EPD EAD SC27L

本客檔號 OUR REF: (7) in EP2/N7/A/78 Pt.28 來函檔號 YOUR REF 231448/(CV/2017/02)/M45/950/602273 電 話 TEL. NO.: 2835 1142 圖文傳真 FAX NO 電子郵件 E-MAIL: 網 址 HOMEPAGE: http://www.epd.gov.hk

Environmental Protection Department Branch Office 28th Floor, Southorn Centre, 130 Hennessy Road,





環境保護署分處 香港灣仔 軒尼詩道 一百三十號 修頓中心廿八樓

30 November 2022

By Post & Fax: 2516 9430

Hsin Chong Tsun Yip Joint Venture Hsin Chong Tower, 107 – 109 Wai Yip Street Kwun Tong, Kowloon (Attn: Mr. HO Man To)

Dear Mr. HO,

Environmental Impact Assessment (EIA) Ordinance (Cap. 499) Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery

Employment of Environmental Team (ET) (Environmental Permit No. FEP-01/534/2017A – Proposed Minimum On-Site <u>Time for ET Leader and ET under EP Condition 2.1</u>)

I refer to your letter dated 24.11.2022 enclosing the proposal for minimum on-site time for Environmental Team (ET) Leader and ET under EP Condition 2.1 for our approval.

2. Pursuant to Condition 2.1 of EP No. FEP-01/534/2017/A, please be advised that the proposed minimum on-site time for ETL and ET is hereby approved. Please be reminded that the ET is required to carry out the duties as specified in Conditions 2.2 and 2.3 of the captioned EP.

3. Should you have any queries, please contact the undersigned or our Mr. Alex Lyn at 2835 1117.

Yours sincerely,

Mu chi Da

(Dr. MA Chi Wai) Acting Senior Environmental Protection Officer for Director of Environmental Protection

CEDD-DPTL (Land Works) AUES

(Attn.: Steven SHUM) (Attn.: T. W. TAM)

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Fax No. 2714 0079 Fax No. 2959 6079

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Our Ref: TCS00881/18/300/L0693

Environmental Protection Department EIAO Register Office

27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong

Attn: EIAO Register Office

24 November 2022 By Courier

Dear Sir/ Madam,

Re: Contract No.: CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery Environmental Permit No. FEP-01/534/2017/A EP Condition 2.1 Submission of Proposal on minimum on-site time for the Environmental Team Leader and Environmental Team

On behalf of the Permit Holder of FEP-01/534/2017, we submit herewith a Proposal on minimum on-site time for the Environmental Team Leader and Environmental Team (Version 4a) incorporating your comment for your approval

Enclosed please find the following documents for your kind perusal:-

- i) CEDD's Clarification Letter regarding Submission and Notifications;
- ii) Response to Comments;
- iii) Certification letter of ET Leader;
- iv) Verification letter if IEC; and
- v) Proposal on minimum on-site time for the Environmental Team Leader and Environmental Team (Version 4a) (4) hard copies and one (1) electronic copy

Should you have any question or require further information, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or Email: twtam@fordbusiness.com.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

T. W. Tam Environmental Team Leader

Encl.

cc CEDD ARUP (RE of Contract 1) Acuity (IEC) HCTY-JV (Contractor of Contract 1) Mr. SHUM Ngai Hung, Steven Mr. Anthony Lau Mr. Jacky Leung Mr. Ho Man To

 Tel
 (852) 2959-6059

 Fax
 (852) 2959-6079

 Email
 info@fordbusiness.com





Our Ref: TCS00881/18/300/L0693

Environmental Protection Department EIAO Register Office

27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong

Attn: EIAO Register Office

24 November 2022 By Courier

Dear Sir/ Madam,

Contract No.: CV/2016/10 Re:

Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemeterv

Environmental Permit No. FEP-01/534/2017/A

EP Condition 2.1

Submission of Proposal on minimum on-site time for the Environmental Team Leader and **Environmental Team**

On behalf of the Permit Holder of FEP-01/534/2017, we submit herewith a Proposal on minimum on-site time for the Environmental Team Leader and Environmental Team (Version 4a) incorporating your comment for your approval

Enclosed please find the following documents for your kind perusal:-

- CEDD's Clarification Letter regarding Submission and Notifications; i)
- ii) Response to Comments;
- Certification letter of ET Leader; iii)
- Verification letter if IEC: and iv)
- Proposal on minimum on-site time for the Environmental Team Leader and Environmental v) Team (Version 4a) (4) hard copies and one (1) electronic copy

Should you have any question or require further information, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or Email: twtam@fordbusiness.com.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

T. W. Tam Environmental Team Leader

Encl.

cc CEDD

ARUP (RE of Contract 1) Acuity (IEC) HCTY-JV (Contractor of Contract 1) Mr. SHUM Ngai Hung, Steven Mr. Anthony Lau Mr. Jacky Leung Mr. Ho Man To

(852) 2959-6059 Fax (852) 2959-6079 Email info@fordbusiness.com

Tel





安順聯合環境服務及顧問 Action-United Environmental Services & Consulting

Our Ref: TCS00881/18/300/L0092

Civil Engineering and Development Department Civil Engineering Office Land Works Division Section 8 2/F, Civil Engineering and Development Building, 101 Princess Margaret Rd, Homantin, Kowloon

Attn: Mr. Joseph WONG

30 July 2018 By e-mail

Dear Sir/ Madam,

Re: CEDD Contract CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery Submission and Notifications (Environmental Permit No. EP-534/2017) (Further Environmental Permit No. FEP-01/534/2017)

With reference to your letter to Environmental Protection Department (EPD) (letter ref.: (COL5AY) in LW-30-3005-3268-06) dated 27 July 2018 concerning on the captioned. Please note that we have no objection on your letter which confirmed that all relevant submission and notifications from Hsin Chong Tsun Yip Joint Venture (HCTYJV) under this FEP No. FEP-01/534/2017 also serves as the corresponding EP submissions and notifications for the relevant geographical areas under the mother EP No. EP-534/2018 which CEDD is the Permit Holder.

Should you have any question or require further information, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or Email: twtam@fordbusiness.com.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

T. W. Tam Environmental Team Leader

cc IICTY-JV (Contractor) Acuity (IEC) ARUP Mr. Ho Man To Mr. Jacky Leung Mr. Steven Tang by-email by-email by-email

香港新界葵涌大運排道35-41號金基工業大廈20樓A室 Unit A, 20/F, Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung, New Territories, Hong Kong
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土木工程拓展署

Civil Engineering and Development Department

N eb site	網址	: http://www.cedd.gov.nk
E-mail	電子郵件	: ypcheng \tilde{a} cedd goy hk
Telephone	電話	: (852) 2762 5645
Facsimile	傳真	: (852) 2714 0079
Our reference	本署檔號	:{COL5AY)in LW-30-3005-3268-06
Your reference	來函檔號	: () in EP2 N7 A 78 Pt 6

土木工程處 Civil Engineering Office

香港九龍公主道101號 土木工程拓展署大樓 Civil Engineering and Development Building, 101 Princess Margaret Road, Kowloon, Hong Kong.

Environmental Impact Assessment Ordinance Register Office 27/F, Southom Centre 130 Hennessy Road Wan Chai, Hong Kong 27 July 2018 Urgent by Post

Dear Sirs.

Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery

Submissions and Notifications (Environmental Permit No. EP-534/2017) (Further Environmental Permit No. FEP-01/534/2017)

Hsin Chong Tsun Yip Joint Venture (HCTYJV) is the Permit Holder of the Further Environmental Permit No. FEP-01/534/2017 (FEP) under the captioned designated project. This is to confirm that all relevant submissions and notifications from HCTYJV submitted under this FEP also serve as the corresponding EP submissions and notifications for the relevant geographical areas under the mother EP No. EP-534/2017 which CEDD is the Permit Holder.

Please contact the undersigned at 2762 5658 if you have any queries.



<u>c.c.</u> Site Office Hsin Chong Tsun Yip Joint Venture ETL (AUES) IEC (Acuity) E/81, PC/82 - to note in file

卓越工程 建設香港

Yours faithfully,

(Joseph WONG) for Chief Engineer/Land Works Civil Engineering Office Civil Engineering and Development Department

By dispatch
By fax: 2633 4691
By fax: 2959 6079
By fax: 2268 3950

We Engineer Hong Kong's Development



Our Ref: TCS00881/18/300/L0649a

Hsin Chong Tsun Yip Joint Venture

Hsin Chong Center, 107-109 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Attn: Mr. HO Man To

14 November 2022 By Hand

Dear Sir,

CEDD Contract CV/2016/10 Re: Site Formation and Associated Infrastructural Works for Development of **Columbarium at Sandy Ridge Cemetery** Proposal on minimum on-site time for the Environmental Team Leader and **Environmental Team (Version 4a)**

We refer to the captioned proposal which prepared to fulfil Environmental Permit no. FEP-01/534/2017/A Conditions 2.1. We herewith certify the captioned Proposal pursuant to Environmental Permit no. FEP-01/534/2017/A Conditions 2.1 and 1.9.

Should you have any queries, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or Email: twtam@fordbusiness.com.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

cc

T. W. Tam Environmental Team Leader TW/nh

> CEDD ARUP (RE of Contract 2) Acuity (IEC)

Mr. SHUM Ngai Hung, Steven Mr. Anthony Lau Mr. Jacky Leung

By-email By-email by e-mail

(852) 2959-6059 (852) 2959-6079 Fax Email info@fordbusiness.com

Tel







Our Ref.: PL-202211037

Hsin Chong Tsun Yip Joint Venture (CV/2016/10) Hsin Chong Centre 107 – 109 Wai Yip Street Kwun Tong, Kowloon Hong Kong

Attention: Mr. HO Man-to

24 November 2022

Dear Sir,

Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery Proposal on Minimum On-site Time for the Environmental Team Leader and Environmental Team (Version 4a)

Referred to the email from ET concerning the above, I have no adverse comment on the revised Proposal on Minimum On-site Time for the Environmental Team (ET) Leader and ET (Version 4a). According to section 1.9 of the FEP with permit no. FEP-01/534/2017A, I hereby verify the captioned proposal with reference no. TCS00881/18/600/R0175v4a.

Yours faithfully,

CH Leung

Leung CH Jacky Independent Environmental Checker



PROJECT NO.: TCS/00881/18

CEDD CONTRACT CV/2016/10SITEFORMATIONANDASSOCIATEDINFRASTRUCTURAL WORKSFORDEVELOPMENT OFCOLUMBARIUM AT SANDY RIDGECEMETERY

SUBMISSION UNDER ENVIRONMENTAL PERMIT: FEP-01/534/2017 and covers the geographical area of Contract CV/2016/10

PROPOSAL ON MINIMUM ON-SITE TIME FOR THE ENVIRONMENTAL TEAM (ET) LEADER AND ET

PREPARED FOR HSIN CHONG TSUN YIP JOINT VENTURE

Quality Index Prepared By Certified by Date Reference No. Prepared By Certified by 21 September 2022 TCS00881/18/600/R0175v4a MMA Mmanual Nicola Hon T.W. Tam

(Environmental Consultant) (Environmental Team Leader)

Ver.	Date	Description	
1	3 Dec 2018	First submission	
2	5 Mar 2020	Amended according to EPD's comments	
3	24 Dec 2020	Amended according to EPD's comments	
4	21 Sep 2022	Amended according to EPD's comments	

This report has been prepared by Action-United Environmental Services & Consulting with all reasonable skill, care and diligence within the terms of the Agreement with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.



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1 INTRODUCTION

1.1 Background

- 1.1.1 Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery" (hereafter referred as "the Project") is classified as Designated Project which required Environmental Permit as per Schedule 2, Part 1 of the EIAO.
- 1.1.2 The Environmental Impact Assessment (EIA) Report for the Project was approved under the EIAO Ordinance in August 2016. An Environmental Permit No. EP-534/2017 was issued to Civil Engineering and Development Department (CEDD) on 7 April 2017 and FEP-01/534/2017 was issued to Hsin Chong Tsun Yip Joint Venture on 23 February 2018. After the project commencement, variation of EP was applied by the Permit Holder and EP no. EP-534/2017/A and FEP-01/534/2017/A were subsequently issued on 24 December 2018.

1.2 Project Description

- 1.2.1 The location of the Designated Project is located in Sandy Ridge Cemetery, New Territories and the location of the Project is shown in *Appendix A*. The Project mainly comprises of:
 - Site formation of about 5.5 hectares of land and associated drainage, sewerage and landscape works for development of Columbarium and Crematorium facilities at the Sandy Ridge Cemetery;
 - Construction of a new road (about 800m) connecting the Crematorium and Man Kam To Road and the pick-up/drop-off point at Man Kam To Road;
 - Widening of two sections of the existing Sha Ling Road (about 900m and 500m respectively);
 - Widening of about 1.4km of the existing Lin Ma Hang Road; and
 - Improvement works to the existing barging point at Siu Lam
- 1.2.2 To facilitate the Project management, the Project were separated into three different Work Contracts and they are listed below.
 - CEDD Contract No. CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery (hereafter referred as "Contract 1") and implemented under FEP-01/534/2017/A
 - CEDD Contract No. CV/2017/02 Infrastructural Works at Man Kam To Road and Lin Ma Hang Road for Development of Columbarium at Sandy Ridge Cemetery (hereafter referred as "Contract 2") and implemented under EP-534/2017/A
 - CEDD Contract No. (to be confirmed) (hereafter referred as "Contract 3")
- 1.2.3 Hsin Chong Tsun Yip Joint Venture (hereafter referred as "HCTYJV") has been awarded the CEDD Contract No. CV/2016/10 "Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery" on 5 December 2017. According to the Contract requirement, HCTYJV shall take over the responsibility for part of the Environmental Permit No. EP-534/2017 for ease of management, therefore application for Further Environmental Permit was submitted by HCTYJV to EPD on 26 January 2018 and Further Environmental Permit No. FEP-01/534/2017 was granted to HCTYJV by EPD on 23 February 2018 and subsequent variation of Further Environmental Permit No. FEP-01/534/2017 A issued by EPD on 24 December 2018.
- 1.2.4 The geographical location of Contract 1 under FEP-01/534/2017 and layout plan of Contract 1 is shown in *Appendix B*. Major works to be executed under the Contract 1 shall include the following:
 - (i) Site formation of about 1.77 ha of land for the proposed pick-up and drop-off area for shuttle bus operation;
 - (ii) Upgrading of a section of 900m existing Sha Ling Road from 3m wide carriageway to



7.3m wide carriageway with footpath at both sides;

- (iii) Construction of one EVA with a total length of about 160m;
- (iv) Construction of noise barriers along Sha Ling Road;
- (v) Modification of junction between Man Kam To Road and Sha Ling Road;
- (vi) Construction of a new pick up / drop off point at Man Kam To Road;
- (vii) Relocation and construction of a new refuse collection point near junction between Man Kam To Road and Sha Ling Road;
- (viii) Associated geotechnical works including cut and fill slopes, soil nailing works and retaining structures;
- (ix) Associated drainage, sewerage and waterworks along Sha Ling Road; and
- (x) Associated landscaping works.
- 1.2.5 Action-Environmental Services & Consulting (hereinafter referred as "AUES") has been commissioned as an Environmental Team (hereinafter referred as "the ET") for Contact 1 to implement the relevant EM&A program in accordance with the approved EM&A Manual, as well as the associated duties. AUES does not have any association relationship and conflict of interest with the Main Contractor of Contract 1 and Independent Environmental Checker (IEC). The employment of ET and associated declaration letter are shown in *Appendix C*. Notification of commencement date of construction had been submitted to EPD no later than one month prior to the commencement of construction of the Project, and the relevant submission is shown in *Appendix D*.

1.3 Project Organization

- 1.3.1 The proposed project organization and lines of communication with respect to environmental protection works are shown in *Appendix E*.
- 1.3.2 The leader of the ET shall be an independent party from the Contractor and has relevant professional qualification, or have sufficient relevant EM&A experience subject to approval of the ET.
- 1.3.3 The responsibilities of respective parties are:

The Contractor

- Implement the EIA recommendations and requirements;
- Employ an ET to undertake monitoring, laboratory analysis and reporting of environmental monitoring and audit;
- Provide assistance to ET in carrying out monitoring and auditing;
- Submit proposals on mitigation measures in case of exceedances of Action and Limit Levels in accordance with the Event and Action Plans;
- Implement measures to reduce impact where Action and Limit Levels are exceeded; and
- Adhere to the agreed procedures for carrying out compliant investigation.

Environmental Team

- Set up all the required environmental monitoring stations;
- Monitor various environmental parameters as required in the EM&A Manual;
- Analyse the environmental monitoring and audit data and review the success of EM&A programme to cost-effectively confirm the adequacy of mitigation measures implemented and the validity of the EIA predictions and to identify any adverse environmental impacts arising;
- Carry out site inspection to investigate and audit the Contractors' site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and take proactive actions to pre-empt problems;
- Audit and prepare audit reports on the environmental monitoring data and site environmental conditions;
- Report on the environmental monitoring and audit results to the IEC, Contractor, the ER and



EPD or its delegated representative;

- Recommend suitable mitigation measures to the Contractor in the case of exceedance of Action and Limit Levels in accordance with the Event and Action Plans;
- Undertake regular on-site audits / inspections and report to the Contractor and the ER of any potential non-compliance;
- Follow up and close out non-compliance actions; and Adhere to the procedures

Engineer or Engineer's Representative

- Supervise the Contractor's activities and ensure that the requirements in the EM&A Manual are fully complied with;
- Inform the Contractor when action is required to reduce impacts in accordance with the Even and Action Plans;
- Assist the Project Proponent in employing an IEC to audit the results of the EM&A works carried out by the ET;
- Comply with the agreed Event Contingency Plan in the event of any exceedance; and
- Adhere to the procedures for carrying out complaint investigations.

Independent Environmental Checker

- Review the EM&A works performed by the ET (at not less than monthly intervals);
- Audit the monitoring activities and results (at not less than monthly intervals);
- Validate and confirm the accuracy of monitoring results, monitoring equipment, monitoring locations, monitoring procedures and location of sensitive receivers;
- Report the audit results to the ER and EPD in parallel;
- Review the EM&A reports (monthly and quarterly summary reports) submitted by the ET;
- Review the proposal on mitigation measures submitted by the Contractor in accordance with the Event and Action Plans;
- Check the mitigation measures submitted by the Contractor in accordance with the Event and Action Plans;
- Check the mitigation measures that have been recommended in the EIA and this Manual, and ensure they are properly
- implemented in a timely manner, when necessary; and
- Report the findings of site inspections and other environmental performance reviews to ER and EPD.
- 1.3.4 The construction works under the project involved large amount of earthwork in site formation and ecologically important species and habitats that require special attention. To prevent the environmental impacts/ violation, of environmental legislation, and potential non-compliance / contravention incidents, according to the Contractor's latest construction programme, a Proposal on minimum on-site time for the ET Leader and ET (hereinafter 'the Proposal') is prepared by the ET to present the methodology for the site inspection of the Project and the associated deficiency and action reporting procedures, covers the relevant geographical area of the Contract 2.

1.4 Nature of Project

- 1.4.1 The nature of Designated Project included a drainage channel which discharges into an area which is less than 300 m from the nearest boundary of an existing conservation area. The potential environmental impact has been assessed in the EIA Report. It is recommended to implement an Environmental Monitoring & Audit (EM&A) programme throughout the entire construction period to regularly monitor the environmental impacts on the neighbouring sensitive receivers. All the requirements (including dust, airborne noise, water quality, waste management, land contamination, ecology, landscape & visual, and cultural heritage) in the EM&A Manual shall be complied with.
- 1.4.2 The construction works under the project involved large amount of earthwork in site formation and ecologically important species and habitats that require special attention. To prevent the environmental impacts/ violation, of environmental legislation, and potential non-compliance /



contravention incidents, according to the Contractor's latest construction programme, a Proposal on minimum on-site time for the ET Leader and ET (hereinafter 'the Proposal') is prepared by the ET to present the methodology for the site inspection of the Project and the associated deficiency and action reporting procedures, covers the relevant geographical area of the Contract 2.

1.5 Objective of the Report

- 1.5.1 Pursuant to Environmental Permit *FEP-01/534/2017/A Condition 2.1*, the minimum on-site time for the ET Leader and ET and the qualifications of the specialist in the ET shall be proposed with justifications for approval of the Director. This is the proposal on minimum on-site time for the ET Leader and ET for the geographical location of Contract 1. The Proposal will be implemented throughout the construction period of the Project upon endorsement by EPD.
- 1.5.2 The Proposal is structured into four sections as follows:
 - 1 Introduction
 - 2 The organization and duties of Environmental Team
 - 3 Deficiency
 - 4 Action Reporting Procedure
 - 5 Review of minimum on-site time



2 THE ORGANIZATION AND DUTIES OF ENVIRONMETNAL TEAM

2.1 **Key Staff of Environmental Team**

- 2.1.1 An ET shall be established by the Permit Holder no later than one month before the commencement of construction of the Project. The ET shall not be in any way an associated body of the Contractor or the IEC for the Project. The Permit Holder shall provide a site office/suitable work accommodation on site to the ET for use. The ET shall be headed by an ET Leader and supported by relevant specialists including qualified ecologist(s) and Registered Landscape Architect. The ET Leader shall be a person who has at least 7 years of experience in EM&A or environmental management. The minimum on-site time for the ET Leader and ET, and the qualifications of the specialists in the ET shall be proposed with justifications for the approval of the Director.
- 2.1.2 The organisation chart of ET with the deployment of specific specialist is shown in *Figure 1* below.



2.2 **Duties of Environmental Team**

- 2.2.1 As stated in Condition 2.2 of the FEP-01/534/2017/A, the ET and the ET Leader shall be responsible for:
 - (i) implementing the EM&A programme in accordance with the EM&A requirements as contained in the EM&A Manual of the Project as mentioned in Condition 3.1;
 - (ii) certifying the environmental acceptability of permanent and temporary works, relevant plans and submissions required in the EM&A Manual and under this Permit;
 - (iii) carrying out site inspections to audit the Contractor's site practice and work methodologies with respect to environmental mitigation measures contained in the EM&A Manual of the Project and to take pro-active actions to pre-empt environmental problems;
 - (iv) notifying the IEC within one working day of the occurrence of each and every instance or circumstance or change of circumstances, which may affect the compliance with the recommendations of the approved EIA Report (Register No. AEIAR-198/2016) and this Permit; and
 - keeping a contemporaneous log-book of any such instance or circumstance or change (v) of circumstances. The log-book shall be kept readily available for inspection by all



persons assisting in supervision of the implementation of the recommendations of the approved EIA Report (Register No. AEIAR-198/2016) and this Permit or by the Director or his authorized officers.

2.2.2 A proposal for employment of ETL including qualification was submitted to EPD and approved on 21 May 2018. The relevant proposal and approval letter are shown in *Appendix F*.

2.3 Employment of Qualified Ecologist(s)

- 2.3.1 According to *FEP-01/534/2017/A Condition 2.4*, Qualified Ecologist(s) shall be appointed, no later than one month before commencement of the construction of the Project, to form part of the ET to carry out works relating to ecological aspects including but not limited to a details vegetation survey, baseline survey for Golden-headed Cisticola and submissions for the Project as required under Condition 2.14 to 2.20. Each Qualified Ecologist shall be a person who has at least 5 years of relevant experience. The qualification and experience of the Qualified Ecologist(s) shall be certified by the ET Leader and verified by the IEC.
- 2.3.2 A proposal for employment of Qualified Ecologist(s) (QE) including qualification and experience of the QE with justifications was submitted to EPD and approved on 21 June 2018. Subsequence proposal on replacement of QE(s) was approved by EPD on 30 June 2020. The relevant proposal and approval letters are shown in *Appendix G*.

2.4 Duties of Registered Landscape Architect

- 2.4.1 According to *FEP-01/534/2017/A Condition 2.5*, a Registered Landscape Architect shall be appointed, no later than one month before commencement of the construction of the Project, to form part of the ET to carry out works relating to landscape aspects including but not limited to auditing the mitigation measures to ensure compliance with the recommendations of the approved EIA Report (Register No. AEIAR-198/2016) to certify submissions for the Project as required under Conditions 2.21 to 2.22. The qualification and experience of the Registered Landscape Architect shall be certified by the ET Leader and verified by the IEC.
- 2.4.2 A proposal for employment of Registered Landscape Architect (RLA) including qualification and experience of the QE with justifications was submitted to EPD and approved on 23 May 2018. The relevant proposal and approval letter are shown in *Appendix H*.
- 2.4.3 Besides, as referred to S.3.1.1.3 of the EM&A Manual, the duties of the ET and ET Leader shall include the followings:
 - Set up all the required environmental monitoring stations;
 - Monitor various environmental parameters as required in the EM&A Manual;
 - Analyse the environmental monitoring and audit data and review the success of EM&A programme to cost-effectively confirm the adequacy of mitigation measures implemented and the validity of the EIA predictions and to identify any adverse environmental impacts arising;
 - Carry out site inspection to investigate and audit the Contractors' site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and take proactive actions to pre-empt problems;
 - Audit and prepare audit reports on the environmental monitoring data and site environmental conditions;
 - Report on the environmental monitoring and audit results to the IEC, Contractor, the ER and EPD or its delegated representative;
 - Recommend suitable mitigation measures to the Contractor in the case of exceedance of Action and Limit Levels in accordance with the Event and Action Plans;
 - Undertake regular on-site audits / inspections and report to the Contractor and the ER of any potential non-compliance;
 - Follow up and close out non-compliance actions; and



- Adhere to the procedures
- 2.4.4 Besides, as referred to S.3.1.1.3 of the EM&A Manual, the duties of the ET and ET Leader shall include the followings:
 - Set up all the required environmental monitoring stations;
 - Monitor various environmental parameters as required in the EM&A Manual;
 - Analyse the environmental monitoring and audit data and review the success of EM&A programme to cost-effectively confirm the adequacy of mitigation measures implemented and the validity of the EIA predictions and to identify any adverse environmental impacts arising;
 - Carry out site inspection to investigate and audit the Contractors' site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and take proactive actions to pre-empt problems;
 - Audit and prepare audit reports on the environmental monitoring data and site environmental conditions;
 - Report on the environmental monitoring and audit results to the IEC, Contractor, the ER and EPD or its delegated representative;
 - Recommend suitable mitigation measures to the Contractor in the case of exceedance of Action and Limit Levels in accordance with the Event and Action Plans;
 - Undertake regular on-site audits / inspections and report to the Contractor and the ER of any potential non-compliance;
 - Follow up and close out non-compliance actions; and
 - Adhere to the procedures

2.5 Accommodation on site to the ET

2.5.1 A work accommodation on site has been provided to the ET for use. It is an independent room in site office with suitable furniture and internet access. The location of the ET's site accommodation is shown in *Appendix I*.

2.6 Proposed Minimum On-site Time

2.6.1 According to the duties of the ET and ET Leader stated in the EM&A Manual and ET, responsibilities that have to be discharged on site included site audit, environmental monitoring, site meeting and keeping contemporaneous log-book. The justification of minimum on-site time of the ET, QE and RLA are show in *Tables 2-1, 2-2 and 2-3*. Geographical area that requires environmental monitoring and audit by the ET cover whole site boundary of Contract 1. The location of environmental monitoring stations and woodland compensation are shown in *Appendix J*.

Item	Works to be carried out on-site	Purposes / duties and responsibility	Approximate Time input by ET
1	General site inspection	 (i) To investigate and audit the Contractor's site practice and work methodologies with respect to environmental mitigation measures contained in the EM&A Manual of the Project to take pro-active actions to pre-empt environmental problems; 	4 hour per week throughout the construction period
		 (ii) To review the effectiveness of environmental mitigation measures and performance of the Project; (iii) To identify any environmental deficiency and any non-compliance; (iv) Follow up and close out non-compliance 	

 Table 2-1
 Justification of minimum on-site time of the Environmental Team

Action-United Environmental Services and Consulting



Item	Works to be carried out on-site	Purposes / duties and responsibility	y Approximate Time input by ET
2	Baseline Monitoring/ Baseline Period	 actions; (v) Adhere to the procedure for carryic environmental complaint investigation (i) Set up all the required environmental stations (ii) Carry out baseline for monitor environmental parameters as required EM&A Manual (iii) Certifying the environmental accept of permanent and temporary works and submissions required in the 1 Manual and under Conditions 2.1 – 2 	ing out mental (i) 6hr to set up station (ii) Water quality: 4hr X 3 days for 4 weeks (iii) 1-hour and 24 hour TSP: 6hr X 14 days (iv) Construction noise: EM&A 2.25 (v) 3 hour per week for site visit before certifying required plans and
3	Impact monitoring during construction period	 (i) Set up all the required environmonitoring stations (ii) Monitor various environmental para as required in the EM&A Manuals 	submission. imental (i) 4hr to set up station (ii) Water quality: 6hr imeters per week; hr and 24-hr TSP: 4hr per week; construction noise: 3hr per week (iii) 1 day site visit and 1 day site investigation
4	Handling non-complian ce related to exceedances of environmenta l parameters	 Carry out additional monitoring and on the non-compliance of environ performance. 	d audit Water quality: 0.5hr per event 1-hr and 24-hr TSP: 3hr per event Construction noise: 0.5hr per event
5	Handling complaints, summons and prosecutions	 Adhere to the procedures for carryi environmental complaint investigatio Carry out additional monitoring and on the non-compliance of environ performance. 	ing out 4 hour per event on; d audit imental
6	Monitoring during establishment period	 Monitor various environmental para as required in the EM&A Manuals, road traffic noise during operational para 	ametersOn site noisesuch asmeasurement and trafficphasecount for 3hr per event
7	Meeting with ER, Contractor and IEC	 (i) Communication between ET, IEC a Contractor on environmental matters (ii) To discuss with ET, IEC and the Cor any environmental deficiencies recommend improvement measure follow up actions 	and the 8 hour per month ntractor and es and
8	keeping a contemporan eous log-book	(i) keeping a contemporaneous lo of any such instance or circumsta change of circumstances.	g-book 2 hour per month nce or

Remark: The total ET's minimum on-site time per week is ~ 38hrs

Table 2-2 Justification of minimum on-site time of the Ecologist

Item	Works to be	Purposes / duties and responsibility
	carried out	



	on-site	Purposes / duties and		Approximate Time input by
		responsibility		QE
1	Baseline Monitoring/ Baseline Period	(i) (ii) (iii)	Carry out baseline survey for Golden-headed Cisticola To prepare the vegetation survey report and transplantation proposal To prepare the Woodland Compensation Plan	 (i) 2hr X 3 days for baseline survey for Golden-headed Cisticola (ii) 2hr X 3 days site visit for vegetation survey report and transplantation proposal (iii) 2hr X 2 days site visit for Woodland
				Compensation Plan
2	Impact monitoring during construction period	(i) (ii) (iii)	Monitoring of measures to minimise impacts to sensitive habitats during construction by a suitably ecologist Checking and review of the implementation of mitigation measures in vegetation survey report and transplantation proposal, by QE, such as transplantation of the target species and monitoring the health condition of the transplanted trees. Carry out precautionary checks for the presence of nesting birds on the presence of nesting birds before any vegetation clearance in breeding season (February to July of every year) by QE	 (i) 6hr per month for monitoring of measures to minimise impacts to sensitive habitats (ii) 0.5hr per month for checking the implementation of mitigation measures in vegetation survey report and transplantation proposal (iii)2hr per event for precautionary checks, if needed
3	Monitoring during establishment period	(ii)	Carry out baseline and quantitative monitoring for woodland compensation area	(iii) 4hr per monitoring event

Table 2-3 Justification of minimum on-site time of the Registered Landscape Architect

Item	Works to be	Purposes / duties and responsibility		
	carried out on-site	Purposes / duties and responsibility	Approximate Time input by RLA	
1	Baseline Monitoring/ Baseline Period	(i) The RLA will certify the Landscape & Visual Mitigation and Tree Preservation Plan.	(i) 2hr X 2 days site visit for Landscape & Visual Mitigation and Tree Preservation Plan	
2	Impact monitoring during construction period	 (i) Landscape and visual inspection shall be conducted once per month by the RLA to oversee the matter of landscape and visual within the site area and implementation of mitigation measures in EM&A Manual. (ii) Checking and review of the implementation of mitigation measures in vegetation survey report and transplantation proposal and Landscape & Visual Mitigation and Tree Preservation Plan. 	 (i) 2hr per month for landscape and visual inspection (ii) 0.5hr per month for checking and review of the implementation of mitigation measures in vegetation survey report and transplantation proposal and Landscape & Visual Mitigation and Tree Preservation Plan. 	
3	Monitoring during	(i) Monitoring of the planting works (i) 2hr per month through the 3 year establishment the construction per		



Item	Works to be	Purposes / duties a	nd responsibility
	carried out on-site	Purposes / duties and responsibility	Approximate Time input by RLA
	establishment period	period after completion of construction works.	landscape and visual inspection

- 2.6.2 It is deemed that the minimum on-site time is the minimum time of the ET and his team required to perform necessary on-site work to discharge the relevant duties of the ET. The proposed time will served as a base case. The minimum on-site time should also be subject to review in tandem with any major changes to the Contractor's works programme.
- 2.6.3 Apart from the general construction works procedure, additional would be deployed for some critical work duties such as works are anticipated to have high environmental impact and buffer times would be deployed to deal with unforeseen during construction. The time employment on-site will be adjusted based on the detailed works programme. The master programme of the Contract is as shown in *Appendix E*.

Critical Construction Activities	Tentative Programme	Anticipated high environmental impact	Recommend additional on-site time
Site Clearance and construction of haul road	Aug 2018 to Oct 2018	Dust impact and ecology	0.5 hr in additional general site inspection
Earth filling and excavation (Site formation)	Oct 2018 to Oct 2021	Dust impact and water quality	0.5 hr in additional general site inspection
Construction of soil nailing	Oct 2018 to Oct 2021	Dust impact	0.5 hr in additional general site inspection

Table 2-4 Recommended Additional on-site time of the ET during Critical Activities

2.7 Site Inspection

- 2.4.1 Regular site inspection provides a direct means to trigger and enforce the specified environmental protection and pollution control measures. With well defined environmental pollution control and mitigation specifications and a well established environmental site inspection, deficiency and action reporting system, environmental site inspection is one of the most effective tools to enforce environmental protection requirements on the construction site.
- 2.4.2 In addition, ad hoc site inspections are usually required when significant environmental problems arise. In addition, ad hoc site inspections are usually required subsequent to receipt of an environmental complaint, or as part of the investigation work, as specified in the Action Plan for environmental monitoring and audit.

SITE INSPECTION TEAM

2.4.3 The Site Inspection Team comprises the representatives of Resident Engineer (RE), Independent Environmental Checker (IEC), Contractor, Environmental Officer (hereinafter 'EO') and the ET. It is established to monitor the adequacy of the environmental site inspection in order to ensure full implementation of the required environmental pollution control and mitigation measures. Through regular joint site inspection amongst the parties of RE, IEC, Contractor and ET, the communication between each parties on environmental matters would be enhanced. The Site Inspection Team will be led by the ET or his representative.

FREQUENCY OF SITE INSPECTION

2.4.4 The frequency of the site inspection is once a week upon commencement of the Project which closely monitors the environmental performance of the Contract works with the latest details works programme.



PROCEDURES FOR SITE INSPECTION

- 2.4.5 Details of the environmental site inspection are presented in the Site Inspection Checklist attached in Appendix L.
- 2.4.6 A pre-inspection or post-inspection briefing may be held to brief the objectives of the site inspection as necessary.
- 2.4.7 The area of inspection will not be limited to the environmental situation, pollution control and mitigation measures within the site, but will cover also the environmental situation outside the site area which is likely to be affected, directly or indirectly, by the site activities. The ET will make reference to the several information and documents in conducting the inspection. The details are presented in the table below.

Information referred	Action by ET
Environmental Permit	The role of ET and ET Leader specified in conditions 2.2 and 2.3
No. FEP-01/534/2017/A	shall be complied.
EIA and EM&A Manual	ET will make reference to the "Implementation Schedule of
	Mitigation Measures (EMIS)" in the EIA Report and mitigation
	measures recommended in the EM&A Manual to inspect the
	implementation status against the aforesaid document during site
	inspection.
Works progress and	ET will focus on the potential environmental issue arise from
programme	construction work according to the works programme. For example,
	cut slope and fill slope work will be the dominant construction work
	for the initial stage of the Contract and special attention will be made
	on the potential dust impact and dust control measures. During wet
	season, special attention shall be paid on the water quality mitigation
	measures etc. Moreover, ecological mitigation measures as
	compensate for the ecological impact shall be checked and ensure
	properly implemented. Particular attention shall be paid on the edge
	of any active works area 30m from the watercourse ET will
	recommend suitable mitigation measures to the Contractor and take
	proactive actions to pre-empt problems.
Individual works	ET will refer to the individual works methodology and pay attention
methodology	to the potential environmental issue from each individual work (e.g.
	dust impact from rock breaking work). Proactive Environmental
	Protection Proforma as mentioned in EM&A Manual will be prepared
	by ET and verified by IEC.
Relevant environmental	ET will check whether any non-compliance of the statutory
protection and pollution	requirement in relation to environmental protection and pollution
control laws	control laws. (e.g. effluent discharge in discharge licence under Water
	Pollution Control Ordinance)
Previous site inspection	ET will follow up the previous deficiency and pay more attention to
results	the repeated observation from previous site inspection.

Table 2-5 **Reference Information and Documents for Conducting Inspection**

2.4.8 The Contractor will update the ET with all relevant information of the construction contract for him to carry out the site inspections. The inspection results and its associated recommendations on improvements of the environmental protection and pollution control works will be submitted to the IEC, RE and the Contractor within 24 hours, for reference and for taking immediate action.

2.5 **Communication with IEC**

The ET shall notify IEC within one working day of the occurrence of each and every single or 2.5.1 circumstance or change of circumstance, which may affect the compliance with recommendations



of the approved EIA Report. The communication procedure of ET and IEC are summarized in below table.

Key Issues	Communication of ET and IEC		
Routine monitoring	- Any instance regards to failure of monitoring and abnormal		
work and monitoring	conditions during monitoring work shall be reported to IEC within		
schedule	one working day.		
	- The ET shall notify IEC the impact monitoring schedule 2 weeks		
	before each reporting month for their agreement. Any changes to		
	the monitoring schedule shall be notified IEC immediately.		
Site inspection	- The ET shall submit the site inspection checklist to report the		
findings	environmental audit results to IEC within one working day after the		
	inspection.		
	The follow-up action taken by the Contractor shall be reported to		
	IEC within one week.		
EM&A Report	- The ET shall submit Monthly EM&A Report to IEC on the agreed		
	time frame for verification.		

Table 2-6Communication procedure of ET and IEC



3 DEFICIENCY

3.1 Deficiency Found in Site Inspection

- 3.1.1 Any deficiency found in the site inspections shall be reported and recorded on the Site Inspection Checklists, with agreed mitigation measures and deadline for completion, which shall be submitted to the RE and Contractor within 24 hour upon completion of the site inspections. The EO and Contractor shall follow up the case to rectify the situation by the agreed deadline, while the status of the environmental issues shall be reviewed during the next inspection to close the case as appropriate.
- 3.1.2 In following up the environmental issues raised in the site inspections, the EO shall closely cooperate with the Contractor and the associated Sub-Contractors to ensure full implementation of the environmental mitigation measures stipulated in the EMIS of the EM&A Manual.

3.2 Deficiency Raised from Environmental Complaints

- 3.2.1 Any deficiency raised from environmental complaints shall be handled properly. Details of the environmental complaints handling have been documented in the EM&A Manual.
- 3.2.2 A contemporaneous complaint logbook has been kept by the Contractor to register every instance or circumstance of environmental complaint, which will be referred to for carrying out complaint investigation.
- 3.2.3 During the complaint investigation work, the Contractor and RE will co-operate with the EO and ET in providing all the necessary information and assistance for completion of the investigation. If mitigation measures are proposed in the investigation (in consultation with IEC), the Contractor will promptly carry out the measures. The RE will ensure that Contractor has carried out the measures.
- 3.2.4 According to the EM&A Manuel Section 15.4.1.1, the following procedures should be undertaken upon receipt of any environmental complaint:
 - The Contractor to log complaint and date of receipt onto the complaint database and inform the ER, ET and IEC immediately;
 - The Contractor to investigate, with the ER and ET, the complaint to determine its validity, and assess whether the source of the problem is due to construction works of the Project with the support of additional monitoring frequency and stations, if necessary;
 - The Contractor to identify remedial measures in consultation with the IEC, ET and ER if a complaint is valid and due to the construction works of the Project;
 - The Contractor to implement the remedial measures as required by the ER and to agree with the ET and IEC any additional monitoring frequency and stations, where necessary, for checking the effectiveness of the remedial measures;
 - The ER, ET and IEC to review the effectiveness of the Contractor's remedial measures and the updated situation;
 - The ET to undertake additional monitoring and audit to verify the situation if necessary, and oversee that circumstances leading to the complaint do not recur;
 - If the complaint is referred by the EPD, the Contractor to prepare interim report on the status of the complaint investigation and follow-up actions stipulated above, including the details of the remedial measures and additional monitoring identified or already taken, for submission to EPD within the time frame assigned by the EPD; and
 - The ET to record the details of the complaint, results of the investigation, subsequent actions taken to address the complaint and updated situation including the effectiveness of the remedial measures, supported by regular and additional monitoring results in the monthly EM&A reports.



3.3 Deficiency Raised from Other Channels

3.3.1 Deficiency may be raised from other channels, e.g. routine and ad hoc meetings of SSEC, SSEMC etc. The EO shall investigate any deficiency raised in consultation with the ET and the Contractor, and RE and IEC as appropriate. It shall be followed up by the EO and ET to rectify the situation promptly following the action reporting procedures in the following *Section 4*.



4 ACTION REPORTING PROCEDURE

4.1 **Reporting Procedure**

- 4.1.1 The action reporting procedures for deficiencies raised from site inspection, environmental complaints and other channels will be carried out once the deficiencies are found. Event and Action Plan of the related environmental parameters shall be implemented as appropriate.
- 4.1.2 Two-way environmental site inspection, deficiency and action reporting procedures have been developed to encourage the dissemination of the environmental site inspection, deficiency and action information among relevant parties via the following document notification and meetings for discussions:
 - Submission of site inspection checklists as detailed above section;
 - Submission of EM&A Reports and implementation of the associated Event and Action Plan, which has been presented in the EM&A Manual
 - The SSEMC and other regular face-to-face site meetings and the associated follow-up actions;
 - The ET, EO and IEC regular site inspections and audits and the associated follow-up actions;
 - Ad hoc environmental meetings, investigations and site inspections;
 - Complaint Logbook; and
 - The ET leader's Environmental Logbook established under the environmental permits No. FEP-01/534/2017/A.

Means	Frequency	Purpose/Action	Responsible Party	
EO Weekly Site Inspection	Continually	Promote awareness of environmental procedures among EO, workers and sub-contractors	Contractor and EO	
ET Weekly Site Inspection	Weekly	Face-to-face communications between ER, IEC, Contractor site staff and ET during the site inspection	RE, IEC, Contractor, ETL and IEC	
SSEMC meeting	Monthly	Face-to-face communications between the ET, IEC, RE, EO, ES, Contractor and other disciplines	ET, EO, ES, Contractor, RE and Sub-Contractors' Representative	
Notice of Exceedance of AL levels or complaint	As required	Written notification to different members of the Contractor requesting appropriate actions	Contractor, ET, EO, IEC and RE.	
Ad hoc environmental meetings, investigations and site inspections	When necessary	Face-to-face communications between ET, IEC, Contractor, ER and EPD in the case of any environmental emergency.	Contractor, ET, EO and RE.	
EM&A Report	Monthly / Quarterly	Written communication among ET, RE, IEC and EPD.	ET	
Web-based EM&A Reports	Monthly / Quarterly	Facilitate public inspection of the EM&A Reports via the EIAO Web-site and at the EIAO Register Office	EPD, ET, IEC, Public	

 Table 4-1
 Action Reporting Procedures for deficiencies



4.2 **Proper Records Keeping**

INTERNAL RECORD KEEPING

- 4.2.1 The monitoring data are handled by the ET's systematic data recording and management, which complies with in-house Quality Management System. Standard Field Data Sheets are used in the monitoring program.
- 4.2.2 The monitoring data recorded in the equipment are downloaded directly from the equipment at the end of each monitoring day. The downloaded monitoring data are input into a computerized database properly maintained by the ET. The laboratory results are input directly into the computerized database and QA/QC checked by personnel other than those who input the data. For monitoring activities require laboratory analysis, the local laboratory follows the QA/QC requirements as set out under the HOKLAS scheme for all laboratory testing.
- 4.2.3 All submissions shall contain document number, version number, effective date, page number and total number of pages in content page. All submission shall be reviewed and approved by ETL prior to release.
- 4.2.4 To achieve an environmental sustainability, e-mail will be the main communication channel to minimise paper printing. All submission will be delivered by email until the formal submission, where hardcopies will be printed in accordance with the specific requirement.
- 4.2.5 Soft copy of all received submissions will be saved under the respective category. Site inspection checklist, monitoring schedule and investigation reports record will be saved under the folder of respective month.
- 4.2.6 All records must be retained in a proper way and maintain in a suitable environment to minimize deterioration, loss or damage; they may be stored in either hard copy and/or computer database system.

EXTERNAL RECORD KEEPING

- 4.2.7 The ET should keep a contemporaneous log-book of any such instance or circumstance or change of circumstances. The log-book shall be kept readily available for inspection by all persons assisting in supervision on the implementation of the recommendation of the approved EIA Report and the EP or by the Director or his authorized officers.
- 4.2.8 The log book shall keep all the records of environmental license and permit, site inspection records, investigation report for non-compliance and complaint etc. The log book should be reviewed and verified by IEC regularly.



5 REVIEW OF MINIMUM ON-SITE TIME

5.1 Conclusion

- 5.1.1 When considered appropriate by the ET or EPD, the minimum on-site time of ET would be reviewed and updated as necessary. The ET shall review and update the minimum on-site time of ET in consultation with the EPD, to suit the changing project situation.
- 5.1.2 As such, the minimum on-site time of ET detailed in this proposal shall be reviewed regularly upon commencement of construction works. Should the minimum on-site time of ET shall be optimised, the ET shall propose the revision to IED and EPD for acceptance.

END OF TEXT



Appendix A

Location of the Project

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(This figure was prepared based on Figure 1 attached to the VEP Application No. VEP-554/2018 and Figures 1.2 and 1.3 of the	Environmental Permit No.: EP-534/2017/A
Approved EIA Report No. AEIAR-198/2016))	環境許可證編號:EP-534/2017/A
(本圖是根據更改環境許可証申請文件編號 VEP-554/2018 所隨附的圖 1 和環境影響評估報告編號 AEIAR-198/2016 圖 1.2 及 1.3	
編制)	

Environmental Permit No.: EP-534/2017/A 環境許可證編號: EP-534/2017/A

LEGEND	
圖例	
	項目範圍
CID	UTILITIES CONSTRUCTION 興建公用設施
_	PROPOSED ACCESS ROAD / EVA 擬建場內通道 / 緊急車輛通道
	PROPOSED PLATFORMS FOR COLUMBARIUM 擬建土地平整工程用以興建 沙嶺墳場骨灰龕
	PROPOSED CUT / FILL SLOPE 斜坡工程
	PROPOSED SEWAGE PUMPING STATION 擬建污水泵站
	PROPOSED REFUSE COLLECTION POINT 擬建垃圾收集站
(222)	PROJECT BOUNDARY FOR CREMATORIUM AND RELATED FACILITIES (BY OTHERS) 項目範圍用以興建沙嶺墳場火葬場 及有關設施(由其他倡議人負責)
сti	BARGING POINT AREA 轉運站範圍
	PROPOSED PICK-UP AND DROP-OFF POINT 擬建上客、落客範圍
-	E



Appendix B

The geographical location of Contract 1 under FEP-01/534/2017/A and layout plan of Contract 1

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上木工程拓展署 Civil Engineering and Development Department						



Appendix C

The employment of ET and associated declaration letter

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Our Ref : TYW/OUT/CV201610/L18-032

26 March 2018

By Fax and By Mail (Fax No. 2959 6079)

Action-United Environmental Services and Consulting Unit A, 20/F., Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung N.T.

Attn: Mr. T.W. Tam

Dear Sirs,

Contract No. CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery Subcontract No. CV201610/SC/006 – Environmental Consultant Services Letter of Acceptance

We are pleased to inform you that your tender for the above subcontract which totals

) is accepted.

The subcontract is under preparation and you will be informed once it is ready for execution.

Our Project Manager, Mr. HO Man To and Site Agent, Mr. Frankie LAM will contact you for arrangement of the subcontract works.

Thank you for your attention.

Yours faithfully, For and on behalf of **Tsun Yip Waterworks Construction Co. Ltd.**

Kan Kwok Cheung Director

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Certificate No : Q016



Our Ref: TCS00881/18/300/L0680

Hsin Chong Tsun Yip Joint Venture Hsin Chong Center, 107-109 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Attn: Mr. HO Man To

23 September 2022 By Hand

Dear Sirs,

Re: Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery Letter of Declaration of Conflict of Interest

We confirm that Action-United Environment Service and Consulting does not have any association relationship and conflict of interest with the main-Contractor (Hsin Chong Tsun Yip Joint Venture) and the Independent Environmental Checker (Acuity Sustainability Consulting Limited) under CEDD Contract No. CV/2016/10.

Should you have any queries, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or Email: <u>twtam@fordbusiness.com</u>.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

Tam Tak Wing General Manager




Appendix D

Notification of Commencement Date of Construction of the Project

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Hsin Chong Tsun Yip Joint Venture Our Ref:

Your Ref :

HCTY/CV201610/L18-447

13 July 2018

By Fax and By Hand

Environmental Protection Department

The EIA Ordinance Register Office, 27th floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong

Dear Sirs,

Contract No.: CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery (Environmental Permit No. FEP-01/534/2017)

Commencement Date of Construction

We refer to our previous letter reference HCTY/CV201610/L18-397 dated 29 June 2018 regarding the commencement date of construction.

Pursuant to General Condition 1.12 of Further Environment Permit (FEP) No. FEP-01/534/2017, if there is no objection from your Department, we would like to notify that the commencement date of construction work of the captioned project would be changed from 30/6/2018 to 16/8/2018 with the certification letter from Environmental Team (ET) Leader and the verification letter from Independent Environmental Checker (IEC) for your review and approval.

Enclosed please find four hard copies and one electronic copy of revised works program with works location plan as per Specific Condition 2.11 of FEP for your information and retention.

Your faithfully, For and on behalf of HSIN CHONG TSUN YIP JOINT VENTURE (CV/2016/10)

HO Man To Site Agent Encl. *MTH/FL/fl*



c/c. :CEDD – DPTL
Ove Arup and Partners H.K. Ltd– Attn: Ms. Cathy Cheng
– Attn: Mr. Steve Tang
– Attn: Mr. Jacky Leung
– Attn: Mr. T.W.Tam

Hsin Chong Tsun Yip Joint Venture 新昌進業聯營 Hsin Chong Center, 107-109 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong 香港九龍觀塘偉業街107-109號新昌中心 T 電話 +852 2579 8238 | F 傳眞 +852 2516 9430



Our Ref: TCS00881/18/300/L0082

Hsin Chong Tsun Yip Joint Venture Hsin Chong Center, 107-109 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Attn: Mr. HO Man To

13 July 2018 By e-mail and by Hand

Dear Sirs,

Re: CEDD Contract CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery (Environmental Permit No. FEP-01/534/2017) Commencement Date of Construction

I refer to your notification for proposed change of "Commencement date of Construction" from 30/06/2018 to 16/08/2018, along with the revised works program with works location. Please note that we have no adverse comments on the revised commencement date and related submission. We herewith certify the captioned pursuant to General Condition 1.9 of the Environmental Permit no. FEP-01/534/2017.

Should you have any queries, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or Email: <u>twtam@fordbusiness.com</u>.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

Ne

T. W. Tam Environmental Team Leader TW/nh

cc Arup (RE) Acuity (IEC)

Mr. Steve Tang Mr. Jacky Leung By-email By-email

 Tel
 (852) 2959-6059

 Fax
 (852) 2959-6079

 Email
 info@fordbusiness.com







Hsin Chong Tsun Yip Joint Venture (CV/2016/10) Hsin Chong Centre 107-109 Wai Yip Street Kwun Tong, Kowloon Hong Kong

Attention: Mr. HO Man-to

13 July 2018

Dear Sir,

Contract No. CV/2016/10 Site formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery Change of Commencement Date of Construction

I refer to your email regarding the change of Commencement Date of Construction under FEP No. 01/534/2017. We have no objection on your proposal to change the Commencement Date of Construction of CV/2016/10 from 30/6/2018 to 16/8/2018, as well as the attached works programme and programme layout.

Yours faithfully,

CH Leung

Ir Leung CH Jacky Independent Environmental Checker

cc. CEDD-DPTL/Land Works – Ms. CHENG Cathy ARUP – Mr. TANG Steve









Appendix E

Project Organization and Lines of Communication

Z:Jobs/2018/TCS00881(CV-2016-10)/600/Site Inspection & Audit/Proposal on the Site Inspection, Deficiency and Action Reporting Procedures/R0175v4a.doc Action-United Environmental Services and Consulting



Organization Project organization and lines of communication



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Appendix F

Proposed Environmental Team Leader

Z:\Jobs\2018\TCS00881(CV-2016-10)\600\Site Inspection & Audit\Proposal on the Site Inspection, Deficiency and Action Reporting Procedures\R0175v4a.doc Action-United Environmental Services and Consulting

23-MAY	-2018	11:10	FROM	EPD	TO 2	25169430	P.01/02
本面 檔號 OUR REF: 來函備累 YOUR REF: 電 TEL. NO.: 關文傳真 FAX NO.: 電子郵件 E-MAIL: 網 此 HOMEPAGE	() in E HCTY/ 2835 1 2591 0 : http://ww	11116 (CV201610, 142 558 ww.epd.gov	8 Pt. 4 /L18-190 .hk		Environmental Protection Department Branch Office 28th Floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong.	BY: By Fax Only (251	環境保護署分處 香港商任 作尼高道 一百三十號 修順中心止八棟 2018
	Hein (Thong Te	un Vin	Toint	Venture		

risin Chong I sun Y ip Joint Venture Hsin Chong Tower, 107-109 Wai Yip Street, Kwun Tong, Kwoloon (Attn : Mr. HO Man To)

7 May 2018

Dear Mr. HO,

Environmental Impact Assessment Ordinance, Cap. 499 Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery

Employment of Environmental Team Leader (Environmental Permit No. FEP-01/534/2017) (Environmental Permit (EP) Condition 2.1)

I refer to your letter of 11 April 2018 proposing Mr. T.W.TAM as the Environmental Team (ET) Leader under Condition 2.1¹ of the captioned EP with verification from IEC.

Please note that we do not have comment on proposing Mr. T.W.TAM as the ET Leader proposed under Condition 2.1 of the captioned EP. Please be reminded to comply with the remaining requirements of EP Condition 2.1 in a timely manner, including a proposal for minimum on-site time for the ET Leader and ET for the Director for approval, and the provision of a site office/suitable work accommodation on site to the ET.

¹ Condition 2.1 of the EP No, FEP-01/534/2017 states "An FT shall be established by the Permit Holder no later than one month before the commencement of construction of the Project. The ET shall not be in day way an associated body of the Contractor or the IEC for the Project. The Permit Holder shall provide a site office/suitable work accommodation on site to the ET for use. The ET shall be headed by an ET Leader and supported by relevant specialists including qualified ecologist(s) and Registered Landscope Architect. The ET Leader shall be a person who has at least 7 years of experience in environmental monitoring and auditing (EM&A) or environmental management. The minimum on-site time for the ET Leader and EI, and the qualifications of the specialists in the ET shall be proposed with justifications for the approval of the Director."

Yours sincerely,

Stort

(Steve T.S. LI) Senior Environmental Protection Officer for Director of Environmental Protection

c.c.(Attn: Mr. LI Kwok Hung)Acuity (IEC)(Attn: Mr. Jacky LEUNG)

fax: 2714 0079 fax: 2333 1316

Internal P(RN) with copy of cover letter and Appendix G of f(29) AE(SA)61



Name: Tam Tak Wing

Proposed Position: Environmental Team Leader (Project Manager)

Years of Experience: 30

Academic Qualification:

- 2000 Certificate of Competence in Ionising Radiation Protection Occupational Safety & Health Council
- 1999 Certificate in Construction Safety Supervisor Course Construction Industry Training Authority
- 1994 Quality System Audit Course The National Association of Testing Authorities, Australia
- 1983 Certificate in Soil and Rock Identification Hong Kong Polytechnic (Civil and Structural Engineering Department)
- 1978 School Certificate Lee Kau Yan Memorial Secondary School

Professional Registration and Affiliations:

• MHKIEIA, Associate Member of Hong Kong Institute of Environmental Impact Assessment, 2009.

Career History:

ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING	2000 - Present
Managing Director	
GREEN VALLEY LANDFILL LIMIT (SENT LANDFILL)	1999 – 2000
QA/QC Manager	
WOODWARD-CLYDE INTERNATIONAL (HK) LTD	1993 - 1999
Land Contamination Specialist / Senior Project Supervisor	
GAMMON CONSTRUCTION LIMITED	1978 - 1993

Laboratory Manager

Synopsis:

Mr. Tam has over 30 years of hands-on experiences in site remediation, civil engineering, land contamination assessments, environmental management, environmental monitoring and audit (EM&A), construction QA/QC and laboratory management. In recent year, Mr. Tam has extensive experiences in designing and implementing both long-term and short-term EM&A programs for the government, multi-disciplinary infrastructure developments, large-scale construction projects, public utilities, education institutions, industrial facilities, and commercial properties. He also responsible for many large laboratory testing contracts for private sector clients, Public Works Department, Hong Kong Housing Authority and internal work for private clients.

Mr. Tam has more than 6 years experiences working in SENT Landfill. He was on a secondment for several years and joined Green Valley Ltd as the Construction QA/QC Manager. Mr. Tam is therefore very well familiar with the landfill construction and operation issues.

Mr. Tam is specialized and has extensive experiences in the areas of land contamination assessment, site remediation and decontamination, and other related issues. He was the contaminated assessment team leader for the Penny's Bay Site Investigation Work in which over 300 of boreholes were investigated and 35 groundwater monitoring wells were installed within 6 months.

In addition, Mr. Tam served as the Land Contamination Specialist for the KCRC East Rail Extension Projects and managed the site remediation at Wing On Plaza and further contamination assessment at Middle Road Children's Playground. He oversaw the entire implementation of the site remediation program and liased with the government authority.

In addition, Mr Tam is experienced in management and quality assurance for civil and building projects. The construction work includes: foundation, site formation, building structural, slope stabilisation and site investigation works.

Selected Project Experiences (EM&A)

- Highways Contract No. HY/2021/06 Retrofitting of Noise Barriers on Po Lam Road North and Po Ning Road (ETL, 2021 present)
- Highways Contract No. HY/2019/11 Retrofitting of Long Tin Road (ETL, 2021 present)
- WSD Contract No.: 3/WSD/20 Reclaimed Water Supply to Sheung Shui and Fanling (ETL, 2021 present)
- CEDD Contract CV/2021/03 Site Formation and Infrastructure Works at Tsueng Kwan O – Ying Yip Road
- CEDD Contract No. WD/11/2018 Environmental Team for Development of Lok Ma Chau Loop Land Decontamination and Advance Engineering Works (ETL, 2019 present)
- CEDD Service Contract No. EDO/04/2018 Environmental Team For Cross Bay Link, Tseung Kwan O ((ETL, 2018 – present)
- Contract No. CV/2017/02 Development of Columbarium at Sandy Ridge Cemetery Infrastructural Works at Man Kam To Road and Lin Ma Hang Road (ETL, 2018 present)
- Contract CV/2016/10 Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery (ETL, 2018 present)
- CEDD Service Contract No. NTE/07/2016 Environmental Team for Development of Anderson Road Quarry Site Site Formation and Associated Infrastructure Works (ETL, 2016 present)
- Contract No. NE/2014/05 Ma On Shan Development Roads, Drainage & Sewerage Works at Whitehead & Lok Wo Sha, Phase 2 (ETL, 2016 – 2020)
- CEDD Contract CV/2013/08 Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works Contract 6 (ETL, 2015 present)
- Contract No. DC/2012/02 Upgrading of Mui Wo Sewage Treatment Works and Village Sewerage at Wang Tong and Yue Kwong Chuen (ETL, 2017 – 2018)
- Contract No. SS C505 Construction of Liantang/Heung Yuen Wai Boundary Control Point (BCP) - Buildings and Associated Facilities (ETL, 2015 – 2020)
- TSW-C004 Ocean Park Tai Shue Wan Development, Site Formation and Foundation Works (ETL, 2016 2017)
- Contract No: DC/2013/09 Advance Works for Shek Wu Hui Sewage Treatment Works Further Expansion Phase 1A and Sewerage Works at Ping Che Road (ETL, 2015 2019)
- Contract No.: DC/2013/04 Outlaying Islands Sewerage Stage 2 (ETL, 2014 2017)
- Contract No. DC/2013/03 Reconstruction and Rehabilitation of Kai Tak River from Tung Kwong Road to Prince Edward Road East (2014 2018)
- Contract No. DC/2013/01 Tolo Harbour Sewerage of Unsewered Areas Stage 2 Phase 1 and Sewerage in Nam Wa Po and Wai Tau (ETL, 2013 – 2019)
- CEDD Contract No. CV/2012/05 Bathing Beach at Lung Mei, Tai Po (ETL, 2017 present)
- Contract No. DC/2010/06 Upgrading of Central and East Kowloon Sewerage Phase 2 (ETL, 2012 2016)
- Contract No. DC/2010/10 Sewerage in Ping Kong, Fu Tei Pai and Tai Wo (ETL, 2012 2017)
- Contract No. DC/2011/06 Reprovisioning of Boundary Patrol Road and Associated Security Facilities between Ping Yuen River and Pak Fu Shan and Drainage Works in North District (ETL, 2012 2016)
- DSD Contract No. DC/2011/04 Reconstruction, Improvement and Rehabilitation of Kai Tak River from Wong Tai Sin Police Station to Tung Tau II Estate (ETL, 2011 2019)



- Contract DC/2010/02 Drainage Improvement in Shuen Wan and Shek Wu Wai (ETL, 2011 2017)
- Contract No.: DC/2009/14 North District and Tolo Harbour Regional Sewerage Upgrading of Sewage Pumping Stations and Trunk Sewers (ETL, 2011 – 2017)
- Contract No DC/2009/07 North District and Tolo Harbour Regional Sewerage Upgrading of Trunk Sewers at Ma Liu Shui, Tai Po (ETL, 2010 – 2017)



Appendix G

Proposed Qualified Ecologist(s)

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21-JUN-2018 16:57 FROM EPD

() in EP2/N7/A/78 Pt. 6

TO 29596079

Branch Office

130 Hennessy Road,

Wan Chai, Hong Kong.

28th Floor, Southorn Centre,

環境保護署分處

泰池灣仔 軒尼詩道 一百三十號 修頓中心廿八樓

来函檔號 HCTY/CV201610/L18-278, HCTY/CV201610/L18-329
YOUR REF: 2835
第 2835 1868
TEL. NO.: 圖文傳真 2591 0558
FAX NO.: 電子郵件
E-MAIL: 網 址

HOMEPAGE: http://www.epd.gov.hk

本署檔號

OUR REF:

By Fax Only (2516 9430)

Hsin Chong Tsun Yip Joint Venture Hsin Chong Tower, 107-109 Wai Yip Street, Kwun Tong, Kwoloon (Attn : Mr. HO Man To)

2 June 2018

Dear Mr. HO,

Environmental Impact Assessment Ordinance, Cap. 499 Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery

Environmental Protection Department

Employment of Qualified Ecologist(s) (Environmental Permit No. FEP-01/534/2017) (Environmental Permit (EP) Condition 2.1 and 2.4)

I refer to your letter of 18 May 2018 enclosing the updated Curriculum Vitae of Mr. H.Y. TANG Desmond and Mr. Keith L.W. KEI as the proposed Qualified Ecologists required under EP Condition 2.4, and your letter of 4 June 2018 clarifying the division of labour between Mr. TANG and Mr. KEI. Both letters were submitted with certification by the ET Leader and verification by the IEC.

Pursuant to EP No. FEP-01/534/2017 Condition 2.1, I hereby approve Mr. H.Y. TANG Desmond and Mr. Keith L.W. KEI as the Qualified Ecologists for this Project.

The Qualified Ecologists are required to carry out the duties as specified in Condition 2.4 of the captioned EP, following the division of labour as stated in your letter of 4 June 2018.

Should you have any queries, please contact our Mr. Steve LI at 2835 1142.

Yours sincerely,

(Raymond W. M. WONG) Principal Environmental Protection Officer for Director of Environmental Protection

,

<u>c.c.</u>		
CEDD-DPTL	(Attn: Mr. LI Kwok Hung)	fax: 2714 0079
Acuity (IEC)	(Attn: Mr. Jacky LEUNG)	fax: 2333 1316
AUES (ET)	(Attn: Mr. T.W. TAM)	fax: 2959 6079
AFCD	(Attn: Ms. Aidia CHAN)	fax: 2377 4427

Internal

P(RN) with copy of f(20) in Pt.4 and f(18) in Pt.6 S(SA)6 AE(SA)61

.



H.Y. Tang Desmond

Staff Curriculum Vitae

Professional History	
2010/10 – present	Arborist
	Muni Arborist Limited
2006/07 – 2010/10	Assistant Project Manager
	Kelvin Design and Horticulture Limited
2005/04 – 2006/07	Environmental Officer
	Mak Hang Kei (HK) Construction Limited



Academic	<u>Fraining</u>		
Master	MSc. in Arboriculture and Urban Forestry	2016	University of Central Lancashire
Master	MSc. in Environmental Science	2006	Hong Kong University of Science and Technology
Degrees	BSc. in Environmental Science	2003	University of Plymouth
Profession	al Qualification		
Tree Risk A	ssessment Qualification	2013	International Society of Arboriculture
Cert in the F	Principles of Garden Planning,	2013	Royal Horticultural Society
Constructio	n and Planting.		
(Categorize	d under "Horticulture and		
Forestry" ur	der the UK qualification		
framework			
Cert in the F	Principles of Plant Growth,	2012	Royal Horticultural Society
Health and	Applied Propagation (Level 3)		
(Categorize	d under "Horticulture and		
Forestry" ur	ider the UK qualification		
framework			
Certified Art	oorist (HK-0469A)	2009	International Society of Arboriculture

Key Experience

Desmond has more than 10 years' experience in landscape management and preservation, such as Tree Survey, Tree Felling Application, and he is currently a Senior Qualified Arborist for a slope vegetation maintenance project for ArchSD which has more than 100, 000 trees to preserve.

Desmond has degrees of BSc. and MSc. which are major in Environment Science. in order to further develop the knowledge in tree management, he also acquired the MSc. in Arboriculture and Urban Forestry in 2016. He is familiar with local plants and trees especially in large tree management. He acts as a tree expert to provide advice in designing the transplanting method of a 1m DBH paper-bark tree and to supervise the work from a private development site to a LCSD park at night with road closures in Sheung Shui. The project involved two 200 tonnes mobile cranes working in parallel at night.

Project Experience

Duties

TCD038 - Tree Safety Enhancement Measures on SIMAR Slopes Maintained by ArchSD – for ArchSD (Qualified Arborist) April 2016 – Present Tree risk assessment and tree work supervision for trees on slope belongs to ArchSD



Staff Curriculum Vitae

H.Y. Tang Desmond

Assessment Team Leader for The Inventory Record, Tree Risk Assessment and Tree Works Certification in Public Housing Estates and Housing Authority Properties for Wong Tai Sin, Tsing Yi, Tsuen Wan and Islands Region. November 2015 – Present

Independent Tree Expert for T15 for the Residential Development at Fanling Sheung Shui Town Lot NO. 177 March 2013 – Aug 2017

Independent Tree Specialist for Liantang/ Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works (Contract 2) January 2014 – Present

TCY038 - Tree Safety Enhancement Measures on SIMAR Slopes Maintained by ArchSD – for ArchSD (Qualified Arborist) April 2012 – March 2016

25 Public Housing Estates in Kowloon & NT for HK.

Ngan Ying Road Ex-Caltex Petroleum Refilling Station, Sai Kung

TWGH Kap Yan Directors Secondary School in Sheung Shui for The Education Bureau

The Arts & Technology Education Centre, 145 Junction road, Kowloon for The Education Bureau

Tree Risk Assessment for 4 no. of mature trees at Mount Davis BBQ Area, HK for Home Affairs Dept Review and endorse tree risk assessment inspection report and works record

Advise on the design, site supervision of a tree transplant, post planting care of a paper bark tree. Regular tree risk assessment of the tree during the construction and maintenance period.

Advice on tree protection and site supervision of retain and transplant trees. Tree risk assessment for tree retained on site. Site Supervision of retain trees includes the install and maintenance of tree protection fence, regular tree pruning, post typhoon tree remedial work, pesticide application.

Tree risk assessment and tree work supervision for trees on slope belongs to ArchSD

Tree Risk Assessment (5,000+ no. of trees)

Tree Risk Assessment for 3 mature Araucaria heterophylla

Tree Risk Assessment & Tree Felling for a 20+m tall dead *Albizia lebbek*

Tree structural pruning works for 10+ mature trees

Tree Risk Assessment

Keith L W Kei

Ecologist

Mr. Kei is an Ecologist with extensive experience in marine and ecological survey including subtidal, intertidal and bird surveys.

Mr. Kei is the Executive Director of Reef Check Foundation, Hong Kong (one of the sub-branch of worldwide Reef Check Foundation) and organized the activities of "Reef Check" in Hong Kong since 1998. The objectives of this activity are to monitor the health status of corals in Hong Kong and increase public awareness and attention on coral conservation. Since 2000, the Reef Check Foundation is collaborating with Agriculture, Fisheries and Conservation Department to organize the activity.

Mr. Kei is working as a demonstrator in Hong Kong Baptist University and needs to arrange ecological field trip for students frequently including bird survey, intertidal survey and tree survey in the past 10 years. He is also an active bird watcher for the past 10 years.

In addition to the above, Mr. Kei has conducted a number of ecological survey and impact assessment for local consultant companies including Environment Resource Management ERM, Maunsell Consultants Company Ltd. and Ecosystem.

Fields of Competence

- 1. Coral Habitat Assessment
- 2. Environmental Impact Assessment
- 3. Marine/Coastal Ecology Management
- 4. Natural Resources and Conservation

Education

1. MPhil in Biology (1997), The Hong Kong University of Science and Technology

2. BSc (Honours) in Biology (1995), The Hong Kong University of Science and Technology

Professional Affiliations & Registrations

- 1. Director, Hong Kong Reef Check Foundation
- 2. Member of Hong Kong Bird Watching Society

Languages

- 1. English
- 2. Cantonese
- 3. Mandarin

Consultancy Survey Experiences for Bird Survey

- WBSE Survey for "CE9/2011 (CE) Increasing Land Supply by Reclamation and Rock Cavern Development cum Public Engagement - Feasibility Study"
- Ecological Monitoring for Trial Piling Works for Proposed Comprehensive Development at Tin Shui Wai Area 115 (2012)
 - 4 months monitoring with 3 times per week frequency from April 2012 to Aug 2012. The monitoring was done by both sighting and hearing of bird species inside the Wetland Park area. Beside the wetland park area, some grassland along the working areas were also surveyed.
- The Drainage Services Department (DSD) "Agreement No. CE 56/2014 (DS) Relocation to Sham Tseng Sewage Treatment Works to Caverns – Feasibility Study" (2016)
 - Bird surveys were carried out 3 times at wet season and 3 times at dry season. Habitats being surveyed included shrubland, plantation, woodland, developed area, watercourses and coastlines along the work area. Both sighting and hearing were used during the survey
- WBSE Monitoring for IWMF Shek Kwu Chau Incinerator (2017 to present)

Other Relevant Experiences

- 1. Arrange bird survey for university students during ecology field trip (2007 to present)
 - Survey area including Tai Pu Kau, Tai Mo Shan and Long Valley in the past 10 years
- Volunteer for Hong Kong Bird Watching Society (2013 to present)

30-JUN-2020 14:35 FROM EPD

OUR REF: (11) in EP 2/N7/A/78 Pt 23

YOUR REF: HCTY/CV201610/L20-244

HOMEPAGE: http://www.epd.gov.hk

lawrencelju@epd.gov.hk

電 話 TEL. NO.: 2835 1142

FAX NO: 2591 0558

來遠權號

圖文傳真

電子郵件

E-MAIL:

业

TO 29596079

Branch Office

130 Hennessy Road,

Wan Chai, Hong Kong.

27th Floor, Southorn Centre.

環境保護署分處 香港灣伊 軒尼語道 一面三十號

修頓中心廿八樓

30 June 2020

By Fax (2611 9908)

Y

Hsin Chong Tsun Yip Joint Venture 9/F, 163 Hoi Bun Road Kwun Tong, Kowloon Hong Kong (Attn : Mr. HO Man To)

Dear Mr. HO,

Environmental Impact Assessment Ordinance, Cap. 499 Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery

Environmental Protection Department

<u>Proposal on Replacement of Qualified Ecologist(s)</u> (Environmental Permit No. FEP-01/534/2017/A) (EP Conditions 2.1 and 2.4)

I refer to your letter dated 6.5.2020 enclosing the Curriculum Vitae of Mr. LEUNG Wing Keung, Mike, as a Qualified Ecologist to replace Mr. H. Y. Tang, Desmond, who was approved in our letter dated 21.6.2018 and recently left his post, and the division of labour of the Qualified Ecologists proposed in your letter dated 4.6.2018. It is noted that the qualification and experience of Mr. LEUNG has been certified by the ET Leader and verified by the IEC.

2. Having reviewed the submission and taking advice from Agriculture, Fisheries and Conservation Department, we consider that the qualification and experience of Mr. LEUNG meets the relevant requirements. Pursuant to Condition 2.1 of FEP-01/534/2017/A, I hereby approve Mr. LEUNG Wing Keung, Mike as the Qualified Ecologist for this Project.

3. Regarding the duties of the Qualified Ecologist(s) to be carried out as specified in Condition 2.4 of the captioned FEP, it is understood that the division of labour proposed in your letter dated 4.6.2018 remains valid. This means Mr. LEUNG Wing Keung, Mike, would take up all responsibilities under Mr. H. Y. Tang, Desmond, as a Qualified Ecologist to carry out work related to i) Grassland Reinstatement Plan; ii) Vegetation Survey Report and the Transplantation Proposal; and iii) Woodland Compensation Plan under Conditions 2.13, 2.14-2.16 and 2.17 respectively. And Mr. Keith L. W. KEI would continue his responsibilities as a Qualified

TO 29596079

Ecologist to carry out work related to i) Monitoring and Survey Plan for Golden-headed Cisticola, ii) Precautionary checks on the presence of nesting birds before any vegetation clearance in breeding season, and iii) baseline monitoring for Golden-headed Cisticola under Conditions 2.18, 2.19 and 3.2(i) respectively.

4.

Should you have any queries, please contact our Ms. Candice CHUNG at 2835 1114.

Yours sincerely,

(Lawrence W.H. LIU) Senior Environmental Protection Officer for Director of Environmental Protection

<u>c.c.</u>

CEDD(Attn: Mr. Steven SHUM)Acuity (IEC)(Attn: Mr. Jacky LEUNG)AUES (ET)(Attn: Mr. T.W. TAM)ARUP(Attn: Mr. EVANS Robert Antony)AFCD(Attn: Ms. Chole NG)

fax: 2714 0695 fax: 2698 9383 fax: 2959 6079 fax: 2211 9699 fax: 2377,4427

<u>Internal</u>

S(RN)3 (Copy of proposal by despatch) AE(SA)64



LEUNG Wing-Keung, Mike

Staff Curriculum Vitae

Professional History

2010/03 – present	Director Muni Arborist Limited
2009/02 – 2010/03	Resident Senior Field Officer
2008/05 – 2009/01	Resident Field Officer I
	P & T Architects and Engineers Ltd.
2007/04 – 2008/04	Senior Landscape Supervisor
	Oriental Landscape Ltd.
2005/05 – 2007/03	Horticulturist/ Assistant Project Manager ACLA Ltd.
2005/02 – 2005/08	Landscape Foreman
	Clearwater Bay Golf and Country Club
2004/01 – 2005/01	Project Coordinator
	Pegasus Greenland Limited

Academic Training

Grad Cert	Graduate Cert in Arboriculture (QF 6)	2017
Degree Diploma	BSc. in Environmental Science PDBM in Management Theory and Practice	2003 2014

Professional Qualification

Technical Member	
Tree Risk Assessment Qualification	
Municipal Specialist (HK-0287AM)	
Certified Arborist (HK-0287AM)	

Training Certificate

Certified	Integrated Pest Management
Certified	Permaculture Design

Certified Turf Professional

Diploma in Chinese Medicinal Herbs

Professional Affiliation

ISA HK Chapter ISA HK Chapter ISA HK Chapter Steering Committee ISA ISA HK/China International Society of Arboriculture (ISA)



The Chinese University of Hong Kong Vocational Training Council
The Arboricultural Association

The University of Melbourne

Inte	ernational	Society	of Arboricul	ture
Inte	ernational	Society	of Arboricul	ture
Inte	ernational	Society	of Arboricul	ture

Purdue University
Permaculture Institute
Hong Kong
The University of
Georgia
Hong Kong Chinese
Medical Research
Institute

2018 – present President Vice President Co-chair 2010 – present Proctor/Evaluator Vice President 2007 – present **Professional Member**

Key Experience

Mike has a Bachelor Degree in Environmental Science and equipped with knowledge including ecology, landscape ecology, EIA and etc through the university training. After graduation, he further studied a Chinese Medicinal Herbs Diploma course which covers identification of different herbs and shrubs in rural area.

2011 2011

2008

2006

2013 – 2018

2012 – 2013

2010 - 2013



LEUNG Wing-Keung, Mike

Staff Curriculum Vitae

Mike is currently the project director of MTR Shatin to Central Line (SCL). He is responsible to prepare and to review the Vegetation Landscape and Tree Preservation Proposal (VLTTP) and to submit to EPD for approval under the EIA permit requirement. The VLTTP covers vegetation, landscape and tree preservation, including transplantation methodology along the whole 17km long SCL to ensure the implementation of mitigation measures specified in the approved EIA report. He also need to ensure the vegetation protection measures stated in the VLTTP are implemented on site. Since the project involve protection of more than 1000 trees along the railway line and relevant storage points stretched from Lo Wu to Shek O, there are a number of protected species being transplanted. Mike was responsible to identify the tree on site and to design the method statement and to prepare logistics, on behalf of MTR, with the contractors. Examples includes four 15m tall *Ailanthus fordii*, which is a protected species under Cap 96, at Olympic Garden Kowloon City being transplanted to off-site holding nursery and seven young *Aquilaria sinensis*, which is a protected species under Cap 586, on a slope at Hin Heng Tai Wai being transplanted onsite.

Mike was the independent Vegetation Maintenance Checker(VMC) for a slope vegetation maintenance project for ArchSD (TCD 938) since 2010, which covers more than 100, 000 trees plus vegetation on slopes maintained by ArchSD. One of the main duties in the project was to supervise and to perform Vegetation Maintenance Inspections and Operation, to ensuring healthy and sustainability of the vegetation on slopes. There are more than 3000 slopes in New Territory, located in the country parks, countryside, rural areas, parks and re-site villages and etc. Major duties in Vegetation Maintenance Inspections includes identifying and designing protection measure for the species of conservation interest including wild orchid and Aquilaria sinensis seedling. Examples include setting up protection measures of ,Coelogyne fimbriata on a slope at Tai Mo Shan, enhancing the vegetation diversity by introducing a variety of native species on slopes, identifying any unsatisfactory site conditions such as soil erosion and proposing related mitigation to improve the site condition. Another task under the same project is Woodland Management which includes woodland thinning and enhancement of vegetated slopes by identity native species, to preserve and to remove overcrowded plants and invasive and parasitic vines, weeds and unwanted vegetation that compete with other vegetation that hinder the establishment of woodland/shrubland or weaken bio-diversity. After the removal of the unwanted vegetation, compensatory planting proposal using the native species (which the seedlings were supplied by AFCD's Tai Tong Nursery) were proposed to create a woodland which is similar to the existing woodland nearby.

Project Experience

<u>Duties</u>



LEUNG Wing-Keung, Mike

Staff Curriculum Vitae

Yuet Wah

C11038 – Arborist Consultancy for Shatin to Central Line for MTRC (Project Director) July 2012 – present	To deploy resources and manpower to fulfil the tree preservation requirements stated in Environmental Permit
FEHD E90/2012 Provision of Tree Risk Assessment, Inspection, Maintenance and Related Arboricultural Services to the Venues Under the Management of the District Environmental Hygiene Office (Project Director) June 2013 - May 2015	Arrange arborist to conduct inspection and arboricultural works supervision
C735F - West Island Line Arborist for Tree Protection – for MTRC (Project Director) Dec 2009 – June 2016 (31 months)	To deploy resources and manpower to fulfil the tree preservation requirements stated in Environmental Permit
TCY038/TCD 938 – The Term Contract for the Maintenance of Slopes for which the Architectural Services Department (Property Services Branch) is Responsible – NT and Outlying Islands (N) – for ArchSD (Senior Independent Checker) Oct 2010 – Oct 2019	Arrange arborist to conduct horticultural maintenance including tree risk assessment (~100, 000 trees).
Contract No. HY/2010/08 Central Wan Chai Bypass Tunnel SR8	Independent Tree Expert to advise tree preservation
Independent Qualified Arborist for T15 Tree Transplant for the Proposed Residential Development at Fanling, Sheung Shui Town Lot No. 177 Aug 2010 – July 2015	Independent Arborist to advise and supervise a large tree transplant for a private development
TCR318 - Tree Safety Enhancement Measures on SIMAR Slopes Maintained by ArchSD – for ArchSD (Senior Qualified Arborist)	Supervision and conducting of tree risk assessment for ~50, 000 trees.
KS20100061 - Tree Risk Assessment and Inspection for 41 Public Rental Housing Estates in Wong Tai Sin, Tsing Yi, Tsuen Wan and Islands Region – for Housing Authority (Qualified Arborist)	Conducting tree risk assessment, supervision of tree risk mitigation works for ~20,000 trees.
Maintenance Services for Old and Valuable Trees (New Territories) – for LCSD (Qualified Arborist)	Monitoring of Old and Valuable Trees (OVTs) conditions in twice a year basis.
Tree Risk Assessment for 16 Public Housing Estates in Kowloon East and Outlying Islands Region	Conducting tree risk assessment in Public Housing Estates.
HY/2009/03 - Tuen Mun Highways Widening Phase 4 – for HyD (Independent Tree Specialist)	Tree specialist in supervising the implementation of tree protection.
Yuet Wah Street Bus Terminus Redevelopment – for	Field Officer for tree protection

Urban Renewal Authority (Field Officer)

Monitoring of Preserved Trees for the Hotel Development Monthly monitoring of large trees' condition at the Former Marine Police Station at Tsim Sha Tsui

during construction.



Staff Curriculum Vitae

LEUNG Wing-Keung, Mike

(Heritage 1881)

Equestrian Olympic Game in HK 2008	Supervision of landscape works in HKSI, Perfold Park and Beas River Country Club.		
Greening Works in Urban Areas Phase II and III (Resident Senior Field Officer)	Resident site staff for supervision of soft landscape works.		
District Open Space at Po Kong Village Road, Wong Tai Sin – for ArchSD (Resident Field Officer)	Resident site staff for supervision of soft landscape works.		
Hong Kong Jockey Club's Third Golf Club at Kau Sai Chau	Supervision of soft landscape works.		



Appendix H

Proposed Registered Landscape Architect

Z:Jobs/2018/TCS00881(CV-2016-10)/600/Site Inspection & Audit/Proposal on the Site Inspection, Deficiency and Action Reporting Procedures/R0175v4a.doc Action-United Environmental Services and Consulting

本者恼號 () in EP2/N7/A/78 Pt. 4 OUR REF: 來函檔號 HCTY/CV201610/L18-190 YOUR REF: 電話 2835 1868 TEL. NO.: 圖文傳真 2591 0558 FAX NO.: 電子郵件 E-MAIL: 網 址 HOMEPAGE: http://www.epd.gov.hk

Environmental Protection Department Branch Office 28th Floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong.



環境保護署分處 香港灣仔 軒尼詩道 一百三十號 修頓中心廿八樓

By Fax Only (2516 9430)

Hsin Chong Tsun Yip Joint Venture Hsin Chong Tower, 107-109 Wai Yip Street, Kwun Tong, Kwoloon (Attn : Mr. HO Man To)

23 May 2018

Dear Mr. HO,

Environmental Impact Assessment Ordinance, Cap. 499 Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery

Employment of Registered Landscape Architect (Environmental Permit No. FEP-01/534/2017) (Environmental Permit (EP) Condition 2.1 and 2.5)

I refer to your letter of 11 April 2018 proposing Mr. SHIU Yau Bun Ivan as the Registered Landscape Architect with certification by the ET Leader and verification by the IEC to form part of the Environmental Team (ET) for the captioned project under Condition 2.1 and carrying out the duties as specified in Condition 2.5^1 of the captioned Environmental Permit.

Pursuant to EP Condition 2.1², I hereby approve Mr. SHIU Yau Bun Ivan as the Registered Landscape Architect for this Project.

Please be reminded to comply with the remaining requirements of EP Condition 2.1 in a timely manner, including a proposal for minimum on-site time for the ET Leader and ET, and the provision of a site office/suitable work accommodation on site to the ET.

¹ Condition 2.5 of FEP No. FEP-01/534/2017 states that "A Registered Landscape Architect shall be appointed, no later than one month before the commencement of the construction of the Project, to form part of the ET to carry out work relating to landscape aspects including but not limited to auditing the mitigation measures to ensure compliance with the recommendations of the approved EIA Report (Register No. AEIAR-198/2016) and to certify submissions for the Project as required under Conditions 2.20 to 2.21. The qualification and experience of the Registered Landscape Architect shall be certified by the ET Leader and verified by the IEC."

² Condition 2.1 of FEP No. FEP-01/534/2017 states that "An ET shall be established by the Permit Holder no later than one month before the commencement of construction of the Project. The ET shall not be in any way an associated body of the Contractor or the IEC for the Project. The Permit Holder shall provide a site office/suitable work accommodation on site to the ET for use. The ET shall be headed by an ET Leader and supported by relevant specialists including qualified ecologist(s) and Registered Landscape Architect. The ET Leader shall be a person who has at least 7 years of experience in environmental monitoring and auditing (EM&A) or environmental management. The minimum on-site time for the ET Leader and ET, and the qualifications of the specialists in the ET shall be proposed with justifications for the approval of the Director."



Yours sincerely,

(Raymond W. M. WONG) Principal Environmental Protection Officer for Director of Environmental Protection

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c.c.

CEDD-DPTL	(Attn: Mr. LI Kwok Hung)	faz
Acuity (IEC)	(Attn: Mr. Jacky LEUNG)	faz
AUES (ET)	(Attn: Mr. T.W. TAM)	faz
UD&L, PlanD	(Attn: Ms. Jaime PONG)	fax

fax: 2714 0079 x: 2333 1316 x: 2959 6079 x: 2116 0752

Internal

 $\overline{P(RN)}$ with copy of cover letter, Appendix C, F(for RLA) and G(for RLA) of f(29) S(SA)6_ AE(SA)61



Ivan Shui

Staff Curriculum Vitae

Professiona	l History				
02/ 2014 – P	resent	Landscape Archi	tect		
		Muni Arborist Limited			
1/2012 — 02/2014		Landscape Architect			
		Earthasia Ltd			
1/2010 — 1/2012		Landscape Architect			
		Belt Collins HK			
5/2007 – 1/2010		Landscape Architect			
8/2002 E/2007		Urbis Lta			
8/2003 - 5/2007		Landscape Architect			
Academic T	aining	Dell Collins HK			
Academic II	annig		0007		
Master	Master of La	ndscape	2007	The University of Hong Kong	
Deerree	Architecture	a la ito atu wa l	2002	Liniversity of Lood LIK	
Degree	Degree in Ar	chitectural	2003	University of Leed, UK	
	Engineering				

Professional Association Registered Landscape Architect (R142)

Key Experience

Ivan has the academic background of engineering and landscape architecture. He has extensive experience in the landscape industry from planning to implementation. He is particularly experienced in landscape lead consultancy projects to ensure team work efficiently within required time frame and budget.

Project Experience

Hong Kong & Macau

2014, Landscape consultancy services for The Hong Kong Polytechnics University CDEF court revitalization works.

2014, Improvement Works of Proposed Ball Court at Chinese Y.M.C.A. College, Ma On Shan, N.T., Hong Kong

2014, Tree transplanting supervision of Long Ping Station Extension for MTRC, N.T. Hong Kong.

2014, Landscape consultancy services for two temples development at Ngau Tau Kok Lower Estates, KLN, Hong Kong.

2013, LOHAS Retail Development Landscape Consultancy Services for MTRC, N.T. Hong Kong.



Staff Curriculum Vitae

2013, Chu Hai College Tuen Mun New Campus Landscape Consultancy Services N.T. Hong Kong.

2013, Term Landscape Consultancy Services for Environmental Protection Department, Hong Kong.

2013, Lead consultancy services for Tai Kok Tsui Streetscape Improvement Works for URA, Hong Kong.

2012, Lead consultancy services for Tree Nursery Of West Kowloon Cultural District for WKCDA, Hong Kong.

2012, Heya Residential Development Landscape Consultancy Services for Hong Kong Housing Society, Cheung Sha Wan, Hong Kong

2012, Landscape consultancy services for Studio City Casino Resort Development, Macau.

2012, Landscape consultancy services for Kai Yuen Lane Private Residential Development for New World Project Management Ltd, North Point, Hong Kong

2012, Lead consultancy services for Man Cheong Street Open Space Development for Sino Group, Jordan, Hong Kong

2010, Consultancy Agreement No. 9AW 026, Tuen Mun River Beautification - Tin Hau Temple Plaza

2008-2010, Provision of 13 nos. of Green Roofs at Various Locations at Hong Kong Island, Mui Wo and Hei Ling Chau

2007-2010, Sub-consultancy services for Residential Development and Tree Removal Application at 350 Tai Hang Road, Hong Kong.

2008-2009, Sub-consultancy services for Proposed Footbridge Linking Junk Bay with Tiu Keng Leng MTR Station, Hong Kong

2008-2010, The University of Hong Kong - Institute of Human Resources - Soft Landscape Sub-Consultancy

2008-2010, Phased Reprovisioning of Cape Collinson Crematorium, Cape Collinson Road, Chai Wan, Hong Kong



Ivan Shui

Staff Curriculum Vitae

<u>China</u>

2013, 寶能集團 深圳寶能公館住宅項目 Shenzhen Baoneng Residential development

2012,廣州利合 亞運城D地塊住宅項目 Guangzhou Asia Game Site Re-development, GZ, PRC

2011-2012, 嘉里 營口香格里拉酒店及住宅項目 Conceptual Design of Shangri-La Hotel and residential development, YinKao, PRC

2011-2012, 雨潤集團 南京國際廣場 Commercial Plaza and Podium Garden, Nanjing, PRC

2010-2012, 雨潤集團 青島星雨華府 Commercial complex development, TsingDao, PRC

2011-2012, 雅居樂 廣州科學城 Residential development, GZ, PRC

2010-2011, 上海蓮申 春申Mansion住宅項目 Residential development, Shanghai, PRC

2010-2012, 綠城 無錫太湖新城 GreenTown Residential development, Wuxi, PRC

2010-2012, 綠城 金華海棠 GreenTown Residential development, Jinhua, PRC

2007-2010, 瑞安 重慶天地 天地湖公園項目 MAN-MADE LAKE PARK, CHONGQING, PRC

2007, Consultantcy service for tender Prequalification for New Civil Aviation Headquarter, Hong Kong.

2005, Responsible for landscape constructions documents for Wynn Hotel, Macau.



Staff Curriculum Vitae

2003, Union Square Package 5, 6 and 7, Kowloon Station Development, Hong Kong.



Appendix I

Accommodation of Environmental Team

Z:Jobs/2018/TCS00881(CV-2016-10)/600/Site Inspection & Audit/Proposal on the Site Inspection, Deficiency and Action Reporting Procedures/R0175v4a.doc Action-United Environmental Services and Consulting




Appendix J

Locations of Environmental Monitoring Stations

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E	FIFTH ISSUE	GL	02/16
D	FOURTH ISSUE	GL	12/15
С	THIRD ISSUE	GL	10/15
В	SECOND ISSUE	GL	02/15
Rev	Description	By	Date
Cone	ultant		

Contract No. and Title: Agreement No. CE 1/2013(CE)

Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery - Design and Construction

Drawing title

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Layout Plan for Woodland Compensation Area



Appendix K

Construction Master Programme

Z:\Jobs\2018\TCS00881(CV-2016-10)\600\Site Inspection & Audit\Proposal on the Site Inspection, Deficiency and Action Reporting Procedures\R0175v4a.doc Action-United Environmental Services and Consulting

Contrac Site For	No. CV/2016/10 nation and Associated Infrastructural Works for		Master Pro	ogramme Rev.1b	(Draft)				
ID	Task Name	Duration	Start	Finish	Predecessors	1 C 2018 C 2018	3 C 2018 C 2018 C 2019 C	2019 C 2019 C 2019 C	2020 Q 2020 Q 2020
1	Kan Deter	0400 dave	5	F-: 00/40/00		DelarFeMaAp/1af	lurlulluserDckoDelarFelMal	ıphaluılukuşerDckoDela	arFelMaApMaJunJulAuso
2	Contract Starting Date	2199 days	Fri 17/12/15	Fri 23/12/22		10/15			
3	Contract Statiling Date	0 days	FIL 17/12/15	FIL 17/12/15 Wod 20/2/12	າາ				▲ 2/12
4	Contract Completion Date for Section 1	0 days	Mon 20/12/21	Mon 20/12/21	22	1			× 2/12
5	Contract Completion Date for Section 2	0 days	Wod 19/7/17	Wed 19/7/17	23	1		♦ 7/17	
6	Contract Completion Date for Section 4 (Establishment Works)	0 days	Sun 23/2/12	Sun 23/2/12	25	1		*	
7	Contract Completion Date for Section 5 (Establishment Works)	0 days	Fri 23/12/22	Fri 23/12/22	26	1			
8	Contract Completion Date for Section 6 (Establishment Works)	0 days	Sun 22/7/17	Sun 22/7/17	27	1			
9	Contract Completion Date	0 days	Fri 23/12/22	Fri 23/12/22		1			
10 🕻	Access Dates	580 davs	Fri 17/12/15	Wed 19/7/17		ir			
11 🕻	Part A1	0 davs	Fri 17/12/15	Fri 17/12/15	2SS	♦ 12/15			
12 🕻	Part A2	0 davs	Fri 17/12/15	Fri 17/12/15	2SS	12/15			
13 🕻	Part A3	0 days	Fri 17/12/15	Fri 17/12/15	2SS	♦ 12/15			
14 🕻	Part B1	0 days	Fri 17/12/15	Fri 17/12/15	2SS	12/15			
15 🕻	Part B2	0 days	Fri 17/12/15	Fri 17/12/15	2SS	12/15			
16 🕻	Part C	0 days	Fri 17/12/15	Fri 17/12/15	2SS	12/15			
17 🕻	Part D	0 days	Fri 18/12/14	Fri 18/12/14	2SS+365 days		→ 12/14		
18 🕻	Part E	0 days	Fri 17/12/15	Fri 17/12/15	2SS	12/15			
19 🕻	Part G1	0 days	Wed 19/7/17	Wed 19/7/17	2SS+580 days			7/17	_
20	Part G2	0 days	Wed 19/7/17	Wed 19/7/17	2SS+580 days	┢╋╋		7/17	\neg
21 🕻	Section Completion Date	1619 days	Wed 19/7/17	Fri 23/12/22	-			r#	
22	Section 1 (Parts A1, A2 & A3)	0 days	Wed 20/2/12	Wed 20/2/12	105			ہ	▶ 2/12
23	Section 2 (Parts B1, B2, C, D, F, G1 & G2)	0 days	Mon 20/12/21	Mon 20/12/21	179				
24	Section 3 (Part E)	0 days	Wed 19/7/17	Wed 19/7/17	495			7/17	
25	Section 4 (Establishment Works within Parts A1, A2 & A3)	0 days	Sun 23/2/12	Sun 23/2/12	545				
26	Section 5 (Establishment Works within Parts B1, B2, C, D, F, G1 & G2)	0 days	Fri 23/12/22	Fri 23/12/22	547				
27	Section 6 (Establishment Works within Part E)	0 days	Sun 22/7/17	Sun 22/7/17	549				
28 🕻	3 Subletting	239 days	Fri 18/1/5	Fri 18/8/31					
29 🕻	Subletting of Tree Specialist	54 days	Fri 18/1/5	Tue 18/2/27	42				
30	Subletting of Conditon Survey	54 days	Fri 18/1/5	Tue 18/2/27	42				
31 🕻	Subletting of Ground Investigation Work	74 days	Fri 18/1/5	Mon 18/3/19	42				
32 🕻	Subletting of Geotechnical Instrumentation	74 days	Fri 18/1/5	Mon 18/3/19	42	▏ <mark><mark>┎</mark>╸╋╂╮</mark>	1		
33 🕻	Subletting of Environmental Team and ET Leader	81 days	Fri 18/1/5	Mon 18/3/26	42				
34 🕻	Subletting of Independent Checking Engineer	142 days	Fri 18/1/5	Sat 18/5/26	42				
35 🕻	Subletting of Temporary Works Design	12 days	Sun 18/5/27	Thu 18/6/7	34				
36 🕻	Subletting of Contractor Design	45 days	Fri 18/6/8	Sun 18/7/22	35				
37 🕻	Subletting of Site Hoarding	90 days	Fri 18/1/5	Wed 18/4/4	42				
38 📢	Subletting of Slopworks	150 days	Tue 18/3/27	Thu 18/8/23	33,29,31,32		┈┈		
39 💽	Subletting of Fill Transportation	158 days	Tue 18/3/27	Fri 18/8/31	33,29,31,32		╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔╔		
40 🖌	Subletting of Retaining Wall	154 days	Tue 18/3/27	Mon 18/8/27	29,31,32,33				
41 🕻	Preliminary Works	606 days	Fri 17/12/15	Mon 19/8/12					
42 🖌	Submission and Approval of Subletting and Procurement Procedure	21 days	Fri 17/12/15	Thu 18/1/4	2	(IK ↓			
43 🕻	Condition Survey and Report Submission	60 days	Wed 18/2/28	Sat 18/4/28	30				
44	Initial Site Survey and Setting out of the Site	150 days	Fri 17/12/15	Sun 18/5/13	2				
45	Submission of Subcontractor Management Plan	39 days	Fri 17/12/15	Mon 18/1/22	2	(📕 📜 📗 📗			
46	Approval of Subcontractor Management Plan	24 days	Tue 18/1/23	Thu 18/2/15	45				
4/	Submission of Safety Plan	82 days	Fri 17/12/15	Tue 18/3/6	2				
48	Approval of Safety Plan	21 days	Wed 18/3/7	Tue 18/3/27	47				
49	Submission of Environmental Management Plan	29 days	Fri 17/12/15	Fri 18/1/12	2	(🕂 🚽 🛛 🖓			
51	Approval of Environmental Management Plan	19 days	Sat 18/1/13	wea 18/1/31	49				
52 6	Submission and Approval Required at Environmental Permit for Commencement of Construction	142 days	Tue 18/3/2/	Wed 18/8/15					
52	Vegetation Survey Report and Transplantation Proposal	68 days	Tue 18/3/2/	Sat 18/6/2	00				
53 🔽	vegetation Survey (including baseline Flora Survey Reports) Reports Submission and Transplantation EPD Approval	30 days	1 UE 18/3/2/	111U 18/5/3	<u>აა</u> 52				
55 1	Woodland Componention Plan	SU days	Tuo 19/3/4	Sat 10/0/2	55	í [] ∭∎			
56	Woodland Compensation Plan Propagation and Submission to EPD	38 days	Tue 18/3/2/	Jai 10/0/2	22				
57		30 days	Fri 18/5/4	Sat 18/6/2	56	(
58	Golden-beaded Cisticals Manitoring and Survey Plan	68 days	TUD 18/3/97	Sat 19/0/2	50	í [] ∭			
59	Golden-beaded Cisticals Monitoring and Survey Plan Submission to EDD	38 days		Thu 18/5/2	33				
60	EPD A proval	30 days	Fri 18/5/4	Sat 18/6/2	59				
61	I andscape and Visual Mitigation and Tree Preservation Plan	68 days	Tuo 18/3/27	Sat 18/6/2	00	í [] ₊↓			
62	Landscape and Visual Mitigation and Tree Preservation Plan Submission to EPD	38 days	Tue 18/3/27	Thu 18/5/3	33				
63		30 days	Fri 18/5/4	Sat 18/6/2	62				
64	Traffic Noise Mitigation Plan	65 days	Tue 18/3/27	Wed 18/5/30	02	íll ⊮∔∔ ∎			
65	Traffic Noise Mitigation Plan Submission to FPD	35 days	Tue 18/3/27	Mon 18/4/30	33				
66 Г	FPD Approval	30 days	Tue 18/5/1	Wed 18/5/30	65	i [] 🛛 📲			
67 Г	Grassland Reinstatement Plan	30 days	Thu 18/5/3	Sat 18/6/2	~~	i 			
68	Grassland Reinstatement Plan Submission to EPD (by Others)	0 days	Thu 18/5/3	Thu 18/5/3			5/3		
69 Г	EPD Approval	30 days	Fri 18/5/4	Sat 18/6/2	68	i [] 🛛 📗 🖬			
70	Environmental Baseline Monitoring	142 days	Tue 18/3/27	Wed 18/8/15	~~	╷╽╷╶╟╫╀╇			
71	Environmental Baseline Monitoring Methodology for Air Quality and Noise	15 days	Tue 18/3/27	Tue 18/4/10	33				
72	Environmental Baseline Monitoring Methodology for Air Quality and Noise Verification and Approval	14 days	Wed 18/4/11	Tue 18/4/24	71				
73 🕻	Environmental Baseline Monitoring Methodology for Water Quality and Holde Vermouter and Approval	17 davs	Tue 18/3/27	Thu 18/4/12	33				
Mast	r Programme Rev.1b Task Summary Inactive Milestone	D	uration-only	Start-only	E	External Mr	ilestone 🔷	Critical ?	Split
-	Split Project Summary Inactive Summary	M	ianual Summary Rollup	Finish-only	3	Deadline	+	Progress	. –
	Date: Jan 2019 Milestone Inactive Task Manual Task	М	anual Summary	External Tasks		Critical		Manual ?	Progress



Site Formation and Associated Infrastructural Works for Task Name Duration Start Finish Predecessors d 2018 d 2018 d 2018 d 2018 d 2019 d 2019 d 2019 d 2019 d 2019 d 2020 d 2020 d 2020 larfeMaApMaJurJuAuserDckoDclarfeMaApMaJurJuAuserDckoDclarfeMaApMaJurJuAuse Fri 18/4/13 74 33 34 37 76 35 36 37 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 77 78 78 78 78 78 78 78 78 78 78 78 78 78 78 78 79 79 79 79 79 79 79 79 79 79 79 70 <th Environmental Baseline Monitoring Methodology for Water Quality Verification and Approval from 14 days Thu 18/4/26 73 Environmental Baseline Monitoring for Air Quality 14 days Wed 18/4/25 Tue 18/5/8 72 Environmental Baseline Monitoring for Noise 14 days Wed 18/4/25 Tue 18/5/8 72 Environmental Baseline Monitoring Report Verification by IEC and Report Submission to EPD for Air Sat 18/5/12 4 days Wed 18/5/9 75.76 Environmental Baseline Monitoring for Water Quality 102 days Fri 18/4/27 Mon 18/8/6 74 Environmental Baseline Monitoring Report Verification by IEC and Report Submission to EPD for Water 2 days Wed 18/8/8 Tue 18/8/7 78 EPD Review for Baseline Monitoring Thu 18/8/9 Wed 18/8/15 79,77 7 davs Other Requirement at Environmental Permits for Commencement of Works 68 days Tue 18/3/27 Sat 18/6/2 33 Contractor's Design and Major Temporary Works Design Fri 18/6/8 Mon 19/8/12 431 davs Temporary Drainage Design 30 days Fri 18/6/8 Sat 18/7/7 35,34 Approval of Temporary Drainage Design 21 days Sat 18/7/28 Sun 18/7/8 83 Design of Noise Barrier Superstructure, and Liasion with WSD for Construction of Noise Barrier 365 days Mon 18/7/23 Mon 19/7/22 35.34.36 Approval of Noise Barrier Superstructure Design 21 days Tue 19/7/23 Mon 19/8/12 85 Temporary Works Design for Retaining Wall RW11 Construction Fri 18/6/8 210 davs Thu 19/1/3 35.34 Approval of Temporary Works Design for Retaining Wall RW11 Construction 21 days Fri 19/1/4 Thu 19/1/24 87 Temporary Works Design for RCP Construction between DongJiang Water Mains, Liasion and Fri 18/6/8 Mon 18/12/24 200 days 35.34 Approval of Temporary Works Design for RCP Construction between DongJiang Water Mains 21 days Tue 18/12/25 Mon 19/1/14 89 Design of E&M Works for Reprovisioned Government Refuse Collection Point (RCP) Mon 18/7/23 Thu 18/9/20 36.34 60 davs Approval of RCP E&M Design 21 days Fri 18/9/21 Thu 18/10/11 91 Temporary Works Design for Sewerage Across DongJiang Water Mains, Liasion and Submission 365 days Fri 18/6/8 Fri 19/6/7 35,34 Approval of Temporary Works Design for Sewerage Across DongJiang Water Mains 21 days Sat 19/6/8 Fri 19/6/28 93 Design of Ventilation and De-odourisation Sytem (VDS) and Air Mixing System (AMS) of Sewage 150 days Fri 18/9/21 Sun 19/2/17 36,91,34 Approval of VDS and AMS Design for Sewage Detention Tank Sun 19/3/10 21 days Mon 19/2/18 95.92 Design of Concrete Plinth and Enclosure for Water Meter Box for Fresh Water for C&C Development 45 days Mon 18/7/23 Wed 18/9/5 36.34 Approval of Concrete Plinth and Enclsoure for Water Meter Box for Fresh Water for C&C Development 21 days Thu 18/9/6 Wed 18/9/26 97 Design and Co-ordination for Road Lighting 275 days Mon 18/7/23 Tue 19/4/23 36 **Project Manager's Site Accommodation** 280 days Thu 17/12/28 Wed 18/10/3 42 Set up of Secondary Site Office Fri 18/1/5 Sun 18/2/18 45 days Application for Land Allocation of Site Accommodation 170 days Thu 17/12/28 Fri 18/6/15 2SS 103 2 104 2 105 2 106 3 107 2 108 2 109 2 110 3 111 3 112 3 113 3 114 3 115 3 Subletting, Procurement and Design for Site Accomodation 45 days Wed 18/5/2 Fri 18/6/15 102FF Construction of Site Accommodation Sat 18/6/16 Wed 18/10/3 110 days 103 Section 1 of the Works (Parts A1, A2 & A3) 940 days Fri 17/12/15 Sat 20/7/11 Tree Survey and Report Submission 31 days Wed 18/2/28 Mon 18/4/9 29 Tree Felling and Tree Transplant Fri 18/5/4 Fri 18/7/13 106 53 59 58 davs Erection of Site Hoarding 30 days Thu 18/8/16 Wed 18/9/19 37.51 Temporary Drainage Works 90 days Thu 18/8/16 Tue 18/12/4 84,51 Utilities Diversion/Protection Works 45 days Fri 17/12/15 Thu 18/2/8 Enquiries of Utilities As-built Record from UU Companies 45 days Fri 17/12/15 Thu 18/2/8 2 12/15 Fri 17/12/15 Fri 17/12/15 CLP 0 days Removal / Diversion of Existing 11kV Overhead Cable (By CLP) 0 days Fri 17/12/15 Fri 17/12/15 2 12/15 Ground Investigation and Geotechnical instrumentation for Commencement of Slopework 120 days Tue 18/3/20 Wed 18/8/15 Mobilization of GI Rig and Preparation Works 18 days Tue 18/3/20 Fri 18/4/13 11,12,13,31,106 116 🝥 Verification Drillholes (2 Nos., VDH1, 2) and Preliminary Results Submission 12 days Sat 18/4/14 Fri 18/4/27 115 117 Site Clearance for Vertification Drillholes (6 Nos., VDH7-9.16-18) 31,106,115,53, 14 days Fri 18/5/4 Sat 18/5/19 118 🝥 Verification Drillholes (6 Nos., VDH7-9, 16-18) and Preliminary Results Submission 36 days Mon 18/5/21 Wed 18/7/4 117 119 3 120 3 121 3 122 3 Inspection Pits (4 Nos., IP1-4) Mon 18/5/21 31,106,115,117 24 days Tue 18/6/19 Geotechnical Instrumentation Required for Commencement of Slope Works 30 days Sat 18/4/14 Sat 18/5/19 115.32 Formal Report Submission and Verification of the Design of Cut and Fill Slope by PM 42 days Thu 18/7/5 Wed 18/8/15 116,119,118 **Retaining Wall RW1** Thu 18/8/16 Fri 19/9/13 317 days 123 Excavation to Formation Level, Plate Load Test and Blinding Laver for Retaining Wall Bays 1-9 Thu 18/8/16 Sat 18/9/15 27 davs 51,106 124 Excavation to Formation Level, Plate Load Test and Blinding Layer for Retaining Wall Bays 10-17 Mon 18/9/17 29 days Thu 18/10/25 123 125 Temporary Access Road for Vechicular Access Thu 18/8/16 Tue 18/8/28 11 days 51 126 Base of Retaining Wall RW1 Bay 1-9 32 days Thu 18/8/30 Mon 18/10/8 40,120,107,123 127 Base of Retaining Wall RW1 Bay 10-17 32 days 126.124SS+12 Tue 18/10/9 Sat 18/11/17 1 128 🔞 Wall Stem of Retaining Wall RW1 1-4 26 days Sat 18/9/8 Wed 18/10/10 126SS+8 days 129 Wall Stem of Retaining Wall RW1 Bay 5-10 (1st pour) Thu 18/10/11 26 days Tue 18/11/13 128,126,127FF 130 Wall Stem of Retaining Wall RW1 11-17 Wed 18/11/14 Thu 18/12/27 129.127FF+22 36 days 1 131 Wall Stem of Retaining Wall RW1 Bay 5-10 (2nd pour) 39 days Fri 18/12/28 Fri 19/2/15 130 1 132 Filter Layer behind RW1 173 days Thu 18/9/13 Thu 19/4/18 126SS+12 days 133 🚰 Erosion Control Mat at RW1 111 days Fri 18/12/28 Mon 19/5/20 130 134 120 days Drainage and Maintenance Access in front of RW1 Thu 19/5/30 Fri 18/12/28 130 1 135 Drainage and Maintenance Access on top of RW1 120 days Tue 19/4/23 Fri 19/9/13 132.130 Ř 136 Fill Slope FS1 503 days Thu 18/10/11 Fri 20/7/3 137 Fill Slope FS1 South (Section 12 at Drawing C1/GE/1030) 453 days Wed 18/11/14 Wed 20/6/3 138 🔞 FS1 South Backfilling Stage 1 (~7.6m max, Section 12 up to +20 mPD) 43,51,121,107, 75 days Wed 18/11/14 Fri 19/2/15 139 FS1 South Backfilling Stage 2 (~7.5m, Section 12 up to +27.5 mPD)+filter blanket 7.5m height 100 days Sat 19/2/16 Sat 19/6/22 138,127,131,13 10 140 FS1 South Backfilling Stage 3 (~7.5m height, Section 12 up to ~+35mPD), (27.5mPD to 30mPD filter 91 days Mon 19/10/14 Mon 19/6/24 139,107 141 FS1 South Backfilling Stage 4 (~7.4m height, Section 12 up to +42.4mPD), (Filter blanket from 35mPD 83 days Tue 19/10/15 Wed 20/1/22 140 142 FS1 South Backfilling Stage 5 (~7.6m height, Section 12 up to Proposed Platform, +50mPD), (Filter Thu 20/1/23 83 days Sat 20/5/9 141 18 143 Drainage and Maintenance Access 300 days Tue 19/5/28 Wed 20/6/3 142FF+21 davs 0 1 1 1 144 Geotechnical Instrumentation Works Sat 20/5/16 138.142FF+6 d 220 davs Wed 19/8/14 145 Fill Slope FS1 North (Section 14 at Drawing C1/GE/1030) 503 days Thu 18/10/11 Fri 20/7/3 146 🔞 FS1 North Backfilling Stage 1 (~5m height, Section 14 up to ~+20 mPD), (Filter Blanket 15mPD to 92 days Thu 18/10/11 Fri 19/2/1 43,51,121,128,1 Summary Inactive Milestone Duration-only Start-only Г. External Milestone Critical Split Master Programme Rev.1b Task Split Project Summary Inactive Summary Manual Summary Rollup Finish-only Э Deadline Progress Milestone Critical Inactive Task Manual Task External Tasks Manual Progress Date: Jan 2019 • Manual Summary

Contract No. CV/2016/10

Master Programme Rev.1b (Draft)

	Hsin Chong Tsun Yip Joint Venture										
202 cNc	0 Q 2021 Q 2021 Q 2021 Q 2021 Q 2022 Q 2022 DefarteMaApMaJurJuLuSerDcKoDefarteMaApMa	2 Q 2022 Q 2022 Q IunTulAuserDeviope	2023 C 2023 C 2023 C 20 JarFelMaAp/IaJurJuAuSerDck	23 C 2024 C 2024 C 2 opelarfeMaAp/Iajurju							

Master Programme Rev.1b (Draft) Site Formation and Associated Infrastructural Works for Task Name Duration Start Finish Predecessors d 2018 d 2018 d 2018 d 2018 d 2019 d 2019 d 2019 θ darfeMaAp/laturJuAuserDcNoDedarfeMaAp/laturJuAuserDcNoDedarfeMaAp/laturJuAuse 147 FS1 North Backfilling Stage 2 (~7.5m height, Section 14 up to ~+27.5 mPD), (Filter Blanket 20 to 133 days Sat 19/2/2 Mon 19/7/22 146 148 FS1 North Backfilling Stage 3 (~7.5m height, Section 14 up to ~+35 mPD), (Filter Blanket 27.5 to 91 days Tue 19/7/23 Mon 19/11/11 147,107 1 1/10 FS1 North Backfilling Stage 4 (~7.5m height, Section 14 up to +42.5 mPD), (Filter blanket 35 to 83 days Tue 19/11/12 Sat 20/2/22 148 Ø., 150 FS1 North Backfilling Stage 5 (~7.5 m height, Section 14 up to Proposed Platform), (Filter blanket 44.3 83 days Mon 20/2/24 Sat 20/6/6 149 <u>.</u> 151 Existing Slope Feature 3NW-C/F37 Upgrading Re-compaction Wed 20/6/17 175 days Tue 19/11/12 148 152 153 154 155 152 Drainage and Maintenance Access Wed 19/6/26 Fri 20/7/3 150FF+21 days 300 days Geotechnical Instrumentation Works 220 days Wed 19/9/11 Sat 20/6/13 146,150FF+6 d Mon 18/7/23 Road D and Pickup/Drop-Off Area 577 days Sat 20/7/11 Mon 20/2/3 Wed 20/3/4 Waterworks 27 days 156 141FS-18 days. Watermain FW2, Watermain at Pick-up/Drop Off Mon 20/2/3 Wed 20/3/4 27 davs - <u>(</u> 157 Mon 20/2/3 Drainage, Sewerage and Utilities Works 103 days Tue 20/6/9 158 Drainage at Road D 141FS-18 days, Mon 20/2/3 Thu 20/3/26 46 days 16 159 Drainage at Pick-up/Drop Off 20 days Mon 20/5/18 Tue 20/6/9 142FS-18 days, 160 🔞 Sewerage Works Mon 20/3/2 Thu 20/4/2 142SS,150SS+ 27 days 161 **HKT Cable Installation** 19 days Mon 20/5/18 Mon 20/6/8 150FS-18 days, () () () () 162 **Carriageway and Footway** 577 days Mon 18/7/23 Sat 20/7/11 163 Backfilling to Formation Level at Road D 27 days Fri 20/3/27 Tue 20/5/5 156,158,149,14 164 Carriageway, Pavement, Road Marking and Street Furniture at Road D 50 days Tue 20/3/24 Thu 20/5/28 163FS-30 days 164 🧼 165 🚰 Design and Co-ordination for Road Lighting 76 days Mon 18/7/23 Wed 18/10/24 99SS 166 Road Lighting Civil Works Provision Fri 20/3/27 Mon 20/5/4 156,158,164SS 166 🧆 167 🕰 168 🕰 26 days Road Lighting E&M works, Testing and Comissioning (by others) 45 days Wed 20/5/6 Sat 20/6/27 166.163 Backfilling to Formation Level at Pick-up/Drop Off 21 days Wed 20/6/10 Mon 20/7/6 159,161,160,14 169 Pavement, Road Marking and Street Furniture at Pick-up/Drop Off 17 days Sat 20/6/20 Sat 20/7/11 168SS+9 days 169 🤌 170 🕰 337 days Landscape Works Tue 19/5/21 Sat 20/7/11 171 00 172 03 173 03 174 03 Planter E2 Construction at RW1 34 days Tue 19/5/21 Sat 19/6/29 133 Shrubs Planting at RW1 34 days Tue 19/7/2 Fri 19/8/9 171 Woodland Planting at Fill Slope Wed 19/6/26 Fri 20/7/3 138.142FF+25 300 days Hydroseeding at Fill Slope 300 days Tue 19/7/2 Wed 20/7/8 138,146,142FF Planter E2 Construction at Pick-up/Drop Off 175 Wed 20/6/10 168SS <u>()</u> 15 days Sat 20/6/27 176 Shrubs Planting at Planter E2 at Pick-up/Drop Off 10 days Mon 20/6/29 Fri 20/7/10 175 177 Irrigation System and Water Points (Except Water Connection) Mon 20/5/18 159SS,156 1 24 days Sat 20/6/13 178 Tree Planting Works 10 days Tue 20/6/30 Sat 20/7/11 168FS-5 days 1/16 0 179 0 180 0 181 182 183 0 184 0 185 0 186 0 187 0 189 0 190 0 191 192 193 193 Section 2 of the Works (Parts B1, B2, C, D, F, G1 & G2) 1292 days Fri 17/12/15 Mon 21/6/28 Tree Survey and Report Submission 22 days Wed 18/2/28 Sat 18/3/24 29 60 days Tree Felling and Tree Transplant Fri 18/5/4 Mon 18/7/16 180,53,59 Erection of Site Hoarding 21 days Thu 18/8/16 Sat 18/9/8 37,51 Thu 18/8/16 Temporary Drainage Works 90 days Tue 18/12/4 84,51 Enquiries of Utilities As-built Record from UU Companies 45 days Fri 17/12/15 Thu 18/2/8 2 Uilities Detection and Reports Submission 184 45 days Fri 18/2/9 Tue 18/4/10 1034 days Fri 17/12/15 Part B1 Mon 21/6/28 **Utilities Diversion/Protection Works** 820 days Fri 17/12/15 Wed 20/9/30 нкт 820 days Fri 17/12/15 Wed 20/9/30 Liaison with HKT for Diversion/Supporting of Existing Cable Fri 17/12/15 Wed 18/5/16 120 days 2 Trial Pits for HKT Cable 12 days Thu 18/5/17 Thu 18/5/31 189 Supporting / Diversion of Existing HKT Cable Thu 18/5/17 Wed 20/9/30 700 days 189 Ground Investigation and Geotechnical instrumentation for Commencement of Slopework Tue 18/3/20 Sat 18/7/14 93 days 11,12,13,31 Mobilization of GI Rig and Preparation Works 7 days Tue 18/3/20 Tue 18/3/27 194 Verification Drillholes (2 Nos. ,6, 14) and Preliminary Results Submission 12 days Wed 18/3/28 Sat 18/4/14 180,193 1 195 Site Clerance for Verification Drillholes (8 Nos., VDH3, 10-13, 15, 19 & 20) Fri 18/5/4 Tue 18/5/29 53,59 21 days 1 196 197 197 198 199 199 200 197 201 197 202 197 196 Verification Drillholes (8 Nos., VDH3,10-13, 15, 19 & 20) and Preliminary Results Submission Thu 18/5/10 20 days Sat 18/6/2 195SS+5 days, Formal Report Submission and Verification of the Design of Cut and Fill Slope by PM 42 days Sun 18/6/3 Sat 18/7/14 194,196 Geotechnical Instrumentation Required for Commencement of Slope Works 20 days Mon 18/6/4 Wed 18/6/27 194,32,196 Cut Slopes CS1 & CS2 Fri 19/11/15 Mon 20/2/24 81 davs 197,43,51,520,3 Excavate to Proposed Toe Level 60 days Fri 19/11/15 Thu 20/1/30 Geotechnical Instrumentation Works 6 days Fri 20/1/31 Thu 20/2/6 200 202 Drainage and Maintenance Access Mon 19/12/2 Mon 20/2/24 200FF+21 davs 67 days 202 🧼 203 🖓 204 🖓 Cut Slope CS3 81 days Tue 19/11/19 Thu 20/2/27 Excavate to Proposed Toe Level 197.217.51 60 days Tue 19/11/19 Mon 20/2/3 205 Drainage and Maintenance Access 70 days Mon 19/12/2 Thu 20/2/27 204FF+21 days 205 🧶 Landscape Works at Cut Slopes CS1, CS2 & CS3 199 days Fri 20/1/31 Tue 20/9/29 207 🍥 208 🔁 207 Planter W1 & W2 Construction at CS1 & CS2 Wed 20/4/22 66 days Fri 20/1/31 200 Shrub Planting at Planter W1 & W2 at CS1 & CS2 Thu 20/4/23 Mon 20/7/13 207 66 davs 209 Planter W2 Construction at CS3 Tue 20/2/4 Thu 20/6/4 204 1 98 days 210 🔁 Shrub Planting at Planter W2 at CS3 Fri 20/6/5 Tue 20/9/29 98 days 209 211 Planter E2 Construction besides CS2 27 days Thu 20/4/23 Tue 20/5/26 207 212 213 213 21 214 21 215 21 216 21 217 21 218 21 219 21 212 Shrub Planting at Planter E2 besides CS2 Wed 20/5/27 27 davs Sat 20/6/27 211 Temporary Excavation to Proposed Platform at Future PDA 434 days Sat 18/9/1 Wed 20/2/26 Excavate to +80 mPD 42 days Sat 18/9/1 Thu 18/10/25 43,51,39 Excavate to +71 mPD 86 days Fri 18/10/26 Sat 19/2/9 214.39 Excavate to +64 mPD 116 days Mon 19/2/11 Sat 19/7/6 215 Mon 19/7/8 Mon 19/11/18 Excavate to +56 mPD 110 days 216 Excavate to +50 mPD Tue 19/11/19 Wed 20/2/26 80 davs 217 Cut Slopes CS11 & CS12 Thu 21/4/8 759 days Sat 18/9/1 Task Summary Inactive Milestone Duration-only Start-only E External Milestone Critical Split Master Programme Rev.1b Split Project Summary Inactive Summary Manual Summary Rollup Finish-only Э Deadline Progress Milestone Critical Inactive Task Manual Task External Tasks Manual Progress Date: Jan 2019 Manual Summary

Contract No. CV/2016/10

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2020 Q 2021 DevioDeviarFelv	С 2021 С 2021 С 2021 С 2022 С 2022 IaAp/IajurJuAuSerDeNopeJarFel/IaAp/Iaj	U 2022 Q 2022 Q urfulAu≸erDcNoDe	2023 () 2023 () 2023 () 202 JarfeMaAp/JaJurJuAuSerDck	23 Q 2024 Q 2024 Q 2 oDefarFeMaAp/IaJurJu
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Contract No. CV/2016/10 Site Formation and Associated Infrastructural Works for

Master Programme Rev.1b (Draft)

) ()	Task Name	Duration	Start	Finish	Predecessors	Q 2018 Q 2018 Q 2 Dellariel Mahry alurlu	018 C 2018 C 2019 C AuserDevoDedarFel/1:	2019 C 2019 C 2019 C 2020) C 2020 C 2020 MaApMaturiulAus
220 🟹	Mobilization of Plant and Equipment	12 days	Sat 18/9/1	Fri 18/9/14	38,39			ipinia airapepero pera ea	
221 🚰	Excavate to +94 mPD	21 days	Sat 18/9/15	Thu 18/10/11	197,220,198,51	1			
222 🔞	Excavate to +87 mPD, Pull Out Test and Soil Nails (59 nos. of Soil Nail)	44 days	Fri 18/10/12	Wed 18/12/5	221				
223	Excavate to +79.5mPD, Pull Out Test, Soil Nails and Raking Drains (78 Nos. of Soil Nail)	63 days	Thu 18/12/6	Sat 19/2/23	222,39				
224 陖	Excavate to +/2mPD, Pull Out Test, Soil Nails and Raking Drains (99 Nos. of Soil Nail)	79 days	Wed 19/6/12	Thu 19/9/12	223,252				
225 0	Excavate to +57 mPD, Pull Out Test, Soil Nails and Raking Drains (124 Nos. of Soil Nail)	78 days	5at 19/9/28 Thu 19/12/5	Wed 20/3/11	224,253				
227	Excavate to +49.5 mPD Pull Out Test, Soil Nails and Raking Drains (433 nos. of Soil Nail, 65 nos. of	⁸⁴ days	Thu 19/12/3	Fri 20/6/26	226 255				+ ↓
228 🚳	Excavate to Toe Level. Pull Out Test, Soil Nails and Raking Drains (168 nos. of Soil Nail, 33 nos of	56 days	Sat 20/6/27	Tue 20/9/1	227.256				
229 💰	Backfilling Behind Retaining Wall RW11 (max. 5.8m)	80 days	Mon 20/12/28	Thu 21/4/8	246				
230 🚳	Drainage and Maintenance Access up to +72 mPD	235 days	Wed 19/1/2	Wed 19/10/23	224FF+30 days				
231 🔌	Drainage and Maintenance Access from +72 mPD to Toe Level	347 days	Thu 19/10/24	Thu 20/12/24	228FF+30 days				
232	Geotechnical Instrumentation Works	450 days	Wed 19/2/27	Tue 20/9/8	228FF+6 days,2				
233	Landscape Works at Cut Slopes CS11 & CS12	703 days	Tue 19/1/22	Fri 21/6/18	00455.50 days				
234 📎		238 days	Tue 19/1/22	Thu 20/2/12	224FF+50 days				
236	Planter W1 & W2 Construction Stage 2 from +72 mPD to Toe Level	352 days	Fri 19/8/23	Wed 20/11/4	228FF+50 days				
237 🏹	Shrub Planting at Planter W1 & W2 Stage 2 from +72 mPD to Toe Level	352 days	Tue 20/3/10	Mon 21/5/24	236SS+160 day	1			
238 🔞	Planter E2 Construction	25 days	Mon 21/4/19	Tue 21/5/18	247				
239 🏹	Shrub Planting at Planter E2	25 days	Thu 21/5/20	Fri 21/6/18	238				
240 🏹	Hydroseeding Stage 1 up to +72 mPD	212 days	Mon 19/2/25	Fri 19/11/15	224FF+50 days				, .
241	Hydroseeding Stage 2 from +72 mPD tp Toe Level	212 days	Sat 20/2/15	Wed 20/11/4	228FF+50 days				
242	Retaining Wall RW11	307 days	Fri 20/5/29	Sat 21/6/12	000E0 . 00 . days				
243	Installation of Temporary Works	70 days	Fri 20/5/29	Thu 20/8/20	226FS+60 days				
245 🚳	Base of Retaining Wall Ray 1-6	54 days	Thu 20/9/10	Tue 20/11/17	243 244FF+18 days				
246	Wall Stem of Retaining Wall RW11 Bay 1-6	78 days	Sat 20/9/19	Thu 20/12/24	245SS+8 days				
247 🚳	Backfilling and Filter Layer behind Retaining Wall	88 days	Mon 20/12/28	Sat 21/4/17	246				
248 🔞	Drainage and Maintenance Access	46 days	Mon 21/4/19	Sat 21/6/12	247				
249 🏹	Cut Slope CS13	791 days	Fri 18/5/4	Mon 21/1/11					
250 🚳	Trial Pit Excavation	50 days	Fri 18/5/4	Wed 18/7/4	53,59		-		
251	Verification of Design by Supervisor	42 days	Thu 18/7/5	Wed 18/8/15	250				
252 📎	Excavate to +79.5mPD, Pull Out Test and Soil Nails (6 Nos. of Soil Nail) plus Excavation & 24 no. soil Soil Nails (6 Nos. of Soil Nail) plus 21 nos. of additional soil Soil Nails (6 Nos. of Soil Nail) plus 21 nos. of additional soil	1 146 days	1 nu 18/12/6	Tue 19/6/11 Eri 10/0/27	251,222,38,39,5				
255 💋	Excavate to +7211FD, Full Out Test and Soil Nails (10 Nos. of Soil Nail) plus 21 nos. of additional soil	il 54 days	Sat 19/9/28	Wed 19/12/4	252,223				
255 🔞	Excavate to +57 mPD. Pull Out Test. Soil Nails and Raking Drains (82 nos. of Soil Nail, 34 nos. of	78 davs	Thu 19/12/5	Wed 20/3/11	254.225				
256 🚳	Excavate to +49.5 mPD, Pull Out Test, Soil Nails and Raking Drains (152 nos. of Soil Nail, 34 nos. of	84 days	Thu 20/3/12	Fri 20/6/26	255,226				
257 💋	Excavate to +42 mPD, Pull Out Test, Soil Nails and Raking Drains (215 nos. of Soil Nail, 54 nos. of	56 days	Sat 20/6/27	Tue 20/9/1	256,227				
258 🚳	Excavate to Proposed Toe Level, Pull Out Test, Soil Nails and Raking Drains (199 nos. of Soil Nail, 8	32 34 days	Wed 20/9/2	Tue 20/10/13	257				
259 🚳	Drainage and Maintenance Access up to +72 mPD	235 days	Wed 19/1/16	Wed 19/11/6	253FF+30 days				
260 👳	Drainage and Maintenance Access from +/2 mPD to Toe Level	347 days	Thu 19/11/7	Mon 21/1/11	258FF+30 days				
262	Landscane Works at Cut Slone CS13	549 days	Thu 19/7/10	Tue 20/10/20	250FF+0 uays,2				
263 🚳	Planter W2 Construction	385 days	Thu 19/8/1	Fri 20/11/20	258FF+30 davs	1			
264 🛃	Shrub Planting at Planter W2	202 days	Thu 20/5/28	Fri 21/1/29	263SS+240 day	1			
265 💋	Planter W1 Construction	88 days	Sat 20/11/21	Wed 21/3/10	263,258	1			
266 🖳	Shrub Planting at Planter W1	88 days	Wed 21/2/24	Sat 21/6/12	265SS+75 days				
267 🚳	Planter W3 Construction	38 days	Thu 21/3/11	Wed 21/4/28	265				
208	Shrub Planting at Planter W3	38 days	Thu 21/4/29	Tue 21/6/15	267				
200	Cut Slope CS15	524 days	Sat 18/9/1	Thu 20/12/20	250FF+00 uays				
271	Mobilization of Plant and Equipment	12 days	Sat 18/9/1	Fri 18/9/14	38.39				
272 💰	Excavate to +69.5 mPD, Pull Out Test, Soil Nails and Raking Drains (25 nos. of Soil Nail)	27 days	Sat 18/9/15	Mon 18/10/22	197,271,51				
273 🚳	Excavate to +62mPD, Pull Out Test, Soil Nails and Raking Drains (76 nos. of Soil Nail, 31 nos. of	59 days	Tue 18/10/23	Wed 19/1/2	272				
274 🧆	Excavate to +54.5 mPD, Pull Out Test, Soil Nails and Raking Drains (101 nos. of Soil Nail, 38 nos. of	80 days	Thu 19/1/3	Fri 19/4/12	273			♣	
275 🧕	Excavate to +47mPD, Pull Out Test, Soil Nails and Raking Drains (331 nos. of Soil Nail, 45 nos. of	139 days	Sat 19/4/13	Wed 19/10/2	274				
277	Excavate to +39.5mPD, Pull Out Test, Soil Nails and Raking Drains and Excavate to Proposed Toe	162 days	1 nu 19/10/3	Fri 20/4/24	275 27655145 dour				
278	Drainage and Maintenance Access	213 days	Tuo 18/10/23	Wed 20/5/20	270FF+45 days	4			
279	Landscape Works at Cut Slope CS15	613 days	Thu 19/1/3	Wed 21/2/3	212,2101 FTO U				╤╤╬╫╫
280 🔞	Planter W1 & W2 Construction	288 days	Mon 19/6/10	Mon 20/6/1	276FF+30 davs	1			
281	Shrub Planting at Planter W1 & W2	300 days	Fri 20/1/31	Wed 21/2/3	280SS+190 day				
282 🚰	Hydroseeding	450 days	Thu 19/1/3	Sat 20/7/18	273,276FF+30				╺╺╼╼╼╼╍╸┥╵║
283	Cut Slopes CS16 and CS17	242 days	Tue 18/10/23	Mon 19/8/19					
284	Excavate to +62 mPD, Pull Out Test, Soil Nails and Raking Drains (23 Nos. of Soil Nail, 6 Nos. of	28 days	Tue 18/10/23	Fri 18/11/23	272,38,39,51,19				
286	Excavate to +54.5 mPD, Pull Out Test, Soll Nails and Raking Drains (136 nos. of Soil Nail, 20 nos. of Soil Nai	1 50 days	1 nu 19/1/3 Wed 10/2/6	Tue 19/3/5	284,273				
287	Excavate to +41mPD, Full Out Test, Soli Nails and Raking Drains, and Excavate to Proposed Test and Paking Drains, and Excavate to Proposed Test and Paking Drains.	og udys	Fri 19/6/28	Mon 19/0/27	286 537				
288	Excavate to +41mPD, Pull Out Test. Soil Nails and Raking Drains, and Excavate to Proposed Toe Le	evel 110 davs	Wed 19/3/6	Tue 19/7/23	286SS				
289 💰	Drainage and Maintenance Access	207 days	Fri 18/11/30	Fri 19/8/16	288FF+21 days				
290 🔁	Geotechnical Instrumentation Works	180 days	Fri 18/12/14	Tue 19/7/30	284,288FF+6 di				
291	Fill Slope FS17	717 days	Thu 18/7/5	Thu 20/12/10					
292 🚳	Trial Pits Excavation and Preliminary Results Submission	25 days	Thu 18/7/5	Thu 18/8/2	31FS+12 days,2		<u>н </u>		
Masta	Drogramme Day 1b Task Summary Inactive Milectone		Duration-only	Start-only	г	External Milect	one 🗠	Critical Colit	
waster	Split Project Summary Inactive Summary	1	Manual Summary Rollup -	Finish-only	3	Deadline	¥	Progress	
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Site Formatic	. CV/2016/10 ion and Associated Infrastructural Works for	Master Programme Rev.1b (Draft)									
ID 👝 T	Task Name	Duration	Start	Finish	Predecessors	Q 2018 Q 2018 Q 2018 Q 2018 Q 2	018 0 2019 0 2019 0 2	2019 Q 2019 Q 2020 Q	2020 Q 2020		
203	Final Regults Submission and Varification of Registry by Supervisor	42 dovo	Eri 10/0/2	Thu 19/0/12	202)eJarfel/JaAp/JaJurJuAuSerDc	NoDedarfel/JaAp/JaJurJu	ıl\u\$etDcNoDe≬arFel/Ia	Apilalunlulu		
293	Prinal Results Submission and vehication of Design by Supervisor	42 days	FIL 18/8/3	Mon 20/10/5	292	i l T					
295	Drainage and Maintenance Access	27 days	Tue 20/3/2	Thu 20/12/10	293,23633,31						
296	Geotechnical Instrumentation Works	6 days	Tue 20/10/6	Mon 20/10/12	294FF+6 days						
297 强	Landscape Works at Fill Slope FS17	111 days	Fri 20/12/11	Fri 21/4/30	20 m r ro dayo						
298 🚳	Planter E2 Construction	65 days	Fri 20/12/11	Wed 21/3/3	295						
299	Shrub Planting at Planter E2	72 days	Fri 21/1/29	Fri 21/4/30	298FF+46 days						
300 🛃	Hydroseeding	72 days	Fri 20/12/11	Thu 21/3/11	295						
301 🚳	Tree Planting	83 davs	Fri 20/12/11	Wed 21/3/24	295						
302 🛃	Landscape Works at Cut Slopes CS16 and CS17	460 davs	Tue 18/7/3	Thu 20/1/23		∶│ │ ┏─┼─ ─					
303 🚳	Planter W2 Construction	196 davs	Mon 18/12/24	Tue 19/8/27	288FF+30 davs	i					
304 🛃	Shrub Planting at Planter W2	196 davs	Wed 19/5/29	Thu 20/1/23	303SS+120 day	i					
305 🚳	Planter W1 Construction	68 days	Wed 19/8/28	Wed 19/11/20	303,288	(
306 🚰	Shrub Planting at Planter W2	68 days	Sat 19/10/19	Thu 20/1/9	305SS+40 days	4					
307 🚰	Hydroseeding	360 days	Tue 18/7/3	Fri 19/9/20	288FF+50 days						
308 🚰	Existing Slope Upgrading Works	172 days	Tue 19/11/12	Sat 20/6/13		(
309 🚰	Existing Feature 3NW-C/F37 Upgrading Re-compaction	150 days	Tue 19/11/12	Tue 20/5/19	148						
310 🔁	Existing Feature 3NW-C/C256 Rock Joint Mapping, drainage and maintenance access	70 days	Thu 19/12/5	Mon 20/3/2	255SS						
311 🔁	Existing Feature 3NW-C/C258 Slope Upgrading Works	74 days	Thu 20/3/12	Sat 20/6/13				r I			
312 🚳	Excavate to +48.5 mPD, Pull Out Test, Soil Nails (14 Nos. of Soil Nail)	21 days	Thu 20/3/12	Tue 20/4/7	255	(
313 🚳	Excavate to Proposed Ground Level, Pull Out Test, Soil Nails and Raking Drains (14 Nos. of So	oil 23 days	Wed 20/4/8	Sat 20/5/9	312	(
314 🔞	Drainage and Maintenance Access	67 days	Fri 20/3/20	Sat 20/6/13	313FF+30 days	4					
315 🛃	Sha Ling Road (M001 CH +620 to +820), M011, M004 and PDA	310 days	Mon 20/5/11	Fri 21/5/28		(
316 🔁	Sewerage and Drainage	105 days	Thu 20/6/18	Thu 20/10/22		(
317 🚳	Drainage and Sewerage Works	105 days	Thu 20/6/18	Thu 20/10/22	150,142,204,21						
318 🔁	Utilities and Watermains Works	128 days	Thu 20/6/18	Sat 20/11/21		(
319 🚳	Watermains Works	55 days	Thu 20/6/18	Sat 20/8/22	150,142,204,21	(
320 🚳	HKT Cable Installation	73 days	Mon 20/8/24	Sat 20/11/21	142,150,204,21	(
321 🛃	Landscape Works	148 days	Mon 20/5/11	Fri 20/11/6		(
322 🔞	Tree Planting	48 days	Mon 20/5/11	Tue 20/7/7	142						
323 🚳	Irrigation System and Water Points	60 days	Mon 20/8/24	Fri 20/11/6	319	(
324	Roadworks	128 davs	Fri 20/10/23	Wed 21/3/31							
325 🔞	Road Lighting Civil Works Provision	38 days	Fri 20/10/23	Wed 20/12/9	142,150,204,21	(
326 🛃	Backfill to Formation Level	30 days	Thu 20/12/10	Sat 21/1/16	317,320,323,32						
327 🔁	Road Lighting E&M works. Testing and Comissioning (by others)	45 davs	Mon 21/1/18	Sat 21/3/13	326	(
328 🚳	Carriageway, Pavement, Road Marking and Street Furniture	60 davs	Mon 21/1/18	Wed 21/3/31	326						
329 🚳	Road and Drainage Works after Completion of RW11	33 davs	Mon 21/4/19	Fri 21/5/28	248SS	(
330 🔁	Sha Ling Road (M001 CH +480 to +620). M008 & Road B M005	233 davs	Wed 20/9/2	Mon 21/6/21							
331 🔁	Sewerage and Drainage	63 davs	Wed 20/9/2	Thu 20/11/19		(
332 🚳	Drainage and Severage Works	63 days	Wed 20/9/2	Thu 20/11/19	218.288.203.22						
333	Sewage Detention Tank	230 days	Wed 20/9/2	Thu 21/6/17	2.0,200,200,22	(
334 🞑	Sewage Detention Tank Civil and Structural Works	90 davs	Wed 20/9/2	Mon 20/12/21	218.287.288.20						
335 🔁	VDS and AMS for Sewage Detention Tank	140 davs	Tue 20/12/22	Thu 21/6/17	334.96	(
336 🞑	Utilities and Watermains Works	83 days	Fri 20/11/20	Wed 21/3/3		(
337 🚳	Watermains Works	39 davs	Fri 20/11/20	Thu 21/1/7	332	(
338 🚳	Town Gas Installation	20 days	Fri 21/1/8	Sat 21/1/30	337	(
339 🚳	HKT Cable Installation	24 days	Mon 21/2/1	Wed 21/3/3	338	(
340 🛃	Landscape Works	41 days	Fri 21/1/8	Sat 21/2/27							
341 🚳	Irrigation System and Water Points	41 days	Fri 21/1/8	Sat 21/2/27	337	(
342 🛃	Roadworks	131 davs	Fri 21/1/8	Mon 21/6/21		(
343 🚳	Road Lighting Civil Works Provision	30 davs	Fri 21/1/8	Thu 21/2/11	99.332.337						
344 🛃	Road Lighting E&M works. Testing and Comissioning (by others)	45 davs	Tue 21/4/13	Sat 21/6/5	345	(
345 🛃	Backfilling to Formation Level	30 davs	Thu 21/3/4	Mon 21/4/12	341,332.337.33						
346 🔞	Carriageway, Pavement, Road Marking and Street Furniture	57 davs	Tue 21/4/13	Mon 21/6/21	345						
347 🚰	Sha Ling Road (M001 CH +340 to +480)	205 davs	Wed 20/10/14	Mon 21/6/28							
348 🛃	Sewerage and Drainage	90 davs	Wed 20/10/14	Tue 21/2/2		(
349 🔞	Drainage and Sewerage Works	90 davs	Wed 20/10/14	Tue 21/2/2	228,276.288.25						
350 🚰	Utilities and Watermains Works	91 days	Wed 20/10/14	Wed 21/2/3	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
351 🔞	Watermains Works	30 davs	Wed 20/10/14	Fri 20/11/20	228.276.288.25						
352 🔞	Town Gas Installation	47 davs	Sat 20/11/21	Mon 21/1/18	351						
353 🔞	HKT Cable Installation	14 davs	Tue 21/1/19	Wed 21/2/3	352						
354 🏹	Landscape Works	42 days	Sat 20/11/21	Tue 21/1/12							
355 🔞	Irrigation System and Water Points	42 davs	Sat 20/11/21	Tue 21/1/12	351						
356 🚰	Roadworks	115 days	Wed 21/2/3	Mon 21/6/28							
357 🔞	Road Lighting Civil Works Provision	38 davs	Wed 21/2/3	Mon 21/3/22	99,349.351						
358 🚰	Road Lighting E&M works, Testing and Comissioning (by others)	45 davs	Mon 21/5/3	Fri 21/6/25	357.359						
359 🔁	Backfilling to Formation Level	30 davs	Tue 21/3/23	Fri 21/4/30	349,355.357.35						
360 🔞	Carriageway, Pavement, Road Marking and Street Furniture	47 davs	Mon 21/5/3	Mon 21/6/28	359						
361 🛃	Sha Ling Road (M001 CH +180 to +340)	205 davs	Wed 20/10/14	Mon 21/6/28							
362 🚰	Sewerage and Drainage	86 davs	Wed 20/10/14	Thu 21/1/28							
363 🔞	Drainage and Sewerage Works	86 davs	Wed 20/10/14	Thu 21/1/28	258,294.380.38						
364 🛃	Utilities and Watermains Works	92 davs	Wed 20/10/14	Thu 21/2/4	, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
365 🔞	Watermains Works and Water Meter Box	36 davs	Wed 20/10/14	Fri 20/11/27	258.294.98.380						
×											
Master Pro	rogramme Rev.1b Task Summary Inactive Milestone	•	Duration-only	Start-only	E	External Milestone	\$	Critical Split	1		
	Split Project Summary Inactive Summary		Manual Summary Rollup	Finish-only	3	Deadline	÷	Progress			
Date	te: Jan 2019 Milestone \blacklozenge Inactive Task Manual Task		Manual Summary	External Tasks		Critical		Manual Progre	:SS =		

Contract No. CV/2016/10

Date: Jan 2019



Contract No Site Formati	. CV/2016/10 ion and Associated Infrastructural Works for		Master Pi	rogramme Rev.1	b (Draft)						
	Task Name	Duration	Start	Finish	Predecessors	Q 2018 Q 20 DeJarFel/JaAp/	18 C 2018 C 2(IajurjukuserDc) 18 C 2019 C 2019 (NoDefarFel/IaAp/Iafu	J 2019 C 2019) C 2020 C 2 DeJarFel/IaAr	.020 Q 202 Majurjuk
366 🝥	Town Gas Installation	40 days	Sat 20/11/28	Sat 21/1/16	365						
367 👲 _	HKT Cable Installation	16 days	Mon 21/1/18	Thu 21/2/4	366						
368 🚰	Landscape Works	169 days	Sat 20/11/28	Mon 21/6/28							
369 🚳 _	Tree Planting	44 days	Thu 21/5/6	Mon 21/6/28	375FF+32 days						
370 🧆	Irrigation System and Water Points	60 days	Sat 20/11/28	Tue 21/2/9	365						
3/1	Roadworks	87 days	Fri 21/1/29	Thu 21/5/20							
372 🚳	Road Lighting Civil Works Provision	25 days	Fri 21/1/29	Tue 21/3/2	258,294,99,363						
3/3	Road Lighting E&M works, Testing and Comissioning (by others)	45 days	Wed 21/3/3	Wed 21/4/28	372,374SS						
3/4	Backfilling to Formation Level	30 days	Wed 21/3/3	Sat 21/4/10	363,365,366,36						
276	Carriageway, Pavement, Road Marking and Street Furniture	32 days	Mon 21/4/12	Thu 21/5/20	372,374						
277	Part B2	887 days	Fri 17/12/15	Wed 20/12/23		4					
270	Slope Works (CS14, FS14)	170 days	Thu 19/7/18	Thu 20/2/13							
270	Trial Pits Excavation and Preliminary Results Submission	25 days	Thu 19/7/18	Thu 19/8/15	51,19,20						
220 0	Final Results Submission and Verification of Design by Supervisor	42 days	Ffi 19/8/16	Thu 19/9/26	3/8						
291	Excavation at CS14	21 days	Ffi 19/9/27	FII 19/10/25	379						
202 0	Backfilling at FS14 to proposed level	21 days	FII 19/9/27	Fri 19/10/25	379						
292	Geotechnical instrumentation Works at CS14	6 days	Sat 19/10/26	FIT 19/11/1	380						
384	Geolechnical Instrumentation WORKS at F514	o days	Sat 19/10/26	FII 19/11/1 Eri 40/44/20	301 20055 - 20 dour						
385	Fidniel E2 Construction	59 days	VVeu 19/9/18	Thu 20/0/42	300FF+30 days					Y	
386	Drainage and Maintenance Access	Ja uays	Jai 19/11/30	Fri 10/11/20	2004 20055 - 20 dour						
387	Shalling Poad (M001 CH ±40 to ±490)	40 udys	Sat 19/10/10	Cit 19/11/29	SOULL+30 days			┟┼┼╟┼┝		<u>`</u>	$\downarrow \downarrow \downarrow$
388	TTA and YD Application for Evisting Shalling Pood		Sat 10/12/1	Mod 10/7/17							
389	Noise Barrier	100 days	Jai 10/12/1		ISFF,2UFF						
390	Sub-structure of Noise Barrier Construction Bay 3 to Bay 9	60 days		Fri 20/5/15	381 388 105						
391	Backfilling to Road Formation Level at Noise Partiar Roy 2 to Roy 5	22 days	Tue 20/2/18 Fri 20/4/17	THE 20/5/10	300,300,400						ווב
302	Backfilling to Road Formation Level at Noise Barrier Bay 5 to Bay 5	32 days	FII 20/4/17	Map 20/6/22	200						
393	Daumining to road Formation Level at Noise Danier Day 0 to Day 0	3∠ udys	Sat 20/5/10	Wed 20/10/22	390 86						
394	Superstitution of Noise Daniel Constitution Day 5 to Day 5	72 days	Wed 20/5/27	Thu 20/8/20	330,00						
395	Drainage and Sewerage Works	72 days	Wed 20/5/27	Thu 20/8/20	392FF+36 dave					'	
396	Itilities and Watermains Works	355 days	Thu 19/7/18	Sat 20/9/26	55211 +50 days					'	
397	CLP Structure Paloration (By Others)	180 days	Thu 19/7/18	Tue 20/2/25	17155						
398	Evicting HKT Pole Relocation (By Others)	180 days	Thu 19/7/18	Tue 20/2/25	47455			Í			
399	Watermains Works	21 days	Wed 20/6/10	Mon 20/7/6	392FF+10 days						
400	Town Gas Installation	29 days	Tue 20/7/7	Sat 20/8/8	399					'	
401	CI P Cable Installation	28 days	Mon 20/8/10	Thu 20/9/10	400.397					'	
402	HXT Cable Installation	14 days	Fri 20/9/11	Sat 20/9/26	398,401					'	
403 🏹	Rodworks	86 days	Fri 20/8/21	Fri 20/12/4	000,101					'	
404 🚳	Road Lighting Civil Works Provision	30 days	Fri 20/8/21	Thu 20/9/24	395					'	
405 🚰	Road Lighting E&M works. Testing and Comissioning (by others)	45 days	Fri 20/9/25	Sat 20/11/21	404					'	
406 🚰	Backfilling to Formation Level	30 days	Mon 20/9/28	Fri 20/11/6	404.395.397.39					'	
407 🔞	Carriageway, Pavement, Road Marking and Street Furniture	24 davs	Sat 20/11/7	Fri 20/12/4	406					'	
408 🚰	Landscape Works	138 days	Tue 20/7/7	Sat 20/12/19						'	
409 🔞	Tree Planting	24 days	Thu 20/11/19	Wed 20/12/16	407FF+10 days					'	
410 🚳	Irrigation System and Water Points	36 davs	Tue 20/7/7	Mon 20/8/17	399					'	
411 🔞	Planter Construction	16 days	Sat 20/11/7	Wed 20/11/25	406					'	
412 🏹	Shrubs Planting	21 days	Thu 20/11/26	Sat 20/12/19	411					'	
413 🚰	Man Kam To Road Bus Shelter	836 days	Fri 17/12/15	Wed 20/10/21		I			┍╋╪╾╾╾┥		
414 🚰	Temporary Storage and Secondary Site Office	600 days	Fri 17/12/15	Fri 20/1/3	15	ř		∕╍╫╼╫╪╪╼╼╸╫┦		┍┓║╵	
415 🔞	Bus Shelter Drainage	56 days	Sat 20/1/4	Thu 20/3/12	414						
416 🧔	Road Lighting Civil Works Provision	25 days	Fri 20/3/13	Thu 20/4/16	415					│	<u>↓</u> ↓
417 🎴	Road Lighting E&M works, Testing and Comissioning (by others)	45 days	Fri 20/4/17	Wed 20/6/10	416]	
418 🚰	Backfilling to Formation Level	30 days	Fri 20/4/17	Sat 20/5/23	415,416,435					🕽	
419 🧔	Carraigeway, Pavement, Road Marking and Street Furniture	65 days	Mon 20/5/25	Mon 20/8/10	418					∣	
420	Tree Planting	75 days	Fri 20/7/24	Wed 20/10/21	419FF+60 days					∣ '	
421	Sha Ling Road (M001 CH+0 to +40), Man Kam To Road Drainage, Sewerage, Watermains and O	ther 749 days	Fri 18/6/8	Wed 20/12/23							
422	TTA and XP Application at Man Kam To Road	270 days	Fri 18/6/8	Sat 19/5/11	35			_₩₩₩₩₩		╓╌╢╫	
423	Works at Existing Sha Ling Road	298 days	Thu 19/12/19	Wed 20/12/23						↓ – "	
424	Sub-structure of Noise Barrier Construction Bay 1 to Bay 2	150 days	Thu 19/12/19	Fri 20/6/26	422,439						F
425 🧶 -	Backfilling to Road Formation Level at Noise Barrier Bay 1 to Bay 2	45 days	Sat 20/6/27	Wed 20/8/19	86,424						Ŭ
426	Superstructure of Noise Barrier Construction Bay 1 to Bay 2	40 days	Sat 20/6/27	Thu 20/8/13	424						•
421 🥸		15 days	1 hu 20/8/20	Sat 20/9/5	425						
428	I own Gas Installation	17 days	Mon 20/9/7	Fri 20/9/25	427						
429 🥬	CLP Cable Installation	17 days	Sat 20/9/26	Sat 20/10/17	428						$\ \ $
430 🧐	HKI Cable Installation	10 days	Mon 20/10/19	Mor 20/11/2	429						$\ \ $
431	Backfill to Formation Level	30 days	Tue 20/11/3	Mon 20/12/7	427,428,429,43						$\ \ $
432 🧐	Carraigeway, Pavement, Koad Marking and Street Furniture	14 days	Tue 20/12/8	vved 20/12/23	431						
433	I I A Stage 1 - Future Sha Ling Road Run-in	173 days	Sat 19/6/29	I hu 20/1/30	100.01						
434 🦻	Drainage and Sewerage Works	98 days	Sat 19/6/29	Mon 19/10/28	422,94						
435 100-	Road Lighting Civil works Provision	35 days	Sat 19/6/29	Ffi 19/8/9	422,94				tirt t		
430 M	Road Lighting Eavin works, Lesting and Comissioning (by others)	45 days	Tue 19/12/3	Thu 20/1/30	435,438				╈╋╧┷╍╌┥╎╿╿		$\ \ $
138 P	Watermains Works	76 days	Sat 19/6/29	Ffi 19/9/27	422,94				╷┭┮═╹╁╁	J	
100		30 days	Tue 19/10/29	WU1119/12/2	404,437,435					<u>al II – </u>	
Master P	rogramme Rev 1b Task Summary Inactive Milestone	>	Duration-only	Start-only	С	External '	Milestone	\$	Criti	ical Split	
THUSLET FI	Split Project Summary Inactive Summary]]	Manual Summary Rollup	Finish-only	3	Deadline		+	Pros	zress	
Det	te lan 2019 Milestone Inactive Task Manual Task	_	Manual Summary	External Tasks		Critical			Mar	ual Progress	
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Contract Site Forr	: No. CV/2016/10 nation and Associated Infrastructural Works for		Master P	rogramme Rev.1	b (Draft)	Hsin Chong Tsun Yip Joint Venture
D	Task Nama	Duration	Stort	Einich	Dradaaaaaa	ל א נימר לא מימר לא מימר לא מומר לא מ
		Duration	Start	1 misu	FIEuccessors	DefarfeltakpltaturlukuserDckoDefarfeltakp
439	Carraigeway, Pavement, Road Marking and Street Furniture	14 days	Tue 19/12/3	Wed 19/12/18	438	
440	TTA Stage 2 - Man Kam To Road Eastbound Slow Lane	158 days	Fri 20/1/31	Wed 20/8/12	400,400	
442 0	Drainage and Sewerage Connections	76 days	Fil 20/1/31 Eri 20/1/31	Wed 20/6/17	422,433	
443	Backfill to Formation Level	30 days	Thu 20/6/18	Fri 20/7/24	422,455	
444 🛃	Carraigeway Reinstatement, Road Marking and Preparation Works for Change of TTA	16 days	Sat 20/7/25	Wed 20/8/12	443	
445 🗳	TTA Stage 3 - Man Kam To Road Eastbound Fast Lane	62 days	Thu 20/8/13	Wed 20/10/28		
446 🤞	Sewerage Works	15 days	Thu 20/8/13	Sat 20/8/29	422,440	
447 🤞	Watermains Works	11 days	Mon 20/8/31	Fri 20/9/11	446	
448	Backfill to Formation Level	20 days	Sat 20/9/12	Wed 20/10/7	446,447	
449	Carraigeway Reinstatement, Road Marking and Preparation Works for Change of TTA	16 days	Thu 20/10/8	Wed 20/10/28	448	
450	TTA Stage 4 - Man Kam To Road Westbound	47 days	Thu 20/10/29	Wed 20/12/23	400 445	
451	Watermains works Deptities Examples to use	11 days	Thu 20/10/29	Wed 20/11/11	422,445	
453	Dackill to Formation Level	20 days	Sat 20/12/5	Med 20/12/23	451	
454	Part C	570 days	Tue 19/1/15	Wed 20/12/23	402	
455 🛃	Installation of Temporary Works	60 days	Tue 19/1/15	Thu 19/3/28	90	
456 🛃	Excavation to Formation Level and Blinding Layer	45 days	Fri 19/3/29	Wed 19/5/29	455	
457 🗳	R.C. Structure Up to Ground Floor	60 days	Thu 19/5/30	Fri 19/8/9	456	
458 🗳	R.C. Structure up to Roof	45 days	Sat 19/8/10	Thu 19/10/3	457	
459	ABWF Works	120 days	Fri 19/10/4	Mon 20/3/2	458	
400	Drainage and Sewerage Works and Connections TTA Stage 1	110 days	Fri 19/10/4	Wed 20/2/19	458,422,434SS	
461	Drainage and Sewerage Works and Connections TTA Stage 2	112 days	Thu 20/2/20	Thu 20/7/9	460,441SS	
463	Sewerage works and Connections TTA Stage 3	15 days	i nu 20/8/13 Eri 20/7/10	Sat 20/8/29	401,44655	
464	F&M and Waterworks	570 days	Tuo 10/1/10	Wad 20/0/20	401,400	
465	Water Meter Application	150 days	Tue 19/1/15	Tue 19/7/23	45588	
466 🛃	Watermain Works and Connection TTA Stage 2	100 days	Fri 20/1/31	Wed 20/6/3	442SS.465	
467 🛃	Watermain Works and Connection TTA Stage 3	11 days	Mon 20/8/31	Fri 20/9/11	466,447SS	
468 🗳	Watermain Works and Connection TTA Stage 4	11 days	Thu 20/10/29	Wed 20/11/11	451SS,465	
469 🗳	CLP Meter Application	90 days	Thu 20/4/9	Thu 20/7/30	471	
470	CLP Cabling Works	120 days	Fri 20/7/31	Wed 20/12/23	469	
471	Electrial and Lighting Works	30 days	Tue 20/3/3	Wed 20/4/8	459	
4/2	Part D	586 days	Sat 18/12/15	Tue 20/12/15	47 57	
473	Woodland Planting Parts G1 and G2	586 days	Sat 18/12/15	Tue 20/12/15	17,57	
475	Land Decontamination Works	173 days	Thu 19/7/18	Mon 20/2/17		
476	Re-appraisal and Contamination Assessment Plan (CAP) Submission to EPD	12 days	Thu 19/7/18	Wed 19/7/31	19.20	
477 🛃	EPD Review and Acceptance for CAP	14 days	Thu 19/8/1	Fri 19/8/16	476	
478 🗳	Environmental SI for Determination of Decontamination and SI Testing	24 days	Sat 19/8/17	Fri 19/9/13	477	
479 🗳	Contamination Assessment Report (CAR) Submission to EPD	13 days	Mon 19/9/16	Mon 19/9/30	478	
480	EPD Review and Acceptance for CAR	18 days	Wed 19/10/2	Fri 19/10/25	479	
481	Remedial Action Plan (RAP) Submission to EPD	13 days	Sat 19/10/26	Sat 19/11/9	480	
482	EPD Review and Acceptance for RAP	18 days	Mon 19/11/11	Sat 19/11/30	481	
484	Land Decontamination Works	30 days	Thu 20/1/9	Thu 20/1/23	482	
485	EPD Review and Accentance for RR	18 days	Fri 20/1/24	Mon 20/2/17	484	
486 🛃	Fill Slope FS13	127 davs	Tue 20/2/18	Fri 20/7/24		
487 🤞	Trial Pits Excavation and Preliminary Results Submission	25 days	Tue 20/2/18	Tue 20/3/17	51,19,20,485	
488 🗳	Final Results Submission and Verification of Design by Supervisor	42 days	Wed 20/3/18	Tue 20/4/28	487	
489	Backfill to Proposed Ground Level (Max. 2.5m)	36 days	Wed 20/4/29	Thu 20/6/11	483,488	
490	Drainage and Maintenance Access	35 days	Fri 20/6/12	Fri 20/7/24	489	
491	Sewerage and Drainage	/2 days	Wed 20/5/27	Thu 20/8/20	39488	
492 💱		21 days	VVed 20/6/10 Eri 20/8/21	Fri 20/12/4	39955	
494	Landscape Works	138 davs	Tue 20/7/7	Sat 20/12/19	408SS	
495 🛃	Section 3 of the Works (Part E)	721 days	Fri 17/12/15	Thu 19/12/5		
496 🗳	Temporary Drainage Works	90 days	Thu 18/8/16	Tue 18/12/4	84,51	
497 🗳	Utilities Diversion/Protection Works	30 days	Fri 17/12/15	Mon 18/1/22		
498 🗳	Enquiries of As-built Record from UU Companies	30 days	Fri 17/12/15	Mon 18/1/22	2	
499 🗳	Ground Investigation and Geotechnical Instrumentation for Commencement of Slopework	50 days	Fri 18/5/4	Wed 18/7/4		
501	Site Clearance for Verification Drillholes (2 Nos., VDH4-5)	8 days	Fri 18/5/4	Sat 18/5/12	53,59	
502	Mobilization of GLKig and Preparation of Works	7 days	Fri 18/5/4	Ffi 18/5/11	31,50055,18	
503	Formal Report Submission and Verification of the Design of Cut and Fill Slope by DM	0 uays 42 dave	Thu 18/5/24	Wed 18/7/4	500,501	
504	Geotechnical Instrumentation Required for Commencement of Slope Works	12 days	Thu 18/5/24	Wed 18/6/6	32,502	
505 🗳	Fill Slope FS3	278 davs	Thu 18/8/16	Tue 19/7/30	. ,	
506 🤞	Backfilling Stage 1 (~11m, up to +27 mPD at Section 17) + Filter Blanket from +16mPD to 27mPD	148 days	Thu 18/8/16	Sat 19/2/16	503,51	
507 🦿	Drainage, Maintenance Access after Backfilling Stage 1	94 days	Sat 18/11/17	Wed 19/3/13	506FF+21 days	
508	Backfilling Stage 2 (~4m, up to Proposed Ground)+ filter blanket 1.6m depth	44 days	Tue 19/5/14	Fri 19/7/5	514	
510	Drainage, Maintenance Access after Backfilling Stage 2	62 days	Fri 19/5/17	I ue 19/7/30	508FF+21 days	
511	Geotechnical Instrumentation Works	70 days	Non 19/4/15	Fri 19/7/12	506,508FF+6 d	
J11 M		192 days	WON 19/2/18	wea 19/10/16		
Maste	er Programme Rev.1b Task Summary Inactive Milestone	> E	uration-only	Start-only	C	External Milestone 🔷 Critical Split
	Split Project Summary Inactive Summary	l N	Ianual Summary Rollup	Finish-only	3	Deadline V Progress
	Date: Jan 2019 Milestone Inactive Task Manual Task I	Ν	Ianual Summary	External Tasks		Critical Manual Progress
				_		
				Page 7		

Contract No. CV/2016/10 Site Formation and Associated Infrastructural Works for

Master Programme Rev.1b (Draft)

ID		m. 1. N	Dunting	Ctot	El a la la	Dec 1.	t d 2018 d 2018 d 2018 d 2018 d 2010 d 2010 d 2010 d 2010 d 2020 d 2020 d
ID	0	Lask Name	Duration	Start	Finish	Predecessors	od 2018 d 2018 d 2018 d 2018 d 2019 d 2019 d 2019 d 2019 d 2020 d
512	2 🚰	Backfilling to Formation Level, Plate Load Test, Blinding Layer	30 days	Mon 19/2/18	Sat 19/3/23	51,506	
513	3 🔞 _	Base Slab of Retaining Wall RW4 Bay 1-8	32 days	Sat 19/2/23	Tue 19/4/2	512FF+7 days	
514	4 🔞	Wall Stem of Retaining Wall RW4 Bay 1-8	52 days	Tue 19/3/5	Sat 19/5/11	513FF+28 days	s 📃 💻
515	5 🔞	Backfilling behind RW4 (~8m up to +36 mPD)	87 days	Tue 19/5/14	Sat 19/8/24	514	
510	6 🚰	Filter Layer behind RW4	87 days	Tue 19/5/14	Sat 19/8/24	514,515FF	
511	7 🔞	Drainage and Maintenance Access	40 days	Mon 19/8/26	Wed 19/10/16	516	
518	8 🚰	Fill Slope FS2	224 days	Mon 19/2/18	Fri 19/11/22		
519	9 🙆	Backfilling Stage 1 (~16m, up to Maintenance Berm +43 mPD) + filter Blanket from +27mPD to 35mPD on	167 days	Mon 19/2/18	Wed 19/9/11	506	
520	0 🔞	Backfilling Stage 2 (~4m, up to Proposed Ground) + 2.5m depth filter blanket 3m below berm surface	50 days	Thu 19/9/12	Thu 19/11/14	519	
52	1 🔞	Drainage, Sewerage and Maintenance Access	82 days	Wed 19/8/14	Fri 19/11/22	520FF+7 days	
522	2 🏹	Geotechnical Instrumentation Works	30 days	Sat 19/10/19	Fri 19/11/22	520FF+7 days	
523	3 🏹	Fill Slope FS4	54 days	Mon 19/7/8	Sat 19/9/7		
524	4 🔞	Backfilling (~3.5m up to Proposed Ground)	42 days	Mon 19/7/8	Sat 19/8/24	515FF	
52	5 🔞	Drainage, Maintenance Access after Backfilling	25 days	Sat 19/8/10	Sat 19/9/7	524FF+12 days	s 🖌
520	6 🛃	Geotechnical Instrumentation Works	6 days	Mon 19/8/26	Sat 19/8/31	524FF+6 days	
52	7 🚰	Landscape Works at Fill Slopes FS2, FS3 and FS4	196 days	Mon 19/4/8	Thu 19/12/5		
528	8 🍥	Whips and shrubs planting at FS3	100 days	Mon 19/4/8	Fri 19/8/9	508FF+30 days	s i i i i i i i i i i i i i i i i i i i
529	9 🗳	Whips and shrubs planting FS2	45 days	Tue 19/10/15	Thu 19/12/5	520FF+18 days	s 🔤
530	0 🚰	Hydroseeding	30 days	Fri 19/10/25	Thu 19/11/28	520FF+12 days	s 🗾
53	1 🚰	Cut Slope CS18	51 days	Tue 19/7/16	Thu 19/9/12		
532	2 🔞	Excavate to proposed roadwork level and raking drains (11 Nos. of Raking Drain)	30 days	Tue 19/7/16	Mon 19/8/19	538FF	
533	3 🔞	Drainage and Maintenance Access	35 days	Sat 19/8/3	Thu 19/9/12	532FF+21 days	s i i i i i i i i i i i i i i i i i i i
534	4 🚱	Geotechnical Instrumentation Works	12 days	Tue 19/8/13	Mon 19/8/26	532FF+6 days	
535	5 🚰	Cut Slope CS19	204 days	Thu 19/1/3	Thu 19/9/12		
530	6 🔞	Excavate to +54.5 mPD	50 days	Thu 19/1/3	Tue 19/3/5	285SS	
537	7 🔞	Excavate to +47mPD, Soil Nails and Raking Drains (17 nos. of Soil Nail, 13 Nos. of Raking Drain)	89 days	Wed 19/3/6	Thu 19/6/27	536,286SS	
538	8 🔞	Excavate to +41mPD, Soil Nails, Raking Drains and Excavate to Toe Level (4 Nos. of Soil Nail, 7 Nos. of	44 days	Fri 19/6/28	Mon 19/8/19	537,287SS	
539	9 🔞 -	Drainage and Maintenance Access	196 days	Sat 19/1/12	Thu 19/9/12	538FF+21 days	s 📕
540	0 🚰	Geotechnical Instrumentation Works	6 days	Tue 19/8/20	Mon 19/8/26	538FF+6 days	
54	1 🚰	Landscape Works at Cut Slopes C18, CS19	24 days	Tue 19/8/20	Tue 19/9/17		
542	2 🔞	Planter W2 Construction	17 days	Tue 19/8/20	Sat 19/9/7	532	
543	3 🚰	Shrubs Planting at Planter W2	18 days	Tue 19/8/27	Tue 19/9/17	542FF+7 days	
544	4 🏹	Water Connections for Watermains (by Interfacing Contract)	50 days	Mon 21/3/1	Mon 21/5/3	155,177,319,32	2
54	5 🚰	Section 4 of the Works	1096 days	Sun 20/7/12	Wed 23/7/12		/ I I I
540	6 🚰	Establishment Works of Parts A1, A2 & A3	1096 days	Sun 20/7/12	Wed 23/7/12	170] 🎽
54	7 🚰	Section 5 of the Works	1096 days	Tue 21/6/29	Fri 24/6/28		
548	8 🚰	Establishment Works of Parts B1, B2, C, D, F, G1 & G2	1096 days	Tue 21/6/29	Fri 24/6/28	206,233,262,27	7
549	9 🚰	Section 6 of the Works	1096 days	Fri 19/12/6	Mon 22/12/5		
550	0 🚰	Establishment Works of Part E	1096 days	Fri 19/12/6	Mon 22/12/5	527,541	
							· · ·

Master Programme Rev.1b	Task		Summary	Inactive Milestone	\$ Duration-only	Start-only	E	External Milestone	\$	Critical Split	
	Split	•	Project Summary	Inactive Summary	Manual Summary Rollur	 Finish-only	3	Deadline	+	Progress	
Date: Jan 2019	Milestone	•	inactive Task	Manual Lask	Manual Summary	 External Lasks		Critical		Manual Progress	





Appendix L

Environmental Site Inspection Checklist

Z:Jobs/2018/TCS00881(CV-2016-10)/600/Site Inspection & Audit/Proposal on the Site Inspection, Deficiency and Action Reporting Procedures/R0175v4a.doc Action-United Environmental Services and Consulting

Environmental Team –Site Inspection and Environmental Audit Checklist

Project: Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery								for ery	Checklist No: <u>CE-32/2010-(CE)-</u>						
Contrac Enviror	ct No.: nmental	CED	D Contr -01/534/	act No. CV/2 2017	016/10				Inspe	cted b	y:				
Permit	No.:		01/001/						IEC RF			CEDD			
Date:									ET			AUES			
Time:									EO/C	ontrac	tor	Hsin Cho	ong Tsi	un Yip JV	
PART	A: G	ENER	AL INFC	ORMATION											
Weathe	<u>er:</u> Sur	nny		Fine		Cloudy		Rainy		-	Temp	erature:	0	C	
<u>Humidit</u>	<u>ty:</u> Hig	h		Moderate		Low			_						
Wind:	Stro	ong		Breeze		Light		Calm							
PARIE	3: S														
Note:	Not Obs	.: Not (Jp : Ob	Observe servatio	d; Yes: Comp ns requiring fo	bliance; N bliow-Up	actions N/A	: Not App	olicable	Not Obs.	Yes	No	Follow Up	N/A	Photo/ Remarks	
Sectio	n 1: Wate	er Qu	ality												
1.01	Is effluen	nt disch	harge lice	ence for the C	Contract c	btained?									
1.02	Is the dis	charge	e of turbi	d water avoid	led?										
1.03	Are there	e prop effluer	er desilt	ting facilities	in the dr	ainage syste	ms to re	educe SS							
1.04	Are there	e char	nnels, e to silt re	arth bunds o moval facilitie	r sand b s?	ag barriers	provided	to direct							
1.05	Are there	any p	erimetei m cross	r cut-off drains	s provide	d at site boun	idaries to	intercept							
1.06	Is draina	ge sys	tem well	maintained?											
1.07	Are dike boundari facilitate	s or e es of e	embankr earthwor	nents for floo k areas; Are t	od protecter temporary	ound the ovided to									
1.08	Are earth	nworks 12	s final su	urfaces or exp	posed slo	ope surface v	vell com	pacted or							
1.09	Are man	holes a	adequate	ely covered or	tempora	rily sealed?									
1.10	Are there	e any p	orocedur	es and equipr	ment for r	ainstorm prot	ection?								
1.11	Are there	e any v	vheel wa	shing facilitie	s?										
1.12	Are there	whee	l washin	g facilities we	II maintai	ned?									
1.13	Is runoff	from w	heel wa	shing facilities	s avoided	!?									
1.14	Are there	e toilets	s provide	ed on site?											
1.15	Are toilet	s prop	erly mai	ntained?											
1.16	Are there	e any v	ehicles a	and plant with	in the site	e?									
1.17	Is the oil	leakag	ge or spi	llage from ver	nicle or pl	ant avoided?									
1.18	Are fuel areas, wi largest ta nearby?	tanks ithin bu ank to j	and sto unds of a prevent s	rage areas p a capacity equ spilled fuel oil:	vrovided al to 110 s from rea	with locks an % of the stora aching water	nd sited o age capa sensitive	on sealed city of the receivers							
1.19	Are there system?	e any	measur	es to prevent	leaked	oil from ente	ering the	drainage							
1.20	Are there concretin	e any n ng worl	neasures	s to collect sp	ilt cemen	t and concret	e washin	gs during							
1.21	Are mobi	ile toile	ets provid	ded on site an	d located	l away from th	ne stream	n course?							
1.22	Is license toilet?	ed coll	ector em	ployed for ha	Indling th	e waste gene	erated fro	m mobile							
1.23	Are cons and dispo	structio osed o	n solid f proper	waste, debris ly to avoid wa	and rub ter qualit	bish on site o y impacts?	collected,	, handled							
1.24	Are notic discharge	ces po e any s	sted at sewage	conspicuous or wastewate	iocations r into the	to remind the nearby environment of the n	ne worke onment?	ers not to							

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Environmental Team –Site Inspection and Environmental Audit Checklist									
Note:	Not Obs.: Not Observed; Yes: Compliance; No: Non-Compliance; Follow Up: Observations requiring follow-Up actions N/A: Not Applicable	Not Obs.	Yes	No	Follow Up	N/A	Photo/ Remarks		
Bargir	ng point at Siu Lam								

Bargii	ng point at Siu Lam					
1.25	Are all barges fitted with tight bottom seals to prevent leakage of materials					
1.26	Are barges or hoppers not be filled to a level that will cause overflow of materials or polluted water during loading or transportation?					
1.27	Are all vessels sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is					
1.28	Is loading of barges and hoppers controlled to prevent splashing of material into the surrounding water?					
Sectio	nn 2: Air Quality					
2.01	Are active works area provided with dust suspension measures, such as					
2 02	waster spraying?					
2.02	wet or paved?					
2.03	Is excavated or stockpile of dusty material covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet?					
2.04	Are dusty materials remaining after a stockpile removed maintained in wet with water and cleared from the surface of roads?					
2.05	Is stockpile of dusty material not be extended beyond the pedestrian barriers, fencing or traffic cones?					
2.06	Are the load of dusty materials on a vehicle leaving a construction site covered entirely by impervious sheeting to ensure that the dusty materials do not leave from the vehicle?					
2.07	Are vehicle wheel washing facilities provided at each construction site exit and every vehicle washed to remove any dusty materials from its body and					
2.08	Are hoardings of not less than 2.4m high provided along the site boundary,					
2 09	which adjoins areas accessible to the public? Is the portion of any road leading only to construction site that is within 30m of		_			
2.00	a vehicle entrance or exit kept clear of dusty materials?					
2.10	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place sprayed with water or a dust suppression chemical continuously					
2.11	Is any area that involves demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the optime surface wet?					
2.12	Is any skip hoist for material transport totally enclosed by impervious					
2.13	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?					
2.14	Is every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered					
2.15	on the top and the 3 sides? Is exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other					
2.16	suitable surface stabiliser? Are site vehicles travelling within the speed limit not more than 10km/hour?	_]		
2 17	ls dark smoke emission from plant/equipment avoided?					
2.17						
2.18	Is open burning avoided?					
2.19	All non-road mobile machinery (NRMM) using on site are granted and displayed with the approval/ exemption labels under the regulation?					
<u>Bargii</u>	ng point at Siu Lam					
2.20	Is road surface within the barging facilities paved?					
2.21	Are dust enclosures provided for the loading ramp, installation of 3-sided screen with top cover and the provision of water sprays at the discharge point					
2.22	provided? Are vehicles required to pass through designated wheel wash facilities?					
2.23	Is continuous water spray provided at the loading point?					
-		\Box		\Box	\Box	

Environmental Team -

Note:

onmental Team –Site Inspection and Environmental Audit C	hecklis	t			A	UES
Not Obs.: Not Observed; Yes: Compliance; No: Non-Compliance; Follow Up: Observations requiring follow-Up actions N/A: Not Applicable	Not Obs.	Yes	No	Follow Up	N/A	Photo/ Remarks

	Follow Up: Observations requiring follow-Up actions N/A: Not Applicable	Obs.	Yes	NO	Up	N/A	Remarks
Sectio	on 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?						
3.02	Is silenced equipment adopted?						
3.03	Is idle equipment turned off or throttled down?						
3.04	Are all plant and equipment well maintained and in good condition?						
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?						
3.06	Are hand held breakers fitted with valid noise emission labels during operation?						
3.07	Are air compressors fitted with valid noise emission labels during operation?						
3.08	Are flaps and panels of mechanical equipment closed during operation?						
3.09	Are Construction Noise Permit(s) applied for percussive piling works or construction activities out of restricted hours?						
Sectio	on 4: Waste/Chemical Management						
4.01	Is Waste Management Plan submitted to Engineer for approval?						
4.02	Are receptacles available for general refuse collection?						
4.03	Is general refuse sorting or recycling implemented?						
4.04	Is general refuse disposed of properly and regularly?						
4.05	Is the Contractor registered as a chemical waste producer?						
4.06	Are the chemical waste containers properly labelled?						
4.07	Are the chemical wastes stored in proper storage areas?						
4.08	Is the chemical waste storage area properly labelled?						
4.09	Is the chemical waste storage area used for storage of chemical waste only?						
4.10	Are incompatible chemical wastes stored in different areas?						
4.11	Are the chemical wastes disposed of by licensed collectors?						
4.12	Are trip tickets for chemical wastes disposal available for inspection?						
4.13	Are chemical/fuel storage areas bunded?						
4.14	Are designated areas identified for storage and sorting of construction wastes?						
4.15	Are construction wastes sorted (inert and non-inert) on site?						
4.16	Are construction wastes reused?						
4.17	Is construction waste disposed of properly?						
4.18	Are site hoardings and signboards made of durable materials instead of timber?						
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?						
4.20	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?						
Sectio 5.01	on 5: Landscape & Visual Are retained and transplanted trees in health condition?	lanagement Plan submitted to Engineer for approval?					
5.00	Are retained and transplanted trace properly protected?						
5.02	Are retained and transplanted trees property protected?						

Environmental Team –Site Inspection and Environmental Audit Checklist

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Note:	Not Obs.: Not Observed; Yes: Compliance; No: Non-Compliance; Follow Up: Observations requiring follow-Up actions N/A: Not Applicable	Not Obs.	Yes	No	Follow Up	N/A	Photo/ Remarks
5.03	Are surgery works carried out for the damaged trees?						
5.04	Is damage to trees outside site boundary due to construction activities avoided?						
Sectio	n 6: Others						
6.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?						
6.02	Is stagnant water accumulated in works area avoided to prevent mosquito breeding?						

Follow-up of last site inspection (Dated:

Observation

General Reminder/ Advice

IEC's representative	RE's representative	ET's representative	Contractor's representative
Name:	Name:	Name:	Name:
	Date:	Date:	Date [.]