

本署檔號  
OUR REF: EP2/G/A/95 Pt.56  
來函檔號  
YOUR REF: HSK-COR-CEM-ENV-090007  
電話  
TEL. NO.: 2835 1868  
圖文傳真  
FAX NO: 2591 0558  
電子郵件  
E-MAIL: slau@epd.gov.hk  
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

30 November 2022

**By Registered Post & Fax**

MTR Corporation Limited

Dear ,

**Environmental Impact Assessment (EIA) Ordinance, Cap.499**  
**Application for Variation of an Environmental Permit**  
**Project Title: West Rail, Phase 1**  
**(Application No. VEP-622/2022)**

I refer to your above application received on 4 November 2022 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 (No. FEP-24/004/1998/J). I attach the Environmental Permit as amended (No. FEP-24/004/1998/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. Anthony HO at 2835 1115.

Yours sincerely,

  
(Stanley C.F. LAU)

Principal Environmental Protection Officer  
for Director of Environmental Protection

Encl.

**ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE**  
**(CHAPTER 499)**  
**SECTIONS 10 AND 13**  
**環境影響評估條例**  
**(第 499 章)**  
**第 10 條 及 13 條**

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

**PART A (MAIN PERMIT)**

**A 部 (許可證主要部分)**

Pursuant to Sections 10 and 12 of the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (the Director) granted the Further Environmental Permit (No. FEP-24/004/1998/J) to the MTR Corporation Limited (hereinafter referred to as the "Permit Holder") on 21 October 2013. Pursuant to Section 13 of the EIAO, the Director amends the Further Environmental Permit (No. FEP-24/004/1998/J) based on the Application No. VEP-622/2022. The amendments, described below, are incorporated into this Further Environmental Permit (No. FEP-24/004/1998/K). This Further 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 Further Environmental Permit is based on the documents, approvals or permissions described below:

根據《環境影響評估條例》(環評條例) 第 10 條及 12 條的規定，環境保護署署長(署長)於 2013 年 10 月 21 日將新的環境許可證 (編號：FEP-24/004/1998/J) 批予香港鐵路有限公司 (下稱“許可證持有人”)。根據環評條例第 13 條的規定，署長因應更改環境許可證的申請編號：VEP-622/2022 修訂環境許可證(編號：FEP-24/004/1998/J)。以下修訂已包含在本新的環境許可證內 (編號：FEP-24/004/1998/K)。本經修訂的新的環境許可證作為建造及營辦 B 部 所說明的指定工程項目，但須遵守 C 部 所列明的條件。本新的環境許可證的發出，乃以下表所列的文件、批准或許可作為根據：

<b>Application No.</b> 申請書編號：	VEP-622/2022
<b>Documents in the Register :</b> 登記冊上的文件：	(a) West Rail - Final Assessment Report West Kowloon to Tuen Mun Centre - Environmental Impact Assessment, its Technical Annexes, and Final Landscape Design Strategy, Report Vol.1 (Register No. EIA-149/1998) [Hereafter referred to as the EIA report]  (b) Application documents submitted by Permit Holder including all attachments on 19 August 1998 (Application No. AEP-004/1998)



- (c) Environmental Permit issued on 16 September 1998 (Permit No. EP-004/1998)
- (d) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 21 July 2000. (Application No. VEP-020/2000)
- (e) Environmental Permit issued on 18 August 2000 (Permit No. VEP-020/2000/A/EP-004)
- (f) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 29 May 2001. (Application No. VEP-045/2001)
- (g) Environmental Permit issued on 27 June 2001 (Permit No. EP-004/1998/B)
- (h) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 11 March 2002. (Application No. VEP-062/2002)
- (i) Environmental Permit issued on 9 April 2002 (Permit No. EP-004/1998/C)
- (j) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 10 June 2002. (Application No. VEP-067/2002)
- (k) Environmental Permit issued on 8 July 2002 (Permit No. EP-004/1998/D)
- (l) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 27 September 2002. (Application No. VEP-078/2002)
- (m) Environmental Permit issued on 24 October 2002 (Permit No. EP-004/1998/E).



- (n) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 24 January 2003 (Application No. VEP-084/2003).
- (o) Environmental Permit issued on 20 February 2003 (Permit No. EP-004/1998/F).
- (p) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 22 November 2003 (Application No. VEP-122/2003).
- (q) Environmental Permit issued on 4 December 2003 (Permit No. EP-004/1998/G).
- (r) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 28 May 2004 (Application No. VEP-142/2004).
- (s) Environmental Permit issued on 24 June 2004 (Permit No. EP-004/1998/H).
- (t) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 15 May 2012 (Application No. VEP-361/2012).
- (u) Environmental Permit issued on 6 June 2012 (Permit No. EP-004/1998/I).
- (v) Application documents for Further Environmental Permit submitted on 6 July 2012 (Application No. FEP-138/2012)
- (w) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 26 September 2013 (Application No. VEP-413/2013).
- (x) Further Environmental Permit issued on 21 October 2013 (Permit No. FEP-24/004/1998/J).



- (y) Application documents for Variation of an Environmental Permit including all attachments by Permit Holder submitted on 4 November 2022 (Application No. VEP-622/2022).
- (a) 西部鐵路-最終評估報告西九龍至屯門中-環境影響評估、其技術附件及最終景觀美化設計策略報告第一冊(登記冊檔號 :EIA-149/1998)[下稱 "環評報告"]
- (b) 許可證持有人於 1998 年 8 月 19 日提交之申請文件包括所有附件(申請書編號 AEP-004/1998)
- (c) 於 1998 年 9 月 16 日發出的環境許可證(許可證編號 EP-004/1998)
- (d) 許可證持有人於 2000 年 7 月 21 日提交申請文件包括所有附件(申請書編號 VEP-020/2000)
- (e) 於 2000 年 8 月 18 日發出的環境許可證(許可證編號 VEP-020/2000/A/EP-004)
- (f) 許可證持有人於 2001 年 5 月 29 日提交之申請文件包括所有附件(申請書編號 VEP-045/2001)
- (g) 於 2001 年 6 月 27 日發出的環境許可證(許可證編號 EP-004/1998/B)
- (h) 許可證持有人於 2002 年 3 月 11 日提交之申請文件包括所有附件(申請書編號 VEP-062/2002)
- (i) 於 2002 年 4 月 9 日發出的環境許可證(許可證編號 EP-004/1998/C)
- (j) 許可證持有人於 2002 年 6 月 10 日提交之申請文件包括所有附件(申請書編號 VEP-067/2002)
- (k) 於 2002 年 7 月 8 日發出的環境許可證(許可證編號 EP-004/1998/D)




- (l) 許可證持有人於 2002 年 9 月 27 日提交之申請文件包括所有附件(申請書編號 VEP-078/2002)
- (m) 於 2002 年 10 月 24 日發出的環境許可證(許可證編號 EP-004/1998/E)
- (n) 許可證持有人於 2003 年 1 月 24 日提交之申請文件包括所有附件(申請書編號 VEP-084/2003)
- (o) 於 2003 年 2 月 20 日發出的環境許可證(許可證編號 EP-004/1998/F)
- (p) 許可證持有人於 2003 年 11 月 22 日提交之申請文件包括所有附件(申請書編號 VEP-122/2003)
- (q) 於 2003 年 12 月 4 日發出的環境許可證(許可證編號 EP-004/1998/G)
- (r) 許可證持有人於 2004 年 5 月 28 日提交之申請文件包括所有附件(申請書編號 VEP-142/2004)
- (s) 於 2004 年 6 月 24 日發出的環境許可證(許可證編號 EP-004/1998/H)
- (t) 許可證持有人於 2012 年 5 月 15 日提交之申請文件包括所有附件(申請書編號 VEP-361/2012)
- (u) 於 2012 年 6 月 6 日發出的環境許可證(許可證編號 EP-004/1998/I)
- (v) 許可證持有人於 2012 年 7 月 6 日提交的新的環境許可證申請文件(申請書編號 FEP-138/2012)
- (w) 許可證持有人於 2013 年 9 月 26 日提交之申請文件包括所有附件(申請書編號 VEP-413/2013)
- (x) 於 2013 年 10 月 21 日發出的新的環境許可證(許可證編號 FEP-24/004/1998/J)



(y) 許可證持有人於 2022 年 11 月 4 日提交之申請文件 包括所有附件 (申請書編號 VEP-622/2022)
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30 November 2022



Date  
日期

(Stanley C.F. LAU)

Principal Environmental Protection Officer (Strategic Assessment)  
for Director of Environmental Protection

環境保護署署長

(首席環境保護主任(策略評估) 劉志輝 代行)



**PART B (DESCRIPTIONS 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 :

下列為本環境許可證 A 部所提述的指定工程項目的說明：

<b>Title of Designated Project</b> 指定工程項目的名稱	West Rail, Phase I [This designated project is hereafter referred to as "the Project"] 西部鐵路第一期 [下稱「工程項目」]
<b>Nature of Designated Project</b> 指定工程項目的性質	A railway and its associated stations 鐵路及其相聯車站
<b>Location of Designated Project</b> 指定工程項目的地點	Kowloon to Tuen Mun (The location and alignment of the Project is shown in Figure 1, 2, 3 and 3A of this Environmental Permit). 九龍至屯門 (工程項目的地點及線路載於本環境許可證的圖 1、2、3 及 3A。)
<b>Scale and Scope of Designated Project(s)</b> 指定工程項目的規模和範圍	The Project is an electrified double-tracked railway system including the railway alignment, all railway premises, depots, tracks, cuttings, embankments, tunnels, stations, goods and rail yards, car parks and other areas for ancillary uses but excludes non-railway developments above stations or above other railway property. The Project includes the following four sections:  <u>Southern Section</u> This Section is located on the West Kowloon Reclamation (WKR) and commences at of the proposed Yen Chow Street (YCS) Station near the proposed Prince Edward Road Roundabout. From Yen Chow Station, the alignment extends north - west to Lai Chi Kok and Mei Foo, passing under Hing Wah Street and the Lai Wan Interchange. The alignment then turns east through Lai Chi Kok Park around the Mei Foo Sun Chuen residential development and ends just before the proposed Mei Foo (MEF) Station.





The entire rail alignment of the Southern Section will be constructed at grade. The alignment will be contained in a box structure constructed above ground and covered by a landscape earth mound.

#### Central Section

This Section commences at the western end of the proposed MEF Station, and extends north-west under Kwai Chung Hospital in Ha Kwai Chung Tunnels for approximately 1.5km. These tunnels give way to the Kwai Fuk Road Tunnels for approximately 600m before entering the Tsing Tsuen Tunnels in the vicinity of Kwai Chung Park and Tsing Tsuen Road. The alignment continues north - west in Tsing Tsuen Tunnels for approximately 1km before exiting at Tsuen Wan Waterfront in the vicinity of the site of the proposed Tsuen Wan West (TWW) Station. From TWW, the alignment continues north - west and enters the southern portal of the Tai Lam Tunnel (TLT) a point north of Tuen Mun Road at Tsuen Wan. The northern portal of the TLT is situated approximately 5km north - west in the Kam Tin valley, where the railway extends for another 250m above ground reaching the end of the Central Section.

#### Northern Section

The Section commences approximately 250m north of the northern portal of the TLT. The alignment then heads generally north - west, passing through a new station to be constructed at Kam Tin (KAT). From Kam Tin, the alignment continues north - west until it reaches a junction at Au Tau between a north - bound section of the alignment and the west bound route to Tuen Mun. Two kilometres west of Au Tau along Tuen Mun branch, the North Section comes to an end at eastern end wall of the proposed Yuen Long Station (YUL).

The Northern Section also includes the West Rail Depot (WRD), which lies between the northern portal of TLT and Kam Tin Station. The WRD includes infrastructure such as rail and fleet maintenance facilities as well as buildings which in total occupy an area of approximately 22 hectares. The WRD facility also includes approximately 2.2km of main line alignment.



Western Section

This Section of the alignment extends generally westward from Yuen Long Station (YUL) before heading south to the proposed Tuen Mun Centre (TMC) Station. The Western Section includes intermediate stations at Long Ping (LOP), Tin Shui Wai, Hung Shui Kiu (HSK) and Tuen Mun North (TMN).

The Project will interface with Mass Transit Railway's services at Mei Foo (the Tsuen Wan Line) and Yen Chow Street (the Lantau Line). It will also interchange with the Light Rail service at Yuen Long, Tin Shui Wan, Tuen Mun North and Tuen Mun Centre.

The full description of the scale and scope of the Project is given in section 1 and 2 of the EIA report mentioned in Part A of this Environmental Permit.

工程項目是一個電動雙軌鐵路系統，包括鐵路路線、全部鐵路範圍、車廠、軌道、開鑿、路堤、隧道、車站、貨物及鐵路場、停車場及其他附屬用途的範圍，但不包括車站上蓋或其他鐵路物業上蓋的非鐵路發展項目。工程項目包括以下4段：

南段

本段位於西九龍填海區，起點為擬議的欽州街站近擬議的太子道迴旋處。路線由欽州街站向西北伸延至荔枝角及美孚，在興華街及荔灣交匯處底下通過。路線接向東伸延，經過荔枝角公園，再繞過美孚新村住宅發展區，以擬議的美孚站為終點。

南段整段鐵路路線將在同一水平面上興建。路線將藏於建在地面上的箱形構築物內，再以景觀美化的土墩覆蓋。

中段

本段以擬議的美孚站西端為起點，在葵涌醫院對下的下葵涌隧道向西北伸延約1.5公里。該隧道讓出約0.6公里給葵福路隧道後，才進入葵涌公園及青荃路附近的青荃

隧道。路線繼續在青荃隧道內向西北面伸延約1公里，然後在位於擬議的荃灣西站工地附近的荃灣海傍伸出。路線繼續從荃灣西站向西北伸延，進入大欖隧道南面出口，即荃灣屯門公路北面的位置。大欖隧道北面出口位於錦田谷西北約5公里處，鐵路在該處地面上再伸延0.25公里，到達中段的終點。

#### 北段

本段的起點在大欖隧道北面出口以北約0.25公里。路線接連向西北伸延，然後經過將於錦田興建的新車站。路線從錦田繼續向西北伸延，直至與路線的北行段及西行往屯門的路線在凹頭交匯。沿屯門支線凹頭西面2公里處，北段以擬議的元朗站東端牆壁為終點。

北段也包括位於大欖隧道北面出口及錦田站之間的西部鐵路車廠。該車廠包括鐵路及車隊保養設施等基礎建設，以及佔地約22公頃的建築物。西部鐵路車廠設施也包括約2.2公里的幹線路線。

#### 西段

本段路線由元朗站向西伸延，然後向南伸延至擬議的屯門中心站。西段包括朗屏、天水圍、洪水橋及屯門北等中途站。

工程項目將與地下鐵路在美孚(荃灣線)及欽州街(大嶼山線)交匯，也於元朗、天水圍、屯門北及屯門中心與輕便鐵路交匯。

關於工程項目的規模和範圍的詳細說明，載於本環境許可證A部提及的環評報告第1及第2條。



**PART C (PERMIT CONDITIONS)**

**C 部 (許可證條件)**

**1. General Conditions**

一般條件

- 1.1 The Permit Holder shall ensure full compliance with all conditions of this Environmental Permit (the Permit). Any non-compliance with this Permit may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap. 499) and shall be definite ground for enforcement action or permit cancellation where applicable.

許可證持有人必須確保完全符合本環境許可證(下稱許可證)的全部條件。如有不符合本許可證的情況，可能構成違反環境影響評估條例(第499章)的規定，並可按適用情況作為採取執法行動或取消許可證的確切理由。

- 1.2 This Permit shall not remove the responsibility of the Permit Holder to comply with any legislation currently in force such as Noise Control Ordinance (Cap.400), Air Pollution Control Ordinance (Cap.311), Water Pollution Control Ordinance (Cap.358), Dumping at Sea Ordinance (Cap.466), the Waste Disposal Ordinance (Cap.354) and others.

本許可證並不免除許可證持有人須符合現行生效的法的責任，例如：噪音管制條例(第400章)；空氣污染管制條例(第311章)；水污染管制條例(第358章)；海上傾倒物料條例(第466章)；廢物處置條例(第354章)；及其他條例。

- 1.3 The Permit Holder shall make copies of this Permit available at all times for inspection by the Director at all sites covered by this Permit.

許可證持有人須複印本許可證的副本，以供署長任何時間內在本許可證所涵蓋的所有工地查閱。

- 1.4 The Permit Holder shall give a copy of this Permit to the person(s) in charge of the site(s).

許可證持有人須將本許可證的一份副本交予有關工地的負責人。

- 1.5 The Permit Holder shall display a copy of this Permit on the construction site(s) at all vehicular site entrances/exits for public information at all times. The Permit Holder shall ensure that the most updated information about the environmental 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 of Environmental Protection shall also be displayed at the same locations as the original Permit.



許可證持有人須在有關建造工地的所有車輛進出口展示本許可證的副本，以供公眾在任何時間內閱覽。許可證持有人須確保在這些地點展示關於環境許可證的最新資料，包括經修改的許可證。如果許可證持有人交回許可證的部分或全部，須將其送交署長的通知書，在備有原本許可證的各處相同地點展示。

- 1.6 The Permit Holder shall construct and operate the Project in accordance with the project descriptions in Part B of this Permit.

許可證持有人須依據本許可證 B 部的工程項目說明來建造及營辦工程項目。

- 1.7 Unless varied under the Environmental Impact Assessment Ordinance, the Permit Holder shall ensure that the Project is designed, constructed and operated in accordance with the information and recommendations contained in the EIA report [ref: register no EIA 149/1998].

除非已根據環境影響評估條例更改，許可證持有人須確保依據環評報告[登記冊檔案:EIA 149/1998]內載的資料及建議來進行工程項目的設計、建造及營運工作。



**2. Submissions or Measures before Commencement of Construction of Certain Sections of the Project**

**在展開工程項目某些路段的建造工程前提交的文件或採取的措施**

- 2.1 The Permit Holder shall employ an Environmental Manager with at least 7 years of experience in environmental monitoring and auditing or environmental management. The Environmental Manager shall be responsible for supervising the environmental monitoring and audit programme and executing the duties as recommended in the Environmental Monitoring and Audit Manual to be prepared in accordance with section 2.19 of this Permit.

許可證持有人須聘用一名在環境監察及審核或環境管理方面至少有7年經驗的環境經理。該名環境經理負責監督環境監察及審核計劃，並執行按本許可證第2.19 條擬備的環境監察及審核手冊所建議的職責。

- 2.2 The Permit Holder shall employ an Independent Environmental Checker with at least 7 years of experience in environmental monitoring and auditing or environmental management. The Independent Environmental Checker shall verify the overall environmental performance of the Project, including the implementation of all the environmental mitigation measures, submissions relating to environmental monitoring and auditing, and any other submissions required under this Permit.

許可證持有人須聘用一名在環境監察及審核或環境管理方面至少有7 年經驗的獨立環境查核人。該名獨立環境查核人負責核證工程項目的整體環境表現，包括實施所有環境影響緩解措施、提交與環境監察及審核有關的文件，以及提交本許可證規定的其他文件。

- 2.3 Environmental Team(s) shall be established prior to the commencement of construction of relevant sections of the Project, described in Part B of this Permit. The Environmental Team(s) shall be headed by a team leader who has at least 7 years experience in environmental monitoring auditing or environmental management.

在展開本許可證 B 部所述的工程項目各有關路段的建造工程之前，須先設立環境小組。環境小組須由一名在環境監察及審核或環境管理方面至少有7 年經驗的環境經理領導。

- 2.4 Before the commencement of construction of relevant sections of the Project described in Part B of this Permit, the Permit Holder shall deposit with the Director 3 sets of 1 to 1000 scale layout drawings with an explanatory statement showing the works boundary, railway and tunnel alignment, environmental mitigation measures recommended in the EIA report [ref: register no EIA 149/1998] and any other facilities assessed in the EIA report. The drawings shall be certified by the Environmental Manager and verified by the Independent



Environmental Checker as conforming to the findings and recommendations of the EIA report [ref: register no EIA 149/1998]. The Project shall be constructed in accordance with the information and recommendations contained in the EIA report [ref: register no EIA 149/1998] and the drawings deposited with the Director. All measures set out in the drawings shall be fully implemented. (See Note 6)

在展開本許可證 B 部所述的工程項目各有關路段的建造工程之前，許可證持有人須向署長存放3套1:1000比例連同解釋說明的詳細設計圖則。圖則須顯示工地界線、鐵路及隧道的路線、環評報告[登記冊檔案:EIA 149/1998]建議的環境影響緩解措施，以及其他在環評報告內已評估的設施。圖則須由環境經理證明，並由獨立環境審核人核證，以確定符合環評報告[登記冊檔案:EIA 149/1998]的結果及建議。工程項目須依據環評報告[登記冊檔案:EIA 149/1998]的資料及建議，以及向署長存放的圖則建造。圖則載明的各項措施須完全執行。(見註6)

- 2.5 Before the commencement of construction of track sections not in tunnel, the Permit Holder shall deposit with the Director 3 sets of drawings with an explanatory statement showing all the noise mitigation measures. The drawings shall be certified by the Environmental Manager and verified by the Independent Environmental Checker as conforming to the findings and recommendations of the EIA report [ref: register no EIA 149/1998]. The Project shall be constructed in accordance with the information and recommendations contained in the EIA report [ref: register no EIA 149/1998] and the drawings deposited with the Director or the information contained in the Application for Variation No. VEP-122/2003 and the Application for Variation No. VEP-142/2004. All measures set out in the drawings or the information contained in the Application for Variation No. VEP-122/2003 and the Application for Variation No. VEP-142/2004 shall be fully implemented. In particular, the following requirements shall be included :

在展開本許可證B部所述的工程項目各有關路段的建造工程之前，許可證持有人須向署長存放3套1:1000比例連同解釋說明的詳細設計圖則。圖則須顯示工地界線、鐵路及隧道的路線、環評報告[登記冊檔案:EIA 149/1998]建議的環境影響緩解措施，以及其他在環評報告內已評估的設施。圖則須由環境經理證明，並由獨立環境審核人核證，以確定符合環評報告[登記冊檔案:EIA 149/1998]的結果及建議。工程項目須依據環評報告[登記冊檔案:EIA 149/1998]的資料及建議，以及向署長存放的圖則建造。圖則載明的各項措施須完全執行。(見註6)

- (a) the use of resilient rail baseplates for track on viaduct, to reduce vibration transmission to the viaduct structure and thereby reduce re-radiated noise from the structures;

高架鐵路的路軌採用彈性底板，以減少傳送至高架構築物的震盪，從而減少構築物反射擴散的噪音



- (b) for the track on viaduct, mounting the track on a floating slab system to further reduce vibration transmission to the viaduct structure;

高架鐵路的路軌採用浮動平板裝配方式，進一步減少傳送至高架構築物的震盪；

- (c) the use of extended wheel skirts and adsorptive lining beneath the car, to create an acoustic plenum in the under-car area;

在列車底部安裝伸延的車裙及吸音墊，在車底範圍造成隔音氣室；

- (d) Except for the locations as set out in Schedule 1 of this Permit, the creation of a second acoustic plenum on either side of the car, using either a walkway at the side of the track or a purpose-built construction. This would also incorporate absorptive lining in the area beneath the plenum;

除本許可證附表 1 所載地點外，利用路軌旁的行人道或專門建造的結構物，在列車兩旁造成第二個隔音氣室。另外亦可在充氣空間下面的地方鋪上吸音墊，以作配合；

- (e) edge walls with sound adsorption; and

具吸音作用的圍牆；及

- (f) barriers and enclosures.

隔音屏障及隔音罩。

2.6 Before the commencement of construction of West Rail Depot, the Permit Holder shall deposit with the Director three sets of drawings with an explanatory statement showing the mitigation measures for fixed plant noise. The drawings shall be certified by the Environmental Manager and verified by the Independent Environmental Checker as conforming to the findings and recommendations of the EIA report [ref: register no EIA 149/1998]. The Project shall be constructed in accordance with the information and recommendations contained in the EIA report [ref: register no EIA 149/1998], the drawings deposited with the Director (See Note 6). All measures set out in the drawings shall be fully implemented. In particular, the following noise sources shall be addressed :

在動工建造西鐵車廠之前，許可證持有人須向署長存放3套顯示固定裝置噪音緩解措施的圖則連同解釋說明。圖則須由環境經理證明，並由獨立環境查核人核證，以確定符合環評報告[登記冊檔案:EIA 149/1998]的結果及建議。工程項目須依據環評報告[登





註冊檔案:EIA 149/1998]的資料及建議，以及向署長存放的圖則建造(見註6)。圖則載明的各項措施須完全執行，尤其須要解決下列噪音來源：

- (a) train rolling noise at West Rail Depot;  
西鐵車廠列車滾轉發出的噪音；
- (b) ventilation fans, vents and buildings;  
抽氣扇、排氣口及建築物；
- (c) chiller plant;  
冷凍裝置；
- (d) cooling water pumping station; and  
冷卻水抽水站；及
- (e) traction sub-stations.  
牽引分站。

The modification works for the West Rail Depot as per the proposal in the Application for Variation No. VEP-361/2012 shall be constructed and operated as shown in Figure 16 and the information contained in the Application for Variation No. VEP-361/2012 and Application for Variation No. VEP-413/2013. To allow sufficient time for the establishment of baseline conditions, at least three months before the commencement of construction of the modification works for the West Rail Depot, the Permit Holder shall submit an Environmental Monitoring and Auditing Programme for approval by the Director. The Permit Holder shall employ an Environmental Manager and an Independent Environmental Checker as defined in section 2.1 and section 2.2 of this Permit respectively for the implementation of the Environmental Monitoring and Auditing Programme.

編號VEP-361/2012之更改環境許可證申請書所訂定的西鐵車廠改善工程，須依據圖16、編號VEP-361/2012之更改環境許可證申請書及編號VEP-413/2013之更改環境許可證申請書的資料建造及營運。為確保具備充足時間進行基線量度，許可證持有人須於西鐵車廠改善工程動工前最少三個月，提交環境監察及審核計劃書供署長批核。許可證持有人須按本許可證第2.1及2.2條聘用環境經理及獨立環境查核人各一名，負責執行環境監察及審核計劃。



- 2.7 The Permit Holder shall submit to the Director for approval three sets of landscape master plan(s) 1 to 1000 scale together with a master implementation schedule before the commencement of construction of relevant sections of the Project described in Part B of this Permit. The drawings shall be expanded based on the Landscape Strategy Report of the EIA report [ref: register no EIA 149/1998] and shall show the conceptual landscape proposals within the works boundary to be in accordance with the recommendations of the EIA report [ref: register no EIA 149/1998] during the construction and operation of the Project. It shall also include a management and maintenance schedule indicating clearly how the landscape areas will be managed and maintained. The landscape drawings shall be certified by the Environmental Manager, and verified by the Independent Environmental Checker. All measures recommended in the approved drawings shall be fully implemented in accordance with the details and time schedule set out in the approved landscape master plan(s). (See Note 6).

在動工建造本許可證 B 部所述工程項目各有關路段之前，許可證持有人須向署長提交3套1:1000比例的總綱景觀美化圖則，並連同整體實施時間表，以待批准。圖則須按照環評報告[登記冊檔案:EIA 149/1998]的景觀美化策略報告加以引伸，並須按照環評報告[登記冊檔案:EIA 149/1998]的建議，顯示在建造及營辦工程項目期間的工程界線內的概念景觀美化建議。圖則也須包括管理及保養時間表，示明景觀美化地帶將會如何管理及保養。景觀美化圖則須由環境經理證明，並由獨立環境查核人核證。經批准的圖則所列舉的各項建議措施須完全按已批准景觀美化整體計劃載列的細項及時間表執行。(見註6)

- 2.8 Three sets of detailed landscape drawings shall be submitted to the Director for approval before the commencement of landscape and visual mitigation works of the relevant section(s) of the Project or part(s) thereof. Such drawings shall expand on the approved landscape master plan(s) and shall show the detailed landscape proposals during the construction and operation of the Project. The landscape drawings shall be certified by the Environmental Manager, and verified by the Independent Environmental Checker. All measures recommended in the approved drawings shall be fully implemented in accordance with the details and time schedule set out in the approved landscape drawings.

工程項目有關路段或部分的景觀美化或視覺上的緩解工程展開前，須向署長提交3套詳盡景觀美化圖則，以待批准。該些圖則須按照獲批准的景觀美化整體計劃加以引伸，並須示明在建造及營辦工程項目期間的詳盡景觀美化建議。景觀美化圖則須由環境經理證明，並由獨立環境查核人核證。經批准的圖則所列舉的各項建議措施，須完全按已批准的景觀美化圖則載列的細項及時間表執行。

- 2.9 The Permit Holder shall submit a field evaluation programme and an archaeological action plan for each of the Central, Northern and Western Sections in accordance with the requirements of the EIA Report [ref: register no EIA 149/1998] before commencement of



construction of the relevant sections, and obtain the approval of the Director on the programmes and action plans. The field evaluation programme and the archaeological action plans shall be certified by the Environmental Manager, and verified by the Independent Environmental Checker. All measures recommended in the approved programme and action plans shall be fully implemented in accordance with the details and time schedules set out in the approved programme and action plans. In particular, the proposals for mitigation measures to the archaeological resources revealed during the field evaluation shall be included. (See Note 6).

在動工建造中段、北段及西段的每一路段之前，許可證持有人須依據環評報告[登記冊檔案:EIA 149/1998]的規定，就各段工程分別向署長提交實地評估計劃及考古行動計劃，以待批准。實地評估計劃及考古行動計劃須由環境經理證明，並由獨立環境查核人核證。經批准的評估計劃及行動計劃所列舉的各項建議措施，須完全按已批准的評估計劃及行動計劃所載列的細項及時間表執行。實地評估所顯示關於考古資源的緩解措施建議，須一一包括在內。(見註6)

- 2.10 The design of the West Rail Depot shall avoid direct impacts to the Kwan Tai Shing Kung temple and associated grove situated to the north-east of Cheung Po and provide for buffer zone around the temple during construction.

西鐵車廠的設計須避免對位於長莆東北面的關帝聖宮廟及相關的園林造成直接影響，並在建造期間在廟宇附近提供緩衝區。

- 2.11 The external design of the Tin Shui Wai Station shall avoid adverse impacts to the Tsui Shing Lau Pagoda and be compatible with the local cultural environment.

天水圍站的外部設計須避免對聚星樓造成不良影響，並須與當地文化環境協調。

- 2.12 For the Western Section, a condition survey on the Tsui Shing Lau Pagoda shall be carried out as recommended in the EIA report [ref: register no EIA 149/1998] and deposited to the Director. The condition survey shall be undertaken prior to and following the completion of works and sample vibration monitoring shall be undertaken during construction. A vibration limit of 2mm/s peak particle velocity should be applied to all construction related activities. The condition survey shall be certified by the Environmental Manager, and verified by the Independent Environmental Checker as conforming to the information and recommendation contained in the EIA report [ref: register no EIA 149/1998] before being deposited with the Director.

西段須依據環評報告[登記冊檔案:EIA 149/1998]的建議，於聚星樓進行一項狀況勘測，並向署長存放有關勘測文件。狀況勘測須在工程完成前後進行，並在建造期間，進行採樣震盪監測，而所有與建造有關的作業活動，震盪標準以2 毫米/秒的最高粒子速



度為上限。狀況勘測文件須由環境經理證明，並由獨立環境查核人核證，以確定符合環評報告[登記冊檔案:EIA 149/1998]的資料及建議，才向署長存放。

- 2.13 Before the commencement of construction of the Northern Section and the 270m alignment from North Portal of Tai Lam Tunnel to West Rail Depot of the Project, the Permit Holder shall submit a Habitat Creation and Management Plan as recommended in the EIA report [ref: register no EIA 149/1998] and obtain the approval of the Director on the Habitat Creation and Management Plan. Before submission to the Director, the Habitat Creation and Management Plan shall be certified by the Environmental Manager and verified by the Independent Environmental Checker.

在北段及大欖隧道北面出口至西鐵車廠的一段270 米路線的建造工程展開前，許可證持有人須按照環評報告[登記冊檔案:EIA 149/1998]的建議提交生境創造及管理計劃，以待署長批准。生境創造及管理計劃在提交署長前，須由環境經理證明，並由獨立環境查核人核證。

- 2.14 Before the commencement of the construction of Central Section and Western Section, the Permit Holder shall submit and obtain approval of the Director for the Contamination Assessment Plans (CAP) of the potentially contaminated sites in accordance with the information and recommendations contained in the EIA report [ref: register no EIA 149/1998] and Annex 19, Section 3 of the TM. Before submission to the Director, the Contamination Assessment Plans shall be certified by the Environmental Manager and verified by the Independent Environmental Checker. (See Note 6)

在中段及西段建造工程動工前，許可證持有人須依據環評報告[登記冊檔案:EIA 149/1998]的資料及建議，以及技術備忘錄附件19 第3 條的規定，就有可能受污染的地區，向署長提交污染評估計劃，以待批准。污染評估計劃在提交署長前，須由環境經理證明，並由獨立環境查核人核證。(見註6)

- 2.15 Before the commencement of the construction of Central Section and Western Section, the Permit Holder shall submit and obtain the approval of the Director Contamination Assessment Reports (CAR) based on the endorsed Contamination Assessment Plans in accordance with Annex 19, Section 3 of the TM. During the preparation of the Contamination Assessment Report, if land contamination is confirmed, Remediation Action Plans (RAP) are required in accordance with Annex 19, Section 3 of the TM and shall be submitted as a combined report with the CAR to the Director for approval. Before submission to the Director, the results of the Contamination Assessment Reports and any Remediation Action Plans shall be certified by the Environmental Manager and verified by the Independent Environmental Checker. All measures recommended in the approved Remediation Action Plans shall be fully implemented in accordance with the requirements and time schedule set out in the approved Remediation Action Plans.



在中段及西段建造工程動工前，許可證持有人須依據按照技術備忘錄附件19 第3 條批核的污染評估計劃，向署長提交污染評估報告，以待批准。按照技術備忘錄附件19 第3 條，在擬備污染評估報告時如證實有土地污染，須向署長提交連同補救行動計劃的污染評估報告，以待批准。污染評估報告的結果及任何補救行動計劃在提交署長前，須由環境經理證明，並由獨立環境查核人核證。經批准補救行動計劃所列舉的各項建議措施，須完全按已批准補救行動計劃載列的細項及時間表執行。

- 2.16 Before the commencement of the construction, the Permit Holder shall deposit with the Director waste management plan(s) as recommended in the EIA report [ref: register no EIA 149/1998]. Before submission to the Director, the waste management plan shall be certified by the Environmental Manager and verified by the Independent Environmental Checker. Measures covered by the Waste Disposal Ordinance shall not be included in the waste management plan(s). All measures recommended in the approved waste management plan(s) shall be fully implemented in accordance with the requirements and time schedule(s) set out in the waste management plan(s). (See Note 6).

在建造工程動工前，許可證持有人須依據環評報告[登記冊檔案:EIA 149/1998]的建議，向署長存放廢物管理計劃。廢物管理計劃在提交署長前，須由環境經理證明，並由獨立環境查核人核證。廢物處置條例涵蓋的措施不得包括於廢物管理計劃內。經批准廢物管理計劃所列舉的各項建議措施，須完全按照廢物管理計劃載列的細項及時間表執行。(見註 6)

- 2.17 Before the commencement of the construction of the Central Section, the Permit Holder shall deposit with the Director a detailed construction risk assessment of the work site located south west of Kwai Hei Street, Kwai Fong as recommended in the EIA report [ref: register no EIA 149/1998]. The report shall, with reference to Annex A, address the risks of landfill gas accumulation in temporary structures, storage facilities and the processes and activities to be undertaken at the site and shall be certified by the Environmental Manager, and verified by the Independent Environmental Checker. All measures recommended in the report shall be fully implemented in accordance with the requirements and time schedule set out in the report deposited with the Director. (See Note 6).

在中段建造工程動工前，許可證持有人須依據環評報告[登記冊檔案:EIA 149/1998]的建議，就位於葵芳葵喜街西南的工地，向署長存放詳盡的建造風險評估報告，以待批准。該報告須參考附件 A 評估臨時構築物及貯存設施的沼氣積聚風險，並評估各項將於工地內進行的工序及作業活動。該報告須由環境經理證明，並由獨立環境查核人核證。向署長存放的報告所列舉的各項建議措施，須完全按報告載列的規定及時間表執行。(見註6)

- 2.18 The Permit Holder shall, no later than 2 months before the issue of tender for relevant Works Contract(s) for the construction of the HSK Station, deposit with the Director 3 hard copies



and 1 electronic copy of Construction Noise Management Plan (CNMP). The CNMP shall be included in the tender document for relevant Works Contract(s) of the HSK Station. If there is any change to the construction noise mitigation measures and/or plant inventory recommended in the CNMP, the Permit Holder shall, no later than 1 month before the implementation of any such change, deposit with the Director 3 hard copies and 1 electronic copy of an updated CNMP. The CNMP and updated CNMP shall include a quantitative construction noise impact assessment (including cumulative impact from the concurrent projects), an inventory of noise sources, the quieter construction method(s) and equipment, noise mitigation measures and the construction noise impact monitoring and audit programme. Quieter construction method(s), such as silent piling by Press-in method for sheet piles, use of precasting/prefabrication technology to replace in-situ construction for the aboveground superstructures of the HSK Station, etc. shall be used where practicable to mitigate the construction noise impact. The CNMP and updated CNMP shall also include an implementation schedule in table form to clearly list out the mitigation measures to be implemented, and the implementation party, location, timing, and environmental performance required for implementation of the mitigation measures. The CNMP and updated CNMP shall be certified by the Environmental Manager and verified by the Independent Environmental Checker as conforming to the relevant information and recommendations of the Application Documents for Variation of an Environmental Permit (Application No. VEP-622/2022). All mitigation measures recommended and requirements specified in the CNMP and the updated CNMP shall be fully implemented.

許可證持有人須在建造洪水橋站的相關建造工程合約招標前最少2個月，向署長存放建築噪音管理計劃的3份硬複本及1份電子複本。洪水橋站的相關建造工程合約的招標文件中須包含該建築噪音管理計劃。如建築噪音管理計劃建議的建築噪音緩解措施及／或設備清單有任何更改，許可證持有人須在實施任何更改事項前最少1個月把已更新的建築噪音管理計劃的3份硬複本及1份電子複本送交署長存放。建築噪音管理計劃及已更新的建築噪音管理計劃須包括定量建築噪音評估(包括與其他工程的累積影響)、噪音源清單、較低噪音的建築方法及機動設備、噪音緩解措施、以及建築噪音影響的監察及審核計劃。在可行的情況下須盡量使用較低噪音的建築方法，如以靜壓植樁法安裝板樁、利用預製技術取代於現場建造洪水橋站的上蓋結構等，以緩解建築噪音影響。建築噪音管理計劃及已更新的建築噪音管理計劃須包括以列表形式列出的實施時間表，清楚列明將會執行的緩解措施、實施者、地點、時間，以及實施緩解措施時須達到的環境表現規定。建築噪音管理計劃及已更新的建築噪音管理計劃須由環境經理核證，並經獨立環境查核人核實，確定符合更改環境許可證申請文件(申請書編號：VEP-622/2022)載列的相關資料及建議。建築噪音管理計劃及已更新的建築噪音管理計劃中建議的所有緩解措施及指明的規定，均須全面予以實施。

- 2.19 In accordance with the information and recommendations contained in the EIA report [ref: register no EIA 149/1998], the Permit Holder shall deposit an Environmental Monitoring



and Audit (EM&A) Manual with the Director no later than 2 months before the commencement of construction of the HSK Station. The EM&A Manual shall satisfy the requirements as prescribed in section 10, SCHEDULE 4 of the Environmental Impact Assessment Ordinance and Annex 21 of the Technical Memorandum on Environmental Impact Assessment Process. The EM&A Manual shall be certified by the Environmental Manager and verified by the Independent Environmental Checker before submission to the Director. (See Note 6).

依據環評報告[登記冊檔案:EIA 149/1998]的資料及建議，許可證持有人須在洪水橋站的建造工程展開前最少 2 個月，向署長存放環境監察及審核手冊。該手冊須符合環境評估條例附表4 第10 條載列的規定，以及環境影響評估程序的技術備忘錄附件21 的規定。該手冊在提交署長前，須由環境經理證明，並由獨立環境查核人核證。(見註6)

- 2.20 In accordance with the information and recommendation contained in the EIA report [ref: register no EIA 149/1998], the Permit Holder shall deposit an Implementation Schedule with the Director no later than 2 months before the commencement of construction of the HSK Station. The Implementation Schedule shall contain a schedule of all mitigation measures recommended in the EIA report, listing out what the mitigation measures are, by whom, when, where and to what requirements, and including the key environmental monitoring and audit requirements. The implementation Schedule shall be certified by the Environmental Manager and verified by the Independent Environmental Checker before submission to the Director. All measures included in the Implementation Schedule shall be fully implemented. (See Note 6).

依據環評報告[登記冊檔案:EIA 149/1998]的資料及建議，許可證持有人須在洪水橋站的建造工程展開前最少 2 個月，向署長存放實施時間表。實施時間表須載明環評報告列舉的各項建議緩解措施的時間表，列明緩解措施的具體內容、執行人、時間、地點及達到的規定，並包括主要的環境監察及審核規定。實施時間表在提交署長前，須由環境經理證明，並由獨立環境查核人核證。實施時間表內各項措施，須完全按照時間表執行。(見註6)

- 2.21 The Permit Holder pursuant to  
許可證持有人依據

(I)The Application for Variation No. VEP-084/2003 with respect to

更改環境許可證申請書編號VEP-084/2003 就

- (a) revision of measures to mitigate the landfill gas risk;



更改工程項目的堆填區沼氣風險緩解措施；

(II) The Application for Variation No. VEP-078/2002 with respect to

更改環境許可證申請書編號VEP-078/2002 就

(b) revision of location of noise barriers at West Rail Depot;

更改位於西鐵車廠的隔音屏障的位置；

(III) The Application for Variation No. VEP-067/2002 with respect to

更改環境許可證申請書編號VEP-067/2002 就

(c) revision of the 86m long full noise enclosure at Tuen Mun Station to semi-noise enclosure; and provide additional enclosure on the north of this enclosure;

位於屯門站 86 米長全密封的隔音罩修改至半密封的隔音罩；  
及在隔音罩北面提供額外的隔音罩；

(IV) The Application for Variation No. VEP-062/2002 with respect to

更改環境許可證申請書編號VEP-062/2002 就

(d) increase in the elevation of viaduct by approximately 8m at Yick Yuen;

增加位於亦園的高架鐵路的高度約 8 米；

(V) The Application for Variation No. VEP-045/2001 with respect to

更改環境許可證申請書編號VEP-045/2001 就

(e) reduction of train length from 12 cars to 9 cars with increase in train frequency from 30 to 40 trains per hour during 0600 to 0700;

時期間增加列車班次，由每小時30 班增至每小時 40 班；

(f) reduction of train speed between Tin Shui Wai and Siu Hong from 130km/h to 100km/h;

減低天水圍至兆康一段的車速，由每小時 130 公里減至每小時



100 公里；

- (g) revised locations of noise enclosure and additional height noise barriers at the north of Kam Sheung Road Station, near Pok Oi Hospital, the west of Long Ping Station, the west of Tin Shui Wai Station, Tin Sam Tsuen to Lam Tei and Tuen Mun;

在錦上路站北面近博愛醫院、朗屏站西面、天水圍站西面、田心村至藍地和屯門更改隔音罩的位置，並加高隔音屏障；

(VI) The Application for Variation No. VEP-020/2000

更改環境許可證申請書編號VEP-020/2000 就

- (h) the construction method for the Tsing Tsuen Tunnel;

青荃隧道的建造方法；

- (i) the revised alignment in Tsuen Wan;

經修訂的荃灣路線；

- (j) the increased quantities of marine mud at Tsuen Wan Bay;

荃灣海灣海泥數量增多；

shall within 45 days, provide supplementary information for the Director's approval of any changes necessary to the submissions previously made to the Director in fulfilment of conditions 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.14, 2.16, 2.17, 2.19 and 2.20 above. All supplementary information shall be certified by the Environmental Manager and verified by the Independent Environmental Checker before submission to the Director. All mitigation measures arising from submitted supplementary information shall be fully implemented in accordance with the details and time schedule set out in the approved supplementary information.

為符合上文條件第2.4、2.5、2.6、2.7、2.8、2.9、2.14、2.16、2.17、2.19和2.20項而於早前向署長提交的文件如需作出改動，須在45天內把補充資料提交署長批准。所有補充資料均須由環境經理核證，並由獨立環境查核人核實，然後才提交署長。因提交補充資料所引致的各項緩解措施，均須依據獲批准的補充資料所載詳情和時間表完全執行。



2.22 All finalised submissions, as required under this part of the permit, shall be released to the public if requested by the Director, by depositing copies in the Environmental Impact Assessment Ordinance Register Office or any other places or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of submissions.

所有按本許可證本部規定提交的文件定稿，在署長要求下須公開給公眾人士知道，方法是將有關文件副本存放於環境影響評估條例登記冊辦事處或署長所指定的任何地方或任何方法，以供公眾查閱。因此，許可證持有人須提供足夠數量的文件副本。



**3. Submissions or Measures during the Construction Period**

**建造工程期間提交的文件或採取的措施**

- 3.1 Within two months of commencement of construction of each of the Southern, Central, Northern and Western sections of the Project, the Permit Holder shall deposit with the Director environmental management plan(s) as recommended in the EIA Report [ref: register no EIA 149/1998]. Before their submission to the Director, the environmental management plan(s) shall be certified by the Environmental Manager and verified by the Independent Environmental Checker.

工程項目南段、中段、北段及西段各段建造工程展開後2個月內，許可證持有人須向署長存放環評報告[登記冊檔案:EIA 149/1998]建議的環境管理計劃。環境管理計劃在提交署長之前，須由環境經理證明，並由獨立環境查核人核證。

- 3.2 Within 6 months of the commencement of construction of the Northern Section and the 270m alignment from North Portal of Tai Lam Tunnel to West Rail Depot of the Project, the Permit Holder shall submit an implementation programme for the Habitat Creation and Management Plan submitted under condition 2.13 and obtain the approval of the Director. Before its submission to the Director, the implementation programme shall be certified by the Environmental Manager and verified by the Independent Environmental Checker. All measures recommended in the approved Habitat Creation and Management Plan and its implementation programme shall be fully implemented.

在工程項目北段及大欖隧道北面出口至西鐵車廠的一段270米路線的建造工程展開後6個月內，許可證持有人須就按照第2.13項條件提交的生境創造及管理計劃，提交一份實施計劃，並須獲得署長批准。實施計劃在提交署長之前，須由環境經理證明，並由獨立環境查核人核證。獲批准的生境創造及管理計劃及其實施計劃內所建議的各項措施，須完全執行。

- 3.3 All design or construction measures described in the submissions approved or deposited under section 2, and conditions 3.1 and 3.2 above shall be fully implemented. Any changes to the measures shall be justified by Environmental Manager and verified by the Independent Checker as conforming to the requirements of the EIA Report [ref: register no EIA 149/1998]. (See Note 6).

依據上述第2條及第3.1項及3.2項條件獲批准或存放的提交文件內說明的各項設計或建造措施，須完全執行。措施如有任何更改須由環境經理提出充分理由支持，並由獨立環境查核人核證符合環評報告[登記冊檔案:EIA 149/1998]的規定。(見註6)



- 3.4 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998] and with reference to Annex B, measures to mitigate environmental impacts from site run-off and drainage shall be implemented.

根據環評報告[登記冊檔案:EIA 149/1998]的資料及建議以及參照附件 B，須實施措施以緩解工地徑流及排水所造成的環境影響。

- 3.5 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998]) and with reference to Annex C, measures to mitigate water quality impacts during tunneling and station construction shall be implemented.

根據環評報告[登記冊檔案:EIA 149/1998]的資料及建議以及參照附件 C，須實施措施以緩解開挖隧道及建造車站期間所造成的水質影響。

- 3.6 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998] and with reference to Annex D, measures to mitigate water quality impacts during reclamation work and other construction activities shall be implemented.

根據環評報告[登記冊檔案:EIA 149/1998]的資料及建議以及參照附件 D，須實施措施以緩解在填海工程及其他建造作業活動期間所造成的水質影響。

- 3.7 For the construction of the Central Section at Tsuen Wan Bay Reclamation, the combined rate of filling and dredging shall not be exceeding 15,000cu.m. per day for filling and 1,000cu.m. per day for the duration of the 16-hour working days for dredging. The status of compliance with these rates shall be reported in the monthly EM&A reports in condition 4.5 of this Permit.

在荃灣海灣填海區進行的中段鐵路建造工程，就合併的填土挖泥率而言，每日的填土率須不超過15,000 立方米，而挖泥率在以每日工作16 小時計算下須不超過每日1,000 立方米。依據本許可證第4.5 項條件提交的環境監察及審核報告，須匯報符合上述填土/挖泥率的狀況。

- 3.8 For the Tsuen Wan Central Salt Water Pumping Station at Tsuen Wan Bay Reclamation, silt curtain mitigation around dredging shall be adapted to maintain the flushing water intakes at acceptable levels.

在荃灣海灣填海區挖泥地點四周採取設置淤泥屏幕的緩解措施，以確保在荃灣海灣填區內的荃灣中海水抽水站抽取的沖廁用水維持在可接受的水平。



- 3.9 Storm water culverts, including Tai Ho and Ma Tau Pa Culverts, shall be relocated along the existing coastline before dredging and reclamation filling being undertaken in order to avoid water quality impacts.

雨水下水道(包括大河及馬頭壩下水道)須在進行挖泥及填海填土之前,沿現存海岸線遷移,以避免影響水質。

- 3.10 To mitigate the cultural heritage and archaeological impacts during construction:

為緩解建造期間對文化遺產及考古文物造成影響:

- (a) The Director shall be informed immediately if any antiquities are discovered during the course of the construction works to further assess the cultural value of the items;

在建造工程進行期間如發現任何古物,須即時通知署長,以進一步評估物品的文化價值;

- (b) Direct impact to any historical buildings or structures identified shall be avoided. Devices shall be attached to the walls of those historical buildings next to the working site so as to monitor the impact of vibration on the structural stability of the historic buildings; and

須避免對任何已確認的歷史建築物或構築物造成直接影響。與工作場地毗鄰的歷史建築物,其牆壁須加上裝置,以監測震盪對歷史建築物結構穩定程度的影響;及

- (c) a buffer zone of at least 5m shall be adopted between the Lau's residence at Tung Shing Lei (east of Yuen Long) and the site boundary for the construction work to avoid direct impacts to the buildings.

東成里的劉氏大屋(元朗東面)及建造工程工地界線之間須設有至少5米的緩衝區,避免直接影響建築物。

- 3.11 During the construction of the Northern Section, native species shall be included in the plant list for revegetation of finished cut slope and lineside planting.

在北段建造工程進行期間,為已完工的削坡重新種植以及在沿線種植的植物名單,須包括本地品種。

- 3.12 The following measures shall be undertaken to protect the marsh habitat adjacent to Kam Tin Road as shown in Figure 4:



須採取以下措施以保護圖 4 所示錦田公路毗鄰的濕地生境：

- (a) Bunding, sheet piling shall be installed at the works boundary within and adjacent to the marsh to prevent dewatering of the marsh outside the work areas. Such devices shall be removed on the completion of construction works;

濕地內及濕地毗鄰的工程界線須設置岸堤及圍板，防止工程範圍外的濕地疏乾。該等裝置須在建造工程完成後拆除。

- (b) Solid fencing shall be installed at the boundary of works area within and adjacent to the marsh. The works boundary shall be regularly inspected and any necessary maintenance of the fencing shall be undertaken within 24 hours; and

濕地內及濕地毗鄰的工程範圍界線須設置實心的圍欄。須定期巡視工程界線，如發現圍欄需要進行任何必要的維修，須在24小時內進行；及

- (c) Works areas at the marsh that are not permanently occupied by the Project shall be reinstated back to original conditions immediately after the completion of the construction.

工程項目不會永久佔用的濕地工程範圍，須在建造工程完成後立即回復原狀。

3.13 Fish ponds that are temporarily disturbed during construction shall be reinstated back to fish ponds after completion of construction.

在建造期間暫時受到干擾的魚塘，須在建造工程完成後回復為魚塘。

3.14 The Permit Holder pursuant to

許可證持有人依據

(I) The Application for Variation No. VEP-084/2003 with respect to

更改環境許可證申請書編號VEP-084/2003 就

- (a) revision of measures to mitigate the landfill gas risk;

更改工程項目的堆填區沼氣風險緩解措施；



(II) The Application for Variation No. VEP-078/2002 with respect to

更改環境許可證申請書編號VEP-078/2002 就

- (b) revision of location of noise barriers at West Rail Depot;

更改位於西鐵車廠的隔音屏障的位置；

(III) The Application for Variation No. VEP-067/2002 with respect to

更改環境許可證申請書編號VEP-067/2002 就

- (c) revision of the 86m long full noise enclosure at Tuen Mun Station to semi-noise enclosure; and provide additional enclosure on the north of this enclosure;

位於屯門站 86 米長全密封的隔音罩修改至半密封的隔音罩；  
及在隔音罩北面提供額外的隔音罩；

(IV) The Application for Variation No. VEP-062/2002 with respect to

更改環境許可證申請書編號 VEP-062/2002 就

- (d) increase in the elevation of viaduct by approximately 8m at Yick Yuen;

增加位於亦園的高架鐵路的高度約 8 米；

(V) The Application for Variation No. VEP-045/2001 with respect to

更改環境許可證申請書編號VEP-045/2001 就

- (e) reduction of train length from 12 cars to 9 cars with increase in train frequency from 30 to 40 trains per hour during 0600 to 0700;

縮減火車的長度，由 12 節車廂減至 9 節車廂，並在上午 6 時至 7 時期間增加列車班次，由每小時 30 班增至每小時 40 班；

- (f) reduction of train speed between Tin Shui Wai and Siu Hong from 130km/h to 100km/h;

減低天水圍至兆康一段的車速，由每小時 130 公里減至每小



時 100 公里；

- (g) revised locations of noise enclosure and additional height noise barriers at the north of Kam Sheung Road Station, near Pok Oi Hospital, the west of Long Ping Station, the west of Tin Shui Wai Station, Tin Sam Tsuen to Lam Tei and Tuen Mun;

在錦上路站北面近博愛醫院、朗屏站西面、天水圍站西面、田心村至藍地和屯門更改隔音罩的位置，並加高隔音屏障；

(VI) The Application for Variation No. VEP-020/2000

更改環境許可證申請書編號VEP-020/2000 就

- (h) the construction method for the Tsing Tsuen Tunnel;

青荃隧道的建造方法；

- (i) the revised alignment in Tsuen Wan;

經修訂的荃灣路線；

- (j) the increased quantities of marine mud at Tsuen Wan Bay;

荃灣海灣海泥數量增多；

shall within 45 days, provide supplementary information for the Director's approval of any changes necessary to the submissions previously made to the Director in fulfilment of condition 3.1. All supplementary information shall be certified by the Environmental Manager and verified by the Independent Environmental Checker before submission to the Director. All measures in the approved supplementary information shall be fully implemented in accordance with the details and time schedule set out in the approved supplementary information. (See note 6).

為符合上文條件第3.1 項而於早前向署長提交的文件如需作出改動，須在45 天內把補充資料提交署長批准。所有補充資料均須由環境經理核證，並由獨立環境查核人核實，然後才提交署長。獲批准的補充資料內載的各項措施，均須依據獲批准的補充資料所載詳情和時間表完全執行。(見註6)

3.15 All finalised submissions, as required under this part of the permit, shall be released to the public if requested by the Director, by depositing copies in the Environmental Impact



Assessment Ordinance Register Office or any other places or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of submissions.

所有按本許可證本部規定提交的文件定稿，在署長要求下須公開給公眾人士知道，方法是將有關文件副本存放於環境影響評估條例登記冊辦事處或署長所指定的任何地方或任何方法，以供公眾查閱。因此，許可證持有人須提供足夠數量的文件副本。

#### **4. Environmental Monitoring and Audit During Construction**

##### **建造工程期間的環境監察及審核**

- 4.1 Any changes to the EM&A arrangements as required under the EM&A Manual or under the Implementation Schedule shall be justified by the Environmental Manager, and verified by the Independent Environmental Checker in the monthly EM&A Reports and submitted to the Director under condition 4.5.

根據環境監察及審核手冊或實施時間表而訂立的環境監察及審核規定，若要作出任何更改，須在每月提交的環境監察及審核報告中，由環境經理提出充分理由支持，並經由獨立環境查核人加以核證，然後依據第4.5項條件提交給署長。

- 4.2 EM&A requirements shall be implemented as set out in the EM&A Manuals and monthly EM&A Reports unless the changes are justified in the monthly EM&A Reports submission, verified by the Independent Environmental Checker and approved by the Director.

環境監察及審核的規定，須按環境監察及審核手冊及每月環境監察及審核報告訂明的要求執行，除非擬議的更改在每月提交的環境監察及審核報告獲得充分理由支持並經由獨立環境查核人核證，以及獲得署長批准。

- 4.3 Samples and measurements shall be taken in accordance with the requirements of noise, air quality, water quality monitoring, ecological in the EM&A Manual by:

須按照環境監察及審核手冊對噪音、空氣質素、水質監測及生態方面的規定進行抽樣及測量：

- (a) conducting baseline air, noise and water quality monitoring at the specified locations and frequencies;

在指定地點進行指定次數的空氣、噪音及水質基線監測；

- (b) conducting impact monitoring on air quality, water quality, noise quality, and ecological resources at the specified locations and frequencies;



在指定地點進行指定次數的空氣質素、水質、噪音質素及生態資源影響監測；

- (c) in cases where specified criteria in the EM&A Manual are exceeded, carrying out remedial actions in accordance with Event Contingency Plans, to be set out in the EM&A Manual; and

如果超逾了環境監察及審核手冊所指定的準則，須按照環境監察及審核手冊載明的事件應變計劃，採取補救行動；及

- (d) logging and keeping records of the details of (a) to (c) above, within 3 working days of the collection of data or completion of remedial action, for the purposes of preparing and submitting EM&A Reports, and to make available for information for inspection on site,

在收集數據或完成補救行動3 個工作天內記錄上述(a)至(c)項的詳情，用作擬備和提交環境監察及審核報告，並備妥有關資料以便在工地查閱。

- 4.4 Ten copies of the Baseline Monitoring Report certified by the Environmental Manager, and verified by the Independent Environmental Checker shall be submitted to the Director one month before the commencement of any major construction works that would affect the monitoring results.

在任何會影響監察結果的大型建造工程展開1 個月前，須向署長提交10 份由環境經理證明，並由獨立環境查核人核證的基線監察報告。

- 4.5 Ten copies of monthly EM&A Reports certified by the Environmental Manager, and verified by the Independent Environmental Checker shall be submitted to the Director within 10 working days from the end of the reporting month.

在須提交報告的月份結束後10 個工作天內，須向署長提交10 份由環境經理證明，並經獨立環境查核人核證的每月環境監察及審核報告。

- 4.6 The submitted reports as required in condition 4.4 and 4.5 shall be rectified in accordance with the comments made by the Director within one month or otherwise specified by the Director.

第4.4 及4.5 項條件所規定提交的報告，須在1 個月或按署長指定的其他形式，根據署長的意見作出修改。



- 4.7 Actions described in the action plan(s) of the EM&A Manual shall be carried out, in accordance with the time frame set out in the action plan(s), or as agreed by the Director.

環境監察及審核手冊的行動計劃所說明的行動，須按照行動計劃所訂明的時限或如署長所同意執行。

- 4.8 All finalised submissions, as required under this part of the Permit, shall be released to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office or any other places or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of submissions.

所有按本許可證本部規定提交的文件定稿，須公開給公眾人士知道，方法是將有關文件副本存放於環境影響評估條例登記冊辦事處或署長所指定的任何地方或任何方法，以供公眾查閱。因此，許可證持有人須提供足夠數量的文件副本。



**5. Submissions or Measures before Operation of the Project**

**營辦工程項目前提交的文件或採取的措施**

- 5.1 All design or operational measures described in the submissions approved, or deposited under section 2 and section 3 above, shall be fully implemented.

按照上述第2及第3條，經批准的提交文件或存放的提交文件內說明的各項設計或營運措施，必須完全執行。

- 5.2 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998], the information contained in the Application for Variation No. VEP-020/2000, Environmental Permit No. VEP-020/2000/A/EP-004, Application for Variation No. VEP-045/2001, Environmental Permit No. EP-004/1998/B, Application for Variation No. VEP-062/2002, Environmental Permit No. EP-004/1998/C, Application for Variation No. VEP-067/2002, Environmental Permit No. EP-004/1998/D, Application for Variation No. VEP-078/2002, Environmental Permit No. EP-004/1998/E, Application for Variation No. VEP-084/2003, Environmental Permit No. EP-004/1998/F, Application for Variation No. VEP-122/2003 and any approved supplementary information arising therefrom, the Permit Holder shall submit an Operational Environmental Monitoring and Audit (EM&A) Manual for the approval by the Director prior to the commissioning of the project. The Operational EM&A Manual shall satisfy the requirements as prescribed in section 10, SCHEDULE 4 of the Environmental Impact Assessment Ordinance and Annex 21 of the Technical Memorandum on Environmental Impact Assessment Process. The Operational EM&A Manual shall be certified by the Environmental Manager and verified by the Independent Environmental Checker before submission to the Director. In particular, the requirements on landfill gas hazard monitoring, maintenance, precautionary and emergency measures, with reference to Annex E, shall be included. (See Note 6).

依據環評報告[登記冊檔案:EIA 149/1998]所載的資料及建議，編號VEP-020/2000之更改環境許可證申請書，環境許可證編號VEP-020/2000/A/EP-004，編號VEP-045/2001之更改環境許可證申請書，環境許可證編號EP-004/1998/B，編號VEP-062/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/C，編號VEP-067/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/D，編號VEP-078/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/E，編號VEP-084/2003之更改環境許可證申請書，環境許可證編號EP-004/1998/F，編號VEP-0122/2003之更改環境許可證申請書的資料和任何已批核的附加資料所載資料及建議，許可證持有人須在工程項目投入運作前，向署長提交營運的環境監察及審核手冊，以待批准。該手冊須符合環境評估條例附表4第10條載列的規定，以及環境影響評估程序的技術備忘錄附件21的規定。該手冊在提交署長前，須由環境經理證明，並由獨立環境查核人核證。該手冊尤須包括參照附件E而就堆填區沼氣危險監測、保養、預防及緊急應變措施所訂定的規定。(見註6)



- 5.3 Prior to the operation of the Project, the Permit Holder shall submit to the satisfaction of the Director a proposal for performance test(s) to illustrate that the 9-car disc braked Electric Multiple Unit train would meet the specification of maximum level (Lmax) not exceeding 82.5dB(A) at 130kph measured at 25m from the at-grade ballasted tracks. The performance test proposal shall be certified by the Environmental Manager and verified by the Independent Environmental Checker.

許可證持有人在營辦工程項目前，須向署長提交令其滿意的效能測試建議，以說明當9卡碟形制動電氣化列車在地面上的鋪道碴路軌上以時速130公里行駛時，在25米距離，測量所得的噪音量會符合不超過82.5分貝(A)的最高聲級規格。該效能測試建議須由環境經理證明，並由獨立環境查核人核證。

- 5.4 Prior to the operation of the Project, the Permit Holder shall submit to the satisfaction of the Director a report on performance test of the disc braked Electric Multiple Unit train on the basis of condition 5.3. The performance test report shall be certified by the Environmental Manager and verified by the Independent Environmental Checker.

許可證持有人在營辦工程項目前，須向署長提交以第5.3項條件為基礎關於碟形制動電氣化列車效能測試的報告，並令署長滿意。效能測試報告須由環境經理證明，並由獨立環境查核人核證。

- 5.5 For the Southern Section, the railway shall be fully contained in a box structure and covered by a landscaped earth mound in accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998].

南段的鐵路須依據環評報告[登記冊檔案:EIA 149/1998]所載的資料及建議，完全藏於箱形構築物內，再以景觀美化的土墩覆蓋。

- 5.6 For the Central Section, except the 270m at the northern end, the railway shall be built in a tunnel in accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998], the information contained in the Application for Variation No. VEP-020/2000, Environmental Permit No. VEP-020/2000/A/EP-004, Application for Variation No. VEP-045/2001 and any approved supplementary information arising therefrom. (See Note 6).

中段的鐵路(除北端一段270米路線之外)，須依據環評報告[登記冊檔案:EIA 149/1998]，編號VEP-020/2000之更改環境許可證申請書的資料，環境許可證編號VEP-020/2000/A/EP-004，編號VEP-045/2001之更改環境許可證申請書和任何已批核的附加資料所載的資料及建議，在隧道內建造。

- 5.7 For the Northern Section and Western Section, the noise mitigation measures shall be constructed in accordance with the information and recommendations contained in the EIA

Report [ref: register no EIA 149/1998], the information contained in the Application for Variation No. VEP-045/2001, Environmental Permit No. EP-004/1998/B, Application for Variation No. VEP-062/2002, Environmental Permit No. EP-004/1998/C, Application for Variation No. VEP-067/2002, Environmental Permit No. EP-004/1998/D, Application for Variation No. VEP-078/2002, Environmental Permit No. EP-004/1998/E, Application for Variation No. VEP-122/2003, Environmental Permit No. EP-004/1998/G, Application for Variation No. VEP-142/2004, and Application for Variation No. VEP-622/2022.

有關北段及西段，須按照環評報告[登記冊檔案:EIA 149/1998]所載的資料及建議，編號VEP-045/2001之更改環境許可證申請書，環境許可證編號EP-004/1998/B，編號VEP-062/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/C，編號VEP-067/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/D，編號VEP-078/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/F，編號VEP-0122/2003之更改環境許可證申請書，環境許可證編號EP-004/1998/G，編號VEP-142/2004和編號VEP-622/2022之更改環境許可證申請書的資料建設噪音緩解措施。

- 5.8 The Permit Holder shall, no later than 2 months before operation of the HSK station, deposit with the Director 3 hard copies and 1 electronic copy of a Railway Noise Performance Test Report (RNPTR) and a Fixed Noise Audit Report (FNAR). The RNPTR and FNAR shall demonstrate that the railway and fixed noise associated with the HSK Station as well as their cumulative impact comply with the requirements as set out in the Application Documents for Variation of an Environmental Permit (Application No. VEP-622/2022), or otherwise approved by the Director in compliance with the requirements in Technical Memorandum on Environmental Impact Assessment Process and Noise Control Ordinance. The RNPTR and FNAR shall be certified by the Environmental Manager and verified by the Independent Environmental Checker as conforming to the relevant information and recommendations of the Application Documents for Variation of an Environmental Permit (Application No. VEP-622/2022). All mitigation measures recommended and requirements specified in the RNPTR and FNAR shall be fully implemented.

許可證持有人須在洪水橋站營辦前最少2個月，向署長存放鐵路噪音水平測試報告和固定噪音審核報告的3份硬複本及1份電子複本。鐵路噪音水平測試報告和固定噪音審核報告須證明有關洪水橋站所產生的鐵路和固定噪音及其累積影響均符合更改環境許可證申請文件(申請書編號：VEP-622/2022)所載列的要求，或由署長另外批准以符合環境影響評估程序的技術備忘錄和噪音管制條例的要求。鐵路噪音水平測試報告和固定噪音審核報告須由環境經理核證，並經獨立環境查核人核實，確定符合更改環境許可證申請文件(申請書編號：VEP-622/2022)載列的相關資料及建議。鐵路噪音水平測試報告和固定噪音審核報告中建議的所有緩解措施及指明的規定，均須全面予以實施。



- 5.9 The Permit Holder shall liaise with the Fire Service Department to work out an off-site Emergency Plan for Au Tau Water Treatment Work including the arrangements for the external services to stop trains from entering the affected area from either direction in the event of a chlorine release, in accordance with the information and recommendations in the EIA Report [ref: register no EIA 149/1998].

許可證持有人應聯絡消防處，以便為凹頭濾水廠擬訂一套場外緊急應變計劃，包括按照環評報告[登記冊檔案:EIA 149/1998]的資料及建議，在萬一氯氣洩漏時，有外部支援，截停上下行列車以免駛入受影響範圍。

- 5.10 Ventilation intakes for Kam Tin Station and the shops and offices there should be located at as high a level as reasonably practicable and should be substantially enclosed.

錦田站及該處店舖和寫字樓的通風入口，應在合理可行的情況下盡量設於較高位置，並應盡量圍封。

- 5.11 Before operation of the Project, the Permit Holder shall carry out an audit to confirm that all the agreed environmental measures for the Project's operation have been fully implemented. The audit shall cover all measures recommended in the EIA Report [ref: register no EIA 149/1998], described in submissions approved, or deposited with the Director under section 2, section 3, and section 5 of this Permit. The result of the audit shall be documented in an Audit Report and submitted to the Director prior to operation of the Project. The audit Report shall be certified by the Environmental Manager and verified by the Independent Environmental Checker as conforming to the findings and recommendations of the EIA Report [ref: register no EIA 149/1998], the information contained in the Application for Variation No. VEP-020/2000, Environmental Permit No. VEP-020/2000/A/EP-004, Application for Variation No. VEP-045/2001, Environmental Permit No. EP-004/1998/B, Application for Variation No. VEP-062/2002, Environmental Permit No. EP-004/1998/C, Application for Variation No. VEP-067/2002, Environmental Permit No. EP-004/1998/D, Application for Variation No. VEP-078/2002, Environmental Permit No. EP-004/1998/E, Application for Variation No. VEP-084/2003 and any submissions approved or deposited with the Director. (See Note 6).

許可證持有人須在營辦工程項目前進行審核，以確定已完全執行各項為營辦工程項目而同意的環境措施。審核須包括環評報告[登記冊檔案:EIA 149/1998]建議的各項措施，以及按照本許可證第2、3及5條經批准提交的文件或向署長存放的文件所載明的各項措施。審核結果須記錄於審核報告內，並在營辦工程項目前提交給署長。審核報告須由環境經理證明，並由獨立環境查核人核證，以確定符合環評報告[登記冊檔案:EIA 149/1998]，編號VEP-020/2000之更改環境許可證申請書的資料，環境許可證編號VEP-020/2000/A/EP-004，編號VEP-045/2001之更改環境許可證申請書，環境許可證編號EP-004/1998/B，編號VEP-062/2002之更改環境許可證申請書，環境許可證編號EP-



004/1998/C，編號VEP-067/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/D，編號VEP-078/2002之更改環境許可證申請書，環境許可證編號EP-004/1998/E，編號VEP-084/2003之更改環境許可證申請書的資料和任何已批核的附加資料的結果及建議。

- 5.12 All finalised submissions, as required under this part of the Permit, shall be released to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office or any other places or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of submissions.

所有按本許可證本部規定提交的文件定稿，須公開給公眾人士知道，方法是將有關文件副本存放於環境影響評估條例登記冊辦事處或署長所指定的任何地方或任何方法，以供公眾查閱。因此，許可證持有人須提交足夠數量的文件副本。

- 5.13 Five sets of as-built drawings of scale 1 to 1000 with an explanatory statement showing the alignment and mitigation measures covered by this Permit, shall be deposited to the Director within three months after the completion of construction of each of the Southern, Central, Northern and Western sections.

須於南段、中段、北段及西段每項建造工程竣工3個月內，向署長存放5套1:1000比例的竣工圖連同解釋說明，示明本許可證涵蓋的路線及緩解措施。

- 5.14 All measures specified in Table A of Schedule 1 shall be implemented in accordance with the information contained in the Application for Variation No. VEP-122/2003, and the details and the time frame specified in the Schedule 1 of this Permit.

附表1表A列明的各項措施，須按照更改環境許可證申請書編號VEP-122/2003內載的資料及本許可證附表1列明的詳情及時間表執行。

- 5.15 All measures specified in Schedule 2 shall be implemented in accordance with the information contained in the Application for Variation No. VEP-622/2022, and the details and the time frame specified in the Schedule 2 of this Permit.

附表2列明的各項措施，須按照更改環境許可證申請書編號VEP-622/2022內載的資料及本許可證附表2列明的詳情及時間表執行。

## **6. Environmental Mitigation Measures during Operation Period** **營辦期間的環境緩解措施**

- 6.1 The maximum train speed shall be 130km/hr except for train speed between Tin Shui Wai and Siu Hong which is reduced to 100km/hr. Prior to any increase in train frequency, train





length and speed with respect to the initial start-up, a noise assessment report shall be submitted and obtain approval from the Director. The noise assessment is to evaluate the adequacy of noise mitigation measures and develop enhancement programmes. Before its submission to the Director, the noise assessment report shall be certified by the Environmental Manager and verified by the Independent Environmental Checker. All measures recommended in the approved noise assessment report Plan shall be fully implemented in accordance with the requirements and time schedules set out in the report.

列車的最高時速為 130 公里。如以最初通車的情況作基準擬增加列車班次、列車長度或速度，之前須向署長提交噪音評估報告，以待批准。噪音評估作用是評估噪音緩解措施是否足夠，並制訂改善計劃。噪音評估報告提交予署長前，須由環境經理證明，並由獨立環境查核人核證。經批准的噪音評估報告計劃所列舉的各項建議措施，須完全按報告載列的規定及時間表執行。

- 6.2 In line with the commitment made by the Permit Holder, the multi-plenum system should be designed to provide the flexibility for future enhancement so that edge wall barrier heights can be incrementally extended for increased noise attenuation from 1.2 m upto full enclosure. This is to provide greater flexibility in the long term land use planning of areas through which the Project passes and will facilitate, as yet uncommitted, developments, to be considered in much closer proximity to the railway than would otherwise be the case.

為符合許可證持有人作出的承諾，多重充氣空間系統的設計應該具備彈性，可供將來增大，使圍牆屏障的高度可以由1.2米逐步提高，以至全面圍封，從而提高消減噪音的效能。這樣可為工程項目所經過的地區的長遠土地用途規劃，提供較大的彈性，並使未承諾的發展項目有較大可能獲考慮在較貼近鐵路的地方興建。

- 6.3 In accordance with the information and recommendations contained in the EIA Report [ref: register no EIA 149/1998] and Annex F, measures to mitigate the water quality impact during operation shall be implemented.

營辦期間水質影響的緩解措施，須按照環評報告[登記冊檔案:EIA 149/1998]及附件 F 的資料及建議執行。

- 6.4 Before public sewerage becomes available in Hung Shui Kiu and Kam Tin, waste water and sewage arising from the proposed HSK Station, Kam Tin Station, KCRC Head Quarter and West Rail Depot (WRD) shall be collected at holding tanks and transported to Yuen Long Sewage Treatment Works or any sewage treatment facilities as agreed with Drainage Services Department by road tanker for off-site treatment. Once public sewerage is available in Hung Shui Kiu and Kam Tin, waste water and sewage arising from the proposed HSK Station, Kam Tin Station, KCRC Head Quarter Building and WRD shall be redirected to discharge directly to the public sewer. Waste water and sewage arising from uses other



than the four above, including stations, railway premises, depots and ancillary uses, shall be conveyed to public sewer after any pre-treatment.

在洪水橋及錦田提供公共排污設備前，建議中的洪水橋站、錦田站、九廣鐵路總部及西鐵車廠所排出的廢水及污水，須收集在貯存池，再以車輛運往元朗污水處理廠或其他渠務署同意的污水處理設施作場外處理。洪水橋及錦田設有公共排污設備後，建議中的洪水橋站、錦田站、九廣鐵路總部大樓及西鐵車廠所排出的廢水及污水，須改道直接排入公共污水渠。除上述 4 處以外，其他用地(包括車站、鐵路範圍、車廠及輔助用途)所排出的廢水及污水，須經預處理後引入公共污水渠。

- 6.5 The Permit Holder shall fully implement the EM&A requirements as set out in the Operational Manual approved under condition 5.2. Any changes to the EM&A arrangement shall be justified by the Environmental Manager, verified by the Independent Environmental Checker and approved by the Director.

許可證持有人須完全執行按照第5.2 項條件批准的營辦手冊所訂立的環境監察及審核規定。若要對環境監察及審核安排作出任何更改，環境經理必須具備充分理由，並經由獨立環境查核人核證，然後提交署長批准。

- 6.6 The Permit Holder shall fully implemented the EM&A requirements as set out in the Operational EM&A Manual approved under condition 5.2. Any changes to the EM&A arrangements and requirements as set out shall be justified by the Environmental Manager, verified by the Independent Environmental Checker and approved by the Director.

許可證持有人須完全執行按照第5.2 項條件批准的營辦環境監測及審核手冊所訂立的環境監察及審核規定。若要對所訂立的環境監察及審核安排和規定作出任何更改，環境經理必須具備充分理由，並經由獨立環境查核人核證，然後提交署長批准。

- 6.7 Actions described in the action plan(s) of the Operational EM&A Manual shall be carried out, in accordance with the time frame set out in the action plan(s), or as agreed by the Director.

營辦的環境監察及審核手冊的行動計劃所說明的行動，須按照行動計劃所訂明的時限或如署長所同意執行。

- 6.8 All finalised submissions, as required under this part of the Permit, shall be released to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office or any other places or by any other means as specified by the Director for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of submissions.



所有按本許可證本部規定提交的文件定稿，須公開給公眾人士知道，方法是將有關文件副本存放於環境影響評估條例登記冊辦事處或署長所指定的任何地方或任何方法，以供公眾查閱。因此，許可證持有人須提交足夠數量的文件副本。

- 6.9 All measures specified in Table B and Table C of Schedule 1 shall be implemented in accordance with the information contained in the Application for Variation No. VEP-122/2003 and the Application for Variation No. VEP-142/2004, and the details and the time frame specified in the Schedule 1 of this Permit.

附表 1 表 B 及表 C 列明的各項措施，須按照更改環境許可證申請書編號 VEP-122/2003 及更改環境許可證申請書編號 VEP-142/2004 內載的資料及本許可證附表 1 列明的詳情及時間表執行。

- 6.10 In relation to condition 6.1, until all mitigation measures in Table A, Table B and Table C of Schedule 1 are fully implemented, the train length shall be limited to 7 cars maximum.

關於條件第 6.1 項，列車的長度須限制至最多 7 個車廂，直至徹底執行附表 1 表 A，表 B 及表 C 內的各項消減噪音措施為止。

**Notes:**

註：

1. This Environmental Permit consists of three parts, namely, PART A (Main Permit), PART B (Description of Designated Project) and part C (Permit Conditions).

本環境許可證共有 3 部，即：A 部（許可證主要部分）；B 部（指定工程項目的說明）；及 C 部（許可證條件）。

2. The Permit Holder may apply under section 13 of the Environmental Impact Assessment Ordinance to the Director for a variation of the conditions of this Environmental Permit. The Permit Holder shall replace the original Permit displayed on the construction site, by the amended Permit.

許可證持有人可根據環境影響評估條例第 13 條的規定向署長申請更改本環境許可證的條件。許可證持有人須將經修改的許可證，替換在建造工地內展示的原有許可證。



3. A person who assumes the responsibility for the whole or a part of the Project may, before he assumes responsibility of the Project, apply under section 12 of the Ordinance to the Director for a further Environmental Permit.

承擔指定工程項目的整項或部分工程的責任的人，在承擔指定工程項目責任之前，可根據條例第12條的規定向署長申請新的環境許可證。

4. Under section 14 of the Ordinance, the Director with the consent of the Secretary for Environment and Ecology, may suspend, vary or cancel this Permit. The Permit shall be removed from the display on the construction site.

根據條例第14條的規定，署長可在環境及生態局局長的同意下暫時吊銷、更改或取消環境許可證。該許可證必須從建造工地除下，不再展示。

5. If this Permit is cancelled or surrendered during the construction or operation, an Environmental Permit must be obtained under the Ordinance before the construction or operation of the Project could be continued. It is an offence under section 26(1) of the Ordinance to construct or operate a designated project without an Environmental Permit.

如果本許可證在工程項目建造或營辦期間取消或交回，則在繼續進行建造或營辦工程項目之前，必須先根據條例規定取得環境許可證。根據條例第26(1)條的規定，任何人在沒有環境許可證的情況下建造或營辦指定工程項目，即屬犯罪。

6. The Permit Holder shall in regard to the implementation of conditions 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.14, 2.16, 2.17, 2.19 and 2.20 of the permit, give due consideration to the requirements of condition 2.21. Similarly, the Permit Holder shall in regard to condition 3.1, give due consideration to condition 3.14.

許可證持有人須根據本許可證條例第2.21條的規定去實行本許可證條例第2.4、2.6、2.7、2.9、2.14、2.17、2.19和2.20條。同樣地，許可證持有人須根據本許可證條例第3.14條的規定去實行本許可證條例第3.1條。

- (a) Revision of measures to mitigate the landfill gas risk of the project as described in the Application VEP-084/2003;

如申請書VEP-084/2003所說明更改工程項目的堆填區沼氣風險緩解措施;

- (b) Revision of location of noise barriers at West Rail Depot as described in the Application VEP-078/2002;

如申請書VEP-078/2002所說明更改位於西鐵車廠的隔音屏障的位置;



- (c) Revision of the 86m long full noise enclosure at Tuen Mun Station to semi-noise enclosure; and provide additional enclosure on the north of this enclosure;

位於屯門站 86 米長全密封的隔音罩修改至半密封的隔音罩；及在隔音罩北面提供額外的隔音罩；

- (d) Increase in the elevation of viaduct by approximately 8m at Yick Yuen as described in the Application VEP-062/2002;

如申請書VEP-062/2002 所說明，增加位於亦園的高架鐵路的高度約 8 米

- (e) Reduction of train length from 12 cars to 9 cars with increase in train frequency from 30 to 40 trains per hour during 0600 to 0700 as described in the Application VEP-045/2001;

如申請書 VEP-045/2001 所說明，縮減火車的長度，由 12 節車廂減至 9 節車廂，並在上午 6 時至 7 時期間增加列車班次，由每小時 30 班增至每小時 40 班；

- (f) Reduction of train speed between Tin Shui Wai and Siu Hong as described in the Application VEP-045/2001;

如申請書VEP-045/2001 所說明，減低天水圍至兆康一段的車速；

- (g) Revised locations of noise enclosure and additional height noise barriers at the north of Kam Sheung Road Station, near Pok Oi Hospital, the west of Long Ping station, the west of Tin Shui Wai Station, Tin Sam Tsuen to Lam Tei and Tuen Mun as described in the Application VEP-045/2001;

如申請書VEP-045/2001 所說明，在錦上路站北面近博愛醫院、朗屏站西面、天水圍站西面、田心村至藍地和屯門更改隔音罩的位置，並加高隔音屏障；

- (h) Construction method for the Tsing Tsuen Tunnel refers to Application VEP-020/2000. Drawing Nos. WR/07/C01/001, WR/07/C01/002, WR/07/C01/003, WR/07/C01/004, WR/07/C01/005, WR/07/C01/006;

青荃隧道的建造方法是根據編號VEP-020/2000 之環境許可證申請書內圖則編號 WR/07/C01/001、WR/07/C01/002、WR/07/C01/003、WR/07/C01/004、WR/07/C01/005 和WR/07/C01/006;



- (i) Revised alignment in Tsuen Wan refers to Application VEP-020/2000 Drawing Nos.WR/04/C01/001, WR/04/C01/002, WR/04/C01/003;

荃灣一段經修訂的路線是根據編號VEP-020/2000 之環境許可證申請書內圖則編號WR/04/C01/001、WR/04/C01/002和WR/04/C01/003;以及

- (j) Quantities of Marine Mud at Tsuen Wan Bay refers to the total dredge quantity increased from 235,000m<sup>3</sup> to 263,000m<sup>3</sup> as described in the Application VEP-020/2000.

荃灣海灣淤泥量增加是根據編號VEP-020/2000 之環境許可證申請書，總挖泥量由235,000 立方米增加至263,000 立方米。

Environmental Permit No. FEP-24/004/1998/K

環境許可證編號 FEP-24/004/1998/K



### Measures to Mitigate Landfill Gas Risk During Construction

#### 建造期間的堆填區沼氣風險緩解措施

Temporary Construction worksite located southwest of Kwai Hei Street at Kwai Chung. The worksite lies within 50m of the northeast perimeter of the former landfill site near to gas monitoring wells which have shown up to 20% v/v methane concentrations. Procedures and measures which can be made during the construction phase to reduce the risk of gas related problems :

臨時建造工地位於葵涌葵喜街西南面。工地位於接近氣體監測井的舊堆填區東北面周邊50米範圍以內，而監測井顯示有容積百分比高達20%的甲烷濃度。下列是於建造期間可減少與氣體有關的問題風險的程序和措施：

- (a) A detailed risk assessment should be conducted to assess and propose precautionary measures pertinent to the risks from the proposed construction methods and machinery to be used in the excavations;

須進行一項詳細的風險評估，以評定及建議預防措施；這些措施與擬採用的建造方法及將用作挖掘的機器所帶來的風險相關；

- (b) Work method(s) which outlines the measures to be implemented to reduce the risk of fires and uncontrolled explosions and asphyxiation of workers shall be proposed;

須擬議一些作業方法，列述會實行甚麼措施，以減低火警及發生不受控制爆炸和及工作人員窒息事故的風險；

- (c) Workers should undergo training about the risks and indications of landfill gas and be thoroughly versed in first aid and emergency and evacuation techniques in the event of an incident;

工作人員應接受有關堆填區沼氣風險和現象的訓練，並充分熟悉發生事故時應採取的急救、緊急和疏散方法；

- (d) Works must be carried out in strict adherence to the work methods proposed above;

進行工程時必須嚴格遵守上述的擬議作業方法；

- (e) Strict adherence to the no smoking policy;

嚴格遵守不准吸煙的規定；

- (f) A mechanical ventilation system must be in use at all times during which construction work force are engaged in works inside tunnel(s) or excavation(s) and these work force shall be evacuated in the event of power outages. Work must not be carried out in the absence of mechanical ventilation and supervision of adequately trained safety officer;

建造工程人員在隧道或洞穴內工作的任何時間內，必須啟動機械通風系統；當電力中斷時，須疏散這些工作人員。在沒有機械通風系統及受過足夠訓練的安全人員監督的情況下，不可進行上述工作；

- (g) All electrical equipment (including extension leads) used in the works must be fitted with spark arrestors or be intrinsically safe;

所有工程使用的電力設備(包括伸延電線)必須配置火花消除器或本身安全妥當；

- (h) Work must not be carried out in the absence of fire extinguishers, emergency breathing apparatus and other safety equipment as deemed necessary by safety consultant or plan submitted by the construction contractor;

如果沒有滅火筒、緊急呼吸器及其他經安全顧問認為必需的安全設備，而建造承辦商亦沒有提交計劃，不可進行有關工程；

- (i) Monitoring of methane, carbon dioxide and oxygen must be carried out at all times during works using suitable equipment as in clause (e) of Annex E. Following the completion of the tunnel construction works, monitoring shall be carried out monthly or more frequently. For a period of not less than 7 days prior to commencement of operation of the Project, monitoring shall be carried out daily or more frequently. The actions detailed in Table 1 below shall be carried out in the event of gas trigger levels being breached.

在工程進行的任何時間，必須使用附件 E 的第(e)項的合適設備以監測甲烷、二氧化碳和氧氣的濃度。隧道建造工程完成後，監測工作須每月或更頻密地進行。在工程項目營辦前不少於7天的時間內，更須每天甚至更頻密地進行監測。當將要超逾觸發爆炸的氣體水平時，必須採取下表1 詳細列明的行動。

**Table 1 Actions to be carried out in the event of Landfill Gas Detection**

Parameter	Measurement	Action
O <sub>2</sub>	<19%	Increase ventilation to restore O <sub>2</sub> to >19%
	<18%	Stop works
		Evacuate personnel





		Increase ventilation to restore O <sub>2</sub> to >19%
CH <sub>4</sub>	>10% LEL	Prohibit hot works
		Increase ventilation to restore CH <sub>4</sub> to <10% LEL
	>20% LEL	Stop works
		Evacuate personnel
	Increase ventilation to restore CH <sub>4</sub> level to <10% LEL	
CO <sub>2</sub>	>0.5%	Increase ventilation to restore CO <sub>2</sub> to <0.5%
	>1.5%	Stop works
		Evacuate personnel
		Increase ventilation to restore CO <sub>2</sub> to <0.5%

表 1 探測到堆填區沼氣時所須採取的行動

參數	量度數值	行動
氧氣	<19%	加強通風系統使氧氣回復至 >19%的水平
	<18%	停止工程
		疏散人員
		加強通風系統使氧氣回復至 >19%的水平
甲烷	>10% LEL	禁止進行高溫工作
		加強通風系統使甲烷回落至 <10%LEL 的水平
	>20% LEL	停止工程
		疏散人員
		加強通風系統使甲烷回落至 <10%LEL 的水平
二氧化碳	>0.5%	加強通風系統使二氧化碳回落至 <0.5%的水平
	>1.5%	停止工程
		疏散人員
		加強通風系統使二氧化碳回落至 <0.5%的水平

- (j) The exact frequency of monitoring should be determined prior to the commencement of works, but should be no less frequent than hourly, and be carried out by a suitably qualified person. Measurements shall be recorded and kept as a record of safe working conditions with copies of the site diary. Continuous monitoring via an automated monitoring system

may also be adopted. In this event, the gas levels specified in Table 1 shall be so programmed to automate the actions in the table and in the event of the trigger levels being breached, to activate suitable audible and visual warning devices; and

確實的監測次數須在工程施工之前決定，但至少每小時一次，並由具備合適資格人員進行。須記錄所量度的數值，連同工地日誌備存作為安全工作條件的紀錄；也可採用自動監測系統進行連續監測。在這個情況下，須按表1列明的氣體水平，編定能自動採取表上所列行動的計劃，以及在超逾啟動水平時，能觸發適當的鳴響及目視警報器；及

- (k) All measurements taken are to include at a minimum the areas where personnel are operating as well as the highest and lowest elevations within tunnel(s). Measurements are to be carried out with the sensor located not greater than 10 mm from the exposed rock surface and at locations where landfill gas has the highest potential to enter tunnel(s) such as highly fissured areas, dykes, identified faults, etc.

所有觸發測讀資料，須至少包括工作人員工作的地方及隧道內最高和最低處。進行測讀時感應器距離外露石塊表面不得超過10 毫米，且放在堆填區沼氣最可能滲進隧道的位置，例如滿布裂縫的地方、堤壕、已知的斷層等。



**Measures to Mitigate Environmental Impacts from Site Run-off and Drainage**

**工地徑流和排水的環境影響緩解措施**

To mitigate the environmental impacts from site run-off and drainage, the following shall be implemented:

必須執行下列措施以緩解工地徑流和排水造成的環境影響：

- (a) adequate maintenance of drainage systems shall be provided to prevent flooding and overflow during the construction period;

排水系統須得到充分修護，以防止在建造工程期間出現泛濫及溢流；

- (b) the boundaries of areas of earthworks shall be marked and surrounded by dykes for flood protection during the construction period. Temporary ditches should be provided to facilitate runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in ProPEC Practice Note 1/94 issued by the Director of Environmental Protection;

在建造工程期間，土木工事的範圍界線須標明，並以堤壕包圍，以防泛濫。應設置臨時溝渠，以使徑流經由淤泥隔離池，排入合適的水道。永久的排水道應設置沉澱池或沉積物捕集和阻隔裝置，以提高沉降率。有效淤泥清除設施的設計應按照由環境保護署署長發出的《專業人士環保事務諮詢委員會專業守則1/94》內載明的指引；

- (c) construction works shall be programmed to minimize surface excavation works during the rainy season (April to September). All exposed earth shall be stabilized as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means;

建造工程的安排，須盡量減少在雨季(四月至九月)進行挖掘路面工程。所有泥土外露的範圍，在土木工事完成後或土木工事停止14日內，應該在切實可行情況下盡早加以穩固。如果不能避免在雨季或年中極可能出現暴雨的任何時間挖掘泥土，外露的斜坡表面應該以帆布或其他方式覆蓋；



- (d) sediment tanks of sufficient capacity constructed from pre-formed individual cells of approximately 6 to 8 cu.m. capacity shall be used for settling surface runoff prior to disposal during the construction period. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and particularly suited to applications where the influent is pumped;

在建造工程期間，地面徑流應先經沉澱才可排放，而所採用的沉澱池容量要足夠，由預挖每個約6至8立方米的獨立槽池組成。系統的容量須具彈性，能夠處理從多處來源排入的污水及物質，並特別適合應用於泵入的污水；

- (e) open stockpiles of construction materials (e.g. aggregates, sand and fill material) of more than 50 cu.m. shall be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system;

在暴雨期間，露天堆存而面積超過50立方米的建築材料(如石料、沙及填料)，須以帆布或同類質地的布料覆蓋。應採取措施防止建築物料、泥土、淤泥或碎屑沖入任何排水系統；

- (f) manholes, including newly constructed ones, shall always be covered and sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers during the construction period. At any time of year when rainstorms are imminent or forecast, actions shall be taken in accordance with the ProPECC Practice Note 1/94 issued by the Director of Environmental Protection. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes;

在建造工程期間，沙井(包括新建的沙井)須經常覆蓋及密封，以防止淤泥、建築材料或碎屑被沖入排水系統，以及暴雨徑流被引入污水渠。在年中暴雨將臨或預測會有暴雨的任何時間，須按照環境保護署署長發出的《專業人士環保事務諮詢委員會專業守則1/94》採取行動。在暴雨期間，應特別注意控制含有淤泥的地面徑流，尤以陡峭斜坡附近的範圍為甚；

- (g) oil interceptors shall be provided in drainage systems and oils and grease shall be regularly removed to prevent the release of oils and grease into storm water drainage systems after accidental spillage during the construction period. The interceptors should have a bypass to prevent flushing during periods of heavy rain;

排水系統須設置截油器，並須定期清除油及油脂，以防在建造工程期間發出意外溢洩後，油脂流入雨水排水系統。截油器應設有旁管，以防止大雨期間出現泛濫；



- (h) all vehicles and plant shall be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads during the construction period. An adequately designed and located wheel washing bay should be provided at every site exit and wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfill toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains;

所有車輛及裝置在離開建造工地之前須進行清潔，以確保在施工期間，車輛及裝置沒有把泥土、碎屑及類似物料留在路面。每個工地出口應設置設計妥善、位置方便的輪胎清洗處，而清洗輪胎的水應至少每星期沉澱一次，把沙及淤泥清除，以確保這個程序繼續發揮效能，出入輪胎清洗處的一段通道，應用足夠的回填料朝輪胎清洗處鋪砌路面，防止車輛輪胎把泥土及泥水帶到公路及排水渠；

- (i) sediment shall be intercepted before it enters into modified sections of culverts. Sediment traps should be installed both upstream and downstream of any modified culvert sections in order to minimise the sediment loading in these culverts. Vortex tube site traps shall also be installed to provide continuous extraction of sediment within the modified sections of the culverts;

沉積物進入下水道改裝部分前須先進行截流。任何改裝的下水道部分應在逆流及順流方向都裝置沉積物捕集裝置，以盡量減少沉積物在下水道積聚。下水道的改裝部分內也應設置渦流管原地捕集裝置，把沉積物不斷抽出；

- (j) temporary and permanent drainage pipes and culverts shall be provided to facilitate runoff discharge during the construction period. The temporary and permanent drainage pipes and culverts should be adequately designed for the controlled release of storm flows. All sediment control measures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. Temporarily diverted drainage should be reinstated to its original condition when construction work has finished or the temporary diversion is no longer required; and

須設置臨時及永久排水管及下水道，以便建造工程期間排放徑流。臨時及永久排水管及下水道應妥為設計，以控制雨水水流的排放。尤其在暴雨之後，所有沉積物控制措施應定期檢查及修護，以確保任何時間內操作妥善及有效。當建造工程完成後，或再無須進行臨時導流的時候，臨時導流的排水設施應回復原狀；

- (k) discharge and surface runoff contaminated by materials from any concrete batching plant shall be diverted to neutralisation tank to reduce acidity and the treated discharge should be connected to silt trap to remove suspended solids before disposing to sewage system.

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受任何混凝土配料廠物料污染的排放物及地面徑流，須引入中和池以減低酸度，經處理的排放物須連接淤泥捕集裝置，以便先清除懸浮固體物才排入污水系統。



## Measures to Mitigate the Water Quality Impacts During Tunneling and Station Construction

### 隧道及車站建造工程期間的水質影響緩解措施

To mitigate the water quality impacts during tunneling and station construction:

下列措施以緩解進行隧道及車站建造工程期間所造成的水質影響：

- (a) cut-and-cover tunnel work shall be conducted segment by segment to limit the amount of construction runoff generated in the areas during the wet season (April to September). Temporary open storage of excavated materials used for backfill on site should be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials should be diverted through appropriate sediment traps before discharge to stormwater drainage system. Ground water pumped out of tunnels should be discharged into the drainage channels which incorporate sediment traps to enhance deposition rates and to remove silt; and

隨挖隨填的隧道工程須分段進行，以限制在雨季(四月至九月)施工區所產生的徑流量。在暴雨期間，用作即場回填而臨時露天存放的挖掘物料應用帆布或同類質地布料覆蓋。任何沖出的建築或挖掘物料在流入雨水排水系統之前，應先流經合適的沉積物捕集裝置。從隧道泵出的地下水應排入裝有沉積物捕集裝置的排水渠道，以提高沉降率及清除淤泥；

- (b) spent bentonite slurries or other grouts used in diaphragm wall construction and in a separate slurry collection system shall be collected, and reconditioned and reused wherever practicable.

薄壁隔牆建造工程及獨立泥漿收集系統所用完的斑脫土泥漿或其他泥灌漿，須在切實可行情況下予以收集、重新調和及再用



**Measures to Mitigate Water Quality Impact During Reclamation Work and Other Construction Activities**

**進行填海及其他建造工程期間的水質影響緩解措施**

To mitigate the water quality impact during reclamation work and other construction activities :

下列措施以緩解進行填海及其他建造工程期間所造成的水質影響：

- (a) any mechanical grabs shall be designed and maintained to avoid spillage and sealed tightly while being lifted during the construction period. For dredging of contaminated mud, closed watertight grabs shall be used;

任何機械抓斗須妥為設計及保養，確保在施工期間升高的時候不會造成濺溢，並穩固密封。挖掘污泥的時候，須採用閉合防滲的抓斗；

- (b) silt curtains shall be deployed around dredging areas without jeopardizing the navigation of ships and ferries along the navigation channels during the dredging and filling operation;

在進行挖泥及填土作業期間，挖泥區周圍須設置淤泥擋板，但不應對航道的輪船及渡輪航行構成危險；

- (c) all vessels shall be sized so that undue turbidity is not generated by turbulence from vessel movement or propeller wash during the construction period;

所有船隻的大小須合適，以免在施工期間船隻行駛或螺旋槳拍打沖擊使海水變混濁；

- (d) no foam, oil, grease, sum, litter or other objectionable matter shall be caused to be present on the water within the site or dumping grounds during the construction period;

在施工期間，工地或傾倒物料地點範圍的水面，不應出現泡沫、油、油脂、浮渣、垃圾或其他令人討厭的物質；

- (e) loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water. Barges or hoppers shall not be filled to a level which will cause the overflow of materials or polluted water during loading or transportation;

駁船及底卸式駁船在裝載物料時須小心操控，以防挖掘物料濺入周圍的水中，所裝載的物料不應過滿，以免在裝卸或運輸途中造成物料或污水溢流；





- (f) debris and rubbish on site shall be collected, handled and disposed of properly to avoid entering the water column to cause water quality impacts;

工地的瓦礫碎屑及垃圾須妥為收集、處理及處置，以免進入水柱影響水質；

- (g) to prevent spilled fuel oils from reaching coastal water, all fuel tanks and storage areas shall be provided with locks and located on sealed areas, and within bunds of a capacity equal to 110% of the storage capacity of the largest tank; and

為防溢出的燃料流進沿岸水域，所有燃料缸及燃料貯存區須可上鎖，並設於以堤圍密封的範圍，其容量應相等於最大燃料缸的貯存量1.1倍；及

- (h) construction work force sewage discharges on site shall be connected to existing sewer or sewage treatment facilities. Portable chemical toilets shall be provided to construction workers.

建造工程人員在工地所排放的污水，須接駁排入現有的污水渠或污水處理設施。應提供活動的化糞式廁所，供建造工人使用。



## Measures to Mitigate the Landfill Gas Hazard During the Operation of the Project

### 工程項目營運期間的堆填區沼氣風險緩解措施

During non-operational hours and particularly at the time when the first train travels through the tunnel each day, there is potential for accumulated gas to be ignited by an electrical spark caused by the train. To reduce the likelihood of this occurrence, the measures outlines below shall be adopted:

在非運作時間及特別是每天首班列車駛過隧道時，列車所產生的電火花有可能燃點着積聚的氣體。為減低發生上述情況的可能，須採用下列措施：

- (a) Staff undertaking the daily safety check of each line prior to daily operation shall be trained in the use of portable gas detection equipment. Measurement of methane and carbon dioxide concentrations shall be undertaken as part of the daily safety check of the tunnels. Should the methane concentration exceed 10% of the Lower Explosive Limit (LEL), ventilation shall be increased and operation of the train service shall not commence until the methane level falls below 10% of the LEL. Should the methane concentration exceed 20% of the LEL, all personnel shall be evacuated from the tunnels, operation of the train service shall not commence, and ventilation shall be increased to restore the methane concentration to below 10% of the LEL prior to operation of the train service.

負責在火車每天運作前為每條行車線進行安全檢查的員工，必須接受使用手提氣體探測設備的訓練。量度甲烷和二氧化碳濃度須為每天隧道安全檢查工作的一部分。如甲烷濃度超出爆炸濃度下限百分之十，須加強通風，並不得展開火車服務，直至甲烷濃度回落至爆炸濃度下限百分之十以下。如甲烷濃度超出爆炸濃度下限百分之二十，所有人員均須撤離隧道，火車服務不得展開，並須加強通風，直至甲烷濃度回落至爆炸濃度下限百分之十以下，火車服務方可展開。

- (b) With the information contained in the Application for Variation No. VEP-142/2004, the permit holder shall carry out at least 12 bi-weekly safety checks starting from July 2004 to replace the daily safety checks in above (a). Except the frequency, the measurement procedure and the requirement shall be the same as described in (a). Any changes to the frequency, procedure and requirement as set out shall be approved by the Director.

根據更改環境許可證申請書編號 VEP-142/2004 所載資料，許可證持有人由 2004 年 7 月開始，須每兩星期進行一次安全檢查，檢查次數合共不得少於 12 次，以代替上文 (a) 項的每天安全檢查。除檢查次數外，量度程序及規定須與 (a) 項所說明的資料一致。檢查次數、程序及規定如有任何更改，必須獲得署長批准。

- (c) All maintenance personnel and station staff working within the tunnels shall be educated in the dangers of landfill gas and the signs and symptoms of asphyxia;

所有在隧道內工作的維修人員和車站職員，應接受訓練，以認識有關堆填區沼氣危險及引起窒息的蹟象和徵兆；



- (d) Smoking within the tunnels shall be prohibited at all times;

隧道內任何時間均不准吸煙；

- (e) An assumed presence of landfill gas should be adopted at all times by maintenance workers and a strictly regulated "work permit procedure" involving training, ventilation, gas monitoring (as detailed in the Construction recommendations section), safety tracking and communication with maintenance staff, enforcement of the no smoking order and use of only intrinsically safe equipment and electrical leads;

維修工人在任何時間均應假設堆填區沼氣存在，並應制訂嚴格的「工作許可證程序」，包括訓練、通風系統、氣體監測(詳述於建造工程建議部分)、維修人員的安全追蹤和聯絡、執行嚴禁吸煙指令，以及只限使用本質安全的設備和電線；

- (f) Monitoring for methane, carbon dioxide and oxygen as recommended above shall be conducted using equipment with the following indication ranges.

上文建議的甲烷、二氧化碳和氧氣的監測工作，須使用設有下列顯示幅度的設備進行。

(i)	Methane	0-100%LEL and 0-100%v/v
	甲烷	0-100%LEL及容積百分比 0-100%
(ii)	Carbon dioxide	0-100%
	二氧化碳	0-100%
(iii)	Oxygen	0-21%
	氧氣	0-21%



### Measures to Mitigate the Water Quality Impact During the Operation of the Project

#### 工程項目營運期間的水質影響緩解措施

To mitigate the water quality impact during the operation of the Project :

在工程項目營運期間緩解水質影響的措施：

- (a) A surface water drainage system shall be provided to collect operational tunnel seepage during the operation of the Project. Where oils and lubricating fluids could be spilt, the operational tunnel discharge and track runoff should pass through oil and grit/silt interceptors/chambers to remove oil, grease and sediment before being pumped to the public storm water drainage system via a rising main. However, washing water from regular tunnel washing shall be directed to foul sewers after pre-treatment;

工程項目營運期間，須設置地面排水系統，以收集因運作而由隧道滲出的水。如果有可能溢出油類及潤滑液，因運作而由隧道排放的物質及車軌徑流須先經過油類及砂礫/淤泥阻截器/收集箱，以清除油、油脂和沉積物，然後才經上升總管排入公共雨水渠系統。然而，一般用以清洗隧道的洗滌水須先經預處理後才引至污水渠；

- (b) All silt traps and oil interceptors shall be regularly cleaned and maintained during the operation of the Project;

在工程項目營運期間，所有淤泥捕集裝置及截油器均須定期清洗及修護；

- (c) Contents of the oil interceptors shall be collected for reuse, or transferred to an appropriate disposal facility; and

須收集截油器內的物質循環再用，或轉送至適當的處置設施；及

- (d) Sanitary fitments and drainage works shall be provided taking into account the Practice Note for Professional Persons, No. 5/93 (ProPECC PN 5/93) - Drainage Plans subject to Comment by the Environmental Protection Department.

設置衛生設備及排水系統時，須參考有關須經由環境保護署評論的排水渠圖則事宜的《專業人士環保事務諮詢委員會專業守則5/93》。



**Schedule 1. Alternative Noise Mitigation Measures at Different Locations of the Project**

附表 1. 工程項目各處地點的替代消減噪音措施

Table A

The Permit Holder shall complete the measures specified in the following table to a large extent before the operation of the Project. Any outstanding details shall be completed no later than 2 weeks after the operation of the Project.

Locations	Alternatives
Kam Sheung Road Station	(a) Windshields shall be extended above the top of the parapet walls as shown in Figure 7; and (b) Trackside panels shall be installed above the parapet walls as shown in Figure 7
Yuen Long Station	<u>Down track (track from Tuen Mun to Kowloon)</u> (a) All rail/track sections within the station to be fully enclosed  <u>Up track (track from Kowloon to Tuen Mun)</u> (a) Windshields shall be extended above the top of the parapet walls as shown in Figure 5; (b) Trackside panels shall be installed with the lower part incorporated with the absorptive lining as shown in Figure 5; and (c) Acoustic louvers to be implemented for all openings on the outboard side at the location as shown in Figure 6
Long Ping Station	(a) Windshields shall be extended above the top of the parapet walls as shown in Figure 7; (b) Trackside panels shall be installed above the parapet walls as shown in Figure 7; (c) Uptrack section to be fully enclosed at the location as shown in Figure 8, except the vertical gap between the enclosure and the plant room at the back of the station; (d) 2m high barrier above the top of the parapet walls extending from the noise enclosure to be implemented at the location as shown in Figure 8; and (e) Plenum enhancement along the up and down tracks to be implemented as shown in Figure 9 and at the location as shown in Figure 8
Tin Shui Wai Station	(a) Windshields shall be extended above the top of the parapet walls as shown in Figure 7; (b) Trackside panels shall be installed above the parapet walls as shown in Figure 7; and (c) Plenum enhancement along the down track to be implemented as shown in Figure 9 and at the location as shown in Figure 10
Siu Hong Station	(a) All rail/track sections within the station to be fully enclosed
Tuen Mun Station	(a) All rail/track sections within the station to be fully enclosed
Viaduct Section	(a) Plenum enhancement along the up and down tracks at the locations as shown in Figure 11 and Figure 12



表 A

許可證持有人須在營辦工程項目前，在很大程度上完成下表訂明的措施，並須在營辦工程項目後 2 個星期內完成餘下部分。

地點	替代措施
錦上路站	(a) 風擋須延伸至圖 7 所示的護牆頂上；以及 (b) 須在圖 7 所示的護牆上安裝路軌旁板
元朗站	<u>下行路軌(屯門至九龍)</u> (a) 車站內的全部鐵路/路軌均須完全密封  <u>上行路軌(九龍至屯門)</u> (a) 風擋須延伸至圖 5 所示的護牆頂上； (b) 須按圖 5 所示安裝路軌旁板，而旁板的下部分須設有吸音墊；以及 (c) 須在圖 6 所示位置外側的所有孔口安裝隔音百葉板窗
朗屏站	(a) 風擋須延伸至圖 7 所示的護牆頂上； (b) 須在圖 7 所示的護牆上安裝路軌旁板； (c) 圖 8 所示位置的上行路段須完全密封，車站後面隔音罩與機房之間的垂直縫隙則除外； (d) 按圖 8 所示位置，由隔音罩開始在護牆頂上設置 2 米高的隔音屏障；以及 (e) 按圖 9 所示及在圖 8 所示位置，沿上下行路軌進行隔音氣室改善工程
天水圍站	(a) 風擋須延伸至圖 7 所示的護牆頂上； (b) 須在圖 7 所示的護牆上安裝路軌旁板；以及 (c) 按圖 9 所示及在圖 10 所示位置，沿下行路軌進行隔音氣室改善工程
兆康站	(a) 車站內的全部鐵路/路軌均須完全密封
屯門站	(a) 車站內的全部鐵路/路軌均須完全密封
高架路段	(a) 在圖 11 及 12 所示位置，沿上下行路軌進行隔音氣室改善工程



Table B

The Permit Holder shall fully implement the measure specified in the following table within 6 months after the operation of the Project.

Locations	Alternatives
Tin Shui Wai Station	2m high cranked noise barrier above the top of the parapet walls at the down track section to be implemented at the location as shown in Figure 10 and Figure 15

表 B

許可證持有人須在營辦工程項目後 6 個月內，徹底執行下表列明的措施。

地點	替代措施
天水圍站	按圖 10 及圖 15 所示位置，沿下行路段護牆頂上安裝 2 米高曲軸隔音屏障

Table C

The Permit Holder shall fully implement the measure specified in the following table 3 months before any related resident occupies the Yuen Long CDA 15 site or the former Yuen Long Estate.

Viaduct Section	Plenum enhancement along the up and down tracks at the locations as shown in Figure 13 and Figure 14
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表 C

許可證持有人須在任何有關居民遷入元朗 15 區或元朗村舊址 3 個月或之前，徹底執行下表列明的措施。

高架路段	在圖 13 及 14 所示位置，沿上下行路軌進行隔音氣室改善工程
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**Schedule 2. Noise Mitigation Measures at Hung Shui Kiu Station**

附表 2. 洪水橋站的噪音緩解措施

The Permit Holder shall complete the measures specified in the following table before the operation of the Hung Shui Kiu Station.

Hung Shui Kiu Station	Acoustic canopies with noise absorptive surfaces at their undersides facing the tracks as shown in Figure 17
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許可證持有人須在營辦洪水橋站前完成下表訂明的措施。

洪水橋站	按圖 17 所示安裝隔音板，而面向路軌的部分須設有吸音物料
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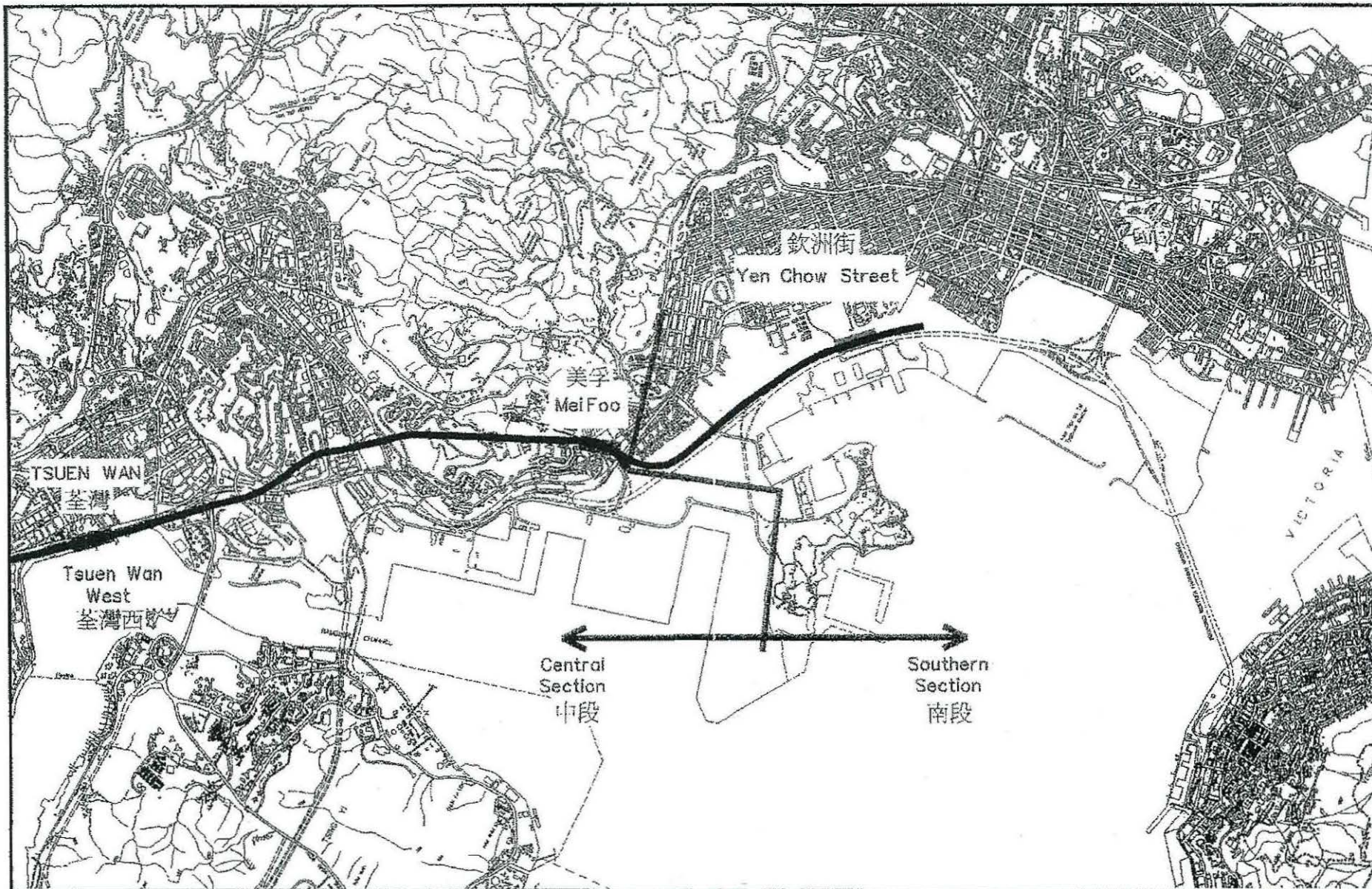


Figure 1 - Location and Alignment of the Project

圖1 - 工程項目的地點及線路



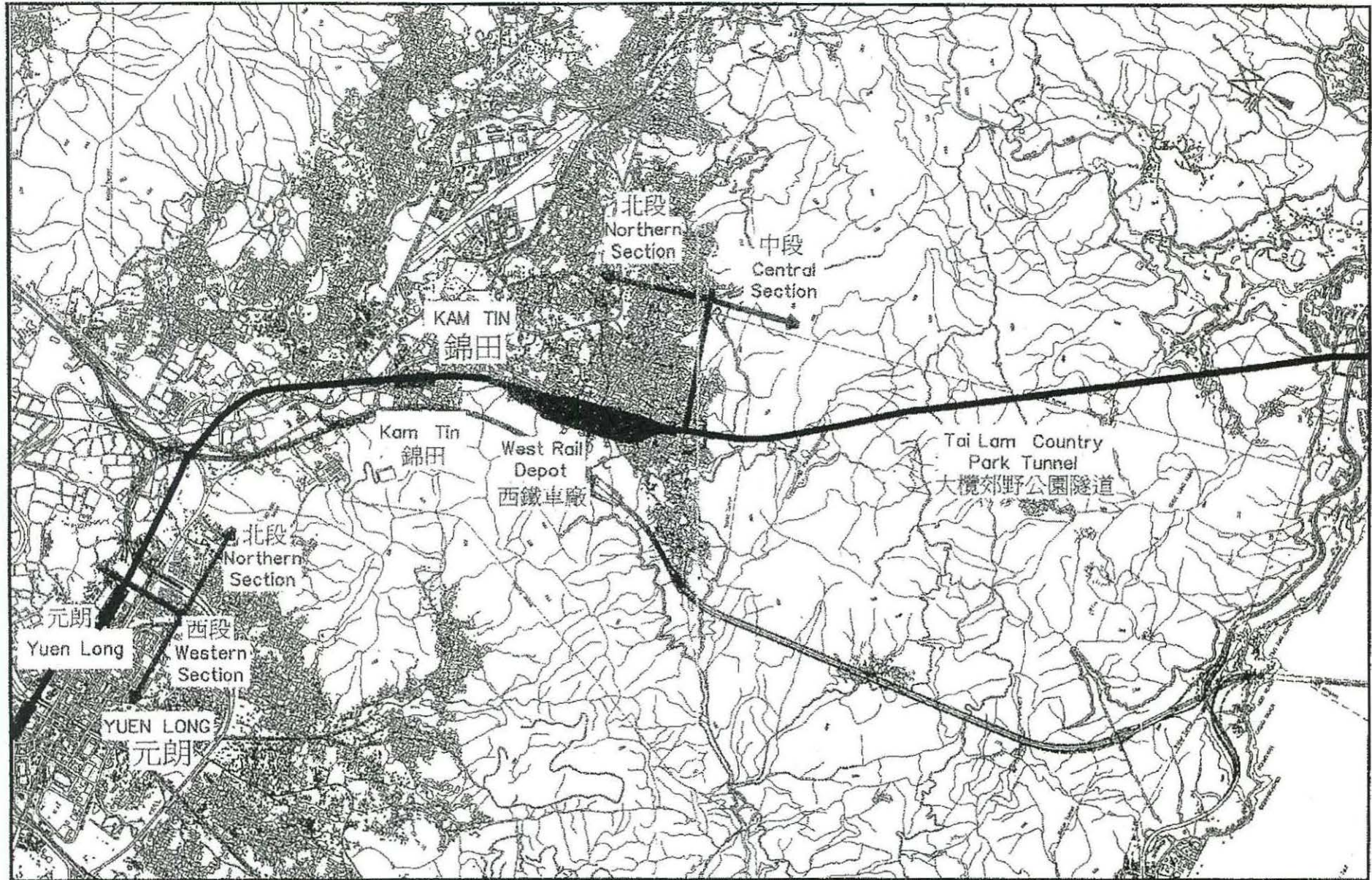


Figure 2 - Location and Alignment of the Project  
 圖2 - 工程項目的地點及線路



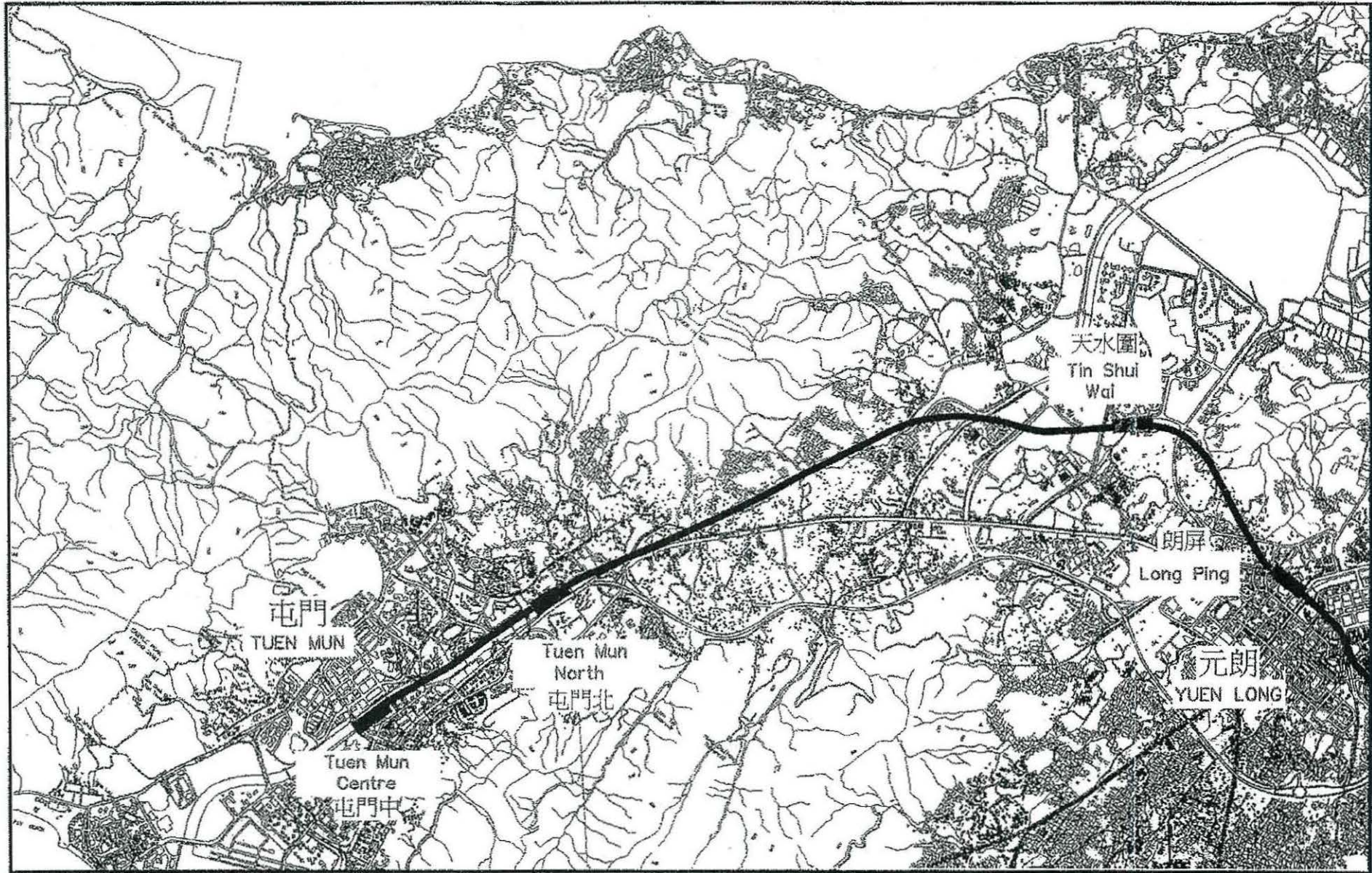


Figure 3 - Location and Alignment of the Project

圖3 - 工程項目的地點及線路



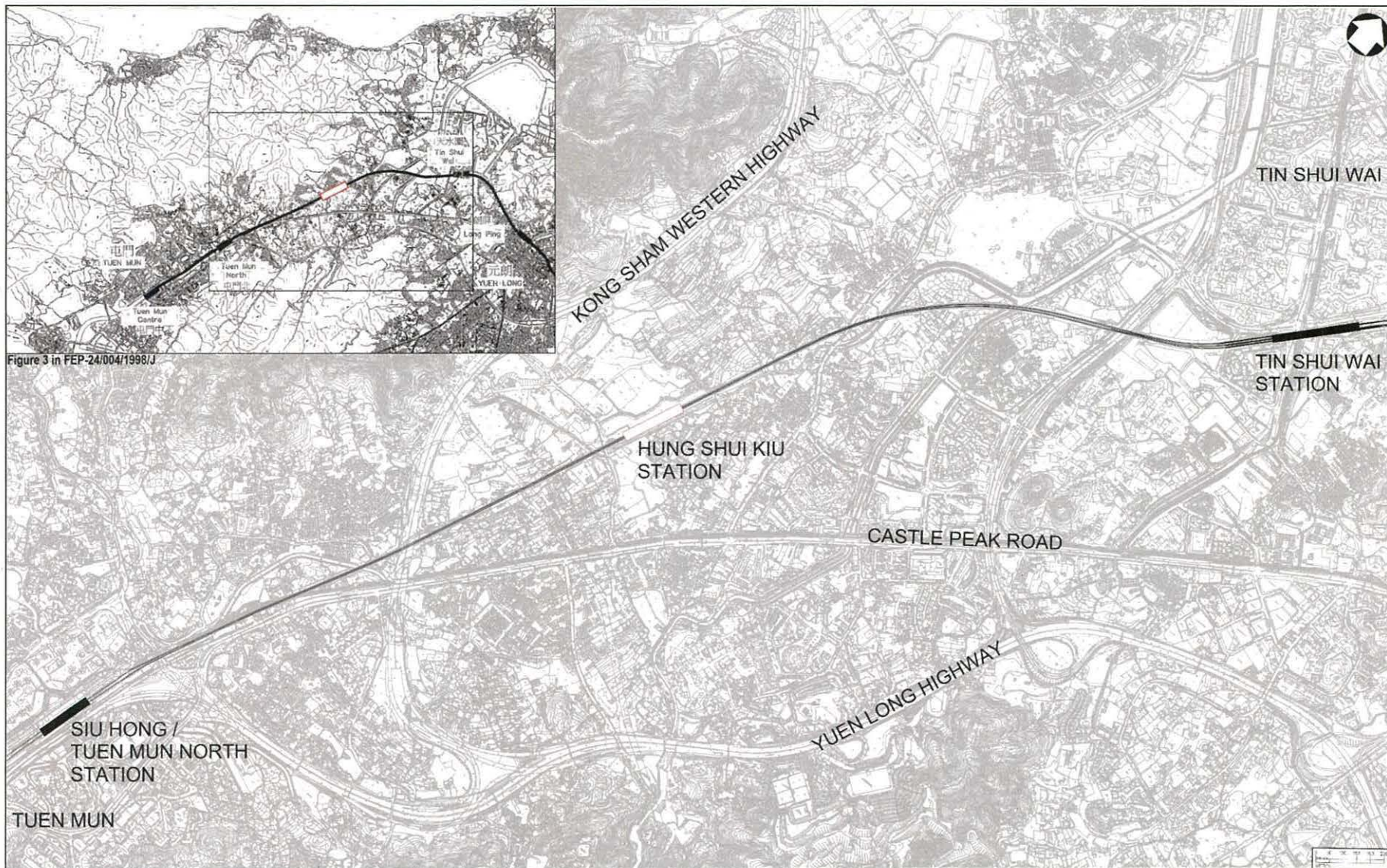


Figure 3 in FEP-24/004/1998/J

Figure 3A – Location and Alignment of the Project

圖 3A – 工程項目的地點及線路

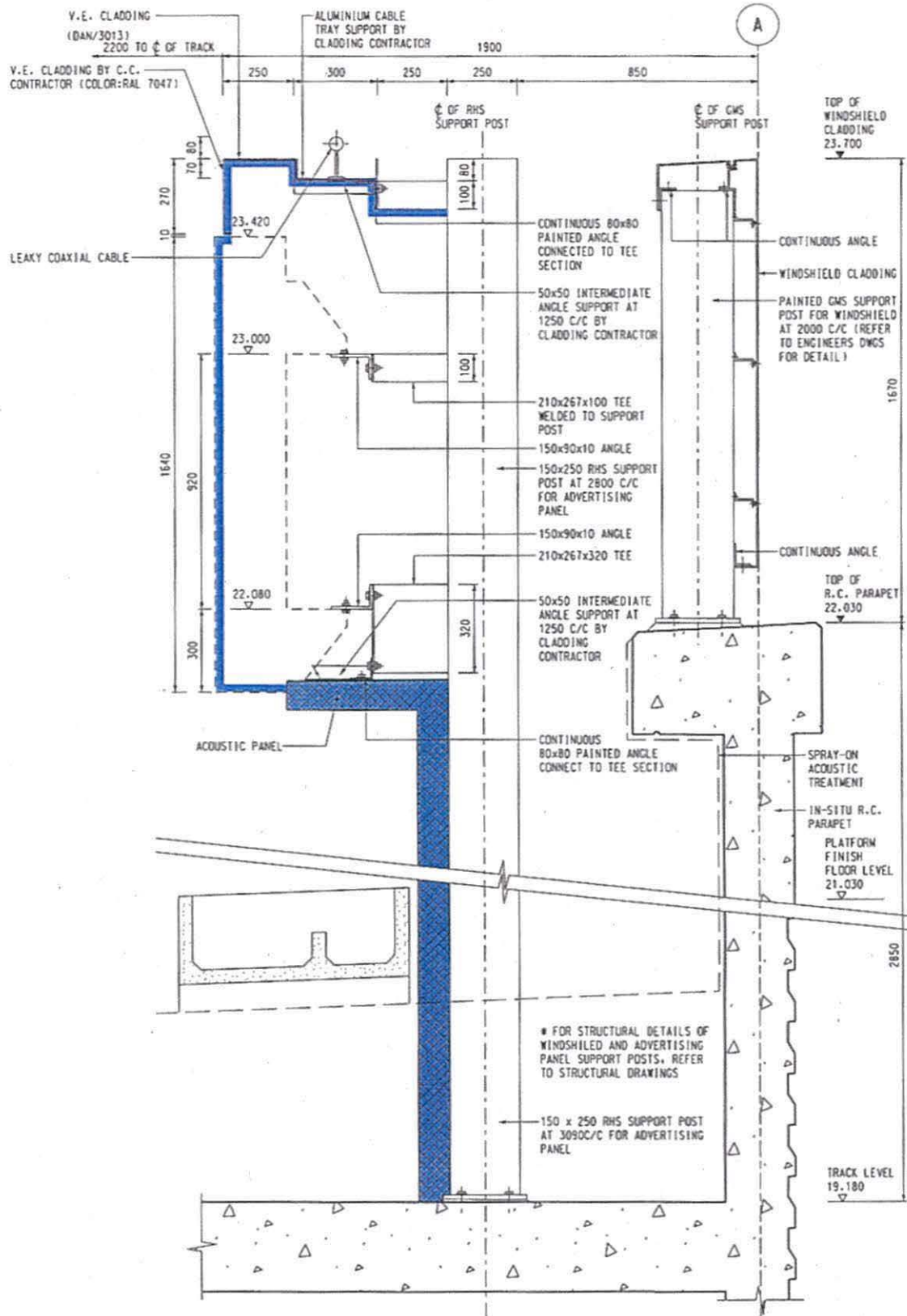




Figure 4 - Location of the Marsh in Kam Tin

圖4—錦田沼澤的位置





\* All dimensions are nominal,  
 subject to adjustment to suit  
 site condition

TYPICAL SECTION 3  
 SCALE 1 : 10

0 100 200 300 400 500  
 MILLIMETRES  
 1 : 10

**Figure 5 - Trackside Panels and Windshields at the Yuen Long Station [Uptrack (track from Kowloon to Tuen Mun)]**

圖五—元朗站的路軌旁板及風擋 [上行路軌 (從九龍往屯門的路軌)]



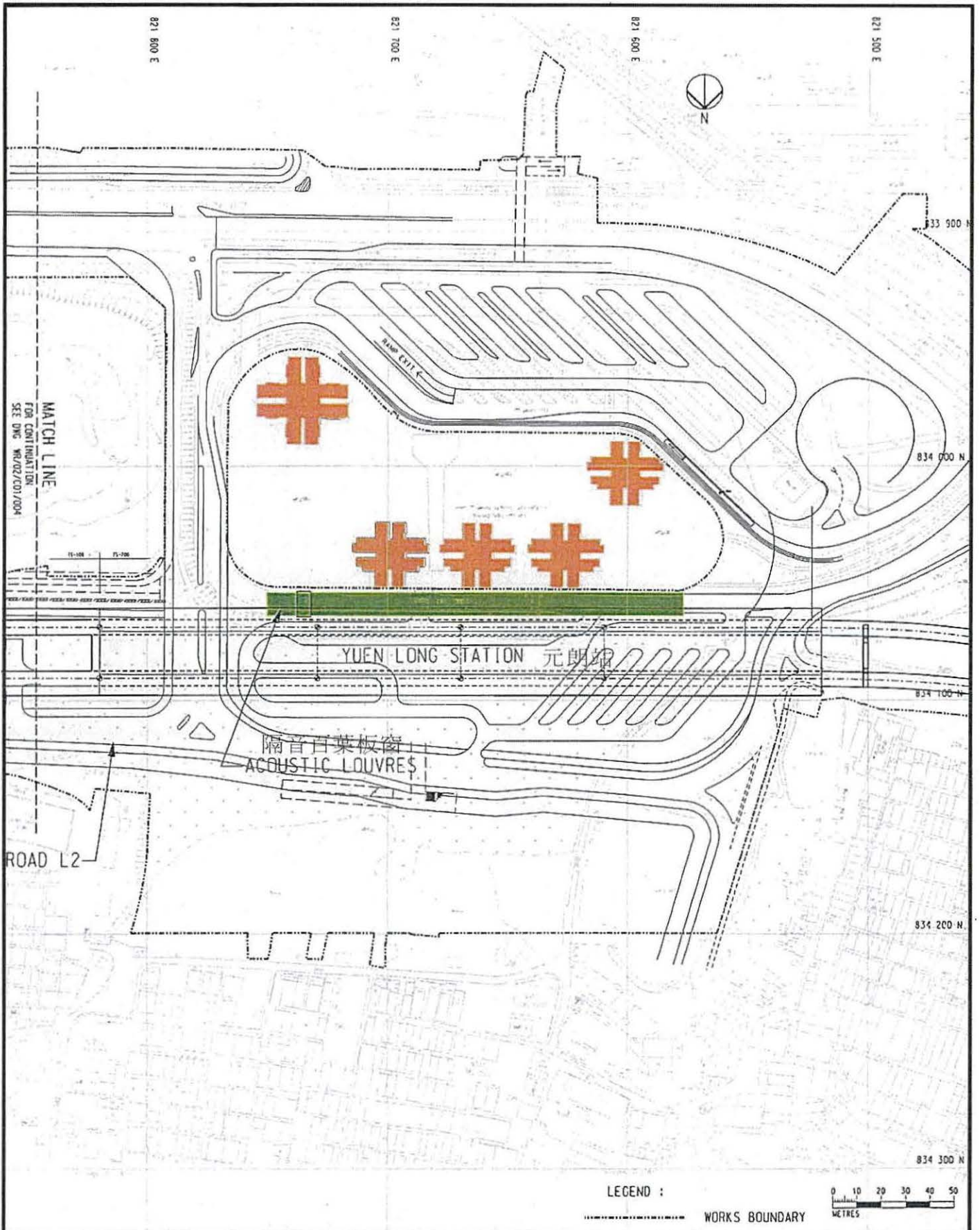
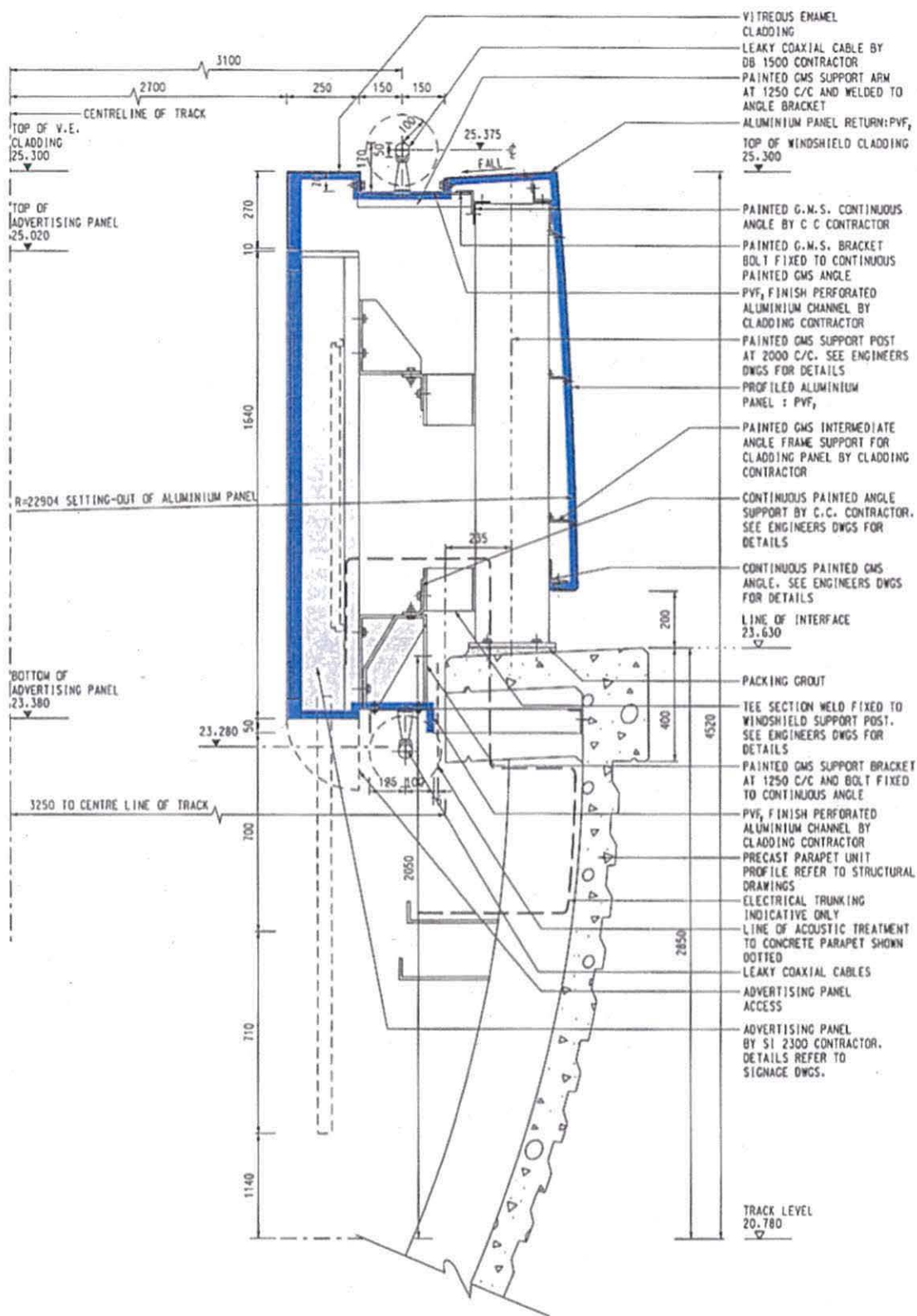


Figure 6 - Acoustic Louvers at the Yuen Long Station

圖六一元朗站的隔音百葉板窗





\* All dimensions are nominal, subject to adjustment to suit site condition

TYPICAL SECTION  
 SCALE 1 : 10

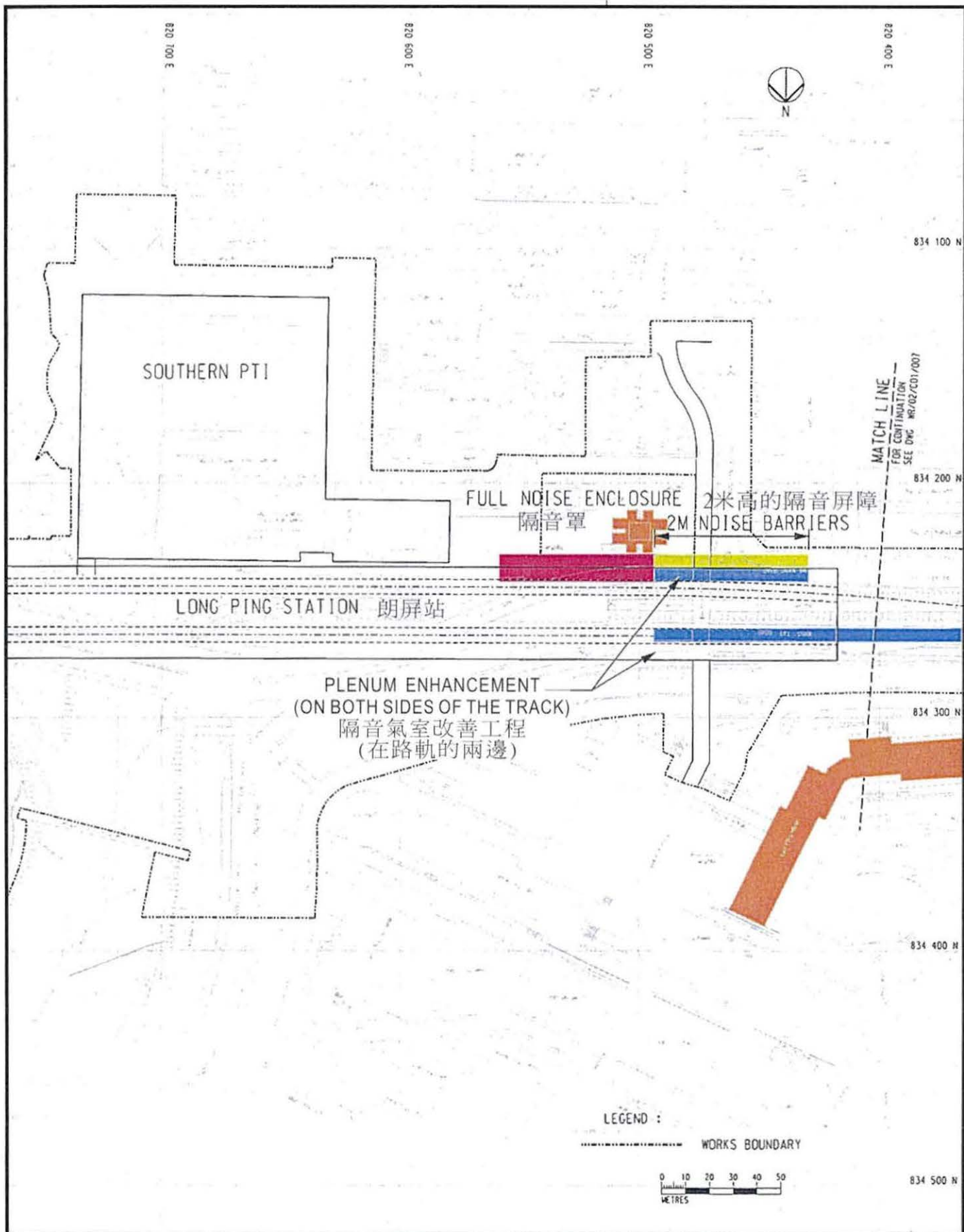
0 100 200 300 400 500  
 MILLIMETRES  
 1 : 10

Figure 7 - Trackside Panels and Windshields at the Kam Sheung Road Station, Long Ping Station and Tin Shui Wai Station

圖七—錦上路站，朗屏站及天水圍站的路軌旁板及風擋



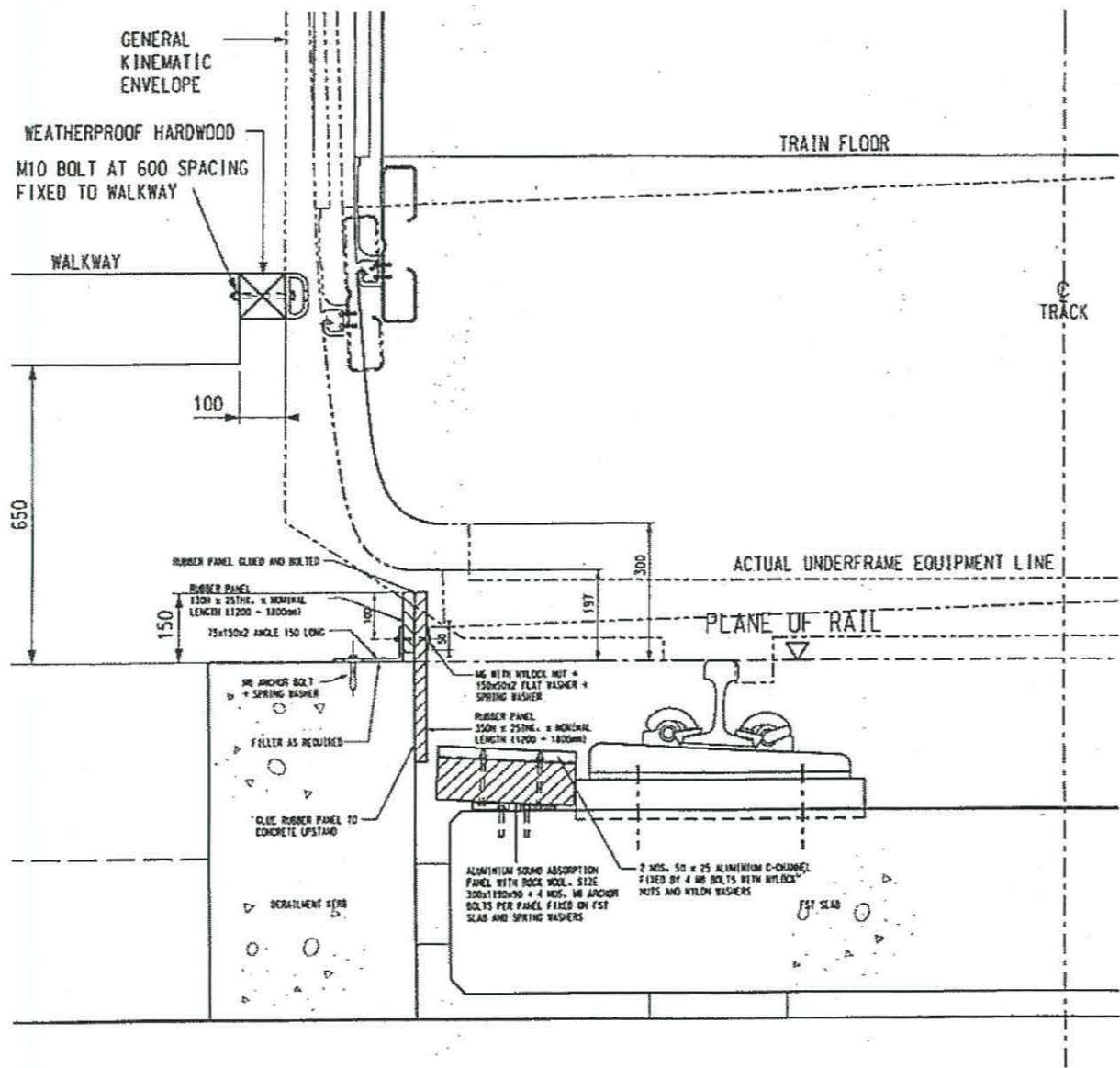




**Figure 8 - Tracking Enclosure, 2m Noise Barrier and Plenum Enhancement at the Long Ping Station**

圖八—朗屏站的路軌隔音罩，2米高的隔音屏障及隔音氣室的改善工程





\* Plenum enhancement shall be implemented at both sides under the train

\* ALL DIMENSIONS ARE NOMINAL. SUBJECT TO ADJUSTMENT TO SUIT SITE CONDITIONS

LATERAL STATIC MOVEMENT	
RUNNING CLEARANCE + FLANGE WEAR:	15
CARBODY TOLERANCE:	5
RAIL SIDE WEAR:	5
GAUGE TOLERANCE:	5
ALIGNMENT TOLERANCE:	10
<b>TOTAL:</b>	<b>40</b>

1. SKIRT LEVEL (STATIC CONDITION):	300
2. VEHICLE DOWNWARD MOVEMENT	
VERTICAL ALIGNMENT:	10
RAIL HEAD WEAR:	15
WHEEL TREAD WEAR:	10
PRIMARY SUSPENSION MOVEMENT:	15
AIR SUSPENSION MOVEMENT:	10
CARBODY ROLL:	43
SUB-TOTAL:	103
3. MAX. ALLOWABLE SPACE FOR BRACKET:	197

Figure 9 - Additional Noise Mitigation Measure on the Viaducts

圖九—高架橋的附加噪音緩減設施



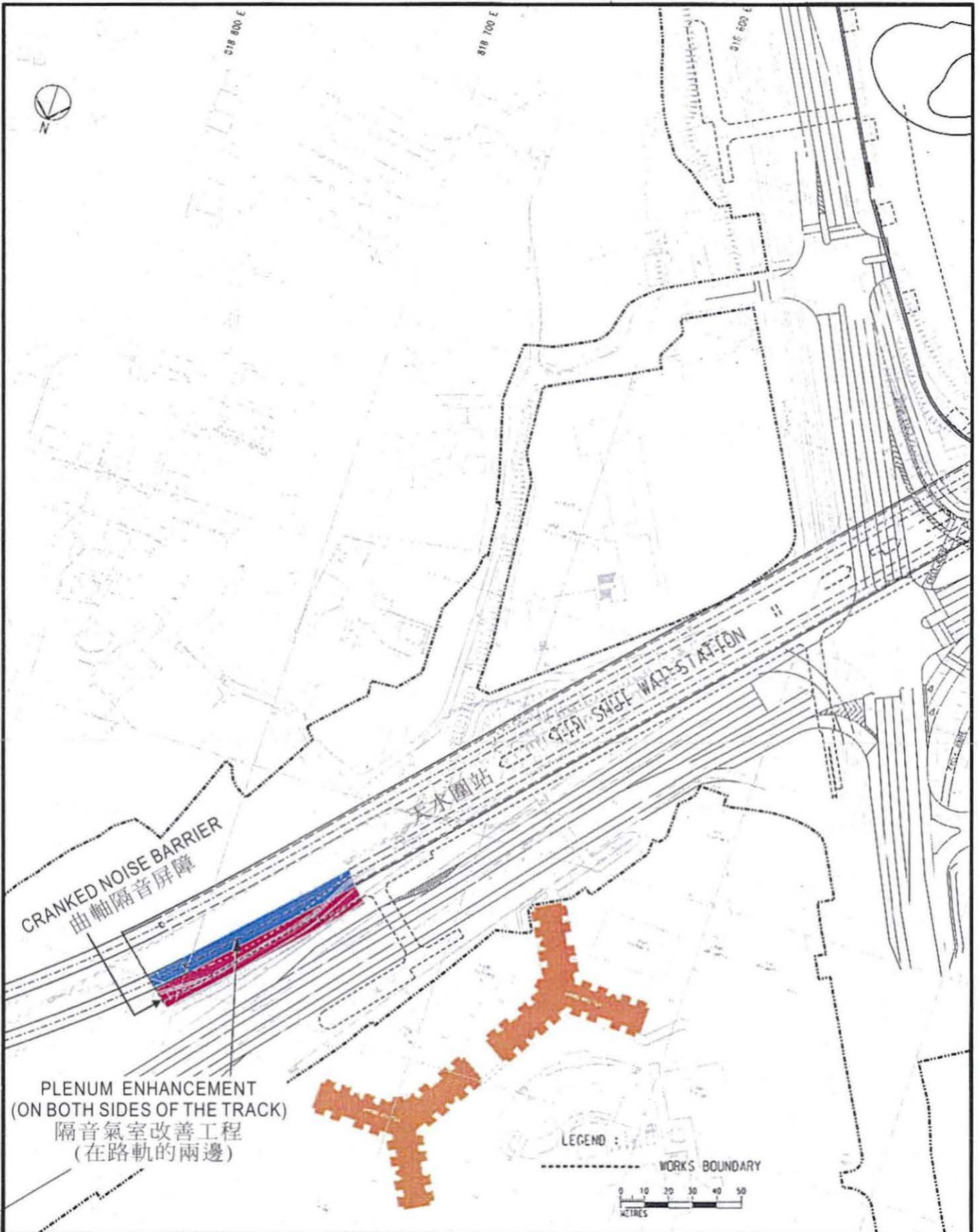
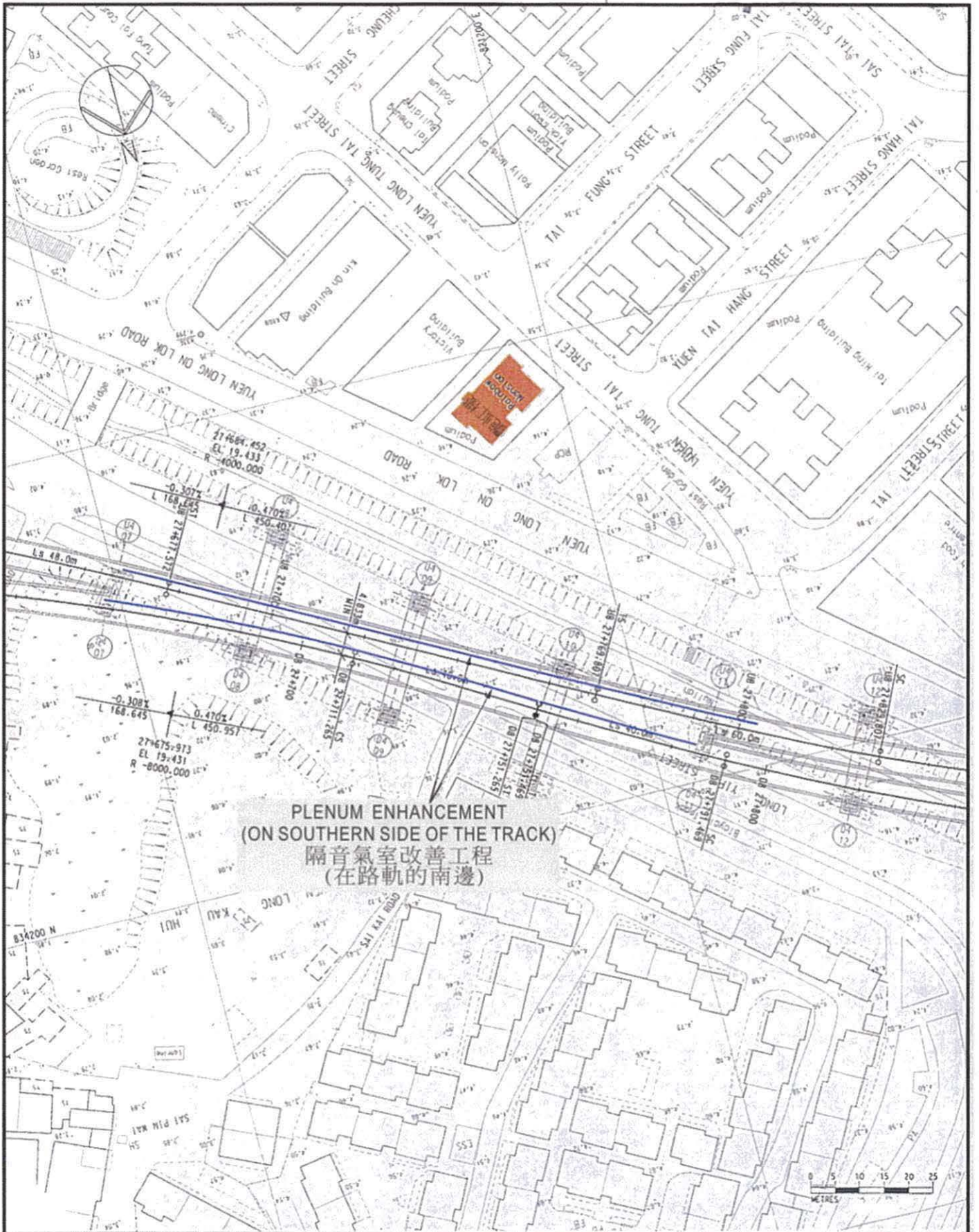


Figure 10 - Cranked Noise Barrier and Plenum Enhancement at the Tin Shui Wai Station

圖十一天水圍站的曲軸隔音屏障及隔音氣室的改善工程

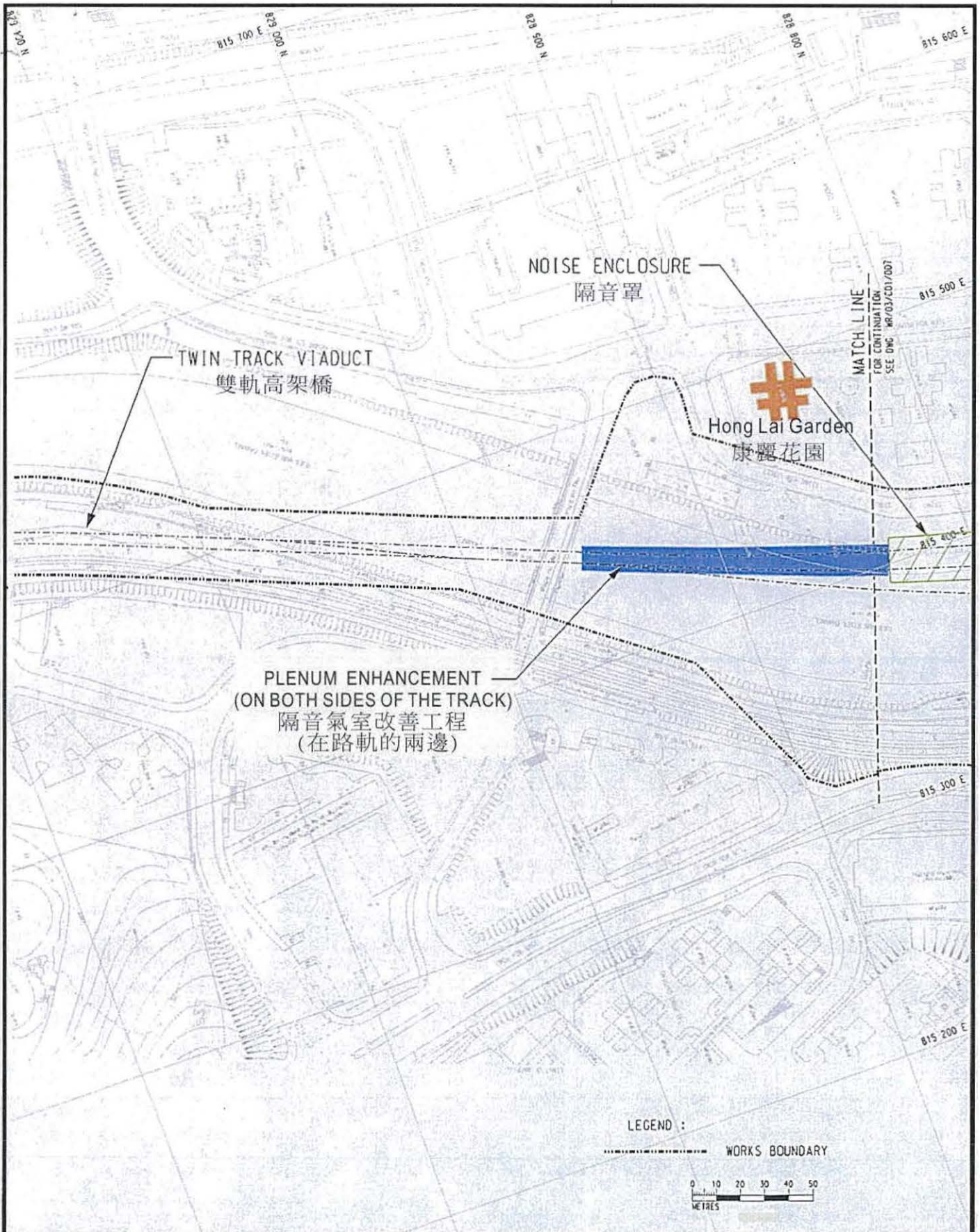




**Figure 11 - The Location of Plenum Enhancement Along the Up and Down Tracks of the Viaduct near the Rainbow Mansion**

圖十一——鄰近彩虹樓之高架橋上沿上行路軌及下行路軌的隔音氣室改善工程的位置

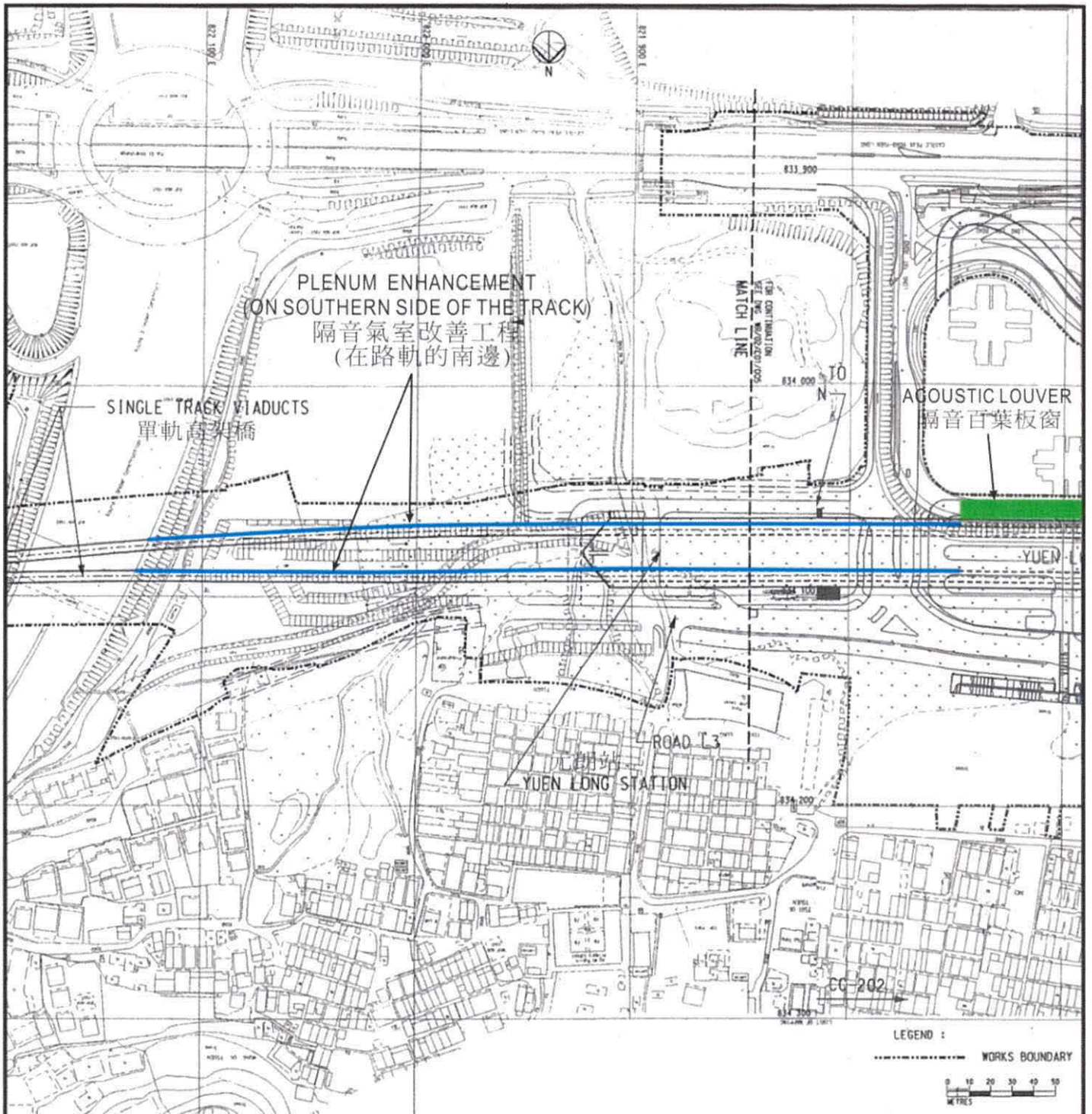




**Figure 12 - The Location of Plenum Enhancement Along the Up and Down Tracks of the Viaduct near Hong Lai Garden**

圖十二—鄰近康麗花園之高架橋上沿上行路軌及下行路軌的隔音氣室改善工程的位置

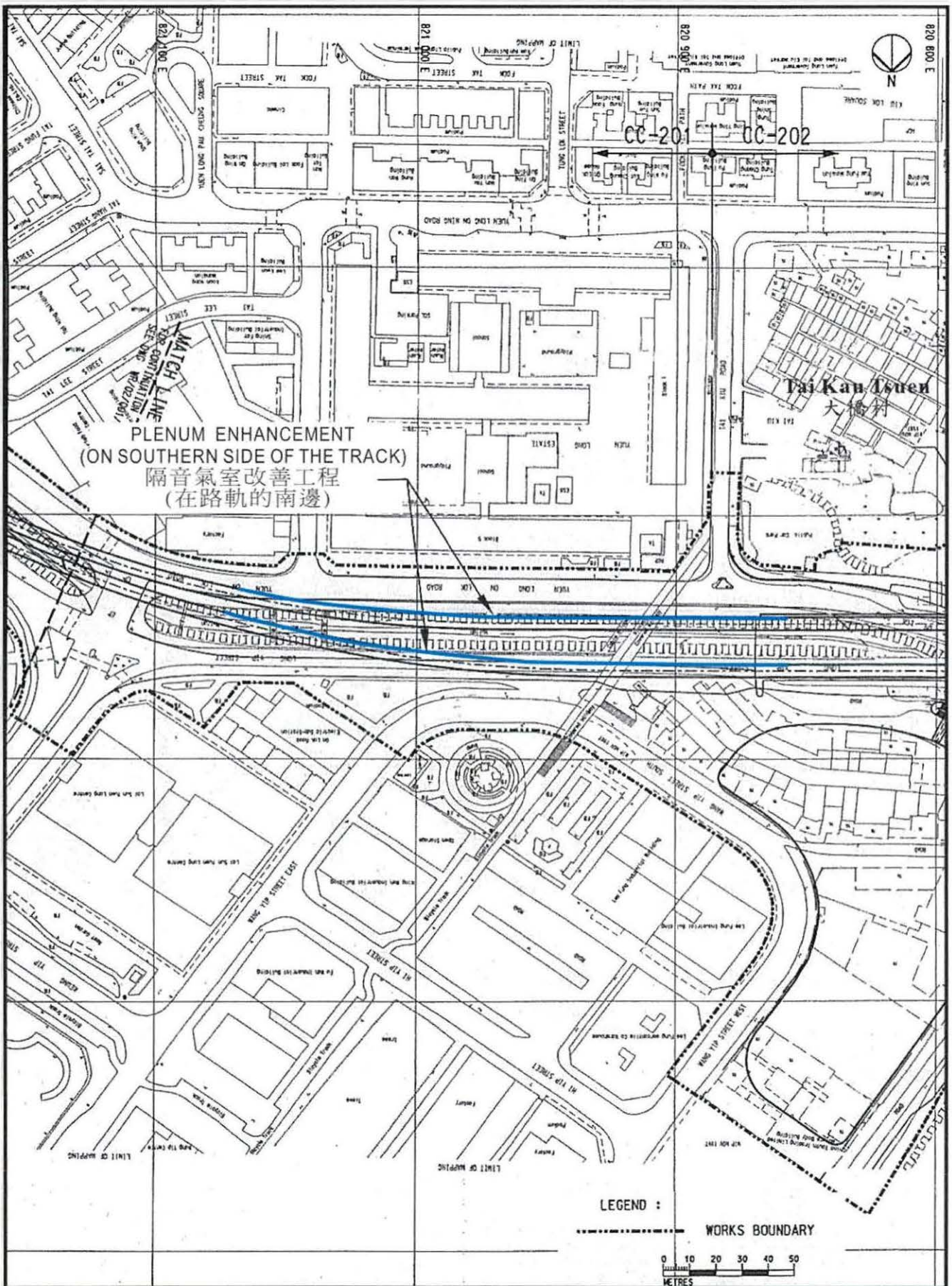




**Figure 13 - The Location of Plenum Enhancement Along the Up and Down Tracks of the Viaduct near Yuen Long Station**

圖十三—鄰近元朗站之高架橋上沿上行路軌及下行路軌的隔音氣室改善工程的位置





**Figure 14 - The Location of Plenum Enhancement Along the Up and Down Tracks of the Viaduct between Yuen Long Station and Long Ping Station**

圖十四—在元朗站及朗屏站之間的高架橋上沿上行路軌及下行路軌的隔音氣室改善工程的位置



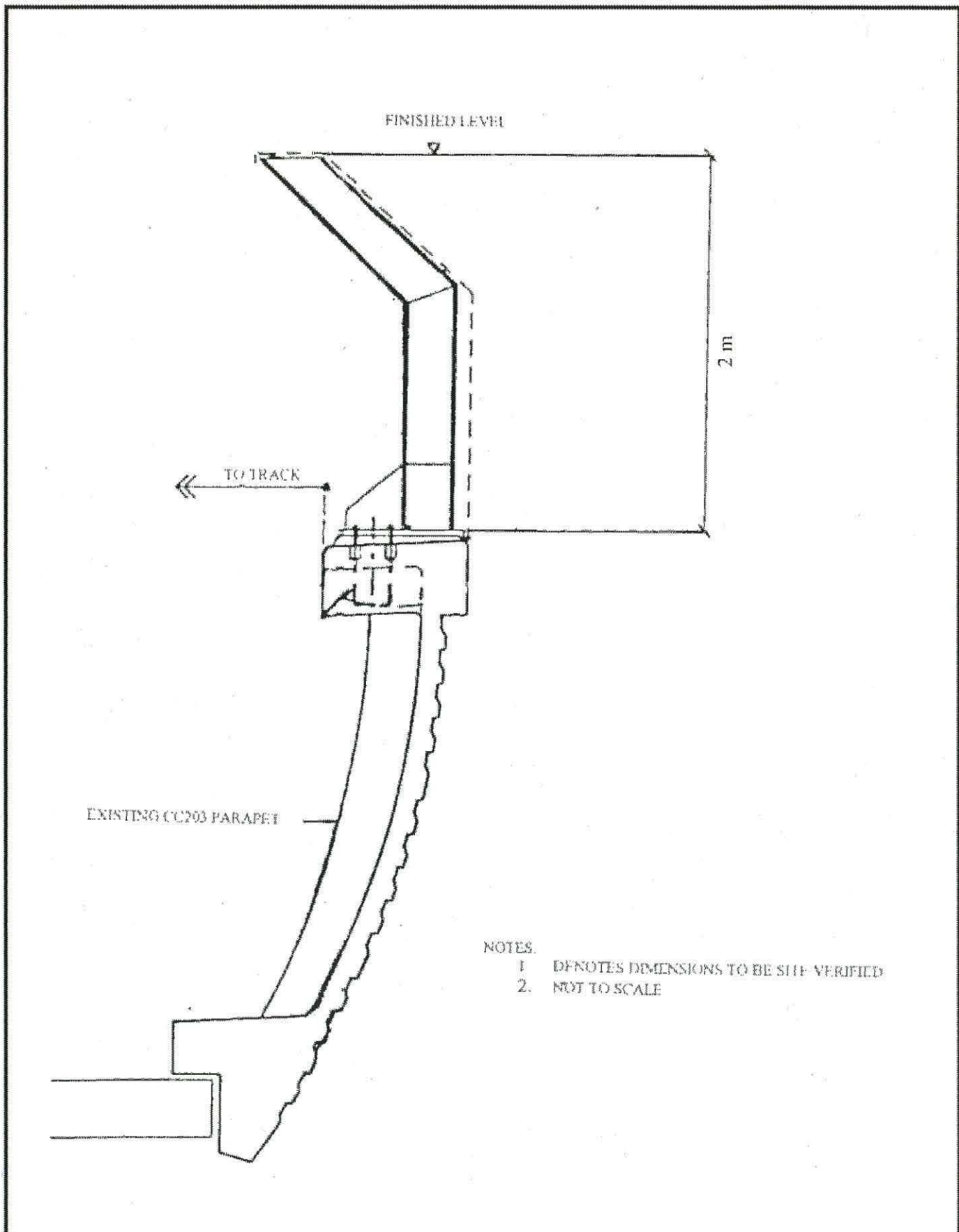


Figure 15 - Cranked Noise Barrier at the Tin Shui Wai Station

圖十五一天水圍站的曲軸隔音屏障





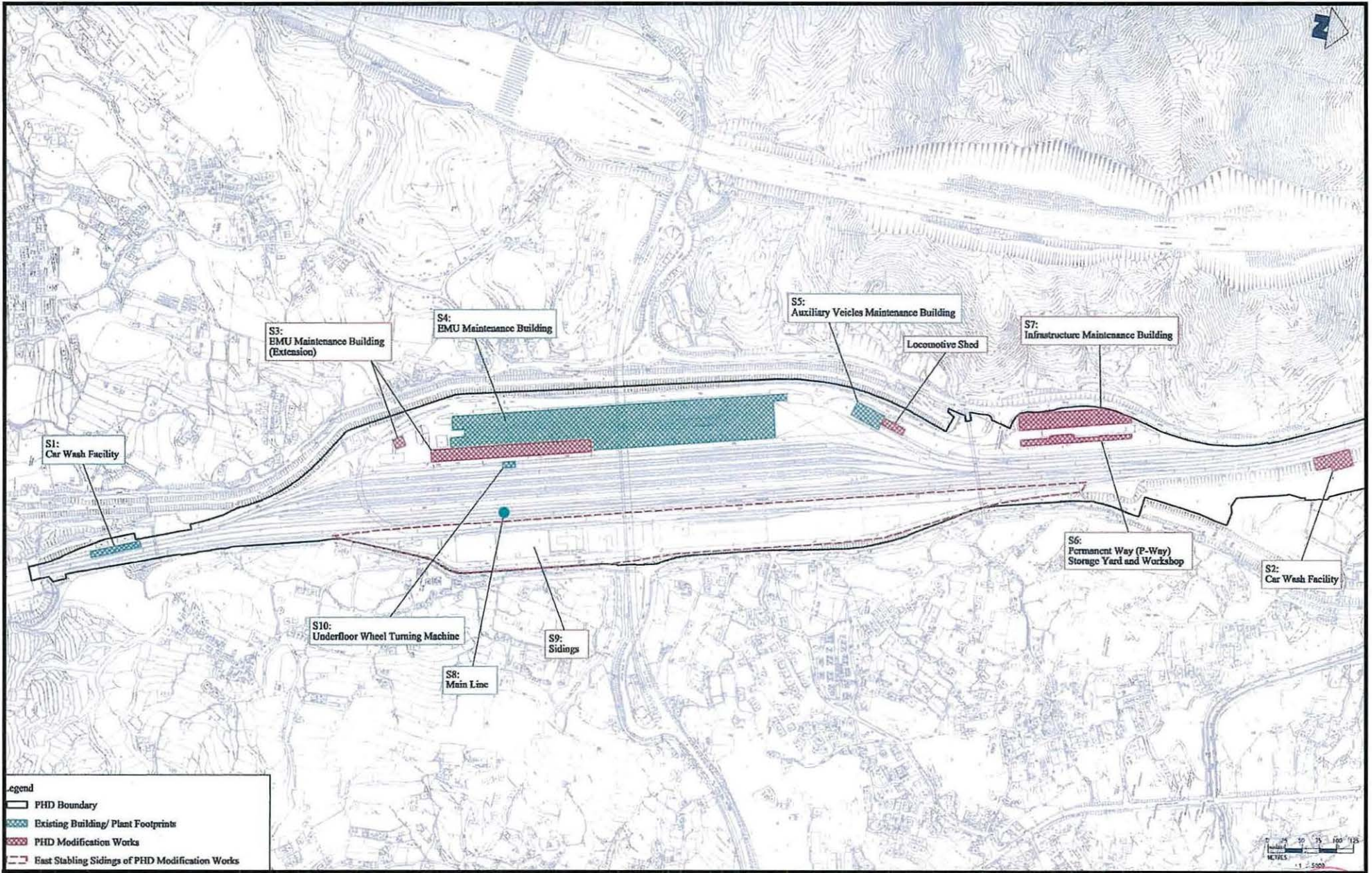


Figure 16 – West Rail Pat Heung Depot Modification Works  
 圖十六 – 西鐵八鄉車廠改善工程



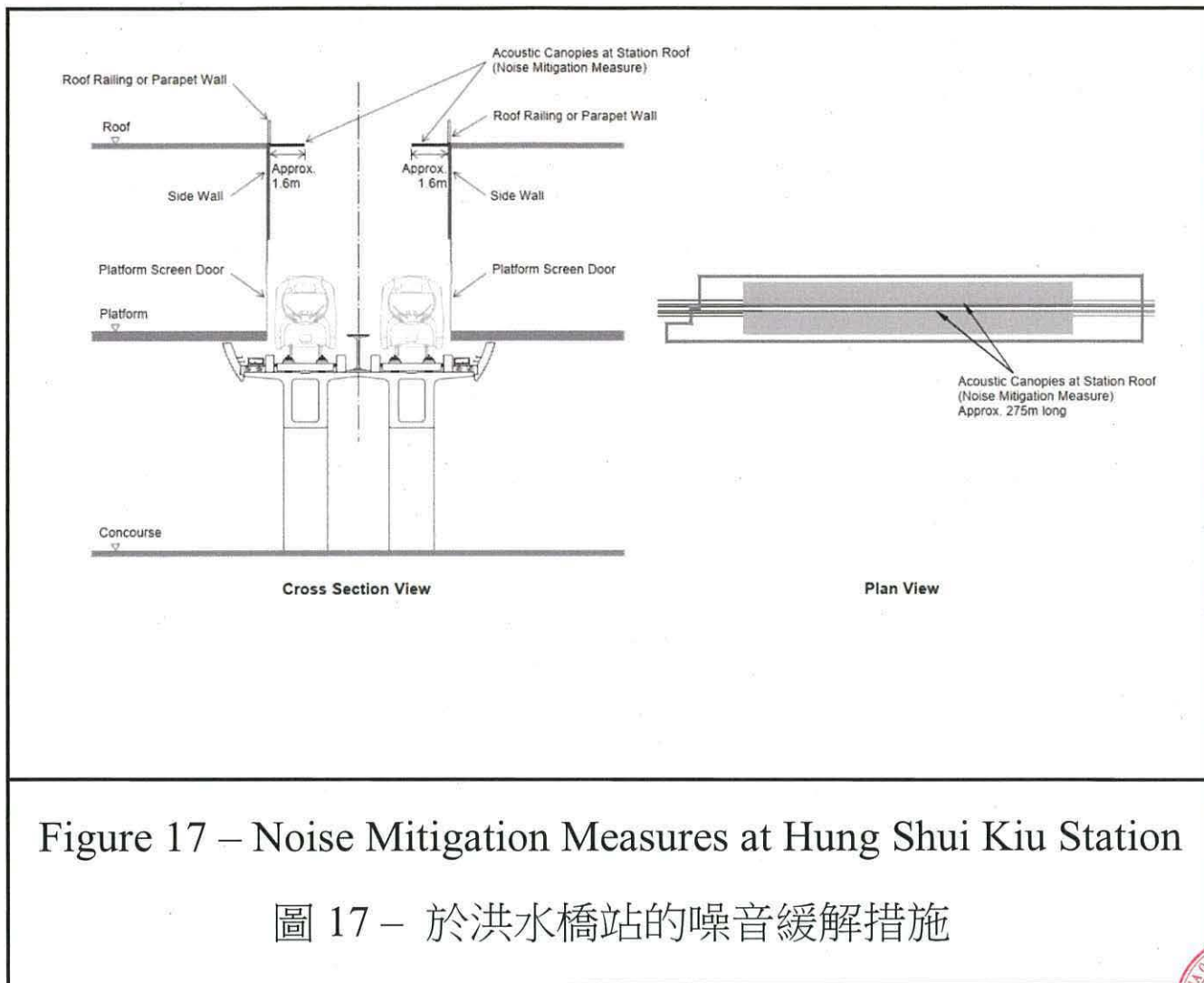


Figure 17 – Noise Mitigation Measures at Hung Shui Kiu Station

圖 17 – 於洪水橋站的噪音緩解措施

