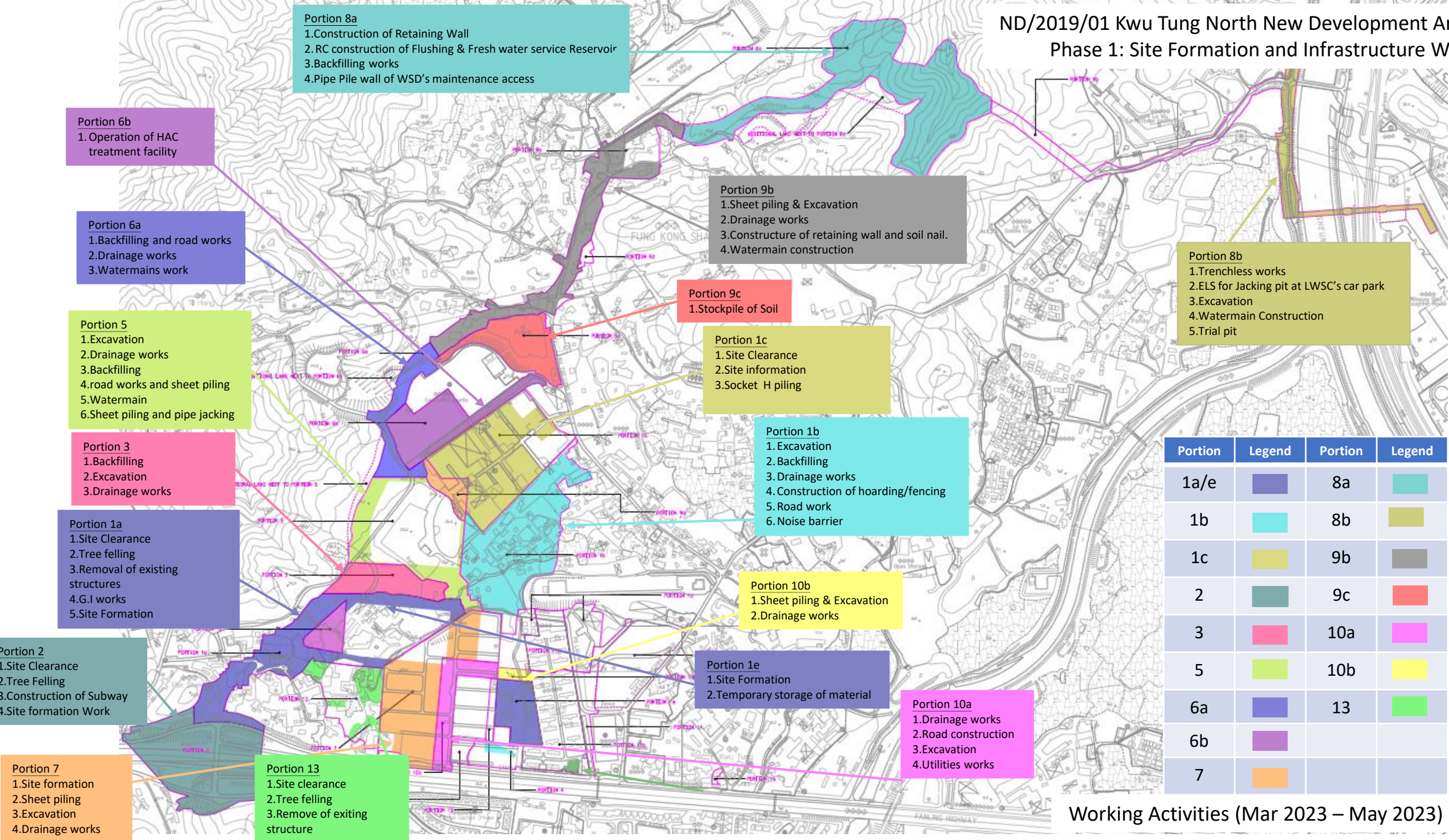
Run Date: 28-Feb-2023

Project ID: ND201901-RP-35
Lauyout: ND201901-3MRP with logo
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REVISED PROGRAMME (2023-02)

| Date | Revision | Checked | Approved |
|-----------|----------|---------|----------|
| 28-Feb-23 | Rev.0 | SC | BY |

ND/2019/01 Kwu Tung North New Development Area,
Phase 1: Site Formation and Infrastructure Work



| Portion | Legend | Portion | Legend |
|---------|--------|---------|--------|
| 1a/e | | 8a | |
| 1b | | 8b | |
| 1c | | 9b | |
| 2 | | 9c | |
| 3 | | 10a | |
| 5 | | 10b | |
| 6a | | 13 | |
| 6b | | | |
| 7 | | | |

Working Activities (Mar 2023 – May 2023)

Construction Programme of ND/2019/02

ND/2019/02 - Kwu Tung North New Development Area Phase 1: Roads & Drains between Kwu Tong North
New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|--|--|-------------------|-------------|------------|------|-----|-----|-----|-----|
| | | | | | Jan | Feb | Mar | Apr | May |
| ND-2019-02 KTNDA Phase 1:Roads and Drains between Kwu Tung North New Developme | | | | | | | | | |
| Programme Data | | | | | | | | | |
| Preliminaries | | | | | | | | | |
| Works in Section 2 | | | | | | | | | |
| Portion 2 - Road & Drains | | | | | | | | | |
| Pre-construction works | | | | | | | | | |
| P2-1070 | Tree Protection and Preservation | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| ELS | | | | | | | | | |
| Receiving shaft at FMH_KT1.32A | | | | | | | | | |
| P2-7190 | Set up TTA at Castle Peak Road Carriageway (westbound) | 25 | 16-Feb-23 A | 16-Mar-23 | | | | | |
| P2-7200 | ELS for inspection shaft at FMH_KT1.32A | 38 | 17-Mar-23 | 29-Apr-23 | | | | | |
| P2-7210 | Install decking at KT1.32A | 1 | 02-May-23 | 02-May-23 | | | | | |
| Combined shaft for SMH_KT6005A & FMH_KT1.33A | | | | | | | | | |
| P2-4005 | ELS of combined pit for SMH_KT6005A & FMH_KT1.33A | 38 | 02-Feb-23 A | 17-Mar-23 | | | | | |
| P2-4010 | Install decking at KT1.33A & release TTA | 1 | 18-Mar-23 | 18-Mar-23 | | | | | |
| Combined shaft for SMH_KT6003B & FMH_KT1.27A | | | | | | | | | |
| P2-8225 | Site Possession (Assume 03-Apr-2023) | 0 | | 03-Apr-23* | | | | | |
| P2-8230 | Set up TTA at Castle Peak Road Carriageway | 1 | 04-Apr-23 | 04-Apr-23 | | | | | |
| P2-8235 | ELS of combined pit for SMH_KT6003B & FMH_KT1.27A | 38 | 05-Apr-23 | 19-May-23 | | | | | |
| Combined shaft for SMH_KT6004A & FMH_KT1.29A | | | | | | | | | |
| P2-3000 | Set up TTA at Castle Peak Road Carriageway | 1 | 04-Apr-23 | 04-Apr-23 | | | | | |
| P2-3010 | ELS of combined pit for SMH_KT6004A & FMH_KT1.29A | 38 | 05-Apr-23 | 19-May-23 | | | | | |
| Pipe Jacking | | | | | | | | | |
| (KT1.30A to KT1.32A) (IL:3.8-3..6mPD) 800mm dia | | | | | | | | | |
| P2-3170 | Set up and assembly of TBM (0.8m dia.) | 38 | 03-May-23 | 15-Jun-23 | | | | | |
| (KT6003A to KT6003B) (IL: 6.0-5.7mPD) 2100mm dia | | | | | | | | | |
| P2-8260 | Set up and Assembly TBM (2.1m dia.) at SMH_KT6003A | 38 | 05-Apr-23 | 19-May-23 | | | | | |
| P2-8265 | Pipe Jacking from SMH_KT6003A to SMH_KT6003B (85m, 3m/day) | 28 | 20-May-23 | 21-Jun-23 | | | | | |
| Portion 3 - Road & Drains | | | | | | | | | |
| Pre-construction works | | | | | | | | | |
| P3-1060 | Tree Protection and Preservation | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Sewer Pipeline Installation (KT1.33A to KT1.41A) | | | | | | | | | |
| KT1.39A - KT1.40A (99m) (Pipe Jacking by CE-074) | | | | | | | | | |
| P3-6040 | Pipe Jacking of 800 Concrete Pipe (1.39A to 1.40A) (99m ~3m/d) | 33 | 14-Feb-23 A | 18-Mar-23 | | | | | |
| P3-6050 | TBM reach the sheet pile at receiving pit | 1 | 20-Mar-23 | 20-Mar-23 | | | | | |

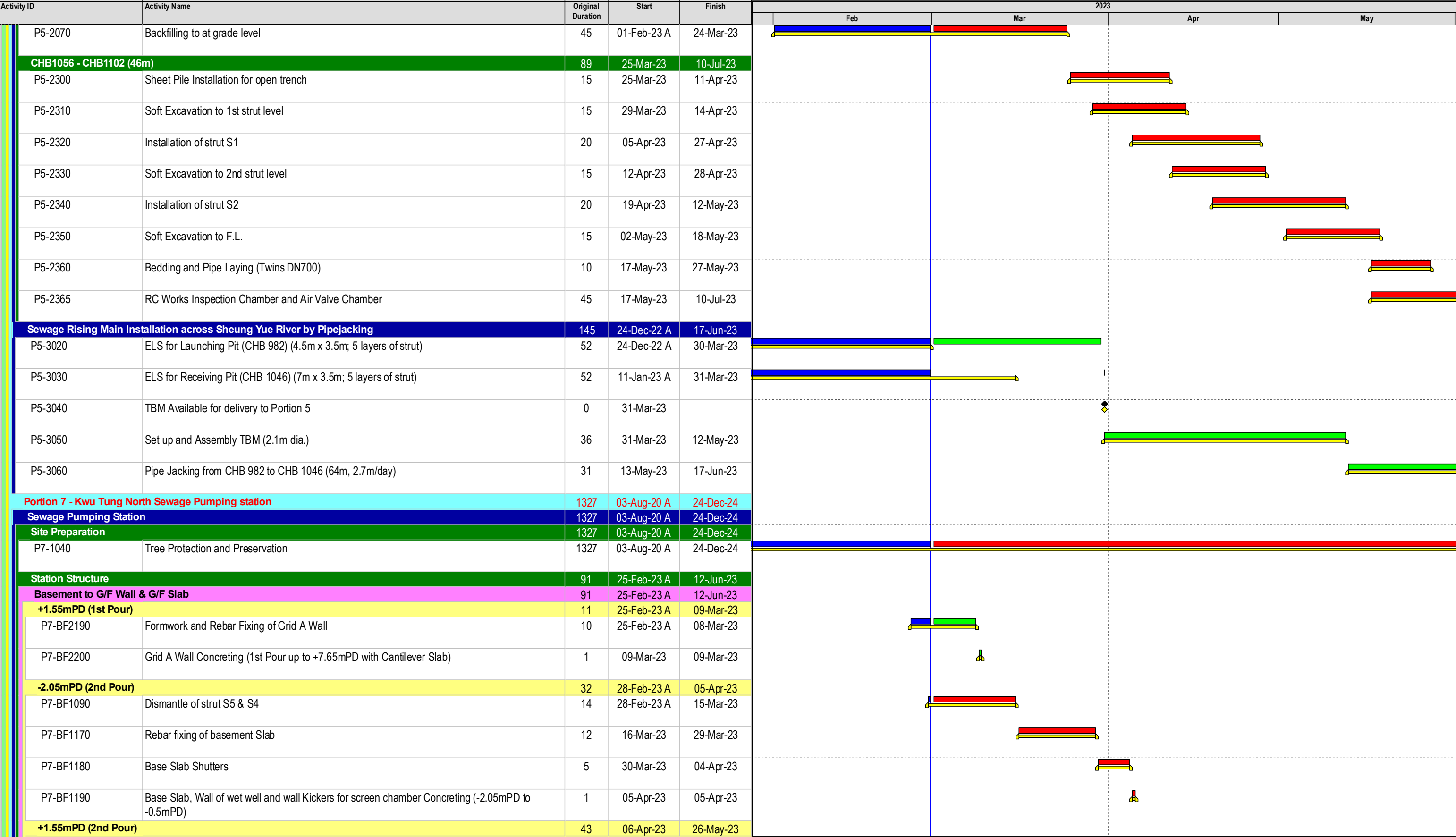
ND/2019/02 - Kwu Tung North New Development Area Phase 1: Roads & Drains between Kwu Tong North
New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|--|---|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P3-6060 | Pre- treatment grouting, setup the exit ring, cutting sheet pile | 7 | 21-Mar-23 | 28-Mar-23 | | | | | |
| P3-6070 | TBM break through, setup guide rail, lifting out the TBM, jacking the remaining pipe to designated location, air test | 5 | 29-Mar-23 | 03-Apr-23 | | | | | |
| P3-6080 | Demolish & removal of the slurry pipe, power cable inside the jacking pipe, | 12 | 04-Apr-23 | 17-Apr-23 | | | | | |
| P3-6090 | Demolish the guide rail, Breaking the thrust wall at Jacking Pit | 7 | 18-Apr-23 | 25-Apr-23 | | | | | |
| P3-6100 | Demolish and removal the hoisting frame at Jacking Pit | 3 | 26-Apr-23 | 28-Apr-23 | | | | | |
| P3-6105 | Construction of Manhole KT1.39A | 30 | 29-Apr-23 | 03-Jun-23 | | | | | |
| P3-6110 | Construction of Manhole KT1.40A | 30 | 29-Apr-23 | 03-Jun-23 | | | | | |
| KT1.36A - KT1.33A (23m) (Open Cut by CE-068) | | 77 | 01-Mar-23 | 30-May-23 | | | | | |
| P3-5030 | Sheet Pile Installation of combined shaft (KT1.33A & KT6005A) | 6 | 01-Mar-23 | 07-Mar-23 | | | | | |
| P3-5040 | Soft Excavation to 1st strut level | 3 | 08-Mar-23 | 10-Mar-23 | | | | | |
| P3-5040.1 | Installation of strut S1 | 5 | 11-Mar-23 | 16-Mar-23 | | | | | |
| P3-5050 | Soft Excavation to 2nd strut level | 4 | 17-Mar-23 | 21-Mar-23 | | | | | |
| P3-5050.1 | Installation of strut S2 | 5 | 22-Mar-23 | 27-Mar-23 | | | | | |
| P3-5070 | Soft Excavation to F.L ; (approx. 8.5m depth) | 6 | 28-Mar-23 | 03-Apr-23 | | | | | |
| P3-6130 | Sheet pile installation of Trench for 800 dia. and 2100 dia. pipe installation | 10 | 04-Apr-23 | 14-Apr-23 | | | | | |
| P3-6140 | Soft Excavation to to 1st Strut Level | 6 | 15-Apr-23 | 21-Apr-23 | | | | | |
| P3-6150 | Install 1st Level Strut | 7 | 22-Apr-23 | 29-Apr-23 | | | | | |
| P3-6160 | Soft Excavation to to 2nd Strut Level | 6 | 02-May-23 | 08-May-23 | | | | | |
| P3-6170 | Install 2nd Level Strut | 7 | 09-May-23 | 16-May-23 | | | | | |
| P3-6200 | Excavate to FEL | 6 | 17-May-23 | 23-May-23 | | | | | |
| P3-6210 | Bedding & 800 Dia. Concrete Pipe Laying | 6 | 24-May-23 | 30-May-23 | | | | | |
| Portion 4 - Road & Drains | | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Pre-construction works | | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| P4-1050 | Tree Protection and Preservation | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Rising Main Installation by Open Cut (CHB 50 to 493 & CHB515 to 974) | | 213 | 27-Sep-22 A | 10-Jun-23 | | | | | |
| Gang 1 | | 213 | 27-Sep-22 A | 10-Jun-23 | | | | | |
| Rising Main CHB255 to CHB371 (116M) Gang 1-1 | | 213 | 27-Sep-22 A | 10-Jun-23 | | | | | |
| P4-3222 | Bedding and Pipe Laying (Twins DN700) | 112 | 27-Sep-22 A | 18-Apr-23 | | | | | |
| P4-3223 | RC Works Inspection Chamber and Air Valve Chamber | 112 | 27-Sep-22 A | 01-Mar-23 | | | | | |

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New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|---|---|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P4-3224 | Backfilling of drain to at grade level | 45 | 19-Apr-23 | 10-Jun-23 | | | | | |
| Gang 2 | | 70 | 04-Jan-23 A | 18-Apr-23 | | | | | |
| Rising Main CHB120 to CHB180 (60M) Gang 2-1 | | 70 | 04-Jan-23 A | 18-Apr-23 | | | | | |
| P4-6065 | RC Works Inspection Chamber and Air Valve Chamber | 63 | 04-Jan-23 A | 21-Mar-23 | | | | | |
| P4-6070 | Backfilling of drain to at grade level | 40 | 11-Jan-23 A | 21-Mar-23 | | | | | |
| P4-6320 | Sheet Pile Extraction | 30 | 23-Feb-23 A | 18-Apr-23 | | | | | |
| Gang 3 | | 81 | 04-Nov-22 A | 17-Mar-23 | | | | | |
| Rising Main CHB589 to CHB699 (88M) Gang 3-1 | | 81 | 04-Nov-22 A | 17-Mar-23 | | | | | |
| P4-5665 | RC Works Inspection Chamber and Air Valve Chamber | 45 | 04-Nov-22 A | 10-Mar-23 | | | | | |
| P4-5670 | Backfilling of drain to at grade level | 45 | 16-Dec-22 A | 17-Mar-23 | | | | | |
| Gang 4 | | 148 | 10-Dec-22 A | 07-Jun-23 | | | | | |
| Rising Main CHB50 to CHB120 (70M) Gang 4-1 | | 63 | 10-Dec-22 A | 23-Mar-23 | | | | | |
| P4-6145 | RC Works Inspection Chamber and Air Valve Chamber | 45 | 10-Dec-22 A | 17-Mar-23 | | | | | |
| P4-6150 | Backfilling of drain to at grade level | 45 | 03-Jan-23 A | 23-Mar-23 | | | | | |
| Rising Main CHB371 to CHB493 (122M) Gang 4-2 | | 64 | 24-Mar-23 | 07-Jun-23 | | | | | |
| P4-6410 | Sheet Pile Installation for open trench | 36 | 24-Mar-23 | 05-May-23 | | | | | |
| P4-6420 | Soft Excavation to 1st strut level | 38 | 22-Apr-23 | 06-Jun-23 | | | | | |
| P4-6430 | Installation of strut S1 | 36 | 26-Apr-23 | 07-Jun-23 | | | | | |
| Gang 5 | | 101 | 11-Feb-23 A | 09-Jun-23 | | | | | |
| Rising Main CHB867 to CHB974 (107M) Gang 5-1 | | 101 | 11-Feb-23 A | 09-Jun-23 | | | | | |
| P4-6330 | Sheet Pile Installation for open trench | 49 | 11-Feb-23 A | 08-Apr-23 | | | | | |
| P4-6340 | Soft Excavation to 1st strut level | 57 | 07-Mar-23 | 12-May-23 | | | | | |
| P4-6350 | Installation of strut S1 | 56 | 11-Mar-23 | 16-May-23 | | | | | |
| P4-6360 | Soft Excavation to 2nd strut level | 42 | 04-Apr-23 | 23-May-23 | | | | | |
| P4-6370 | Installation of strut S2 | 44 | 15-Apr-23 | 06-Jun-23 | | | | | |
| P4-6380 | Soft Excavation to F.L. | 39 | 25-Apr-23 | 09-Jun-23 | | | | | |
| Portion 5 - Sewage Rising Main | | 1422 | 10-Apr-20 A | 24-Dec-24 | | | | | |
| Preparation Works | | 1422 | 10-Apr-20 A | 24-Dec-24 | | | | | |
| P5-5020 | Relocation work of existing Board Band Cable and Street Light | 97 | 02-Dec-22 A | 30-Mar-23 | | | | | |
| P5-5030 | Tree Protection and Preservation | 1422 | 10-Apr-20 A | 24-Dec-24 | | | | | |
| Sewage Rising Main Installation by Open Cut (CHB1056 to CHB 1557) | | 174 | 10-Dec-22 A | 10-Jul-23 | | | | | |
| CHB1200 - CHB1300 (100m) | | 85 | 10-Dec-22 A | 24-Mar-23 | | | | | |
| P5-2065 | RC Works Inspection Chamber and Air Valve Chamber | 45 | 10-Dec-22 A | 03-Mar-23 | | | | | |

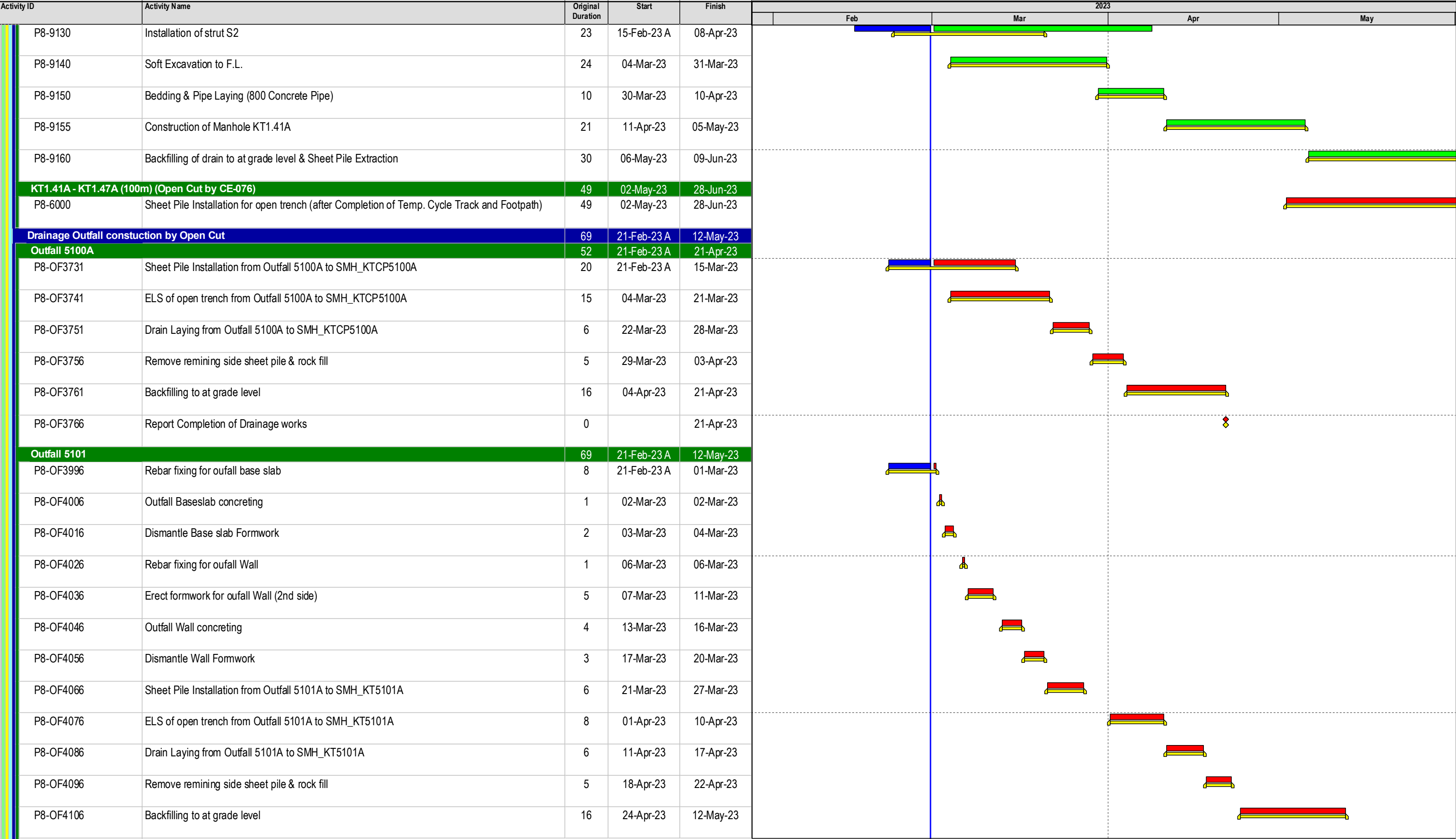
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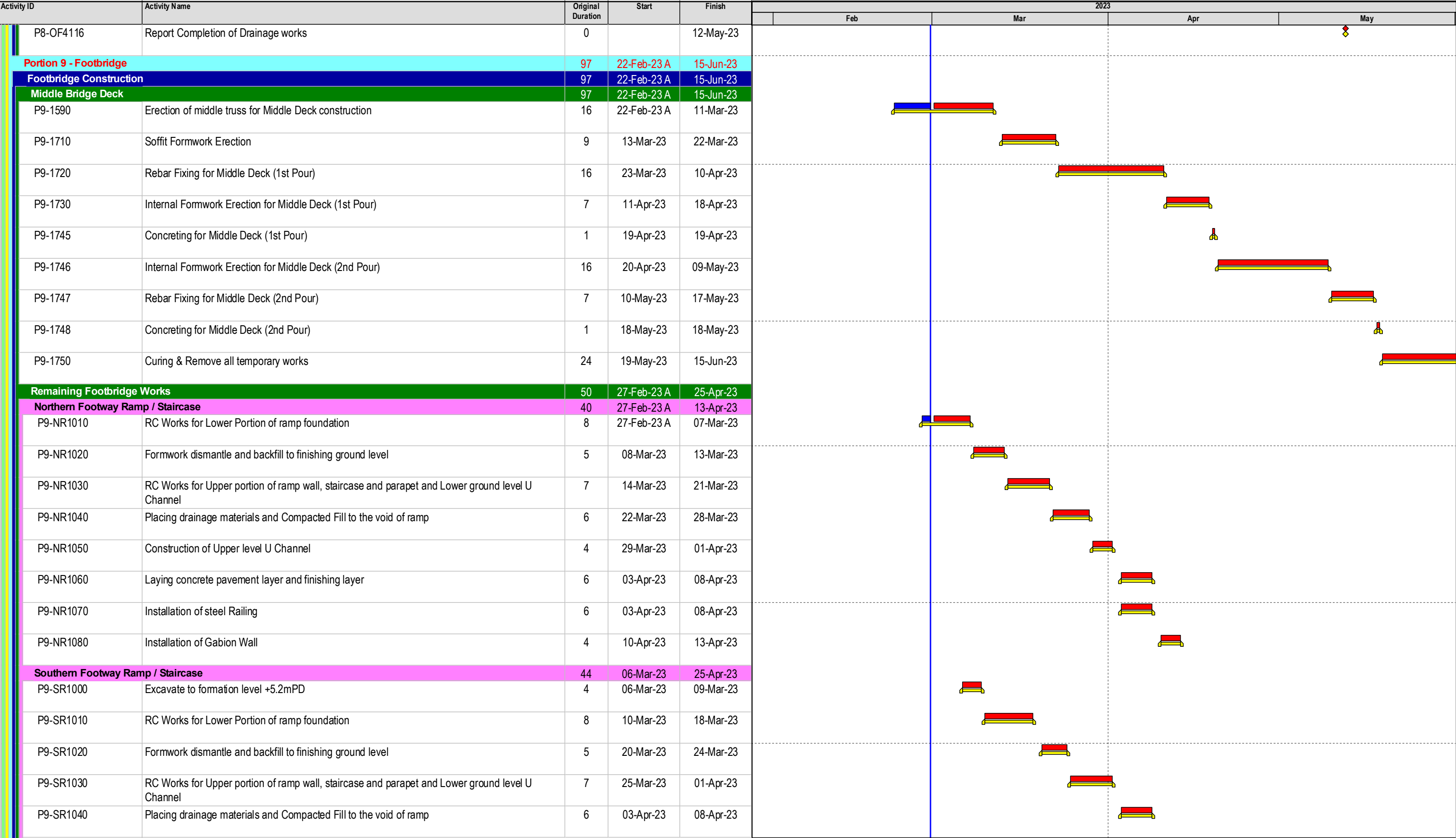
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New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|--|---|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P7-BF2000 | Dismantling base slab formwork and soil backfill to -0.5mPD with testing | 10 | 06-Apr-23 | 17-Apr-23 | | | | | |
| P7-BF2010 | Dismantle of strut S3 at -0.5mPD | 7 | 18-Apr-23 | 25-Apr-23 | | | | | |
| P7-BF2060 | Remove Intermediate Sheet Pile separating Portion 1,2 & 3 | 14 | 26-Apr-23 | 12-May-23 | | | | | |
| P7-BF2070 | Construct Remaining Portion of +1.55mPD B/F Slab (137m3) | 12 | 13-May-23 | 26-May-23 | | | | | |
| +7.50mPD (G/F Slab) | | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| Bay 1 | | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| P7-BF1401 | Backfill & Dismantle of strut S2 at +2.2mPD | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| Bay 2 | | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| P7-BF1423 | Backfill & Dismantle of strut S2 at +2.2mPD | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| Bay 3 | | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| P7-BF1433 | Dismantle of strut S2 at +2.2mPD | 14 | 27-May-23 | 12-Jun-23 | | | | | |
| External Works | | 16 | 18-Apr-23 | 06-May-23 | | | | | |
| Drainage and Site Formation | | 16 | 18-Apr-23 | 06-May-23 | | | | | |
| Sewerage pipe KT1.47A to KT1.48A | | 16 | 18-Apr-23 | 06-May-23 | | | | | |
| P7-1333 | Open Trench formation for sewerage pipe KT1.47A to KT1.48A (12m long, -1.96mPD) | 10 | 18-Apr-23 | 28-Apr-23 | | | | | |
| P7-1336 | Sewerage Pipe laying KT1.47A to KT1.48A (12m) (DN1050) | 6 | 29-Apr-23 | 06-May-23 | | | | | |
| Works in Section 3 | | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Portion 8 - Roads & Drains | | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Pre-construction works | | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| P8-1055 | Tree Protection and Preservation | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Cycle Track and Footpath Diversion (For KT1.41A to KT1.47A Construction) | | 53 | 28-Feb-23 A | 29-Apr-23 | | | | | |
| P8-5850 | North Bridge Ramp Landing Completion | 0 | | 13-Apr-23 | | | | | |
| P8-5900 | Cycle Track Shifting to the top of North Bridge Ramp (After North Bridge Ramp Completion) | 53 | 28-Feb-23 A | 29-Apr-23 | | | | | |
| Sewer Pipeline Installation | | 180 | 23-Nov-22 A | 28-Jun-23 | | | | | |
| KT1.40A - KT1.43.7 (50m) | | 69 | 23-Nov-22 A | 25-Mar-23 | | | | | |
| P8-5205 | Construction of Manhole KT1.43.7 | 19 | 23-Nov-22 A | 15-Mar-23 | | | | | |
| P8-5210 | Backfilling of drain to at grade level with dismantling strut | 20 | 15-Dec-22 A | 20-Mar-23 | | | | | |
| P8-5220 | Extraction of sheet pile and reinstatement | 40 | 28-Dec-22 A | 25-Mar-23 | | | | | |
| KT1.43.7 - KT1.41A (60m) | | 155 | 05-Dec-22 A | 09-Jun-23 | | | | | |
| P8-9090 | Sheet Pile Installation for open trench (Open Trench from 1.43.7 to 1.41A) | 23 | 05-Dec-22 A | 11-Mar-23 | | | | | |
| P8-9100 | Soft Excavation to 1st strut level | 22 | 17-Dec-22 A | 17-Mar-23 | | | | | |
| P8-9110 | Installation of strut S1 | 23 | 21-Dec-22 A | 24-Mar-23 | | | | | |
| P8-9120 | Soft Excavation to 2nd strut level | 31 | 30-Jan-23 A | 01-Apr-23 | | | | | |

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| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|---------------------------------|--|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P9-SR1050 | Construction of Upper level U Channel | 4 | 10-Apr-23 | 13-Apr-23 | | | | | |
| P9-SR1060 | Laying concrete pavement layer and finishing layer | 6 | 14-Apr-23 | 20-Apr-23 | | | | | |
| P9-SR1070 | Installation of steel Railing | 6 | 14-Apr-23 | 20-Apr-23 | | | | | |
| P9-SR1080 | Installation of Gabion Wall | 4 | 21-Apr-23 | 25-Apr-23 | | | | | |
| Works in Section 4 | | 1605 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Portion 10 - Visitor Centre | | 1605 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Pre-construction works | | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| P10-1040 | Tree Protection and Preservation | 1327 | 03-Aug-20 A | 24-Dec-24 | | | | | |
| Visitor Centre | | 190 | 24-Feb-23 A | 01-Sep-23 | | | | | |
| Superstructure | | 79 | 24-Feb-23 A | 27-May-23 | | | | | |
| Ground Floor to Roof Floor | | 79 | 24-Feb-23 A | 27-May-23 | | | | | |
| B/F to G/F Wall and G/F Slab | | 47 | 03-Apr-23 | 27-May-23 | | | | | |
| Bay 4 (On Grade Slab) (Toilet) | | 41 | 10-Apr-23 | 27-May-23 | | | | | |
| P10-2110.112 | Dismantle falseworks from G/F to 1/F | 6 | 10-Apr-23 | 15-Apr-23 | | | | | |
| P10-2110.143 | Laying Underground Drainage and testing | 20 | 04-May-23 | 26-May-23 | | | | | |
| P10-2110.153 | Backfilling of Drainages | 1 | 27-May-23 | 27-May-23 | | | | | |
| Bay 5 (On Grade Slab) (Tx Room) | | 38 | 03-Apr-23 | 17-May-23 | | | | | |
| P10-2110.203 | Dismantle falseworks from G/F to 1/F | 6 | 03-Apr-23 | 08-Apr-23 | | | | | |
| P10-2110.223 | Laying Underground Drainage and testing | 20 | 10-Apr-23 | 03-May-23 | | | | | |
| P10-2110.233 | Backfilling of Drainages | 1 | 04-May-23 | 04-May-23 | | | | | |
| P10-2110.243 | Rebar fixing of on grade Slab | 5 | 09-May-23 | 13-May-23 | | | | | |
| P10-2110.253 | Base Slab formwork shutters | 2 | 15-May-23 | 16-May-23 | | | | | |
| P10-2110.263 | G/F On Grade Slab Concreting | 1 | 17-May-23 | 17-May-23 | | | | | |
| G/F to 1/F Wall and 1/F Slab | | 25 | 24-Feb-23 A | 24-Mar-23 | | | | | |
| Bay 1 | | 9 | 04-Mar-23 | 14-Mar-23 | | | | | |
| P10-2670 | Erection of Formwork for 1/F Slab | 3 | 04-Mar-23* | 07-Mar-23 | | | | | |
| P10-2680 | Rebar Fixing for 1/F Slab | 3 | 08-Mar-23 | 10-Mar-23 | | | | | |
| P10-2690 | 1/F Slab Shutters | 2 | 11-Mar-23 | 13-Mar-23 | | | | | |
| P10-2700 | 1/F Slab Concreting | 1 | 14-Mar-23 | 14-Mar-23 | | | | | |
| Bay 2 | | 12 | 06-Mar-23 | 18-Mar-23 | | | | | |
| P10-2760 | Erection of Formwork for 1/F Slab | 4 | 06-Mar-23* | 09-Mar-23 | | | | | |
| P10-2770 | Rebar Fixing for 1/F Slab | 4 | 10-Mar-23 | 14-Mar-23 | | | | | |

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New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|--|---|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-2780 | 1/F Slab Shutters | 3 | 15-Mar-23 | 17-Mar-23 | | | | | |
| P10-2790 | 1/F Slab Concreting | 1 | 18-Mar-23 | 18-Mar-23 | | | | | |
| Bay 3 | | 25 | 24-Feb-23 A | 24-Mar-23 | | | | | |
| P10-2835 | G/F to 1/F Wall & Columns Concreting | 7 | 24-Feb-23 A | 03-Mar-23 | | | | | |
| P10-2840 | Erection of falsework and working platform for 1/F Slab | 4 | 09-Mar-23* | 13-Mar-23 | | | | | |
| P10-2850 | Erection of Formwork for 1/F Slab | 4 | 14-Mar-23 | 17-Mar-23 | | | | | |
| P10-2860 | Rebar Fixing for 1/F Slab | 3 | 18-Mar-23 | 21-Mar-23 | | | | | |
| P10-2870 | 1/F Slab Shutters | 2 | 22-Mar-23 | 23-Mar-23 | | | | | |
| P10-2880 | 1/F Slab Concreting | 1 | 24-Mar-23 | 24-Mar-23 | | | | | |
| 1/F to +12.850mPD wall and +12.850mPD slab | | 25 | 15-Mar-23 | 12-Apr-23 | | | | | |
| Bay 1 | | 19 | 15-Mar-23 | 05-Apr-23 | | | | | |
| P10-3250 | Erection of props for dwarf wall | 3 | 15-Mar-23 | 17-Mar-23 | | | | | |
| P10-3260 | Erection of One Side Formwork for dwarf wall | 2 | 18-Mar-23 | 20-Mar-23 | | | | | |
| P10-3270 | Rebar Fixing for dwarf wall | 2 | 21-Mar-23 | 22-Mar-23 | | | | | |
| P10-3280 | Erection of remaining side formwork for dwarf wall | 2 | 23-Mar-23 | 24-Mar-23 | | | | | |
| P10-3290 | Concreting of drawf wall | 1 | 25-Mar-23 | 25-Mar-23 | | | | | |
| P10-3300 | Dismantling formwork of drawf wall | 3 | 27-Mar-23 | 29-Mar-23 | | | | | |
| P10-3310 | Erection of formwork for double slab | 2 | 30-Mar-23 | 31-Mar-23 | | | | | |
| P10-3320 | Double slab Rebar fixing | 2 | 01-Apr-23 | 03-Apr-23 | | | | | |
| P10-3330 | Double Slab Shutters | 1 | 04-Apr-23 | 04-Apr-23 | | | | | |
| P10-3340 | Double Slab Concreting | 1 | 05-Apr-23 | 05-Apr-23 | | | | | |
| Bay 2 | | 21 | 20-Mar-23 | 12-Apr-23 | | | | | |
| P10-3350 | Erection of props for dwarf wall | 3 | 20-Mar-23 | 22-Mar-23 | | | | | |
| P10-3360 | Erection of One Side Formwork for dwarf wall | 2 | 23-Mar-23 | 24-Mar-23 | | | | | |
| P10-3370 | Rebar Fixing for dwarf wall | 2 | 25-Mar-23 | 27-Mar-23 | | | | | |
| P10-3380 | Erection of remaining side formwork for dwarf wall | 2 | 28-Mar-23 | 29-Mar-23 | | | | | |
| P10-3390 | Concreting of drawf wall | 1 | 30-Mar-23 | 30-Mar-23 | | | | | |
| P10-3400 | Dismantling formwork of drawf wall | 3 | 31-Mar-23 | 03-Apr-23 | | | | | |

























| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|------------------------------|---|-------------------|-----------|-----------|------|-----|-----|---|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-3410 | Erection of formwork for double slab | 3 | 04-Apr-23 | 06-Apr-23 | | | |  | |
| P10-3420 | Double slab Rebar fixing | 3 | 07-Apr-23 | 10-Apr-23 | | | |  | |
| P10-3430 | Double Slab Shutters | 1 | 11-Apr-23 | 11-Apr-23 | | | |  | |
| P10-3440 | Double Slab Concreting | 1 | 12-Apr-23 | 12-Apr-23 | | | |  | |
| 1/F to R/F Wall and R/F Slab | | 30 | 06-Apr-23 | 11-May-23 | | | | | |
| Bay 1 | | 24 | 06-Apr-23 | 04-May-23 | | | | | |
| P10-3810 | Erection of falsework and working platform from Double Slab to R/F wall | 3 | 06-Apr-23 | 08-Apr-23 | | | |  | |
| P10-3820 | Erection of One Side Formwork from Double Slab to R/F wall | 3 | 10-Apr-23 | 12-Apr-23 | | | |  | |
| P10-3830 | Rebar Fixing from Double Slab to R/F wall | 3 | 13-Apr-23 | 15-Apr-23 | | | |  | |
| P10-3840 | Erection of remaining side formwork from Double Slab to R/F wall | 3 | 17-Apr-23 | 19-Apr-23 | | | |  | |
| P10-3845 | Double Slab to R/F wall Concreting | 1 | 20-Apr-23 | 20-Apr-23 | | | |  | |
| P10-3850 | Erection of falsework and working platform for R/F Slab | 4 | 21-Apr-23 | 25-Apr-23 | | | |  | |
| P10-3860 | Erection of Formwork for R/F Slab | 2 | 26-Apr-23 | 27-Apr-23 | | | |  | |
| P10-3870 | Rebar Fixing for R/F Slab | 2 | 28-Apr-23 | 29-Apr-23 | | | |  | |
| P10-3880 | R/F Slab Shutters | 2 | 02-May-23 | 03-May-23 | | | |  | |
| P10-3890 | R/F Slab Concreting | 1 | 04-May-23 | 04-May-23 | | | |  | |
| Bay 2 | | 24 | 13-Apr-23 | 11-May-23 | | | | | |
| P10-3900 | Erection of falsework and working platform from Double Slab to R/F wall | 3 | 13-Apr-23 | 15-Apr-23 | | | |  | |
| P10-3910 | Erection of One Side Formwork from Double Slab to R/F wall | 3 | 17-Apr-23 | 19-Apr-23 | | | |  | |
| P10-3920 | Rebar Fixing from Double Slab to R/F wall | 3 | 20-Apr-23 | 22-Apr-23 | | | |  | |
| P10-3930 | Erection of remaining side formwork from Double Slab to R/F wall | 3 | 24-Apr-23 | 26-Apr-23 | | | |  | |
| P10-3935 | Double Slab to R/F wall Concreting | 1 | 27-Apr-23 | 27-Apr-23 | | | |  | |
| P10-3940 | Erection of falsework and working platform for R/F Slab | 3 | 28-Apr-23 | 02-May-23 | | | |  | |
| P10-3950 | Erection of Formwork for R/F Slab | 3 | 03-May-23 | 05-May-23 | | | |  | |
| P10-3960 | Rebar Fixing for R/F Slab | 2 | 06-May-23 | 08-May-23 | | | |  | |
| P10-3970 | R/F Slab Shutters | 2 | 09-May-23 | 10-May-23 | | | |  | |
| P10-3980 | R/F Slab Concreting | 1 | 11-May-23 | 11-May-23 | | | |  | |
| ABWF / E&M Works | | 74 | 31-Mar-23 | 27-Jun-23 | | | | | |
| Basement Floor | | 62 | 12-Apr-23 | 24-Jun-23 | | | | | |

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|--|---|-------------------|-----------|-----------|------|-----|---|-----|--|
| | | | | | Feb | Mar | Apr | May | |
| Rainwater Harvesting Tank / Irrigation Pump Room | | 62 | 12-Apr-23 | 24-Jun-23 | | |  | | |
| P10-BFRH-1000 | Access Date of B/F Rainwater and Irrigation Room Fitting Out | 0 | 12-Apr-23 | | | | | | |
| ABWF | | 55 | 12-Apr-23 | 15-Jun-23 | | | | | |
| P10-BFRH-1010 | Setting Out | 2 | 12-Apr-23 | 13-Apr-23 | | | | | |
| P10-BFRH-1020 | Water Tanks Props and formwork removal | 12 | 14-Apr-23 | 27-Apr-23 | | | | | |
| P10-BFRH-1030 | Water Tanks water testing before waterproofing and touch up works | 6 | 28-Apr-23 | 05-May-23 | | | | | |
| P10-BFRH-1040 | Erect Scaffolding for wall and ceiling finishes | 2 | 06-May-23 | 08-May-23 | | | | | |
| P10-BFRH-1050 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 09-May-23 | 22-May-23 | | | | | |
| P10-BFRH-1060 | Wall Finishes (Wall waterproofing, plastering, Skim Coat and 1st Coat Painting) | 21 | 23-May-23 | 15-Jun-23 | | | | | |
| BS Works | | 40 | 09-May-23 | 24-Jun-23 | | | | | |
| MVAC | | 24 | 09-May-23 | 05-Jun-23 | | | | | |
| P10-BFRH-1110 | Setting out for all equipment / MOS inspection | 3 | 09-May-23 | 11-May-23 | | | | | |
| P10-BFRH-1120 | Air Duct installation | 21 | 12-May-23 | 05-Jun-23 | | | | | |
| PD | | 40 | 09-May-23 | 24-Jun-23 | | | | | |
| P10-BFRH-1130 | setting out for all equipment / MOS inspection | 10 | 09-May-23 | 19-May-23 | | | | | |
| P10-BFRH-1140 | Installation of inertia block, FRP water tank, pressure pipe | 30 | 20-May-23 | 24-Jun-23 | | | | | |
| EL | | 17 | 09-May-23 | 27-May-23 | | | | | |
| P10-BFRH-1160 | Setting out for all equipment / MOS inspection | 2 | 09-May-23 | 10-May-23 | | | | | |
| P10-BFRH-1170 | Installation of cable containments | 15 | 11-May-23 | 27-May-23 | | | | | |
| Sprinkler & FS Pump Room | | 62 | 12-Apr-23 | 24-Jun-23 | | |  | | |
| P10-BFFS-1000 | Access Date of B/F Sprinkler and FS Pump Room Fitting Out | 0 | 12-Apr-23 | | | | | | |
| ABWF | | 48 | 12-Apr-23 | 07-Jun-23 | | | | | |
| P10-BFFS-1100 | Water Tanks Props and formwork removal | 2 | 12-Apr-23 | 13-Apr-23 | | | | | |
| P10-BFFS-1110 | Setting Out | 12 | 14-Apr-23 | 27-Apr-23 | | | | | |
| P10-BFFS-1120 | Water Tanks water testing before waterproofing and touch up works | 6 | 28-Apr-23 | 05-May-23 | | | | | |
| P10-BFFS-1130 | Erect Scaffolding for wall and ceiling finishes | 2 | 06-May-23 | 08-May-23 | | | | | |
| P10-BFFS-1140 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 09-May-23 | 22-May-23 | | | | | |
| P10-BFFS-1150 | Wall Finishes (Wall waterproofing, plastering, Skim Coat and 1st Coat Painting) | 14 | 23-May-23 | 07-Jun-23 | | | | | |
| BS Works | | 49 | 27-Apr-23 | 24-Jun-23 | | | | | |
| MVAC | | 3 | 09-May-23 | 11-May-23 | | | | | |
| P10-BFFS-1010 | Setting out for all equipment / MOS inspection | 3 | 09-May-23 | 11-May-23 | | | | | |
| PD | | 40 | 09-May-23 | 24-Jun-23 | | | | | |

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| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|-----------------------|--|-------------------|-----------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-BFFS-1030 | Setting out for all equipment / MOS inspection | 10 | 09-May-23 | 19-May-23 | | | | | |
| P10-BFFS-1040 | Installation of inertia block, FRP water tank, pressure | 30 | 20-May-23 | 24-Jun-23 | | | | | |
| EL | | 35 | 09-May-23 | 17-Jun-23 | | | | | |
| P10-BFFS-1060 | Setting out for all equipment / MOS inspection | 10 | 09-May-23 | 19-May-23 | | | | | |
| P10-BFFS-1070 | Installation of cable containment | 5 | 20-May-23 | 25-May-23 | | | | | |
| P10-BFFS-1080 | Cable wiring | 20 | 26-May-23 | 17-Jun-23 | | | | | |
| FS | | 15 | 27-Apr-23 | 15-May-23 | | | | | |
| P10-BFFS-1190 | FS 1st Fixing | 15 | 27-Apr-23 | 15-May-23 | | | | | |
| Ground Floor | | 74 | 31-Mar-23 | 27-Jun-23 | | | | | |
| Generator Room | | 55 | 22-Apr-23 | 27-Jun-23 | | | | | |
| P10-GFGS1000 | Access Date of G/F Generator Room Fitting Out | 0 | 22-Apr-23 | | | | | | |
| ABWF | | 34 | 22-Apr-23 | 01-Jun-23 | | | | | |
| P10-GFGS1010 | Setting Out | 2 | 22-Apr-23 | 24-Apr-23 | | | | | |
| P10-GFGS1020 | Erect Scaffolding for wall and ceiling finishes | 2 | 25-Apr-23 | 26-Apr-23 | | | | | |
| P10-GFGS1030 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 27-Apr-23 | 11-May-23 | | | | | |
| P10-GFGS1040 | Wall Finishes (Wall plastering, Tiling, Skim Coat and 1st Coat Painting) | 18 | 12-May-23 | 01-Jun-23 | | | | | |
| BS Works | | 51 | 27-Apr-23 | 27-Jun-23 | | | | | |
| MVAC | | 21 | 27-Apr-23 | 22-May-23 | | | | | |
| P10-GFGS1110 | Setting out for all equipment / MOS inspection | 3 | 27-Apr-23 | 29-Apr-23 | | | | | |
| P10-GFGS1120 | Air Duct installation | 18 | 02-May-23 | 22-May-23 | | | | | |
| EL | | 35 | 27-Apr-23 | 07-Jun-23 | | | | | |
| P10-GFGS1130 | Setting out for all equipment / MOS inspection | 10 | 27-Apr-23 | 09-May-23 | | | | | |
| P10-GFGS1140 | Installation of cable containment | 10 | 10-May-23 | 20-May-23 | | | | | |
| P10-GFGS1150 | Cable wiring | 15 | 22-May-23 | 07-Jun-23 | | | | | |
| FS | | 30 | 23-May-23 | 27-Jun-23 | | | | | |
| P10-GFGS1090 | FS Piping, cable containment Installation | 30 | 23-May-23 | 27-Jun-23 | | | | | |
| Tx Room / Switch Room | | 32 | 29-Apr-23 | 06-Jun-23 | | | | | |
| ABWF | | 25 | 29-Apr-23 | 29-May-23 | | | | | |
| P10-Tx1000 | Access Date of G/F Tx Room / Switch Room Fitting Out | 0 | 29-Apr-23 | | | | | | |
| P10-Tx1100 | Setting Out | 2 | 29-Apr-23 | 02-May-23 | | | | | |
| P10-Tx1105 | Access Date of Tx Room Double Slab Builders works | 0 | 29-Apr-23 | | | | | | |
| P10-Tx1107 | Formwork dismantling and touch up works | 3 | 29-Apr-23 | 03-May-23 | | | | | |

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| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|------------------|---------------|--|-----------|-----------|-----------|-----|-----|-----|---|
| | | | | | | Feb | Mar | Apr | May |
| | P10-Tx1108 | Waterproofing works of Tx Room Double Slab | 3 | 04-May-23 | 06-May-23 | | | |  |
| | P10-Tx1109 | Flooding Test and Infra Red test after waterproofing | 2 | 08-May-23 | 09-May-23 | | | |  |
| | P10-Tx1110 | Erect Scaffolding for wall and ceiling finishes of Tx Rm | 1 | 03-May-23 | 03-May-23 | | | |  |
| | P10-Tx1120 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 5 | 04-May-23 | 09-May-23 | | | |  |
| | P10-Tx1130 | Wall Finishes (Wall plastering, Louve Frame, Wall Tiling, Skim Coat and 1st Coat Painting) | 4 | 10-May-23 | 13-May-23 | | | |  |
| | P10-Tx1140 | Cable Trench Plastering | 5 | 15-May-23 | 19-May-23 | | | |  |
| | P10-Tx1150 | Cable Trench Angle Frame Installation | 2 | 20-May-23 | 22-May-23 | | | |  |
| | P10-Tx1160 | Floor Screeding | 2 | 23-May-23 | 24-May-23 | | | |  |
| | P10-Tx1170 | Metal Door Frame Installation | 2 | 23-May-23 | 24-May-23 | | | |  |
| | P10-Tx1180 | Ceiling And Wall Painting (Final Coat) | 2 | 25-May-23 | 26-May-23 | | | |  |
| | P10-Tx1190 | Chequer Plate Installation | 2 | 25-May-23 | 26-May-23 | | | |  |
| | P10-Tx1195 | Lourves Installation | 2 | 25-May-23 | 26-May-23 | | | |  |
| | P10-Tx1200 | Painting to Chequer Plate | 2 | 27-May-23 | 29-May-23 | | | |  |
| BS Works | | 20 | 15-May-23 | 06-Jun-23 | | | | | |
| Electrical Works | | 20 | 15-May-23 | 06-Jun-23 | | | | | |
| | P10-Tx1240 | Intallation (Electrical) of Conduit / Cable Containment at Tx Room | 10 | 15-May-23 | 25-May-23 | | | |  |
| | P10-Tx1250 | Cable Wiring at Tx Room | 10 | 26-May-23 | 06-Jun-23 | | | |  |
| MVAC Works | | 13 | 15-May-23 | 29-May-23 | | | | | |
| | P10-Tx1680 | Intallation (MVAC) of Conduit at Tx Room | 2 | 15-May-23 | 16-May-23 | | | |  |
| | P10-Tx1690 | Cable Wiring & Cable Containment (MVAC) of Conduit at Tx Room | 2 | 17-May-23 | 18-May-23 | | | |  |
| | P10-Tx1700 | Installation of Fan and Air Duct at Tx Room | 3 | 19-May-23 | 22-May-23 | | | |  |
| | P10-Tx1710 | Installation of Fan Controller at Tx Room | 2 | 23-May-23 | 24-May-23 | | | |  |
| | P10-Tx1720 | Installation of Fan and Air Duct at Switchroom | 2 | 25-May-23 | 26-May-23 | | | |  |
| | P10-Tx1730 | Installation of LMCP at Switchroom | 2 | 27-May-23 | 29-May-23 | | | |  |
| FS Works | | 12 | 15-May-23 | 27-May-23 | | | | | |
| | P10-Tx1770 | Intallation (FS) of Conduit at Tx Room | 2 | 15-May-23 | 16-May-23 | | | |  |
| | P10-Tx1780 | Cable Wiring (FS) of Conduit at Tx Room | 2 | 17-May-23 | 18-May-23 | | | |  |
| | P10-Tx1790 | Installation of Heat Detector at Tx Room | 2 | 19-May-23 | 20-May-23 | | | |  |

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New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|-------------------|--|-------------------|-----------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-Tx1800 | Installation of (FS) Conduit at Switchroom | 2 | 22-May-23 | 23-May-23 | | | | | |
| P10-Tx1810 | Cable Wiring (FS) of Conduit at Switchroom | 2 | 24-May-23 | 25-May-23 | | | | | |
| P10-Tx1820 | Installation of Heat Detector at Switchroom | 1 | 26-May-23 | 26-May-23 | | | | | |
| P10-Tx1830 | Installation of AFA panel and audio / visual alarm equipment | 1 | 27-May-23 | 27-May-23 | | | | | |
| FS Control Room | | 40 | 29-Apr-23 | 15-Jun-23 | | | | | |
| P10-GFFS1020 | Access Date of G/F FS control Room Fitting Out | 0 | 29-Apr-23 | | | | | | |
| ABWF | | 28 | 29-Apr-23 | 01-Jun-23 | | | | | |
| P10-GFFS1050 | Setting Out | 2 | 29-Apr-23 | 02-May-23 | | | | | |
| P10-GFFS1060 | Erect Scaffolding for wall and ceiling finishes | 2 | 03-May-23 | 04-May-23 | | | | | |
| P10-GFFS1070 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 8 | 05-May-23 | 13-May-23 | | | | | |
| P10-GFFS1080 | Wall Finishes (Wall plastering, Skim Coat and 1st Coat Painting) | 8 | 15-May-23 | 23-May-23 | | | | | |
| P10-GFFS1100 | Concrete Plinth Casting and finishes | 8 | 24-May-23 | 01-Jun-23 | | | | | |
| BS Works | | 36 | 05-May-23 | 15-Jun-23 | | | | | |
| MVAC | | 36 | 05-May-23 | 15-Jun-23 | | | | | |
| P10-GFFS1150 | Setting out for all equipment / MOS inspection | 3 | 05-May-23 | 08-May-23 | | | | | |
| P10-GFFS1160 | Air Duct installation | 18 | 26-May-23 | 15-Jun-23 | | | | | |
| EL | | 25 | 05-May-23 | 02-Jun-23 | | | | | |
| P10-GFFS1170 | Setting out for all equipment / MOS inspection | 10 | 05-May-23 | 16-May-23 | | | | | |
| P10-GFFS1180 | Installation of cable containment | 5 | 17-May-23 | 22-May-23 | | | | | |
| P10-GFFS1190 | Cable wiring | 10 | 23-May-23 | 02-Jun-23 | | | | | |
| BOH | | 65 | 31-Mar-23 | 15-Jun-23 | | | | | |
| Material Recovery | | 53 | 31-Mar-23 | 01-Jun-23 | | | | | |
| ABWF | | 42 | 31-Mar-23 | 19-May-23 | | | | | |
| P10-GF-MR1000 | Setting Out | 2 | 31-Mar-23 | 01-Apr-23 | | | | | |
| P10-GF-MR1010 | Erect Scaffolding for wall and ceiling finishes | 2 | 03-Apr-23 | 04-Apr-23 | | | | | |
| P10-GF-MR1020 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 05-Apr-23 | 18-Apr-23 | | | | | |
| P10-GF-MR1030 | Wall Finishes (Wall plastering, tiling) | 12 | 19-Apr-23 | 03-May-23 | | | | | |
| P10-GF-MR1040 | Floor Screeding | 2 | 04-May-23 | 05-May-23 | | | | | |
| P10-GF-MR1050 | Floor quarry Tiles & door installation | 12 | 06-May-23 | 19-May-23 | | | | | |
| BS Works | | 25 | 04-May-23 | 01-Jun-23 | | | | | |
| MVAC | | 21 | 04-May-23 | 27-May-23 | | | | | |

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|------------------------------|--|-------------------|-----------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-GF-MR1080 | Setting out for all equipment / MOS inspection | 3 | 04-May-23 | 06-May-23 | | | | | |
| P10-GF-MR1090 | Air Duct installation | 18 | 08-May-23 | 27-May-23 | | | | | |
| EL | | 25 | 04-May-23 | 01-Jun-23 | | | | | |
| P10-GF-MR1100 | Setting out for all equipment / MOS inspection | 10 | 04-May-23 | 15-May-23 | | | | | |
| P10-GF-MR1110 | Installation of cable containment | 5 | 16-May-23 | 20-May-23 | | | | | |
| P10-GF-MR1120 | Cable wiring | 10 | 22-May-23 | 01-Jun-23 | | | | | |
| Security Control Room | | 65 | 31-Mar-23 | 15-Jun-23 | | | | | |
| P10-GFSC1190 | Access Date of G/F security control Room Fitting Out | 0 | 31-Mar-23 | | | | | | |
| ABWF | | 48 | 31-Mar-23 | 26-May-23 | | | | | |
| P10-GFSC1030 | Setting Out | 2 | 31-Mar-23 | 01-Apr-23 | | | | | |
| P10-GFSC1040 | Erect Scaffolding for wall and ceiling finishes | 2 | 03-Apr-23 | 04-Apr-23 | | | | | |
| P10-GFSC1050 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 9 | 05-Apr-23 | 14-Apr-23 | | | | | |
| P10-GFSC1060 | Wall plastering | 9 | 15-Apr-23 | 25-Apr-23 | | | | | |
| P10-GFSC1070 | Floor Screeding | 2 | 04-May-23 | 05-May-23 | | | | | |
| P10-GFSC1090 | Wall Skim Coat and 1st Coat Painting | 6 | 06-May-23 | 12-May-23 | | | | | |
| P10-GFSC1100 | Floor epoxy Painting & door installation | 6 | 20-May-23 | 26-May-23 | | | | | |
| BS Works | | 43 | 26-Apr-23 | 15-Jun-23 | | | | | |
| MVAC | | 26 | 26-Apr-23 | 26-May-23 | | | | | |
| P10-GFSC1130 | Setting out for all equipment / MOS inspection | 3 | 26-Apr-23 | 28-Apr-23 | | | | | |
| P10-GFSC1140 | Air Duct installation | 18 | 06-May-23 | 26-May-23 | | | | | |
| EL | | 43 | 26-Apr-23 | 15-Jun-23 | | | | | |
| P10-GFSC1150 | Setting out for all equipment / MOS inspection | 10 | 26-Apr-23 | 08-May-23 | | | | | |
| P10-GFSC1160 | Installation of cable containment | 5 | 09-May-23 | 13-May-23 | | | | | |
| P10-GFSC1170 | Cable wiring | 10 | 15-May-23 | 25-May-23 | | | | | |
| P10-GFSC1180 | Installation of Lighting fitting and small power provision | 18 | 26-May-23 | 15-Jun-23 | | | | | |
| Main Distribution Frame Room | | 53 | 05-Apr-23 | 06-Jun-23 | | | | | |
| ABWF | | 46 | 05-Apr-23 | 29-May-23 | | | | | |
| P10-GF-MDF1000 | Setting Out | 2 | 05-Apr-23 | 06-Apr-23 | | | | | |
| P10-GF-MDF1010 | Erect Scaffolding for wall and ceiling finishes | 2 | 07-Apr-23 | 08-Apr-23 | | | | | |
| P10-GF-MDF1020 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 10-Apr-23 | 22-Apr-23 | | | | | |

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New Development Area and Shek Wu Hui

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|---------------------|--|-------------------|-----------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-GF-MDF1030 | Wall Finishes (Wall plastering, Skim Coat and 1st Coat Painting) | 12 | 24-Apr-23 | 08-May-23 | | | | | |
| P10-GF-MDF1040 | Floor Screeding | 2 | 09-May-23 | 10-May-23 | | | | | |
| P10-GF-MDF1050 | Floor epoxy Painting | 10 | 18-May-23 | 29-May-23 | | | | | |
| BS Works | | 25 | 09-May-23 | 06-Jun-23 | | | | | |
| MVAC | | 21 | 09-May-23 | 01-Jun-23 | | | | | |
| P10-GF-MDF1080 | Setting out for all equipment / MOS inspection | 3 | 09-May-23 | 11-May-23 | | | | | |
| P10-GF-MDF1090 | Air Duct installation | 18 | 12-May-23 | 01-Jun-23 | | | | | |
| EL | | 25 | 09-May-23 | 06-Jun-23 | | | | | |
| P10-GF-MDF1100 | Setting out for all equipment / MOS inspection | 10 | 09-May-23 | 19-May-23 | | | | | |
| P10-GF-MDF1110 | Installation of cable containment | 5 | 20-May-23 | 25-May-23 | | | | | |
| P10-GF-MDF1120 | Cable wiring | 10 | 26-May-23 | 06-Jun-23 | | | | | |
| Water Meter Cabinet | | 55 | 05-Apr-23 | 08-Jun-23 | | | | | |
| ABWF | | 40 | 05-Apr-23 | 22-May-23 | | | | | |
| P10-GF-WMC1000 | Setting Out | 2 | 05-Apr-23 | 06-Apr-23 | | | | | |
| P10-GF-WMC1010 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 07-Apr-23 | 20-Apr-23 | | | | | |
| P10-GF-WMC1020 | Wall Finishes (Wall plastering, Skim Coat and 1st Coat Painting) | 12 | 21-Apr-23 | 05-May-23 | | | | | |
| P10-GF-WMC1030 | Floor Screeding | 2 | 06-May-23 | 08-May-23 | | | | | |
| P10-GF-WMC1040 | Double Leaf Door Installation to water meter cabinet | 6 | 09-May-23 | 15-May-23 | | | | | |
| P10-GF-WMC1050 | Floor epoxy Painting & door installation | 6 | 16-May-23 | 22-May-23 | | | | | |
| BS Works | | 15 | 23-May-23 | 08-Jun-23 | | | | | |
| PD | | 15 | 23-May-23 | 08-Jun-23 | | | | | |
| P10-GF-WMC1060 | Water piping works Installation | 15 | 23-May-23 | 08-Jun-23 | | | | | |
| Equipment Room | | 28 | 29-Apr-23 | 01-Jun-23 | | | | | |
| ABWF | | 28 | 29-Apr-23 | 01-Jun-23 | | | | | |
| P10-GFER1000 | Setting Out | 2 | 29-Apr-23 | 02-May-23 | | | | | |
| P10-GFER1010 | Erect Scaffolding for wall and ceiling finishes | 2 | 03-May-23 | 04-May-23 | | | | | |
| P10-GFER1020 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 05-May-23 | 18-May-23 | | | | | |
| P10-GFER1030 | Wall Finishes (Wall plastering, Skim Coat and 1st Coat Painting) | 12 | 19-May-23 | 01-Jun-23 | | | | | |
| Staircase | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| ST-02 | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| ABWF | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| P10-GF-ST2-1020 | Setting Out | 2 | 22-May-23 | 23-May-23 | | | | | |

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New Development Area and Shek Wu Hui

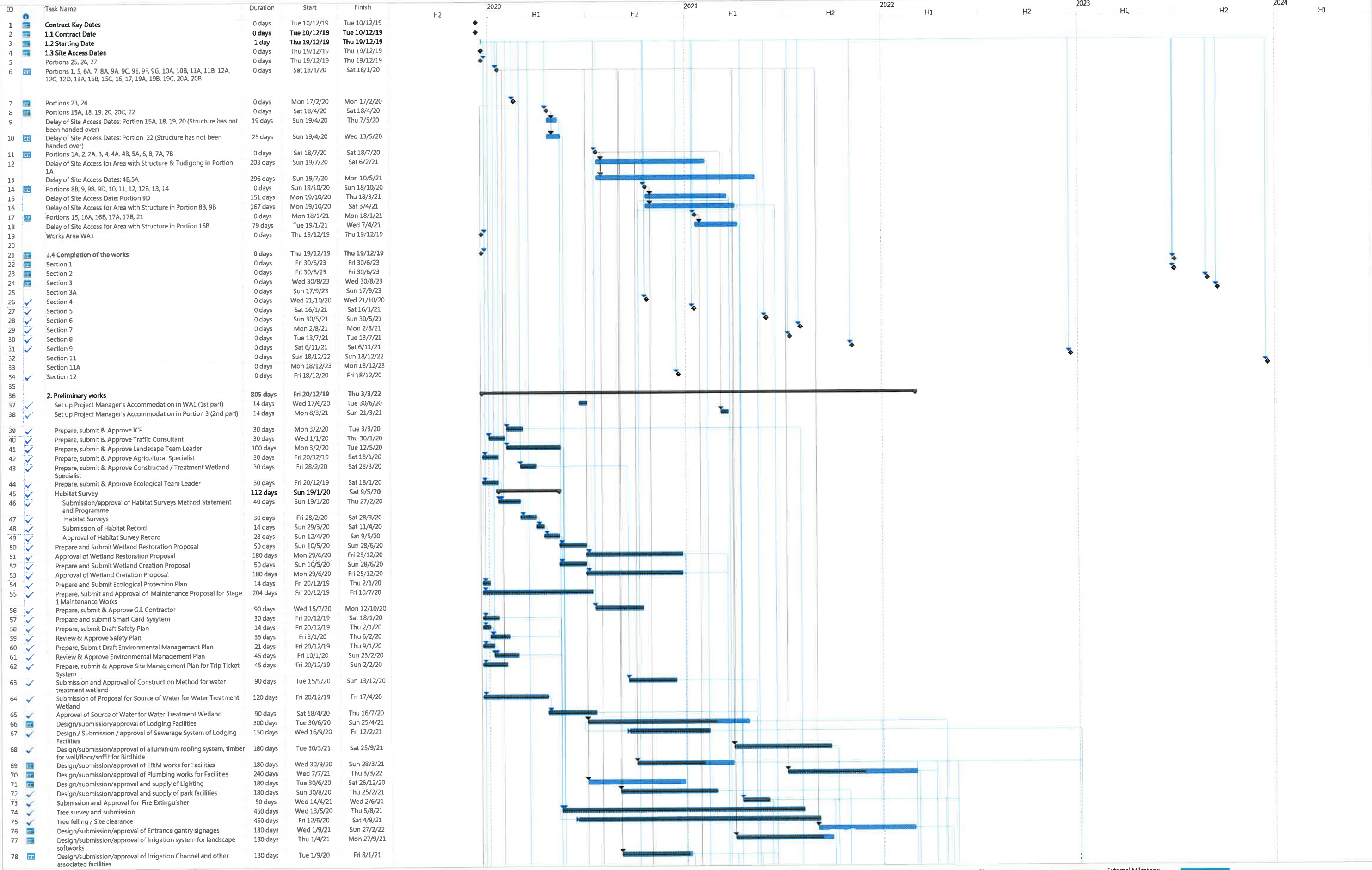
| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|----------------------------------|--|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P10-GF-ST2-1030 | Erect Scaffolding for wall and ceiling finishes | 2 | 24-May-23 | 25-May-23 | | | | | |
| P10-GF-ST2-1040 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 26-May-23 | 08-Jun-23 | | | | | |
| 1st Floor | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| Zone 1 | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| Multi Purpose Room 1 & 2 | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| P10-1FMP-1000 | Access Date of 1/FMulti Purpose Room (1&2) Fitting Out | 0 | 22-May-23 | | | | | | |
| ABWF | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| P10-1F-MP1010 | Setting Out | 2 | 22-May-23 | 23-May-23 | | | | | |
| P10-1F-MP1020 | Erect Scaffolding for wall and ceiling finishes | 2 | 24-May-23 | 25-May-23 | | | | | |
| P10-1F-MP1030 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 26-May-23 | 08-Jun-23 | | | | | |
| Storage Room | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| P10-1F-SR0900 | Access Date of 1/FStorage Room Fitting Out | 0 | 22-May-23 | | | | | | |
| ABWF | | 16 | 22-May-23 | 08-Jun-23 | | | | | |
| P10-1F-SR1000 | Setting Out | 2 | 22-May-23 | 23-May-23 | | | | | |
| P10-1F-SR1010 | Erect Scaffolding for wall and ceiling finishes | 2 | 24-May-23 | 25-May-23 | | | | | |
| P10-1F-SR1020 | Ceiling Finishes (Touch up, Skim Coat and 1st coat Painting) | 12 | 26-May-23 | 08-Jun-23 | | | | | |
| External Works | | 171 | 15-Mar-23 | 01-Sep-23 | | | | | |
| Retaining wall | | 88 | 10-Apr-23 | 24-Jul-23 | | | | | |
| P10-4140 | Construction of U trough Structure KW-09 (6 Bays @ 7.5m / Bay) | 48 | 10-Apr-23 | 05-Jun-23 | | | | | |
| P10-4145 | Construction of Retaining Wall KW-14 (11 Bays @ 7.5m / Bay) | 48 | 27-May-23 | 24-Jul-23 | | | | | |
| Underground Utilities Connection | | 171 | 15-Mar-23 | 01-Sep-23 | | | | | |
| P10-2311 | Underground Drainage and sewerage installation near U trough Structure KW-09 | 20 | 31-Mar-23 | 22-Apr-23 | | | | | |
| P10-2311.1 | Underground sewerage Installation and Temp. Sewerage Tank connection | 12 | 27-May-23 | 09-Jun-23 | | | | | |
| P10-2312 | ELS, Trench excavation for drainage pipe (65m long, -0.72mPD to -1.03mPD) | 28 | 03-Apr-23* | 05-May-23 | | | | | |
| P10-2316 | Installation of 11KV Cables along sub-station from HSH Pai Lau to Vistor Centre EVA (~500m @ 2wks/50m) | 120 | 15-Mar-23* | 04-Aug-23 | | | | | |
| P10-4160 | Installation of FTNS Cables from HSH Pai Lau to Vistor Centre MDF Room (~500m @ 2wks/50m) | 144 | 15-Mar-23* | 01-Sep-23 | | | | | |
| Works in Section 5 | | 95 | 27-Feb-23 A | 17-Jun-23 | | | | | |
| Portion 11 - Village Resite Area | | 95 | 27-Feb-23 A | 17-Jun-23 | | | | | |
| Ground Investigation Works | | 44 | 28-Feb-23 A | 19-Apr-23 | | | | | |
| P11-1010 | Engineering Gl x 3nos. | 12 | 28-Feb-23 A | 21-Mar-23 | | | | | |
| P11-1015 | Environmental Gl & Trial Pit: 4nos. & Submission of report | 31 | 28-Feb-23 A | 12-Apr-23 | | | | | |
| P11-1020 | Submission and approval of GI report | 24 | 23-Mar-23 | 19-Apr-23 | | | | | |
| Site Formation | | 30 | 20-Apr-23 | 25-May-23 | | | | | |

| Activity ID | Activity Name | Original Duration | Start | Finish | 2023 | | | | |
|---|--|-------------------|-------------|-----------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May |
| P11-1030 | Excavation and Cart Away High Arsenic Content Soil (Subjected to actual GI Result) (3000m3 @100m3/d) | 30 | 20-Apr-23 | 25-May-23 | | | | | |
| Drainage Works (Level: (IL +5mPD to +6.25mPD) | | 20 | 26-May-23 | 17-Jun-23 | | | | | |
| P11-1040 | Sheet Pile installation (total length 140m with assume using type 4 sheet pile with 350pcs) | 20 | 26-May-23 | 17-Jun-23 | | | | | |
| Fresh Water Pipeworks (Level: (IL +6mPD to +7.0mPD) | | 7 | 27-Feb-23 A | 06-Mar-23 | | | | | |
| P11-1033 | Reply with Form WWO46 Part 3 from WSD for application of Water works (Fresh Water Works) | 7 | 27-Feb-23 A | 06-Mar-23 | | | | | |
| Salt Water Pipeworks | | 7 | 27-Feb-23 A | 06-Mar-23 | | | | | |
| P11-1069 | Reply with Form WWO46 Part 3 from WSD for application of Water works (Salt Water Works) | 7 | 27-Feb-23 A | 06-Mar-23 | | | | | |

Construction Programme of ND/2019/03

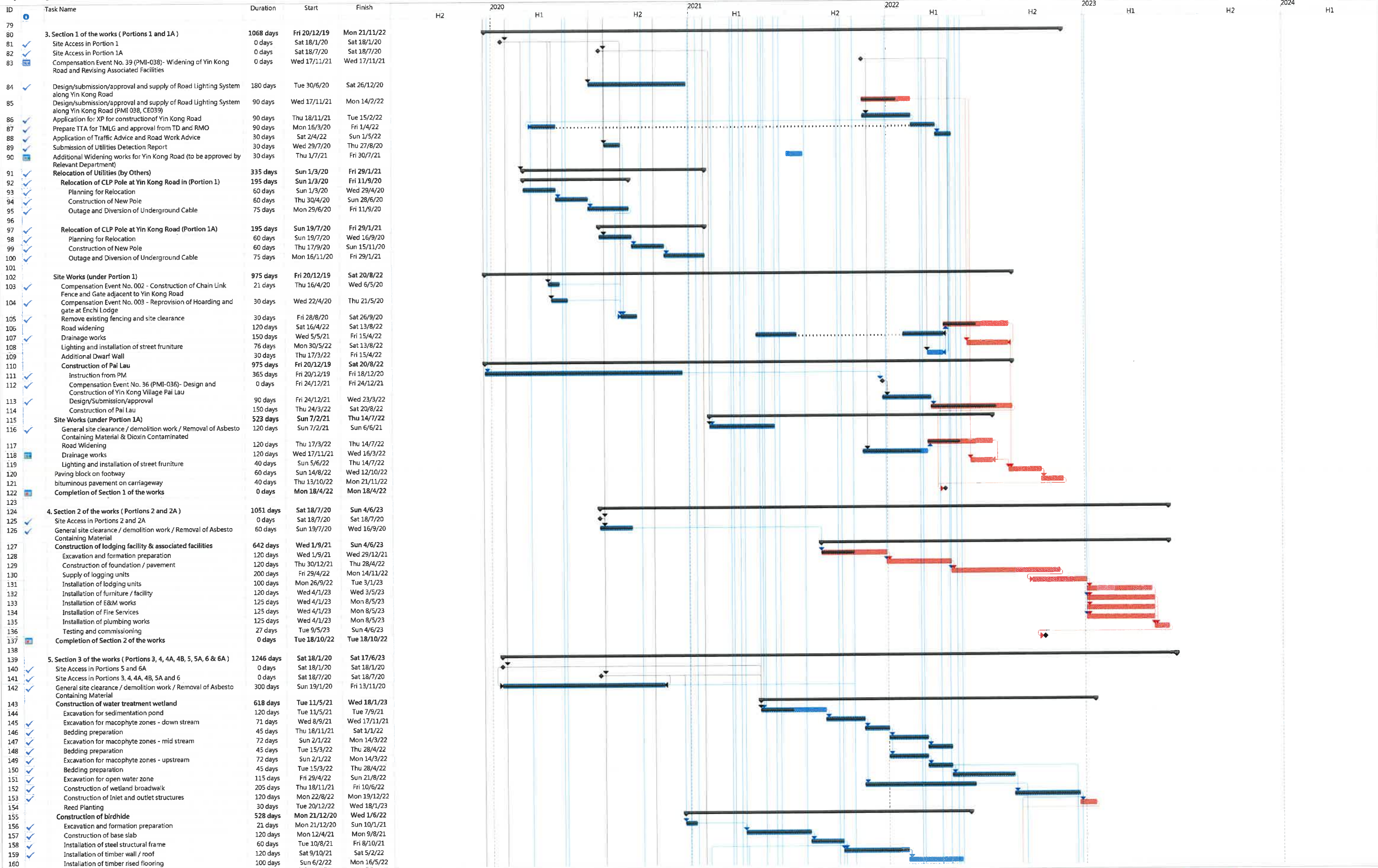
Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Works



Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Works



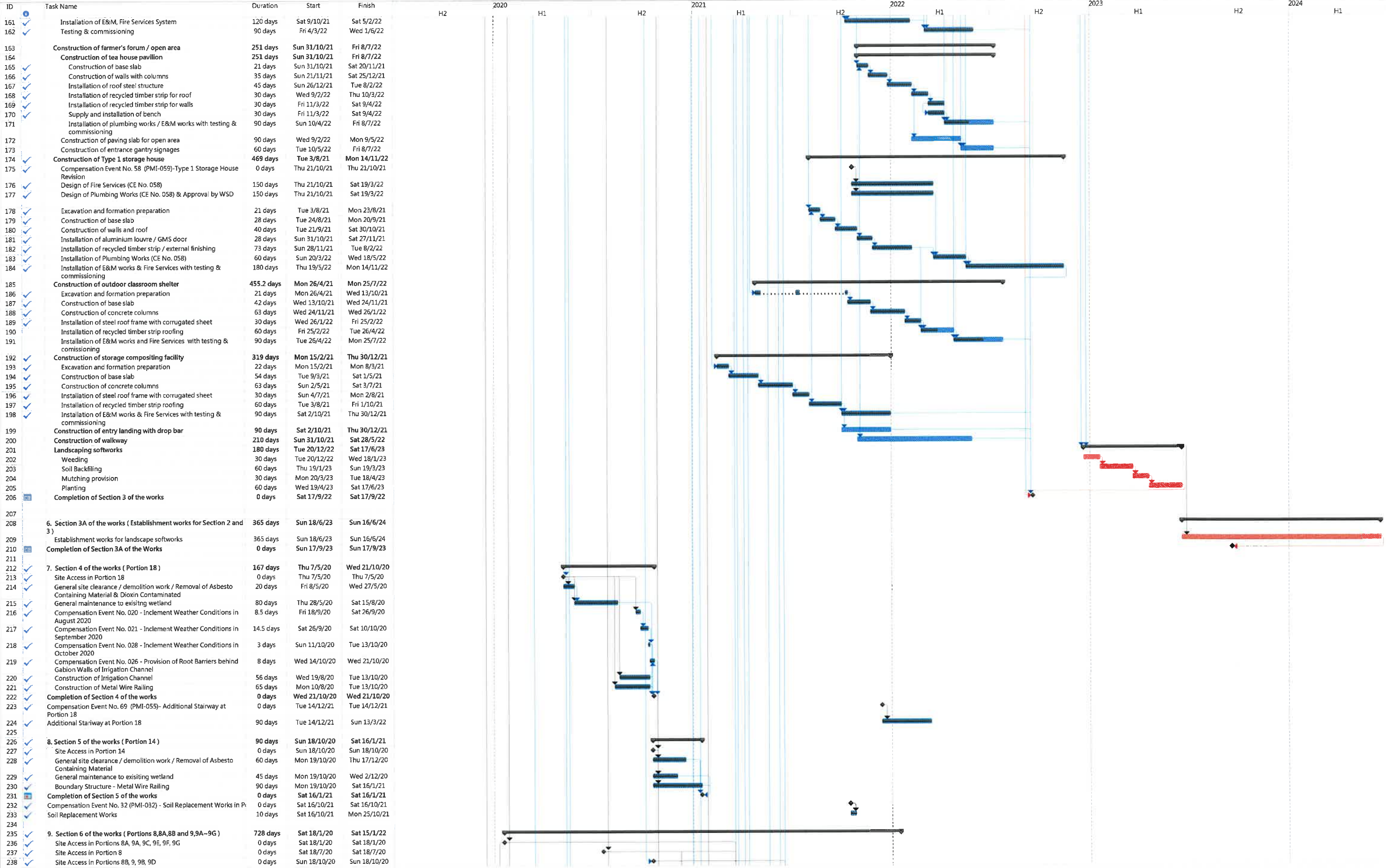
Revised Programme: Sep 2022

Data Date : 2022-9-3



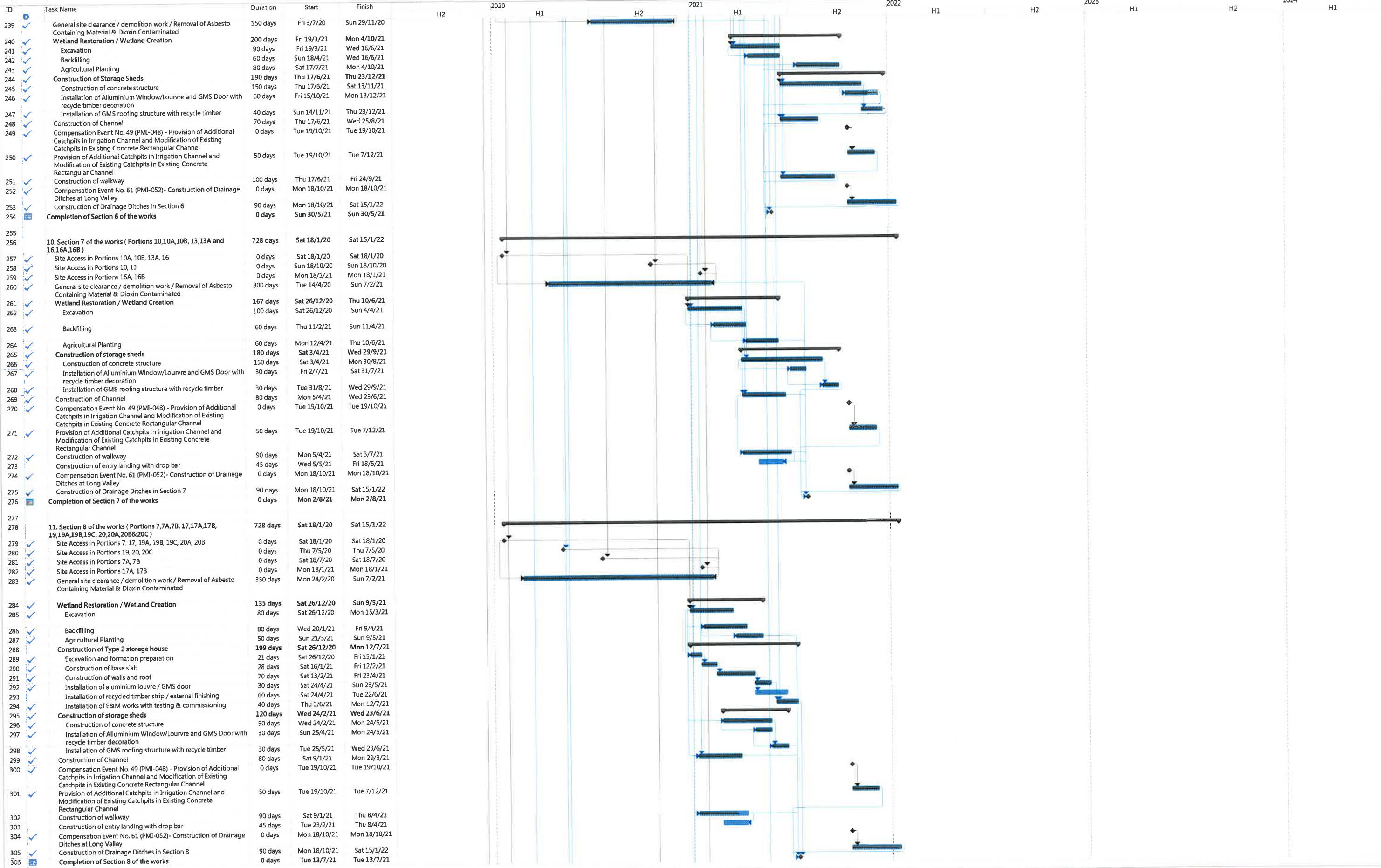
Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Works



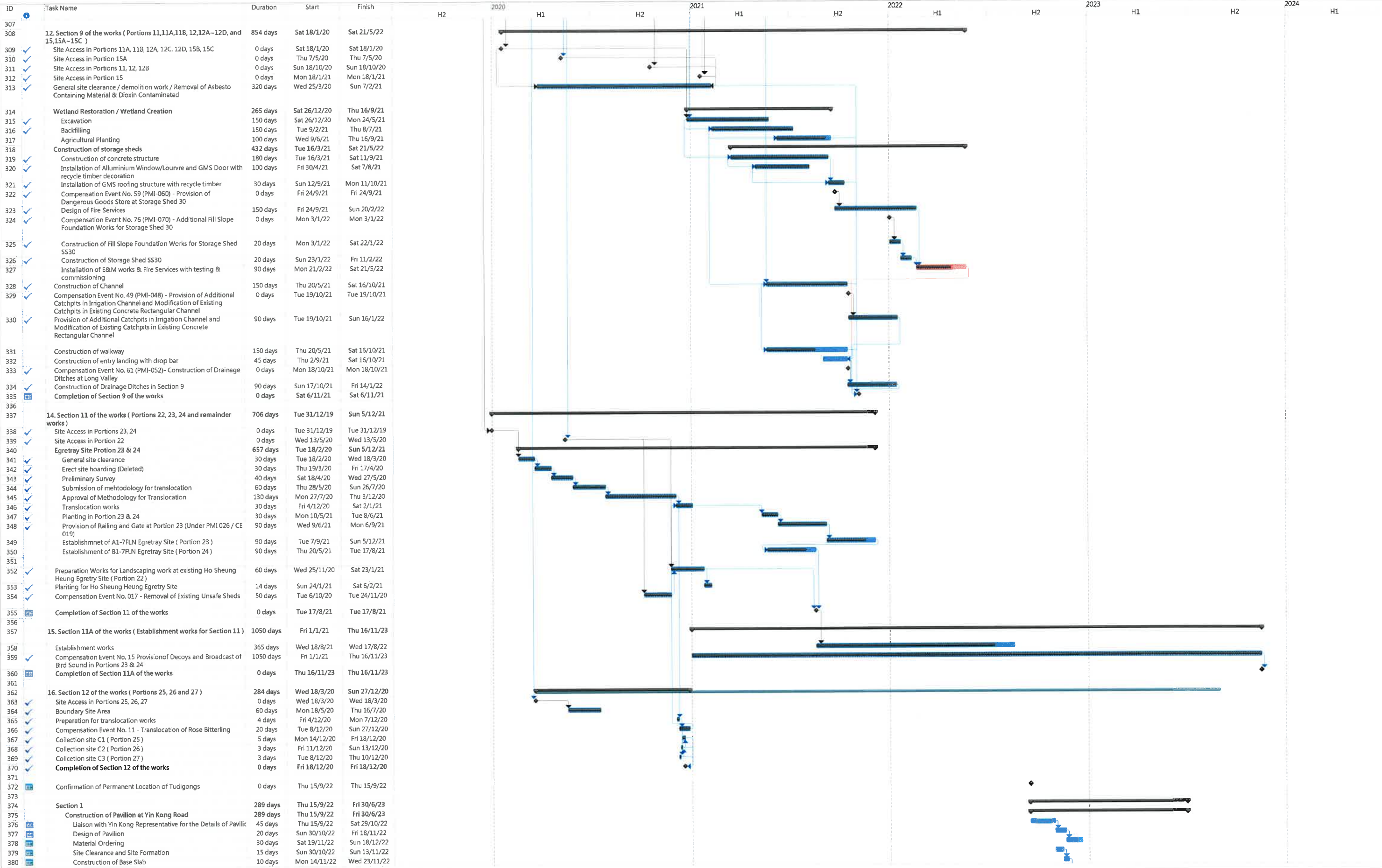
Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

Project Programme of the Works



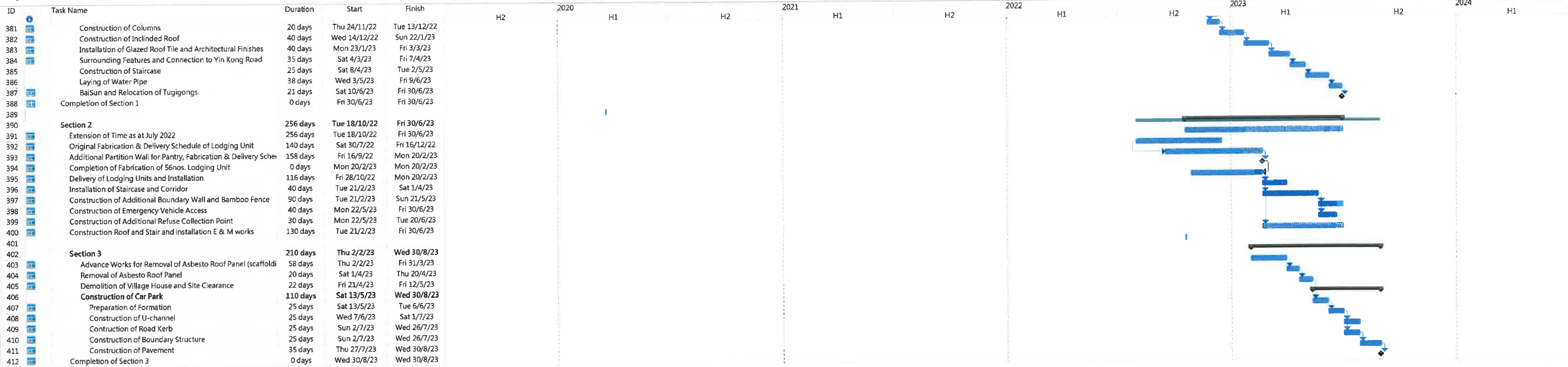
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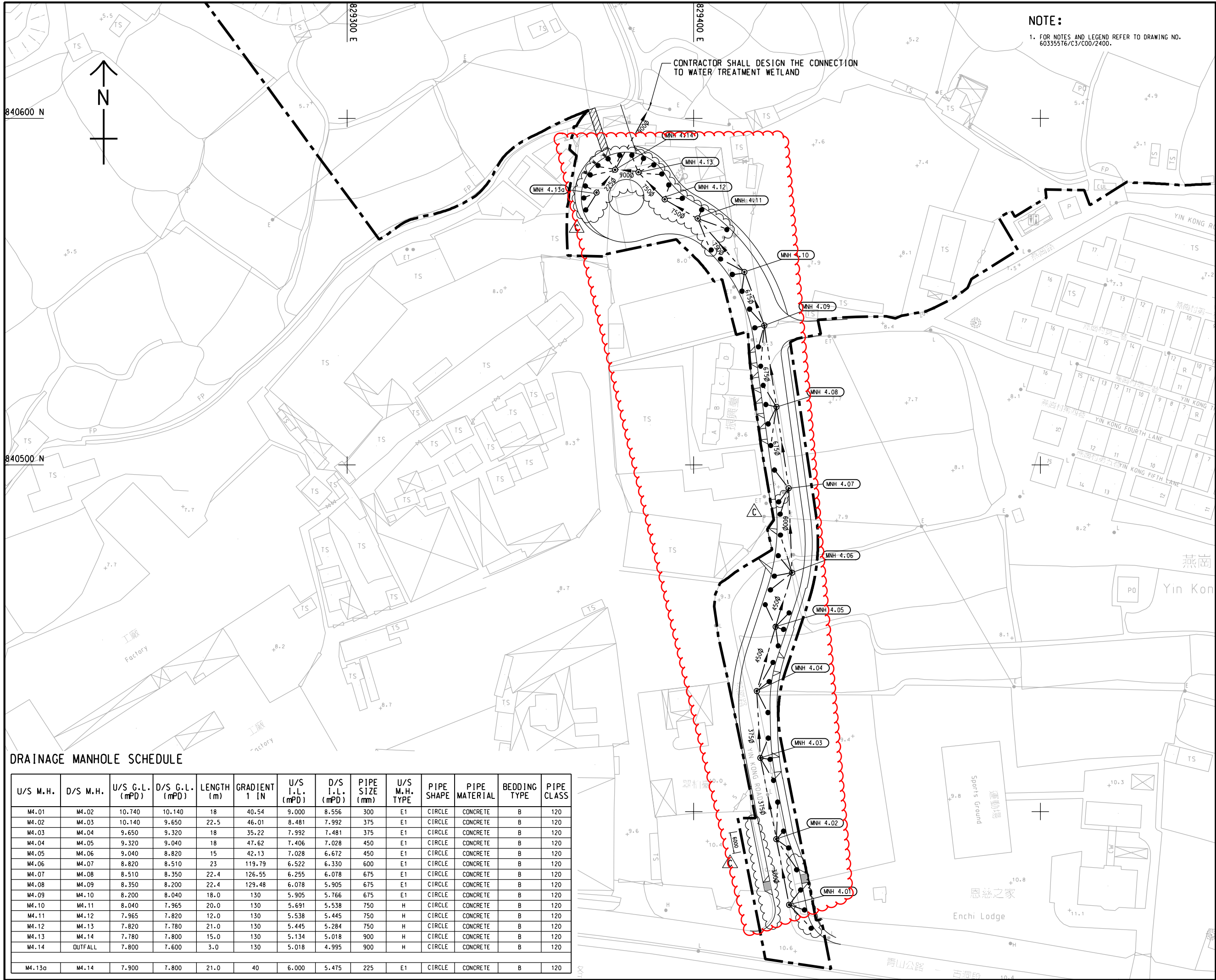
Project Programme of the Works





Kwu Tung North and Fanling North New Development Areas, Phase 1 : Development of Long Valley Nature Park

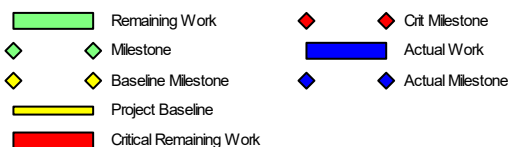
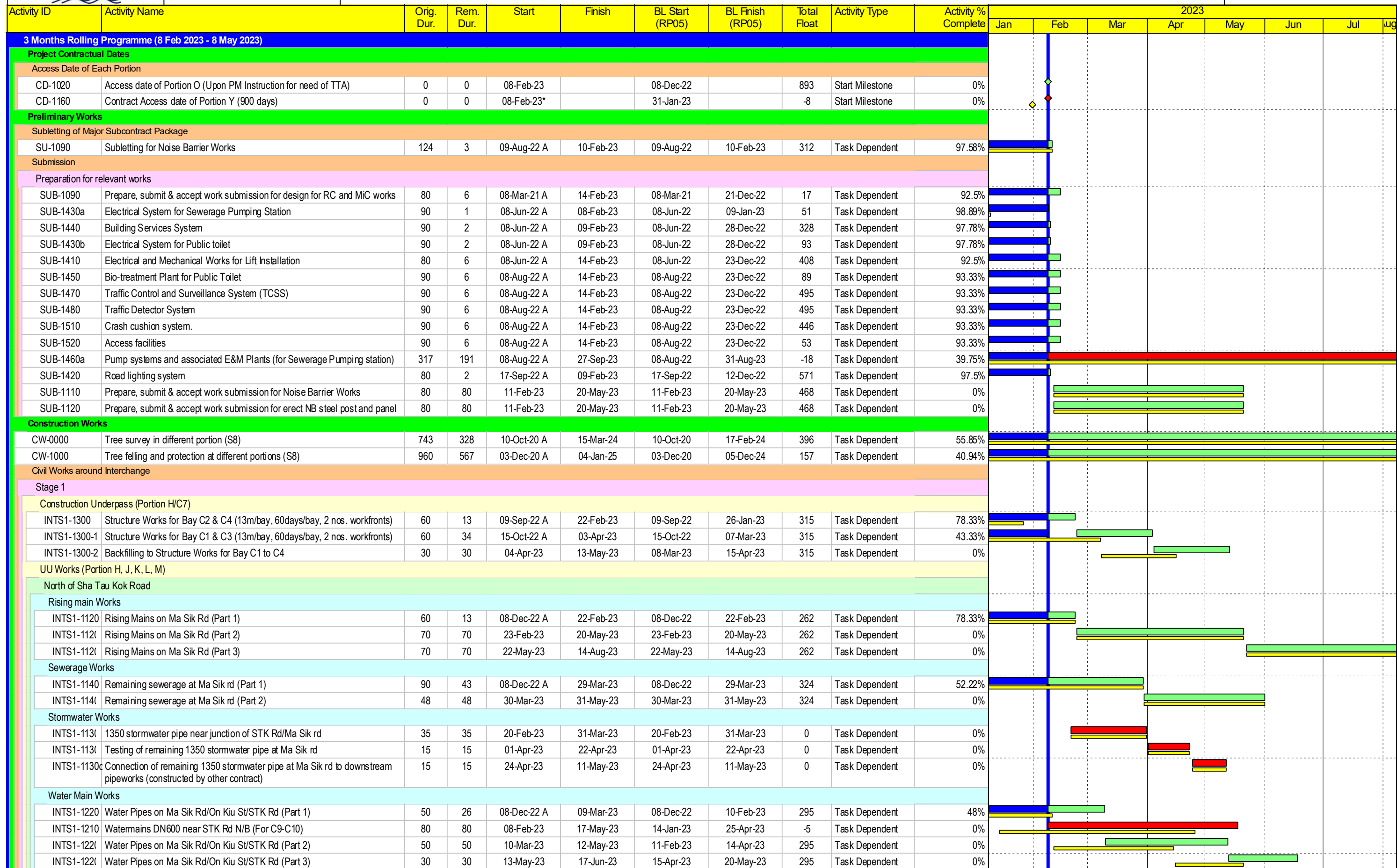
Project Programme of the Works





| | | | | | |
|---|----------|--------------------------------------|--------------|----------|------|
| C | 21/05/21 | LAYOUT AMENDED | HLH | DT | WT |
| B | 7/12/20 | ROAD ALIGNMENT AMENDED | KLC | DT | WT |
| A | 15/07/20 | RUN IN ADDED AND MANHOLE RE-ARRANGED | KLC | DF | PY |
| REV. | DATE | DESCRIPTION | DRAWN | PRE. | APP. |
| CLIENT | | | | | |
| <div><div><div>土木 工程 拓展 署</div><div>Civil Engineering and Development Department</div></div></div> | | | | | |
| CONSULTANT | | | | | |
| <div></div> | | | | | |
| PROJECT | | | | | |
| DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1 | | | | | |
| CONTRACT TITLE | | | | | |
| KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1: DEVELOPMENT OF LONG VALLEY NATURE PARK | | | | | |
| REMARK : | | | | | |
| 1. SUPERSEDE DRG NO. 60335576/C3/C00/2410 | | | | | |
| TITLE | | | | | |
| YIN KONG ROAD - ROAD DRAINAGE LAYOUT | | | | | |
| PROJECT NO. | | | CONTRACT NO. | | |
| 60335576 | | | ND/2019/03 | | |
| SCALE | | | DATE | | |
| 1:500 (A1) | | | 4-JUN-20 | | |
| DRAWN | | PREPARED | | APPROVED | |
| KLC | | DF | | PY | |
| SKETCH NO. | | | | | REV. |
| ND/2019/03/R10/130/0052 | | | | | C |

Construction Programme of ND/2019/04



Project ID: RP-RP05-1-MU01-1

Three Months Rolling Programme (08 February 2023 to 31 May 2023)

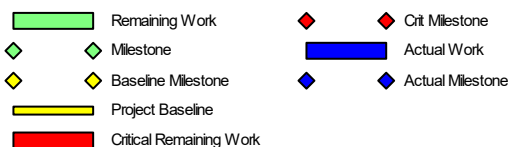
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Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

Baseline Programme RP05

| Date | Revision | Ch... | Approved |
|-----------|-----------|-------|----------|
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | | |
|--|--|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|--|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | |
| South of Sha Tau Kok Road | | | | | | | | | | | | | | | | | | | |
| Sewerage Works | | | | | | | | | | | | | | | | | | | |
| INTS1-1300t | Sewerage works including ELSW (Portion K), from FMH_FL5.02 to FMH_FL5.04 | 85 | 20 | 18-May-22 A | 02-Mar-23 | 18-May-22 | 03-Jan-23 | 46 | Task Dependent | 76.47% | | | | | | | | | |
| INTS1-1300e | Sewerage works including ELSW (near Portion M), from FMH_FL5.06 to FMH_FL5.08 | 80 | 26 | 08-Dec-22 A | 09-Mar-23 | 08-Dec-22 | 10-Feb-23 | -23 | Task Dependent | 67.5% | | | | | | | | | |
| INTS1-1300e | Sewerage works including ELSW (On Chuen St), from FMH_FL5.09 to FMH1004470 (Part 1) | 60 | 36 | 08-Dec-22 A | 21-Mar-23 | 08-Dec-22 | 22-Feb-23 | -23 | Task Dependent | 40% | | | | | | | | | |
| INTS1-1300t | Sewerage works including ELSW (Portion K), from FMH_FL5.05 to FMH_FL5.06 | 93 | 69 | 08-Dec-22 A | 04-May-23 | 08-Dec-22 | 01-Apr-23 | -23 | Task Dependent | 25.81% | | | | | | | | | |
| INTS1-1300e | Sewerage works including ELSW (On Kiu St), from FMH_FL5.08 to FMH_FL5.09 (Part 1) | 61 | 61 | 10-Mar-23 | 25-May-23 | 11-Feb-23 | 27-Apr-23 | -23 | Task Dependent | 0% | | | | | | | | | |
| INTS1-1300e | Sewerage works including ELSW (On Chuen St), from FMH_FL5.09 to FMH1004470 (Part 2) | 60 | 60 | 22-Mar-23 | 06-Jun-23 | 23-Feb-23 | 09-May-23 | -23 | Task Dependent | 0% | | | | | | | | | |
| INTS1-1300c | Sewerage works including ELSW (STK Road), from FMH_FL5.00 to FMH_FL5.02 (Part 1) | 50 | 50 | 05-May-23 | 05-Jul-23 | 03-Apr-23 | 06-Jun-23 | -23 | Task Dependent | 0% | | | | | | | | | |
| INTS1-1300e | Sewerage works including ELSW (On Kiu St), from FMH_FL5.08 to FMH_FL5.09 (Part 2) | 82 | 82 | 27-May-23 | 01-Sep-23 | 28-Apr-23 | 05-Aug-23 | -23 | Task Dependent | 0% | | | | | | | | | |
| INTS1-1300e | Sewerage works including ELSW (On Chuen St), from FMH_FL5.09 to FMH1004470 (Part 3) | 73 | 73 | 07-Jun-23 | 01-Sep-23 | 10-May-23 | 05-Aug-23 | -23 | Task Dependent | 0% | | | | | | | | | |
| Site Formation at Portion C, F, G, H and J (KD1) | | | | | | | | | | | | | | | | | | | |
| INTS1-1050 | Site clearance work and setup TTA (early start by direct labour)(to be confirmed with PMI) | 12 | 12 | 08-Dec-22 A | 21-Feb-23 | 08-Dec-22 | 21-Dec-22 | 27 | Task Dependent | 0% | | | | | | | | | |
| Site Formation at Portion W(S2) | | | | | | | | | | | | | | | | | | | |
| Relocation of Bus Stop at Sha Tau Kok Rd (Portion W) | | | | | | | | | | | | | | | | | | | |
| Area 3 Central divider | | | | | | | | | | | | | | | | | | | |
| EAW-3050 | EMSD duct inspection & Connection Works by EMSD including installation of traffic lights & Cabling & T&C (Portion W) | 4 | 4 | 08-Dec-22 A | 11-Feb-23 | 08-Dec-22 | 12-Dec-22 | 720 | Task Dependent | 0% | | | | | | | | | |
| F6 after TTA2 Implemented(Southbound Temporary Road) | | | | | | | | | | | | | | | | | | | |
| INTS1-9110 | Piling Works for Lift tower and Footbridge F6 (Part C) (total 5nos. H piles, 4d/pile) | 20 | 20 | 20-Feb-23 | 14-Mar-23 | 20-Feb-23 | 14-Mar-23 | 106 | Task Dependent | 0% | | | | | | | | | |
| INTS1-9010a | Piling Works for Lift tower and Footbridge F6 (Part D) (total 18nos. socket H piles, 4d/pile) | 72 | 72 | 20-Feb-23 | 19-May-23 | 20-Feb-23 | 19-May-23 | 22 | Task Dependent | 0% | | | | | | | | | |
| INTS1-9020 | ELS for F6 Part D | 90 | 90 | 20-May-23 | 05-Sep-23 | 20-May-23 | 05-Sep-23 | 22 | Task Dependent | 0% | | | | | | | | | |
| CLC | | | | | | | | | | | | | | | | | | | |
| CLC-1010 | Approval | 28 | 5 | 09-Dec-22 A | 13-Feb-23 | 09-Dec-22 | 13-Jan-23 | 579 | Task Dependent | 82.14% | | | | | | | | | |
| CLC-1020 | Material ordering (Steel) | 16 | 16 | 14-Feb-23 | 03-Mar-23 | 14-Jan-23 | 04-Feb-23 | 579 | Task Dependent | 0% | | | | | | | | | |
| CLC-1030 | Steel fabrication | 40 | 40 | 04-Mar-23 | 24-Apr-23 | 06-Feb-23 | 23-Mar-23 | 615 | Task Dependent | 0% | | | | | | | | | |
| CLC-1020a | Material ordering (Other) | 40 | 40 | 04-Mar-23 | 24-Apr-23 | 06-Feb-23 | 23-Mar-23 | 579 | Task Dependent | 0% | | | | | | | | | |
| CLC-1040 | Builder works/Renovation works before installation of prefabricated panel | 36 | 36 | 25-Apr-23 | 07-Jun-23 | 24-Mar-23 | 10-May-23 | 579 | Task Dependent | 0% | | | | | | | | | |
| Stage 2 | | | | | | | | | | | | | | | | | | | |
| TTA no.2 | | | | | | | | | | | | | | | | | | | |
| Construction of Temporary Road for TTA no. 2 | | | | | | | | | | | | | | | | | | | |
| INTS2-1020 | Implementation of Major TTA No.2 (shift southbound of Sha Tau Kok Rd to "Banana" Road Southbound) | 4 | 4 | 15-Feb-23 | 18-Feb-23 | 15-Feb-23 | 18-Feb-23 | -18 | Task Dependent | 0% | | | | | | | | | |
| Full closure of On Kui Street for Subsequent Works | | | | | | | | | | | | | | | | | | | |
| INTS2-3040a | Necessary diversion works near the new entrance of wholesale market (for full closure of On Kui St) -Part 1 | 90 | 66 | 08-Dec-22 A | 29-Apr-23 | 08-Dec-22 | 29-Mar-23 | -19 | Task Dependent | 26.67% | | | | | | | | | |
| INTS2-3070 | Temp road btw On Lok Mun St and Wholesale market, if necessary | 90 | 66 | 08-Dec-22 A | 29-Apr-23 | 08-Dec-22 | 29-Mar-23 | 110 | Task Dependent | 26.67% | | | | | | | | | |
| INTS2-3040b | Necessary diversion works near the new entrance of wholesale market (for full closure of On Kui St)-Part 2 | 90 | 90 | 02-May-23 | 17-Aug-23 | 30-Mar-23 | 21-Jul-23 | -19 | Task Dependent | 0% | | | | | | | | | |
| Construction of Underpass (Portion H, J, K) | | | | | | | | | | | | | | | | | | | |
| INTS2-1010a | Sheet piling for Bay C14 to C15 (start after access of Portion K granted) | 30 | 2 | 21-May-22 A | 11-Oct-23 | 21-May-22 | 11-Oct-23 | 52 | Task Dependent | 93.33% | | | | | | | | | |
| INTS2-1140 | Trial Pit for Existing UU @ Northbound Lane of Sha Tau Kok Road | 7 | 7 | 08-Feb-23 | 15-Feb-23 | 18-Jan-23 | 28-Jan-23 | 68 | Task Dependent | 0% | | | | | | | | | |



Project ID: RP-RP05-1-MU01-1

Three Months Rolling Programme (08 February 2023 to 31 May 2023)

Page 2 of 11

Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | |
|--|--|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| INTS2-1090b | Sheet piling Bay C9 and C10 (after TTA2 Southbound) | 34 | 34 | 18-May-23 | 28-Jun-23 | 12-May-23 | 21-Jun-23 | -5 | Task Dependent | 0% | | | | | | | | |
| UU works (Portion J) | | | | | | | | | | | | | | | | | | |
| INTS2-1040 | UU Works - Northbound of Sha Tau Kok Road (after TTA2)-Part 1 | 60 | 60 | 08-Feb-23 | 22-Apr-23 | 18-Jan-23 | 31-Mar-23 | 75 | Task Dependent | 0% | | | | | | | | |
| INTS2-1040a | UU Works - Northbound of Sha Tau Kok Road (after TTA2)-Part 2 | 60 | 60 | 24-Apr-23 | 06-Jul-23 | 01-Apr-23 | 16-Jun-23 | 75 | Task Dependent | 0% | | | | | | | | |
| Lift Tower and Footbridge F6 (Portion J) | | | | | | | | | | | | | | | | | | |
| Part A (Cable D) | | | | | | | | | | | | | | | | | | |
| INTS2-3000a | F6 Column works C01, C02 & S01 (3 ELS), 1WF | 90 | 90 | 15-Mar-23 | 06-Jul-23 | 15-Mar-23 | 06-Jul-23 | 106 | Task Dependent | 0% | | | | | | | | |
| Part B (Some part After Cable D) | | | | | | | | | | | | | | | | | | |
| INTS2-1060 | Piling for Footbridge F6 (Part B2) and lift (constrained by CLP 11kV cables), 32 nos., 2WF | 64 | 29 | 05-Sep-22 A | 28-Jun-23 | 05-Sep-22 | 28-Jun-23 | -18 | Task Dependent | 54.69% | | | | | | | | |
| Part D | | | | | | | | | | | | | | | | | | |
| INTS2-1080 | Construction of Footbridge F6 columns P06 after TTA no.2 (6nos piles)(Part D) | 24 | 24 | 20-Feb-23 | 18-Mar-23 | 20-Feb-23 | 18-Mar-23 | 204 | Task Dependent | 0% | | | | | | | | |
| INTS2-1080a | Construction of Footbridge F6 columns P06 after TTA no.2 (ELS, 1 cap, 1 column)(Part D) | 66 | 66 | 20-Mar-23 | 10-Jun-23 | 20-Mar-23 | 10-Jun-23 | 204 | Task Dependent | 0% | | | | | | | | |
| Stage 3 | | | | | | | | | | | | | | | | | | |
| TTA no.3 | | | | | | | | | | | | | | | | | | |
| INTS3-0010 | Design, submit, processing & approval for TTA no.3 | 180 | 180 | 20-Feb-23 | 26-Sep-23 | 20-Feb-23 | 26-Sep-23 | 129 | Task Dependent | 0% | | | | | | | | |
| Construction of Depressed road (Portion H & F) | | | | | | | | | | | | | | | | | | |
| Site Formation Works near Retaining Wall FW34 | | | | | | | | | | | | | | | | | | |
| UTR-SF1010 | Slope upgrading works near Retaining Wall FW34 | 26 | 13 | 01-Mar-22 A | 22-Feb-23 | 01-Mar-22 | 22-Dec-22 | 125 | Task Dependent | 50% | | | | | | | | |
| UTR-SF1040b | FW34 construction (Wall) | 49 | 5 | 26-Jan-23 A | 28-Feb-23 | 26-Jan-23 | 23-Mar-23 | 412 | Task Dependent | 89.8% | | | | | | | | |
| Depressed Road A | | | | | | | | | | | | | | | | | | |
| Original Contract Design | | | | | | | | | | | | | | | | | | |
| UTR-1030 | Sheet Piling | 40 | 1 | 29-Nov-22 A | 08-Feb-23 | 29-Nov-22 | 06-Jan-23 | -38 | Task Dependent | 97.5% | | | | | | | | |
| UTR-1020 | U trough A (total: 93 nos. socket-H piles, 4 day/pile, 2 workfronts) | 216 | 214 | 07-Jan-23 A | 28-Oct-23 | 07-Jan-23 | 28-Sep-23 | -38 | Task Dependent | 0.93% | | | | | | | | |
| Depressed Road B | | | | | | | | | | | | | | | | | | |
| B1-B3 | | | | | | | | | | | | | | | | | | |
| UTR-1000a | Sheet pile installation for U-trough B (B1-B3) | 60 | 2 | 13-Jun-22 A | 20-Jun-23 | 13-Jun-22 | 24-Apr-23 | 104 | Task Dependent | 96.67% | | | | | | | | |
| UTR-1000 | U trough B (27 nos. socket-H piles, 4 day/pile, 1 workfronts) for B1 to B3 | 108 | 108 | 08-Feb-23 | 20-Jun-23 | 08-Dec-22 | 24-Apr-23 | 68 | Task Dependent | 0% | | | | | | | | |
| B4-B10 | | | | | | | | | | | | | | | | | | |
| UTR-1050a | ELS for U-trough B (B4 - B10, 7 bays, 2 workfronts)_Part 1 (Sheet pile) | 110 | 4 | 13-Jun-22 A | 18-Jan-24 | 13-Jun-22 | 11-Dec-23 | -14 | Task Dependent | 96.36% | | | | | | | | |
| Remaining Works at Depressed road and Slip Road at both side of Depressed Road B | | | | | | | | | | | | | | | | | | |
| Slip Road from Interchange to Fanling Highway | | | | | | | | | | | | | | | | | | |
| UTR-1140 | Excavation or Installation of sheet pile for retaining wall FW9/10 | 25 | 25 | 08-Feb-23 | 08-Mar-23 | 08-Dec-22 | 09-Jan-23 | -47 | Task Dependent | 0% | | | | | | | | |
| UTR-3100 | Retaining Wall FW9 (13 bays, 15d/bay,2 teams)-Part 1 | 50 | 50 | 05-May-23 | 05-Jul-23 | 03-Apr-23 | 06-Jun-23 | 45 | Task Dependent | 0% | | | | | | | | |
| Slip Road from Fanling Highway to Interchange | | | | | | | | | | | | | | | | | | |
| UTR-3010 | FW-10(~75m, ~10bay, 15d/bay, 2 team) (before 11kV) | 60 | 60 | 09-Mar-23 | 23-May-23 | 10-Jan-23 | 23-Mar-23 | -47 | Task Dependent | 0% | | | | | | | | |
| Sewage Pumping Station in Portion N (After TTA2 Northbound) | | | | | | | | | | | | | | | | | | |
| Statutory Submission | | | | | | | | | | | | | | | | | | |
| SPS-105 | Submission and approval of WWO 542 | 365 | 243 | 08-Aug-22 A | 08-Oct-23 | 08-Aug-22 | 07-Aug-23 | 72 | Task Dependent | 33.42% | | | | | | | | |
| Excavation and ELS | | | | | | | | | | | | | | | | | | |
| SPS-1009 | Sheet pile installation - SP1 (82 nos) and SP2 (105 nos) @ 10 nos/d (use 2 vibro hammer) | 19 | 19 | 08-Feb-23 | 01-Mar-23 | 18-Jan-23 | 11-Feb-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010a | Install Dewatering Wells (DW1 ~ DW4) and Observation Wells (OW1 ~ OW2) | 12 | 12 | 02-Mar-23 | 15-Mar-23 | 13-Feb-23 | 25-Feb-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010b | Pumping Test + Report | 7 | 7 | 16-Mar-23 | 23-Mar-23 | 27-Feb-23 | 06-Mar-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010c | Submit Pumping Test Report and Obtain Consent for Excavation | 7 | 7 | 24-Mar-23 | 31-Mar-23 | 07-Mar-23 | 14-Mar-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010 | Excavate (+8.70mPD to +7.35mPD) to and install L1 ELS @ +7.850 mPD; Qty:463 m3 @ 300 m3/d) | 14 | 14 | 01-Apr-23 | 21-Apr-23 | 15-Mar-23 | 30-Mar-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010d | Excavate (+7.35mPD to +5.325mPD for Sheet Pile SP3 Installation (Approx. Vol = 695 m3 @ 300 m3/day | 2 | 2 | 22-Apr-23 | 24-Apr-23 | 31-Mar-23 | 01-Apr-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010e | Sheet Pile Installation - SP3 (41 nos @ 5 nos/day/rig (use 1 vibro hammer) | 8 | 8 | 25-Apr-23 | 04-May-23 | 03-Apr-23 | 15-Apr-23 | -12 | Task Dependent | 0% | | | | | | | | |



Project ID: RP-RP05-1-MU01-1

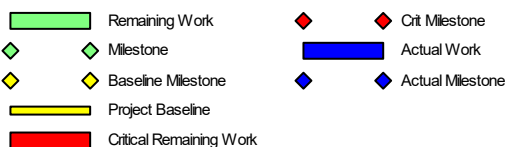
Three Months Rolling Programme (08 February 2023 to 31 May 2023)

Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | |
|--|---|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| SPS-1010f | Excavate (+5.325mPD to 4.35mPD) and Install L2 ELS at +4.850 mPD (Qty:203m3 @ 250m3/d) | 10 | 10 | 05-May-23 | 16-May-23 | 17-Apr-23 | 27-Apr-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010g | Excavate (+4.35mPD to +1.35mPD) and Install L3 ELS at +1.850 mPD; (Qty: 624m3 @ 250m3/d) | 12 | 12 | 17-May-23 | 31-May-23 | 28-Apr-23 | 12-May-23 | -12 | Task Dependent | 0% | | | | | | | | |
| SPS-1010h | Excavate (+1.35mPD to -1.65mPD) and Install L4 ELS at +1.850 mPD; (Qty: 624m3 @ 250m3/d) | 12 | 12 | 01-Jun-23 | 14-Jun-23 | 13-May-23 | 27-May-23 | -12 | Task Dependent | 0% | | | | | | | | |
| Transformer Room, Switch Room | | | | | | | | | | | | | | | | | | |
| Tx and Switch Rooms - Structures | | | | | | | | | | | | | | | | | | |
| SPS-1020-01 | Construct Base Slab for Tx Room and Switch Room | 15 | 15 | 05-May-23 | 22-May-23 | 17-Apr-23 | 04-May-23 | 210 | Task Dependent | 0% | | | | | | | | |
| SPS-1020-02 | Construct Wall and Columns for Tx Room and Switch Room | 18 | 18 | 23-May-23 | 13-Jun-23 | 05-May-23 | 25-May-23 | 210 | Task Dependent | 0% | | | | | | | | |
| ABWF and E&M Works (Remaining Parts of Sewage PS) | | | | | | | | | | | | | | | | | | |
| SPS-1035 | E&M, BS and ABWF Procurement | 227 | 152 | 07-Nov-22 A | 14-Aug-23 | 07-Nov-22 | 14-Aug-23 | 51 | Task Dependent | 33.04% | | | | | | | | |
| Reprovision of On Luk Mun Street Playground (S3) | | | | | | | | | | | | | | | | | | |
| Sublet and Design for Skateboard Park | | | | | | | | | | | | | | | | | | |
| OLMSP-100a | Sublet of subcontractor for construction of new skate board park | 30 | 6 | 08-Dec-22 A | 14-Feb-23 | 15-Dec-22 | 21-Jan-23 | -57 | Task Dependent | 80% | | | | | | | | |
| OLMSP-100a | AIP (including preparation of submission and approval) | 28 | 17 | 23-Dec-22 A | 27-Feb-23 | 23-Dec-22 | 31-Jan-23 | -95 | Task Dependent | 39.29% | | | | | | | | |
| OLMSP-100a | DDA (including preparation of submission and approval) | 27 | 27 | 28-Feb-23 | 30-Mar-23 | 01-Feb-23 | 03-Mar-23 | -95 | Task Dependent | 0% | | | | | | | | |
| OLMSP-100a | Mock up and other submission | 73 | 73 | 31-Mar-23 | 03-Jul-23 | 04-Mar-23 | 03-Jun-23 | -95 | Task Dependent | 0% | | | | | | | | |
| Sublet and Design for Acillary and Services Block | | | | | | | | | | | | | | | | | | |
| OLMSP-100b | Submission & Approval of design for Ancillary Block | 90 | 11 | 01-Sep-22 A | 20-Feb-23 | 01-Sep-22 | 20-Jan-23 | -124 | Task Dependent | 87.78% | | | | | | | | |
| OLMSP-100b | Preliminary Design and Layout, Elevations | 50 | 13 | 08-Nov-22 A | 20-Feb-23 | 08-Nov-22 | 20-Jan-23 | -154 | Task Dependent | 74% | | | | | | | | |
| OLMSP-100b | Submission & Approval - UU/Drainage/E&M | 63 | 15 | 14-Nov-22 A | 22-Feb-23 | 14-Nov-22 | 22-Jan-23 | -154 | Task Dependent | 76.19% | | | | | | | | |
| OLMSP-100b | Submission & Approval - Shop Drawing | 60 | 12 | 21-Nov-22 A | 19-Feb-23 | 21-Nov-22 | 19-Jan-23 | -154 | Task Dependent | 80% | | | | | | | | |
| OLMSP-100b | Submission & Approval - Design Foundation/Footing/Structure | 37 | 13 | 21-Nov-22 A | 20-Feb-23 | 21-Nov-22 | 20-Jan-23 | -154 | Task Dependent | 64.86% | | | | | | | | |
| OLMSP-100b | Submission & Approval - Materials | 94 | 42 | 21-Nov-22 A | 21-Mar-23 | 21-Nov-22 | 18-Feb-23 | -142 | Task Dependent | 55.32% | | | | | | | | |
| OLMSP-100b | Submission & Consent (ASD & LCSD) | 75 | 75 | 20-Feb-23 | 05-May-23 | 20-Jan-23 | 04-Apr-23 | -154 | Task Dependent | 0% | | | | | | | | |
| Works in Portion K1 | | | | | | | | | | | | | | | | | | |
| Permanent Access between Wholesale Market and STK Road | | | | | | | | | | | | | | | | | | |
| OLMSP-500a | Construction of remaining permanent access, water main & UUs | 30 | 6 | 08-Dec-22 A | 14-Feb-23 | 08-Dec-22 | 14-Jan-23 | 140 | Task Dependent | 80% | | | | | | | | |
| OLMSP-500b | Dismantle existing water main supply to wholesale market (for subsequent construction of Depressed Rd B - Bay 4-10) | 30 | 30 | 15-Feb-23 | 21-Mar-23 | 16-Jan-23 | 22-Feb-23 | 140 | Task Dependent | 0% | | | | | | | | |
| New Skateboard Park | | | | | | | | | | | | | | | | | | |
| Material Submissions (Lighting) | | | | | | | | | | | | | | | | | | |
| OLMSP-25 | Lighting Layout Plan (with BIM) by Kum Shing | 78 | 28 | 08-Nov-22 A | 11-Mar-23 | 08-Nov-22 | 13-Feb-23 | 31 | Task Dependent | 64.1% | | | | | | | | |
| Site Formation and UUs | | | | | | | | | | | | | | | | | | |
| OLMSP-10 | Retaining Wall FW30 (165m, 25 bays, 15d/bay, 3 teams) | 75 | 5 | 21-Jul-22 A | 25-Mar-23 | 21-Jul-22 | 27-Feb-23 | 39 | Task Dependent | 93.33% | | | | | | | | |
| OLMSP-10 | Retaining Wall FW 31 and other facilities (165m, 25 bays, 15d/bay, 3 teams) | 69 | 17 | 09-Aug-22 A | 19-Apr-23 | 09-Aug-22 | 18-Mar-23 | 39 | Task Dependent | 75.36% | | | | | | | | |
| OLMSP-10 | Site formation , UUs and drainage within the park | 90 | 66 | 08-Dec-22 A | 29-Apr-23 | 08-Dec-22 | 29-Mar-23 | -44 | Task Dependent | 26.67% | | | | | | | | |
| Landscape, T&C and FS Inspection | | | | | | | | | | | | | | | | | | |
| OLMSP-10 | Landscaping Softworks with acceptance by clients (S3) | 55 | 55 | 06-May-23 | 12-Jul-23 | 06-Apr-23 | 14-Jun-23 | -29 | Task Dependent | 0% | | | | | | | | |
| Ancillary Block & Service Block and other facility | | | | | | | | | | | | | | | | | | |
| OLMSP-1210 | Excavation and laying underground duct for buildings and park | 30 | 6 | 08-Dec-22 A | 14-Feb-23 | 08-Dec-22 | 14-Jan-23 | -86 | Task Dependent | 80% | | | | | | | | |
| OLMSP-1220 | Backfilling for playground/Ancillary block and Service block | 30 | 30 | 14-Feb-23 | 20-Mar-23 | 14-Jan-23 | 21-Feb-23 | -86 | Task Dependent | 0% | | | | | | | | |
| OLMSP-123 | Construction of Service Block (Foundation) | 21 | 21 | 06-May-23 | 31-May-23 | 06-Apr-23 | 04-May-23 | -52 | Task Dependent | 0% | | | | | | | | |
| OLMSP-124 | Construction of Ancillary Block (Foundation) | 21 | 21 | 06-May-23 | 31-May-23 | 06-Apr-23 | 04-May-23 | -52 | Task Dependent | 0% | | | | | | | | |
| OLMSP-1240 | Construction of Ancillary Block (Fabrication) | 90 | 90 | 06-May-23 | 22-Aug-23 | 06-Apr-23 | 27-Jul-23 | -121 | Task Dependent | 0% | | | | | | | | |
| OLMSP-1230 | Construction of Service Block (Fabrication) | 90 | 90 | 06-May-23 | 22-Aug-23 | 06-Apr-23 | 27-Jul-23 | -121 | Task Dependent | 0% | | | | | | | | |
| Material Submissions (MEP) | | | | | | | | | | | | | | | | | | |
| OLMSP-25 | Material Submissions & Shop Drawings - MVAC | 78 | 37 | 14-Nov-22 A | 16-Mar-23 | 14-Nov-22 | 13-Feb-23 | 8 | Task Dependent | 52.56% | | | | | | | | |
| OLMSP-25 | Material Submissions & Shop Drawings - FS | 78 | 37 | 14-Nov-22 A | 16-Mar-23 | 14-Nov-22 | 13-Feb-23 | 8 | Task Dependent | 52.56% | | | | | | | | |
| OLMSP-25 | Material Submissions & Shop Drawings - Pumping and Drainage | 78 | 37 | 14-Nov-22 A | 16-Mar-23 | 14-Nov-22 | 13-Feb-23 | 8 | Task Dependent | 52.56% | | | | | | | | |
| OLMSP-25 | Material Submissions & Shop Drawings - Electrical | 78 | 37 | 14-Nov-22 A | 16-Mar-23 | 14-Nov-22 | 13-Feb-23 | 8 | Task Dependent | 52.56% | | | | | | | | |



Project ID: RP-RP05-1-MU01-1

Three Months Rolling Programme (08 February 2023 to 31 May 2023)

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Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | | |
|---|--|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|--|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | |
| Works in Portion P | | | | | | | | | | | | | | | | | | | |
| Temporary Skateboard Park Scheme | | | | | | | | | | | | | | | | | | | |
| OLMSP-2560 | Operation of Temporary Skateboard Park | 166 | 166 | 01-Apr-23* | 13-Sep-23 | 01-Apr-23 | 13-Sep-23 | 180 | Task Dependent | 0% | | | | | | | | | |
| OLMSP-2570 | Time Risk Allowance | 166 | 166 | 01-Apr-23 | 13-Sep-23 | 01-Apr-23 | 13-Sep-23 | 180 | Task Dependent | 0% | | | | | | | | | |
| Reprovision of Public Toilet and Refuse Collection Point (S6) | | | | | | | | | | | | | | | | | | | |
| PTRCP-1000 | Prefabrication of Mic Unit | 30 | 12 | 22-Dec-22 A | 28-Feb-23 | 22-Dec-22 | 01-Feb-23 | 17 | Task Dependent | 60% | | | | | | | | | |
| PTRCP-1010 | Delivery of Mic Units | 30 | 30 | 01-Mar-23 | 04-Apr-23 | 02-Feb-23 | 08-Mar-23 | 17 | Task Dependent | 0% | | | | | | | | | |
| PTRCP-2000 | Retaining Wall FW10 (70m, 10 bays) | 60 | 60 | 09-Mar-23 | 23-May-23 | 10-Jan-23 | 23-Mar-23 | -47 | Task Dependent | 0% | | | | | | | | | |
| PTRCP-1020 | Minor TTA after TTA Stage 2 and Portion P retaining wall | 30 | 30 | 06-Apr-23 | 15-May-23 | 09-Mar-23 | 17-Apr-23 | 17 | Task Dependent | 0% | | | | | | | | | |
| PTRCP-2000a | Footing of NB34 (60m, 6 bays) | 60 | 60 | 12-May-23 | 24-Jul-23 | 13-Mar-23 | 27-May-23 | -47 | Task Dependent | 0% | | | | | | | | | |
| Works in Portion A and Portion B (KD5) | | | | | | | | | | | | | | | | | | | |
| Portion A | | | | | | | | | | | | | | | | | | | |
| OTH-A-1020 | Works at north part (Stage 3) | 70 | 5 | 21-Oct-22 A | 13-Feb-23 | 21-Oct-22 | 13-Jan-23 | -16 | Task Dependent | 92.86% | | | | | | | | | |
| OTH-A-5000 | Noise barrier 91- Footing (Stage 1) | 56 | 56 | 14-Feb-23 | 24-Apr-23 | 14-Jan-23 | 23-Mar-23 | 470 | Task Dependent | 0% | | | | | | | | | |
| OTH-A-2000 | Works at south part (Stage 1) | 70 | 70 | 14-Feb-23 | 11-May-23 | 14-Jan-23 | 13-Apr-23 | -16 | Task Dependent | 0% | | | | | | | | | |
| OTH-A-5010 | Noise barrier 91 - Footing (Stage 2) | 56 | 56 | 25-Apr-23 | 03-Jul-23 | 24-Mar-23 | 03-Jun-23 | 470 | Task Dependent | 0% | | | | | | | | | |
| OTH-A-2010 | Works at south part (Stage 2) | 70 | 70 | 12-May-23 | 04-Aug-23 | 14-Apr-23 | 08-Jul-23 | -16 | Task Dependent | 0% | | | | | | | | | |
| Portion B | | | | | | | | | | | | | | | | | | | |
| South Part of L3 Road | | | | | | | | | | | | | | | | | | | |
| Southbound | | | | | | | | | | | | | | | | | | | |
| CL200 to CL250 including footpath & slope | | | | | | | | | | | | | | | | | | | |
| OTH-B-2010 | Backfilling for watermain | 25 | 25 | 29-Dec-22 A | 08-Mar-23 | 29-Dec-22 | 31-Jan-23 | 220 | Task Dependent | 0% | | | | | | | | | |
| OTH-B-2020 | Watermain | 56 | 56 | 09-Mar-23 | 18-May-23 | 01-Feb-23 | 11-Apr-23 | 220 | Task Dependent | 0% | | | | | | | | | |
| OTH-B-2030 | Backfilling for UUs | 25 | 25 | 19-May-23 | 17-Jun-23 | 12-Apr-23 | 11-May-23 | 220 | Task Dependent | 0% | | | | | | | | | |
| From Ma Sik rd to CL200 (Road Section) | | | | | | | | | | | | | | | | | | | |
| OTH-B-4030 | Footing of NB52 | 45 | 45 | 16-Dec-22 A | 31-Mar-23 | 16-Dec-22 | 13-Feb-23 | 3 | Task Dependent | 0% | | | | | | | | | |
| OTH-B-4040 | Backfilling for drainage works | 25 | 25 | 01-Apr-23 | 05-May-23 | 14-Feb-23 | 14-Mar-23 | 3 | Task Dependent | 0% | | | | | | | | | |
| OTH-B-4050 | Drainage works | 38 | 38 | 06-May-23 | 20-Jun-23 | 15-Mar-23 | 03-May-23 | 3 | Task Dependent | 0% | | | | | | | | | |
| From Ma Sik rd to CL200 (Footpath Section & slope) | | | | | | | | | | | | | | | | | | | |
| OTH-B-3000 | Backfilling for watermain | 25 | 25 | 29-Dec-22 A | 08-Mar-23 | 29-Dec-22 | 31-Jan-23 | 220 | Task Dependent | 0% | | | | | | | | | |
| OTH-B-3010 | Watermain | 56 | 56 | 09-Mar-23 | 18-May-23 | 01-Feb-23 | 11-Apr-23 | 220 | Task Dependent | 0% | | | | | | | | | |
| OTH-B-3020 | Backfilling for UUs | 25 | 25 | 19-May-23 | 17-Jun-23 | 12-Apr-23 | 11-May-23 | 220 | Task Dependent | 0% | | | | | | | | | |
| North Part of L3 Road | | | | | | | | | | | | | | | | | | | |
| Southbound | | | | | | | | | | | | | | | | | | | |
| OTH-B-6000 | ELS for drainage works | 45 | 45 | 06-May-23 | 29-Jun-23 | 15-Mar-23 | 11-May-23 | 3 | Task Dependent | 0% | | | | | | | | | |
| Works within Portions Q, R, S,T, U, V, X and Y (S4) | | | | | | | | | | | | | | | | | | | |
| Portion T | | | | | | | | | | | | | | | | | | | |
| OTH-1060c | Road and UU works at Portion T (additional)-Stage 3 | 9 | 9 | 08-Feb-23 | 17-Feb-23 | 08-Dec-22 | 17-Dec-22 | 191 | Task Dependent | 0% | | | | | | | | | |
| OTH-1060d | Road and UU works at Portion T (additional)-Stage 4 | 9 | 9 | 18-Feb-23 | 28-Feb-23 | 19-Dec-22 | 30-Dec-22 | 191 | Task Dependent | 0% | | | | | | | | | |
| Portion R | | | | | | | | | | | | | | | | | | | |
| Stage 2 (Area 1) | | | | | | | | | | | | | | | | | | | |
| OTH-1042-1c | Relocate traffic signal post | 26 | 26 | 08-Dec-22 A | 09-Mar-23 | 08-Dec-22 | 10-Jan-23 | 77 | Task Dependent | 0% | | | | | | | | | |
| OTH-1042-1d | Construct road kerb and planter | 16 | 16 | 10-Mar-23 | 28-Mar-23 | 11-Jan-23 | 01-Feb-23 | 77 | Task Dependent | 0% | | | | | | | | | |
| OTH-1042-1e | Construct carriageway pavement | 15 | 15 | 29-Mar-23 | 19-Apr-23 | 02-Feb-23 | 18-Feb-23 | 77 | Task Dependent | 0% | | | | | | | | | |
| OTH-1042-1f | Road marking | 1 | 1 | 20-Apr-23 | 20-Apr-23 | 20-Feb-23 | 20-Feb-23 | 77 | Task Dependent | 0% | | | | | | | | | |
| OTH-1042-1g | Enabling traffic signal system | 14 | 14 | 21-Apr-23 | 08-May-23 | 21-Feb-23 | 08-Mar-23 | 77 | Task Dependent | 0% | | | | | | | | | |
| Stage 3 (Area 1) | | | | | | | | | | | | | | | | | | | |
| OTH-1043-1b | Construt road kerb and pedestrain crossing | 16 | 16 | 24-Dec-22 A | 25-Feb-23 | 24-Dec-22 | 14-Jan-23 | -33 | Task Dependent | 0% | | | | | | | | | |
| OTH-1043-1c | Construct street furniture | 12 | 12 | 27-Feb-23 | 11-Mar-23 | 16-Jan-23 | 01-Feb-23 | -33 | Task Dependent | 0% | | | | | | | | | |
| OTH-1043-1d | Construct carriageway pavement | 15 | 15 | 13-Mar-23 | 29-Mar-23 | 02-Feb-23 | 18-Feb-23 | -33 | Task Dependent | 0% | | | | | | | | | |
| OTH-1043-1e | Road marking | 1 | 1 | 30-Mar-23 | 30-Mar-23 | 20-Feb-23 | 20-Feb-23 | -33 | Task Dependent | 0% | | | | | | | | | |



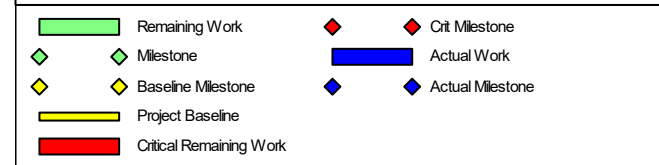
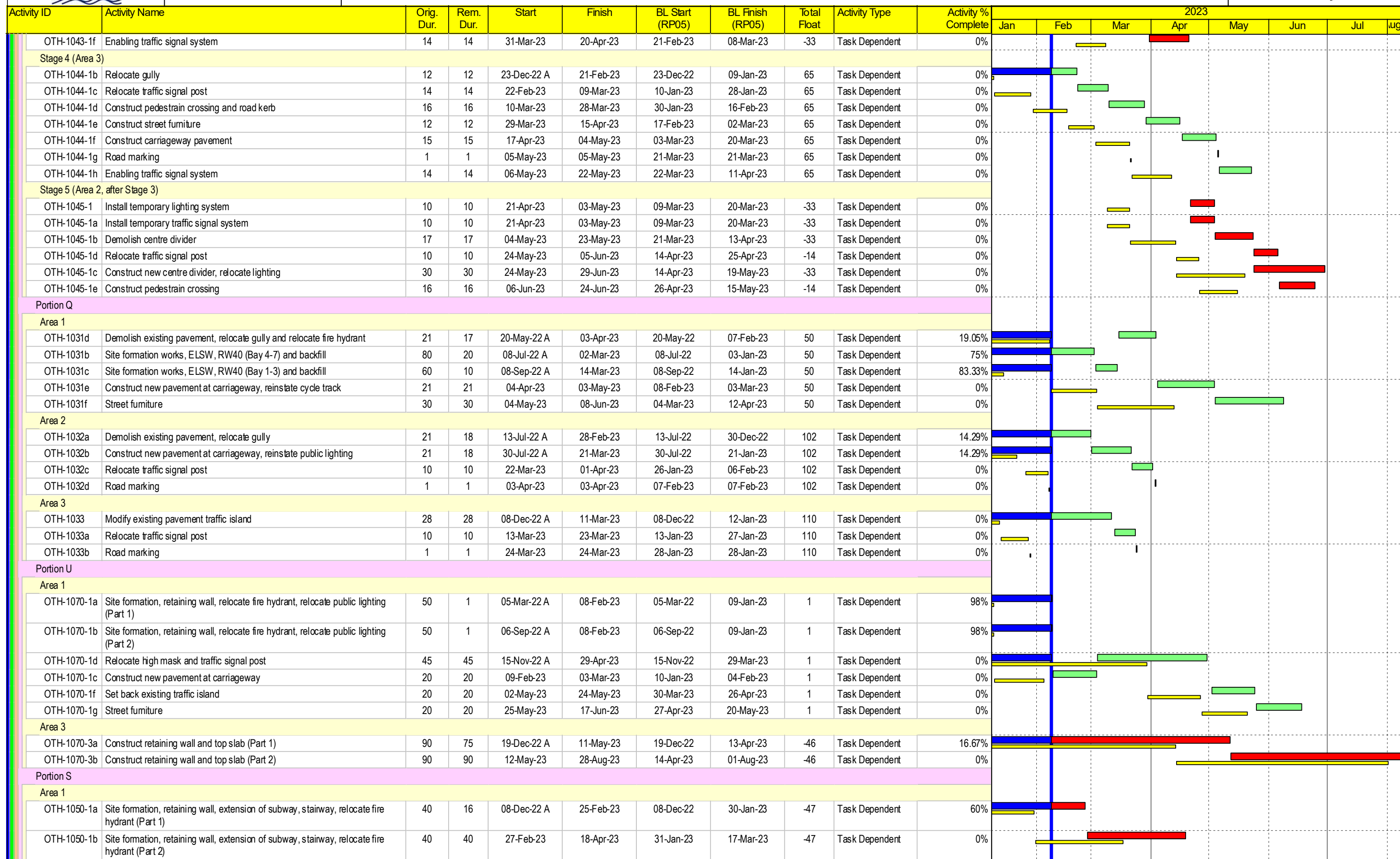
Project ID: RP-RP05-1-MU01-1

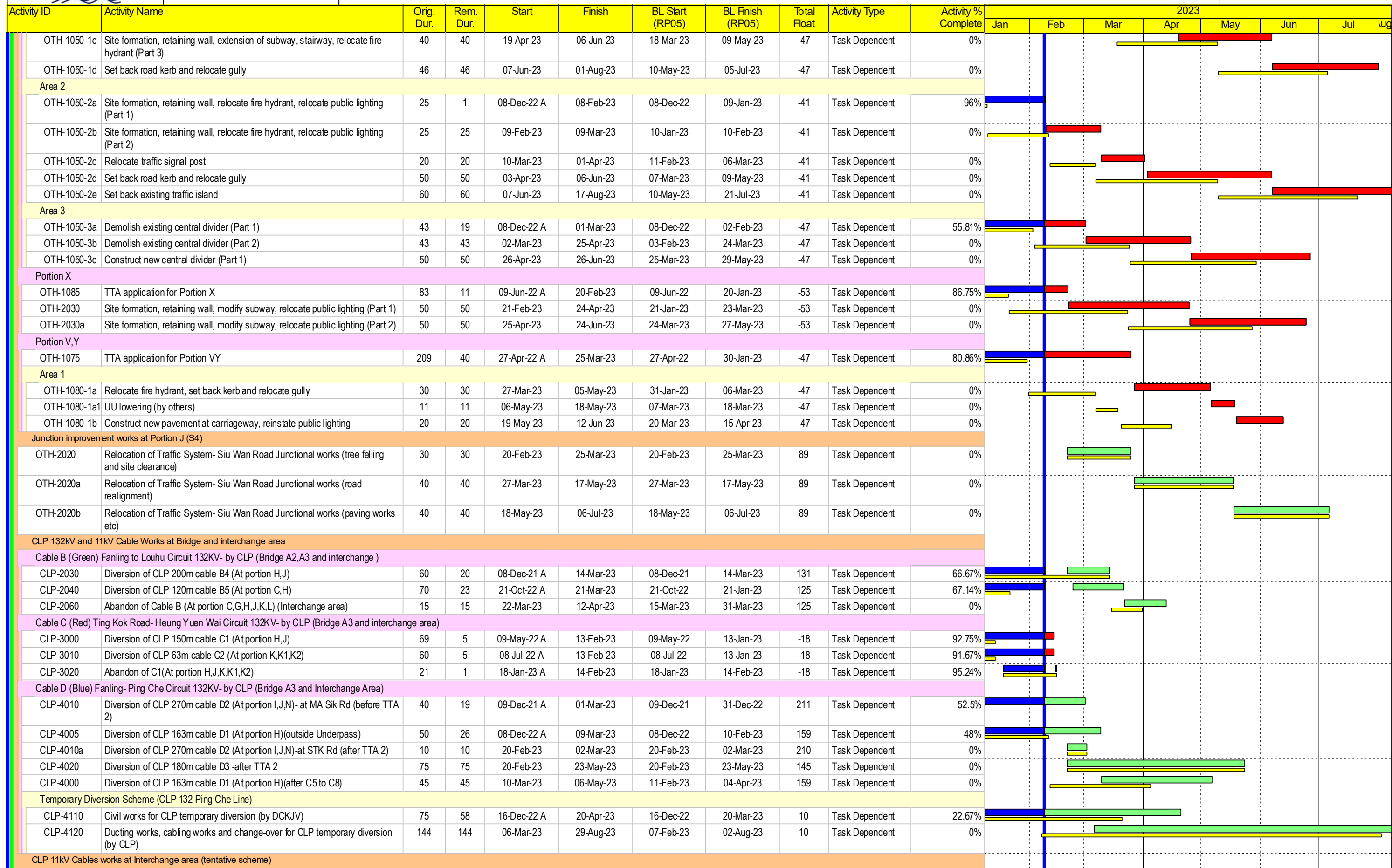
Three Months Rolling Programme (08 February 2023 to 31 May 2023)

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Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
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TASK filter: 3 Months
Lookahead.

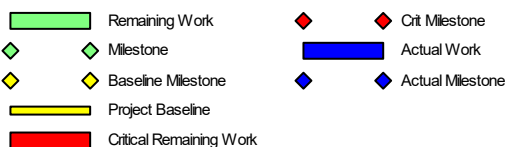
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|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |







| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | |
|---|--|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| CLP-5010 | Laying new 11kV cables(255m) F6 & underpass area (Portion J/H)(after C5 to C8) | 60 | 36 | 08-Dec-22 A | 21-Mar-23 | 08-Dec-22 | 22-Feb-23 | 58 | Task Dependent | 40% | | | | | | | | |
| CLP-5050 | Laying new 11kV cables(400m) at STK Road and MS Road (portion J)(after TTA 2) | 60 | 60 | 20-Feb-23 | 05-May-23 | 20-Feb-23 | 05-May-23 | -18 | Task Dependent | 0% | | | | | | | | |
| CLP-5020 | Abandon 11kV cables in F6 & underpass area (portion K/H) (after C5 to C8) | 15 | 15 | 22-Mar-23 | 12-Apr-23 | 23-Feb-23 | 11-Mar-23 | 58 | Task Dependent | 0% | | | | | | | | |
| CLP-5060 | Abandon 11kV cables at STK Rad and MS Road (portion J) | 15 | 15 | 06-May-23 | 23-May-23 | 06-May-23 | 23-May-23 | -18 | Task Dependent | 0% | | | | | | | | |
| CLP-5030 | Laying new 11kV cables(520m) F6 & underpass & U-Through B area (portion K) | 60 | 60 | 24-May-23 | 04-Aug-23 | 24-Mar-23 | 08-Jun-23 | -8 | Task Dependent | 0% | | | | | | | | |
| Towngas (By others) | | | | | | | | | | | | | | | | | | |
| TG-1000 | IPA gas main laying (after C5 to C8) | 45 | 45 | 08-Feb-23 | 31-Mar-23 | 08-Dec-22 | 04-Feb-23 | 64 | Task Dependent | 0% | | | | | | | | |
| TG-1010 | MP gas main laying-stage 1 (after C5 to C8) | 45 | 45 | 08-Feb-23 | 31-Mar-23 | 08-Dec-22 | 04-Feb-23 | 4 | Task Dependent | 0% | | | | | | | | |
| TG-1040 | LBG gas main laying-stage 1 (after C5 to C8) | 47 | 47 | 08-Feb-23 | 03-Apr-23 | 08-Dec-22 | 07-Feb-23 | 11 | Task Dependent | 0% | | | | | | | | |
| TG-1020 | MP gas main laying-stage 2 (portion J/K, near Toilet/ RCP) | 46 | 46 | 01-Apr-23 | 31-May-23 | 06-Feb-23 | 30-Mar-23 | 4 | Task Dependent | 0% | | | | | | | | |
| TG-1060 | LBG gas main laying-stage 3 (Portion P, near Playground) | 51 | 51 | 24-May-23 | 25-Jul-23 | 24-Mar-23 | 29-May-23 | 16 | Task Dependent | 0% | | | | | | | | |
| TG-1030 | MP gas main laying-stage 3 (Portion P, near Playground) | 52 | 52 | 24-May-23 | 26-Jul-23 | 24-Mar-23 | 30-May-23 | 15 | Task Dependent | 0% | | | | | | | | |
| Telecom (By others) | | | | | | | | | | | | | | | | | | |
| HGC/HKBN/HKBNES/SHK/PCCW | | | | | | | | | | | | | | | | | | |
| TL-1000 | HGC/HKBN/HKBNES/PCCW diversion -stage 1 (after C5-C8) | 50 | 50 | 08-Feb-23 | 11-Apr-23 | 08-Dec-22 | 10-Feb-23 | 59 | Task Dependent | 0% | | | | | | | | |
| TL-1040 | PCCW diversion-stage 5 (near the toilet and RCP) | 50 | 50 | 08-Feb-23 | 11-Apr-23 | 08-Dec-22 | 10-Feb-23 | 45 | Task Dependent | 0% | | | | | | | | |
| TL-1020 | HGC/HKBN/HKBNES/PCCW diversion -stage 3 (after RW9, near existing market and new playground) | 100 | 100 | 08-Feb-23 | 10-Jun-23 | 08-Dec-22 | 14-Apr-23 | 46 | Task Dependent | 0% | | | | | | | | |
| TL-1010 | HGC/HKBN/HKBNES/PCCW diversion -stage 2 (after TTA) | 49 | 49 | 20-Feb-23 | 21-Apr-23 | 20-Feb-23 | 21-Apr-23 | 50 | Task Dependent | 0% | | | | | | | | |
| TL-1030 | HGC/HKBN/HKBNES/PCCW diversion -stage 4 (near Portion M) | 75 | 75 | 20-Feb-23 | 23-May-23 | 20-Feb-23 | 23-May-23 | 61 | Task Dependent | 0% | | | | | | | | |
| TL-1050 | PCCW diversion-stage 6 (near the On Luk Min St playground, assume access is granted on 1 Aug 22) | 75 | 75 | 24-May-23 | 22-Aug-23 | 24-Mar-23 | 27-Jun-23 | -14 | Task Dependent | 0% | | | | | | | | |
| Towngas/telecom | | | | | | | | | | | | | | | | | | |
| TL-3000 | Towngas telecom diversion -stage 1 (after C5 to C8) | 50 | 50 | 08-Feb-23 | 11-Apr-23 | 08-Dec-22 | 10-Feb-23 | 59 | Task Dependent | 0% | | | | | | | | |
| TL-3010 | HGC/HKBN/HKBNES diversion -stage 2 (after TTA) | 49 | 49 | 20-Feb-23 | 21-Apr-23 | 20-Feb-23 | 21-Apr-23 | 50 | Task Dependent | 0% | | | | | | | | |
| Bridge F(MS) | | | | | | | | | | | | | | | | | | |
| Stage 5 Pile Cap & Piers construction and ELS installation & Excavation in N.side | | | | | | | | | | | | | | | | | | |
| BWFW-5020 | Backfill and remove the ELS system at pier F-03 area | 32 | 14 | 14-Jan-23 A | 23-Feb-23 | 14-Jan-23 | 23-Feb-23 | 298 | Task Dependent | 56.25% | | | | | | | | |
| Stage 6 Falsework Erection and Abutment Construction in N.side | | | | | | | | | | | | | | | | | | |
| BWFW-6000a | Submission and approval of Bearing and Trial | 74 | 11 | 08-Jul-22 A | 20-Feb-23 | 08-Jul-22 | 20-Dec-22 | 291 | Task Dependent | 85.14% | | | | | | | | |
| BWFW-6000 | Abutment F-04M construction (include pile cap, 1no. 60d/abt, 1no.workfront) | 73 | 11 | 05-Sep-22 A | 20-Feb-23 | 05-Sep-22 | 20-Jan-23 | 269 | Task Dependent | 84.93% | | | | | | | | |
| BWFW-6000b | Submission and approval of temporary bearing | 90 | 12 | 08-Oct-22 A | 06-Mar-23 | 08-Oct-22 | 07-Feb-23 | 291 | Task Dependent | 86.67% | | | | | | | | |
| BWFW-6000c | Fabrication of Bearing including material delivery | 150 | 87 | 05-Nov-22 A | 08-Jun-23 | 05-Nov-22 | 11-May-23 | 598 | Task Dependent | 42% | | | | | | | | |
| BWFW-6000d | Bearing installation at F-04 (Temporary bearing) | 12 | 12 | 07-Mar-23 | 20-Mar-23 | 08-Feb-23 | 21-Feb-23 | 291 | Task Dependent | 0% | | | | | | | | |
| BWFW-6010 | Erect falsework for bridge deck construction between pier F-03 and abutment F-04M (near F-04) | 14 | 14 | 30-Mar-23 | 19-Apr-23 | 03-Mar-23 | 18-Mar-23 | 269 | Task Dependent | 0% | | | | | | | | |
| Stage 7 Bridge Deck Construction & Formation work and abutment in N.side | | | | | | | | | | | | | | | | | | |
| BWFW-7020a | Submission and approval of post tension method statement and material | 90 | 43 | 08-Dec-22 A | 29-Mar-23 | 08-Dec-22 | 29-Mar-23 | 336 | Task Dependent | 52.22% | | | | | | | | |
| BWFW-7000 | Backfill at F-04M area | 18 | 18 | 21-Jan-23 A | 13-Mar-23 | 21-Jan-23 | 14-Feb-23 | 269 | Task Dependent | 0% | | | | | | | | |
| BWFW-7010 | Remove the ELS system around the abutment F-04M | 14 | 14 | 14-Mar-23 | 29-Mar-23 | 15-Feb-23 | 02-Mar-23 | 269 | Task Dependent | 0% | | | | | | | | |
| BWFW-7020 | Bridge deck construction between pier F-03 and abt F-04M | 53 | 53 | 20-Apr-23 | 23-Jun-23 | 20-Mar-23 | 25-May-23 | 269 | Task Dependent | 0% | | | | | | | | |
| Stage 8 Cofferdam modification and Formation in Both sides | | | | | | | | | | | | | | | | | | |
| South side | | | | | | | | | | | | | | | | | | |
| New scheme in wet season | | | | | | | | | | | | | | | | | | |
| BWFW-808C | Backfill behind concrete block at Pier F-01 | 15 | 3 | 05-Jan-23 A | 10-Feb-23 | 05-Jan-23 | 21-Jan-23 | 169 | Task Dependent | 80% | | | | | | | | |
| BWFW-8080b | Set up concrete block for bored piling at Pier F-02 | 15 | 15 | 08-Feb-23 | 24-Feb-23 | 06-Feb-23 | 22-Feb-23 | 194 | Task Dependent | 0% | | | | | | | | |
| BWFW-808C | Install decking for bored piling at Pier F-02 (Stage 1) | 40 | 40 | 25-Feb-23 | 17-Apr-23 | 23-Feb-23 | 14-Apr-23 | 194 | Task Dependent | 0% | | | | | | | | |
| BWFW-808C | Install decking for bored piling at Pier F-02 (Stage 2) | 40 | 40 | 18-Apr-23 | 05-Jun-23 | 15-Apr-23 | 02-Jun-23 | 194 | Task Dependent | 0% | | | | | | | | |
| Stage 9 Piling works for pier F-02 and abutment F-01M in S.side | | | | | | | | | | | | | | | | | | |



Project ID: RP-RP05-1-MU01-1

Three Months Rolling Programme (08 February 2023 to 31 May 2023)

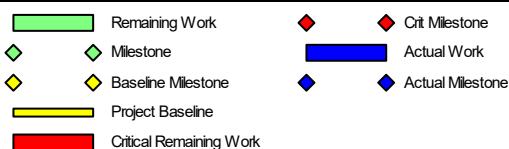
Page 8 of 11

Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | |
|--|--|------------|-----------|-------------|-----------|-----------------|------------------|-------------|------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| BWFW-9010a | Pre-drilling work at abutment F-01M (including confirmation of predrilling report) | 13 | 3 | 05-Jan-23 A | 10-Feb-23 | 05-Jan-23 | 19-Jan-23 | 167 | Task Dependent | 76.92% | | | | | | | | |
| BWFW-9010b | Mobilisation of bored pile plants (carry out on dry season) | 4 | 4 | 08-Feb-23* | 11-Feb-23 | 21-Jan-23 | 28-Jan-23 | 171 | Task Dependent | 0% | | | | | | | | |
| BWFW-9030 | Bored pile construction at abutment F-01M(4 nos, 15d/ bored, 1 set machine) | 60 | 60 | 01-Mar-23 | 15-May-23 | 01-Mar-23 | 15-May-23 | 157 | Task Dependent | 0% | | | | | | | | |
| BWFW-9030a | Interface coring, sonic test, and grouting for bored pile construction at abutment F-01M | 36 | 36 | 16-May-23 | 28-Jun-23 | 16-May-23 | 28-Jun-23 | 228 | Task Dependent | 0% | | | | | | | | |
| BWFW-9020 | Bored pile construction at abutment pier F-02 (2 nos, 15d/ bored, 1 set machine) | 30 | 30 | 06-Jun-23 | 12-Jul-23 | 03-Jun-23 | 10-Jul-23 | 194 | Task Dependent | 0% | | | | | | | | |
| Stage 11 Abutment construction in S.side | | | | | | | | | | | | | | | | | | |
| BWFW-11000 | Install sheet pile using vibration hammer to form ELS system for the pile cap F-01 | 47 | 47 | 16-May-23 | 12-Jul-23 | 16-May-23 | 12-Jul-23 | 157 | Task Dependent | 0% | | | | | | | | |
| Bridge Works (A1,A2,A3,G,F4) | | | | | | | | | | | | | | | | | | |
| Site Clearance & Additional GI and Predrilling Works | | | | | | | | | | | | | | | | | | |
| BWGIPW-1050 | Site clearance & additional GI and Pre-drilling works: Footbridge F4 (after Road of C7 redirect and A3-02) | 53 | 4 | 06-Aug-21 A | 29-Mar-23 | 06-Aug-21 | 01-Apr-23 | 251 | Task Dependent | 92.45% | | | | | | | | |
| BWGIPW-1040 | Site clearance & additional GI and Pre-drilling works: Bridge G | 53 | 5 | 25-Oct-21 A | 20-Mar-23 | 25-Oct-21 | 20-Mar-23 | 59 | Task Dependent | 90.57% | | | | | | | | |
| BWGIPW-1015 | Site clearance & additional GI and Pre-drilling works: Bridge A3 (part-3) | 12 | 12 | 08-Feb-23 | 21-Feb-23 | 08-Dec-22 | 21-Dec-22 | -13 | Task Dependent | 0% | | | | | | | | |
| BWGIPW-0010 | C7 access completed after unchartered tree (INTS1-5020)(A3-03R, 04,05,06M) | 0 | 0 | | 21-Feb-23 | | 21-Dec-22 | 27 | Finish Milestone | 0% | | | | | | | | |
| Construction of Bridge Foundation | | | | | | | | | | | | | | | | | | |
| Construction of Bridge A3 Foundation (Team 2) (~30m depth) | | | | | | | | | | | | | | | | | | |
| BWBF-1350a1 | Demolition of piling platform at A3-02 | 30 | 9 | 12-Dec-22 A | 17-Feb-23 | 12-Dec-22 | 18-Jan-23 | 251 | Task Dependent | 70% | | | | | | | | |
| BWBF-1380 | Pier A3-03l (2nos. bored piles, 20d/pile, 1no. workfront)* | 40 | 40 | 22-Dec-22 A | 13-Apr-23 | 22-Dec-22 | 13-Feb-23 | -13 | Task Dependent | 0% | | | | | | | | |
| BWBF-1340b | Pier A3-01r (2nos. pile, 20d/pile, 1no. workfront)* | 40 | 40 | 14-Apr-23 | 01-Jun-23 | 14-Feb-23 | 31-Mar-23 | -3 | Task Dependent | 0% | | | | | | | | |
| Rising Main Diversion at Bridge A3 | | | | | | | | | | | | | | | | | | |
| BWBF-1350 | Stage 3 - Rising main diversion works (Between A3-03 and Abutment A3-06) | 60 | 54 | 01-Feb-23 A | 15-Apr-23 | 01-Feb-23 | 15-Apr-23 | 977 | Task Dependent | 10% | | | | | | | | |
| Construction of Bridge G Foundation (Team 3) (~20m depth) | | | | | | | | | | | | | | | | | | |
| BWBF-1180 | ELS for G-02 to G-04 | 30 | 30 | 08-Feb-23* | 14-Mar-23 | 02-Feb-23 | 08-Mar-23 | 34 | Task Dependent | 0% | | | | | | | | |
| BWBF-1210 | Pier G-04 (2nos. pile, 15d/pile, 1 no. workfront) | 30 | 30 | 15-Mar-23 | 22-Apr-23 | 13-Mar-23 | 20-Apr-23 | 61 | Task Dependent | 0% | | | | | | | | |
| BWBF-1110 | ELS for Abt G-06 and G-05 | 30 | 30 | 15-Mar-23 | 22-Apr-23 | 09-Mar-23 | 17-Apr-23 | 34 | Task Dependent | 0% | | | | | | | | |
| BWBF-1220 | Pier G-03 (2nos. pile, 15d/pile, 1 no. workfront) | 30 | 30 | 24-Apr-23 | 30-May-23 | 21-Apr-23 | 27-May-23 | 61 | Task Dependent | 0% | | | | | | | | |
| BWBF-1120 | Abt G-06 (6nos. pile, 15d/pile, 1 no. workfront) | 90 | 90 | 24-Apr-23 | 10-Aug-23 | 18-Apr-23 | 04-Aug-23 | 34 | Task Dependent | 0% | | | | | | | | |
| BWBF-1240 | Pier G-02 (2nos. pile, 15d/pile, 1 no. workfront) | 30 | 30 | 31-May-23 | 06-Jul-23 | 29-May-23 | 04-Jul-23 | 61 | Task Dependent | 0% | | | | | | | | |
| Construction of Footbridge F4 Foundation | | | | | | | | | | | | | | | | | | |
| BWBF-1360a | ELS for Footbridge F4-01 | 30 | 30 | 18-Feb-23 | 24-Mar-23 | 19-Jan-23 | 25-Feb-23 | 251 | Task Dependent | 0% | | | | | | | | |
| BWBF-170a | ELS for Footbridge F4-02 | 30 | 30 | 25-Mar-23 | 04-May-23 | 27-Feb-23 | 01-Apr-23 | 262 | Task Dependent | 0% | | | | | | | | |
| BWBF-1360 | Footbridge F4-01 (6nos. socket-H, 4d/pile, 1no. workfront) | 24 | 24 | 30-Mar-23 | 02-May-23 | 03-Apr-23 | 05-May-23 | 251 | Task Dependent | 0% | | | | | | | | |
| BWBF-1370 | Footbridge F4-02 (6nos. socket-H, 4d/pile, 1no. workfront) | 24 | 24 | 05-May-23 | 02-Jun-23 | 06-May-23 | 03-Jun-23 | 262 | Task Dependent | 0% | | | | | | | | |
| ELS of Bridge Pier | | | | | | | | | | | | | | | | | | |
| ELS of Bridge A1 Foundation | | | | | | | | | | | | | | | | | | |
| BWBE-1030 | ELS for Pier A1-04 | 30 | 30 | 05-Jan-23 A | 14-Mar-23 | 05-Jan-23 | 11-Feb-23 | 188 | Task Dependent | 0% | | | | | | | | |
| BWBE-1010 | ELS for Pier A1-02 | 30 | 30 | 08-Feb-23 | 14-Mar-23 | 24-Dec-22 | 03-Feb-23 | 308 | Task Dependent | 0% | | | | | | | | |
| BWBE-1050 | ELS for Pier A1-01M | 30 | 30 | 15-Mar-23 | 22-Apr-23 | 04-Feb-23 | 10-Mar-23 | 338 | Task Dependent | 0% | | | | | | | | |
| ELS of Bridge A2 Foundation | | | | | | | | | | | | | | | | | | |
| BWBE-2000 | Excavation & strut for Pier A2-02 | 15 | 15 | 19-Apr-23 | 06-May-23 | 19-Apr-23 | 06-May-23 | -25 | Task Dependent | 0% | | | | | | | | |
| ELS of Bridge A3 Foundation | | | | | | | | | | | | | | | | | | |
| BWBE-3010 | ELS for Pier A3-02 | 30 | 1 | 08-Dec-22 A | 08-Feb-23 | 08-Dec-22 | 14-Jan-23 | 36 | Task Dependent | 96.67% | | | | | | | | |
| BWBE-3000 | ELS for Pier A3-01l | 30 | 6 | 07-Jan-23 A | 14-Feb-23 | 07-Jan-23 | 14-Feb-23 | 63 | Task Dependent | 80% | | | | | | | | |
| BWBE-3020 | ELS for Pier A3-03r | 30 | 30 | 14-Apr-23 | 19-May-23 | 14-Feb-23 | 20-Mar-23 | -13 | Task Dependent | 0% | | | | | | | | |
| BWBE-3030 | ELS for Pier A3-03l | 30 | 30 | 14-Apr-23 | 19-May-23 | 14-Feb-23 | 20-Mar-23 | -13 | Task Dependent | 0% | | | | | | | | |
| BWBF-1340a | ELS for Pier A3-01r | 30 | 30 | 02-Jun-23 | 08-Jul-23 | 01-Apr-23 | 11-May-23 | -3 | Task Dependent | 0% | | | | | | | | |
| ELS of Bridge G Foundation | | | | | | | | | | | | | | | | | | |
| BWBE-4020 | ELS for Pier G-04 | 30 | 30 | 24-Apr-23 | 30-May-23 | 21-Apr-23 | 27-May-23 | 211 | Task Dependent | 0% | | | | | | | | |



Project ID: RP-RP05-1-MU01-1

Three Months Rolling Programme (08 February 2023 to 31 May 2023)

Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | |
|--|---|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| BWBE-4030 | ELS for Pier G-03 | 30 | 30 | 31-May-23 | 06-Jul-23 | 29-May-23 | 04-Jul-23 | 271 | Task Dependent | 0% | | | | | | | | |
| ELS of Bridge F4 Foundation | | | | | | | | | | | | | | | | | | |
| BWBE-5000 | ELS for Pier F4-01 | 20 | 20 | 03-May-23 | 25-May-23 | 06-May-23 | 30-May-23 | 251 | Task Dependent | 0% | | | | | | | | |
| BWBE-5010 | ELS for Pier F4-02 | 20 | 20 | 03-Jun-23 | 27-Jun-23 | 05-Jun-23 | 28-Jun-23 | 262 | Task Dependent | 0% | | | | | | | | |
| Pile cap of Bridge | | | | | | | | | | | | | | | | | | |
| Pile cap of Bridge A1 Foundation | | | | | | | | | | | | | | | | | | |
| BWBC-1040 | Pile cap for Abt A1-05 (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 28-Jan-23 A | 14-Mar-23 | 01-Mar-23 | 04-Apr-23 | 158 | Task Dependent | 0% | | | | | | | | |
| BWBC-1010 | Pile cap for Abt A1-02 (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 15-Mar-23 | 22-Apr-23 | 04-Feb-23 | 10-Mar-23 | 308 | Task Dependent | 0% | | | | | | | | |
| BWBC-1030 | Pile cap for Abt A1-04 (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 15-Mar-23 | 22-Apr-23 | 13-Feb-23 | 18-Mar-23 | 188 | Task Dependent | 0% | | | | | | | | |
| BWBC-1050 | Pile cap for Abt A1-01M (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 24-Apr-23 | 30-May-23 | 11-Mar-23 | 19-Apr-23 | 338 | Task Dependent | 0% | | | | | | | | |
| Pile cap of Bridge A2 Foundation | | | | | | | | | | | | | | | | | | |
| BWBC-2050 | Pile cap for A2-05M (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 5 | 07-Dec-22 A | 13-Feb-23 | 07-Dec-22 | 13-Jan-23 | -65 | Task Dependent | 83.33% | | | | | | | | |
| BWBC-2030 | Pile cap for A2-03I (1no. pile cap, 30d/cap, 1no. workfront) | 30 | 6 | 07-Jan-23 A | 14-Feb-23 | 07-Jan-23 | 14-Feb-23 | -27 | Task Dependent | 80% | | | | | | | | |
| BWBC-2040 | Pile cap for A2-04M (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 12 | 14-Jan-23 A | 21-Feb-23 | 14-Jan-23 | 21-Feb-23 | -27 | Task Dependent | 60% | | | | | | | | |
| BWBC-2010 | Pile cap for A2-01a/b (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 18 | 21-Jan-23 A | 28-Feb-23 | 21-Jan-23 | 28-Feb-23 | -27 | Task Dependent | 40% | | | | | | | | |
| BWBC-2000 | Pile cap for A2-02a/b (1 no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 08-May-23 | 12-Jun-23 | 08-May-23 | 12-Jun-23 | -25 | Task Dependent | 0% | | | | | | | | |
| Pile cap of Bridge A3 Foundation | | | | | | | | | | | | | | | | | | |
| BWBC-3010 | Pile cap for A3-02 (1no. pile cap, 30d/cap, 1no. workfront) | 30 | 12 | 16-Jan-23 A | 22-Feb-23 | 16-Jan-23 | 22-Feb-23 | 36 | Task Dependent | 60% | | | | | | | | |
| BWBC-3000 | Pile cap for A3-01I (2nos. pile cap, 30d/cap, 1nos. workfronts) | 30 | 30 | 15-Feb-23 | 21-Mar-23 | 15-Feb-23 | 21-Mar-23 | 63 | Task Dependent | 0% | | | | | | | | |
| BWBC-3030 | Pile cap for A3-03I (1no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 20-May-23 | 26-Jun-23 | 21-Mar-23 | 28-Apr-23 | -13 | Task Dependent | 0% | | | | | | | | |
| BWBC-3020 | Pile cap for A3-03r (1no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 20-May-23 | 26-Jun-23 | 21-Mar-23 | 28-Apr-23 | -13 | Task Dependent | 0% | | | | | | | | |
| Pile cap of Bridge G Foundation | | | | | | | | | | | | | | | | | | |
| BWBC-4030 | Pile cap for G-04 (1no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 31-May-23 | 06-Jul-23 | 29-May-23 | 04-Jul-23 | 211 | Task Dependent | 0% | | | | | | | | |
| Pile cap of Bridge F4 Foundation | | | | | | | | | | | | | | | | | | |
| BWBC-5000 | Pile cap for F4-01 (1no. pile cap, 30d/cap, 1no. workfront) | 30 | 30 | 27-May-23 | 03-Jul-23 | 31-May-23 | 06-Jul-23 | 251 | Task Dependent | 0% | | | | | | | | |
| Construction of Bridge Substructure | | | | | | | | | | | | | | | | | | |
| Construction of Bridge A1 Substructure | | | | | | | | | | | | | | | | | | |
| BWBS-1050 | Pier A1-06a/b (2nos. column, 30d/column, 1 no. workfront) | 60 | 60 | 08-Feb-23 | 22-Apr-23 | 21-Jan-23 | 04-Apr-23 | 128 | Task Dependent | 0% | | | | | | | | |
| BWBS-1150 | Pier A1-05a/b (2nos. column, 30d/column, 1 no. workfront) | 60 | 60 | 15-Mar-23 | 30-May-23 | 06-Apr-23 | 20-Jun-23 | 158 | Task Dependent | 0% | | | | | | | | |
| BWBS-1130 | Pier A1-04a/b (2nos. column, 30d/column, 1 no. workfront) | 60 | 60 | 24-Apr-23 | 06-Jul-23 | 06-Apr-23 | 20-Jun-23 | 188 | Task Dependent | 0% | | | | | | | | |
| BWBS-1090 | Pier A1-03a/b (2nos. column, 30d/column, 1 no. workfront) | 60 | 60 | 31-May-23 | 10-Aug-23 | 21-Jun-23 | 31-Aug-23 | 218 | Task Dependent | 0% | | | | | | | | |
| Construction of Bridge A2 Substructure | | | | | | | | | | | | | | | | | | |
| BWBS-1140 | Pier A2-05M (1no. column, 30d/column, 1no. workfront) | 30 | 30 | 14-Feb-23 | 20-Mar-23 | 14-Jan-23 | 21-Feb-23 | -65 | Task Dependent | 0% | | | | | | | | |
| BWBS-1085 | Pier A2-03I (1 no. column, 50d/column, portal, 1no. workfront) | 50 | 50 | 15-Feb-23 | 18-Apr-23 | 15-Feb-23 | 18-Apr-23 | -25 | Task Dependent | 0% | | | | | | | | |
| BWBS-1120 | Pier A2-04M (1no. column, 30d/column, 1no. workfront) | 30 | 30 | 22-Feb-23 | 28-Mar-23 | 22-Feb-23 | 28-Mar-23 | 43 | Task Dependent | 0% | | | | | | | | |
| BWBS-1060 | Pier A2-01a/b (2nos. column, 30d/column, 1no. workfronts) | 60 | 60 | 01-Mar-23 | 15-May-23 | 01-Mar-23 | 15-May-23 | -27 | Task Dependent | 0% | | | | | | | | |
| Construction of Bridge A3 Substructure | | | | | | | | | | | | | | | | | | |
| BWBS-1215 | Pier A3-04a/b (2nos. column, 30d/column, 1no. workfront) | 60 | 8 | 29-Sep-22 A | 16-Feb-23 | 29-Sep-22 | 16-Dec-22 | 91 | Task Dependent | 86.67% | | | | | | | | |
| BWBS-1010 | Abt 03-06M (1no. abutment, 60d/abutment, 1no. workfront) | 60 | 13 | 08-Dec-22 A | 22-Feb-23 | 08-Dec-22 | 22-Feb-23 | 6 | Task Dependent | 78.33% | | | | | | | | |
| BWBS-1170 | Pier A3-02 in nullah (1no. column, 60d/column, 1no. workfront) | 60 | 60 | 23-Feb-23 | 09-May-23 | 23-Feb-23 | 09-May-23 | 36 | Task Dependent | 0% | | | | | | | | |
| BWBS-1195 | Pier A3-01I (1 no. column, 50d/column, portal, 1no. workfront)- Stage 1 | 50 | 50 | 22-Mar-23 | 24-May-23 | 22-Mar-23 | 24-May-23 | 63 | Task Dependent | 0% | | | | | | | | |
| Construction of Bridge Deck | | | | | | | | | | | | | | | | | | |
| Construction of Bridge A1 Deck | | | | | | | | | | | | | | | | | | |
| BWBD-1063 | Falsework Erection for A1 cast in-situ pier segments-stage 1 (A1-06) | 15 | 15 | 24-Apr-23 | 11-May-23 | 06-Apr-23 | 26-Apr-23 | 128 | Task Dependent | 0% | | | | | | | | |
| BWBD-1073 | Bridge A1 cast in-situ pier segments A1-06* | 90 | 90 | 12-May-23 | 28-Aug-23 | 27-Apr-23 | 14-Aug-23 | 128 | Task Dependent | 0% | | | | | | | | |
| BWBD-1066 | Falsework Erection for A1 cast in-situ pier segments-stage 2 (A1-05) | 15 | 15 | 31-May-23 | 16-Jun-23 | 21-Jun-23 | 10-Jul-23 | 158 | Task Dependent | 0% | | | | | | | | |
| Construction of Bridge A2 Deck | | | | | | | | | | | | | | | | | | |
| Construction of Pier Segment | | | | | | | | | | | | | | | | | | |
| BWBD-1022a | Bridge A2 cast pier segments at A2-03r | 90 | 66 | 07-Jan-23 A | 29-Apr-23 | 07-Jan-23 | 29-Apr-23 | 10 | Task Dependent | 26.67% | | | | | | | | |
| BWBD-1024 | Falsework Erection for A2 cast in-situ pier segments-A2-05 | 23 | 23 | 21-Mar-23 | 20-Apr-23 | 22-Feb-23 | 20-Mar-23 | -65 | Task Dependent | 0% | | | | | | | | |
| BWBD-1027 | Falsework Erection for A2 cast in-situ pier segments-A2-04 | 23 | 23 | 29-Mar-23 | 28-Apr-23 | 29-Mar-23 | 28-Apr-23 | 43 | Task Dependent | 0% | | | | | | | | |



Project ID: RP-RP05-1-MU01-1

Three Months Rolling Programme (08 February 2023 to 31 May 2023)

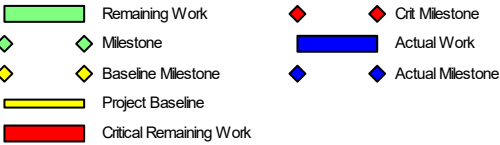
Page 10 of 11

Data Date: 08-Feb-23
Printed: 16-Feb-23 08:59
Layout: 3 MRP Layout
TASK filter: 3 Months
Lookahead.

| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |



| Activity ID | Activity Name | Orig. Dur. | Rem. Dur. | Start | Finish | BL Start (RP05) | BL Finish (RP05) | Total Float | Activity Type | Activity % Complete | 2023 | | | | | | | |
|---|---|------------|-----------|-------------|-----------|-----------------|------------------|-------------|----------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | | | | | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| BWBD-1023 | Falsework Erection for A2 cast in-situ pier segments-A2-03I | 23 | 23 | 19-Apr-23 | 16-May-23 | 19-Apr-23 | 16-May-23 | -3 | Task Dependent | 0% | | | | | | | | |
| BWBD-1024a | Bridge A2 cast pier segments at A2-05* | 90 | 90 | 21-Apr-23 | 08-Aug-23 | 21-Mar-23 | 12-Jul-23 | -65 | Task Dependent | 0% | | | | | | | | |
| BWBD-1027a | Bridge A2 cast pier segments at A2-04 | 90 | 90 | 29-Apr-23 | 16-Aug-23 | 29-Apr-23 | 16-Aug-23 | 43 | Task Dependent | 0% | | | | | | | | |
| BWBD-1026 | Falsework Erection for A2 cast in-situ pier segments-A2-01 | 23 | 23 | 16-May-23 | 12-Jun-23 | 16-May-23 | 12-Jun-23 | -27 | Task Dependent | 0% | | | | | | | | |
| Form Traveller and Segment Erection Works | | | | | | | | | | | | | | | | | | |
| BWBD-2000 | Procurement of Traveler (4nos, 2pairs) | 151 | 3 | 09-Aug-22 A | 10-Feb-23 | 09-Aug-22 | 10-Feb-23 | 80 | Task Dependent | 98.01% | | | | | | | | |
| BWBD-2040 | Procurement of Falsework-Stage 2 | 90 | 32 | 25-Nov-22 A | 16-Mar-23 | 25-Nov-22 | 16-Mar-23 | 51 | Task Dependent | 64.44% | | | | | | | | |
| Construction of Bridge A3 Deck | | | | | | | | | | | | | | | | | | |
| Construction of Pier Segment | | | | | | | | | | | | | | | | | | |
| BWBD-1082a | Bridge A3 cast in-situ segments (A3-05) | 90 | 10 | 08-Nov-22 A | 18-Feb-23 | 08-Nov-22 | 19-Dec-22 | 461 | Task Dependent | 88.89% | | | | | | | | |
| BWBD-1081a | Bridge A3 cast in-situ segments (A3-04) | 90 | 53 | 31-Dec-22 A | 24-Apr-23 | 31-Dec-22 | 24-Apr-23 | 148 | Task Dependent | 41.11% | | | | | | | | |
| BWBD-1083 | Falsework Erection for A3 cast in-situ segments (A3-06) | 10 | 10 | 23-Feb-23 | 06-Mar-23 | 23-Feb-23 | 06-Mar-23 | 6 | Task Dependent | 0% | | | | | | | | |
| BWBD-1083a | Bridge A3 cast in-situ segments (A3-06)* | 90 | 90 | 07-Mar-23 | 27-Jun-23 | 07-Mar-23 | 27-Jun-23 | 6 | Task Dependent | 0% | | | | | | | | |
| BWBD-1087 | Falsework Erection for A3 cast in-situ segments (A3-02) | 10 | 10 | 10-May-23 | 20-May-23 | 10-May-23 | 20-May-23 | 36 | Task Dependent | 0% | | | | | | | | |
| U-trough 1-4 | | | | | | | | | | | | | | | | | | |
| UT1-1000 | U-trough 1 and near by road works and FW-18 (after Bored pile G-06) | 80 | 80 | 24-Apr-23 | 29-Jul-23 | 18-Apr-23 | 24-Jul-23 | 34 | Task Dependent | 0% | | | | | | | | |

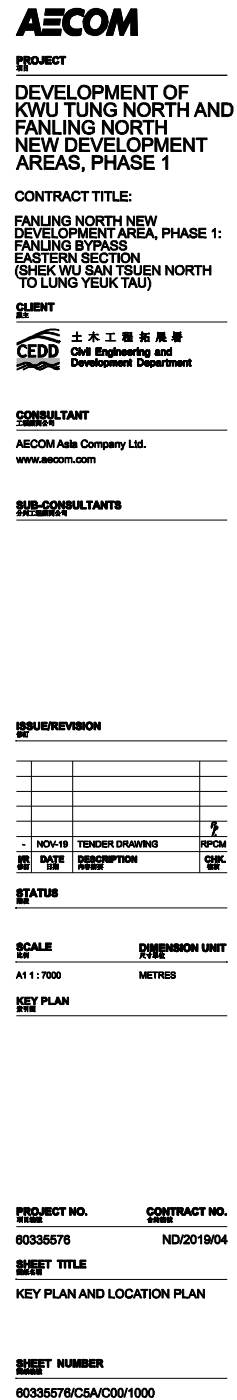


Project ID: RP-RP05-1-MU01-1

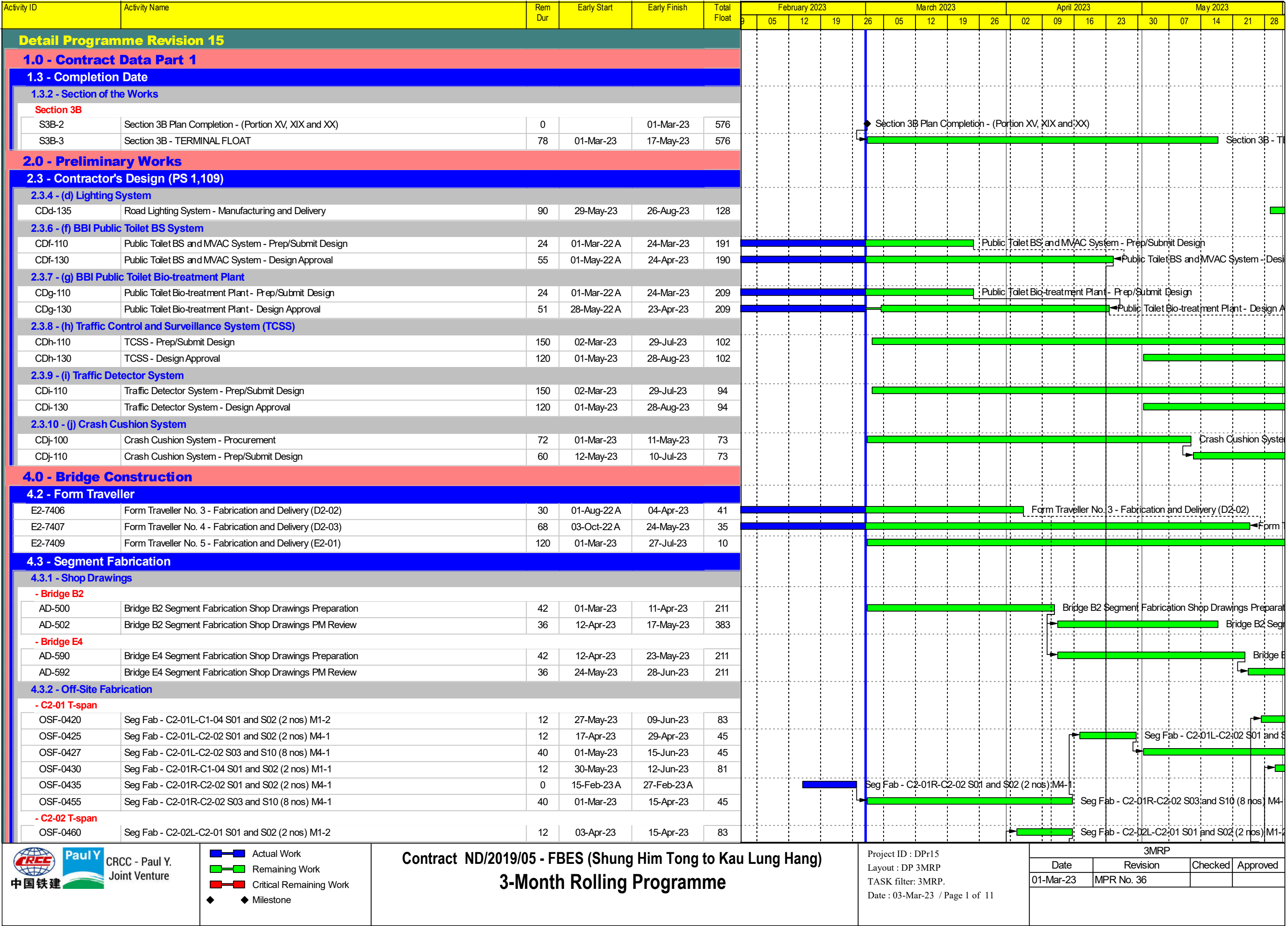
Three Months Rolling Programme (08 February 2023 to 31 May 2023)

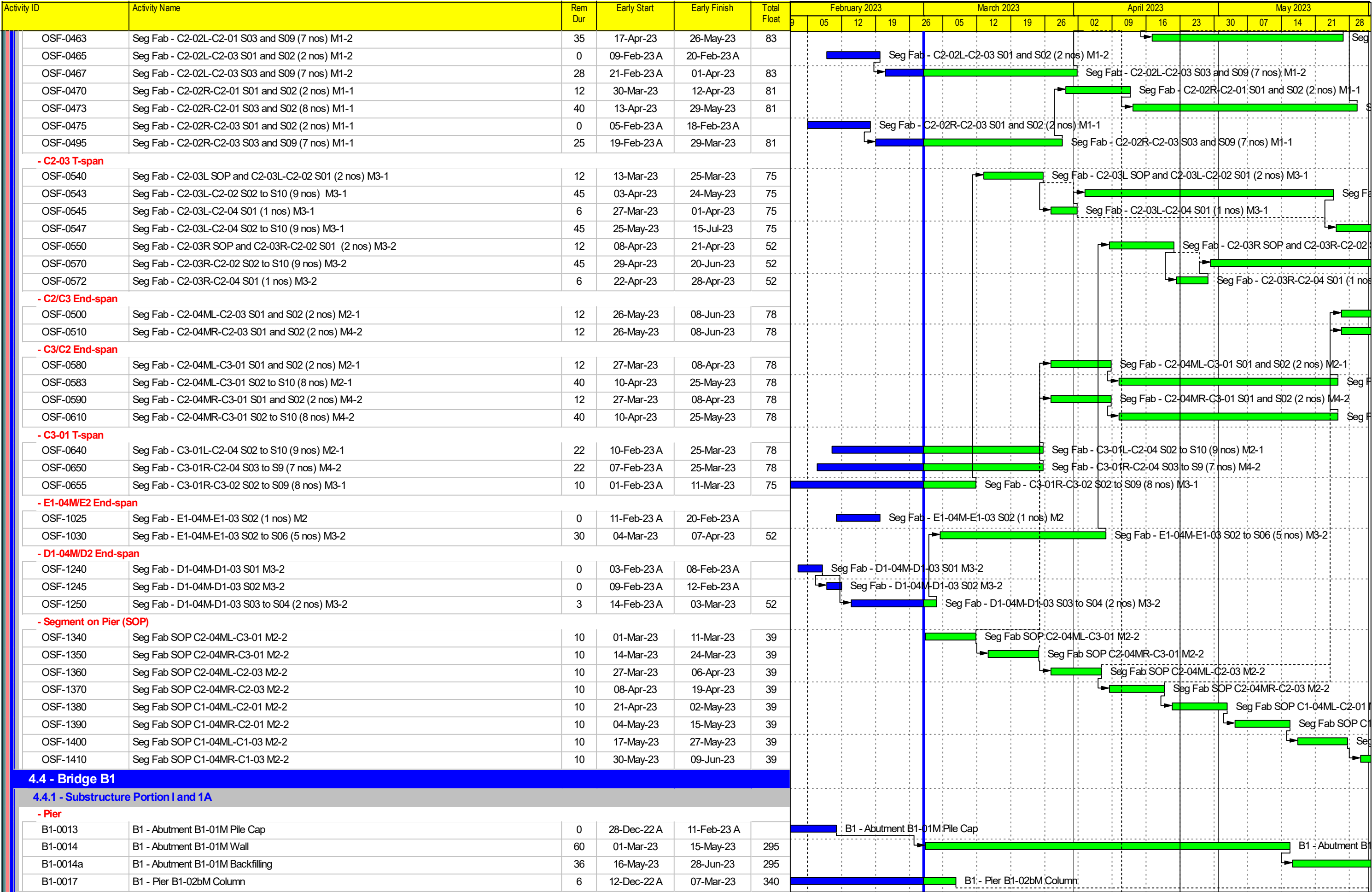
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TASK filter: 3 Months Lookahead.

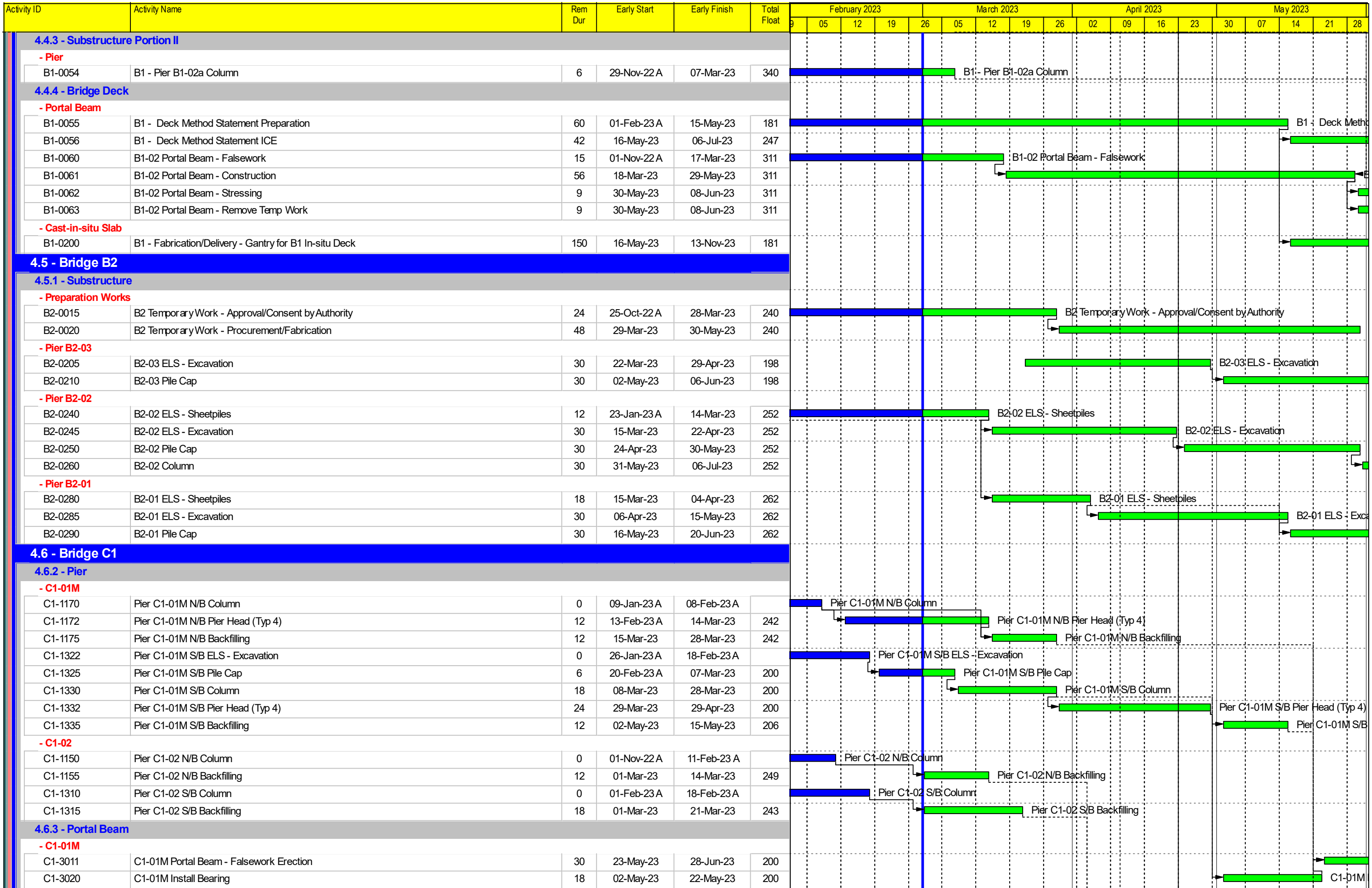
| Baseline Programme RP05 | | | |
|-------------------------|-----------|-------|----------|
| Date | Revision | Ch... | Approved |
| 08-Feb-23 | Data Date | | |

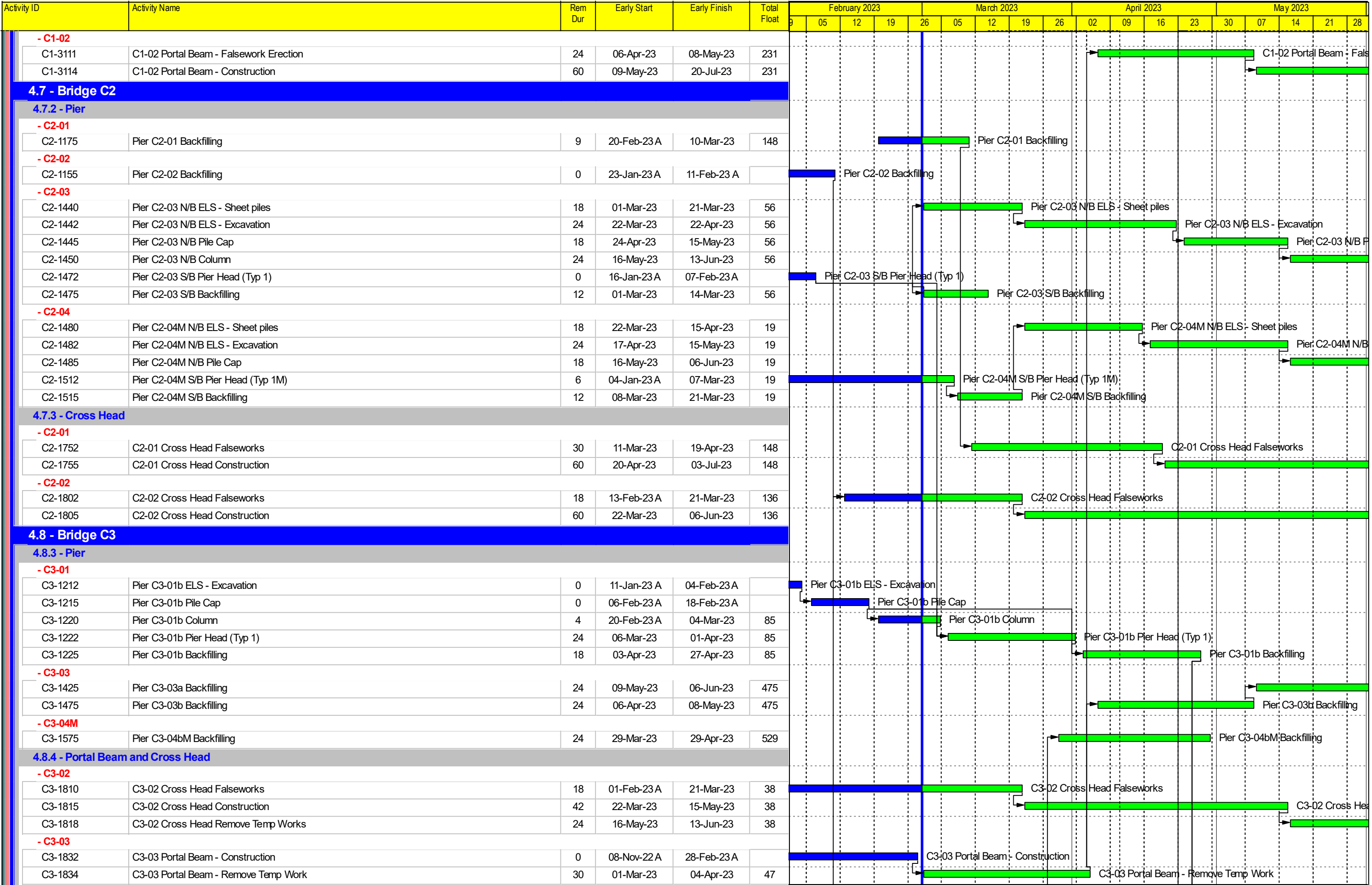


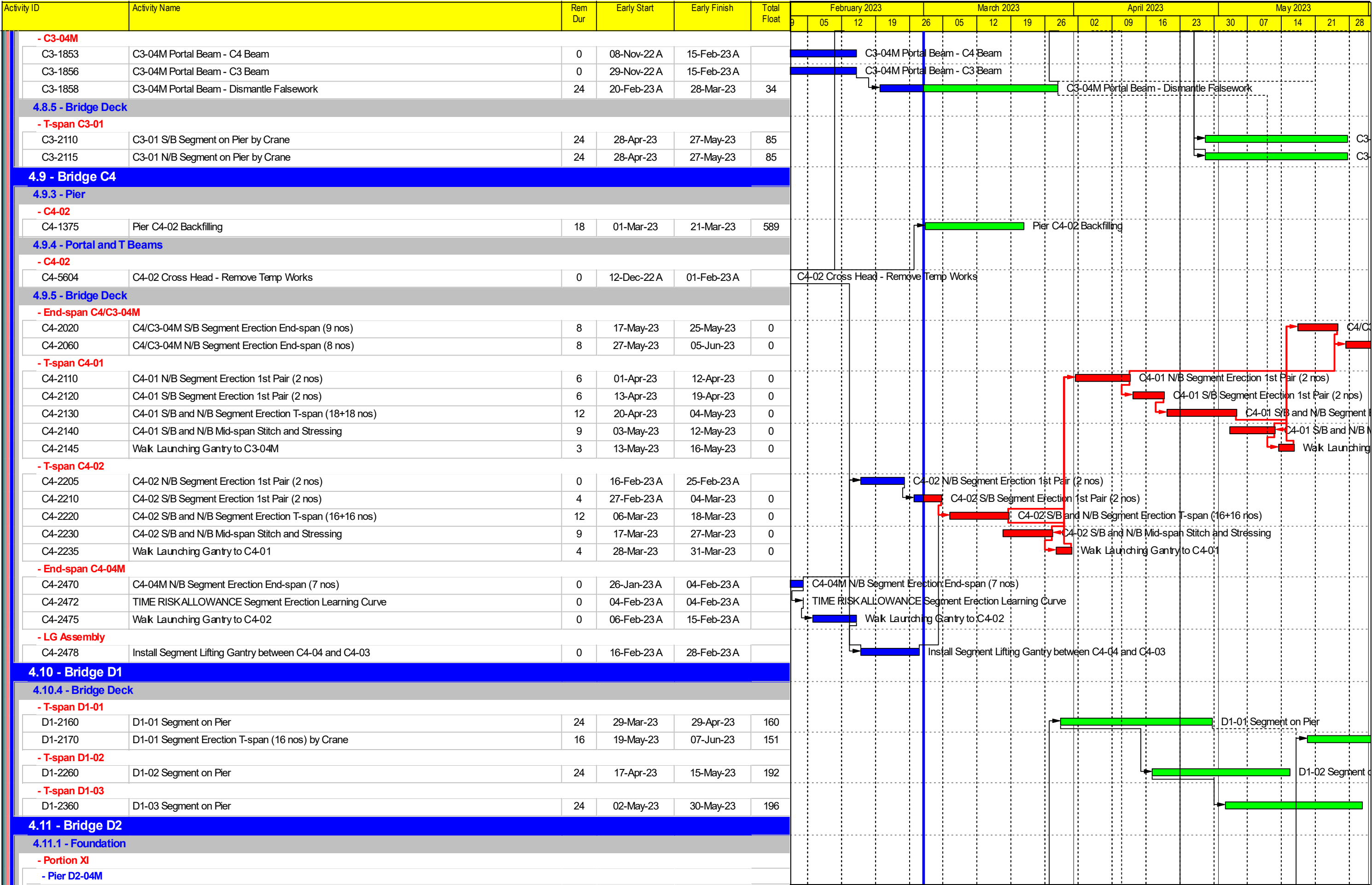
Construction Programme of ND/2019/05

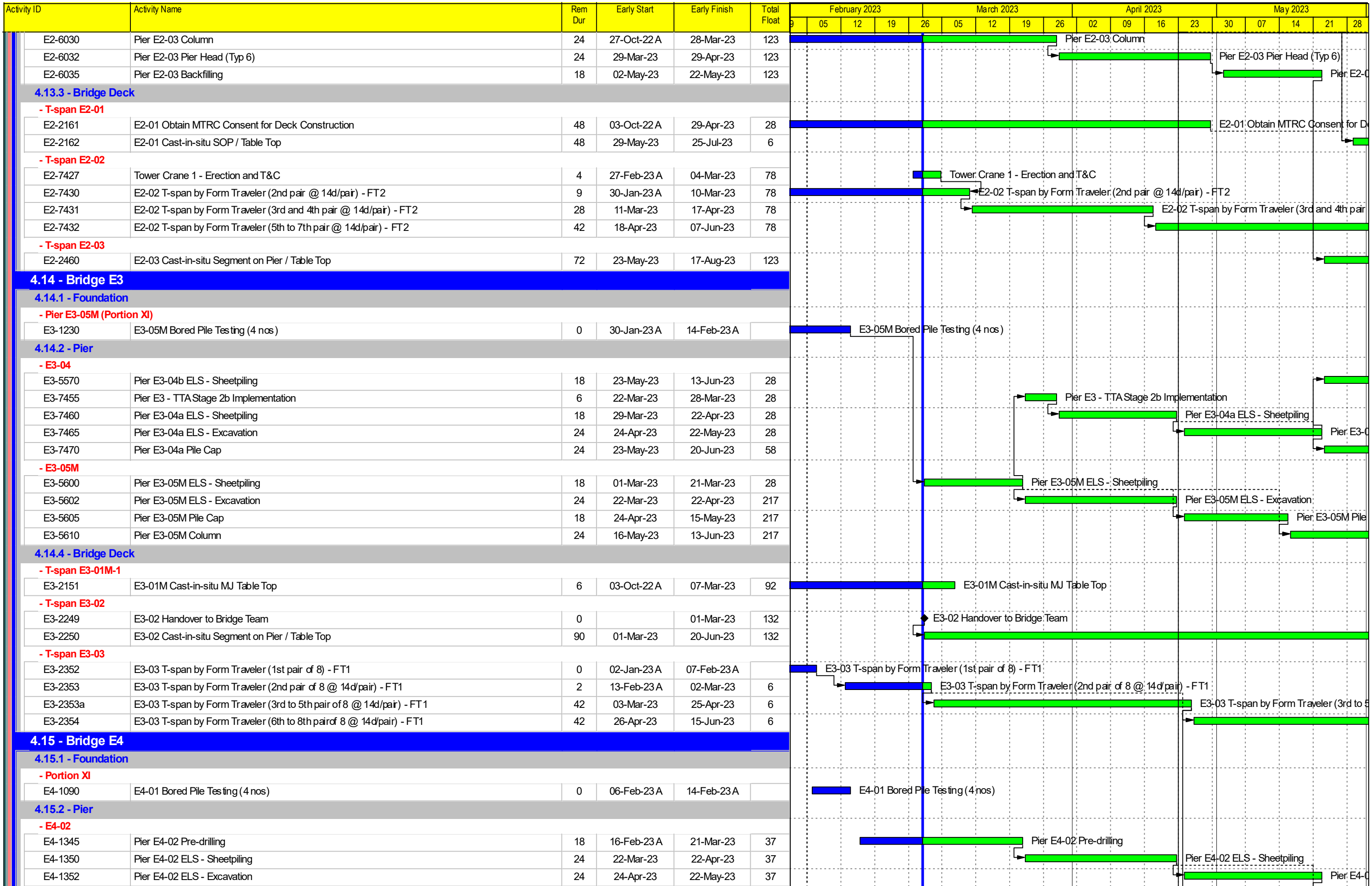


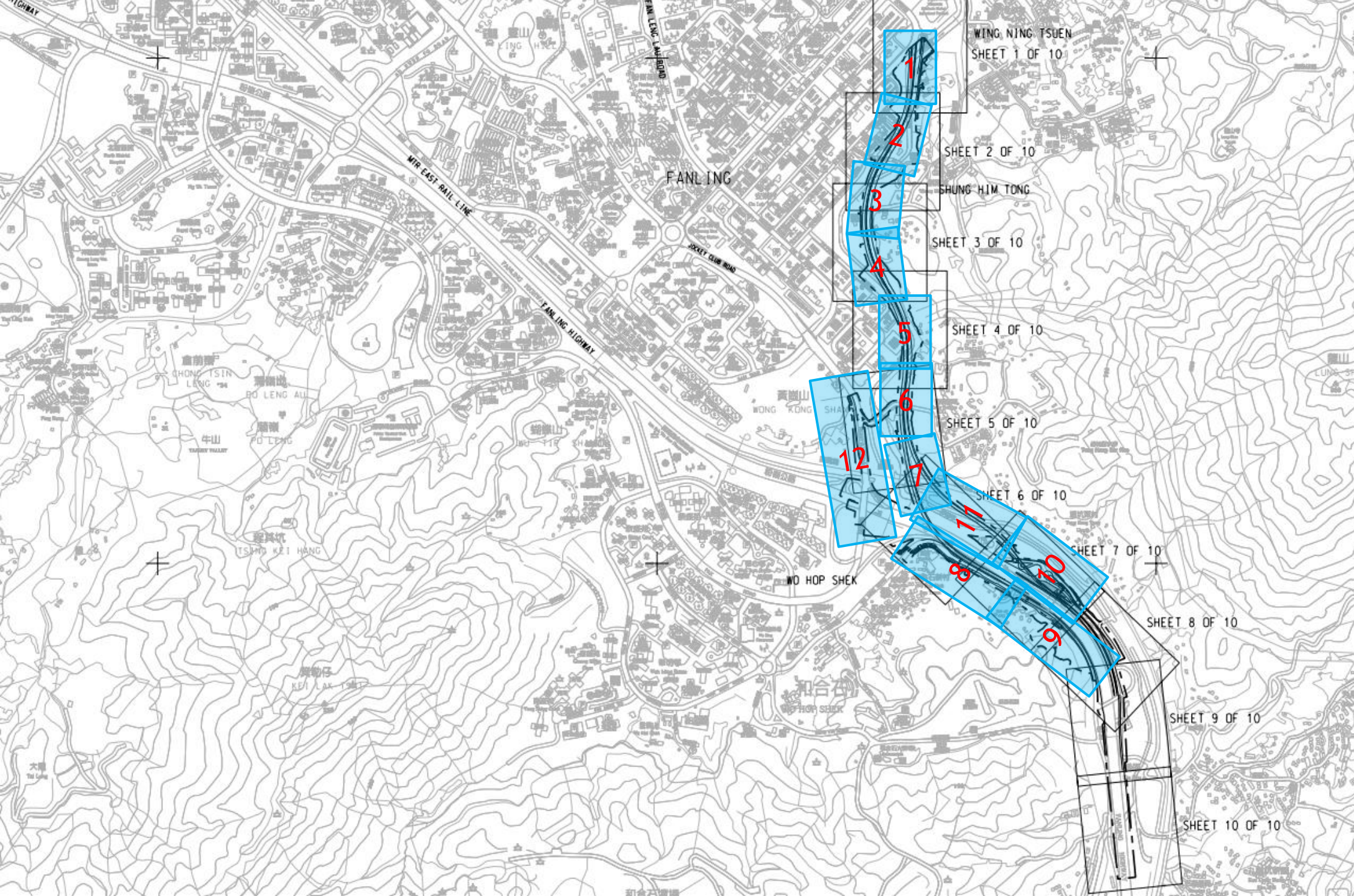












CONSULTANT
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AECOM

ISSUE/REVISION
REV

| REV | DATE | DESCRIPTION | CHK |
|-----|--------|----------------|-------|
| 1 | JUN-19 | TENDER DRAWING | P/PCM |

STATUS
REV

SCALE
A1:7000

DIMENSION UNIT
METRES

KEY PLAN
REV

PROJECT NO.
60335576

CONTRACT NO.
ND/2019/05

SHEET TITLE
KEY PLAN AND LOCATION PLAN

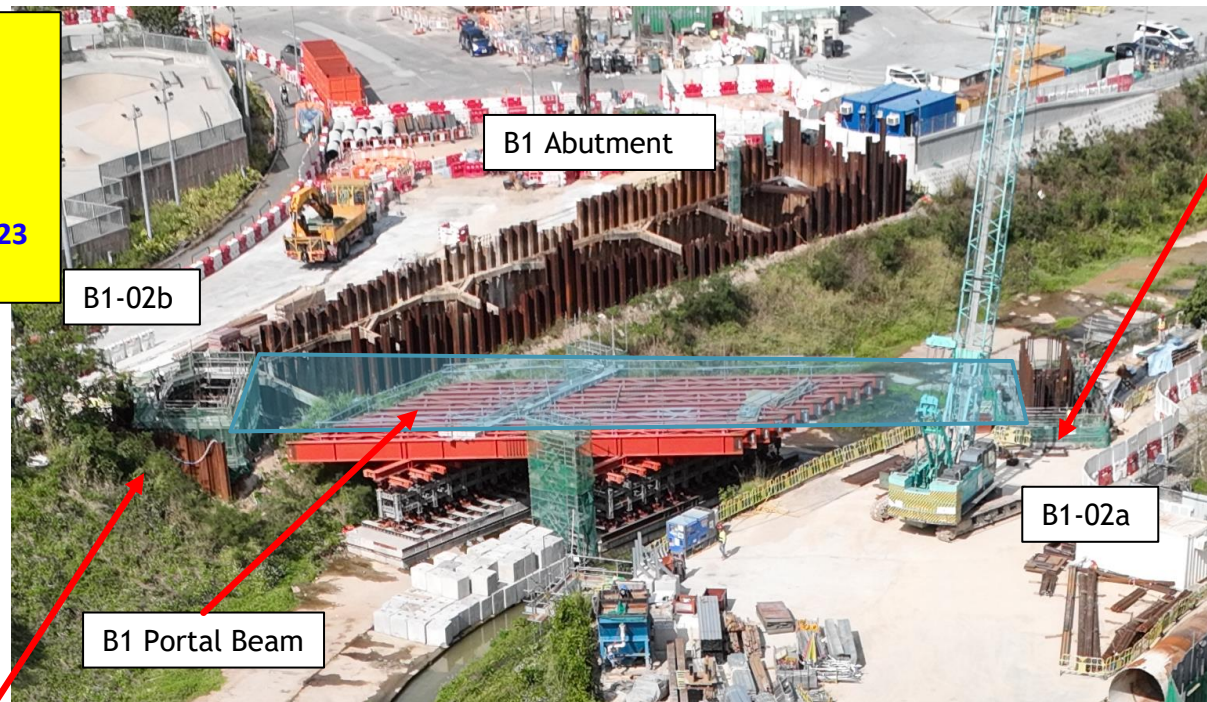
North Team

Area Highlighted - B1-02 Portal Beam

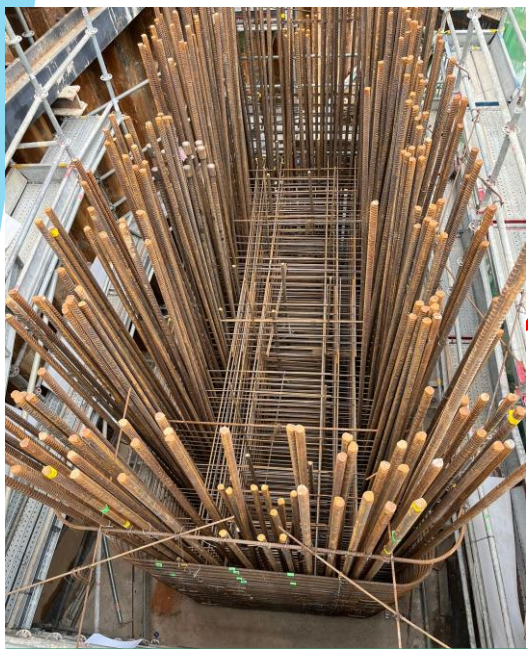
Portion 1 (On Kui St)

B1-02 Portal Beam

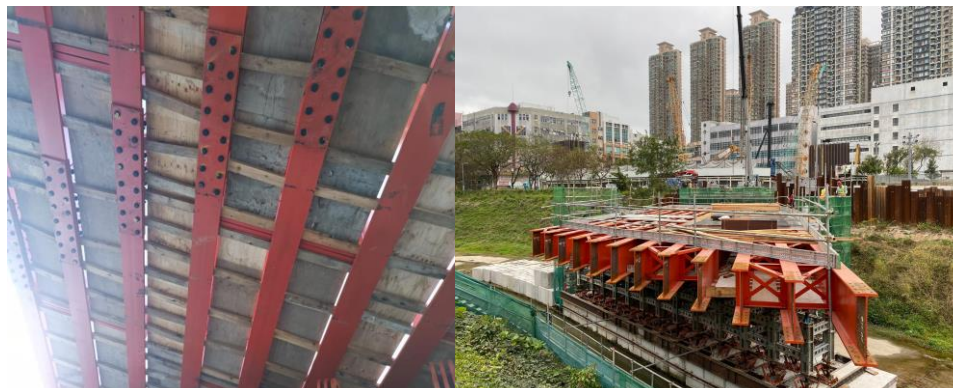
- Pile cap Concreted on 05/11/22.
- ES:01/11/23 EF:20/04/24
- LS:01/11/23 LF:20/04/24
- Target 1st pour concreting by 10/03/23
- Ahead against R14A



B1-02a pier construction in progress.



B1-02b pier construction in progress.



B1-02 portal beam construction in progress

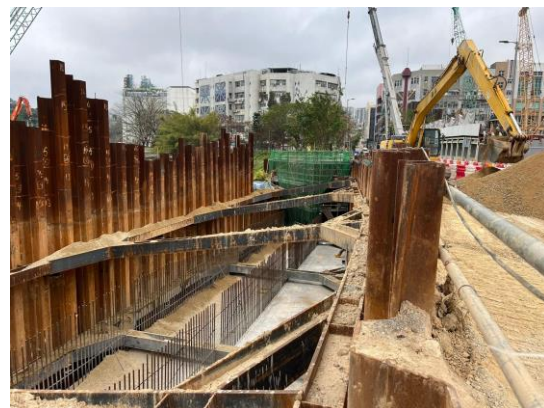


B1-02 Mega-shor tower for portal beam construction completed on 29/12/22

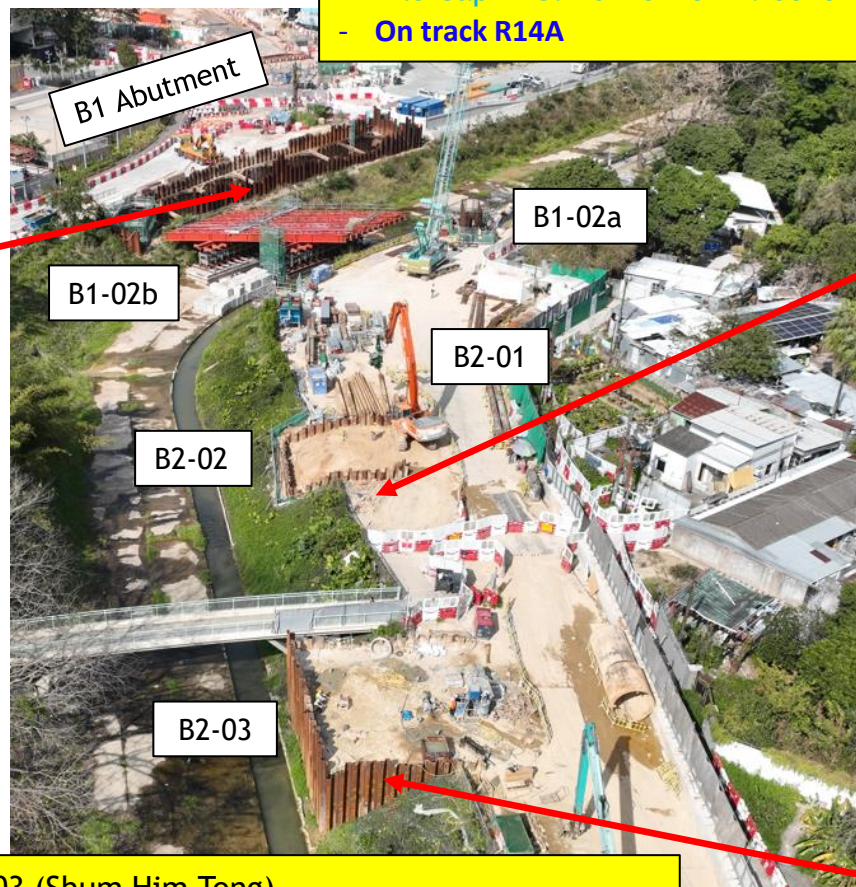
1 North Team



B1-01M Pile Cap Concreted & Formwork Removal works in progress



B1-01M backfilling in progress



B1 Abutment

B1-02b

B2-02

B2-03

B1-02a

B2-01

B1-01M (On Kui St)

- Pile cap concreted
- Backfilling in Progress
- Pile Cap - ES: 22/11/22 EF: 06/02/23
- Pile Cap - LS: 26/10/23 LF: 06/01/24
- **On track R14A**

B2-03 (Shum Him Tong)

- B2-03 grouting of reservation tubes completed
- ELS Sheet Piling Works planned to commence on 13/02/23
- Bored Piling - ES: 03/01/23 EF: 18/01/23
- Bored Piling - LS: 19/07/23 LF: 03/08/23
- **Ahead R14A**



B2-02 Sheet Piling Works in progress

B2-02 (Shum Him Tong)

- Sheet Piling Works in Progress: 30/96 nos. completed (updated on 8/2)
- ELS - ES: 22/04/23 EF: 13/05/23
- ELS - LS: 28/10/23 LF: 27/11/23
- **Ahead R14A**



B2-03 Grouting of reservation tubes Completed

2 North Team



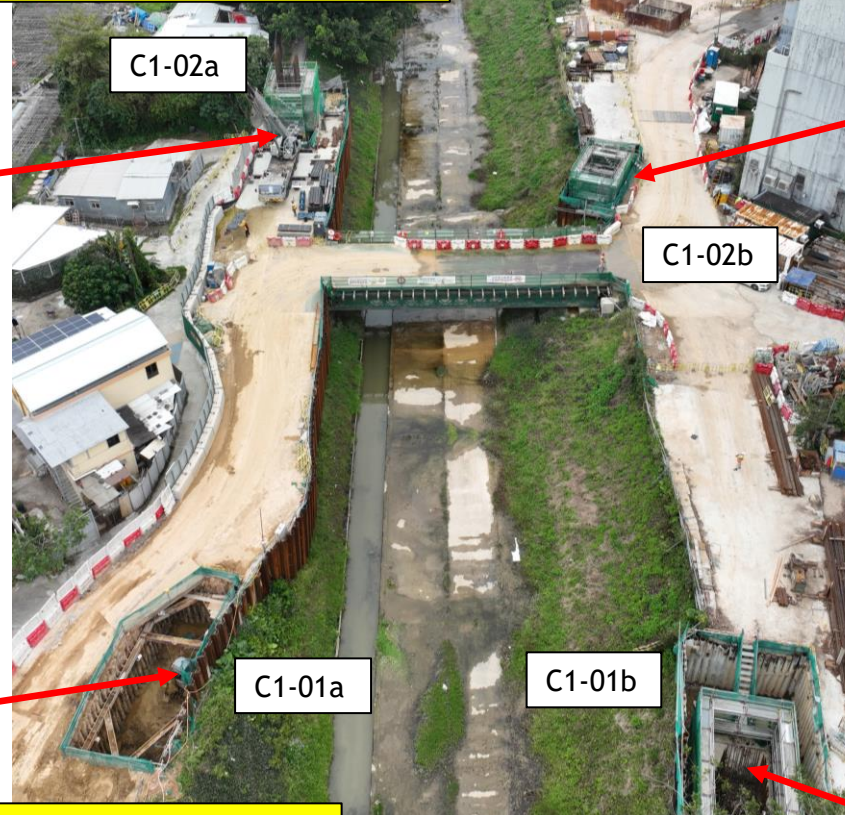
C1-02a pier 1st & 2nd pour completed on 20/01/23 & 03/02/23 respectively



C1-01a 3rd layer of strut Installation completed

C1-02a & b pier

- C1-02a & b pier construction in progress
- Pier
 - ES: 29/12/22 EF: 13/02/23
 - LS: 25/09/23 LF: 08/11/23
- **On Track against R14A**



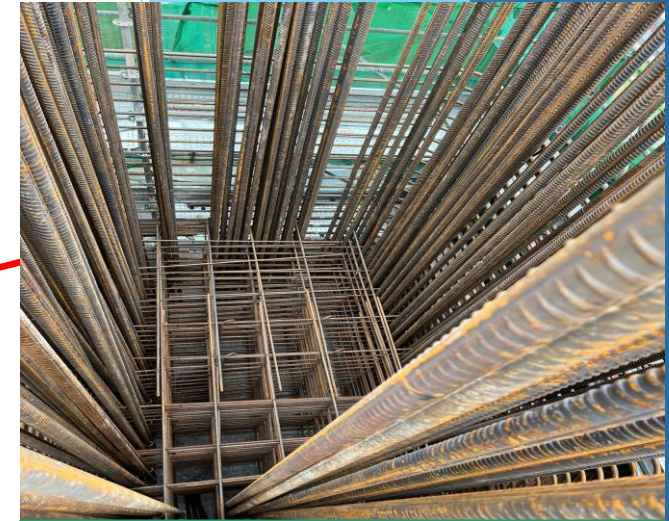
C1-02a

C1-03ab

C1-02b

C1-01a

C1-01b



C1-02b pier 1st pour in progress



C1-01b pier head construction in progress

C1-01a (Shum Him Tong)

- Pipe Piling Works Completed
- 3rd layer of strut Installation completed
- Target to cast blinding layer on 11/02/23
- ELS - ES: 17/12/22 EF: 17/01/23
- ELS - LS: 28/07/23 LF: 24/08/23
- **On Track against R14A**

C1-01b pier head

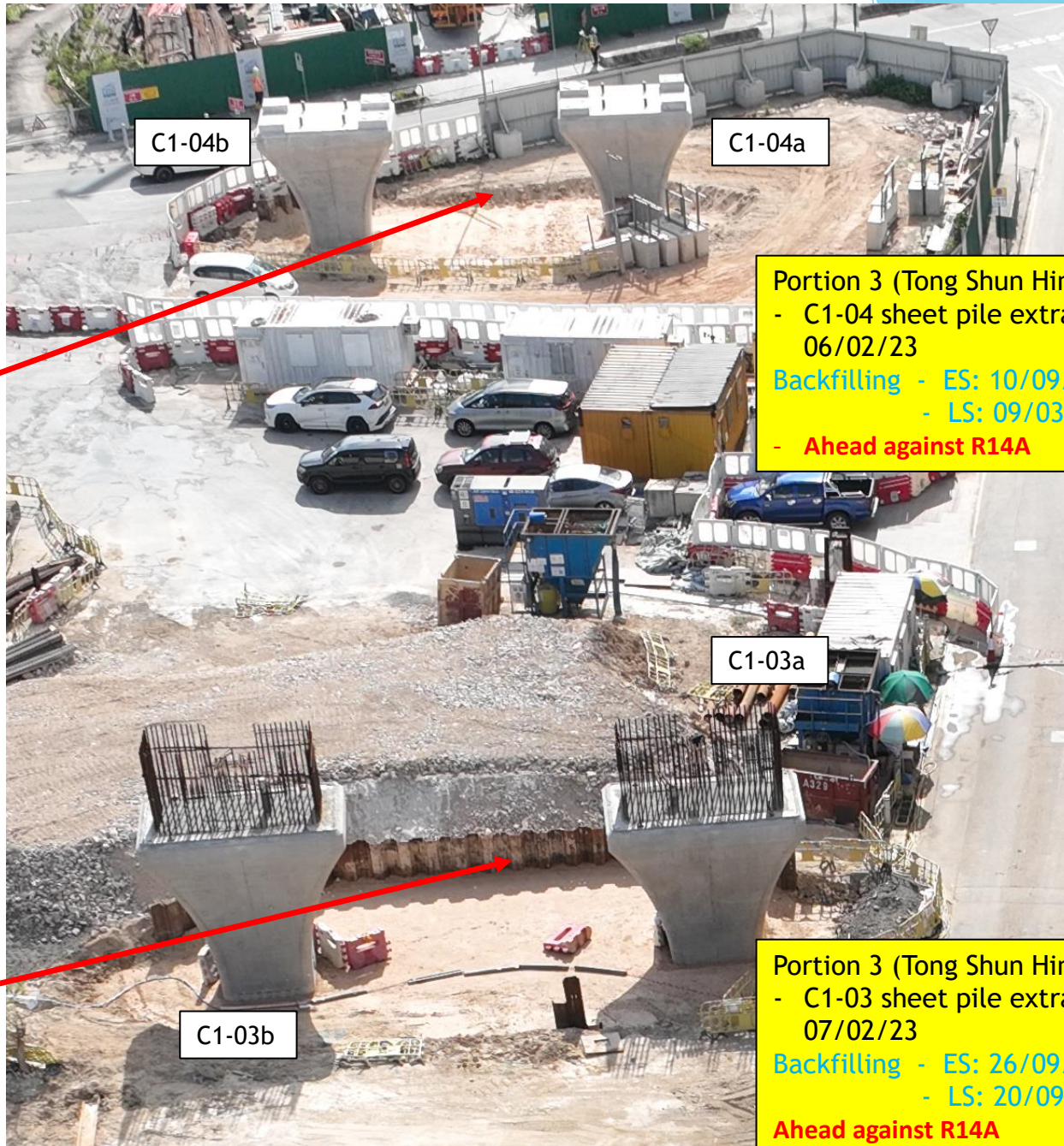
- C1-01b pier head in progress
- Pier head
 - ES: 18/11/22 EF: 15/12/22
 - LS: 01/09/23 LF: 28/09/23
- **On Track against R14A**



C1-04 sheet pile extraction completed on 06/02/23.
Backfilling to E.G.L. in progress.



C1-03 sheet pile extraction completed on 07/02/23.
Backfilling to E.G.L. in progress.



Portion 3 (Tong Shun Hing)

- C1-04 sheet pile extraction completed on 06/02/23

Backfilling - ES: 10/09/22 EF: 16/09/22

- LS: 09/03/24 LF: 09/03/24

- Ahead against R14A

Portion 3 (Tong Shun Hing)

- C1-03 sheet pile extraction completed on 07/02/23

Backfilling - ES: 26/09/22 EF: 30/09/22

- LS: 20/09/23 LF: 20/09/23

Ahead against R14A

2 North Team



C2-02 cross head construction in progress



C2-01 Dismantling of falsework completed



3 North Team

Portion 5 (On Lok Garden)

C2-03a & C2-04a & C3-01a pier head

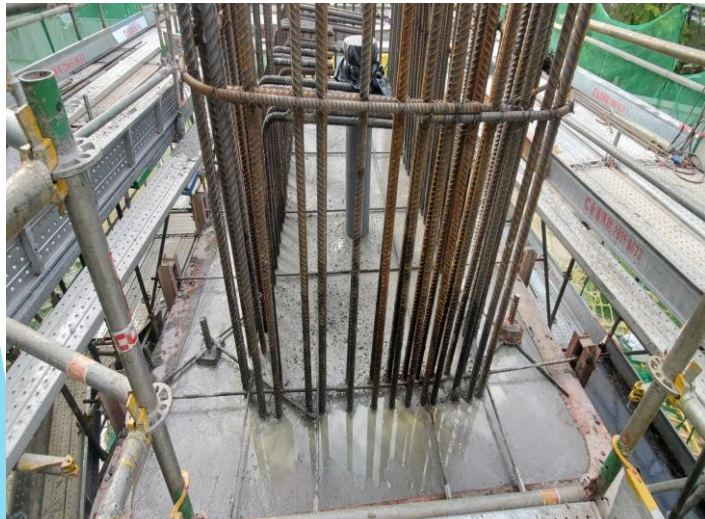
- C3-01 pier head completed
- C2-03a & C2-04a pier head in progress
- Pier + Pier head
 - ES: 15/11/22 EF: 30/01/23
 - LS: 14/12/22 LF: 22/02/23

- On Track against R14A

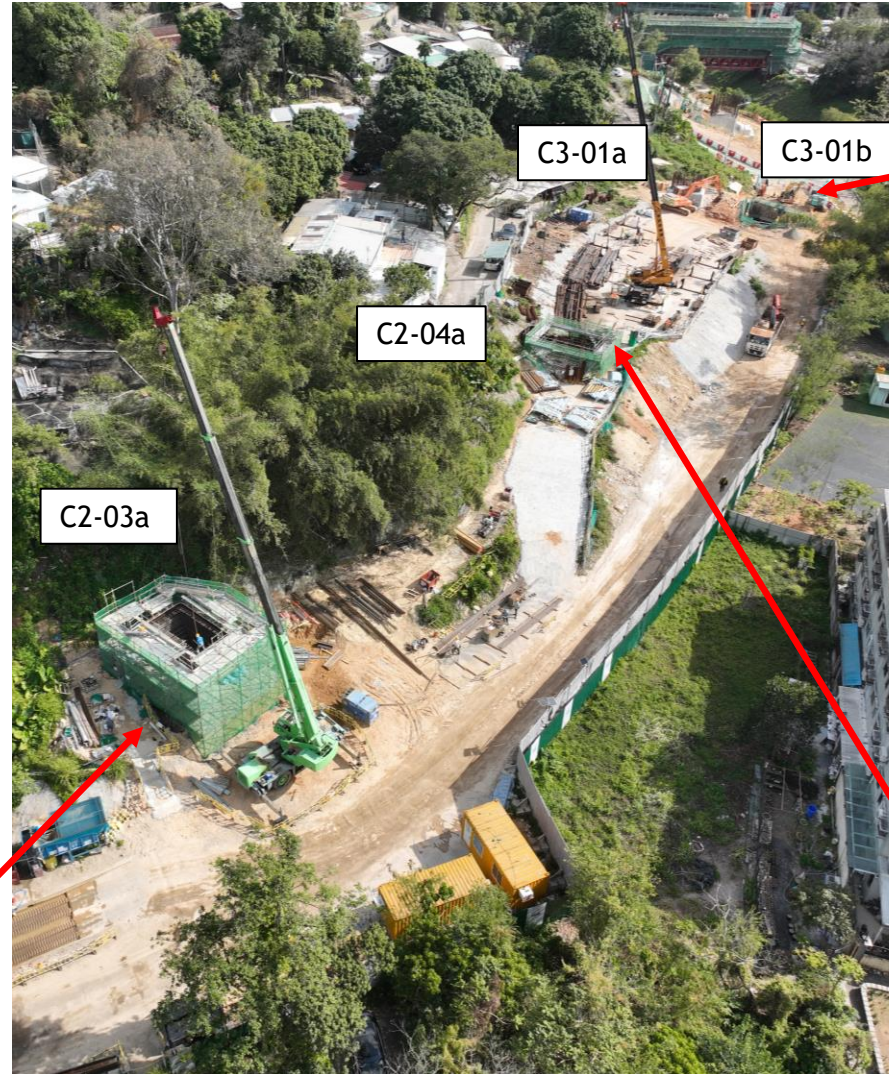
C3-01b ELS

- Pipe piling commenced on 05/01/23
- ELS - ES: 06/01/23 EF: 30/01/23
- LS: 21/02/23 LF: 13/03/23

- On Track against R14A



C2-03a pier head construction completed on 07/02/23



C3-01b blinding layer completed on 03/02/23. Pile head breaking in progress.



C2-04a pier head construction in progress

3

- ▶ North Team
- Area Highlighted
- Cross head - C3-02



Footing for C3-02 cross head construction in progress



▶ North Team
Area Highlighted
- Portal Beam - C3-04 & C3-03

Portion 6 (Village side)
C3-04 MJ Portal Beam Construction in Progress
- Portal beam - ES:08/11/22 EF:06/03/23
LS:05/12/22 LF:01/04/23
- Target 2nd pour concreting by 15/02/23
- On track against R14A



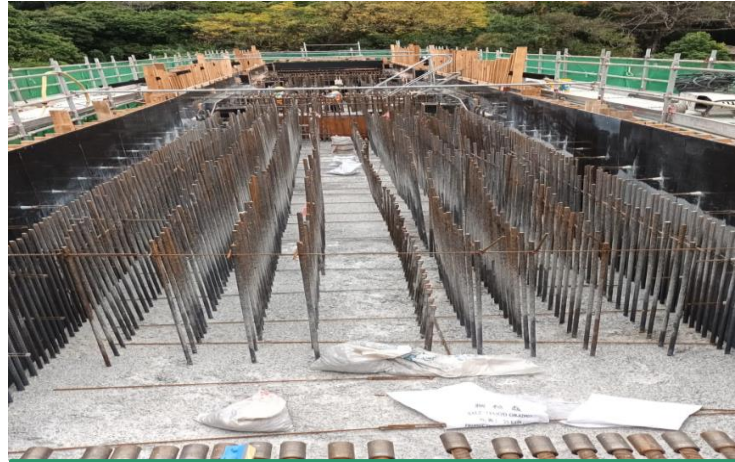
C3-04 Portal Beam 1st pour concreting completed on 12/01/23



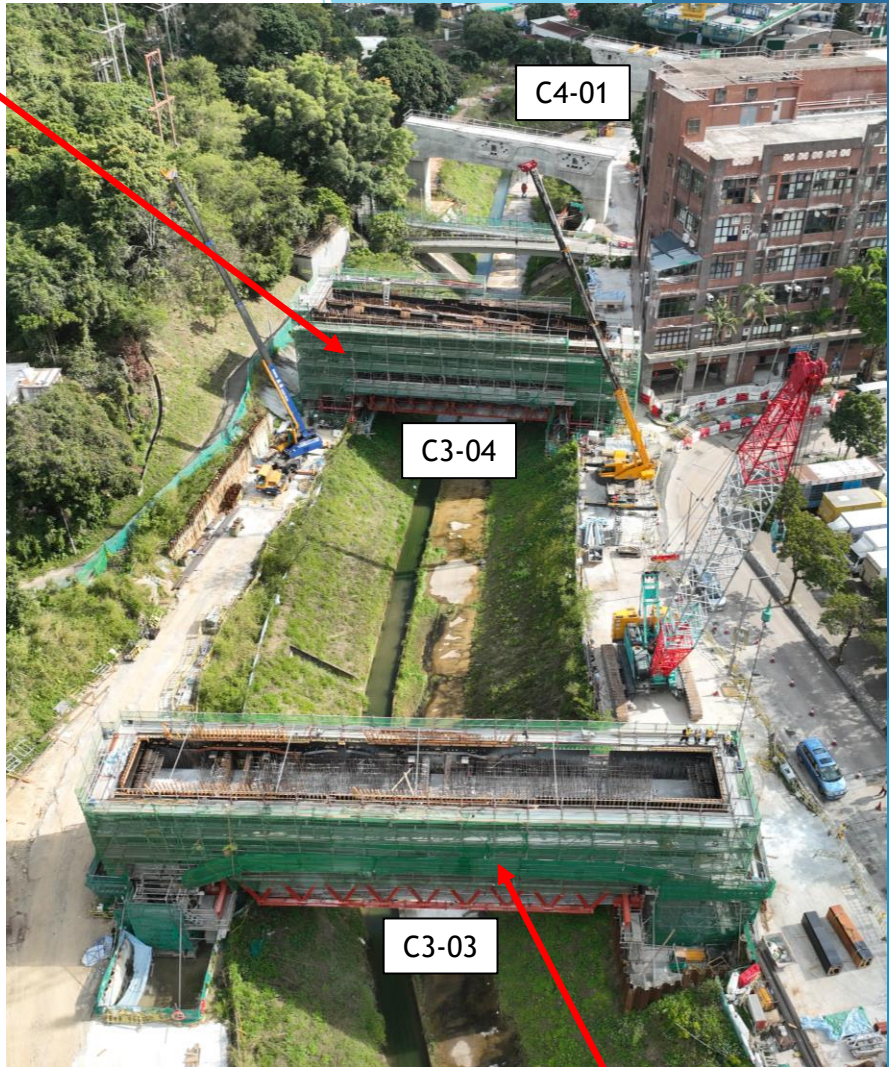
C3-03 Portal Beam 1st pour concreting completed on 19/01/23



C3-04 Portal Beam 2nd pour rebar fixing in progress



C3-03 Portal Beam rebar fixing for 2nd pour in progress



Portion 6 (Village side)
C3-03 Portal Beam Construction in Progress
- Portal beam - ES:03/10/22 EF:13/02/23
LS:12/12/22 LF:27/04/23
- Target 2nd pour concreting by 28/02/23
- On track against R14A

► North Team
Area Highlighted
- HD - C4-02

Portion 6
C4-02

- C4-02 cross head - hand over to bridge team on 01/02/23
- ES:29/11/22 EF:28/12/22
LS:13/12/22 LF:12/01/23
- On track against R14A



C4-02 Dismantling of temporary falsework completed on 13/01/23

▶ North Team
Area Highlighted - E2-01 & D2-01



E2-01 formwork erection for upper turntable in progress.

Portion 8 (MTR trackside)

E2-01

- Formwork Erection for upper turntable in progress
- E2-01 Pile Cap Construction
 - ES: 07/10/22 EF: 05/01/23
 - LS: 07/10/22 LF: 05/01/23
- Slippage against R14A

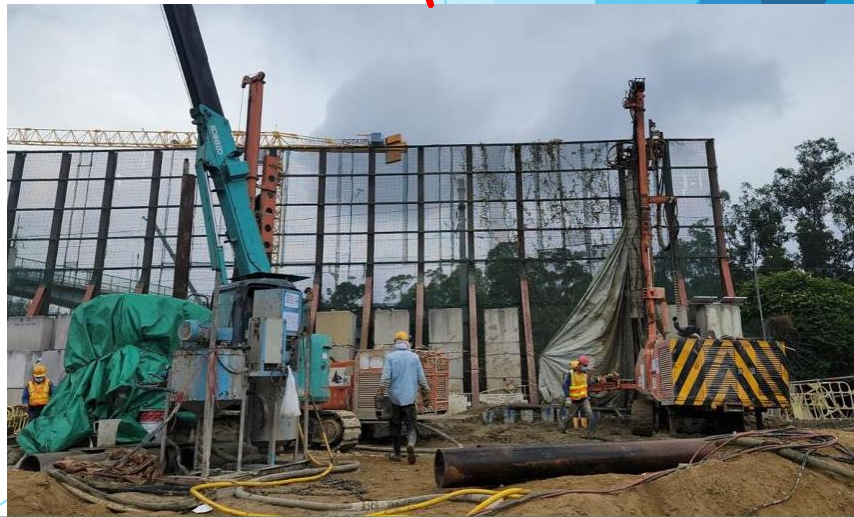
D2-01

- Pre-grouting works (within MTRC 6m Zone) completed on 10/01/23.
- Pipe piling in progress.
- D2-01 ELS + Grouting + Excavation
 - ES:11/11/22 EF:16/02/23
 - LS:15/11/22 LF:20/02/23
- Slippage against R14A



E2-01

D2-01



D2-01 pre-grouting works (within MTRC 6m Zone) completed. Pipe piling in progress.

▶ Viaduct

Launching Girder (Bridge C4)

- Launching LG forward to erect C4-02 T-Span segments in progress



► Viaduct

Segments Erection by Crane (Bridge E1 and D1)

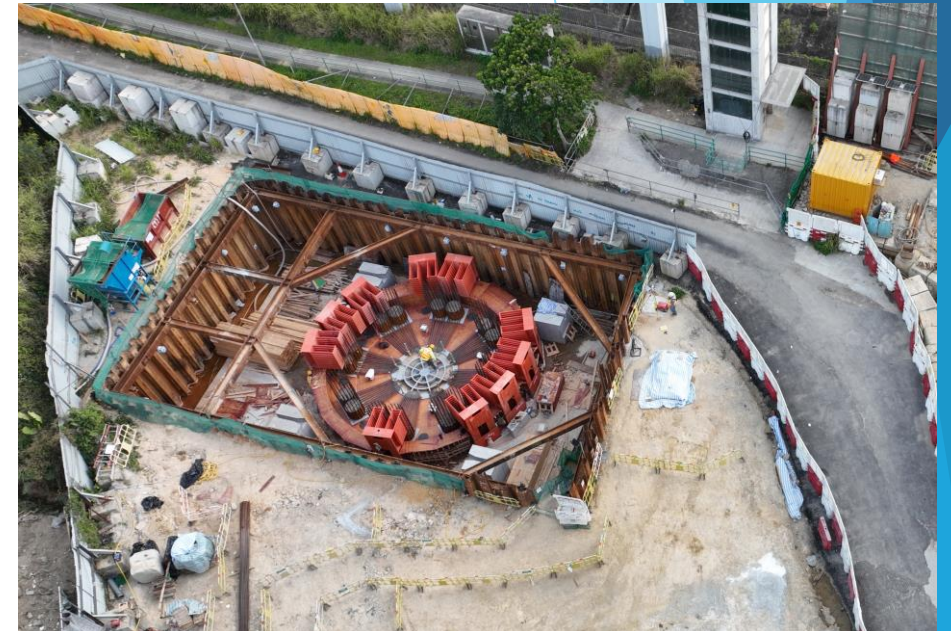
- 2nd cast of the diaphragm at SOP E1-03 completed on 18 January.
- 2nd cast of the diaphragm at SOP E1-02 completed on 9 February.
- Completed erecting access towers for SOP E1-01 and D1-01.
- Temporary jack and sliding boxes installation completed for SOP E1-01 and D1-01.



▶ Viaduct

Bridge Rotation

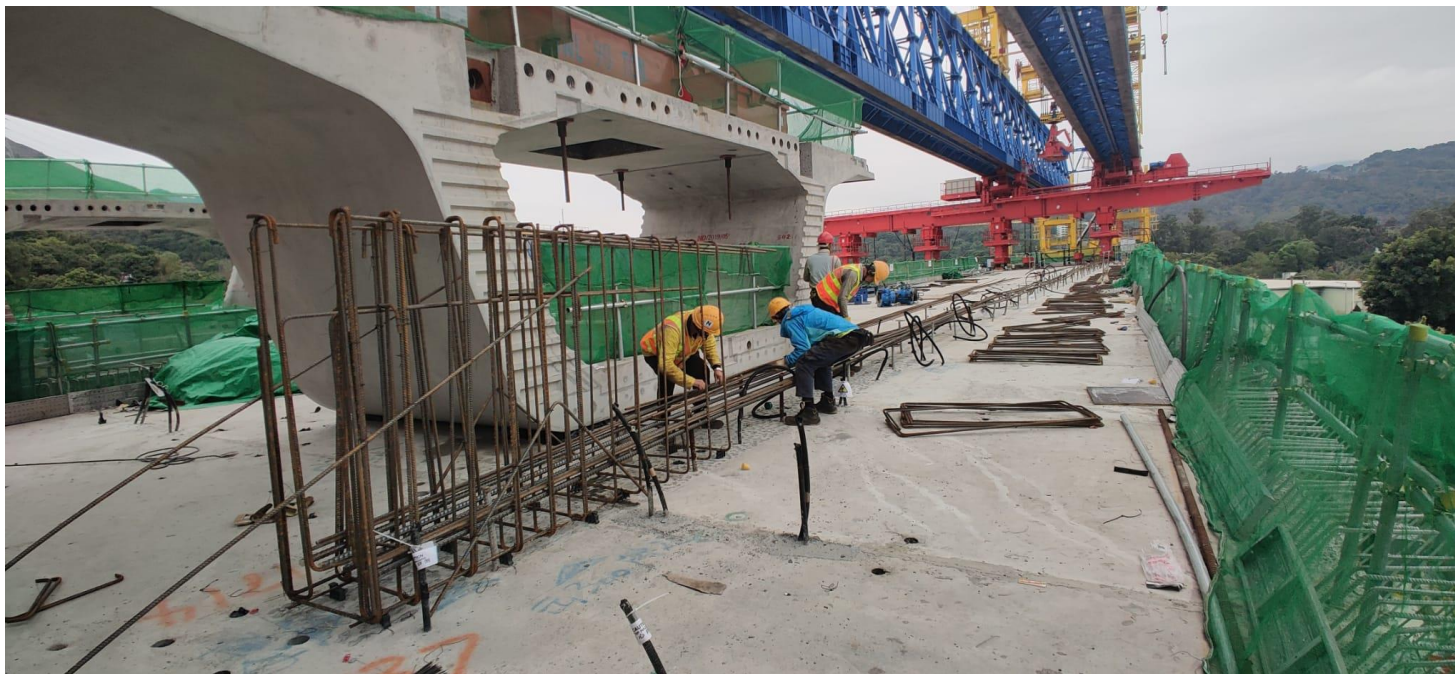
- Completed grouting shear steel support.
- Completed concreting the primary reaction blocks in 6 January.
- Formwork erection and trial rebar fixing for upper turntable in progress.



▶ Viaduct

Others

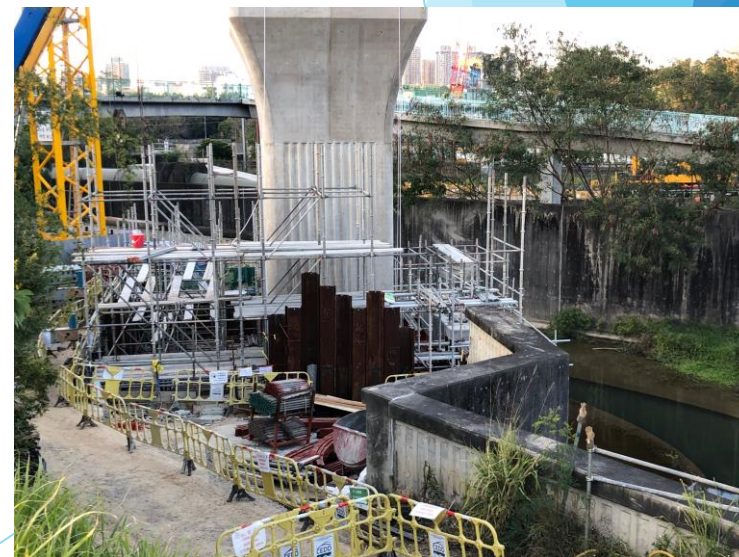
- Erection of Tower Crane at D2-02 was completed.
- Preparation works for gantry crane assembly on segment deck at Bridge C4 was in progress.



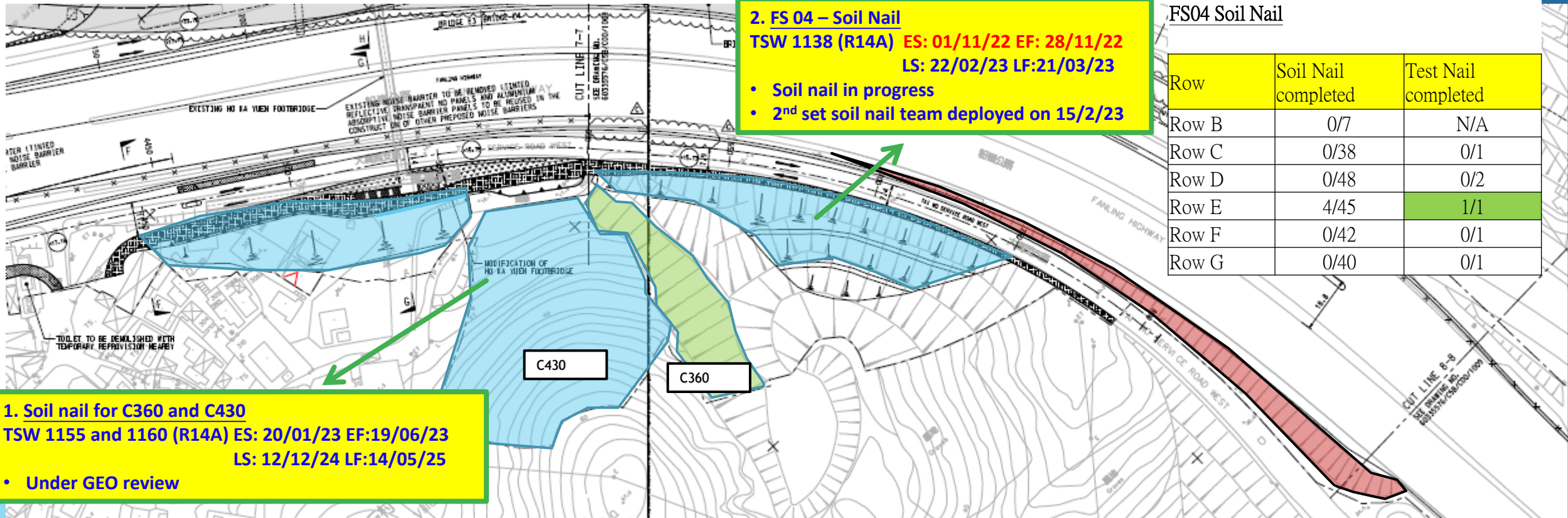
► Viaduct

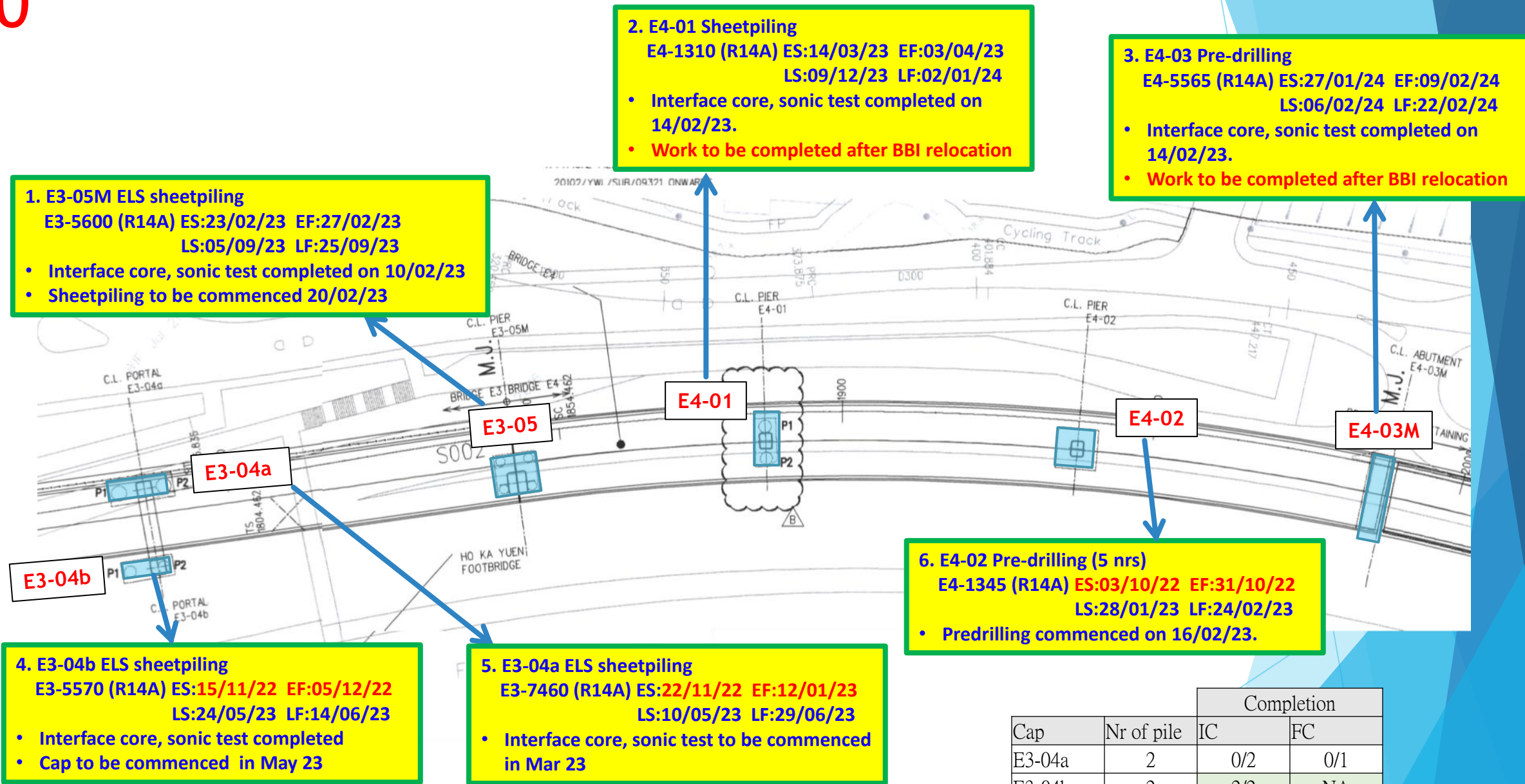
Segment On Pier (SOP)

- Completed pouring for E3-01-E3-02-S01 and E3-01-E2-03-S01 on 10 January 2023.
- Horizontal TPT and false cantilever tendons threading for first pair segments at E3-01 commenced.
- Falsework erection for D2-02 SOP in progress.
- Preparation works for falsework erection for E3-02 SOP in progress.



▶ South Team





| | | Completion | |
|--------|------------|------------|-----|
| Cap | Nr of pile | IC | FC |
| E3-04a | 2 | 0/2 | 0/1 |
| E3-04b | 2 | 2/2 | NA |
| E3-05M | 4 | 4/4 | 1/1 |
| E4-01 | 2 | 2/2 | 1/1 |

► South Team

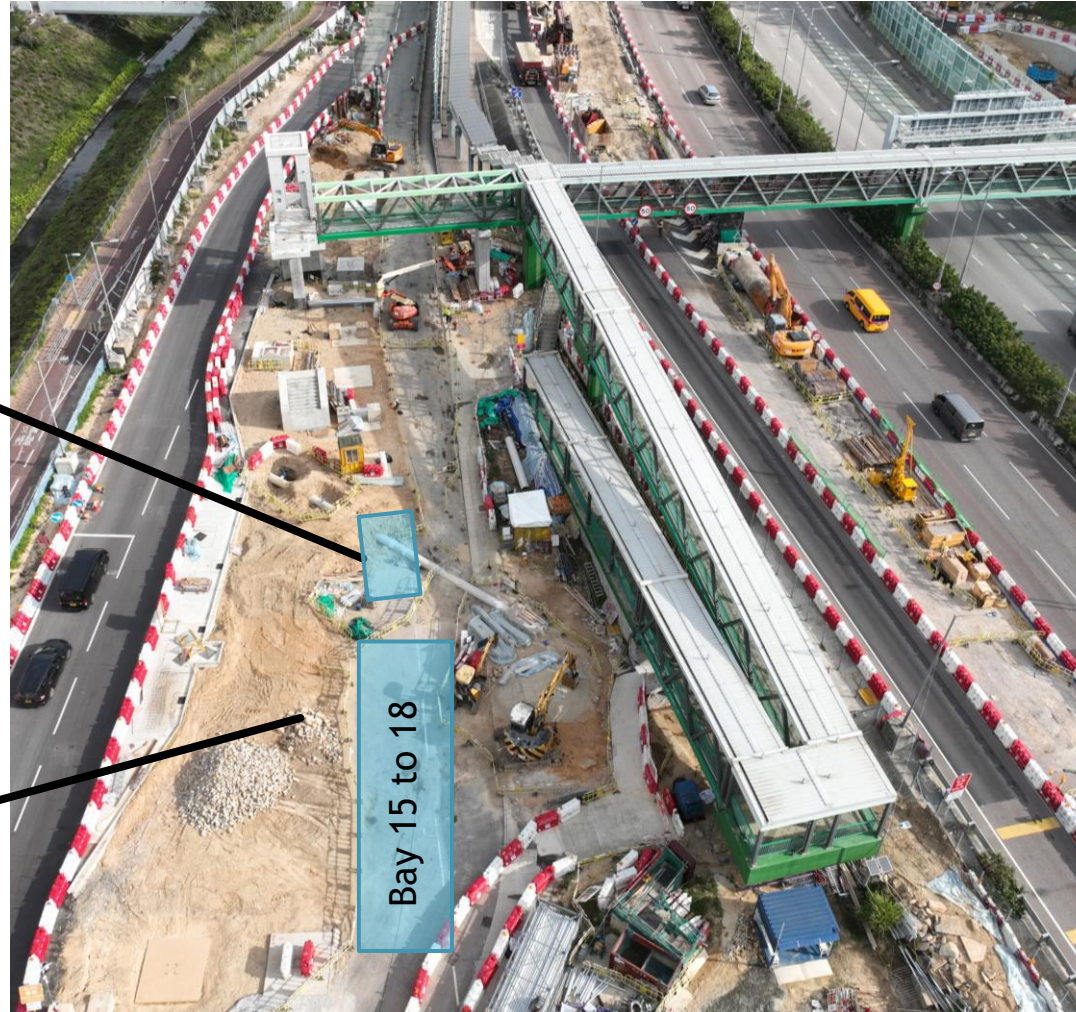
1. HKY FB East Steel Deck - Erection
FBE-1350 (R14A) ES:29/11/22 EF:12/12/22
LS:04/01/23 LF:17/01/23
• Staircase to be erect on 15/ Feb 23

3. TWSRE – BBI Road work
BBI-1330 (R14A) ES:07/02/23 EF:03/04/23
LS:11/03/23 LF:11/05/23



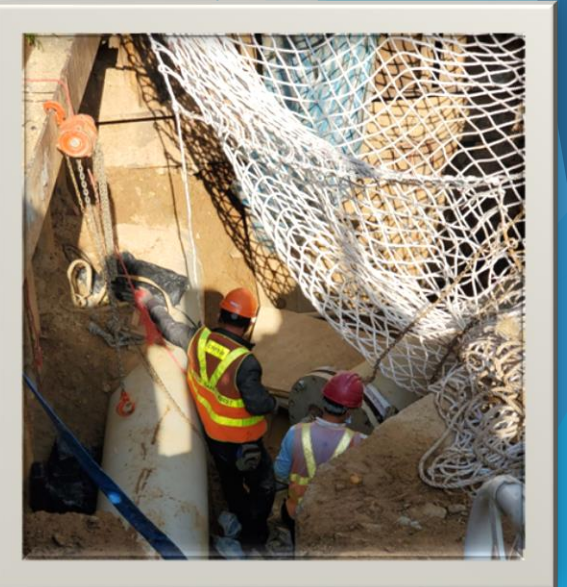
Bay 13 & 14

2. TWSRE – BBI Cover walkway Footing
BBI-1215 (R14A) ES:13/12/22 EF:19/01/23
LS:18/01/23 LF:24/02/23
• Footing bay 4~12 and bay 19 ~ 20 completed
(11/20 completed)
• Bay 13 & 14 in progress
• Bay 15 & 16 to be commenced after Dn450/
600 drainage completed



Bay 15 to 18

4. TWSRE – Dn600 Watermain within BBI area
PMI 027- 200 (R14A) ES:18/10/22 EF:28/11/22
LS:19/05/23 LF:03/07/23
• Pressures Test on 9/ Feb/ 23
• Target connection by 14/Feb/23





Area A: Joint Bay by CLP



1. TWSRW CLP132kV Cable diversion

TSW 8835 (R14A) ES:25/02/23 EF:31/03/23

LS:20/04/23 LF:25/05/23

All ducts laying must be completed on or before 20/02/23 in order to facilitate outage in 2023

Outage shall be completed by 15/04/23

Schedule for 132kV switchover at TWSRW

Key dates

1/2/23 – TTA by JV and Excavation of joint bay by CLP (at A and G)

21/2/23 – Cabling work

10/3/23 – 1st outage

27/3/23 – 2nd outage (complete works by 15/4)

E: Trench HKY Entrance

G: Joint Bay at Kui Tau Rd

D: Joint Bay for cabling

F: Trench at access next to FW 6

B: Trench at RW52 Bay 4b

C: Trench at RW52 Bay 7b

A: Joint Bay at Wo Hing Rd

| Location | Description/ Status | Completion Date | Action by |
|----------------------------------|--|-----------------|-----------|
| A: | JV to obtain RA for TTA | 30/1 | Done |
| Joint bay at Wo Hing Rd footpath | TTA to be implemented by 30/1 | | |
| B: | Excavation and set up joint bay | 1/2 – 20/2 | CLP |
| FW 52 bay 4b | Complete footing | 6/1 | |
| C: | CLP duct laying | 7/1 – 9/1 | |
| FW52 bay 7b | Complete footing | 13/1 | |
| D: | CLP duct laying | 16/1 – 19/1 | |
| Joint bay for cabling | Expose joint bay | 10/1 – 14/1 | |
| E: | Lower down existing footpath and preparation | 4/1 – 11/1 | Done |
| Trench at HKY entrance | Access diversion | 12/1 | |
| F: | Trench excavation | 13 – 14/1 | |
| Trench near FW06 | CLP duct laying | 16/1 – 20/1 | |
| G: | Cross road drainage and trench excavation | 4/1 – 9/1 | |
| Joint bay at Kui Tau Rd | CLP duct laying | 10/1 – 13/1 | |
| | RA for TTA165 is ready | 30/1 | |
| | TTA to be implemented by 30/1 | | |
| | Excavation and set up joint bay | 1/2 – 20/2 | CLP |
| | Cabling works (2 circuits, total 6 drums) | 21/2 – 10/3 | |
| | Cable jointing (1 st circuit) | 10/3 – 24/3 | |
| | T&C | 24/3 – 26/3 | CLP |
| | Cable jointing (2 nd circuit) | 27/3 – 10/4 | |
| | T&C | 12/4 – 15/4 | |

Drawpit Dp 0-9 done by JV



Area G:Joint Bay by CLP



11 South Team

1. E2-03 Pier: (Twin pier, 5 pours)

E2-6030 (R14A) ES: 27/10/22 EF: 01/02/23

LS: 22/12/22 LF: 29/03/23

- 2/5 pour completed
- Backfilling completed 4/02/23
- Rebar fixing for 3rd and 4th pour in progress

3. NB109 Bay 5-10: Sheet pile

FHY-1512 (R14A) ES: 15/05/23 EF: 12/06/23

LS: 09/06/23 LF: 08/07/23

- Excavation bay 5 and 6 in progress
- Demolish existing abandoned drain pipe

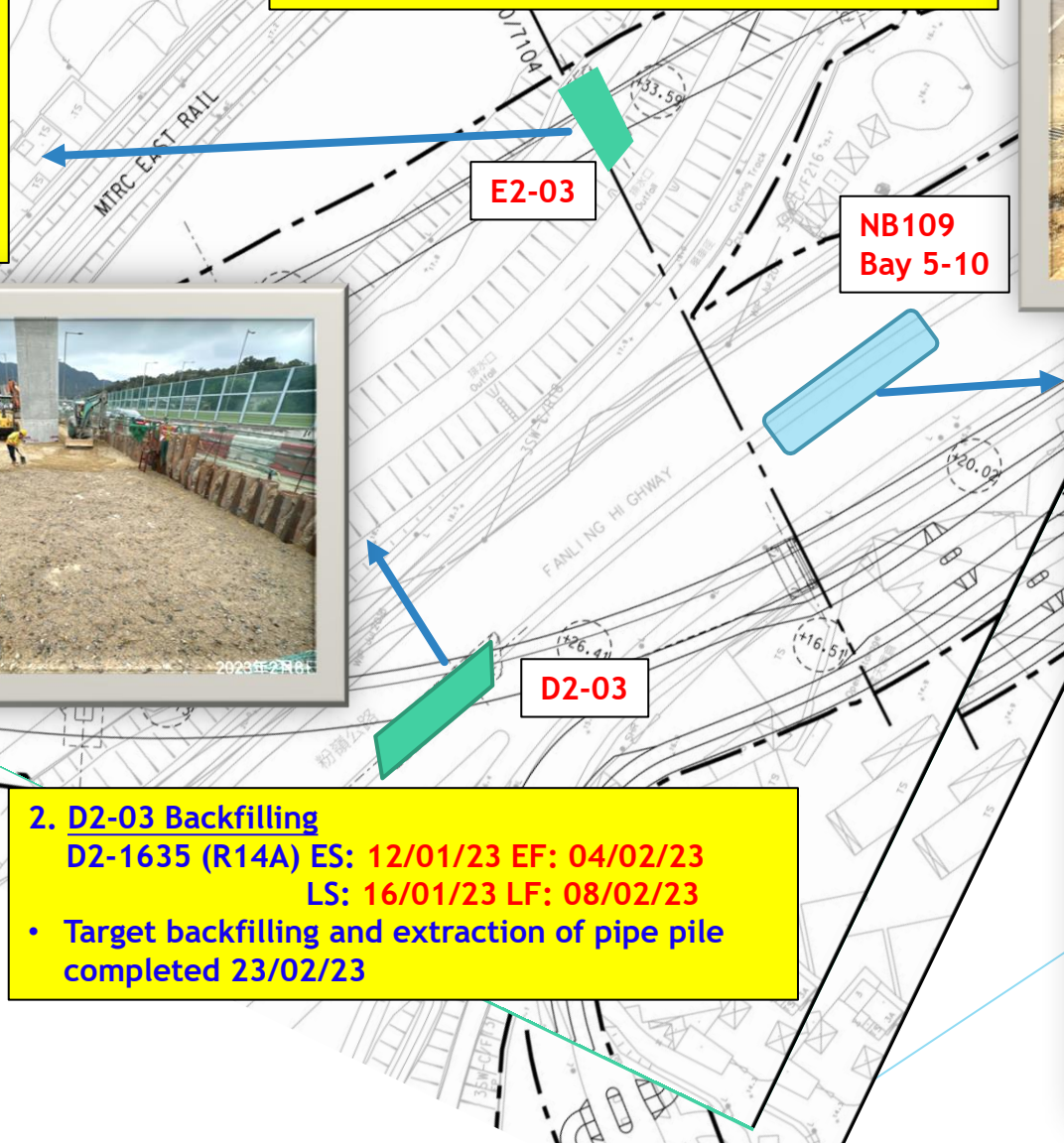


2. D2-03 Backfilling

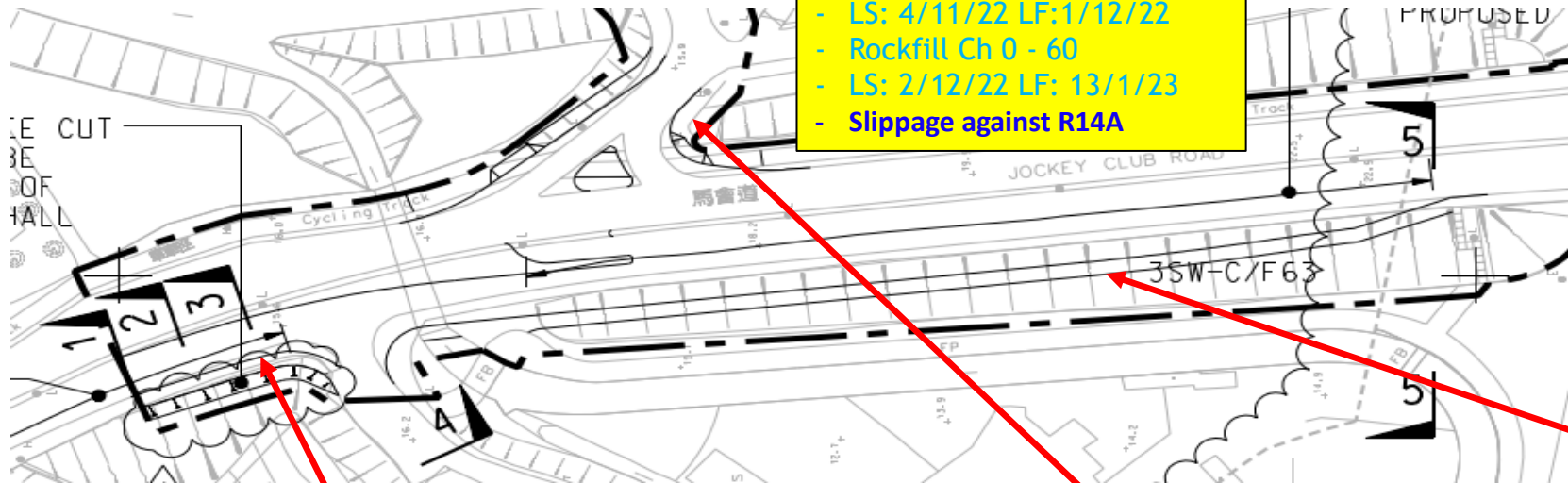
D2-1635 (R14A) ES: 12/01/23 EF: 04/02/23

LS: 16/01/23 LF: 08/02/23

- Target backfilling and extraction of pipe pile completed 23/02/23



12 North Team



- Jockey Club Road 3SW-C/F63
- Rockfill Slope construction in progress
- Rockfill Ch 60 - 110
- LS: 4/11/22 LF: 1/12/22
- Rockfill Ch 0 - 60
- LS: 2/12/22 LF: 13/1/23
- Slippage against R14A



Trench excavation for watermain diversion (near FS05)



Footpath Construction in progress at Tong Hang



Rockfill Slope at Ch. 0 - 110 in progress

Construction Programme of ND/2019/07

Contract No. ND/2019/07 Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

| Activity ID | Activity Name | Original Duration | Start | Finish | Total Float | Feb | Mar | 2023 | Apr | May | Jun |
|---|---|-------------------|-------------|------------|-------------|-----|---|--|---|---|--|
| Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works | | | | | | | | | | | |
| Key Dates and Sectional Completion of the Works | | | | | | | | | | | |
| Contractual Key Dates | | 0 | 08-Feb-23 | 08-Feb-23 | -28 | | | | | | |
| KDS1000 | KD1 - Completion of all works within Portion V of the Site necessary for the opening of partial Road L1 | 0 | | 08-Feb-23* | -28 | | ◆ KD1 - Completion of all works within Portion V of the Site necessary for the opening of partial Road L1 | | | | |
| Contractual Sectional Completion of the Works | | 0 | 10-Mar-23 | 10-Mar-23 | 0 | | | | | | |
| KDS1040 | Section 4- Completion of site formation and infrastructure works in Works Area D | 0 | | 10-Mar-23* | 0 | | | ◆ Section 4- Completion of site formation and infrastructure works in Works Area D | | | |
| Preliminaries, Contractor's Design, Method Statement Submission and Approval | | | | | | | | | | | |
| General Submission | | 150 | 01-Jan-23 A | 30-May-23 | -224 | | | | | | |
| PGS1260 | TTA Scheme for UU along MSK Road | 150 | 01-Jan-23 A | 30-May-23 | -224 | | | | | | TTA Scheme for UU |
| Contractor's Design Submission and Approval | | 90 | 23-Nov-22 A | 13-May-23 | -36 | | | | | | |
| Permanent Works Design | | 90 | 23-Nov-22 A | 13-May-23 | -36 | | | | | | |
| PWD1030 | Design for irrigation system | 75 | 08-Feb-23 | 05-May-23 | -52 | | | | | | Design for irrigation system |
| PWD1035 | Time risk allowance for Design for irrigation system | 7 | 06-May-23 | 13-May-23 | -52 | | | | | | Time risk allowance for Design for irrigation system |
| PWD1040 | Design for noise barrier panel | 90 | 23-Nov-22 A | 07-Mar-23 | 15 | | | | | | |
| PWD1045 | Time risk allowance for Design for noise barrier panel | 7 | 08-Mar-23 | 15-Mar-23 | 15 | | | | | | |
| Major Construction Works Method Statement | | 24 | 19-Aug-22 A | 13-Feb-23 | -51 | | | | | | |
| MS1590 | Method statement for construction of NS560 sewerage by trenchless method | 24 | 19-Aug-22 A | 13-Feb-23 | -51 | | Method statement for construction of NS560 sewerage by trenchless method | | | | |
| Tendering and Procurement for Major Subcontractor | | | | | | | | | | | |
| TDS1170 | Place Order and Delivery of NB steel posts | 299 | 10-Aug-22 A | 04-Jun-23 | -63 | | | | | | Place C |
| TDS1180 | Place Order and Delivery of NB steel panel | 364 | 09-Nov-22 A | 07-Nov-23 | -142 | | | | | | |
| Tree Works and Submission of the tree survey report and tree preservation and removal | | | | | | | | | | | |
| Tree Works on Ma Sik Road | | 80 | 28-Mar-22 A | 03-Mar-23 | -136 | | | | | | |
| TWS1210 | TPRP and Tree transplanting works at the side of road (9nos) (before noise barrier construction) | 80 | 28-Mar-22 A | 03-Mar-23 | -136 | | TPRP and Tree transplanting works at the side of road (9nos) (before noise barrier construction) | | | | |
| Section 1- Site Formation and Infrastructure Works in Area A | | | | | | | | | | | |
| Site Formation (Portion II- Area A 21900m2) | | 411 | 03-Jan-22 A | 27-May-23 | -241 | | | | | | |
| Site Formation Works in South Part of Portion II | | 411 | 03-Jan-22 A | 27-May-23 | -241 | | | | | | |
| S1-SF1415 | Site formation works part 2 (12577m3) and Removal of temporary works, haul road and temporary accesses | 75 | 03-Jan-22 A | 18-Feb-23 | -241 | | Site formation works part 2 (12577m3) and Removal of temporary works, haul road and temporary accesses | | | | |
| S1-SF1417 | Site formation works part 3 (12577m3) and Removal of temporary works, haul road and temporary accesses | 78 | 20-Feb-23 | 27-May-23 | -241 | | | | | | Site formation works part 3 (12577m3) and Removal of temporary works, haul road and temporary accesses |
| Site Formation (Portion III- Area A 4900m2) | | 15 | 04-Apr-23 | 25-Apr-23 | 328 | | | | | | |
| S1-SF1546 | Removal of existing feature 3SW-A/F85 | 15 | 04-Apr-23 | 25-Apr-23 | 328 | | | | Removal of existing feature 3SW-A/F85 | | |
| Site Formation (Portion IV- Area A 3800m2) | | 31 | 23-Dec-21 A | 18-Feb-23 | -111 | | | | | | |
| S1-SF1780 | Site clearance | 20 | 30-Dec-21 A | 18-Feb-23 | -232 | | Site clearance | | | | |
| S1-SF1800 | Construction of haul road | 21 | 23-Dec-21 A | 18-Feb-23 | -111 | | Construction of haul road | | | | |
| Box Culvert BC3 and Outfall 10 | | 349 | 28-Dec-22 A | 16-Dec-23 | -199 | | | | | | |
| Box Culvert BC3 (CH168 to CH216) | | 80 | 28-Dec-22 A | 19-Apr-23 | -77 | | | | | | |
| S1-BC0875 | Erection of traveller formwork at Bay 18 | 30 | 28-Dec-22 A | 14-Feb-23 | -166 | | Erection of traveller formwork at Bay 18 | | | | |
| S1-BC0880 | Construction of the box culvert side wall and top slab Bay 18 | 20 | 15-Feb-23 | 09-Mar-23 | -166 | | Construction of the box culvert side wall and top slab Bay 18 | | | | |
| S1-BC0890 | Backfilling from Bay 17 to Bay 18 (2310m3) | 31 | 10-Mar-23 | 19-Apr-23 | -77 | | | | Backfilling from Bay 17 to Bay 18 (2310m3) | | |
| Box Culvert BC3 (CH216 to CH264) | | 86 | 08-Feb-23 | 24-May-23 | -106 | | | | | | |
| S1-BC1080 | Construction of the box culvert side wall and top slab Bay 19 | 30 | 10-Mar-23 | 18-Apr-23 | -166 | | | | Construction of the box culvert side wall and top slab Bay 19 | | |
| S1-BC1090 | Construction of the box culvert side wall and top slab Bay 20 | 30 | 19-Apr-23 | 24-May-23 | -166 | | | | | | Construction of the box culvert side wall and top slab Bay 20 |
| S1-BC1105 | Excavation and construction of the box culvert base slab Bay 22 | 10 | 08-Feb-23 | 18-Feb-23 | -30 | | Excavation and construction of the box culvert base slab Bay 22 | | | | |
| Box Culvert BC3 (CH264 to CH282.799) and Outfall 10 | | 19 | 13-Jan-23 A | 16-Dec-23 | -35 | | | | | | |
| S1-BC1125 | Construction of haul road and preparation works for Bay 23, Bay 24 and outfall 10 | 19 | 13-Jan-23 A | 16-Dec-23 | -35 | | | | | | |
| Drainage, Sewerage, Waterworks and Road Works | | | | | | | | | | | |
| Along Proposed Cycletrack and Footpath | | 300 | 04-Jan-23 A | 22-Dec-23 | -9 | | | | | | |
| Works in Portion I | | 164 | 04-Jan-23 A | 31-Jul-23 | 112 | | | | | | |
| Works in Portion I CT73 (Ch400 to Ch649) | | 108 | 04-Jan-23 A | 23-May-23 | 55 | | | | | | |
| S1-CS1472 | Irrigation system (CT73 Ch400 to Ch649 total 249m) | 85 | 08-Feb-23 | 23-May-23 | -278 | | | | | | Irrigation system (CT73 Ch400 to Ch649 total 249m) |
| S1-CS1473 | Fresh water main works (CT73 Ch400 to Ch649 total 249m) | 85 | 04-Jan-23 A | 21-Mar-23 | -229 | | Fresh water main works (CT73 Ch400 to Ch649 total 249m) | | | | |
| S1-CS1474 | Flushing water main works (CT73 Ch400 to Ch649 total 249m) | 85 | 04-Jan-23 A | 24-Apr-23 | -254 | | | | Flushing water main works (CT73 Ch400 to Ch649 total 249m) | | |
| S1-CS1475 | U-Channel along the Cycletrack(CT73 Ch400 to Ch649 total 249m) | 85 | 08-Feb-23 | 23-May-23 | 55 | | | | | | U-Channel along the Cycletrack(CT73 Ch400 to Ch649 total 249m) |
| Works in Portion I CT74 | | 80 | 25-Apr-23 | 31-Jul-23 | 112 | | | | | | |
| S1-CS1495 | Flushing water main works (CT74 Ch100 to Ch281 total 181m) | 80 | 25-Apr-23 | 31-Jul-23 | 112 | | | | | | |
| Works in Portion II CT71 (Ch100 to Ch369.376) | | 85 | 09-Jan-23 A | 20-Oct-23 | 27 | | | | | | |
| S1-CS1520 | Drainage work (MNH_FL5.29 to MNH_FL5.26 229m) After box culvert back filling Bay1 to Bay22 | 85 | 09-Jan-23 A | 20-Oct-23 | 27 | | | | | | |
| Works in Portion III CT76 (Ch100 to Ch298.277) | | 262 | 08-Feb-23 | 22-Dec-23 | -45 | | | | | | |
| S1-CS1790 | CE149 - Sewerage DN600 - Construction of working pit at FMH_FL1.19 (Receiving Pit) | 30 | 08-Feb-23 | 14-Mar-23 | -40 | | CE149 - Sewerage DN600 - Construction of working pit at FMH_FL1.19 (Receiving Pit) | | | | |
| S1-CS1800 | CE149 - Sewerage DN600 - Construction of working pit at FMH_FL1.19A (Jacking Pit) | 32 | 15-Mar-23 | 25-Apr-23 | -40 | | | | CE149 - Sewerage DN600 - Construction of working pit at FMH_FL1.19A (Jacking Pit) | | |
| S1-CS1810 | CE149 - Sewerage DN600 - Setting up for trenchless works, construction of sewerage, dismantle TBM, constr | 195 | 03-May-23 | 22-Dec-23 | -45 | | | | | | |
| Section 4- Site Formation and Infrastructure Works in Area D | | | | | | | | | | | |
| S4-SF1050 | Site clearance | 40 | 11-Feb-22 A | 16-May-23 | -232 | | | | | Site clearance | |
| S4-SF1120 | Site formation works (10276m3) | 80 | 04-Feb-22 A | 08-Aug-23 | -241 | | | | | | |
| Section 5- Site Formation and Infrastructure Works in Area E and Remainder of the Works | | | | | | | | | | | |
| Road L1 | | 239 | 09-Mar-22 A | 21-Jul-23 | -111 | | | | | | |
| Road L1 in Portion I (P700 CH175 to CH245) | | 75 | 22-Mar-23 | 24-Jun-23 | -254 | | | | | | |
| S5-RD1060 | Fresh water main works (168m) | 50 | 22-Mar-23 | 24-May-23 | -229 | | | | | | Fresh water main works (168m) |
| S5-RD1070 | Flushing water main works (168m) | 50 | 25-Apr-23 | 24-Jun-23 | -254 | | | | | | |
| Road L1 in Portion V (P600 CH100 to CH194) | | 176 | 11-Oct-22 A | 21-Jul-23 | -111 | | | | | | |
| S5-RD1345 | Construction of drainage works (8nos Manholes 235m) | 80 | 30-Nov-22 A | 14-Apr-23 | -332 | | | | Construction of drainage works (8nos Manholes 235m) | | |
| S5-RD1350 | Construction of sewerage works (4nos Manholes) | 46 | 11-Oct-22 A | 14-Mar-23 | -332 | | Construction of sewerage works (4nos Manholes) | | | | |
| S5-RD1360 | Construction of irrigation system (184m) | 80 | 15-Apr-23 | 21-Jul-23 | -332 | | | | | | |
| S5-RD1370 | Fresh water main works (184m) | 80 | 15-Apr-23 | 21-Jul-23 | -332 | | | | | | |
| S5-RD1375 | Flushing water main works (184m) | 80 | 15-Apr-23 | 21-Jul-23 | -297 | | | | | | |
| S5-RD1585 | CE149 - Sewerage DN600 - Setup for trenchless construction at FMH_FL1.16 (from FL1.16 to FL1.19) | 30 | 14-Feb-23 | 20-Mar-23 | -45 | | CE149 - Sewerage DN600 - Setup for trenchless construction at FMH_FL1.16 (from FL1.16 to FL1.19) | | | | |
| S5-RD1590 | CE149 - Sewerage DN600 - Construction of Sewerage (from FL1.16 to FL1.19) | 32 | 21-Mar-23 | 02-May-23 | -45 | | | | | CE149 - Sewerage DN600 - Construction of Sewerage (from FL1.16 to FL1.19) | |

Contract No. ND/2019/07 Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

| Activity ID | Activity Name | Original Duration | Start | Finish | Total Float | 2023 | | | | |
|--|---|-------------------|-------------|-----------|-------------|------|-----|-----|-----|-----|
| | | | | | | Feb | Mar | Apr | May | Jun |
| Road L1 in Portion IV (P600 CH194 to CH393, P700 CH100 to CH175) | | | | | | | | | | |
| S5-RD1180 | Construction of drainage (17nos Manholes 630m) | 85 | 09-Mar-22 A | 23-May-23 | -85 | | | | | |
| S5-RD1182 | Construction of sewerage (16nos Manholes) | 85 | 04-Apr-22 A | 24-Apr-23 | -85 | | | | | |
| Road L2 | | | | | | | | | | |
| S5-RD1500 | Construction of drainage works (13nos manholes 320m) | 80 | 13-Dec-22 A | 29-Jun-23 | -85 | | | | | |
| S5-RD1502 | Construction of sewerage works (3nos manholes) | 50 | 29-Nov-22 A | 15-Jun-23 | -74 | | | | | |
| Noise Barrier NB62 | | | | | | | | | | |
| S5-NB1060 | Excavation and construction of base slabs and wall stems (Bay 1 - Bay 6) | 70 | 14-Nov-22 A | 04-May-23 | -136 | | | | | |
| Noise Barrier NB63 | | | | | | | | | | |
| Noise Barrier NB63 (Bay 18 to Bay 21) | | | | | | | | | | |
| S1-NB1265-2 | Installation of Mini Piles (Bay 18 - Bay 21 18 nos) - grouting vertical piles + raking piles | 36 | 11-Nov-22 A | 25-Feb-23 | -182 | | | | | |
| S1-NB1275 | Excavation and construction of base slab (Bay 18 - Bay 21) | 42 | 05-May-23 | 24-Jun-23 | -19 | | | | | |
| Noise Barrier NB63 (Bay 13 to Bay 17) | | | | | | | | | | |
| S1-NB1180-2 | Installation of Mini Piles (Bay 13 - Bay 17 12nos) - grouting + remaining piles | 48 | 13-Dec-22 A | 14-Mar-23 | -182 | | | | | |
| S1-NB1200 | Installation of sheet piles (Bay 13 - Bay 17) | 50 | 15-Mar-23 | 17-May-23 | -124 | | | | | |
| Noise Barrier NB63 (Bay 7 to Bay 12) | | | | | | | | | | |
| S1-NB1190 | Installation of Mini Piles (Bay 7 - Bay 12 16nos) (CSD) (Original: 30nos H-pile, 45days) | 64 | 04-Feb-23 A | 27-May-23 | -182 | | | | | |
| Noise Barrier NB63 (Bay 1 to Bay 6) | | | | | | | | | | |
| S1-NB1015 | Implement TTA @ Luen Chit St. and Ma Sik Rd Junction | 10 | 29-Dec-22 A | 13-Feb-23 | -158 | | | | | |
| S1-NB1020 | UU detection and trial pit | 14 | 14-Feb-23 | 01-Mar-23 | -158 | | | | | |
| S1-NB1040 | Pre-drilling works (12nos) (after TTA, diversion of existing footpath and tree felling & transplanting) | 60 | 18-Jan-23 A | 27-Apr-23 | -158 | | | | | |
| Section 6- Completion of Preservation And Protection Of Existing Trees | | | | | | | | | | |
| S6-CS1000 | Preservation and protection of trees | 1146 | 31-Aug-20 A | 09-Nov-24 | -87 | | | | | |






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中國路橋工程有限責任公司

CHINA ROAD AND BRIDGE CORPORATION

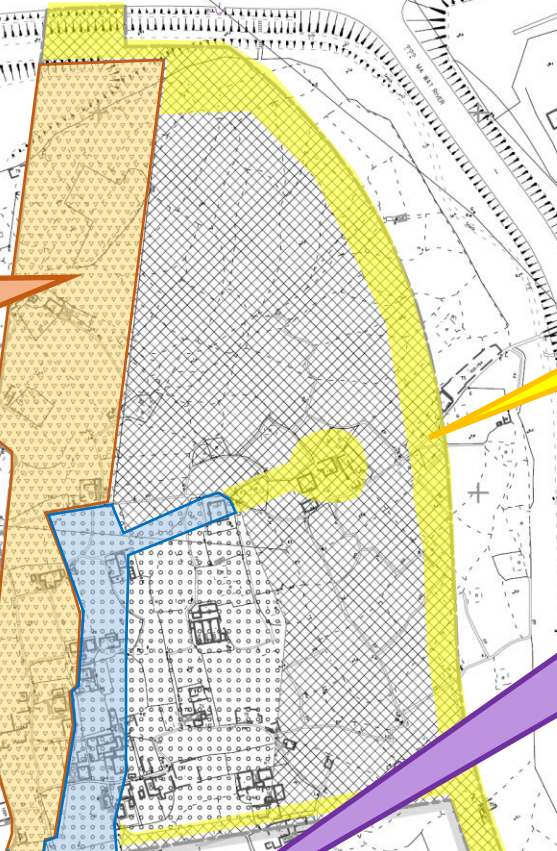
Three Month Rolling Programme (Data Date : 08-Feb-23)

Page : 2 of 2

| Portion | Legend |
|---------|---|
| I |  |
| II |  |
| III |  |
| IV |  |
| V |  |

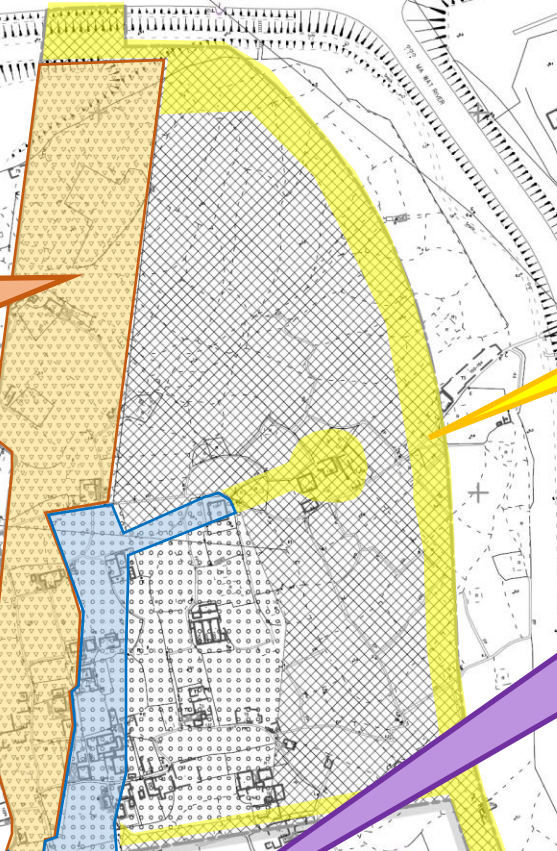
PORTION II

- C&D waste disposal
- Construction of box culvert
- Filling works



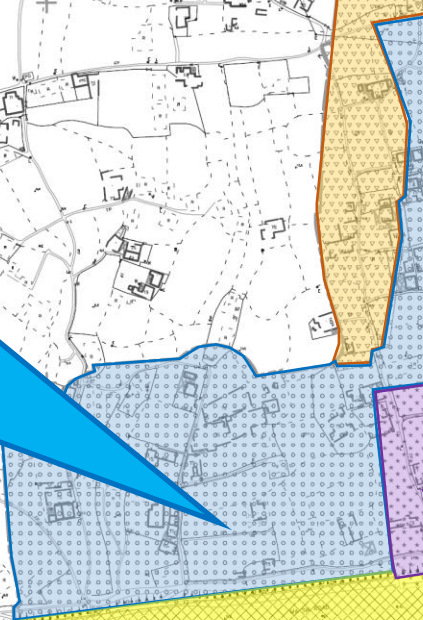
PORTION I

- C&D waste disposal
- Drainage works
- Sewerage works
- Road works
- Waterworks



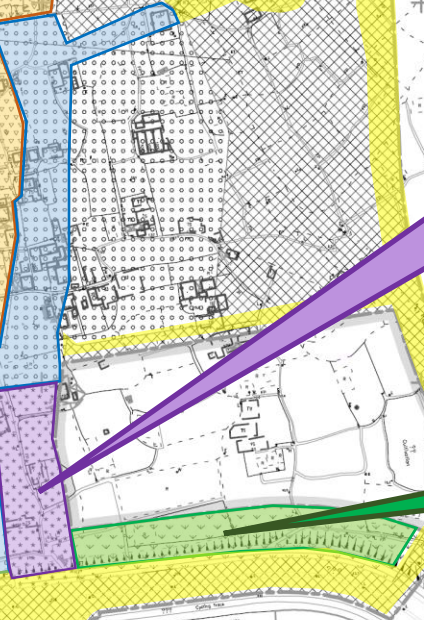
PORTION IV

- Site Clearance
- Drainage works
- Sewerage works
- C&D waste disposal
- Filling works
- Mini piling works
- Construction of site haul road
- Construction of noise barrier
- Road works
- Waterworks




PORTION V

- C&D waste disposal
- Construction of noise barrier
- Construction of site haul road
- Drainage works
- Sewerage works
- Road works



PORTION III

- Drainage works
- Sewerage works



ND/2019/07

– FANLING NORTH NEW DEVELOPMENT AREA, PHASE 1:
SITE FORMATION AND INFRASTRUCTURE WORKS

Working Activities (Feb 2023 – May 2023)

APPENDIX B
ACTION AND LIMIT LEVELS

Appendix B - Action and Limit Levels**Table B-1 Action and Limit Levels for 1-hour TSP**

| Monitoring station | Action Level (ug/m ³) | Limit Level (ug/m ³) |
|--------------------|-----------------------------------|----------------------------------|
| FLN-DMS1 | 303 | 500 |
| FLN-DMS3 | 301 | |
| FLN-DMS5 | 279 | |
| KTN-DMS4(B) | 297 | |

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

| Monitoring station | Action Level (ug/m ³) | Limit Level (ug/m ³) |
|--------------------|-----------------------------------|----------------------------------|
| FLN-DMS1 | 150 | 260 |
| FLN-DMS3 | 165 | |
| FLN-DMS5A | 153 | |
| KTN-DMS4(B) | 192 | |

Table B-3 Action and Limit Levels for Construction Noise

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

Noted:

If works are to be carried during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

(*) reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

Table B-4.1 Action and Limit Levels for Water Quality Monitoring⁽¹⁾

| Parameters | Action Level | Limit Level |
|--|---|--|
| DO in mg/L (depth average) ^{#+} | 5 percentile of baseline data. | 4 mg/L or 1 percentile of baseline data. |
| SS in mg/L (depth averaged) ^{*&} | 95 percentile of baseline data or 120% of upstream control station. | 20 mg/L or 99 percentile of baseline data or 130% of upstream control station. |
| Turbidity in NTU (depth averaged) ^{*^} | 95 percentile of baseline data or 120% of upstream control station. | 99 percentile of baseline data or 130% of upstream control station. |
| Unionized ammonia in mg/L (depth averaged) ^{*~} | 95 percentile of baseline data or 120% of upstream control | 0.021mg/L or 99 percentile of baseline data or 130% of |

| | station. | upstream control station. |
|---|---|---|
| Nitrate nitrogen in mg/L (depth averaged)*^ | 95 percentile of baseline data or 120% of upstream control station. | 99 percentile of baseline data or 130% of upstream control station. |
| Orthophosphate in mg/L (depth averaged)*^ | 95 percentile of baseline data or 120% of upstream control station. | 99 percentile of baseline data or 130% of upstream control station. |

Remarks:

AL of DO is 5 percentile of baseline data or level at control station at same tide of the same day (whichever lower) and LL of DO is 4.0 mg/L or level at control station at same tide of the same day (whichever lower);

+ 1 percentile of baseline data were adopted for LL for DO as those levels were greater than 4 mg/L;

* AL is 120% of control station's level at the same tide of the same day when depth average greater than 95 percentile of baseline data;

^ LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data.

~ LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data or 0.021mg/L.

& LL is 130% of control station's level at the same tide of the same day when depth average greater than 99 percentile of baseline data or 20mg/L.

Table B-4.2 Summary of Baseline Water Quality Monitoring Results (KTN NDA)⁽¹⁾

| Monitoring Parameter | | | | | |
|---------------------------|---------|--------|---------|---------------|---------------|
| Location Parameter | KTN-CS1 | | | | |
| | Max | Min | Average | 5 Percentile | 1 Percentile |
| DO in mg/L | 7.79 | 6.28 | 6.82 | 6.32 | 6.28 |
| | Max | Min | Average | 95 Percentile | 99 Percentile |
| Turbidity in NTU | 72.4 | 4.59 | 10.88 | 62.2 | 72.2 |
| Suspended Solid in mg/L | 74 | 2 | 9 | 60 | 73 |
| Unionized ammonia in mg/L | 0.0005 | 0.0001 | 0.0003 | 0.0004 | 0.0005 |
| Nitrate nitrogen in mg/L | 0.52 | 0.09 | 0.27 | 0.50 | 0.52 |
| Orthophosphate in mg/L | 0.19 | 0.01 | 0.10 | 0.17 | 0.19 |

| Monitoring Parameter | | | | | |
|---------------------------|---------|------|---------|--------------|--------------|
| Location Parameter | KTN-IS1 | | | | |
| | Max | Min | Average | 5 Percentile | 1 Percentile |
| DO in mg/L | 8.08 | 4.71 | 6.83 | 6.14 | 5.02 |

| | Max | Min | Average | 95 Percentile | 99 Percentile |
|---------------------------|--------|--------|---------|------------------|------------------|
| Turbidity in NTU | 44.56 | 4.57 | 8.63 | 38.98 | 44.56 |
| Suspended Solid in mg/L | 35 | 2 | 6 | 31 | 35 |
| Unionized ammonia in mg/L | 0.0006 | 0.0001 | 0.0004 | 0.0005 | 0.0006 |
| Nitrate nitrogen in mg/L | 0.57 | 0.09 | 0.29 | 0.54 | 0.57 |
| Orthophosphate in mg/L | 0.14 | 0.03 | 0.09 | 0.13 | 0.14 |

Note:

(1) The Action and Limit Levels for Water Quality Monitoring and the Summary of Baseline Water Quality Monitoring Results are according to pre-construction ET's Updated EM&A Manual and Baseline Water Quality Monitoring Report (KTN & FLN NDA).

Table B-4.3 Action and Limit Levels for Additional Water Quality Monitoring

| Parameters | Action Level | Limit Level |
|--|--|--|
| River Beas (SYR-IS1) | | |
| DO in mg/L (depth average) ^[1] | SYR-IS1: <u>6.1</u> ^[2] | SYR-IS1: <u>6.0</u> ^[2] |
| SS in mg/L (depth average) ^[1] | SYR-IS1: <u>75.6</u> or 120% of upstream control station, whichever is higher ^[3] | SYR-IS1: <u>83.1</u> or 130% of upstream control station, whichever is higher ^[3] |
| Turbidity in NTU (depth average) ^[1] | SYR-IS1: <u>48.2</u> or 120% of upstream control station, whichever is higher ^[3] | SYR-IS1: <u>50.9</u> or 130% of upstream control station, whichever is higher ^[3] |
| Arsenic in µg/L (depth average) ^[2] | SYR-IS1: <u>5.4</u> or 120% of upstream control station, whichever is higher ^[3] | SYR-IS1: 50 µg/L ^[4] |
| River Indus and near Siu Hang San Tsuen Stream (NTR-IS1, SHST-IS2, MWR-IS3) | | |
| DO in mg/L (depth average) ^[1] | NTR-IS1: <u>5.8</u> ^[2] SHST-IS2: <u>7.0</u> ^[2] MWR-IS3: <u>8.6</u> ^[2] | NTR-IS1: <u>5.7</u> ^[2] SHST-IS2: <u>6.8</u> ^[2] MWR-IS3: <u>8.5</u> ^[2] |
| SS in mg/L (depth average) ^[1] | NTR-IS1: <u>8.9</u> SHST-IS2: <u>4.0</u> MWR-IS3: <u>14.0</u> or 120% of upstream control station, whichever is higher ^[3] | NTR-IS1: <u>9.0</u> SHST-IS2: <u>4.0</u> MWR-IS3: <u>14.4</u> or 130% of upstream control station, whichever is higher ^[3] |
| Turbidity in NTU (depth average) ^[1] | NTR-IS1: <u>6.0</u> SHST-IS2: <u>4.4</u> MWR-IS3: <u>10.1</u> or 120% of upstream control station, whichever is higher ^[3] | NTR-IS1: <u>6.1</u> SHST-IS2: <u>4.7</u> MWR-IS3: <u>11.1</u> or 130% of upstream control station, whichever is higher ^[3] |

Remarks:

[1] "Depth-averaged" is calculated by taking the arithmetic mean of reading of all three depths.

[2] For DO, non-compliance occurs when monitoring results is lower than the limits.

[3] For turbidity, SS and arsenic, non-compliance occurs when monitoring results is larger than the limits.

[4] There is no local criterion for heavy metal. Limit Level of heavy metal is adopted from Category III Surface Water Quality Standards (GB3838-2002) (地表水環境質量標準), which applicable for Shenzhen River on mainland side.

Table B-5 Action and Limit Levels for Ambient Arsenic Monitoring

| Parameter | Action Level | Limit Level |
|-------------------------------|---|---|
| Ambient Arsenic Concentration | 9.36ng/m³ - 80% of 11.7ng/m ³ – the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented) | 11.7ng/m³ - the highest ambient arsenic concentration predicted during the construction phase with mitigation measures implemented |

Table B-6 Action level in the event of LFG being detected

| Parameter | Monitoring Results | Actions |
|-----------------|--------------------|--|
| O ₂ | <19% v/v | Increase underground ventilation to restore O ₂ to >19% v/v |
| | <18% v/v | Stop works, evacuate all personnel, prohibit entry, and increase ventilation to restore O ₂ level to >19% |
| CH ₄ | >10% LEL | Prohibit hot works, increase ventilation to restore CH ₄ to <10% LEL |
| | >20% LEL | Stop works, evacuate all personnel, increase ventilation further to restore CH ₄ to <10% LEL |
| CO ₂ | >0.5% v/v | Increase ventilation to restore C O ₂ to <0.5% v/v |
| | >1.5% v/v | Stop works, evacuate all personnel, increase ventilation further to restore CO ₂ to <0.5% |

Table B-7 Vibration Limit for Construction Vibration Monitoring

| Type of Building | Guide Values of Maximum PPV* (mm/Sec) | |
|--|---------------------------------------|----------------------|
| | Transient Vibration | Continuous Vibration |
| Vibration-sensitive / dilapidated buildings# | 7.5 | 3.0 |
| Declared monuments/ Historical structures | 3.0 | |

Table B-8.1 Action and Limit Levels and Responses to Evidence of Disturbance to Waterbirds using in Ng Tung, Sheung Yue and Shek Sheung Rivers

| Action Level | Response | Limit Level | Response |
|--|--|---|--|
| Construction Phase | | | |
| Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Action Level response is triggered. | Investigate cause and if cause identified as related to NDAs project instigate remedial action to remove or reduce source of | Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Limit Level response is triggered. | Investigate cause and if caused identified as related to NDAs project instigate remedial action. Review and adjust LVNP management |

| | | | |
|--|---|---|---|
| | disturbance. | | measures to improve conditions for affected species. |
| Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Action Level response is triggered. | Investigate cause and if cause identified as related to NDAs project instigate remedial action to remove or reduce source of disturbance. | Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Limit Level response is triggered. | Investigate cause and if caused identified as related to NDAs project instigate remedial action. Review and adjust LVNP management measures to improve conditions for affected species. |
| Operational Phase | | | |
| Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Action Level response is triggered. | Investigate cause and if cause identified as related to NDAs review and adjust LVNP management measures to improve conditions for affected species in LVNP. | Decline in numbers of all waterbird species relative to numbers during Baseline Monitoring such that the Limit Level response is triggered. | Investigate cause and if cause identified as related to NDAs consider and implement additional mitigation measures (e.g. additional screening and screen planting, adjustments to infrastructure design). |
| Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Action Level response is triggered. | Investigate cause and if cause identified as related to NDAs review and adjust LVNP management measures to improve conditions for affected species. | Decline in numbers of any one waterbird species occurring in significant numbers* during Baseline Monitoring such that the Limit Level response is triggered. | Investigate cause and if cause identified as related to NDAs consider and implement additional mitigation measures (e.g. additional screen planting, adjustments to infrastructure design). |

* Whether numbers are significant will depend on species and season and should be determined following collection and evaluation of Baseline survey data.

Table B-8.2 Action and Limit Levels and Responses to Evidence of Declines in Aquatic Fauna

| Action Level | Response | Limit Level | Response |
|--|--|--|---|
| Construction Phase | | | |
| Reduction in species diversity such that Action Level response is triggered. | Investigate cause and if cause identified as related to Project instigate remedial action to remove or reduce source of disturbance. | Reduction in taxa diversity such that Limit Level response is triggered. | Investigate cause and if caused identified as related to Project instigate remedial action. |

* Whether numbers are significant will depend on species and season. Significance threshold for each species should be reviewed following collection of Baseline survey data.

Table B-8.3 Action and Limit Levels and Responses to Evidence of Declines in non-aquatic Fauna

| Action Level | Response | Limit Level | Response |
|--|--|--|---|
| Construction Phase | | | |
| Reduction in species diversity such that Action Level response is triggered. | Investigate cause and if cause identified as related to Project instigate remedial action to remove or reduce source of disturbance. | Reduction in taxa diversity such that Limit Level response is triggered. | Investigate cause and if caused identified as related to Project instigate remedial action. |

* Whether numbers are significant will depend on species and season. Significance threshold for each species should be reviewed following collection of Baseline survey data.

**APPENDIX C
COPIES OF CALIBRATION
CERTIFCATES**

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37675A |
| Date of Issue: | 2023-01-09 |
| Date Received: | 2023-01-06 |
| Date Tested: | 2023-01-06 |
| Date Completed: | 2023-01-09 |
| Next Due Date: | 2023-03-08 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X23808 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-02 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.114 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-02 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X23808 | 2203 |
| Calibration Date: | 6-Jan-23 | 6-Jan-23 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|-------------------------|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 37 | 42 |
| 2 | 52 | 57 |
| 3 | 66 | 74 |
| 4 | 78 | 88 |
| 5 | 91 | 99 |
| Average | 64.8 | 72.2 |

By Linear Regression of Y on X

Slope, $m_w =$ 1.0954

Intercept, $b_w =$ 1.2195

Correlation coefficient* = 0.9987

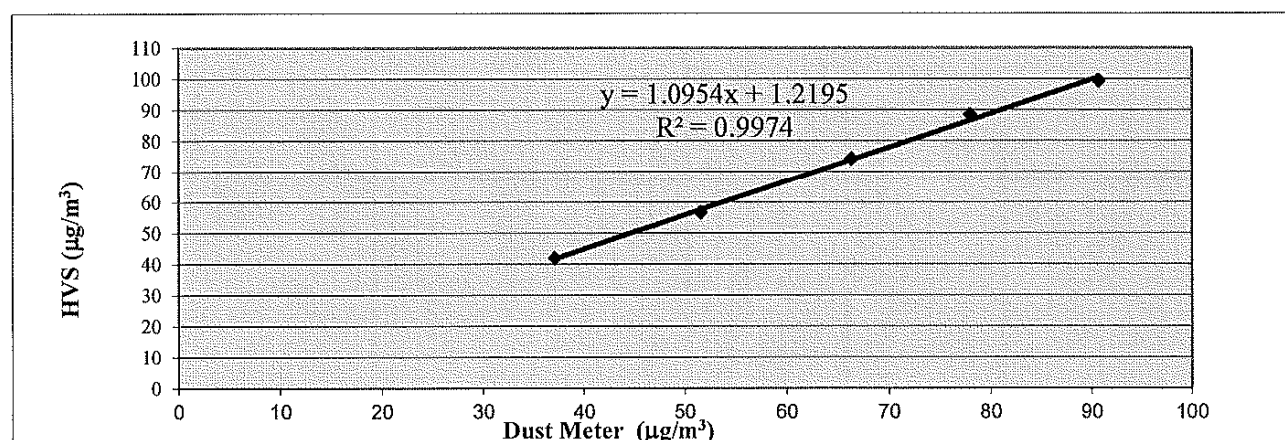
*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 72.2 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 64.8 |
| Measuring time, (min) | 60 |

Set Correlation Factor, SCF

SCF = $[K = \text{High Volume Sampler} / \text{Dust Meter}, (\mu\text{g}/\text{m}^3)]$

1.114



QC Reviewer:

LEE MAM HAZ

Signature:

hi

Date:

6/1/2023

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37674 |
| Date of Issue: | 2023-01-03 |
| Date Received: | 2022-12-30 |
| Date Tested: | 2022-12-30 |
| Date Completed: | 2023-01-03 |
| Next Due Date: | 2023-03-02 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X24476 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-05 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.143 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

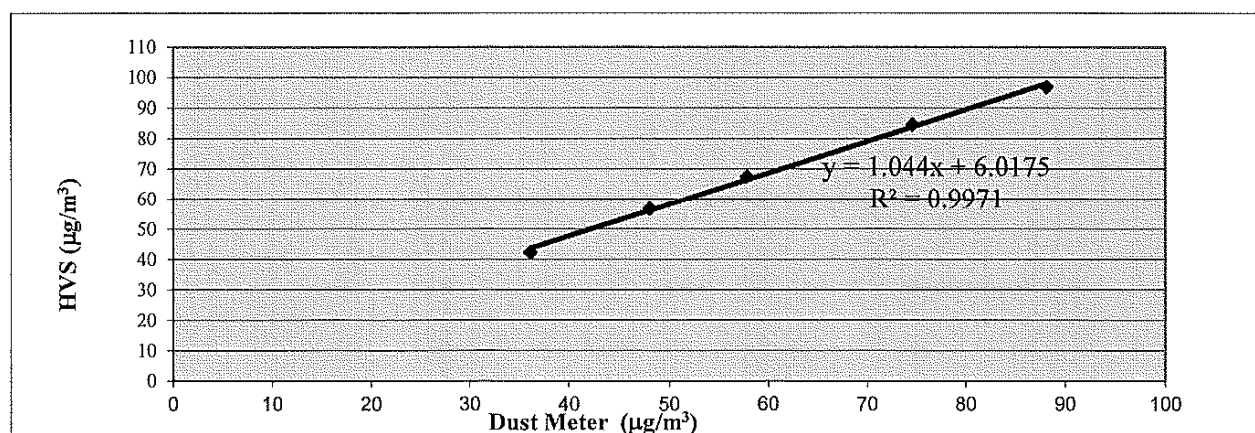
Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-05 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X24476 | 2203 |
| Calibration Date: | 30-Dec-22 | 30-Dec-22 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|---|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 36 | 42 |
| 2 | 48 | 57 |
| 3 | 58 | 68 |
| 4 | 75 | 85 |
| 5 | 88 | 97 |
| Average | 61.0 | 69.7 |
| By Linear Regression of Y on X | | |
| Slope, mw = <u>1.0440</u> Intercept, bw = <u>6.0175</u> | | |
| Correlation coefficient* = <u>0.9986</u> | | |

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|--------------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 69.7 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 61.0 |
| Measuring time, (min) | 60 |
| Set Correlation Factor, SCF | |
| SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] | <u>1.143</u> |



QC Reviewer:

LEE MW MW

Signature:

Lee

Date:

30/10/2022

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37858 |
| Date of Issue: | 2023-02-27 |
| Date Received: | 2023-02-25 |
| Date Tested: | 2023-02-25 |
| Date Completed: | 2023-02-27 |
| Next Due Date: | 2023-04-26 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X24476 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-05 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.109 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-05 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X24476 | 2203 |
| Calibration Date: | 25-Feb-23 | 25-Feb-23 |
| Location: | Wellab Office (Calibration Room) | |

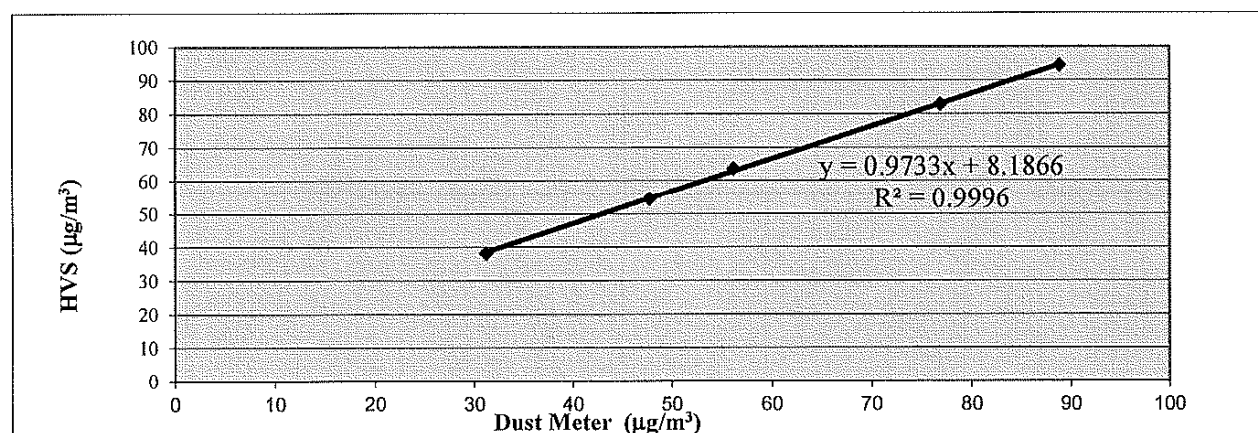
| Calibration of 1 hr TSP | | |
|-------------------------|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 31 | 38 |
| 2 | 48 | 55 |
| 3 | 56 | 64 |
| 4 | 77 | 83 |
| 5 | 89 | 95 |
| Average | 60.2 | 66.8 |

By Linear Regression of Y on X
 Slope , mw = 0.9733 Intercept, bw = 8.1866
 Correlation coefficient* = 0.9998

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 66.8 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 60.2 |
| Measuring time, (min) | 60 |

Set Correlation Factor , SCF
 SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] 1.109



QC Reviewer: LEE MIN HEE Signature: Lee Date: 26/2/2023

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37674A |
| Date of Issue: | 2023-01-03 |
| Date Received: | 2022-12-30 |
| Date Tested: | 2022-12-30 |
| Date Completed: | 2023-01-03 |
| Next Due Date: | 2023-03-02 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X24477 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-06 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.159 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-06 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X24477 | 2203 |
| Calibration Date: | 30-Dec-22 | 30-Dec-22 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|-------------------------|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 35 | 42 |
| 2 | 49 | 57 |
| 3 | 58 | 68 |
| 4 | 73 | 85 |
| 5 | 86 | 97 |
| Average | 60.1 | 69.7 |

By Linear Regression of Y on X

Slope, mw = 1.0819

Intercept, bw = 4.6569

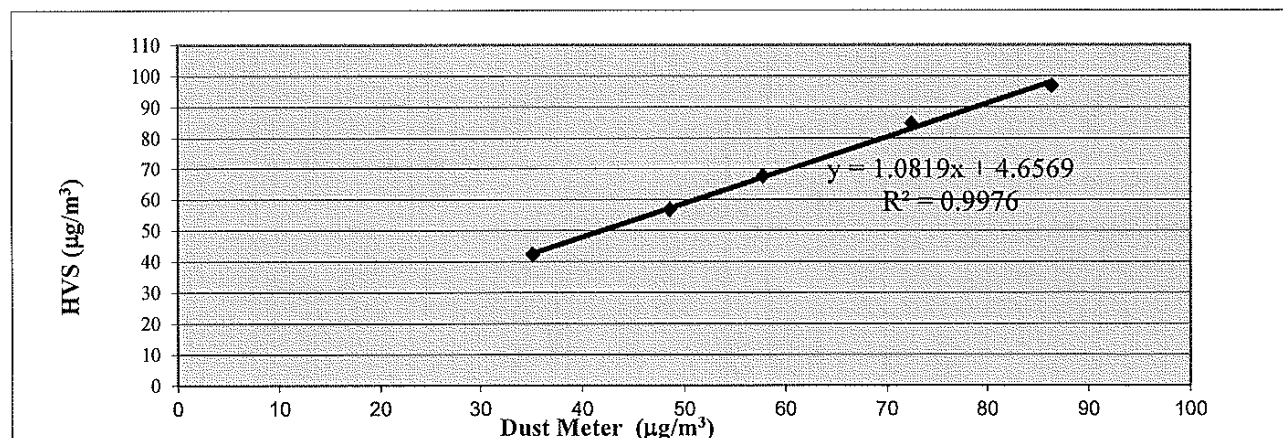
Correlation coefficient* = 0.9988

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 69.7 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 60.1 |
| Measuring time, (min) | 60 |

Set Correlation Factor, SCF

SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] 1.159



QC Reviewer:

UW MW 11/2

Signature:

her

Date:

30/12/2022

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37858A |
| Date of Issue: | 2023-02-27 |
| Date Received: | 2023-02-25 |
| Date Tested: | 2023-02-25 |
| Date Completed: | 2023-02-27 |
| Next Due Date: | 2023-04-26 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X24477 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-06 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.136 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

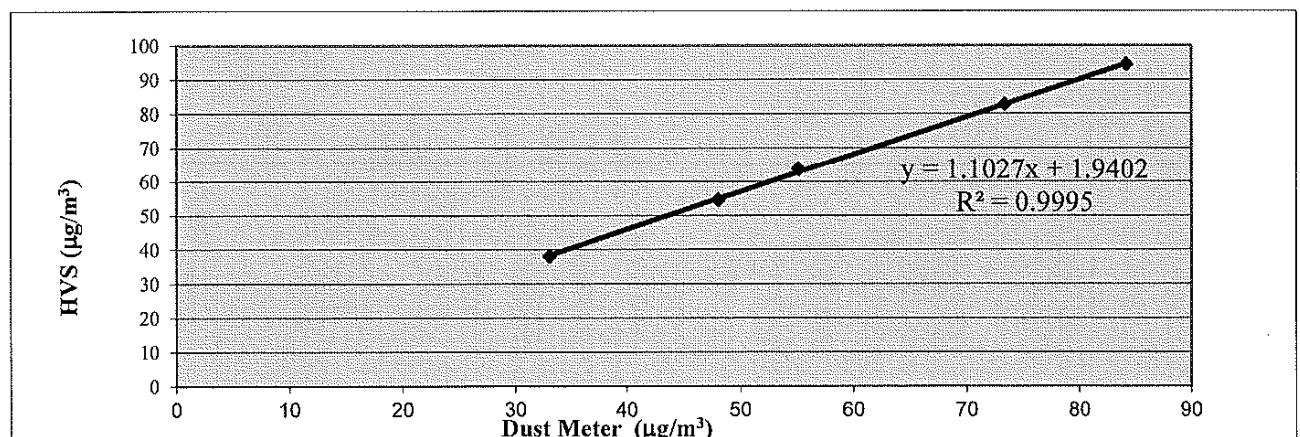
Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-06 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X24477 | 2203 |
| Calibration Date: | 25-Feb-23 | 25-Feb-23 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|---|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 33 | 38 |
| 2 | 48 | 55 |
| 3 | 55 | 64 |
| 4 | 73 | 83 |
| 5 | 84 | 95 |
| Average | 58.8 | 66.8 |
| By Linear Regression of Y on X Slope, mw = <u>1.1027</u> Intercept, bw = <u>1.9402</u> Correlation coefficient* = <u>0.9997</u> | | |

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|--|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 66.8 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 58.8 |
| Measuring time, (min) | 60 |
| Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] <u>1.136</u> | |



QC Reviewer: LEE Mon 1/12/23 Signature: hei Date: 26/2/2023

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37675D |
| Date of Issue: | 2023-01-09 |
| Date Received: | 2023-01-06 |
| Date Tested: | 2023-01-06 |
| Date Completed: | 2023-01-09 |
| Next Due Date: | 2023-03-08 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X24475 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-07 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.108 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

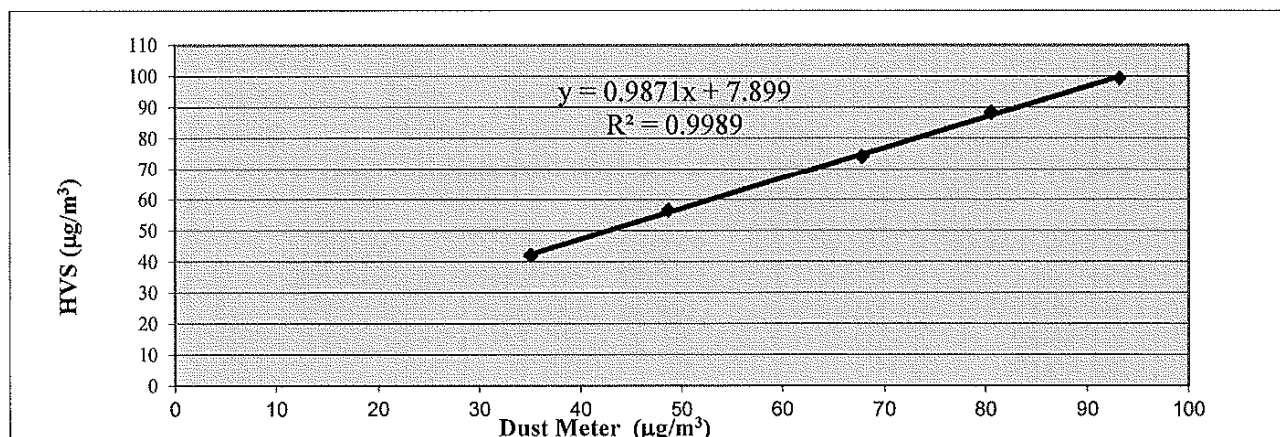
Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-07 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X24475 | 2203 |
| Calibration Date: | 6-Jan-23 | 6-Jan-23 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|---|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 35 | 42 |
| 2 | 49 | 57 |
| 3 | 68 | 74 |
| 4 | 81 | 88 |
| 5 | 93 | 99 |
| Average | 65.1 | 72.2 |
| <p>By Linear Regression of Y on X</p> <p>Slope, mw = <u>0.9871</u> Intercept, bw = <u>7.8990</u></p> <p>Correlation coefficient* = <u>0.9994</u></p> | | |

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 72.2 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 65.1 |
| Measuring time, (min) | 60 |
| <p>Set Correlation Factor, SCF</p> <p>SCF = $[K = \text{High Volume Sampler} / \text{Dust Meter, } (\mu\text{g}/\text{m}^3)]$ <u>1.108</u></p> | |



QC Reviewer: LEB WYN LGB Signature: he Date: 6/1/2023

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37674B |
| Date of Issue: | 2023-01-03 |
| Date Received: | 2022-12-30 |
| Date Tested: | 2022-12-30 |
| Date Completed: | 2023-01-03 |
| Next Due Date: | 2023-03-02 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X24479 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-08 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.111 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

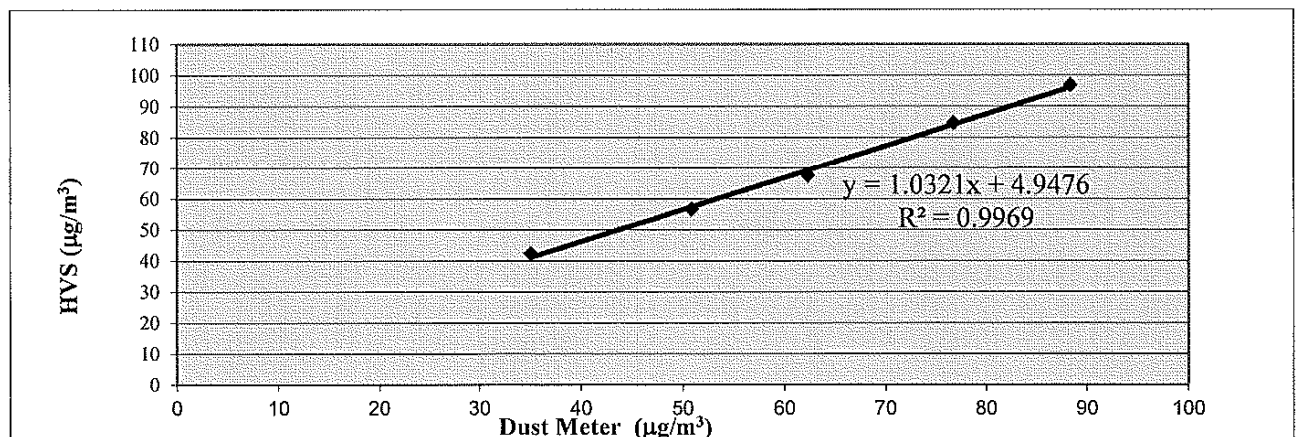
Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-08 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X24479 | 2203 |
| Calibration Date: | 30-Dec-22 | 30-Dec-22 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|---|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 35 | 42 |
| 2 | 51 | 57 |
| 3 | 62 | 68 |
| 4 | 77 | 85 |
| 5 | 88 | 97 |
| Average | 62.7 | 69.7 |
| <p>By Linear Regression of Y on X</p> <p>Slope , mw = <u>1.0321</u> Intercept, bw = <u>4.9476</u></p> <p>Correlation coefficient* = <u>0.9985</u></p> | | |

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 69.7 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 62.7 |
| Measuring time, (min) | 60 |
| <p>Set Correlation Factor , SCF</p> <p>SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] <u>1.111</u></p> | |



QC Reviewer: Lat Man Lee Signature: he Date: 30/12/2022

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37674C |
| Date of Issue: | 2023-01-03 |
| Date Received: | 2022-12-30 |
| Date Tested: | 2022-12-30 |
| Date Completed: | 2023-01-03 |
| Next Due Date: | 2023-03-02 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for Calibration:

| | |
|-----------------|------------------------|
| Description | : Dust Monitor |
| Manufacturer | : Met One Instruments |
| Model No. | : AEROCET-831 |
| Serial No. | : X23811 |
| Flow rate | : 0.1 cfm |
| Zero Count Test | : 0 count per 1 minute |
| Equipment No. | : WA-01-09 |

Test Conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Tisch Environmental Inc.
2. In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Results:

| | |
|-------------------------|-------|
| Correlation Factor (CF) | 1.105 |
|-------------------------|-------|

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



PATRICK TSE

Laboratory Manager

TSP - Total Suspended Particulates (1 hr Dust Meter)

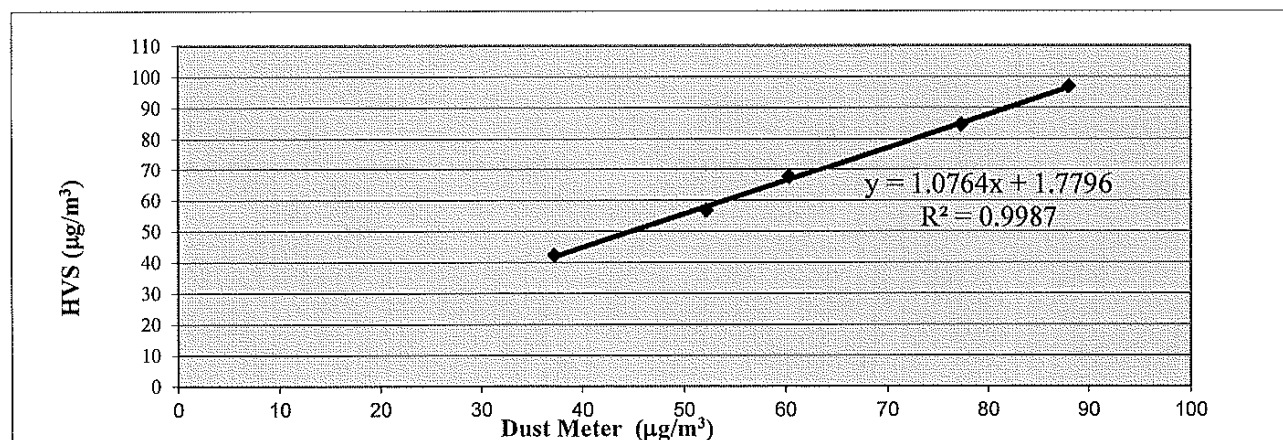
Calibration Report

| | | |
|-------------------|----------------------------------|---------------------|
| Dust Meter | Dust Meter | High Volume Sampler |
| Equipment No.: | WA-01-09 | WA-12-09 |
| Model No. : | AEROCET-831 | TE-5170 |
| Serial No. | X23811 | 2203 |
| Calibration Date: | 30-Dec-22 | 30-Dec-22 |
| Location: | Wellab Office (Calibration Room) | |

| Calibration of 1 hr TSP | | |
|---|---|---|
| Calibration Point | Dust Meter | HVS |
| | Mass Concentration ($\mu\text{g}/\text{m}^3$) X-axis | Mass concentration ($\mu\text{g}/\text{m}^3$) Y-axis |
| 1 | 37 | 42 |
| 2 | 52 | 57 |
| 3 | 60 | 68 |
| 4 | 77 | 85 |
| 5 | 88 | 97 |
| Average | 63.1 | 69.7 |
| <p>By Linear Regression of Y on X</p> <p>Slope , mw = <u>1.0764</u> Intercept, bw = <u>1.7796</u></p> <p>Correlation coefficient* = <u>0.9993</u></p> | | |

*If Correlation Coefficient < 0.90, check and recalibrate.

| Set Correlation Factor | |
|---|------|
| Particulate Concentration by High Volume Sampler ($\mu\text{g}/\text{m}^3$) | 69.7 |
| Particulate Concentration by Dust Meter ($\mu\text{g}/\text{m}^3$) | 63.1 |
| Measuring time, (min) | 60 |
| <p>Set Correlation Factor , SCF</p> <p>SCF = [K=High Volume Sampler / Dust Meter, ($\mu\text{g}/\text{m}^3$)] <u>1.105</u></p> | |



QC Reviewer: LGE MAN LRV Signature: hei Date: 30/10/2022

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

File No. Cal./221230

Equipment No.: WA-12-09
Model No. TE-5170
Operator: HL

Serial No. 2203
Cal. Date: 30-Dec-22

| Ambient Condition | | | |
|---------------------|-------|---------------------|-------|
| Temperature, Ta (K) | 290.2 | Pressure, Pa (mmHg) | 769.7 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|--------|---------------|----------|
| Serial No. | 2896 | Slope, mc | 0.0588 | Intercept, bc | -0.01030 |
| Last Calibration Date: | 20-Jan-22 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ | | | |
| Next Calibration Date: | 20-Jan-23 | | | | |

| Calibration of TSP Sampler | | | | | |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|--|
| Calibration Point | Orifice | | | HVS | |
| | ΔH (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | ΔW (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1 | 12.5 | 3.61 | 61.54 | 7.9 | 2.87 |
| 2 | 9.9 | 3.21 | 54.79 | 6.2 | 2.54 |
| 3 | 8.6 | 2.99 | 51.08 | 5.4 | 2.37 |
| 4 | 5.4 | 2.37 | 40.51 | 3.7 | 1.96 |
| 5 | 3.7 | 1.96 | 33.56 | 2.5 | 1.61 |

By Linear Regression of Y on X

Slope, mw = 0.0438

Intercept, bw : 0.1564

Correlation coefficient* = 0.9989

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.99

Remarks: _____

Conducted by: Lib Man Heu
Checked by: Go (Ca) dm

Signature: leg
Signature: Ch

Date: 30/12/2022
Date: 30/12/2022

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

Equipment No.: WA-12-09 Serial No. 2203 File No. Cal./230225
Model No. TE-5170 Cal. Date: 25-Feb-23
Operator: HL

| Ambient Condition | | | |
|---------------------|-------|---------------------|-------|
| Temperature, Ta (K) | 291.4 | Pressure, Pa (mmHg) | 767.4 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|--|--------|---------------|----------|
| Serial No. | 0993 | Slope, mc | 0.0574 | Intercept, bc | -0.04292 |
| Last Calibration Date: | 16-Jan-23 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | | | |
| Next Calibration Date: | 16-Jan-24 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ | | | |

| Calibration of TSP Sampler | | | | | |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|--|
| Calibration Point | Orifice | | | HVS | |
| | ΔH (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | ΔW (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1 | 11.6 | 3.46 | 61.00 | 7.9 | 2.86 |
| 2 | 9.2 | 3.08 | 54.41 | 6.4 | 2.57 |
| 3 | 8.6 | 2.98 | 52.63 | 5.7 | 2.43 |
| 4 | 5.7 | 2.43 | 42.98 | 3.8 | 1.98 |
| 5 | 3.1 | 1.79 | 31.90 | 2.3 | 1.54 |

By Linear Regression of Y on X

Slope, mw = 0.0456 Intercept, bw = 0.0604
Correlation coefficient* = 0.9979

*If Correlation Coefficient < 0.990, check and recalibrate.

| Set Point Calculation | |
|---|--|
| From the TSP Field Calibration Curve, take Qstd = 43 CFM | |
| From the Regression Equation, the "Y" value according to | |
| $mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ | |
| Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.95</u> | |

Remarks: _____

Conducted by: HL PAW HZ Signature: HL Date: 25/2/2023
Checked by: HL CA AL Signature: HL Date: 25/2/2023

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

| | | | |
|----------------|---|----------------|------------------|
| Station | FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark | File No. | WMA20002/20/0016 |
| Date: | 30-Dec-22 | Next Due Date: | 28-Feb-23 |
| Model No. | TE-5170 | Operator: | HL |
| Equipment No.: | WA-12-20 | Serial No. | 3223 |

| Ambient Condition | | | |
|---------------------|-------|---------------------|-------|
| Temperature, Ta (K) | 293.5 | Pressure, Pa (mmHg) | 768.2 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|--------|---------------|----------|
| Serial No. | 2896 | Slope, mc | 0.0588 | Intercept, bc | -0.01030 |
| Last Calibration Date: | 20-Jan-22 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ | | | |
| Next Calibration Date: | 20-Jan-23 | | | | |

| Calibration of TSP Sampler | | | | | |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|---|
| Calibration Point | Orifice | | | HVS | |
| | ΔH (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | ΔW (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1 | 12.0 | 3.51 | 59.91 | 7.8 | 2.83 |
| 2 | 10.5 | 3.28 | 56.05 | 6.6 | 2.60 |
| 3 | 7.9 | 2.85 | 48.64 | 5.2 | 2.31 |
| 4 | 5.4 | 2.35 | 40.24 | 3.4 | 1.87 |
| 5 | 3.5 | 1.90 | 32.43 | 2.3 | 1.54 |

By Linear Regression of Y on X

Slope, mw = 0.0468

Intercept, bw : 0.0067

Correlation coefficient* = 0.9989

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.98

Remarks:

Conducted by: Lee Kwan Yee Signature: _____
 Checked by: Ho Ka Chun Signature: _____

Date: 30/12/2022
 Date: 30/12/2022

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

Station FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark
Date: 23-Feb-23
Model No. TE-5170
Equipment No.: WA-12-20

File No. WMA20002/20/0017
Next Due Date: 22-Apr-23
Operator: HL
Serial No. 3223

| Ambient Condition | | | |
|---------------------|-------|---------------------|-------|
| Temperature, Ta (K) | 290.6 | Pressure, Pa (mmHg) | 770.5 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|---|--------|---------------|----------|
| Serial No. | 0993 | Slope, mc | 0.0574 | Intercept, bc | -0.04292 |
| Last Calibration Date: | 16-Jan-23 | $mc \times Q_{std} + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | | | |
| Next Calibration Date: | 16-Jan-24 | $Q_{std} = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ | | | |

| Calibration of TSP Sampler | | | | | |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|---|
| Calibration Point | Orifice | | | HVS | |
| | ΔH (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | ΔW (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1 | 11.5 | 3.46 | 60.94 | 8.0 | 2.88 |
| 2 | 10.4 | 3.29 | 57.99 | 6.9 | 2.68 |
| 3 | 7.1 | 2.72 | 48.05 | 5.0 | 2.28 |
| 4 | 5.4 | 2.37 | 42.00 | 3.7 | 1.96 |
| 5 | 3.3 | 1.85 | 32.99 | 2.4 | 1.58 |

By Linear Regression of Y on X

Slope, mw = 0.0459

Intercept, bw : 0.0553

Correlation coefficient* = 0.9985

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Q_{std} + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Q_{std} + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.96

Remarks: _____

Conducted by: LEE MAN HEE

Signature: _____

Date: 23/2/2023

Checked by: Ho Ka Chun

Signature: _____

Date: 23/2/2023

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

Station FLN-DMS3 - House near Tong Hang
Date: 30-Dec-22
Model No. TE-5170
Equipment No.: WA-12-17

File No. WMA20002/17/0016
Next Due Date: 28-Feb-23
Operator: HL
Serial No. 3218

| Ambient Condition | | | |
|---------------------|-------|---------------------|-----|
| Temperature, Ta (K) | 293.2 | Pressure, Pa (mmHg) | 768 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|--|--------|---------------|----------|
| Serial No. | 2896 | Slope, mc | 0.0588 | Intercept, bc | -0.01030 |
| Last Calibration Date: | 20-Jan-22 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | | | |
| Next Calibration Date: | 20-Jan-23 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ | | | |

| Calibration of TSP Sampler | | | | | |
|----------------------------|------------------------------------|--|---------------------|--------------------------------|---|
| Calibration Point | Orifice | | | HVS | |
| | ΔH (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | ΔW (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1 | 12.5 | 3.58 | 61.16 | 7.9 | 2.85 |
| 2 | 9.8 | 3.17 | 54.18 | 6.2 | 2.52 |
| 3 | 8.5 | 2.95 | 50.47 | 5.2 | 2.31 |
| 4 | 5.3 | 2.33 | 39.89 | 3.4 | 1.87 |
| 5 | 3.0 | 1.76 | 30.05 | 2.2 | 1.50 |

By Linear Regression of Y on X

Slope, mw = 0.0433

Intercept, bw = 0.1701

Correlation coefficient* = 0.9979

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.02

Remarks:

Conducted by: LEE KAM HEE Signature: Lee Kam Hee
Checked by: Ho Ka Chun Signature: Ho Ka Chun

Date: 30/12/2022
Date: 30/12/2022

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

Station FLN-DMS3 - House near Tong Hang
Date: 23-Feb-23
Model No. TE-5170
Equipment No.: WA-12-17

File No. WMA20002/17/0017
Next Due Date: 22-Apr-23
Operator: HL
Serial No. 3218

| Ambient Condition | | | |
|---------------------|-------|---------------------|-------|
| Temperature, Ta (K) | 290.4 | Pressure, Pa (mmHg) | 770.8 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|--|--------|---------------|----------|
| Serial No. | 0993 | Slope, mc | 0.0574 | Intercept, bc | -0.04292 |
| Last Calibration Date: | 16-Jan-23 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | | | |
| Next Calibration Date: | 16-Jan-24 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ | | | |

| Calibration of TSP Sampler | | | | | |
|----------------------------|------------------------------------|--|------------------------|--------------------------------|---|
| Calibration Point | Orifice | | | HVS | |
| | ΔH (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM) X - axis | ΔW (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis |
| 1 | 10.8 | 3.35 | 59.11 | 7.3 | 2.76 |
| 2 | 8.8 | 3.03 | 53.43 | 6.0 | 2.50 |
| 3 | 7.1 | 2.72 | 48.07 | 4.8 | 2.24 |
| 4 | 5.4 | 2.37 | 42.02 | 3.9 | 2.01 |
| 5 | 3.1 | 1.80 | 32.02 | 2.4 | 1.58 |

By Linear Regression of Y on X

Slope, mw = 0.0431

Intercept, bw = 0.1933

Correlation coefficient* = 0.9992

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

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

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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 4.03

Remarks: _____

Conducted by: Lee Man Hei Signature: _____

Date: 23/2/2023

Checked by: Ho Ka Chun Signature: _____

Date: 23/2/2023

RSP - Respirable Suspended Particulates Sampler (PM 10)
Field Calibration Report

Station KTN-DMS4A - Temporary Structure at Pak Shek Au
Date: 5-Jan-23
Model No. TE-6070X
Equipment No.: WA-11-03

File No. WMA20002/03/0016
Next Due Date: 4-Mar-23
Operator: HL
Serial No. 3225

| Ambient Condition | | | |
|---------------------|-----|---------------------|-----|
| Temperature, Ta (K) | 293 | Pressure, Pa (mmHg) | 769 |

| Orifice Transfer Standard Information | | | | | |
|---------------------------------------|-----------|------------------------|-----------|---------------|----------|
| Serial No.: | 2896 | Slope, mc | 0.0588 | Intercept, bc | -0.01030 |
| Last Calibration Date: | 20-Jan-22 | Next Calibration Date: | 20-Jan-23 | | |

| Calibration of RSP Sampler | | | | | | | |
|----------------------------|------------------------------------|-----------------------|---------------------------|--------------------------------|--|--------------------------------|---|
| Calibration Point | ORIFICE | | | | | HVS | |
| | ΔH (orifice), in. of water | Del Hc ⁽¹⁾ | Qstd ⁽²⁾ (CFM) | Qa ⁽³⁾ (CFM) X-axis | Qa ⁽³⁾ (m ³ /min) X-axis | ΔW (HVS), in. of water | $[\Delta W \times (Ta + 30) / Pa]^{1/2}$ Y-axis |
| 1 | 8.6 | 8.85 | 50.81 | 49.37 | 1.40 | 7.7 | 1.80 |
| 2 | 7.2 | 7.41 | 46.51 | 45.19 | 1.28 | 6.3 | 1.63 |
| 3 | 5.6 | 5.76 | 41.04 | 39.88 | 1.13 | 5.2 | 1.48 |
| 4 | 4.6 | 4.73 | 37.21 | 36.16 | 1.02 | 4.2 | 1.33 |
| 5 | 2.9 | 2.98 | 29.58 | 28.74 | 0.81 | 2.6 | 1.05 |

By Linear Regression of Y on X

Slope, mw = 0.0359 Intercept, bw = 0.0223
Correlation coefficient* = 0.9984

- (1) $DEL Hc = \Delta H \times (Pa/760 \times 298/Ta)$
(2) $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$ (m³/min)
(3) $Qa = Qstd \times (Ta / Pa) \times (760 / 298)$ (m³/min)

*If Correlation Coefficient < 0.990, check and recalibrate.

| Set Point Calculation | |
|--|--------------|
| Set Point Flow Rate., SFR | |
| $SFR = 1.13 \times (760/Pa) \times (Ta/298) =$ | <u>38.80</u> |
| Sampler Well - Type Manometer Set Point, SSP | |
| $SSP = [(mw \times SFR + bw)^2 \times Pa] / (Ta + 30) =$ | <u>4.78</u> |

Remarks: _____

Conducted by: LEE MAN HEE
Checked by: HO CA CHU

Signature: Lee Man Hee
Signature: Ho Ca Chu

Date: 5/1/2023
Date: 5/1/2023



RECALIBRATION

DUE DATE:

January 20, 2023

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 20, 2022 Rootsmeter S/N: 438320 Ta: 293 °K
 Operator: Jim Tisch Pa: 759.7 mm Hg
 Calibration Model #: TE-5025A Calibrator S/N: 2896

| Run | Vol. Init (m3) | Vol. Final (m3) | ΔVol. (m3) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H2O) |
|-----|-------------------|--------------------|---------------|----------------|---------------|----------------|
| 1 | 1 | 2 | 1 | 1.4610 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 1.0360 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.9190 | 7.9 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8780 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.7250 | 12.7 | 8.00 |

Data Tabulation

| Vstd (m3) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|--------------|------------------|---|--------|----------------|--|
| 1.0124 | 0.6929 | 1.4260 | 0.9958 | 0.6816 | 0.8783 |
| 1.0081 | 0.9731 | 2.0166 | 0.9916 | 0.9571 | 1.2420 |
| 1.0061 | 1.0948 | 2.2546 | 0.9896 | 1.0768 | 1.3887 |
| 1.0049 | 1.1445 | 2.3647 | 0.9884 | 1.1258 | 1.4564 |
| 0.9997 | 1.3789 | 2.8519 | 0.9833 | 1.3563 | 1.7565 |
| QSTD | m= | 2.07510 | QA | m= | 1.29939 |
| | b= | -0.01030 | | b= | -0.00634 |
| | r= | 0.99995 | | r= | 0.99995 |

Calculations

| | | | |
|---|---|--|--------------------------------|
| Vstd= | $\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$ | Va= | $\Delta Vol((Pa-\Delta P)/Pa)$ |
| Qstd= | Vstd/ΔTime | Qa= | Va/ΔTime |
| For subsequent flow rate calculations: | | | |
| Qstd= $1/m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right)$ | | Qa= $1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$ | |

Standard Conditions

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

RECALIBRATION

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

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 16, 2023 Rootsmeter S/N: 438320 Ta: 293 °K
 Operator: Jim Tisch Pa: 749.0 mm Hg
 Calibration Model #: TE-5025A Calibrator S/N: 0993

| Run | Vol. Init (m3) | Vol. Final (m3) | ΔVol. (m3) | ΔTime (min) | ΔP (mm Hg) | ΔH (in H2O) |
|-----|----------------|-----------------|------------|-------------|------------|-------------|
| 1 | 1 | 2 | 1 | 1.3860 | 3.2 | 2.00 |
| 2 | 3 | 4 | 1 | 0.9880 | 6.4 | 4.00 |
| 3 | 5 | 6 | 1 | 0.8810 | 8.0 | 5.00 |
| 4 | 7 | 8 | 1 | 0.8410 | 8.8 | 5.50 |
| 5 | 9 | 10 | 1 | 0.6950 | 12.8 | 8.00 |

Data Tabulation

| Vstd (m3) | Qstd (x-axis) | $\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis) | Va | Qa (x-axis) | $\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis) |
|-------------|---------------|--|-----------|-------------|---|
| 0.9981 | 0.7201 | 1.4159 | 0.9957 | 0.7184 | 0.8845 |
| 0.9938 | 1.0059 | 2.0024 | 0.9915 | 1.0035 | 1.2509 |
| 0.9917 | 1.1257 | 2.2388 | 0.9893 | 1.1230 | 1.3985 |
| 0.9906 | 1.1779 | 2.3480 | 0.9883 | 1.1751 | 1.4668 |
| 0.9853 | 1.4177 | 2.8318 | 0.9829 | 1.4143 | 1.7690 |
| QSTD | m= | 2.02881 | QA | m= | 1.27041 |
| | b= | -0.04292 | | b= | -0.02681 |
| | r= | 0.99998 | | r= | 0.99998 |

Calculations

| | | | |
|---|---|-----|--|
| Vstd= | $\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$ | Va= | $\Delta Vol((Pa-\Delta P)/Pa)$ |
| Qstd= | Vstd/ΔTime | Qa= | Va/ΔTime |
| For subsequent flow rate calculations: | | | |
| Qstd= | $1/m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right)$ | Qa= | $1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$ |

Standard Conditions

Tstd: 298.15 °K

Pstd: 760 mm Hg

Key

ΔH: calibrator manometer reading (in H2O)

ΔP: rootsmeter manometer reading (mm Hg)

Ta: actual absolute temperature (°K)

Pa: actual barometric pressure (mm Hg)

b: intercept

m: slope

RECALIBRATION

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

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 36405A |
| Date of Issue: | 2022-03-07 |
| Date Received: | 2022-03-04 |
| Date Tested: | 2022-03-04 |
| Date Completed: | 2022-03-07 |
| Next Due Date: | 2023-03-06 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

| | |
|---------------|---------------------|
| Description | : Sound Level Meter |
| Manufacturer | : BSWA |
| Model No. | : BSWA 308 |
| Serial No. | : 580004 |
| Equipment No. | : WN-01-02 |

Test conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94 | 94.0 |
| 114 | 114.0 |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 36405B |
| Date of Issue: | 2022-03-07 |
| Date Received: | 2022-03-04 |
| Date Tested: | 2022-03-04 |
| Date Completed: | 2022-03-07 |
| Next Due Date: | 2023-03-06 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

| | |
|---------------|---------------------|
| Description | : Sound Level Meter |
| Manufacturer | : BSWA |
| Model No. | : BSWA 308 |
| Serial No. | : 580005 |
| Equipment No. | : WN-01-03 |

Test conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94 | 94.0 |
| 114 | 114.0 |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.: 36405E
Date of Issue: 2022-03-07
Date Received: 2022-03-04
Date Tested: 2022-03-04
Date Completed: 2022-03-07
Next Due Date: 2023-03-06

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description : Sound Level Meter
Manufacturer : BSWA
Model No. : BSWA 308
Serial No. : 580008
Equipment No. : WN-01-06

Test conditions:

Room Temperature : 17-22 degree Celsius
Relative Humidity : 40-70%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94 | 94.0 |
| 114 | 114.0 |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.: 36481
Date of Issue: 2022-03-14
Date Received: 2022-03-11
Date Tested: 2022-03-11
Date Completed: 2022-03-14
Next Due Date: 2023-03-13

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description : Sound Level Meter
Manufacturer : BSWA
Model No. : BSWA 308
Serial No. : 580011
Equipment No. : WN-01-08

Test conditions:

Room Temperature : 17-22 degree Celsius
Relative Humidity : 40-70%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

| Reference Set Point, dB | Instrument Readings, dB |
|-------------------------|-------------------------|
| 94 | 94.0 |
| 114 | 114.0 |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

| | |
|------------------|------------|
| Test Report No.: | 37163 |
| Date of Issue: | 2022-10-02 |
| Date Received: | 2022-09-30 |
| Date Tested: | 2022-10-02 |
| Date Completed: | 2022-10-02 |
| Next Due Date: | 2023-10-01 |

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

| | |
|---------------|-------------------------|
| Description | : Acoustical Calibrator |
| Manufacturer | : SVANTEK |
| Model No. | : SV30A |
| Serial No. | : 24803 |
| Equipment No. | : N-09-03 |

Test conditions:

| | |
|-------------------|------------------------|
| Room Temperature | : 17-22 degree Celsius |
| Relative Humidity | : 40-70% |

Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance |
|-----------------------------|--------------|----------------|
| At 94 dB SPL | 94.0 | 94.0 ± 0.1 dB |
| At 114 dB SPL | 114.0 | 114.0 ± 0.1 dB |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited
(EM&A Department)
Room 1808, Technology Park,
18 On Lai Street,
Shatin, NT, Hong Kong

Test Report No.: 37018A
Date of Issue: 2022-08-22
Date Received: 2022-08-19
Date Tested: 2022-08-19
Date Completed: 2022-08-22
Next Due Date: 2023-08-21

Page: 1 of 1

ATTN: Ms. Meiling Tang

Certificate of Calibration

Item for calibration:

Description : Acoustical Calibrator
Manufacturer : SVANTEK
Model No. : SV30A
Serial No. : 24791
Equipment No. : N-09-04

Test conditions:

Room Temperature : 17-22 degree Celsius
Relative Humidity : 40-70%

Methodology:

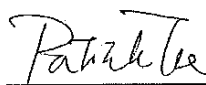
The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

| Sound Pressure Level (1kHz) | Measured SPL | Tolerance |
|-----------------------------|--------------|----------------|
| At 94 dB SPL | 94.0 | 94.0 ± 0.1 dB |
| At 114 dB SPL | 114.0 | 114.0 ± 0.1 dB |

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Test Report No.: 37645B
Date of Issue: 2022-12-25
Date Received: 2022-12-24
Date Tested: 2022-12-24 to
2022-12-25
Date Completed: 2022-12-25

ATTN: Miss Mei Ling Tang

Page: 1 of 2

Certificate of Calibration

Item for calibration:

| | | |
|---|---------------------------------|------------|
| YSI EXO1 Multiparameter Sondes | Equipment No.: SW-08-108 | |
| Manufacturer: | YSI Incorporated, a Xylem brand | |
| Description: | Model No. | Serial No. |
| - EXO1 Sonde, 100 meter Depth, 4 Sensor ports | 599502-24 | 17B100681 |
| - EXO Optical DO Sensor, Ti | 599100-01 | 16J100992 |
| - EXO conductivity/Temperature Sensor, Ti | 599870 | 17H103451 |
| - EXO Turbidity Sensor, Ti | 599101-01 | 20J103612 |
| - EXO pH Sensor Assembly, Guarded, Ti | 599701 | 17B103616 |

Test conditions:

Room Temperature : 17-22 degree Celsius
Relative Humidity : 40-70%

Test Specifications:

Performance checking for Conductivity, Temperature, pH, Dissolved oxygen (D.O.)
and Turbidity

Methodology:

According to manufacturer instruction manual, APHA 20e 4500-O C

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|------------------|-----------------------------|
| Test Report No.: | 37645B |
| Date of Issue: | 2022-12-25 |
| Date Received: | 2022-12-24 |
| Date Tested: | 2022-12-24 to 2022-12-25 |
| Date Completed: | 2022-12-25 |

Page: 2 of 2

Certificate of Calibration

Results:

Conductivity performance checking

| | Instrument Readings ($\mu\text{S}/\text{cm}$) | Acceptance Criteria | Comment |
|--|---|---------------------|---------|
| KCl stock solution (12890 $\mu\text{S}/\text{cm}$) | 12300 | 12246-13534 | Pass |

Temperature performance checking

| Reference thermometer- E431 Readings ($^{\circ}\text{C}$) | Instrument Readings ($^{\circ}\text{C}$) | Correction ($^{\circ}\text{C}$) | Comment |
|--|--|-----------------------------------|---------|
| 20.0 | 20.001 | -0.001 | N/A |

pH performance checking

| | Instrument Readings (pH unit) | Acceptance Criteria | Comment |
|-------------------|----------------------------------|---------------------|---------|
| pH QC buffer 4.00 | 3.99 | 4.00 ± 0.10 | Pass |
| pH QC buffer 6.86 | 6.91 | 6.86 ± 0.10 | Pass |
| pH QC buffer 9.18 | 9.24 | 9.18 ± 0.10 | Pass |

D.O. performance checking

| | Instrument Readings (mg/L) | Acceptance Criteria | Comment |
|------------------|----------------------------|---------------------|---------|
| Zero DO solution | 0.05 | $<0.1\text{mg/L}$ | Pass |

| Winkler Titration value (mg/L) | Instrument Readings (mg/L) | Acceptance Criteria | Comment |
|-----------------------------------|----------------------------|--|---------|
| 8.24 | 8.12 | Difference between Titration value and instrument reading $<0.2\text{mg/L}$ | Pass |

Turbidity performance checking

| Turbidity stock solution | Instrument Readings (NTU) | Acceptance Criteria | Comment |
|--------------------------|---------------------------|---------------------|---------|
| 10 NTU | 9.55 | 9.0-11.0 | Pass |
| 50 NTU | 43.51 | 45.0-55.0 | Pass |
| 100 NTU | 95.6 | 90.0-110.0 | Pass |

Depth performance checking

| Water Depth | Instrument Readings (m) | Acceptance Criteria | Comment |
|-------------|-------------------------|---------------------|---------|
| 0.5 meter | 0.50 | 0.45-0.55 | Pass |

*****END OF REPORT*****

TEST REPORT

APPLICANT: Wellab Limited (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Test Report No.: 37645D
Date of Issue: 2022-12-25
Date Received: 2022-12-24
Date Tested: 2022-12-24 to
2022-12-25
Date Completed: 2022-12-25

ATTN: Miss Mei Ling Tang

Page: 1 of 2

Certificate of Calibration

Item for calibration:

| | | |
|---|---------------------------------|------------|
| YSI EXO1 Multiparameter Sondes | Equipment No.: SW-08-129 | |
| Manufacturer: | YSI Incorporated, a Xylem brand | |
| Description: | Model No. | Serial No. |
| - EXO1 Sonde, 100 meter Depth, 4 Sensor ports | 599502-24 | 17B101455 |
| - EXO Optical DO Sensor, Ti | 599100-01 | 17M101337 |
| - EXO conductivity/Temperature Sensor, Ti | 599870 | 17B100784 |
| - EXO Turbidity Sensor, Ti | 599101-01 | 16J101112 |
| - EXO pH Sensor Assembly, Guarded, Ti | 599701 | 16J100565 |

Test conditions:

Room Temperature : 17-22 degree Celsius
Relative Humidity : 40-70%

Test Specifications:

Performance checking for Conductivity, Temperature, pH, Dissolved oxygen (D.O.)
and Turbidity

Methodology:

According to manufacturer instruction manual, APHA 20e 4500-O C

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|------------------|-----------------------------|
| Test Report No.: | 37645D |
| Date of Issue: | 2022-12-25 |
| Date Received: | 2022-12-24 |
| Date Tested: | 2022-12-24 to 2022-12-25 |
| Date Completed: | 2022-12-25 |

Page: 2 of 2

Certificate of Calibration

Results:

Conductivity performance checking

| | Instrument Readings ($\mu\text{S}/\text{cm}$) | Acceptance Criteria | Comment |
|--|---|---------------------|---------|
| KCl stock solution (12890 $\mu\text{S}/\text{cm}$) | 13100 | 12246-13534 | Pass |

Temperature performance checking

| Reference thermometer- E431 Readings ($^{\circ}\text{C}$) | Instrument Readings ($^{\circ}\text{C}$) | Correction ($^{\circ}\text{C}$) | Comment |
|--|--|-----------------------------------|---------|
| 20.0 | 20.002 | -0.002 | N/A |

pH performance checking

| | Instrument Readings (pH unit) | Acceptance Criteria | Comment |
|-------------------|----------------------------------|---------------------|---------|
| pH QC buffer 4.00 | 4.00 | 4.00 ± 0.10 | Pass |
| pH QC buffer 6.86 | 6.94 | 6.86 ± 0.10 | Pass |
| pH QC buffer 9.18 | 9.25 | 9.18 ± 0.10 | Pass |

D.O. performance checking

| | Instrument Readings (mg/L) | Acceptance Criteria | Comment |
|------------------|----------------------------|---------------------|---------|
| Zero DO solution | 0.08 | $<0.1\text{mg/L}$ | Pass |

| Winkler Titration value (mg/L) | Instrument Readings (mg/L) | Acceptance Criteria | Comment |
|-----------------------------------|----------------------------|--|---------|
| 8.24 | 8.15 | Difference between Titration value and instrument reading $<0.2\text{mg/L}$ | Pass |

Turbidity performance checking

| Turbidity stock solution | Instrument Readings (NTU) | Acceptance Criteria | Comment |
|--------------------------|---------------------------|---------------------|---------|
| 10 NTU | 9.63 | 9.0-11.0 | Pass |
| 50 NTU | 47.44 | 45.0-55.0 | Pass |
| 100 NTU | 95.2 | 90.0-110.0 | Pass |

Depth performance checking

| Water Depth | Instrument Readings (m) | Acceptance Criteria | Comment |
|-------------|-------------------------|---------------------|---------|
| 0.5 meter | 0.50 | 0.45-0.55 | Pass |

*****END OF REPORT*****



Eurotron Instruments (UK) Ltd
Unit 18 Austin Way,
Daventry, Northants, NN11 8QY
T: 01327 871044
F: 01327 301255

CALIBRATION CERTIFICATE N. EE13257

Job Reference 35844
Customer Cadmus Distribution Group LT T/A Kesion
Unit 34 . Waterhouse Business Centre
2 Cromer Way
Chelmsford

CM1 2QE

Instrument Type: EIUK
Instrument Model: RASI 700 BIO
Instrument S/N: 330055
Calibration date: 06 Apr 2022
Due Date: 06 Apr 2023

Traceability: All measuring equipment used for calibration purposes is traceable to National or Internationally recognised standards.

Test Method: Under controlled conditions and procedures, known physical, electrical and gas mixture were applied to the instruments under test and the results are reported in the table below

Due Date: This is a recommendation only and does not imply any guaranteed performance of the instrument over this period.

Standards: S/N/ID N. Certificate:N
O2 certified gas mixture 373466 040008266460
H2S/CO2/CH4 certified gas mixture 384603 040008461025
Pressure Calibrator 2803358 89402
Temperature Calibrator 2702DE150201A 84089

CALIBRATION RESULTS

| Parameter | Unit | Applied | As received | Error | Pass/Fail | As left | Error | Pass/Fail |
|-------------|-------|----------|-------------|-------|-----------|---------|-------|-----------|
| O2 | % Vol | 20.90 | 20.90 | 0.0 | Pass | 20.90 | 0.0 | Pass |
| O2 | % Vol | 9.918 | 10.00 | 0.1 | Pass | 10.00 | 0.1 | Pass |
| O2 | % Vol | 0.0 | 0.00 | 0.0 | Pass | 0.00 | 0.0 | Pass |
| CO2IR | %Vol | 39.987 | 40.48 | 0.5 | Pass | 40.18 | 0.2 | Pass |
| CH4 | %Vol | 59.980 | 60.25 | 0.3 | Pass | 60.25 | 0.3 | Pass |
| Pressure | mbar | 0.00 | n/a | N/A | N/A | 0.00 | 0.00 | Pass |
| | mbar | 50.00 | n/a | N/A | N/A | 49.97 | -0.03 | Pass |
| | mbar | 75.00 | n/a | N/A | N/A | 74.99 | -0.01 | Pass |
| | mbar | 90.00 | n/a | N/A | N/A | 90.04 | 0.04 | Pass |
| | mbar | 100.00 | n/a | N/A | N/A | 100.19 | 0.19 | Pass |
| Temperature | °C | 0.00 | n/a | N/A | N/A | 0.2 | 0.2 | Pass |
| (T2) | °C | 200.00 | n/a | N/A | N/A | 200.1 | 0.1 | Pass |
| | °C | 400.00 | n/a | N/A | N/A | 400.2 | 0.2 | Pass |
| | °C | 600.00 | n/a | N/A | N/A | 600.1 | 0.1 | Pass |
| | °C | 1,190.00 | n/a | N/A | N/A | 1190.4 | 0.4 | Pass |
| Temperature | °C | 0.00 | n/a | N/A | N/A | 0.2 | 0.2 | Pass |
| (Air,T1) | °C | 50.00 | n/a | N/A | N/A | 50.2 | 0.2 | Pass |

Date: 06/04/22
Printed Name: Anthony Kinninmonth / John Dorgan

Signature

CALIBRATION CERTIFICATE

Calibration Item: Micromate System ISEE (Calibration with
Geophone UM17121)
Model No.: 721A2501
Serial No.: UM17121
Calibration Date: 21 February 2022
Next Calibration Date: 21 February 2023
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Blastmate III | 714A0801 | BA15521 |
| ISEE Triaxial Geophone | 714A9701 | BG14463 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____

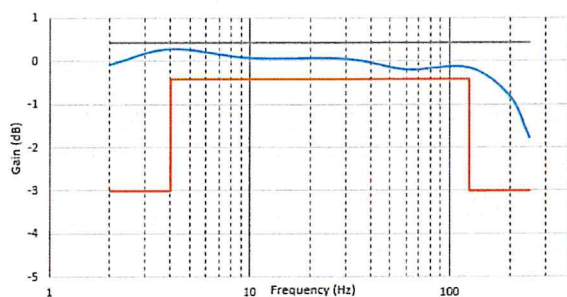


(Anson Kan)

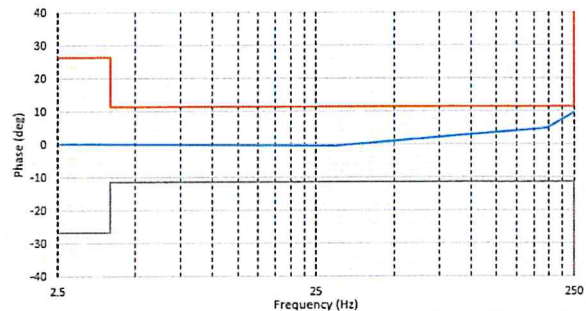
Date: 21 February 2022

Frequency Responses UM17121

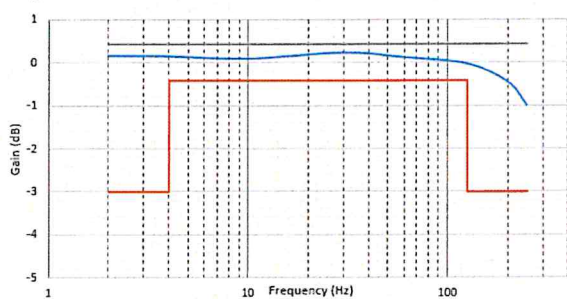
Vertical Frequency Response of UM17121



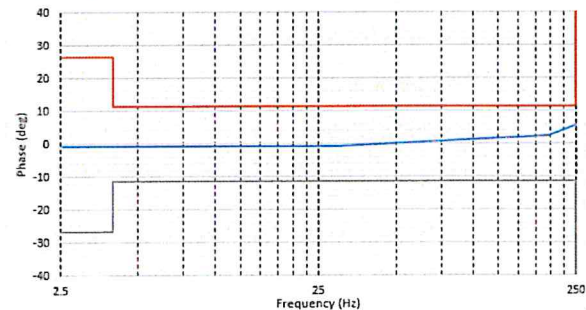
Vertical Phase Response of UM17121



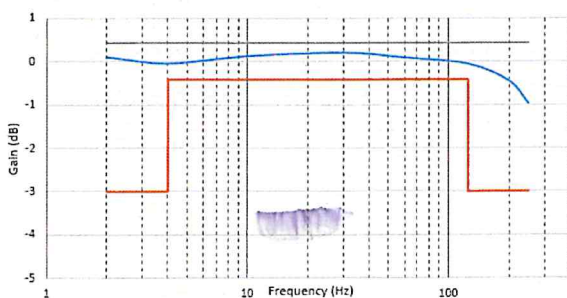
Longitudinal Frequency Response of UM17121



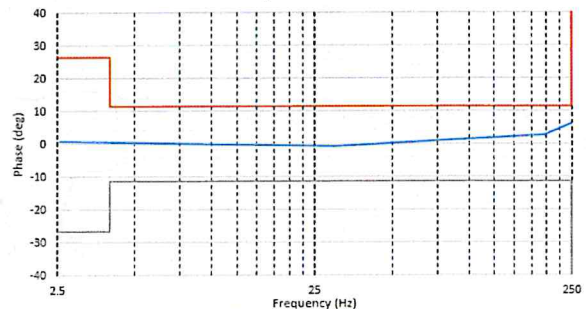
Longitudinal Phase Response of UM17121



Transverse Frequency Response of UM17121



Transverse Phase Response of UM17121



CALIBRATION CERTIFICATE

Calibration Item: TRIAXIAL GEOPHONE (Calibration with
main unit UM17121)
Part Number: 721A2901
Serial No.: UM17121
Calibration Date: 21 February 2022
Next Calibration Date: 21 February 2023
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Blastmate III | 714A0801 | BA15521 |
| ISEE Triaxial Geophone | 714A9701 | BG14463 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____



(Anson Kan)

Date: 21 February 2022



Calibration Report

Calibration No. : 92008051 - B14D3501

Laboratory : FT Laboratories Ltd.

Address : Lot No. DD77 Section 1552 S.Ass 1RP, Ng Chow South Road, Ping Che, Fanling, New Territories

Telephone : (852) 2758 4861

Facsimile : (852) 2758 8962

Customer : CRCC-Paul Y. Joint Venture

Address : Unit A, 10/F., MG Tower, 133 Hoi Bun Road, Kwun Tong, Kowloon.

Item Calibrated : Name/Description: Vibration meter

Manufacturer: Instatel

Meter's model: Micromate ISEE Std

Serial no. of meter: UM17121

Serial no. of sensor: UM17121

Eqt. No.: -

| | | |
|----------------------|---|----------------------|
| Reference Standard / | C/ACC/1 (CNAS Cert No.: 2HB21001704-0001) | Accelerometer |
| Major Measurement | C/OSC/2 (HKASCL Cert No.: RF210042) | Oscilloscope |
| Equipment | C/F-GEN/3 (CNAS Cert No.: 2HB21000253-0001) | Function Generator |
| | R/DMM/2 (CNAS Cert No.: 2HB21000253-0002) | Multimeter |
| | C/ES/1, C/AMP/3 | Shaker and amplifier |

Calibration Method : In-house procedure (CAL 091)

Calibration of Vibration meters by comparison with reference transducer.

Date of item received : 14 Feb., 2023

Date of Calibration : 16 Feb., 2023

Location of Calibration : Calibration Laboratory of FT Laboratories Ltd.

Calibration Conditions

Temperature : 20 ± 3 °C

Relative Humidity : 30% to 80%

Test Results : The test results are detailed in the subsequent page(s).

HOKLAS Approved Signatory :

Date of Issue: 21 FEB 2023

☐ LAI Wing Chun, Victor (General Manager)

☒ CHAN Joseph Nicolas (Senior Technical Engineer)

-
- Notes:
- (1) The above equipment has been calibrated against standards which are traceable to internationally recognized standards.
 - (2) Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation.
 - (3) Such terms of accreditation stipulate that the results shall be traceable to the International System of Units (S.I.) or recognised measurement standards.
 - (4) This certificate shall not be reproduced, except in full, without the written approval of FT Laboratories Ltd.



Calibration Report

Calibration No. : 92008051 - B14D3501

Results

(1) Frequency response at 10.0 mm/s (velocity measurement)

| Frequency (Hz) | Measured velocity in the following direction (mm/s) | | | Error in the following direction (mm/s) | | |
|-------------------|---|--------|--------|---|-------|-------|
| | Vert. | Tran. | Long. | Vert. | Tran. | Long. |
| 20 | 10.330 | 10.546 | 10.483 | 0.330 | 0.546 | 0.483 |
| 60 | 10.173 | 10.764 | 10.701 | 0.173 | 0.764 | 0.701 |
| 100 | 10.210 | 11.576 | 12.099 | 0.210 | 1.576 | 2.099 |

Error for frequency response = Measured velocity (mm/s) minus 10.0 mm/s

(2) Level linearity at 60Hz (velocity measurement)

| Reference level (mm/s) | Measured velocity in the following direction (mm/s) | | | Error in the following direction (mm/s) | | |
|---------------------------|---|--------|--------|---|-------|-------|
| | Vert. | Tran. | Long. | Vert. | Tran. | Long. |
| 5.0 | 5.131 | 5.531 | 5.654 | 0.131 | 0.531 | 0.654 |
| 10.0 | 10.173 | 10.764 | 10.701 | 0.173 | 0.764 | 0.701 |
| 20.0 | 20.130 | 21.478 | 22.227 | 0.130 | 1.478 | 2.227 |

Error for level linearity = Measured velocity (mm/s) minus Reference level (mm/s)

Remarks:

- (A) The expanded uncertainty of measurement relative to "measured values" with $k=2$,
10.7 % For frequency range 20 Hz to 100 Hz; 0.1 g to 0.8 g
- (B) Each reported result is the mean of three measurements on UUT (unit-under-test).
- (C) Before calibration, the UUT was allowed to stabilise in the laboratory environment for at least 1 hr.
- (D) The reported uncertainty is the expanded uncertainty U for a level of confidence of 95%, together with a coverage factor k . The combined standard uncertainty u_c can be calculated as $u_c=U/k$ and its k value.
- (E) The values given in this Calibration Report only relate to the unit-under-test and the values measured at the time of the test. Any uncertainties quoted will not include allowances for the environmental changes, variation and shock during transportation, or the capability of any other laboratory to repeat the measurement.
- (F) The UUT was mounted in the vibration shaker using mounting jigs and cyanoacrylate adhesive or petro wax.
- (G) Applicable g value used, $1g = 9.80665 \text{ m/s}^2$, as per C/ACC/1 report no. SSD20071651.

<End of Report>

Calibrated by: Yan Wing Man
Date: 16 Feb., 2023

Checked by: CH Cheung
Date: 17 FEB 2023



FT Laboratories Ltd.

科達測檢試驗所有限公司

Calibration Report



Calibration No. : 92008051 - B14D3601

Laboratory : FT Laboratories Ltd

Address : Lot No. DD77 Section 1552 S.Ass 1RP, Ng Chow South Road, Ping Che, Fanling, New Territories

Telephone : (852) 2758 4861

Facsimile : (852) 2758 8962

Customer : CRCC-Paul Y. Joint Venture

Address : Unit A, 10/F., MG Tower, 133 Hoi Bun Road, Kwun Tong, Kowloon.

Unit under test (UUT) : Description: Tiltmeter Sensor

Manufacturer: Sung Jin

Model: SJ-705

Serial No.: 121871

Eqt No.: -

Reference Standard / : C/CAL/5 (CNAS Cert No.: CDP202104081)

Major Measurement

Equipment

Calibration Method : In-house Procedure (CAL 112) Comparison of UUT reading against reference clinometer reading while mounted in an angle generator jig.

Date of item received : 14 Feb , 2023

Date of Calibration : 14 Feb , 2023

Location of Calibration : Calibration Laboratory of FT Laboratories Ltd.

Calibration Conditions

Temperature : $20 \pm 3^{\circ}\text{C}$

Relative Humidity : 30% to 80%

Test Results : The test results are detailed in the subsequent page(s).

HOKLAS Approved Signatory :

Date of Issue: 21 FEB 2023

- ☐ LAI Wing Chun, Victor (General Manager)
- ☒ CHAN Joseph Nicolas (Senior Technical Engineer)

- Notes:
- (1) The above equipment has been calibrated against standards which are traceable to internationally recognized standards.
 - (2) Hong Kong Accreditation Service (HKAS) has accredited this laboratory under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for specific laboratory activities as listed in the HOKLAS directory of accredited laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation.
 - (3) Such terms of accreditation stipulate that the results shall be traceable to the International System of Units (S.I.) or recognised measurement standards.
 - (4) This certificate shall not be reproduced, except in full, without the written approval of FT Laboratories Ltd.



FT Laboratories Ltd.

科達測檢試驗所有有限公司

Calibration Report



Calibration No. : 92008051 - B14D3601

Results:

| Reference angle (°) | UUT reading (see Note 1) | Error of reading (see Note 2) | Expanded Uncertainty, U (°) | Coverage factor, k |
|------------------------|-----------------------------|----------------------------------|--------------------------------|--------------------|
| Horizontal measurement | | | | |
| 5.009 | 4.943 | -0.066 | 0.029 | 1.96 |
| 2.504 | 2.473 | -0.032 | 0.029 | 1.96 |
| 1.001 | 0.986 | -0.015 | 0.029 | 1.96 |
| 0.000 | -0.007 | -0.007 | 0.029 | 1.96 |
| -1.002 | -0.994 | 0.008 | 0.029 | 1.96 |
| -2.504 | -2.481 | 0.023 | 0.029 | 1.96 |
| -5.008 | -4.958 | 0.050 | 0.029 | 1.96 |
| Vertical measurement | | | | |
| 5.009 | 4.921 | -0.088 | 0.029 | 1.96 |
| 2.504 | 2.448 | -0.057 | 0.029 | 1.96 |
| 1.001 | 0.964 | -0.038 | 0.029 | 1.96 |
| 0.000 | -0.026 | -0.026 | 0.029 | 1.96 |
| -1.002 | -1.018 | -0.016 | 0.029 | 1.96 |
| -2.504 | -2.504 | 0.000 | 0.029 | 1.96 |
| -5.008 | -4.979 | 0.029 | 0.029 | 1.96 |

Note:

- (1) UUT reading = (the reading when (+) sign on the left - the reading when (-) sign on the left) / 2
- (2) Error of reading = UUT reading - Reference angle

Remarks:

- (A) The tiltmeter and readout system were calibrated together as a single measuring system (UUT).
- (B) Before calibration, the UUT and referee were allowed to stabilize in the laboratory for at least 30 mins while the UUT was also switched on for at least 30 mins.
- (C) The reported uncertainties are the expanded uncertainty U for a level of confidence of 95%, together with their coverage factor k. The combined standard uncertainties can be calculated as $u_c = U/k$ and their k values are given by t-distribution with its degrees of freedom ν_{eff} .
- (D) The values given in this Calibration Report only relate to the unit-under-test (UUT) and the values measured at the time of test. Any uncertainties quoted will not include allowances for the environment changes, variation and shock during transportation,

< End of Report >

Calibrated by: Yan Wing Man *Man*
Date: 14 Feb., 2023

Checked by: CH Chung *Chung*
Date: 17 FEB 2023

CALIBRATION CERTIFICATE

Calibration Item: Micromate System ISEE (Calibration with
Geophone UM17124)
Model No.: 721A2501
Serial No.: UM17124
Calibration Date: 21 February 2022
Next Calibration Date: 21 February 2023
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Blastmate III | 714A0801 | BA15521 |
| ISEE Triaxial Geophone | 714A9701 | BG14463 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____



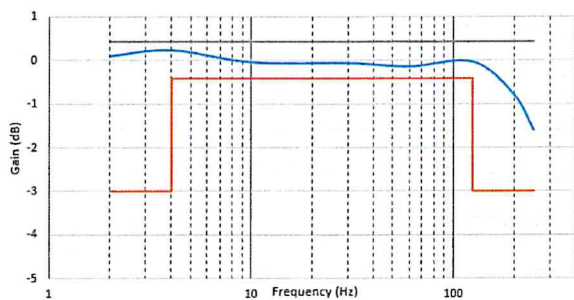
(Anson Kan)

Date: 21 February 2022

Frequency Responses UM17124

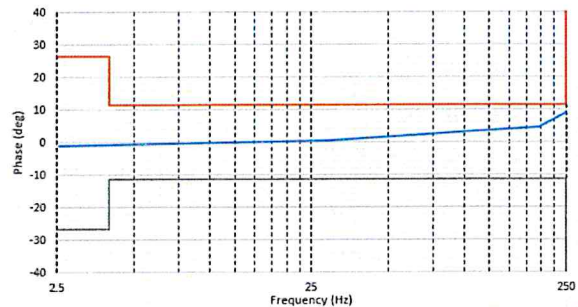
Vertical

Frequency Response of UM17124



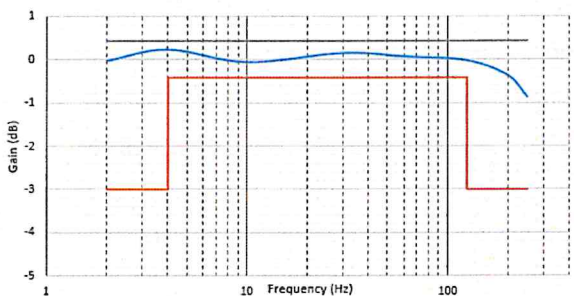
Vertical

Phase Response of UM17124



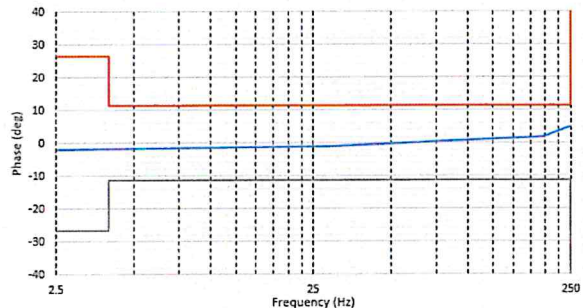
Longitudinal

Frequency Response of UM17124



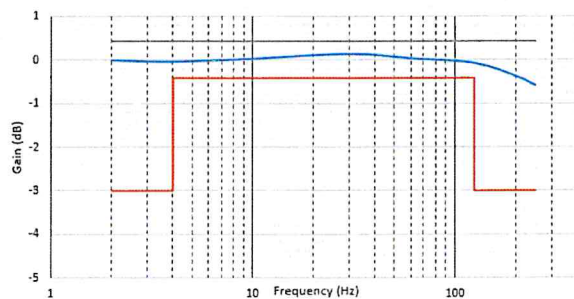
Longitudinal

Phase Response of UM17124



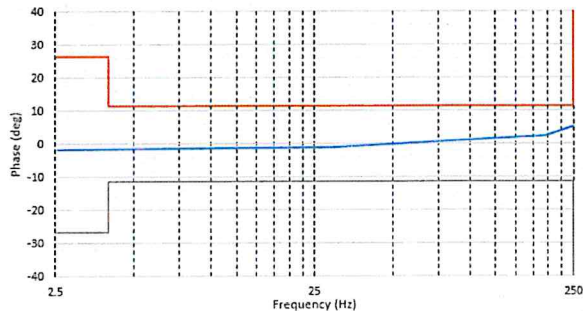
Transverse

Frequency Response of UM17124



Transverse

Phase Response of UM17124



CALIBRATION CERTIFICATE

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main unit UM17124)
Part Number: 721A2901
Serial No.: UM17124
Calibration Date: 21 February 2022
Next Calibration Date: 21 February 2023
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Blastmate III | 714A0801 | BA15521 |
| ISEE Triaxial Geophone | 714A9701 | BG14463 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____



(Anson Kan)

Date: 21 February 2022

CALIBRATION CERTIFICATE

Calibration Item: Micromate System ISEE (Calibration with
Geophone UM17124)
Model No.: 721A2501
Serial No.: UM17124
Calibration Date: 1 March 2023
Next Calibration Date: 1 March 2024
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Minimate Pro 4 | 720A2301 | MP12550 |
| ISEE Triaxial Geophone | 720A2001 | SE12565 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

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Authorized by: _____



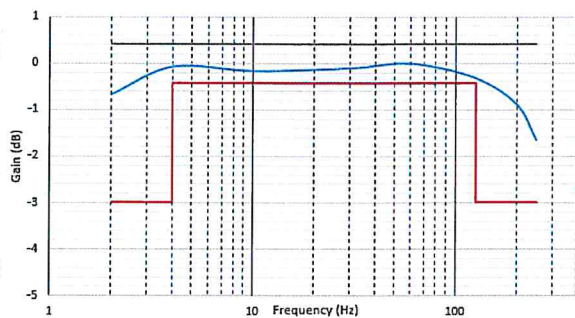
(Anson Kan)

Date: 1 March 2023

Frequency Responses of UM17124

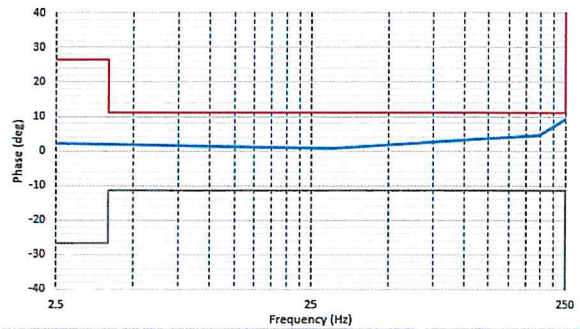
Vertical

Frequency Response of UM17124



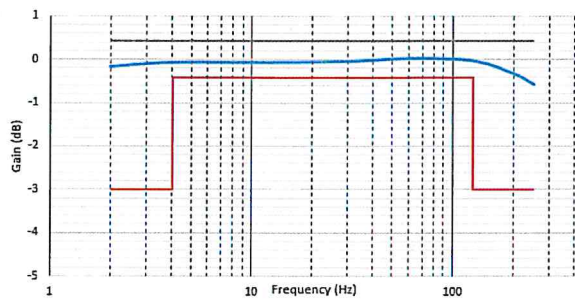
Vertical

Phase Response of UM17124



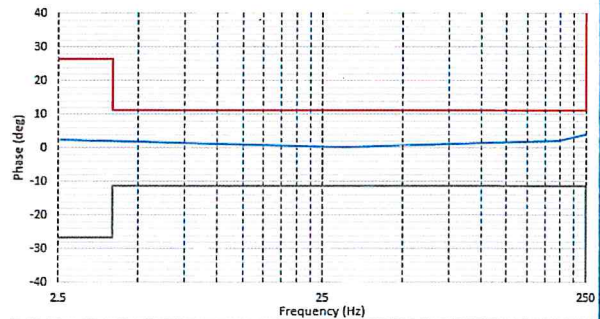
Longitudinal

Frequency Response of UM17124



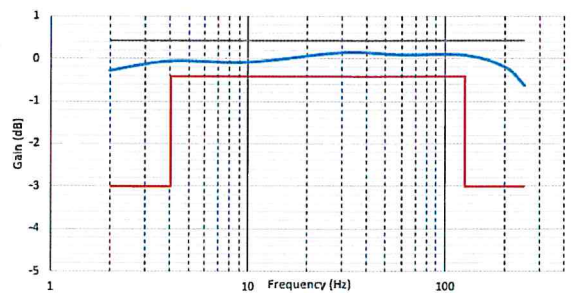
Longitudinal

Phase Response of UM17124



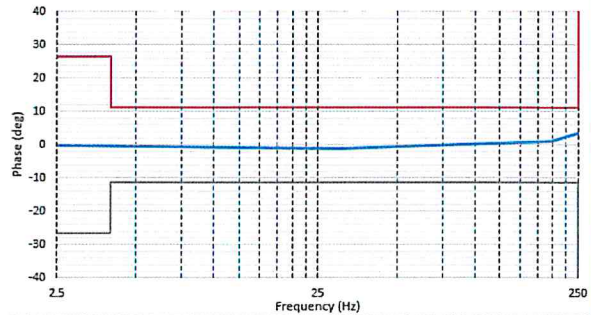
Transverse

Frequency Response of UM17124



Transverse

Phase Response of UM17124



CALIBRATION CERTIFICATE

Calibration Item: TRIAXIAL GEOPHONE (Calibration with
main unit UM17124)
Part Number: 721A2901
Serial No.: UM17124
Calibration Date: 1 March 2023
Next Calibration Date: 1 March 2024
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Minimate Pro 4 | 720A2301 | MP12550 |
| ISEE Triaxial Geophone | 720A2001 | SE12565 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____



(Anson Kan)

Date: 1 March 2023

CALIBRATION CERTIFICATE

Calibration Item: Micromate System ISEE (Calibration with
Geophone UM17126)
Model No.: 721A2501
Serial No.: UM17126
Calibration Date: 28 February 2022
Next Calibration Date: 28 February 2023
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Blastmate III | 714A0801 | BA15521 |
| ISEE Triaxial Geophone | 714A9701 | BG14463 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____

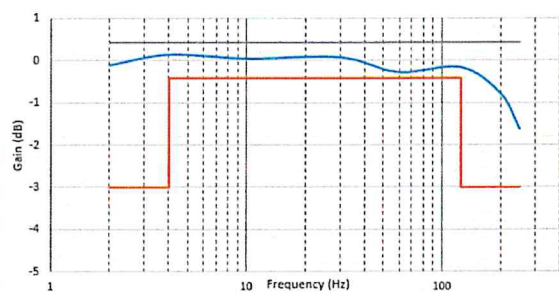


(Anson Kan)

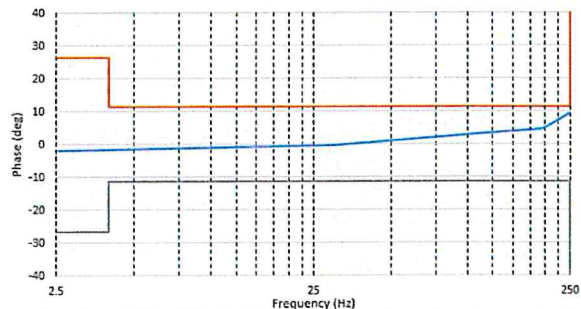
Date: 28 February 2022

Frequency Responses UM17126

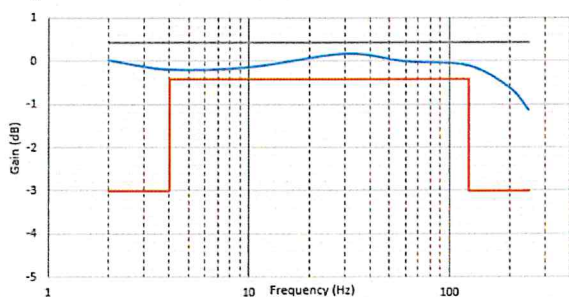
Vertical Frequency Response of UM17126



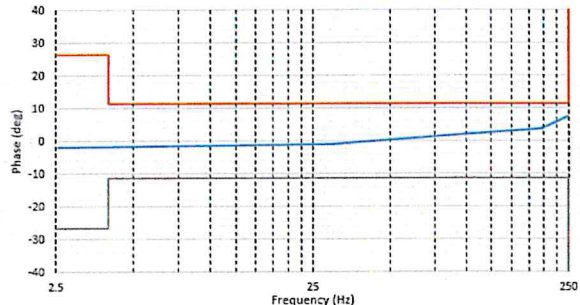
Vertical Phase Response of UM17126



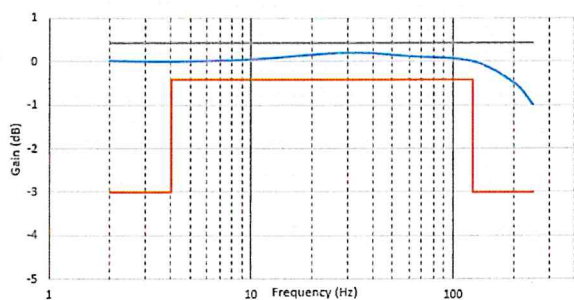
Longitudinal Frequency Response of UM17126



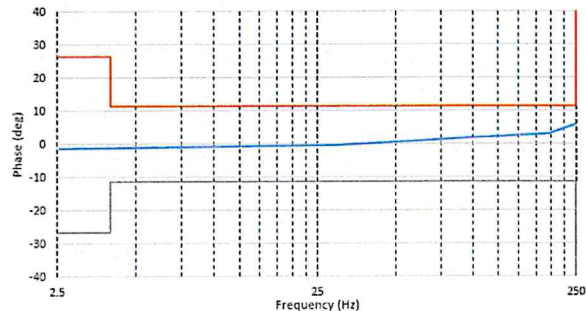
Longitudinal Phase Response of UM17126



Transverse Frequency Response of UM17126



Transverse Phase Response of UM17126



CALIBRATION CERTIFICATE

Calibration Item: TRIAXIAL GEOPHONE (Calibration with
main unit UM17126)
Part Number: 721A2901
Serial No.: UM17126
Calibration Date: 28 February 2022
Next Calibration Date: 28 February 2023
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Blastmate III | 714A0801 | BA15521 |
| ISEE Triaxial Geophone | 714A9701 | BG14463 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____



(Anson Kan)

Date: 28 February 2022

CALIBRATION CERTIFICATE


Calibration Item: Micromate System ISEE (Calibration with
Geophone UM17126)
Model No.: 721A2501
Serial No.: UM17126
Calibration Date: 17 February 2023
Next Calibration Date: 17 February 2024
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Minimate Pro 4 | 720A2301 | MP12550 |
| ISEE Triaxial Geophone | 720A2001 | SE12565 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

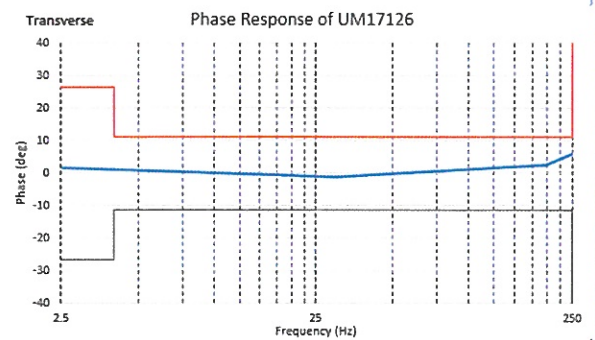
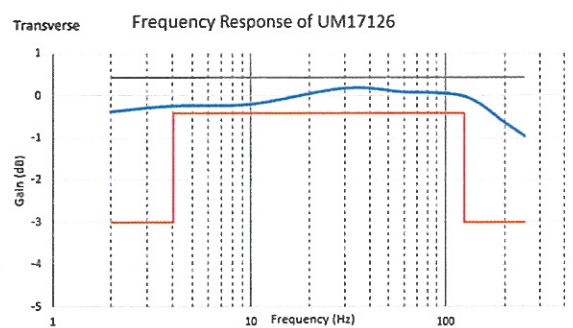
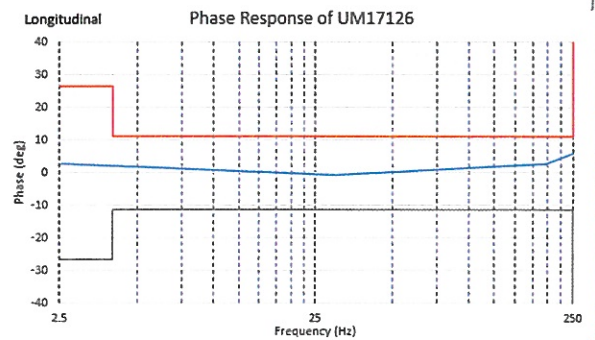
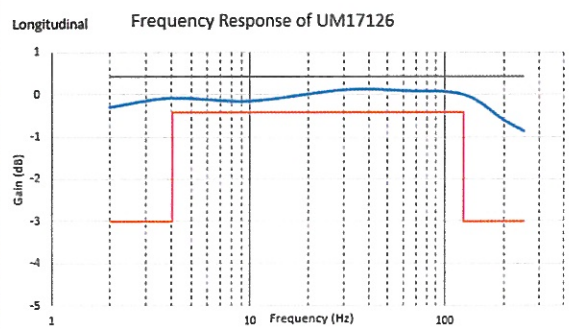
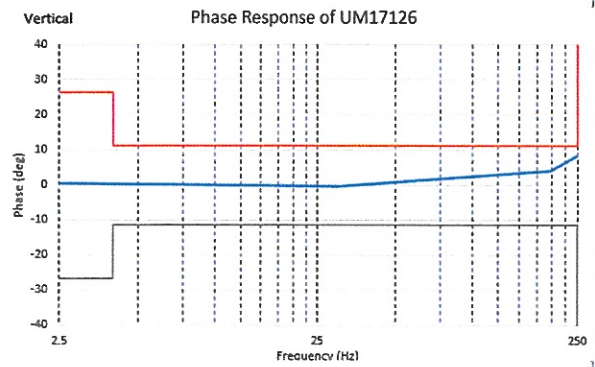
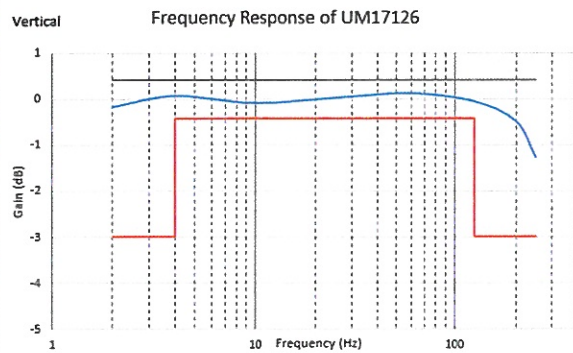
Authorized by: _____



(Anson Kan)

Date: 17 February 2023

Frequency Responses of UM17126



CALIBRATION CERTIFICATE

Calibration Item: TRIAXIAL GEOPHONE (Calibration with main unit UM17126)
Part Number: 721A2901
Serial No.: UM17126
Calibration Date: 17 February 2023
Next Calibration Date: 17 February 2024
Method Used: In-house Method B3-001
In-house Testing Procedure No.: B3-001

| Test References | Model | Serial No. |
|--------------------------------------|----------|------------|
| Minimate Pro 4 | 720A2301 | MP12550 |
| ISEE Triaxial Geophone | 720A2001 | SE12565 |
| 15MHz Function Generator* | 33120A | US34003309 |
| Stanford Spectrum Analyzer | SR760 | 41550 |
| Keysight Multimeter* | 34470A | MY57700765 |
| HP Distortion Meter* | 339A | 2025A04515 |
| Bruel & Kjaer Accelerometer* | 4370 | 31474 |
| Bruel & Kjaer Charge Amplifier* | 2647 | 2731339 |
| Bruel & Kjaer Conditional Amplifier* | 2690 | 2437929 |
| LDS Air Cooled Vibrator | V556 | 92794/1 |
| LDS Field Power Supply | FPS10L | ARA 04/05 |
| LDS Power Amplifier | PA1000L | ARA 07/06 |

*References are traceable to NIST or equivalent.

INSTANTEL INC. hereby certifies that this unit has been calibrated and that the results are consistent with the specifications published regarding this instrument. The SENSORCHECK feature of the unit is sufficiently reliable to indicate proper operation, although it is recommended that this unit be sent to INSTANTEL or an authorized service center for regular calibration.

Authorized by: _____



(Anson Kan)

Date: 17 February 2023

**APPENDIX D
ENVIRONMENTAL MONITORING
SCHEDULES**

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Impact Air Quality and Noise Monitoring Schedule (February 2023)

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---|---|---|---|----------|
| | | | 1-Feb | 2-Feb | 3-Feb | 4-Feb |
| | | | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | |
| 5-Feb | 6-Feb | 7-Feb | 8-Feb | 9-Feb | 10-Feb | 11-Feb |
| | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | |
| 12-Feb | 13-Feb | 14-Feb | 15-Feb | 16-Feb | 17-Feb | 18-Feb |
| | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 | |
| 19-Feb | 20-Feb | 21-Feb | 22-Feb | 23-Feb | 24-Feb | 25-Feb |
| | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | |
| 26-Feb | 27-Feb | 28-Feb | | | | |
| | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | | | | |

Remarks:

*Monitoring session would be conducted by portable TSP monitor.

| Environmental Permit(s) | Contract No. | Air Quality Stations | Noise Stations |
|---|--------------|---|---|
| EP-466/2013/A EP-467/2013/A EP-468/2013/A | ND/2019/01 | <u>1hr TSP and 24hr TSP</u> KTN-DMS4(B) - Temporary Structure near Fanling Highway (near Pak Shek Au) | -- |
| EP-468/2013/A | ND/2019/03 | | |
| EP-466/2013/A EP-467/2013/A EP-468/2013/A | ND/2019/01 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A - Temporary Structure at Pak Shek Au | -- |
| EP-468/2013/A | ND/2019/03 | | |
| EP-467/2013/A EP-468/2013/A ⁽¹⁾ | ND/2019/01 | -- | CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung |
| EP-468/2013/A ⁽²⁾ | ND/2019/01 | -- | CP-KTN-NMS3 -Fung Kong Garden |
| EP-469/2013 ⁽³⁾ | ND/2019/02 | -- | CP-KTN-NMS6 - Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery |
| EP-470/2013/A | ND/2019/01 | -- | CP-KTN-NMS5 - N/A |
| EP-473/2013/A ⁽⁴⁾ | ND/2019/03 | <u>1hr TSP and 24hr TSP</u> FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark | -- |
| | ND/2019/04 | | -- |
| EP-473/2013/A ⁽⁵⁾ | ND/2019/05 | <u>1hr TSP and 24hr TSP</u> FLN-DMS3 - House near Tong Hang | -- |
| EP-473/2013/A ⁽⁶⁾ | ND/2019/03 | <u>1hr TSP</u> FLN-DMS5 - Noble Hill | -- |
| | ND/2019/04 | <u>24hr TSP</u> FLN-DMS5A - Good View New Village | -- |
| EP-473/2013/A ⁽⁷⁾ | ND/2019/05 | -- | CP-FLN-NMS2 - Scattered Village Houses in Tong Hang |
| EP-473/2013/A ⁽⁸⁾ | ND/2019/04 | -- | CP-FLN-NMS1 - Belair Monte |
| | ND/2019/05 | -- | |
| EP-475/2013/A | ND/2019/06 | -- | |
| Remarks: 1. Since the distance between monitoring station CP-KTN-NMS2 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 2. Since the distance between monitoring station CP-KTN-NMS3 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 3. Since the distance between monitoring station CP-KTN-NMS1 and site boundary of ND/2019/02 under EP-469/2013 exceeds 300m. The monitoring station is not applicable to ND/2019/02 4. Since the distance between monitoring station FLN-DMS1 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/05 5. Since the distance between monitoring station FLN-DMS3 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04 6. Since the distance between monitoring station FLN-DMS5 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/05 7. Since the distance between monitoring station CP-FLN-NMS2 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04. 8. Since the distance between monitoring station CP-FLN-NMS1 and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03. | | | |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Impact Water Quality Monitoring Schedule (February 2023)

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|---|----------|---|----------|
| | | | 1-Feb | 2-Feb | 3-Feb | 4-Feb |
| | | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 5-Feb | 6-Feb | 7-Feb | 8-Feb | 9-Feb | 10-Feb | 11-Feb |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 12-Feb | 13-Feb | 14-Feb | 15-Feb | 16-Feb | 17-Feb | 18-Feb |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 19-Feb | 20-Feb | 21-Feb | 22-Feb | 23-Feb | 24-Feb | 25-Feb |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 26-Feb | 27-Feb | 28-Feb | | | | |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | | | | |

Water Quality Monitoring Stations

River Beas: SYR-CS1 - Upstream of river, SYR-IS1 - Downstream of river

River Indus and near Siu Hang San Tsuen Stream: NTR-CS1 - Upstream of river, NTR-IS1 - Downstream of river, SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream,

MWR-IS3 - Water sensitive receiver at near Ma Wat River

| Environmental Permit(s) | Contract No. | Water Quality Stations |
|-------------------------|--------------|--|
| EP-469/2013 | ND/2019/02 | <u>River Beas</u> SYR-CS1 - Upstream of river SYR-IS1 - Downstream of river |
| EP-473/2013/A | ND/2019/04 | <u>River Indus and near Siu Hang San Tsuen Stream</u> NTR-CS1 - Upstream of river NTR-IS1 - Downstream of river SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream MWR-IS3 - Water sensitive receiver at near Ma Wat River |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Impact Ecological Monitoring Schedule (February 2023)

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---------|--|--|--|----------|
| | | | 1-Feb | 2-Feb | 3-Feb | 4-Feb |
| | | | | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 16:00 Low tide: Start time: 09:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5#</u> High tide: Start time: 16:15 Low tide: Start time: 08:00 | |
| 5-Feb | 6-Feb | 7-Feb | 8-Feb | 9-Feb | 10-Feb | 11-Feb |
| | | | | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 11:30 Low tide: Start time: 09:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5</u> High tide: Start time: 14:00 Low tide: Start time: 09:00 | |
| 12-Feb | 13-Feb | 14-Feb | 15-Feb | 16-Feb | 17-Feb | 18-Feb |
| | | | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution <u>T1, T6</u> | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 16:00 Low tide: Start time: 09:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5</u> High tide: Start time: 10:00 Low tide: Start time: 12:15 | |
| 19-Feb | 20-Feb | 21-Feb | 22-Feb | 23-Feb | 24-Feb | 25-Feb |
| | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution <u>T3, T4, T5</u> | | | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 11:00 Low tide: Start time: 09:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5#</u> High tide: Start time: 14:00 Low tide: Start time: 09:00 | |
| 26-Feb | 27-Feb | 28-Feb | | | | |
| | | | | | | |

#Night-time avifauna monitoring in Long Valley

| Item | Activity | Monitoring Stations/Transects |
|------|---|---|
| 1 | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, Sheung Yue River, and Long Valley | T1. Ng Tung River T2. Ng Tung River T3. Sheung Yue River T5. Long Valley |
| 2 | Monitoring of Measures to Minimise Impacts to Aquatic Fauna in Ma Tso Lung Stream and Siu Hang San Tsuen Stream | MS_01, MS_02, MS_03, MS_04, MS_05, MS_06, MS_07, MS_08, MS_09, MS_10, MS_11, MS_12, MS_13, MS_14, MS_15 |
| 3 | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution | T1. Ma Tso Lung riparian zone and associated wetland habitats T1. Green belt areas E1-8,D1-8 and G1-3 in KTN NDA T1. AGR one C2-4 and C2-2 in KTN NDA T1. Areas north of Ng Tung River T3. Area west of Siu Hang San Tsuen Stream T4. South side of Fanling Highway and Castle Peak Road in the vicinity of Pak Shek Au T5. Area west and east of the southern limit of the FLN NDA work area T6. Areas in the western part of KTN |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Weekly Site Inspection Schedule for February 2023

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|------------------------------|--|------------------------------|--|--|----------|
| | | | 1-Feb | 2-Feb | 3-Feb | 4-Feb |
| | | | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |
| 5-Feb | 6-Feb | 7-Feb | 8-Feb | 9-Feb | 10-Feb | 11-Feb |
| | Site Inspection (ND/2019/05) | Site Inspection (ND/2019/01) | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |
| 12-Feb | 13-Feb | 14-Feb | 15-Feb | 16-Feb | 17-Feb | 18-Feb |
| | | | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/05) Site Inspection (ND/2019/01) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | |
| 19-Feb | 20-Feb | 21-Feb | 22-Feb | 23-Feb | 24-Feb | 25-Feb |
| | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/01) Site Inspection (ND/2019/03) Site Inspection (ND/2019/05) | | | Site Inspection (ND/2019/07) Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | |
| 26-Feb | 27-Feb | 28-Feb | | | | |
| | Site Inspection (ND/2019/05) | Site Inspection (ND/2019/01) | | | | |

Contract No. NDO 04/2019

**Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Tentative Impact Air Quality and Noise Monitoring Schedule (March 2023)**

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---|---|---|---|----------|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | | <u>1hr TSP* X3</u> KTN-DMS4(B), FLN-DMS5 <u>24hr TSP*</u> <u>KTN-DMS4(B), FLN-DMS5A</u> <u>Noise</u> CP-KTN-NMS2, CP-KTN-NMS3, CP-KTN-NMS5, CP-KTN-NMS6 <u>24hr TSP</u> FLN-DMS1, FLN-DMS3 | <u>1hr TSP* X3</u> FLN-DMS1, FLN-DMS3 <u>Noise</u> CP-FLN-NMS1, CP-FLN-NMS2 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A | | |

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

Remarks:

*Monitoring session would be conducted by portable TSP monitor.

| Environmental Permit(s) | Contract No. | Air Quality Stations | Noise Stations |
|---|--------------|---|---|
| EP-466/2013/A EP-467/2013/A EP-468/2013/A | ND/2019/01 | <u>1hr TSP and 24hr TSP</u> KTN-DMS4(B) - Temporary Structure near Fanling Highway (near Pak Shek Au) | -- |
| EP-468/2013/A | ND/2019/03 | | |
| EP-466/2013/A EP-467/2013/A EP-468/2013/A | ND/2019/01 | <u>24hr RSP (Arsenic)</u> KTN-DMS4A - Temporary Structure at Pak Shek Au | -- |
| EP-468/2013/A | ND/2019/03 | | |
| EP-467/2013/A EP-468/2013/A ⁽¹⁾ | ND/2019/01 | -- | CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung |
| EP-468/2013/A ⁽²⁾ | ND/2019/01 | -- | CP-KTN-NMS3 -Fung Kong Garden |
| EP-469/2013 ⁽³⁾ | ND/2019/02 | -- | CP-KTN-NMS6 - Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery |
| EP-470/2013/A | ND/2019/01 | -- | CP-KTN-NMS5 - N/A |
| EP-473/2013/A ⁽⁴⁾ | ND/2019/03 | <u>1hr TSP and 24hr TSP</u> FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark | -- |
| | ND/2019/04 | | -- |
| EP-473/2013/A ⁽⁵⁾ | ND/2019/05 | <u>1hr TSP and 24hr TSP</u> FLN-DMS3 - House near Tong Hang | -- |
| EP-473/2013/A ⁽⁶⁾ | ND/2019/03 | <u>1hr TSP</u> FLN-DMS5 - Noble Hill | -- |
| | ND/2019/04 | <u>24hr TSP</u> FLN-DMS5A - Good View New Village | -- |
| EP-473/2013/A ⁽⁷⁾ | ND/2019/05 | -- | CP-FLN-NMS2 - Scattered Village Houses in Tong Hang |
| EP-473/2013/A ⁽⁸⁾ | ND/2019/04 | -- | CP-FLN-NMS1 - Belair Monte |
| | ND/2019/05 | -- | |
| EP-475/2013/A | ND/2019/06 | -- | |
| Remarks: 1. Since the distance between monitoring station CP-KTN-NMS2 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 2. Since the distance between monitoring station CP-KTN-NMS3 and site boundary of ND/2019/03 under EP-468/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 3. Since the distance between monitoring station CP-KTN-NMS1 and site boundary of ND/2019/02 under EP-469/2013 exceeds 300m. The monitoring station is not applicable to ND/2019/02 4. Since the distance between monitoring station FLN-DMS1 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/05 5. Since the distance between monitoring station FLN-DMS3 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04 6. Since the distance between monitoring station FLN-DMS5 and site boundary of ND/2019/05 under EP-473/2013/A exceeds 500m. The monitoring station is not applicable to ND/2019/05 7. Since the distance between monitoring station CP-FLN-NMS2 and site boundary of ND/2019/03 and ND/2019/04 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03 and ND/2019/04. 8. Since the distance between monitoring station CP-FLN-NMS1 and site boundary of ND/2019/03 under EP-473/2013/A exceeds 300m. The monitoring station is not applicable to ND/2019/03. | | | |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Tentative Impact Water Quality Monitoring Schedule (March 2023)

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|---|----------|---|----------|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | | <u>Water Quality Monitoring</u> River Beas, River Indus and near Siu Hang San Tsuen Stream | |

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

Water Quality Monitoring Stations

River Beas: SYR-CS1 - Upstream of river, SYR-IS1 - Downstream of river

River Indus and near Siu Hang San Tsuen Stream: NTR-CS1 - Upstream of river, NTR-IS1 - Downstream of river, SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream,

MWR-IS3 - Water sensitive receiver at near Ma Wat River

| Environmental Permit(s) | Contract No. | Water Quality Stations |
|-------------------------|--------------|--|
| EP-469/2013 | ND/2019/02 | <u>River Beas</u> SYR-CS1 - Upstream of river SYR-IS1 - Downstream of river |
| EP-473/2013/A | ND/2019/04 | <u>River Indus and near Siu Hang San Tsuen Stream</u> NTR-CS1 - Upstream of river NTR-IS1 - Downstream of river SHST-IS2 - Water sensitive receiver at near Siu Hang San Tsuen Stream MWR-IS3 - Water sensitive receiver at near Ma Wat River |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Tentative Impact Ecological Monitoring Schedule (March 2023)

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---|--|--|--|----------|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 15:00 Low tide: Start time: 07:30 <hr/> Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5#</u> High tide: Start time: 15:00 Low tide: Start time: 07:30 | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution <u>T1, T6</u> | |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | | | | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 10:00 Low tide: Start time: 15:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5</u> High tide: Start time: 10:00 Low tide: Start time: 15:30 | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5</u> High tide: Start time: 13:00 Low tide: Start time: 08:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 13:00 Low tide: Start time: 09:00 | | | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | | | | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 10:00 Low tide: Start time: 15:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5#</u> High tide: Start time: 10:00 Low tide: Start time: 16:00 | |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution <u>T3, T4, T5</u> | Monitoring of Measures to Minimise Disturbance to Water Birds in Sheung Yue River and Long Valley <u>T3 T5</u> High tide: Start time: 13:00 Low tide: Start time: 08:00 | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River <u>T1 T2</u> High tide: Start time: 13:00 Low tide: Start time: 07:00 | | | |

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

#Night-time avifauna monitoring in Long Valley

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Tentative Egretry Monitoring Schedule for March 2023

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---------|-----------|----------|--------|----------|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | | | | |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | | | | | | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | | | | | | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | Egretry Monitoring Ho Sheung Heung Egretry Site, Compensation Site A1-7 FLN and B1-7 FLN, Meanders of Split Colony | | | | | |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | | | | | | |

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

| Item | Activity | Monitoring Stations/Transects |
|------|---|---|
| 1 | Monitoring of Measures to Minimise Disturbance to Water Birds in Ng Tung River, Sheung Yue River, and Long Valley | T1. Ng Tung River T2. Ng Tung River T3. Sheung Yue River T5. Long Valley |
| 2 | Monitoring of Measures to Minimise Impacts to Aquatic Fauna in Ma Tso Lung Stream and Siu Hang San Tsuen Stream | MS_01, MS_02, MS_03, MS_04, MS_05, MS_06, MS_07, MS_08, MS_09, MS_10, MS_11, MS_12, MS_13, MS_14, MS_15 |
| 3 | Monitoring of Measures to Minimise Impacts on Ecological Sensitive Habitats from Disturbance and Pollution | T1. Ma Tso Lung riparian zone and associated wetland habitats |
| | | T1. Green belt areas E1-8,D1-8 and G1-3 in KTN NDA |
| | | T1. AGR one C2-4 and C2-2 in KTN NDA |
| | | T1. Areas north of Ng Tung River |
| | | T3. Area west of Siu Hang San Tsuen Stream |
| | | T4. South side of Fanling Highway and Castle Peak Road in the vicinity of Pak Shek Au |
| | | T5. Area west and east of the southern limit of the FLN NDA work area |
| | | T6. Areas in the western part of KTN |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Tentative Weekly Site Inspection Schedule for March 2023

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|------------------------------|------------------------------|------------------------------|--|--|----------|
| | | | 1-Mar | 2-Mar | 3-Mar | 4-Mar |
| | | | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |
| 5-Mar | 6-Mar | 7-Mar | 8-Mar | 9-Mar | 10-Mar | 11-Mar |
| | Site Inspection (ND/2019/05) | Site Inspection (ND/2019/01) | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |
| 12-Mar | 13-Mar | 14-Mar | 15-Mar | 16-Mar | 17-Mar | 18-Mar |
| | Site Inspection (ND/2019/05) | Site Inspection (ND/2019/01) | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |
| 19-Mar | 20-Mar | 21-Mar | 22-Mar | 23-Mar | 24-Mar | 25-Mar |
| | Site Inspection (ND/2019/05) | Site Inspection (ND/2019/01) | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |
| 26-Mar | 27-Mar | 28-Mar | 29-Mar | 30-Mar | 31-Mar | |
| | Site Inspection (ND/2019/05) | Site Inspection (ND/2019/01) | Site Inspection (ND/2019/02) | Site Inspection (ND/2019/04) Site Inspection (ND/2019/06) | Site Inspection (ND/2019/03) Site Inspection (ND/2019/07) | |

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

APPENDIX E
AIR QUALITY AND AMBIENT ARSENIC
MONITORING RESULTS AND
GRAPHICAL PRESENTATION

Appendix E - 1-hour TSP Monitoring Results

| Location FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark | | | |
|--|-------|---------|--|
| Date | Time | Weather | Particulate Concentration ($\mu\text{g}/\text{m}^3$) |
| 1-Feb-23 | 9:00 | Cloudy | 70.2 |
| 1-Feb-23 | 10:00 | Cloudy | 61.8 |
| 1-Feb-23 | 11:00 | Cloudy | 67.3 |
| 7-Feb-23 | 13:00 | Sunny | 42.9 |
| 7-Feb-23 | 14:00 | Sunny | 43.0 |
| 7-Feb-23 | 15:00 | Sunny | 45.3 |
| 13-Feb-23 | 9:00 | Fine | 64.8 |
| 13-Feb-23 | 10:00 | Fine | 77.2 |
| 13-Feb-23 | 11:00 | Fine | 67.5 |
| 17-Feb-23 | 13:00 | Sunny | 98.5 |
| 17-Feb-23 | 14:00 | Sunny | 128.9 |
| 17-Feb-23 | 15:00 | Sunny | 107.9 |
| 23-Feb-23 | 9:00 | Sunny | 161.8 |
| 23-Feb-23 | 10:00 | Sunny | 166.4 |
| 23-Feb-23 | 11:00 | Sunny | 145.2 |
| Minimum | | | 42.9 |
| Maximum | | | 166.4 |
| Average | | | 89.9 |

| Location FLN-DMS3 - House near Tong Hang | | | |
|--|-------|---------|--|
| Date | Time | Weather | Particulate Concentration ($\mu\text{g}/\text{m}^3$) |
| 1-Feb-23 | 9:00 | Cloudy | 47.1 |
| 1-Feb-23 | 10:00 | Cloudy | 40.7 |
| 1-Feb-23 | 11:00 | Cloudy | 41.4 |
| 7-Feb-23 | 13:00 | Cloudy | 41.4 |
| 7-Feb-23 | 14:00 | Cloudy | 48.6 |
| 7-Feb-23 | 15:00 | Cloudy | 44.2 |
| 13-Feb-23 | 13:00 | Fine | 81.1 |
| 13-Feb-23 | 14:00 | Fine | 74.3 |
| 13-Feb-23 | 15:00 | Fine | 70.7 |
| 17-Feb-23 | 13:30 | Sunny | 84.3 |
| 17-Feb-23 | 14:30 | Sunny | 106.3 |
| 17-Feb-23 | 15:30 | Sunny | 117.5 |
| 23-Feb-23 | 13:00 | Sunny | 147.1 |
| 23-Feb-23 | 14:00 | Sunny | 134.0 |
| 23-Feb-23 | 15:00 | Sunny | 130.3 |
| Minimum | | | 40.7 |
| Maximum | | | 147.1 |
| Average | | | 80.6 |

Appendix E - 1-hour TSP Monitoring Results

| Location FLN-DMS5 - Noble Hill | | | |
|--------------------------------|-------|---------|--|
| Date | Time | Weather | Particulate Concentration ($\mu\text{g}/\text{m}^3$) |
| 6-Feb-23 | 9:00 | Cloudy | 73.2 |
| 6-Feb-23 | 10:00 | Cloudy | 55.5 |
| 6-Feb-23 | 11:00 | Cloudy | 48.1 |
| 10-Feb-23 | 9:00 | Cloudy | 133.8 |
| 10-Feb-23 | 10:00 | Cloudy | 130.0 |
| 10-Feb-23 | 11:00 | Cloudy | 124.2 |
| 16-Feb-23 | 13:00 | Sunny | 106.0 |
| 16-Feb-23 | 14:00 | Sunny | 111.9 |
| 16-Feb-23 | 15:00 | Sunny | 100.1 |
| 22-Feb-23 | 9:00 | Sunny | 117.3 |
| 22-Feb-23 | 10:00 | Sunny | 126.4 |
| 22-Feb-23 | 11:00 | Sunny | 131.0 |
| 28-Feb-23 | 9:00 | Sunny | 86.6 |
| 28-Feb-23 | 10:00 | Sunny | 116.8 |
| 28-Feb-23 | 11:00 | Sunny | 74.9 |
| Minimum | | | 48.1 |
| Maximum | | | 133.8 |
| Average | | | 102.4 |

| Location KTN-DMS4(B) - Temporary Structure at Pak Shek Au | | | |
|---|-------|---------|--|
| Date | Time | Weather | Particulate Concentration ($\mu\text{g}/\text{m}^3$) |
| 6-Feb-23 | 9:00 | Cloudy | 79.2 |
| 6-Feb-23 | 10:00 | Cloudy | 44.2 |
| 6-Feb-23 | 11:00 | Cloudy | 34.9 |
| 10-Feb-23 | 8:47 | Cloudy | 58.1 |
| 10-Feb-23 | 9:47 | Cloudy | 28.2 |
| 10-Feb-23 | 10:47 | Cloudy | 32.6 |
| 16-Feb-23 | 13:00 | Sunny | 141.6 |
| 16-Feb-23 | 14:00 | Sunny | 85.9 |
| 16-Feb-23 | 15:00 | Sunny | 73.4 |
| 22-Feb-23 | 13:00 | Sunny | 85.7 |
| 22-Feb-23 | 14:00 | Sunny | 78.7 |
| 22-Feb-23 | 15:00 | Sunny | 68.7 |
| 28-Feb-23 | 13:00 | Sunny | 116.9 |
| 28-Feb-23 | 14:00 | Sunny | 129.3 |
| 28-Feb-23 | 15:00 | Sunny | 165.3 |
| Minimum | | | 28.2 |
| Maximum | | | 165.3 |
| Average | | | 81.5 |

Appendix E - 24-hour TSP Monitoring Results

Location FLN-DMS1 - Scattered Village Houses North of Proposed Potential Ecopark

| Start Date | Weather Condition | Air Temp. (K) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time(hrs.) | Flow Rate (m ³ /min.) | | Av. flow (m ³ /min) | Total vol. (m ³) | Conc. (µg/m ³) |
|------------|-------------------|---------------|-------------------|--------|------------------------|-------------|--------|---------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|
| | | | Initial | Final | | Initial | Final | | Initial | Final | | | |
| 6-Feb-23 | Cloudy | 290.6 | 2.9252 | 3.0255 | 0.1003 | 7423.8 | 7447.8 | 24.0 | 1.23 | 1.22 | 1.22 | 1763.6 | 56.9 |
| 10-Feb-23 | Cloudy | 291.8 | 2.9184 | 2.9815 | 0.0631 | 7447.8 | 7471.8 | 24.0 | 1.22 | 1.22 | 1.22 | 1759.4 | 35.9 |
| 16-Feb-23 | Sunny | 288.1 | 3.4224 | 3.5721 | 0.1497 | 7471.8 | 7495.8 | 24.0 | 1.23 | 1.24 | 1.23 | 1777.6 | 84.2 |
| 22-Feb-23 | Sunny | 289.9 | 2.8661 | 3.0575 | 0.1914 | 7495.8 | 7519.8 | 24.0 | 1.23 | 1.23 | 1.23 | 1770.6 | 108.1 |
| 28-Feb-23 | Sunny | 288.1 | 2.9483 | 3.1541 | 0.2058 | 7519.8 | 7543.8 | 24.0 | 1.23 | 1.23 | 1.23 | 1772.7 | 116.1 |
| | | | | | | | | | | | | Min | 35.9 |
| | | | | | | | | | | | | Max | 116.1 |
| | | | | | | | | | | | | Average | 80.2 |

Location FLN-DMS3 - House near Tong Hang

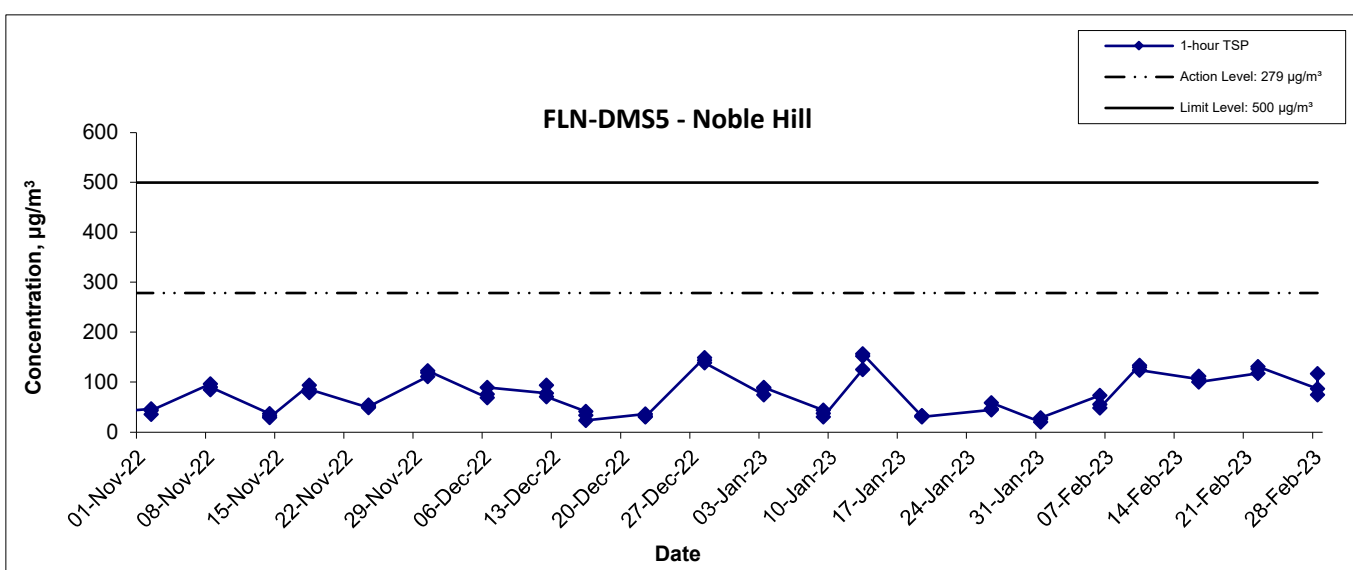
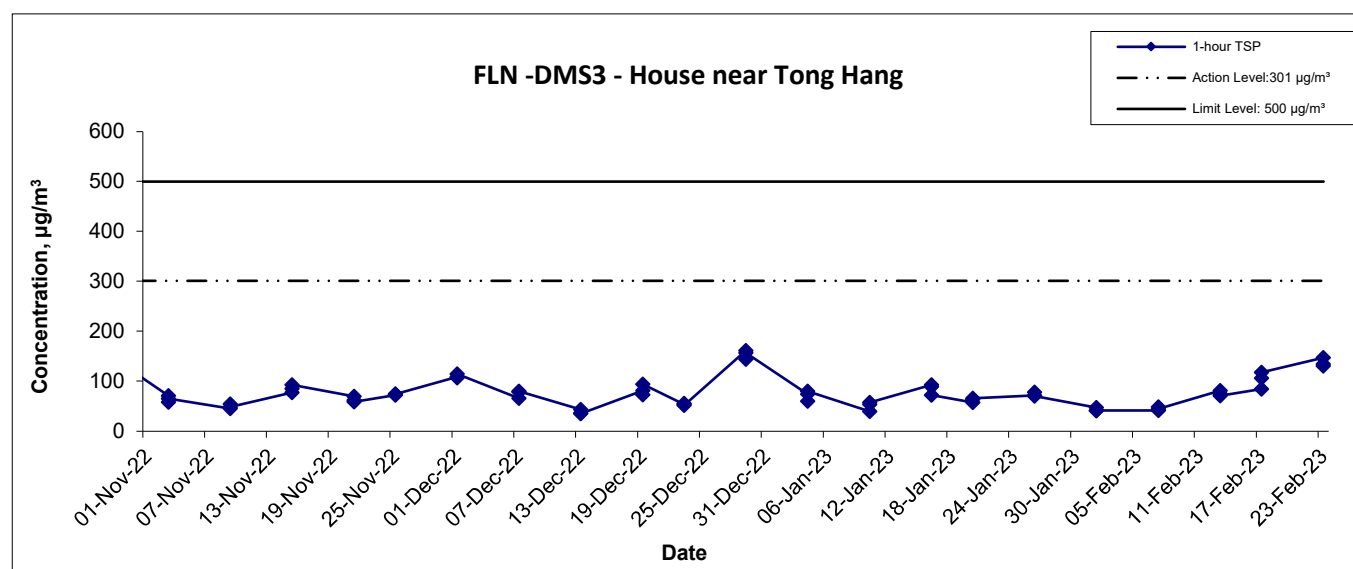
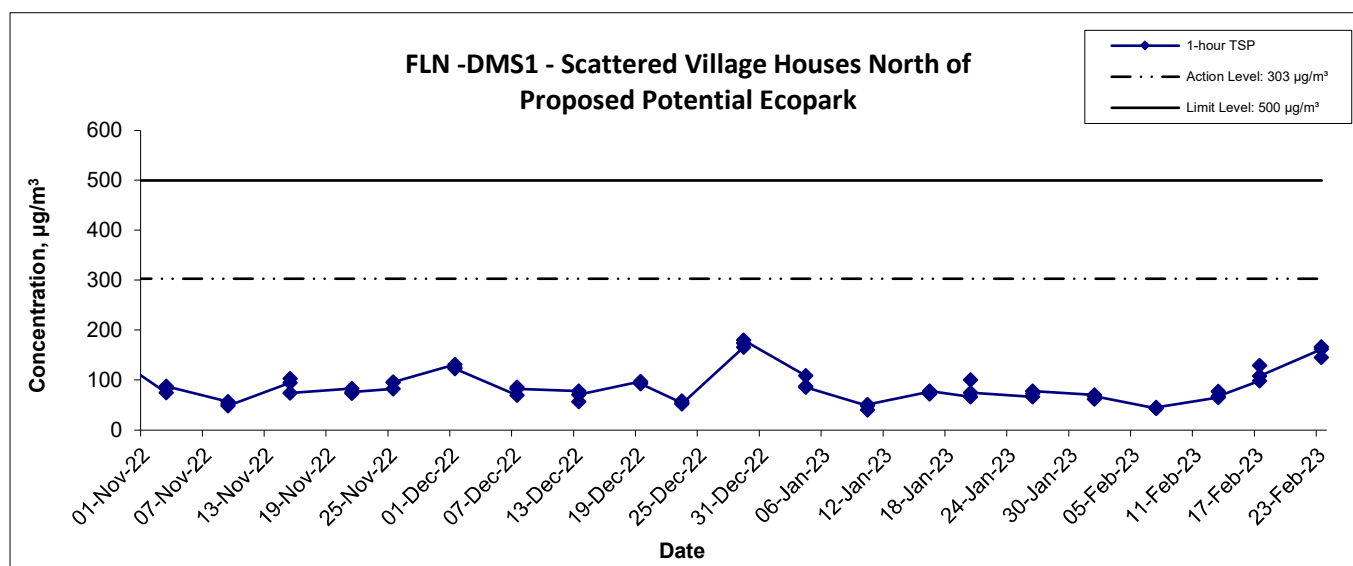
| Start Date | Weather Condition | Air Temp. (K) | Filter Weight (g) | | Particulate weight (g) | Elapse Time | | Sampling Time(hrs.) | Flow Rate (m ³ /min.) | | Av. flow (m ³ /min) | Total vol. (m ³) | Conc. (µg/m ³) |
|------------|-------------------|---------------|-------------------|--------|------------------------|-------------|--------|---------------------|----------------------------------|-------|--------------------------------|------------------------------|----------------------------|
| | | | Initial | Final | | Initial | Final | | Initial | Final | | | |
| 6-Feb-23 | Cloudy | 290.6 | 2.9726 | 3.0292 | 0.0566 | 8557.3 | 8581.3 | 24.0 | 1.22 | 1.22 | 1.22 | 1752.4 | 32.3 |
| 10-Feb-23 | Cloudy | 291.8 | 2.9387 | 2.9890 | 0.0503 | 8581.3 | 8605.3 | 24.0 | 1.21 | 1.21 | 1.21 | 1747.8 | 28.8 |
| 16-Feb-23 | Sunny | 288.1 | 3.0016 | 3.0721 | 0.0705 | 8605.3 | 8629.3 | 24.0 | 1.23 | 1.23 | 1.23 | 1767.5 | 39.9 |
| 22-Feb-23 | Sunny | 289.9 | 2.9507 | 3.0955 | 0.1448 | 8629.3 | 8653.3 | 24.0 | 1.22 | 1.23 | 1.22 | 1760.0 | 82.3 |
| 28-Feb-23 | Sunny | 288.1 | 2.8804 | 3.0430 | 0.1626 | 8653.3 | 8677.3 | 24.0 | 1.22 | 1.22 | 1.22 | 1757.4 | 92.5 |
| | | | | | | | | | | | | Min | 28.8 |
| | | | | | | | | | | | | Max | 92.5 |
| | | | | | | | | | | | | Average | 55.2 |

Appendix E - 24-hour TSP Monitoring Results


| Location FLN-DMS5A - Good View New Village | | | |
|--|-------|---------|--|
| Date | Time | Weather | Particulate Concentration ($\mu\text{g}/\text{m}^3$) |
| 6-Feb-23 | 9:00 | Cloudy | 73.3 |
| 10-Feb-23 | 8:46 | Cloudy | 57.0 |
| 16-Feb-23 | 9:00 | Sunny | 114.2 |
| 22-Feb-23 | 9:00 | Sunny | 82.5 |
| 28-Feb-23 | 12:00 | Sunny | 109.5 |
| Minimum | | | 57.0 |
| Maximum | | | 114.2 |
| Average | | | 87.3 |

| Location KTN-DMS4(B) - Temporary Structure at Pak Shek Au | | | |
|---|-------|---------|--|
| Date | Time | Weather | Particulate Concentration ($\mu\text{g}/\text{m}^3$) |
| 6-Feb-23 | 9:30 | Cloudy | 48.4 |
| 10-Feb-23 | 10:00 | Cloudy | 61.5 |
| 16-Feb-23 | 9:00 | Sunny | 94.1 |
| 22-Feb-23 | 9:30 | Sunny | 72.0 |
| 28-Feb-23 | 11:00 | Sunny | 70.1 |
| Minimum | | | 48.4 |
| Maximum | | | 94.1 |
| Average | | | 69.2 |

1-hr TSP Concentration Levels

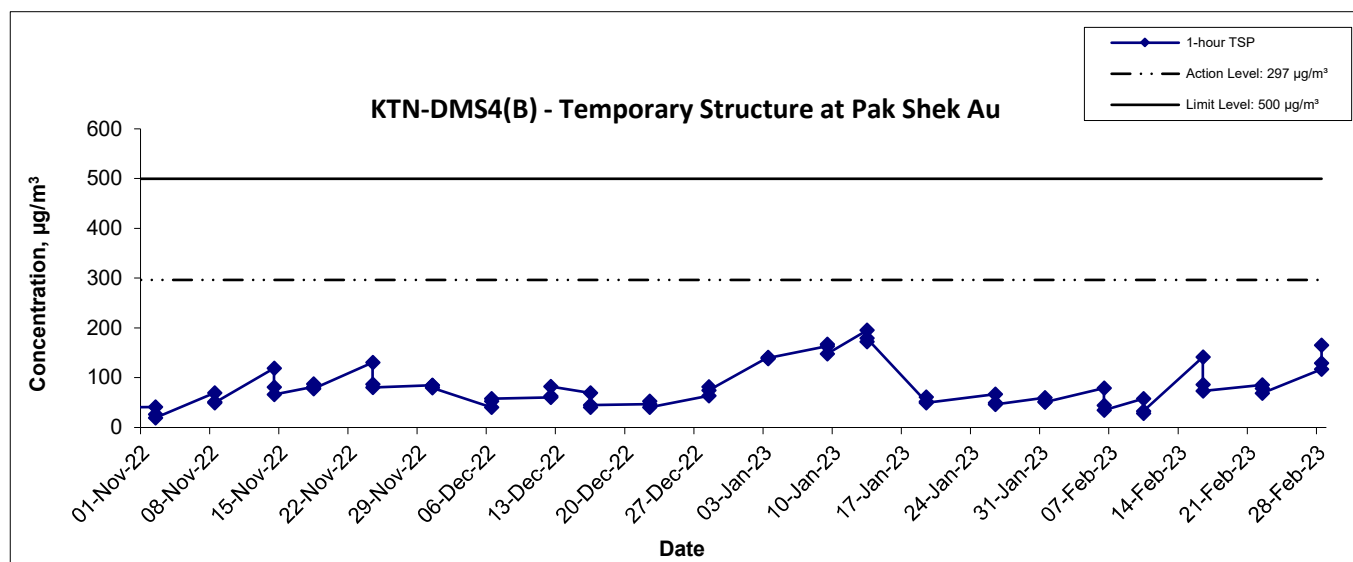


| | | | | |
|-------|---|--|--------|-------------|
| Title | Service Contract No. NDO 04/2019 | | Scale | Project No. |
| | Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas | | N.T.S | WMA20002 |
| | Graphical Presentation of 1-hour TSP Monitoring Results | | Date | Appendix |
| | | | Feb 23 | E |



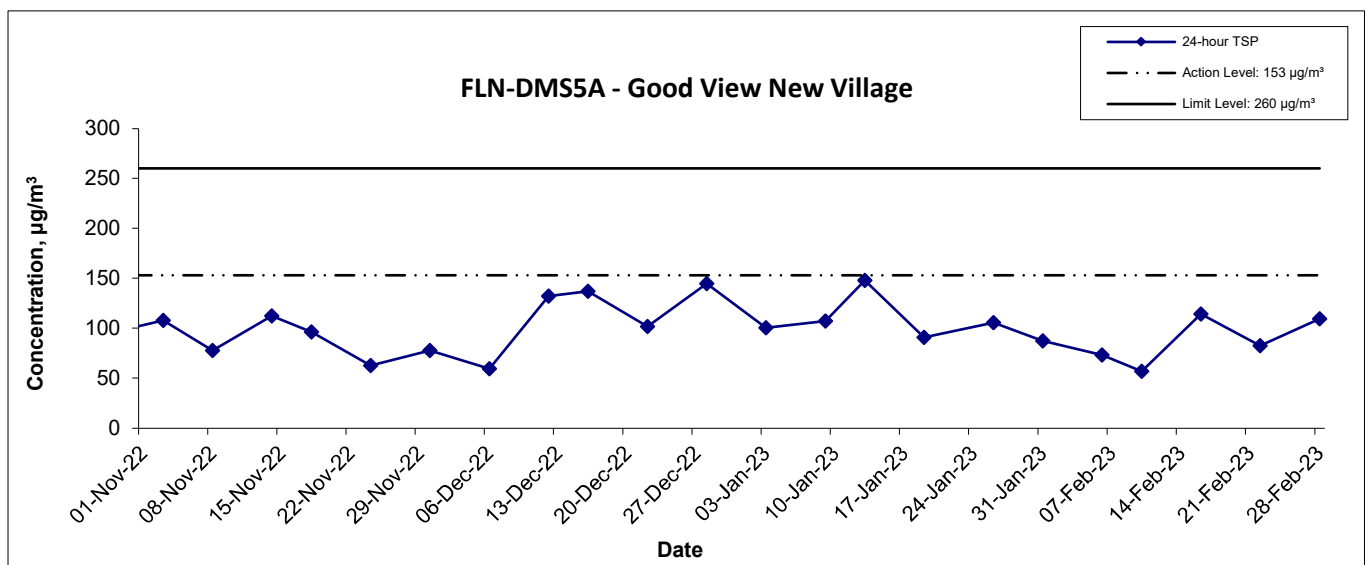
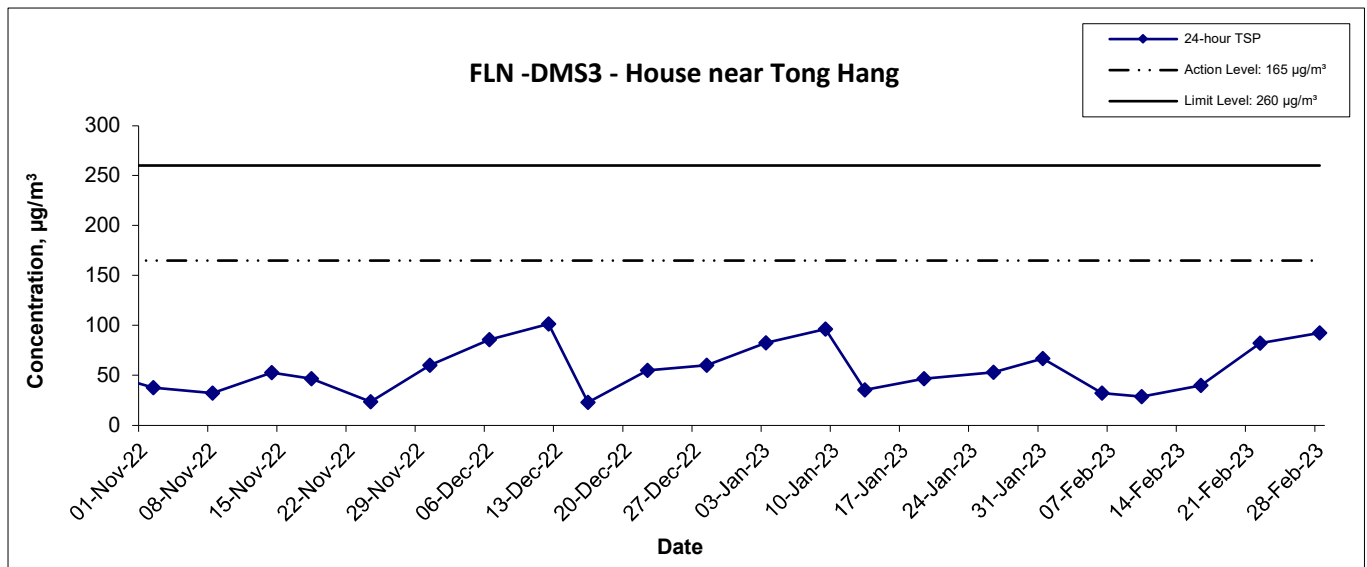
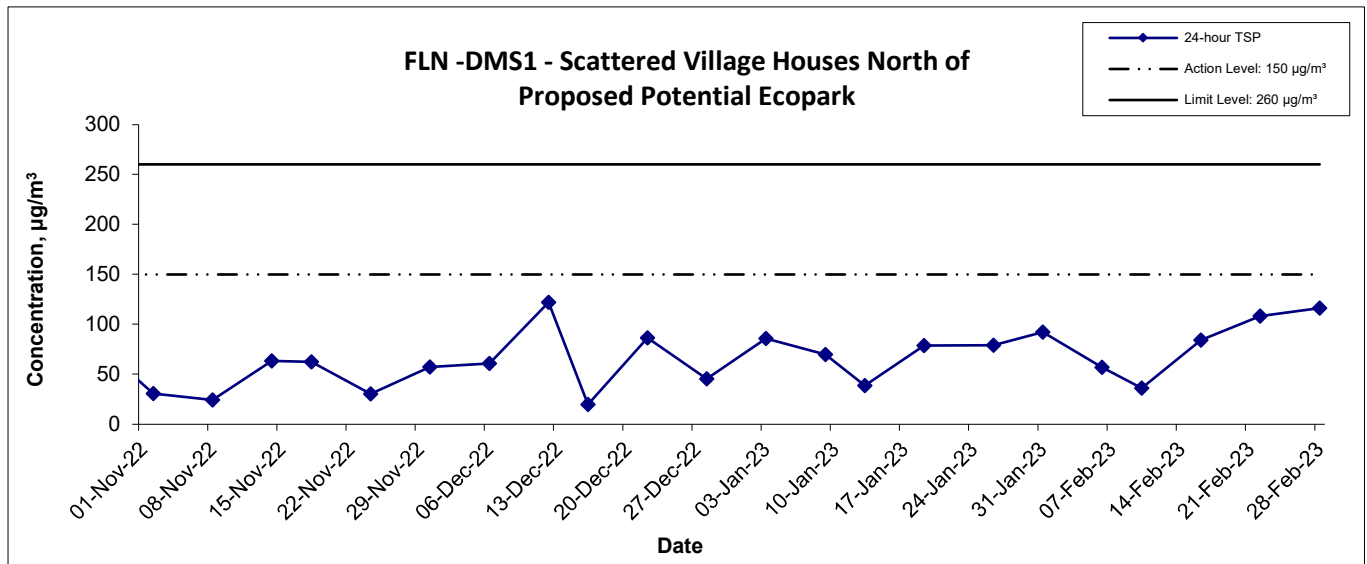
consulting . testing . research

1-hr TSP Concentration Levels



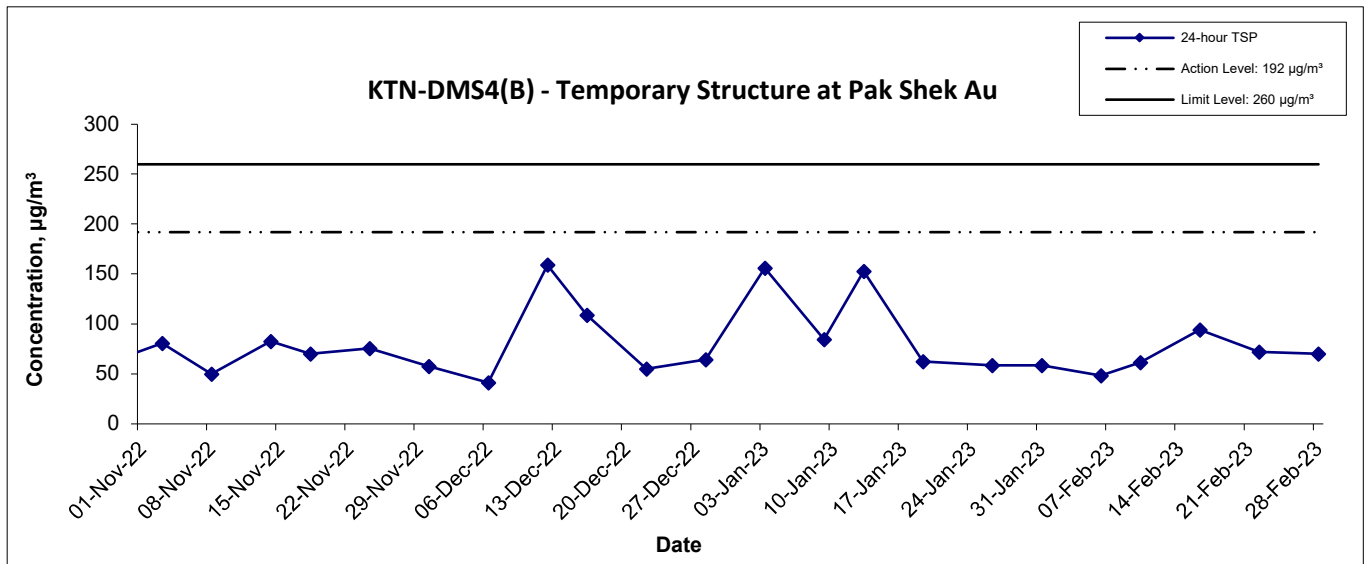
| | | | |
|--------|---|----------|---|
| Title | Service Contract No. NDO 04/2019 | | |
| | Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas | | |
| | Graphical Presentation of 1-hour TSP Monitoring Results | | |
| Scale | N.T.S | | Project No. |
| | Date | | WMA20002 |
| Feb 23 | | Appendix | |
| | | E | |
| | | | WELLAB 匯力 consulting . testing . research |


24-hr TSP Concentration Levels



| | | | | |
|-------|---|--|--------|-------------|
| Title | Service Contract No. NDO 04/2019 | | Scale | Project No. |
| | Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas | | N.T.S | WMA20002 |
| | Graphical Presentation of 24-hour TSP Monitoring Results | | Date | Appendix |
| | | | Feb 23 | E |

24-hr TSP Concentration Levels

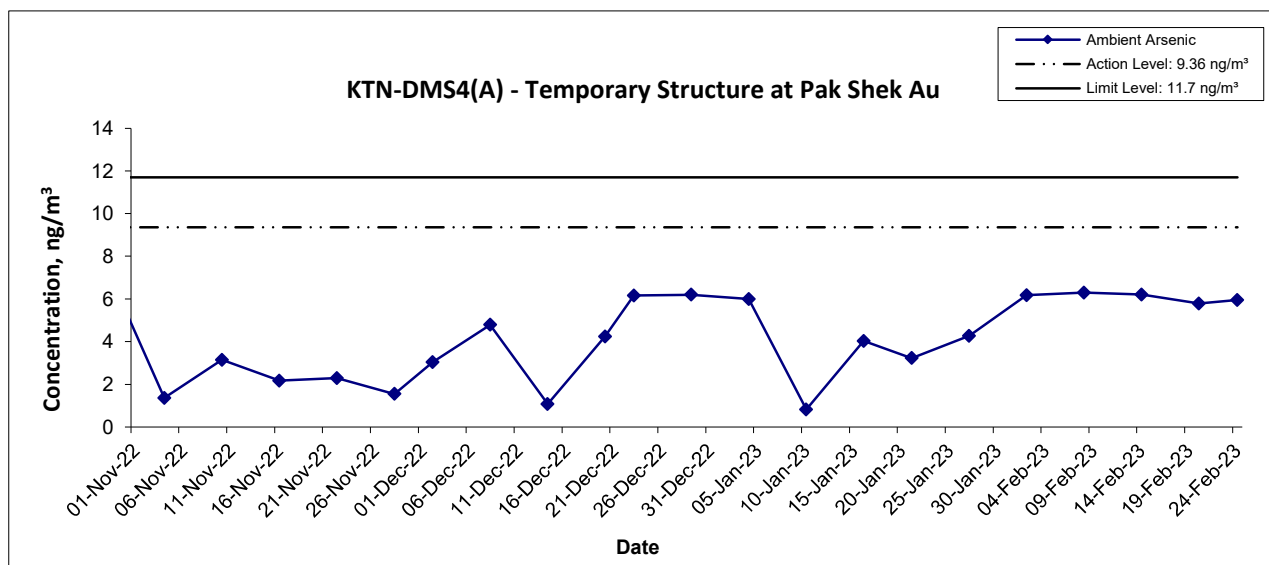



| | | | |
|---|-----------------------|--------------------------------|---|
| Title Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of 24-hour TSP Monitoring Results | Scale N.T.S | Project No. WMA20002 |  |
| | Date Feb 23 | Appendix E | |
| | | | |

Appendix E - Ambient Arsenic Monitoring Results

| Location KTN-DMS4(A) - Temporary Structure at Pak Shek Au | | | |
|---|------------------------------|---|---|
| Date | Arsenic (μg) | Standard Volume, Vstd (m^3) | Ambient Arsenic Concentration (ng/m^3) |
| 2-Feb-23 | 9.8 | 1586.4 | 6.18 |
| 8-Feb-23 | 10.0 | 1590.4 | 6.29 |
| 14-Feb-23 | 9.9 | 1594.7 | 6.21 |
| 20-Feb-23 | 9.2 | 1588.3 | 5.79 |
| 24-Feb-23 | 9.4 | 1579.7 | 5.95 |

Ambient Arsenic



| | | | |
|---|-----------------------|--------------------------------|--|
| Title Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Ambient Arsenic Monitoring Results | Scale N.T.S | Project No. WMA20002 |  consulting . testing . research |
| | Date Feb 23 | Appendix E | |

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | 37729 |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-03 |
| Date Tested: | 2023-02-03 |
| Date Completed: | 2023-02-07 |

ATTN: Ms Ivy Tam

Page: 1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 37729
Project No. : WMA 20002
Project Title: Service Contract No. NDO 04/2019
Environmental Team for Environmental Monitoring and Audit Works in
Construction Phase for the First Phase Development of Kwu Tung North
and Fanling North New Development Areas

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|------------|---------------------------------|--------------------|
| 1 | Arsenic | In-house method SOP036 (ICP-MS) | 0.18 µg |

Results:

| | |
|--------------|------------|
| Sample ID | 220411/041 |
| Sample No. | 37729-1 |
| Arsenic (µg) | 9.8 |

Remarks: 1) < = less than
2) Results for the test material reported as received

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | QC37729 |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-03 |
| Date Tested: | 2023-02-03 |
| Date Completed: | 2023-02-07 |

ATTN: Ms Ivy Tam

Page: 1 of 2

QC report:

Method Blank

| Parameter | Method Blank | Acceptance |
|--------------|--------------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Filter Lot Blank

| Parameter | Filter Lot Blank | Acceptance |
|--------------|------------------|------------|
| Arsenic (µg) | 0.03 | N/A |

Laboratory control spike/ Method QC

| Parameter | MQC | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 93 | 80-120 |

Calibration check

| Parameter | CCV | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 102 | 90-110 |

Interference check solution A

| Parameter | ICS A | Acceptance |
|--------------|--------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Interference check solution AB

| Parameter | ICS AB | Acceptance |
|-------------|--------|------------|
| Arsenic (%) | 96 | 70-130 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37729

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|-----------------|------------|
| Report No.: | QC37729 |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-03 |
| Date Tested: | 2023-02-03 |
| Date Completed: | 2023-02-07 |

Page: 2 of 2

QC report:

Matrix Spike

| Parameter | Matrix Spike | Acceptance |
|-------------|--------------|------------|
| Arsenic (%) | 86 | 75-125 |

Filter Duplicate

| Parameter | Filter Duplicate | Acceptance |
|-------------|------------------|----------------|
| Arsenic (%) | 5 | RPD \leq 20% |

Serial dilution check

| Parameter | Serial dilution check | Acceptance |
|-------------|-----------------------|------------|
| Arsenic (%) | 92 | 90-110 |

Remarks: 1) \leq less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37729

*****END OF REP ORT*****

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | 37768 |
| Date of Issue: | 2023-02-14 |
| Date Received: | 2023-02-09 |
| Date Tested: | 2023-02-09 |
| Date Completed: | 2023-02-14 |

ATTN: Ms Ivy Tam

Page: 1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 37768
Project No. : WMA 20002
Project Title: Service Contract No. NDO 04/2019
Environmental Team for Environmental Monitoring and Audit Works in
Construction Phase for the First Phase Development of Kwu Tung North
and Fanling North New Development Areas

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|------------|---------------------------------|--------------------|
| 1 | Arsenic | In-house method SOP036 (ICP-MS) | 0.18 µg |

Results:

| | |
|--------------|------------|
| Sample ID | 220411/042 |
| Sample No. | 37768-1 |
| Arsenic (µg) | 10 |

Remarks: 1) < = less than
2) Results for the test material reported as received

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Report No.: QC37768
Date of Issue: 2023-02-14
Date Received: 2023-02-09
Date Tested: 2023-02-09
Date Completed: 2023-02-14

ATTN: Ms Ivy Tam

Page: 1 of 2

QC report:

Method Blank

| Parameter | Method Blank | Acceptance |
|--------------|--------------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Filter Lot Blank

| Parameter | Filter Lot Blank | Acceptance |
|--------------|------------------|------------|
| Arsenic (µg) | 0.03 | N/A |

Laboratory control spike/ Method QC

| Parameter | MQC | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 99 | 80-120 |

Calibration check

| Parameter | CCV | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 102 | 90-110 |

Interference check solution A

| Parameter | ICS A | Acceptance |
|--------------|--------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Interference check solution AB

| Parameter | ICS AB | Acceptance |
|-------------|--------|------------|
| Arsenic (%) | 102 | 70-130 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37768

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|-----------------|------------|
| Report No.: | QC37768 |
| Date of Issue: | 2023-02-14 |
| Date Received: | 2023-02-09 |
| Date Tested: | 2023-02-09 |
| Date Completed: | 2023-02-14 |

Page: 2 of 2

QC report:

Matrix Spike

| Parameter | Matrix Spike | Acceptance |
|-------------|--------------|------------|
| Arsenic (%) | 111 | 75-125 |

Filter Duplicate

| Parameter | Filter Duplicate | Acceptance |
|-------------|------------------|------------|
| Arsenic (%) | 2 | RPD≤20% |

Serial dilution check

| Parameter | Serial dilution check | Acceptance |
|-------------|-----------------------|------------|
| Arsenic (%) | 99 | 90-110 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37768

*****END OF REP ORT*****

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | 37818 |
| Date of Issue: | 2023-02-27 |
| Date Received: | 2023-02-22 |
| Date Tested: | 2023-02-22 |
| Date Completed: | 2023-02-27 |

ATTN: Ms Ivy Tam

Page: 1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 37818
Project No. : WMA 20002
Project Title: Service Contract No. NDO 04/2019
 Environmental Team for Environmental Monitoring and Audit Works in
 Construction Phase for the First Phase Development of Kwu Tung North
 and Fanling North New Development Areas

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|------------|---------------------------------|--------------------|
| 1 | Arsenic | In-house method SOP036 (ICP-MS) | 0.18 µg |

Results:

| | |
|--------------|------------|
| Sample ID | 220411/044 |
| Sample No. | 37818-1 |
| Arsenic (µg) | 9.2 |

Remarks: 1) < = less than

2) Results for the test material reported as received

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
 General Manager

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | QC37787 |
| Date of Issue: | 2023-02-21 |
| Date Received: | 2023-02-16 |
| Date Tested: | 2023-02-16 |
| Date Completed: | 2023-02-21 |

ATTN: Ms Ivy Tam

Page: 1 of 2

QC report:

Method Blank

| Parameter | Method Blank | Acceptance |
|--------------|--------------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Filter Lot Blank

| Parameter | Filter Lot Blank | Acceptance |
|--------------|------------------|------------|
| Arsenic (µg) | 0.03 | N/A |

Laboratory control spike/ Method QC

| Parameter | MQC | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 93 | 80-120 |

Calibration check

| Parameter | CCV | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 94 | 90-110 |

Interference check solution A

| Parameter | ICS A | Acceptance |
|--------------|--------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Interference check solution AB

| Parameter | ICS AB | Acceptance |
|-------------|--------|------------|
| Arsenic (%) | 100 | 70-130 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37787

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|-----------------|------------|
| Report No.: | QC37787 |
| Date of Issue: | 2023-02-21 |
| Date Received: | 2023-02-16 |
| Date Tested: | 2023-02-16 |
| Date Completed: | 2023-02-21 |

Page: 2 of 2

QC report:

Matrix Spike

| Parameter | Matrix Spike | Acceptance |
|-------------|--------------|------------|
| Arsenic (%) | 84 | 75-125 |

Filter Duplicate

| Parameter | Filter Duplicate | Acceptance |
|-------------|------------------|------------|
| Arsenic (%) | 5 | RPD ≤ 20% |

Serial dilution check

| Parameter | Serial dilution check | Acceptance |
|-------------|-----------------------|------------|
| Arsenic (%) | 104 | 90-110 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37787

*****END OF REP ORT*****

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | 37818 |
| Date of Issue: | 2023-02-27 |
| Date Received: | 2023-02-22 |
| Date Tested: | 2023-02-22 |
| Date Completed: | 2023-02-27 |

ATTN: Ms Ivy Tam

Page: 1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 37818
Project No. : WMA 20002
Project Title: Service Contract No. NDO 04/2019
Environmental Team for Environmental Monitoring and Audit Works in
Construction Phase for the First Phase Development of Kwu Tung North
and Fanling North New Development Areas

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|------------|---------------------------------|--------------------|
| 1 | Arsenic | In-house method SOP036 (ICP-MS) | 0.18 µg |

Results:

| | |
|--------------|------------|
| Sample ID | 220411/044 |
| Sample No. | 37818-1 |
| Arsenic (µg) | 9.2 |

Remarks: 1) < = less than

2) Results for the test material reported as received

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

Report No.: QC37818
Date of Issue: 2023-02-27
Date Received: 2023-02-22
Date Tested: 2023-02-22
Date Completed: 2023-02-27

ATTN: Ms Ivy Tam

Page: 1 of 2

QC report:
Method Blank

| Parameter | Method Blank | Acceptance |
|--------------|--------------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Filter Lot Blank

| Parameter | Filter Lot Blank | Acceptance |
|--------------|------------------|------------|
| Arsenic (µg) | 0.03 | N/A |

Laboratory control spike/ Method QC

| Parameter | MQC | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 100 | 80-120 |

Calibration check

| Parameter | CCV | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 103 | 90-110 |

Interference check solution A

| Parameter | ICS A | Acceptance |
|--------------|--------|------------|
| Arsenic (µg) | <0.036 | <0.036 |

Interference check solution AB

| Parameter | ICS AB | Acceptance |
|-------------|--------|------------|
| Arsenic (%) | 96 | 70-130 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37818

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|-----------------|------------|
| Report No.: | QC37818 |
| Date of Issue: | 2023-02-27 |
| Date Received: | 2023-02-22 |
| Date Tested: | 2023-02-22 |
| Date Completed: | 2023-02-27 |
| Page: | 2 of 2 |

QC report:

Matrix Spike

| Parameter | Matrix Spike | Acceptance |
|-------------|--------------|------------|
| Arsenic (%) | 108 | 75-125 |

Filter Duplicate

| Parameter | Filter Duplicate | Acceptance |
|-------------|------------------|----------------|
| Arsenic (%) | 7 | RPD \leq 20% |

Serial dilution check

| Parameter | Serial dilution check | Acceptance |
|-------------|-----------------------|------------|
| Arsenic (%) | 99 | 90-110 |

Remarks: 1) \leq less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37818

*****END OF REPORT*****

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | 37825 |
| Date of Issue: | 2023-03-02 |
| Date Received: | 2023-02-27 |
| Date Tested: | 2023-02-27 |
| Date Completed: | 2023-03-02 |

ATTN: Ms Ivy Tam

Page: 1 of 1

Sample Description : 1 sample as received from customer said to be quartz filter
Laboratory No. : 37825
Project No. : WMA 20002
Project Title: Service Contract No. NDO 04/2019
 Environmental Team for Environmental Monitoring and Audit Works in
 Construction Phase for the First Phase Development of Kwu Tung North
 and Fanling North New Development Areas

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|------------|---------------------------------|--------------------|
| 1 | Arsenic | In-house method SOP036 (ICP-MS) | 0.18 µg |

Results:

| | |
|--------------|------------|
| Sample ID | 220411/045 |
| Sample No. | 37825-1 |
| Arsenic (µg) | 9.4 |

Remarks: 1) < = less than

2) Results for the test material reported as received

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
 General Manager

TEST REPORT

APPLICANT: Wellab (EM&A)
RM 1808, Technology Park,
18 On Lai Street,
Shatin, N.T., Hong Kong

| | |
|-----------------|------------|
| Report No.: | QC37825 |
| Date of Issue: | 2023-03-02 |
| Date Received: | 2023-02-27 |
| Date Tested: | 2023-02-27 |
| Date Completed: | 2023-03-02 |

ATTN: Ms Ivy Tam

Page: 1 of 2

QC report:

Method Blank

| Parameter | Method Blank | Acceptance |
|---------------------------|--------------|------------|
| Arsenic (μg) | <0.036 | <0.036 |

Filter Lot Blank

| Parameter | Filter Lot Blank | Acceptance |
|---------------------------|------------------|------------|
| Arsenic (μg) | 0.03 | N/A |

Laboratory control spike/ Method QC

| Parameter | MQC | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 89 | 80-120 |

Calibration check

| Parameter | CCV | Acceptance |
|-------------|-----|------------|
| Arsenic (%) | 104 | 90-110 |

Interference check solution A

| Parameter | ICS A | Acceptance |
|---------------------------|--------|------------|
| Arsenic (μg) | <0.036 | <0.036 |

Interference check solution AB

| Parameter | ICS AB | Acceptance |
|-------------|--------|------------|
| Arsenic (%) | 96 | 70-130 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37825

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

| | |
|-----------------|------------|
| Report No.: | QC37825 |
| Date of Issue: | 2023-03-02 |
| Date Received: | 2023-02-27 |
| Date Tested: | 2023-02-27 |
| Date Completed: | 2023-03-02 |

Page: 2 of 2

QC report:

Matrix Spike

| Parameter | Matrix Spike | Acceptance |
|-------------|--------------|------------|
| Arsenic (%) | 117 | 75-125 |

Filter Duplicate

| Parameter | Filter Duplicate | Acceptance |
|-------------|------------------|------------|
| Arsenic (%) | 1 | RPD≤20% |

Serial dilution check

| Parameter | Serial dilution check | Acceptance |
|-------------|-----------------------|------------|
| Arsenic (%) | 97 | 90-110 |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37825

*****END OF REPORT*****

APPENDIX F
NOISE MONITORING RESULTS AND
GRAPHICAL PRESENTATION

Appendix F - Noise Monitoring Results

| Location CP-FLN-NMS1 - Belair Monte (Existing) | | | | | | | |
|--|---------|-------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Date | Weather | Time | Unit: dB (A) (5-min) | | | Average | Baseline Level |
| | | | L _{eq} | L ₁₀ | L ₉₀ | L _{eq} | L _{eq} |
| 1-Feb-23 | Cloudy | 09:50 | 64.6 | 67.2 | 59.7 | 66.1 | 69.9 |
| | | 09:55 | 67.4 | 70.2 | 58.5 | | |
| | | 10:00 | 65.4 | 68.1 | 59.1 | | |
| | | 10:05 | 66.1 | 69.2 | 60.7 | | |
| | | 10:10 | 66.9 | 69.7 | 59.9 | | |
| 7-Feb-23 | Cloudy | 10:15 | 65.8 | 68.5 | 59.5 | 67.7 | |
| | | 16:00 | 67.8 | 71.3 | 62.2 | | |
| | | 16:05 | 68.2 | 71.8 | 59.1 | | |
| | | 16:10 | 68.5 | 71.7 | 59.7 | | |
| | | 16:15 | 66.5 | 68.9 | 60.2 | | |
| 13-Feb-23 | Sunny | 16:20 | 68.1 | 71.8 | 60.6 | 69.1 | |
| | | 16:25 | 66.9 | 69.6 | 62.2 | | |
| | | 10:00 | 70.3 | 73.3 | 63.6 | | |
| | | 10:05 | 68.9 | 72.3 | 62.3 | | |
| | | 10:10 | 68.7 | 72.3 | 62.9 | | |
| 23-Feb-23 | Sunny | 10:15 | 68.2 | 72.1 | 61.7 | 69.8 | |
| | | 10:20 | 69.0 | 71.9 | 64.1 | | |
| | | 10:25 | 69.3 | 72.0 | 64.3 | | |
| | | 10:30 | 71.0 | 74.5 | 63.4 | | |
| | | 10:35 | 69.7 | 73.2 | 62.9 | | |
| | | 10:40 | 70.0 | 72.6 | 64.9 | | |
| | | 10:45 | 68.0 | 70.8 | 63.5 | | |
| | | 10:50 | 69.4 | 72.5 | 64.8 | | |
| | | 10:55 | 70.2 | 73.0 | 65.8 | | |

| Location CP-FLN-NMS2 - Scattered Village House in Tong Hang (Existing) | | | | | | | |
|--|---------|-------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Date | Weather | Time | Unit: dB (A) (5-min) | | | Average | Baseline Level |
| | | | L _{eq} | L ₁₀ | L ₉₀ | L _{eq} | L _{eq} |
| 1-Feb-23 | Cloudy | 09:05 | 60.5 | 62.3 | 52.8 | 59.1 | 59.6 |
| | | 09:10 | 58.7 | 59.4 | 52.3 | | |
| | | 09:15 | 59.1 | 60.3 | 52.5 | | |
| | | 09:20 | 58.9 | 60.4 | 52.4 | | |
| | | 09:25 | 57.4 | 59.0 | 51.9 | | |
| | | 09:30 | 59.4 | 60.7 | 52.4 | | |
| 7-Feb-23 | Cloudy | 14:30 | 67.2 | 67.5 | 65.9 | 66.9 | |
| | | 14:35 | 66.5 | 67.1 | 65.9 | | |
| | | 14:40 | 66.5 | 67.3 | 65.9 | | |
| | | 14:45 | 66.5 | 67.3 | 65.3 | | |
| | | 14:50 | 67.2 | 69.0 | 65.6 | | |
| | | 14:55 | 67.2 | 67.7 | 65.5 | | |
| 13-Feb-23 | Sunny | 08:55 | 60.2 | 61.5 | 58.0 | 59.6 | |
| | | 09:00 | 60.5 | 61.8 | 58.0 | | |
| | | 09:05 | 59.6 | 60.3 | 58.9 | | |
| | | 09:10 | 59.5 | 60.9 | 58.0 | | |
| | | 09:15 | 58.6 | 59.8 | 57.2 | | |
| | | 09:20 | 58.6 | 59.5 | 57.7 | | |
| 23-Feb-23 | Sunny | 14:15 | 64.5 | 65.5 | 63.5 | 64.2 | |
| | | 14:20 | 64.5 | 65.5 | 63.7 | | |
| | | 14:25 | 65.0 | 65.8 | 64.1 | | |
| | | 14:30 | 64.1 | 65.0 | 63.3 | | |
| | | 14:35 | 63.3 | 63.8 | 62.8 | | |
| | | 14:40 | 63.4 | 64.0 | 62.8 | | |

Appendix F - Noise Monitoring Results

| Location CP-KTN-NMS2 - Residential Buildings at Ma Tso Lung (Existing) | | | | | | | |
|--|---------|-------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Date | Weather | Time | Unit: dB (A) (5-min) | | | Average | Baseline Level |
| | | | L _{eq} | L ₁₀ | L ₉₀ | L _{eq} | L _{eq} |
| 6-Feb-23 | Cloudy | 09:30 | 58.2 | 62.1 | 49.8 | 58.9 | 58.6 |
| | | 09:35 | 56.4 | 60.3 | 48.5 | | |
| | | 09:40 | 61.7 | 63.1 | 50.0 | | |
| | | 09:45 | 58.6 | 61.9 | 52.0 | | |
| | | 09:50 | 57.6 | 61.2 | 50.4 | | |
| | | 09:55 | 59.2 | 60.2 | 47.9 | | |
| 16-Feb-23 | Sunny | 13:50 | 52.2 | 54.6 | 48.4 | 53.4 | |
| | | 13:55 | 51.1 | 54.0 | 47.0 | | |
| | | 14:00 | 56.2 | 56.9 | 49.1 | | |
| | | 14:05 | 55.1 | 56.7 | 48.8 | | |
| | | 14:10 | 52.1 | 55.5 | 45.6 | | |
| | | 14:15 | 50.5 | 53.4 | 45.1 | | |
| 22-Feb-23 | Sunny | 09:20 | 53.7 | 57.1 | 47.7 | 53.2 | |
| | | 09:25 | 54.5 | 58.4 | 47.6 | | |
| | | 09:30 | 51.5 | 54.2 | 47.9 | | |
| | | 09:35 | 53.7 | 56.3 | 47.9 | | |
| | | 09:40 | 49.6 | 51.0 | 47.3 | | |
| | | 09:45 | 54.5 | 59.9 | 46.9 | | |
| 28-Feb-23 | Sunny | 09:10 | 53.4 | 56.4 | 48.2 | 52.2 | |
| | | 09:15 | 50.3 | 54.2 | 43.0 | | |
| | | 09:20 | 51.7 | 54.9 | 43.3 | | |
| | | 09:25 | 49.9 | 53.6 | 44.2 | | |
| | | 09:30 | 49.8 | 53.5 | 43.7 | | |
| | | 09:35 | 55.3 | 59.3 | 46.7 | | |

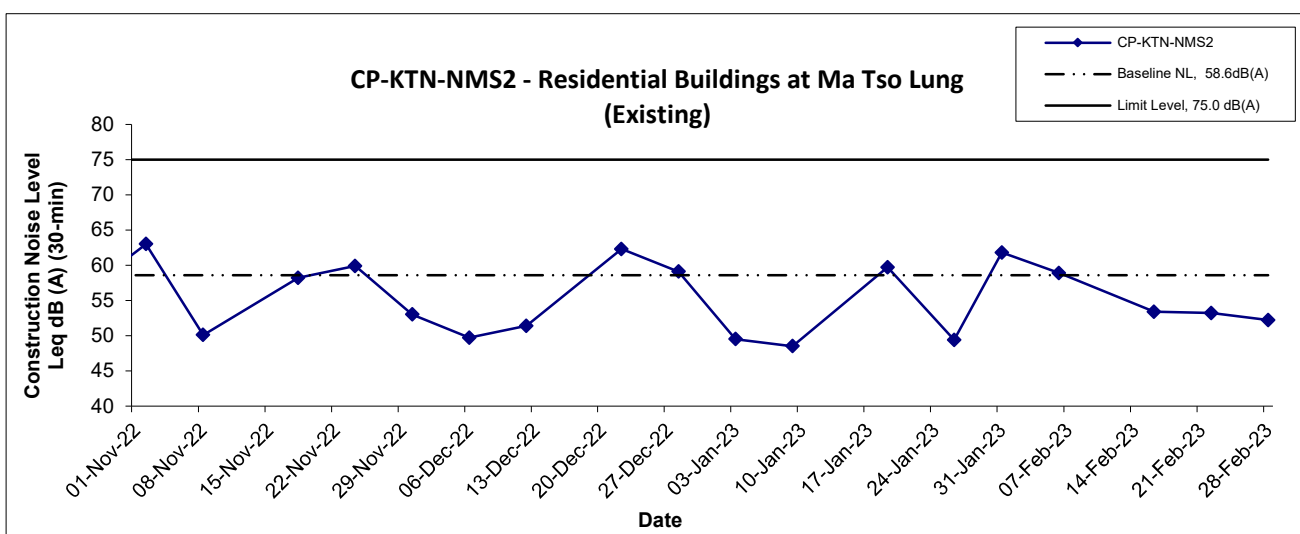
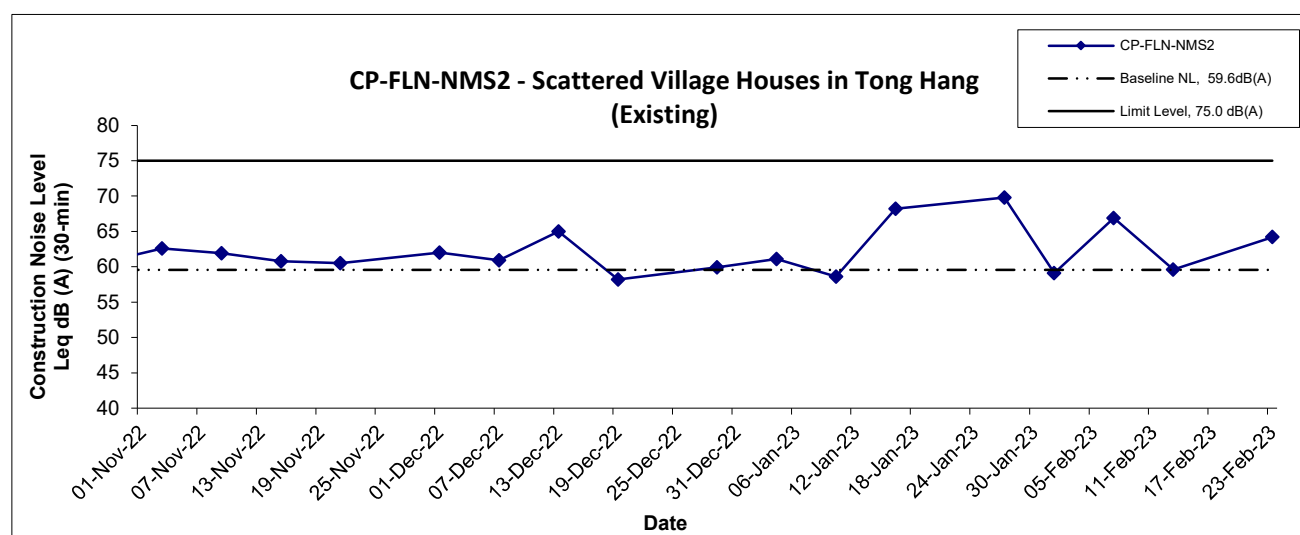
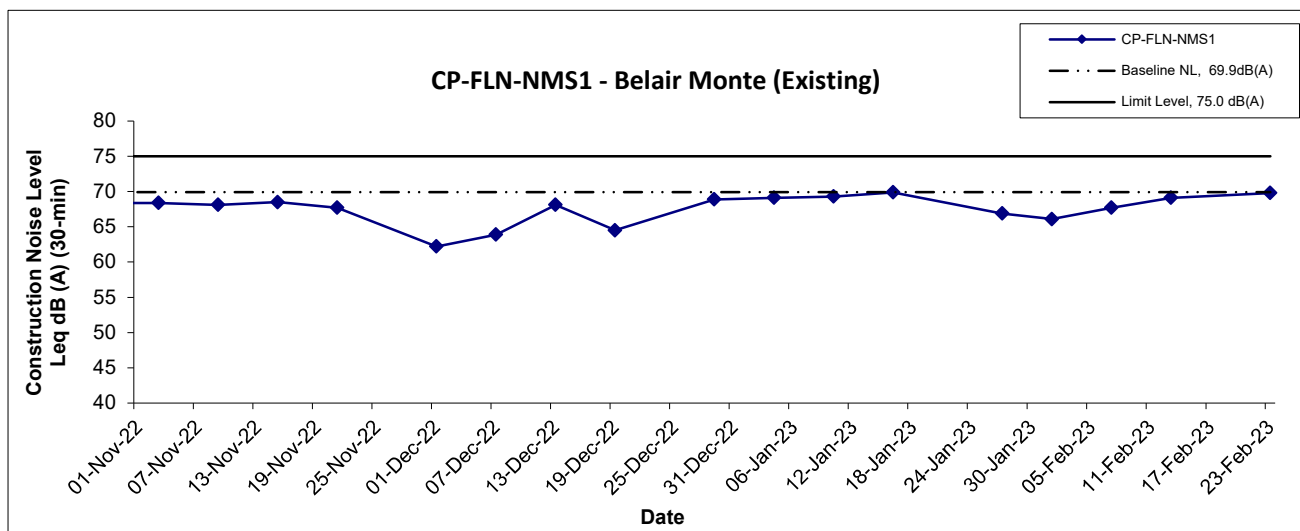
| Location CP-KTN-NMS3 - Fung Kong Garden (Existing) | | | | | | | |
|--|---------|-------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Date | Weather | Time | Unit: dB (A) (5-min) | | | Average | Baseline Level |
| | | | L _{eq} | L ₁₀ | L ₉₀ | L _{eq} | L _{eq} |
| 6-Feb-23 | Cloudy | 09:40 | 58.5 | 59.1 | 57.9 | 58.7 | 51.6 |
| | | 09:45 | 58.8 | 59.2 | 58.1 | | |
| | | 09:50 | 58.7 | 59.3 | 58.1 | | |
| | | 09:55 | 58.6 | 59.2 | 58.0 | | |
| | | 10:00 | 58.7 | 59.3 | 58.0 | | |
| | | 10:05 | 58.6 | 59.2 | 58.1 | | |
| 16-Feb-23 | Cloudy | 14:30 | 59.5 | 60.3 | 58.3 | 61.9 | |
| | | 14:35 | 58.6 | 59.0 | 58.3 | | |
| | | 14:40 | 65.1 | 66.8 | 58.7 | | |
| | | 14:45 | 59.1 | 59.7 | 58.7 | | |
| | | 14:50 | 59.7 | 60.1 | 58.6 | | |
| | | 14:55 | 64.2 | 68.8 | 55.9 | | |
| 22-Feb-23 | Sunny | 10:00 | 58.2 | 58.8 | 57.2 | 58.2 | |
| | | 10:05 | 58.0 | 58.5 | 57.1 | | |
| | | 10:10 | 58.2 | 59.0 | 57.3 | | |
| | | 10:15 | 57.9 | 58.4 | 57.1 | | |
| | | 10:20 | 58.7 | 59.8 | 57.3 | | |
| | | 10:25 | 58.0 | 58.6 | 57.2 | | |
| 28-Feb-23 | Sunny | 09:50 | 55.8 | 56.4 | 55.2 | 55.7 | |
| | | 09:55 | 55.8 | 56.2 | 55.4 | | |
| | | 10:00 | 55.9 | 56.4 | 55.5 | | |
| | | 10:05 | 55.9 | 56.3 | 55.4 | | |
| | | 10:10 | 55.7 | 56.1 | 55.3 | | |
| | | 10:15 | 54.7 | 55.7 | 53.5 | | |


Appendix F - Noise Monitoring Results

| Location CP-KTN-NMS5 - N/A | | | | | | | |
|----------------------------|---------|-------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Date | Weather | Time | Unit: dB (A) (5-min) | | | Average | Baseline Level |
| | | | L _{eq} | L ₁₀ | L ₉₀ | L _{eq} | L _{eq} |
| 6-Feb-23 | Cloudy | 11:25 | 61.3 | 64.2 | 57.3 | 59.0 | 57.2 |
| | | 11:30 | 61.0 | 62.2 | 57.4 | | |
| | | 11:35 | 56.4 | 56.7 | 53.9 | | |
| | | 11:40 | 57.2 | 60.1 | 53.3 | | |
| | | 11:45 | 58.0 | 59.2 | 53.4 | | |
| | | 11:50 | 57.1 | 58.9 | 53.5 | | |
| 16-Feb-23 | Cloudy | 13:00 | 55.0 | 55.8 | 52.7 | 54.0 | |
| | | 13:05 | 53.7 | 53.9 | 52.3 | | |
| | | 13:10 | 54.3 | 54.4 | 52.5 | | |
| | | 13:15 | 55.2 | 58.6 | 50.6 | | |
| | | 13:20 | 52.3 | 51.3 | 49.5 | | |
| | | 13:25 | 52.5 | 54.9 | 49.1 | | |
| 22-Feb-23 | Sunny | 11:25 | 57.6 | 59.9 | 53.5 | 57.3 | |
| | | 11:30 | 55.9 | 58.2 | 53.3 | | |
| | | 11:35 | 58.8 | 60.9 | 53.0 | | |
| | | 11:40 | 57.2 | 58.1 | 53.4 | | |
| | | 11:45 | 57.4 | 59.4 | 53.2 | | |
| | | 11:50 | 56.4 | 57.9 | 53.6 | | |
| 28-Feb-23 | Sunny | 11:25 | 54.0 | 54.7 | 48.9 | 53.4 | |
| | | 11:30 | 53.0 | 55.6 | 49.3 | | |
| | | 11:35 | 51.3 | 52.4 | 49.8 | | |
| | | 11:40 | 50.7 | 52.2 | 49.5 | | |
| | | 11:45 | 54.9 | 56.1 | 48.9 | | |
| | | 11:50 | 54.6 | 55.3 | 48.8 | | |

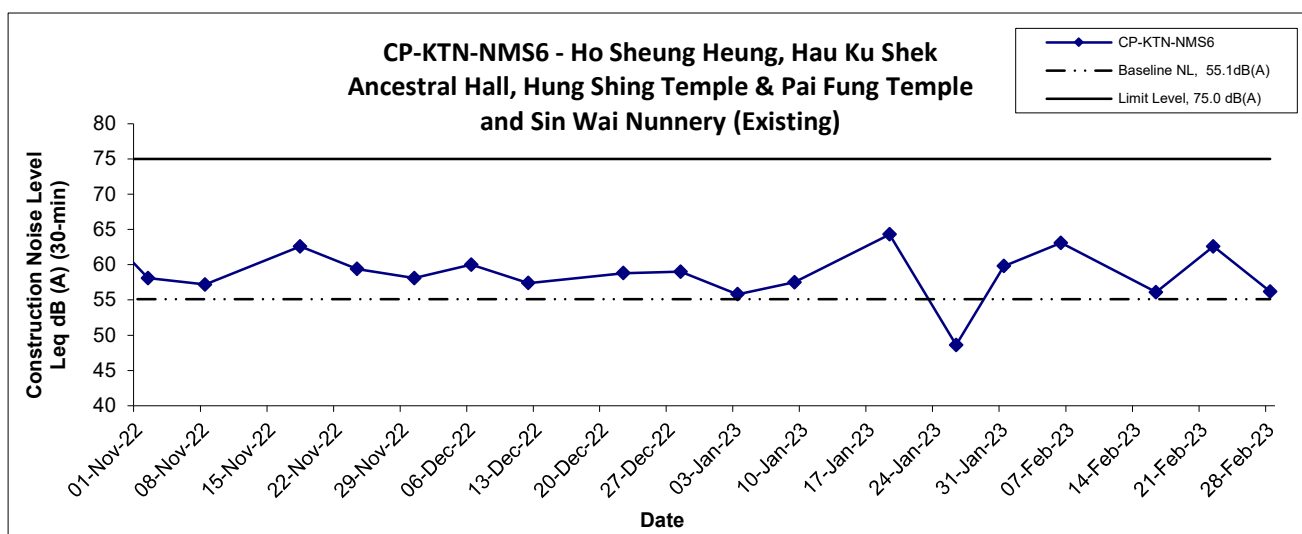
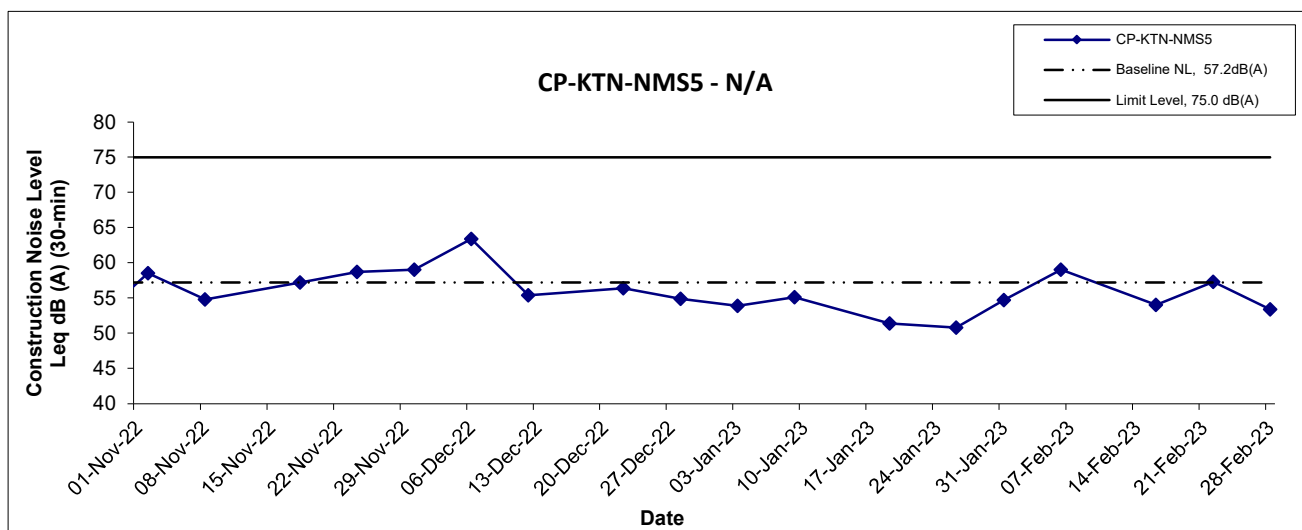
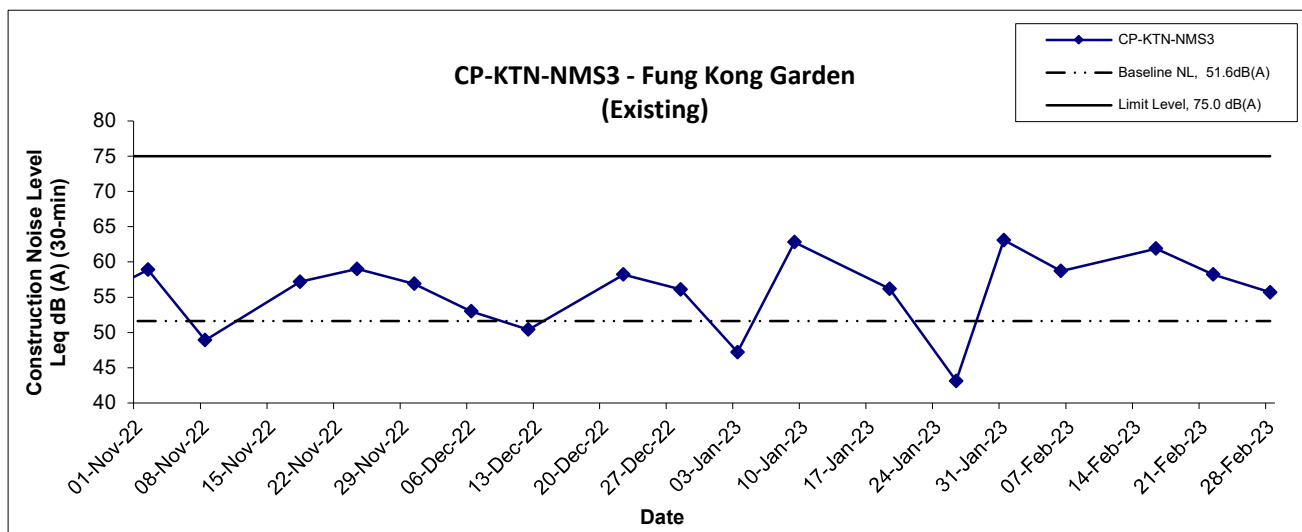
| Location CP-KTN-NMS6 - Ho Sheung Heung, Hau Ku Shek Ancestral Hall, Hung Shing Temple & Pai Fung Temple and Sin Wai Nunnery (Existing) | | | | | | | |
|--|---------|-------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Date | Weather | Time | Unit: dB (A) (5-min) | | | Average | Baseline Level |
| | | | L _{eq} | L ₁₀ | L ₉₀ | L _{eq} | L _{eq} |
| 6-Feb-23 | Cloudy | 10:20 | 66.4 | 70.7 | 55.4 | 63.1 | 55.1 |
| | | 10:25 | 62.6 | 66.1 | 57.3 | | |
| | | 10:30 | 65.3 | 67.8 | 55.8 | | |
| | | 10:35 | 60.4 | 63.1 | 55.9 | | |
| | | 10:40 | 60.0 | 62.7 | 56.5 | | |
| | | 10:45 | 58.0 | 60.3 | 55.2 | | |
| 16-Feb-23 | Cloudy | 15:10 | 58.7 | 61.9 | 52.5 | 56.1 | |
| | | 15:15 | 57.0 | 60.5 | 51.7 | | |
| | | 15:20 | 54.0 | 55.0 | 51.4 | | |
| | | 15:25 | 53.0 | 54.7 | 51.2 | | |
| | | 15:30 | 53.6 | 55.6 | 51.5 | | |
| | | 15:35 | 57.4 | 60.7 | 52.6 | | |
| 22-Feb-23 | Sunny | 10:40 | 58.1 | 60.1 | 56.0 | 62.6 | |
| | | 10:45 | 59.4 | 62.0 | 56.7 | | |
| | | 10:50 | 63.7 | 66.6 | 57.6 | | |
| | | 10:55 | 66.2 | 69.0 | 58.7 | | |
| | | 11:00 | 62.6 | 65.2 | 57.3 | | |
| | | 11:05 | 60.5 | 63.5 | 56.6 | | |
| 28-Feb-23 | Sunny | 10:35 | 58.4 | 58.5 | 54.4 | 56.2 | |
| | | 10:40 | 56.6 | 57.9 | 54.3 | | |
| | | 10:45 | 56.4 | 58.3 | 54.7 | | |
| | | 10:50 | 54.8 | 55.6 | 54.1 | | |
| | | 10:55 | 56.0 | 58.2 | 52.8 | | |
| | | 11:00 | 53.2 | 54.8 | 51.8 | | |


Noise Levels



| | | | |
|--|-----------------------|--------------------------------|--|
| Title Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Construction Noise Monitoring Results | Scale N.T.S | Project No. WMA20002 |  consulting . testing . research |
| | Date Feb 23 | Appendix F | |
| | | | |

Noise Levels



| | | | |
|--|-----------------------|--------------------------------|---|
| Title Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Construction Noise Monitoring Results | Scale N.T.S | Project No. WMA20002 |  |
| | Date Feb 23 | Appendix F | |
| | | | |

APPENDIX G
WATER QUALITY MONITORING
RESULTS AND GRAPHICAL
PRESENTATIONS

Contract No. NDO 04/2019

Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas

Water Quality Monitoring Results

Location: SYR-CS1

| Date | Weather Condition | Start Time | Sampling Depth (m) | | Temperature (°C) | | pH | | Salinity ppt | | DO Saturation (%) | | Dissolved Oxygen (mg/L) | | Turbidity(NTU) | | Suspended Solids (mg/L) | | Arsenic (µg/L) | |
|-----------|-------------------|------------|--------------------|-----|------------------|---------|------------|---------|--------------|---------|-------------------|---------|-------------------------|---------|----------------|---------|-------------------------|---------|----------------|---------|
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average |
| 1-Feb-23 | Fine | 11:30 | Middle | 0.2 | 20.2 20.2 | 20.2 | 7.2 7.2 | 7.2 | 0.2 0.2 | 0.2 | 64.1 64.0 | 64.1 | 5.8 5.8 | 5.8 | 15.3 15.2 | 15.3 | 22 24 | 23.0 | 8 8 | 8.0 |
| 3-Feb-23 | Sunny | 14:06 | Middle | 0.3 | 20.1 20.1 | 20.1 | 7.2 7.2 | 7.2 | 0.1 0.1 | 0.1 | 67.9 67.9 | 67.9 | 6.2 6.2 | 6.2 | 10.9 11.0 | 11.0 | 12 11 | 11.5 | 7 7 | 7.0 |
| 6-Feb-23 | Cloudy | 11:08 | Middle | 0.1 | 19.6 19.6 | 19.6 | 7.9 7.9 | 7.9 | 0.2 0.2 | 0.2 | 47.4 47.6 | 47.5 | 4.3 4.4 | 4.4 | 20.3 20.6 | 20.5 | 29 30 | 29.5 | 10 10 | 10.0 |
| 8-Feb-23 | Cloudy | 11:26 | Middle | 0.2 | 20.2 20.2 | 20.2 | 7.0 7.0 | 7.0 | 0.2 0.2 | 0.2 | 40.9 40.8 | 40.9 | 3.7 3.7 | 3.7 | 14.8 14.7 | 14.8 | 9 8 | 8.5 | 11 10 | 10.5 |
| 10-Feb-23 | Cloudy | 10:10 | Middle | 0.1 | 21.1 21.1 | 21.1 | 8.1 8.1 | 8.1 | 0.1 0.1 | 0.1 | 58.4 58.4 | 58.4 | 5.2 5.2 | 5.2 | 20.1 20.7 | 20.4 | 23 26 | 24.5 | 6 7 | 6.5 |
| 13-Feb-23 | Sunny | 11:58 | Middle | 0.1 | 23.7 23.7 | 23.7 | 7.7 7.7 | 7.7 | 0.2 0.2 | 0.2 | 60.1 60.0 | 60.1 | 5.1 5.1 | 5.1 | 19.3 19.5 | 19.4 | 17 18 | 17.5 | 11 9 | 10.0 |
| 15-Feb-23 | Sunny | 12:57 | Middle | 0.2 | 21.5 21.5 | 21.5 | 8.0 8.0 | 8.0 | 0.2 0.2 | 0.2 | 82.9 82.8 | 82.9 | 7.3 7.3 | 7.3 | 11.1 11.2 | 11.2 | 32 27 | 29.5 | 7 7 | 7.0 |
| 17-Feb-23 | Sunny | 10:31 | Middle | 0.2 | 19.6 19.6 | 19.6 | 7.7 7.7 | 7.7 | 0.1 0.1 | 0.1 | 67.0 66.9 | 67.0 | 6.1 6.1 | 6.1 | 5.0 4.9 | 5.0 | 9 9 | 9.0 | 7 7 | 7.0 |
| 20-Feb-23 | Cloudy | 09:18 | Middle | 0.2 | 20.3 20.3 | 20.3 | 7.4 7.4 | 7.4 | 0.1 0.1 | 0.1 | 56.0 55.7 | 55.9 | 5.1 5.0 | 5.1 | 6.5 6.5 | 6.5 | 12 11 | 11.5 | 7 7 | 7.0 |
| 22-Feb-23 | Sunny | 13:08 | Middle | 0.1 | 22.3 22.3 | 22.3 | 8.5 8.4 | 8.5 | 0.2 0.2 | 0.2 | 59.4 59.1 | 59.3 | 5.2 5.1 | 5.2 | 28.4 29.6 | 29.0 | 24 30 | 27.0 | 10 10 | 10.0 |
| 24-Feb-23 | Sunny | 09:10 | Middle | 0.2 | 19.1 19.1 | 19.1 | 7.3 7.4 | 7.4 | 0.1 0.1 | 0.1 | 62.1 62.1 | 62.1 | 5.7 5.7 | 5.7 | 7.6 7.5 | 7.6 | 7 7 | 7.0 | 5 6 | 5.5 |
| 27-Feb-23 | Sunny | 11:17 | Middle | 0.2 | 18.5 18.5 | 18.5 | 8.0 8.0 | 8.0 | 0.2 0.2 | 0.2 | 51.6 51.5 | 51.6 | 4.8 4.8 | 4.8 | 26.9 26.2 | 26.6 | 25 26 | 25.5 | 10 9 | 9.5 |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: SYR-IS1

| Date | Weather Condition | Start Time | Sampling Depth (m) | | Temperature (°C) | | pH | | Salinity ppt | | DO Saturation (%) | | Dissolved Oxygen (mg/L) | | Turbidity(NTU) | | Suspended Solids (mg/L) | | Arsenic (µg/L) | |
|-----------|-------------------|------------|--------------------|-----|------------------|---------|------------|---------|--------------|---------|-------------------|---------|-------------------------|---------|----------------|---------|-------------------------|---------|----------------|---------|
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average |
| 1-Feb-23 | Fine | 11:47 | Middle | 0.1 | 21.6 21.7 | 21.7 | 7.3 7.3 | 7.3 | 0.2 0.2 | 0.2 | 69.9 69.8 | 69.9 | 6.2 6.1 | 6.2 | 13.3 13.2 | 13.3 | 23 21 | 22.0 | 5 5 | 5.0 |
| 3-Feb-23 | Sunny | 14:15 | Middle | 0.3 | 21.3 21.2 | 21.3 | 7.6 7.6 | 7.6 | 0.2 0.2 | 0.2 | 122.4 122.5 | 122.5 | 10.9 10.9 | 10.9 | 21.3 21.3 | 21.3 | 32 38 | 35.0 | 6 6 | 6.0 |
| 6-Feb-23 | Cloudy | 10:49 | Middle | 0.4 | 20.0 20.0 | 20.0 | 7.9 7.9 | 7.9 | 0.2 0.2 | 0.2 | 71.2 71.1 | 71.2 | 6.5 6.5 | 6.5 | 24.0 23.6 | 23.8 | 34 40 | 37.0 | 5 4 | 4.5 |
| 8-Feb-23 | Cloudy | 11:53 | Middle | 0.3 | 21.9 21.9 | 21.9 | 7.0 7.0 | 7.0 | 0.3 0.3 | 0.3 | 73.9 73.9 | 73.9 | 6.5 6.5 | 6.5 | 35.8 35.5 | 35.7 | 37 35 | 36.0 | 6 7 | 6.5 |
| 10-Feb-23 | Cloudy | 10:28 | Middle | 0.1 | 21.8 21.8 | 21.8 | 8.3 8.3 | 8.3 | 0.1 0.1 | 0.1 | 80.0 80.0 | 80.0 | 7.0 7.0 | 7.0 | 35.0 35.2 | 35.1 | 40 45 | 42.5 | 6 6 | 6.0 |
| 13-Feb-23 | Sunny | 11:36 | Middle | 0.1 | 25.2 25.2 | 25.2 | 7.9 7.9 | 7.9 | 0.1 0.1 | 0.1 | 111.3 111.4 | 111.4 | 9.2 9.2 | 9.2 | 44.9 45.1 | 45.0 | 47 51 | 49.0 | 8 9 | 8.5 |
| 15-Feb-23 | Sunny | 13:09 | Middle | 0.1 | 20.6 20.6 | 20.6 | 7.7 7.7 | 7.7 | 0.3 0.3 | 0.3 | 71.8 71.5 | 71.7 | 6.5 6.4 | 6.5 | 18.3 18.4 | 18.4 | 33 39 | 36.0 | 6 6 | 6.0 |
| 17-Feb-23 | Sunny | 10:53 | Middle | 0.1 | 20.7 20.7 | 20.7 | 7.4 7.4 | 7.4 | 0.3 0.3 | 0.3 | 70.1 69.9 | 70.0 | 6.3 6.3 | 6.3 | 14.5 14.3 | 14.4 | 20 19 | 19.5 | 3 3 | 3.0 |
| 20-Feb-23 | Cloudy | 09:31 | Middle | 0.1 | 19.6 19.6 | 19.6 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 77.3 77.1 | 77.2 | 7.1 7.1 | 7.1 | 5.5 5.5 | 5.5 | 8 7 | 7.5 | 7 7 | 7.0 |
| 22-Feb-23 | Sunny | 13:24 | Middle | 0.7 | 21.9 22.0 | 22.0 | 7.3 7.3 | 7.3 | 0.3 0.3 | 0.3 | 63.3 64.8 | 64.1 | 5.5 5.7 | 5.6 | 45.0 44.2 | 44.6 | 48 45 | 46.5 | 3 2 | 2.5 |
| 24-Feb-23 | Sunny | 09:25 | Middle | 0.1 | 19.5 19.5 | 19.5 | 7.6 7.6 | 7.6 | 0.1 0.1 | 0.1 | 86.0 85.9 | 86.0 | 7.9 7.9 | 7.9 | 15.2 15.4 | 15.3 | 38 36 | 37.0 | 6 6 | 6.0 |
| 27-Feb-23 | Sunny | 11:02 | Middle | 0.4 | 19.7 19.6 | 19.7 | 8.1 8.1 | 8.1 | 0.2 0.2 | 0.2 | 67.7 68.0 | 67.9 | 6.2 6.2 | 6.2 | 34.4 35.0 | 34.7 | 43 40 | 41.5 | 5 4 | 4.5 |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: NTR-CS1

| Date | Weather Condition | Start Time | Sampling Depth (m) | | Temperature (°C) | | pH | | Salinity ppt | | DO Saturation (%) | | Dissolved Oxygen (mg/L) | | Turbidity(NTU) | | Suspended Solids (mg/L) | |
|-----------|-------------------|------------|--------------------|-----|------------------|---------|------------|---------|--------------|---------|-------------------|---------|-------------------------|---------|----------------|---------|-------------------------|---------|
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average |
| 1-Feb-23 | Fine | 13:11 | Middle | 0.2 | 21.7 21.7 | 21.7 | 7.7 7.6 | 7.7 | 0.1 0.1 | 0.1 | 109.0 109.2 | 109.1 | 9.6 9.6 | 9.6 | 6.6 6.5 | 6.6 | 10 10 | 10.0 |
| 3-Feb-23 | Sunny | 15:22 | Middle | 0.2 | 20.9 20.9 | 20.9 | 7.6 7.6 | 7.6 | 0.1 0.1 | 0.1 | 102.7 103.0 | 102.9 | 9.2 9.2 | 9.2 | 5.5 5.7 | 5.6 | 7 8 | 7.5 |
| 6-Feb-23 | Cloudy | 14:10 | Middle | 0.1 | 20.9 20.9 | 20.9 | 7.7 7.7 | 7.7 | 0.1 0.1 | 0.1 | 102.9 103.0 | 103.0 | 9.2 9.2 | 9.2 | 12.9 12.8 | 12.9 | 14 15 | 14.5 |
| 8-Feb-23 | Cloudy | 13:09 | Middle | 0.2 | 20.1 20.1 | 20.1 | 7.1 7.1 | 7.1 | 0.1 0.1 | 0.1 | 92.9 92.9 | 92.9 | 8.4 8.4 | 8.4 | 14.9 14.8 | 14.9 | 16 16 | 16.0 |
| 10-Feb-23 | Cloudy | 12:12 | Middle | 0.2 | 20.7 20.7 | 20.7 | 8.2 8.2 | 8.2 | 0.1 0.1 | 0.1 | 94.7 94.7 | 94.7 | 8.5 8.5 | 8.5 | 24.2 24.3 | 24.3 | 12 15 | 13.5 |
| 13-Feb-23 | Sunny | 09:47 | Middle | 0.2 | 21.1 21.1 | 21.1 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 88.4 88.2 | 88.3 | 7.9 7.9 | 7.9 | 8.0 8.2 | 8.1 | 10 12 | 11.0 |
| 15-Feb-23 | Sunny | 14:50 | Middle | 0.2 | 21.9 21.9 | 21.9 | 7.7 7.6 | 7.7 | 0.1 0.1 | 0.1 | 103.0 103.1 | 103.1 | 9.0 9.0 | 9.0 | 8.9 8.8 | 8.9 | 6 6 | 6.0 |
| 17-Feb-23 | Sunny | 12:34 | Middle | 0.2 | 22.9 23.0 | 23.0 | 7.8 7.8 | 7.8 | 0.1 0.1 | 0.1 | 108.0 108.5 | 108.3 | 9.3 9.3 | 9.3 | 10.1 10.1 | 10.1 | 7 7 | 7.0 |
| 20-Feb-23 | Cloudy | 11:23 | Middle | 0.2 | 20.5 20.5 | 20.5 | 7.5 7.4 | 7.5 | 0.1 0.1 | 0.1 | 100.6 100.7 | 100.7 | 9.1 9.1 | 9.1 | 6.9 6.9 | 6.9 | 4 3 | 3.5 |
| 22-Feb-23 | Sunny | 14:27 | Middle | 0.2 | 22.1 22.1 | 22.1 | 7.6 7.6 | 7.6 | 0.0 0.0 | 0.0 | 106.6 107.2 | 106.9 | 9.3 9.4 | 9.4 | 3.6 3.6 | 3.6 | 4 5 | 4.5 |
| 24-Feb-23 | Sunny | 11:34 | Middle | 0.2 | 21.6 21.6 | 21.6 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 103.7 103.9 | 103.8 | 9.1 9.2 | 9.2 | 13.7 13.8 | 13.8 | 8 9 | 8.5 |
| 27-Feb-23 | Sunny | 10:04 | Middle | 0.2 | 18.0 18.0 | 18.0 | 8.0 7.9 | 8.0 | 0.1 0.1 | 0.1 | 100.5 100.6 | 100.6 | 9.5 9.5 | 9.5 | 9.6 9.5 | 9.6 | 15 15 | 15.0 |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: NTR-IS1

| Date | Weather Condition | Start Time | Sampling Depth (m) | | Temperature (°C) | | pH | | Salinity ppt | | DO Saturation (%) | | Dissolved Oxygen (mg/L) | | Turbidity(NTU) | | Suspended Solids (mg/L) | |
|-----------|-------------------|------------|--------------------|-----|------------------|---------|------------|---------|--------------|---------|-------------------|---------|-------------------------|---------|----------------|---------|-------------------------|---------|
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average |
| 1-Feb-23 | Fine | 12:32 | Middle | 0.1 | 19.6 19.6 | 19.6 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 80.0 79.7 | 79.9 | 7.3 7.3 | 7.3 | 6.6 6.7 | 6.7 | 10 11 | 10.5 |
| 3-Feb-23 | Sunny | 14:36 | Middle | 0.2 | 20.3 20.3 | 20.3 | 7.3 7.3 | 7.3 | 0.1 0.1 | 0.1 | 71.6 71.6 | 71.6 | 6.5 6.5 | 6.5 | 5.3 5.2 | 5.3 | 6 6 | 6.0 |
| 6-Feb-23 | Cloudy | 13:17 | Middle | 0.6 | 19.6 19.6 | 19.6 | 8.2 8.2 | 8.2 | 0.1 0.1 | 0.1 | 64.1 64.1 | 64.1 | 5.9 5.9 | 5.9 | 9.1 9.0 | 9.1 | 17 15 | 16.0 |
| 8-Feb-23 | Cloudy | 12:12 | Middle | 0.5 | 20.2 20.2 | 20.2 | 7.0 7.0 | 7.0 | 0.1 0.1 | 0.1 | 65.3 65.2 | 65.3 | 5.9 5.9 | 5.9 | 13.6 13.6 | 13.6 | 15 13 | 14.0 |
| 10-Feb-23 | Cloudy | 11:11 | Middle | 0.5 | 21.2 21.2 | 21.2 | 8.3 8.3 | 8.3 | 0.1 0.1 | 0.1 | 67.2 67.5 | 67.4 | 6.0 6.0 | 6.0 | 16.1 16.3 | 16.2 | 16 15 | 15.5 |
| 13-Feb-23 | Sunny | 11:18 | Middle | 0.2 | 22.1 22.1 | 22.1 | 7.6 7.6 | 7.6 | 0.1 0.1 | 0.1 | 67.9 67.8 | 67.9 | 5.9 5.9 | 5.9 | 7.5 7.6 | 7.6 | 5 6 | 5.5 |
| 15-Feb-23 | Sunny | 14:06 | Middle | 0.1 | 20.3 20.3 | 20.3 | 7.9 7.9 | 7.9 | 0.1 0.1 | 0.1 | 84.8 84.8 | 84.8 | 7.7 7.7 | 7.7 | 5.4 5.4 | 5.4 | 5 6 | 5.5 |
| 17-Feb-23 | Sunny | 11:45 | Middle | 0.1 | 20.5 20.6 | 20.6 | 7.6 7.6 | 7.6 | 0.1 0.1 | 0.1 | 82.6 82.2 | 82.4 | 7.4 7.4 | 7.4 | 8.6 8.5 | 8.6 | 8 8 | 8.0 |
| 20-Feb-23 | Cloudy | 10:55 | Middle | 0.2 | 21.3 21.3 | 21.3 | 7.3 7.3 | 7.3 | 0.1 0.1 | 0.1 | 69.1 68.8 | 69.0 | 6.1 6.1 | 6.1 | 5.8 5.7 | 5.8 | 6 5 | 5.5 |
| 22-Feb-23 | Sunny | 13:58 | Middle | 0.5 | 19.8 19.8 | 19.8 | 7.3 7.3 | 7.3 | 0.1 0.1 | 0.1 | 81.9 82.1 | 82.0 | 7.5 7.5 | 7.5 | 5.5 5.5 | 5.5 | <2.5 3 | 2.8 |
| 24-Feb-23 | Sunny | 10:41 | Middle | 0.3 | 21.5 21.5 | 21.5 | 7.7 7.7 | 7.7 | 0.1 0.1 | 0.1 | 76.1 75.9 | 76.0 | 6.7 6.7 | 6.7 | 14.0 14.1 | 14.1 | 9 9 | 9.0 |
| 27-Feb-23 | Sunny | 10:41 | Middle | 0.5 | 18.7 18.7 | 18.7 | 8.1 8.1 | 8.1 | 0.1 0.1 | 0.1 | 84.0 84.0 | 84.0 | 7.8 7.8 | 7.8 | 10.4 10.0 | 10.2 | 12 11 | 11.5 |

Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas
Water Quality Monitoring Results

Location: SHST-IS2

| Date | Weather Condition | Start Time | Sampling Depth (m) | | Temperature (°C) | | pH | | Salinity ppt | | DO Saturation (%) | | Dissolved Oxygen (mg/L) | | Turbidity(NTU) | | Suspended Solids (mg/L) | |
|-----------|-------------------|------------|--------------------|-----|------------------|---------|------------|---------|--------------|---------|-------------------|---------|-------------------------|---------|----------------|---------|-------------------------|---------|
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average |
| 1-Feb-23 | Fine | 12:13 | Middle | 0.4 | 19.4 19.4 | 19.4 | 7.8 7.8 | 7.8 | 0.1 0.1 | 0.1 | 91.7 91.8 | 91.8 | 8.4 8.4 | 8.4 | 5.9 6.0 | 6.0 | 3 <2.5 | 2.8 |
| 3-Feb-23 | Sunny | 14:45 | Middle | 0.1 | 19.6 19.6 | 19.6 | 7.7 7.7 | 7.7 | 0.1 0.1 | 0.1 | 90.9 90.4 | 90.7 | 8.3 8.3 | 8.3 | 5.3 5.4 | 5.4 | 7 8 | 7.5 |
| 6-Feb-23 | Cloudy | 13:03 | Middle | 0.2 | 19.7 19.7 | 19.7 | 8.2 8.2 | 8.2 | 0.1 0.1 | 0.1 | 83.1 82.9 | 83.0 | 7.6 7.6 | 7.6 | 7.1 7.0 | 7.1 | 8 8 | 8.0 |
| 8-Feb-23 | Cloudy | 12:26 | Middle | 0.2 | 19.5 19.5 | 19.5 | 7.2 7.1 | 7.2 | 0.1 0.1 | 0.1 | 86.5 86.3 | 86.4 | 8.0 7.9 | 8.0 | 14.8 13.4 | 14.1 | 14 13 | 13.5 |
| 10-Feb-23 | Cloudy | 10:53 | Middle | 0.2 | 19.9 19.9 | 19.9 | 8.1 8.1 | 8.1 | 0.1 0.1 | 0.1 | 79.1 79.1 | 79.1 | 7.2 7.2 | 7.2 | 12.5 12.4 | 12.5 | 9 9 | 9.0 |
| 13-Feb-23 | Sunny | 10:59 | Middle | 0.1 | 21.7 21.7 | 21.7 | 7.6 7.6 | 7.6 | 0.1 0.1 | 0.1 | 85.6 85.5 | 85.6 | 7.5 7.5 | 7.5 | 5.4 5.5 | 5.5 | <2.5 3 | 2.8 |
| 15-Feb-23 | Sunny | 14:18 | Middle | 0.3 | 20.4 20.4 | 20.4 | 7.9 7.9 | 7.9 | 0.1 0.1 | 0.1 | 86.8 86.4 | 86.6 | 7.8 7.8 | 7.8 | 6.0 5.9 | 6.0 | 3 4 | 3.5 |
| 17-Feb-23 | Sunny | 11:24 | Middle | 0.3 | 19.6 19.7 | 19.7 | 7.9 7.9 | 7.9 | 0.1 0.1 | 0.1 | 85.1 84.9 | 85.0 | 7.8 7.8 | 7.8 | 4.8 4.8 | 4.8 | 5 6 | 5.5 |
| 20-Feb-23 | Cloudy | 10:35 | Middle | 0.3 | 19.3 19.3 | 19.3 | 7.7 7.7 | 7.7 | 0.1 0.1 | 0.1 | 79.9 79.6 | 79.8 | 7.4 7.3 | 7.4 | 4.0 4.1 | 4.1 | 3 <2.5 | 2.8 |
| 22-Feb-23 | Sunny | 13:47 | Middle | 0.3 | 20.2 20.2 | 20.2 | 8.1 8.1 | 8.1 | 0.1 0.1 | 0.1 | 82.7 82.5 | 82.6 | 7.5 7.5 | 7.5 | 4.2 4.3 | 4.3 | 3 4 | 3.5 |
| 24-Feb-23 | Sunny | 10:19 | Middle | 0.3 | 19.1 19.1 | 19.1 | 7.7 7.7 | 7.7 | 0.1 0.1 | 0.1 | 81.9 81.8 | 81.9 | 7.6 7.6 | 7.6 | 5.2 5.2 | 5.2 | <2.5 <2.5 | <2.5 |
| 27-Feb-23 | Sunny | 10:32 | Middle | 0.2 | 17.1 17.1 | 17.1 | 8.0 8.0 | 8.0 | 0.1 0.1 | 0.1 | 80.9 80.9 | 80.9 | 7.8 7.8 | 7.8 | 5.6 5.7 | 5.7 | 6 5 | 5.5 |

Contract No. NDO 04/2019

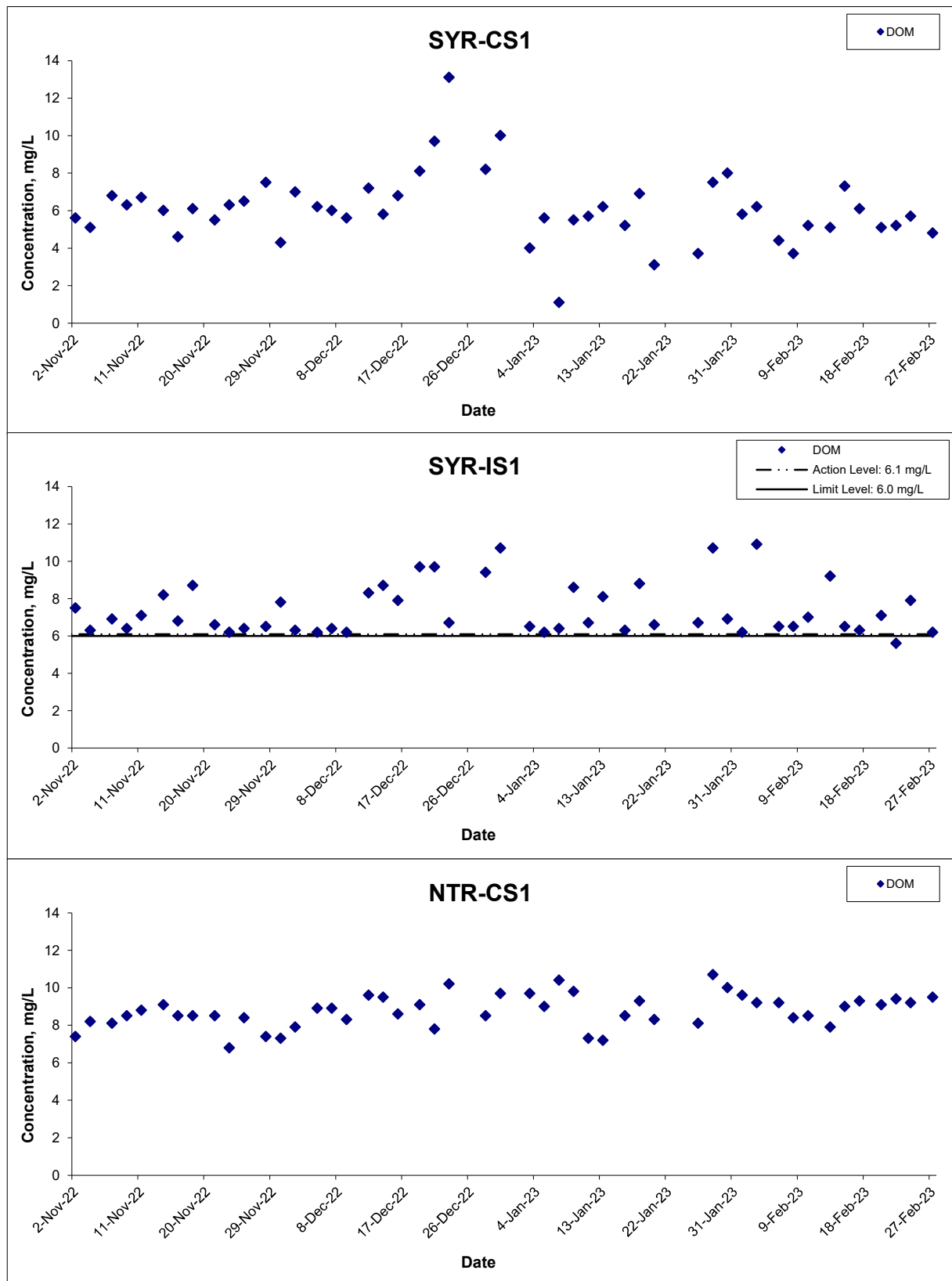
Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas


Water Quality Monitoring Results

Location: MWR-IS3

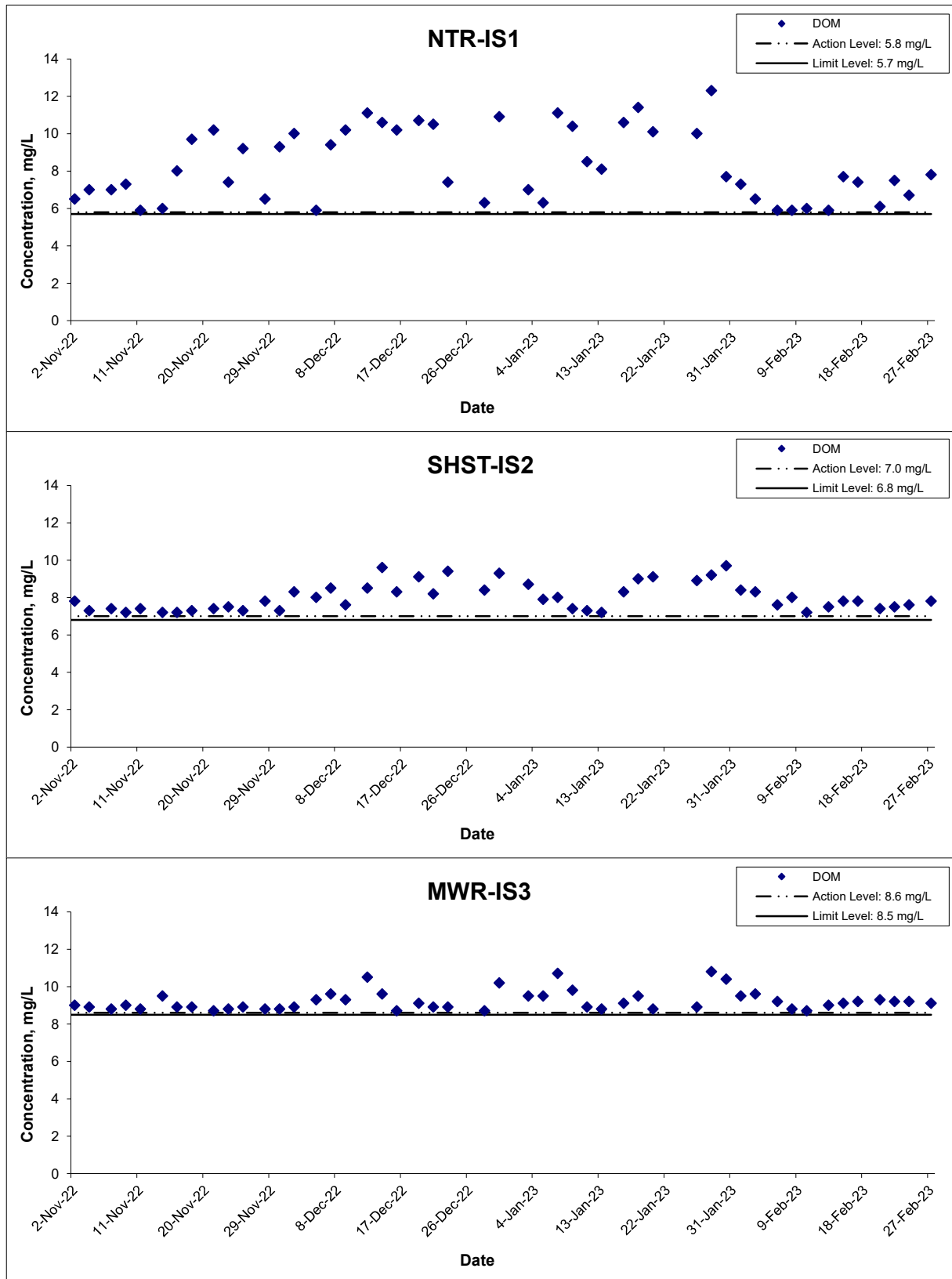
| Date | Weather Condition | Start Time | Sampling Depth (m) | | Temperature (°C) | | pH | | Salinity ppt | | DO Saturation (%) | | Dissolved Oxygen (mg/L) | | Turbidity(NTU) | | Suspended Solids (mg/L) | |
|-----------|-------------------|------------|--------------------|-----|------------------|---------|------------|---------|--------------|---------|-------------------|---------|-------------------------|---------|----------------|---------|-------------------------|---------|
| | | | | | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average | Value | Average |
| 1-Feb-23 | Fine | 13:40 | Middle | 0.2 | 24.1 24.1 | 24.1 | 7.9 7.9 | 7.9 | 0.1 0.1 | 0.1 | 113.2 113.1 | 113.2 | 9.5 9.5 | 9.5 | 7.2 7.1 | 7.2 | 11 10 | 10.5 |
| 3-Feb-23 | Sunny | 15:14 | Middle | 0.2 | 20.8 20.8 | 20.8 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 107.6 107.6 | 107.6 | 9.6 9.6 | 9.6 | 5.9 6.0 | 6.0 | 12 13 | 12.5 |
| 6-Feb-23 | Cloudy | 13:52 | Middle | 0.1 | 20.8 20.7 | 20.8 | 8.6 8.6 | 8.6 | 0.1 0.1 | 0.1 | 103.2 103.2 | 103.2 | 9.2 9.2 | 9.2 | 14.3 14.4 | 14.4 | 17 16 | 16.5 |
| 8-Feb-23 | Cloudy | 12:55 | Middle | 0.2 | 20.2 20.2 | 20.2 | 7.5 7.4 | 7.5 | 0.2 0.2 | 0.2 | 98.5 96.3 | 97.4 | 8.9 8.7 | 8.8 | 15.6 15.5 | 15.6 | 14 15 | 14.5 |
| 10-Feb-23 | Cloudy | 11:53 | Middle | 0.2 | 21.0 21.0 | 21.0 | 8.7 8.7 | 8.7 | 0.1 0.1 | 0.1 | 97.4 97.8 | 97.6 | 8.7 8.7 | 8.7 | 24.6 25.0 | 24.8 | 13 14 | 13.5 |
| 13-Feb-23 | Sunny | 09:41 | Middle | 0.2 | 21.1 21.1 | 21.1 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 101.0 100.4 | 100.7 | 9.0 8.9 | 9.0 | 9.1 9.3 | 9.2 | 12 11 | 11.5 |
| 15-Feb-23 | Sunny | 15:09 | Middle | 0.2 | 21.6 21.6 | 21.6 | 7.9 7.9 | 7.9 | 0.1 0.1 | 0.1 | 103.4 103.4 | 103.4 | 9.1 9.1 | 9.1 | 10.4 10.3 | 10.4 | 10 9 | 9.5 |
| 17-Feb-23 | Sunny | 12:50 | Middle | 0.2 | 21.9 21.9 | 21.9 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 104.9 105.0 | 105.0 | 9.2 9.2 | 9.2 | 4.9 5.0 | 5.0 | 11 12 | 11.5 |
| 20-Feb-23 | Cloudy | 11:33 | Middle | 0.2 | 20.7 20.7 | 20.7 | 7.5 7.5 | 7.5 | 0.1 0.1 | 0.1 | 103.8 103.8 | 103.8 | 9.3 9.3 | 9.3 | 9.3 9.2 | 9.3 | 10 8 | 9.0 |
| 22-Feb-23 | Sunny | 14:36 | Middle | 0.2 | 22.9 22.9 | 22.9 | 8.4 8.4 | 8.4 | 0.1 0.1 | 0.1 | 107.4 107.3 | 107.4 | 9.2 9.2 | 9.2 | 9.9 9.9 | 9.9 | 7 7 | 7.0 |
| 24-Feb-23 | Sunny | 11:16 | Middle | 0.2 | 21.8 21.8 | 21.8 | 7.8 7.7 | 7.8 | 0.1 0.1 | 0.1 | 104.7 104.8 | 104.8 | 9.2 9.2 | 9.2 | 4.2 4.2 | 4.2 | 8 7 | 7.5 |
| 27-Feb-23 | Sunny | 09:40 | Middle | 0.2 | 17.6 17.6 | 17.6 | 8.0 8.0 | 8.0 | 0.1 0.1 | 0.1 | 95.5 95.5 | 95.5 | 9.1 9.1 | 9.1 | 10.7 10.6 | 10.7 | 16 17 | 16.5 |


Dissolved Oxygen (Middle)



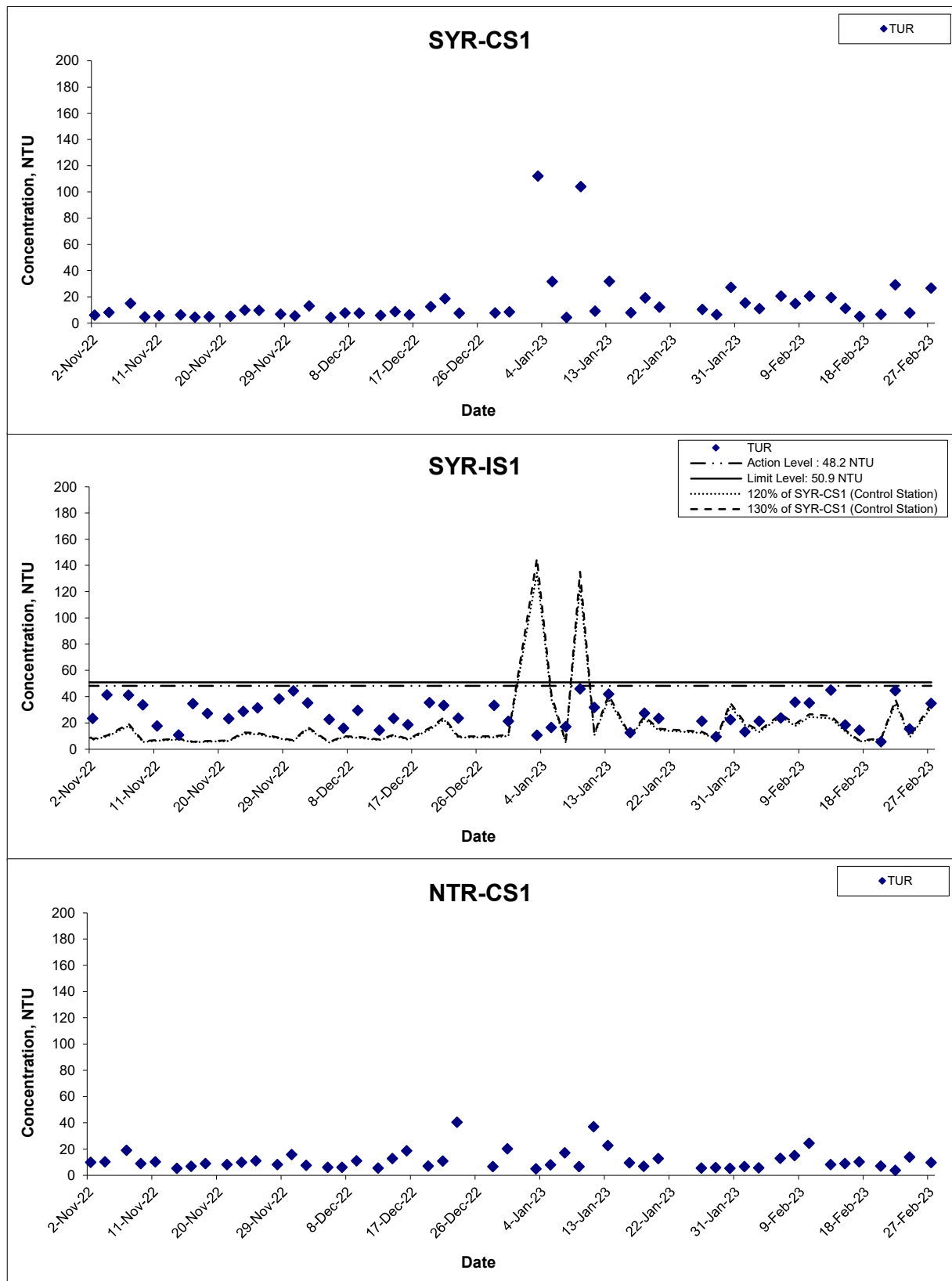
| | | | |
|---|-----------------------|--------------------------------|---|
| Title Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results | Scale N.T.S | Project No. WMA20002 |  |
| | Date Feb 23 | Appendix G | |

Dissolved Oxygen (Middle)



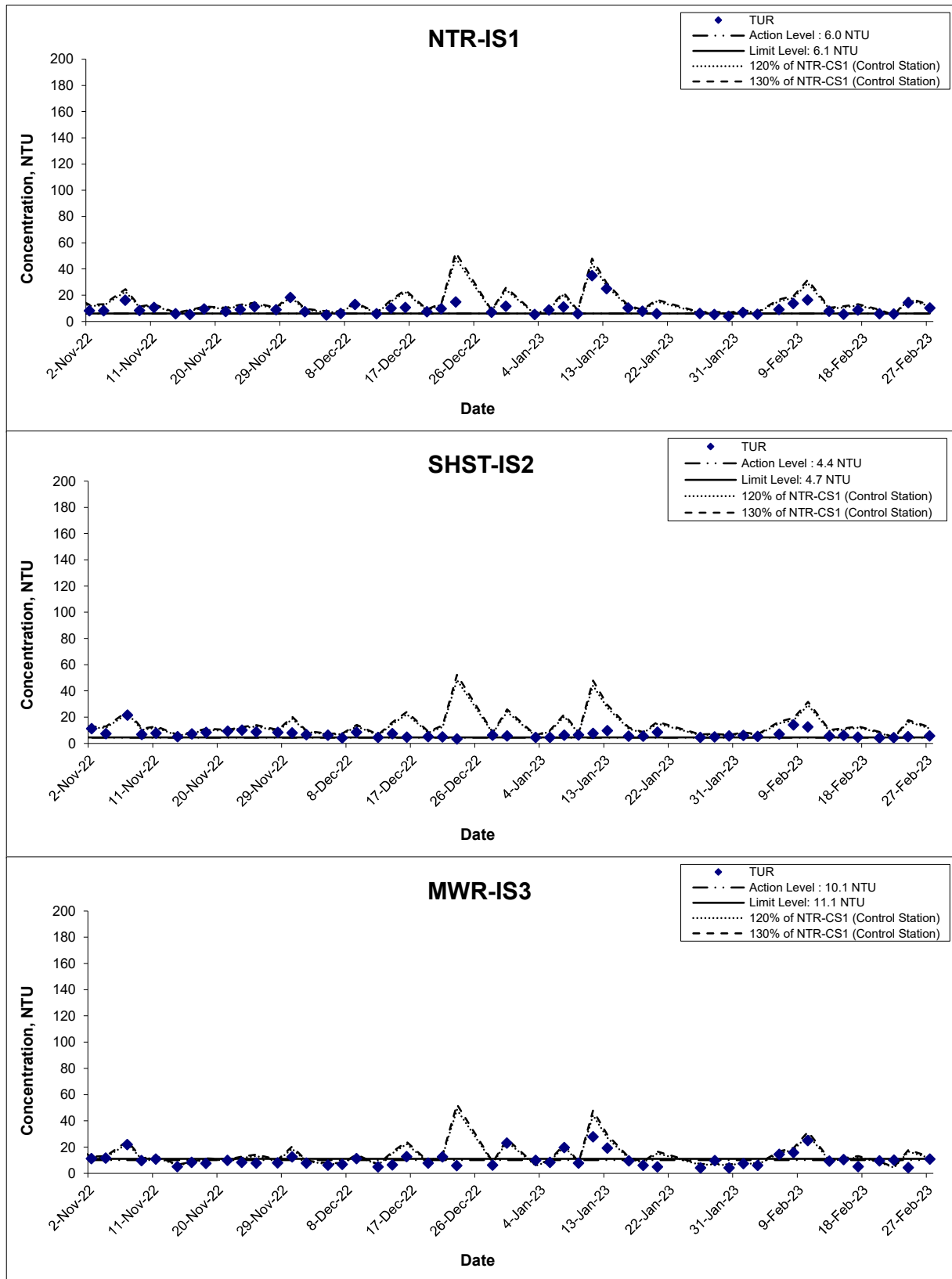
| | | | | |
|-------|--|----------------|-------------------------|---|
| Title | Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas | Scale N.T.S | Project No. WMA20002 |  |
| | Graphical Presentation of Water Quality Monitoring Results | Date Feb 23 | Appendix G | |

Turbidity (Depth-averaged)



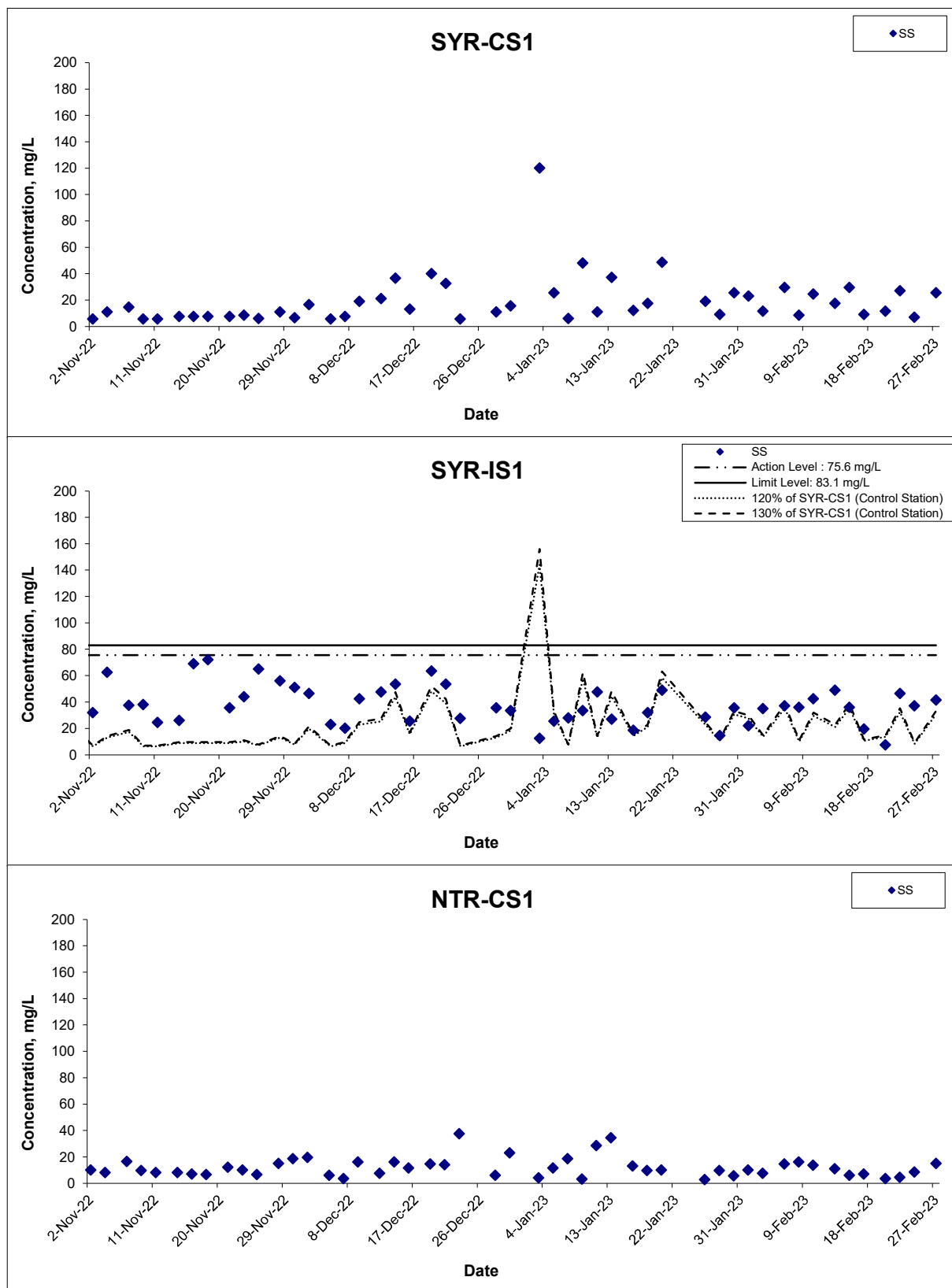
| | | | |
|---|-----------------------|--------------------------------|---|
| Title Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results | Scale N.T.S | Project No. WMA20002 | WELLAB 匯力 consulting . testing . research |
| | Date Feb 23 | Appendix G | |

Turbidity (Depth-averaged)



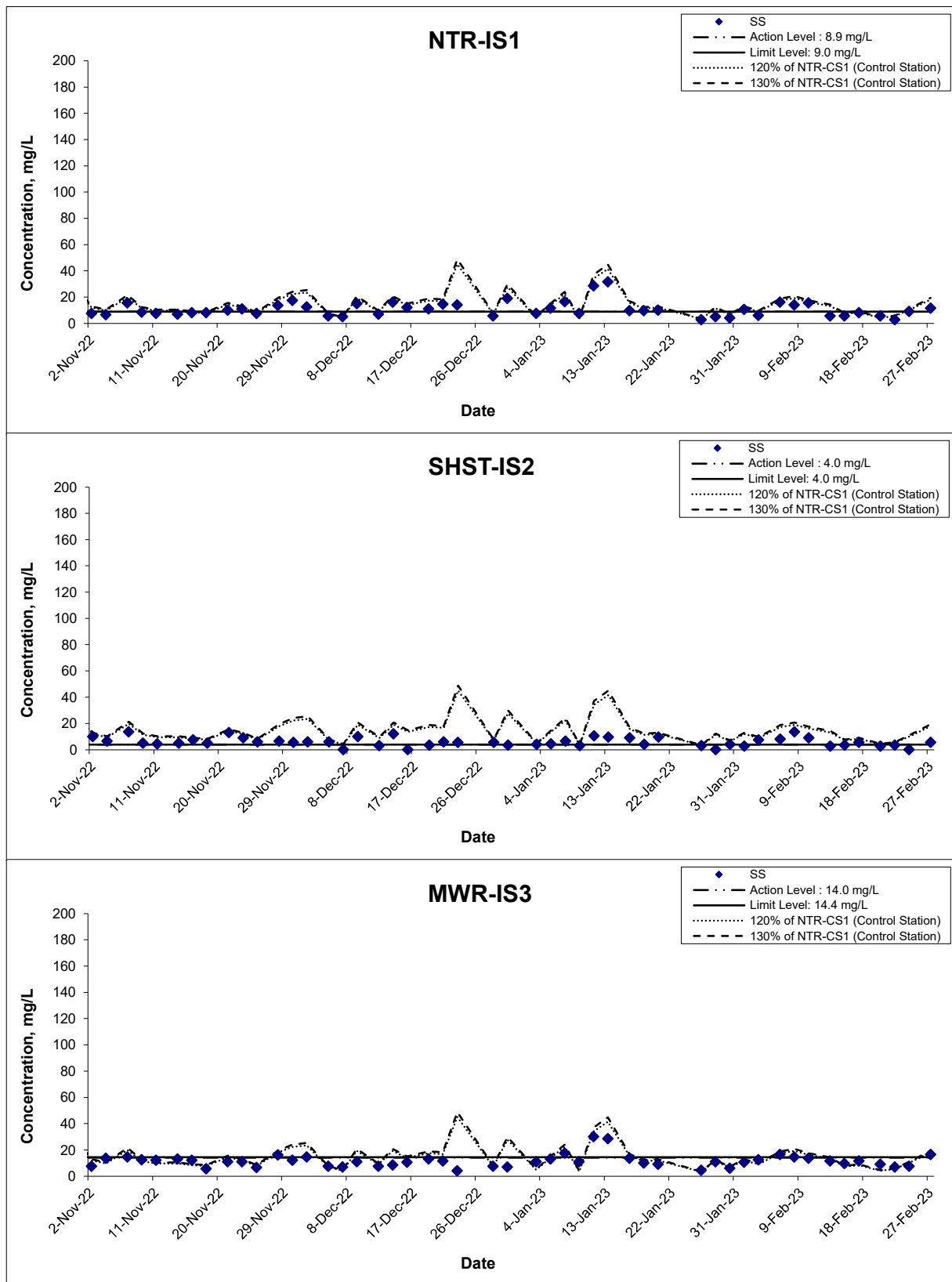
| | | | |
|---|-----------------------|--------------------------------|---|
| Title Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results | Scale N.T.S | Project No. WMA20002 | WELLAB 匯力 consulting . testing . research |
| | Date Feb 23 | Appendix G | |

Suspended Solids (Depth-averaged)




| | | | |
|---|-----------------------|--------------------------------|---|
| Title Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results | Scale N.T.S | Project No. WMA20002 | WELLAB 匯力 consulting . testing . research |
| | Date Feb 23 | Appendix G | |

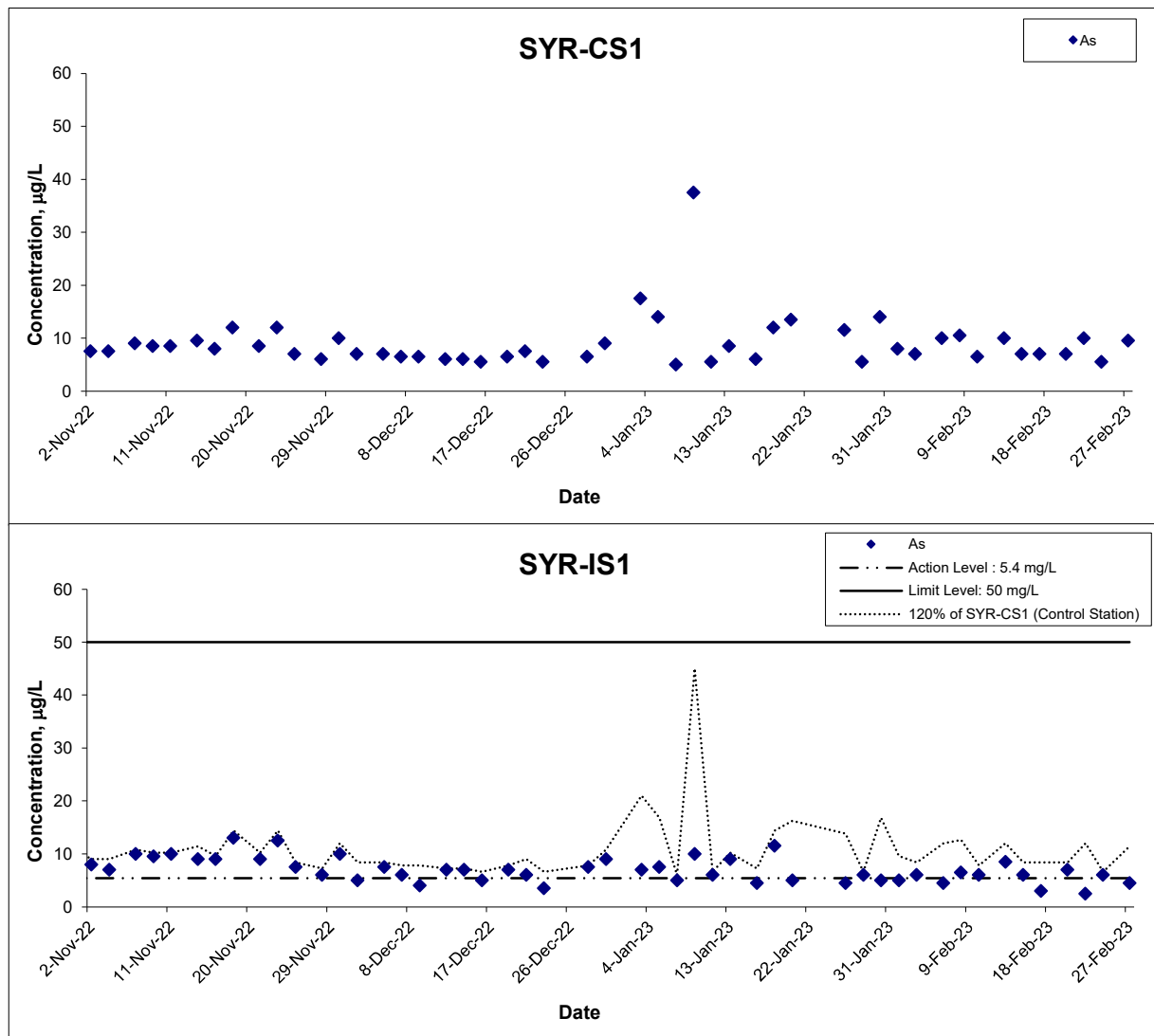
Suspended Solids (Depth-averaged)




Remarks: The graphical point at zero concentration is presented as below the reporting limit.

| | | | |
|---|-----------------------|--------------------------------|--|
| Title Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results | Scale N.T.S | Project No. WMA20002 |  consulting . testing . research |
| | Date Feb 23 | Appendix G | |

Arsenic (Depth-averaged)



| | | | |
|---|-----------------------|--------------------------------|--|
| Title Contract No. NDO 04/2019 Advance and First Stage Works of Kwu Tung North and Fanling North New Development Areas Graphical Presentation of Water Quality Monitoring Results | Scale N.T.S | Project No. WMA20002 |  consulting . testing . research |
| | Date Feb 23 | Appendix G | |

APPENDIX H
LABORATORY TESTING REPORTS FOR
LABORATORY ANALYSIS

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37692 |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-01 |
| Date Tested: | 2023-02-01 |
| Date Completed: | 2023-02-07 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37692
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230201
Sampling Date : 2023-02-01

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37692-2 | 37692-3 | 37692-5 | 37692-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 22 | 24 | 23 | 21 |
| Arsenic (µg/L) | 8 | 8 | 5 | 5 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37692A |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-01 |
| Date Tested: | 2023-02-01 |
| Date Completed: | 2023-02-07 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37692A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230201
Sampling Date : 2023-02-01

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37692-8 | 37692-9 | 37692-11 | 37692-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 10 | 10 | 10 | 11 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37692-14 | 37692-15 | 37692-17 | 37692-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 3 | <2.5 | 11 | 10 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37696 |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-03 |
| Date Tested: | 2023-02-03 |
| Date Completed: | 2023-02-07 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37696
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230203
Sampling Date : 2023-02-03

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37696-2 | 37696-3 | 37696-5 | 37696-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 12 | 11 | 32 | 38 |
| Arsenic (µg/L) | 7 | 7 | 6 | 6 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37696A |
| Date of Issue: | 2023-02-07 |
| Date Received: | 2023-02-03 |
| Date Tested: | 2023-02-03 |
| Date Completed: | 2023-02-07 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37696A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230203
Sampling Date : 2023-02-03

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37696-8 | 37696-9 | 37696-11 | 37696-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 7 | 8 | 6 | 6 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37696-14 | 37696-15 | 37696-17 | 37696-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 7 | 8 | 12 | 13 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37716 |
| Date of Issue: | 2023-02-10 |
| Date Received: | 2023-02-06 |
| Date Tested: | 2023-02-06 |
| Date Completed: | 2023-02-10 |

Page: 1 of 1

ATTN: Mr. Marco Ma

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37716
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230206
Sampling Date : 2023-02-06

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37716-2 | 37716-3 | 37716-5 | 37716-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 29 | 30 | 34 | 40 |
| Arsenic (µg/L) | 10 | 10 | 5 | 4 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37716A |
| Date of Issue: | 2023-02-10 |
| Date Received: | 2023-02-06 |
| Date Tested: | 2023-02-06 |
| Date Completed: | 2023-02-10 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37716A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230206
Sampling Date : 2023-02-06

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37716-8 | 37716-9 | 37716-11 | 37716-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 14 | 15 | 17 | 15 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37716-14 | 37716-15 | 37716-17 | 37716-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 8 | 8 | 17 | 16 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37720 |
| Date of Issue: | 2023-02-10 |
| Date Received: | 2023-02-08 |
| Date Tested: | 2023-02-08 |
| Date Completed: | 2023-02-10 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37720
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230208
Sampling Date : 2023-02-08

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37720-2 | 37720-3 | 37720-5 | 37720-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 9 | 8 | 37 | 35 |
| Arsenic (µg/L) | 11 | 10 | 6 | 7 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37720A |
| Date of Issue: | 2023-02-10 |
| Date Received: | 2023-02-08 |
| Date Tested: | 2023-02-08 |
| Date Completed: | 2023-02-10 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37720A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230208
Sampling Date : 2023-02-08

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37720-8 | 37720-9 | 37720-11 | 37720-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 16 | 16 | 15 | 13 |


| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37720-14 | 37720-15 | 37720-17 | 37720-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 14 | 13 | 14 | 15 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: 37724
Date of Issue: 2023-02-15
Date Received: 2023-02-10
Date Tested: 2023-02-10
Date Completed: 2023-02-15

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37724
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230210
Sampling Date : 2023-02-10

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37724-2 | 37724-3 | 37724-5 | 37724-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 23 | 26 | 40 | 45 |
| Arsenic (µg/L) | 6 | 7 | 6 | 6 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: 37724A
Date of Issue: 2023-02-15
Date Received: 2023-02-10
Date Tested: 2023-02-10
Date Completed: 2023-02-15

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37724A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230210
Sampling Date : 2023-02-10

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37724-8 | 37724-9 | 37724-11 | 37724-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 12 | 15 | 16 | 15 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37724-14 | 37724-15 | 37724-17 | 37724-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 9 | 9 | 13 | 14 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37736 |
| Date of Issue: | 2023-02-15 |
| Date Received: | 2023-02-13 |
| Date Tested: | 2023-02-13 |
| Date Completed: | 2023-02-15 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37736
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230213
Sampling Date : 2023-02-13

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37736-2 | 37736-3 | 37736-5 | 37736-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 17 | 18 | 47 | 51 |
| Arsenic (µg/L) | 11 | 9 | 8 | 9 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37736A |
| Date of Issue: | 2023-02-15 |
| Date Received: | 2023-02-13 |
| Date Tested: | 2023-02-13 |
| Date Completed: | 2023-02-15 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37736A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230213
Sampling Date : 2023-02-13

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37736-8 | 37736-9 | 37736-11 | 37736-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 10 | 12 | 5 | 6 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37736-14 | 37736-15 | 37736-17 | 37736-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | <2.5 | 3 | 12 | 11 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37742 |
| Date of Issue: | 2023-02-17 |
| Date Received: | 2023-02-15 |
| Date Tested: | 2023-02-15 |
| Date Completed: | 2023-02-17 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37742
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230215
Sampling Date : 2023-02-15

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37742-2 | 37742-3 | 37742-5 | 37742-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 32 | 27 | 33 | 39 |
| Arsenic (µg/L) | 7 | 7 | 6 | 6 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37742A |
| Date of Issue: | 2023-02-17 |
| Date Received: | 2023-02-15 |
| Date Tested: | 2023-02-15 |
| Date Completed: | 2023-02-17 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37742A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230215
Sampling Date : 2023-02-15

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37742-8 | 37742-9 | 37742-11 | 37742-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 6 | 6 | 5 | 6 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37742-14 | 37742-15 | 37742-17 | 37742-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 3 | 4 | 10 | 9 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37747 |
| Date of Issue: | 2023-02-22 |
| Date Received: | 2023-02-17 |
| Date Tested: | 2023-02-17 |
| Date Completed: | 2023-02-22 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37747
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230217
Sampling Date : 2023-02-17

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37747-2 | 37747-3 | 37747-5 | 37747-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 9 | 9 | 20 | 19 |
| Arsenic (µg/L) | 7 | 7 | 3 | 3 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37747A |
| Date of Issue: | 2023-02-22 |
| Date Received: | 2023-02-17 |
| Date Tested: | 2023-02-17 |
| Date Completed: | 2023-02-22 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37747A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230217
Sampling Date : 2023-02-17

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37747-8 | 37747-9 | 37747-11 | 37747-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 7 | 7 | 8 | 8 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37747-14 | 37747-15 | 37747-17 | 37747-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 5 | 6 | 11 | 12 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37752 |
| Date of Issue: | 2023-02-23 |
| Date Received: | 2023-02-20 |
| Date Tested: | 2023-02-20 |
| Date Completed: | 2023-02-23 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37752
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230220
Sampling Date : 2023-02-20

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

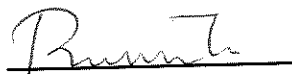
| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37752-2 | 37752-3 | 37752-5 | 37752-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 12 | 11 | 8 | 7 |
| Arsenic (µg/L) | 7 | 7 | 7 | 7 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37752A |
| Date of Issue: | 2023-02-23 |
| Date Received: | 2023-02-20 |
| Date Tested: | 2023-02-20 |
| Date Completed: | 2023-02-23 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37752A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230220
Sampling Date : 2023-02-20

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37752-8 | 37752-9 | 37752-11 | 37752-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 4 | 3 | 6 | 5 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37752-14 | 37752-15 | 37752-17 | 37752-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 3 | <2.5 | 10 | 8 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37758 |
| Date of Issue: | 2023-02-28 |
| Date Received: | 2023-02-22 |
| Date Tested: | 2023-02-22 |
| Date Completed: | 2023-02-28 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37758
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230222
Sampling Date : 2023-02-22

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37758-2 | 37758-3 | 37758-5 | 37758-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 24 | 30 | 48 | 45 |
| Arsenic (µg/L) | 10 | 10 | 3 | 2 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37758A |
| Date of Issue: | 2023-02-28 |
| Date Received: | 2023-02-22 |
| Date Tested: | 2023-02-22 |
| Date Completed: | 2023-02-28 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37758A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230222
Sampling Date : 2023-02-22

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37758-8 | 37758-9 | 37758-11 | 37758-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 4 | 5 | <2.5 | 3 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37758-14 | 37758-15 | 37758-17 | 37758-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 3 | 4 | 7 | 7 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37763 |
| Date of Issue: | 2023-03-02 |
| Date Received: | 2023-02-24 |
| Date Tested: | 2023-02-24 |
| Date Completed: | 2023-03-02 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37763
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230224
Sampling Date : 2023-02-24

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37763-2 | 37763-3 | 37763-5 | 37763-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 7 | 7 | 38 | 36 |
| Arsenic (µg/L) | 5 | 6 | 6 | 6 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37763A |
| Date of Issue: | 2023-03-02 |
| Date Received: | 2023-02-24 |
| Date Tested: | 2023-02-24 |
| Date Completed: | 2023-03-02 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37763A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230224
Sampling Date : 2023-02-24

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37763-8 | 37763-9 | 37763-11 | 37763-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 8 | 9 | 9 | 9 |

| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37763-14 | 37763-15 | 37763-17 | 37763-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | <2.5 | <2.5 | 8 | 7 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37803 |
| Date of Issue: | 2023-03-03 |
| Date Received: | 2023-02-27 |
| Date Tested: | 2023-02-27 |
| Date Completed: | 2023-03-03 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 4 liquid samples as received from client said to be water
Laboratory No. : 37803
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230227
Sampling Date : 2023-02-27

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|--|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |
| 2 | Arsenic | In-house method SOP022 (ICP-AES) and SOP076 (ICP-MS) | 1 µg/L |

Results:

| Sample ID | SYR-CS1-a | SYR-CS1-b | SYR-IS1-a | SYR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37803-2 | 37803-3 | 37803-5 | 37803-6 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 25 | 26 | 43 | 40 |
| Arsenic (µg/L) | 10 | 9 | 5 | 4 |

Remarks: 1) < = less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | 37803A |
| Date of Issue: | 2023-03-03 |
| Date Received: | 2023-02-27 |
| Date Tested: | 2023-02-27 |
| Date Completed: | 2023-03-03 |

ATTN: Mr. Marco Ma

Page: 1 of 1

Sample Description : 8 liquid samples as received from client said to be water
Laboratory No. : 37803A
Project No. : WMA20002
Project Name : Contract No. NDO 04/2019
Advance and First Stage Works of Kwu Tung North and Fanling North New
Development Areas
Custody No. : WMA20002/230227
Sampling Date : 2023-02-27

Tests Requested & Methodology:

| Item | Parameters | Ref. Method | Limit of reporting |
|------|---|------------------|--------------------|
| 1 | Total Suspended Solids dried at 103-105°C | APHA 17ed 2540 D | 2.5 mg/L |

Results:

| Sample ID | NTR-CS1-a | NTR-CS1-b | NTR-IS1-a | NTR-IS1-b |
|--|-----------|-----------|-----------|-----------|
| Sample No. | 37803-8 | 37803-9 | 37803-11 | 37803-12 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 15 | 15 | 12 | 11 |

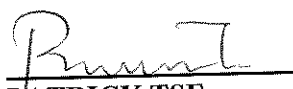
| Sample ID | SHST-IS2-a | SHST-IS2-b | MWR-IS3-a | MWR-IS3-b |
|--|------------|------------|-----------|-----------|
| Sample No. | 37803-14 | 37803-15 | 37803-17 | 37803-18 |
| Total Suspended Solids dried at 103-105°C (mg/L) | 6 | 5 | 16 | 17 |

Remarks: 1) <= less than

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICK TSE
General Manager

**APPENDIX I
QUALITY CONTROL REPORTS FOR SS
AND ARSENIC LABORATORY
ANALYSIS**

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37692
Date of Issue: 2023-02-07
Date Received: 2023-02-01
Date Tested: 2023-02-01
Date Completed: 2023-02-07

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 107 | 99 | 80-120 |
| Arsenic (%) | 91 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 87 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 2 | 3 | RPD ≤ 5% |
| Arsenic (%) | 4 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37692.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37696
Date of Issue: 2023-02-07
Date Received: 2023-02-03
Date Tested: 2023-02-03
Date Completed: 2023-02-07

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report**Method Blank**

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 106 | 109 | 80-120 |
| Arsenic (%) | 91 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 95 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 3 | 2 | RPD ≤ 5% |
| Arsenic (%) | 1 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37696.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37716
Date of Issue: 2023-02-10
Date Received: 2023-02-06
Date Tested: 2023-02-06
Date Completed: 2023-02-10

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic ($\mu\text{g/L}$) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 102 | 109 | 80-120 |
| Arsenic (%) | 92 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 93 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|----------------|
| Total Suspended Solids (%) | 3 | 0 | RPD \leq 5% |
| Arsenic (%) | 1 | N/A | RPD \leq 20% |

Remarks: 1) \leq less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37716.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of WELLAB Ltd.


PATRICIA TSE
General Manager

TEST REPORT**APPLICANT:** Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | QC37720 |
| Date of Issue: | 2023-02-10 |
| Date Received: | 2023-02-08 |
| Date Tested: | 2023-02-08 |
| Date Completed: | 2023-02-10 |

Page: 1 of 1

ATTN: Mr. Marco Ma**QC report****Method Blank**

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 101 | 101 | 80-120 |
| Arsenic (%) | 94 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 113 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 4 | 1 | RPD≤5% |
| Arsenic (%) | 2 | N/A | RPD≤20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37720.

*****END OF REPORT*****

*PREPARED AND CHECKED BY:*For and On Behalf of **WELLAB Ltd.**
PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37724
Date of Issue: 2023-02-15
Date Received: 2023-02-10
Date Tested: 2023-02-10
Date Completed: 2023-02-15

Page: 1 of 1

ATTN: Mr. Marco Ma
QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 85 | 110 | 80-120 |
| Arsenic (%) | 89 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 105 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 3 | 1 | RPD ≤ 5% |
| Arsenic (%) | 7 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37724.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37736
Date of Issue: 2023-02-15
Date Received: 2023-02-13
Date Tested: 2023-02-13
Date Completed: 2023-02-15

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 116 | 111 | 80-120 |
| Arsenic (%) | 108 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 92 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 1 | 2 | RPD ≤ 5% |
| Arsenic (%) | 6 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37736.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37742
Date of Issue: 2023-02-17
Date Received: 2023-02-15
Date Tested: 2023-02-15
Date Completed: 2023-02-17

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report**Method Blank**

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic ($\mu\text{g/L}$) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 103 | 99 | 80-120 |
| Arsenic (%) | 89 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 91 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|----------------|
| Total Suspended Solids (%) | 1 | 3 | RPD \leq 5% |
| Arsenic (%) | 2 | N/A | RPD \leq 20% |

Remarks: 1) \leq less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37742.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37747
Date of Issue: 2023-02-22
Date Received: 2023-02-17
Date Tested: 2023-02-17
Date Completed: 2023-02-22

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report**Method Blank**

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 105 | 113 | 80-120 |
| Arsenic (%) | 93 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 110 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 5 | 4 | RPD ≤ 5% |
| Arsenic (%) | 8 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37747.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37752
Date of Issue: 2023-02-23
Date Received: 2023-02-20
Date Tested: 2023-02-20
Date Completed: 2023-02-23

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 119 | 89 | 80-120 |
| Arsenic (%) | 91 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 88 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 2 | 1 | RPD ≤ 5% |
| Arsenic (%) | 9 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37752.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | QC37758 |
| Date of Issue: | 2023-02-28 |
| Date Received: | 2023-02-22 |
| Date Tested: | 2023-02-22 |
| Date Completed: | 2023-02-28 |

Page: 1 of 1

ATTN: Mr. Marco Ma

QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 105 | 98 | 80-120 |
| Arsenic (%) | 104 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 89 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 3 | 4 | RPD ≤ 5% |
| Arsenic (%) | 6 | N/A | RPD ≤ 20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37758.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIA TSE
General Manager

TEST REPORT

APPLICANT: Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

Report No.: QC37763
Date of Issue: 2023-03-02
Date Received: 2023-02-24
Date Tested: 2023-02-24
Date Completed: 2023-03-02

Page: 1 of 1

ATTN: Mr. Marco Ma
QC report

Method Blank

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 108 | 99 | 80-120 |
| Arsenic (%) | 85 | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | 84 | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 2 | 4 | RPD≤5% |
| Arsenic (%) | 15 | N/A | RPD≤20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37763.

*****END OF REPORT*****

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**


PATRICIK TSE
General Manager

TEST REPORT**APPLICANT:** Wellab Limited (EM&A Department)
Rm 1714, Technology Park,
18 On Lai Street,
Shatin, N.T.

| | |
|-----------------|------------|
| Report No.: | QC37803 |
| Date of Issue: | 2023-03-03 |
| Date Received: | 2023-02-27 |
| Date Tested: | 2023-02-27 |
| Date Completed: | 2023-03-03 |

Page: 1 of 1

ATTN: Mr. Marco Ma**QC report****Method Blank**

| Parameter | Method Blank 1 | Method Blank 2 | Acceptance |
|-------------------------------|----------------|----------------|------------|
| Total Suspended Solids (mg/L) | <0.5 | <0.5 | <0.5 |
| Arsenic (µg/L) | <0.2 | N/A | <0.2 |

Method QC

| Parameter | MQC1 | MQC2 | Acceptance |
|----------------------------|------|------|------------|
| Total Suspended Solids (%) | 82 | 97 | 80-120 |
| Arsenic (%) | | N/A | 80-120 |

Sample Spike

| Parameter | Sample Spike 1 | Sample Spike 2 | Acceptance |
|----------------------------|----------------|----------------|------------|
| Total Suspended Solids (%) | N/A | N/A | N/A |
| Arsenic (%) | | N/A | 80-120 |

Sample Duplicate

| Parameter | Sample Duplicate 1 | Sample Duplicate 2 | Acceptance |
|----------------------------|--------------------|--------------------|------------|
| Total Suspended Solids (%) | 1 | 3 | RPD≤5% |
| Arsenic (%) | | N/A | RPD≤20% |

Remarks: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 37803.

*****END OF REPORT*****

*PREPARED AND CHECKED BY:*For and On Behalf of **WELLAB Ltd.**
PATRICIK TSE
General Manager

**APPENDIX J
LANDFILL GAS MONITORING
RESULTS**

Contract No. ND/2019/01

**Development of Kwu Tung North & Fanling North New Development Area, Phase 1:
Kwu Tung North New Development Area, Phase 1: Site formation & Infrastructure works**

堆填區附近區域(Consultation Zone)每月氣體監察記錄

| 日期及時間 | 位置 | 氣體及安全標準 | 氧氣 O ₂ >19% | 甲烷 CH ₄ <10% LEL | 二氧化碳 CO ₂ <0.5% |
|------------------|----------------|---------|---------------------------|--------------------------------|-------------------------------|
| 15-02-2023 15:02 | CZ PT 1 | | 20.98 | 0.00 | 0.02 |
| 15-02-2023 15:10 | CZ container 1 | | 21.13 | 0.00 | 0.02 |
| 15-02-2023 15:08 | CZ container 2 | | 21.06 | 0.00 | 0.02 |
| 15-02-2023 15:06 | CZ container 3 | | 21.04 | 0.00 | 0.02 |
| 15-02-2023 15:04 | CZ container 4 | | 21.05 | 0.00 | 0.02 |
| 15-02-2023 15:12 | CZ container 5 | | 21.15 | 0.00 | 0.02 |

Prepared by : Y L Chan (Safety Officer)

Date : 15-02-2023

**APPENDIX K
BUILT HERITAGE MONITORING
RESULTS**

Summary of vibration readings at FL02 (C2-SEISM-01)

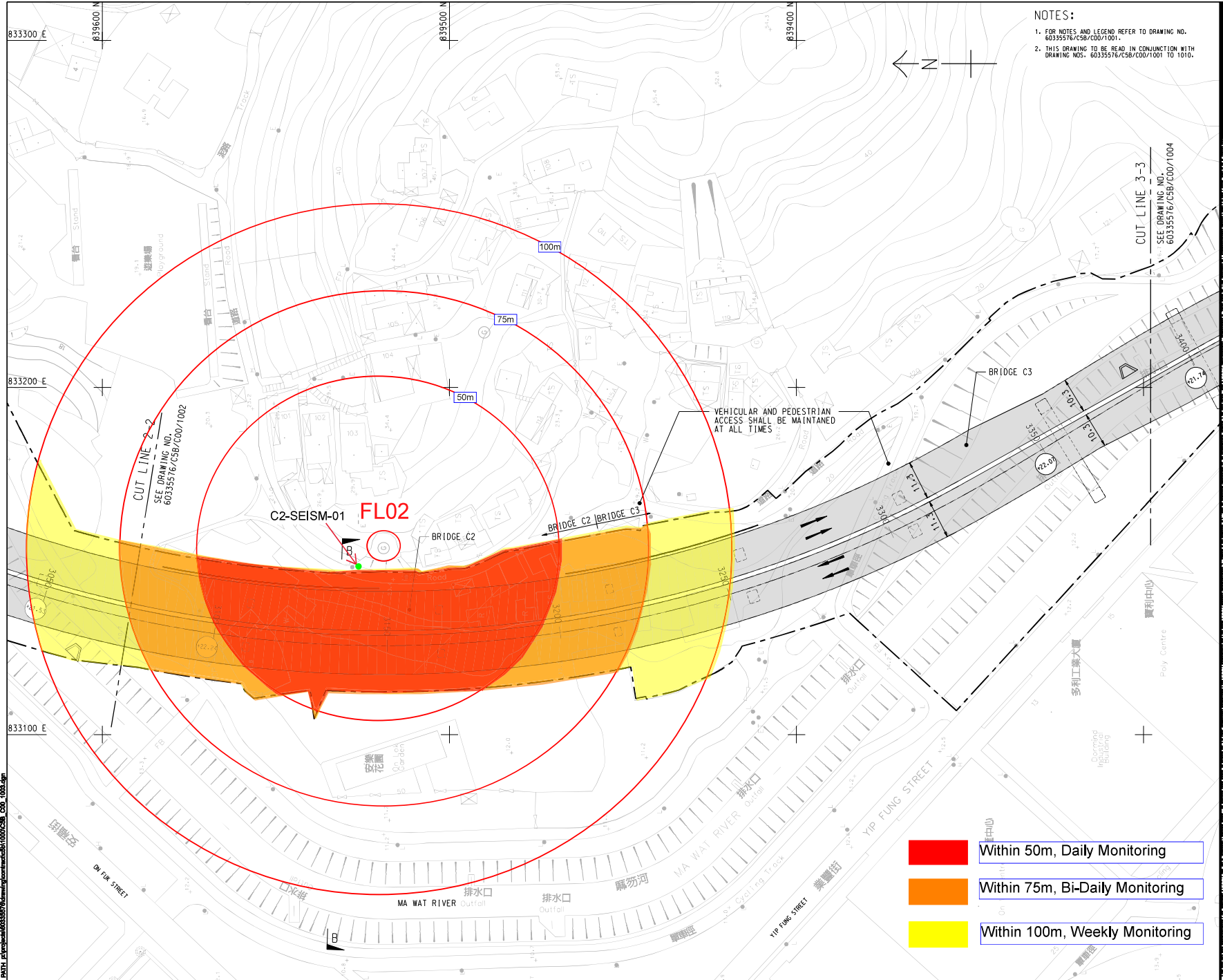


CRCC – Paul Y. Joint Venture

Table 2.3: Vibration Limit from PNAP APP-137 & PS 34.01(2)

| TYPE OF BUILDING | GUIDE VALUES OF MAXIMUM PPV* (MM/SEC) | |
|--|---------------------------------------|----------------------|
| | TRANSIENT VIBRATION | CONTINUOUS VIBRATION |
| Vibration-sensitive / dilapidated buildings# | 7.5 | 3.0 |

| Date | Max. PPV recorded (mm/s) | Serial no. of device (Micromate/ Supergraph) |
|-------------|--------------------------|--|
| 01 Feb 2023 | 0.159 | UM17126 |
| 02 Feb 2023 | 0.135 | UM17126 |
| 03 Feb 2023 | 0.419 | UM17121 |
| 04 Feb 2023 | 0.135 | UM17126 |
| 06 Feb 2023 | 0.096 | UM17121 |
| 07 Feb 2023 | 0.142 | UM17124 |
| 08 Feb 2023 | 0.122 | UM17121 |
| 09 Feb 2023 | 0.368 | UM17124 |
| 10 Feb 2023 | 0.458 | UM17121 |
| 11 Feb 2023 | 0.112 | UM17124 |
| 13 Feb 2023 | 0.201 | UM17124 |
| 14 Feb 2023 | 0.161 | UM17124 |
| 15 Feb 2023 | 0.375 | UM17124 |
| 16 Feb 2023 | 0.305 | UM17124 |
| 17 Feb 2023 | 0.080 | UM17124 |
| 18 Feb 2023 | 0.074 | UM17124 |
| 20 Feb 2023 | 0.250 | UM17121 |
| 21 Feb 2023 | 0.196 | UM17126 |
| 22 Feb 2023 | 0.121 | UM17126 |
| 23 Feb 2023 | 0.074 | UM17126 |
| 24 Feb 2023 | 0.129 | UM17126 |
| 25 Feb 2023 | 0.074 | UM17126 |
| 27 Feb 2023 | 0.189 | UM17126 |
| 28 Feb 2023 | 0.071 | UM17126 |



NOTES:
 1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60335576/C5B/C00/1001.
 2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60335576/C5B/C00/1001 TO 1010.

- Within 50m, Daily Monitoring
- Within 75m, Bi-Daily Monitoring
- Within 100m, Weekly Monitoring

AECOM

PROJECT
 DEVELOPMENT OF KWU TUNG NORTH AND FANLING NORTH NEW DEVELOPMENT AREAS, PHASE 1

CONTRACT TITLE:
 FANLING NORTH NEW DEVELOPMENT AREA, PHASE 1: FANLING BYPASS EASTERN SECTION (SHUNG HIM TONG TO KAU LUNG HANG)

CLIENT
 土木工程拓展署
 Civil Engineering and Development Department

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 2017/06/04

| ISSUE/REVISION | | |
|----------------|--------|----------------|
| NO. | DATE | DESCRIPTION |
| 1 | JUN-19 | TENDER DRAWING |

STATUS
 A1 1: 800

SCALE
 A1 1: 70000

KEY PLAN

PROJECT NO.
 60335576

CONTRACT NO.
 ND/2019/05

SHEET TITLE
 GENERAL LAYOUT

SHEET NUMBER
 60335576/C5B/C00/1003

SHEET 3 OF 10

Summary of vibration readings at FL27 (C1-SEISM-04)



Table 2.3: Vibration Limit from PNAP APP-137 & PS 34.01(2)

| TYPE OF BUILDING | GUIDE VALUES OF MAXIMUM PPV* (MM/SEC) | |
|---|---------------------------------------|----------------------|
| | TRANSIENT VIBRATION | CONTINUOUS VIBRATION |
| Vibration-sensitive / dilapidated buildings# | 7.5 | 3.0 |

| Date | Max. PPV recorded (mm/s) | Serial no. of device (Micromate/ Supergraph) |
|-------------|-----------------------------|---|
| 01 Feb 2023 | 0.149 | UM17124 |
| 02 Feb 2023 | 0.085 | UM17121 |
| 03 Feb 2023 | 0.081 | UM17121 |
| 04 Feb 2023 | 0.245 | UM17124 |
| 06 Feb 2023 | 0.215 | UM17124 |
| 07 Feb 2023 | 0.167 | UM17124 |
| 08 Feb 2023 | 0.111 | UM17121 |
| 09 Feb 2023 | 0.113 | UM17124 |
| 10 Feb 2023 | 0.061 | UM17121 |
| 11 Feb 2023 | 0.191 | UM17124 |
| 13 Feb 2023 | 0.067 | UM17121 |
| 14 Feb 2023 | 0.105 | UM17124 |
| 15 Feb 2023 | 0.100 | UM17124 |
| 16 Feb 2023 | 0.208 | UM17124 |
| 17 Feb 2023 | 0.178 | UM17124 |
| 18 Feb 2023 | 0.594 | UM17121 |
| 20 Feb 2023 | 0.139 | UM17124 |
| 21 Feb 2023 | 0.127 | UM17121 |
| 22 Feb 2023 | 0.124 | UM17126 |
| 23 Feb 2023 | 0.143 | UM17126 |
| 24 Feb 2023 | 0.134 | UM17126 |
| 25 Feb 2023 | 0.141 | UM17126 |
| 27 Feb 2023 | 0.120 | UM17126 |
| 28 Feb 2023 | 0.130 | UM17126 |



60335576/C5B/C00/1002

APPENDIX L
ECOLOGICAL MONITORING RESULTS

Appendix L1a. Avifauna Species Recorded for Water Birds Monitoring, 2 & 3 February 2023, High Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | |
|-------------------------|------------------------------|--------------|------------------|---------------------|-------------------|----|----|--------|--|----|--|----|--|
| | | | | | Weather Condition | | | | Sunny, Fine | | | | |
| | | | | | Tidal Condition | | | | High | | | | |
| | | | | | Tide Level (m) | | | | 1.63, 1.5 | | | | |
| | | | | | Start Time | | | | 1600, 1615 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | | | 1 | | | | | |
| Asian Brown Flycatcher | <i>Muscicapa dauurica</i> | 北灰鶇 | PM, WV | | | 1 | | | | | | | |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | | | | | | | | 2 | |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 2 | 1 | | 29 | | | | 2 | |
| Black-faced Spoonbill | <i>Platalea minor</i> | 黑臉琵鷺 | CWV | EN, (EN), PGC | | | | | | | | 1 | |
| Black-winged Kite | <i>Elanus caeruleus</i> | 黑翅鳶 | OV | LC, (VU) | | | | | | | | 1 | |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鶇 | PM | RC | | | 3 | 58 | | 38 | | | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | | 1 | | | | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | 1 | 6 | 1 | 1 | 3 | 1 | | 10 | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鴉 | UR | LC, VU | 1 | 2 | 1 | | 1 | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鶇 | PM, WV | RC | | | 1 | 2 | | 2 | | | |
| Common Kestrel | <i>Falco tinnunculus</i> | 紅隼 | CaM, WV | Cap. 586 | | | | | | | | 2 | |
| Common Kingfisher | <i>Alcedo atthis</i> | 普通翠鳥 | R | | | | 1 | | | | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | 1 | | 7 | | | | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鶇 | WV, PM | | | | 4 | | | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | |
|------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|--|--|----|
| | | | | | Weather Condition | | | Sunny, Fine | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.63, 1.5 | | | | | |
| | | | | | Start Time | | | 1600, 1615 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | | | | 8 | | 1 | | | | 2 |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | 3 | 2 | | 88 | | | | |
| Daurian Redstart | <i>Phoenicurus aureoreus</i> | 北紅尾鵯 | WV | | | 2 | | | | | | | |
| Dusky Thrush | <i>Turdus eunomus</i> | 斑鶇 | SWV | | | | | 1 | | | | | |
| Eastern Buzzard | <i>Buteo japonicus</i> | 普通鵟 | WV | Cap.586 | | | | | | | | | 1 |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鵝 | R, PM | (LC) | | 1 | 1 | 1 | | | | | |
| Eastern Water Rail | <i>Rallus indicus</i> | 普通秧雞 | SWV, PM | | | | | 1 | 1 | | | | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵪鶉 | PM, WV | | | | 3 | | 1 | | | | 2 |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | | 5 | | | 2 |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鶿 | CWV | PRC | 2 | 1 | | | | | | | 20 |
| Great Egret | <i>Ardea alba</i> | 大白鵝 | R, WV | PRC(RC) | | 3 | | | | | | | 70 |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鶿 | UPM, WV | | | | 1 | 2 | 1 | | | | |
| Grey-backed Thrush | <i>Turdus hortulorum</i> | 灰背鶇 | WV, PM | | | 1 | | | | | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鵝 | WV | PRC | | 2 | 6 | 2 | | | | | |
| House Swift | <i>Apus nipalensis</i> | 小白腰雨燕 | SpM, R | | | | | | | | | | 19 |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵪鶉 | CPM, WV | | | | | | 1 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鵝 | R | PRC(RC) | 1 | 11 | 4 | | | 2 | | | 2 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | |
|-------------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|----|--|---|---|
| | | | | | Weather Condition | | | Sunny, Fine | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.63, 1.5 | | | | | |
| | | | | | Start Time | | | 1600, 1615 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Little Grebe | <i>Tachybaptus ruficollis</i> | 小鸕鶿 | R | LC | | | | | | 1 | | | |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鴝 | WV, PM | LC | | | 2 | | | | | | |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鵞 | PM, WV | RC | | | | 1 | | | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鵝 | R | | 2 | 3 | | | | | | 3 | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵞 | WV | | | 2 | 20 | | 8 | | | | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鵲 | R | | 1 | 1 | | | | | | | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鵞 | WV | | | 2 | | | | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鵞 | WV | RC | | | | | | 25 | | | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | 1 | | | | 10 | | | | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵞 | CPM, WV | RC | | | | | 2 | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵞 | R | | 4 | 10 | | | 2 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鵞 | R | | | 19 | | | 6 | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | | | 1 | | 50 | | | | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | 3 | 1 | 4 | | 8 | | | | |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 1 | | | | | | | | |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | 1 | 1 | 2 | 8 | | | | 1 |
| White Wagtail | <i>Motacilla alba</i> | 白鵞鵒 | PM, WV | | 3 | 1 | 4 | | 5 | | | | 3 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | |
|--|-------------------------------|--------------|------------------|---------------------|-------------------|----|----|--------|--|---|---|---|----|
| | | | | | Weather Condition | | | | Sunny, Fine | | | | |
| | | | | | Tidal Condition | | | | High | | | | |
| | | | | | Tide Level (m) | | | | 1.63, 1.5 | | | | |
| | | | | | Start Time | | | | 1600, 1615 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鷸 | PM, WV | LC | | | | 7 | | | | | 13 |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷦鶯 | R | | | | | | | | | 2 | |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鶯 | WV, SpM | | 1 | | | | 1 | | | | |
| Zitting Cisticola | <i>Cisticola juncidis</i> | 棕扇尾鶯 | PM, WV | LC | | | | | 1 | | | | |
| Total No. of Species | | | | | 13 | 22 | 19 | 11 | 22 | 8 | 0 | 2 | 17 |
| Total No. of Conservation Interest Species | | | | | 4 | 7 | 8 | 7 | 4 | 7 | 0 | 0 | 10 |

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant;; UR – Uncommon resident; CWV - Common Winter Visitor; OV - Occasional visitor
Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)
Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance
Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)
CR: Rare in China Red Data Book Status
VU: Vulnerable in IUCN Red List Status
(VU): Vulnerable in China Red Data Book Status
EN: Endangered in IUCN Red List Status
(EN): Endangered in China Red Data Book Status
NT: Near Threatened in IUCN Red List Status
CR: Critically Endangered in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

| | | | | | | | | | | | | | |
|---|--------------|--------------|------------------|---------------------|-------------------|----|--|-----|-----|-----|---|-------|--------|
| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | | |
| | | | | | Weather Condition | | Sunny, Fine | | | | | | |
| | | | | | Tidal Condition | | High | | | | | | |
| | | | | | Tide Level (m) | | 1.63, 1.5 | | | | | | |
| | | | | | Start Time | | 1600, 1615 | | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | | | | | | WAL | DAL | SWH | P | Heard | Flight |
| WAL: Wet Agricultural Land DAL: Dry Agricultural Land SWH: Shallow Water Habitat P: Pond | | | | | | | | | | | | | |

Appendix L1b. Avifauna Species Recorded for Water Birds Monitoring, 2 & 3 February 2023, Low Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | |
|-------------------------|------------------------------|--------------|------------------|---------------------|-------------------|----|----|--|----|----|--|---|--|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.33, 0.99 | | | | | |
| | | | | | Start Time | | | 0900, 0800 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | | | 4 | | | | | |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | 4 | 2 | 1 | | | | | 1 | |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | | 1 | | 1 | 2 | | | | |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | | | | | | 3 | | | | |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鵯 | PM | RC | | | 4 | 36 | 18 | 31 | | | |
| Buff-bellied Pipit | <i>Anthus rubescens</i> | 黃腹鵯 | UPM, WV | | | | | | 1 | | | | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | | 2 | | | | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鵯 | R | PRC(RC) | 1 | 3 | 1 | 8 | 1 | | | 1 | |
| Cinereous Tit | <i>Parus cinereus</i> | 蒼背山雀 | R | | 2 | | | | | | | | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鵯 | UR | LC, VU | 1 | 1 | | | | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鵯 | PM, WV | RC | | | 1 | 2 | | 2 | | | |
| Common Kingfisher | <i>Alcedo atthis</i> | 普通翠鳥 | R | | | | | | | | | 1 | |
| Common Moorhen | <i>Gallinula chloropus</i> | 黑水雞 | R | | | | | | 2 | | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | | | 1 | | | 2 | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鵯 | WV, PM | | | | 1 | | 2 | 1 | | | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | | | | | | | 1 | | 1 | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | |
|------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|----|----|--|---|---|--|--|---|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.33, 0.99 | | | | | |
| | | | | | Start Time | | | 0900, 0800 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | | | 1 | | | 2 | | | | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | | | | 2 | | | | |
| Daurian Redstart | <i>Phoenicurus aureoreus</i> | 北紅尾鵯 | WV | | 1 | 4 | 2 | | 1 | | | | |
| Dusky Warbler | <i>Phylloscopus fuscatus</i> | 褐柳鶯 | PM, WV | | | | | | 2 | | | | |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鶯 | R, PM | (LC) | | 2 | | 26 | | | | | |
| Eastern Water Rail | <i>Rallus indicus</i> | 普通秧雞 | SWV, PM | | | | | | 1 | | | | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵲鵯 | PM, WV | | | | | 2 | 4 | | | | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | 8 | 1 | | | |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | | | | 1 | | | | |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鶿 | CWV | PRC | 1 | | | | | | | | 1 |
| Great Egret | <i>Ardea alba</i> | 大白鶯 | R, WV | PRC(RC) | | 2 | 3 | | | | | | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鵲 | UPM, WV | | | | 2 | 2 | 2 | 1 | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鶯 | WV | PRC | | 2 | 1 | 1 | | | | | 1 |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵲 | CPM, WV | | | | | | 8 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鶯 | R | PRC(RC) | 1 | 8 | 9 | 6 | 1 | 2 | | | 1 |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鵲 | WV, PM | LC | | | | 4 | | 8 | | | 2 |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | | | | | | 1 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | |
|-------------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|----|--|---|---|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.33, 0.99 | | | | | |
| | | | | | Start Time | | | 0900, 0800 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鵲 | R | | 2 | 3 | | | | | | | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵲 | WV | | 1 | | 7 | | 4 | | | | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鵲 | R | | | | 1 | | 3 | | | | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | | | 3 | 2 | | | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | | | | 17 | | | 7 |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | 4 | | | | 7 | | | 2 | |
| Red-rumped Swallow | <i>Cecropis daurica</i> | 金腰燕 | UPM | | | | | | | | | | 1 |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵲 | CPM, WV | RC | | | | 8 | | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵲 | R | | 4 | 10 | | | | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵲 | WV, PM | | | | | 2 | 5 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | | | 11 | | 9 | | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | | | 1 | | 55 | | | | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | | 3 | | | 3 | | | | 2 |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 2 | 6 | 5 | | 4 | | | | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鵲 | PM, WV | | | | 5 | 4 | 10 | 1 | | | 4 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | | | 1 | 3 | | | | |
| White-rumped Munia | <i>Lonchura striata</i> | 白腰文鳥 | R | | | | | | 10 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 2/2/2023 (T1 & T2), 3/2/2023 (T3 & T5) | | | | | |
|--|-------------------------------|--------------|------------------|---------------------|-------------------|----|----|--|----|----|---|---|----|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.33, 0.99 | | | | | |
| | | | | | Start Time | | | 0900, 0800 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | R | (LC) | 1 | 2 | | | | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鷸 | PM, WV | LC | | | | 4 | 1 | 1 | | | |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷯鶯 | R | | 1 | | | | | | | 1 | |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鶯 | WV, SpM | | | 1 | 1 | | | | | | |
| Total No. of Species | | | | | 14 | 19 | 17 | 16 | 32 | 11 | 0 | 2 | 13 |
| Total No. of Conservation Interest Species | | | | | 5 | 7 | 6 | 9 | 6 | 7 | 0 | 0 | 6 |

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant;; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident;
Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)
Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance
Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)
WAL: Wet Agricultural Land
DAL: Dry Agricultural Land
SWH: Shallow Water Habitat
P: Pond

Appendix L1c. Avifauna Species Recorded for Water Birds Monitoring, 9 & 10 February 2023, High Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | |
|-------------------------|------------------------------|--------------|------------------|---------------------|-------------------|----|----|--------|---|----|--|---|---|
| | | | | | Weather Condition | | | | Fine, Sunny | | | | |
| | | | | | Tidal Condition | | | | High | | | | |
| | | | | | Tide Level (m) | | | | 1.81, 1.50 | | | | |
| | | | | | Start Time | | | | 1400, 1130 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | 1 | | | 7 | | | | |
| Asian Brown Flycatcher | <i>Muscicapa dauurica</i> | 北灰鵯 | PM, WV | | | | | | 1 | | | | |
| Asian Koel | <i>Eudynamys scolopacea</i> | 噪鵯 | R | | | | | | | | | 1 | |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | | 1 | | | | | | | 1 |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 2 | | 2 | | 2 | | | | 2 |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | | | | | | 1 | | | | |
| Black-faced Spoonbill | <i>Platalea minor</i> | 黑臉琵鷺 | CWV | EN, (EN), PGC | 3 | | 7 | | 5 | | | | |
| Black-winged Kite | <i>Elanus caeruleus</i> | 黑翅鳶 | OV | LC, (VU) | | | | | | | | | 1 |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鵯 | PM | RC | | | 5 | 52 | | 34 | | | 1 |
| Chinese Blackbird | <i>Turdus mandarinus</i> | 烏鶇 | CWV | | | | | | 1 | | | | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | 4 | | | | 1 | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | 1 | 11 | 5 | 19 | 3 | | | | 4 |
| Cinereous Tit | <i>Parus cinereus</i> | 蒼背山雀 | R | | | | | | | | | | 3 |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鴉 | UR | LC, VU | | | 1 | | | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鵯 | PM, WV | RC | | | 1 | 1 | 1 | | | | 1 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | | |
|------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|----|----|---|---|---|--|----|--|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.81, 1.50 | | | | | |
| | | | | | Start Time | | | 1400, 1130 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Common Moorhen | <i>Gallinula chloropus</i> | 黑水雞 | R | | | | | | 3 | | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | | 2 | | | | | |
| Common Kestrel | <i>Falco tinnunculus</i> | 紅隼 | CaM, WV | Cap. 586 | | | | | | | | 1 | |
| Common Kingfisher | <i>Alcedo atthis</i> | 普通翠鳥 | R | | | 1 | 1 | | | | | | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鷸 | WV, PM | | | | 1 | 1 | | | | | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | | | | | | 1 | | | 22 | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | | | 5 | | | | 50 | |
| Daurian Redstart | <i>Phoenicurus aureoreus</i> | 北紅尾鵯 | WV | | 1 | 2 | | | 2 | | | | |
| Dusky Thrush | <i>Turdus eunomus</i> | 斑鶇 | SWV | | | | | | 1 | | | | |
| Dusky Warbler | <i>Phylloscopus fuscatus</i> | 褐柳鶯 | PM, WV | | | 1 | | | | | | | |
| Eastern Buzzard | <i>Buteo japonicus</i> | 普通鵟 | WV | Cap.586 | | | | | | | | 1 | |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鷺 | R, PM | (LC) | | | | 3 | 4 | | | | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵯鵯 | PM, WV | | | | | | | | | 12 | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | | 7 | | | |
| Great Egret | <i>Ardea alba</i> | 大白鷺 | R, WV | PRC(RC) | | 2 | 2 | | 1 | 1 | | 1 | |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) | | | | | 1 | | | | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鵯 | UPM, WV | | | | 2 | 1 | | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | | |
|-----------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|---|---|---|--|--|---|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.81, 1.50 | | | | | |
| | | | | | Start Time | | | 1400, 1130 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | WV | PRC | | 1 | 4 | | | | | | 3 |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | | | | 1 | | | | |
| House Swift | <i>Apus nipalensis</i> | 小白腰雨燕 | SpM, R | | | | | | | | | | 3 |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵪 | CPM, WV | | | | | 1 | 6 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | R | PRC(RC) | 1 | 14 | 5 | 4 | | 2 | | | 2 |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鴝 | WV, PM | LC | | | 3 | 3 | | | | | 2 |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | | | | | | 2 | | | | |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鵞 | PM, WV | RC | | | | 1 | | | | | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵪 | WV | | | 2 | 8 | | 5 | | | | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鵲 | R | | | 1 | | | 1 | | | | |
| Oriental Turtle dove | <i>Streptopelia orientalis</i> | 山斑鳩 | WV, PM | | | | | | 1 | | | | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | | | | | | 1 | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鵞 | WV | RC | | | | | 1 | 7 | | | |
| Pied Kingfisher | <i>Ceryle rudis</i> | 斑魚狗 | UR | (LC) | | 1 | | | | | | | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | 4 | 1 | | | 7 | | | | |
| Red Collared Dove | <i>Streptopelia tranquebarica</i> | 火斑鳩 | UPM | | | | | | 1 | | | | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵪 | CPM, WV | RC | | | | | 2 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | | |
|--|-------------------------------|--------------|------------------|---------------------|-------------------|----|----|---|----|---|---|---|-----|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.81, 1.50 | | | | | |
| | | | | | Start Time | | | 1400, 1130 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鸛 | R | | 7 | 10 | 4 | | 2 | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鸛 | WV, PM | | | | | | 3 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | | | 22 | | | 14 | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | 1 | 1 | | | 30 | | | | 100 |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | 1 | 2 | 1 | | 7 | | | | 4 |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 1 | 5 | | 10 | | | | | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鵲 | PM, WV | | 2 | 2 | 4 | 15 | 2 | | | | 18 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | | 1 | | 7 | | | | 2 |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | R | (LC) | | | 1 | | | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | PM, WV | LC | | | 1 | 5 | 2 | 1 | | | 4 |
| Total No. of Species | | | | | 12 | 19 | 20 | 13 | 35 | 8 | 0 | 1 | 22 |
| Total No. of Conservation Interest Species | | | | | 3 | 5 | 11 | 8 | 10 | 6 | 0 | 0 | 11 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | | |
|---|--------------|--------------|------------------|---------------------|-------------------|----|----|---|--|--|--|--|--|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.81, 1.50 | | | | | |
| | | | | | Start Time | | | 1400, 1130 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Note: R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; UR – Uncommon resident; SWV –CWV - Common Winter Visitor; Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net) Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586) VU: Vulnerable in IUCN Red List Status EN: Endangered in IUCN Red List Status (EN): Endangered in China Red Data Book Status RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002) WAL: Wet Agricultural Land DAL: Dry Agricultural Land SWH: Shallow Water Habitat P: Pond | | | | | | | | | | | | | |

Appendix L1d. Avifauna Species Recorded for Water Birds Monitoring, 9 & 10 February 2023, Low Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | |
|-------------------------|------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--------|---|----|--|---|--|
| | | | | | Weather Condition | | | | Fine, Overcast | | | | |
| | | | | | Tidal Condition | | | | Low | | | | |
| | | | | | Tide Level (m) | | | | 0.47, 0.48 | | | | |
| | | | | | Start Time | | | | 0900, 0900 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | 1 | | 4 | | | | | |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | | | | | | | | 1 | |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 1 | | | 2 | | | | 2 | |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | | | | | 1 | | | | | |
| Black-winged Kite | <i>Elanus caeruleus</i> | 黑翅鳶 | OV | LC, (VU) | | | | 1 | | | | | |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鵯 | PM | RC | | | 5 | 58 | | 34 | | | |
| Chinese Blackbird | <i>Turdus mandarinus</i> | 烏鶇 | CWV | | | | | 1 | | | | | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | | 2 | | | | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鵯 | R | PRC(RC) | 1 | 3 | 3 | 3 | 5 | | | 2 | |
| Cinereous Tit | <i>Parus cinereus</i> | 蒼背山雀 | R | | | 1 | | | | | | | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鴉 | UR | LC, VU | 1 | | 1 | | | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鵯 | PM, WV | RC | | | 1 | 1 | | | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | | 9 | | | | | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鵯 | WV, PM | | | 1 | | | 1 | | | | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | | | | | | | | | 3 | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | |
|------------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|----|--------|---|---|---|---|---|
| | | | | | Weather Condition | | | | Fine, Overcast | | | | |
| | | | | | Tidal Condition | | | | Low | | | | |
| | | | | | Tide Level (m) | | | | 0.47, 0.48 | | | | |
| | | | | | Start Time | | | | 0900, 0900 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | | | 1 | | | 2 | | | | |
| Daurian Redstart | <i>Phoenicurus aureoreus</i> | 北紅尾鵯 | WV | | | | 1 | | 2 | | | | |
| Dusky Thrush | <i>Turdus eunomus</i> | 斑鵯 | SWV | | | | | | 1 | | | | |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鶯 | R, PM | (LC) | | 3 | | 11 | 15 | | | | 9 |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵪鶉 | PM, WV | | | | 1 | 1 | 11 | | | | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | 4 | | | | |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鶿 | CWV | PRC | | 1 | | | | | | | |
| Great Egret | <i>Ardea alba</i> | 大白鶯 | R, WV | PRC(RC) | 1 | 3 | 4 | | 1 | | | | 1 |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) | | | | | | | | 1 | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鶿 | UPM, WV | | | | 3 | | | | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鶯 | WV | PRC | | 1 | 5 | | | | | | |
| Large-billed Crow | <i>Corvus macrorhynchus</i> | 大嘴烏鴉 | R | | | | 2 | | | | | | |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵪 | CPM, WV | | | | 1 | | 2 | 3 | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鶯 | R | PRC(RC) | | 9 | 7 | 1 | 5 | | | | 2 |
| Little Grebe | <i>Tachybaptus ruficollis</i> | 小鸕鶿 | R | LC | | | | | | | 3 | | |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | | | 1 | | | 1 | | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鵯 | R | | 2 | 6 | | | | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | |
|---------------------------|-------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--------|---|---|---|---|----|
| | | | | | Weather Condition | | | | Fine, Overcast | | | | |
| | | | | | Tidal Condition | | | | Low | | | | |
| | | | | | Tide Level (m) | | | | 0.47, 0.48 | | | | |
| | | | | | Start Time | | | | 0900, 0900 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵲 | WV | | 1 | 2 | 12 | | 8 | | | | 3 |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鴝 | R | | | 1 | | | | | | | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | 2 | | | 6 | 8 | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | | | | 8 | 2 | | |
| Red-flanked Bluetail | <i>Tarsiger cyanurus</i> | 紅脇藍尾鵲 | WV, PM | | | | | | 1 | | | | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵲 | CPM, WV | RC | | | | | 6 | | | | 11 |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵲 | R | | 10 | 2 | | | | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵲 | WV, PM | | | | 1 | | 8 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鵲 | R | | | 25 | | | 16 | | | | 1 |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | 3 | | | 100 | 60 | | | | |
| Scarlet Minivet | <i>Pericrocotus speciosus</i> | 赤紅山椒鳥 | R | | 10 | | | | | | | | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鵲 | R | | 2 | 1 | | 1 | 9 | | | | 3 |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 3 | 9 | | | | | | | 4 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | | | 4 | 2 | | | 1 | 2 |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | R | (LC) | | | 1 | | 1 | | | | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鵲 | PM, WV | | 1 | 4 | 2 | | 17 | | | | 1 |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鵲 | WV, SpM | | | | | | 1 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 9/2/2023 (T1 & T2), 10/2/2023 (T3 & T5) | | | | | |
|--|--------------|--------------|------------------|---------------------|-------------------|----|----|---|----|---|---|---|----|
| | | | | | Weather Condition | | | Fine, Overcast | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 0.47, 0.48 | | | | | |
| | | | | | Start Time | | | 0900, 0900 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Total No. of Species | | | | | 13 | 18 | 18 | 10 | 29 | 4 | 2 | 2 | 14 |
| Total No. of Conservation Interest Species | | | | | 3 | 6 | 8 | 5 | 7 | 2 | 2 | 1 | 5 |

Note:

R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SpM – Spring migrant; UR – Uncommon resident; CWV - Common Winter Visitor

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

DAL: Dry Agricultural Land

SWH: Shallow Water Habitat

P: Pond

Appendix L1e. Avifauna Species Recorded for Water Birds Monitoring, 16 & 17 February 2023, High Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|-------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--------|--|----|--|--|----|--|
| | | | | | Weather Condition | | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | | High | | | | | |
| | | | | | Tide Level (m) | | | | 2.12, 1.57 | | | | | |
| | | | | | Start Time | | | | 1600, 1000 | | | | | |
| | | | | | Abundance | | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | 1 | 1 | | | 4 | | | | | |
| Barn Swallow | <i>Hirundo rustica</i> | 家燕 | PM, Sv | | 3 | | | | | | | | 25 | |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 3 | 3 | | | | | | | | |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鷸 | PM | RC | | | 1 | 11 | 4 | 85 | | | 1 | |
| Bluethroat | <i>Luscinia svecica</i> | 藍喉歌鵯 | CWV | | | | | | 1 | | | | | |
| Buff-bellied Pipit | <i>Anthus rubescens</i> | 黃腹鵯 | UPM, WV | | | | | | 1 | | | | | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | | 2 | | | 2 | | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | 5 | 5 | 4 | 1 | 4 | 2 | | | 2 | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鷸 | PM, WV | RC | | | 1 | | | 1 | | | | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鷸 | WV, PM | | | 4 | | | | | | | | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | | | 2 | | | | | | | | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | 4 | 10 | | | 10 | | | | | |
| Daurian Redstart | <i>Phoenicurus aureus</i> | 北紅尾鵯 | WV | | 1 | 2 | | | 1 | | | | | |
| Dusky Warbler | <i>Phylloscopus fuscatus</i> | 褐柳鶯 | PM, WV | | | 1 | | | 2 | | | | | |
| Eastern Buzzard | <i>Buteo japonicus</i> | 普通鵟 | WV | Cap.586 | | | | | | | | | 1 | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|------------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|--|---|----|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 2.12, 1.57 | | | | | |
| | | | | | Start Time | | | 1600, 1000 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鷺 | R, PM | (LC) | | | | | 6 | | | | 7 |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵲鴝 | PM, WV | | 1 | | 1 | | 7 | | | | 2 |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | 13 | | | | |
| Eurasian Tree Sparrow | <i>Passer montanus</i> | 樹麻雀 | R | | | 5 | | | | | | | |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鷀 | CWV | PRC | 4 | 1 | | | | | | | |
| Great Egret | <i>Ardea alba</i> | 大白鷺 | R, WV | PRC(RC) | 5 | 4 | 3 | | 1 | 1 | | | 1 |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) | | 1 | | | | | | 1 | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鵲 | UPM, WV | | | 1 | 2 | | | | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | WV | PRC | 1 | 1 | 4 | | | | | | |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | | | | 1 | | | | |
| House Swift | <i>Apus nipalensis</i> | 小白腰雨燕 | SpM, R | | | | | | | | | | 26 |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵲 | CPM, WV | | | | | | 6 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | R | PRC(RC) | 8 | 8 | 6 | | 1 | 2 | | | 1 |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鵲 | WV, PM | LC | | | | 4 | | | | | |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | | | | | | 2 | | | | |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鵲 | PM, WV | RC | | | | | | 1 | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鵲 | R | | 1 | 5 | | | 8 | | | | 5 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|-------------------------|--------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|--|---|-----|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 2.12, 1.57 | | | | | |
| | | | | | Start Time | | | 1600, 1000 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵲 | WV | | 3 | 2 | | | 4 | | | | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鵯 | R | | | 1 | | | 1 | | | 2 | 1 |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | | | | | | 4 | | | 1 | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | | 4 | | | 4 | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | | | | 8 | | | |
| Pied Kingfisher | <i>Ceryle rudis</i> | 斑魚狗 | UR | (LC) | | | 1 | | | | | | |
| Red-flanked Bluetail | <i>Tarsiger cyanurus</i> | 紅脇藍尾鵯 | WV, PM | | | | | | 1 | | | | |
| Red-rumped Swallow | <i>Cecropis daurica</i> | 金腰燕 | UPM | | | | | | | | | | 6 |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵲 | CPM, WV | RC | | | | | 3 | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵯 | R | | 16 | 14 | 4 | | | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵲 | WV, PM | | | | | | 3 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鵡 | R | | | 26 | | | 1 | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | | | | | 24 | | | | 130 |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | 1 | 4 | | | 1 | | | | |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 1 | | | | | | | | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鵯 | PM, WV | | 1 | 2 | 1 | | 7 | | | | 3 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | 1 | | | | | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|--|-------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|---|---|----|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 2.12, 1.57 | | | | | |
| | | | | | Start Time | | | 1600, 1000 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | PM, WV | LC | | | 1 | 4 | 1 | 2 | | | 1 |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷦鶯 | R | | 1 | | | | 1 | | | | |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鶯 | WV, SpM | | 1 | 4 | | | | | | | |
| Total No. of Species | | | | | 20 | 25 | 12 | 4 | 31 | 8 | 0 | 3 | 15 |
| Total No. of Conservation Interest Species | | | | | 5 | 6 | 8 | 4 | 9 | 8 | 0 | 1 | 7 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|-------------|--------------|--------------|------------------|---------------------|-------------------|----|----|--|-----|-----|---|-------|--------|
| | | | | | Weather Condition | | | Fine, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 2.12, 1.57 | | | | | |
| | | | | | Start Time | | | 1600, 1000 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | | | | | | WAL | DAL | SWH | P | Heard | Flight |

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SpM – Spring migrant; UR – Uncommon resident; CWV - Common Winter Visitor; OV – Occasional Visitor
Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)
Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance
Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)
(EN): Endangered in China Red Data Book Status
VU: Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)
WAL: Wet Agricultural Land
DAL: Dry Agricultural Land
SWH: Shallow Water Habitat
P: Pond

Appendix L1f. Avifauna Species Recorded for Water Birds Monitoring, 16 & 17 February 2023, Low Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|-------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|----|----|----|--|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.44, 1.50 | | | | | |
| | | | | | Start Time | | | 0900, 1200 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | 1 | | 3 | | | | | |
| Black Drongo | <i>Dicrurus macrocercus</i> | 黑卷尾 | Sv | | 1 | | | | | | | | |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | 1 | 1 | | | | | | 2 | |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 2 | | 3 | | 7 | | 4 | 3 | |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | | 2 | | | | 2 | | | | |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鵯 | PM | RC | | | 3 | 36 | 8 | 41 | | 7 | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | 1 | | | | | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | 1 | 4 | 4 | 6 | 1 | 1 | | 3 | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鴉 | UR | LC, VU | | | 2 | | | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鵯 | PM, WV | RC | | | 1 | | | 1 | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | | | 8 | | | | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鵯 | WV, PM | | 1 | 1 | 1 | | | | | | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | | | | | | 2 | | | 5 | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | | | | | | 2 | | | | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | | | | 57 | | 30 | 13 | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|------------------------|---------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|--|---|----|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.44, 1.50 | | | | | |
| | | | | | Start Time | | | 0900, 1200 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Daurian Redstart | <i>Phoenicurus aureoreus</i> | 北紅尾鵯 | WV | | 1 | 1 | 1 | | 2 | | | | |
| Dusky Warbler | <i>Phylloscopus fuscatus</i> | 褐柳鶯 | PM, WV | | 1 | 1 | | | 1 | | | | |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鶯 | R, PM | (LC) | | | | | 17 | | | | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵪鶉 | PM, WV | | | | 2 | 5 | 6 | 4 | | | 5 |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | 13 | | | | |
| Eurasian Tree Sparrow | <i>Passer montanus</i> | 樹麻雀 | R | | | | | | 15 | | | | |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鶿 | CWV | PRC | 5 | | | | | | | | |
| Great Egret | <i>Ardea alba</i> | 大白鶯 | R, WV | PRC(RC) | | 3 | 4 | | 1 | 1 | | | 1 |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) | 1 | | | | | | | 1 | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鶿 | UPM, WV | | | 1 | 2 | | | | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鶯 | WV | PRC | | | 3 | | | | | | |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | | | | 1 | | | | |
| House Swift | <i>Apus nipalensis</i> | 小白腰雨燕 | SpM, R | | | | | | | | | | 34 |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵪 | CPM, WV | | | | | | 4 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鶯 | R | PRC(RC) | | 4 | 5 | 1 | 1 | | | | 1 |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鶿 | WV, PM | LC | | | | 8 | | | | | |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | | | | | | 2 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|---------------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|--|---|----|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.44, 1.50 | | | | | |
| | | | | | Start Time | | | 0900, 1200 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鷸 | PM, WV | RC | | | | | | 1 | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鵲 | R | | 3 | 5 | | | 7 | | | 3 | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵲 | WV | | 6 | 1 | 6 | | | | | | 5 |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鴝 | R | | | 2 | | | 1 | | | | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | | 2 | | | | 3 | | | | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | | | | | 4 | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | | | | 8 | | | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵲 | CPM, WV | RC | | | | | 8 | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵲 | R | | 6 | 3 | | | | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵲 | WV, PM | | | | | | 4 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | | | 22 | | | 13 | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | | | | | 45 | | | | 70 |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | | 5 | | | 4 | | | | 6 |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鴝 | PM, WV | | 1 | 1 | 3 | | 7 | | | | 2 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | | 1 | 1 | 2 | | | 1 | |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | R | (LC) | | | | | 1 | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | PM, WV | LC | | | 1 | 3 | | 1 | | | 2 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | |
|--|-------------------------------|--------------|------------------|---------------------|-------------------|----|----|--|----|---|---|---|----|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 1.44, 1.50 | | | | | |
| | | | | | Start Time | | | 0900, 1200 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷓鴣 | R | | | | | 1 | | | 2 | | |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鶯 | WV, SpM | | | 2 | | | | | | | |
| Zitting Cisticola | <i>Cisticola juncidis</i> | 棕扇尾鶯 | PM, WV | LC | | | | 1 | | | | | |
| Total No. of Species | | | | | 16 | 16 | 17 | 7 | 34 | 8 | 0 | 6 | 15 |
| Total No. of Conservation Interest Species | | | | | 3 | 3 | 8 | 5 | 10 | 7 | 0 | 0 | 5 |

Note:

R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant;; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; OV - Occasional visitor

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)

CR: Rare in China Red Data Book Status

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status

(EN): Endangered in China Red Data Book Status

NT: Near Threatened in IUCN Red List Status

CR: Critically Endangered in IUCN Red List Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land

| | | | | | | | | | | | | | |
|---|--------------|--------------|------------------|---------------------|-------------------|----|--|-----|-----|-----|---|-------|--------|
| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | 16/2/2023 (T1 & T2), 17/2/2023 (T3 & T5) | | | | | | |
| | | | | | Weather Condition | | Sunny, Sunny | | | | | | |
| | | | | | Tidal Condition | | Low | | | | | | |
| | | | | | Tide Level (m) | | 1.44, 1.50 | | | | | | |
| | | | | | Start Time | | 0900, 1200 | | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | | | | | | WAL | DAL | SWH | P | Heard | Flight |
| DAL: Dry Agricultural Land SWH: Shallow Water Habitat P: Pond | | | | | | | | | | | | | |

Appendix L1g. Avifauna Species Recorded for Water Birds Monitoring, 23 & 24 February 2023, High Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | | |
|-------------------------|------------------------------|--------------|------------------|---------------------|-------------------|----|----|--|---|----|--|---|---|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.59, 2.03 | | | | | |
| | | | | | Start Time | | | 1100, 1400 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | | | 5 | | | | 3 | |
| Asian Koel | <i>Eudynamys scolopacea</i> | 噪鵯 | R | | | 1 | 1 | | | | | 1 | |
| Barn Swallow | <i>Hirundo rustica</i> | 家燕 | PM, Sv | | 2 | | | | | | | | 5 |
| Black Drongo | <i>Dicrurus macrocercus</i> | 黑卷尾 | Sv | | | | | | | | | | 1 |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | 1 | | | | | | | | 1 |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 1 | 2 | 2 | | 6 | | | 2 | 2 |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | | | | | | 2 | | | | |
| Black-winged Kite | <i>Elanus caeruleus</i> | 黑翅鳶 | OV | LC, (VU) | | | | | | | | | 1 |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鵯 | PM | RC | | | | 72 | | 41 | | | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | | | | | 1 | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | 1 | 2 | 1 | 3 | 7 | 9 | | | 1 |
| Cinereous Tit | <i>Parus cinereus</i> | 蒼背山雀 | R | | | 2 | | | | | | | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鵲 | UR | LC, VU | 2 | 1 | | | | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鵯 | PM, WV | RC | | | 1 | | 1 | 1 | | 1 | |
| Common Kestrel | <i>Falco tinnunculus</i> | 紅隼 | CaM, WV | Cap. 586 | | | | | | | | | 1 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | |
|------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--------|--|---|--|----|--|
| | | | | | Weather Condition | | | | Sunny, Sunny | | | | |
| | | | | | Tidal Condition | | | | High | | | | |
| | | | | | Tide Level (m) | | | | 1.59, 2.03 | | | | |
| | | | | | Start Time | | | | 1100, 1400 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Common Moorhen | <i>Gallinula chloropus</i> | 黑水雞 | R | | | | | | 1 | | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | | 2 | | | | | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | | | | 1 | 2 | 2 | | | | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | | 4 | | | | | | | | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | | | 40 | | | | 10 | |
| Daurian Redstart | <i>Phoenicurus aureus</i> | 北紅尾鴝 | WV | | 3 | 1 | | 1 | | | | | |
| Dusky Warbler | <i>Phylloscopus fuscatus</i> | 褐柳鶯 | PM, WV | | 1 | | | 1 | | | | | |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鶯 | R, PM | (LC) | | 2 | 2 | | | 9 | | | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵪鶉 | PM, WV | | | | 1 | 3 | 4 | | | 1 | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | | | 1 | | | | |
| Eurasian Tree Sparrow | <i>Passer montanus</i> | 樹麻雀 | R | | | 2 | | | | | | | |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鶿 | CWV | PRC | 2 | 1 | | | | | | 1 | |
| Great Egret | <i>Ardea alba</i> | 大白鶯 | R, WV | PRC(RC) | 1 | 2 | | | | 1 | | 2 | |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) | 1 | | | | 1 | | | 1 | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鵪 | UPM, WV | | | | 4 | | 1 | 2 | | 1 | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鶯 | WV | PRC | | 3 | | | | | | | |
| Grey Wagtail | <i>Motacilla cinerea</i> | 灰鵪鶉 | WV | | | | 2 | | | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | | |
|-----------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|----|---|--|---|---|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.59, 2.03 | | | | | |
| | | | | | Start Time | | | 1100, 1400 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | | | | 1 | | | | |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵪 | CPM, WV | | | | | | 8 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | R | PRC(RC) | 1 | 5 | 8 | | | | | | 4 |
| Little Grebe | <i>Tachybaptus ruficollis</i> | 小鸕 | R | LC | | | | | | 2 | | | |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鴝 | WV, PM | LC | | | | 22 | | | | | |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | | | 1 | | | 2 | | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鵲 | R | | | 3 | 1 | | 12 | | | | |
| Northern Shoveler | <i>Spatula clypeata</i> | 琵嘴鴨 | WV | RC | | | | | | 1 | | | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鵪 | WV | | 2 | 5 | 1 | | 4 | | | | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鵲 | R | | | | | | 1 | | | | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | | | 1 | | | | | | | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | 1 | 1 | | | 4 | | | 2 | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鵲 | WV | RC | | | | | | 9 | | | |
| Red-billed Starling | <i>Spodiopsar sericeus</i> | 絲光椋鳥 | WV | GC | | | | | 4 | | | | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵪 | CPM, WV | RC | | | | | 9 | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鶇 | R | | 2 | | 1 | | 3 | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵪 | WV, PM | | | | | | 1 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | | | 4 | | | 13 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | | |
|--|-------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--|-----|----|---|---|----|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | High | | | | | |
| | | | | | Tide Level (m) | | | 1.59, 2.03 | | | | | |
| | | | | | Start Time | | | 1100, 1400 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | | | 7 | | 100 | | | | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | 1 | 6 | 4 | | 4 | | | | 2 |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 5 | | 1 | | | | | | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鴝 | PM, WV | | 1 | 3 | 5 | 11 | 16 | 2 | | | 1 |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | | | | 4 | 3 | | 1 | |
| White-rumped Munia | <i>Lonchura striata</i> | 白腰文鳥 | R | | | | | | | | | | 10 |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | R | (LC) | | 1 | | | | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | PM, WV | LC | | | | 18 | | 2 | | | |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷓鴣 | R | | | | 1 | | | | | 1 | |
| Yellow-breasted Bunting | <i>Emberiza aureola</i> | 黃胸鵪 | PM | CR, RC | | | | | 1 | | | | |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鶯 | WV, SpM | | | 3 | | | | | | | |
| Total No. of Species | | | | | 18 | 22 | 17 | 8 | 31 | 14 | 0 | 6 | 18 |
| Total No. of Conservation Interest Species | | | | | 6 | 8 | 4 | 4 | 8 | 9 | 0 | 1 | 7 |

| | | | | | | | | | | | | | |
|--|--------------|--------------|------------------|---------------------|-------------------|----|--|-----|-----|-----|---|-------|--------|
| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | | | |
| | | | | | Weather Condition | | Sunny, Sunny | | | | | | |
| | | | | | Tidal Condition | | High | | | | | | |
| | | | | | Tide Level (m) | | 1.59, 2.03 | | | | | | |
| | | | | | Start Time | | 1100, 1400 | | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | | | | | | WAL | DAL | SWH | P | Heard | Flight |
| <p>Note:</p> <p>R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor; OV - Occasional visitor</p> <p>Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)</p> <p>Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance</p> <p>Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)</p> <p>VU: Vulnerable in IUCN Red List Status</p> <p>RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)</p> <p>WAL: Wet Agricultural Land</p> <p>DAL: Dry Agricultural Land</p> <p>SWH: Shallow Water Habitat</p> <p>P: Pond</p> | | | | | | | | | | | | | |

Appendix L1h. Avifauna Species Recorded for Water Birds Monitoring, 23 & 24 February 2023, Low Tide

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | |
|-------------------------|------------------------------|--------------|------------------|---------------------|-------------------|----|----|--------|--|-----|--|---|---|
| | | | | | Weather Condition | | | | Sunny, Sunny | | | | |
| | | | | | Tidal Condition | | | | Low | | | | |
| | | | | | Tide Level (m) | | | | 0.52, 0.53 | | | | |
| | | | | | Start Time | | | | 0900, 0900 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | | | 4 | | | | | |
| Asian Koel | <i>Eudynamys scolopacea</i> | 噪鵲 | R | | | 3 | | | | | | 1 | |
| Barn Swallow | <i>Hirundo rustica</i> | 家燕 | PM, Sv | | 2 | | | | | | | | 4 |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | | 1 | 1 | | | | | | | 1 |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | 2 | 1 | | | 3 | | | 1 | |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | | 3 | | | | | | | | |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鵯 | PM | RC | | | | 23 | 15 | 134 | | | 2 |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鵯 | R | | | 4 | | | | | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | 2 | 4 | | | 2 | 3 | | | 3 |
| Cinereous Tit | <i>Parus cinereus</i> | 蒼背山雀 | R | | | 1 | | | | | | | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鴉 | UR | LC, VU | 2 | | | | | | | | |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鵯 | PM, WV | RC | | | | 1 | | 2 | | | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | | | | | | 7 | | | | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | | | 4 | | | | | | | |
| Daurian Redstart | <i>Phoenicurus aureus</i> | 北紅尾鵯 | WV | | 2 | 3 | | | | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | |
|------------------------|-----------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--------|--|----|---|---|---|
| | | | | | Weather Condition | | | | Sunny, Sunny | | | | |
| | | | | | Tidal Condition | | | | Low | | | | |
| | | | | | Tide Level (m) | | | | 0.52, 0.53 | | | | |
| | | | | | Start Time | | | | 0900, 0900 | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | |
| Eastern Buzzard | <i>Buteo japonicus</i> | 普通鵟 | WV | Cap.586 | 1 | | | | | | | | 1 |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鷺 | R, PM | (LC) | | | | | | 30 | | | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵲鴝 | PM, WV | | | | | | 1 | | | | |
| Eurasian Tree Sparrow | <i>Passer montanus</i> | 樹麻雀 | R | | | 7 | | | | | | | |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鷀 | CWV | PRC | 3 | | | | | | | | |
| Great Egret | <i>Ardea alba</i> | 大白鷺 | R, WV | PRC(RC) | | 7 | 1 | | | 2 | | | |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) | | | | | | | | 1 | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鴝 | UPM, WV | | | | 1 | | | | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | WV | PRC | | 1 | | | | | | | |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | | | | 1 | | | | |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵲 | CPM, WV | | | | | | 6 | | | | |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | R | PRC(RC) | | 10 | 6 | | | 2 | | | |
| Little Grebe | <i>Tachybaptus ruficollis</i> | 小鷺鸕 | R | LC | | | | | | | 1 | | |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鴝 | WV, PM | LC | | | | 1 | | 3 | | | |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鴝 | PM, WV | RC | | | | 1 | | 1 | | | |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鴝 | R | | 1 | 10 | | | 8 | | | | |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鷺 | WV | | | 1 | | | 3 | | | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | | |
|-------------------------|--------------------------------|--------------|------------------|---------------------|-------------------|----|-------|--------|--|---|---|---|---|--|
| | | | | | Weather Condition | | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | | Low | | | | | |
| | | | | | Tide Level (m) | | | | 0.52, 0.53 | | | | | |
| | | | | | Start Time | | | | 0900, 0900 | | | | | |
| | | | | | Abundance | | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | | |
| | | | WAL | DAL | SWH | P | Heard | Flight | | | | | | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鴝 | R | | 2 | 1 | | | 1 | | | | | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | | | 1 | | | | | | | | |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | | | 2 | | | 5 | | | 1 | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | | | | | 9 | | | |
| Red-billed Starling | <i>Spodiopsar sericeus</i> | 絲光椋鳥 | WV | GC | | | | | 4 | | | | | |
| Red-flanked Bluetail | <i>Tarsiger cyanurus</i> | 紅脇藍尾鵲 | WV, PM | | | | | | 1 | | | | | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵲 | CPM, WV | RC | | | | | 2 | | | | | |
| Red-whiskered Bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵲 | R | | 3 | 10 | | | | | | | | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵲 | WV, PM | | | | | | 2 | | | | | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | | | 2 | | | 8 | | | | | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | | | | | 200 | | | | | | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | 1 | 1 | | | 7 | | | | 6 | |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | | 2 | | | | | | | | | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鴝 | PM, WV | | 1 | 2 | | | 13 | | | | | |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | | | | 1 | | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | PM, WV | LC | | | 1 | 1 | 1 | 2 | | | | |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷓鴣 | R | | 2 | | | | | | | 2 | | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date | | | 23/2/2023 (T1 & T2), 24/2/2023 (T3 & T5) | | | | | |
|--|--------------|--------------|------------------|---------------------|-------------------|----|----|--|----|---|---|---|---|
| | | | | | Weather Condition | | | Sunny, Sunny | | | | | |
| | | | | | Tidal Condition | | | Low | | | | | |
| | | | | | Tide Level (m) | | | 0.52, 0.53 | | | | | |
| | | | | | Start Time | | | 0900, 0900 | | | | | |
| | | | | | Abundance | | | | | | | | |
| | | | | | Transect Walk | | | | | | | | |
| | | | | | T1 | T2 | T3 | T5 | | | | | |
| WAL | DAL | SWH | P | Heard | | | | Flight | | | | | |
| Total No. of Species | | | | | 16 | 21 | 4 | 6 | 21 | 9 | 2 | 5 | 6 |
| Total No. of Conservation Interest Species | | | | | 4 | 4 | 3 | 5 | 5 | 9 | 2 | 1 | 3 |

Note:
R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant;; USV - Uncommon Summer visitor; SpM – Spring migrant; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor.
Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)
Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance
Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)
VU: Vulnerable in IUCN Red List Status
RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)
WAL: Wet Agricultural Land
DAL: Dry Agricultural Land
SWH: Shallow Water Habitat
P: Pond

Appendix L1i. Avifauna Species Recorded for Water Birds Monitoring, Night Survey, 3 February 2023, T5

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date: 3/2/2023 | | | | | |
|--|----------------------------------|--------------|------------------|---------------------|-------------------|-----|-----|---|-------|--------|
| | | | | | Start Time: 18:25 | | | | | |
| | | | | | Abundance | | | | | |
| | | | | | WAL | DAL | SWH | P | Heard | Flight |
| Besra | <i>Accipiter virgatus</i> | 松雀鷹 | R, CPM | Cap.586 | | | | | | 1 |
| Black-crowned Night Heron | <i>Nycticorax nycticorax</i> | 夜鷺 | R, WV | LC | | | | | | 1 |
| Black-faced Spoonbill | <i>Platalea minor</i> | 黑臉琵鷺 | CWV | EN, (EN), PGC | | | | | | 1 |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鷸 | PM | RC | 6 | | 10 | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | | | | | | 3 |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | | | | 30 | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | | | 12 | | | |
| Great Egret | <i>Ardea alba</i> | 大白鷺 | R, WV | PRC(RC) | | | | | | 2 |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | WV | PRC | | | | | | 1 |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | 1 | | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | 28 | | | |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | | 1 | | | | |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鷸 | PM, WV | LC | 13 | | 2 | | | |
| Total No. of Species | | | | | 2 | 2 | 4 | 0 | 1 | 6 |
| Total No. of Conservation Interest Species | | | | | 2 | 1 | 3 | 0 | 0 | 6 |
| Note: R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; CaM - Common autumn migrant;; SpM – Spring migrant; UR – Uncommon resident; CWV - Common Winter Visitor Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net) Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586) CR: Rare in China Red Data Book Status VU: Vulnerable in IUCN Red List Status RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002) WAL: Wet Agricultural Land; DAL: Dry Agricultural Land; SWH: Shallow Water Habitat; P: Pond. | | | | | | | | | | |

Appendix L1j. Avifauna Species Recorded for Water Birds Monitoring, Night Survey, 24 February 2023, T5

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status | Date: 24/2/2023 | | | | | |
|---------------------------|----------------------------------|--------------|------------------|---------------------|-------------------|-----|-----|---|-------|--------|
| | | | | | Start Time: 18:25 | | | | | |
| | | | | | Abundance | | | | | |
| | | | | | WAL | DAL | SWH | P | Heard | Flight |
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | | | 1 | | | | |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領棕鳥 | R | | | 13 | | | | |
| Black-crowned Night Heron | <i>Nycticorax nycticorax</i> | 夜鷺 | R, WV | LC | | | | | | 1 |
| Black-faced Spoonbill | <i>Platalea minor</i> | 黑臉琵鷺 | CWV | EN, (EN), PGC | | | | | | 1 |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鷸 | PM | RC | 10 | | 28 | | | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) | | 11 | | | | 8 |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鷸 | PM, WV | RC | | | 1 | | | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | | | 50 | | | | |
| Daurian Redstart | <i>Phoenicurus aureus</i> | 北紅尾鵲 | WV | | | 1 | | | | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC | 3 | | 6 | | | |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鷸 | UPM, WV | | 1 | | 1 | | | |
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | WV | PRC | | | | | | 2 |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC | | 1 | | | | |
| House Swift | <i>Apus nipalensis</i> | 小白腰雨燕 | SpM, R | | | | | | | 30 |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | R | PRC(RC) | | | | | | 18 |
| Northern Shoveler | <i>Spatula clypeata</i> | 琵嘴鴨 | WV | RC | | | 3 | | | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鷸 | WV | RC | | | 9 | | | |
| Pintail Snipe | <i>Gallinago stenura</i> | 針尾沙錐 | CPM | | 2 | | | | | 2 |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷦鶯 | R | | | 1 | | | | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | | | 1 | | | | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | | | 1 | | | | |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | | 4 | 2 | | | | 5 |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鷸 | PM, WV | LC | 30 | | 3 | | | |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷦鶯 | R | | | | | | 1 | |
| Total No. of Species | | | | | 6 | 10 | 7 | 0 | 1 | 8 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Total No. of Conservation Interest Species | 3 | 2 | 6 | 0 | 0 | 5 |
| <p>Note:</p> <p>R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant;; CWV - Common Winter Visitor.</p> <p>Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)</p> <p>Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance</p> <p>Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)</p> <p>EN: Endangered in IUCN Red List Status</p> <p>(EN): Endangered in China Red Data Book Status</p> <p>RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)</p> <p>WAL: Wet Agricultural Land; DAL: Dry Agricultural Land; SWH: Shallow Water Habitat; P: Pond.</p> | | | | | | |

Appendix L1k, Waterbirds Recorded in February 2023

| Common Name | Species Name | Chinese Name | Conservation Status | Recorded habitat from the survey | Distribution in Hong Kong* |
|---------------------------|------------------------------|--------------|---------------------|--|--|
| Black-crowned Night Heron | <i>Nycticorax nycticorax</i> | 夜鷺 | LC | T5: In flight | Common resident and winter visitor. Widely distributed in Hong Kong. |
| Black-faced Spoonbill | <i>Platalea minor</i> | 黑臉琵鷺 | EN, (EN), PGC | T5: In flight | Common winter visitor. Found in Deep Bay area. |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鷸 | RC | T3: River bank, River bed, in flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight | Common passage migrant. Found in Deep Bay area, Long Valley, Kam Tin. |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | PRC(RC) | T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, in flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight | Common resident. Widely distributed in Hong Kong. |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鷸 | RC | T2: River bank, In flight T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight | Abundant winter visitor and migrant. Found in Deep Bay area. |
| Common Kingfisher | <i>Alcedo atthis</i> | 普通翠鳥 | | T2: River bank, In flight T3: River bank, In flight T5: In flight | Common passage migrant and winter visitor. Widely distributed in wetland habitat throughout Hong Kong. |
| Common Moorhen | <i>Gallinula chloropus</i> | 黑水雞 | | T5: Dry Agricultural Land, Shallow Water Habitat | Common winter visitor, resident and migrant. Found in Deep Bay area, Shuen Wan, Starling Inlet. |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鷸 | | T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habitat, In flight. | Common passage migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong. |

| Common Name | Species Name | Chinese Name | Conservation Status | Recorded habitat from the survey | Distribution in Hong Kong* |
|----------------------|----------------------------|--------------|---------------------|---|--|
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | | T5: Wet Agricultural Land, Shallow Water Habitat, In flight | Common passage migrant and winter visitor. Found in Long Valley, Chau Tau, Sai Kung. |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鷺 | (LC) | T2: River bank, In flight T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land, In flight | Resident and common passage migrant. Widely distributed in Hong Kong. |
| Eastern Water Rail | <i>Rallus indicus</i> | 普通秧雞 | | T5: Wet Agricultural Land, Dry Agricultural Land | Scarce winter visitor and passage migrant. Found in Mai Po, Nam Chung, Wu Kau Tang, Mui Wo, Tai O. |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | RC | T5: Shallow Water Habitat, Pond In flight | Common winter visitor. Found in Deep Bay area, Shuen Wan, Tai Lam Chung Reservoir, Victoria Harbour, Urban Park. |
| Eurasian Wigeon | <i>Mareca penelope</i> | 赤頸鴨 | RC | T5: Wet Agricultural Land, Shallow Water Habitat, Pond | Common winter visitor. Found in Deep Bay area, Tai Lam Chung. |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鷀 | PRC | T1: In flight T2: In flight T5: In flight | Common winter visitor. Widely distributed in coastal areas throughout Hong Kong. |
| Great Egret | <i>Ardea alba</i> | 大白鷺 | PRC(RC) | T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habitat, In flight | Common resident and winter visitor. Widely distributed in Hong Kong. |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鷺 | | T2: River bank T3: River bank, River bed T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight. | Uncommon passage migrant and winter visitor. Found in Deep Bay area, Shuen Wan, Long Valley, Kam Tin, Shek Kong, Ho Chung. |

| Common Name | Species Name | Chinese Name | Conservation Status | Recorded habitat from the survey | Distribution in Hong Kong* |
|----------------------|-------------------------------|--------------|---------------------|--|--|
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | PRC | T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Wet Agricultural Land, In flight | Common winter visitor. Found in Deep Bay area, Starling Inlet, Kowloon Park, Cape D'Aguilar. |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | LC | T5: Dry Agricultural Land | Locally common winter visitor and migrant. Found in Kam tin, Tsim Bei Tsui, Lo Wu, Tai Long Wan, Shuen Wan, Castle Peak, Chek Lap Kok. |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | PRC(RC) | T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, Pond, In flight | Common resident. Widely distributed in coastal area throughout Hong Kong. |
| Little Grebe | <i>Tachybaptus ruficollis</i> | 小鸕鶿 | LC | T1: River T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, Pond | Common resident. Found in Deep Bay area. |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鴝 | (LC) | T2: River bank T3: River bank, River bed, In flight T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight | Common winter visitor and passage migrant. Widely distributed in freshwater areas throughout Hong Kong. |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鵲 | RC | T5: Wet Agricultural Land, Shallow Water Habitat, Pond | Abundant winter visitor and migrant. Found in Deep Bay area, Shuen Wan, Long Valley, Kam Tin, Sai Kung. |
| Northern Shoveler | <i>Spatula clypeata</i> | 琵嘴鴨 | RC | T5: Dry Agricultural Land, Shallow Water Habitat, Pond | Abundant winter visitor. Found in Deep Bay area. |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鵲 | RC | T5: Dry Agricultural Land, Shallow Water Habitat, Pond, In flight | Abundant winter visitor. Found in Deep Bay area. |

| Common Name | Species Name | Chinese Name | Conservation Status | Recorded habitat from the survey | Distribution in Hong Kong* |
|---------------------------|-------------------------------|--------------|---------------------|--|---|
| Pied Kingfisher | <i>Ceryle rudis</i> | 斑魚狗 | (LC) | T2: In flight T3: In flight | Uncommon resident. Widely distributed in lakes and ponds throughout Hong Kong. |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | | T3: River bank T5: Wet Agricultural Land, Dry Agricultural Land, In flight | Common resident. Widely distributed in wetland throughout Hong Kong. |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | (LC) | T1: River bank, In flight T2: River bank, In flight T3: River bank, River bed, In flight T5: Dry Agricultural Land, Shallow Water Habitat | Common resident. Widely distributed in coastal areas throughout Hong Kong. |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | LC | T3: River bank T5: Wet Agricultural Land, Dry Agricultural Land, Shallow Water Habitat, In flight | Common migrant and winter visitor. Widely distributed in wetland area throughout Hong Kong. |

Note:

R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrant; SPM - Scarce Passage Migrant; CaM - Common autumn migrant; USV - Uncommon Summer visitor; SpM – Spring migrant; Sv – Summer Visitor; UR – Uncommon resident; SWV – Scarce winter visitor; CWV - Common Winter Visitor

Status was decided according to AFCD biodiversity website (www.hkbiodiversity.net)

Cap. 170: All bird species are under protection of Wild Animals Protection Ordinance

Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)

VU: Vulnerable in IUCN Red List Status

(VU): Vulnerable in China Red Data Book Status

EN: Endangered in IUCN Red List Status

(EN): Endangered in China Red Data Book Status

RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)

WAL: Wet Agricultural Land DAL: Dry Agricultural Land SWH: Shallow Water Habitat P: Pond

*Source: Hong Kong Biodiversity Database, AFCD (<https://www.afcd.gov.hk/English/conservation/hkbiodiversity/database/search.php>)

Appendix L1I. Birds Recorded in February 2023

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status |
|---------------------------|------------------------------|--------------|------------------|---------------------|
| Amur Stonechat | <i>Saxicola stejnegeri</i> | 黑喉石鵯 | WV | |
| Asian Brown Flycatcher | <i>Muscicapa dauurica</i> | 北灰鶺鴒 | PM, WV | |
| Barn Swallow | <i>Hirundo rustica</i> | 家燕 | PM, Sv | |
| Besra | <i>Accipiter virgatus</i> | 松雀鷹 | R, CPM | Cap.586 |
| Black Drongo | <i>Dicrurus macrocercus</i> | 黑卷尾 | Sv | |
| Black Kite | <i>Milvus migrans</i> | 黑鳶 | R, WV | (RC), Cap.586 |
| Black-collared Starling | <i>Gracupica nigricollis</i> | 黑領椋鳥 | R | |
| Black-crowned Night Heron | <i>Nycticorax nycticorax</i> | 夜鷺 | R, WV | LC |
| Black-faced Bunting | <i>Emberiza spodocephala</i> | 灰頭鵯 | WV, PM | |
| Black-faced Spoonbill | <i>Platalea minor</i> | 黑臉琵鷺 | CWV | EN, (EN), PGC |
| Black-winged Kite | <i>Elanus caeruleus</i> | 黑翅鳶 | OV | LC, (VU) |
| Black-winged Stilt | <i>Himantopus himantopus</i> | 黑翅長腳鷸 | PM | RC |
| Bluethroat | <i>Luscinia svecica</i> | 藍喉歌鵯 | CWV | |
| Buff-bellied Pipit | <i>Anthus rubescens</i> | 黃腹鵯 | UPM, WV | |
| Chinese Blackbird | <i>Turdus mandarinus</i> | 烏鶇 | CWV | |
| Chinese Bulbul | <i>Pycnonotus sinensis</i> | 白頭鶇 | R | |
| Chinese Pond Heron | <i>Ardeola bacchus</i> | 池鷺 | R | PRC(RC) |
| Cinereous Tit | <i>Parus cinereus</i> | 蒼背山雀 | R | |
| Collared Crow | <i>Corvus torquatus</i> | 白頸鴉 | UR | LC, VU |
| Common Greenshank | <i>Tringa nebularia</i> | 青腳鷸 | PM, WV | RC |
| Common Kestrel | <i>Falco tinnunculus</i> | 紅隼 | CaM, WV | Cap. 586 |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status |
|------------------------|----------------------------------|--------------|------------------|---------------------|
| Common Kingfisher | <i>Alcedo atthis</i> | 普通翠鳥 | R | |
| Common Moorhen | <i>Gallinula chloropus</i> | 黑水雞 | R | |
| Common Myna | <i>Acridotheres tristis</i> | 家八哥 | UR | |
| Common Sandpiper | <i>Actitis hypoleucos</i> | 磯鷸 | WV, PM | |
| Common Snipe | <i>Gallinago gallinago</i> | 扇尾沙錐 | WV, PM | |
| Common Tailorbird | <i>Orthotomus sutorius</i> | 長尾縫葉鶯 | R | |
| Crested Myna | <i>Acridotheres cristatellus</i> | 八哥 | R | |
| Daurian Redstart | <i>Phoenicurus aureus</i> | 北紅尾鵲 | WV | |
| Dusky Thrush | <i>Turdus eunomus</i> | 斑鶇 | SWV | |
| Dusky Warbler | <i>Phylloscopus fuscatus</i> | 褐柳鶯 | PM, WV | |
| Eastern Buzzard | <i>Buteo japonicus</i> | 普通鵟 | WV | Cap.586 |
| Eastern Cattle Egret | <i>Bubulcus coromandus</i> | 牛背鶯 | R, PM | (LC) |
| Eastern Water Rail | <i>Rallus indicus</i> | 普通秧雞 | SWV, PM | |
| Eastern Yellow Wagtail | <i>Motacilla tschutschensis</i> | 東黃鵪鶉 | PM, WV | |
| Eurasian Teal | <i>Anas crecca</i> | 綠翅鴨 | WV | RC |
| Eurasian Tree Sparrow | <i>Passer montanus</i> | 樹麻雀 | R | |
| Eurasian Wigeon | <i>Mareca penelope</i> | 赤頸鴨 | CWV | RC |
| Great Cormorant | <i>Phalacrocorax carbo</i> | 普通鸕鶿 | CWV | PRC |
| Great Egret | <i>Ardea alba</i> | 大白鶯 | R, WV | PRC(RC) |
| Greater Coucal | <i>Centropus sinensis</i> | 褐翅鴉鵂 | R | (VU) |
| Green Sandpiper | <i>Tringa ochropus</i> | 白腰草鶿 | UPM, WV | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status |
|-----------------------|-----------------------------------|--------------|------------------|---------------------|
| Grey Heron | <i>Ardea cinerea</i> | 蒼鷺 | WV | PRC |
| Grey Wagtail | <i>Motacilla cinerea</i> | 灰鵲鴿 | WV | |
| Grey-backed Thrush | <i>Turdus hortulorum</i> | 灰背鶇 | WV, PM | |
| Grey-headed Lapwing | <i>Vanellus cinereus</i> | 灰頭麥雞 | WV, PM | LC |
| House Swift | <i>Apus nipalensis</i> | 小白腰雨燕 | SpM, R | |
| Intermediate Egret | <i>Ardea intermedia</i> | 中白鷺 | CPM | RC |
| Large-billed Crow | <i>Corvus macrorhynchus</i> | 大嘴烏鴉 | R | |
| Little Bunting | <i>Emberiza pusilla</i> | 小鵲 | CPM, WV | |
| Little Egret | <i>Egretta garzetta</i> | 小白鷺 | R | PRC(RC) |
| Little Grebe | <i>Tachybaptus ruficollis</i> | 小鸕鶿 | R | LC |
| Little Ringed Plover | <i>Charadrius dubius</i> | 金眶鶺鴒 | WV, PM | (LC) |
| Long-tailed Shrike | <i>Lanius schach</i> | 棕背伯勞 | R | |
| Marsh Sandpiper | <i>Tringa stagnatilis</i> | 澤鶺鴒 | PM, WV | RC |
| Masked Laughingthrush | <i>Pterorhinus perspicillatus</i> | 黑臉噪鶺鴒 | R | |
| Northern Shoveler | <i>Spatula clypeata</i> | 琵嘴鴨 | WV | RC |
| Olive-backed Pipit | <i>Anthus hodgsoni</i> | 樹鶺鴒 | WV | |
| Oriental Magpie | <i>Pica serica</i> | 喜鵲 | R | |
| Oriental Magpie-Robin | <i>Copsychus saularis</i> | 鵲鴿 | R | |
| Oriental Turtle dove | <i>Streptopelia orientalis</i> | 山斑鳩 | WV, PM | |
| Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 黃腰柳鶯 | WV | |
| Pied Avocet | <i>Recurvirostra avosetta</i> | 反嘴鶺鴒 | WV | RC |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status |
|---------------------------|-----------------------------------|--------------|------------------|---------------------|
| Pied Kingfisher | <i>Ceryle rudis</i> | 斑魚狗 | UR | (LC) |
| Plain Prinia | <i>Prinia inornata</i> | 純色鷓鴣 | R | |
| Red Collared Dove | <i>Streptopelia tranquebarica</i> | 火斑鳩 | UPM | |
| Red-billed Starling | <i>Spodiopsar sericeus</i> | 絲光椋鳥 | WV | GC |
| Red-flanked Bluetail | <i>Tarsiger cyanurus</i> | 紅脇藍尾鴝 | WV, PM | |
| Red-rumped Swallow | <i>Cecropis daurica</i> | 金腰燕 | UPM | |
| Red-throated Pipit | <i>Anthus cervinus</i> | 紅喉鵯 | CPM, WV | RC |
| Red-whiskered bulbul | <i>Pycnonotus jocosus</i> | 紅耳鵯 | R | |
| Richard's Pipit | <i>Anthus richardi</i> | 理氏鵯 | WV, PM | |
| Rock Dove | <i>Columba livia</i> | 原鴿 | R | |
| Scaly-breasted Munia | <i>Lonchura punctulata</i> | 斑文鳥 | R | |
| Scarlet Minivet | <i>Pericrocotus speciosus</i> | 赤紅山椒鳥 | R | |
| Spotted Dove | <i>Streptopelia chinensis</i> | 珠頸斑鳩 | R | |
| Swinhoe's White-eye | <i>Zosterops simplex</i> | 暗綠繡眼鳥 | R | |
| White Wagtail | <i>Motacilla alba</i> | 白鵲鴝 | PM, WV | |
| White-breasted Waterhen | <i>Amaurornis phoenicurus</i> | 白胸苦惡鳥 | R | |
| White-throated Kingfisher | <i>Halcyon smyrnensis</i> | 白胸翡翠 | R | (LC) |
| Wood Sandpiper | <i>Tringa glareola</i> | 林鵲 | PM, WV | LC |
| Yellow-bellied Prinia | <i>Prinia flaviventris</i> | 黃腹鷓鴣 | R | |
| Yellow-breasted Bunting | <i>Emberiza aureola</i> | 黃胸鵯 | PM | (EN), RC |
| Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 黃眉柳鶯 | WV, SpM | |

| Common Name | Species Name | Chinese Name | Hong Kong Status | Conservation Status |
|---|---------------------------|--------------|------------------|---------------------|
| Zitting Cisticola | <i>Cisticola juncidis</i> | 棕扇尾鶯 | PM, WV | LC |
| <p>Note:</p> <p>R – Resident; WV – Winter visitor; PM – Passage migrant; CPM - Common Passage Migrant; UPM – Uncommon passage migrantUR – Uncommon resident; SPM - Scarce Passage Migrant; SpM – Spring Migrant; SWV – Scarce winter visitor;</p> <p>Cap.586 : Endangered Species of Animals and Plants Ordinance (Cap.586)</p> <p>VU: Vulnerable on IUCN Red List of Threatened Species.</p> <p>(VU): Vulnerable in China Red Data Book Status</p> <p>(EN): Endangered in China Red Data Book Status</p> <p>RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes et al. (2002)</p> <p>WAL: Wet Agricultural Land</p> <p>DAL: Dry Agricultural Land</p> <p>SWH: Shallow Water Habitat</p> <p>P: Pond</p> | | | | |

Appendix L2. Mammal Species Recorded for Ecologically Sensitive Habitat Monitoring, 15 & 20 February 2023

| Common Name | Species Name | Chinese Name | Conservation Status | Occurrence Status | Date: 15/2 /2023 (T1,6) , 20/2 /2022 (T3,4,5) | | | | |
|--|--------------------------------|--------------|---------------------|-------------------|---|----|----|----|----|
| | | | | | Relative Abundance | | | | |
| | | | | | Transect Walk | | | | |
| | | | | | T1 | T3 | T4 | T5 | T6 |
| Domestic Dog | <i>Canis lupus familiaris</i> | 野狗 | | Introduced | + | | + | | + |
| Japanese Pipistrelle | <i>Pipistrellus abramus</i> | 東亞家蝠 | Cap. 170 | Native | +++ | | ++ | + | + |
| Pallas's Squirrel | <i>Callosciurus erythraeus</i> | 赤腹松鼠 | Cap. 170 | Introduced | | | + | | |
| Total No. of species | | | | | 2 | 0 | 3 | 1 | 2 |
| Total No. of Conservation Interest Species | | | | | 1 | 0 | 2 | 1 | 1 |
| <p>Note:</p> <p>Cap. 170: Species under protection of Wild Animals Protection Ordinance (Cap. 170)</p> <p>NT: Near Threatened in the Red List of China's Vertebrates</p> <p>I: Indeterminate in China Red Data Book Status</p> <p>Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)</p> <p>+: species recorded within transect routes</p> <p>++: species commonly recorded within transect routes</p> <p>+++: dominant species within transect routes</p> <p>Local Restrictedness Column has been removed as said information is no longer available.</p> | | | | | | | | | |

Appendix L3. Herpetofauna Species Recorded for Ecologically Sensitive Habitat Monitoring, 15 & 20 February 2023

Appendix B5: Herpetofauna Species Recorded for Ecologically Sensitive Habitat Monitoring, 15 & 20 February 2023

| Common Name | Species Name | Chinese Name | Conservation Status | Occurrence Status | Date: 15/2 /2023 (T1,6) , 20/2 /2022 (T3,4,5) | | | | |
|---|---------------------------------------|--------------|---------------------|-------------------|---|----|----|----|----|
| | | | | | Relative Abundance | | | | |
| | | | | | Transect Walk | | | | |
| | | | | | T1 | T3 | T4 | T5 | T6 |
| Amphibian | | | | | | | | | |
| Asian Common Toad | <i>Bufo melanostictus</i> | 黑眶蟾蜍 | - | Native | + | | | ++ | |
| Reptile | | | | | | | | | |
| Bowring's Gecko | <i>Hemidactylus bowringii</i> | 原尾蜥虎 | - | Native | | | | + | |
| Chinese gecko | <i>Gekko chinensis</i> | 中國壁虎 | - | Native | | | | + | |
| Chinese Skink | <i>Plestiodon chinensis chinensis</i> | 石龍子 | - | Native | ++ | | | | |
| Reeve's Smooth Skink | <i>Scincella reevesii</i> | 南滑蜥 | - | Native | + | | | + | |
| Total No. of species | | | | | 3 | 0 | 0 | 4 | 0 |
| Total No. of Conservation Interest Species | | | | | 0 | 0 | 0 | 0 | 0 |
| Note: Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org) +: species recorded within transect routes ++: species commonly recorded within transect routes +++: dominant species within transect routes | | | | | | | | | |

Appendix L4. Butterfly Species Recorded Ecologically Sensitive Habitat Monitoring, 15 & 20 February 2023

| Common Name | Species Name | Chinese Name | Conservation Status | Occurrence Status* | Date: 15/2 /2023 (T1,6) , 20/2 /2022 (T3,4,5) | | | | |
|-----------------------|------------------------------|--------------|---------------------|--------------------|---|-----|----|----|----|
| | | | | | Relative Abundance | | | | |
| | | | | | Transect Walk | | | | |
| | | | | | T1 | T3 | T4 | T5 | T6 |
| Angled Castor | <i>Ariadne ariadne</i> | 波蛺蝶 | | | + | | | | + |
| Blue Tiger | <i>Tirumala limniace</i> | 青斑蝶 | | | | + | | | |
| Chinese Peacock | <i>Papilio bianor</i> | 碧鳳蝶 | | | | | | + | |
| Common Bluebottle | <i>Graphium sarpedon</i> | 青鳳蝶 | | | ++ | | | + | |
| Common Five-ring | <i>Ypthima baldus</i> | 矍眼蝶 | | | ++ | | | ++ | ++ |
| Common Grass Yellow | <i>Eurema hecabe</i> | 寬邊黃粉蝶 | | | ++ | + | | + | |
| Common Jester | <i>Symbrenthia lilaea</i> | 散紋盛蛺蝶 | | | | | | + | |
| Common Mormon | <i>Papilio polytes</i> | 玉帶鳳蝶 | | | +++ | + | + | ++ | + |
| Common Palmfly | <i>Elymnias hypermnestra</i> | 翠袖鋸眼蝶 | | | ++ | | | | |
| Common Sailer | <i>Neptis hylas</i> | 中環蛺蝶 | | | ++ | | + | ++ | + |
| Dark Brand Bush Brown | <i>Mycalesis mineus</i> | 小眉眼蝶 | | | + | | | + | |
| Glassy Bluebottle | <i>Graphium cloanthus</i> | 寬帶青鳳蝶 | LC | | | | | + | |
| Great Mormon | <i>Papilio memnon</i> | 美鳳蝶 | | | ++ | | | | |
| Indian Cabbage White | <i>Pieris canidia</i> | 東方菜粉蝶 | | | | ++ | | | + |
| Indian Fritillary | <i>Argyreus hyperbius</i> | 斐豹蛺蝶 | | | | | | + | |
| Lemon Emigrant | <i>Catopsilia pomona</i> | 遷粉蝶 | | | ++ | + | | | |
| Long-tailed Blue | <i>Lampides boeticus</i> | 亮灰蝶 | | | | | + | | |
| Pale Grass Blue | <i>Pseudozizeeria maha</i> | 酢漿灰蝶 | | | +++ | +++ | + | + | |

| Common Name | Species Name | Chinese Name | Conservation Status | Occurrence Status* | Date: 15/2 /2023 (T1,6) , 20/2 /2022 (T3,4,5) | | | | |
|---|----------------------------|--------------|---------------------|--------------------|---|----|----|-----|----|
| | | | | | Relative Abundance | | | | |
| | | | | | Transect Walk | | | | |
| | | | | | T1 | T3 | T4 | T5 | T6 |
| Paris Peacock | <i>Papilio paris</i> | 巴黎翠鳳蝶 | | | ++ | | | ++ | |
| Plum Judy | <i>Abisara echerius</i> | 蛇目褐蛱蝶 | | | ++ | + | ++ | | + |
| Purple Sapphire | <i>Heliophorus epicles</i> | 斜斑彩灰蝶 | | | + | | | | |
| Red Helen | <i>Papilio Helenus</i> | 玉斑鳳蝶 | | | ++ | | | | |
| Red Ring Skirt | <i>Hestina assimilis</i> | 黑脈蛱蝶 | | | | + | | | |
| Red-base Jezebel | <i>Delias pasithoe</i> | 報喜斑粉蝶 | | | | | ++ | | |
| Slate Flash | <i>Rapala manea</i> | 燕灰蝶 | | | | | | + | |
| Small Cabbage White | <i>Pieris rapae</i> | 菜粉蝶 | | | +++ | ++ | ++ | +++ | + |
| Southern Sullied Sailer | <i>Neptis clinia</i> | 珂環蛱蝶 | | | | | | + | |
| Spangle | <i>Papilio protenor</i> | 藍鳳蝶 | | | | + | + | + | |
| Total No. of species | | | | | 16 | 10 | 8 | 16 | 7 |
| Total No. of Conservation Interest Species | | | | | 0 | 0 | 0 | 1 | 0 |
| <p>Note:</p> <p>Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)</p> <p>*Very limited data are available for the occurrence status (being native to Hong Kong) of butterflies</p> <p>+: species recorded within transect routes</p> <p>++: species commonly recorded within transect routes</p> <p>+++ : dominant species within transect routes</p> <p>LC: Local Concern (Fellowes et al., 2002)</p> | | | | | | | | | |

Appendix L5. Odonata Species Recorded for Ecologically Sensitive Habitat Monitoring 15 & 20 February 2023

| Common Name | Species Name | Chinese Name | Conservation Status | Occurrence Status | Date: 15/2 /2023 (T1,6) , 20/2 /2022 (T3,4,5) | | | | |
|--|----------------------------|--------------|---------------------|-------------------|---|----|----|----|----|
| | | | | | Relative Abundance | | | | |
| | | | | | Transect Walk | | | | |
| | | | | | T1 | T3 | T4 | T5 | T6 |
| Common Red Skimmer | <i>Orthetrum pruinatum</i> | 赤褐灰蜻 | | Native | | | | + | |
| Wandering Glider | <i>Pantala flavescens</i> | 黃蜻 | | Native | | + | | | |
| Total No. of species | | | | | 0 | 1 | 0 | 1 | 0 |
| Total No. of Conservation Interest Species | | | | | 0 | 0 | 0 | 0 | 0 |
| <p>Note:</p> <p>Occurrence Status was according to The IUCN Red List of Threatened Species website (https://www.iucnredlist.org)</p> <p>+: species recorded within transect routes</p> <p>++: species commonly recorded within transect routes</p> <p>+++: dominant species within transect routes</p> | | | | | | | | | |

Since activities of odonata can fluctuates with environmental conditions, in addition to potential effects of surrounding human activities and alteration to their natural habitat (vegetative clearance and construction works outside of the projects observed at various transect), more attention should be paid to future monitoring results, potential sources of disturbance and other relevant ecological data.

APPENDIX M
WEATHER CONDITION

**APPENDIX M –
GENERAL WEATHER CONDITIONS DURING THE MONITORING PERIOD**

| Date | Mean Air Temperature (°C) | Mean Relative Humidity (%) | Precipitation (mm) |
|-----------------------|----------------------------------|-----------------------------------|---------------------------|
| 1 February 23 | 19.9 | 77 | 0 |
| 2 February 23 | 19.4 | 77 | 0 |
| 3 February 23 | 17.9 | 76 | 0 |
| 4 February 23 | 17.4 | 81 | 0.4 |
| 5 February 23 | 17.9 | 83 | Trace |
| 6 February 23 | 19.2 | 85 | 0.1 |
| 7 February 23 | 21 | 83 | Trace |
| 8 February 23 | 18.5 | 84 | Trace |
| 9 February 23 | 19.5 | 83 | 0.1 |
| 10 February 23 | 21.2 | 87 | 0.1 |
| 11 February 23 | 18.7 | 93 | 0.9 |
| 12 February 23 | 19.9 | 95 | Trace |
| 13 February 23 | 22.3 | 88 | Trace |
| 14 February 23 | 18.5 | 64 | 0 |
| 15 February 23 | 16.3 | 60 | 0 |

| Date | Mean Air Temperature (°C) | Mean Relative Humidity (%) | Precipitation (mm) |
|-----------------------|----------------------------------|-----------------------------------|---------------------------|
| 16 February 23 | 16.8 | 62 | 0 |
| 17 February 23 | 18.7 | 70 | 0 |
| 18 February 23 | 21 | 67 | 0 |
| 19 February 23 | 22.8 | 67 | Trace |
| 20 February 23 | 20.1 | 64 | 0 |
| 21 February 23 | 17.8 | 62 | 0 |
| 22 February 23 | 16.9 | 61 | 0 |
| 23 February 23 | 18.2 | 70 | 0 |
| 24 February 23 | 19.8 | 67 | 0 |
| 25 February 23 | 17.1 | 54 | 0 |
| 26 February 23 | 16.8 | 58 | 0 |
| 27 February 23 | 16.4 | 60 | 0 |
| 28 February 23 | 17.8 | 71 | 0 |

* The above information was extracted from the daily weather summary by Hong Kong Observatory.

APPENDIX N
EVENT ACTION PLANS

Appendix N:**Table N-1: Event / Action Plan for Air Quality**

| EVENT | ACTION | | | |
|---|--|---|---|--|
| | ET | IEC | ER | CONTRACTOR |
| ACTION LEVEL | | | | |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily. | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures. | 1. Notify Contractor. | 1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Rectify any unacceptable practice and implement remedial measures; and 3. Amend working methods agreed with ER if appropriate. |
| 2. Exceedance for two or more consecutive samples | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures; 4. Repeat measurements | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented. | 1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 3. Implement the |

| | | | | |
|-----------------------------|---|--|---|--|
| | to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, ER and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; and 8. If exceedance stops, cease additional monitoring. | Implementation of remedial measures. | | agreed proposals; and 4. Amend proposal if appropriate. |
| LIMIT LEVEL | | | | |
| 1.Exceedance for one sample | Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor, IEC and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise the ER and ET on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented. | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 4. Implement the agreed proposals; and 5. Amend proposal if appropriate. |

| | | measures. | | |
|--|--|---|---|---|
| 2.Exceedance for two or more consecutive samples | 1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and 5. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise and ensure remedial measures properly implemented; and 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 4. Implement the agreed proposals; 5. Resubmit proposals if problem still not under control; 6. Stop the relevant portion of works as determined by the ER until the exceedance is abated. |

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

Table N-2: Event / Action Plan for Construction Noise

| EVENT | ACTION | | | |
|--------------|---|---|---|---|
| | ET | IEC | ER | CONTRACTOR |
| Action Level | 1. Notify IEC, ER and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss jointly with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness. | 1. Review the monitoring data submitted by the ET; 2. Review the construction methods and proposed remedial measures by the Contractor, and advise the ET and ER if the proposed remedial measures would be sufficient; 3. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of failure in writing; 2. Notify the Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented | 1. Submit noise mitigation proposals to ER and copy to the IEC and ET; 2. Implement noise mitigation proposals. |
| Limit Level | 1. Identify source; 2. Inform IEC, ER and Contractor; 3. Repeat measurements to confirm findings; 4. Increase the monitoring frequency; 5. Carry out analysis of Contractor's working procedures with the ER and Contractor to determine possible mitigation to be implemented; 6. Inform IEC, ER and Contractor the causes and actions taken for the exceedances; | 1. Discuss amongst the ER, ET, and Contractor on the potential remedial actions; 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of exceedance in writing; 2. Notify the Contractor; 3. Require the Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the | 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to the ER and copy to the ET and IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problems still not under control; 5. Stop the relevant portion of works as |

| EVENT | ACTION | | | |
|-------|--|-----|---|--|
| | ET | IEC | ER | CONTRACTOR |
| | 7. Assess effectiveness of Contractor's remedial actions and keep IEC informed of the results; 8. If exceedance stops, cease additional monitoring. | | Contractor to stop that portion of work until the exceedance is abated. | determined by the ER until the exceedance is abated. |

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

Table N-3: Event / Action Plan for Water Quality

| EVENT | ACTION | | | | |
|--|--|---|--|--|------------|
| | ET | | IEC | ER | CONTRACTOR |
| Action level being exceeded by one sampling day | 1. Conduct addition site investigation on the same day; | 1. Discuss with ET, ER and Contractor on the implemented mitigation measures; | 1. Review proposals on remedial measures submitted by Contractor; | 1. Identify source(s) of impact; | |
| | 2. Inform IEC, Contractor and ER; | 2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and | 2. Discuss with IEC, ET and Contractor on the Implemented mitigation measures; | 2. Inform the ER and confirm notification of the noncompliance in writing; | |
| | 3. Check monitoring data, all plant, equipment, Contractor’s working methods and other relative information; | 3. Review submit proposal and advise the ET and ER on the Effectiveness of the implemented mitigation measures. | 3. Make agreement on the remedial measures to be implemented; and | 3. Rectify unacceptable practice; | |
| | 4. Review proposals on remedial measures submitted by Contractor; | | 4. Supervise the implementation of agreed remedial measures. | 4. Check all plant and equipment; | |
| | 5. Discuss remedial measures with IEC and Contractor and ER; and | | | 5. Consider changes of working methods; | |
| | 6. Review submit proposal and ensure the effectiveness of the implemented mitigation measures. | | | 6. Discuss with ER, ET and IEC and submit proposal of remedial measures to ER and IEC; and | |
| | | | | 7. Implement the agreed mitigation measures. | |
| Action level being exceeded by more than one consecutive sampling days | 1. Conduct addition site investigation on the same day; | 1. Discuss with ET, Contractor and ER on the implemented mitigation measures; | 1. Discuss with ET, IEC and Contractor on the proposed mitigation measures; | 1. Identify source(s) of impact; | |
| | 2. Inform IEC, Contractor and ER; | 2. Review the proposed remedial measures submitted by Contractor and advise | 2. Make agreement on the remedial measures to be implemented; and | 2. Inform the ER and confirm notification of the non-compliance in writing; | |
| | 3. Check monitoring data, all plant, equipment, | | | 3. Rectify unacceptable | |

| EVENT | ACTION | | | |
|--|--|--|--|--|
| | ET | IEC | ER | CONTRACTOR |
| | <p>Contractor's working methods and other relative information;</p> <p>4. Discuss remedial measures with IEC, contractor and ER; and</p> <p>5. Review submit proposal and ensure the agreed remedial measures are implemented</p> | <p>the ER accordingly; and</p> <p>3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.</p> | <p>3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures</p> | <p>practice;</p> <p>4. Check all plant and equipment and consider changes of working methods;</p> <p>5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification; and</p> <p>6. Implement the agreed mitigation measures.</p> |
| Limit level being exceeded by one sampling day | <p>1. Conduct addition site investigation on the same day;</p> <p>2. Inform IEC, Contractor and ER;</p> <p>3. Rectify unacceptable practice;</p> <p>4. Check monitoring data, all plant, equipment, Contractor's working methods and other relative information;</p> <p>5. Consider changes of working methods;</p> <p>6. Discuss mitigation measures with IEC, ER and Contractor;</p> <p>7. Review the submit</p> | <p>1. Discuss with ET, Contractor and ER on the implemented mitigation measures;</p> <p>2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and</p> <p>3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures.</p> | <p>1. Discuss with ET, IEC and Contractor on the implemented remedial measures;</p> <p>2. Request Contractor to critically review the working methods;</p> <p>3. Make agreement on the remedial measures to be implemented; and</p> <p>4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures.</p> | <p>1. Identify source(s) of impact;</p> <p>2. Inform the ER and confirm notification of the noncompliance in writing;</p> <p>3. Rectify unacceptable practice;</p> <p>4. Check all plant and equipment and consider changes of working methods;</p> <p>5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of</p> |

| EVENT | ACTION | | | |
|---|---|---|---|--|
| | ET | IEC | ER | CONTRACTOR |
| | proposal and ensure the agreed remedial measures are implemented; | | | notification; and 6. Implement the agreed remedial measures. |
| Limit level being exceeded by more than one consecutive sampling days | 1. Conduct addition site investigation on the same day; 2. Inform IEC, contractor and ER; 3. Check monitoring data, all plant, equipment, Contractor's working methods and other relative information; 4. Discuss mitigation measures with IEC, ER and Contractor; and 5. Review the submit proposal and ensure the agreed remedial measures are implemented. | 1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures. | 1. Discuss with ET, IEC and Contractor on the implemented remedial measures 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; 4. Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level. | 1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the noncompliance in writing; 3. Rectify Unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures. 7. As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level. |

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

Table N-4: Actions in the event of LFG being detected

| Parameter | Monitoring Results | Actions |
|-----------------|--------------------|--|
| O ₂ | <19% v/v | Increase underground ventilation to restore O ₂ to >19% v/v |
| | <18% v/v | Stop works, evacuate all personnel, prohibit entry, and increase ventilation to restore O ₂ level to >19% |
| CH ₄ | >10% LEL | Prohibit hot works, increase ventilation to restore CH ₄ to <10% LEL |
| | >20% LEL | Stop works, evacuate all personnel, increase ventilation further to restore CH ₄ to <10% LEL |
| CO ₂ | >0.5% v/v | Increase ventilation to restore C O ₂ to <0.5% v/v |
| | >1.5% v/v | Stop works, evacuate all personnel, increase ventilation further to restore CO ₂ to <0.5% |

Note: Depending on the results of the measurements, actions required will vary and should be set down by the Safety Officer or another appropriately qualified person. As a minimum these should encompass those actions specified in the above table.

Table N-5: Event / Action Plan for Ambient Arsenic Monitoring

| EVENT | ACTION | | | |
|---|---|--|---|--|
| | ET | IEC | ER | CONTRACTOR |
| ACTION LEVEL | | | | |
| 1. Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily. | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures. | 1. Notify Contractor. | 1. Rectify any unacceptable practice; 2. Amend working methods if appropriate |
| 2. Exceedance for two or more consecutive samples | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC,ER and Contractor; 3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, ER and Contractor on remedial | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures. | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented. | 1. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 2. Implement the agreed proposals; and 3. Amend proposal if appropriate. |

| | | | | |
|--|---|--|--|---|
| | actions required; 7. If exceedance continues, arrange meeting with IEC and ER; and 8. If exceedance stops, cease additional monitoring. | | | |
| LIMIT LEVEL | | | | |
| 1.Exceedance for one sample | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor, IEC and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. | 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise the ER and ET on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented. | 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 4. Implement the agreed proposals; and 5. Amend proposal if appropriate. |
| 2.Exceedance for two or more consecutive samples | 1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working | 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure | 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the ET and IEC, agree with the Contractor on the | 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; |

| | | | | |
|--|--|---|---|---|
| | <p>procedures to determine possible mitigation to be implemented;</p> <p>6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken;</p> <p>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</p> <p>8. If exceedance stops, cease additional monitoring.</p> | <p>their effectiveness and advise the ER accordingly;</p> <p>3. Supervise the implementation of remedial measures</p> | <p>remedial measures to be implemented;</p> <p>4. Supervise and ensure remedial measures properly implemented; and</p> <p>5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</p> | <p>3. Implement the agreed proposals;</p> <p>4. Resubmit proposals if problem still not under control;</p> <p>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</p> |
|--|--|---|---|---|

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

Table N-6.1 Action and Limit Levels and Responses for Avifauna Monitoring and General Site Inspection in the LVNP during Construction Phase.

| EVENT | RESPONSE | | | |
|----------------------------|--|--|---|--|
| | ET | IEC | Contractor | Project Proponent |
| AVIFAUNA MONITORING | | | | |
| Action Level exceeded. | 1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial | 1. Check monitoring data, analysis and investigation by ET; 2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | 1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s). |

| | | | | |
|-----------------------|---|---|---|---|
| | measures are properly implemented by the Contractor, as agreed with the PP. | | | |
| Limit Level exceeded. | <ol style="list-style-type: none"> 1. Check monitoring data and repeat data analysis to confirm findings; 2. Identify potential source(s) of impact; 3. Immediately inform IEC, Contractor and PP. 4. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 5. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly | <ol style="list-style-type: none"> 1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and | <ol style="list-style-type: none"> 1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | <ol style="list-style-type: none"> 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s). |

| | | | | |
|--------------------------------|--|---|---|---|
| | implemented by the Contractor, as agreed with the PP. | feedback the audit results to the PP. | | |
| General Site Inspection | | | | |
| Action Level exceeded. | 1. Investigate if the activity identified is related to the construction works; 2. Immediately inform IEC, Contractor and PP. 3. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 4. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP. | 1. Check the investigation and findings of the ET; 2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | 1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) of the activity identified. | 1. Check the investigation and findings of the ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s). |
| Limit Level exceeded | 1. Investigate if the activity identified is related to the construction works; | 1. Check the investigation and findings or the ET; 2. Discuss with the PP, | 1. Confirm receipt of notification of the exceedance of Limit Level in writing; | 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for |

| | | | | |
|--|---|---|---|---|
| | <p>2. Immediately inform IEC, Contractor and PP.</p> <p>3. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified;</p> <p>4. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and</p> <p>5. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>ET, and Contractor on the need for further mitigation measure(s);</p> <p>3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly;</p> <p>4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and</p> <p>3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>increased site inspection and audit frequency proposed by ET with IEC and the Contractor;</p> <p>3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and</p> <p>4. Supervise the instigated further mitigation measure(s).</p> |
|--|---|---|---|---|

Table N-6.2 Action and Limit Levels and Responses to Evidence of Disturbance to Waterbirds using in Ng Tung, Sheung Yue and Shek Sheung Rivers

| EVENT | RESPONSE | | | |
|---------------------------|---------------------|---------------------------|-----------------------|-------------------------|
| | ET | IEC | Contractor | Project Proponent |
| Construction Phase | | | | |
| Action Level | 1. Check monitoring | 1. Check monitoring data, | 1. Confirm receipt of | 1. Check the monitoring |

| | | | | |
|-----------|---|--|--|---|
| exceeded. | <p>data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and</p> <p>6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>analysis and investigation by ET;</p> <p>2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>notification of the exceedance of Action Level in writing; and</p> <p>2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and</p> <p>3. Supervise the instigated further mitigation measure(s).</p> |
|-----------|---|--|--|---|

| | | | | |
|--------------------------|--|--|--|--|
| Limit Level Exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Identify potential source(s) of impact;</p> <p>3. Immediately inform IEC, Contractor and PP.</p> <p>4. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified;</p> <p>5. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and</p> <p>6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s);</p> <p>3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly;</p> <p>4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>1. Confirm receipt of notification of the exceedance of Limit Level in writing;</p> <p>2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and</p> <p>3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor;</p> <p>3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and</p> <p>4. Supervise the instigated further mitigation measure(s).</p> |
| Operational Phase | | | | |
| Action Level | 1. Check monitoring | 1. Check monitoring | 1. Confirm receipt of | 1. Check the monitoring |

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| exceeded. | <p>data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and</p> <p>6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>data, analysis and investigation by ET;</p> <p>2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>3. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>notification of the exceedance of Action Level in writing; and</p> <p>2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and</p> <p>3. Supervise the instigated further mitigation measure(s).</p> |
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| Limit Level exceeded. | <ol style="list-style-type: none"> 1. Check monitoring data and repeat data analysis to confirm findings; 2. Identify potential source(s) of impact; 3. Immediately inform IEC, Contractor and PP. 4. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 5. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP. | <ol style="list-style-type: none"> 1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | <ol style="list-style-type: none"> 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s). |
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Table N-6.3 Action and Limit Levels and Responses to Evidence of Declines in Aquatic Fauna
WMA20002\App N - Event Action Plan

| EVENT | RESPONSE | | | |
|---------------------------|--|---|---|--|
| | ET | IEC | Contractor | Project Proponent |
| Construction Phase | | | | |
| Action Level exceeded. | 1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly | 1. Check monitoring data, analysis and investigation by ET; 2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | 1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s). |

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| | implemented by the Contractor, as agreed with the PP. | | | |
| Limit Level exceeded. | <ol style="list-style-type: none"> 1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and | <ol style="list-style-type: none"> 1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit | <ol style="list-style-type: none"> 1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | <ol style="list-style-type: none"> 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s). |

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| | 7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP. | results to the PP. | | |
| Operational Phase | | | | |
| Action Level exceeded. | 1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; | 1. Check monitoring data, analysis and investigation by ET; 2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | 1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s). |

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| | and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP. | | | |
| Limit Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s);</p> <p>3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly;</p> <p>4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> | <p>1. Confirm receipt of notification of the exceedance of Limit Level in writing;</p> <p>2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and</p> <p>3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor;</p> <p>3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and</p> <p>4. Supervise the instigated further mitigation measure(s).</p> |

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| | <p>impact(s) identified;</p> <p>6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and</p> <p>7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | | |
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Table N-6.4 Action and Limit Levels and Responses to Evidence of Declines in the Seasonal Non-aquatic Fauna (Herptofauna, Butterfly and Odonates) in Ecologically Sensitive Habitats

| EVENT | RESPONSE | | | |
|---------------------------|--|---|--|---|
| | ET | IEC | Contractor | Project Proponent |
| Construction Phase | | | | |
| Action Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> | <p>1. Confirm receipt of notification of the exceedance of Action Level in writing; and</p> <p>2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and</p> |

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| | <p>construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and</p> <p>6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | | <p>3. Supervise the instigated further mitigation measure(s).</p> |
| Limit Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s);</p> | <p>1. Confirm receipt of notification of the exceedance of Limit Level in writing;</p> <p>2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s),</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the</p> |

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| | <p>natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified;</p> <p>6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and</p> <p>7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly;</p> <p>4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>then propose and implement the further mitigation measure(s); and</p> <p>3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>Contractor;</p> <p>3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and</p> <p>4. Supervise the instigated further mitigation measure(s).</p> |
| Operational Phase | | | | |

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|------------------------|--|---|---|--|
| Action Level exceeded. | <ol style="list-style-type: none"> 1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and 6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP. | <ol style="list-style-type: none"> 1. Check monitoring data, analysis and investigation by ET; 2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of the exceedance of Action Level in writing; and 2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | <ol style="list-style-type: none"> 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and 3. Supervise the instigated further mitigation measure(s). |
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| Limit Level exceeded. | <ol style="list-style-type: none"> 1. Check monitoring data and repeat data analysis to confirm findings; 2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related; 3. Identify potential source(s) of impact; 4. Immediately inform IEC, Contractor and PP. 5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; 6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and 7. Conduct necessary | <ol style="list-style-type: none"> 1. Check monitoring data, analysis and investigation by ET; 2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s); 3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly; 4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and 5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP. | <ol style="list-style-type: none"> 1. Confirm receipt of notification of the exceedance of Limit Level in writing; 2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and 3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified. | <ol style="list-style-type: none"> 1. Check the monitoring results and findings from ET and IEC; 2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor; 3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and 4. Supervise the instigated further mitigation measure(s). |

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| | <p>site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | | | |
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Table N-6.5 Action and Limit Levels and Responses to Evidence of Declines in the Non-seasonal Non-aquatic Fauna (Mammals) in Ecologically Sensitive Habitats

| EVENT | RESPONSE | | | |
|---------------------------|---|--|--|---|
| | ET | IEC | Contractor | Project Proponent |
| Construction Phase | | | | |
| Action Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>3. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit</p> | <p>1. Confirm receipt of notification of the exceedance of Action Level in writing; and</p> <p>2. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection/audit frequency proposed by ET with IEC and the Contractor; and</p> <p>3. Supervise the instigated further mitigation measure(s).</p> |

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| | <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and</p> <p>6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | results to the PP. | | |
| Limit Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s);</p> <p>3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly;</p> <p>4. Review the remedial measure(s) proposed by the Contractor and advise the PP</p> | <p>1. Confirm receipt of notification of the exceedance of Limit Level in writing;</p> <p>2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and</p> <p>3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor;</p> <p>3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and</p> <p>4. Supervise the instigated further mitigation measure(s).</p> |

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| | <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified;</p> <p>6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and</p> <p>7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>accordingly; and</p> <p>5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | | |
| Operational Phase | | | | |
| Action Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> <p>2. Review relevant ecological data to</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> <p>2. Review the remedial measure(s) proposed by the Contractor and</p> | <p>1. Confirm receipt of notification of the exceedance of Action Level in writing; and</p> <p>2. Propose and implement the</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> <p>2. Discuss the need for increased site inspection/audit</p> |

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| | <p>check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified; and</p> <p>6. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP.</p> | <p>advise the PP accordingly; and</p> <p>3. Conduct necessary site inspections/ audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>remedial measures(s) to mitigate the impact(s) identified.</p> | <p>frequency proposed by ET with IEC and the Contractor; and</p> <p>3. Supervise the instigated further mitigation measure(s).</p> |
| Limit Level exceeded. | <p>1. Check monitoring data and repeat data analysis to confirm findings;</p> | <p>1. Check monitoring data, analysis and investigation by ET;</p> | <p>1. Confirm receipt of notification of the exceedance of Limit Level in writing;</p> | <p>1. Check the monitoring results and findings from ET and IEC;</p> |

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| | <p>2. Review relevant ecological data to check if the exceedance is due to natural variation or is construction works related;</p> <p>3. Identify potential source(s) of impact;</p> <p>4. Immediately inform IEC, Contractor and PP.</p> <p>5. Discuss with the Contractor on the remedial measure(s) to mitigate the impact(s) identified;</p> <p>6. Discuss with the PP, IEC, and Contractor on the need for further mitigation measure(s); and</p> <p>7. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed</p> | <p>2. Discuss with the PP, ET, and Contractor on the need for further mitigation measure(s);</p> <p>3. Review the effectiveness of the further mitigation measure(s) proposed and implemented by Contractor and advise the PP accordingly;</p> <p>4. Review the remedial measure(s) proposed by the Contractor and advise the PP accordingly; and</p> <p>5. Conduct necessary site inspections/audits to ensure all remedial measures are properly implemented by the Contractor, as agreed with the PP and feedback the audit results to the PP.</p> | <p>2. Discuss with the PP, IEC, and ET on the need of further mitigation measure(s), then propose and implement the further mitigation measure(s); and</p> <p>3. Propose and implement the remedial measures(s) to mitigate the impact(s) identified.</p> | <p>2. Discuss the need for increased site inspection and audit frequency proposed by ET with IEC and the Contractor;</p> <p>3. Discuss and confirm the further mitigation measure(s) required with the ET, IEC, and Contractor; and</p> <p>4. Supervise the instigated further mitigation measure(s).</p> |
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| | with the PP. | | | |
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APPENDIX O
SUMMARY OF EXCEEDANCE

Appendix O: Exceedance Report**(A) Exceedance Report for Air Quality**

| Environmental Monitoring | Parameter | No. of non-project related Exceedance | | No. of Exceedance related to the Construction Activities of this Contract | |
|--------------------------|-----------------------------|---------------------------------------|-------------|---|-------------|
| | | Action Level | Limit Level | Action Level | Limit Level |
| Air Quality | 1-hr TSP | 0 | 0 | 0 | 0 |
| | 24-hr TSP | 0 | 0 | 0 | 0 |
| | 24-hr RSP (Ambient Arsenic) | 0 | 0 | 0 | 0 |

(B) Exceedance Report for Construction Noise

| Environmental Monitoring | Parameter | No. of non-project related Exceedance | | No. of Exceedance related to the Construction Activities of this Contract | |
|--------------------------|---|---------------------------------------|-------------|---|-------------|
| | | Action Level | Limit Level | Action Level | Limit Level |
| Noise | $L_{eq}(30 \text{ min.}) \text{ dB(A)}$ | 1 | 0 | 0 | 0 |

(C) Exceedance Report for Water Quality

| Environmental Monitoring | Parameter | No. of non-project related Exceedance | | No. of Exceedance related to the Construction Activities of this Contract | |
|--------------------------|-----------|---------------------------------------|-------------|---|-------------|
| | | Action Level | Limit Level | Action Level | Limit Level |
| Water Quality | DO | 0 | 1 | 0 | 0 |
| | Turbidity | 0 | 0 | 0 | 0 |
| | SS | 0 | 0 | 0 | 0 |
| | Arsenic | 0 | 0 | 0 | 0 |

(D) Exceedance Report for Landfill Gas

| Environmental Monitoring | Parameter | No. of non-project related Exceedance | | No. of Exceedance related to the Construction Activities of this Contract | |
|--------------------------|--|---------------------------------------|-------------|---|-------------|
| | | Action Level | Limit Level | Action Level | Limit Level |
| Landfill Gas | O ₂ (% v/v) CH ₄ (% LEL) CO ₂ (% v/v) | 0 | 0 | 0 | 0 |

(E) Exceedance Report for Built Heritage Monitoring

| Environmental Monitoring | Parameter | No. of non-project related Exceedance | | No. of Exceedance related to the Construction Activities of this Contract | |
|--------------------------|---------------------------|---------------------------------------|-------------|---|-------------|
| | | Action Level | Limit Level | Action Level | Limit Level |
| Cultural Heritage | Built Heritage Monitoring | 0 | 0 | 0 | 0 |

APPENDIX P
SITE AUDIT SUMMARY


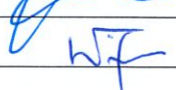
Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230207 |
| Date | 7 February 2023 (Tuesday) |
| Time | 09:30 – 11:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>F. Land Contamination</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Landfill Gas Hazard</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>J. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>K. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>L. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.:230131), all environmental deficiency was observed improved/rectified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|-----------------|
| Recorded by | Marco Ma |  | 8 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 8 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Weekly Site Inspection Record Summary

| | |
|----------------------------|-----------------------------|
| Checklist Reference Number | 230216 |
| Date | 16 February 2023 (Thursday) |
| Time | 14:00 – 15:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>F. Land Contamination</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Landfill Gas Hazard</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>J. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>K. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>L. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.:230207), no environmental deficiency was observed during site inspection. | |

| | | | |
|-------------|--------------------|--|------------------|
| | Name | Signature | Date |
| Recorded by | Marco Ma |  | 21 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 21 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230221 |
| Date | 21 February 2023 (Tuesday) |
| Time | 09:30 – 11:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>F. Land Contamination</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Landfill Gas Hazard</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>J. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>K. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>L. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.:230216), no environmental deficiency was observed during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 21 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 21 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/01 – Kwu Tung North New Development Area, Phase 1: Site Formation and Infrastructure Work

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230228 |
| Date | 28 February 2023 (Tuesday) |
| Time | 09:30 – 11:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>F. Land Contamination</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Landfill Gas Hazard</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>J. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>K. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>L. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.:230221), no environmental deficiency was observed during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 28 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 28 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

| | |
|----------------------------|-----------------------------|
| Checklist Reference Number | 230201 |
| Date | 1 February 2023 (Wednesday) |
| Time | 09:30 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | C. Construction Noise Impact | |
| | • No environmental deficiency was identified during site inspection. | |
| | D. Water Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | E. Waste / Chemical Management | |
| | • No environmental deficiency was identified during site inspection. | |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | G. Landscape and Visual | |
| 230201-R01 | • To remove construction material leaning onto retained trees and set up tree protection zone. | G 1 |
| | H. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | L. Others | |
| | • Follow-up on previous audit section (Ref. No.:230126), item 230126-R02 was observed improved/rectified by the contractor. Item 230126-R01 was remarked as 230201-R01. Follow-up action is needed to be reviewed. | |

| | Name | Signature | Date |
|-------------|--------------------|--|-----------------|
| Recorded by | Marco Ma |  | 1 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 1 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

| | |
|----------------------------|-----------------------------|
| Checklist Reference Number | 230208 |
| Date | 8 February 2023 (Wednesday) |
| Time | 09:30 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | C. Construction Noise Impact | |
| | • No environmental deficiency was identified during site inspection. | |
| | D. Water Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | E. Waste / Chemical Management | |
| | • No environmental deficiency was identified during site inspection. | |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | G. Landscape and Visual | |
| 230208-R01 | • To remove construction material leaning onto retained trees and set up tree protection zone. | G 1 |
| | H. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | L. Others | |
| | • Follow-up on previous audit section (Ref. No.:230201), item 230201-R01 was remarked as 230208-R01. Follow-up action is needed to be reviewed. | |

| | Name | Signature | Date |
|-------------|--------------------|--|-----------------|
| Recorded by | Marco Ma |  | 8 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 8 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

| | |
|----------------------------|------------------------------|
| Checklist Reference Number | 230215 |
| Date | 15 February 2023 (Wednesday) |
| Time | 09:30 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Construction Noise Impact</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>L. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.:230208), item 230208-R01 was observed improved/rectified by the contractor during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 15 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 15 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/02 – Kwu Tung North New Development Area, Phase 1: Roads and Drains between Kwu Tung North New Development and Shek Wu Hui

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230220 |
| Date | 20 February 2023 (Monday) |
| Time | 09:30 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | C. Construction Noise Impact | |
| | • No environmental deficiency was identified during site inspection. | |
| | D. Water Quality | |
| 230220-R01 | • Drainage should be cleared and maintained properly. | D 6 |
| | E. Waste / Chemical Management | |
| | • No environmental deficiency was identified during site inspection. | |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | G. Landscape and Visual | |
| 230220-R02 | • Tree protection zone should be enhanced. | G 1 |
| | H. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | L. Others | |
| | • Follow-up on previous audit section (Ref. No.:230215), no major environmental deficiency was identified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 21 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 21 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Weekly Site Inspection Record Summary

| | |
|----------------------------|--------------------------|
| Checklist Reference Number | 230203 |
| Date | 3 February 2023 (Friday) |
| Time | 10:00-11:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| 230203-001 | <ul style="list-style-type: none"> Dusty debris were observed at the site exit of Yin Kong. Contractor was reminded to clear the dusty debris immediately, and enhance water and dust mitigation measures around the boundary of Yin Kong Road works area. | B 9 |
| | | |
| | C. Construction Noise Impact | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | | |
| | D. Water Quality | |
| 230203-001 | <ul style="list-style-type: none"> Dusty debris were observed at the site exit of Yin Kong. Contractor was reminded to clear the dusty debris immediately, and enhance water and dust mitigation measures around the boundary of Yin Kong Road works area. | D 3 |
| | | |
| | E. Waste / Chemical Management | |
| 230203-R01 | <ul style="list-style-type: none"> Provide drip tray for chemical/fuel containers. | E 14. |
| | | |
| | F. Landscape & Visual | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | | |
| | G. Ecology | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | | |
| | H. Permits/Licences | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | | |
| | I. Others | |
| | Follow-up on previous audit section (Ref. No.:230127). Items no. 230127-O01 and 230127-R01 were remarked as 230203-O01 and 230203-R01. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|--|-----------------|
| Recorded by | Him Ng |  | 4 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 4 February 2023 |

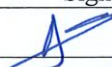
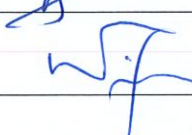
Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230210 |
| Date | 10 February 2023 (Friday) |
| Time | 10:00-11:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Construction Noise Impact</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| 230210-R01 | • To provide drip tray for chemical storage. | E 14. |
| | <i>F. Landscape & Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Others</i> | |
| | Follow-up on previous audit section (Ref. No.:230203). Items no. 230203-R01 were remarked as 230210-R01. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Adrian Lam |  | 13 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 13 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230217 |
| Date | 17 February 2023 (Friday) |
| Time | 10:00-11:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | C. Construction Noise Impact | |
| | • No environmental deficiency was identified during site inspection. | |
| | D. Water Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | E. Waste / Chemical Management | |
| 230217-R01 | • To provide drip tray for chemical storage. | E 14. |
| | F. Landscape & Visual | |
| | • No environmental deficiency was identified during site inspection. | |
| | G. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | H. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | I. Others | |
| | Follow-up on previous audit section (Ref. No.:230210). Items no. 230210-R01 were remarked as 230217-R01. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Adrian Lam |  | 22 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 22 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/03 – Kwu Tung North New Development Area, Phase 1: Development of Long Valley Nature Park

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230221 |
| Date | 21 February 2023 (Tuesday) |
| Time | 14:00-15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Construction Noise Impact</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape & Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | Follow-up on previous audit section (Ref. No.:230217). All major environmental deficiency had been rectified by the contractors. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Adrian Lam |  | 22 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 22 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230202 |
| Date | 2 February 2023 (Thursday) |
| Time | 14:00 – 15:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | C. Noise | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | D. Water Quality | |
| 230202-R01 | • Covering of stockpile is required to minimize the muddy runoff during rainstorm. | D 8 |
| | | |
| | E. Waste / Chemical Management | |
| 230202-R02 | • Provide drip tray for chemical/fuel containers | E14 |
| | | |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | G. Landscape and Visual | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | H. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | J. Others | |
| | Follow-up on previous audit section (Ref. No.: 230126), Item no.230126-R02 was rectified by Contractor. Item no. 230126-R01 was remarked as 230202-R01. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|---|-----------------|
| Recorded by | Him Ng |  | 4 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 4 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230209 |
| Date | 9 February 2023 (Thursday) |
| Time | 14:00 – 15:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | C. Noise | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | D. Water Quality | |
| 230209-R01 | • Covering of stockpile is required to minimize the muddy runoff during rainstorm. | D 8 |
| 230209-O01 | • Discharge of muddy water was observed. Contractor was reminded to enhance the water mitigation measure. | D 3 |
| | | |
| | E. Waste / Chemical Management | |
| 230209-R02 | • Provide drip tray for chemical/fuel containers. | E 14 |
| | | |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | G. Landscape and Visual | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | H. Ecology | |
| 230209-R03 | • 2m high solid barrier for the Siu Hang San Tsun should be maintain regularly. | H 3 |
| | | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | J. Others | |
| | Follow-up on previous audit section (Ref. No.: 230202), Item no.230202-R02 was rectified by Contractor. Item no. 230202-R01 was remarked as 230209-R01. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|---|-----------------|
| Recorded by | Him Ng |  | 9 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 9 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230217 |
| Date | 17 February 2023 (Friday) |
| Time | 14:00 – 15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| 230217-R03 | • Stockpile should be covered or sprayed by water. | B 2 |
| | | |
| | C. Noise | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | D. Water Quality | |
| 230217-R01 | • Covering of stockpile is required to minimize the muddy runoff during rainstorm. | D 8 |
| | | |
| | E. Waste / Chemical Management | |
| 230217-R02 | • Provide drip tray for chemical/fuel containers. | E 14 |
| | | |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | G. Landscape and Visual | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | H. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | J. Others | |
| | Follow-up on previous audit section (Ref. No.: 230209), Item no.230209-R03 and 230209-O01 were rectified by Contractor. Item no. 230209-R01 and 230209-R02 was remarked as 230217-R01 and 230217-R02. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 17 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 17 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/04 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shek Wu San Tsuen North to Lung Yeuk Tau)

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230224 |
| Date | 24 February 2023 (Friday) |
| Time | 9:30 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| 220224-R04 | • Provide impervious sheeting or water spraying for dusty stockpile in whole sale market. | B 2 |
| | C. Noise | |
| | • No environmental deficiency was identified during site inspection. | |
| | D. Water Quality | |
| 230224-R01 | • Covering of stockpile is required to minimize the muddy runoff during rainstorm. | D 8 |
| 230224-R03 | • Provide barrier (e.g., sandbag) for G.I. operation. | D 4 |
| | E. Waste / Chemical Management | |
| 230224-R02 | • Provide drip tray for chemical/fuel containers. | E 14 |
| | F. Cultural Heritage | |
| | • No environmental deficiency was identified during site inspection. | |
| | G. Landscape and Visual | |
| | • No environmental deficiency was identified during site inspection. | |
| | H. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | I. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | J. Others | |
| | Follow-up on previous audit section (Ref. No.: 230217), Item no.230217-R03 was rectified by Contractor. Item no. 230217-R01 and 230217-R02 was remarked as 230224-R01 and 230224-R02. Follow-up action is needed to be review. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 27 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 27 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Weekly Site Inspection Record Summary

| | |
|----------------------------|--------------------------|
| Checklist Reference Number | 230206 |
| Date | 6 February 2023 (Monday) |
| Time | 14:00 – 15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>J. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230130), no environmental deficiency was observed during site inspection. | |



| | | | |
|-------------|--------------------|---|-----------------|
| | Name | Signature | Date |
| Recorded by | Him Ng |  | 6 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 6 February 2023 |

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas
ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Weekly Site Inspection Record Summary

| | |
|----------------------------|-----------------------------|
| Checklist Reference Number | 230216 |
| Date | 16 February 2023 (Thursday) |
| Time | 09:00 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>F. Cultural Heritage</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>J. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230206), no environmental deficiency was observed during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 21 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 21 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230221 |
| Date | 21 February 2023 (Tuesday) |
| Time | 14:00 – 15:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| 230221-R01 | <ul style="list-style-type: none"> Provide impervious sheeting to cover the dusty stockpile. | B 2 |
| | <i>C. Noise</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>F. Cultural Heritage</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>G. Landscape and Visual</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>H. Ecology</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>I. Permits/Licences</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>J. Others</i> | |
| | <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.: 230216), no environmental deficiency was observed during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 21 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 21 February 2023 |


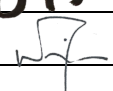
Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/05 – Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section between Shung Him Tong to Kau Lung Hang

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230227 |
| Date | 27 February 2023 (Monday) |
| Time | 14:00 – 15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| 230227-R01 | <ul style="list-style-type: none"> Provide impervious sheeting to cover the dusty stockpile in JCR. | B 2 |
| | <i>C. Noise</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>D. Water Quality</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>F. Cultural Heritage</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>G. Landscape and Visual</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>H. Ecology</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>I. Permits/Licences</i> | |
| | <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. | |
| | <i>J. Others</i> | |
| | <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.: 230221), item no.230221-R01 was improved by Contractor. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 27 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 27 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230202 |
| Date | 2 February 2023 (Thursday) |
| Time | 13:30 - 14:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230126), no environmental deficiency was identified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|-----------------|
| Recorded by | Him Ng |  | 4 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 4 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Weekly Site Inspection Record Summary

| | |
|----------------------------|----------------------------|
| Checklist Reference Number | 230209 |
| Date | 9 February 2023 (Thursday) |
| Time | 13:30 - 14:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230202), no environmental deficiency was identified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|---|-----------------|
| Recorded by | Him Ng |  | 9 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 9 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230217 |
| Date | 17 February 2023 (Friday) |
| Time | 13:30 - 14:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Noise</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230209), no environmental deficiency was identified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 17 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 17 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/06 – Fanling North New Development Area, Phase 1: Reprovisioning of North District Temporary Wholesale Market for Agricultural Products

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230224 |
| Date | 24 February 2023 (Friday) |
| Time | 13:30 - 14:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | B. Air Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | C. Noise | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | D. Water Quality | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | E. Waste / Chemical Management | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | F. Landscape and Visual | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | G. Ecology | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | H. Permits/Licences | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | I. Others | |
| | • Follow-up on previous audit section (Ref. No.: 230217), no environmental deficiency was identified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 27 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 27 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Weekly Site Inspection Record Summary

| | |
|----------------------------|--------------------------|
| Checklist Reference Number | 230203 |
| Date | 3 February 2023 (Friday) |
| Time | 14:00 – 15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|---|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>C. Construction Noise Impact</i> | |
| 230203-R01 | • Compressor should be operate with door closed. | C 9 |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230127), no major environmental deficiency was observed/identified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|-----------------|
| Recorded by | Marco Ma |  | 6 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 6 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230210 |
| Date | 10 February 2023 (Friday) |
| Time | 14:00 – 15:00 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Construction Noise Impact</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230203), all major environmental deficiency was observed improved/rectified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 13 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 13 February 2023 |



Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230217 |
| Date | 17 February 2023 (Friday) |
| Time | 9:30 – 10:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|------------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| 230217-R01 | • Stockpile of dusty material should be covered by impervious sheeting. | B 2 |
| | | |
| | <i>C. Construction Noise Impact</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230210), no major environmental deficiency was observed during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|---|------------------|
| Recorded by | Him Ng |  | 17 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 17 February 2023 |

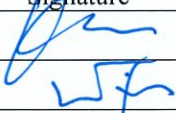

Service Contract No. NDO 04/2019 Environmental Team for Environmental Monitoring and Audit Works in Construction Phase for the First Phase Development of Kwu Tung North and Fanling North New Development Areas

ND/2019/07 – Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Weekly Site Inspection Record Summary

| | |
|----------------------------|---------------------------|
| Checklist Reference Number | 230224 |
| Date | 24 February 2023 (Friday) |
| Time | 14:30 – 15:30 |

| Ref. No. | Non-Compliance | Related Item No. |
|----------|--|------------------|
| - | None identified | - |
| Ref. No. | Remarks/Observations | Related Item No. |
| | <i>B. Air Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>C. Construction Noise Impact</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>D. Water Quality</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>E. Waste / Chemical Management</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>F. Landscape and Visual</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>G. Ecology</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>H. Permits/Licences</i> | |
| | • No environmental deficiency was identified during site inspection. | |
| | | |
| | <i>I. Others</i> | |
| | • Follow-up on previous audit section (Ref. No.: 230217), all major environmental deficiency was observed improved/rectified during site inspection. | |

| | Name | Signature | Date |
|-------------|--------------------|--|------------------|
| Recorded by | Marco Ma |  | 27 February 2023 |
| Checked by | Dr. Priscilla Choy |  | 27 February 2023 |

APPENDIX Q
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|---------------------------------|-----------------|---|---|--|--|---|---------------------------------------|
| Construction Dust Impact | | | | | | | |
| S3.8 | D1 | Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road is proposed to achieve dust removal efficiency of 92.1%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.7 L/m ² to achieve the respective dust removal efficiencies | Minimize dust impact at the nearby sensitive receivers | Contractor | All construction sites | Construction phase | ^ |
| S3.8 | D2 | The Contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation. | Minimize dust impact at the nearby sensitive receivers | Contractor | All construction sites | Construction phase | ^ |
| S3.8 | D3 | <p>Following dust suppression measures should also be incorporated by the Contractor to control the dust nuisance throughout the construction Phase</p> <ul style="list-style-type: none"> Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones; The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; When there are open excavation and reinstatement works, | Minimize dust impact at the nearby sensitive receivers | Contractor | All construction sites | Construction phase | # ^ ^ ^ ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period.</p> <ul style="list-style-type: none"> • The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; • Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; • Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; • Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; • Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and | | | | | <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>N/A</p> <p>N/A</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|--|--------------|---|--|---|---|---|-----------------------|
| | | <ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies. | | | | | ^ |
| SURFACE S3.8 | D4 | Implement regular dust monitoring under EM&A programme during the construction stage. | Monitoring of dust impact | Contractor | Selected representative dust monitoring station | Construction phase | ^ |
| Noise Impact (Construction Phase) | | | | | | | |
| S4.9 | N1 | Implement the following good site management practices: <ul style="list-style-type: none"> Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; Plant known to emit noise strongly in one direction, where | Control construction airborne noise | Contractor | All construction sites | Construction phase | ^ ^ ^ |

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|----------|--------------|--|---|---|--|---|-----------------------|
| | | <p>possible, be orientated so that the noise is directed away from nearby NSRs; silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;</p> <ul style="list-style-type: none"> Mobile plant should be sited as far away from NSRs as possible and practicable; Material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. | | | | | <p>^</p> <p>^</p> |
| S4.9 | N2 | Install temporary site hoarding (approx 2.4m high) located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period. | Reduce the construction noise levels at low-level zone of NSRs through partial screening. | Contractor | All construction sites where practicable | Construction phase | ^ |
| S4.9 | N3 | Install movable noise barriers and full enclosure and acoustic mat, screen the noisy plants including air compressor and generator. | Screen the noisy plant items to be used at all construction sites | Contractor | All construction sites where practicable | Construction phase | ^ |
| S4.9 | N4 | Use of “Quiet” Plant and Working Methods | Reduce the noise levels of plant items | Contractor | All construction sites where practicable | Construction phase | ^ |
| S4.9 | N5 | Sequencing operation of construction plants where practicable. | Operate sequentially within the same work site to reduce the construction airborne noise | Contractor | All construction sites where practicable | Construction phase | ^ |
| S4.9 | N6 | Implement a noise monitoring under EM&A programme. | Monitor the construction noise levels at the selected | Contractor | Selected representative | Construction phase | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|--|-----------------|--|---|--|--|---|--------------------------|
| | | | representative locations | | noise monitoring stations | | |
| Water Quality Impact (Construction Phase) | | | | | | | |
| S5.7 | W1 | <p><u>Construction Runoff and Site Drainage</u></p> <p>In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94), construction phase mitigation measures should be provided and the Storm Water Pollution Control Plan is given below. where appropriate, should include the following:</p> <p>Stormwater Pollution Control Plan</p> <ul style="list-style-type: none"> 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 stormwater 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. Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipments in order to avoid or minimize polluted runoff. Sedimentation tanks with sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8m³ capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple | Control construction runoff | Contractor | All construction sites | Construction phase | <p>^</p> <p>#</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|-----------------|---|---|--|--|---|--|
| | | <p>inputs from a variety of sources and suited to applications where the influent is pumped.</p> <ul style="list-style-type: none"> The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. The silt/sediment traps should be incorporated in the permanent drainage channels to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction. Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means. All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas. Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or | | | | | <p>^</p> <p>^</p> <p>N/A</p> <p>#</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|-----------------|--|---|--|--|---|-------------------------------------|
| | | <p>foundation excavations should be discharged into storm drains via silt removal facilities.</p> <ul style="list-style-type: none"> • All open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. • Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers. • Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events. • All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to | | | | | <p>^</p> <p>^</p> <p>^</p> <p>^</p> |

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|----------|--------------|--|--|---|-------------------------------------|---|---------------------------------------|
| | | <p>public roads and drains.</p> <ul style="list-style-type: none"> Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. Regular environmental audit on the construction site should be carried out in order to prevent any malpractices. Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the meander, wetlands and fish ponds. | | | | | <p>N/A</p> <p>^</p> <p>^</p> <p>^</p> |
| S5.7 | W2 | <p><u>Stream Diversion</u></p> <ul style="list-style-type: none"> In order to prevent sediment transport during riverbank works, deployment of silt curtain should be implemented, especially when construction works encroach or occur in close distance to water body. It is recommended to carry out all the riverbank works and diversion works within a cofferdam or diaphragm wall and the work areas on riverbed should be kept in dry condition. | Minimize water quality impact due to stream diversion | Contractor | All streams that required diversion | Construction phase | # |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|--------------|---|--|---|---|---|-----------------------|
| S5.7 | W3 | <u>Groundwater from Contaminated Area</u> <ul style="list-style-type: none"> For other inaccessible sites, site investigation is required when they are resumed and handed over to the Project Proponent to identify if contaminated groundwater is found. If the investigation results indicated that the groundwater to be generated from construction works would be contaminated, the contaminated groundwater should be either discharged into recharged wells, or properly treated in compliance with the requirements of Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters. If recharged well method were used, the groundwater quality in the recharged well should not be affected by recharging operation, i.e. the pollution levels of the recharged groundwater should not be higher than that in the recharging wells. If treatment and discharge method were used, the design of wastewater treatment facilities, such as active carbon and petrol interceptor, should be submitted to the EPD and a discharge license should be obtained under the WPCO through the Regional Offices of EPD. | Minimize water quality impact due to potential groundwater from contaminated area | Contractor | All identified groundwater-contaminated areas | Construction phase | N/A |
| | | | | | | | N/A |
| | | | | | | | N/A |
| | | | | | | | N/A |
| S5.7 | W4 | <u>Sewage from Workforce</u> Portable chemical toilets and sewage holding tanks should be provided for | Handling of site sewage | Contractor | All construction sites | Construction Phase | ^ |

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|--|--------------|---|--|---|--|---|-----------------------|
| | | <p>handling the construction sewage generated by the workforce. A licensed Contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.</p> <p>Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on the construction site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the Project would not cause water quality impact after undertaking all required measures.</p> | | | | | |
| Waste Management (Construction Waste) | | | | | | | |
| S7.6 | WM1 | <p><u>Waste Reduction Measures</u></p> <p>Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction:</p> <ul style="list-style-type: none"> segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal; proper storage and site practices to minimize the potential for | Reduce waste generation | Contractor | All construction sites where practicable | Prior to the commencement of construction | <p>^</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|--------------|--|--|---|-------------------------------------|---|------------------------------|
| | | <p>damage and contamination of construction materials;</p> <ul style="list-style-type: none"> plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste; sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc); provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling. | | | | | <p>^</p> <p>N/A</p> <p>^</p> |
| S7.6 | WM2 | Prepare Waste Management Plan and submit to the Engineer for approval | Minimize waste generation during construction | Contractor | All construction sites | Construction phase | ^ |
| S7.6 | WM3 | <p><u>Good Site Practice</u></p> <p>The following good site practices are recommended throughout the construction activities:</p> <ul style="list-style-type: none"> Nomination of an approved personnel, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; Training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling; | Minimize waste generation during construction | Contractor | All construction sites | Construction phase | <p>^</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|--------------|--|--|---|-------------------------------------|---|-----------------------------|
| | | <ul style="list-style-type: none"> Provision of sufficient waste disposal points and regular collection for disposal; Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; | | | | | ^ ^ # |
| S7.6 | WM4 | <u>Storage of Waste</u> The following recommendation should be implemented to minimize the impacts: <ul style="list-style-type: none"> Waste such as soil should be handled and stored well to ensure secure containment; Stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; Different locations should be designated to stockpile each material to enhance reuse; | Minimize waste impacts from storage | Contractor | All construction sites | Construction phase | ^ ^ ^ |
| S7.6 | WM5 | <u>Collection and Transportation of Waste</u> The following recommendation should be implemented to minimize the | Minimize waste impact | Contractor | All construction | Construction | |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|--------------|---|--|---|-------------------------------------|---|----------------------------------|
| | | impacts: <ul style="list-style-type: none"> Remove waste in timely manner; Employ the trucks with cover or enclosed containers for waste transportation; Obtain relevant waste disposal permits from the appropriate authorities; and Disposal of waste should be done at licensed waste disposal facilities. | from storage | | sites | phase | ^ ^ ^ ^ |
| S7.6 | WM6 | <u>Excavated and C&D Material</u> Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at Public Fill Reception Facilities areas or reclamation sites. The following mitigation measures should be implemented in handling the excavated and C&D materials: <ul style="list-style-type: none"> Maintain temporary stockpiles and reuse excavated fill material for backfilling; Carry out on-site sorting; Deliver surplus artificial hard materials to Tuen Mun Area 38 recycling plant or its successor for recycling into subsequent useful products; Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; and Implement a recording system for the amount of waste generated, | Minimize waste impacts from excavated and C&D material | Contractor | All construction sites | Construction phase | ^ ^ N/A N/A N/A ^ |

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|----------|--------------|--|--|---|---|---|-----------------------|
| | | <p>recycled and disposed of for checking;</p> <p>Standard formwork should be used as far as practicable in order to minimize the arising of C&D waste. The use of more durable formwork (e.g. metal hoarding) or plastic facing should be encouraged in order to enhance the possibility of recycling. The purchasing of construction materials should be carefully planned in order to avoid over ordering and wastage.</p> <p>Wheel wash facilities have to be provided at the site entrance before the trucks leaving the works area.</p> | | | | | N/A ^ |
| S7.6 | WM7 | <p><u>Contaminated Soil</u></p> <p>As a precaution, it is recommended that standard good site practice should be implemented during the construction phase to minimize any potential exposure to contaminated soils or groundwater. The details of river measures to minimize the potential environmental implications arising from the handling of contaminated materials refer to Land Contamination Section.</p> | Remediate contaminated soil | Contractor | All construction sites where applicable | Construction phase | ^ |
| S7.6 | WM8 | <p><u>Chemical Waste</u></p> <p>If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producers. Chemical wastes should be stored in appropriate containers and collected by a licensed</p> | Control the chemical waste and ensure proper storage, handling and disposal | Contractor | All construction sites | Construction phase | ^ |

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|----------|--------------|--|--|---|-------------------------------------|---|-----------------------|
| | | chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. | | | | | |
| S7.6 | WM9 | <u>General Waste</u> <ul style="list-style-type: none"> General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling. Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean. A reputable waste collector should be employed to remove general refuse on a daily basis. | Minimize production of the general refuse and avoid odour, pest and litter impacts | Contractor | All construction sites | Construction phase | # ^ ^ |
| S7.6 | WM10 | <u>Sewage</u> <ul style="list-style-type: none"> The WMP should document the locations and number of portable chemical toilets depending on the number of workers, land availability, site condition and activities. Regularly collection by licensed collectors should be arranged to minimize potential environmental impacts. | Minimize production of sewage impacts | Contractor | All construction sites | Construction phase | N/A N/A |

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|---------------------------|--------------|---|---|---|--|---|-----------------------|
| S7.6 | WM11 | Topsoil reuse – Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical. This is considered a general measure for good site practice. | Good site practice | Contractor/ Project Proponent | Onsite | Construction phase | N/A |
| Land Contamination | | | | | | | |
| S 8.4 | LC2 | Detailed site investigation (SI) for all inaccessible potentially contaminated sites in 2 NDAs | Verify the land contamination potential before the commencement of construction | Project Proponent Detailed Design Consultant Contractor | All inaccessible potentially contaminated sites in 2 NDAs as listed in the CAP | After the land is resumed and handed over to the Project Proponent | N/A |
| S 8.5 | LC3 | Preparation and submission of supplementary Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) for all inaccessible potentially contaminated sites in 2 NDAs to EPD for agreement if land contamination is confirmed | Present the findings of SI and evaluate the potential environmental and human health impacts Recommend appropriate mitigation measures for the contaminated soil and groundwater identified in the assessment if | Project Proponent/ Detailed Design Consultant | All inaccessible potentially contaminated sites in 2 NDAs as listed in the CAP | Prior to the commencement of any proposed construction works if land contamination is confirmed and remediation is required | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|-----------------|---|--|--|--|---|--------------------------|
| | | | remediation is required | | | | |
| S 8.5 | LC4 | Preparation and submission of Remediation Report to EPD for agreement | Demonstrate that the decontamination work is adequate and is carried out in accordance with the endorsed supplementary CAR and RAP | Project Proponent/ Detailed Design Consultant | All inaccessible potentially contaminated sites in 2 NDAs as listed in the CAP | Prior to the commencement of any proposed construction works if land contamination is confirmed and remediation is required | N/A |
| S 8.6 | LC5 | Re-appraisal of surveyed sites (if they become part of the land requirement for NDA development) that were not identified as potentially contaminated or could not be accessed for visual inspection during the site survey | Verify the land contamination potential due to potential change of land uses before the commencement of construction | Project Proponent/ Detailed Design Consultant | All surveyed sites (if they become part of the land requirement for NDA development (that were not identified as potentially | After the land is resumed and handed over to the Project Proponent. | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|--------------------------|--------------|---|---|---|---|--|-----------------------|
| | | | | | contaminated or could not be accessed for visual inspection during the site survey as listed in the CAP | | |
| S 8.7.2 and Appendix 8.4 | LC6 | Treatment of arsenic-containing soil “Solidification/Stabilization” (S/S) treatment method was proposed for the treatment of arsenic-containing soil. Toxicity Characteristic Leaching Procedure (TCLP) test should be undertaken after S/S in order to ensure that the contaminant will not leach to the environment. Unconfined Compressive Strength (UCS) test should be conducted, and not less than 1MPa should be met prior to the backfilling or stockpiled for future reuse within the study area. | To treat the arsenic containing soil | Government Developer/ Contractor | KTN NDA | Prior to commencement of construction works within KTN NDA | N/A |
| S 8.7.2 and Appendix 8.4 | LC7 | Excavation and Transportation <ul style="list-style-type: none"> Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table; Excavation should be carried out during dry season as far as | To minimize the potential environmental impacts arising from the handling of contaminated materials | Contractor | KTN NDA | Prior to commencement of construction works within KTN NDA | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>possible to minimize runoff from excavated soils;</p> <ul style="list-style-type: none"> Stockpiling site(s) should be lined with impermeable sheeting and bunded. Stockpiles should be properly covered by impermeable sheeting to reduce dust emission during dry season or contaminated run-off during rainy season. Watering should be avoided on stockpiles of soil to minimize runoff; Supply of suitable backfill material after excavation, if require; Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or run-off, and truck bodies and tailgates should be sealed to prevent any discharge during transport or during wet season; Speed control for the trucks carrying excavated materials should be enforced; and Vehicle wheel washing facilities at the site's exit points should be established and used. | | | | | ^ |
| S 8.7.2 and Appendix 8.4 | LC8 | <p>Solidification/Stabilization</p> <ul style="list-style-type: none"> The loading, unloading, handling, transfer or storage of cement should be carried out in an enclosed system; Mixing process and other associated material handling activities should be properly scheduled to minimize potential noise impact and dust emission; The mixing facilities should be sited as far apart as | To minimize the potential environmental impacts arising from the handling of contaminated materials | Contractor | KTN NDA | The course of treatment | <p>N/A</p> <p>^</p> <p>^</p> |

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| | | <p>practicable from the nearby noise sensitive receivers;</p> <ul style="list-style-type: none"> Mixing of soil and cement / water / other additive(s) should be undertaken at a solidification plant to minimize the potential for leaching; Runoff from the solidification / stabilization area should be prevented by constructing a concrete bund along the perimeter of the solidification / stabilization area; If stockpile of treated soil is required, the stockpiling site(s) should be lined with impermeable sheeting and banded. Stockpiles should be properly covered by impermeable sheeting to reduce dust emission during dry season or site run-off during rainy season; and <p>If necessary, there should be clear and separated areas for stockpiling of untreated and treated materials.</p> | | | | | <p>^</p> <p>^</p> <p>*</p> |
| S 8.7.2 and Appendix 8.4 | LC9 | <p><u>Safety Measures</u></p> <ul style="list-style-type: none"> Set up a list of safety measures for site workers; Provide written information and training on safety for site workers; Keep a log-book and plan showing the zones requiring treatment and clean zones; Maintain a hygienic working environment; Avoid dust generation; Provide face and respiratory protection gear to site workers if | To minimize the potential adverse effects on health and safety of construction workers | Contractor | KTN NDA | The course of treatment | N/A |

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| | | <p>necessary;</p> <ul style="list-style-type: none"> Provide personal protective clothing (e.g. chemical resistant jackboot, liquid tight gloves) to site workers if necessary; Provide first aid training and materials to site worker; Bulk earth moving equipment should be utilized as much as possible to minimize worker <p>Eating, drinking and smoking should not be allowed in the excavation areas and treatment area to avoid inadvertent ingestion of arsenic containing soil.</p> | | | | | |
| Landfill Gas Hazard | | | | | | | |
| S10.6 | LFG1 | <ul style="list-style-type: none"> Underground rooms or void should be avoided as far as practicable in the proposed developments within the Consultation Zone and should be avoided totally in the proposed developments within the MTLL. Buildings or structures within the MTLL should be at ground level with raised floor slabs which are less prone to gas ingress. For the high risk category, the use of active control of gas, including barriers and detection systems are recommended. These measures include the control of gas by mechanical means e.g. ventilation of spaces with air to dilute gas, or extraction of gas using fans or blowers. For the low risk category, the provision of barriers to the movement of gas is recommended. Measures recommended | To minimize the risk of LFG hazards to occupants within MTLL and its 250m Consultation Zone | Government / Developer/ Detailed Design Consultant within MTLL and its 250m Consultation Zone | Buildings within MTLL and its 250m Consultation Zone | Detailed design phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>include the use of membranes in floors or walls, or in trenches, coupled with high permeability vents such as nofines gravel in trenches or voids/permeable layers below structures.</p> <ul style="list-style-type: none"> The need and practicality of incorporating such measures should be reviewed in the detailed Qualitative LFG Hazards Assessment (QLFGHA) during the detailed design stage for developments within the 250m Consultation Zone and within MTLL. Recommendations on the detailed precautionary and protection measures to be adopted should be given in the QLFGHA. The design and construction method of the proposed development within MTLL (i.e. the proposed recreational area in site E1-1) should be provided to EPD for agreement in the design stage to ensure compatibility with the landfill restoration facilities and aftercare works within MTLL, such that these facilities and works will not be affected by the construction or operation of the proposed development. | | | | | |
| S10.6 | LFG2 | <ul style="list-style-type: none"> During all works, safety procedures should be implemented to minimize the risks of fires and explosions, asphyxiation of workers (especially in confined space) and toxicity effects resulting from contact with contaminated soils and groundwater. Safety officers, specifically trained with regard to LFG and leachate related hazards and the appropriate actions to take in | To minimize the risk of LFG hazards to the staff and visitors within MTLL and its 250m Consultation Zone | Contractor | Construction sites within MTLL and its 250m Consultation Zone | Construction phase | <p>^</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>adverse circumstances, should be present on all worksites throughout the works.</p> <ul style="list-style-type: none"> All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid physical contact with it. Those staff who work in, or have responsibility for “at risk” areas, including bore pilling and excavation works, should receive appropriate training on working in areas susceptible to LFG. Enhanced personal hygiene practices including washing thoroughly after working and eating only in “clean” areas should be adopted where contact may have been made with any groundwater which is thought to be contaminated with leachate. Any offices / quarters set up on site should take precautions against LFG ingress, such as being raised off the ground. Other storage premises, e.g. shipping containers, where this is not possible should be well ventilated prior to entry. Adequate precautions to prevent the accumulation of LFG under site buildings and within storage shed should be taken by raising buildings off the ground where appropriate and “airing” storage containers prior to entry by personnel and ensuring adequate ventilation at all times. | | | | | <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <ul style="list-style-type: none"> Smoking and naked flames should be prohibited within confined spaces. “No Smoking” and “No Naked Flame” notices in Chinese and English should be posted prominently around the construction site. Safety notices should be posted warning of the potential hazards. Welding, flame-cutting or other hot works may only be carried out in confined spaces when controlled by a “permit to work” procedure, properly authorized by the Safety Officer. The permit to work procedure should set down clearly the requirements for continuous monitoring of methane, carbon dioxide and oxygen throughout the period during which the hot works are in progress. The procedure should also require the presence of an appropriately qualified person who shall be responsible for reviewing the gas measurements as they are made, and who shall have executive responsibility for suspending the work in the event of unacceptable or hazardous conditions. Only those workers who are appropriately trained and fully aware of the potentially hazardous conditions which may arise should be permitted to carry out hot works in confined areas. During the construction works, adequate fire extinguishers and breathing apparatus sets should be made available on site and appropriate training given in their use. | | | | | <p>^</p> <p>N/A</p> <p>^</p> |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <ul style="list-style-type: none"> Ongoing gas monitoring should be considered for offices, stores etc set up on site. | | | | | ^ |
| S10.6 | LFG3 | <p>Utility Companies</p> <ul style="list-style-type: none"> The developers should make the utility companies aware of the location and features of the site within the Consultation Zone during the respective detailed design stage as part of the QLFCHA. The utilities companies should have a responsibility to train and ensure their staff to take appropriate precautions at all times when entering enclosed spaces or plant rooms. Should utility installation be required in site E1-1, the developers should make the utility companies aware of the potential constraints imposed by the landfill restoration facilities and aftercare works to ensure these facilities and works will remain unaffected. Appropriate precautionary measures against landfill gas should also be taken should utility installation be required within the MTLL. <p>Building Management</p> <ul style="list-style-type: none"> The management committee of the building estate will hold a special responsibility to ensure that the occupants of the building, its staff and maintenance workers are protected from LFG and that visitors to the site are also made aware as to the dangers and the | <p>To minimize the risk of LFG hazards to the occupants, maintenance personnel, visitors and other users within MTLL and its 250m Consultation Zone</p> | Government / Developer within MTLL and its 250m Consultation Zone | Buildings within MTLL and its 250m Consultation Zone | Operation phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>precautions required to be taken.</p> <ul style="list-style-type: none"> Of primary importance to satisfactorily upholding this responsibility will be to ensure that strict procedures for maintaining control over all temporary and /or permanent works proposed at the site are reviewed with regard to the LFG hazard. This needs to be accompanied by a comprehensive contingency plan in case of incidents, including liaison with EPD officers, Fire Services Department, Landfill Restoration Contractors and others, as necessary. All construction and maintenance (including utilities) personnel working at the site should be made aware of the hazards of LFG and its possible presence on site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on LFG hazards and the designs and procedural means by which these hazards are being minimized on site. In addition, entry to confined spaces such as refuse/store rooms, drainage manholes etc. should be preceded by a period of “airing” the space by opening the door widely allowing fresh air to enter. Where appropriate, monitoring of gas should also precede entry. Any proposed modifications or additions to the building structure should be subject to a further assessment of LFG hazard, | | | | | |

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| | | <p>particularly in areas where a gas membrane has been installed.</p> <p>Any penetrations of the membrane must be repaired as soon as possible after detection or works completion using similar products.</p> <ul style="list-style-type: none"> The building management company should also make arrangement with Landfill Restoration Contractor so that they are advised of all situations which may potentially threaten the safety of the building occupants resulting from any accidents or failures at the landfill site. The building management company should also have available suitable gas monitoring equipment for any ad hoc investigations necessary relating to LFG and be in a position to undertake any future routine monitoring of gas which may be considered necessary soloing completion of the defects correction period. To ensure that all the above protection and precautionary measures and issues pertaining to LFG are properly and consistently addressed by future users and owners of the site, it is recommended that a comprehensive LFG hazard management system be developed by the owner of the building or its property management agency. The system should be developed by the developers of the sites as part of the QLFGHA before the occupation of the building and implemented during its operational | | | | | |

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| | | phase. | | | | | |
| <i>Cultural Heritage (Pre-construction Phase)</i> | | | | | | | |
| S11.6.1 | CH1 | <p><u>Undertaking Further Archaeological Survey to Cover the Outstanding Areas</u></p> <p>Further archaeological surveys to cover the outstanding areas of the not-yet-surveyed-area with medium archaeological potential located in the areas with proposed development as presented in Figure 11.9 should be implemented after land resumption to confirm and verify the findings of the EIA. The survey should be conducted by a professional archaeologist and prior to fieldwork commencement, the archaeologist should obtain a Licence to Excavate and Search for Antiquities from the Authority under the AM Ordinance. It should be noted that the scope of further archaeological survey is based on the current proposed alignment. Any additional works areas which have not been covered by the current archaeological impact assessment should be covered as soon as possible. Subject to the findings of the archaeological survey to be conducted after land resumption, additional mitigation measures would be designed and implemented before the commencement of construction works to mitigate the adverse impact.</p> | To confirm and verify the findings of the EIA | Project Proponent/ Contractor/ Qualified Archaeologist | In the not-yet-surveyed-areas with medium archaeological potential located in the areas within Areas D1-11, A3-5, A3-6, B1-1, and B1-7, | After land resumption but before construction | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| S11.6.1 | CH2 | <u>Undertaking Survey-cum-Rescue Excavation</u> A Survey-cum-Rescue Excavation should be conducted after land resumption and before the commencement of construction works to define the precise archaeological deposits extent and to preserve the archaeological resources by record. The excavation should be conducted by a professional archaeologist and prior to fieldwork commencement, the archaeologist should obtain a Licence to Excavate and Search for Antiquities from the Authority under the AM Ordinance. | To define the precise archaeological deposits extent and to preserve the archaeological resources as far as possible | Project Proponent/ Contractor/ Qualified Archaeologist | In KTN NDA, for Site 3 and In FLN NDA for Site 5. | After land resumption but before construction commencement of the zone | N/A |
| S11.6.1 | CH3 | <u>Undertaking Preservation in-situ for Site 7</u> Preservation in-situ of the cultivation deposits in Site 7 is proposed. If disturbance to the site by the design of the Central Park is unavoidable, further archaeological survey should be conducted after land resumption prior to the pre-construction stage to assess the feasibility to incorporate Site 7 into the design of the development plan of the proposed zone. Appropriate followup actions, including preservation of the significant archaeological deposits in-situ in the Central Park, would then be considered with the consent of AMO. The recommended mitigation measure of preservation in-situ with further archaeological survey should be conducted by a professional archaeologist and prior to fieldwork commencement, the archaeologist should obtain a Licence to Excavate and Search for Antiquities from the | To preserve the archaeological resources as far as possible. | Project Proponent/ Contractor/ Qualified Archaeologist | Site 7 in FLN NDA | After land resumption prior to preconstruction stage of the proposed Central Park (Area C2-8, Zoning O) | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | Authority under the AM Ordinance. | | | | | |
| S11.6.1 | CH4 | <u>Undertaking Induction Training</u> Induction training should be provided to the construction Contractor before the commencement of the excavation works in Spots A, D, F to H. An induction will be conducted as part of the environmental health and safety induction programme to all site staff before they are deployed on site. The induction will include an introduction on the historical development of the Site, the possible archaeological remains that may be encountered during ground excavation works as well as the reporting procedures in case suspected archaeological remains are identified. A set of the presentation material (in the form of power point presentation) with content details will be prepared by an archaeologist and submitted to AMO for reference and record purpose. The first induction briefing will be video recorded and it will be used as induction briefing material for new site staff. | To preserve the archaeological resources as far as possible | Project Proponent/ Contractor/ Qualified Archaeologist | Spots A, D, F to H | Before the commencement of the excavation works and before site staff are deployed on site | N/A |
| S11.6.1 | CH5 | <u>Undertaking Archaeological Impact Assessment before Construction at A1</u> It is recommended that an Archaeological Impact Assessment to be conducted in the impacted area in Area B1-8 and B1-9 at A1 (Sheung | To define the precise archaeological deposits extent and to preserve the archaeological resources as | Project Proponent/ Contractor/ Qualified | Area B1-8 and B1-9 zoned as R4 and R3 in A1 | After land resumption but before construction | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | Shui Wa Shan Site of Archaeological Interest) after land resumption and before construction when detail construction work information is available to determine the need for further archaeological follow up actions. | far as possible | Archaeologist | | | |
| S11.6.1 | CH6 | <u>Undertaking Archaeological Impact Assessment before Construction within A1 but except Area B1-8 and B1-9</u> Should there be any development work within the Sheung Shui Wa Shan Site of Archaeological Interest, it is recommended that an Archaeological Impact Assessment is required after land resumption and before construction when detail construction work information is available to determine the need for further archaeological follow up actions. | To define the precise archaeological deposits extent and to preserve the archaeological resources as far as possible. | Project Proponent/ Contractor/ Qualified Archaeologist | Area within A1 except Area B1-8 and B1-9 in R4 &R3 zoning | After land resumption but before construction | N/A |
| S11.6.2 | CH7 | <u>Undertaking baseline condition survey and baseline vibration impact assessment</u> In case any potential vibration impact on any nearby built heritage features are identified during the pre-construction stage of the Project, prior to commencement of construction works, a baseline condition survey and baseline vibration impact assessment should be conducted by a qualified building surveyor or a qualified structural engineer to define the vibration limit (a vibration limit at 7.5mm/s could be adopted for graded historic buildings) and to evaluate if construction vibration monitoring and structural strengthening measures are required during | To minimize the vibration impacts during preconstruction stage on any identified potential vibration impacted built heritage features | Project Proponent/ Contractor | G303 and G308 | Preconstruction stage before commencement of construction works during Schedule 3 study | N/A |

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| | | construction phase so as to ensure the construction performance meets with the vibration standard stated in the EIA report. The condition survey of graded historic building should be submitted to AMO for information. | | | | | |
| S11.6.2 | CH8 | <u>Undertaking baseline condition survey and baseline vibration impact assessment</u> In case any potential vibration impact on any nearby built heritage features are identified during the pre-construction stage of the Project, prior to commencement of construction works, a baseline condition survey and baseline vibration impact assessment should be conducted by a qualified building surveyor or a qualified structural engineer to define the vibration limit (a vibration limit at 7.5mm/s and 15mm/s could be adopted for graded historic buildings and historic buildings respectively) and to evaluate if construction vibration monitoring and structural strengthening measures are required during construction phase so as to ensure the construction performance meets with the vibration standard stated in the EIA report. The condition survey of graded historic building should be submitted to AMO for information. | To minimize the vibration impacts during preconstruction stage on any identified potential vibration impacted built heritage features | Project Proponent/ Contractor | KT57, FL05, FL18, and FL2 | Preconstruction stage before commencement of construction works | N/A |
| S11.6.2 | CH9 | <u>Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages</u> Prior to removal/relocation of the directly impacted historical buildings and cultural/historical landscape features, photographic and cartographic | To preserve the directly impacted sites by record prior to their removal / relocation | Project Proponent/ Contractor | Ancillary structures of G303, HKT01, HKT02, Entrance | Prior to Removal / Relocation of features before commencement of construction | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | records should be conducted to preserve them by record. Liaison with and obtaining agreement from the descendants of these features will be carried out the Project Proponent. | | | Gate of HKT03, HKT04, KT01 to KT10, KT13, KT36, KT39, KT40, KT41, KT43, KT45, KT47, KT50, KT54, KT62 to KT63, KT69, FL01, FL16, and FL35 | works during Schedule 3 study | |
| S11.6.2 | CH10 | <u>Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages</u> Prior to removal/relocation of the directly impacted historical buildings and cultural/historical landscape features, photographic and cartographic records should be conducted to preserve them by record. Liaison with and obtaining agreement from the descendants of these features will be carried out by the Project Proponent. | To preserve the directly impacted sites by record prior to their removal / relocation | Project Proponent/ Contractor | KT12 and KT61 | Prior to Removal / Relocation of features before commencement of construction works | N/A |
| S11.6.2 | CH11 | Relocation of Built Heritages Relocation of built heritages to a reasonable location nearby may be required. | To preserve the directly impacted sites by relocation | Project Proponent/ Contractor | HKT01, HKT02, Entrance Gate of HKT03 | After the photographic and cartographic records and before commencement of | N/A |

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| | | | | | | construction works | |
| S11.6.2 | CH12 | Drainage System and Access Route Design For the retained built heritage items in developable area, drainage system and access route would be designed to prevent the persevered flooding and maintain the accessibility to the built heritage. | To prevent the persevered flooding and maintain the accessibility to the built heritage | Contractor /Detailed Design consultant | The retained built heritage items | Pre-construction phase | N/A |
| Cultural Heritage (Construction Phase) | | | | | | | |
| S11.6.1 | CH13 | <u>Inform Upon Archaeological Discovery</u> Pursuant to the Antiquities and Monuments Ordinance, the construction Contractor should inform the AMO immediately in case of discovery of antiquities or supposed antiquities in the course of excavation works in construction phase. | Special attention should be given to areas evaluated to have archaeological potential or significance. | Contractor | All soil excavation works | Immediately upon discovery during excavation works | N/A |
| S11.6.2 | CH14 | <u>Watertable Monitoring</u> Since the construction works and development activities may induce change in the watertable. It is recommended the Contractor should ensure that the change of watertable induced by the construction works and development activities will not result in settlement of built heritage. | To minimize the potential impacts to the built heritage items by the change of watertable induced by the works during the Construction phase | Contractor | Within NDAs | Construction phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| S11.6.2 | CH15 | <u>Conducting Construction Vibration Monitoring and Structural Strengthening Measures</u> Construction vibration monitoring and structural strengthening measures should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report. | To minimize the potential impacts during Construction phase on any identified potential vibration impacted built heritage features | Contractor | Identified potential vibration impacted built heritage features | Construction phase, with details specified in baseline condition survey and baseline vibration impact assessment | ^ |
| <i>Landscape and Visual Impact (Detailed Design, Prior to Construction, Construction and Operation Phases)</i> | | | | | | | |
| S.12.9 | LV1 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | Detailed design consultant/ Contractor | Throughout NDAs, | Prior to Construction, Construction & for all planting, this should be installed as the areas become available, to achieve early establishment | N/A |

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| S.12.9 MM1 | LV2 | Minimum Topographical Change –To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside setting. | Reduce topographical changes and minimize land resumption | Government / Detailed Design Consultant/ Contractor | Throughout NDAs, particularly for reservoirs | Prior to Construction | N/A |
| S.12.9 MM2 | LV3 | Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow the Sustainable Building Design Guidelines. The form, textures, finishes and colours of the proposed development components should aim to be compatible with the existing surroundings. To improve visual amenity designs should be aesthetically pleasing and treatment of structures also improve visual amenity. For example, natural building materials such as stone and timber, should be considered for architectural features, and | Improve visual amenity of the new buildings, NDAs in general and integrate as best possible into the surrounding landscape | Detailed Design Consultant | Throughout NDAs | Prior to Construction | N/A |

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| | | light earthy tone colours such as shades of green, shades of grey, shades of brown and off-white should also be considered to reduce the visibility of the development components, including all roadwork, buildings and noise barriers. In addition, the design of structures should consider green roofs were feasible, following stated guidelines. All Noise barriers, particularly noise barriers but also any barriers proposed for ecological impact mitigation, should be kept to a practical minimum, and be of such a designed as to integrate as well as possible into the surrounding visual context and be as low as practical to minimize blocking views. Noise barrier design, including vertical, cantilever or curved, and noise enclosures including semi-enclosure and full enclosure, at grade and/ or elevated, should follow the guidelines stated. Construction time frame should also be considered and designs seek to keep it to a practical minimum. | | | | | |
| S12.9 MM14.4 | LV 4 | Avoid affecting Watercourses – In the detailed design, consideration should be made of watercourses, to minimize any impacts e.g. at new bridge crossings, viaducts, road alignment etc. Guidelines stated should be followed. For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of the stream is located underneath the viaduct for the proposed Fanling Bypass. In order to avoid impacts to the stream, the detailed | Avoid direct impacts to watercourses | Detailed Design Consultant/ Contractor | All watercourses, particularly the stream at Siu Hang San Tsuen that will flow under the Fanling Bypass Eastern | Prior to Construction and Construction Phase | ^ |

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| | | final design of the viaduct should follow guidelines and ensure that no viaduct footings or other structures are placed in the stream. Bridges and box culverts should also be used to minimize the necessity of watercourse modification and protect the watercourses where necessary. | | | Section | | |
| Landscape and Visual (Construction) | | | | | | | |
| S.12.9 MM3 | LV5 | Open Space Provision - the principles adopted in the RODP planning ensure that public open space systems are incorporated. All requirements for open space areas stipulated in the planning documents for the formulation of the Preliminary Layout Plan should be adhered to. | Reprovision of open space. Enhance visual amenity of the area and improve the overall landscape character | Government Developer/ Detailed Design Consultant/ Contractor/ | Onsite as stipulated in the planning documents for the formulation of the Preliminary Layout Plan | Prior to Construction and Construction Phas | N/A |
| S.12.9 MM4 | LV6 | Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. | Protect and Preserve Trees | Government / Detailed Design Consultant/ Contractor | Onsite | Prior to Construction and Construction Phase | N/A |

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| | | A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained | | | | | |
| S.12.9 MM5 | LV7 | <p>Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible.</p> <p>A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.</p> <p>A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work.</p> <p>For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted,</p> | Transplant Trees where suitable for transplantation | Government / Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be referred to. | | | | | |
| S.12.9 MM6 | LV8 | <p>Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/or shrubs should be planted where slope gradient and site conditions allow.</p> <p>In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.</p> | <p>To avoid substantial slope cutting and fill slopes.</p> <p>To prevent erosion and subsequent loss of landscape resources and character.</p> <p>To ensure man-made slopes are as visually amenable as possible.</p> | Government / Detailed Design Consultant/ Contractor | Onsite | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.9 MM7 | LV9 | <p>Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006.</p> <p>Compensatory planting is proposed at the potential open areas such as</p> | Compensate for trees and shrubs lost due to the Project. | Government / Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots. Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i> , <i>Diospyros vaccinioides</i> , <i>Gardenia jasminoides</i> , <i>Ixora chinensis</i> , <i>Ligustrum sinense</i> , <i>Litsea rotundifolia</i> , <i>Melastoma dodecandrum</i> , <i>Atalantia buxifolia</i> , <i>Rhodomyrtus tomentosa</i> , <i>Raphiolepis indica</i> , and <i>Rhododendron simsii</i> are suggested. | | | | | |
| S.12.9 MM8 | LV10 | Woodland Compensatory Planting – Specific Woodland compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate | | | | | N/A |

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| | | <p>locations, including <i>Ailanthus fordii</i>, <i>Bischofia javanica</i>, <i>Castanopsis fissa</i>, <i>Celtis sinensis</i>, <i>Cinnamomum burmannii</i>, <i>Cinnamomum camphora</i>, <i>Xanthoxylum avicennae</i>, <i>Hibiscus tiliaceus</i>, <i>Liquidambar formosana</i>, <i>Sapium discolor</i>, <i>Schefflera heptaphylla</i> and <i>Ilex rotunda</i>.</p> <p>In addition some understory vegetation may be planted including shrubs such as <i>Atalantia buxifolia</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma malabathricum</i>, <i>Melastoma dodecandrum</i>, <i>Rhodomyrtus tomentosa</i>, <i>Rhaphiolepis indica</i>, and <i>Rhododendron simsii</i>.</p> <p>The area allocated for compensatory woodland planting allows in part for the fact that it will take some time for the compensatory planting to achieve the landscape and ecological function and value of the area to be lost. In addition, it allows for the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs which would be inappropriate for further planting.</p> | | | | | |

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| S.12.9 MM9 | LV11 | Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. building edges, piers). | Soften hard surfaces and facilities | Government / Developer/ Detailed Design Consultant/ Contractor | On appropriate structures | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.9 MM10 | LV12 | Green Roof – Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable. | Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels. Provide greening. | Government / Developer/ Detailed Design Consultant/ Contractor | On appropriate buildings | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.9 MM11 | LV13 | Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting. | To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Government / Detailed Design Consultant/ Contractor | Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures. | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| S.12.9 MM12 | LV14 | <p>Road Greening –For viaducts, soft landscaping should be provided to soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural forms and textural finishes which improve aesthetics.</p> <p>For at grade roads, planting should be considered along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, is considered part of Screen Planting)</p> | To soften the hard, straight edges and provide greening along roads. | Government / Developer/ Detailed Design Consultant/ Contractor | On viaducts or along roads | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.9 MM13 & EIA Annex 13 | LV15 | <p>Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance on- wetland areas within the LVNP. (See E4,E15 and E25 also)</p> <p>Also see LV16, LV17, and LV18 as wetland planting should be provided along the embankments and beds of modified/ reprovisioned watercourses.</p> | Compensate for Marsh/ Wetland lost due to the Project. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| S.12.9 MM14.1 | LV16 | <p>Reprovision of Natural Stream – Where natural streams are unavoidably affected along some of their length, they can be diverted to avoid the proposed new developments and retain the integrity of the whole stream. Detailed design of any stream diversion should follow the Guidelines in ETWB Technical Circular (Works) No. 5/2005 (Protection of natural streams/rivers from adverse impacts arising from construction works) and appropriate construction methods should be used.</p> <p>Two short stretches of the Ma Tso Lung Stream will be affected by Project in the KTN NDA; by the LMC Eastern Connection Road on the western border of Site F1-3 and further upstream by Site E-2.</p> <p>At both these locations, the stream will be reprovisioned and maintain the flow between unaffected sections of the stream. The reprovisioned stream will be provided with a natural bed and banks, as well as having an area of marsh/ pool next to it and trees and shrubs further from the banks. (See E2, E14 and E24 also)</p> | Achieve a natural stream, similar to existing, including wetland planting provision for embankments | Government / Developer/ Detailed Design Consultant/ Contractor | Streams and channelized watercourses e.g. a Ma Tso Lung and Siu Han San Tsuen | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S12.9 MM14.2 | LV17 | Stream Buffer Planting –Providing a minimum 10 m buffer with planting (where there is a general presumption against any development taking place) along streams where they flow close to developments, confers a degree of protection to the stream course and its associated vegetation. | Protect natural streams | Government / Developer/ Detailed Design Consultant/ Contractor | Streams and channelized watercourses e.g. a Ma Tso Lung and Siu Han | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | <p>For the stream at Ma Tso Lung in KTN NDA, the middle and upper sections will be designated as Green Belt zone where there is a general presumption against development as buffer to the stream.</p> <p>For the stream at Siu Hang San Tsuen in FLN NDA, within the NDA boundary much of the stream would be located underneath the viaduct for the proposed Fanling Bypass. To the south of the viaduct the stream flows through an Open Space area D1-3. In this Open Space zone a 10m buffer is proposed in which natural vegetation will be retained and enhanced and human activities will be limited in order to avoid direct impacts to the stream bed and to minimize potential indirect impacts to the stream and riparian corridor. (See E3 also)</p> | | | San Tsuen | | |
| S12.9 MM14.3 | LV18 | Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary maintenance work can be carried out and that the channel meets all its requirements for water flow, etc. | Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses | Government / Developer/ Detailed Design Consultant/ Contractor | Channelized watercourse, particularly the Ma Wat River Channel Diversion | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | For example, a stretch of the Ma Wat River Channel in the south of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. | | | | | |
| S12.9 MM15 | LV19 | <p>Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs.</p> <p>All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to.</p> | Reprovision for ponds lost due to the Project. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA | Prior to Construction, Construction Phase Maintenance in Operation Phase | N/A |
| S.12.9 MM16 | LV20 | <p>Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non- reflective, recessive colours be used.</p> <p>Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report).</p> | To screen undesirable views of the works site. | Contractor | Throughout NDAs | Construction Phase | ^ |

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| S.12.9 MM17 | LV21 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | To minimize glare impact to adjacent VSRs | Government / Developer/ Contractor | Throughout NDAs | Construction and Operation Phases | N/A |
| Ecology (Prior to Construction Phase or throughout the project) | | | | | | | |
| S. 13.9 | E1 | Egretry Habitat Creation & Management Plan (EHCMP) and Woodland Planting and Management Plan (WPMP) | Compensate for loss of Man Kam To Road egretry. Compensate for loss of secondary woodland and hillside plantation of ecological significance. | Project Proponent/ Detailed Design Consultant (EHCMP and WPMP). | FLN area A1-7 (egretry compensation). KTN areas E1-8 and G1-3 (woodland compensation). | Detailed design phase | N/A |

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| S. 13.9 | E2 | Detailed design of development along lower reaches of Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream in OU zones F1-2 and F1-3 and detailed design of LMC Loop Eastern Connection Road with restoration of diverted stream and riparian corridor, permanent barrier and underpass on the at-grade section Compensation for the loss of seasonally wet grassland at Ma Tso Lung by habitat restoration and enhancement along diverted section of Ma Tso Lung Stream | Minimize impacts on Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream and riparian corridor of importance to species of conservation significance. | Project Proponent/ Detailed Design Consultant. (design of Ma Tso Lung Stream diversion and buffer zone habitat restoration measures) | KTN areas F1-2 and F1-3 and LMC Loop Eastern Connection Road. | Detailed design and construction phases. | N/A |
| S13.9 | E3 | Detailed design, implementation and management of Siu Hang San Tsuen Stream to have 10m wide vegetated buffer in Open Space zone D1-3, Fanling Bypass to cross stream on viaduct. | Minimize impacts on Siu Hang San Tsuen Stream and stream fauna. | PlanD, Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | FLN area D1-3. | Detailed design, construction and operation phases. | N/A |
| S.13.9 | E4 | Long Valley Nature Park (LVNP) designation, design and implementation. | Compensate for wetland loss arising from the project and protection of | Project Proponent/ Detailed Design | Long Valley KTN area C1-9 and any suitable areas to | Detailed design phase | N/A |

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| | | Enhancement of non-wetland habitats in LVNP. Planning for the advanced provision of alternative foraging habitat along main river channels for large waterbirds. | Long Valley from adverse ecological impacts including provision of additional/alternative habitat for large waterbirds using Ng Tung, Sheung Yue and Shek Sheung River channels. | Consultant (Long Valley Nature Park Habitat Creation & Management Plan) | be identified during the planning stage | | |
| S13.9 | E5 | Stringent planning control requirements in Long Valley north and west of Sheung Yue River, including Ho Sheung Heung egrettry. | Protect these wetland areas from indirect impacts to habitats and fauna especially breeding ardeids foraging in these areas and utilizing flight-lines from Ho Sheung Heung egrettry. Avoid habitat loss and disturbance to fauna of conservation significance, especially nesting ardeids Maintenance of ecological linkages with Deep Bay ecosystem and avoidance | PlanD. | KTN areas C2-1 and C2-2 , Ho Sheung Heung egrettry and areas north of Long Valley along the Ng Tung River to the Shenzhen River | Detailed design phase | N/A |

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| | | | of severance of these linkages, especially for waterbirds | | | | |
| S13.9 | E6 | Planning for creation of Green Corridors along the Sheung Yue, Ng Tung and Shek Sheung Rivers, retention and provision of screen plantings where feasible; and detailed design of Open Space areas and development areas along river corridors. | Minimize disturbance to large waterbirds using Ng Tung, Sheung Yue and Shek Sheung River channels. Maintain ecological linkages within NDA Project Area and between Project Area and Deep Bay ecosystem, especially for Long Valley and waterbirds. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | Area along Ng Tung, Sheung Yue and Shek Sheung River | Detailed design, construction and operational phases. | N/A |
| S13.9 | E7 | Building setback and mounding in locations near Long Valley. KTN area B3-12 (30m setback from road D3) and KTN area C1-1 (15m setback and mounding along northern and northeastern boundaries). | Minimization of disturbance impacts to fauna using Long Valley. | PlanD | KTN area B3-12 (30m setback from road D3) and KTN area C1-1 (15m setback and mounding along | Detailed design phase | N/A |

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| | | | | | northern and northeastern boundaries. | | |
| S13.9 | E8 | <p>Preparation and implementation of Guidelines for building design measures to minimize mortality and light and glare impacts to fauna.</p> <p>Guidelines to address the following measures:</p> <p>Use opaque, non-transparent, non-reflective noise barriers for all developments associated with the Project.</p> <p>Measures to include the following:</p> <ul style="list-style-type: none"> Fritting, or the placement of ceramic lines or dots on glass, which creates a visual barrier to birds and reduces air conditioning loads by lowering heat gain, while still allowing light transmission for interior spaces. It is most successful when the frits are applied on the outside surface. Frosted glass has similar effects; Angled glass to be used only for smaller panes in buildings with a limited amount of glass; The use of glass that reflects UV light (primarily visible to birds, but not to humans) to reduce collisions; Film and art treatment allow glass surfaces to be used a medium of expression, often related to the nature and use of the building, as well indicating to birds their impenetrability; | Minimize mortality and disturbance impacts on fauna, especially mammals and birds. | PlanD/ Project Proponent/ Developer/ Detailed Design Consultant | Near Long Valley | Detailed design phase | N/A |

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| | | <ul style="list-style-type: none"> Lightweight external screens can be added to windows or become a façade element of larger buildings, and are suitable where non-operable windows are prevalent, which is often the case in modern buildings in HK | | | | | |
| | E9 | Not used | | | | | N/A |
| S13.8 | E10 | Review development footprint and layout of proposed developments in KTN areas D1-11a and G1-5 to avoid/minimize direct and indirect impacts on secondary woodland at Ho Sheung Heung and shrubland at Crest Hill. | Minimize loss of secondary woodland and shrubland of ecological value. | Project Proponent/Detailed Design Consultant | KTN areas D1-11a and G1-5 to avoid/minimize direct and indirect impacts on secondary woodland at Ho Sheung Heung and Crest Hill | Detailed design phase | N/A |

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| S13.9 | E11 | <p>No construction during ardeid breeding season (1 March to 31 July) along Sheung Yue River north or east of KTN D1-5 and east of D1-9 and C2-3, construction hours restricted to 09.00 to 17.30 during 1 March to 31 July on new pedestrian bridge over the Sheung Yue River, new pedestrian bridge over the tidal section of the Ng Tung River and existing bridge between KTN areas C2-2 and C1-8.</p> <p>Review Design and construction methods for all bridges especially those on the Sheung Yue and tidal Ng Tung Rivers and adopt methods which minimize impacts on Long Valley and the rivers, and disturbance and fragmentation impacts on fauna.</p> <p>No overlap in construction of bridges over main river channels. Measures to ensure no hydrological disruption to Long Valley Watercourse and water supply to Long Valley to be designed at the detailed design stage for the rechannelisation of the Long Valley Watercourse and the development of areas through which it passes, including KTN area B3-12. Contingency plan to address any disruption to be included in LVNP HCMP. Avoid removal or interference with screen planting undertaken under the Construction of Cycle Tracks and Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung project.</p> | Minimize disturbance impacts (including cumulative impacts with cycle track project) to flight-lines of breeding ardeids. | Project Proponent/ Detailed Design Consultant Contractor | Along and within Sheung Yue and Ng Tung Rivers, Long Valley, Long Valley and watercourse upstream areas including KTN area B3-12 | Detailed design/ construction phase. | ^ |
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| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| Ecology (Construction Phase) | | | | | | | |
| S13.9 | E12 | Compensatory egret habitat provision and establishment. Review condition and location of egretries before commencement of works. Formulate and implement additional mitigation measures as appropriate. Phasing of works near and within Man Kam To Road Egret habitat outside breeding season | Compensate for loss of Man Kam To Road egret habitat. Avoid mortality of breeding egrets | Project Proponent/ Detailed Design Consultant/ Contractor | FLN area A1-7 500m from Man Kam To Road Egret habitat. | Construction phase. | ^ |
| S13.9 | E13 | Review design and construction methods for bridges, especially those on the Sheung Yue and tidal Ng Tung Rivers, and adopt measures which minimize impacts on rivers and disturbance and fragmentation impacts on fauna. No construction during ardeid breeding season (1 March to 31 July) along Sheung Yue River north and east of KTN area D1-5 and east of D1-9 and C2-3 and restriction of working hours on new pedestrian bridges over the Sheung Yue River and tidal Ng Tung River to 09.00 to 17.30 during the ardeid breeding season (1 March to 31 July) Provision of alternative foraging habitat along main river channels for large waterbirds. | Minimize impacts on rivers and disturbance and fragmentation impacts on fauna | Project Proponent/ Detailed Design Consultant/ Contractor | Along and within the Sheung Yue, Ng Tung and Shek Sheung Rivers | Detailed design and construction phases. | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| S13.9 | E14 | <p>Buffer zone of 15-30m as appropriate on both sides (not less than 45m total width) of Ma Tso Lung Stream north of the point where it is crossed by the LMC Loop Eastern Connection Road, and Ma Tso Lung Stream diversion during construction of the LMC Loop Eastern Connection Road; development along lower reaches of Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream in OU zones in KTN areas F1-2 and F1-3 to be set back beyond buffer.</p> <p>Construction and maintenance of permanent 1.2m high solid faunal barrier at all at-grade sections of LMC Loop eastern connection Road north of junction with road D4 within 15-30m as appropriate of Ma Tso Lung Stream buffer and construction of faunal underpass beneath road.</p> <p>Compensation for the loss of seasonally wet grassland at Ma Tso Lung by habitat restoration and enhancement along diverted section of Ma Tso Lung Stream.</p> | Minimize impacts direct and indirect impacts of habitat loss, disturbance, pollution and fragmentation on Ma Tso Lung Stream and marsh and riparian corridor of importance to species of conservation significance. | PlanD/ Project Proponent/ Developer/ Detailed Design Consultant/ Contractor. (Design of Ma Tso Lung Stream diversion and buffer zone habitat restoration measures) | KTN areas H1-1, F12 and F1-3 and Lok Ma Chau Loop Eastern Connection Road. | Detailed design and construction phases. | N/A |

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| S.13.9 | E15 | Creation and enhancement of proposed Long Valley Nature Park and creation and enhancement of wetland and buffer planting within LVNP. | Compensate for wetland loss arising from the project | Project Proponent/ Contractor (LVNP Detailed Habitat Creation & Management Plan) | Long Valley, (KTN area C1-9). | Construction phase. | ^ |
| S13.9 | E16 | Creation of Green Corridors along the Sheung Yue, Ng Tung and Shek Sheung Rivers, retention and provision of screen plantings where feasible; provision of Open Space areas and development areas along river corridors; Design and erection of 2m high solid dull green site barrier fence between river channel and any active works area along or adjacent to Ng Tung, Sheung Yue and Shek Sheung Rivers. Ng Tung, Sheung Yue and Shek Sheung Rivers screen planting. | Minimize disturbance to waterbirds using Ng Tung, Sheung Yue and Shek Sheung River channels. | Detailed Design Consultant/ Contractor | Ng Tung, Sheung Yue and Shek Sheung Rivers | Detailed design and Construction phases. | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| S13.9 | E17 | <p>Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance on edge of development areas, including along any roads adjacent to or penetrating into areas/habitats of ecological importance.</p> <p>Erection of a 2m high dull green site barrier fence at the edge of the works area or 30m from Ma Tso Lung Stream and tributaries, whichever distance is the greater.</p> | <p>Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. Measures to minimize flight- line impacts to birds, especially breeding ardeids.</p> | Contractor | <p>Interface between areas/habitats/ fauna/ flora of ecological importance (e.g. KTN areas B1-3, C1-5, C1- 6, C1-9, C2-2, C2-4, C2-5, D1-8, E1-8, G1-3, H1-1, Ma Tso Lung Stream and tributaries; FLN areas A1-3, A1-7 and A1-9) and works areas; and around any works areas north of the Fanling Bypass and north of the Ng Tung River west of the western terminus</p> | Construction phase. | ^ |

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| | | | | | of the Fanling Bypass. Riparian corridor of Ma Tso Lung Stream and tributaries. | | |
| S13.9 | E18 | Compensatory woodland planting, management and maintenance. | Compensate for loss of secondary woodland and hillside plantation of ecological significance. | Project Proponent/ Contractor | KTN areas E1-8 and G1-3. | Construction phase. | N/A |
| S13.9 | E19 | Use opaque, non-transparent, non-reflective noise barriers for all construction sites. Unnecessary lighting should be avoided. | Minimize mortality impacts on birds. | Contractor | All construction sites | Construction phase. | ^ |
| S13.9 | E20 | Pre-site clearance check for presence of flora or fauna of conservation significance and bat roosts. If any are found, measures should be proposed and implemented to avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works, transplantation and translocation. Seek agreement of relevant authorities including AFCD in respect of proposed measures, then implement. | Minimize impacts to flora and fauna of conservation significance. Minimize impacts to protected fauna and flora species. Formulate and implement mitigation measures to | Government/ Developer/ Contractor/ Ecologist | All construction sites. | Prior to clearance of vegetation and structures. | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>Pre-site clearance check on all construction sites and pre –works commencement check on watercourses to be physically and/or hydrologically impacted by construction activities for presence of protected plant species/specimens of conservation significance. If any are found consider adjustments to avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works,</p> <p>Pre-site clearance of construction sites in Crest Hill area, KTN areas D1-7, D1-11 and G1-5 (where Eurasian Hobby was recorded) and on Cheung Po Tau, FLN area A3-1 (where Grey Nightjar was recorded) for presence of any breeding birds/breeding sites. If any are found consider adjustments to avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works, translocation and translocation.</p> <p>Seek agreement of relevant authorities including AFCD in respect of proposed measures, then implement.</p> <p>Pre-site clearance check on all construction sites for presence of Chinese Bullfrog, translocation to suitable areas including LVNP.</p> | <p>avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works, translocation and translocation.</p> | | | | |
| S13.9 | E21 | Pre-works commencement check on watercourses to be physically and/or hydrologically impacted by construction activities for presence of flora or fauna of conservation significance and bat roosts. If any are found consider adjustments to avoid, minimize and/or compensate for impacts; including adjustments to design, timing of works, translocation and | Minimize impacts to flora and fauna of conservation significance. Minimize impacts to protected fauna and flora species. Consider | Government/ Developer/ Contractor/ Ecologist | All construction sites. | Prior to clearance of vegetation and structures. | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>translocation. Seek agreement of relevant authorities including AFCD in respect of proposed measures, then implement.</p> <p>Pre-site clearance check on all construction sites for presence of reptile species of conservation significance, capture and translocate to receptor site; review translocation options in respect to species in Ma Tso Lung area and determine whether release locally or elsewhere is appropriate. Seek agreement of relevant authorities including AFCD in respect of proposed measures then implement</p> <p>Pre-works commencement check on watercourses to be physically and/or hydrologically impacted by construction activities for presence of Small Snakehead and <i>Somaniathelphusa zanklon</i>. Capture any <i>Somaniathelphusa zanklon</i> found and translocate to Ma Tso Lung Stream/ other suitable areas including LVNP</p> | <p>and implement adjustments to avoid, minimize or compensate for impacts; including adjustments to design, timing of works, transplantation and translocation</p> | | | | |
| S13.9 | E22 | Prevention of dust, run-off and pollutants impacting Deep Bay catchment area and areas of ecological importance. | Avoid increase to pollution entering ecologically sensitive Deep Bay ecosystem. | Contractor | All construction sites. | Construction | N/A |
| Specific Mitigation Measures for Designated Projects | | | | | | | |
| DP2- Castle Peak Road Diversion (Major Improvement) | | | | | | | |
| Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) | | | | | | | |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| S.12.A9 | LV1-DP2 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | Detailed Design Consultant/ Contractor | Throughout NDAs, | Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become available, to achieve early establishment | N/A |
| S.12.A9 MM14.4 | LV4-DP2 | Avoid affecting Watercourses – In the detailed design, consideration should be made of watercourses, to minimize any impacts e.g. at new bridge crossings, viaducts, road alignment etc. Guidelines stated should be followed. For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of the stream is located underneath the viaduct for the proposed Fanling Bypass. In order to avoid impacts to the stream, the detailed final design of the viaduct should follow guidelines and ensure that no viaduct footings or other structures are placed in the stream. Bridges and box culverts should also be used to minimize the necessity of watercourse modification and protect the watercourses where necessary. | Avoid direct impacts to watercourses | Detailed Design Consultant/ Contractor | All watercourses, particularly the stream at Siu Hang San Tsuen that will flow under the Fanling Bypass Eastern Section | Prior to Construction and Construction Phase | N/A |
| S.12.A9 MM4 | LV5-DP2 | Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction. | Protect and Preserve Trees | Government/ Detailed | Onsite | Prior to Construction | * |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas.</p> <p>A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.</p> | | Design Consultant/ Contractor | | and Construction Phase | |
| S.12.A9 MM5 | LV6- DP2 | <p>Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work.</p> | Transplant Trees where suitable for transplantation | Government Detailed Design Consultant/ Contractor | <i>Onsite where possible, otherwise consider offsite locations</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit" should be referred to. | | | | | |
| S.12.A9 MM6 | LV7- DP2 | Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes. | To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible. | Government Detailed Design Consultant/ Contractor | <i>Onsite</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM8 | LV9- DP2 | Woodland Compensatory Planting – Specific Woodland compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. | Reprovide areas of woodland to compensate for those areas of quality woodland lost. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | <i>In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | <p>The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also).</p> <p>Native tree species are suggested for planting in the appropriate locations, including <i>Ailanthus fordii</i>, <i>Bischofia javanica</i>, <i>Castanopsis fissa</i>, <i>Celtis sinensis</i>, <i>Cinnamomum burmannii</i>, <i>Cinnamomum camphora</i>, <i>Xanthoxylum avicennae</i>, <i>Hibiscus tiliaceus</i>, <i>Liquidambar formosana</i>, <i>Sapium discolor</i>, <i>Schefflera heptaphylla</i> and <i>Ilex rotunda</i>. In addition some understory vegetation may be planted including shrubs such as <i>Atalantia buxifolia</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma malabathricum</i>, <i>Melastoma dodecandrum</i>, <i>Rhodomyrtus tomentosa</i>, <i>Rhaphiolepis indica</i>, and <i>Rhododendron simsii</i>.</p> <p>The area allocated for compensatory woodland planting allows in part for the fact that it will take some time for the compensatory planting to achieve the landscape and ecological function and value of the area to be lost. In addition, it allows for the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs which would be inappropriate for further planting.</p> | | | | | |
| S.12.A9 | LV10- | Vertical Greening – Planting of climbers to grow up vertical surfaces were | Soften hard surfaces and | Government | <i>On appropriate</i> | Prior to | N/A |

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| MM9 | DP2 | appropriate (e.g. viaduct piers, noise barriers). | facilities | Detailed Design Consultant/ Contractor | <i>structures</i> | Construction, Construction Phase & Maintenance in Operation Phase | |
| S.12.A9 MM11 | LV11- DP2 | Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting. | To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Government Detailed Design Consultant/ Contractor | <i>Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM12 | LV12- DP2 | Road Greening –For viaducts, soft landscaping should be provided to soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural | To soften the hard, straight edges and provide greening along roads. | Government Detailed Design Consultant/ Contractor | <i>On viaducts or along roads.</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | forms and textural finishes which improve aesthetics. For at grade roads, planting should be considered along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, is considered part of Screen Planting) | | | | | |
| S.12.A9 MM13 & EIA Annex 13 | LV13- DP2 | Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance onwetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided along the embankments and beds of modified/ reprovisioned watercourses. | Compensate for Marsh/ Wetland lost due to the Project. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | <i>Onsite where possible. Otherwise consider offsite locations</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM14.3 | LV14- DP2 | Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary | Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses | Government / Detailed Design Consultant/ Contractor | <i>Channelized watercourse, particularly the Ma Wat River Channel Diversion</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | <p>maintenance work can be carried out and that the channel meets all its requirements for water flow, etc.</p> <p>For example, a stretch of the Ma Wat River Channel in the south of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area.</p> | | | | | |
| S.12.A9 MM15 | LV15- DP2 | <p>Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs.</p> <p>All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to.</p> | <p>Reprovision for ponds lost due to the Project.</p> | <p>Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority</p> | <p><i>E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA</i></p> | <p>Prior to Construction, Construction Phase Maintenance in Operation Phase</p> | N/A |
| Landscape and Visual (Construction) | | | | | | | |
| S.12.A9 MM16 | LV16- DP2 | <p>Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, nonreflective, recessive colours be used.</p> <p>Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report).</p> | <p>To screen undesirable views of the works site.</p> | Contractor | <p><i>Throughout NDAs</i></p> | <p>Construction Phase</p> | ^ |

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| S.12.A9 MM17 | LV17-DP2 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | To minimize glare impact to adjacent VSRs | Government / Contractor | Throughout NDAs | Construction and Operation Phases | ^ |
| Ecology (Detailed Design, Construction and Operational Phases) | | | | | | | |
| S13.9 | E2-DP2 | Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided. | Minimize mortality impacts on birds. | Detailed Design Consultant/ Contractor/ Maintenance Authority | Within NDA. | Detailed design phase, Construction phase and Operation phase. | ^ |
| Ecology (Construction Phase) | | | | | | | |
| S.13.9 | E3-DP2 | Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance. | Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. | Contractor. | Interface between areas/habitats of ecological importance (KTN area B1-3) and works areas. | Construction phase. | ^ |
| S13.9 | E4-DP2 | Compensatory native woodland planting. | Compensate for loss of | Project | KTN NDA areas | Construction | N/A |

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| | | | plantation of ecological significance. | Proponent / Contractor | E1-8 and G1-3. | phase. | |
| Cultural Heritage (Construction Phase) | | | | | | | |
| S11.6.2 | CH5-DP2 | Conducting Construction Vibration Monitoring and Structural Strengthening Measures Construction vibration monitoring and structural strengthening measures should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report. | To minimize the potential impacts during Construction phase on any identified potential vibration impacted built heritage features | Project Proponent/ Contractor | Identified potential vibration impacted built heritage features | Construction phase, with details specified in baseline condition survey and baseline vibration impact assessment, | N/A |
| DP3- KTN NDA Road P1 and P2 (New Road) and associated new Kwu Tung Interchange (New Road) and Pak Shek Au Interchange Improvement (Major Improvement) | | | | | | | |
| Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) | | | | | | | |
| S.12.A9 | LV1-DP3 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | Detailed Design Consultant/ Contractor | Throughout NDAs, | Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become available, to achieve early establishment | ^ |
| S.12.A9 | LV4- | Avoid affecting Watercourses – In the detailed design, consideration should | Avoid direct impacts to | Detailed | All watercourses, | Prior to Construction | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------------|--------------|--|--|--|--|--|-----------------------|
| MM14.4 | DP3 | <p>be made of watercourses, to minimize any impacts e.g. at new bridge crossings, viaducts, road alignment etc.</p> <p>Guidelines stated should be followed.</p> <p>For example, for the stream at Siu Hang San Tsuen in FLN NDA, much of the stream is located underneath the viaduct for the proposed Fanling Bypass.</p> <p>In order to avoid impacts to the stream, the detailed final design of the viaduct should follow guidelines and ensure that no viaduct footings or other structures are placed in the stream.</p> <p>Bridges and box culverts should also be used to minimize the necessity of watercourse modification and protect the watercourses where necessary.</p> | watercourses | Design Consultant/ Contractor | <i>particularly the stream at Siu Hang San Tsuen that will flow under the Fanling Bypass Eastern Section</i> | And Construction Phase | |
| S.12.A9 MM4 | LV5- DP3 | <p>Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction.</p> <p>In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas.</p> <p>A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will</p> | Protect and Preserve Trees | Government Detailed Design Consultant/ Contractor | <i>Onsite</i> | Prior to Construction and Construction Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------------|--------------|---|--|--|---|--|-----------------------|
| | | propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained. | | | | | |
| S.12.A9 MM5 | LV6- DP3 | <p>Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.</p> <p>A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work.</p> <p>For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 „Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit“ should be referred to.</p> | Transplant Trees where suitable for transplantation | Government Detailed Design Consultant/ Contractor | <i>Onsite where possible. Otherwise consider offsite locations.</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM6 | LV7- DP3 | <p>Slope Landscaping – Site formation should be reduced as far as possible.</p> <p>Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where</p> | <p>To avoid substantial slope cutting and fill slopes.</p> <p>To prevent erosion and</p> | Government Detailed Design Consultant/ | <i>Onsite</i> | Prior to Construction, Construction Phase & | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------------|--------------|---|---|--|--|--|-----------------------|
| | | <p>slope gradient and site conditions allow.</p> <p>In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.</p> | <p>subsequent loss of landscape resources and character.</p> <p>To ensure man-made slopes are as visually amenable as possible.</p> | Contractor | | Maintenance in Operation Phase | |
| S.12.A9 MM7 | LV8-DP3 | <p>Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensate orytrees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006.</p> <p>Compensatory planting is proposed at the potential open areas such as open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots. Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma dodecandrum</i>, <i>Atalantia buxifolia</i>, <i>Rhodomyrtus tomentosa</i>, <i>Rhaphiolepis indica</i>, and <i>Rhododendron simsii</i> are suggested.</p> | Compensate for trees and shrubs lost due to the Project. | Government Detailed Design Consultant/ Contractor | <i>Onsite where possible.</i> <i>Otherwise consider offsite locations</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 | LV9- | Woodland Compensatory Planting –Specific Woodland compensatory | Reprovide areas of | Project | <i>In areas</i> | Prior to | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|----------|--------------|--|--|--|---|--|-----------------------|
| MM8 | DP3 | <p>planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA.</p> <p>The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including <i>Ailanthus fordii</i>, <i>Bischofia javanica</i>, <i>Castanopsis fissa</i>, <i>Celtis sinensis</i>, <i>Cinnamomum burmannii</i>, <i>Cinnamomum camphora</i>, <i>Xanthoxylum avicennae</i>, <i>Hibiscus tiliaceus</i>, <i>Liquidambar formosana</i>, <i>Sapium discolor</i>, <i>Schefflera heptaphylla</i> and <i>Ilex rotunda</i>. In addition some understory vegetation may be planted including shrubs such as <i>Atalantia buxifolia</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma malabathricum</i>, <i>Melastoma dodecandrum</i>, <i>Rhodomyrtus tomentosa</i>, <i>Raphiolepis indica</i>, and <i>Rhododendron simsii</i>. The area allocated for compensatory woodland planting allows in part for the fact that it will take some time for the compensatory planting to achieve the landscape and ecological function and value of the area to be lost. In addition, it allows for</p> | woodland to compensate for those areas of quality woodland lost. | Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | <i>identified in the EIA Landscape Mitigation Plans and as agreed with AFCD</i> | Construction, Construction Phase & Maintenance in Operation Phase | |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|-----------------|--------------|--|--|--|---|---|-----------------------|
| | | the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs which would be inappropriate for further planting. | | | | | |
| S.12.A9 MM9 | LV10- DP3 | Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers). | Soften hard surfaces and facilities | Government Detailed Design Consultant/ Contractor | <i>On appropriate structures</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM11 | LV11- DP3 | Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting. | To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Government Detailed Design Consultant/ Contractor | <i>Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 | LV12- | Road Greening –For viaducts, soft landscaping should be provided to soften | To soften the hard, | Government | <i>On viaducts or</i> | Prior to | N/A |

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|------------------------------------|--------------|---|--|---|--|--|-----------------------|
| MM12 | DP3 | the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural forms and textural finishes which improve aesthetics. For at grade roads, planting should be considered along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, is considered part of Screen Planting) | straight edges and provide greening along roads. | Detailed Design Consultant/ Contractor | <i>along roads.</i> | Construction, Construction Phase & Maintenance in Operation Phase | |
| S.12.A9 MM13 EIA Annex 13 | LV13- DP3 | Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance onwetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided along the embankments and beds of modified/ reprovisioned watercourses. | Compensate for Marsh/ Wetland lost due to the Project. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | <i>Onsite where possible. Otherwise consider offsite locations</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM14.3 | LV14- DP3 | Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel | Minimize the necessity of watercourse modification, | Government / Detailed Design | <i>Channelized watercourse, particularly the</i> | Prior to Construction, Construction | N/A |

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|--|--------------|--|--|---|---|--|-----------------------|
| | | Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary maintenance work can be carried out and that the channel meets all its requirements for water flow, etc. For example, a stretch of the Ma Wat River Channel in the south of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. | protect watercourses where possible and enhance channelized watercourses | Consultant/ Contractor | <i>Ma Wat River Channel Diversion</i> | Phase & Maintenance in Operation Phase | |
| S.12.A9 MM15 | LV15- DP3 | Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs. All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to. | | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | <i>E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA</i> | Prior to Construction, Construction Phase Maintenance in Operation Phase | N/A |
| Landscape and Visual (Construction) | | | | | | | |
| S.12.A9 MM16 | LV16- DP3 | Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically | To screen undesirable views | Contractor | <i>Throughout NDAs</i> | Construction Phase | N/A |

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| | | accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, nonreflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). | of the works site. | | | | |
| S.12.A9 MM17 | LV17-DP3 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | To minimize glare impact to adjacent VSRs | Government / Contractor | Throughout NDAs | Construction and Operation Phases | N/A |
| Ecology (Detailed Design, Construction and Operational Phases) | | | | | | | |
| S13.9 | E3-DP3 | Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided. | Minimize mortality impacts on birds. | Detailed Design Consultant/ Contractor Maintenance Authority. | Throughout. | Detailed design, Construction and Operation phases. | ^ |
| Ecology (Construction Phase) | | | | | | | |
| S.13.9 | E4-DP3 | Creation of proposed Long Valley Nature Park and creation and enhancement of wetland and woodland areas and buffer planting within LVNP. | Compensate for wetland loss arising from the project. | Project Proponent/ Contractor | Long Valley | Construction phase. | N/A |

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|---|--------------|--|---|---|---|---|-----------------------|
| | | | | (LVNP Detailed Habitat Creation & Management Plan). | | | |
| S.13.9 | E5-DP3 | Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance on edge of development areas, including along any roads adjacent to or penetrating into areas/habitats of ecological importance. | Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. Measures to minimize flightline impacts to birds, | Contractor. | Interface between areas/habitats of ecological importance (KTN areas B1-3, H1-1) and works areas. | Construction phase. | N/A |
| S13.9 | E6-DP3 | Compensatory native woodland planting. | Compensate for loss of plantation of ecological significance. | Project Proponent / Contractor | KTN areas E1-8 and G1-3. | Construction phase. | N/A |
| DP4- KTN NDA Road D1 to D5 (New Road) | | | | | | | |
| Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) | | | | | | | |
| S.12.A9 | LV1-DP4 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to | | Detailed Design Consultant/ | <u>Throughout NDAs,</u> | Prior to Construction, Construction & for all | N/A |

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|----------------|--------------|---|---|--|---|--|-----------------------|
| | | try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | Contractor | | planting, this should be installed as soon as the areas become available, to achieve early establishment | |
| S.12.A9 MM1 | LV2- DP4 | Minimum Topographical Change –To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside setting. | Reduce topographical changes and minimize land resumption | Government / Detailed Design Consultant/ Contractor/ | <u>Throughout NDAs, particularly for reservoirs</u> | Prior to Construction | N/A |
| S.12.A9 MM2 | LV3- DP4 | Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow the Sustainable Building Design | Improve visual amenity of the new buildings, NDAs in general and integrate as best possible | Detailed Design Consultant/ | Throughout NDAs | Prior to Construction | N/A |

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| | | <p>Guidelines. The form, textures, finishes and colours of the proposed development components should aim to be compatible with the existing surroundings. To improve visual amenity designs should be aesthetically pleasing and treatment of structures also improve visual amenity. For example, natural building materials such as stone and timber, should be considered for architectural features, and light earthy tone colours such as shades of green, shades of grey, shades of brown and off-white should also be considered to reduce the visibility of the development components, including all roadwork, buildings and noise barriers. In addition, the design of structures should consider green roofs were feasible, following stated guidelines.</p> <p>All Noise barriers, particularly noise barriers but also any barriers proposed for ecological impact mitigation, should be kept to a practical minimum, and be of such a designed as to integrate as well as possible into the surrounding visual context and be as low as practical to minimize blocking views. Noise barrier design, including vertical, cantilever or curved, and noise enclosures including semi-enclosure and full enclosure, at grade and/ or elevated, should follow the guidelines stated.</p> <p>Construction time frame should also be considered and designs seek to keep it to a practical minimum.</p> | into the surrounding landscape | | | | |
| S.12.A9 | LV4- | Tree Protection & Preservation – Existing trees to be retained within the | Protect and Preserve Trees | Government / | Onsite | Prior to Construction | ^ |

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|----------------|--------------|---|--|--|---|---|-----------------------|
| MM4 | DP4 | <p>Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas.</p> <p>A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.</p> | | Detailed Design Consultant/ Contractor | | and Construction Phase | |
| S.12.A9 MM5 | LV5- DP4 | <p>Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.</p> <p>A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC</p> | Transplant Trees where suitable for transplantation | Government / Detailed Design Consultant/ Contractor | Onsite possible. Consider locations where Otherwise offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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|----------------|--------------|---|--|--|--|--|-----------------------|
| | | 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 „Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit’ should be referred to. | | | | | |
| S.12.A9 MM6 | LV6- DP4 | Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes. | To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible. | Government Detailed Design Consultant/ Contractor | Onsite | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM7 | LV7- DP4 | Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. Compensatory planting is proposed at the potential open areas such as | Compensate for trees and shrubs lost due to the Project. | Government Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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|----------------|-----------------|---|---|--|--|---|--------------------------|
| | | open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots. Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i> , <i>Diospyros vaccinioides</i> , <i>Gardenia jasminoides</i> , <i>Ixora chinensis</i> , <i>Ligustrum sinense</i> , <i>Litsea rotundifolia</i> , <i>Melastoma dodecandrum</i> , <i>Atalantia buxifolia</i> , <i>Rhodomyrtus tomentosa</i> , <i>Raphiolepis indica</i> , and <i>Rhododendron simsii</i> are suggested.. | | | | | |
| S.12.A9 MM8 | LV8- DP4 | Woodland Compensatory Planting –Specific Woodland compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including <i>Ailanthus fordii</i> , <i>Bischofia javanica</i> , <i>Castanopsis fissa</i> , <i>Celtis sinensis</i> , <i>Cinnamomum burmannii</i> , <i>Cinnamomum camphora</i> , | Reprovide areas of woodland to compensate for those areas of quality woodland lost. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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|-----------------|-----------------|--|---|--|--|---|--------------------------|
| | | <p>Xanthoxylum avicennae, Hibiscus tiliaceus, Liquidambar formosana, Sapium discolor, Schefflera heptaphylla and Ilex rotunda. In addition some understory vegetation may be planted including shrubs such as Atalantia buxifolia, Diospyros vaccinioides, Gardenia jasminoides, Ixora chinensis, Ligustrum sinense, Litsea rotundifolia, Melastoma malabathricum, Melastoma dodecandrum, Rhodomyrtus tomentosa, Rraphiolepis indica, and Rhododendron simsii.</p> <p>The area allocated for compensatory woodland planting allows in part for the fact that it will take some time for the compensatory planting to achieve the landscape and ecological function and value of the area to be lost. In addition, it allows for the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs which would be inappropriate for further planting.</p> | | | | | |
| S.12.A9 MM9 | LV9- DP4 | Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers). | Soften hard surfaces and facilities | Government / Detailed Design Consultant/ Contractor | On appropriate structures | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM11 | LV10- DP4 | Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting. | To screen proposed structures such as roads | Government / Detailed Design | Along roads, around suitable | Prior to Construction, Construction Phase & | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | | and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Consultant/ Contractor | built structures , or around VSRs to contain their view out to the NDA structures. | Maintenance in Operation Phase | |
| S.12.A9 MM12 | LV11- DP4 | Road Greening –For viaducts, soft landscaping should be provided to soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural forms and textural finishes which improve aesthetics. For at grade roads, planting should be considered along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, is considered part of Screen Planting) | To soften the hard, straight edges and provide greening along roads. | Government Detailed Design Consultant/ Contractor | On viaducts or along roads. | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.A9 MM13 & EIA Annex 13 | LV12- DP4 | Marsh/Wetland Compensation –The proposed Long Valley Nature Park (LVNP) will be designed and implemented to enhance on-wetland areas within the LVNP. (See E4,E15 and E25 also) Also see LV16, LV17, and LV18 as wetland planting should be provided | Compensate for Marsh/ Wetland lost due to the Project. | Project Proponent/ Detailed Design Consultant/ | Onsite where possible. Otherwise consider offsite | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | along the embankments and beds of modified/ re-provisioned watercourses. | | Contractor/ Maintenance Authority | locations | | |
| S.12.A9 MM15 | LV13- DP4 | Pond Replacement –Principles adopted in the design of the NDAs ensure that they incorporate ponds within the RODPs. All requirements for ponds stipulated in the planning documents for the formulation of the Preliminary Layout Plan (e.g. at Fung Kong Shan Park in E1-7 of KNT ND) should be adhered to. | Reprovision for ponds lost due to the Project. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | E1-7 and C1-9 (LVNP) in KNT NDA and generally throughout NDA | Prior to Construction, Construction Phase Maintenance in Operation Phase | N/A |
| <i>Landscape and Visual (Construction)</i> | | | | | | | |
| S.12.A9 MM16 | LV14- DP4 | Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). | To screen undesirable views of the works site. | Contractor | | | N/A |
| S.12.A9 MM17 | LV15- DP4 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the | To minimize glare impact to adjacent VSRs | Government / Contractor | <u>Throughout NDAs</u> | Construction and Operation Phases | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | | | | | |
| Ecology (Prior to Detailed Design Prior to Construction Phase) | | | | | | | |
| S. 13.9 | E1-DP4 | Egretry Habitat Creation & Management Plan (EHCMP) and Woodland Planting and Management Plan (WPMP) | Compensate for loss of Man Kam To Road egretry. Compensate for loss of secondary woodland and hillside plantation of ecological significance. | Project Proponent/ Detailed Design Consultant (EHCMP and WPMP). | FLN area A1-7 (egretry compensation). KTN areas E1-8 and G1-3 (woodland compensation). | Detailed design phase. | N/A |
| Ecology (Detailed Design, Construction and Operational Phases) | | | | | | | |
| S13.9 | E2-DP4 | Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided. | Minimize mortality impacts on birds. | Detailed Design Consultant/ Contractor Maintenance Authority. | Throughout. | Throughout. | N/A |
| Ecology (Construction Phase) | | | | | | | |
| S.13.9 | E3-DP4 | Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance. | Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora | Contractor. | Interface between areas/habitats of ecological importance (KTN | Construction phase. | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | | and fauna. | | areas B1-3, E1-8, G1-3 and H1-1) and works areas | | |
| S13.9 | E4-DP4 | Compensatory native woodland planting. | Compensate for loss of plantation of ecological significance. | Project Proponent / Contractor | KTN areas E1-8 and G1-3. | Construction phase. | N/A |
| S13.8 | E5-DP4 | Maintenance of compensatory native woodland planting. | Compensate for loss of plantation of ecological significance. | Maintenance Authority. | KTN areas E1-8 and G1-3. | Operation phase | N/A |
| Cultural Heritage (Pre-construction Phase) | | | | | | | |
| S11.6.1 | CH1-DP4 | <u>Undertaking Survey-cum-Rescue Excavation</u> A Survey-cum-Rescue Excavation should be conducted after land resumption and before the commencement of construction works to define the precise archaeological deposits extent and to preserve the archaeological resources by record. The excavation should be conducted by a professional archaeologist and prior to fieldwork commencement, the archaeologist should obtain a Licence to Excavate and Search for Antiquities from the Authority under the AM Ordinance. | To define the precise archaeological deposits extent and to preserve the archaeological resources as far as possible. | Project Proponent / Contractor/ Qualified Archaeologist | In KTN NDA, for Site 1 | After land resumption but before Construction commencement of the zones | N/A |
| S11.6.1 | CH2-DP4 | <u>Undertaking Further Archaeological Survey to Cover the Outstanding Areas</u> Further archaeological surveys to cover the outstanding areas of the not-yet-surveyed-area with medium archaeological potential located with | To confirm and verify the findings of the EIA | Project Proponent/ Contractor/ Qualified | In the not-yet-surveyed- areas with medium archaeological | After land resumption but before construction | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | areas with proposed development as presented in Figure 11.9 should be implemented after land resumption to confirm and verify the findings of the EIA. The survey should be conducted by a professional archaeologist and prior to fieldwork commencement, the archaeologist should obtain a Licence to Excavate and Search for Antiquities from the Authority under the AM Ordinance. It should be noted that the scope of further archaeological survey is based on the current proposed alignment. Any additional works areas which have not been covered by the current archaeological impact assessment should be covered as soon as possible. Subject to the findings of the archaeological survey to be conducted after land resumption, additional mitigation measures would be designed and implemented before the commencement of construction works to mitigate the adverse impact. | | Archaeologist | potential located within the work extent of DP4 | | |
| S11.6.1 | CH3-DP4 | <u>Undertaking Induction Training</u> Induction training should be provided to the construction Contractor before the commencement of the excavation works in Spot E. An induction will be conducted as part of the environmental health and safety induction programme to all site staff before they are deployed on site. The induction will include an introduction on the historical development of the Site, the possible archaeological remains that may be encountered during ground excavation works as well as the reporting procedures in case suspected archaeological remains are identified. A set | To preserve the archaeological resources as far as possible | Project Proponent/ Contractor/ Qualified Archaeologist | Spot E | Before the commencement of the excavation works and before site staff are deployed on site | N/A |

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| | | of the presentation material (in the form of power point presentation) with content details will be prepared by an archaeologist and submitted to AMO for reference and record purpose. The first induction briefing will be video recorded and it will be used as induction briefing material for new site staff. | | | | | |
| S11.6.2 | CH4-DP4 | <u>Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages</u> Prior to removal/relocation of the directly impacted historical buildings and cultural/historical landscape features, photographic and cartographic records should be conducted to preserve them by record. Liaison with and obtaining agreement from the descendants of these features will be carried out by the Project Proponent. | To preserve the directly impacted sites by record prior to their removal / relocation | Project Proponent/ Contractor | Entrance Gate of HKT03, KT16, KT17 and KT18 | Prior to Removal / Relocation of features before commencement of construction works | N/A |
| S11.6.2 | CH5-DP4 | <u>Undertaking baseline condition survey and baseline vibration impact assessment</u> In case any potential vibration impact on any nearby built heritage features are identified during the pre-construction stage of the Project, prior to commencement of construction works, a baseline condition survey and baseline vibration impact assessment should be conducted by a qualified building surveyor or a qualified structural engineer to define the vibration limit (a vibration limit at 15mm/s could be adopted for historic buildings) and to evaluate if construction vibration monitoring and structural strengthening measures are required during construction | To minimize the vibration impacts during preconstruction stage on any identified potential vibration impacted built heritage features | Project Proponent/ Contractor | HKT03 (Main Building) and G308 | Preconstruction stage before commencement of construction works | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | phase so as to ensure the construction performance meets with the vibration standard stated in the EIA report. | | | | | |
| S11.6.2 | CH6-DP4 | <u>Relocation of Built Heritages</u> Relocation of built heritages to a reasonable location nearby may be required. | To preserve the directly impacted sites by relocation | Project Proponent/ Contractor | Entrance Gate of HKT03 | After the photographic and cartographic records and before commencement of construction works | N/A |
| Cultural Heritage (Construction Phase) | | | | | | | |
| S11.6.2 | CH7-DP4 | <u>Conducting Construction Vibration Monitoring and Structural Strengthening Measures</u> Construction vibration monitoring and structural strengthening measures should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report. | To minimize the potential impacts during Construction phase on any identified potential vibration impacted built heritage features | Contractor | Identified potential vibration impacted built heritage features | Construction phase, with details specified in baseline condition survey and baseline vibration impact assessment, | N/A |
| DP5- New sewage pumping stations (SPSs) in KTN NDA | | | | | | | |
| Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) | | | | | | | |
| S.12.B9 | S.12.B9 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated | | Detailed Design Consultant/ Contractor/ | Throughout NDAs, | Prior to Construction, Construction & for all planting, | N/A |

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| | | appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | | | this should be installed as soon as the areas become available, to achieve early establishment | |
| S.12.B9 MM1 | LV2- DP5 | Minimum Topographical Change –To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside setting. | Reduce topographical changes and minimize land resumption | Government / Detailed Design Consultant/ Contractor/ | Throughout NDAs, particularly for reservoirs | Prior to Construction | N/A |
| S.12.B9 MM2 | LV3- DP5 | Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow the Sustainable Building Design Guidelines. The form, | Improve visual amenity of the new buildings, NDAs in | Detailed Design Consultant/ | Throughout NDAs | Throughout NDAs | N/A |

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| | | <p>textures, finishes and colours of the proposed development components should aim to be compatible with the existing surroundings. To improve visual amenity designs should be aesthetically pleasing and treatment of structures also improve visual amenity. For example, natural building materials such as stone and timber, should be considered for architectural features, and light earthy tone colours such as shades of green, shades of grey, shades of brown and off-white should also be considered to reduce the visibility of the development components, including all roadwork, buildings and noise barriers. In addition, the design of structures should consider green roofs were feasible, following stated guidelines.</p> <p>All Noise barriers, particularly noise barriers but also any barriers proposed for ecological impact mitigation, should be kept to a practical minimum, and be of such a designed as to integrate as well as possible into the surrounding visual context and be as low as practical to minimize blocking views. Noise barrier design, including vertical, cantilever or curved, and noise enclosures including semi-enclosure and full enclosure, at grade and/ or elevated, should follow the guidelines stated Construction time frame should also be considered.</p> | general and integrate as best possible into the surrounding landscape | | | | |
| S.12.B9 MM4 | LV4- DP5 | <p>Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction.</p> <p>In particular OVTs will be preserved according to ETWB Technical Circular</p> | <p>Protect and Preserve Trees</p> | <p>Government Detailed Design</p> | Onsite | <p>Prior to Construction and</p> | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <p>(Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas.</p> <p>A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained.</p> | | Consultant/ Contractor | | Construction Phase | |
| S.12.B9 MM5 | LV5- DP5 | <p>Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.</p> <p>A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work.</p> | Transplant Trees where suitable for transplantation | Government Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite location. | Prior to Construction,, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 „Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit“ should be referred to. | | | | | |
| S.12.B9 MM6 | LV6- DP5 | Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow. In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011- Technical Guidelines on Landscape Treatment for Slopes. | To avoid substantial slope cutting and fill slopes. To prevent erosion and subsequent loss of landscape resources and character. To ensure man-made slopes are as visually amenable as possible. | Government/ Detailed Design Consultant/ | Onsite | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.B9 MM7 | LV7- DP5 | Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006. Compensatory planting is proposed at the potential open areas such as open | Compensate for trees and shrubs lost due to the Project. | Government/ Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots. Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i> , <i>Diospyros vaccinioides</i> , <i>Gardenia jasminoides</i> , <i>Ixora chinensis</i> , <i>Ligustrum sinense</i> , <i>Litsea rotundifolia</i> , <i>Melastoma dodecandrum</i> , <i>Atalantia buxifolia</i> , <i>Rhodomyrtus tomentosa</i> , <i>Raphiolepis indica</i> , and <i>Rhododendron simsii</i> are suggested. | | | | | |
| S.12.B9 MM8 | LV8-DP5 | Woodland Compensatory Planting –Specific Woodland compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA. The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also). Native tree species are suggested for planting in the appropriate locations, including <i>Ailanthus fordii</i> , <i>Bischofia javanica</i> , <i>Castanopsis fissa</i> , <i>Celtis sinensis</i> , <i>Cinnamomum burmannii</i> , <i>Cinnamomum camphora</i> , <i>Xanthoxylum</i> | Reprovide areas of woodland to compensate for those areas of quality woodland lost. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | <p><i>avicennae</i>, <i>Hibiscus tiliaceus</i>, <i>Liquidambar formosana</i>, <i>Sapium discolor</i>, <i>Schefflera heptaphylla</i> and <i>Ilex rotunda</i>. In addition some understory vegetation may be planted including shrubs such as <i>Atalantia buxifolia</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma malabathricum</i>, <i>Melastoma dodecandrum</i>, <i>Rhodomyrtus omentosa</i>, <i>Raphiolepis indica</i>, and <i>Rhododendron simsii</i>.</p> <p>The area allocated for compensatory woodland planting allows in part for the fact that it will take some time for the compensatory planting to achieve the landscape and ecological function and value of the area to be lost. In addition, it allows for the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs which would be inappropriate for further planting.</p> | | | | | |
| S.12.B9 MM9 | LV9- DP5 | Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers). | Soften hard surfaces and facilities | Government / Detailed Design Consultant/ Contractor | <i>On appropriate structures</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| S.12.B9 MM10 | LV10-DP5 | Green Roof – Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable. | Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels. Provide greening. | Government / Detailed Design Consultant/ Contractor | <i>On appropriate buildings</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.B9 MM11 | LV11-DP5 | Screen Planting – Tall screen/buffer trees and shrubs should be implanted. This measure may additionally form part of the compensatory planting. | To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Government / Detailed Design Consultant/ Contractor | <i>Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.B9 MM14.3 | LV12-DP5 | Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the | Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses | Government / Detailed Design Consultant/ Contractor | <u>Channelized watercourse, particularly the Ma Wat River Channel Diversion</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | channel lining (e.g. gabion). All measures must also ensure any necessary maintenance work can be carried out and that the channel meets all its requirements for water flow, etc. For example, a stretch of the Ma Wat River Channel in the south of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. | | | | | |
| Landscape and Visual (Construction) | | | | | | | |
| S.12.B9 MM16 | LV13- DP5 | Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, nonreflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). | To screen undesirable views of the works site. | Contractor | <i>Throughout NDAs</i> | Construction Phase | N/A |
| S.12.B9 MM17 | LV14- DP5 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | To minimize glare impact to adjacent VSRs | Government / Contractor | <i>Throughout NDAs</i> | Construction and Operation Phases | ^ |
| Ecology (Construction Phase) | | | | | | | |
| S.13.9 | E1-DP5 | Design and erection of 2m high solid dull green site barrier fence | Minimize dust, | Contractor. | <i>Interface</i> | Construction phase. | N/A |

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| | | between active works areas and all areas/habitats of ecological importance. | disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. | | <i>between areas/habitats of ecological importance and works areas (all sides of KTN area F1-2).</i> | | |
| <i>DP7-Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works (SWHSTW)</i> | | | | | | | |
| <i>Landscape and Visual (Construction Phase and Operational Phase)</i> | | | | | | | |
| S.12.9 MM4 | LV1- DP7 | <p>Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas.</p> <p>A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of</p> | Protect and Preserve Trees | Government / Detailed Design Consultant/ Contractor | <u>Onsite</u> | Prior to Construction and Construction Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | tree protection measures for those trees to be retained. | | | | | |
| S.12.9 MM9 | LV2-DP7 | Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. building edges, piers). | Soften hard surfaces and facilities | Government / Detailed Design Consultant/ Contractor | <i>On appropriate structures</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.9 MM10 | LV3-DP7 | Green Roof – Roof greening where appropriate should be established on proposed buildings as per the guidelines stated. These guidelines provide further details including information regarding structural loading, design, maintenance, etc. considerations as well as providing information on what types of plants might be suitable. | Reduce exposure to untreated concrete surfaces and particularly mitigate visual impact to VSRs at high levels. Provide greening. | Government / Detailed Design Consultant/ Contractor | <i>On appropriate buildings</i> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| DP10- Fanling Bypass Eastern Section (New Road) | | | | | | | |
| Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases) | | | | | | | |
| S.12.D9 | LV1-DP10 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated | | Detailed Design Consultant/ Contractor | <i>Throughout NDAs.</i> | Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | | | available, to achieve early establishment | |
| S.12.D9 MM1 | LV2- DP10 | Minimum Topographical Change –To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside setting. | Reduce topographical changes and minimize land resumption | Government/ Detailed Design Consultant/ Contractor | <u>Throughout NDAs, particularly for reservoirs</u> | Prior to Construction | N/A |
| S.12.D9 MM4 | LV3- DP10 | Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any | Protect and Preserve Trees | Government/ Detailed Design Consultant/ Contractor | <u>Onsite</u> | Prior to Construction and Construction Phase | ^ |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | works adjacent to all retained trees, including trees in Contractor's works areas. A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained. | | | | | |
| S.12.D9 MM5 | LV4- DP10 | Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme. A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work. For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be | Transplant Trees where suitable for transplantation | Government/ Detailed Design Consultant/ Contractor | <u>Onsite where possible.</u> <u>Otherwise consider offsite locations</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | referred to. | | | | | |
| S.12.D9 MM6 | LV5- DP10 | <p>Slope Landscaping – Site formation should be reduced as far as possible. Seeding of modified slopes should be done as soon as grading works are completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow.</p> <p>In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.</p> | <p>To avoid substantial slope cutting and fill slopes.</p> <p>To prevent erosion and subsequent loss of landscape resources and character.</p> <p>To ensure man-made slopes are as visually amenable as possible.</p> | Government/ Detailed Design Consultant/ Contractor | <u>Onsite</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.D9 MM7 | LV6- DP10 | <p>Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006.</p> <p>Compensatory planting is proposed at the potential open areas such as open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots.</p> <p>Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma</i></p> | Compensate for trees and shrubs lost due to the Project. | Government/ Detailed Design Consultant/ Contractor | <u>Onsite where possible.</u> <u>Otherwise consider offsite locations</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | <i>dodecandrum, Atalantia buxifolia, Rhodomyrtus tomentosa, Rhaphiolepis indica, and Rhododendron simsii</i> are suggested. | | | | | |
| S.12.D9 MM8 | LV7- DP10 | <p>Woodland Compensatory Planting –Specific Woodland compensatory planting is proposed for any areas of quality woodland that are unavoidably affected by the Project. The location and design of the woodland compensatory planting will principally be within habitats of lower value such as upland grassland. The proposed locations are identified, for example, on the foothills of Tai Shek Mo, and on the higher ground of Fung Kong Shan in KTN NDA; along Fanling Bypass; and a small area in the northern FLN NDA.</p> <p>The intention of the compensatory woodland will be to recreate areas of quality woodland, not necessarily to compensate for loss of trees on a like for like basis (See E18 & E27 also).</p> <p>Native tree species are suggested for planting in the appropriate locations, including <i>Ailanthus fordii</i>, <i>Bischofia javanica</i>, <i>Castanopsis fissa</i>, <i>Celtis sinensis</i>, <i>Cinnamomum burmannii</i>, <i>Cinnamomum camphora</i>, <i>Xanthoxylum avicennae</i>, <i>Hibiscus tiliaceus</i>, <i>Liquidambar formosana</i>, <i>Sapium discolor</i>, <i>Schefflera heptaphylla</i> and <i>Ilex rotunda</i>. In addition some understory vegetation may be planted including shrubs such as <i>Atalantia buxifolia</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma malabathricum</i>, <i>Melastoma dodecandrum</i>, <i>Rhodomyrtus tomentosa</i>,</p> | Reprovide areas of woodland to compensate for those areas of quality woodland lost. | Project Proponent/ Detailed Design Consultant/ Contractor/ Maintenance Authority | <u><i>In areas identified in the EIA Landscape Mitigation Plans and as agreed with AFCD</i></u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | <i>Raphiolepis indica, and Rhododendron simsii.</i> <i>The area allocated for compensatory woodland planting allows in part for the fact that it will take some time for the compensatory planting to achieve the landscape and ecological function and value of the area to be lost. In addition, it allows for the fact that not all of the areas identified for planting will prove to be plantable, by virtue of topography and ground conditions and, especially, because though the areas identified are largely grassland it is inevitable that these areas will already support some patches of trees and shrubs which would be inappropriate for further planting.</i> | | | | | |
| S.12.D9 MM9 | LV8- DP10 | Vertical Greening – Planting of climbers to grow up vertical surfaces were appropriate (e.g. viaduct piers, noise barriers). | Soften hard surfaces and facilities | Government/ Detailed Design Consultant/ Contractor | <u>On appropriate structures</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.D9 MM11 | LV9- DP10 | Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting. | To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Government/ Detailed Design Consultant/ Contractor | <u>Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures.</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.D9M | LV10- | Road Greening –For viaducts, soft landscaping should be provided to | To soften the hard, straight | Government/ | <u>On viaducts or</u> | Prior to Construction, | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| M12 | DP10 | soften the hard, straight edges (for climbers used to cover the vertical, hard surfaces of the piers – see MM9 Vertical Greening) and shade tolerant plants should be planted, where light is sufficient, to improve aesthetic value of areas under viaducts. Both at grade planting and use of elevated planters should be considered for the soft landscaping of viaducts, taking into account the preference to minimize the overall viaduct bulk and integrate architectural forms and textural finishes which improve aesthetics. For at grade roads, planting should be considered along central dividers and on road islands e.g. in the middle of roundabouts. (Roadside planting i.e. at the road edge and not in the central divider or road island, is considered part of Screen Planting) | edges and provide greening along roads. | Detailed Design Consultant/ Contractor | <u>along roads.</u> | Construction Phase & Maintenance in Operation Phase | |
| S.12.D9 MM14.3 | LV11- DP10 | Enhancement Planting along Embankment - For channelized watercourses, if these are modified, the Drainage Services Department Practice Note No.1/2005 – Guidelines on Environmental Considerations for River Channel Design, should be considered and appropriate mitigation measures included ensuring the new watercourses match the existing as far as possible. Measures can include enhancement planting to upgrade the channels as appropriate, including consideration of wetland planting along embankments where appropriate; as well as consideration of the best materials for the channel lining (e.g. gabion). All measures must also ensure any necessary maintenance work can be carried out and | Minimize the necessity of watercourse modification, protect watercourses where possible and enhance channelized watercourses | Government/ Detailed Design Consultant/ Contractor | <u>Channelized</u> <u>watercourse,</u> <u>particularly the</u> <u>Ma Wat River</u> <u>Channel</u> <u>Diversion</u> | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | that the channel meets all its requirements for water flow, etc. For example, a stretch of the Ma Wat River Channel in the south of FLN NDA will have to be diverted for the construction of the Fanling Bypass Eastern Section. This measure will be particularly relevant in this area. | | | | | |
| Landscape and Visual (Construction) | | | | | | | |
| S.12.D9 MM16 | LV12- DP10 | Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, non-reflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). | To screen undesirable views of the works site. | Contractor | <u>Throughout NDAs</u> | Construction Phase | ^ |
| S.12.D9 MM17 | LV13- DP10 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | To minimize glare impact to adjacent VSRs | Government / Contractor | <u>Throughout NDAs</u> | Construction and Operation phases | ^ |
| Ecology (Detailed Design, Construction and Operational Phases) | | | | | | | |
| S13.8 | E1- DP10 | Use opaque, non-transparent, non-reflective noise barriers. Unnecessary lighting should be avoided. | Minimize mortality impacts on birds. | Detailed Design Consultant/ | <u>Throughout NDAs</u> | Detailed design, construction and | ^ |

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| | | | | Contractor Maintenance Authority. | | Operation phases. | |
| Ecology (Construction Phase) | | | | | | | |
| S13.9 | E3-DP10 | Lower reaches of Siu Hang San Tsuen Stream to have 10m wide vegetated buffer in Open Space Zone D1-3 and Fanling Bypass to cross stream on viaduct. | Minimize impacts on Siu Hang San Tsuen Stream and stream fauna. | Contractor. | <u>FLN area D1-3.</u> | Construction phase. | ^ |
| S.13.9 | E4-DP10 | Design and erection of 2m high solid dull green site barrier fence between active works areas and all areas/habitats of ecological importance. | Minimize dust, disturbance, mortality and other adverse ecological impacts on habitats, flora and fauna. Measures to minimize flight-line impacts to birds, especially breeding ardeids. | Contractor. | <u>Interface between areas/habitats of ecological importance and works areas (all of the north side of the Bypass works areas west of interchange with Sha Tau Kok Road).</u> | Construction phase. | * |
| Cultural Heritage (Construction Phase) | | | | | | | |
| S11.6.2 | CH4-DP10 | <u>Conducting Construction Vibration Monitoring and Structural Strengthening Measures</u> Construction vibration monitoring and structural strengthening measures | To minimize the potential impacts during Construction phase on any | Contractor. | <u>Identified potential vibration impacted built</u> | Construction phase, with details specified in baseline condition | N/A |

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| | | should be conducted during Construction phase based on the assessment result of baseline condition survey and baseline vibration impact assessment, so as to ensure the construction performance meets with the vibration standard stated in the EIA report. | identified potential vibration impacted built heritage features | | <i>heritage features</i> | survey and baseline vibration impact assessment, | |
| <i>DPI2-Reprovision of temporary wholesale market in FLN NDA</i> | | | | | | | |
| <i>Landscape and Visual (Detailed Design, Prior to Construction, Construction and Operational Phases)</i> | | | | | | | |
| S.12.D9 | LV1-DP12 | General Good Practice Measures - For areas unavoidably disturbed by the Project on a short term basis e.g. works areas, the general principle to try and restore these to their former state to suit future land use, should be adhered to. With regard to topsoil, where identified, it should be stripped, treated appropriately, and where suitable and practical stored for re-use in the construction of the soft landscape works such as roadside amenity strips, and open space sites. | | Detailed design consultant/ Contractor | Throughout NDAs, | Prior to Construction, Construction & for all planting, this should be installed as soon as the areas become available, to achieve early establishment | N/A |
| S.12.D9 MM1 | LV2-DP12 | Minimum Topographical Change –To minimize landscape and visual impacts, the footprint and elevation of such elements should be optimized to reduce topographical/ landform changes, as well as reduce land take and interference with natural terrain. Where there is a need to significantly cut into the existing landform, retaining walls should be considered as well as cut slopes, to minimize landform changes and land resumption, while also considering visual amenity. Earthworks and | Reduce topographical changes and minimize land resumption | Government / Detailed Design Consultant/ Contractor | Throughout NDAs, particularly for reservoirs | Prior to Construction | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
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| | | engineered slopes should be designed to be a visually interesting landform, compatible with the surrounding landscape and to mimic the natural contouring and terrain e.g. introduction and continuation of natural features such as spurs and ridges where appropriate, to support assimilation with the hillside setting. | | | | | |
| S.12.D9 MM2 | LV3- DP12 | Detailed Design (Visual) –The footprint and massing of development components and the works area should also be kept to a practical minimum and the detailed design of development components for Construction phase should follow the Sustainable Building Design Guidelines. The form, textures, finishes and colours of the proposed development components should aim to be compatible with the existing surroundings. To improve visual amenity designs should be aesthetically pleasing and treatment of structures also improve visual amenity. For example, natural building materials such as stone and timber, should be considered for architectural features, and light earthy tone colours such as shades of green, shades of grey, shades of brown and off-white should also be considered to reduce the visibility of the development components, including all roadwork, buildings and noise barriers. In addition, the design of structures should consider green roofs were feasible, following stated guidelines. All Noise barriers, particularly noise barriers but also any barriers | Improve visual amenity of the new buildings, NDAs in general and integrate as best possible into the surrounding landscape | Detailed Design Consultant | Throughout NDAs | Prior to Construction | N/A |

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| | | <p>proposed for ecological impact mitigation, should be kept to a practical minimum, and be of such a design as to integrate as well as possible into the surrounding visual context and be as low as practical to minimize blocking views. Noise barrier design, including vertical, cantilever or curved, and noise enclosures including semi-enclosure and full enclosure, at grade and/ or elevated, should follow the guidelines stated.</p> <p>Construction time frame should also be considered and designs seek to keep it to a practical minimum.</p> | | | | | |
| S.12.D9 MM4 | LV4- DP12 | <p>Tree Protection & Preservation – Existing trees to be retained within the Project Site should be carefully protected during construction. In particular OVTs will be preserved according to ETWB Technical Circular (Works) No. 29/2004. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas.</p> <p>A detailed tree survey will be carried out for the Tree Removal Application (TRA) process which will be carried out at the later detailed design stage of the Project. The detailed tree survey will propose which</p> | Protect and Preserve Trees | Government / Detailed Design Consultant/ Contractor | Onsite | Prior to Construction and Construction Phase | N/A |

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| | | trees should be retained, transplanted or felled and will include details of tree protection measures for those trees to be retained. | | | | | |
| S.12.D9 MM5 | LV5- DP12 | <p>Tree Transplantation – Trees unavoidably affected by the Project works should be transplanted where practical. Trees should be transplanted straight to their final receptor site and not held in a temporary nursery as far as possible. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, where applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.</p> <p>A detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBTC 2/2004 and 3/2006 and final locations of transplanted trees should be agreed prior to commencement of the work.</p> <p>For trees associated with highways e.g. roadside planting along highways, that are unavoidably affected and should be transplanted, HyD HQ/GN/13 'Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit' should be referred to.</p> | Transplant Trees where suitable for transplantation | Government / Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| S.12.D9 MM6 | LV6- DP12 | <p>Slope Landscaping – Site formation should be reduced as far as possible.</p> <p>Seeding of modified slopes should be done as soon as grading works are</p> | To avoid substantial slope cutting and fill slopes. | Government / Detailed Design | Onsite | Prior to Construction, Construction Phase & | N/A |

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|----------------|-----------------|---|--|--|--|---|--------------------------|
| | | <p>completed to prevent erosion and subsequent loss of landscape resources and character. Woodland tree seedlings and/ or shrubs should be planted where slope gradient and site conditions allow.</p> <p>In addition, landscape planting should be provided for the retaining structures associated with modified slopes where conditions allow. All slope landscaping works should comply with GEO Publication No. 1/2011-Technical Guidelines on Landscape Treatment for Slopes.</p> | <p>To prevent erosion and subsequent loss of landscape resources and character.</p> <p>To ensure man-made slopes are as visually amenable as possible.</p> | Consultant/ Contractor | | Maintenance in Operation Phase | |
| S.12.D9 MM7 | LV7- DP12 | <p>Compensatory Planting – Compensatory tree planting for felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Removal Application process under ETWBTC 3/2006.</p> <p>Compensatory planting is proposed at the potential open areas such as open spaces, amenity areas, open areas of the streetscapes, as well as the open areas within development lots.</p> <p>Compensatory planting for shrubs should be considered in suitable locations. Native species such as <i>Melastoma malabathricum</i>, <i>Diospyros vaccinioides</i>, <i>Gardenia jasminoides</i>, <i>Ixora chinensis</i>, <i>Ligustrum sinense</i>, <i>Litsea rotundifolia</i>, <i>Melastoma dodecandrum</i>, <i>Atalantia buxifolia</i>,</p> | Compensate for trees and shrubs lost due to the Project. | Government / Detailed Design Consultant/ Contractor | Onsite where possible. Otherwise consider offsite locations | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |

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| | | <i>Rhodomyrtus tomentosa</i> , <i>Rhaphiolepis indica</i> , and <i>Rhododendron simsii</i> are suggested. | | | | | |
| S.12.D9 MM11 | LV8- DP12 | Screen Planting – Tall screen/buffer trees and shrubs should be planted. This measure may additionally form part of the compensatory planting | To screen proposed structures such as roads and buildings. Improve compatibility with the surrounding environment and create a pleasant pedestrian environment | Government / Detailed Design Consultant/ Contractor | Along roads, around suitable built structures, or around VSRs to contain their view out to the NDA structures. | Prior to Construction, Construction Phase & Maintenance in Operation Phase | N/A |
| Landscape and Visual (Construction) | | | | | | | |
| S.12.D9 MM16 | LV9- DP12 | Screen Hoarding –Screen hoarding shall be erected along areas of the construction works site boundary where the works site borders publically accessible routes and/or is close to visually sensitive receivers (VSRs). It is proposed that the screening be compatible with the surrounding environment and where possible, nonreflective, recessive colours be used. Any works areas near the ecological sensitive areas should erect 2m high dull green site boundary fence. Details can refer to the ecological impact assessment (Chapter 13 of the EIA report). | To screen undesirable views of the works site. | Contractor | Throughout NDAs | Construction Phase | N/A |

| EIA Ref. | EM&A Log Ref | Recommended Mitigation Measures (What Measures) | Objectives of the recommended Measures & Main Concerns to address (What Requirements) | Who to implement the measures? (Who) | Location of the measures (Where) | When to Implement the measures? (When) | Implementation Status |
|-----------------|---------------|---|--|---|-------------------------------------|---|-----------------------|
| S.12.D9 MM17 | LV10- DP12 | Light Control – Construction day and night time lighting should be controlled to minimize glare impact to adjacent VSRs during the Construction phase. Street and night time lighting shall also be controlled to minimize glare impact to adjacent VSRs during the operation phase. | To minimize glare impact to adjacent VSRs | Government / Contractor | Throughout NDAs | Construction and Operation Phases | N/A |

Implementation status:

- ^ Mitigation measure was fully implemented
- * Observation/reminder was made during site audit but improved/rectified by the contractor
- # Observation/reminder was made during site audit but not yet improved/rectified by the contractor
- X Non-compliance of mitigation measure
- Non-compliance but rectified by the contractor

N/A Not Applicable at this stage as no such site activities were conducted in the reporting period

APPENDIX R
WASTE GENERATION IN THE
REPORTING MONTH

Name of Department: Civil Engineering and Development Department

Monthly Summary Waste Flow Table for 2023

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | Actual Quantities of C&D Wastes Generated Monthly | | | | |
|-----------|--|---|----------------------------|------------------------------|-----------------------------|--------------------------|---|-----------------------------|-----------------------|----------------|-----------------------------|
| | Total Quantity Generated | Hard Rock and Large Broken Concrete (a) | Reused in the Contract (b) | Reused in Other Projects (c) | Disposed as Public Fill (d) | Imported Fill (e) | Metals | Paper / Cardboard Packaging | Plastics (see Note 3) | Chemical Waste | Others, e.g. general refuse |
| | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000m ³) |
| January | 3.628 | 0.000 | 2.500 | 0.000 | 1.128 | 6.425 | 2.904 | 0.000 | 0.004 | 0.000 | 0.571 |
| February | 3.466 | 0.000 | 1.869 | 0.000 | 1.597 | 6.967 | 0.004 | 0.364 | 0.003 | 0.560 | 0.454 |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Sub-total | 7.094 | 0.000 | 4.369 | 0.000 | 2.725 | 13.392 | 2.908 | 0.364 | 0.007 | 0.560 | 1.025 |
| July | | | | | | | | | | | |
| August | | | | | | | | | | | |
| September | | | | | | | | | | | |
| October | | | | | | | | | | | |
| November | | | | | | | | | | | |
| December | | | | | | | | | | | |
| Total | 7.094 | 0.000 | 4.369 | 0.000 | 2.725 | 13.392 | 2.908 | 0.364 | 0.007 | 0.560 | 1.025 |

| Forecast of Total Quantities of C&D Materials to be Generated from the Contract* | | | | | | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------|-----------------------------|-----------------------|----------------|-----------------------------|
| Total Quantity Generated | Hard Rock and Large Broken Concrete | Reused in the Contract | Reused in Other Projects | Disposed as Public Fill | Imported Fill | Metals | Paper / Cardboard Packaging | Plastics (see Note 3) | Chemical Waste | Others, e.g. general refuse |
| (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000m ³) |
| 1,310.619 | 300.000 | 1,010.619 | 0.000 | 0.000 | 0.000 | 20.000 | 10.000 | 20.000 | 0.500 | 10.000 |

- Notes: (1) The performance target are given in PS Clause 1.115(14)
(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
(4) The Contractor shall also submit the latest forecast of the amount of C&D materials expected to be generated from the Works, together with a break down of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m³.
(5) Conversion factors for reporting purpose:
in-situ: rock = 2.5 tonnes/m³; soil = 2.0 tonnes/m³
excavated: rock = 2.0 tonnes/m³; soil = 1.8 tonnes/m³
broken concrete and bitumen = 2.4 tonnes/m³
C&D Waste = 0.9 tonnes/m³
Slurry = 1.0 tonnes/m³
(6) Numbers are rounded off to the nearest three decimal places
* Forecast
(7) Total Quantity Generated = a+b+c+d



俊和 - 群利聯營體
CW - KL JV

Name of Department: CEDD

Appendix F

Contract No.: ND/2019/02

Year **2023**

Waste Flow Table

| Month | Total Quantity Generated (a) = (c)+(d)+(e) | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | Actual Quantities of Non-Inert C&D Wastes Generated Monthly | | | | |
|------------------|---|--|-------------------------------------|---------------------------------------|------------------------------------|----------------------|---|----------------------------------|-----------------------------|-------------------|------------------------------------|
| | | Hard Rock and Large Broken Concrete (b) | Reused in the Contract (c) | Reused in other Projects (d) | Disposed as Public Fill* (e) | Imported Fill (f) | Metals | Paper/ cardboard packaging | Plastics (see Note 2) | Chemical Waste | Others, e.g. general refuse# |
| | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) |
| Jan | 3,700.28 | 0.00 | 0.00 | 3,700.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 126.34 |
| Feb | 7,033.84 | 0.00 | 0.00 | 7,033.84 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 102.69 |
| Mar | | | | | | | | | | | |
| Apr | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Sub-total | 10,734.11 | 0.00 | 0.00 | 10,734.11 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 229.03 |
| July | | | | | | | | | | | |
| Aug | | | | | | | | | | | |
| Sept | | | | | | | | | | | |
| Oct | | | | | | | | | | | |
| Nov | | | | | | | | | | | |
| Dec | | | | | | | | | | | |
| Sub-total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 10,734.11 | 0.00 | 0.00 | 10,734.11 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 229.03 |

Notes:

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (3) Broken concrete for recycling into aggregates.

| Forecast of Total Quantities of C&D Materials to be Generated from the ND/2019/02 | | | | | | | | | | | |
|---|-----------------------------|---|---------------------------|--------------------------------|----------------------------|---------------|-------------|----------------------------------|--------------|--------------------|-----------------------------------|
| Forecast Made at the End of the Project | Total Quantity Generated | Hard Rock & Large Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fill | Imported Fill | Metals | Paper/ cardboard packaging | Plastics | Chemicals Waste | Others, e.g. general refuse |
| | | | | | | | | | (see Note 2) | | |
| | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) |
| Total: | 234,210 | 8,400 | 2,500 | 0 | 231,710 | 600 | 100 | 1.0 | 0.5 | 0.5 | 375 |

Name of Department: CEDD

Monthly Summary Waste Flow Table for 2023 (Year)

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | Actual Quantities of C&D Wastes Generated Monthly | | | | |
|-----------|--|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|----------------------------|-----------------------|----------------|-----------------------------|
| | Total Quantity Generated | Hard Rock and Large Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fill | Imported Fill* | Metals | Paper/ cardboard packaging | Plastics (see Note 3) | Chemical Waste | Others, e.g. general refuse |
| | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000m ³) | (in '000 kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000m ³) |
| Jan | 0.24082 | 0 | 0 | 0.16613 | 0.07469 | 0 | 0 | 0 | 0 | 0 | 0 |
| Feb | 0.01357 | 0 | 0 | 0 | 0.01357 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mar | | | | | | | | | | | |
| Apr | | | | | | | | | | | |
| May | | | | | | | | | | | |
| Jun | | | | | | | | | | | |
| Sub-Total | | | | | | | | | | | |
| Jul | | | | | | | | | | | |
| Aug | | | | | | | | | | | |
| Sep | | | | | | | | | | | |
| Oct | | | | | | | | | | | |
| Nov | | | | | | | | | | | |
| Dec | | | | | | | | | | | |
| Total | | | | | | | | | | | |

*Remark: Imported Fill not taken into account of Total Quantity Generated

#Revised Figure

Forecast of Total Quantities of C&D Materials to be Generated from the Contract*

Sang Hing – Kuly Joint Venture

Contract No.: ND/2019/03

Kwu Tung North and Fanling North New Development Areas, Phase 1:

Development of Long Valley Nature Park

| Total Quantity Generated (in '000m ³) | Hard Rock and Large Broken Concrete (in '000m ³) | Reused in the Contract (in '000m ³) | Reused in other Projects (in '000m ³) | Disposed as Public Fill (in '000m ³) | Imported Fill (in '000m ³) | Metals (in '000 kg) | Paper/ cardboard packaging (in '000kg) | Plastics (see Note 3) (in '000kg) | Chemical Waste (in '000kg) | Others, e.g. general refuse (in '000m ³) |
|--|---|--|--|---|---|------------------------|---|--------------------------------------|-------------------------------|---|
| 9 | 2 | 1 | 1 | 6 | 10 | 3 | 3 | 1 | 1 | 3 |

*Remark: Figure to be revised if necessary

Notes:

- (1) The performance targets are given in ETWB Technical Circular PS Clause 6(14).
- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
- (4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³. (ETWB Technical Circular PS Clause 5(4)(b) refers).
[Delete Note (4) and the table above on the forecast, where inapplicable].

Monthly Summary Waste Flow Table for 2023 (Year)

| Month | Total Quantity Generated | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | Actual Quantities of Non-Inert C&D Wastes Generated Monthly | | | | |
|-----------|--------------------------|--|----------------------------|------------------------------|-----------------------------|-------------------|---|--------------------------------|--------------|--------------------|---------------------------------|
| | | Hard Rock and Large Broken Concrete (a) | Reused in the Contract (b) | Reused in other Projects (c) | Disposed as Public Fill (d) | Imported Fill (e) | Metals (f) | Paper/ cardboard packaging (g) | Plastics (h) | Chemical Waste (i) | Others, e.g. general refuse (j) |
| | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) |
| Jan | 1,821.54 | 0.00 | 0.00 | 0.00 | 1648.04 | 0.00 | 62.72 | 0.00 | 0.00 | 0.00 | 110.78 |
| Feb | 5,111.83 | 0.00 | 0.00 | 1,432.80 | 3,268.73 | 289.95 | 0.0006 | 0.0668 | 0.0007 | 0.00 | 120.28 |
| Mar | | | | | | | | | | | |
| Apr | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| Sub-total | 6,933.37 | 0.00 | 0.00 | 1,432.80 | 4,916.77 | 289.95 | 62.72 | 0.07 | 0.00 | 0.00 | 231.06 |
| July | | | | | | | | | | | |
| Aug | | | | | | | | | | | |
| Sept | | | | | | | | | | | |
| Oct | | | | | | | | | | | |
| Nov | | | | | | | | | | | |
| Dec | | | | | | | | | | | |
| Sub-total | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 6,933.37 | 0.00 | 0.00 | 1,432.80 | 4,916.77 | 289.95 | 62.72 | 0.07 | 0.00 | 0.00 | 231.06 |

Notes:

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (3) Broken concrete for recycling into aggregates.
- (4) Total quantity generated = a+b+c+d+e+f+g+h+i+j

| Forecast of Total Quantities of C&D Materials to be Generated from the DCK JV | | | | | | | | | | | |
|---|-----------------------------|---|---------------------------|-----------------------------|----------------------------|---------------|-------------|----------------------------------|-----------------------------|--------------------|--------------------------------|
| Forecast Made at the End of the Project | Total Quantity Generated | Hard Rock & Large Broken Concrete | Reused in the Contract | Reused in other Projects | Disposed as Public Fill | Imported Fill | Metals | Paper/ cardboard packaging | Plastics | Chemicals Waste | Others, e.g. general refuse |
| | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (in tonnes) | (see Note 3) (in tonnes) | (in tonnes) | (in tonnes) |
| | 141,782.30 | 0 | 10,000 | 20,000.00 | 60,000.00 | 32,200.00 | 80 | 0.8 | 0 | 1.5 | 19,500.00 |

Monthly Summary Waste Flow Table for 2023 (year)

Name of Person completing the record: Louise Poon (EO)

Project : Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section (Shung Him Tong to Kau Lung Hang)

Contract No.: ND/2019/05

| Month | Actual Quantities of Inert C&D Materials Generated Monthly | | | | | | Actual Quantities of C&D Wastes Generated Monthly | | | | | |
|---------------------------------|--|--|--------------------------------|---------------------------------|--------------------------------|--------------------------|---|------------------------------------|---------------------------------|-------------------|-----------------------|------------------------------------|
| | Total Quantity Generated (a) = (b)+(c)+(d)+(e) | Hard Rock and Large Broken Concrete (b) | *Reused in the Contract (c) | Reused in other Projects (d) | Disposed as Public Fill (e) | Imported Fill (f) | Metals (g) | Paper/ cardboard packaging/ (h) | Plastics (i) (see Note 3) | Yard Waste (j) | Chemical Waste (k) | Others, e.g. general refuse (l) |
| | (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 '000kg) | (in '000 kg) |
| Jan-23 | 2.602 | 0.000 | 1.878 | 0.000 | 0.724 | 0.000 | 4.126 | 0.275 | 0.005 | 0.000 | 0.000 | 46.650 |
| Feb-23 | 3.198 | 0.000 | 1.728 | 0.000 | 1.470 | 0.000 | 0.000 | 0.608 | 0.000 | 2.660 | 0.000 | 79.010 |
| Mar-23 | | | | | | | | | | | | |
| Apr-23 | | | | | | | | | | | | |
| May-23 | | | | | | | | | | | | |
| Jun-23 | | | | | | | | | | | | |
| Sub-total | 5.800 | 0.000 | 3.606 | 0.000 | 2.194 | 0.000 | 4.126 | 0.883 | 0.005 | 2.660 | 0.000 | 125.660 |
| Jul-23 | | | | | | | | | | | | |
| Aug-23 | | | | | | | | | | | | |
| Sep-23 | | | | | | | | | | | | |
| Oct-23 | | | | | | | | | | | | |
| Nov-23 | | | | | | | | | | | | |
| Dec-23 | | | | | | | | | | | | |
| Total in 2023 | 5.800 | 0.000 | 3.606 | 0.000 | 2.194 | 0.000 | 4.126 | 0.883 | 0.005 | 2.660 | 0.000 | 125.660 |
| Total of the Project since 2020 | 113.038 | 0.000 | 28.221 | 2.857 | 81.960 | 5.110 | 141.830 | 10.315 | 3.825 | 785.473 | 24.882 | 3214.570 |

*Approx. estimation for each dump truck is 6m³/truck or 12 ton/truck

Total Quantity of Inert C&D Materials Generated: 113.038 (in '000m³) (a) = (b)+(c)+(d)+(e)

Monthly Summary Waste Flow Table for 2023 (year)

Name of Person completing the record: KM LUI (EO)

Project : Fanling North New Development Area, Phase 1: Site Formation and Infrastructure Works

Contract No.: ND/2019/07

| 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 (a) | Reused in the Contract (b) | Reused in other Projects (c) | Disposed as Public Fill (d) | Imported Fill | Metals | Paper/ cardboard packaging | Plastics (see Note 2) | Chemical Waste | Others, e.g. general refuse |
| | (in '000T) | (in '000T) | (in '000T) | (in '000T) | (in '000T) | (in '000T) | (in '000 kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000 T) |
| Jan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.018 |
| Feb | 0 | 0 | 0 | 0 | 0 | 1.400 | 0 | 0 | 0 | 0 | 0.013 |
| Mar | | | | | | | | | | | |
| Apr | | | | | | | | | | | |
| May | | | | | | | | | | | |
| Jun | | | | | | | | | | | |
| Sub-total | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.400 | 0.000 | 0.000 | 0.000 | 0.000 | 0.031 |
| Jul | | | | | | | | | | | |
| Aug | | | | | | | | | | | |
| Sep | | | | | | | | | | | |
| Oct | | | | | | | | | | | |
| Nov | | | | | | | | | | | |
| Dec | | | | | | | | | | | |
| Total | 5.309 | 0.000 | 1.514 | 0.000 | 3.795 | 151.447 | 0.017 | 1.763 | 0.025 | 212.240 | 5.680 |

- Notes:
- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.
 - (3) Broken concrete for recycling into aggregates.
 - (4) Total Quantity Generated = a+b+c+d..

APPENDIX S
COMPLAINT LOG

Appendix S - Complaint Log

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|-----------------|---|--------------------------------|---|--|---------------|
| COM-2020-07-01 | Public Road at Portion 6a (ND/2019/01) | 13 th July 2020 | The EPD visit on 13 July 2020 was to respond the complaint received from the 2nd week in July regarding the dust problem in public road of Portion 6a. Mr. Tse (EPD) observed muddy wheel track on the public road, and he expressed that the public road should keep free of mud even it was inside the project area. He also advised BKRWJV (the Contractor) to clean up the muddy wheel track and provide rectified photos to him. | A designated person is provided at the ingress/egress for vehicle washing before the wheel washing facility is in use, this is to make sure all vehicle are free of mud before leaving the site. And, the designated person is also responsible for cleaning the public road if any mud is found on it. | Closed |
| COM-2020-11-01 | Portion 4 and Portion 7 near Dills Corner Garden (ND/2019/01) | 11 th November 2020 | The EPD inspection at Portion 4 on 11 November 2020 was to respond the complaint regarding the dust problem near Dills Corner Garden referred by a District Council Member. No construction activities was carried out and no obvious dust emission was observed. EPD advised BKRWJV (the Contractor) to increase the height of temporary water barrier and install sprinklers on bare ground. Another EPD inspection was conducted on 26 November 2020 at | The height of temporary water barrier was increased at Portion 4. Sprinklers were installed on bare ground at Portion 4 and on top soil at Portion 7. Manual water spraying were provided regularly. Hydroseeding will be provided on soil surface at Portion 4 for long-term measures. Proper implementation of dust mitigation measures will be continuously reviewed and monitored to avoid potential dust impact on site. | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|----------------|----------------------------------|--------------------------------|--|---|--------|
| | | | Portion 7 for the dust complaint. During inspection, no obvious dust emission was observed and potential dust may generate from top soil which appear to be dry. EPD advised the Contractor to install sprinklers on top soil for dust suppression. | | |
| COM-2020-11-02 | Works Area A & B (ND/2019/05) | 27 th November 2020 | The complainant complained about the noise generated from the alarm of scissors platform during works for PM's site accommodation on Sunday and called the police force. Police officer has checked that Construction Noise Permit has been applied for the construction work. Also, the complainant complained about the reflective blue color of roof material of site office. | Permit-to-Work system was properly implemented for works at restricted hours. The PME used have been checked in compliance with the valid Construction Noise Permit (CNP No.: GW-RN0788-20). Acoustics mats were erected between works area and noise sensitive receivers. Scissor platform or noisy work activities will be arranged and minimized to be used on Sunday or evening time on weekdays. Specific training for the quieter works arrangement was provided to workers. Also, the blue roof will be covered by non-reflective green roof material. | Closed |
| COM-2021-01-01 | Ma Tso Lung Road (ND/2019/01) | 7 th January 2021 | A complaint regarding soil deposited on Ma Tso Lung Road was referred by EPD verbally. | No soil / mud deposit or mud track were observed along the Ma Tso Lung Road during investigation and site inspection between Contractor, the <i>Supervisor</i> , ET and IEC. The road condition of Ma Tso Lung Road will be closely monitored and the public road will be regularly cleaned if mud deposit was observed. Wheel washing facilities at every site entrance will be regularly monitored to ensure proper implementation of dust control measures. | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|----------------|---|-------------------------------|--|--|--------|
| COM-2021-01-02 | Ma Tso Lung Road (Near L/P VD5622) (ND/2019/01) | 13 th January 2021 | A complaint was received from 1823 regarding the suspected odour emitted from muddy water discharged. | Water sample collected from the wastewater treatment facility was clear and no odour was detected. Sewage from chemical toilet was collected on a regular basis by licensed collector. Brownish wastewater was observed discharging upstream of the site from an unknown factory to the uncharted channel which may be potential source of the odour. | Closed |
| COM-2021-01-03 | CTC Storage Yard (ND/2019/05) | 22 nd January 2021 | A complaint was referred from EPD regarding the noise generated before 7 a.m. on weekdays and machinery noise generated on Sunday from CTC Storage Yard. | No attendance record of workers working for CTC Storage Yard earlier than 8 a.m. and on Sunday (day of complaint) was recorded. To ensure strict compliance to Noise Control Ordinance and prevent noise nuisance to the nearby villages, the Contractor has implemented the following enhancement measures: 1. Issue a memo to the relevant sub-contractor on restricted working hour. 2. Conduct specific training to sub-contractor frontline supervisor and works. 3. Apply a construction noise permit for the suspected location. | Closed |
| COM-2021-01-04 | Ho Sheung Heung (ND/2019/02) | 28 th January 2021 | A complaint was received from 1823 regarding an idling construction vehicle near Ho Sheung Heung to operate the engine for over 10 | Ad-hoc training was provided to workers on switching off idling engines when awaiting on site. Poster for “Switching off idling engines” was posted at site entrance to alert workers on the | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|----------------|----------------------------------|--------------------------------|---|---|--------|
| | | | minutes. Also, the complainant complained on noise nuisance from the speaker during meeting. | issue. For noise nuisance from the meeting, the speaker volume in the future event will be lower as much as possible. | |
| COM-2021-02-01 | CTC Storage Yard (ND/2019/05) | 4 th February 2021 | A complaint was received from EPD call on 2 nd February 2021 regarding a noise complaint from a Tong Hang villager about noise from CTC storage yard at around 19:00 – 20:00 on 1 st February 2021. | The suspected cause of the complaint was the delivery of a rotary drilling rig by a tractor lorry arrived at CTC Storage Yard at around 19:00 at 1 st February 2021. The delivery time was restricted due to the oversized tractor lorry (width >2.4m and length protruded >1.4m at tractor tail). No loading and unloading was conducted during the time of complaint. For follow up action, the Contractor will apply Construction Noise Permit for any foreseeable delivery that may not be finished before restricted hours and will notify possible affected village representatives in advance. | Closed |
| COM-2021-02-02 | CTC Storage Yard (ND/2019/05) | 16 th February 2021 | A complaint was received from EPD call on 10 th February 2021 regarding a noise complaint from a Tong Hang villager about some impact noise from CTC Storage yard at Sunday's daytime (7 th February 2021). | Under investigation, erection of chain link fence for separating works area and adjacent village house was conducted by a sub-contractor on 7 th February 2021 without notification to the Contractor. Sub-contractor has been reminded that any work within site area shall be conducted after instruction by the Contractor and permit-to-work system on restricted hours works shall be strictly followed. | Closed |
| COM-2021-02-03 | CTC Storage Yard (ND/2019/05) | 2 nd March 2021 | A complaint was received from EPD call on 24 th February 2021 regarding a noise complaint from a Tong Hang villagers about some machinery noise | Further enhancement on erection of acoustics mats and mobile acoustics mat panels was conducted at strategic location at E1-01 for mitigation of the noise impact to the nearby | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|----------------|---|-----------------------------|---|---|--------|
| | | | and dust from CTC Storage yard. Joint site inspection of the Contractor, the <i>supervisor</i> and EPD was conducted on the same day for the bored piling at CTC Storage Yard and check on the noise and dust mitigation measures. EPD requested to enhance noise and dust mitigation measures for grabbing operation of the Rotary Drill Rig for construction of piles of E1-01. | sensitive receivers. Regular water spraying has been applied to suppress the dust from grabbing procedure and the skip. | |
| COM-2021-03-01 | Ma Tso Lung Shun Yee San Tsuen (ND/2019/01) | 1 st March 2021 | A complaint was referred from EPD regarding fly-tipping of C&D waste near Ma Tso Lung Shun Yee San Tsuen and muddy public road. | Under investigation, the suspected site near Shun Yee San Tsuen was out of project site boundary. Internal trip ticket system was properly implemented for dump trucks transported from project site to other approved alternative disposal ground. Also, dump trucks were properly washed and mechanical cover of dump trucks were closed while leaving the site. For follow up action, banners and flags were displayed on site to promote the environmental protection awareness. Regular training was provided to remind the dump truck drivers that illegal dumping is strictly prohibited. | Closed |
| COM-2021-03-02 | CTC Storage Yard (ND/2019/05) | 15 th March 2021 | A complaint was received from EPD call and an inspection by EPD was conducted on 9 th March 2021 regarding a dust complaint from a Tong Hang villager. The complainant | For follow up action, the Contractor provided training to remind frontline supervisors and workers to wet the auger before movement when it was dried for preventing any occasional situation that the auger was dried. | Closed |

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| | | | complained that rotary drill rig shall be equipped with enclosure for dust control and rotary drill rig had exhaust disturbance. Also, the complainant requested to improve wheel washing at site entrance. | The Contractor provided training to brief frontline supervisor and the operators to prevent exhaust disturbance. Also, the drill rigs exhaust pipe shall not face to the public area. If it is avoidable, screens shall be arranged to divert the exhaust gas. An additional cut-off drain was constructed and notice signs were erected for notifying drivers to give wheel washing in front of the cut-off drains. | |
| COM-2021-03-03 | Ma Tso Lung Road (ND/2019/01) | 9 th April 2021 | A complaint was referred from EPD on 23 March 2021 regarding muddy public access road along Ma Tso Lung Road. | The muddy access road was found generated from a nearby private factory where the access road is not hard paved. The Contractor arranged water browser to help clean up the section of road on 24 th and 25 th March 2021 respectively. Also, dump truck were properly washed at project site exit near Ma Tso Lung Road. | Closed |
| COM-2021-04-01 | Long Valley, Kwu Tung (ND/2019/03) | 9 th April 2021 | A complaint was referred from EPD regarding to associated impacts arising from construction works at Long Valley Nature Park, causing nuisance and affecting the habitat and ecological value in Long Valley. | Construction works for development of Long Valley Nature Park are conducted according to the recommended mitigation measures stated in Habitat Creation and Management Plan. Wetland creation and restoration works are in progress which include provision of paddy field, turning abandoned agricultural lands into wet agricultural land and provision of open water habitat with bird island. Irrigation channel is under construction for provision of reliable water supply to farmland. For construction works, the following significant mitigation measures are implemented: 1. Provide noise barriers to minimize noise nuisance to adjacent field where Greater Painted- | Closed |

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| | | | | <p>snipe was found;</p> <p>2. Arrange concrete pump for concreting works to minimise noise impact;</p> <p>3. Provide water spraying on the exposed earth to dampen the dusty surface;</p> <p>4. Provide shade cloth to separate works area and marsh where Greater Painted-snipe were found;</p> <p>5. Demarcation of temporary vehicle access to prohibit vehicle across the farmland;</p> <p>6. Provide 2m dull green site boundary fence along Long Valley work areas; and</p> <p>7. Block the main accesses by temporary barrier to avoid human disturbance.</p> | |
| COM-2021-04-02 | Close to junction of Ma Wat River and Ng Tung River (ND/2019/04, ND/2019/05, ND/2019/06) | 23 rd April 2021 | A complaint was referred from EPD regarding to suspected polluting effluent discharged from Ma Wat River near junction of Ma Wat River and Ng Tung River. | <p>Under investigation, muddy water was observed from a small stream of Ma Wat River which is outside project site boundary. Contractor's wastewater treatment facilities and mitigation measures on water quality were checked. Latest discharge monitoring results shows the discharge quality in compliance with the limit stated in the discharge licence.</p> <p>The following mitigation measures will keep implemented and inspected:</p> <p>1. Installation of silt curtain, geotextiles and concrete blocks for excavation works at Ng Tung River with regular inspection;</p> <p>2. Exposed slope paved with concrete to prevent muddy runoff;</p> <p>3. Setting up wastewater treatment plants at</p> | Closed |

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| | | | | several locations of the site area; 4. Bund/seal off works area near river and set up with dewatering system; 5. Spare water pumps and sand bags for emergency use during heavy rain; 6. Regular training to the operators of wastewater treatment facilities; and 7. Regular checking and maintenance of the wastewater treatment facilities and desilting tank. | |
| COM-2021-04-03 | Near Shek Wu San Tsuen, Sheung Shui (ND/2019/04) | 28 th April 2021 | A complaint was referred from EPD regarding to construction dust arising from dump trucks from construction sites near Shek Wu San Tsuen. | No obvious dust emission was observed during EPD inspection on 28 th and 29 th April 2021, However, potential dust impact may arise from sandy materials found on public road and exposed ground surface. For follow up action, soil debris were removed at public road. Water spraying was provided on the exposed ground surface. Also, all dump trucks are covered properly and wheel wash is provided before leaving site. Implemented of the mitigation measures will keep reviewed and monitored. | Closed |
| COM-2021-05-01 | Near Tong Hang section of Ma Wat River (ND/2019/05) | 17 th May 2021 | A complaint was referred from EPD regarding to suspected polluting effluent discharged from construction sites near Ma Wat River. | Under investigation, no pollution from works areas near Ma Wat River was observed. For wastewater pollution control, all wastewater treatment facilities have been setup at discharge points. According to the latest discharge monitoring results on April 2021, no non-compliance to limit set in discharge licence was recorded. Regular maintenance and services of the facilities have been conducted. Close monitoring | Closed |

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| | | | | with checklist has been conducted by operators of the facilities. Mitigation measures such as sealing gaps between concrete blocks/water barriers/pipe pile walls have been implemented to prevent leakage. Implementation of the mitigation measures will keep reviewed and closely monitored. | |
| COM-2021-09-01 | Chau Tau Road near the CLP Chau Tau Substation (ND/2019/01) | 2 nd September 2021 | A complaint was referred by EPD and an inspection by EPD was conducted on 3 September 2021 regarding a muddy public access road at Chau Tau Road near the CLP Chau Tau Substation. | <p>Ad-hoc site inspection was conducted on 2 Sep 2021 at Chau Tau Road near the CLP Chau Tau Substation, no muddy wheel track or soil deposit was observed. No concrete lorry was observed using the Chau Tau Road near the CLP Chau Tau Substation.</p> <p>Concreting at Portion 5 was observed during EPD inspection on 3 September 2021, wheel washing bay and manual wheel washing was provided at site exit, all vehicles were properly washed and no muddy track was observed at Chau Tau Road.</p> <p>The Contractor has been implement following mitigation measure upon received the complaint:</p> <ul style="list-style-type: none"> • Rearranged the traffic route and informed the concrete lorry drivers not to use Chau Tau Road; • Keep monitoring the effectiveness of the wheel washing facilities at site exist; and • Clean up the public road immediately if soil deposit was observed. | Closed |

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| COM-2021-09-02 | Not specified (ND/2019/01) | 3 rd September 2021 | A complaint was referred by EPD regarding C&D waste stored on site. | <p>Refer to the photos provided by the complainant, the mentioned C&D waste mainly felled trees mixed with general refuse and temporary stored within the site boundary, Ad-hoc site inspection was conducted by Contractor and RSS on 3rd September 2021, all C&D waste were stored within the site boundary, no odour perceived during site inspection.</p> <p>The Contractor has been implement following mitigation measure upon received the complaint:</p> <ul style="list-style-type: none"> • Sort out the non-inert waste from the felled trees; • Remove the general refuse if possible, otherwise, coved by tarpaulin sheet; and • Relocate or transport the yard waste to other places which are not easy visible by public. <p>Implementation of the mitigation measures will keep reviewed and closely monitored to ensure no adverse impact will be generated from the construction works of the Project.</p> | Closed |
| COM-2021-11-01 | Close to Shek Wu San Tsuen (ND/2019/04) | 3 rd November 2021 | A complaint was referred from EPD on 22 th November 2021, about various issues including suspected environmental nuisances from the captioned Project from a member of public on 3 rd Nov 2021. He followed-up again on 19 th Nov 2021. | <p>Site inspection was conducted by contractor and EPD inspectors on 25th November 2021, no obvious dust emission was observed within site boundary. The potential dust impact may arise from sandy materials found at public road which is under DSD maintenance.</p> <p>Air quality monitoring was carried out at location FLN-DMS1 - Scattered Village</p> | Closed |

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| | | | | <p>Houses North of Proposed Potential Ecopark and Location FLN-DMS5 - Noble Hill near Shek Wu San Tsuen in accordance with the EM&A manual. With reference to the air quality monitoring data collected in Nov 2021, all monitoring data were complied with the action and limit level and no exceedance was recorded.</p> <p>The Contractor has been implement following mitigation measure upon received the complaint:</p> <ul style="list-style-type: none"> • 工程團隊亦已於接近民居並正在進行大型工程(例如建造大口徑樁)位置安裝了各種隔音屏障，例如在大型機器的發電機上加上隔音布、在圍板加上隔音屏障 • 增加自動灑水系統 | |
| COM-2021-12-01 | On Kui Street along Ma Wat River (ND/2019/05) | 13 rd December 2021 | AECOM referred to public complaints received by 1823 on 13 December 2021 regarding "中鐵建保華聯營公司粉嶺地盤工人沖建築泥水落河 污染河道。" | <p>Refer to the photo attached in the above complaint, it is suspected that there were bentonite slurry leaking from the flexible pipe joint near works area of pier C2-01 and the cause of incident as blow:</p> <ul style="list-style-type: none"> • Tightness of flexible pipe joint • Worker's awareness and knowledge on proper handling of pipe leakage • Readiness of contingency tools and equipment for the pipe leakage <p>The Contractor has been implement following mitigation measure upon received the complaint:</p> <ul style="list-style-type: none"> • Doubling pipe clamps at each joint to strengthen the connection tightness and | Closed |

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| | | | | seal <ul style="list-style-type: none"> • Briefing workers for proper spillage handling • Well readiness of contingency tools and equipment for handling of leakage • Designating responsible supervisor for regular pipeline condition check and monitoring • Daily inspection for pipeline condition by responsible supervisors before works • Erection of bunding/sandbags along the works area to effectively stop any potential leakage/surface runoff • Review and updated Environmental Management Plans (EMP) covering Site Specific Procedures for Muddy runoff/leakage Control (See CSF submission, ref. no. CSF/HSE/002115) on 21 Dec 2021 • Specific trainings of proper handling of leakage adjacent to the river/drainage for JV managerial and supervisory staff | |
| COM-2022-01-01 | Close to Shek Wu San Tsuen (ND/2019/04) | 13 rd January 2022 | A complaint was referred from EPD on 14 Jan 2022 from a public member alleged the captioned Project of “我們每個工作天都會受到高噪音和震動的影響，在沒有足夠的保障下，使近距離的民居十分擔心，屋裂有惡化跡象，兒童/長者難有 | Contractor have carried out daily noise monitoring and vibration monitoring. No exceedance was recorded. The monitoring results are displayed on the notice board for easy reference. For noise control measures, QPME label are affixed to generators and acoustic noise barriers are mounted on powered mechanical equipments such as | Closed |

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| | | | 寧靜環境，成人在家中工作、兒童做功課在噪雜的環保下，難以適應，我們很希望受到合理的重視和改善，使實際環境不會太差。” | excavators, crawler cranes and vibration hammers and installed along hoarding to minimize noise nuisance to neighborhood. Based on the findings of investigation, no exceedance of noise and vibration monitoring was found. Contractor will ensure that the construction works carried out must comply with the condition stated in the Noise Control Ordinance and to implement mitigation measures proposed in the Project Implementation Schedule. | |
| COM-2022-01-02 | Near Sheung Yue River (ND/2019/02) | 28 th January 2022 | A complaint was received from 1823 on 28 Jan 2022 regarding “在雙魚河河邊單車徑附近的工程，一個多月來，當工人沒有工作期間，所有機械都沒有熄匙，當機械運作時，產生很大的噪音及很多廢氣。理解工人有工作時，機械運作是正常，但一個月來工人沒工作時，機械依然運作，產生問題嚴重，要求部門跟進及處理。” | Investigation was conducted by contractor on 4 Feb 2022. All plants are turned off when awaiting more than 3 min. Dark smoke monitoring for the powered mechanical equipment had been carried out. No dark smoke was recorded. Based on the findings of investigation, no exceedance of noise and air monitoring was found. Follow-up Actions had been conducted on 4 Feb 2022. Mitigation measures are implemented. Dull green barriers are installed around active works areas to prevent dust emitted to the public. QPME is used to minimize noise nuisance to the neighbourhood. Specific environmental training about Noise and Smoke Control for Plants was provided to frontline staff on 4 Feb 2022. The frontline staff was reminded to switch off idling equipment for | Closed |

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| | | | | preventing recurrence of idling construction equipment awaiting on site, and carry out routine maintenance of plant and equipment for mitigating unwanted noise and air pollutant emissions. | |
| COM-2022-02-01 | Ng Tung River (ND/2019/04) | 17 th February 2022 | <p>EPD received 2 complaints from members of public about suspected disposal of foam waste and illegal discharge from the captioned Project to Ng Tung River on 13 & 16 Feb 2022 respectively.</p> <p>Details of complaint case received on 13 Feb 2022: 「本人途經唔上水悟洞河近馬屎埔新村附近地盤發現河道有大量懷疑發泡膠影響何到魚類生物, 要求環境保護署或相關部門進行跟進」</p> <p>Details of complaint case received on 16 Feb 2022: 「2022年2月10日下午三時, 發現梧桐河面出現乳白色, 懷疑與附近工程泥漿水有關, 懷疑經雨水渠排出。」</p> | <p>Investigation was conducted by contractor. It is found that no foam has been used on site. No construction works was carried out during 9 Feb to 14 Feb 2022 at A3 piling platform as two suspected close contact cases for A3-02 piling platform team was found. The bored piling works and A3 piling platform welding works was suspended from 9 Feb 2022 and resumed on 14 Feb 2022 after the whole team received negative results.</p> <p>Mitigation measures are implemented, there is a silt curtain enclosing the opened workfronts and the openings of the A3 piling platform. Hence, the platform and other workfronts along the river have no discharge to the river.</p> <p>In addition, it is reported that suspected contaminated water was discharging to Ma Wat River from surrounding industrial buildings near C5 contract site.</p> <p>Based on the findings of investigation, no foam</p> | Closed |

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| | | | | has been used by on site and no suspected contaminated water was discharged from the project. Thus, the complaint cases are not caused by our project. | |
| COM-2022-03-01 | Near Ho Sheung Heung (ND/2019/02) | 2 nd March 2022 | A complaint was received from EPD on 8 Mar 2022 from a public member regarding "投訴河上鄉鄉公所附近地盤的機器及吊雞車的難嗅氣味滋擾" | <p>Joint inspection for the issue was conducted by AECOM, Environmental team, Contractor on 9 March 2022 and no source of odour was found during the inspection. There was no major works. The area is for temporary soil storage. Only one excavator is at Portion 11. The excavator is well maintained and no bad smell is emitted. Moreover, all plants are checked before used. As per the contract requirement, project must use Euro V diesel in our plants, which is a cleaner fuel than industrial diesel and shall generate less odour. Project regularly conducts diesel sampling and testing to ensure that the used fuel is Euro V diesel. A diesel sampling for the excavator at Portion11 was also conducted on 9 March 2022.</p> <p>Based on the findings of investigation, all plants are well maintained and checked before use. Cleaner fuel is used for plants onsite. No odour was found. CW-KL JV mitigates air pollution from sources to reduce environmental nuisance to the neighbourhood.</p> | Closed |
| COM-2022-03-02 | Near Ho Sheung Heung (ND/2019/02) | 23 rd March 2022 | A complaint was received from EPD on 22 Mar 2022 from a public member regarding "河鄉近洪聖爺廟" | Joint inspection for the issue was conducted by AECOM, Environmental team, Independent Environmental Checker and Contractor on 25 March 2022. There was no major works. The area | Closed |

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| | | | <p>有個很大的基建地盤，經常發出很大噪音，包括車輛駛入後停泊時的聲浪，地盤面積有半個摩士公園大，車輛可以泊到其他地方，減少對居民的滋擾，之前亦曾作出相同投訴，有環保署職員跟進，故現堅持要求再次跟進及回覆 "</p> | <p>is for temporary soil storage. A dump truck was at portion 11, but left the site in short time. All dump trucks used in the project would not stay on site overnight and left the site before 6p.m. One excavator and one loader were at Portion 11. No idling crane lorry was at Portion 11. The equipment would be switched off when not in use. Moreover, all our plants are well maintained and checked before used.</p> <p>Noise monitoring around Portion 11 had been conducted on 26, 28 and 29 March 2022 (AM and PM periods) by Contractor with AECOM. The noise levels are lower than the standard of noise requirement for domestic premises (75dB(A)). It was predicted that no noise exceedance would be found at NSRs.</p> <p>Environmental Training related to use of equipment onsite had been provided to site staff to increase their awareness of environmental protection. Posters of mitigating adverse environmental impacts had been fixed at Portion 11 to increase workers' environmental awareness. QR codes for air quality, noise, and water quality monitoring data conducted by Environmental team of the project had been also fixed at Portion 11 for the public's information.</p> <p>Based on the findings of investigation, all plants</p> | |

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| | | | | are well maintained and checked before use. CW-KL JV mitigates noise pollution from sources to reduce environmental nuisance to the neighborhoods. No noise exceedance is predicted to be found at NSRs. Environmental promotion is given to site staff to increase their awareness of environmental protection. | |
| COM-2022-06-15 | Near Ng Tung River, adjacent to Shek Wu San Tsuen North (ND/2019/04) | 5 th July 2022 | A complaint was received from EPD on 15 June 2022 from a public member regarding “本人住在梧桐河多年，每天都會到河邊兩岸進行晨運或會經河邊出外購物。由年頭開始，兩岸邊有些小型機械在進行工程，開始時還好，但近期發現機械所發出的黑煙比以前多，有時發現有些污水，泥水和油污流道出行人道來。本人有一次發現有些泥水和油污落到溝渠和地面，便好心跟現場人員講叫他們小心。但是他們沒有理會，因為梧桐河是一個非常美麗的地方，假日也有很多人來遊玩。避免意外發生，希望貴處能代為處理。” | <p>Investigation was conducted by contractor and reply as follow: “工程團隊經常及日後亦會加緊巡視地盤範圍，同時敦促工程人員注重機械及挖掘機的廢氣排放，以及工程污水或泥水流出，減少對周邊環境的影響。”</p> <p>Air monitoring was conducted on 2, 8, 14, 20, 24 and 30 June 2022, including AM and PM period. No exceedance of air monitoring was found. One exceedance of Water Quality Monitoring was found on 13 June 2022, but based on the investigation report, there was no direct evidence showing that the exceedance recorded at the 3 nearby monitoring stations were due to Contract.</p> <p>For dark smoke emission, the contractor would collect and test the Ultra Low Sulphur Diesel(ULSD) content monthly. For monitoring of any muddy water discharging from construction activities, the contractor would collect and test the suspended solids from Ng Tung River monthly, also collect and test pH, suspended solids and</p> | Closed |

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| | | | | COD of wastewater sampling at wastewater treatment plant monthly. | |
| COM-2022-06-28 | Near Ng Tung River, adjacent to Shek Wu San Tsuen North (ND/2019/04) | 5 th July 2022 | A complaint was received from EPD on 28 June 2022 from a public member regarding “連續兩日聞到燒塑膠燒鐵味，然後見到地盤這部機放黑煙，每幾秒噴一次村民不想再持續吸入這些毒氣。” | Investigation was conducted by contractor and reply as follow: “本工程沒有包含燃燒塑製品或鐵製品工序，而附近居民有焚燒垃圾習慣，有可能因而產生誤會；工程所使用的機械及挖掘機已符合環保署要求，有團隊接收投訴後即時於6月29日安排維修人員檢查相關挖掘機並無異常，同時就投訴人的關注已於7月4日將所述挖掘機調離該範圍。工程團隊會繼續盡力安排工程機械及挖掘機在合理工作距離內遠離居民住處，以減少對居民的影響。” | Closed |
| COM-2022-06-30 | Near Ng Tung River, adjacent to Shek Wu San Tsuen North (ND/2019/04) | 5 th July 2022 | A complaint was received from EPD on 30 June 2022 from a public member regarding “講嚟講去都係得個講字，日日都大塵，又話整自動灑水系統等咗咁耐都有，機器又放黑煙又臭。” | Investigation was conducted by contractor and reply as follow: “自動灑水系統已安裝完成，另外工程人員亦會手動向工地範圍噴灑水份，以減低塵埃對附近居民的影響；而由於相關投訴時段（6月30日）至今均為雨天，工程人員亦有持續觀察塵土飛揚及泥水等開題，由於雨水可有效隔絕塵埃，待天氣好轉後相關恆常減少塵埃的措施亦會恢復，例如地面乾燥就會進行相對應減少塵埃的措施，包括人手及自動灑水等。” | Closed |
| COM-2022-07-21 | Man Young Storage area (ND/2019/05) | 21 st July 2022 | EPD received a public complaint on 14 July 2022 from nearby villagers regarding noise and odour nuisance from generators. Complaint detail is as follow: | Investigation was conducted by contractor and clarify a few points as follow: 1. Instead of four generators being used simultaneously from the complaint, there shall be actually two generators being used | Closed |

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| | | | "現投訴地盤長期24 小時 長期用柴油發電機，做成民居滋擾，因為噪音及震動.附近居民無法睡眠，柴油氣味亦令人非常討厭，請問法例是否不能晚上七點後不能用柴油發電機.另外那地盤晚上七點後亦有人工作.故亦不一需要長時間開發電機，而那地盤共有四個發電機同時開動.。該地盤為保華公司與中國建築聯營。正確地址為粉嶺塘坑村370 號。萬勇地盤。燈柱號碼AJ2326 對面" | <p>alternatively (one is solely for standby purpose) for power supply of site works and containers.</p> <p>2. Instead of 24 hours operation of the concerned generator from the complaint, there shall be actually no restricted hour (19:00-07:00) works for generator operation according to our permit-to-work system (see appendix I).</p> <p>3. A valid construction noise permit (ref. no.: GW-RN0551-22) is obtained on 11/7/2022 covering concerned works area and PMEs before 23:00 (see appendix II). All conditions imposed on permit will be strictly followed once restricted hour works are conducted.</p> <p>The cause of the complaint is concluded to be noise and odour nuisance for the daily operation of one generator in non-restricted hours (07:00 to 19:00).</p> <p>For noise mitigation measures, contractor had arranged all generators of Quality Powered Mechanical Equipment (QPME) type and installed sound reduction fabric along the side of site boundary facing to the villagers. On top of these measures, JV had installed acoustic blanket (27 dB sound reduction) enclosing the two generators for non-restricted hour operation</p> <p>For odour mitigation measures, on top of currently</p> | |

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| | | | | using all generators with approved NRMM type, JV also installed odour adsorption bags which is made of activated carbon during oil fueling practice to further reduce nuisance. | |
| COM-2022-07-27 | Near Portion 1b/1c (Ma Tso Lung) (ND/2019/01) | 27 th July 2022 | A complaint referred from 1823 regarding dust emission and noise impact, “古洞馬草壟地盤沒有任何圍板引致沙塵及噪音影響附近村民事宜” | <p>The contractor claimed that due to the confirmation of site formation level of the hoarding, water main diversion and necessary access, the erection of site hoarding is on hold. Weekly environmental walk was conducted at the mentioned area on 19 and 26 July 2022, no obvious dust emissions and noise impacts were identified.</p> <p>EPD carried out complaint investigation at Portion 1b / 1c on 26 July 2022 at 11:00, no adverse comment was given.</p> <p>Air quality monitoring and noise monitoring were carried out at nearby location once to twice a week and no exceedance was recorded. An ad-hoc noise monitoring was carried out on 28 July 2022 at Portion 1b, no exceedance was recorded also.</p> <p>The contractor would start the hoarding erection in early of August 2022, erect tarpaulin sheet on temporary fencing in front of villager's house etc as mitigation. The environmental conditions of the site will be continuously reviewed and monitored to ensure no adverse impacts generated from the construction works of the Project.</p> | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| COM-2022-07-21 | Lower Ng Tung River (from upstream Ma Wat River) (ND/2019/05) | 29 th July 2022 | <p>EPD received a complaint on 29 July 2022 concerning that the brownish silty water was continuously flowing to Lower Ng Tung River from upstream of Mat Wat River. The complaint was forwarded to ET by EPD through email on 5 Aug 2022.</p> <p>Based on peripheral inspection, the muddy water was spotted.</p> | <p>At the time of EPD's inspection, a tiny gap was found at the bund around the sheet piles at B2-03. The gap was then sealed off so as to prevent muddy runoff from the sheet piling work.</p> <p>Concerning the photo taken at C2-02 by EPD, there shall be collection facilities to divert runoff to our wastewater treatment plant prior to discharge. Wastewater collection facilities including sufficient water pumps and flexible pipes are prepared during works.</p> <p>Meanwhile, below are some JV's regular preventive measures for water pollution control:</p> <ol style="list-style-type: none"> 1. 18 nos. of wastewater treatment facilities are operating for different working areas including B2-03 and C2-02; 2. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge quality are complying with discharge standards as per discharge license, test results for concerned areas which were submitted to EPD. | Closed |
| COM-2022-08-08 | Ma Wat River near Lamp Post EB1339 (ND/2019/05) | 8 th August 2022 | <p>EPD received a complaint EPD ref: N07/RN/00016607-22 on 8 August 2022 and forwarded to ET through E-mail on 12/08/2022 and transferred to JV on the same day.</p> <p>The complaint content: "近電燈柱</p> | <p>Noise</p> <p>Refer to the Contractor's internal Permit-to-Work (PTW) System for restricted hours works, there was no works carried out at Pier C4-01 on any Sundays or public holidays which is nearest to the lamp pole EB1339 since 13 July 2022. The</p> | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | EB1339 沿麻笏河一帶，有一大型建天橋工程，本來已經帶給鄉郊空氣和噪音污染，近來星期日和假期也開工，其機器均嘈雜和發出廢氣，貴署不應該容許工程在假日運作，嚴重影響跑步、踏單車和郊遊人士。請貴署注視。" | <p>Sundays works at Pier C4-02 and C4-03 which are further away from the aforesaid lamp pole were performed in accordance with the CNP ref. GW-RN0551-22 (with validity from 11 July 2022 to 10 October 2022 granted by EPD on 30 June 2022). Therefore, the possible cause of the incident might be Sundays' works at Pier C4-02 and C4-03 on 31/07/2022 and Pier C4-02 on 07/08/2022 but the works at these areas were carried out in complying with the condition to the valid CNP.</p> <p>Air</p> <p>For the aforesaid Sundays' works for Pier C4-02, a generator has been used and emitted exhaust gas that might be the cause of the incident. There is a high volume sampler for regular air monitoring at around 30m distance from the generator. Up to now, there was no any exceedance reported from ET since commencement of the project. Based on the above findings, it might conclude that there was no any non-compliance issue.</p> <p>Nevertheless, the Contractor will conduct internal surprise check to the restricted hours works, if any, and give exhaust checking and fuel testing to ensure compliance of ULSD standard.</p> | |
| COM-2022-08-16a | Ma Wat River near Lamp Post EB1339 (ND/2019/05) | 16 th August 2022 | EPD received a complaint (EPD ref: N07/RN/00017008-22) regarding water pollution in Fanling On Lok Tsuen near lamp post EB1339 on 16 | To facilitate ET's investigation, this report is providing the following information: Since the works areas vicinity to lamp post EB1339 are Piers C4-01 and C4-02, the following | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | <p>August 2022. EPD forwarded the case to ET through email on 17 August 2022.</p> <p>The complaint content: " 本人留意到近麻笏村的麻笏河有大量水泥水流入河，影響釣魚人士，查看下，是由上游（近安樂村業和街利亨中心近電燈柱EB1339）一帶的多個大型工程的水泥流入河。另外，建築物 and 工地範圍和附近很多積水，很污糟，有大量工人的飯盒和垃圾，引起蚊患和衛生。"</p> | <p>investigation are focusing on these two works area locations.</p> <ol style="list-style-type: none"> 1. Site activities at Piers C4-01 and C4-02; From thorough investigation, there are only minor defect rectification works for pier concrete surface at Pier no. C4-01 which is nearest to the lamp pole EB1339. Besides, there are only formwork/falsework dismantling works in the concerned area at Pier C4-02 which is further away from the aforesaid lamp pole. The whole area has been hard paved without any muddy surface. It is reasonably concluded that there are no construction activities in the concerned location which would generate large amount of muddy water. 2. Preventive measures for pollution control; 18 nos. of wastewater treatment facilities have been setup and operating for different working areas including works area of Pier Nos. C4-01 & C4-02 in the concerned period. 3. Latest discharge monitoring results; The water quality of the discharge from the Site have been monitored according to the granted discharge licence ref. WT00036996-2020. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge samples are complying with discharge standards outlined in discharge license, test results of discharge sample in concerned areas which were | |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | <p>submitted to EPD.</p> <p>4. Any possible source of muddy discharge to induce the captioned incident; Based on the above information and investigation findings, it is concluded that the source of muddy discharge was not related to the construction activities under Contract No. ND/2019/05.</p> <p>5. Housekeeping; Receptacle with lid were provided on site. Cleaning have been performing in daily basis. Daily morning brief have been conducting to remind frontline staff about housekeeping.</p> <p>Although it is concluded that the complaint was not related to the Contract, the Contractor will keep daily monitoring on site condition and visual check discharge qualities against with standard solution of suspended solids (30 mg/L stipulated in licence condition) in order to get rid of any muddy discharge to the river. In addition, the Contractor will regularly conduct morning briefing and tool-box training to the frontline for keeping refresh their awareness on muddy water control.</p> | |
| COM-2022-08-16b | Ma Sik Road and Sha Tau Kok Road near Lung Yeuk Tau (ND/2019/04) | 16 th August 2022 | A complaint was received from EPD on 16 August 2022, "One Innovale construction site located in Ma Sik Road and Sha Tau Kok Road (Lung Yeuk Tau) that has been creating not only serious dust but also muddy | <p>Investigation was conducted by contractor and reply as follow:</p> <p>"Despite the fact that the One Innovale construction site, where the complainant concerned about, is not part of ND/2019/04 project, we would ensure all vehicles has used the</p> | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | materials along the main road. During sunny days, dust flies up with busy traffic flow. This morning I even saw muds dropped down from the trucks made the road a muddy mess pollution." | wheel washing facilities before leaving the site. Also, we have assigned two workers to conduct cleaning works to area adjacent with our vehicle egress. Moreover, we inspect every dump trucks on application of mechanical dump truck cover and keep photo records for compliance control. In addition, water bowser is arranged for road washing along Sha Tau Kok Road adjacent with our vehicle egress regularly." | |
| COM-2022-09-01 | 青山公路近燈柱EA2139 (ND/2019/01 , ND/2019/05) | 1 st September 2022 | Complaint received by EPD on 1 Sep 2022 and forwarded to ET on 2 Sep 2022, “投訴土木工程署, 環保署監管不善, 大量黃泥水從地盤流入附近河流, 影響生態. 地點: 青山公路近燈柱EA2139”. | Investigation was conducted by contractor and reply as follow: “A soil storage area was handed over from ND/2019/01 to ND/2019/05 on 18 August 2022. As this is a new area just possessed about 2 weeks before the date of this complaint, site preparation and setup such as wheel washing bay, temporary drainage system, wastewater treatment facility etc. were still undergoing. Some temporary measures were provided in place for preventing runoff into the adjacent public drainage system. During the site preparation and setup works, it was found that there is a pipework by others outside C5's site which intermittently discharges muddy water into the surface drainage and suspected the complaint is caused by this. Contractor of C1 also provided certain information as follow: “Portion 1e (next to the said area) which is a temporary storage area with no major construction works will be carried out at such portion. The grey water pipe which is | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | <p>belongs to other contractor nearby and muddy water discharge into the surface drainage was occasionally observed. We suspected the complaint is caused by this. Few water pipes were identified at the north sides near the interface of other contractor.”</p> <p>From 5 Sep 2022, the weekly environmental inspection of C5 with Environmental Team (ET) will cover this area for regular identification of any deficiency in environmental management.</p> | |
| COM-2022-09-29 | Construction site nearby Dills Corner Garden Blk 5 (ND/2019/02) | 29 th September 2022 | Complaint received by EPD on 29 Sep 2022 and forwarded to ET on 30 Sep 2022. Complaint detail is as follow: “石仔嶺花園第五座投訴工程噪音滋擾。我們不知承辦商工程，請幫忙跟進。謝謝！” | <p>Joint inspection for the issue was conducted by AECOM, EPD and Contractor on 29 September 2022. Installation of sheet pile by Vibration Hammer was in progress during the inspection. Considering the founding during inspection and in order to quantify the noise nuisance made by related works, noise monitoring around Portion 2 had been conducted on 30 September, 3 and 5 October 2022(AM and PM periods) by Contractor with AECOM. Result shown that all noise levels are lower than the standard (75dB(A)). But the traffic condition has been considered as an influencing factor. Based on the findings, no noise exceedance is predicted to be found at NSRs.</p> <p>Several mitigation measures have been taken to alleviate the impact made. Noise screen has been erected along the fencing at Portion 2. Moreover, noise generation works including installation of sheet pile will be suspended at Portion 2 during 11:00-14:00 of working day. Environmental</p> | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | promotion is given to site staff to increase their awareness of environmental protection. | |
| COM-2022-10-06 | Fanling On Lok Tsuen near lamp post EB1339” (ND/2019/05) | 7 th October 2022 | Complaint received by EPD on 6 Oct 2022 and forwarded to ET on 7 Oct 2022. “近電燈柱 EB1339 近麻笏河，有一大型建天橋工程，星期日和假期幾十名工人正在開工，工作間大型鐵板聲炒耳，工人大聲叫囂，還開擴音器播歌.....使附近寧靜的安樂村、麻笏村、塘坑村和郊遊人士不安寧。” | Based on the Contractor’s internal Permit-to-Work (PTW) System for restricted hours works, there was no works carried out at Pier C4-01 on recent Sundays or public holidays where is located near lamp pole EB1339 since September 2022. The holiday works at Pier C4-02 which are further away from the aforesaid lamp pole were carried out on 04/10/2022 in accordance with the CNP ref. GW-RN0551-22 granted by EPD. The works involved housekeeping and scaffold erection without any Powered Mechanic Equipment (PMEs). Therefore, the possible cause of the incident might be the work at Pier C4-02 on 04/10/2022. But the scaffold erection involved prescribed construction work in non-Designated Area was carried out with fully compliance with the valid CNP. Therefore, it might conclude that there was no any non-compliance issue. Nevertheless, the Contractor have conducted specific training to relevant site supervisors to remind workers to refrain from using loud speakers/playing loud music for works during restricted hours and to ensure keep the restricted hours works as quiet as possible, if any, and will install sound absorbing materials for the concerned works. | Closed |
| COM-2022-10-09 | Portion 5 (ND/2019/02) | 17 th October 2022 | Complaint received by EPD on 13 Oct 2022 and forwarded to ET on 17 | As mentioned by EPD, the construction site is near Shek Sheung River. The complaint location | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | Oct 2022. The complainant alleged the captioned Project of "有關上水石上河有地盤直接排放污水落河事宜 2022 年 10 月 9 日 地盤直接排放污水落河" | may be Portion 5 of project site. Joint inspection for the issue was conducted by EPD, AECOM and Contractor on 14 October 2022. According to the record of construction site, no work was arranged on 9 Oct 2022. Subject to the comments made by EPD staff during the site inspection, several mitigation measures have been taken to enhance the water pollution control performance. Contractor had arranged a wastewater treatment tank to replace the existing tank on site to improve the treatment performance and one more sedimentation tank is introduced to increase the detention time. Moreover, all hoses related to the wastewater transportation have been removed from the slope near Shek Sheung River. Also, water discharge has been suspended for the facilities enhancement. Contractor enhanced the routine checking and maintenance of wastewater treatment facilities including cleaning and replacing of tanks. Posters of mitigating adverse environmental impacts had been fixed at Portion 5 to increase workers' environmental awareness. Training has been provided for site staff. Based on the findings of investigation, CW-KL JV enhanced water pollution control to reduce nuisance to the environment. Environmental promotion is given to site staff to increase their awareness of environmental protection. | |
| COM-2022-10-18 | 安樂村新界蔬 | 28 th October 2022 | EPD received a complaint (EPD ref: N07/RN/00022664-22) regarding | Since the works areas adjacent to North District Temporary Wholesale Market (北區臨時農 | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | 菜批發市場旁 (ND/2019/05) | | water pollution in “construction works of the Kwu Tung North new development area of NENT Project” on 18 October 2022 and forwarded to ET through E-mail on 28 October 2022 and ET transferred to JV on the same day. The complaint alleged: "投訴安樂村新界蔬菜批發市場旁有人私自破壞污水渠並把污水接駁至麻笏非法排放污水，投訴人表示親眼見到涉事人員鑿爛污水渠，具體位置會後續來電補充附近的燈柱號碼，又表示部門跟進時如需要具體位置亦可直接聯絡查詢人。" | 產品批發市場) are Portion I and Portion II, the following investigation are focusing on these two works area locations. 1. Site activities at Portion I and Portion II; In response to the complaint, “sewerage pipe being damaged and connected to Ma Wat River” is not observed on-site. There were substructure construction works which did not generate wastewater in Portion I and II. 2. Preventive measures for pollution control; 2 nos. of wastewater treatment facilities have been setup and operating for works area in portion I & Portion II in the concerned period. 3. Latest discharge monitoring results; The water quality of the discharge from the Site have been monitored according to the granted discharge licence ref. WT00036996-2020. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge samples are complying with discharge standards outlined in discharge license, test results of discharge sample in concerned areas which were submitted to EPD. 4. Any possible source of muddy discharge to induce the captioned incident; No wastewater generating activities were conducted at Portion I and II on 18 October 2022. Wastewater (if any) from all construction activities is properly collected, treated and | |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | monitored. Based on the above findings, it is concluded that the complaint was not related to the Contract. Contractor will continue daily monitoring on our site condition and visual check discharge qualities against with standard solution of suspended solids (30 mg/L stipulated in licence condition) in order to get rid of any water pollution to the river. In addition, Contractor will regularly conduct morning briefing and tool-box training to the frontline for keeping refresh their awareness on water pollution control. | |
| COM-2022-10-31 | near Po Lau Road, Kwu Tung (ND/2019/01) | 31 st October 2022 | EPD received a complaint with ref: N07/RN/00024008-22 on 31 October 2022 and referred the complaint to ET. Description: A complaint referred from EPD regarding dust impact near Po Lau Road, Kwu Tung. The complaint alleged: “古洞開發區波樓路新大樓附近有路面平整工程，早上九時多有儲泥及卸泥活動，吹起沙塵，影響駕駛安全” | The suspected complaint location was Portion 1b. According to the records of Hong Kong Observatory on 31 October 2022, typhoon signal number 1 was hoisted and the local winds were generally strong. 1. Weekly environmental walk and EPD ad-hoc inspection was carried out on 01 November 2022 morning, it was reminded that the frequency of watering shall be increased under strong wind condition. 2. Two water browsers were deployed for regularly watering of main haul road. 3. Mist cannon was provided on site for dust suppression. 4. Manual water spraying was provided to maintain site condition in a damp condition. 5. Once the level of stockpile reached the formation level, hydroseeding was applied. | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | 6. Dust monitoring was carried out at KTN-DMS4(B) on 21 Oct 2022 and 27 Oct 2022, no exceedance was recorded. 7. Cover the slope surface with impervious sheeting. 8. Addition water browser with capacity 20,000L was deployed on site on 01 November 2022. 9. Hydroseeding to exposed soil once the formation level reached. 10. Keep closely monitoring on the concerned area. | |
| COM-2022-11-10 | Construction site near Shek Wu San Tsuen North (ND/2019/04) | 10 th November 2022 | EPD received a complaint with ref: N07/ RN/00025077-22 on 10 November 2022 and referred the complaint to ET and IEC on 2 December 2022. The complaint alleged: "White smoke was emitted from an operating crane (blue/white color) in the construction site of Fanling North New Development Area, Phase 1: Fanling Bypass Eastern Section nearby Shek Wu San Tsuen North." | There was a crane in blue/white color working in the area nearby Shek Wu San Tsuen. According to Contractor's record, the crane has stopped works since 10 Nov 2022 afternoon for the preparation of removal from site. No white or dark smoke emission has been observed on 10 Nov 2022 morning. The crane was removed on 12 Nov 2022. Photo record shown that the blue/white crane was totally removed on 14 Nov 2022. Based on the findings of investigation, no emission of white smoke was observed on the date of complaint. The Contractor would keep monitoring the plant whether there are dark smoke emission and the operation would stop at once if dark smoke emission has been observed, by comparing with the Ringelmann Chart. | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| COM-2022-12-07 | Construction site near Lamp post VD6513 (ND/2019/05) | 7 th December 2022 | <p>EPD received a complaint with ref.: N07/RN/00028143-22 on 7 Dec 2022 and referred the complaint to ET and IEC on 14 Dec 2022. The complaint alleged: “本人住北區，習慣晨運，目睹近來北區太多基建工程，已經很多污染，環保署有沒有積極監察？”</p> <p>本人於星期日(27.12.2022)，行經粉嶺龍山近塘坑村附近，近電燈柱VD6513，興建中的橋跨行人路，高空掉下釘子在行人路上，掉下發泡膠並隨風吹散各地和麻芴河流中，請環保署查看是否有物質？做成污染。附上圖。另外，水馬大部分欠蓋存積水。</p> <p>高空掉建築物很危險”</p> | <p>The investigation results are as follows:</p> <ol style="list-style-type: none"> 1. The works area vicinity to lamp post VD6513 is Piers C4-03. There are viaduct construction works above the concerned lamp post. 2. Expanding foam and tiny metal nails found over there were both non-hazardous and non-harmful substance. It is suspected that they were some remaining left behind from previous foundation construction works or by the public due to there is a public area currently. Although the material might be not from the current works, to maintain good neighborhood relationship, the Contractor have promptly followed up as follow: <ol style="list-style-type: none"> A. Cleaned up the expanding foam and metal nails, B. Tightened and securely fixed the safety net, C. Sealed up those water-filled barriers without lids and their damaged parts. <p>JV conducted joint site inspection with EPD inspectors at the concerned area on 13 Dec 2022. EPD satisfied with the above follow-up actions taken for the complaint.</p> | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| COM-2023-01-12 | Sheung Yue River (ND/2019/01) (ND/2019/02) | 12 th January 2023 | As reported by DSD, DSD had a joint site inspection, and observed large amount of muddy runoff was outflowing from the construction sites at Kwu Tung North into Sheung Yue River, which divided into 3 main sources of muddy runoff. | Due to the complaint location, there will be two contractors conducted the investigation as below. <u>From Contract Number (ND/2019/01):</u> Investigation was conducted by contractor and reply as follow: Investigation Findings: 1. The suspected complaint location was between Portion 7 and the outlet of Sheung Yue River. 2. According to the site records, activities include trimming and compaction of formation level and installation of lamp post were conducted. 3. EPD staff carried out investigation on 16 January 2023 and two water samples were collected. 4. An immediate checking by supplier was arranged to check the efficiency of the wastewater treatment plant. 5. During the checking, it was observed that the chemical dosing system was found clogged due to undissolved chemical, and it has been repaired. 6. The chemical was found lumping due to recent high relative humidity. 7. According to the records of Hong Kong Observatory on 10-15 January 2023, the relative humidity was reached to at least 94%. 8. An inspection was carried out with ET, it was observed that a covered u-channel was found damage and mud was accumulated at the bottom of the channel. Wastewater discharged from wastewater treatment plant may mixed with the | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | <p>accumulated mud and cause the wastewater become turbid / muddy.</p> <p>9. Visual comparison was conducted with ET on 17 January 2023, the colour of the glass bottle collected from wastewater treatment plant looks clear when compare with the standard solution.</p> <p>10. During the ad-hoc inspection on 27 January 2023, inadequate treated wastewater discharge from nearby private construction site was observed.</p> <p>Mitigation Measures and Follow-Up Actions:</p> <ol style="list-style-type: none"> 1. Properly store the chemical with covered tarpaulin to prevent lumping; 2. A refresher training for WWTP operation and maintenance by supplier was provided to foreman and designated workers; 3. Repair the damaged u-channel; 4. Arrange to clear the accumulated sludge in the channel; and 5. Keep closely monitoring such as daily visual inspection on the WWTP and clear the accumulated sludge in the channel. <p><u>From Contract Number (ND/2019/02):</u> Investigation was conducted by contractor and reply as follow: As mentioned by EPD and DSD, the finding was happened at the upstream of Sheung Yue River and the project site falls along the downstream of</p> | |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | <p>complaint location.</p> <p>1. Joint inspection for the issue was conducted by EPD and DSD on 11 January 2023.</p> <p>2. According to the record of construction site, no work was arranged on 12 January 2023 at Portion 1 along Castle Peak Road. Formwork, steel work and welding were carried out along Sheung Yue River. Site inspection and discharge sampling by contractor itself was conducted 12 January 2023 along all of the functioning wastewater treatment facilities along Sheung Yue River and no muddy discharge was found. The condition of outfall along rivers were also checked.</p> <p>3. According to investigation by contractor 12 Jan 2023, no muddy discharge from our project was observed. Preventative measures have been provided to further reduce the risk of illegal discharge. Silt Curtain has been installed along outfall and workforce with potential risk of polluted runoff has been installed sheet pile and canvas was provided to intercept runoff due to rainwater.</p> <p>4. Checking and maintenance of wastewater treatment facilities have been carried out by supplier before the joint inspection by EPD and DSD.</p> <p>5. Training on proper wastewater treatment and discharge has been provided for site staff to raise the awareness of site staff at all levels.</p> <p>Conclusion: Based on the findings of investigation, CW-KL</p> | |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| | | | | JV enhanced water pollution control to reduce nuisance to the environment. Environmental promotion is given to site staff and workers to increase their awareness of environmental protection. | |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
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| COM-2023-02-03 | a construction site near On Lok Garden at On Fuk Street, North District. (ND/2019/05) | 3 rd February 2023 | EPD received a complaint with ref.: N07/RN/0002434-23 on 29 Jan 2023. Complaint detail: Suspect some closeby construction sites flow the waste water into the river that potentially kill the fish inside the river. | <p>The investigation result as follows:</p> <p>Since the concerned area near On Lok Garden is Portion V, the following investigation is focusing on portion V and its nearby works area (portion VI & VIII) from upper stream of Ma Wat River.</p> <ol style="list-style-type: none"> 1. Site activities at concerned areas; There were superstructure construction works (i.e., construction of pier and portal beam and segment) which did not generate wastewater in Portion V and its nearby works area from upper stream of Ma Wat River. 2. Preventive measures for pollution control; 19 sets of wastewater treatment facilities have been setup and operating for all works area for Contract No. 5 which covering all of the concerned works areas, 3. Latest discharge monitoring results; The water quality of the discharge from the Site have been monitored according to the granted discharge licence ref. WT00036996-2020. Discharge qualities are regularly monitored and tested by HOKLAS accredited laboratory. The results show all discharge samples are complying with discharge standards outlined in discharge license, test results of discharge sample in concerned areas which were submitted to EPD. | Closed |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|----------|----------|---------------|----------------------|---|--------|
| | | | | <p>4. Any possible source of muddy discharge to induce the captioned incident; No wastewater generating activities were conducted at Portion V in concerned period between 06:48 to 06:53 on 19 January 2023. Wastewater (if any) from all our construction activities is properly collected, treated and monitored.</p> <p>During joint inspection with EPD inspectors and the Supervisor as well as the contractor on 31 January 2023, off site wastewater sources from other discharge pipes at upper stream of Ma Wat River are observed which are highly potential contributing to the incident.</p> | |

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/ Mitigation Action | Status |
|----------------|---|-------------------------------|---|--|--------|
| COM-2023-02-08 | Construction site near Dills Corner Garden (ND/2019/01) | 8 th February 2023 | EPD received a complaint with ref.: N07/RN/00003315-23 on 6 Feb 2023. Complaint detail: 投訴波樓路石仔嶺花園裏面的打樁工程噪音 | The investigation result as follows: 1. The suspected complaint location was Dills Corner Garden where few contracts which included ND/2019/01, ND/2019/02, ND/2019/05 and private construction site were carried out construction works nearby. 2. There was no foundation work carried out at or near Drills Corner Garden under ND/2019/01. 3. The nearest site area Portion 1e was a temporary storage area for construction material where no construction works carried out. 4. However, piling work was identified next to the Drills Corner Garden which was not belonged to ND/2019/01. 5. According to the EPD records, there were two piling permits granted to other contactors near the Drills Corner Garden which were not under ND/2019/01. 6. As there was no foundation work carried out under ND/2019/01, no mitigation measures or follow-up actions were proposed. | Closed |

APPENDIX T
SUMMARY OF SUCCESSFUL
PROSECUTION

Appendix T - Summary of Successful Prosecution

| Date of Successful Prosecution | Details of the Successful Prosecution | Status | Follow Up |
|---------------------------------------|--|---------------|------------------|
| -- | -- | -- | -- |

**APPENDIX U
SUMMARY TABLE FOR REQUIRED
SUBMISSION UNDER
ENVIRONMENTAL PERMIT**

Development of Kwu Tung North and Fanling North New Development Areas

Summary for the EP Submissions

| DP No. | EP No. | Designated Project | Phase (1st Phase = 1, Remaining Phase = 2) | Commencement date of construction | C1 | C2 | C3 | C4 | C5 | C6 | C7 |
|----------------------|-------------------------------|--|---|--|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----|
| DP2 | EP-466/2013/A | Castle Peak Road Diversion | 1 | 12-Aug-20 | C1-DP2 | | | | | | |
| DP3 | EP-467/2013/A | Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement | 1 | 12-Aug-20 | C1-DP3 | | | | | | |
| DP4 | EP-468/2013/A | Kwu Tung North New Development Area Road D1 to D5 | 1 | 1-Jun-20 (for C1) 3-Jul-20 (for C3) | C1-DP4 | | C3-DP4 | | | | |
| DP5 | EP-469/2013 | Sewage Pumping Stations in Kwu Tung North New Development Area | 1 | 28-Oct-20 | | C2-DP5 | | | | | |
| DP7 | EP-470/2013 | Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works | 1 | 23-Mar-20 | C1-DP7 | | | | | | |
| DP10 | EP-473/2013/A | Fanling Bypass Eastern Section | 1 | 6-Oct-20 (for C3) 23-Feb-21 (for C4) 1-Aug-20 (for C5) | | | C3-DP10 | C4-DP10 | C5-DP10 | | |
| DP12 | EP-475/2013/A | Reprovision of temporary Wholesale Market in Fanling North New Development Area | 1 | 29-Oct-19 | | | | | | C6-DP12 | |
| DP14 | EP-546/2017 | Fanling North Temporary Sewage Pumping Station | 1 | 16-Feb-21 | | | | C4-DP14 | | | |

| DP2 | EP-466/2013/A | Castle Peak Road Diversion | | | | |
|--------------------------------|---|-----------------------------------|--|--|--|---|
| Construction commencement date | | | 12 August 2020 | | | |
| Operation commencement date | | | tbc | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction. | Notified 2 March 2020 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction . | Established 5 March 2020 | Pre-construction ET |
| | | | | | Established 23 January 2020 | Construction Phase ET |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction. | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction. | Deposited 27 July 2020 | |
| 2.5 | Layout Plan | Before construction | Deposit | no later than 2 weeks before the commencement of construction. | Deposited 27 July 2020 | EPD Approved 25 August 2020 |
| 2.6 | Cultural Heritage Impact -- Baseline condition survey and baseline vibration impact assessment | Before construction | To Conduct - A baseline condition survey and baseline vibration impact assessment by a qualified building surveyor or a qualified structural engineer. <u>Note:</u> The baseline condition survey and baseline vibration impact assessment shall be included in and form part of the Baseline Monitoring Report to be submitted under Condition 3.3. | prior to the commencement of construction. | Submitted 8 October 2022 | |
| 2.7 | Cultural Heritage Impact -- Photographic and Cartographic Records/ Proposals on relocation of any building | Others | Deposit - A copy of Photographic and cartographic records of directly impacted historical buildings at HKT08 and the entrance gate of HKT03. | prior to the commencement of the respective removal or relocation works. | NA | No relocation is required. |
| | | Others | For Approval - Proposals on relocation of any built heritages. | prior to commencement of the respective relocation work. | NA | No relocation is required. |
| 2.8 | Landscape Plan | Others | Deposit | at least 6 weeks before the commencement of the corresponding parts of landscape and visual mitigation measures of the Project. | NA | Submitted justification 3 October 2022 PlanD comment 13 October 2022 |
| 2.10 | Traffic Noise Mitigation Plan | Before construction | Submit | At least one month before commencement of construction | To be submitted before commencement of Remaining Phase works | |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction. | Submitted by Pre-Construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period. | Submitted by ET Monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address. | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit. | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available. | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation. | N/A | |

Remarks:
tbc: To be confirmed
DP: Designated Project
* tentative submission date will be supplemented once available
The Landscape Plan will be submitted by CEDD’s Castle Peak Road project team as confirmed since there is no existing tree is being affected by CEDD KTN NDA Phase 1 Works within the small portion of area along Castle Peak Road (near Pak Shek Au) which is overlapped with DP2 work boundary.

| DP3 | EP-467/2013/A | Kwu Tung North New Development Area Road P1 and P2 and Associated New Kwu Tung Interchange and Pak Shek Au Interchange Improvement | | | | |
|--------------------------------|---|--|---|---|---|--|
| Construction commencement date | | 12 August 2020 | | | | |
| Operation commencement date | | tbc | | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction | Notified 2 March 2020 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction | Established 5 March 2020 | Pre-construction ET |
| | | | | | Established 23 January 2020 | Construction Phase ET |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction | Deposited 27 July 2020 | |
| 2.5 | Layout Plan | Before construction | Deposit | no later than 2 weeks before the commencement of construction | Deposited 27 July 2020 | EPD Approved 25 August 2020 |
| 2.6 | Traffic Noise Mitigation Plan | Before construction | For Approval | no later than 1 month before the commencement of construction | Deposited 31 July 2019 | EPD Approved 9 August 2019 |
| 2.7 | Cultural Heritage Impact -- Photographic and Cartographic Records | Others | Deposit - A copy of Photographic and cartographic records of directly impacted historical buildings and cultural/historical lanscape features at Locatoins KT38, KT44 and KT52. | prior to the commencement of the respective removal or relocation works | Deposited 10 Feb 2021 | No relocation is required |
| 2.8 | Landscape Plan | Others | Deposit | at least 6 weeks before the commencement of the corresponding parts of landscape and visual mitigation measures of the Project | Deposited 19 December 2022 | |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction | Submitted by Pre-Construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period | Submitted by ET Monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation | N/A | |

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

| DP4 | EP-468/2013/A | Kwu Tung North New Development Area Road D1 to D5 | | | | |
|--------------------------------|---|---|--|---|---|--|
| Construction commencement date | | 1 June 2020 | | | | |
| Operation commencement date | | tbc | | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction | Notified 2 March 2020 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction | Established 5 March 2020 | Pre-construction ET |
| | Established 23 January 2020 | | | | Construction Phase ET | |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction | Deposited 14 May 2020 | |
| 2.5 | Layout Plan | Before construction | Deposit | no later than 2 weeks before the commencement of construction | Deposited 14 May 2020 | |
| 2.6 | Cultural Heritage Impact -- Baseline condition survey and baseline vibration impact assessment | Before construction | To Conduct - A baseline condition survey and baseline vibration impact assessment by a qualified building surveyor or a qualified structural engineer <u>Note:</u> The baseline condition survey and baseline vibration impact assessment shall be included in and form part of the Baseline Monitoring Report to be submitted under Condition 3.3 | prior to the commencement of construction | Submitted 8 October 2022 | |
| 2.7 | Cultural Heritage Impact -- Photographic and Cartographic Records/ Proposals on relocation of any building | Others | Deposit - A copy of Photographic and cartographic records of directly impacted historical buildings and cultural/historical landscape features at locations HKT03, KT16, KT17 and KT18 | prior to the commencement of the respective removal or relocation works | NA | No relocation is required. |
| | | Others | For Approval - Proposals on relocation of any built heritages | prior to commencement of the respective relocation work | NA | No relocation is required. |
| 2.8 | Compensatory Tree Planting Plan | Before construction | For Approval | prior to the commencement of construction | Resubmitted 17 August 2022 | EPD approved 31 August 2022 |
| 2.9 | Habitat Creation and Management Plan | Others | For Approval | prior to the commencement of construction of relevant part of the Project | Submitted 20 October 2020 | EPD approved 4 November 2020 |
| 2.10 | Traffic Noise Mitigation Plan | Before construction | For Approval | no later than 1 month before commencement of construction | Submitted 31 July 2019 | EPD approved 9 August 2019 |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction | Submitted by Pre-Construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period | Submitted by ET Monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation | N/A | |

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

| DP5 | EP-469/2013 | Sewage Pumping Stations in Kwu Tung North New Development Area | | | | |
|--------------------------------|--|--|---|---|---|--|
| Construction commencement date | | 28 October 2020 | | | | |
| Operation commencement date | | tbc | | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction | Notify 14 October 2020 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction | Established 5 March 2020 | Pre-construction ET |
| | | | | | Established 23 January 2020 | Construction Phase ET |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction | Deposited 17 September 2020 | |
| 2.5 | Location Plans | Before construction | Deposit | no later than 2 weeks before the commencement of construction | Deposited 11 August 2022 | First Deposited 15 October 2020 |
| 2.6 | Landscape Plan | Before construction | Deposit | at least 6 weeks before the commencement of th corresponding parts of landscape and visual mitigation measures | Deposited 9 August 2022 | Comments from PlanD on 8 September 2022 |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction | Submitted by Pre-construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period | Submitted by ET Monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation | N/A | |

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

| DP7 | EP-470/2013 | Utilization of Treated Sewage Effluent (TSE) from Shek Wu Hui Sewage Treatment Works | | | | |
|--------------------------------|--|--|---|---|---|--|
| Construction commencement date | | 23 March 2020 | | | | |
| Operation commencement date | | tbc | | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction | Notify 22 January 2020 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction | Established 5 March 2020 | Pre-construction ET |
| | | | | | Established 23 January 2020 | Construction Phase ET |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction | Deposited 14 May 2020 | |
| 2.5 | Layout Plan | Before construction | Deposit | no later than 2 weeks before the commencement of construction | Deposited 14 May 2020 | |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction | Submitted by Pre-Construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period | Submitted by ET Monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation | N/A | |

Remarks: tbc: To be confirmed
 DP: Designated Project
 *tentative submission date will be supplemented once available

| DP10 | EP-473/2013/A | Fanling Bypass Eastern Section | | | | |
|--------------------------------|--|-----------------------------------|--|---|--|--|
| Construction commencement date | | 1 August 2020 | | | | |
| Operation commencement date | | tbc | | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction | Notified 8 September 2020 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction | Established 5 March 2020 | Pre-construction ET |
| | | | | | Established 23 January 2020 | Construction Phase ET |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction | Deposited 17 March 2021 | |
| 2.5 | Location Plans | Before construction | Deposit | no later than 2 weeks before the commencement of construction | Deposited 10 December 2020 | |
| 2.6 | Relocation Plan for Rose Bitterling | Before construction | Approval | before the commencement of construction | N/A | |
| 2.7 | Egretry Habitat Creation and Management Plan | Before construction | Approval | before the commencement of construction | N/A | |
| 2.8 | Detailed Design of Siu Hang San Tsuen Stream | Before construction | Deposit | before the commencement of construction | Deposited 5 May 2022 | EPD Satisfied 18 May 2022 |
| 2.9 | Traffic Noise Mitigation Plan | Before construction | Approval | no later than 1 month before the commencement of construction | Submitted 11 September 2020 | EPD Approved 8 October 2020 |
| 2.10 | Cultural Heritage Impact -- Baseline condition survey and baseline vibration impact assessment | Before construction | To Conduct - A baseline condition survey and baseline vibration impact assessment by a qualified building surveyor or a qualified structural engineer <u>Note:</u> The baseline condition survey and baseline vibration impact assessment shall be included in and form part of the Baseline Monitoring Report to be submitted under Condition 3.3 | prior to the commencement of construction | Submitted 1 September 2022, 5 May 2022 and 12 July 2022 | |
| 2.11 | Cultural Heritage Impact -- Photographic and Cartographic Records/ Proposals on relocation of any building | Others | Deposit - A copy of Photographic and cartographic records of directly impacted historical buildings and cultural/historical landscape features at FL19 | prior to the commencement of the respective removal or relocation works | Submitted 25 May 2022 | No relocation is required |
| | | Others | For Approval - Proposals on relocation of any built heritages | prior to commencement of the respective relocation work | NA | No relocation is required |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction | Submitted by Pre-Construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period | Submitted by ET Monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation | N/A | |

Remarks: tbc: To be confirmed
DP: Designated Project
*tentative submission date will be supplemented once available

| DP12 | EP-475/2013/A | Reprovision of Temporary Wholesale Market in Fanling North New Development Area | | | | |
|--------------------------------|--|---|---|---|---|--|
| Construction commencement date | | 29 October 2019 | | | | |
| Operation commencement date | | tbc | | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 8 weeks prior to the commencement of construction | Notified 15 October 2019 | |
| 2.1 | Establish of ET | Before construction | Establish - An ET & IEC of at least 7 years of experience in EM&A or environmental management. | no later than 6 weeks before the commencement of construction | Established 5 March 2020 | Pre-construction ET |
| | | | | | Established 23 January 2020 | Construction Phase ET |
| 2.2 | Employment of IEC | | | | Established 11 March 2020 | Pre-construction IEC |
| | | | | | Established 20 February 2020 | Construction Phase IEC |
| 2.3 | Update EM&A Manual | Before construction | Deposit | at least 4 weeks before the commencement of construction | Latest submitted on 4 September 2020 by Pre-construction ET | |
| 2.4 | Management organization of the main construction companies | Before construction | Inform in writing | no later than 2 weeks before the commencement of construction | Deposited 14 October 2019 | |
| 2.5 | Layout Plan | Before construction | Deposit | no later than 2 weeks before the commencement of construction | Deposited 14 October 2019 | |
| 2.6 | Landscape Plan | Others | Deposit | at least 6 weeks before the commencement of the corresponding parts of landscape and visual mitigation measures of the Project | Deposited 31 March 2022 | |
| 3.3 | Baseline Monitoring Report | Before construction | Submit | at least 2 weeks before the commencement of construction | Submitted by Pre-construction ET | by Fugro |
| 3.4 | Monthly EM&A Report | During construction | Submit | within 2 weeks after the end of each reporting month throughout the entire construction period | Submitted by ET monthly | |
| 4.2 | Dedicated website | During construction | Set up and Notify in writing -- the internet address | in place within one month after the commencement of construction of the Project. | Notified 7 July 2022 | First Notified 22 April 2020 [For all EPs] |
| | | During construction and operation | Upload -- All environmental monitoring results described in Condition 4.1 and all submissions required by this Permit | in the shortest time practicable, and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available | N/A | |
| | | | Maintain | entire construction period and during the first 3-year of operation | N/A | |

Remarks: tbc: To be confirmed
 DP: Designated Project
 *tentative submission date will be supplemented once available

| | | | | | | |
|--------------------------------|-----------------------------------|--|-------------------|---|------------------------------|---------|
| DP14 | EP-546/2017 | Fanling North Temporary Sewage Pumping Station | | | | |
| Construction commencement date | | | 16 February 2021 | | | |
| Operation commencement date | | | tbc | | | |
| EP Condition | | Requirements and Submissions | | | Submission Status | Remarks |
| | | Period | Action | Timeframe | | |
| 1.12 | Commencement date of construction | Before construction | | no later than 1 month prior to the commencement of construction | Notified 8 September 2020 | |
| 1.14 | Commencement date of operation | Before operation | Notify in writing | no later than 1 month prior to the commencement of operation | N/A | |
| 2.4 | IEC Audit Report | After construction | Deposit | within one month upon completion of the construction works | N/A | |