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Environmental Protection Department  
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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

2 November 2018

MTR Corporation Limited

**Environmental Impact Assessment (EIA) Ordinance, Cap.499**  
**Application for Variation of an Environmental Permit**

**Project Title: West Island Line**  
**(Application No. VEP-550/2018)**

I refer to your above application received on 24 October 2018 for variation of an environmental permit under Section 13(1) of the EIA Ordinance.

Pursuant to Section 13(5) of the EIA Ordinance, we have amended the Environmental Permit (EP-313/2008/J). I attach the Environmental Permit as amended (No. EP-313/2008/K) for your use.

Under Section 15 of the EIA Ordinance, the amended Environmental Permit will be placed on the EIA Ordinance Register. It will also be placed on the EIA Ordinance website (<http://www.epd.gov.hk/eia/>).

Please note that if you are aggrieved by any of the conditions imposed in this Permit, you may appeal under Section 17 of the EIA Ordinance within 30 days of receipt of this Permit.

Should you have any queries on the above application, please contact my colleague Mr. Richard Wong at 2835 1128.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Tony W.H. Cheung'.

(Tony W.H. Cheung)

Principal Environmental Protection Officer  
for Director of Environmental Protection



ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE  
(CHAPTER 499)  
Sections 10 & 13

環境影響評估條例  
(第 499 章)  
第 10 及 13 條

ENVIRONMENTAL PERMIT TO CONSTRUCT AND OPERATE  
A DESIGNATED PROJECT  
建造及營辦指定工程項目的環境許可證

Part A (MAIN PERMIT)  
A 部 (許可證主要部分)

Pursuant to Section 10 of the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (the Director) grants the Environmental Permit (EP-313/2008) to the **MTR Corporation Limited** (hereinafter referred to as the "Permit Holder") on 12 January 2009. Pursuant to Section 13 of the EIAO, the Director amends the Environmental Permit based on the Application No. VEP-550/2018. The amendments, described below, are incorporated into this Environmental Permit (EP-313/2008/K). This Environmental Permit as amended is for the construction and operation of the designated project described in Part B subject to the conditions specified in Part C. The issue of this environmental permit is based on the documents, approvals or permissions described below:

根據《環境影響評估條例》(條例)第 10 及 13 條的規定，環境保護署署長(署長)於 2009 年 1 月 12 日將環境許可證(編號 EP-313/2008) 批予香港鐵路有限公司(下稱“許可證持有人”)。根據條例第 13 條的規定，署長因應更改環境許可證的申請編號 VEP-550/2018 修訂環境許可證。以下修訂已包含在本環境許可證內(EP-313/2008/K)。本經修訂的環境許可證作為建造及營辦本許可證 B 部所說明的指定工程項目，但須遵守 C 部所列明的條件。本環境許可證的發出，乃以下表所列的文件、批准或許可作為根據：

Application No. 申請書編號	VEP-550/2018
Document in the Register : 登記冊上的文件:	(1) West Island Line Environmental Impact Assessment (EIA) Report, Environmental Monitoring and Audit (EM&A) Manual and Executive Summary (Register No.: AEIAR-126/2008) [Hereinafter referred to as the "EIA Report"] (1) 西港島線環境影響評估報告，環境監測及審核手冊及行政摘要 (登記冊檔號: AEIAR-126/2008) [下稱“環評報告”] (2) The Director's letter of approval of the EIA report dated 23 Dec 2008 [ Ref.: (10) in EP2/G/A/138 Pt.5 ] (2) 署長於 2008 年 12 月 23 日發出批准環評報告的信件 [檔案編號: (10) in EP2/G/A/138 Pt.5] (3) Application for an Environmental Permit No. AEP-313/2008. [Hereafter referred to as "the Application No. AEP-313/2008"] (3) 申請環境許可證編號 AEP-313/2008。[下稱“申請書編號 AEP-313/2008”]



<p><b>Application No.</b> 申請書編號</p>	<p align="center"><b>VEP-550/2018</b></p>
	<p>(4) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 15 June 2009 (Application No. VEP-291/2009) (4) 許可證持有人於2009年6月15日提交的更改環境許可證申請文件包括所有附件(申請書編號：VEP-291/2009)</p>
	<p>(5) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 24 June 2009 and 17 July 2009 (Application No. VEP-294/2009) (5) 許可證持有人於2009年6月24日及2009年7月17日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-294/2009)</p>
	<p>(6) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 18 August 2009 (Application No. VEP-298/2009) (6) 許可證持有人於2009年8月18日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-298/2009)</p>
	<p>(7) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 24 December 2009 (Application No. VEP-333/2010) (7) 許可證持有人於2010年12月24日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-333/2010)</p>
	<p>(8) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 25 July 2012 (Application No. VEP-372/2012) (8) 許可證持有人於2012年7月25日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-372/2012)</p>
	<p>(9) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 24 September 2012 (Application No. VEP-376/2012) (9) 許可證持有人於2012年9月24日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-376/2012)</p>
	<p>(10) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 6 May 2013 (Application No. VEP-404/2013) (10) 許可證持有人於2013年5月6日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-404/2013)</p>
	<p>(11) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 3 December 2013 (Application No. VEP-422/2013) (11) 許可證持有人於2013年12月3日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-422/2013)</p>
	<p>(12) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 26 February 2014 (Application No. VEP-430/2014) (12) 許可證持有人於2014年2月26日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-430/2014)</p>



Application No. 申請書編號	VEP-550/2018
	(13) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 7 August 2014 (Application No. VEP-452/2014) (13) 許可證持有人於2014年8月7日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-452/2014)
	(14) Application documents for Variation of Environmental Permit including all attachments submitted by the Permit Holder on 24 October 2018 (Application No. VEP-550/2018) (14) 許可證持有人於2018年10月24日提交的更改環境許可證申請文件包括所有附件 (申請書編號：VEP-550/2018)

Application No. 申請書編號	Date of Application 申請日期	List of Amendments Incorporated into Environmental Permit 已包含在本環境許可證內的修訂項目	Date of Amendment 修訂日期
VEP-291/2009	15 June 2009 2009年6月15日	Vary Conditions 1.14, 2.7 and 2.12.1 in Part C of Environmental Permit No. EP-313/2008 to shorten the notification periods to 1 week, 2 weeks and 2 weeks respectively. 更改環境許可證編號EP-313/2008 C部第 1.14, 2.7 和 2.12.1 項條件, 依序縮短通知期限至1星期, 2星期及2星期。	26 June 2009 2009年6月26日
VEP-294/2009	24 June 2009 2009年6月24日	Vary Condition 1.7 in Part C of Environmental Permit No. EP-313/2008/A. 更改環境許可證編號EP-313/2008/A C部 第1.7 項條件。  Vary table in Condition 2.10.1 in Part C of Environmental Permit No. EP-313/2008/A to include decking over for Works Area C and other noise mitigation measures at Works Areas A, A1, A2 and A3. Add Figures 5, 6 & 7 to shown the temporary noise barriers and decking over at Works Area C. 更改環境許可證編號EP-313/2008/A C部 第 2.10.1 項條件的圖表, 以包括於施工區C使用鋪蓋遮蔽以及於施工區A, A1, A2 及A3使用其他噪音緩解措施。新增圖 5, 6 & 7以顯示施工區C的臨時隔音屏障和鋪蓋。  Vary Figures 1 and 2 of Environmental Permit No. EP-313/2008/A, and add Figures 3 & 4 to include additional Works Areas A1, A2 and A3. 更改環境許可證編號EP-313/2008/A 的圖1及2, 以及新增 圖 3 & 4 以包括新的施工區A1, A2 及 A3。	22 July 2009 2009年7月22日

**Environmental Permit No. EP-313/2008/K**

環境許可證編號 **EP-313/2008/K**

Application No. 申請書編號	Date of Application 申請日期	List of Amendments Incorporated into Environmental Permit 已包含在本環境許可證內的修訂項目	Date of Amendment 修訂日期
		<p>Re-number Figures 3, 4 &amp; 5 Environmental Permit No. EP-313/2008/A as Figures 8, 9 &amp; 10. 更改環境許可證編號EP-313/2008/A的圖3, 4及5編號為圖8, 9及10。</p>	
VEP-298/2009	18 August 2009 2009年8月18日	<p>Vary Condition 1.7 in Part C of Environmental Permit No. EP-313/2008/B. 更改環境許可證編號EP-313/2008/B C部第1.7項條件。</p> <p>Add Condition 2.14 to specify measures to mitigate landscape &amp; visual impacts at extended Works Area I. 新增第2.14項條件, 指定具體措施, 以減輕擴大的施工區I的景觀及視覺影響。</p> <p>Vary Figures 1 and 2 of Environmental Permit No. EP-313/2008/B, and add Figure 5 to include extended Works Area I. 更改環境許可證編號EP-313/2008/B的圖1及2, 以及新增圖5以包括擴大的施工區I。</p> <p>Add Figures 6 to 9 to show details of extended Works Area I. 新增圖6至9以顯示擴大的施工區I的細節。</p> <p>Re-number Figures 5 to 10 in Environmental Permit No. EP-313/2008/B as Figures 10 to 15. 更改環境許可證編號EP-313/2008/B的圖5至10編號為圖10至15。</p>	31 August 2009 2009年8月31日
VEP-333/2010	24 December 2010 2010年12月24日	<p>Vary Conditions 3.1.2(b), 3.3.1 and 3.3.2 in Part C of Environmental Permit No. EP-313/2008/C. 更改環境許可證編號EP-313/2008/C的C部的第3.1.2(b), 3.3.1及3.3.2項條件。</p> <p>Add Conditions 3.2.8 and 3.3.2 in Part C of Environmental Permit No. EP-313/2008/D. 在環境許可證編號EP-313/2008/D的C部新增第3.2.8及3.3.2項條件。</p> <p>Re-number Condition 3.3.2 in Part C of Environmental Permit No. EP-313/2008/C as Condition 3.3.3 in Part C of Environmental Permit No. 313/2008/D. 更改環境許可證編號EP-313/2008/C的C部的第3.3.2項條件編號為環境許可證編號EP-313/2008/D的C部的第3.3.3項條件。</p> <p>Vary Figure 13 Detail B in Environmental Permit No. EP-313/2008/C and add Figures 14 and 15 in Environmental Permit No. 313/2008/D. 更改環境許可證編號EP-313/2008/C的圖13細節B及在環境許可證編號EP-313/2008/D新增圖14及15。</p>	19 January 2011 2011年1月19日



**Environmental Permit No. EP-313/2008/K**

環境許可證編號 **EP-313/2008/K**

Application No. 申請書編號	Date of Application 申請日期	List of Amendments Incorporated into Environmental Permit 已包含在本環境許可證內的修訂項目	Date of Amendment 修訂日期
		Re-number Figures 14 and 15 in Environmental Permit No. EP-313/2008/C as Figures 16 and 17 in Environmental Permit No. EP-313/2008/D. 更改環境許可證編號EP-313/2008/C的圖14及15為環境許可證編號EP-313/2008/D的圖16及17。	
VEP-372/2012	25 July 2012 2012年7月25日	Vary table in Condition 2.10.1 in Part C of Environmental Permit No. EP-313/2008/D to include noise mitigation measures at Works Areas M3 during blasting. 更改環境許可證編號EP-313/2008/D的C部第2.10.1項條件的圖表,以包括於施工區M3爆破時使用的噪音緩解措施。  Add Conditions 2.15 and 2.15.1 to 2.15.4 to specify special conditions pertaining to blasting at Works Area M3. 新增第2.15及2.15.1至2.15.4項條件,指定具體適用於M3施工區爆破時的特定條件。  Add Figure 13 to show details of the mitigation measures. 新增圖13以顯示緩解措施的細節。  Add Figure 14 to show the locations of Bonham Road Government Primary School, the Methadone Clinic, Bon-Point and Kam Ning Mansion. 新增圖14以顯示般咸道官立小學、美沙酮診所、雍慧閣及金寧大廈的位置。  Re-number Figures 13 to 17 in Environmental Permit No. EP-313/2008/D as Figures 15 to 19 in Environmental Permit No. EP-313/2008/E. 更改環境許可證編號EP-313/2008/D的圖13至17為環境許可證編號EP-313/2008/E的圖15至19。	1 August 2012 2012年8月1日
VEP-376/2012	24 September 2012 2012年9月24日	Condition 2.15.1 which specifies the explosives delivery arrangement to Works Area M3 is not used. 移除指定爆炸品運送往施工區M3的安排的第2.15.1項條件。	5 October 2012 2012年10月5日
VEP-404/2013	6 May 2013 2013年5月6日	Condition 2.15.4(a) specifying the water ballast system is not used. 移除指定水壓載系統的第2.15.4(a)項條件。  Vary Conditions 2.15.4(b) and (c) to better mitigate air quality impact during and after blasting. 更改第2.15.4(b)及(c)項條件以更有效緩解爆破工程期間及之後的空氣質素影響。  Vary Figure 13. 更改圖13。	16 May 2013 2013年5月16日
VEP-422/2013	3 December 2013	Vary Conditions 4.1.3 and 4.1.4 and Figure 18 and add Appendix B to show rail track types and location.	16 December 2013



Application No. 申請書編號	Date of Application 申請日期	List of Amendments Incorporated into Environmental Permit 已包含在本環境許可證內的修訂項目	Date of Amendment 修訂日期
	2013年12月3日	更改第4.1.3及4.1.4項條件及圖18及新增附錄B以顯示列車路軌類形及位置。  Figure 19 is not used. 移除圖19。	2013年12月16日
VEP-430/2014	26 February 2014 2014年2月26日	Vary Conditions 4.1.2 to allow use of C-stock trains and K-stock trains, night-time (2300-0700) train frequency of 10 trains per 30 minutes in each direction, and the total length of the trains shall not be longer than 200m.  更改第4.1.2項條件新增C及K形列車，夜間列車的班次，每個方向的行車密度最多為每30分鐘10班，及列車總長度不得超過200米。	26 March 2014 2014年3月26日
VEP-452/2014	7 August 2014 2014年8月7日	Vary Conditions 2.14.2 in Part C of the Environmental Permit (No. EP-313/2008/I). 更改環境許可證編號EP-313/2008/I的C部的第2.14.2項條件。  Remove Figure 8 & 9 and renumber the figures thereafter. 移除圖8和9及將其後的圖重新編號。	1 September 2014 2014年9月1日
VEP-550/2018	24 October 2018 2018年10月24日	Vary Condition 4.1.2 to include an additional type of train (Q-stock trains).  更改第4.1.2項條件，以包括新增的列車類型(Q型列車)。	2 November 2018 2018年11月2日

2 November 2018

Date

日期

  
(Tony W.H. CHEUNG)  
Principal Environmental Protection Officer  
for Director of Environmental Protection  
環境保護署署長  
(首席環境保護主任 張偉雄 代行)





**PART B (DESCRIPTION OF DESIGNATED PROJECT)**

**B 部 (指定工程項目的說明)**

Hereunder is the description of the designated project mentioned in Part A of this environmental permit (hereinafter referred to as “the Permit”):

下列為本環境許可證(下稱“許可證”)A部所提述的指定工程項目的說明:

Title of Designated Project 指定工程項目的名稱	West Island Line [This designated project hereinafter referred to as “the Project”] 西港島線 [這指定工程項目下稱“工程項目”]
Nature of Designated Project 指定工程項目的性質	Construction and operation of an approximately 3 km underground railway and its associated stations. 興建和運作一條長約 3 公里的地底鐵路及有關的火車站。
Location of Designated Project 指定工程項目的地點	Sheung Wan, Sai Ying Pun and Kennedy Town. The location of the Project is shown in Figures 1 and 2 attached to this Permit. 上環、西營盤和堅尼地城。工程項目的位置見載於本許可證夾附的圖 1 及 2。
Scale and Scope of Designated Project 指定工程項目的規模和範圍	Construction and operation of an approximately 3km underground railway, the Sai Ying Pun Station, University Station and Kennedy Town Station, the related Ventilation Buildings, Electrical and Mechanical Plant Buildings, and the Temporary Underground Explosives Storage Magazine. 興建和營辦一條長約3公里的地底鐵路、西營盤站、大學站和堅尼地城站、有關的通風樓、機樓 及 臨時地下炸藥庫。



**Part C (PERMIT CONDITIONS)**

**1. General Conditions**

- 1.1 The Permit Holder and any person working on the Project shall comply with all conditions set out in this Permit. Any non-compliance by any person may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap. 499) and may become the subject of appropriate action being taken under the Ordinance.
- 1.2 The Permit Holder shall ensure full compliance with all legislation from time to time in force including but without limitation the Noise Control Ordinance (Cap. 400), Air Pollution Control Ordinance (Cap. 311), Water Pollution Control Ordinance (Cap. 358), Waste Disposal Ordinance (Cap. 354), Occupational Safety and Health Ordinance (Cap. 509), Factories and Industrial Undertakings Ordinance (Cap. 59) and Dangerous Goods Ordinance (Cap.295). This Permit does not of itself constitute any ground of defense against any proceedings instituted under any legislation.
- 1.3 The Permit Holder shall make copies of this Permit together with all documents referred to in this Permit or the documents referred to in Part A of the Permit readily available at all times for inspection by the Director or his authorised officers at all sites/offices covered by this Permit. Any reference to the Permit shall include all documents referred to in the Permit and also the relevant documents in the Register.
- 1.4 The Permit Holder shall give a copy of this Permit to the person(s) in charge of the site(s) and ensure that such person(s) fully understands all conditions and all requirements incorporated by the Permit. The site(s) refers to site(s) of construction and operation of the Project and shall mean the same hereafter.
- 1.5 The Permit Holder shall display conspicuously a copy of this Permit on the construction site(s) at all vehicular site entrances/exits or at a convenient location for public's information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the construction site(s).
- 1.6 The Permit Holder shall construct and operate the Project in accordance with the project descriptions in Part B of this Permit.
- 1.7 The Permit Holder shall ensure that the Project is designed, constructed and operated in accordance with the information and all recommendations described in the EIA Report (Register No.: AEIAR



126/2008), the application documents including all attachments (Application No. AEP-313/2008), the Applications for Variation of Environmental Permit including all attachments submitted by the Permit Holder, other relevant documents in the Register; and the information or mitigation measures described in this Permit, and mitigation measures to be recommended in submissions that shall be deposited with or approved by the Director as a result of permit conditions contained in this Permit, and mitigation measures to be recommended under on going surveillance and monitoring activities during all stages of the Project. Where recommendations referred to in the documents of the Register are not expressly referred to in this Permit, such recommendations are nevertheless to be implemented unless expressly excluded or impliedly amended in this Permit.

- 1.8 All deposited submissions, as required under this Permit, shall be rectified and resubmitted in accordance with the comments, if any, made by the Director within one month of the receipt of the Director's comments or otherwise as specified by the Director.
- 1.9 All submissions approved by the Director, all submissions deposited without comments by the Director, and all submissions rectified in accordance with comments by the Director under this Permit shall be construed as part of the permit conditions described in Part C of this Permit. Any variation of the submissions shall be approved by the Director in writing or as prescribed in the relevant permit conditions. Any non-compliance with the submissions may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap. 499). All submissions or any variation of the submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC) referred to in Conditions 2.1 and 2.2 below, before submitting to the Director under this Permit.
- 1.10 The Permit Holder shall release all finalised submissions as required under this Permit, to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office, or in any other places, or any internet websites as specified by the Director, or by any means as specified by the Director, for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of the submissions.
- 1.11 The Permit Holder shall notify the Director in writing the commencement date of construction of the Project no later than one month prior to the commencement of construction of the Project. The Permit Holder shall notify the Director in writing immediately if there is any change of the commencement date of the construction.
- 1.12 All submissions to the Director required under this Permit shall be delivered either in person or by registered mail to the Environmental Impact Assessment Ordinance Register Office (currently at 27/F, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong). Electronic copies of all finalised submissions required under this Permit shall be prepared in Hyper Text Markup Language (HTML)



(version 4.0 or later) and in Portable Document Format (PDF version 1.3 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hardcopies.

- 1.13 For the purpose of this Permit, “commencement of construction” does not include works related to site clearance and preparation, or other works as agreed by the Director.
- 1.14 The Permit Holder shall notify the Director in writing the commencement date of operation of the Project no later than one week prior to the commencement of operation of the Project. The Permit Holder shall notify the Director in writing immediately if there is any change of the commencement date of the operation.

**2. Special Conditions**

**Submissions or Measures before Commencement of Construction of the Project**

- 2.1 An Environmental Team (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 Independent Environmental Checker (IEC) for the Project. The ET shall be headed by an ET Leader. 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 ET and the ET Leader shall be responsible for the implementation of the EM&A programme in accordance with the EM&A requirements as contained in the EM&A Manual of the Project. The ET Leader shall keep a contemporaneous log-book of each and every instance or circumstance or change of circumstances, which may affect the compliance with the recommendations of the EIA Report (Register No. AEIAR-126/2008) and this Permit. The ET Leader shall notify the IEC within one working day of the occurrence of any such instance or circumstance or change of circumstances. The ET Leader’s log-book shall be kept readily available for inspection by all persons assisting in supervision of the implementation of the recommendations of the EIA Report (Register No. AEIAR-126/2008) and this Permit or by the Director or his authorized officers. Failure to maintain records in the log-book, failure to discharge the duties of the ET Leader as defined in the EM&A Manual or failure to comply with this Condition would entitle the Director to require the Permit Holder by notice in writing to replace the ET Leader. Failure by the Permit Holder to make replacement, or further failure to keep contemporaneous records in the log-book despite the employment of a new ET Leader may render the Permit liable to suspension, cancellation or variation.
- 2.2 An Independent Environmental Checker (IEC) shall be employed by the Permit Holder no later than one month before commencement of construction of the Project. The IEC shall not be in any way an associated body of the Contractor or the ET for the Project. The IEC shall be a person who has at least 7 years of experience in EM&A or environmental management. The IEC shall be responsible



for duties defined in the EM&A Manual and shall audit the overall EM&A performance, including the implementation of all environmental mitigation measures, submissions required in the EM&A Manual, and any other submissions required under this Permit. In addition, the IEC shall be responsible for verifying the environmental acceptability of permanent and temporary works, relevant design plans and submissions under this Permit. The IEC shall verify the log-book(s) mentioned in Condition 2.1 of this Permit. The IEC shall notify the Director by fax, within one working day of receipt of notification from the ET Leader of each and every occurrence, change of circumstances or non-compliance with the EIA Report (Register No. AEIAR-126/2008) and this Permit, which might affect the monitoring or control of adverse environmental impacts from the Project. In the case where the IEC fails to so notify the Director of the same, fails to discharge the duties of the IEC as defined in the EM&A Manual or fails to comply with this Condition, the Director may require the Permit Holder by notice in writing to replace the IEC. Failure to replace the IEC as directed or further failure to so notify the Director despite employment of a new IEC may render the Permit liable to suspension, cancellation or variation. Notification by the Permit Holder is the same as notification by the IEC for the purpose of this Condition.

- 2.3 The Permit Holder shall, no later than two weeks before the commencement of construction of the Project, inform the Director in writing the management organization of the main construction companies and/or any form of joint ventures associated with the construction of the Project. The submitted information shall include at least an organization chart, names of responsible persons and their contact details.
- 2.4 The Permit Holder shall, no later than two weeks before the commencement of construction of the Project, deposit with the Director six hard copies and one electronic copy of the construction programme showing the commencement and completion dates of major items of construction works, including dates of taking possession of and subsequent exit from Works Area B. The construction programme shall be certified by the ET Leader and verified by the IEC as conforming to the information, requirements and recommendations set out in the approved EIA report (Register No. AEIAR-126/2008). The Permit Holder shall inform the Director accordingly in writing in case of any subsequent changes of items contained in this submitted construction programme.
- 2.5 The Permit Holder shall appoint a Certified Arborist for the Project to advise on, monitor and ensure proper implementation of measures for protecting trees affected by the Project, in particular the tree walls and registered Old and Valuable Trees around Forbes Street Temporary Playground and King George V Memorial Park and the trees to be transplanted.
- 2.6 The Permit Holder shall set up Community Liaison Groups comprising representatives of concerned and affected parties, including owners' corporations, management offices, local committees and schools in the affected areas, to facilitate communication, enquiries and complaints handling on all



environmental issues, including the follow up on the implementation of remedial mitigation measures, and other initiatives by the Permit Holder such as Indirect Technical Remedy in the form of upgraded glazing and air conditioning for eligible dwellings affected by construction air-borne noise impact, as well as any need for real time noise monitoring and web camera monitoring. The Permit Holder shall notify the Director the date of setting up the Community Liaison Groups at least 2 weeks before commencement of construction of the Project. A designated complaint hotline shall also be set up for the Project to address such concerns and complaints in an efficient manner.

2.7 The Certified Arborist appointed under Condition 2.5 shall no later than two weeks before the commencement of construction of the Project, deposit with the Director six (6) hard copies and one electronic copy of a Tree Protection Plan detailing the requirements and measures for the proper protection and monitoring of trees affected by the construction of the Project, including all Old and Valuable Trees within the Project boundary and the tree walls at Forbes Street Temporary Playground and King George V Memorial Park. The Tree Protection Plan shall also cover Works Area MA (magazine site) shown in Figure 2 and shall include:

- (i) detailed working method statement for the protection of retained trees;
- (ii) tree transplanting proposal including final location for transplanted trees that will be affected by the works and are trees of high to medium survival rate;
- (iii) compensatory tree planting proposal including location of trees planted as compensation to felled trees;
- (iv) water table monitoring proposal at Forbes Street Temporary Playground;
- (v) an audit report proposal on the tree protection activities to be implemented throughout the construction period

Before submission to the Director, the Tree Protection Plan shall be certified by the ET Leader and verified by the IEC as conforming to the information, requirements and recommendations as set out in the approved EIA report.

2.8 Prior to the commencement of construction work at Works Area MA (the magazine site), to protect the two individual plants, Hong Kong Pavetta (*Pavetta hongkongensis*), located within the footprint of proposed tunnel portal and access entrance from Works Area MA, shall be transplanted to a suitable nearby tall shrubland or woodland habitats. The transplantation shall be supervised by the Certified Arborist appointed under Condition 2.5. The existing trees and species of conservation importance (i.e. the two identified Silver-back Artocarpus, *Artocarpus hypargyreus*) located near the Works Area MA shall be fenced off and the trunk protected with hessian sacking as far as practicable prior to the commencement of construction work at Works Area MA.



2.9 The Tunnel Boring Machine (TBM) to be used in the Project shall be launched at Works Area N1 (Sai Woo Lane). If a different Works Area is proposed to be used as the TBM launching shaft, then the Permit Holder shall deposit six hard copies and an electronic copy of a TBM construction method statement with the Director no later than one month before commencement of the construction work at the launching shaft site. The TBM construction method statement shall review potential environmental issues specific to TBM construction using a launching shaft other than Works Area N1, such as construction stage air-borne noise impact, waste disposal and landscape and visual impacts at the TBM launching shaft site. Before submission to the Director, the TBM construction method statement shall be certified by the ET Leader and verified by the IEC as conforming to the information, requirements and recommendations in the approved EIA report.

**Submissions or Measures during Construction of the Project**

2.10 **Measures to Mitigation Construction Stage Air-Borne Noise Impacts**

2.10.1 The following measures shall be employed at specific works areas to mitigate construction noise impacts. If variations or other measure(s) not specified below is/are to be used as a result of discussions and agreements at the Community Liaison Groups set up under Condition 2.6, the Director shall be notified of such changes or alternative proposal through the EM&A mechanism under Condition 6.

Mitigation Measures (Details & timing to refer to approved EIA Report)	Works areas
Movable noise barrier shall be used for the following PME where practicable: Breaker, Mini Backhoe, Generator, Backhoe, Crane, Hand-held Vibratory Poker, Hydraulic Breaker, Wheel Loader, Crusher, Hand Held Breaker, Compressor, Grout Plant, Grout Mixer, Concrete Pump, Excavator, Lorry Crane, Mobile Crane, Crawler Crane.	Works areas A, C, D, H, I, J, J1, L1, M1, N1, M3, O1, O2 and O3
Noise enclosure / acoustic shed shall be used for the following PMEs where practicable: Air Compressor Concrete Pump, Shotcrete Pump, Hand Held Breaker, Grout Pump, Concrete Corer.	All works areas
Acoustic Enclosure shall be used for enclosing the rock drill as fully as possible.	Works areas H, N1 and M
Noise insulating cover shall be used to cover the following PME: Breaker, Backhoe, Submersible Electric Water Pump, Crawler	Works areas J1, N1, M1 and M3



Mounted Rock Drill Trucks, Rock drill, Air Compressor, Electric Winch, Concrete pump, Hand-held Vibratory Poker, Hand Held Breaker, Crane, Shotcrete pump.	
Silencer shall be used for the ventilation fan.	Works areas MA, A, C, D, G, H, I, J, J1, J2, J3, L1, M, M1, M3, N1, O1, O2 and O3.
Noise insulating fabric shall be applied where practicable to cover the following PME: Pile Rig, Drill Rig, Pile Extractor, Power Rammer, Earth Auger Piling, Hydraulic Piling, Sheet Piling Machine.	Works areas A, A1, A2, A3 MA, C, D, G, H, I, J, J1, J2, J3, L1, M, M1, M3, N1, O1, O2 and O3.
Use of “Noise Control Curtain” - a noise insulating fabric to be mounted on the steel scaffold erected on the buildings to be demolished to an extent such that the line of sight between the noise source and NSR would be blocked.	Works area A
Temporary noise barriers shall be erected at the works areas of West of KET Station and SYP Entrance A1 & A2.	Works area C, as shown in Figures 8, 9 & 10, and Works Area N1
Decking over shall be provided to cover the excavation area.	Works areas J, J3, G and L1. Works Area C as shown in Figures 8, 9 & 10.
Full enclosure of entire works area.	Works area J2
Use of concrete crusher instead of hydraulic breaker.	Works area J2, M1 and M3
Soundproof cover as shown in Figure 11 shall be mounted on top of the construction shaft and fully enclosed during blasting.	Works area M3

2.11 **Submissions or Measures to Mitigate Construction Stage Cultural Heritage Impacts**

- 2.11.1 A qualified and licensed Archaeologist shall be appointed to conduct an Archaeological Watching Brief (AWB), based on methodology in Annex A in Appendix 6.2 of the approved EIA Report, for excavation works in the Project. The Archaeologist shall deposit six hard copies and an electronic copy of the AWB Proposal with the Director no later than one month before commencement of





excavation works, detailing the inspection schedule and areas which require AWB. The Archaeologist shall present the procedures and result of the AWB, including all data, material and records forming the site archive, in an AWB Report to be deposited in six hard copies and an electronic copy with the Director within one month after completion of the AWB.

2.12 **Submissions or Measures for Construction Waste Management**

2.12.1 Six hard copies and an electronic copy of a Waste Management Plan (WMP) shall be deposited with the Director no later than two weeks prior to the commencement of construction of the Project to provide an overall framework for waste management and reduction. The WMP shall include detailed information such as estimated volume of different types of waste, e.g. construction and demolition (C&D) material and general refuse, generated from construction activities at various works areas of the Project at different times during the construction programme, in particular if the TBM launching shaft will not be located at Works Area N1, as well as the proper transportation, storage, and disposal methods and the final disposal sites for different wastes. All measures recommended in the deposited WMP shall be fully and properly implemented.

2.13 **Measures to Mitigate Construction Water Quality Impact**

2.13.1 There shall be no reclamation work for the Project.

2.14 **Measures to Mitigate Landscape & Visual Impacts at Extended Works Area I**

2.14.1 Only one tree, tree no. BT 94, Ficus microcarpa, on the masonry wall is allowed to be felled in extended Works Area I, as shown in Figures 6 & 7.

2.14.2 The felled tree no. BT 94 shall be compensated by planting 20 no. of heavy standard trees. The locations and species of compensatory trees and shrubs, including any subsequent changes, shall be incorporated in the Tree Protection Plan deposited under Condition 2.7.

2.14.3 The location of soil nails shall be adjusted on site to avoid and minimize any disturbance to tree trunks and tree roots of existing trees in extended Works Area I. Tree protection measures and monitoring for all trees retained at extended Works Area I shall be carried out in accordance with the Tree Protection Plan deposited under Condition 2.7 to prevent them from being damaged by construction works.

2.15 **Special Conditions pertaining to Blasting at Works Area M3**

2.15.1 Not used.

2.15.2 Blasting shall be carried out between 0700 to 1900 hours and outside the school hours of Bonham Road Government Primary School (BRGPS).

- 2.15.3 At least 48 hours before each blast, advance notice shall be served to BRGPS, the Methadone Clinic and the building management offices of Bon-Point and Kam Ning Mansion, the locations of which are shown in Figure 12.
- 2.15.4 To mitigate air quality impact during and after blasting (including impacts from dust, fumes and smokes), the following measures shall be implemented:
- (a) Not used.
  - (b) A sprinkler system as shown in Figure 11 shall be installed in the shaft under the soundproof cover. The sprinkler system shall start immediately after the blast and be operated for at least 30 minutes to allow sufficient time for dust settling.
  - (c) The exhaust outlet of ventilation system shall be provided with dust filter and shall point away from any air sensitive uses. The ventilation system shall be stopped immediately before each blast and remain switched off for at least 30 minutes to allow sufficient time for dust settling.

### 3. Special Conditions pertaining to Works Area B

#### 3.1 Entry to, taking possession of, or commencing temporary use of Works Area B

3.1.1 Demolition and clearance work is being carried out by others in Work Area B, the location of which is shown in Figure 2 covering all existing chimneys, buildings and ancillary structures above the existing concrete ground slab in the Works Area B, and also including the removal of asbestos containing materials and dioxin/furan contaminated wastes within the Works Area B, and the remediation and disposal of wastes contaminated by Dioxins and/or Furans. The following conditions shall be complied with prior to the Permit Holder's entry to or taking possession of Works Area B :

- (a) At least two weeks before the Permit Holder's entry to or taking possession of Works Area B, the Permit Holder shall deposit with the Director six hard copy and an electronic copy of a detailed updated Project programme, to be accompanied by layout plans with detailed descriptions and drawings of mitigation measures in scale of 1:1000 or in other suitable scale as agreed by the Director, showing clearly the relevant works and/or temporary uses in Works Area B of the Project. The works and/or temporary uses in Works Area B of Project shall be implemented according to the updated programme.
- (b) Six hard copies and one electronic copy of Remediation Report shall be deposited with the Director after the completion of the remediation and disposal of contaminated soil and wastes at Works Area B. The Remediation Report shall demonstrate that the remediation and disposal work has been undertaken according to the specified methodology and has been shown to be adequate. The Remediation Report shall be submitted at least one month before the Permit Holder's entry to or taking possession of Works Area B.



3.1.2 The following conditions shall be complied with after the Permit Holder's entry to or taking possession of Works Area B, but before commencing temporary uses, which shall be limited to site office, storage of common construction materials, workshops, welfare facilities, receiving & stockpiling area for excavated spoil, loading point for spoil barges, landing & storage area for pre-cast tunnel lining segments and rock crushing:

- (a) An Independent Structural Checker (ISC) shall be appointed by the Permit Holder no later than one month before commencing temporary use of Works Area B. The ISC shall be a person with at least 7 years' experience in structural engineering design or structural engineering project management. The ISC shall not be in any way an associated body of the Contractor or the Permit Holder for the Project.
- (b) At locations within the Works Area B identified to be temporarily used as mentioned in Condition 3.1.2 above, an additional concrete paving of not less than 200 mm thickness shall be provided. The indicative extent and details of this additional concrete paving shall be provided in accordance with the Figures 14 and 15 of this Permit. For areas marked in red in Figure 14, additional concrete paving is to be provided on top of the existing concrete paving. For areas marked in green in Figure 14 to make up for level differences in the existing concrete paving, a layer of general fill material is to be introduced between the additional concrete paving and the existing concrete paving, as indicated in Figure 13 Detail B. Six hard copies and an electronic copy of the report shall be deposited with the Director by the ISC, who shall certify the structural adequacy of the concrete pavement design, as proposed in Figure 13 Detail B and Figures 14 & 15, so that the soil underneath will not be disturbed or exposed due to the temporary use of Works Area B as mentioned in Condition 3.1.2 above.

**3.2 Measures to be implemented and/or maintained during temporary use of Works Area B**

3.2.1 The Permit Holder shall not use or carry out any activity in Works Area B other than the site office and storage of common construction materials as well as workshops, welfare facilities, receiving & stockpiling area for excavated spoil, loading point for spoil barges, landing & storage area for pre-cast tunnel lining segments and rock crushing.

3.2.2 Throughout the entire period of temporary use of Works Area B, the additional concrete paving to avoid exposing the contaminated soil underneath shall remain intact and shall not be demolished. Within 7 days, and every month thereafter, of the start of temporary use of Works Area B as mentioned in Condition 3.2.1 above, inspection shall be carried out on the condition of the additional concrete paving, the site drainage and the foul sewerage systems to identify, with the view to repair/remedy, any surface cracks such that the structural integrity of these systems is maintained and the soil underneath will not be disturbed or exposed as far as practicable.



- 3.2.3 To allow natural air dispersion of any entrapped vapour contaminants that might be released from the soil and groundwater, the site office to be erected in the Works Area B shall be properly designed and constructed to create and maintain a clear void of at least 500 mm height between the underside of the site office floor and the top of the additional concrete paving below. The indicative design is shown in Figure 13 of this Permit.
- 3.2.4 To further safeguard against seepage of any vapour contaminants into site offices from the soil and groundwater, the site office to be erected in the Works Area B shall be properly designed and constructed to incorporate gas-resistant membranes flooring. The indicative design is shown in Figure 13 of this Permit.
- 3.2.5 All the temporary uses of Works Area B, including any associated additional site drainage and/or foul sewerage works, shall not involve any excavation work that may disturb or expose any part of the soil underneath the existing concrete slab and the additional concrete paving.
- 3.2.6 Existing site hoardings shall be maintained and/or new site hoardings shall be erected around the works area. These site hoardings shall be properly maintained, complete and intact surrounding the site at all times during temporary use of Works Area B to restrict access of trespassers in order to protect the trespassers from the contaminated soil and groundwater in the works area.
- 3.2.7 Mitigation measures as follow-on to previous demolition & remediation work / to prevent release of contaminants from the soil:
- (a) use adequately designed and maintained perimeter channels, sediment traps, temporary channels, temporary diversion and oil interception facilities to mitigate site run-off impacts;
  - (b) divert all clean surface water around Works Area B;
  - (c) provide bunded areas for generators, and for storage of fuel, oil and chemical wastes; and
  - (d) the provision of mitigation measures to avoid any potential release of additional underground contaminants into the environment resulting from the temporary use of Works Area B as mentioned in Condition 3.2.1 above, and the provision of mitigation measures to avoid impacts on workers on Works Area B and the general public nearby, including residents and passers-by.
- 3.2.8 To monitor any possible migration of contaminants beneath and across the additional concrete paving, regular soil monitoring shall be conducted at 3-month intervals. The indicative locations of monitoring cells are shown in Figure 14 of this Permit. The soil monitoring results shall be certified by the ET Leader and verified by the IEC, and shall be included in the EM&A reports submitted under Condition 6.4 below.



**3.3 Exit from, handing over, or ceasing temporary use of Works Area B**

3.3.1 Prior to the Permit Holder's exit from, handing over, or ceasing temporary use of Works Area B, the Permit Holder shall completely remove from Works Areas B:

- (a) the additional concrete paving and the layer of general fill material within the areas as marked in green and red as shown in Figure 14 of this Permit; and
- (b) the temporary site office and facilities for other temporary uses mentioned in Condition 3.2.1 above.

The site hoardings shall not be removed but shall be properly maintained, complete and intact surrounding the site at all times during the Permit Holder's exit from, handing over, or ceasing temporary use of Works Area B.

3.3.2 The Permit Holder shall, no later than 4 months before commencement of removal of the additional concrete paving and the layer of general fill material mentioned in Condition 3.1.2(b) above, submit to the Director for approval six hard copies and one electronic copy of a Removal Plan. The Removal Plan shall include:

- (a) a Sampling and Testing proposal for the general fill material, to be implemented at no less than 15 sampling points, the indicative locations of which are shown in Figure 14. The proposal shall confirm the exact number and location of sampling points and the details of the contaminants of concern to be included in the general fill material sampling and testing programme, making reference to Appendix A of this Permit and where appropriate update;
- (b) a programme for the submission of the Sampling and Testing Report (STR) and the submission of a Remediation Action Plan (RAP) in the event that the STP found contamination in the sampled general fill material; and
- (c) a detailed Method Statement for the removal, temporary storage and treatment if necessary, and disposal of the additional concrete paving and general fill material, and an event and action plan for ensuring structural integrity of the existing concrete paving throughout the removal process.

Before submission to the Director, the above submissions shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the VEP Application Document (No. VEP-333/2010).

3.3.3 Prior to the Permit Holder's exit from, handing over, or ceasing temporary use of Works Area B and upon completion of removal of all facilities for temporary uses mentioned in Condition 3.2.1 above and the additional concrete paving with or without general fill material underneath within the areas as indicated in green and red in Figure 14, an inspection shall be carried out on the condition of the existing concrete paving, the site drainage and the foul sewerage systems to identify, with the view



to repair/remedy, any surface cracks such that the structural integrity of these systems is maintained and the soil underneath will not be disturbed or exposed as far as practicable. The Permit Holder shall deposit with the Director six hard copies and one electronic copy of a record of the inspection and any repair/remedy work performed to the existing concrete paving, the site drainage, the foul sewerage systems and the site hoardings at least two weeks prior to the Permit Holder's exit from, handing over, or ceasing temporary use of Works Area B.

**4. Submissions or Measures before Commencement of Operation of the Project**

**4.1 Submissions or Measures for Operation Stage Ground-Borne Noise Impacts**

4.1.1 All the tracks for the Project shall be underground.

4.1.2 Unless otherwise approved by the Director subject to the submission of a detailed proposal, the operation details given below shall be adopted:

In accordance with the approved EIA Report and other relevant documents on the Register, only Metro-Cammell (M-stock) trains, C-stock trains, K-stock trains or Q-stock trains shall be deployed in the Project, subject to full and proper implementation of the measures, if any, recommended in the noise performance test report deposited under Condition 4.1.6 below. The maximum nighttime (23:00 hour to 07:00 hour) train frequency operating in the Project shall be limited to 10 trains per 30 minutes in each direction. The total length of the trains shall not be longer than 200m.

4.1.3 Types and locations of rail tracks shall be installed as shown in Appendix B and Figures 16 of this Permit.

4.1.4 Within one month after the completion of installing the tracks, the Permit Holder shall deposit six sets of hard copy and an electronic copy of as-built drawing(s) for the operation ground-borne noise mitigation measures, including the Rail tracks mentioned in Condition 4.1.3 above. The drawing(s) shall be certified by the ET Leader and verified by the IEC to confirm that the length of track types are installed in accordance with the locations specified in Appendix B and Figure 16 of this Permit.

4.1.5 Six months prior to the operation of the Project, the Permit Holder shall submit to the Director for approval six (6) sets of hard copy and an electronic copy of noise performance test proposal. The noise performance test proposal shall include key sensitive receivers, including domestic premises, to illustrate that the operation of the Project meets the operational ground borne noise criteria in the Approved EIA Report. Before submission to the Director, the noise performance test proposal shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the Approved EIA Report.



4.1.6 Two months prior to the operation of the Project, the Permit Holder shall carry out the noise performance test in accordance with the approved noise performance test proposal and deposit with the Director six (6) sets of hard copy and an electronic copy of the noise performance test report, on the basis of Condition 4.1.4. Before submission to the Director, the noise performance test report shall be certified by the ET Leader and verified by the IEC. All measures as recommended in the noise performance test report, if any, shall be fully and properly implemented.

#### **4.2 Submissions or Measures for Operation Stage Landscape and Visual Impacts**

4.2.1 Six hard copies and an electronic copy of an aesthetic landscape and architectural proposal shall be deposited with the Director no later than three (3) months before commencement of operation of the Project. The proposal shall include details of landscape and architectural design of station entrances, vent shafts and other above ground structures to show that the elements have been sensitively designed in colour, texture and tonal quality to be compatible with the existing urban context and minimize the landscape and visual impacts. Tree planting, roof greening and vertical greening may be applied where space, operation and maintenance requirements can be met. Where applicable, the proposal shall state how the discussions and agreements at the Community Liaison Groups set up under Condition 2.6 have been incorporated. The recommendations of the proposal shall be fully and properly implemented.

4.2.2 At least one month before the Project commences operation, six (6) sets of hardcopy and an electronic copy of an audit report on the implementation of recommendations in the Tree Protection Plan and detailed landscape as-built drawing(s) showing the final locations of tree plantings shall be deposited with the Director to demonstrate compliance with the deposited submissions under Condition 2.7. This final set of as-built submission(s) shall be certified by the ET Leader and verified by the IEC to demonstrate that the requirements and recommendations in the deposited submissions under Condition 2.7 is fulfilled.

#### **5. Submissions during Operation of the Project**

##### **5.1 Submission for Operation Visual and Landscape Impact**

5.1.1 The Permit Holder shall consult relevant government departments including Leisure and Cultural Services Department and Planning Department on the reprovisioning/restoration of the public open space affected by the Project. The Permit Holder shall deposit with the Director six hard copies and an electronic copy of the record of the public open space reprovisioning/restoration.

#### **6. Environmental Monitoring and Audit Requirements**

6.1 The EM&A programme shall be implemented in accordance with the procedures and requirements as set out in the approved EM&A Manual. Any changes to the programme shall be justified by the

ET Leader and verified by the IEC as conforming to the information and requirements contained in the EM&A Manual before submission to the Director for approval. The EM&A programme shall include, among other items, the following :

- (i) ground-borne construction noise monitoring shall be conducted for TMB tunneling work. The monitoring locations shall be above the cutting face of the TBM, and shall be located as close to the cutting face as practicable, in accordance with the requirements in the approved EM&A Manual;
- (ii) construction vibration monitoring shall be conducted at Declared Monuments, Graded Historic Buildings or other Built Heritage Resources within the Project boundary as identified in the approved EIA Report and reported in accordance with the requirements of the approved EM&A Manual; and
- (iii) ground water table monitoring shall be conducted on a weekly basis at Forbes Street as a precautionary measure against possible impact on tree walls at Forbes Street Temporary Playground due to the potential groundwater drawdown induced by tunneling work. The monitoring work and the provision of recharge wells, if any, shall be in accordance with the requirements of the approved EM&A Manual.

6.2 Samples, measurements and necessary remedial actions shall be taken in accordance with the requirements of the EM&A Manual by:

- (a) conducting baseline environmental monitoring;
- (b) conducting impact monitoring;
- (c) carrying out remedial actions described in Event/Action Plans of the approved EM&A Manual in accordance with the time frames set out in Event/Action Plans, or as agreed by the Director, in case where specified criteria in the approved EM&A Manual are exceeded; and
- (d) logging and keeping records of details of (a) to (c) above for all parameters within 3 working days of collection of data or completion of remedial action(s), for the purpose of preparing and submitting the monthly EM&A Reports and to make available for inspection on site.

6.3 Six (6) hard copies and one electronic copy of the Baseline Monitoring Report shall be submitted to the Director at least one month before commencement of construction of the Project. The submission shall be certified by the ET Leader and verified by the IEC. Additional copies of the submission shall be made available to the Director upon his request.

6.4 Six (6) hard copies and one electronic copy of monthly EM&A Report shall be submitted to the Director within 10 working days after the end of the reporting month. The EM&A Reports shall include a summary of all non-compliance (exceedances) of the environmental quality performance





limits (Action and Limit Levels). The submissions shall be verified by the IEC. Additional copies of the submission shall be provided to the Director upon request by the Director.

- 6.5 All environmental monitoring and audit data submitted under this Permit shall be true, valid and correct.

7. **Electronic Reporting of EM&A Information**

7.1 To facilitate public inspection of the Baseline Monitoring Report and monthly EM&A Reports via the EIAO Internet Website and at the EIAO Register Office, electronic copies of these Reports shall be prepared in Hyper Text Markup Language (HTML) (version 4.0 or later) and in Portable Document Format (PDF version 1.3 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hardcopies as described in Condition 6 of this Permit. For the HTML version, a content page capable of providing hyperlink to each section and sub-section of these Reports shall be included in the beginning of the document. Hyperlinks to all figures, drawings and tables in these Reports shall be provided in the main text from where the respective references are made. All graphics in these Reports shall be in interlaced GIF format unless otherwise agreed by the Director. The content of the electronic copies of these Reports must be the same as the hardcopies.

7.2 The Permit Holder shall, set up a dedicated web site and notify the Director in writing the Internet address where the environmental monitoring and project data is to be placed, within six weeks after the commencement of construction of the Project. All environmental monitoring data described in Condition 6 above shall be made available to the public via a dedicated web site to be set up by the Permit Holder in the shortest possible time and in no event later than 2 weeks after the relevant environmental monitoring data are collected or become available, unless otherwise agreed with the Director.

7.3 The Internet website as described in Condition 7.2 above shall enable user-friendly public access to the monitoring and project data including the approved EIA report and the environmental permit(s) and the project profile of the Project. The Internet website shall have features capable of:

- (a) providing access to all environmental monitoring data collected since the commencement of works;
- (b) searching by date;
- (c) searching by types of monitoring data (noise, water and air quality); and
- (d) hyperlinks to relevant monitoring data after searching;

or otherwise as agreed by the Director.



Environmental Permit No. EP-313/2008/K  
環境許可證編號 EP-313/2008/K



**Notes :**

1. This Permit consists of three parts, namely, PART A (Main Permit), PART B (Description of Designated Project) and PART C(Permit Conditions). Any person relying on this permit should obtain independent legal advice on the legal implications under the Ordinance, and the following notes are for general information only.
2. If there is a breach of any conditions of this Permit, the Director or his authorized officer may, with the consent of the Secretary for the Environment, order the cessation of associated work until the remedial action is taken in respect of the resultant environmental damage, and in that case the Permit Holder shall not carry out any associated works without the permission of the Director or his authorized officer.
3. The Permit Holder may apply under Section 13 of the Ordinance to the Director for a variation of the conditions of this Permit. The Permit Holder shall replace the original permit displayed on the construction site by the amended permit.
4. A person who assumes the responsibility for the whole or a part of the designated project may, before he assumes responsibility of the designated project, apply under Section 12 of the Ordinance to the Director for a further environmental permit.
5. Under Section 14 of the Ordinance, the Director may with the consent of the Secretary for the Environment, suspend, vary or cancel this Permit. The suspended, varied or cancelled Permit shall be removed from display at the construction site.
6. If this Permit is cancelled or surrendered during construction or operation of the Project, another environmental permit must be obtained under the Ordinance before the Project could be continued. It is an offence under section 26(1) of the Ordinance to construct or operate a designated project listed in Part I of schedule 2 of the Ordinance without a valid environmental permit.
7. Any person who constructs or operates the Project contrary to the conditions in the Permit, and is convicted of an offence under the Ordinance, is liable:-
  - (i) on a first conviction on indictment to a fine of \$ 2 million and to imprisonment for 6 months;
  - (ii) on a second or subsequent conviction on indictment to a fine of \$ 5 million and to imprisonment for 2 years;
  - (iii) on a first summary conviction to a fine at level 6 and to imprisonment for 6 months;
  - (iv) on a second or subsequent summary conviction to a fine of \$1 million and to imprisonment for 1 year; and
  - (v) in any case where the offence is of a continuing nature, the court or magistrate may impose a fine of \$ 10,000 for each day on which he is satisfied the offence continued.
8. The Permit Holder may appeal against any condition of this Permit under Section 17 of the Ordinance within 30 days of receipt of this Permit.
9. The Notes are for general reference only and that the Permit Holder should refer to the EIA Ordinance for details and seek independent legal advice.



**Appendix A**

**Proposed Fill Testing Recommendations**

Remarks:

1. This table is produced according to Table 6.1 of the VEP application document (No. VEP-333/2010).
2. This table is to be read in conjunction with Condition 3.3.2 of this Permit.

<b>COCs</b>	<b>Recommended Test Method</b>	<b>Recommended Reporting Limit (mg/kg)</b>	<b>Acceptance Criteria (mg/kg)*</b>
Arsenic	USEPA 6020A	1 mg/kg	21.8
Barium		1 mg/kg	10,000
Cadmium		0.1 mg/kg	7.28
Copper		1 mg/kg	2,910
Molybdenum		1 mg/kg	364
Nickel		1 mg/kg	1,460
Zinc		20 mg/kg	10,000
Mercury		0.05 mg/kg	6.52
Chromium III	Subtracting CrVI from total Cr	1 mg/kg	10,000
Chromium VI	APHA 3500Cr: D	1 mg/kg	218
Naphthalene	USEPA 8270	0.5 mg/kg	85.6
<b>COCs</b>	<b>Recommended Test Method</b>	<b>Recommended Reporting Limit (mg/kg)</b>	<b>Acceptance Criteria (mg/kg)*</b>
Anthracene		0.5 mg/kg	10,000
Fluoranthene		0.5 mg/kg	2,270
Pyrene		0.5 mg/kg	1,710
Benzo(a)Pyrene		0.5 mg/kg	1.14
Benzene		0.2 mg/kg	2.79
Toluene		0.2 mg/kg	705
Ethylbenzene		0.2 mg/kg	298
m-Xylene		0.4 mg/kg	36.8
O-Xylene		0.4 mg/kg	36.8
TPH C6-C8**	USEPA 8015	50 mg/kg	545
TPH C9-C16**		50 mg/kg	1,330
TPH C17-C35**		100 mg/kg	10,000

\* Based on the "Rural Residential Landuse" recommended in the Risk-Based Remediation Goals promulgated in the EPD's (1) Guidance Note for Contaminated Land Assessment and Remediation, (2) Guidance Manual for Use of Risk-Based Remediation Goals for Contaminated Land Management.

\*\* Number of carbon in Total Petroleum Hydrocarbon



**Appendix B**  
**Operation Stage Ground-Borne Noise Mitigation Measures**  
**(Rail Track Types and Location)**

Remarks:

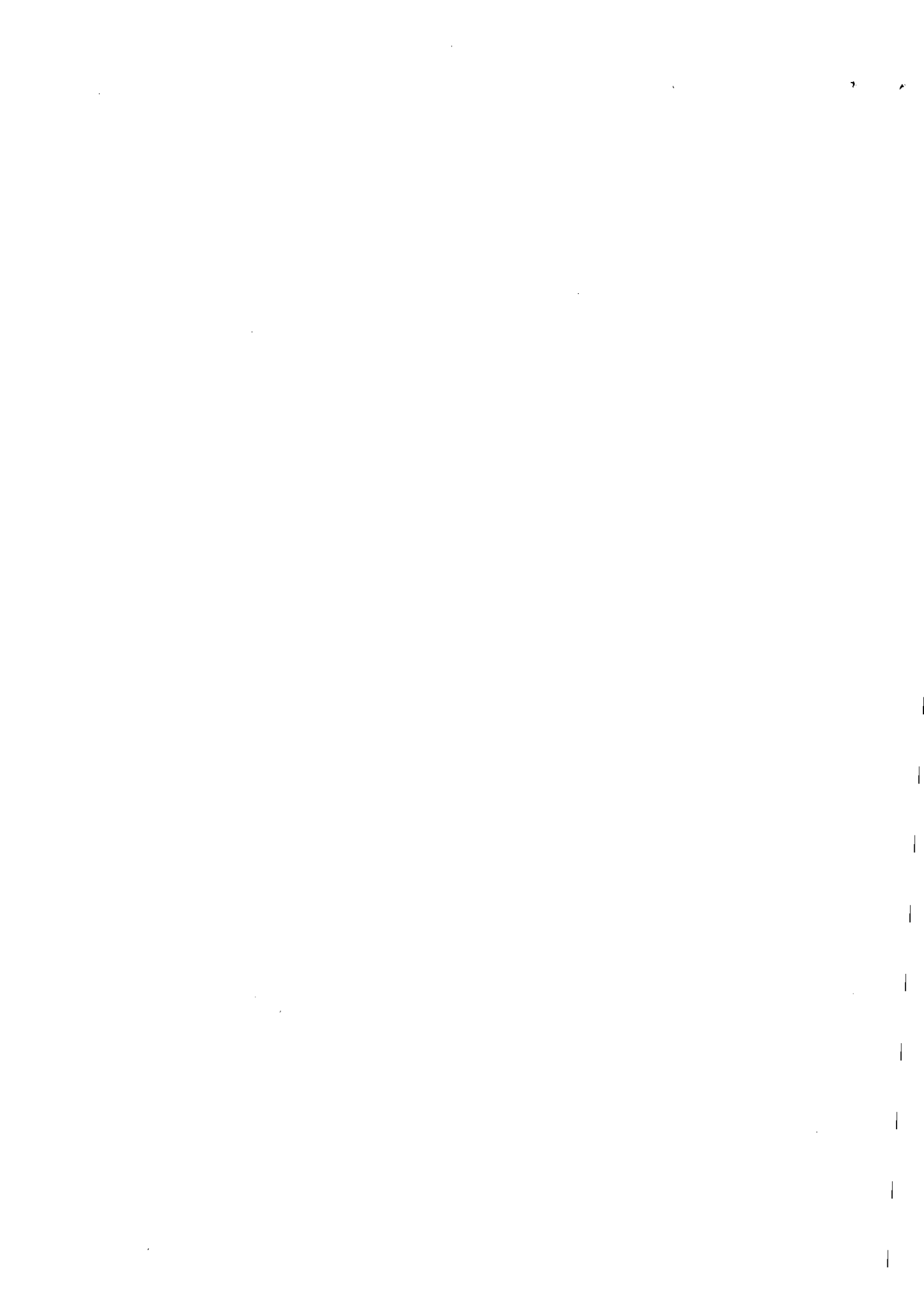
1. The chain-age indicated in this table is for reference only. Please refer to Figures 16 of this Permit for the extent of the ground-borne noise mitigation measures.

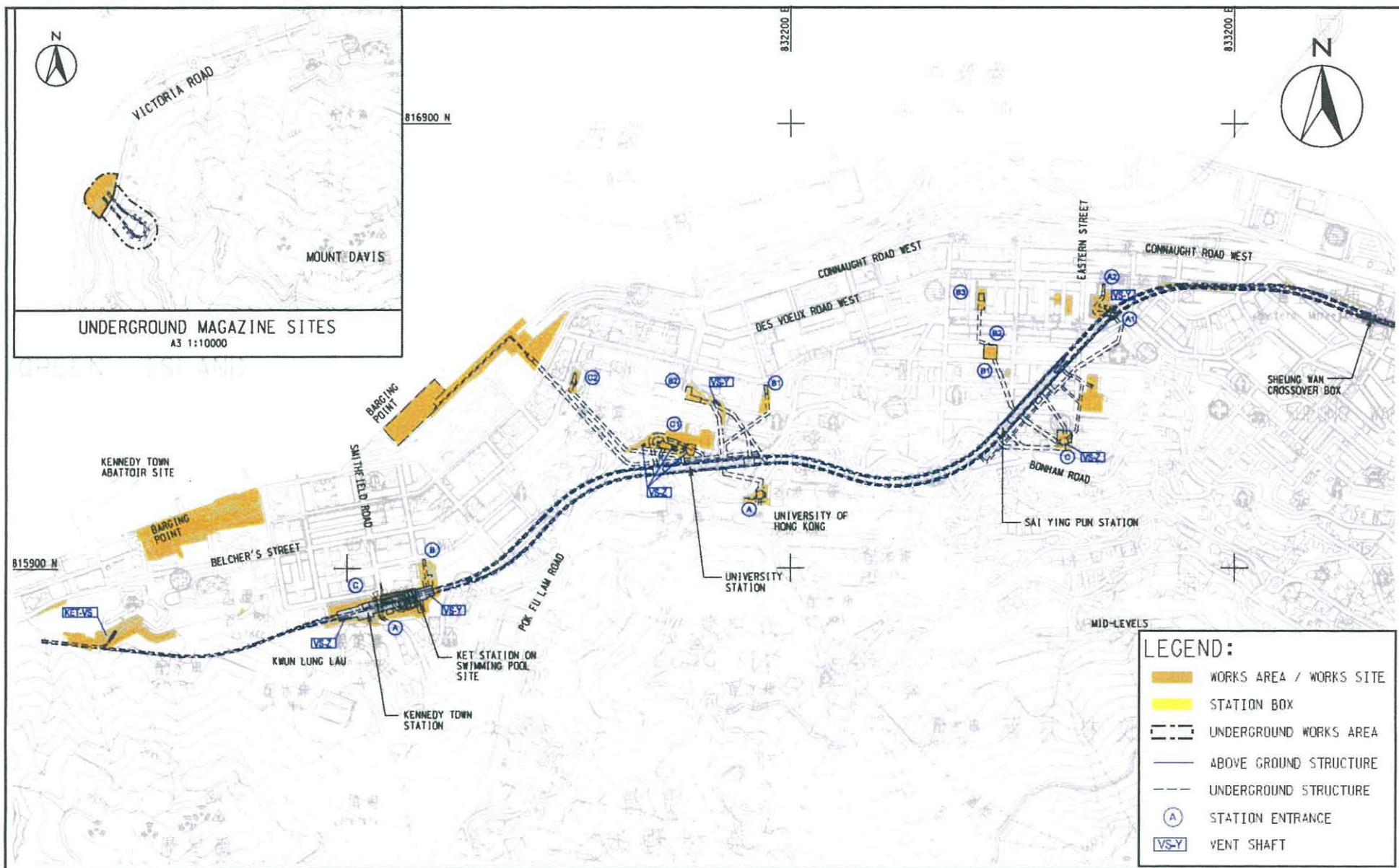
Track Direction	Chain-age (Approx.)	Type of Rail Track
Eastbound	97256 – 97764	MAB <sup>1</sup>
	97764 – 97820	Turnout <sup>2</sup>
	97820 – 98476	HAB <sup>3</sup>
	98476 – 99502	MAB
	99502 – 100206	HAB
	100206 – 100510	MAB
	100510 – 100579	Turnout
	100579 – 100611	MAB
Westbound	100628 – 100507	MAB
	100507 – 100467	Turnout
	100467 – 100210	MAB
	100210 – 99515	HAB
	99515 – 98352	MAB
	98352 – 97825	HAB
	97825 – 97769	Turnout

Note:

1. MAB – Medium Attenuation Baseplate trackform with stiffness of about 25kN/mm.
2. Turnout – a rail pad with stiffness of about 90kN/mm maximum, and a baseplate pad with stiffness in a range of about 26 to 36kN/mm.
3. HAB – High Attenuation Baseplate trackform with stiffness of about 13kN/mm.







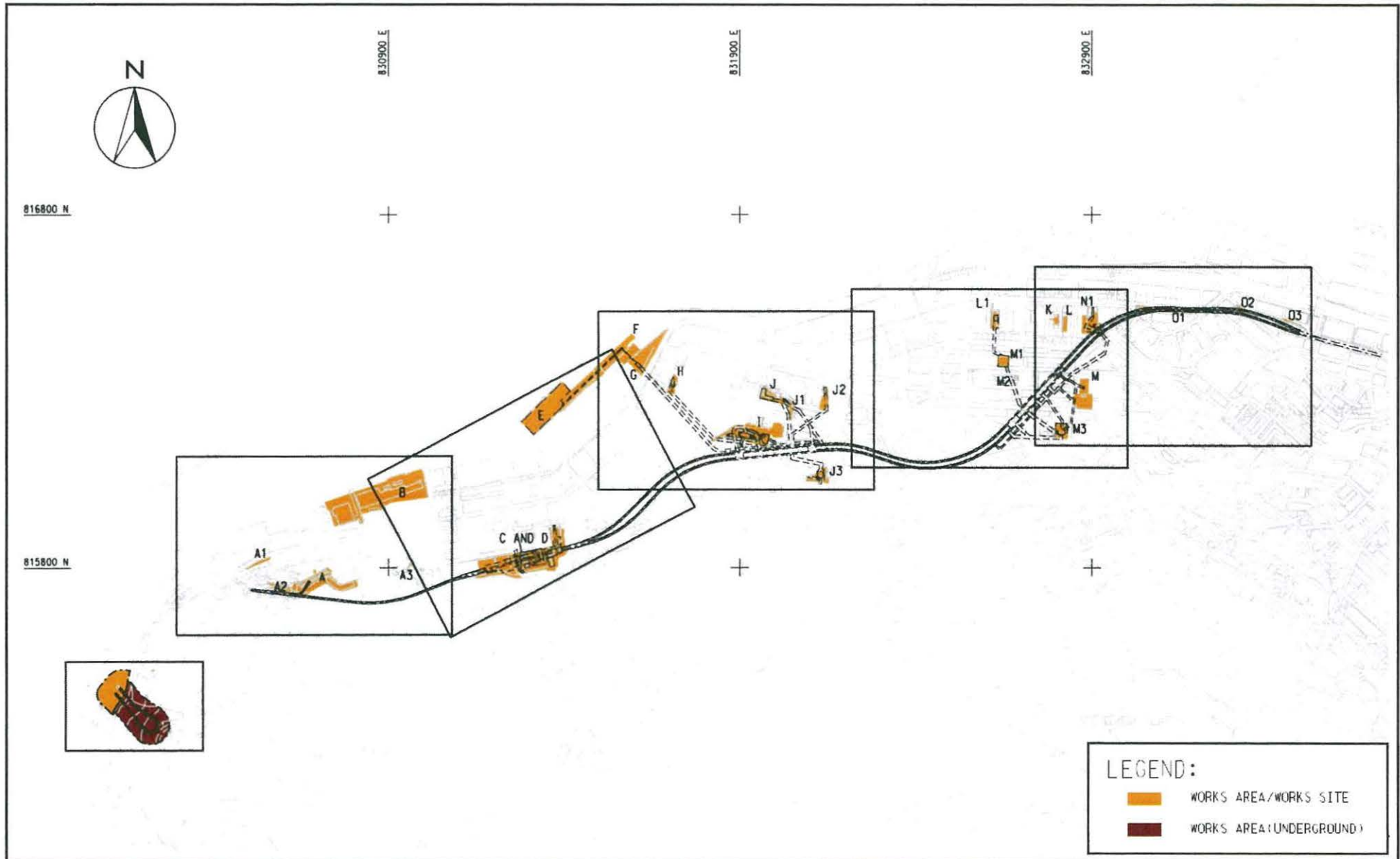
**Project Title: West Island Line**  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

**Figure 1: West Island Line Overall View**  
 圖 1: 西港島綫全綫示意圖

(This figure was prepared based on Figure 1.1 of the report submitted under VEP Application (Register No.: VEP-298/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-298/2009)所提交的報告圖1.1編制)





**Project Title: West Island Line**  
 工程項目名稱：西港島綫

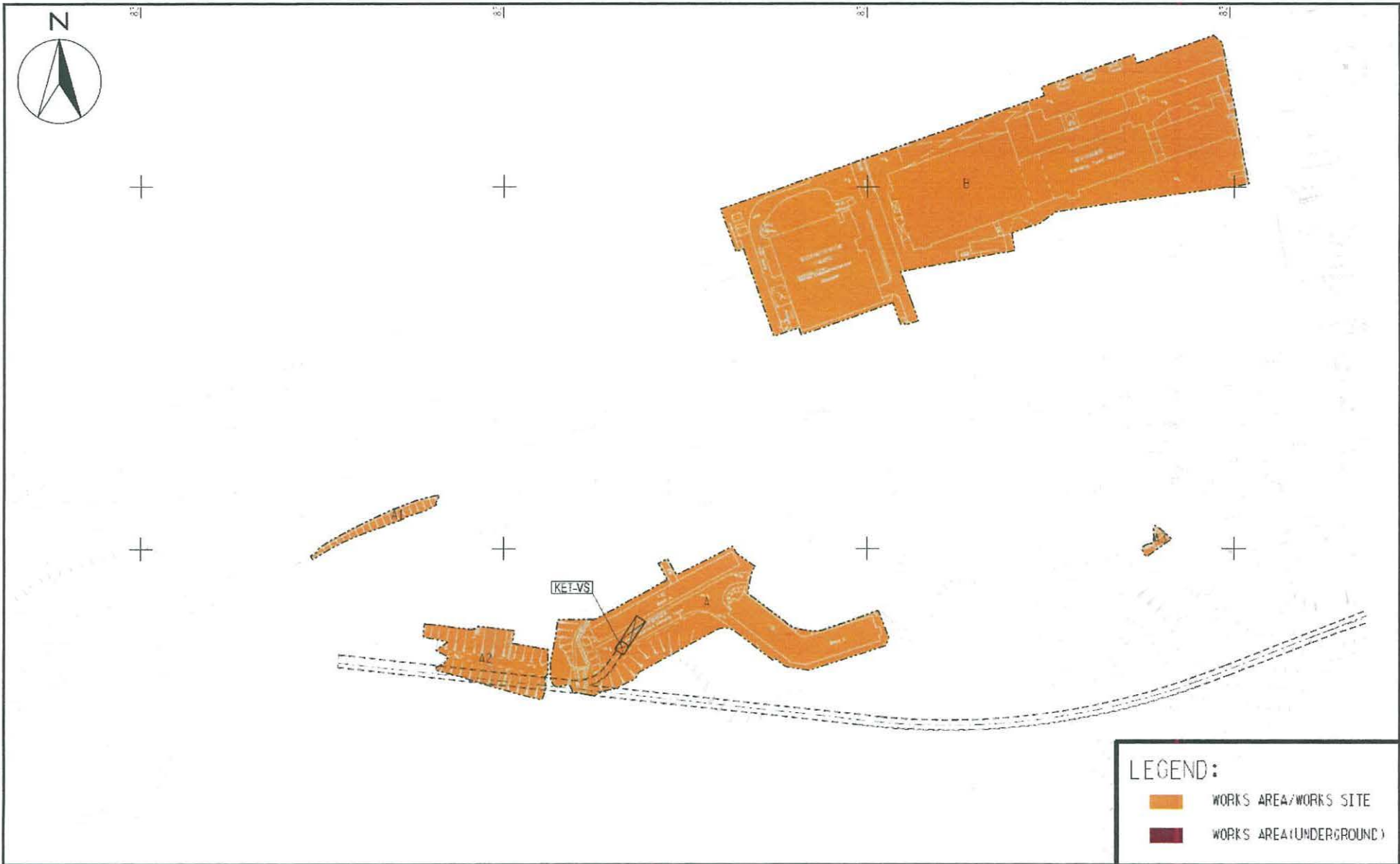
Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

**Figure 2: Major Ground Level Works Area / Works Sites – Key Plan**  
 圖 2: 主要地面施工區 / 工地 – 位置圖

(This figure was prepared based on Figure 1.2 of the report submitted under VEP Application (Register No.: VEP-298/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-298/2009)所提交的報告圖 1.2 編制)







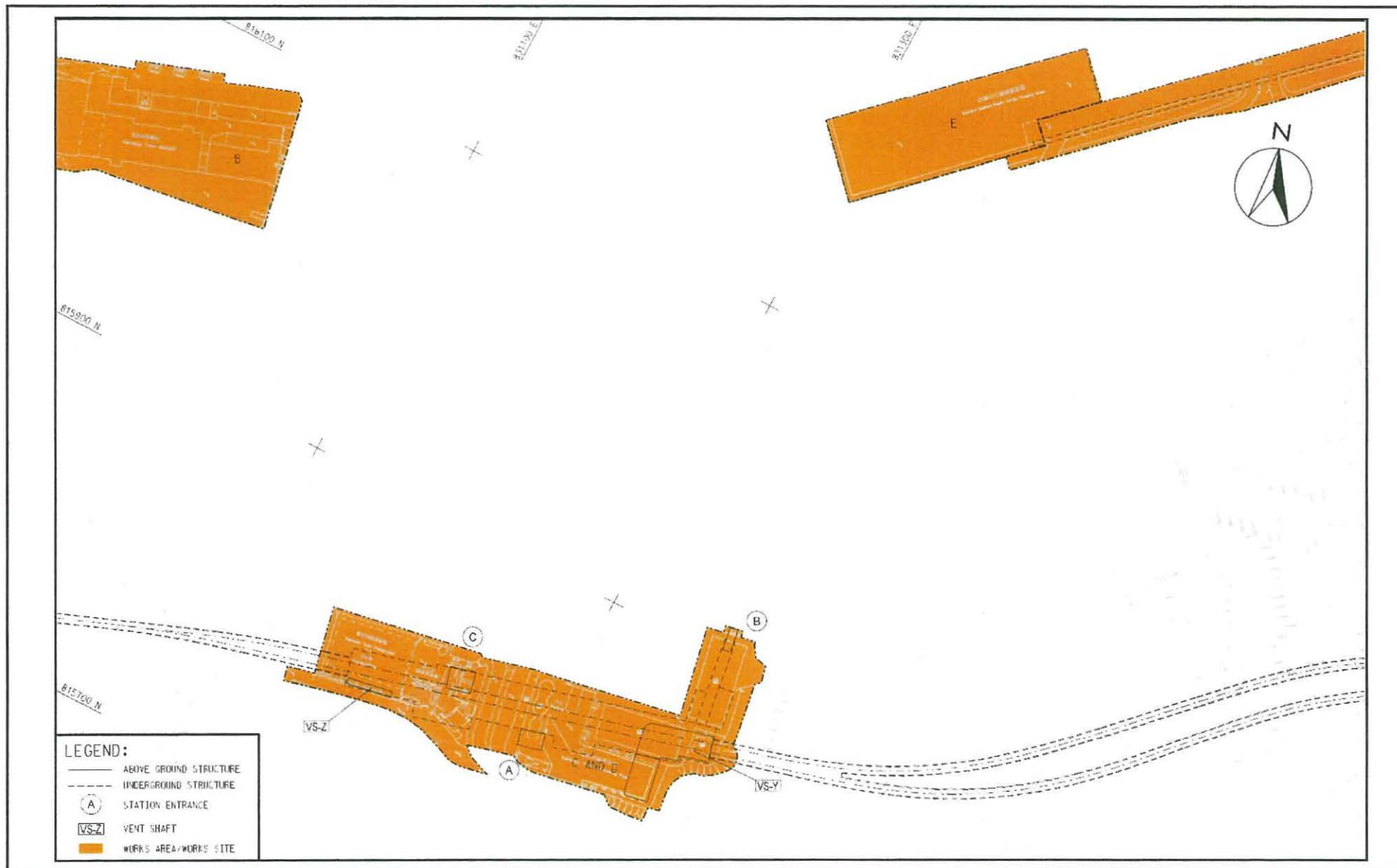
**Project Title: West Island Line**  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

**Figure 3: Major Ground Level Works Area / Works Sites**  
 圖 3: 主要地面施工區 / 工地

(This figure was prepared based on Figure 1.4 of the report submitted under VEP Application (Register No.: VEP-294/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-294/2009)所提交的報告圖 1.4 編制)





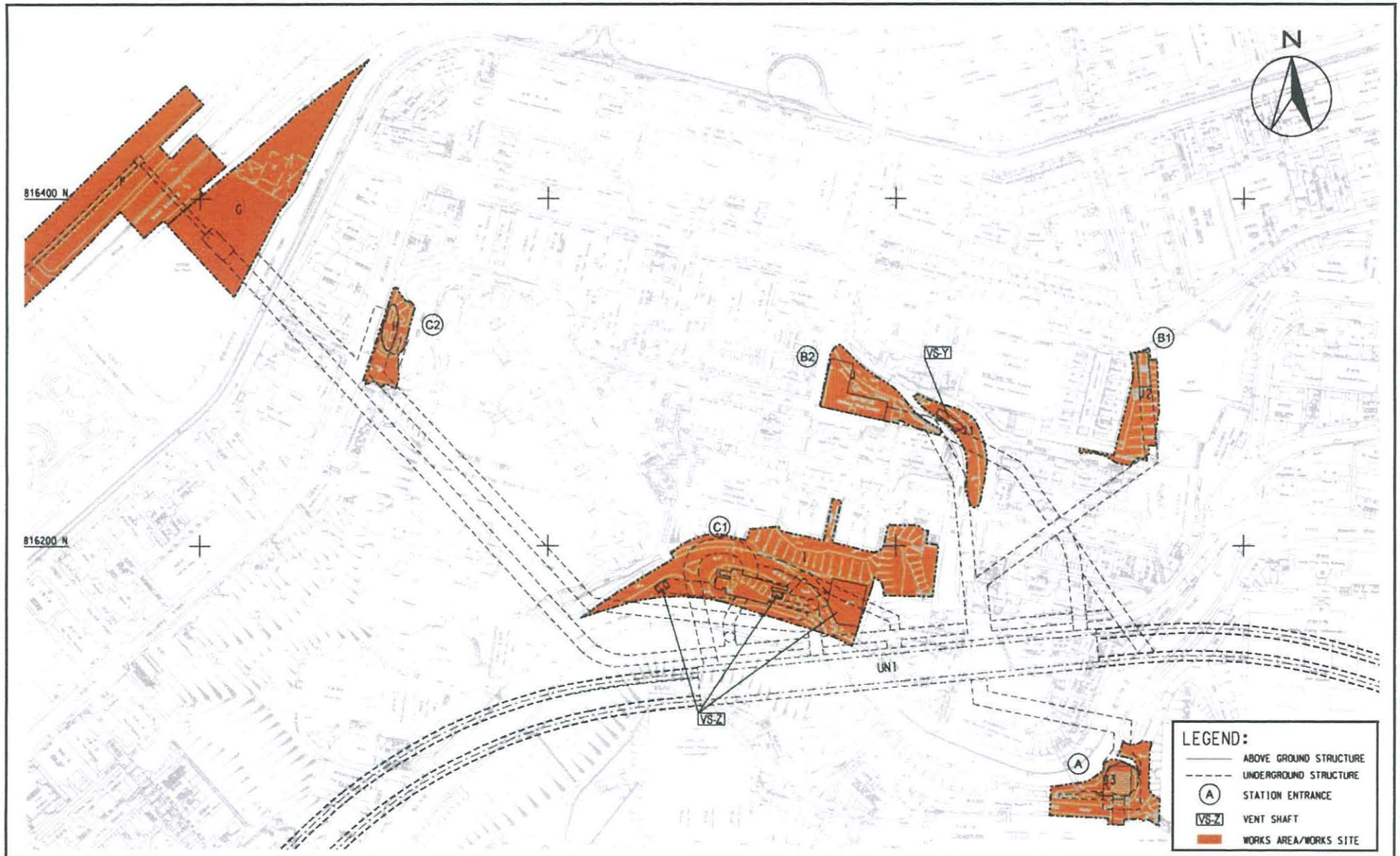
**Project Title: West Island Line**  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

**Figure 4: Major Ground Level Works Area / Works Sites**  
 圖 4: 主要地面施工區 / 工地

(This figure was prepared based on Figure 1.5 of the report submitted under VEP Application (Register No.: VEP-294/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-294/2009)所提交的報告圖 1.5 編制)





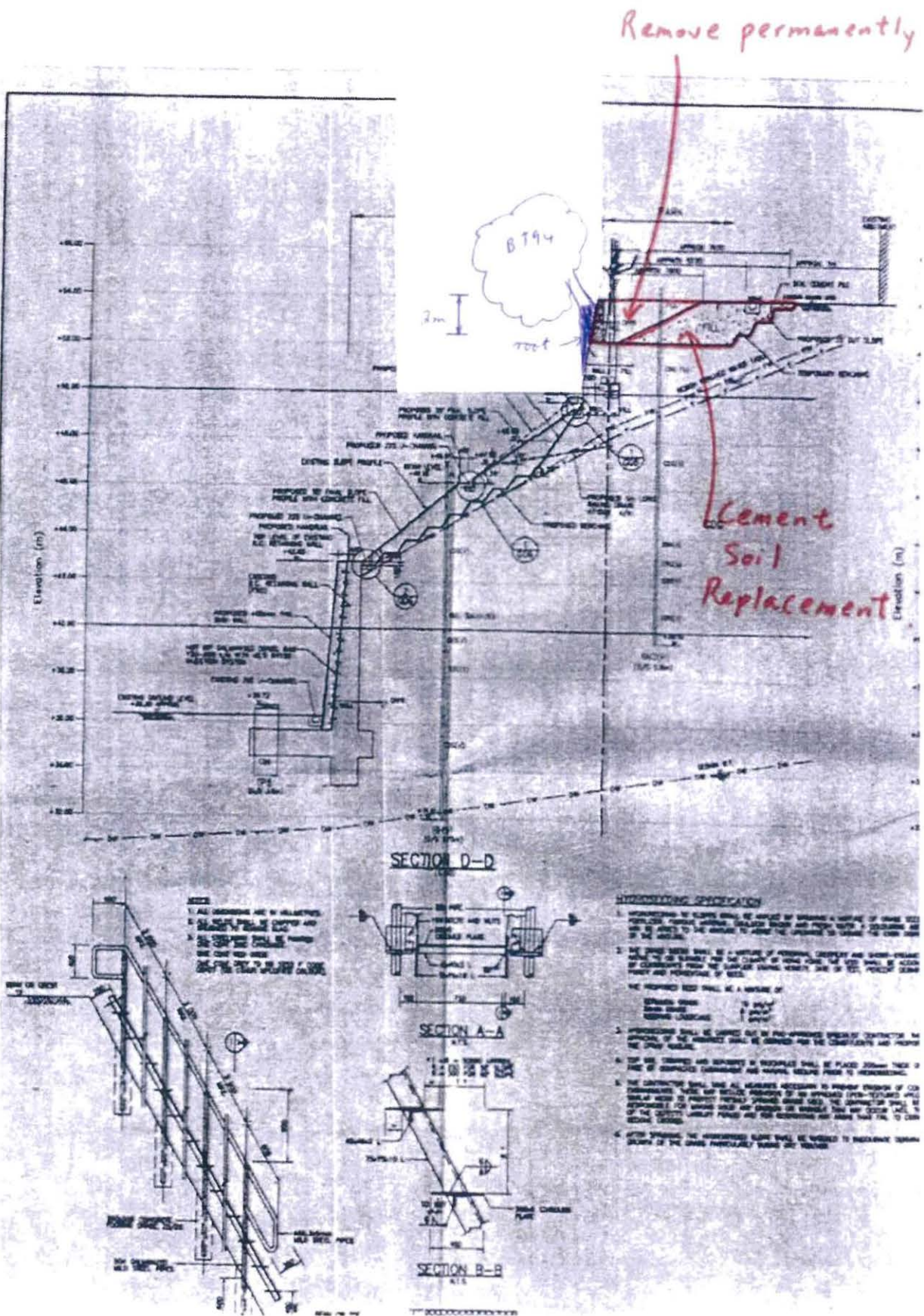
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

Figure 5: Major Ground Level Works Area / Works Sites  
 圖 5: 主要地面施工區 / 工地

(This figure was prepared based on Figure 1.6 of the report submitted under VEP Application (Register No.: VEP-298/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號: VEP-298/2009)所提交的報告圖 1.6 編制)





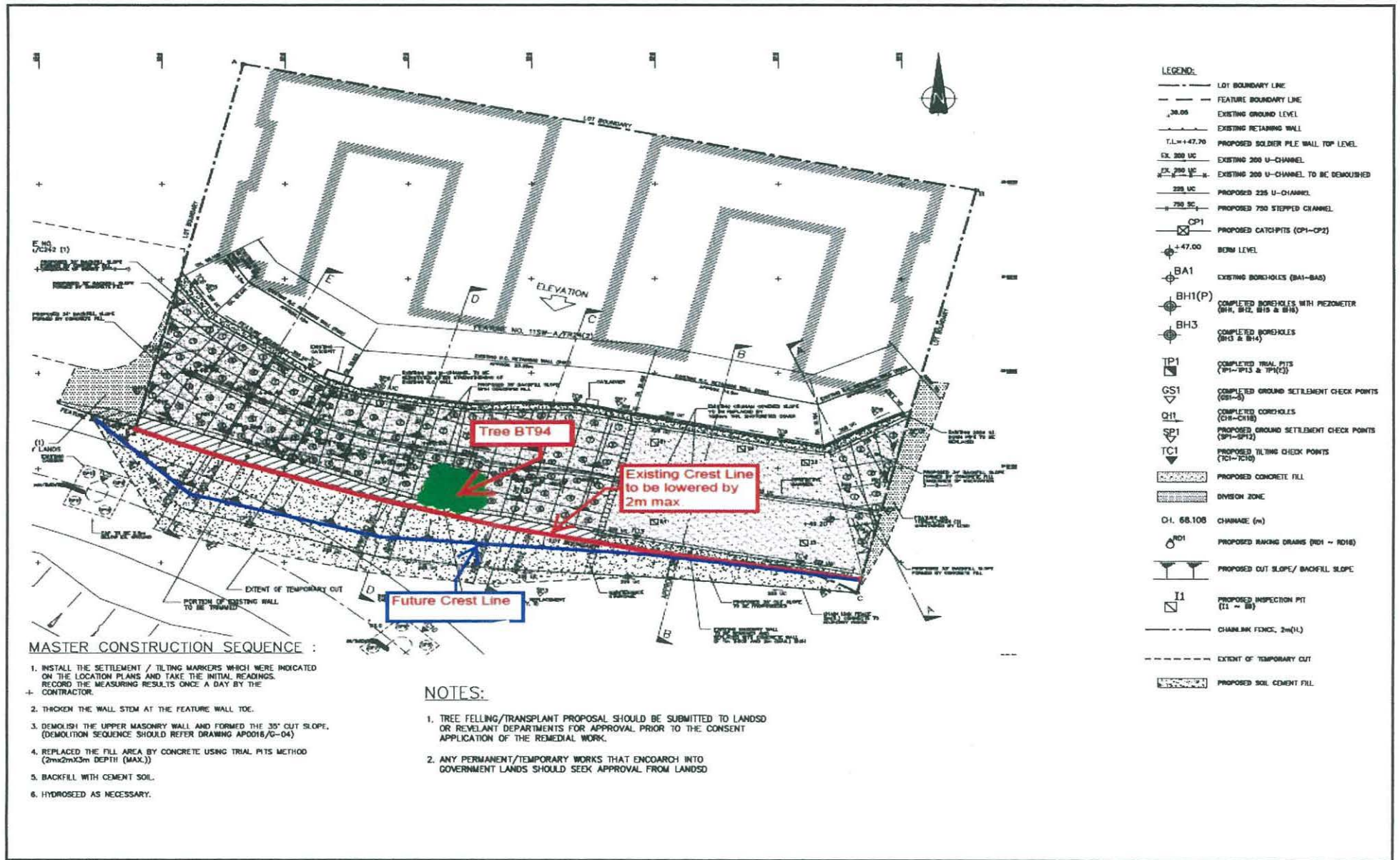
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No.: EP-313/2008/K  
 環境許可證編號：EP-313/2008/K

Figure 6: Construction Works at Private Slope of Works Area I  
 圖 6: 位於工地 I 私人斜坡的建造工程

(This figure was prepared based on Figure 2.3 of the report submitted under VEP Application (Register No.: VEP-298/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-298/2009)所提交的報告圖 2.3 編制)





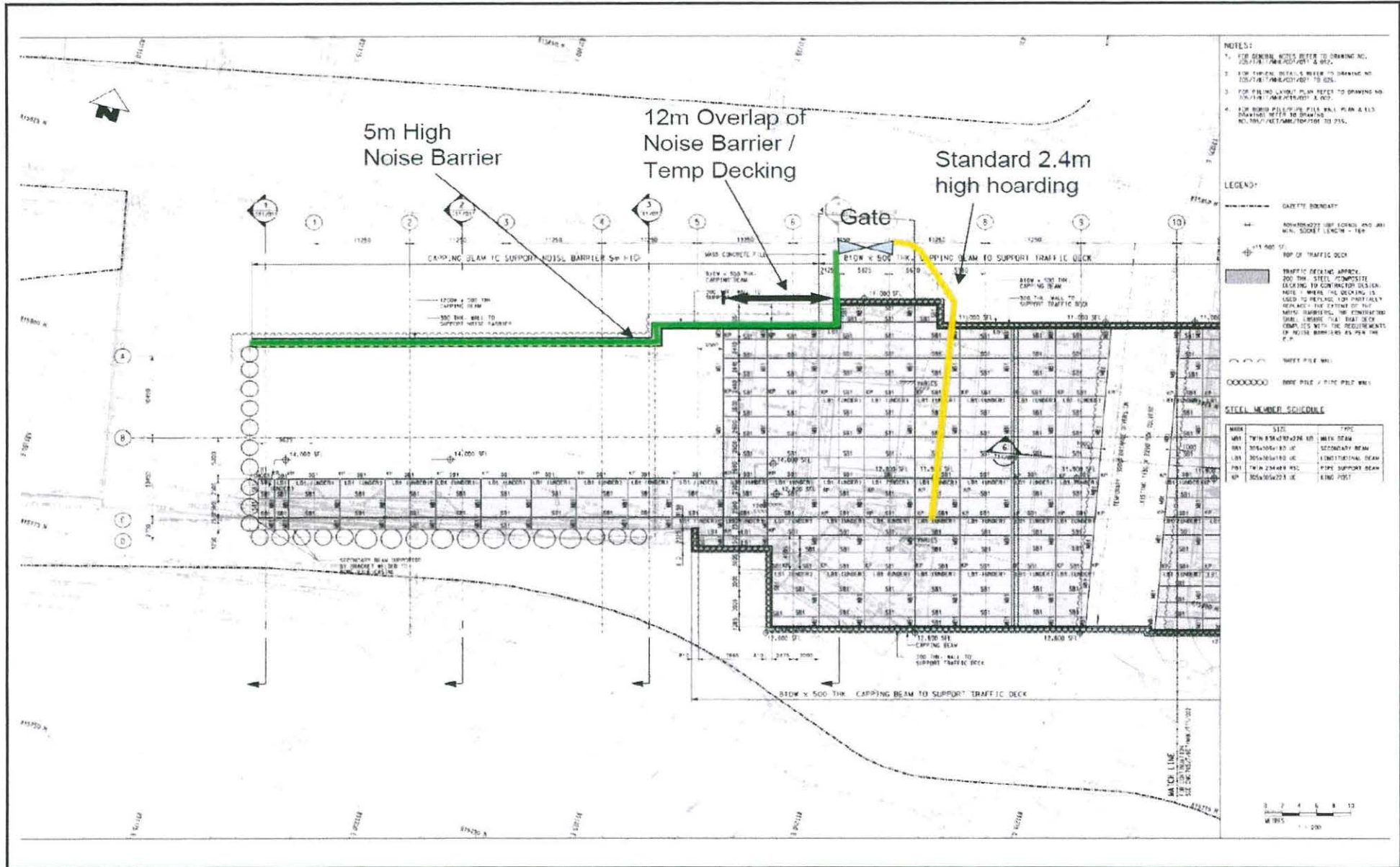
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

Figure 7: Construction Works at Private Slope of Works Area I  
 圖 7: 位於工地 I 私人斜坡的建造工程

(This figure was prepared based on Figure 2.4 of the report submitted under VEP Application (Register No.: VEP-298/2009)  
 (本圖是根據更改環境許可證申請文件(申請書編號: VEP-298/2009)所提交的報告圖 2.4 编制)





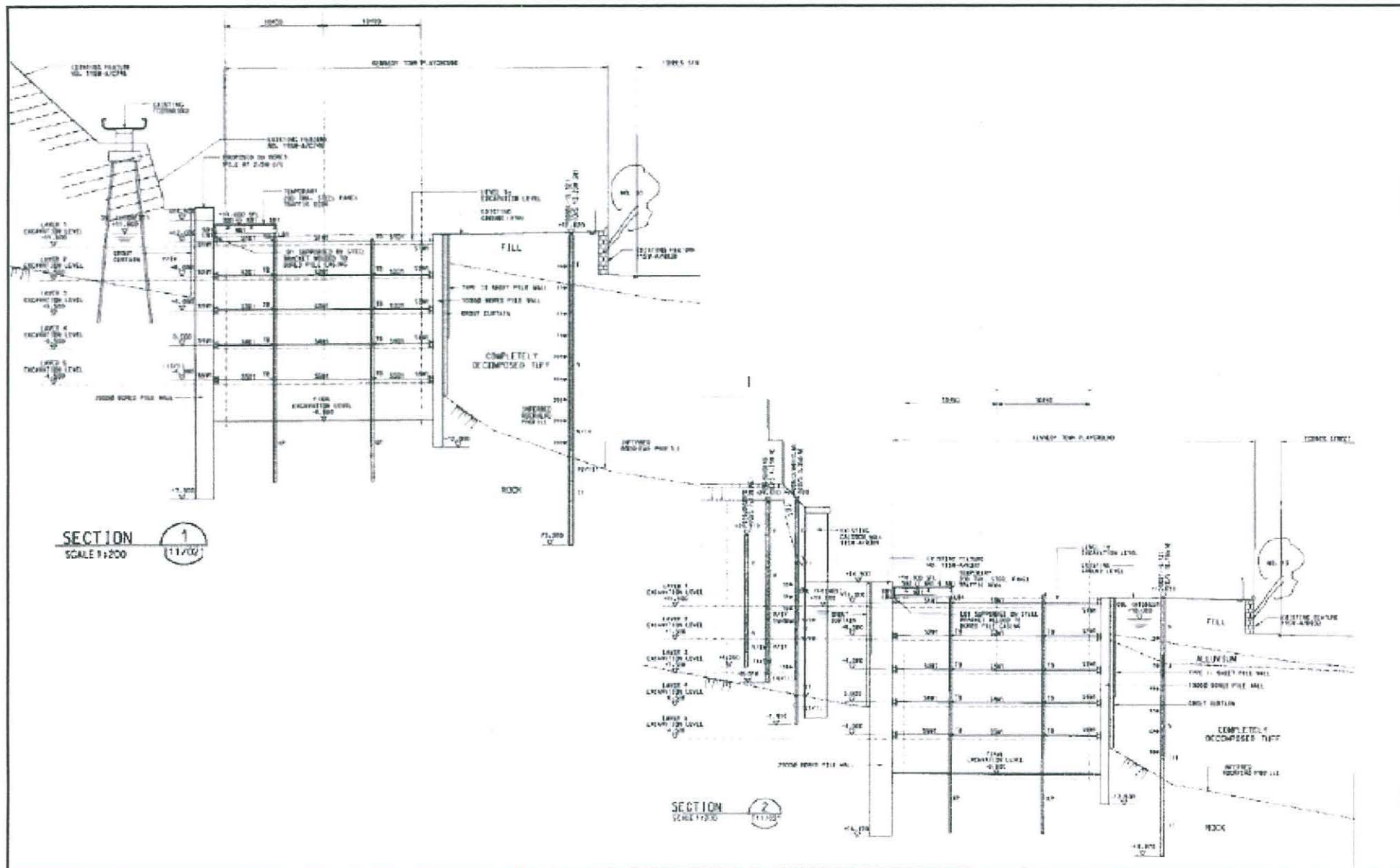
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

Figure 8: Approximate Extend of Decking at Works Area C  
 圖 8: 施工區丙的大概鋪蓋範圍

(This figure was prepared based on Figure 1.9 of the report submitted under VEP Application (Register No.: VEP-294/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-294/2009)所提交的報告圖 1.9 編制)





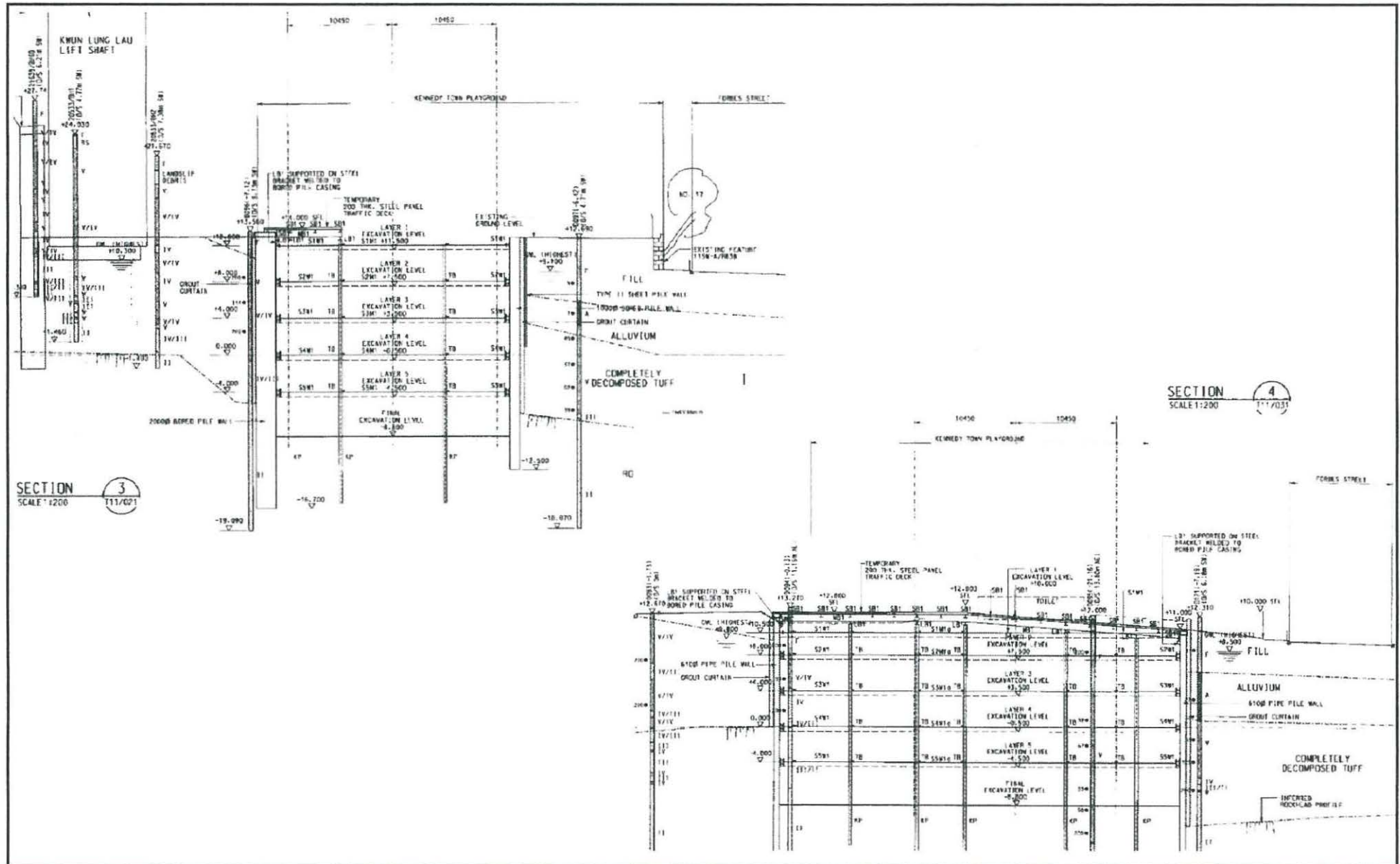
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

Figure 9: Sections of Decking at Works Area C  
 圖 9: 施工區內的大概鋪蓋切面圖

(This figure was prepared based on Figure 1.10 of the report submitted under VEP Application (Register No.: VEP-294/2009))  
 (本圖是根據更改環境許可證申請文件(申請書編號: VEP-294/2009)所提交的報告圖 1.10 編制)





SECTION 3  
SCALE 1:200  
11/07/11

SECTION 4  
SCALE 1:200  
11/07/11



Project Title: West Island Line  
 工程項目名稱：西港島綫

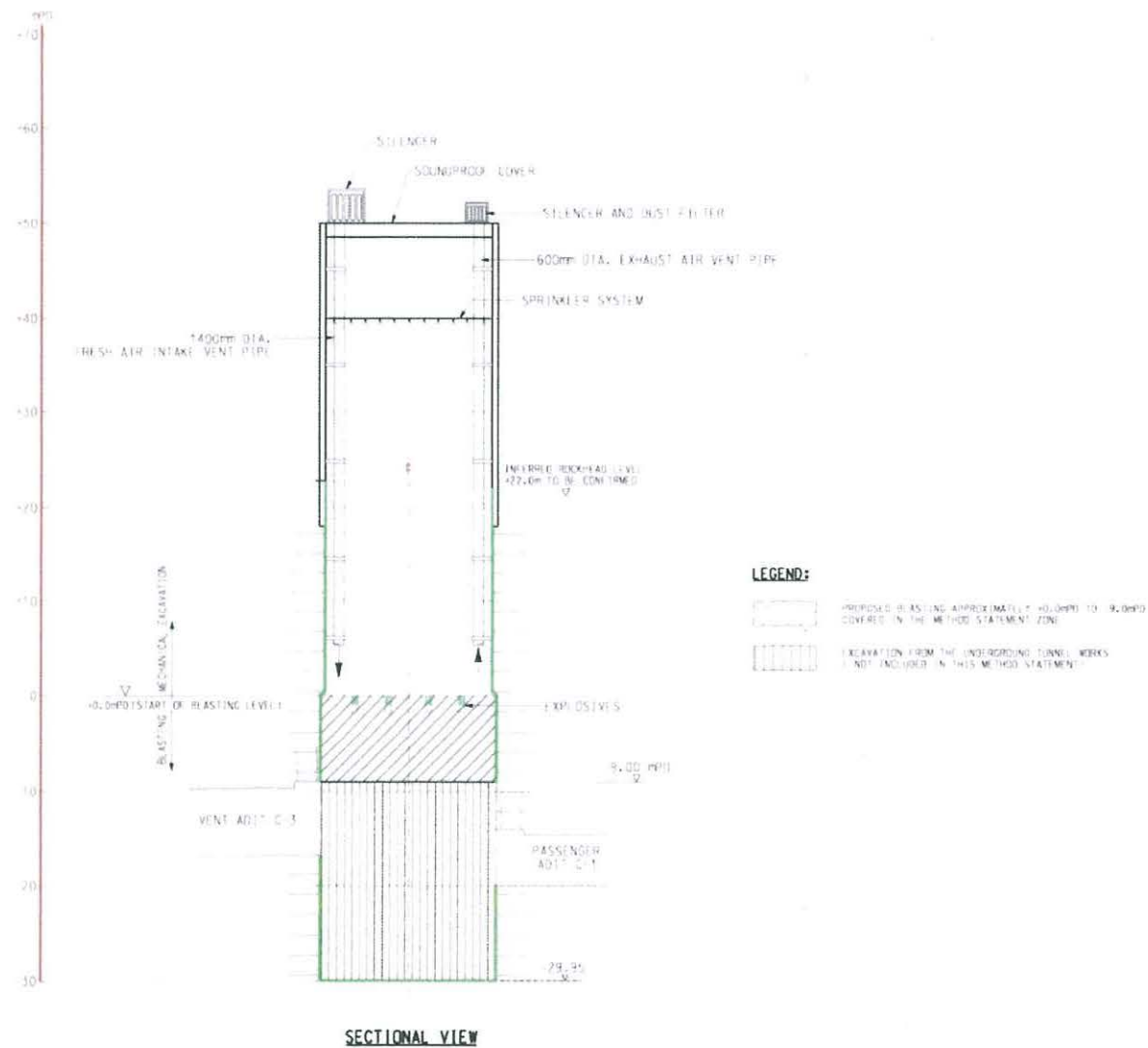
Environmental Permit No.: EP-313/2008/K  
 環境許可證編號：EP-313/2008/K

Figure 10: Sections of Decking at Works Area C  
 圖 10: 施工區丙的大概鋪蓋切面圖

(This figure was prepared based on Figure 1.11 of the report submitted under VEP Application (Register No.: VEP-294/2009)  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-294/2009)所提交的報告圖 1.11 編制)







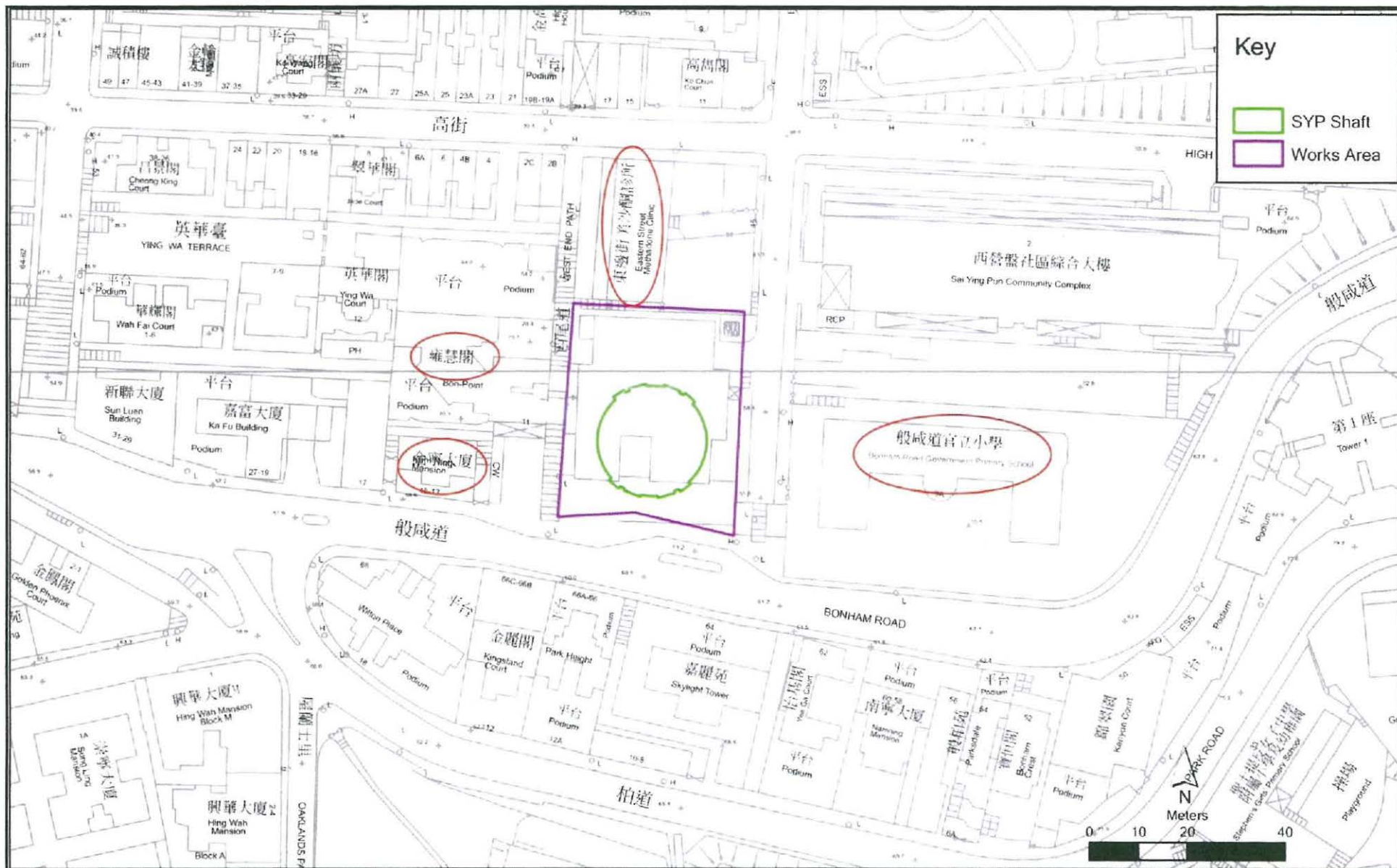
**Project Title: West Island Line**  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

**Figure 11: Mitigation Measures for Blasting at Works Area M3**  
 圖 11: 施工區 M3 爆破工程的緩解措施

(This figure was modified from Drawing No 704/C/SYP/GNJ/T01/193 of the VEP application No. VEP-404/2013)  
 (本圖是修改申請更改環境許可證申請編號 VEP-404/2013 圖 704/C/SYP/GNJ/T01/193 編制)





**Key**

- SYP Shaft
- Works Area



**Project Title: West Island Line**

工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K

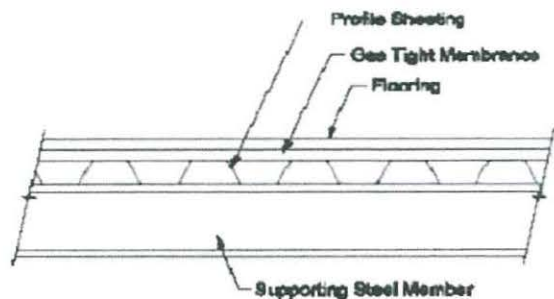
環境許可證編號 : EP-313/2008/K

Figure 12: Locations of Bonham Road Government Primary School, Methadone Clinic, Bon-Point and Kam Ning Mansion

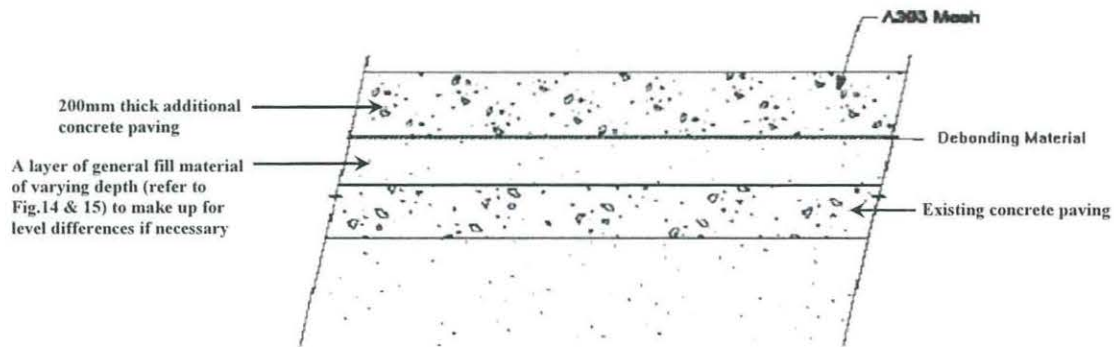
圖 12: 般咸道官立小學、美沙耐診所、雍慧閣及金寧大廈的位置

(This figure was modified from Figure 3.1 of the VEP application No. VEP-372/2012)  
(本圖是修改申請更改環境許可證申請編號 VEP-372/2012 圖 3.1 編制)

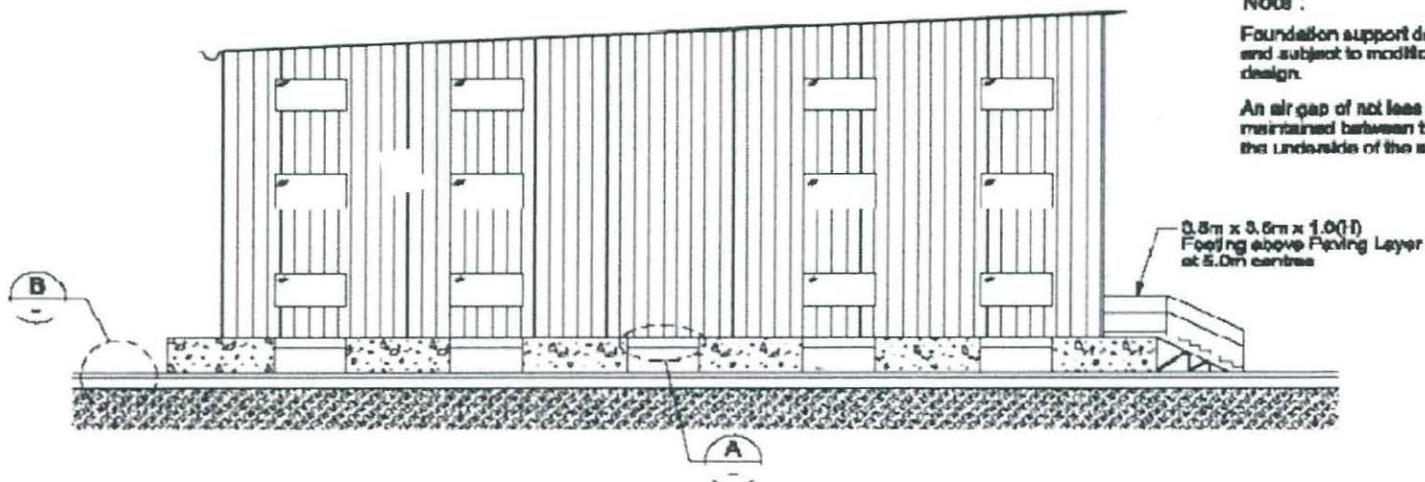




Detail A  
1:30



Detail B  
1:30



**Note :**

Foundation support details indicative only and subject to modification during detailed design.

An air gap of not less than 500mm will be maintained between the ground slab and the underside of the site offices.



Project Title: West Island Line  
工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
環境許可證編號 : EP-313/2008/K

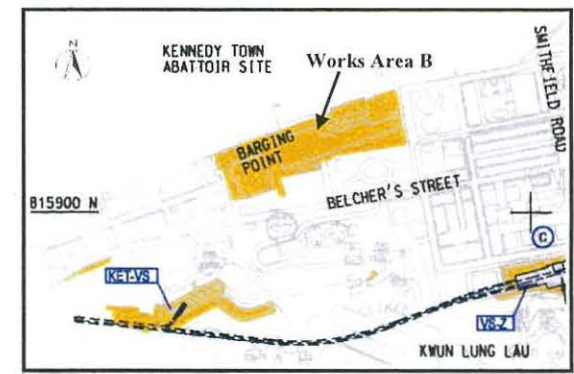
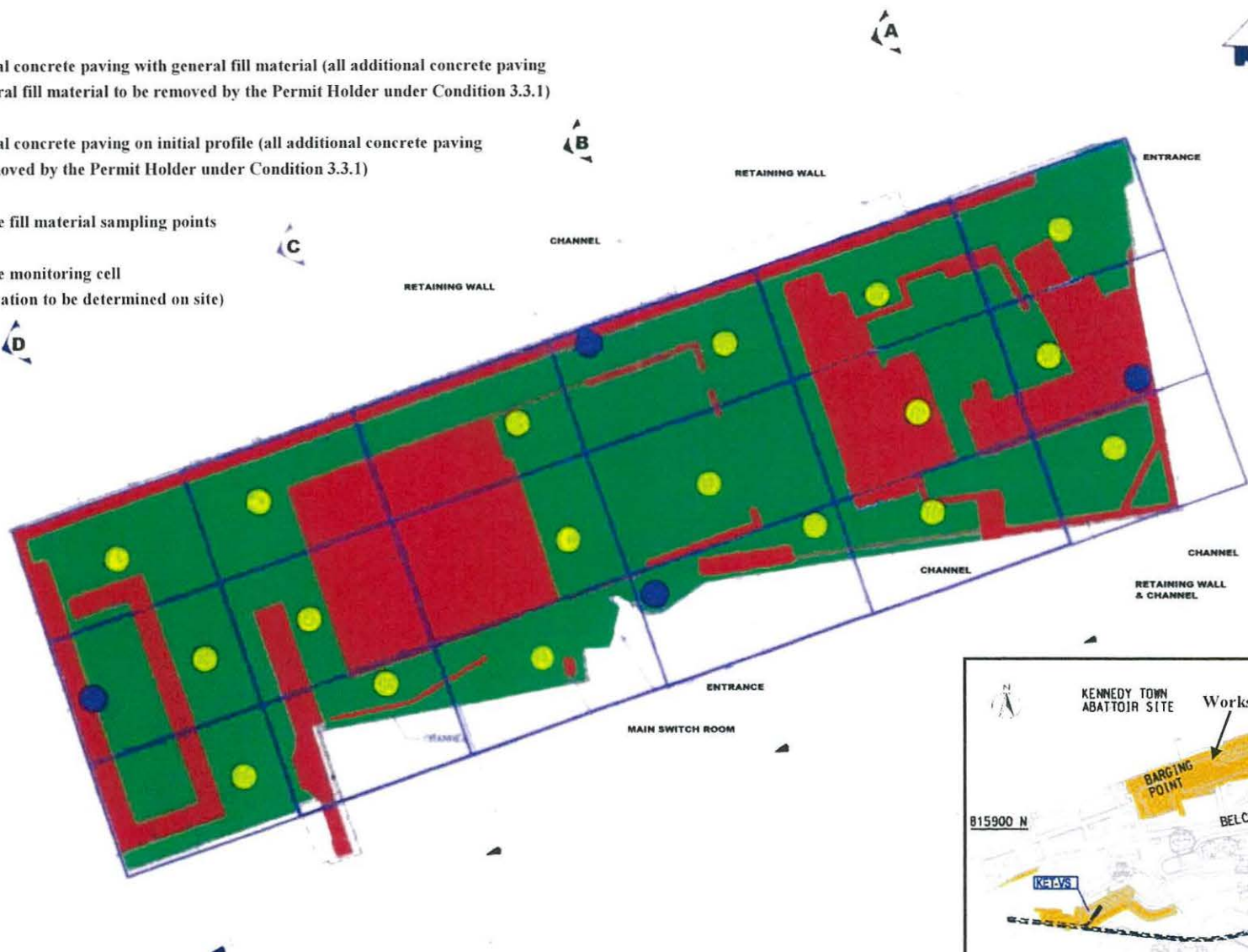
Figure 13: Mitigation Design at Works Area B  
圖 13: 乙施工區的緩解設計

(This figure was prepared based on Figure 4 of the Environmental Permit (EP-136/2002/B))  
(本圖是根據申請更改環境許可證 (EP-136/2002/B) 圖 4 編制)



Legend:

- Additional concrete paving with general fill material (all additional concrete paving and general fill material to be removed by the Permit Holder under Condition 3.3.1)
- Additional concrete paving on initial profile (all additional concrete paving to be removed by the Permit Holder under Condition 3.3.1)
- Indicative fill material sampling points
- Indicative monitoring cell (exact location to be determined on site)



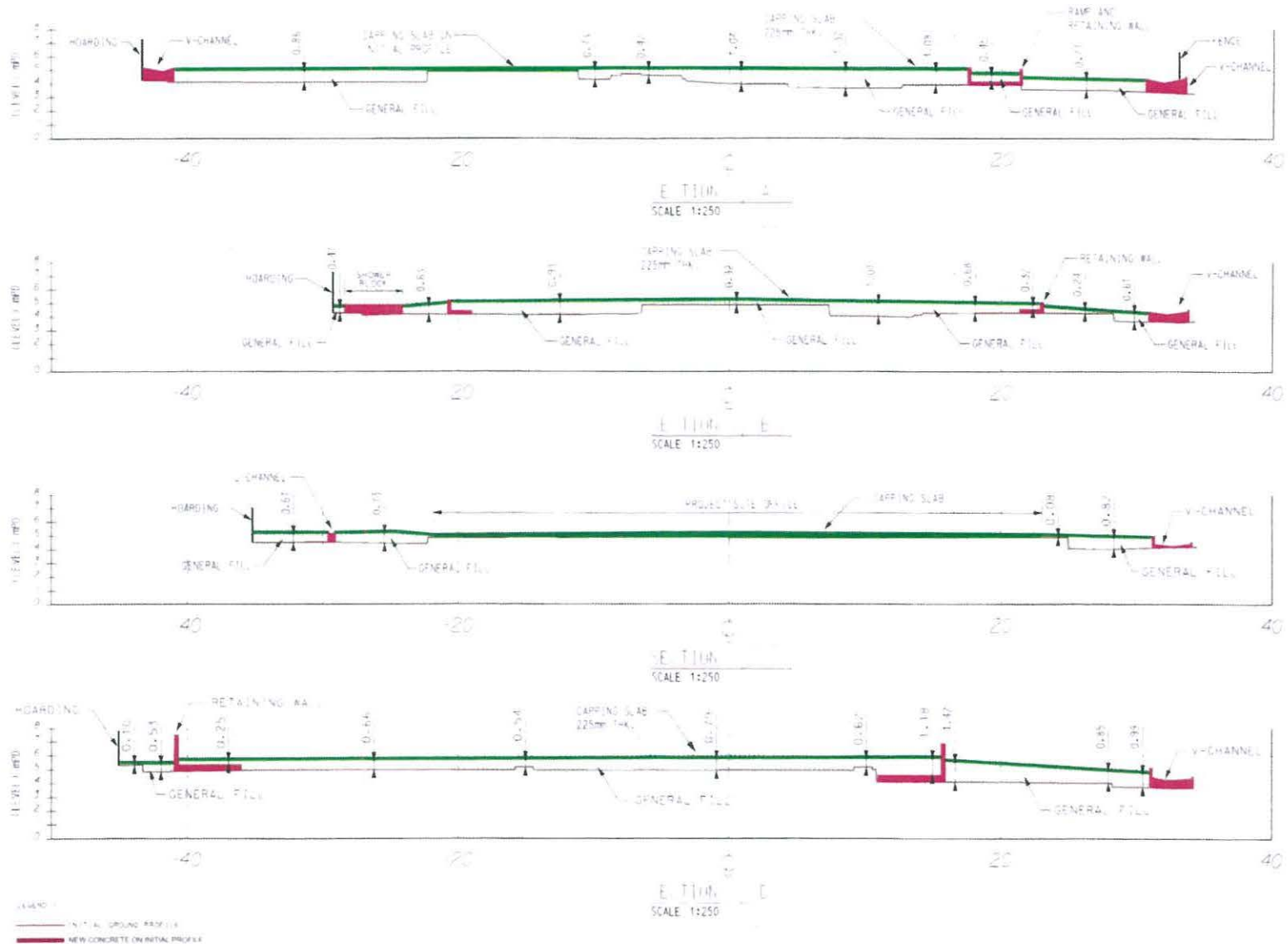
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

Figure 14: Mitigation Design at Works Area B  
 圖 14: 乙施工區的緩解設計

(This figure was prepared based Drawing No.714/F/300/SUR/CBO/002A of the VEP application No.VEP-333/2010)  
 (本圖是根據申請更改環境許可證申請編號 VEP-333/2010 圖 714/F/300/SUR/CBO/002A 編制)





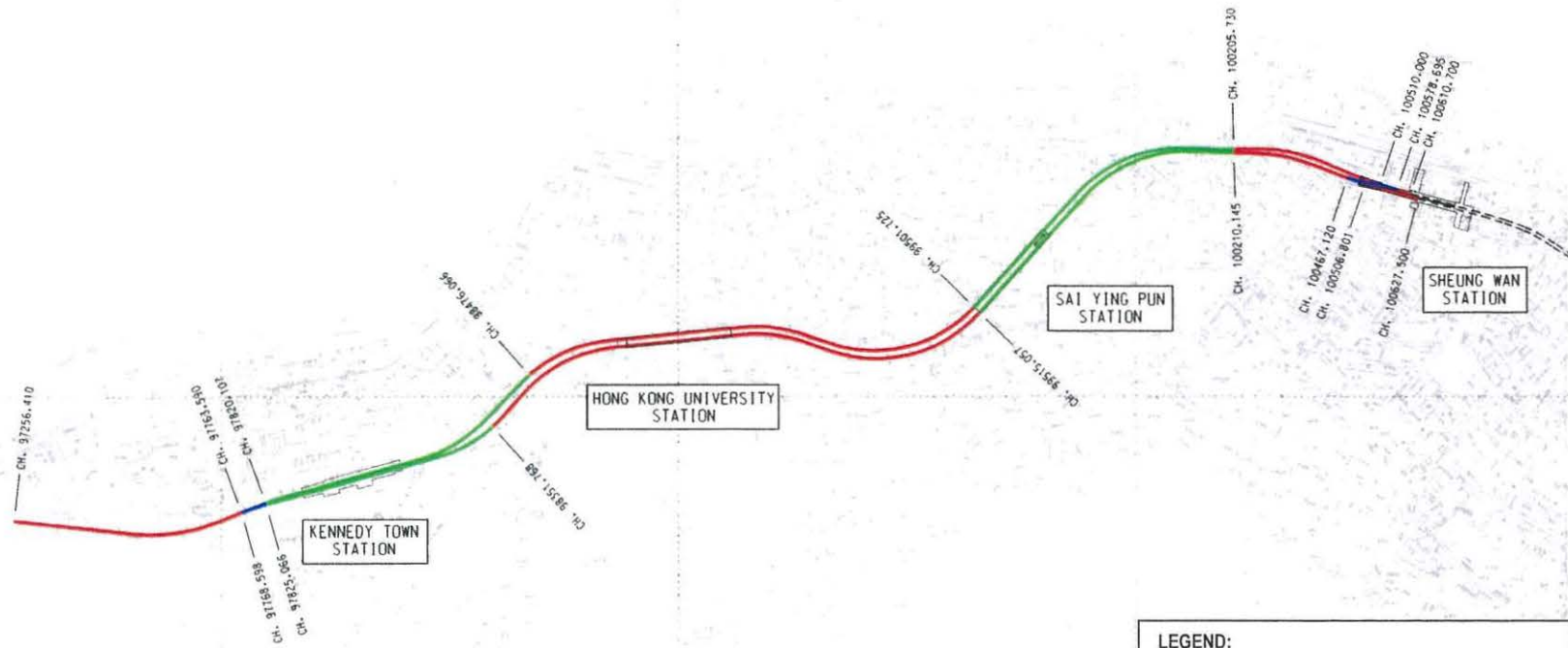
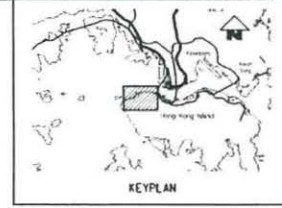
Project Title: West Island Line  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

Figure 15: Mitigation Design at Works Area B  
 圖 15: 乙施工區的緩解設計

(This figure was prepared based Drawing No.714/K/300/SUR/C80/003A of the VEP application No.VEP-333/2010)  
 (本圖是根據申請更改環境許可證申請編號 VEP-333/2010 圖 714/K/300/SUR/C80/003A 編制)





**LEGEND:**

- EXISTING MTRC LINE
- MEDIUM ATTENUATION BASEPLATE
- HIGH ATTENUATION BASEPLATE
- TURNOUT TRACKFORM



**Project Title: West Island Line**  
 工程項目名稱：西港島綫

Environmental Permit No. : EP-313/2008/K  
 環境許可證編號 : EP-313/2008/K

**Figure 16: Rail Track Type**  
 圖 16: 列車路軌類形

(This figure was prepared based on Drawing No. 715/Z/WIL/MTR/C01/100 of the report submitted under VEP Application (Register No.: VEP-422/2013))  
 (本圖是根據更改環境許可證申請文件(申請書編號：VEP-422/2013)所提交的報告圖編號 715/Z/WIL/MTR/C01/100 編制)

