Appendix 5-1
Corresponding MLP of Planned Development at Nam Cheong Station and Correspondence with MTRC

Thomas Wong

From: CHOW Edwin Hin Por (周憲波) [EDWINCHP@mtr.com.hk]
Sent: 12日June2012年Tuesday 9:49
To: 'Thomas Wong'
Cc: '4710'; cftsang@fehd.gov.hk; lfylo@fehd.gov.hk; vypleung@fehd.gov.hk; satshs@archsd.gov.hk; lukty@archsd.gov.hk; Thomas Tse; Perry Chan; Rodney Ip; Ho Tinkit; Fanny Fan; CHAN Charles Chun Lap (陳俊立); CHAN Y Yuen (陳源); YU KM Kwong Ming (余廣明); CHOW Edwin Hin Por (周憲波); WONG Ben Bun (黃斌); CHAN Simon Shui Yan (陳瑞仁); WONG Sallus Shan Shan (王珊珊)
Subject: RE: 9AX 034 (182GK) SYS Depot - Request for Information of Proposed Development at Nam Cheong Station

Dear Thomas,

We refer to our discussion this morning about the Nam Cheong Station Property Development. Kindly note our response as below to your requests:

(i) The latest Master Layout Plan was the one submitted in April 2011 and approved in July 2011. Meanwhile we may not be able to provide AutoCAD copy of the document, but the approved MLP (in pdf and available from internet) has already had the critical dimensions marked which would facilitate your EIA study;
(ii) The construction work of the Development has actually commenced on site, and the anticipated completion of the whole Development would be no later than the year of 2019.

Thank you for your kind attention.

Best Regards,

Edwin Chow

Project Manager -
Property Project Department
Tel: 2993-2035

From: Thomas Wong [mailto:thomas.wong@scottwilson.com.hk]
Sent: Friday, June 08, 2012 7:51 PM
To: MTR Corporate Relations
Cc: '4710'; cftsang@fehd.gov.hk; lfylo@fehd.gov.hk; vypleung@fehd.gov.hk; satshs@archsd.gov.hk; lukty@archsd.gov.hk; Thomas Tse; Perry Chan; Rodney Ip; Ho Tinkit; Fanny Fan
Subject: 9AX 034 (182GK) SYS Depot - Request for Information of Proposed Development at Nam Cheong Station

Dear Sir / Madam,

We are currently undertaking a development project, which is located at Yen Ming Road, Cheung Sha Wan, on behalf of Architectural Services Department and preparing an Environmental Impact Assessment (EIA) in accordance with the EIA Study Brief (ESB-245/2012) issued on 25 May 2012.

In order to facilitate our assessment, in particular the air quality and noise modelling analysis for EIA, it would be grateful the following information could be provided:

(i) The latest / approved layout of the proposed development at West Rail Nam Cheong Station (preferably in the format of PDF and AutoCAD); and
(ii) Expected construction programme and completion.

Due to tight programme of the captioned project, it is appreciated if the abovementioned information could be available by 21 June 2012.

To facilitate direct transmission of the above request, please find the enclosed scanned duly signed letter. We thank you in anticipation for your kind assistance.

Regards,
Thomas K. W. Wong MSc BEng CEng C.WEM MIChemE MCIWEM MHKIE
Senior Environmental Engineer
URS/Scott Wilson I Scott Wilson Ltd
38th Floor, Metroplaza Tower 1, 223 Hing Fong Road, Kwai Fong, Hong Kong

Tel: +852 2428 8866
Direct: +852 2410 3795
Fax: +852 2428 9922
thomas.wong@scottwilson.com.hk
www.urs-scottwilson.com.hk

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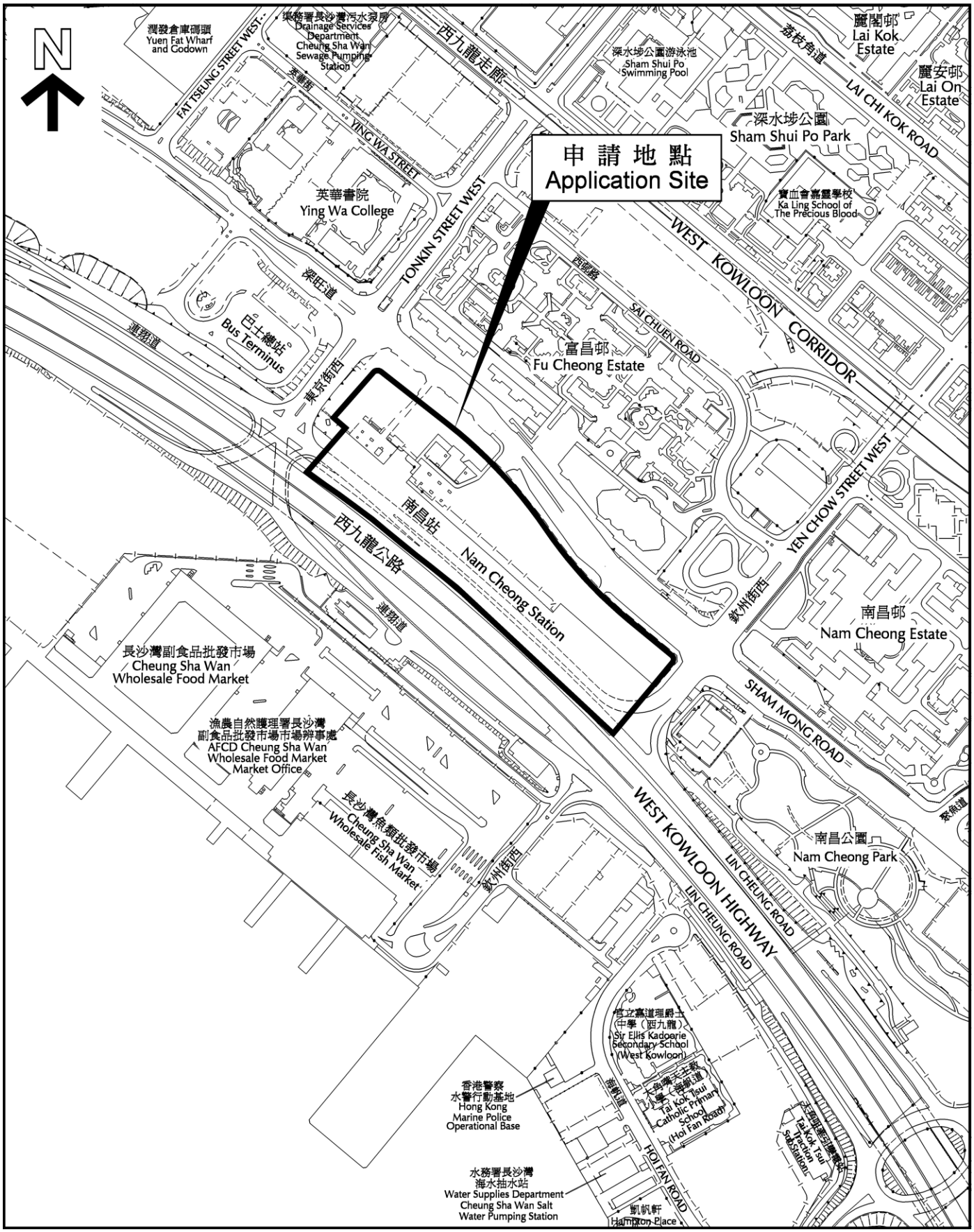
關乎申請編號 A/K20/119 的擬議用途/發展的概括發展規範
Broad Development Parameters of the Applied Use/Development in respect of Application No. A/K20/119

(a)	申請編號 Application no.	A/K20/119		
(b)	位置／地址 Location/Address	西九龍填海區西鐵綫南昌站 West Rail Line Nam Cheong Station, West Kowloon Reclamation		
(c)	地盤面積 Site area	約 About 46,200.00 平方米 m^2		
(d)	圖則 Plan	西南九龍分區計劃大綱核准圖編號 S/K20/28 Approved South West Kowloon Outline Zoning Plan No. S/K20/28		
(e)	地帶 Zoning	「綜合發展區」 "Comprehensive Development Area"		
(f)	申請用途／發展 Applied Use/ Development	擬議綜合住宅及商業發展 (修訂已核准的發展計劃) Proposed Comprehensive Residential and Commercial Development (Amendments to Approved Scheme)		
(g)	總樓面面積及／或地積比率 Total floor area and/or plot ratio		平方米 m^2	地積比率 Plot ratio
		住用 Domestic	約 About 214,700.00	約 About 4.65
		包括 including		
		- 住宅 Flat	214,700.00	---
		非住用 Non-domestic	約 About 30,660.00	約 About 0.66
		包括 including		
		- 零售 Retail	26,660.00	---
		- 幼稚園連同幼兒中心 Kindergarten-cum-child care centre	1,000.00	---
		- 24 小時開放有蓋行人通道 24-hour covered pedestrian walkway	3,000.00	---
(h)	幢數 No. of block	住用 Domestic	-	
		非住用 Non-domestic	-	
		綜合用途 Composite	14	
(i)	建築物高度／層數 Building height/ No. of storeys	住用 Domestic	- 米 m - 米(主水平基準以上)mPD - 層 storey(s)	
		非住用 Non-domestic	- 米 m - 米(主水平基準以上)mPD - 層 storey(s)	
		綜合用途 Composite	- 米 m 181.7 米(主水平基準以上)mPD 12 - 50 層 storey(s)	
		包括 including	2 地庫 Basement 3 平台 Podium 1 空中花園/隔火層 Sky Garden/Fire refuge floor	
(j)	上蓋面積 Site coverage	約 About 92 %		

(k) 單位數目 No. of units	3,414 住宅單位 Flats		
(l) 休憩用地 Open Space	- 私人 Private	不少於 Not less than 10,710.00 平方米 m^2	
	- 公眾 Public	- 平方米 m^2	
(m) 停車位及上落客貨車位數目 No. of parking spaces and loading/ unloading spaces	- 私家車車位 Private Car Parking Spaces		585
	- 電單車車位 Motorcycle Parking Spaces		60
	- 上落客貨車位 Loading/Unloading Spaces		33

* 有關資料是為方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。
The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

A/K20/119


N
申請地點
Application Site
潤發倉庫碼頭
Yuen Fat Wharf and Godown
FAT TSEUNG STREET WEST
渠務署長沙灣污水泵房
Drainage Services Department Cheung Sha Wan Sewage Pumping Station
英華街
YING WA STREET
西九龍走廊
深水埗公園游泳池
Sham Shui Po Swimming Pool
荔枝角道
麗閣邨
Lai Kok Estate
麗安邨
Lai On Estate
LAI CHI KOK ROAD
深水埗公園
Sham Shui Po Park
寶血會嘉靈學校
Ka Ling School of The Precious Blood
英華書院
Ying Wa College
TONKIN STREET WEST
深旺道
巴士總站
Bus Terminus
連翔道
東京街西
西邨路
SAI CHUEN ROAD
WEST KOWLOON CORRIDOR
富昌邨
Fu Cheong Estate
南昌站
Nam Cheong Station
西九龍公路
YEN CHOW STREET WEST
欽州街西
南昌邨
Nam Cheong Estate
長沙灣副食品批發市場
Cheung Sha Wan Wholesale Food Market
漁農自然護理署長沙灣副食品批發市場市場辦事處
AFCD Cheung Sha Wan Wholesale Food Market Market Office
長沙灣魚類批發市場
Cheung Sha Wan Wholesale Fish Market
SHAM MONG ROAD
WEST KOWLOON HIGHWAY
LIN CHEUNG ROAD
南昌公園
Nam Cheong Park
聚魚道
官立嘉道理爵士中學（西九龍）
Sir Ellis Kadoorie Secondary School (West Kowloon)
大角嘴天主教小學（海帆道）
Tai Kok Tsui Catholic Primary School (Hoi Fan Road)
香港警察水警行動基地
Hong Kong Marine Police Operational Base
海帆道
HOI FAN ROAD
水務署長沙灣海水抽水站
Water Supplies Department Cheung Sha Wan Salt Water Pumping Station
凱帆軒
Hampton Place

申請編號 Application No. : A/K20/119
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EXECUTIVE SUMMARY

Background

The Subject Site is situated atop of the West Rail Line Nam Cheong Station and is zoned "Comprehensive Development Area" ("CDA") on the Draft South West Kowloon Outline Zoning Plan No. S/K20/27. A Master Layout Plan (MLP) for the proposed development at the Subject Site was approved by the Town Planning Board (TPB/the Board) on 17 June 2011 under Planning Application No. A/K20/116 (the 2011 Approved Scheme). A Class B amendment submission, which incorporates minor adjustments to the Approved Scheme, was subsequently approved by Director of Planning under delegated authority of TPB on 16 November 2012 under Application No. A/K20/116-1 (the 2012 Approved Amendment Scheme).

Land Grant for the proposed development at the Subject Site was executed on 31 January 2012. To facilitate construction of the Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) which passes through the Subject Site below ground, part of the Subject Site is demarcated as Deferred Possession Areas under the Land Grant, in which possession will only be taken over by the Grantee not later than December 2014 and December 2015 respectively.

Purpose of the Application

To make way for excavation arising from railway construction, separate tree removal applications were made to Lands Department (LandsD) by XRL for trees within the Deferred Possession Areas, and approvals were subsequently obtained. However, discrepancies were found between the tree removal approvals by LandsD and the last Tree Preservation Proposal under the 2011 Approved Scheme. An updated Tree Survey and Preservation Proposal has therefore been prepared to rectify the discrepancies and to reflect the change to the number of trees to be felled, transplanted and preserved. Opportunity has also been taken to update the current condition of certain trees within the Subject Site affected by natural health deterioration and damaged by Typhoon Vicente, which struck Hong Kong in July 2012.

Given that the updated numbers of trees to be felled and preserved have exceeded 10% of the originally approved level under the 2011 Approved Scheme, this Section 16 Planning Application is made, in the context of TPB Guideline PG-No. 36A, to seek permission from the Board for the corresponding changes to the previously approved Tree Survey and Preservation Proposal. Revisions to the approved Landscape Master Plan are also made correspondingly with rectifications and enhancements.

Proposed Amendments

- Rectification of discrepancies between the Tree Survey and Preservation Proposal under the 2011 Approved Scheme and the subsequent tree removal applications already approved by the LandsD relating to the XRL's Deferred Possession Areas within the Subject Site;
- Updating of numbers of trees proposed to be retained, transplanted and felled taking into account the latest conditions of trees;
- Introduction of more compensatory trees in replacement of the additional trees to be felled; and
- Further improvement to the Landscape Master Plan for enhancing tree species diversity.

Justifications for the Application

- This application is merely a technical submission to reflect the change in tree number in response to the latest situation of affected trees and to further enhance the Landscape Master Plan. As the Current Development Scheme in this submission is identical to the 2012 Approved Amendment Scheme, no adverse impact to the Development Scheme on technical aspects is anticipated.

- All design merits and planning gains inherent in the 2012 Approved Amendment Scheme are kept intact, including:
  - Incorporating a three-step terraced podium with an enriched/ landscaped podium façade is incorporated to further break down the podium massing of the proposed development.
  - Providing further podium setback at the landscaped open plaza located next to the Sham Mong Road Station Entrance to cultivate a sense of arrival. A strip of commercial floor space has also been relocated to line next to the open plaza to promote a vibrant streetscape.
  - Further stepping back the entire row of high-rise towers from Sham Mong Road which enhances penetration of natural sunlight and openness of the public realm.
  - Addressing the social aspiration for small and medium size residential flats by increasing housing supply.

- Some of the trees impose high risk of tree failure as they have been affected by natural deterioration or damaged by typhoon. Felling of these trees and replacing them by new compensatory trees is a reasonable solution to avoid potential danger to the public. An adequate number of new compensatory trees are proposed in replacement of the additional trees to be felled.

- Opportunity is particularly taken to incorporate a combination of native and exotic tree species along with ornamental evergreen and flowering species for the compensatory tree planting. This will significantly increase the species diversity within the Subject Site.

- Despite changes to tree felling and preservation, the revised Landscape Master Plan submission would not lead to a reduction in the open space and greening provisions.

申請編號 Application No.：A/K20/119
此頁摘自申請人提交的文件。
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規 劃 申 請 摘 要

背景

申請地盤位於西鐵綫南昌站上蓋，在西南九龍分區計劃大綱草圖編號 S/K20/27 上被劃為「綜合發展區」地帶。城市規劃委員會(城規會)於 2011 年 6 月 17 日，根據城市規劃條例第 16 條核准申請地盤的總綱發展藍圖(規劃申請編號 A/K20/116)，以作綜合住宅及商業發展 (2011 年核准方案)。其後，申請人根據城市規劃條例第 16A 條對核准的總綱發展藍圖作輕微修訂(規劃申請編號 A/K20/116-1)，並於 2012 年 11 月 16 日獲得城規會授權規劃署署長批核 (2012 年核准修訂方案)。

申請地盤的土地契約已於 2012 年 1 月 31 日生效。但由於廣深港高速鐵路香港段（下稱高鐵）將會途經申請地盤，而高鐵工程現正進行中，申請地盤內部分位置在土地契約內被劃為延遲移交區，分別最遲於 2014 年 12 月及 2015 年 12 月才歸還申請人作發展。

申請目的

高鐵工程須進行挖地工程，有關工作團隊已就延遲移交區內的樹木向地政總署提出樹木移除申請，並已獲核准。但由於樹木移除申請中所核准的樹木數量、砍伐及保存的樹木數量等與 2011 年核准方案的樹木保護建議書有所出入，申請人現提交更新樹木調查及保護建議書，以修正有關樹木數量的出入。再者，部分已核准的移植樹木在移植後健康狀況變差，另有部分樹木在 2012 年 7 月遭颱風韋森特吹倒及損毀。因此，建議砍伐及保存的樹木數量需作出調整。

由於修正後建議砍伐及保存的樹木數量超越了先前規劃申請編號 A/K20/116 所核准數量的 10%，申請人須根據城市規劃條例第 16 條及城市規劃指引編號 36A 遞交新的規劃申請，以修訂已核准的樹木保護建議書，並對已獲批的園景設計圖作出修正及改善。

申請事項

- 修訂在 2011 年核准方案中已核准的樹木調查及保護建議書和地政總署核准的樹木移除申請中兩份文件之間的差異；
- 因應樹木最新的健康狀況更新砍伐及保存的樹木數量；
- 建議種植新的補償樹木以彌補受影響而損失的樹木；及
- 優化園景設計圖，建議更多補償的樹木種類以增加植物品種的多樣性。

申請理由

- 本文件純粹為技術修訂文件，旨在反映樹木數量的改變，以及優化園景設計圖。是次提交的發展方案與 2012 年核准修訂方案的總綱發展藍圖完全一致。因此，本申請中的擬議修訂並不會對發展構成任何技術上的不良影響。

- 是次提交的發展方案完全保留 2012 年核准修訂方案中的設計優點及規劃增益，包括：
  - 提供三層梯級式的基座平台，並配以園景設計，減少平台的體積。
  - 進一步將基座平台後移，增大深旺道車站出口旁的地面廣場，並在廣場旁邊新增設的一列店鋪，令深旺道一帶增添活力。
  - 進一步將高座樓宇從深旺道後移，有助自然光線透入，增強開揚感。
  - 提供更多中小型單位，配合社會需求。

- 有部分樹木在移植後健康狀況轉差，亦有部分在 2012 年 7 月受到颱風損毀。這些樹木有機會隨時倒塌，對公眾安全構成威脅。因此，移除這些樹木並種植新的補償樹木以彌補受影響的樹木實為合適的建議。

- 建議補償的樹木種類能有助增加植物品種的多樣性，為申請地盤增添不同的綠化景觀。

- 儘管新的園景設計圖內建議砍伐及保存的樹木數量有所變動，整體休憩空間及綠化覆蓋面積將不會減少。

申請編號 Application No. : A/K20/119
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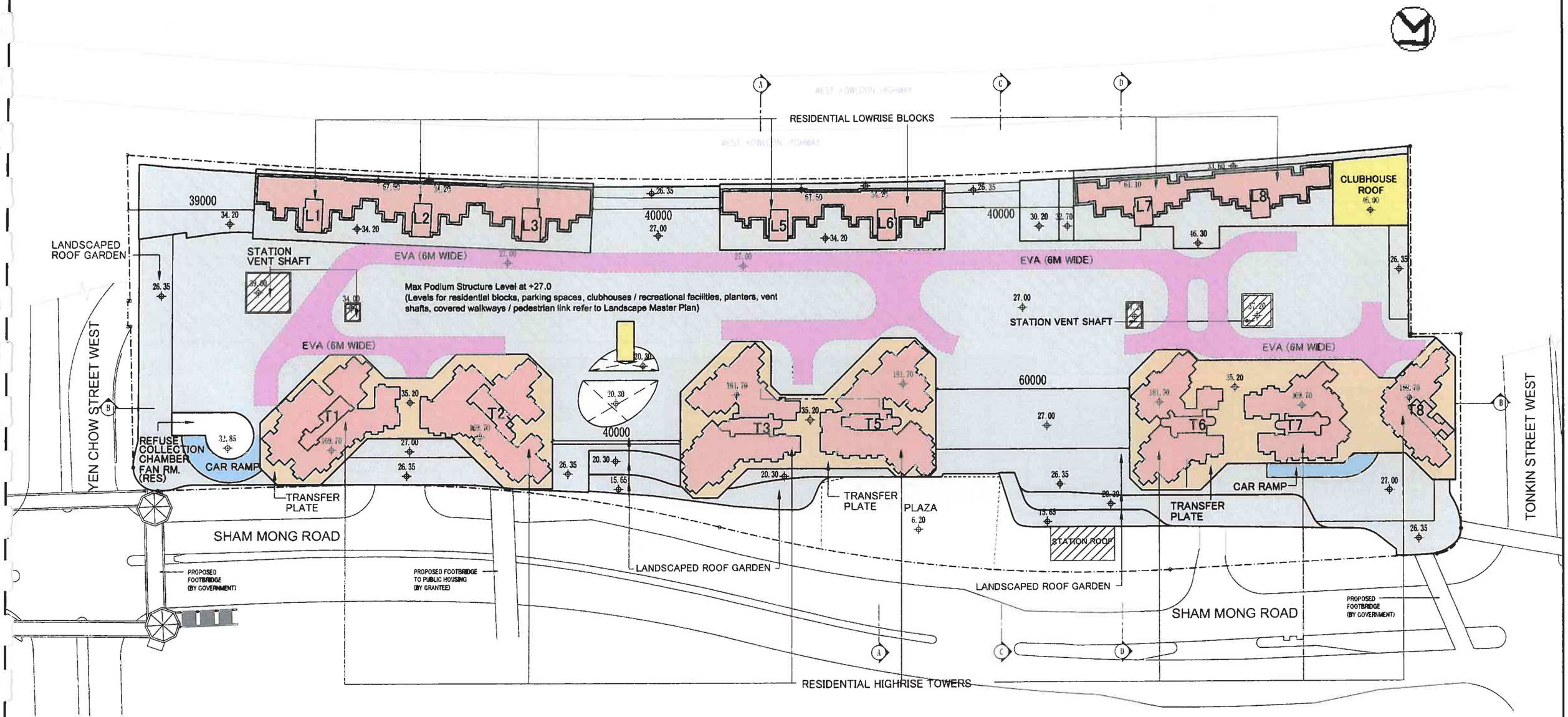

Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

SITE BOUNDARY

STATION AND ASSOCIATED FACILITIES

EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

MASTER LAYOUT PLAN

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Rev		Date	
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Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

SITE BOUNDARY

STATION AND ASSOCIATED FACILITIES

EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

BASEMENT SECOND FLOOR PLAN (B2)

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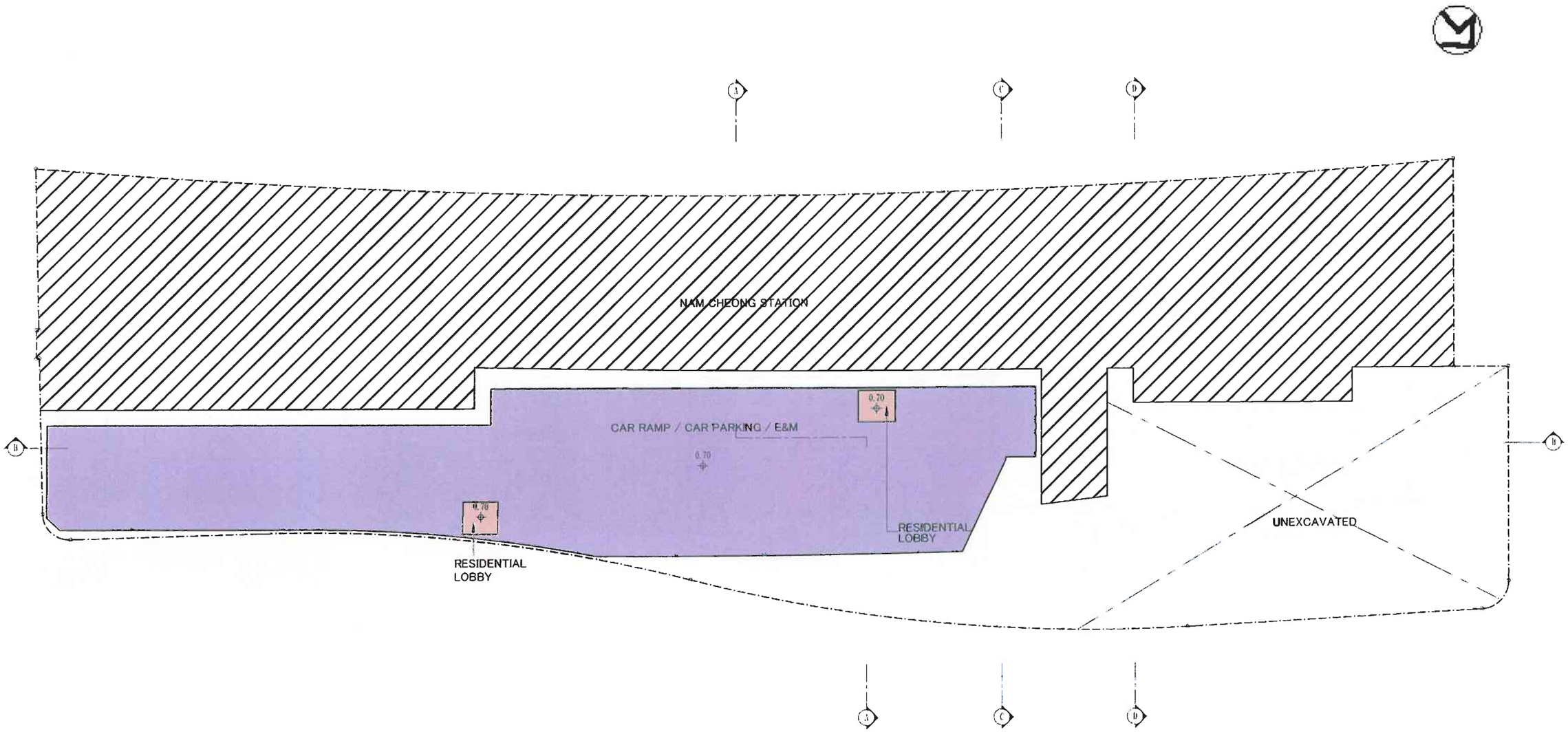

Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

SITE BOUNDARY

STATION AND ASSOCIATED FACILITIES

EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

BASEMENT FIRST FLOOR PLAN (B1)

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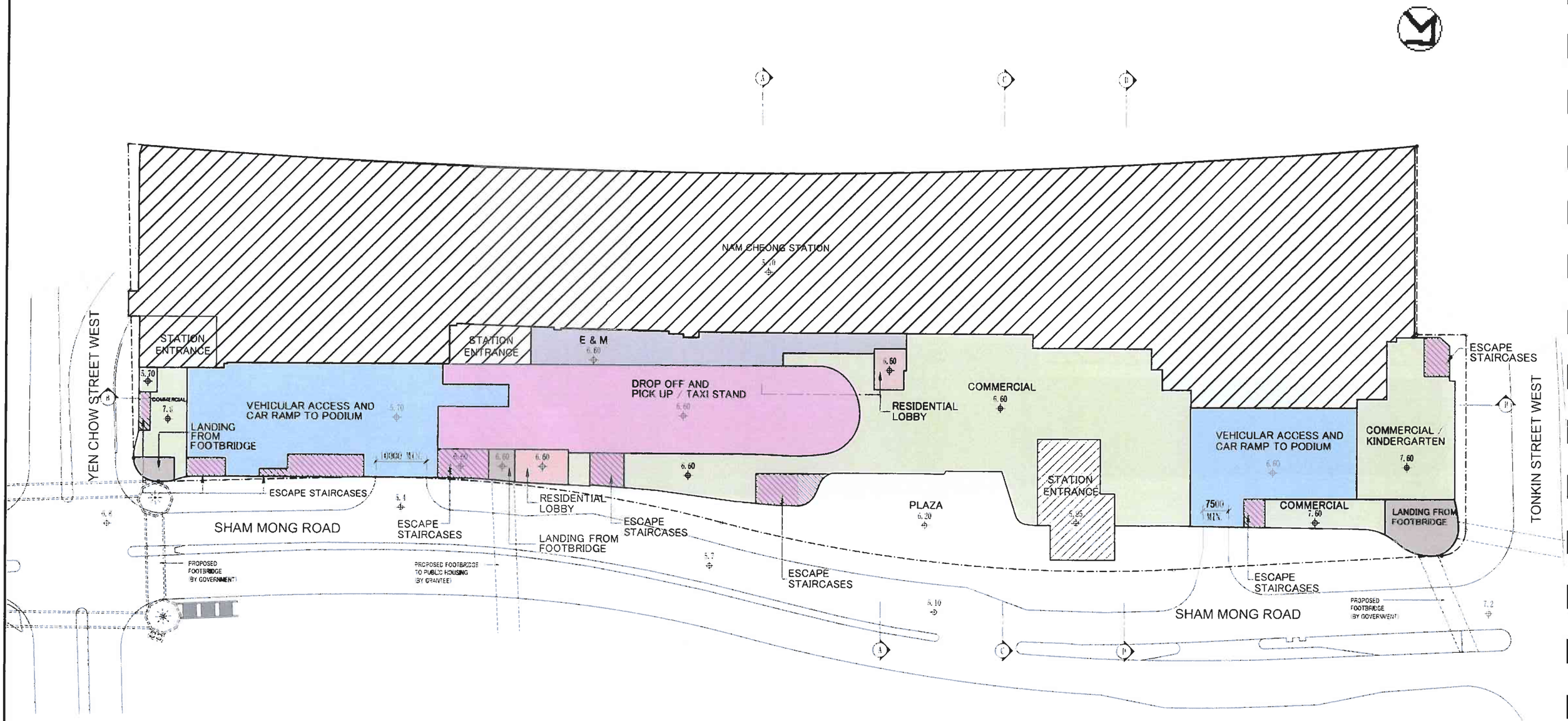

Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

MTR

Title

GROUND FLOOR PLAN (G/F)

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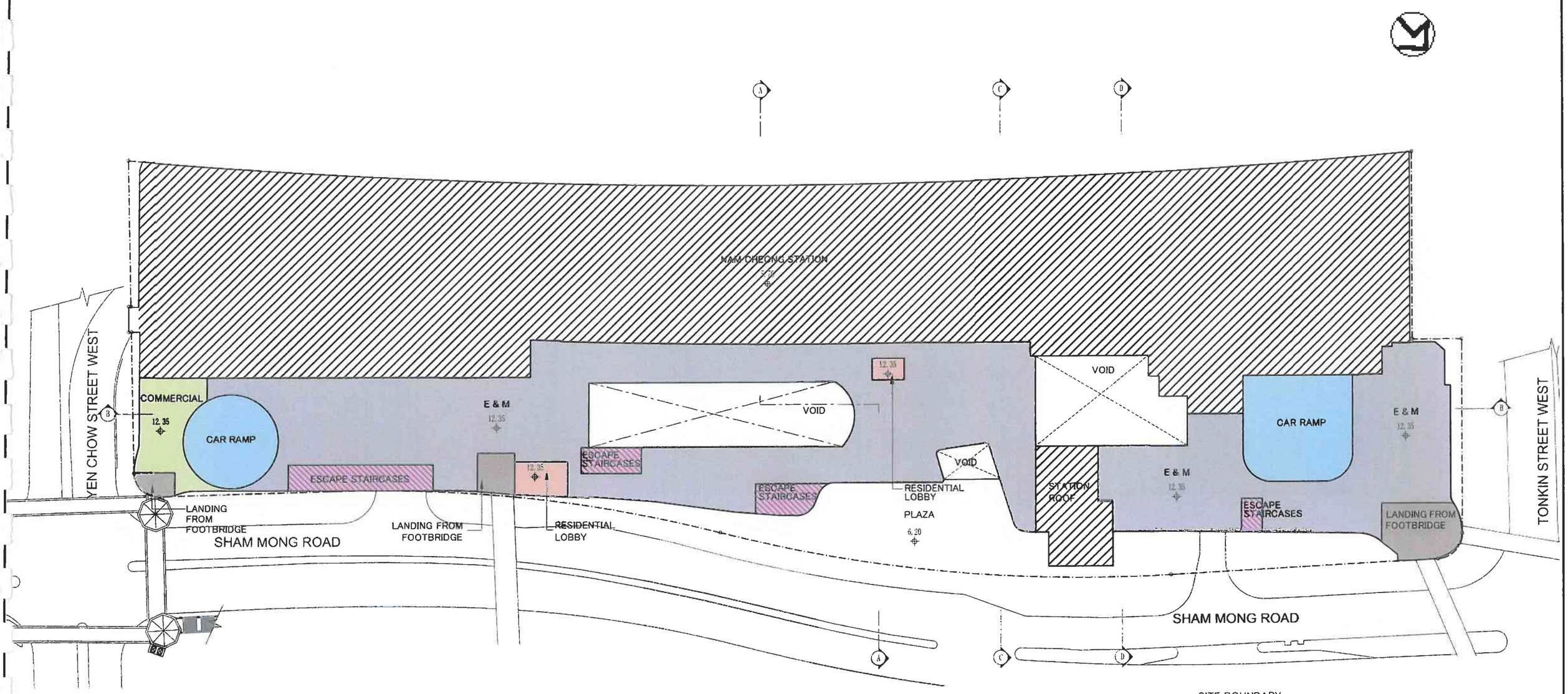

Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

MTR

Title

MEZZ FLOOR PLAN (M/F)

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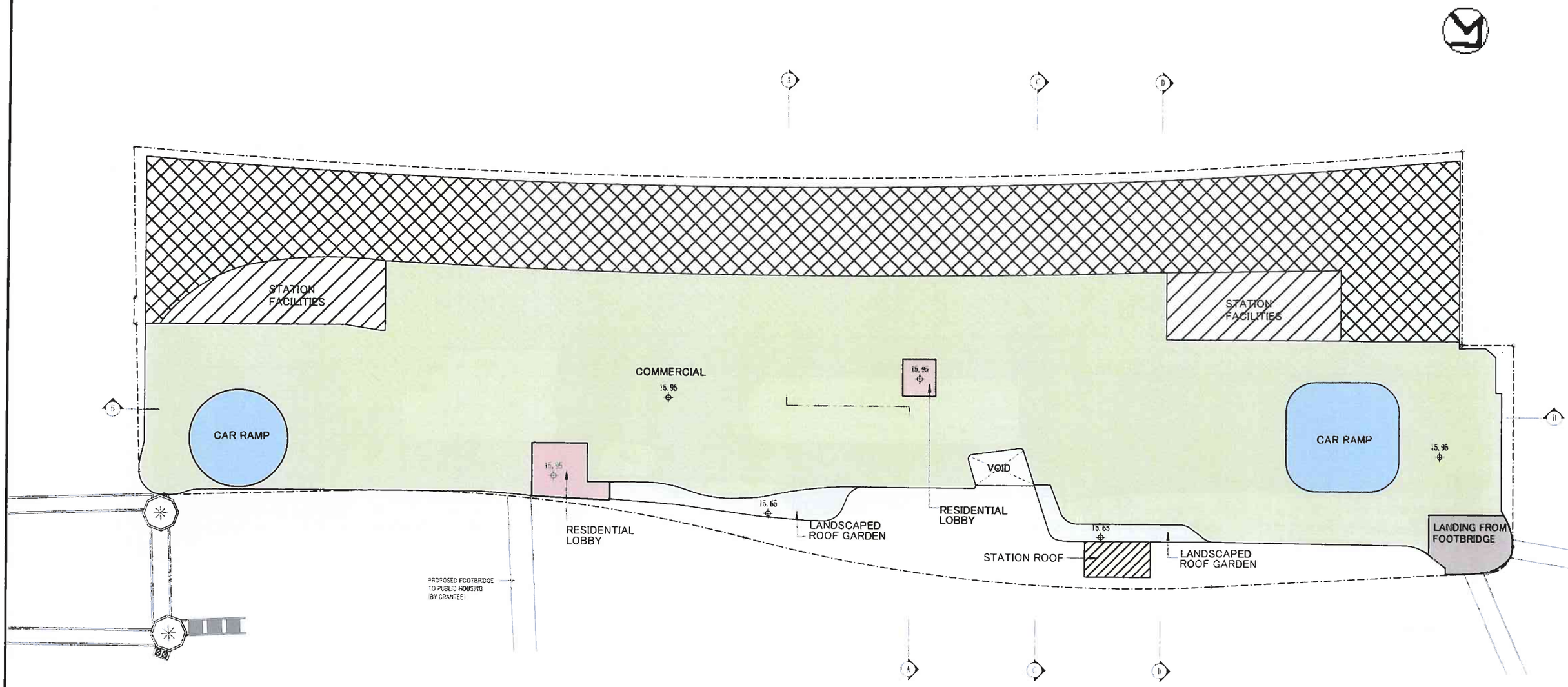

Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

SITE BOUNDARY

LIN CHEUNG ROAD SOUTHBOUND AND SLIPROAD

STATION AND ASSOCIATED FACILITIES

EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

FIRST FLOOR PLAN (P1)

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Rev		Date	
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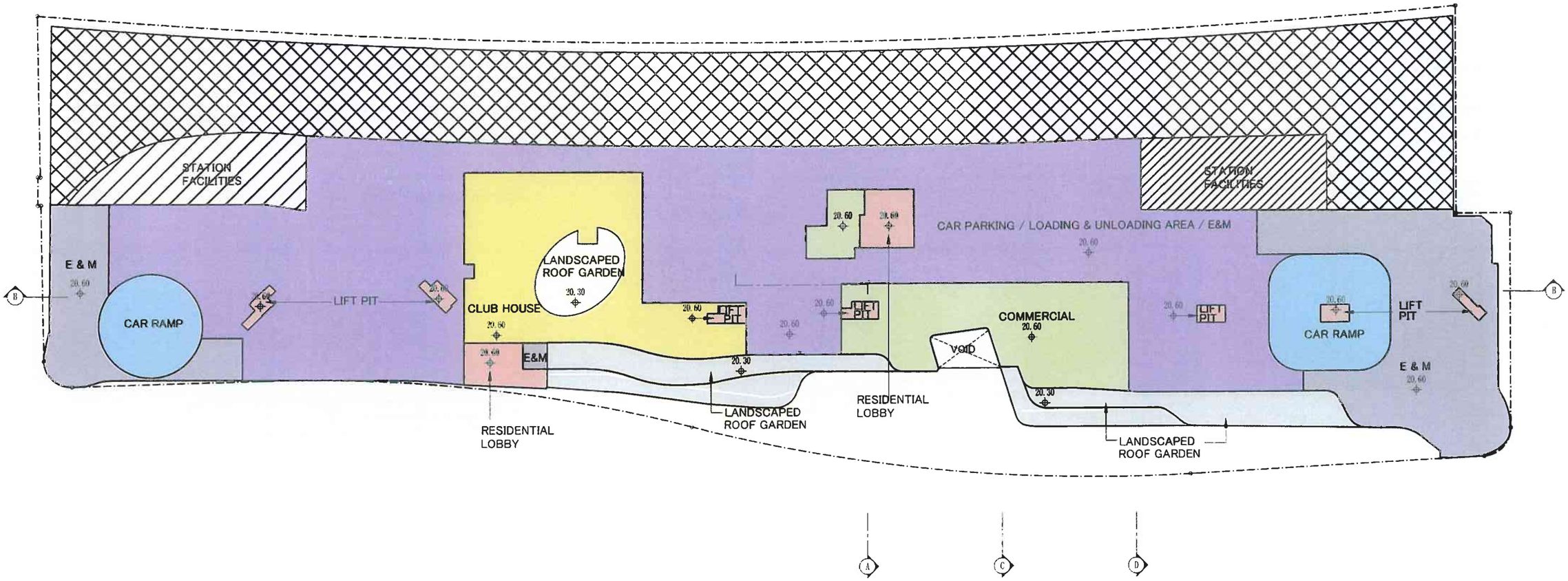


Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

SITE BOUNDARY

LIN CHEUNG ROAD SOUTHBOUND AND SLIPROAD

STATION AND ASSOCIATED FACILITIES

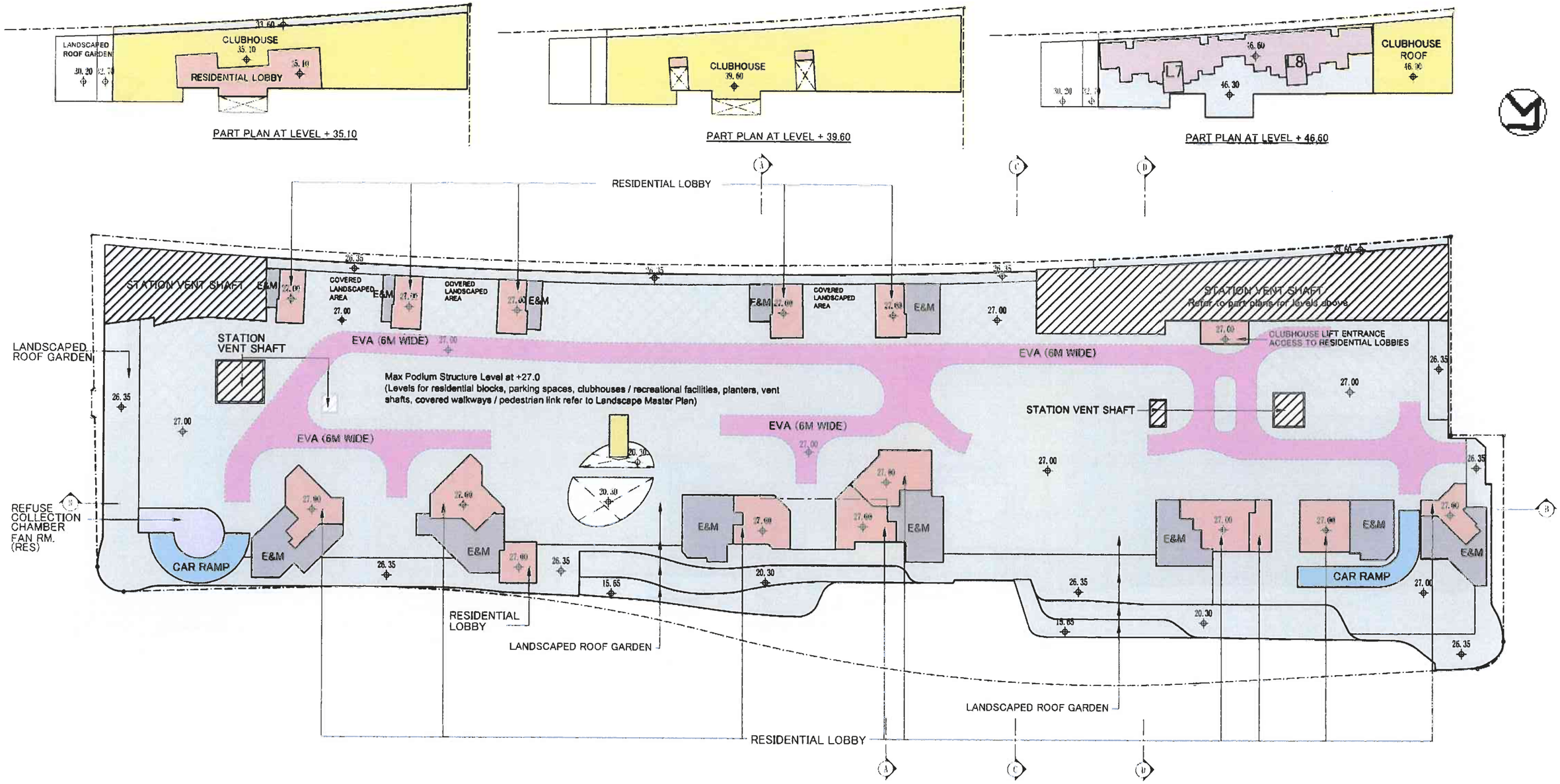
EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

SECOND FLOOR PLAN (P2)

Checked		Drawn	
Rev		Date	
Scale 1 : 1200		Figure	



申請編號 Application No. : A/K20/119
此頁摘自申請人提交的文件。
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Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

SITE BOUNDARY

STATION AND ASSOCIATED FACILITIES

EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

PODIUM ROOF PLAN (P3)

Checked		Drawn	
Rev		Date	
Scale	1 : 1200	Figure	

申請編號 Application No. : A/K20/119
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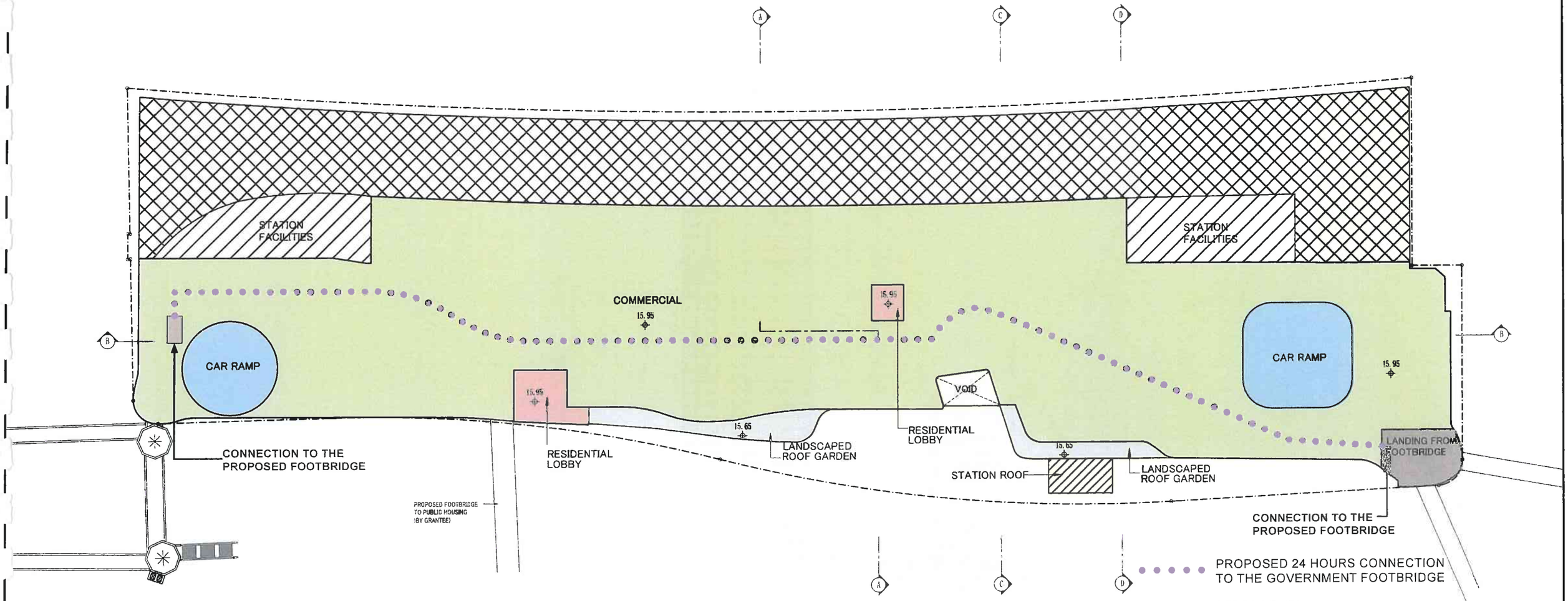

Max Podium Structure Level at +27.0
(Levels for residential blocks, parking spaces, clubhouses / recreational facilities, planters, vent shafts, covered walkways / pedestrian link refer to Landscape Master Plan)

EACH FUNCTIONAL AREA SHALL CONTAIN SOME ANCILLARY E&M FACILITIES, SUBJECT TO DETAILED DESIGN

MTR

Title

24-HOUR PEDESTRIAN WALKWAY

Checked		Drawn	
Rev		Date	
Scale	1 : 1200	Figure	

申請編號 Application No. : A/K20/119
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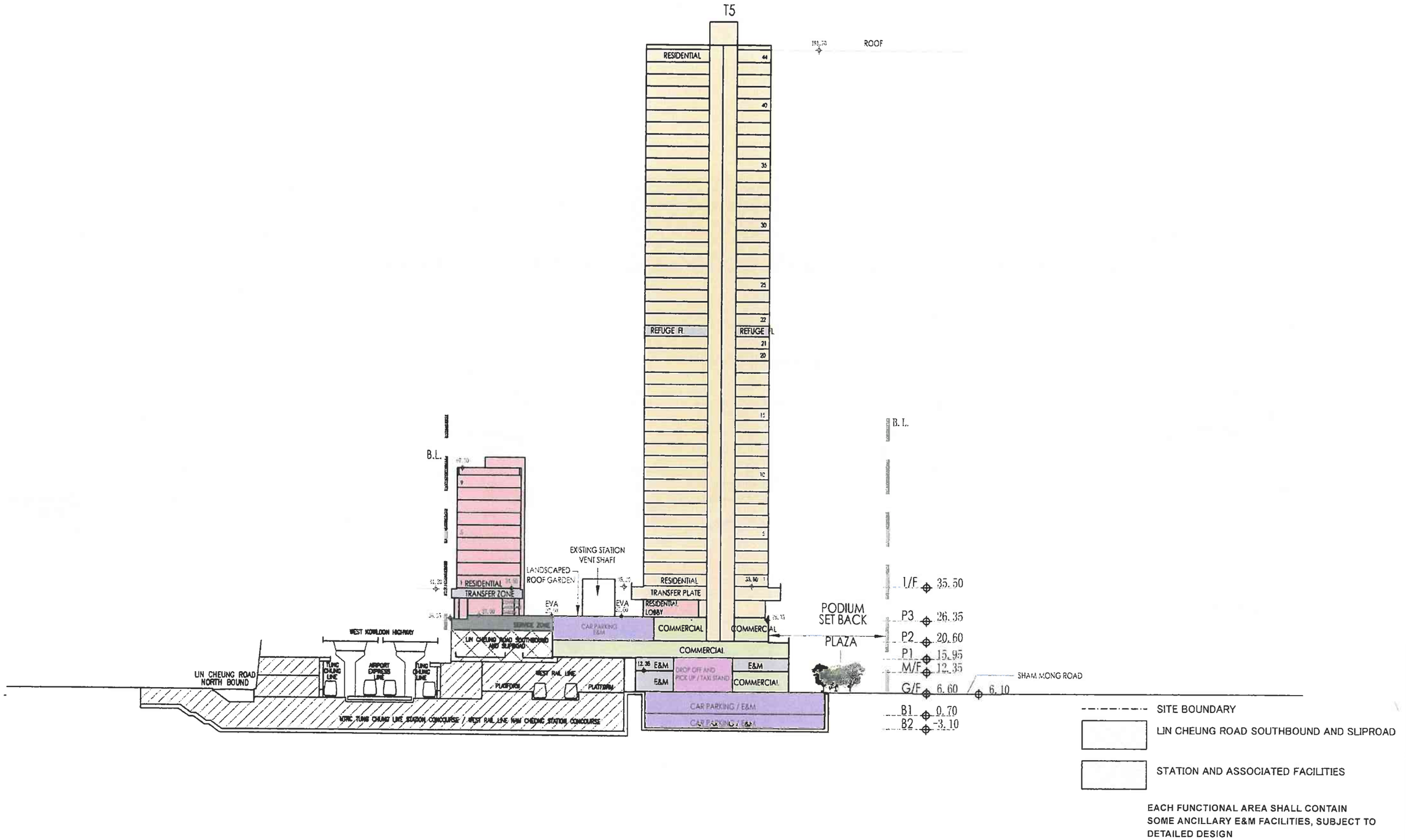

MTR

Title

SECTION A-A

Checked		Drawn	
Rev		Date	
Scale 1 : 1000		Figure	

申請編號 Application No. : A/K20/119
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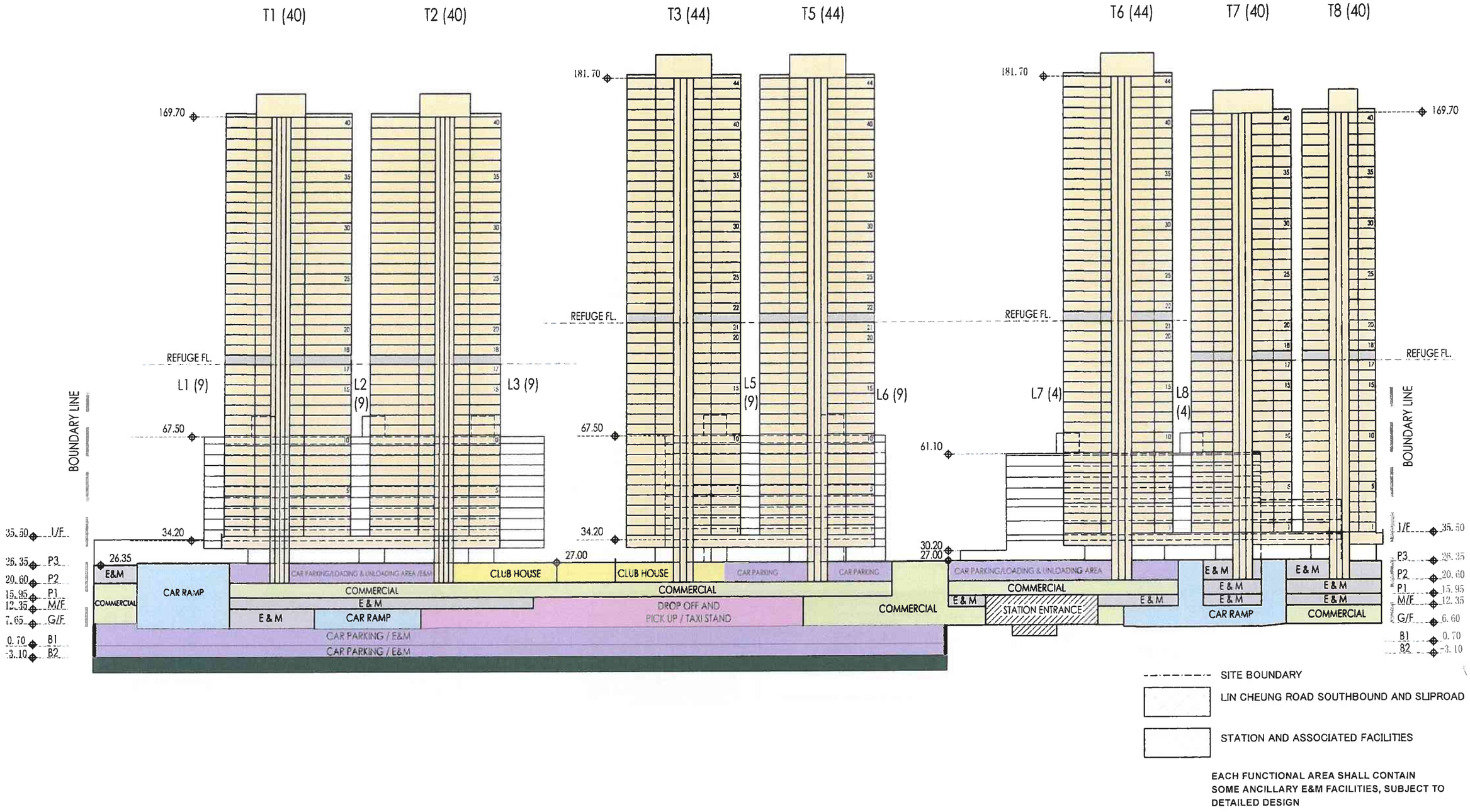

MTR

Title

SECTION B-B

Checked		Drawn	
Rev		Date	
Scale	1 : 1200	Figure	

申請編號 Application No. : A/K20/119
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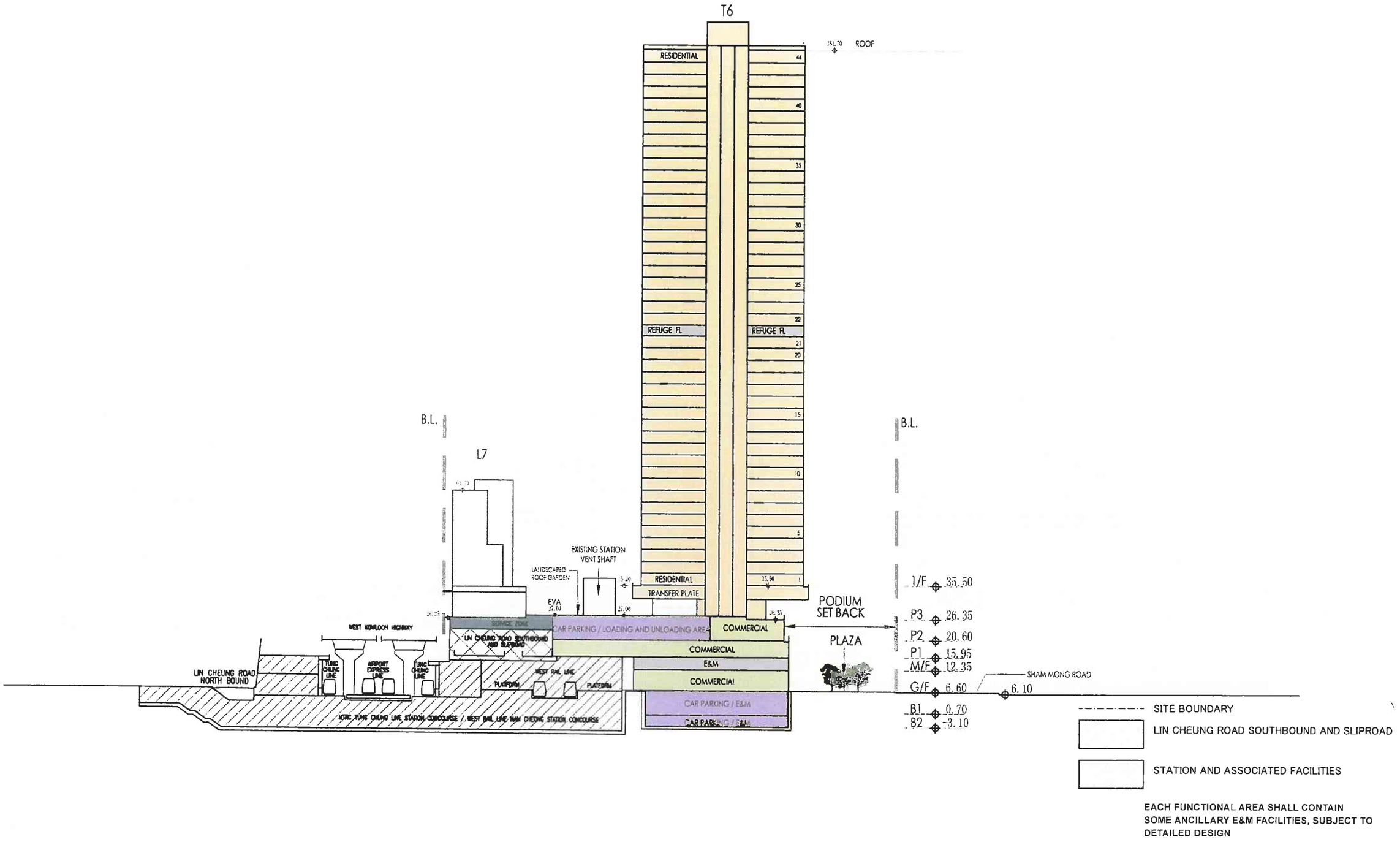

MTR

Title

SECTION C-C

Checked		Drawn	
Rev		Date	
Scale 1 : 1000		Figure	

申請編號 Application No. : A/K20/119
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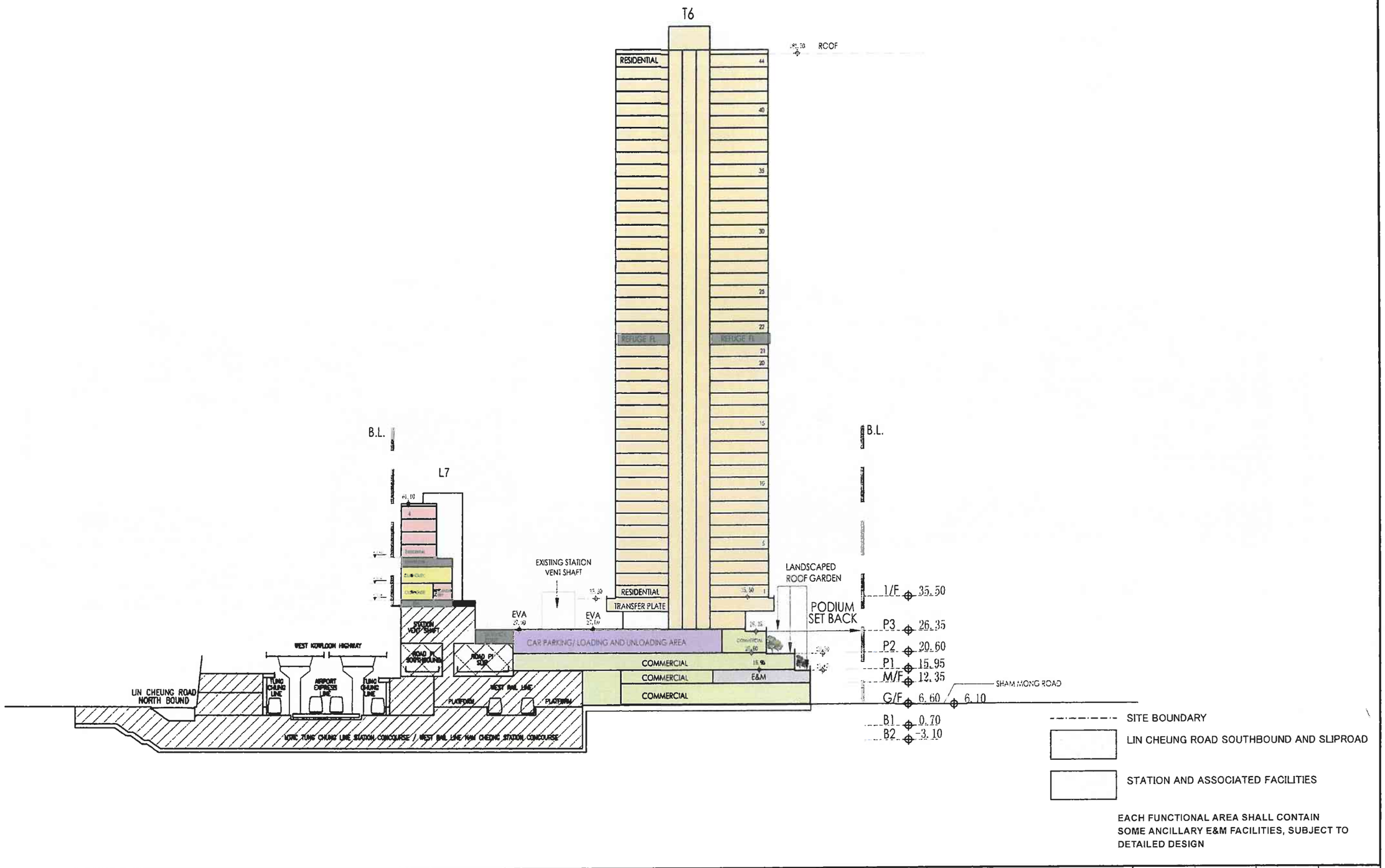

MTR

Title

SECTION D-D

Checked		Drawn	
Rev		Date	
Scale 1 : 1000		Figure	

LEGEND

- Proposed Transplanted Trees
- Proposed Tree Planting
- Proposed Compensatory Trees
- Covered Walkway
- Proposed Shrubs / Ground Cover Planting
- A — Residential Lobby
- Pavilion / Rain Shelter
- Area Under Cover
- Vertical Green Wall

1. Swimming Pool
2. Pool Deck
3. Landscape Garden
4. Children's Play Area
5. Station Vent Shaft
6. Lawn Bowling
7. Water Area
8. Seating Garden
9. Feature Sculpture
10. Landscape Courtyard
11. Landscape Plaza
12. Lawn Area for Multi-purpose use

申請編號 Application No. : A/K20/119
此頁摘自申請人提交的文件。
This page is extracted from applicant's submitted documents.

COMPOSITE PLAN

0m 5m 10m 25m 50m
SCALE . 1:1250

PROPOSED COMPREHENSIVE RESIDENTIAL AND COMMERCIAL DEVELOPMENT IN "COMPREHENSIVE DEVELOPMENT AREA" ZONE AT WEST RAIL NAM CHEONG STATION, WEST KOWLOOM RECLAMATION

LANDSCAPE MASTER PLAN - COMPOSITE PLAN

Dwg. No. : LMP_COMP-01 rev. A

Date : JAN 2013
(A3 size)

axxa group

申請編號 Application No. : A / K 2 0 / 1 1 9
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MTR

Title

Indicative Image of the Proposed Scheme - An Overview

Checked	DH	Drawn	PW
Rev	0	Date	Sep 2012
Scale NTS		Figure	

For Section 16 Applications

申請編號 Application No. : A/K20/119

與申請地點／處所有關的先前申請
Previous Applications Covering the Application Site/Premises

申請編號 Application No.	擬議用途／發展 Proposed Use/Development	城市規劃委員會的決定(日期) Decision of Town Planning Board (Date)
A/K20/27	擬議綜合住宅及商業發展 Proposed Comprehensive Residential and Commercial Development	在有條件下批給許可 Approved with Condition(s) (17.12.1999)
A/K20/45	擬議略爲修訂已核准的綜合住宅及商業發展 Proposed Minor Amendments to the Approved Comprehensive Residential and Commercial Development	在有條件下批給許可 Approved with Condition(s) (28.6.2001)
A/K20/72	擬議綜合住宅及商業發展 (修訂已核准的總綱發展藍圖) Proposed Comprehensive Residential and Commercial Development (Amendments to Approved Master Layout Plan)	拒絕 Rejected (25.6.2004)
A/K20/82	擬議綜合住宅及商業發展 (修訂已核准的總綱發展藍圖) Proposed Comprehensive Residential and Commercial Development (Amendments to Approved Master Layout Plan)	在有條件下批給許可 Approved with Condition(s) (15.10.2004)
A/K20/104	擬議綜合住宅及商業發展 (修訂已核准的總綱發展藍圖) Proposed Comprehensive Residential and Commercial Development (Amendments to Approved Master Layout Plan)	在有條件下批給許可 Approved with Condition(s) (8.5.2009)
A/K20/116	擬議綜合住宅及商業發展 (修訂已核准的總綱發展藍圖) Proposed Comprehensive Residential and Commercial Development (Amendments to Approved Master Layout Plan)	在有條件下批給許可 Approved with Condition(s) (17.6.2011)

有關資料是爲方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會慨不負責。若有任何疑問，應查閱申請人提交的文件。
The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

申請編號 Application No. : A/K20/119

申請人提交的圖則、繪圖及報告書
Plans, Drawings and Reports Submitted by Applicant

	中文 Chinese	英文 English
圖則及繪圖 Plans and Drawings		
總綱發展藍圖／布局設計圖 Master layout plan(s)/Layout plan(s)	☐	☑
樓宇位置圖 Block plan(s)	☐	☑
樓宇平面圖 Floor plan(s)	☐	☐
截視圖 Sectional plan(s)	☐	☑
立視圖 Elevation(s)	☐	☑
顯示擬議發展的合成照片 Photomontage(s) showing the proposed development	☐	☑
園境設計總圖／園境設計圖 Master landscape plan(s)/Landscape plan(s)	☐	☑
其他（請註明）Others (please specify)	☐	☑
位置圖 Location plan, 延遲移交區劃分圖 Demarcation Plan of Deferred Possession Areas, 樹木位置圖 Tree Location Plan, 24 小時行人通道 24-Hour Pedestrian walkway		
報告書 Reports		
規劃報告 Planning statement	☐	☑
環境評估（噪音、空氣、排污／排水及土地污染）Environmental assessment (noise, air, sewerage/drainage and land contamination)	☐	☑
就車輛的交通影響評估 Traffic impact assessment (on vehicles)	☐	☑
就行人的交通影響評估 Traffic impact assessment (on pedestrians)	☐	☐
視覺影響評估 Visual impact assessment	☐	☑
景觀影響評估 Landscape impact assessment	☐	☐
樹木調查 Tree Survey	☐	☑
土力影響評估 Geotechnical impact assessment	☐	☐
排水影響評估 Drainage impact assessment	☐	☐
排污影響評估 Sewerage impact assessment	☐	☐
風險評估 Risk Assessment	☐	☐
其他（請註明）Others (please specify)	☐	☐

有關資料是爲方便市民大眾參考而提供。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會慨不負責。若有任何疑問，應查閱申請人提交的文件。
The information is provided for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

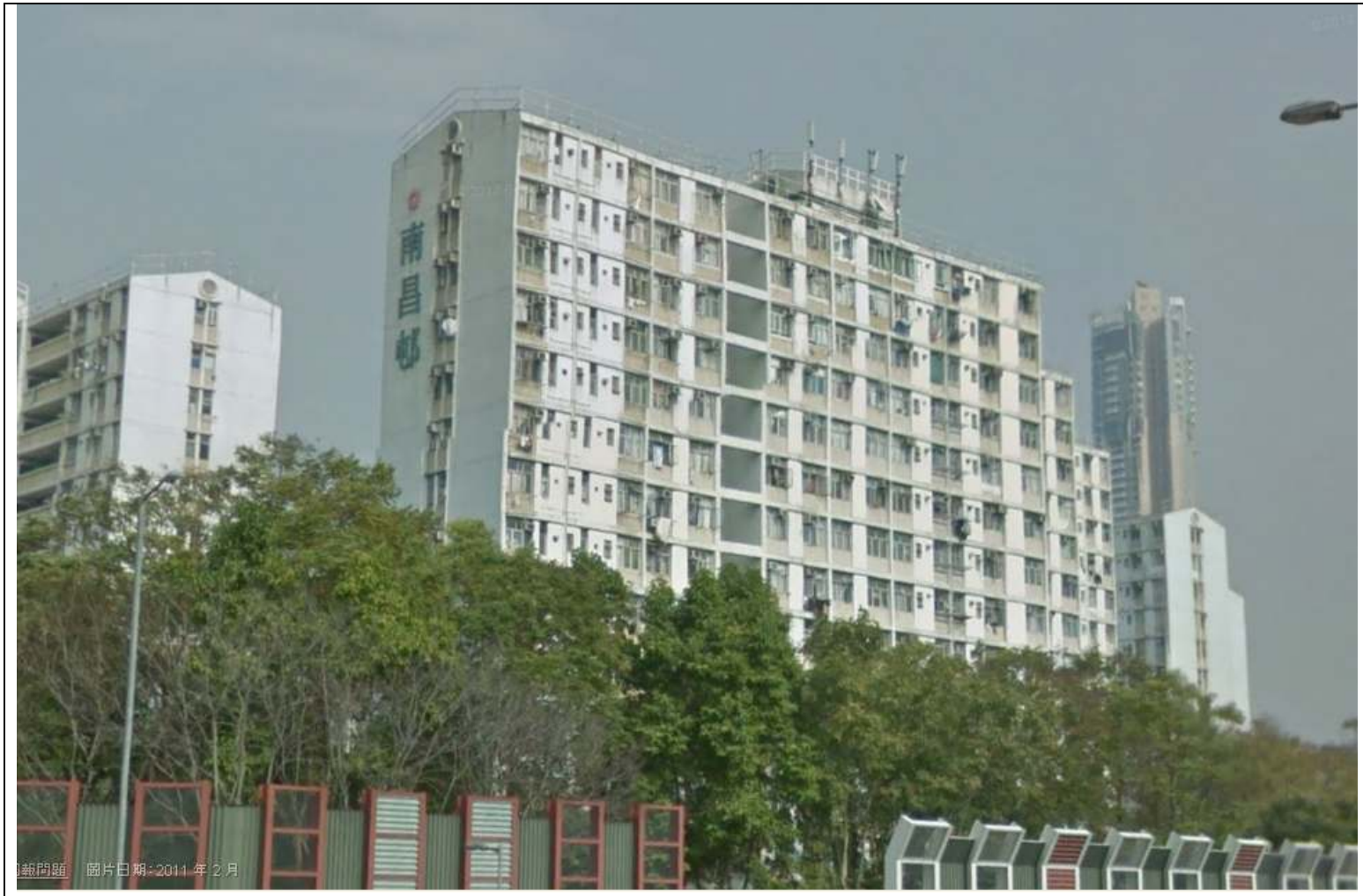
Appendix 5-2
Photographs of the Identified existing NSRs

NSR 1 – Sir Ellis Kadorie Secondary School (West Kowloon)

NSR 2 – Tai Kok Tsui Catholic Primary School (Hoi Fan Road)

NSR 3 – Hampton Place

NSR 4 – Nam Cheong Estate Block 6 – Cheong Chit House



NSR 5 – Nam Cheong Estate Block 5 – Cheong Yat House

NSR 6 – Nam Cheong Estate Block 4 – Cheong Shun House

NSR 7 – Fu Cheong Estate Block 4 – Cheong Shun House

Appendix 5-3
Split Type A/C Observed at NSR1 and NSR2

NSR 1 – Sir Ellis Kadorie Secondary School (West Kowloon)

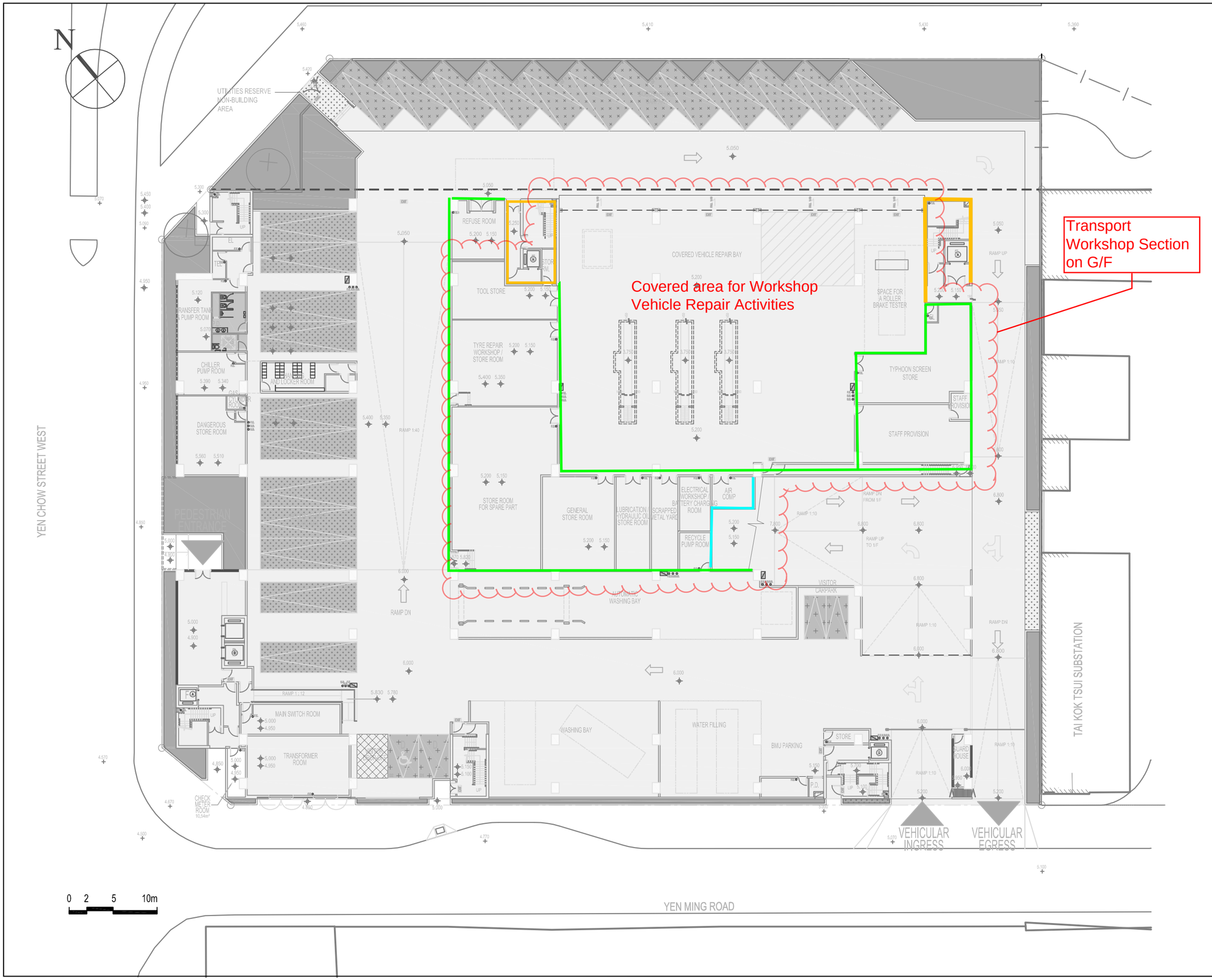
NSR 2 – Tai Kok Tsui Catholic Primary School (Hoi Fan Road)

Appendix 5-4
Construction Programme

Appendix 5-4 Preliminary Construction Programme

No.	Task / Deliverable	2014		2015												2016												2017			
		11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
1.	Site Possession	▲																													
2.	Site Mobilisation, Hoarding, Foundation Design and Submissions																														
3.	Foundation																														
4.	Superstructure																														
5.	Finishes																														
6.	Practical Completion and Handover																													▲	
7.	FEHD Move-In																													⇧	

Appendix 5-5
Latest Layout and Elevation Plan



Transport Workshop Section on G/F

LENGEND

- Proposed Full Height RC Wall (150mm thick)
- Proposed Full Height RC Wall (200mm thick)
- Proposed Full Height RC Wall (300mm thick)

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡議人):
FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門 (工程):
ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問 (顧問合約編號9AX 034)
P&T Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱
REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
在西九龍填海區欽明路重置食物環境衛生署
洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱
OUTLINE LAYOUT PLAN
(GROUND FLOOR)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 現況	FINAL

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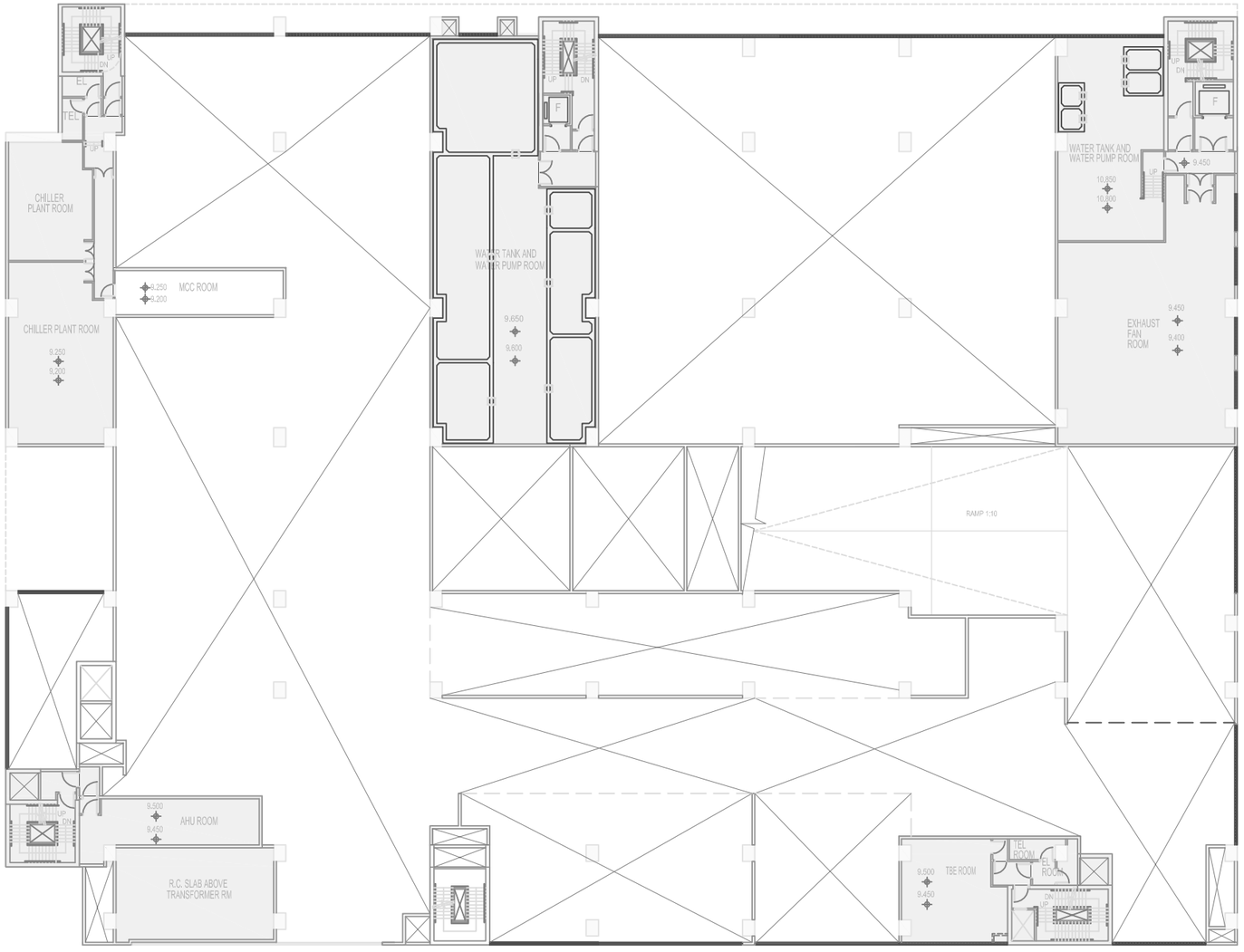

0 2 5 10m

Remark: The plans are subject to revision and finalization in later stages.

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Department (Project Proponent) 部門(項目倡議人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門(工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

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P&T Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(UPPER GROUND FLOOR)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICVR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 現狀	FINAL

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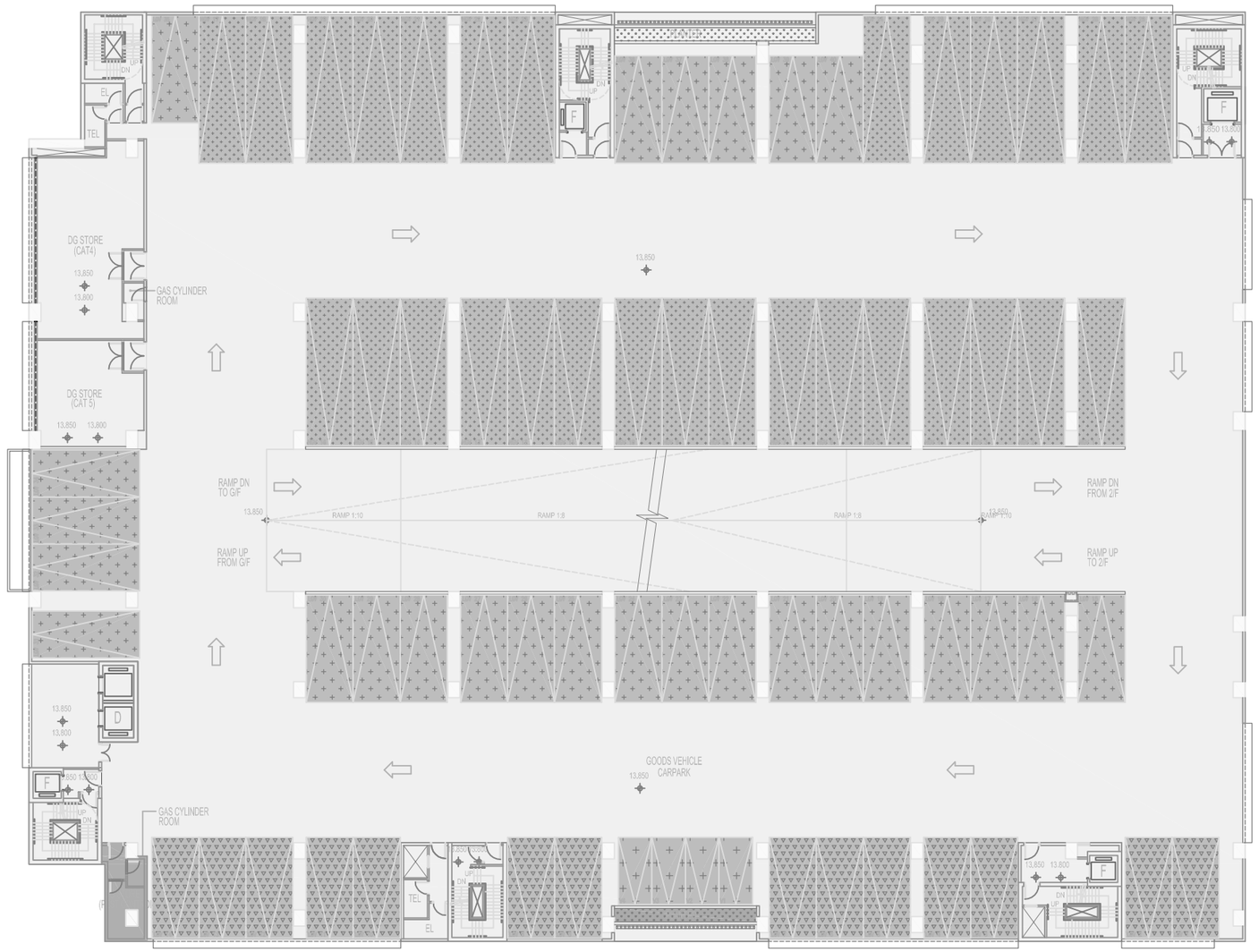

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Department (Project Proponent) 部門(項目倡議人):
FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門(工程):
ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問(顧問合約編號9AX 034)
P&T Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱
REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
在西九龍填海區欣明路重置食物環境衛生署
洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱
OUTLINE LAYOUT PLAN
(FIRST FLOOR)

Drawing No. 圖則編號	APPENDIX D-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例 AS SHOWN	
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況 FINAL	

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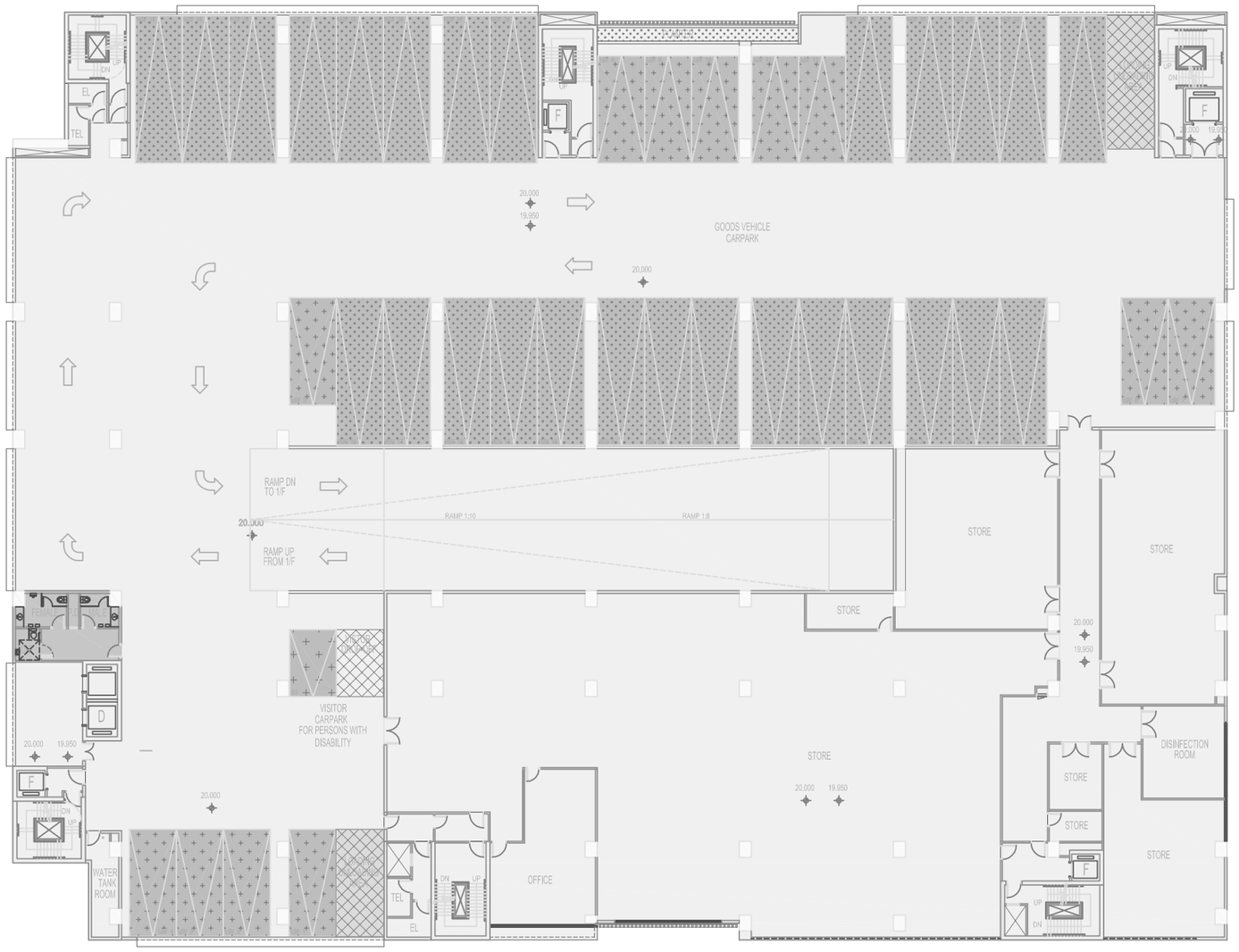

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Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門(項目倡議人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門(工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問(顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衛生署洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(SECOND FLOOR)

Drawing No. 圖則編號	APPENDIX 5-5		
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例 AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況 FINAL

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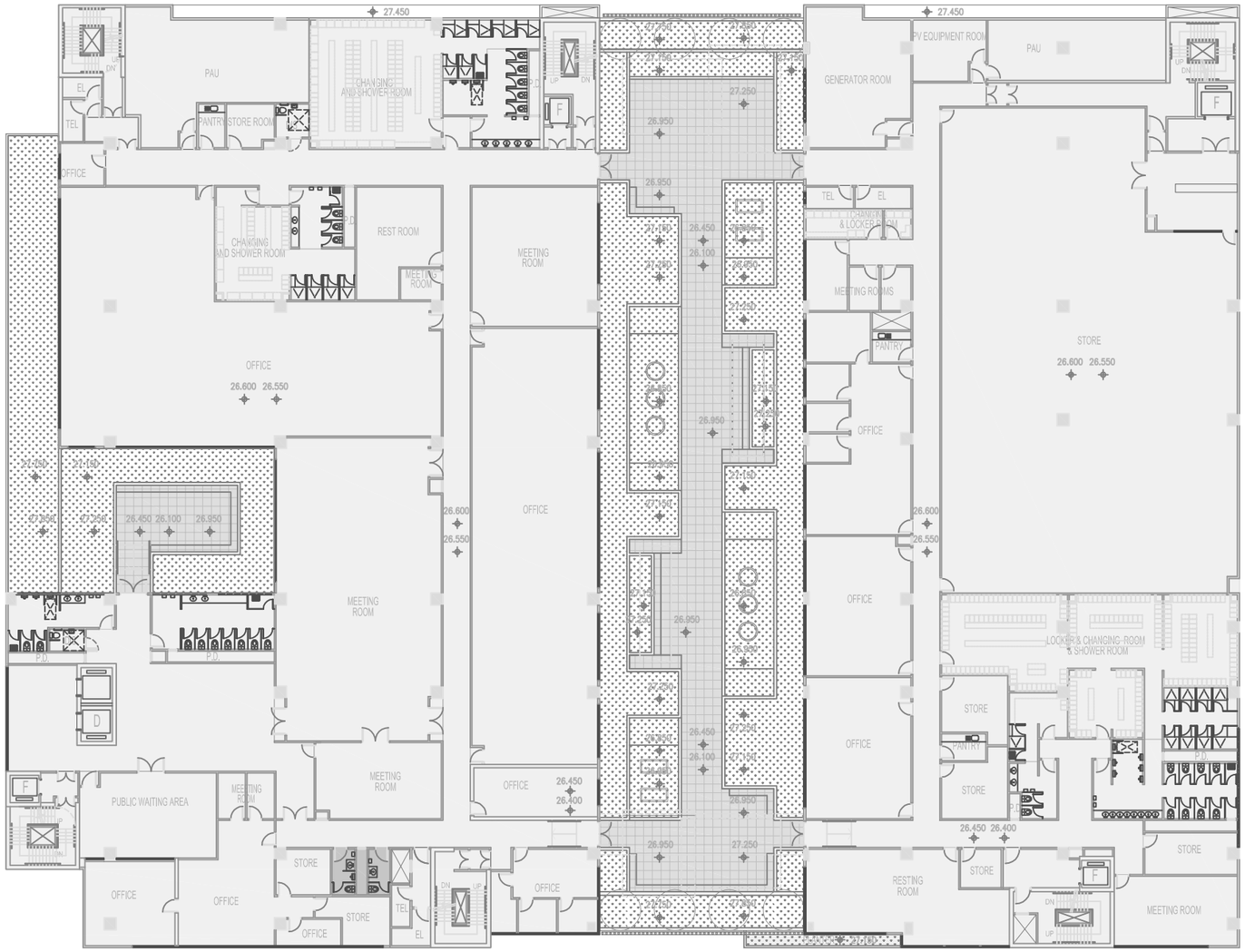

0 2 5 10m

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Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門(項目倡議人):
FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門(工程):
ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問(顧問合約編號9AX 034)
P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程(香港)有限公司

Project Title 項目名稱
REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
在西九龍填海區欽明路重置食物環境衛生署
洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱
OUTLINE LAYOUT PLAN
(THIRD FLOOR)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例 AS SHOWN	
Approved 核准 HTMI		Date 日期 MAY 2013	Status 狀況 FINAL	

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Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡議人士)

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門 (工程)

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問 (顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欣明路重置食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(FOURTH FLOOR)

Drawing No. 圖則編號	APPENDIX S-5		
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例 AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 現況 FINAL

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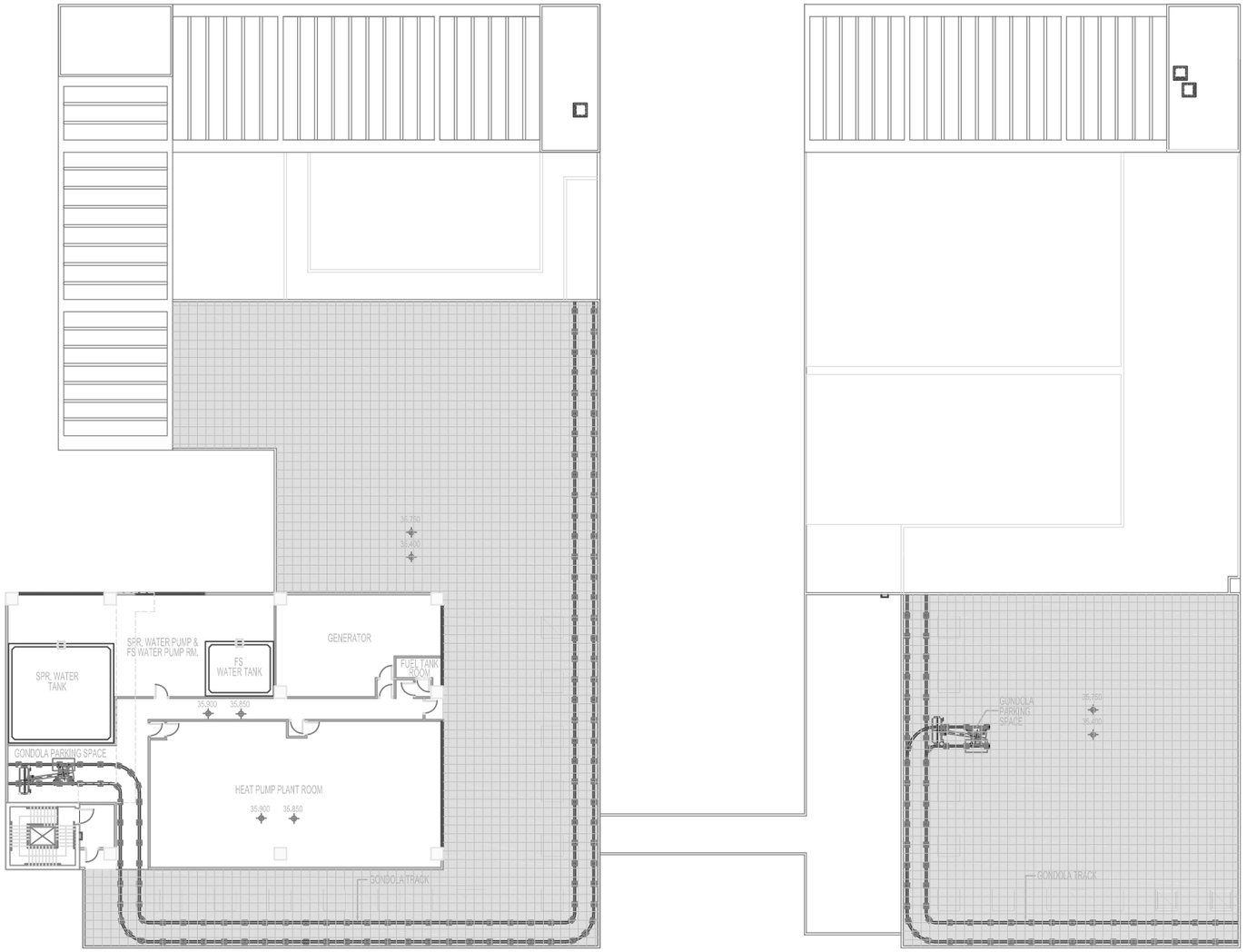

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Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡議人):
FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門 (工務):
ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問 (顧問合約編號9AX 034):
P&T Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(LOWER ROOF)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例 AS SHOWN	
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況 FINAL	

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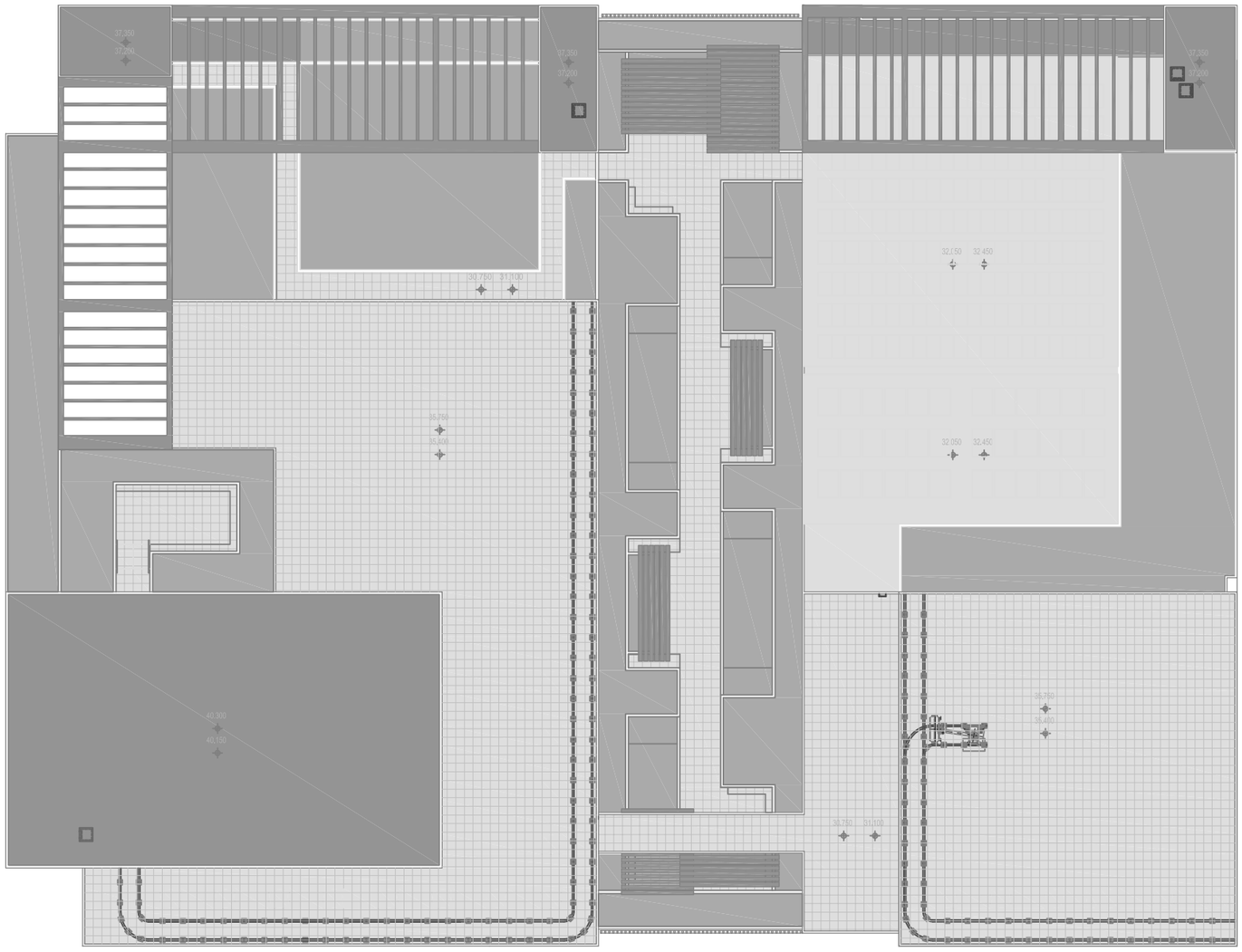

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Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門(項目倡議人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門(工務):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問(顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衛生署
洗衣街環境衛生辦事處連車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(ROOF)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況	FINAL

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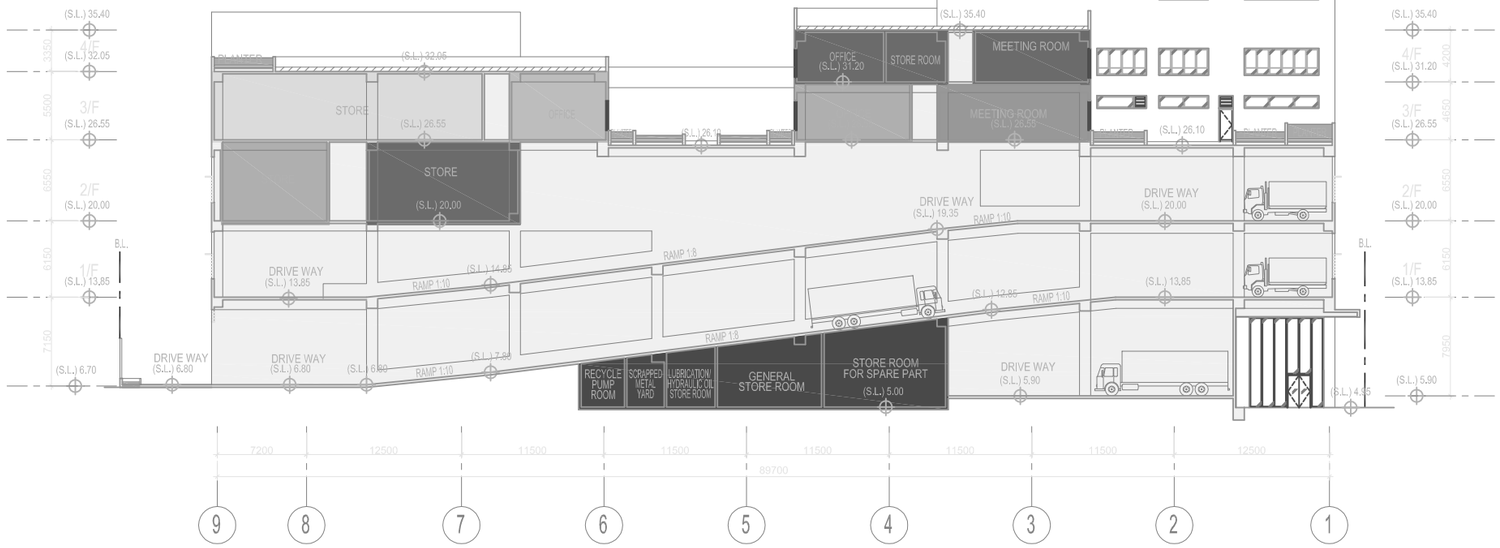
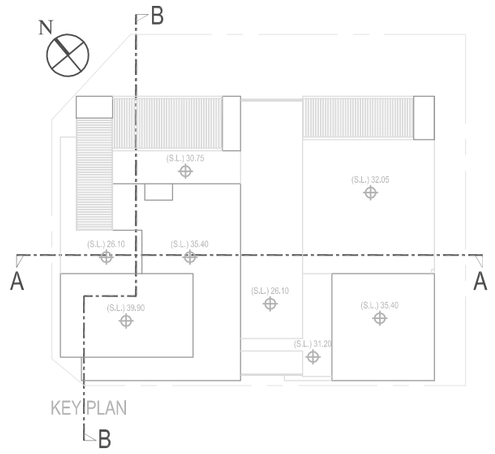
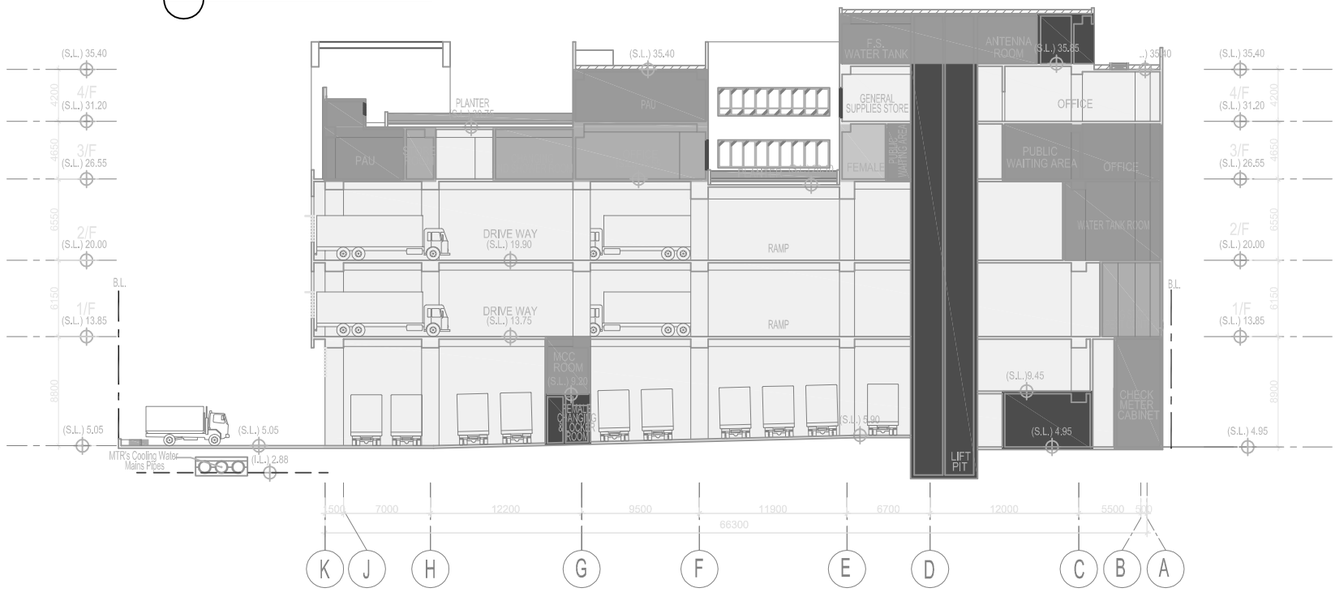


1 SECTION "A-A"





2 SECTION "B-B"

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Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡導人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問 (顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欣明路重置食物環境衛生署洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(SECTION 1 of 3)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例 AS SHOWN	
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況 FINAL	

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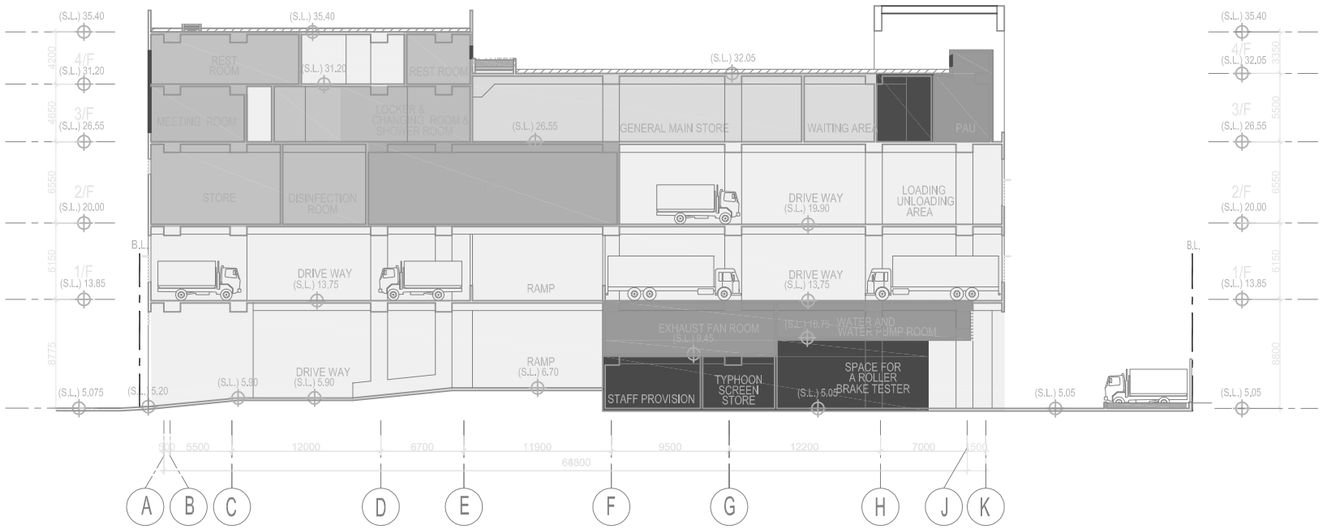

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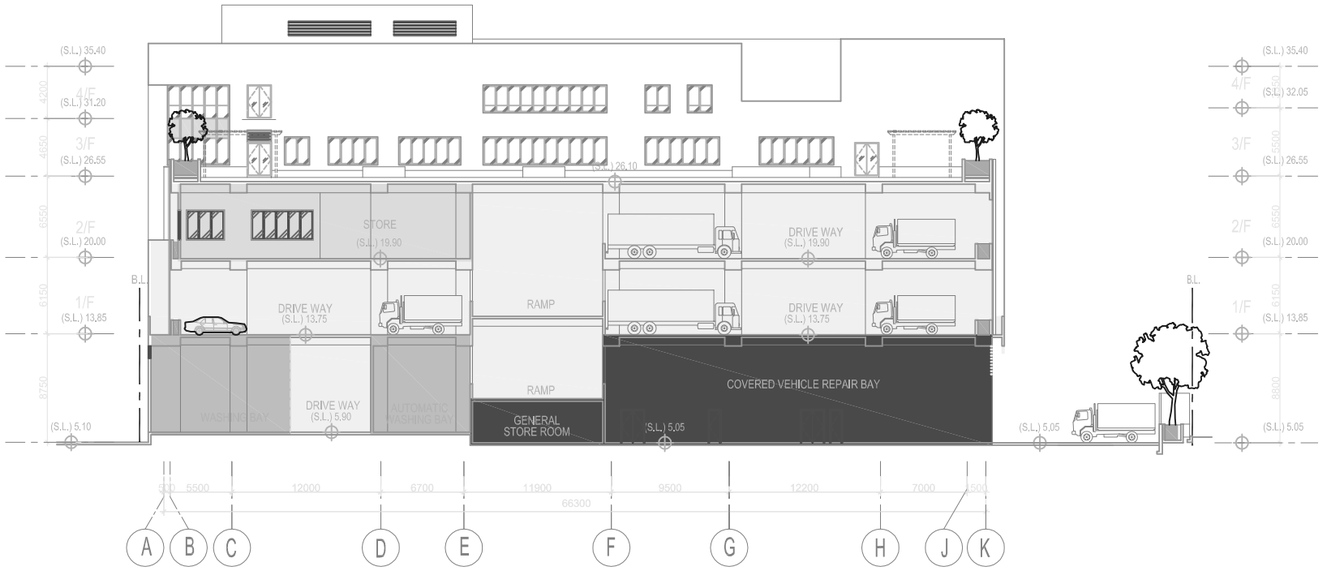

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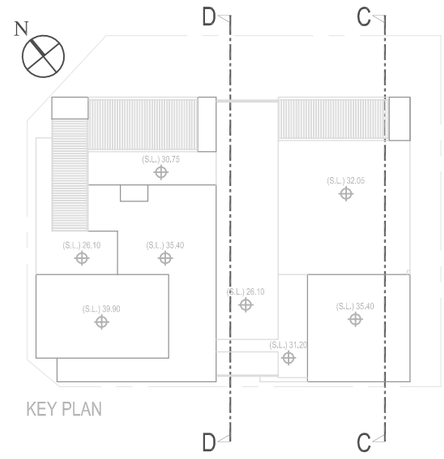

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Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門(項目倡議人):
FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門(工型):
ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問(顧問合約編號9AX 034)
P&T Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱
REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
在西九龍填海區欽明路重置食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱
OUTLINE LAYOUT PLAN
(SECTION 2 OF 3)

Drawing No. 圖則編號				
				APPENDIX 5-5
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況	FINAL

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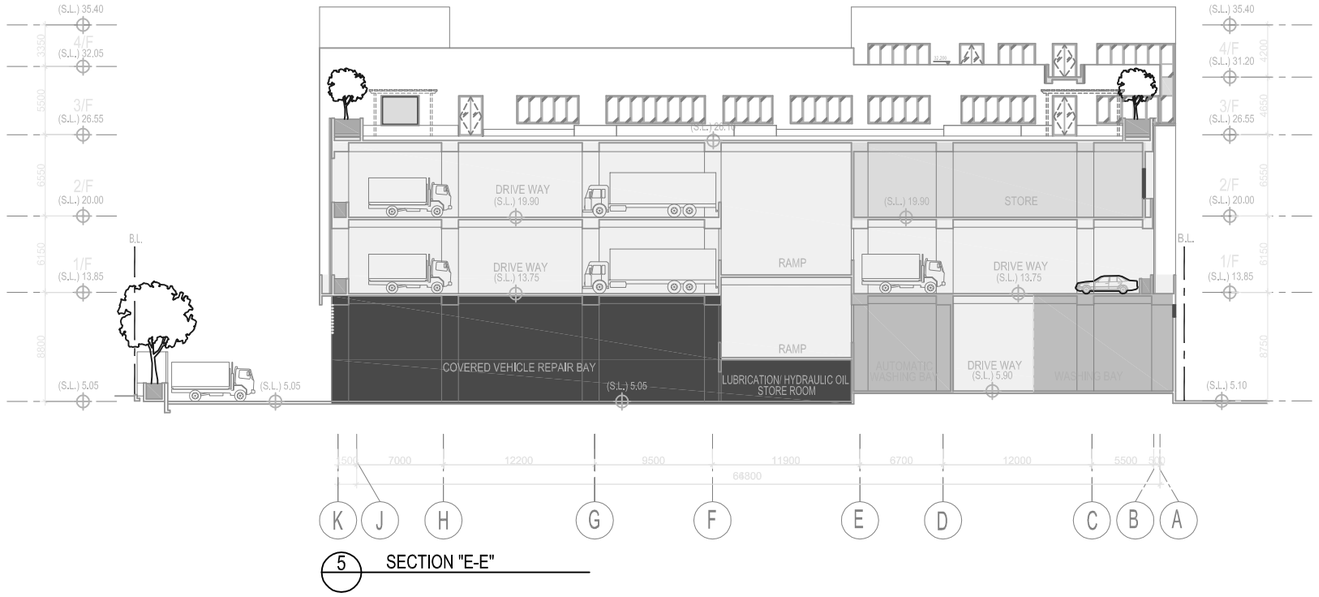
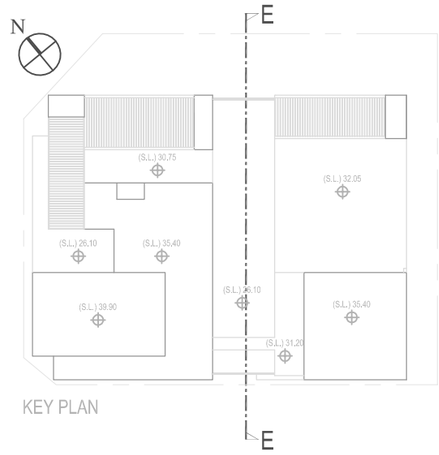


5 SECTION "E-E"



KEY PLAN

0 2 5 10m

Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡導人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
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P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重整食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(SECTION 3 OF 3)

Drawing No. 圖則編號				
	APPENDIX S-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況	FINAL

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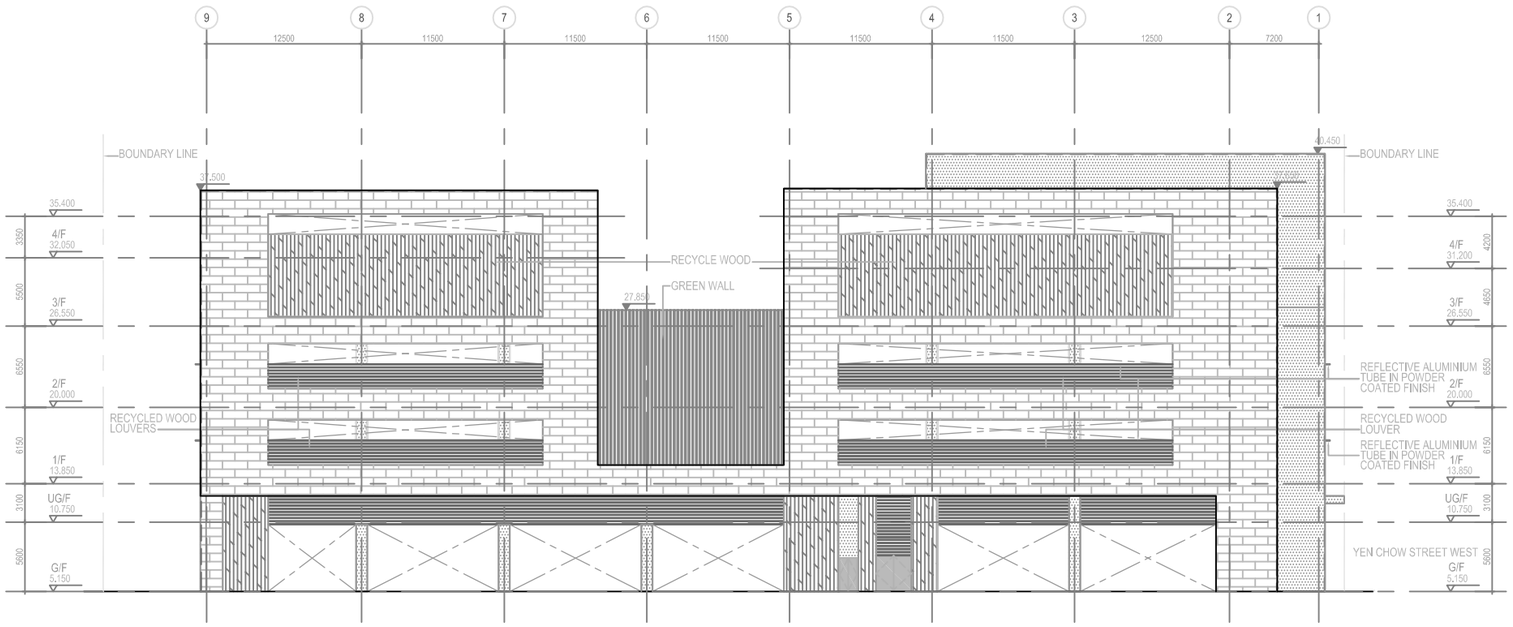
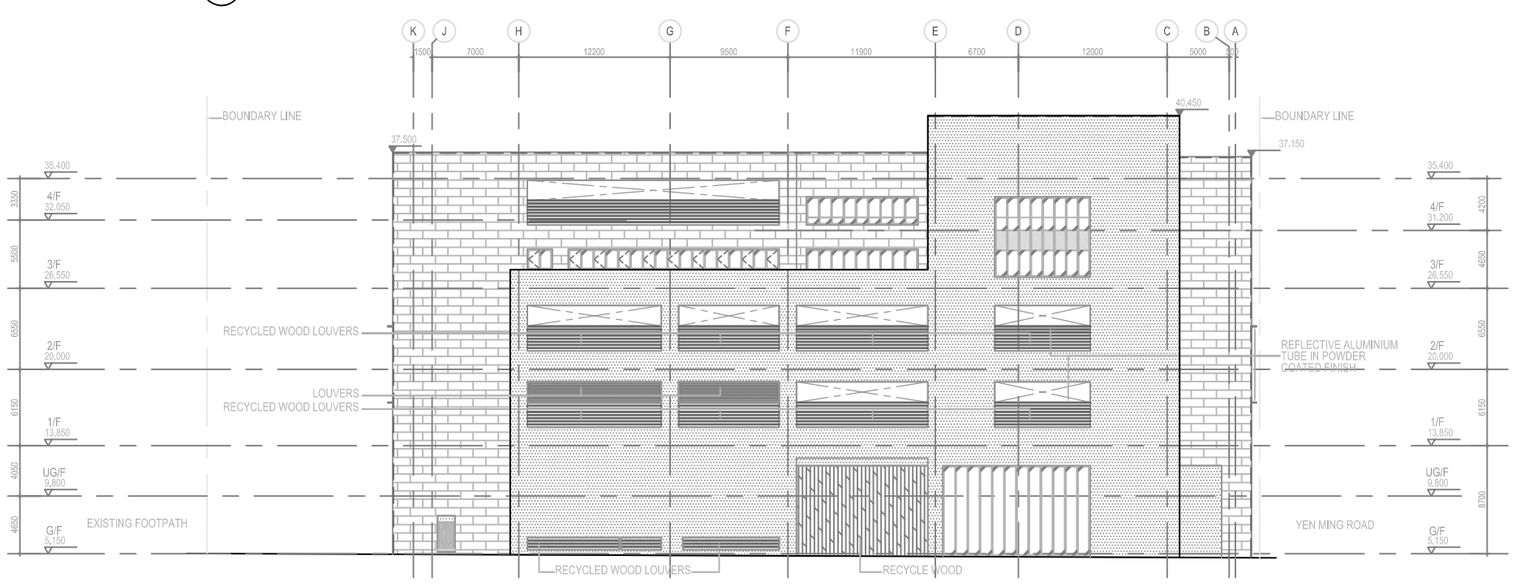
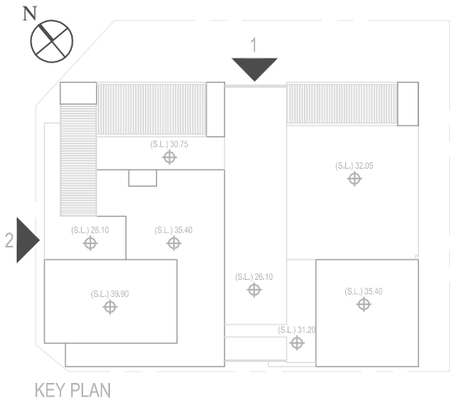


1 NORTHEAST ELEVATION



2 NORTHWEST ELEVATION



KEY PLAN

LEGEND:

- EXTERNAL WALL TILES
- EXTERNAL PAINT
- OPERABLE WINDOWS
- FIX WINDOWS
- RECYCLED WOOD LOUVERS
- VERTICAL GREENERY
- RECYCLED WOOD
- OPENINGS/ VOID

Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡導人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034);
建築顧問 (顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衛生署
洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(ELEVATION 1 of 5)

Drawing No. 圖則編號				
				APPENDIX 5-5
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況	FINAL

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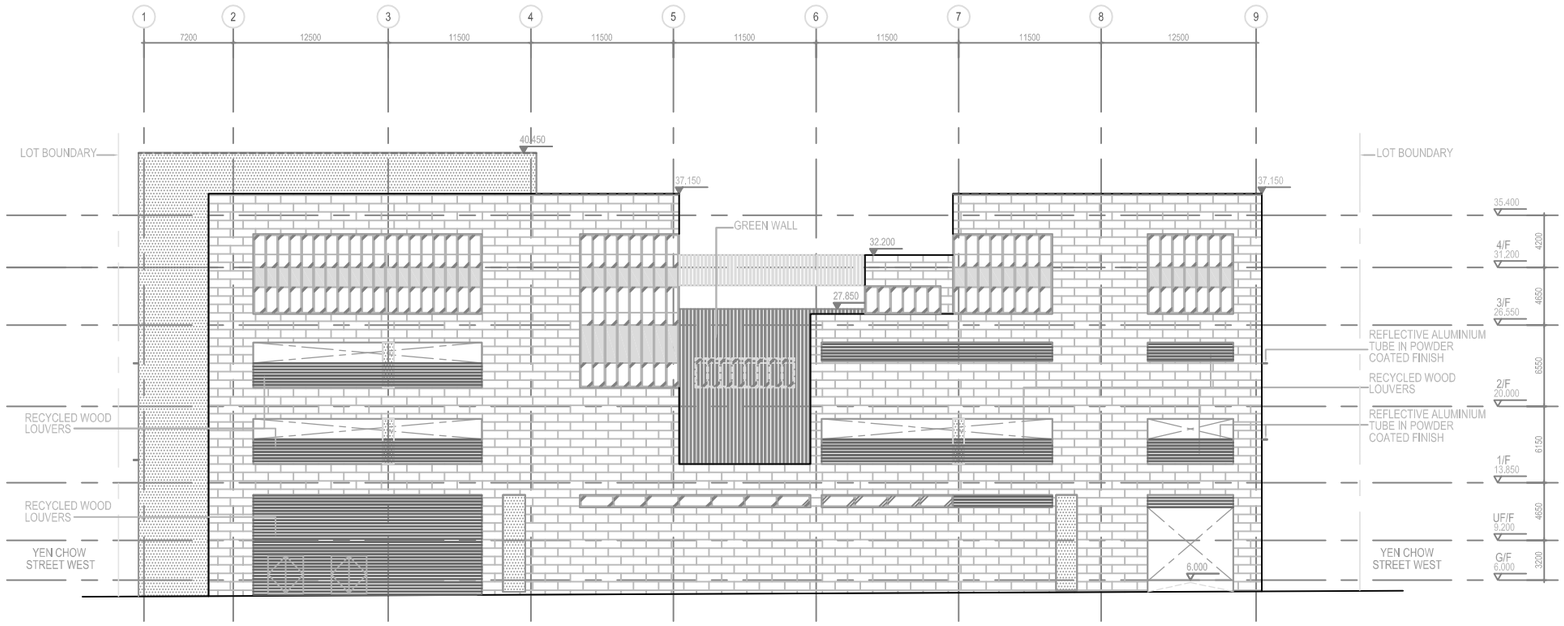
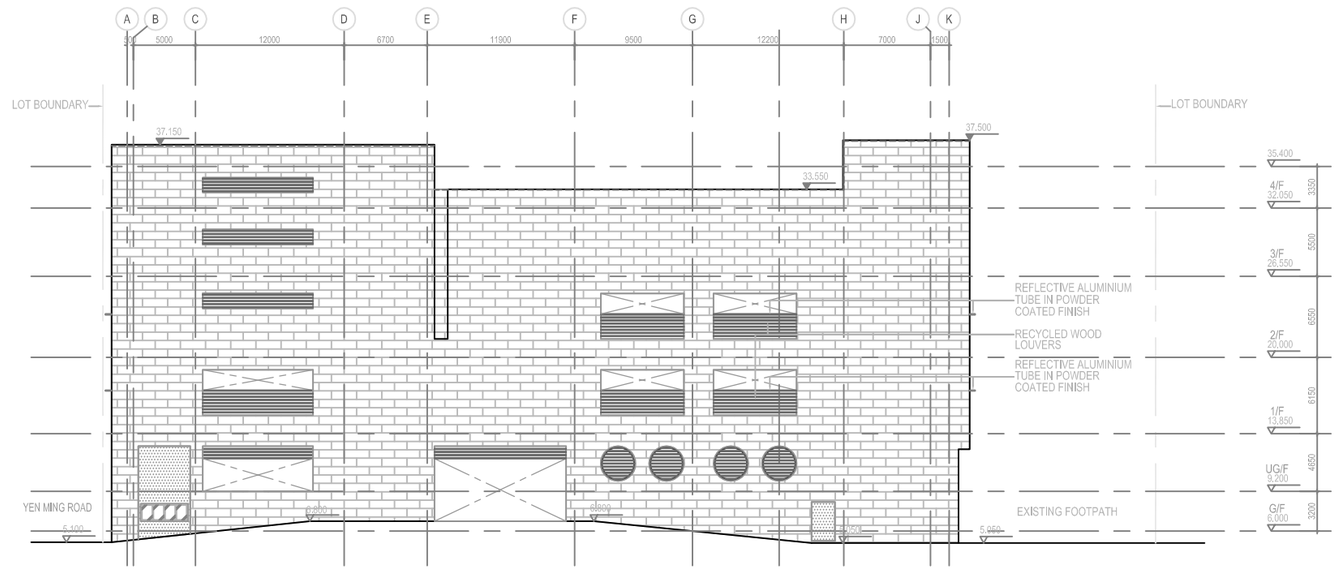
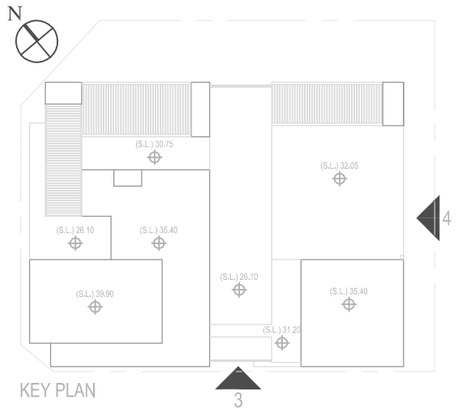


3 SOUTHWEST ELEVATION



4 SOUTHEAST ELEVATION



KEY PLAN

LEGEND:

- EXTERNAL WALL TILES
- EXTERNAL PAINT
- OPERABLE WINDOWS
- FIX WINDOWS
- RECYCED WOOD LOUVERS
- VERTICAL GREENERY
- RECYCLED WOOD
- OPENINGS/ VOID

Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡議人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034);
建築顧問 (顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程綱有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衛生署
洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(ELEVATION 2 of 5)

Drawing No. 圖則編號					APPENDIX 5-5
Designed 設計	FYS	Drawn 繪圖	FYS	Checked 核核	ICWR
Approved 批准	HTMI	Date 日期	MAY 2013	Status 狀況	FINAL

Scale 比例: AS SHOWN

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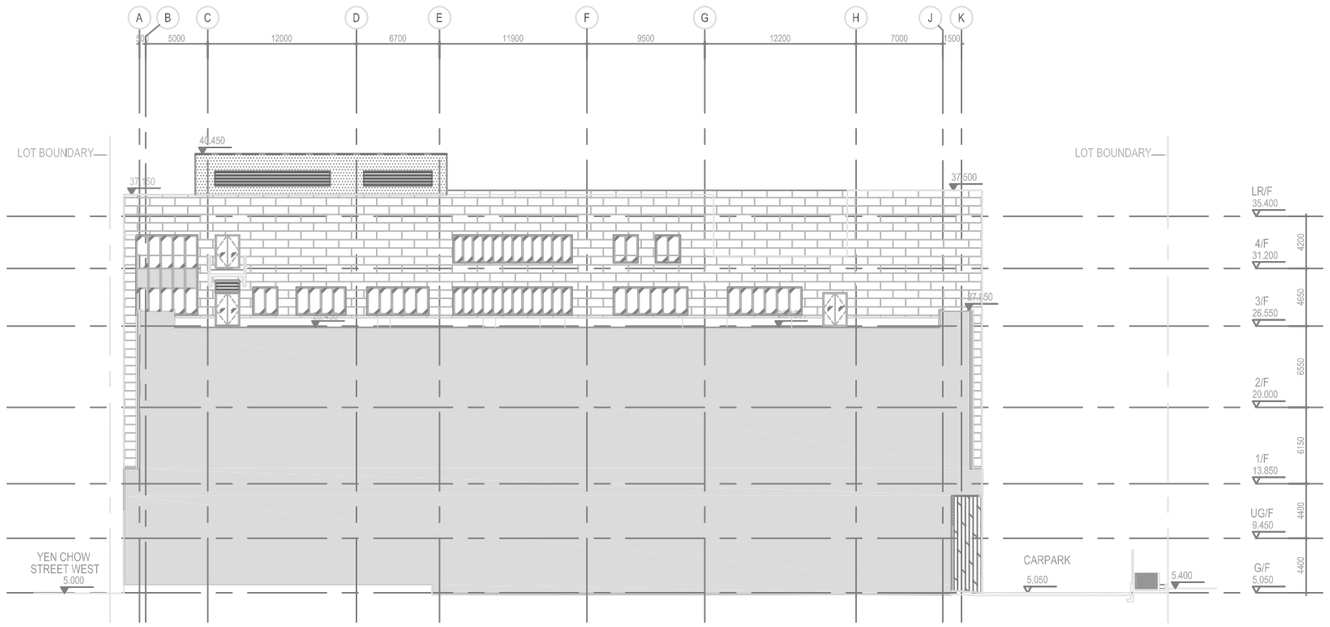
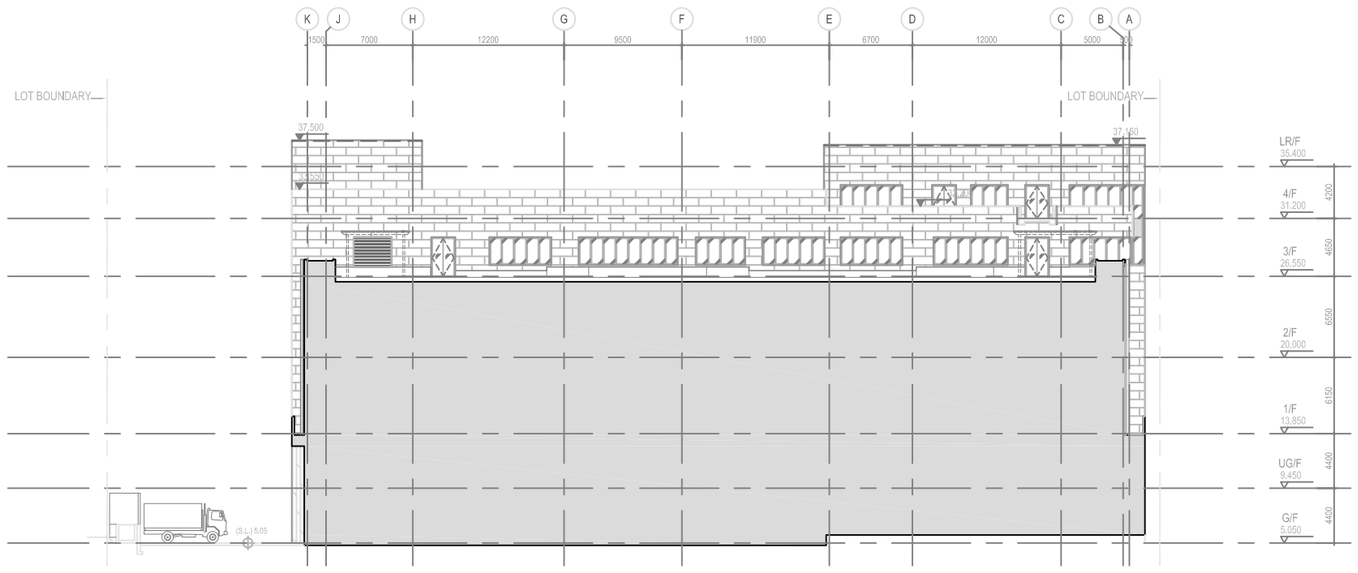
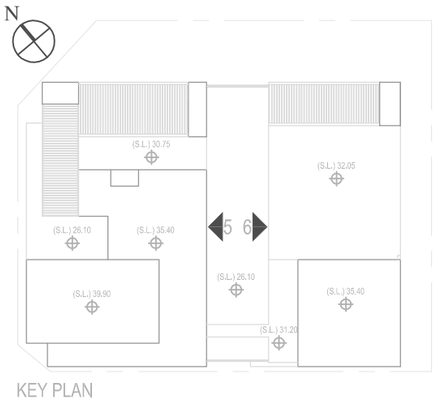


5 ROOF GARDEN ELEVATION



6 ROOF GARDEN ELEVATION



KEY PLAN

LEGEND:

- EXTERNAL WALL TILES
- EXTERNAL PAINT
- OPERABLE WINDOWS
- FIX WINDOWS
- RECYCED WOOD LOUVERS
- VERTICAL GREENERY
- RECYCLED WOOD
- OPENINGS/ VOID

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Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡導人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衛生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034);
建築顧問 (顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重置食物環境衛生署
洗衣街環境衛生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(ELEVATION 3 of 5)

Drawing No. 圖則編號				
				APPENDIX S-5
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況	FINAL

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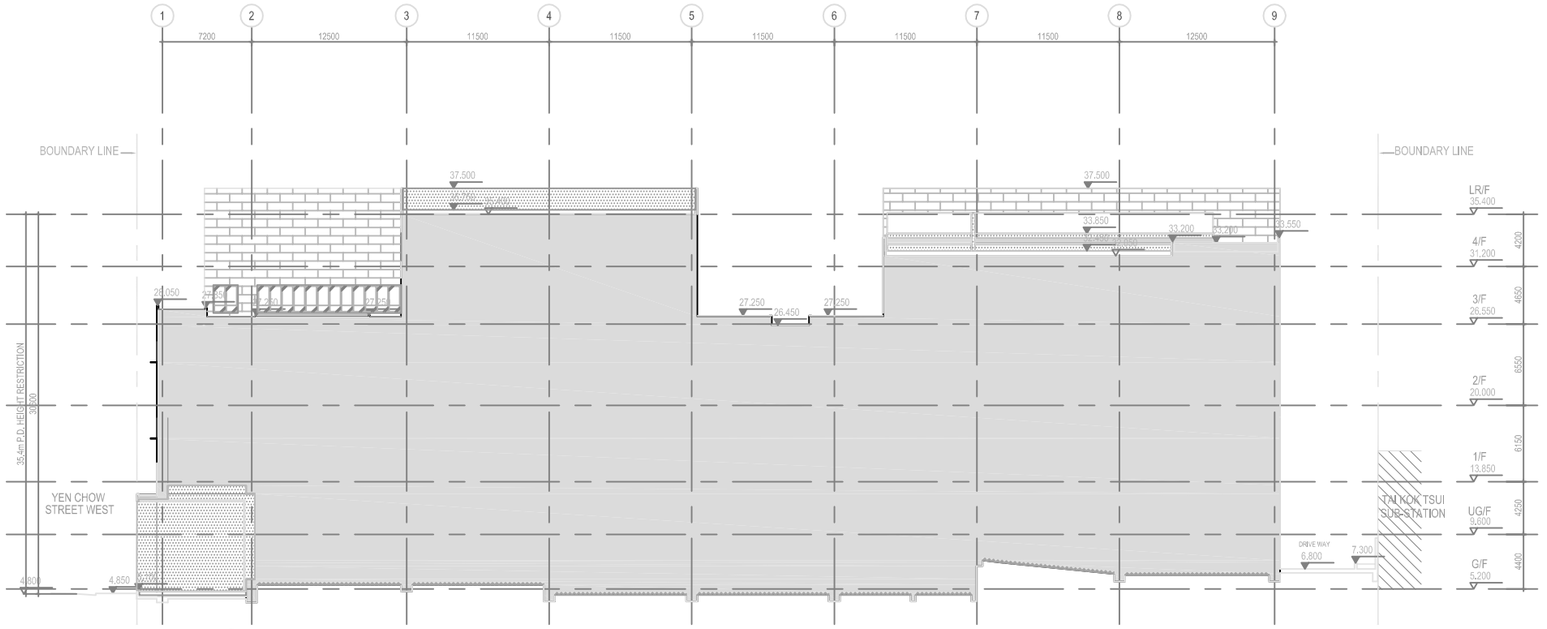
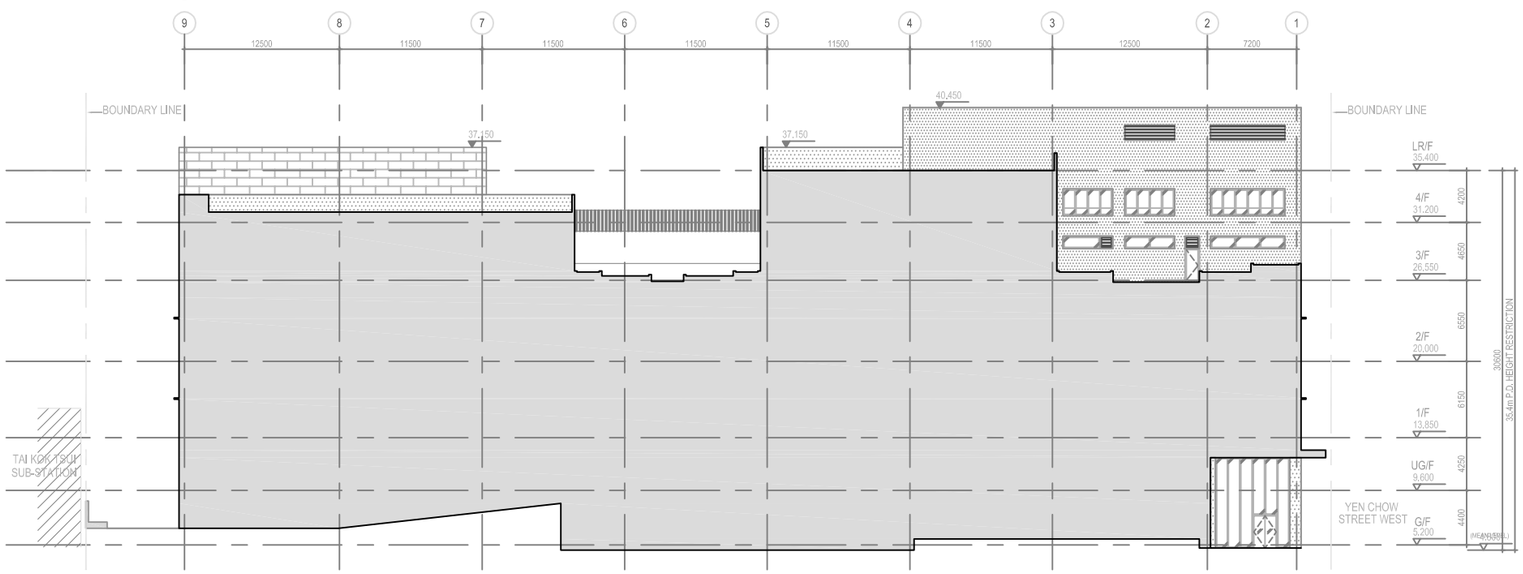
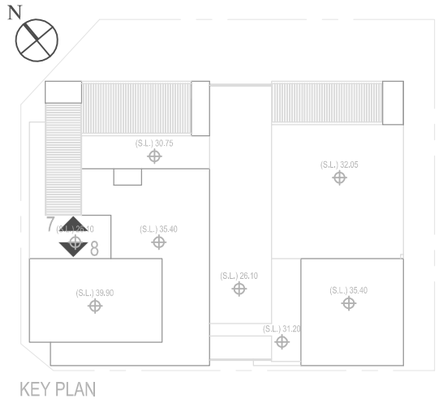


7 ROOF GARDEN ELEVATION



8 ROOF GARDEN ELEVATION



KEY PLAN

LEGEND:

- EXTERNAL WALL TILES
- EXTERNAL PAINT
- OPERABLE WINDOWS
- FIX WINDOWS
- RECYCED WOOD LOUVERS
- VERTICAL GREENERY
- RECYCLED WOOD
- OPENINGS/ VOID

Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡議人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034);
建築顧問 (顧問合約編號9AX 034)

P&T Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重整食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(ELEVATION 4 of 5)

Drawing No. 圖則編號				
				APPENDIX 5-5
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 現況	FINAL

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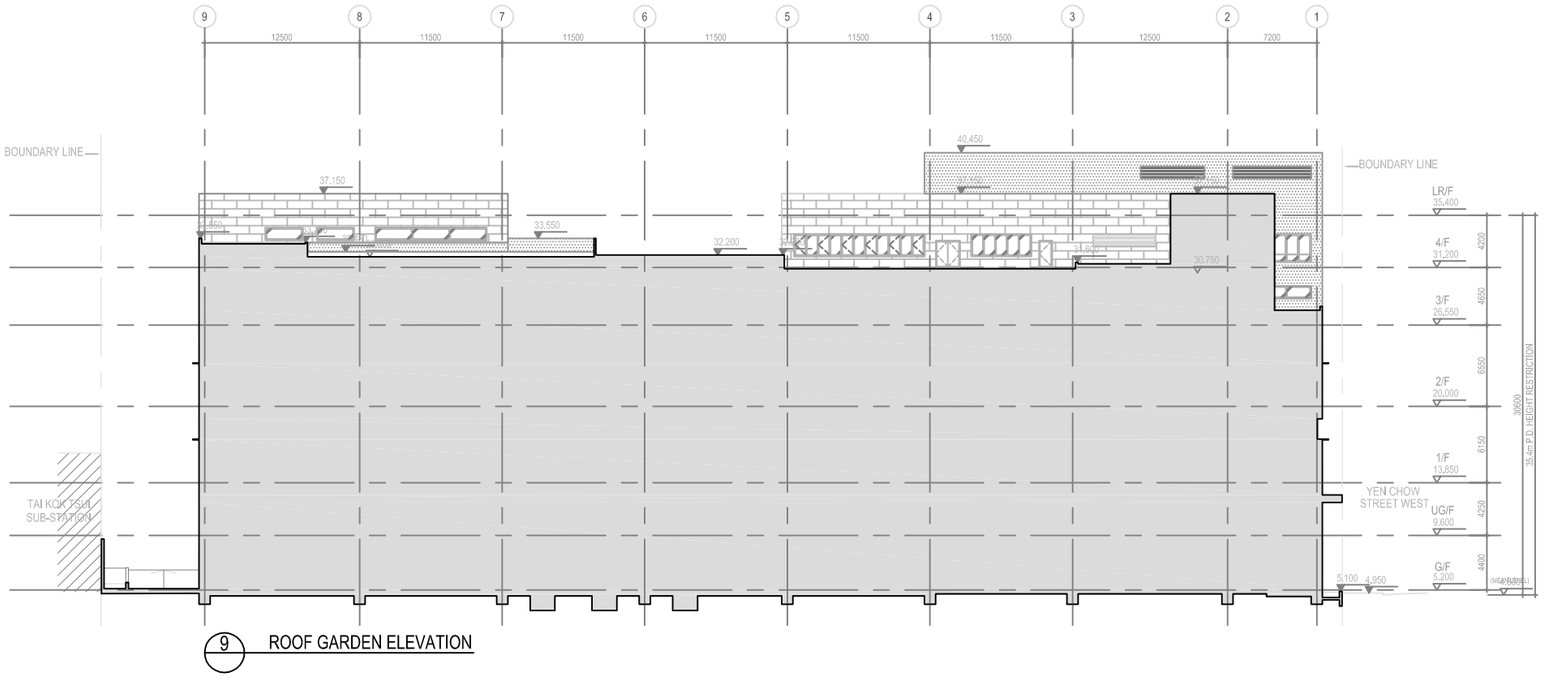
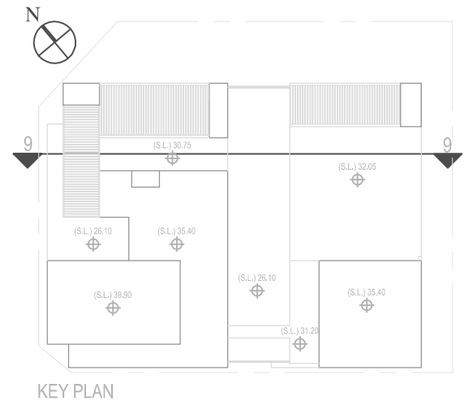


9 ROOF GARDEN ELEVATION



KEY PLAN

LEGEND:

- EXTERNAL WALL TILES
- EXTERNAL PAINT
- OPERABLE WINDOWS
- FIX WINDOWS
- RECYCLED WOOD LOUVERS
- VERTICAL GREENERY
- RECYCLED WOOD
- OPENINGS/ VOID

Remark: The plans are subject to revision and finalization in later stages.

Rev. 修訂	Date 日期	Description 內容摘要	Drawn 繪圖	Checked 核核

Department (Project Proponent) 部門 (項目倡導人):

FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT
食物環境衞生署

Department (Works) 部門 (工程):

ARCHITECTURAL SERVICES DEPARTMENT
建築署

Lead Architect (Consultancy Agreement No. 9AX 034):
建築顧問 (顧問合約編號9AX 034)

P&T
Architects and Engineers Ltd
巴馬丹拿建築及工程師有限公司

Project Title 項目名稱

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA

在西九龍填海區欽明路重整食物環境衞生署
洗衣街環境衞生辦事處暨車房

Drawing Title 圖則名稱

OUTLINE LAYOUT PLAN
(ELEVATION 5 of 5)

Drawing No. 圖則編號	APPENDIX 5-5			
Designed 設計 FYS	Drawn 繪圖 FYS	Checked 核核 ICWR	Scale 比例	AS SHOWN
Approved 批准 HTMI		Date 日期 MAY 2013	Status 狀況	FINAL

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Appendix 5-6
Photos of Identified Workshop Vehicle Repair Activities

Item	Activity	Photo of Activity / Powered Mechanical Equipment	Quantity	Averaged Measured Noise Levels	Operation Location	Operation Time	Operation Duration	Operation Frequency (per 30 mins)
1	Sand Blasting		1	LAeq 108dB @ 1m	Indoor	0700 – 1900	1min	2
2	Grinding		1	LAeq 100dB @ 1m	Indoor	0700 – 1900	1min	2

Item	Activity	Photo of Activity / Powered Mechanical Equipment	Quantity	Averaged Measured Noise Levels	Operation Location	Operation Time	Operation Duration	Operation Frequency (per 30 mins)
3	Hammer-ing		1	LAeq 102dB @ 1m	Indoor	0700 – 1900	1min	1
4	Roller Break Tester		1	SWL = 98.6dB(A) Referenced to the approved EIA report (AEIAR-029/2000)	Indoor	0700 – 1900	1min	5

Item	Activity	Photo of Activity / Powered Mechanical Equipment	Quantity	Averaged Measured Noise Levels	Operation Location	Operation Time	Operation Duration	Operation Frequency (per 30 mins)
5	Vehicle Washing & Brushing (Manual)		1	SWL = 88.4dB(A) Referenced to the approved EIA report (AEIAR-045/2001)	Indoor	0700 – 1900	30mins	1
6	Vehicle Welding		1	LAeq 70dB @ 1m	Indoor	0700 – 1900	20mins	1

Item	Activity	Photo of Activity / Powered Mechanical Equipment	Quantity	Averaged Measured Noise Levels	Operation Location	Operation Time	Operation Duration	Operation Frequency (per 30 mins)
7	Parts Welding		1	LAeq 80dB @ 1m	Indoor	0700 – 1900	5mins	4
8	Screw Driver		1	LAeq 92dB @ 1m	Indoor	0700 – 1900	1min	5

Item	Activity	Photo of Activity / Powered Mechanical Equipment	Quantity	Averaged Measured Noise Levels	Operation Location	Operation Time	Operation Duration	Operation Frequency (per 30 mins)
9	Tyre Changer		1	SWL = 97.6dB(A) Referenced to the approved EIA report (AEIAR-045/2001)	Indoor	0700 – 1900	5mins	4

Remark:
Items 1 to 5: at Kwai Chung Depot
Items 6 to 9: at Sai Yee Street Depot

Appendix 5-7
Summary of Estimated Off-site Traffic Generation (Inbound and Outbound) from FEHD Depot and Summary of Traffic Forecast

Wong, Thomas

From: John Hok Man CHAN/TD/HKSARG <johnhmchan@td.gov.hk>
Sent: 20 June 2013 16:48
To: Lai, Ivan
Cc: 4710 <4710@p-t-group.com> (4710@p-t-group.com); carolshum@fehd.gov.hk; HK - USW-ENV Sai Yee Street vehicle depot; HK - USW-Geot Sai Yee Street vehicle depot; HK - USW-Traffic Sai Yee Street vehicle depot; Lorraine LO 4710 (FEHD) - (lfylo@fehd.gov.hk); T.Y. LUK (PM) 4710 (ASD) - (lukty@archsd.gov.hk); S.H. SAT (SPM) 4710 (ASD) - (satshs@archsd.gov.hk); waitakchan@td.gov.hk
Subject: RE: 9AX 034 - TIA and traffic forecast for EIA in Technical Note 05 (re-send)
Attachments: 2013-123 Consultation DC Paper_FINAL_chi.pdf; 2013-123 Plan 1-p4_low.pdf

Dear Ivan,

First of all, may I clarify that I did not instruct you to use 70sq.m as the average flat size for the private residential units in the Cheung Sha Wan Wholesale Food Market (CSWWFM) Phase 2 site. I however accept this is a reasonable assumption when there is limited information available at this stage.

Overall, the analysis of increase in traffic flows due to the CSWWFM Phase 2 development is considered in order. I have no objection to your conclusion that flows on Sham Mong Road and Lin Cheung Road are not anticipated to increase significantly. Following this, I consider the TIA is still valid and have no objection to adopting the traffic data established based on the forecasting methodology in Technical Note 05 for the purpose of the EIA.

Regards,
John H M CHAN
EK/PW2, TE/K, TD

"Lai, Ivan" <ivan.lai@urs.com>

20/06/2013 15:53

To "johnhmchan@td.gov.hk" <johnhmchan@td.gov.hk>
cc "waitakchan@td.gov.hk" <waitakchan@td.gov.hk>
"carolshum@fehd.gov.hk" <carolshum@fehd.gov.hk>
"Lorraine LO 4710 (FEHD) - (lfylo@fehd.gov.hk)" <lfylo@fehd.gov.hk>
"S.H. SAT (SPM) 4710 (ASD) - (satshs@archsd.gov.hk)" <satshs@archsd.gov.hk>
"T.Y. LUK (PM) 4710 (ASD) - (lukty@archsd.gov.hk)" <lukty@archsd.gov.hk>
"4710 <4710@p-t-group.com> (4710@p-t-group.com)" <4710@p-t-group.com>
HK - USW-Geot Sai Yee Street vehicle depot <hk.usw-geot.sysdepot@urs.com>
HK - USW-ENV Sai Yee Street vehicle depot <hk.usw-env.sysdepot@urs.com>
HK - USW-Traffic Sai Yee Street vehicle depot <hk.usw-traffic.sysdepot@urs.com>
Subject RE: 9AX 034 - TIA and traffic forecast for EIA in Technical Note 05 (re-send)

Dear John,

I refer to your comments vide your e-mail dated 19 June 2013. Traffic analysis has been updated and incorporated in the message below for your agreement.

At the meeting held with EPD to discuss the draft EIA Final report on Monday 10 June 2013, EPD advised that if the traffic generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site is insignificant, FEHD should seek TD's agreement on whether the TIA completed is still valid. If the TIA is still valid, there is no need to re-assess the noise and air impact chapters of the draft EIA Final Report due to the proposed housing development.

According to paragraph 4.3 of SSPDC Paper No. 123/13 which was discussed at the DC meeting held on 18 June 2013, the residential development at this site would involve the provision 900 units under the Home Ownership Scheme and 2,700 units of public rental housing. The planned population is 11,500. A copy of the paper is enclosed below for your reference. The supplementary information regarding the TIA is set out in the ensuring paragraphs for TD's urgent consideration.

Based on trip rates from TPDM, volume of traffic from/to Cheung Sha Wan Wholesale Food Market Phase 2 HOS and PRH residential site would be:

- Morning peak: Outbound: 147 pcu/hour, Inbound: 113 pcu/hour
- Evening peak: Outbound: 83 pcu/hour, Inbound: 104 pcu/hour

Home Ownership Scheme (HOS): 900 units									
Average Flat Size (sq.m)	AM Generation Rate (pcu/hr)	AM Attraction Rate (pcu/hr)	PM Generation Rate (pcu/hr)	PM Attraction Rate (pcu/hr)	No. of Flats	AM Out (pcu/hr)	AM In (pcu/hr)	PM Out (pcu/hr)	PM In (pcu/hr)
50	0.0622	0.0426	0.0297	0.0401	900	56	38	27	36
Public Rental Housing (PRH): 2,700 units									
Average Flat Size (sq.m)	AM Generation Rate	AM Attraction Rate	PM Generation Rate	PM Attraction Rate	No. of Flats	AM Out	AM In	PM Out	PM In
30	0.0242	0.0226	0.0177	0.0201	1350	33	31	24	27
40	0.0432	0.0326	0.0237	0.0301	1350	58	44	32	41
				Total (HOS: 900 units + PRH: 2,700 units) pcu/hour		147	113	83	104

According to paragraph 4.2 of SSPDC Paper No. 123/13, private residential and hotel developments would be situated at the south part of Cheung Sha Wan Wholesale Food Market Phase 2 site. As the private residential flat numbers and hotel room numbers were not explicitly mentioned in the SSPDC paper, the site area and plot ratio information contained in the paper are adopted as the basis for estimation of traffic generation. Per telephone discussion between Ivan Lai of URS and John Chan of Transport Department, we are advised to project the number of flats using the GFA based on average flat size of 70m square. PlanD has indicated verbally agreement for adopting the above approach for projection. The number of trips would be:

- Morning peak: Outbound: 132 pcu/hour, Inbound: 77 pcu/hour
- Evening peak: Outbound: 53 pcu/hour, Inbound: 71 pcu/hour

	Site Area (ha)	Site Area (m square)	Plot Ratio	GFA (m square)	Average Flat size (m square)	Number of flats
Private residential	1.9	19,000	4	76,000		
Private residential / hotel developments	0.5	5,000	5.6	28,000		
Total		24,000	----	104,000	70	1,486

Private Housing: High-Density / R(A): 1,486 units									
Average Flat Size (sq.m)	AM Generation Rate (pcu/hr)	AM Attraction Rate	PM Generation Rate	PM Attraction Rate	No. of Flats	AM Out	AM In	PM Out	PM In

		(pcu/hr)	(pcu/hr)	(pcu/hr)		(pcu/hr)	(pcu/hr)	(pcu/hr)	(pcu/hr)
70	0.0888	0.0515	0.0356	0.048	1,486	132	77	53	71
Total (Private Housing: High-Density / R(A): 1,486 units) pcu/hour						132	77	53	71

Trip distributions for proposed adjacent developments are assumed, firstly, based on trip distributions between major geographic areas in the Third Comprehensive Transport Study: Final Report. This is followed by assigning locally the development flows to local road network taking into account traffic conditions on each possible route.

According to Third Comprehensive Transport Study: Final Report, daily total vehicle demand (1997 – 2016) [Figure 2.8 of Third Comprehensive Transport Study: Final Report] travelling within Kowloon (West Kowloon and East Kowloon) is higher than from Kowloon to other destinations namely the New Territories, Hong Kong Island and Lantau Island.

The entire trip distributions are as follow:

- 55% from/to Kowloon
- 10% from/to the Hong Kong Island; and
- 35% from/to New Territories

Home Ownership Scheme (HOS): 900 units and Public Rental Housing (PRH): 2,700 units	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Traffic from/to Kowloon (55%)	81	62	46	57
Traffic from/to Hong Kong Island (10%)	15	11	8	10
Traffic from/to New Territories (35%)	51	40	29	36
Total (HOS: 900 units + PRH: 2,700 units) pcu/hour	147	113	83	104

Private Housing: High-Density / R(A): 1,486 units	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Traffic from/to Kowloon (55%)	73	42	29	39
Traffic from/to Hong Kong Island (10%)	13	8	5	7
Traffic from/to New Territories (35%)	46	27	19	25

Total (Private Housing: High-Density / R(A): 1,486 units) pcu/hour	132	77	53	71

According to para. 4.8 of SSPDC Discussion Paper No. 123/13, given the traffic in Lin Cheung Road is heavy and construction of a new vehicular access from Lin Cheung Road leading to Cheung Sha Wan Wholesale Food Market Phase 2 is not suitable, the new housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site will involve construction of a two-way road linking Hing Wah Street West to other roads, which is located far away from the reprovisioned depot site at Yen Ming Road.

Lai Chi Kok Road is a Primary Distributor near Hing Wah Street West. This road connects Mei Foo to the west and Mong Kok to the east. Traffic from the proposed housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site is expected to use local roads associated with Lai Chi Kok Road. As these roads are far away from FEHD vehicle routings which make use of Tonkin Street West (without overlapping the vehicular routings of the proposed housing project), traffic from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site is anticipated insignificant to the TIA.

Both Sham Mong Road and Lin Cheung Road are study routes in traffic forecast for EIA included in Technical Note 05. Based on road network pattern, it is anticipated that 20% of total traffic from/to Kowloon (generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site) will use Sham Mong Road and all the Hong Kong Island traffic (traffic generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site) will use Lin Cheung Road respectively.

Home Ownership Scheme (HOS): 900 units and Public Rental Housing (PRH): 2,700 units	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Total traffic from/to Kowloon	81	62	46	57
• **assume 12% via Sham Mong Road**	**10**	**7**	**5**	**7**
• **assume 8% via Lin Cheung Road**	**6**	**5**	**4**	**5**
• assume 80% via other roads	65	50	37	46

Home Ownership Scheme (HOS): 900 units and Public Rental Housing (PRH): 2,700 units	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Total traffic from/to Hong Kong Island	15	11	8	10
• **assume 100% via Lin Cheung Road**	**15**	**11**	**8**	**10**

Private Housing: High-Density / R(A): 1,486 units	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Total traffic from/to Kowloon	73	42	29	39
• **assume 12% via Sham Mong Road**	**9**	**5**	**3**	**5**
• **assume 8% via Lin Cheung Road**	**6**	**3**	**2**	**3**
• assume 80% via other roads	58	34	23	31

Private Housing: High-Density / R(A): 1,486 units	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Total traffic from/to Hong Kong Island	13	8	5	7
• **assume 100% via Lin Cheung Road**	**13**	**8**	**5**	**7**

Based on above traffic assumption, Sham Mong Road (two-way) will have additional flows 31 pcu/hour (i.e.10+7+9+5 in the AM peak and 20 pcu/hour (i.e.5+7+3+5) in the PM peak, which are generated by the housing developments at Cheung Sha Wan Wholesale Food Market Phase 2 site.

Lin Cheung Road southbound and northbound carriageways are separated by MTRC rail tracks. Lin Cheung Road southbound carriageway would be used by outbound traffic from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site to the Hong Kong Island, it is anticipated to have additional flows 40 pcu/hour (i.e.6+15+6+13) in AM peak and 19 pcu/hour (i.e.4+8+2+5) in PM peak respectively. Lin Cheung Road northbound carriageway would be used by inbound traffic from the Hong Kong Island to housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site, it is anticipated to have additional flows 27 pcu/hour (i.e.5+11+3+8) in AM peak and 25 pcu/hour (i.e.5+10+3+7) in PM peak respectively.

The following table presents average traffic forecast on Sham Mong Road and Lin Cheung Road (2017 without FEHD development scenario) in Technical Note 05 and the revised traffic forecast with additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site. As conservative analysis, volume of flows (pcu/hour) derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site are assumed equal the volume of vehicle flows (vehicles/hour).

Traffic Forecast in Technical Note 05 (2017 without FEHD development scenario)		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	860	700
Lin Cheung Road southbound*	2,680	1,530
Lin Cheung Road northbound*	2,300	2,560

Additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site [Home Ownership Scheme (HOS): 900 units and Public Rental Housing (PRH): 2,700 units] **From/to Kowloon**		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	17	12
Lin Cheung Road southbound*	6	4
Lin Cheung Road northbound*	5	5
Additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site [Private Housing: High-Density / R(A): 1,486 units] **From/to Kowloon**		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	14	8
Lin Cheung Road southbound*	6	2
Lin Cheung Road northbound*	3	3

Additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site [Home Ownership Scheme (HOS): 900 units and Public Rental Housing (PRH): 2,700 units] **From/to Hong Kong Island**		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)

Sham Mong Road (2-way flow)	0	0
Lin Cheung Road southbound*	15	8
Lin Cheung Road northbound*	11	10
Additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site [Home Ownership Scheme (HOS): 900 units and Public Rental Housing (PRH): 2,700 units] **From/to Hong Kong Island**		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	0	0
Lin Cheung Road southbound*	13	5
Lin Cheung Road northbound*	8	7

Revised Traffic Forecast (2017 without FEHD development scenario) and with additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	891	721
Lin Cheung Road southbound*	2720	1550
Lin Cheung Road northbound*	2327	2585
Percentage of change with additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	3.6%	2.9%
Lin Cheung Road southbound*	1.5%	1.3%
Lin Cheung Road northbound*	1.2%	1.0%

*Lin Cheung Road southbound and northbound carriageways are separated by MTRC rail tracks

With additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site, volume of flows will increase approximate 3% Sham Mong Road and approximate 1% on Lin Cheung Road. Percentage of changes on Sham Mong Road is higher than Lin Cheung Road because traffic flows on Sham Mong Road (approximate 900 vehicles per hour) are relatively lower than Lin Cheung Road (in excess of 2,000 vehicles per hour). However actual flows on Sham Mong Road and Lin Cheung Road are not expected to increase significantly.

Having regard to the above analysis, we would like to have TD's confirmation that the TIA submitted and the traffic forecast for EIA in Technical Note 05 are still valid with the proposed housing development at this new site. FEHD will formally submit the EIA Report to EPD on **24 June 2013 (next Monday)**. TD's urgent confirmation and reply by **close of play today (20 June 2013)** would be much appreciated in order that there will be no further delay, rendering the project infeasible due to the need to meet new Air Quality Objectives which will come into operation in 2014.

Regards,

Ivan Lai
Traffic Engineer
URS Hong Kong Limited
38th Floor, Metroplaza Tower 1, 223 Hing Fong Road, Kwai Fong, Hong Kong

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ivan.lai@urs.com
www.ursglobal.com

With effect from 15 April 2013, Scott Wilson Ltd has rebranded as URS Hong Kong Ltd. Please update your address book with my new email

address as shown above.

URS – Local Expertise, Global Resources

From: Lai, Ivan
Sent: Wednesday, June 19, 2013 10:56 AM
To: johnhmchan@td.gov.hk
Cc: waitakchan@td.gov.hk; carolshum@fehd.gov.hk; Lorraine LO 4710 (FEHD) - (lfylo@fehd.gov.hk); S.H. SAT (SPM 4710 (ASD) - (satshs@archsd.gov.hk); T.Y. LUK (PM) 4710 (ASD) - (lukty@archsd.gov.hk); 4710 <4710@p-t-group.com> (4710@p-t-group.com); HK - USW-Geot Sai Yee Street vehicle depot; HK - USW-ENV Sai Yee Street vehicle depot; HK - USW-Traffic Sai Yee Street vehicle depot
Subject: 9AX 034 - TIA and traffic forecast for EIA in Technical Note 05 (re-send)

(Re-send due to typo error in previous e-mail [subject: 9AX 034 - TIA and traffic forecast for EIA in Technical Note 05] sent at 10:28am on 19 June 2013)

Dear John,

At the meeting held with EPD to discuss the draft EIA Final report on Monday 10 June 2013, EPD advised that if the traffic generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site is insignificant, FEHD should seek TD's agreement on whether the TIA completed is still valid. If the TIA is still valid, there is no need to re-assess the noise and air impact chapters of the draft EIA Final Report due to the proposed housing development.

According to paragraph 4.3 of SSPDC Paper No. 123/13 which will be discussed at the coming DC meeting held on 18 June 2013, the residential development at this site would involve the provision 900 units under the Home Ownership Scheme and 2,700 units of public rental housing. The planned population is 11,500. A copy of the paper is enclosed below for your reference. The supplementary information regarding the TIA is set out in the ensuring paragraphs for TD's urgent consideration.

Based on trip rates from TPDM, volume of traffic from/to Cheung Sha Wan Wholesale Food Market Phase 2 residential site would be:

- Morning peak: Outbound: 147 pcu/hour, Inbound: 113 pcu/hour
- Evening peak: Outbound: 83 pcu/hour, Inbound: 104 pcu/hour

Home Ownership Scheme (HOS): 900 units									
Average Flat Size (sq.m)	AM Generation Rate (pcu/hr)	AM Attraction Rate (pcu/hr)	PM Generation Rate (pcu/hr)	PM Attraction Rate (pcu/hr)	No. of Flats	AM Out (pcu/hr)	AM In (pcu/hr)	PM Out (pcu/hr)	PM In (pcu/hr)
50	0.0622	0.0426	0.0297	0.0401	900	56	38	27	36
Public Rental Housing (PRH): 2,700 units									
Average Flat Size (sq.m)	AM Generation Rate	AM Attraction Rate	PM Generation Rate	PM Attraction Rate	No. of Flats	AM Out	AM In	PM Out	PM In
30	0.0242	0.0226	0.0177	0.0201	1350	33	31	24	27
40	0.0432	0.0326	0.0237	0.0301	1350	58	44	32	41
				Total (HOS: 900 units + PRH: 2,700 units) pcu/hour		147	113	83	104

Trip distributions for proposed adjacent developments are assumed, firstly, based on trip distributions between major geographic areas in the Third Comprehensive Transport Study: Final Report. This is followed by assigning locally the development flows to local road network taking into account traffic conditions on each possible route.

According to Third Comprehensive Transport Study: Final Report, daily total vehicle demand (1997 – 2016) [Figure 2.8 of Third Comprehensive Transport Study: Final Report] travelling within Kowloon (West Kowloon and East Kowloon) is higher than from Kowloon to other destinations namely the New Territories, Hong Kong Island and Lantau Island.

DAILY TOTAL VEHICLE DEMAND (1997 - 2016)
EXISTING AND COMMITTED INFRASTRUCTURE
FIGURE 2.8

The entire trip distributions are as follow:

- 55% from/to Kowloon
- 10% from/to the Hong Kong Island; and
- 35% from/to New Territories

	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Traffic from/to Kowloon	81	62	46	57
Traffic from/to Hong Kong Island	15	11	8	10
Traffic from/to New Territories	51	40	29	36
Total	147	113	83	104

According to para. 4.8 of SSPDC Discussion Paper No. 123/13, given the traffic in Lin Cheung Road is heavy and construction of a new vehicular access from Lin Cheung Road leading to Cheung Sha Wan Wholesale Food Market Phase 2 is not suitable, the new housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site will involve construction of a two-way road linking Hing Wah Street West to other roads, which is located far away from the reprovisioned depot site at Yen Ming Road.

Lai Chi Kok Road is a Primary Distributor near Hing Wah Street West. This road connects Mei Foo to the west and Mong Kok to the east. Traffic from the proposed housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site is expected to use local roads associated with Lai Chi Kok Road. As these roads are far away from FEHD vehicle routings which make use of Tonkin Street West (without overlapping the vehicular routings of the proposed housing project), traffic from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site is anticipated insignificant to the TIA.

Both Sham Mong Road and Lin Cheung Road are study routes in traffic forecast for EIA included in Technical Note 05. Based on road network pattern, it is anticipated that 20% of total traffic from/to Kowloon (generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site) will use Sham Mong Road and all the Hong Kong Island traffic (traffic generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site) will use Lin Cheung Road respectively.

	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)

Total traffic from/to Kowloon	81	62	46	57
• **assume 20% via Sham Mong Road**	**16**	**12**	**9**	**11**
• assume 80% via other roads	65	50	37	46

	AM Outbound (pcu/hr)	AM Inbound (pcu/hr)	PM Outbound (pcu/hr)	PM Inbound (pcu/hr)
Total traffic from/to Hong Kong Island	15	11	8	10
• **assume 100% via Lin Cheung Road**	**15**	**11**	**8**	**10**

Based on above traffic assumption, Sham Mong Road (two-way) will have additional flows 28 pcu/hour (i.e.16+12) in the AM peak and 20 pcu/hour (i.e.9+11) in the PM peak, which are generated by the housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site.

Lin Cheung Road southbound and northbound carriageways are separated by MTRC rail tracks. Lin Cheung Road southbound carriageway would be used by outbound traffic from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site to the Hong Kong Island, it is anticipated to have additional flows 15 pcu/hour in AM peak and 8 pcu/hour in PM peak respectively. Lin Cheung Road northbound carriageway would be used by inbound traffic from the Hong Kong Island to housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site, it is anticipated to have additional flows 11 pcu/hour in AM peak and 10 pcu/hour in PM peak respectively.

The following table presents average traffic forecast on Sham Mong Road and Lin Cheung Road (2017 without FEHD development scenario) in Technical Note 05 and the revised traffic forecast with additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site. As conservative analysis, volume of flows (pcu/hour) derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site are assumed equal the volume of vehicle flows (vehicles/hour).

Traffic Forecast in Technical Note 05 (2017 without FEHD development scenario)		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	860	700
Lin Cheung Road southbound *	2,680	1,530
Lin Cheung Road northbound*	2,300	2,560
Additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	28	20
Lin Cheung Road southbound*	15	8
Lin Cheung Road northbound*	11	10
Revised Traffic Forecast (2017 without FEHD development scenario) and with additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	888	720
Lin Cheung Road southbound*	2,695	1,538
Lin Cheung Road northbound*	2,311	2,570
Percentage of change with additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site		
Road Links	AM peak average (vehicles/hour)	PM peak average (vehicles/hour)
Sham Mong Road (2-way flow)	3.3%	2.9%

Lin Cheung Road southbound*	0.6%	0.5%
Lin Cheung Road northbound*	0.5%	0.4%

*Lin Cheung Road southbound and northbound carriageways are separated by MTRC rail tracks

With additional traffic derived from housing development at Cheung Sha Wan Wholesale Food Market Phase 2 site, volume of flows will increase approximate 3% Sham Mong Road and less than 1% on Lin Cheung Road. Percentage of changes on Sham Mong Road is higher than Lin Cheung Road because traffic flows on Sham Mong Road (approximate 800 vehicles per hour) are relatively lower than Lin Cheung Road (in excess of 2,000 vehicles per hour). However actual flows on Sham Mong Road and Lin Cheung Road are not expected to increase significantly.

Having regard to the above analysis, we would like to have TD's confirmation that the TIA submitted and the traffic forecast for EIA in Technical Note 05 are still valid with the proposed housing development at this new site. FEHD will formally submit the EIA Report to EPD on **24 June 2013 (next Monday)**. TD's urgent confirmation and reply by **close of play today** would be much appreciated in order that there will be no further delay, rendering the project infeasible due to the need to meet new Air Quality Objectives which will come into operation in 2014.

Regards,

Ivan Lai
Traffic Engineer
URS Hong Kong Limited
38th Floor, Metroplaza Tower 1, 223 Hing Fong Road, Kwai Fong, Hong Kong

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Fan, Fanny

From: John Hok Man CHAN/TD/HKSARG <johnhmchan@td.gov.hk>
Sent: Thursday, May 09, 2013 6:36 PM
To: Lai, Ivan
Cc: 4710; HK - USW-ENV Sai Yee Street vehicle depot; HK - USW-Geot Sai Yee Street vehicle depot; HK - USW-Traffic Sai Yee Street vehicle depot; Lorraine LO 4710 (FEHD) -; T.Y. LUK (PM) 4710 (ASD) -; S.H. SAT (SPM) 4710 (ASD) -; Vincent LEUNG 4710 (FEHD) -; waitakchan@td.gov.hk
Subject: Re: 9AX 034 (182GK) SYS Depot - Technical Note 05 Traffic Forecast for EIA

Dear Ivan,

Further to the telecon between FEHD with our Mr W T CHAN, I confirm that I have no comment on the traffic forecast methodology described in the Technical Note 05, and have no objection to using traffic data established based on the aforesaid forecasting methodology for the Environmental Impact Assessment for the subject project.

Regards,
John H M CHAN
EK/PW2, TE/K, TD

John Hok Man CHAN/TD/HKSARG
TEK/EKSSP

09/05/2013 11:31

To "Lai, Ivan" <ivan.lai@urs.com>
cc 4710 <4710@p-t-group.com>
HK - USW-ENV Sai Yee Street vehicle depot <hk.usw-env.sysdepot@urs.com>
HK - USW-Geot Sai Yee Street vehicle depot <hk.usw-geot.sysdepot@urs.com>
HK - USW-Traffic Sai Yee Street vehicle depot <hk.usw-traffic.sysdepot@urs.com>
"Lorraine LO 4710 (FEHD) -" <lfylo@fehd.gov.hk>
"T.Y. LUK (PM) 4710 (ASD) -" <lukty@archsd.gov.hk>
"S.H. SAT (SPM) 4710 (ASD) -" <satshs@archsd.gov.hk>
"Vincent LEUNG 4710 (FEHD) -" <vypleung@fehd.gov.hk>
"waitakchan@td.gov.hk" <waitakchan@td.gov.hk>
Subject Re: 9AX 034 (182GK) SYS Depot - Technical Note 05 Traffic Forecast for EIA Link

Dear Ivan,

I have no comment on the traffic forecast methodology described in the Technical Note 05.

Regards,
John H M CHAN
EK/PW2, TE/K, TD

"Lai, Ivan" <ivan.lai@urs.com>

08/05/2013 11:26

To "johnhmchan@td.gov.hk" <johnhmchan@td.gov.hk>
cc "waitakchan@td.gov.hk" <waitakchan@td.gov.hk>
4710 <4710@p-t-group.com>
"Vincent LEUNG 4710 (FEHD) -" <vypleung@fehd.gov.hk>

"Lorraine LO 4710 (FEHD) -" <lfylo@fehd.gov.hk>
"S.H. SAT (SPM) 4710 (ASD) -" <satshs@archsd.gov.hk>
"T.Y. LUK (PM) 4710 (ASD) -" <lukty@archsd.gov.hk>
HK - USW-Traffic Sai Yee Street vehicle depot <hk.usw-traffic.sysdepot@urs.com>
HK - USW-ENV Sai Yee Street vehicle depot <hk.usw-env.sysdepot@urs.com>
HK - USW-Geot Sai Yee Street vehicle depot <hk.usw-geot.sysdepot@urs.com>

Subject 9AX 034 (182GK) SYS Depot - Technical Note 05 Traffic Forecast for EIA

Dear John,

Subject: 9AX 034 Reprovisioning of FEHD Sai Yee Street Environmental Hygiene Offices-cum-vehicle Depot at Yen Ming Road, West Kowloon Reclamation Area Programme No. 182GK – Technical Note 05 – Traffic Forecast for Environmental Impact Assessment

We have revised the Technical Note 04 Traffic Forecast for EIA to Technical Note 05. The Technical Note 05 can be downloaded by clicking the link below.

The download link(s) will be expired after the given expiry date.

File	Size (KB)	Description	Expiry Date	
File Transfer\Ivan Lai\9AX 034 (2013 05 07)_Technical Note 5\ASD9AX034 FEHD Technical Note 5 - Traffic Forecast for EIA_7 May 2013.pdf	16024.1		11/03/2014 16:27:47	Download

TD comments on the methodology of traffic forecasting for EIA given in TD's email dated 25/4/2013 and at the meeting (TIA presentation to DD/FEHD) on 2 May 2013 have been addressed in the Technical Note 05.

In addition we have coordinated with Planning Department, regarding the use of planning parameters for adjacent development sites. Please refer to the e-mail between Planning Department and URS dated 7 May 2013 below.

Should you need any further information, please do not hesitate to contact us. In order to provide traffic forecast to EIA consultant to undertake EIA, it is highly appreciated if you can provide us your comments by 9 May 2013.

Regards,

Ivan Lai
Traffic Engineer
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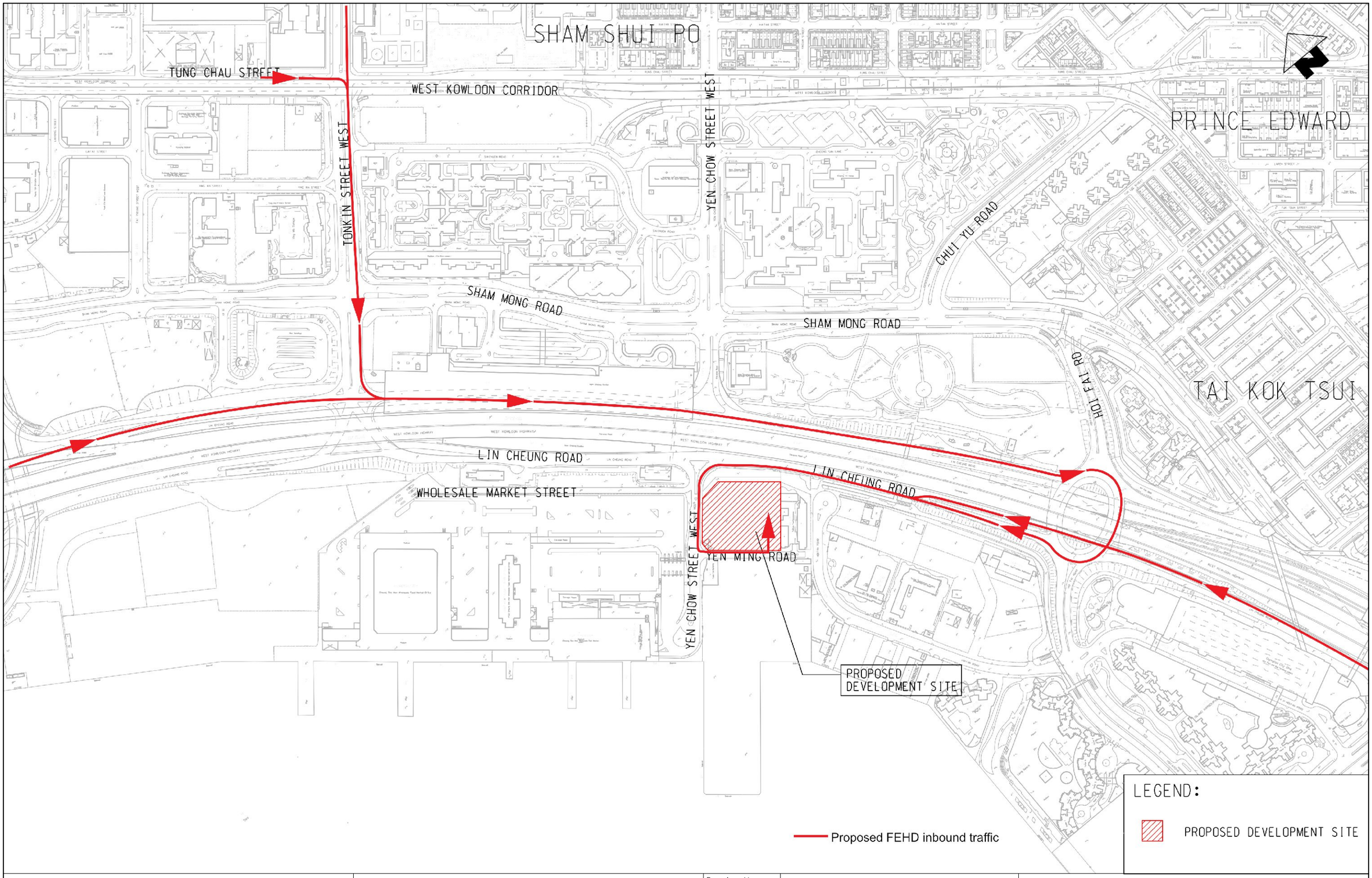
Estimation of In-bound Traffic at Proposed Yen Ming Road Depot

Time Slot	Vehicle Type					
	General Purpose Vehicle			Special Purpose Vehicle		
	Light Bus/Large Van	Medium Van	Light Truck	Refuse Collection Vehicle	Street Washing Vehicle	Total
0600-0700	3		3		2	8
0700-0800						
0800-0900						
0900-1000				1	1	2
1000-1100		3			1	4
1100-1200	11	3	3			17
1200-1300	7	3	3			13
1300-1400						
1400-1500		6		21		27
1500-1600	11	3			4	18
1600-1700					1	1
1700-1800	7			1	1	9
1800-1900		2	3			5
1900-2000			3		1	4
2000-2100						
2100-2200						
2200-2300	7	9	6		3	25
2300-2400				7		7
2400-0100					2	2
0100-0200		2	1			3
0200-0300	3		3		2	8
0300-0400						
0400-0500		2	1			3
0500-0600						
				Frequency of In-bound vheicles:		156

Estimation of Out-bound Traffic at Proposed Yen Ming Road Depot

Time Slot	Vehicle Type						Inbound and Outbound (Total)	
	General Purpose Vehicle			Special Purpose Vehicle				
	Light Bus/Large Van	Medium Van	Light Truck	Refuse Collection Vehicle	Street Washing Vehicle	Total		
0600-0700				21	1	22	30	
0700-0800	18	9	6		4	37	**37**	AM PEAK
0800-0900	7				1	8	8	
0900-1000							2	
1000-1100				1		1	5	
1100-1200	11	3			1	15	32	
1200-1300	7	3	3		1	14	27	
1300-1400		3	3		3	9	9	
1400-1500		3				3	30	
1500-1600		6		7	3	16	**34**	PM PEAK
1600-1700							1	
1700-1800					1	1	10	
1800-1900	7					7	12	
1900-2000		2	3	1		6	10	
2000-2100			3		1	4	4	
2100-2200							0	
2200-2300							25	
2300-2400	3	2	3		2	10	17	
2400-0100			1			1	3	
0100-0200					2	2	5	
0200-0300		2	1			3	11	
0300-0400	3		3		2	8	8	
0400-0500							3	
0500-0600							0	
				Frequency of Out-bound vheicles:		167		



CONSULTANCY AGREEMENT NO. 9AX 034

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
PROGRAMME NO. 182 GK

POSSIBLE INBOUND ROUTINGS OF THE FEHD TRAFFIC

Drawing No. 圖則編號	FIGURE 2		
Drawn 繪圖 WJ	Checked 複核 IL	Approved 批准 CCKL	
Scale 比例 N.T.S.	Date 日期 MAY 2013	Date 日期 MAY 2013	
	Status 現況 DRAFT		

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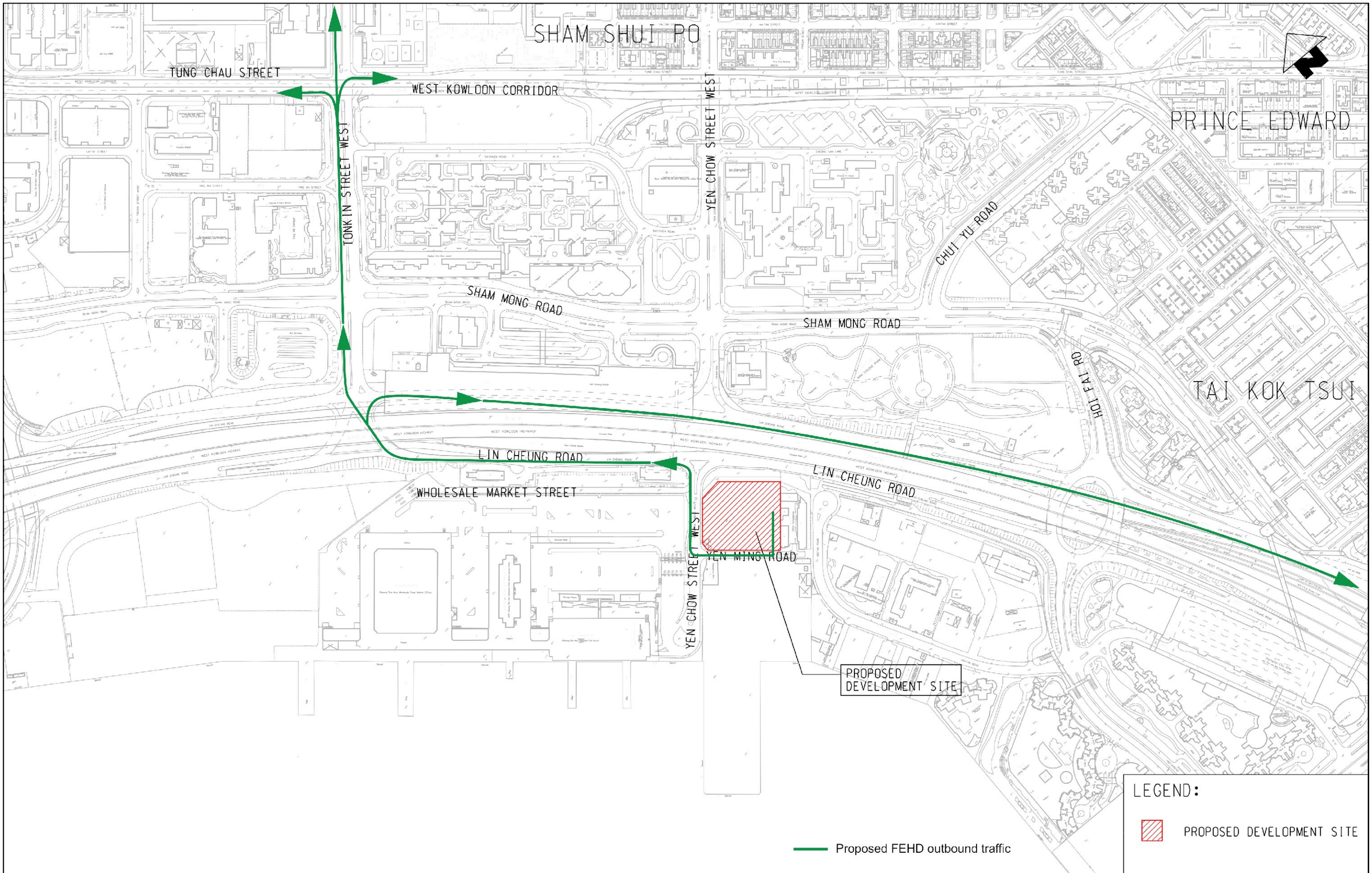

CONSULTANCY AGREEMENT NO. 9AX 034

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
PROGRAMME NO. 182 GK

POSSIBLE OUTBOUND ROUTINGS OF THE FEHD TRAFFIC

Drawing No. 圖則編號	FIGURE 3		
Drawn 繪圖 WJ	Checked 複核 IL	Approved 批准 CCKL	
Scale 比例 N.T.S.	Date 日期 MAY 2013	Date 日期 MAY 2013	
	Status 現況 DRAFT		

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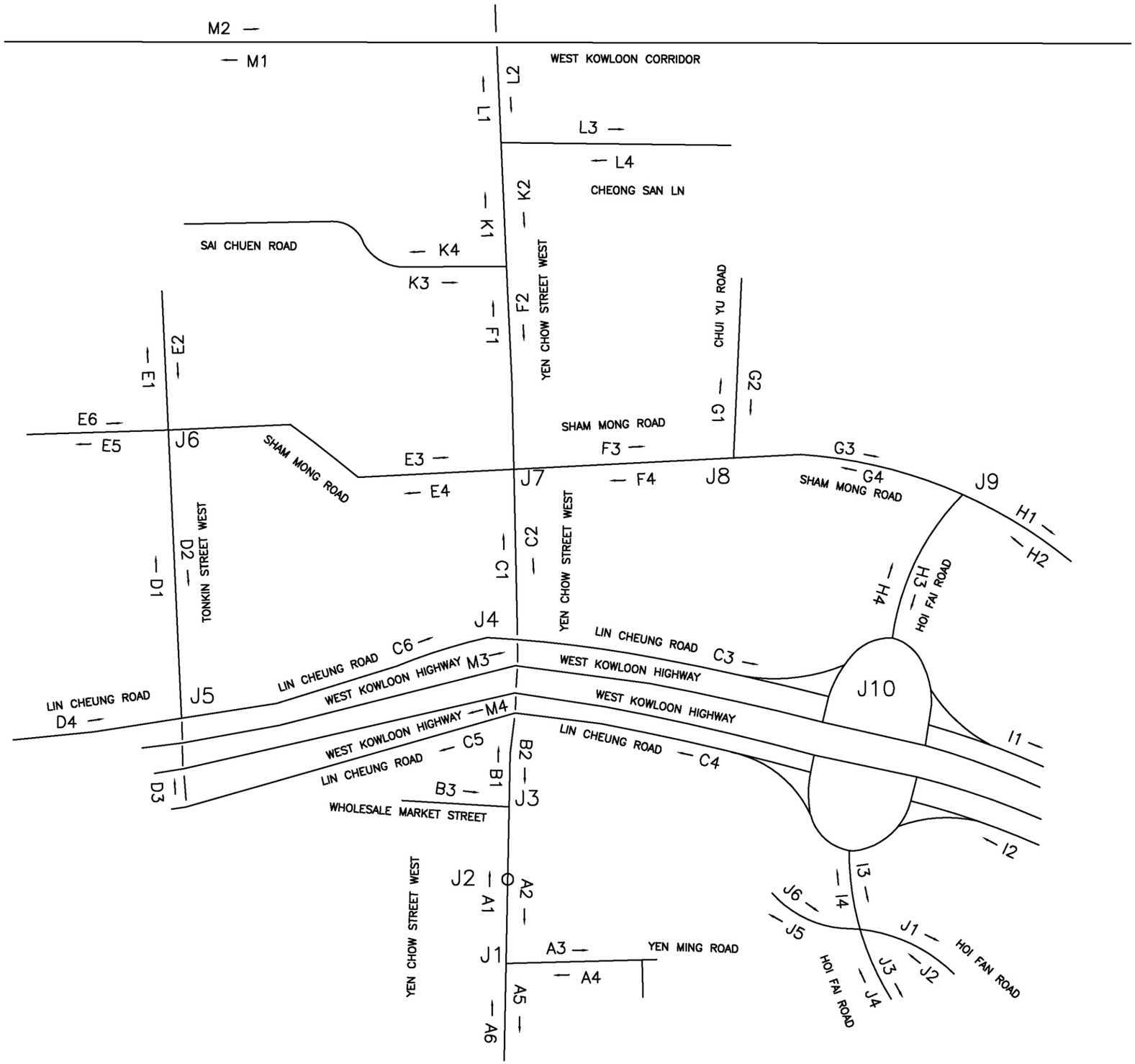

CONSULTANCY AGREEMENT NO. 9AX 034

REPROVISIONING OF FEHD SAI YEE STREET ENVIRONMENTAL HYGIENE OFFICES-CUM-VEHICLE DEPOT AT YEN MING ROAD, WEST KOWLOON RECLAMATION AREA
PROGRAMME NO. 182 GK

ROAD LINK CODE

Drawing No. 圖則編號	FIGURE 10		
Drawn 繪圖 WJ	Checked 複核 IL	Approved 批准 CCKL	
Scale 比例 N.T.S.	Date 日期 MAY 2013	Date 日期 MAY 2013	
	Status 現況 DRAFT		

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Summary of Traffic Forecast in the Years of 2017 and 2031 under Scenarios of "with Project" and "without Project"

Road	2017 FEHD AM Peak				Difference	2017 FEHD PM Peak				Difference	2032 FEHD AM Peak				Difference	2032 FEHD PM Peak				Difference
Link	Without Project		With Project		Veh / hr	Without Project		With Project		Veh / hr	Without Project		With Project		Veh / hr	Without Project		With Project		Veh / hr
A1	58	90%	95	94%	37	118	91%	134	92%	16	69	90%	106	93%	37	137	91%	153	92%	16
A2	128	91%	128	91%	0	39	90%	57	93%	18	148	91%	148	91%	0	45	89%	63	92%	18
A3	14	93%	14	93%	0	31	90%	49	94%	18	17	94%	17	94%	0	35	91%	53	94%	18
A4	13	92%	50	98%	37	26	88%	42	93%	16	15	93%	52	98%	37	29	90%	45	93%	16
A5	105	90%	105	90%	0	32	91%	32	91%	0	122	91%	122	91%	0	37	92%	37	92%	0
A6	19	95%	19	95%	0	41	90%	41	90%	0	22	95%	22	95%	0	49	90%	49	90%	0
B1	151	91%	188	93%	37	45	91%	61	93%	16	177	90%	214	92%	37	53	91%	69	93%	16
B2	128	91%	128	91%	0	39	90%	57	93%	18	148	91%	148	91%	0	45	89%	63	92%	18
B3	188	98%	188	98%	0	66	98%	66	98%	0	219	98%	219	98%	0	77	99%	77	99%	0
C1	199	44%	199	44%	0	372	42%	372	42%	0	230	43%	230	43%	0	432	42%	432	42%	0
C2	180	41%	180	41%	0	332	38%	332	38%	0	207	40%	207	40%	0	385	37%	385	37%	0
C3	1,034	31%	1,041	31%	7	1,963	30%	1,980	30%	17	1,200	31%	1,207	31%	7	2,279	30%	2,296	30%	17
C4	1,216	41%	1,216	41%	0	2,318	40%	2,336	40%	18	1,410	41%	1,410	41%	0	2,692	40%	2,710	40%	18
C5	1,205	40%	1,242	42%	37	2,280	39%	2,296	40%	16	1,397	40%	1,434	42%	37	2,649	39%	2,665	40%	16
C6	1,059	32%	1,066	32%	7	2,004	31%	2,021	31%	17	1,229	32%	1,236	32%	7	2,327	31%	2,344	31%	17
D1	358	43%	388	48%	30	656	41%	666	42%	10	414	43%	444	47%	30	762	41%	772	42%	10
D2	295	41%	295	41%	0	553	40%	564	41%	11	341	41%	341	41%	0	643	40%	654	41%	11
D3	223	47%	227	48%	4	406	44%	408	44%	2	257	46%	261	47%	4	473	44%	475	44%	2
D4	448	41%	448	41%	0	821	38%	821	38%	0	520	41%	520	41%	0	953	38%	953	38%	0
E1	388	45%	418	49%	30	715	43%	725	43%	10	449	45%	479	49%	30	830	43%	840	44%	10
E2	177	47%	177	47%	0	299	39%	310	41%	11	204	47%	204	47%	0	347	39%	358	41%	11
E3	120	48%	150	59%	30	194	50%	205	53%	11	136	49%	166	58%	30	226	50%	237	53%	11
E4	246	46%	246	46%	0	444	42%	444	42%	0	283	46%	283	46%	0	511	42%	511	42%	0
E5	136	48%	139	49%	3	256	45%	256	45%	0	157	48%	160	49%	3	295	46%	295	46%	0
E6	168	63%	168	63%	0	284	56%	284	56%	0	194	62%	194	62%	0	331	56%	331	56%	0
F1	179	47%	186	49%	7	330	45%	332	45%	2	206	47%	213	48%	7	381	44%	383	45%	2
F2	216	50%	216	50%	0	393	47%	396	48%	3	248	50%	248	50%	0	456	48%	459	48%	3
F3	111	45%	134	54%	23	166	43%	178	47%	12	125	46%	148	54%	23	192	44%	204	47%	12
F4	158	39%	158	39%	0	287	34%	287	34%	0	184	39%	184	39%	0	333	34%	333	34%	0
G1	152	38%	163	42%	11	266	29%	269	30%	3	176	37%	187	41%	11	308	29%	311	30%	3
G2	319	34%	319	34%	0	597	32%	602	32%	5	370	34%	370	34%	0	694	32%	699	33%	5
G3	349	35%	361	37%	12	610	32%	624	34%	14	404	36%	416	38%	12	708	32%	722	34%	14
G4	222	33%	222	33%	0	403	29%	403	29%	0	257	33%	257	33%	0	466	29%	466	29%	0
H1	349	33%	361	35%	12	651	35%	655	35%	4	401	33%	413	35%	12	754	35%	758	35%	4
H2	135	23%	135	23%	0	259	23%	264	25%	5	157	24%	157	24%	0	299	23%	304	24%	5
H3	293	27%	293	27%	0	564	27%	578	29%	14	342	28%	342	28%	0	657	27%	671	29%	14
H4	389	34%	389	34%	0	755	35%	755	35%	0	450	34%	450	34%	0	877	35%	877	35%	0
I1	332	28%	339	29%	7	612	25%	618	26%	6	387	28%	394	30%	7	712	25%	718	26%	6
I2	217	40%	217	40%	0	390	36%	396	37%	6	253	40%	253	40%	0	453	36%	459	37%	6
I3	173	38%	173	38%	0	334	37%	334	37%	0	204	39%	204	39%	0	386	37%	386	37%	0
I4	343	29%	343	29%	0	662	29%	676	30%	14	397	29%	397	29%	0	770	29%	784	30%	14
J1	116	23%	116	23%	0	227	24%	227	24%	0	136	24%	136	24%	0	264	24%	264	24%	0
J2	131	36%	131	36%	0	230	29%	230	29%	0	154	36%	154	36%	0	269	29%	269	29%	0
J3	90	62%	90	62%	0	177	61%	177	61%	0	106	62%	106	62%	0	206	61%	206	61%	0
J4	260	32%	260	32%	0	496	32%	510	34%	14	302	32%	302	32%	0	577	32%	591	33%	14
J5	67	24%	67	24%	0	134	25%	134	25%	0	76	22%	76	22%	0	157	25%	157	25%	0
J6	73	26%	73	26%	0	138	24%	138	24%	0	83	25%	83	25%	0	162	25%	162	25%	0
K1	188	45%	195	47%	7	369	45%	371	46%	2	218	44%	225	46%	7	428	45%	430	46%	2
K2	219	49%	219	49%	0	421	49%	424	49%	3	253	49%	253	49%	0	488	49%	491	49%	3
K3	34	50%	34	50%	0	62	42%	62	42%	0	40	50%	40	50%	0	72	42%	72	42%	0
K4	67	45%	67	45%	0	122	42%	122	42%	0	77	45%	77	45%	0	142	42%	142	42%	0
L1	199	47%	206	49%	7	382	46%	384	46%	2	231	47%	238	48%	7	446	46%	448	46%	2
L2	216	48%	216	48%	0	429	49%	432	49%	3	249	48%	249	48%	0	495	49%	498	50%	3
L3	25	32%	25	32%	0	49	33%	49	33%	0	30	33%	30	33%	0	57	33%	57	33%	0
L4	27	33%	27	33%	0	56	36%	56	36%	0	33	33%	33	33%	0	64	36%	64	36%	0
M1	950	46%	950	46%	0	1,837	46%	1,837	46%	0	1,103	46%	1,103	46%	0	2,134	46%	2,134	46%	0
M2	990	44%	990	44%	0	1,914	44%	1,914	44%	0	1,152	44%	1,152	44%	0	2,223	44%	2,223	44%	0
M3	1,188	36%	1,188	36%	0	2,785	33%	2,785	33%	0	1,378	36%	1,378	36%	0	3,232	33%	3,232	33%	0
M4	668	36%	668	36%	0	1,569	33%	1,569	33%	0	774	36%	774	36%	0	1,824	33%	1,824	33%	0
Total	17,701	-	18,046	-	-	33,010	-	33,348	-	-	20,521	-	20,866	-	-	38,328	-	38,666	-	-

Appendix 5-8
Detailed Calculation of Construction Noise Impact Assessment and Complete PME Inventory (Unmitigated Scenario)

FEHD Mobilization and Hoarding

Group 1 Site Mobilisation and Hoarding

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Loader, wheeled (Back-hoe) (All)	CNP 081	1	112	50%	0	109.0
2	Excavator, Tracked (All)	CNP 081	1	112	50%	0	109.0
3	Lorry, with crane, 5.5t<GVH<38t (All)	Other	1	105	50%	0	102.0
4	Generaotr (All)	CNP 103	1	95	100%	0	95.0
5	Breaker, mini-robot mounted (Act 1)	Other	1	115	50%	0	112.0
6	Air Compressor (Act 1)	CNP 001	1	100	50%	0	97.0
7	Concrete Lorry Mixer (Act 2)	CNP 044	0	109	100%	0	0.0
8	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
9							0.0
10							0.0
Total							115.3

Group 2 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 3 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 4 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Other: reference to "Sound power levels of other commonly used PME"

FEHD Foundation

Group 1 Piling (Driven H Pile)

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane	CNP 048	3	112	100%	0	116.8
2	Generator, portable (for welder)	Other	1	100	50%	0	97.0
3	Generator	CNP 103	1	95	100%	0	95.0
4	Driven H-Pile Rig (controlled under CNP)						0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							116.8

Group 2 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 3 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 4 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Other: reference to "Sound power levels of other commonly used PME"

FEHD Superstructure

Group 1 Pile Cap Cosntruction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Excavator, Tracked (Act 1)	CNP 081	2	112	50%	0	112.0
2	Lorry, with crane, 5.5t<GVH<38t (Act 1)	Other	2	105	50%	0	105.0
3	Mobile Crane (Act 1)	CNP 048	1	112	50%	0	109.0
4	Concrete lorry Mixer (Act 2)	CNP 044	0	109	50%	0	0.0
5	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
6	Bar Bender and cutter (electric) (All)	CNP 021	1	90	70%	0	88.5
7							0.0
8							0.0
9							0.0
10							0.0
Total							114.3

Group 2 Superstructure and concreting

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
2	Concrete Lorry Mixer	CNP 044	1	109	50%	0	106.0
3	Concrete Pump	CNP 047	1	109	50%	0	106.0
4	Poker Vibrator, hand-held, electric	Other	2	102	100%	0	105.0
5	Tower crane (electric)	CNP 049	1	95	100%	0	95.0
6	Bar Bender and cutter (electric)	CNP 021	3	90	50%	0	91.8
7							0.0
8							0.0
9							0.0
10							0.0
Total							111.7

Group 3 Finishing

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Drill, Hand-held (battery)	Other	3	89	50%	5	85.8
2	Jig-saw, hand-held, wood (electric)	Other	1	99	50%	5	91.0
3	Saw, wire	Other	2	101	50%	5	96.0
4	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							105.7

Group 4 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Other: reference to "Sound power levels of other commonly used PME"

MTRC Nam Cheong Station Property Development

Group 1 Site Mobilisation

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Loader, wheeled (backhoe) (All)	qpme	1	104	50%	0	101.0
2	Excavator, Tracked (All)	qpme	1	99	50%	0	96.0
3	Lorry, with crane, 5.5t<GVH<38t (All)	Other	1	105	50%	0	102.0
4	Generaotr (All)	qpme	1	89	100%	0	89.0
5	Breaker, Excavator mounted (Act 1)	CNP 027	1	122	50%	0	119.0
6	Air Compressor (Act 1)	CNP 001	1	100	50%	0	97.0
7	Concrete Lorry Mixer (Act 2)	CNP 044	0	109	100%	5	0.0
8	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
9							0.0
10							0.0
Total							119.2

Group 2 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane (Act 1&2)	qpme	2	101	50%	0	101.0
2	Lorry, 5.5t<GVH<38t (Act 1&2)	Other	2	105	50%	0	105.0
3	Generator (Act 1&2)	qpme	1	89	100%	0	89.0
4	Bored Pile Oscillator (Act 1)	CNP 165	2	115	50%	0	115.0
5	Concrete Lorry Mixer (Act 2)	CNP 044	0	109	50%	0	0.0
6	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
7	Air Compressor (Act 1)	CNP 001	1	100	50%	0	97.0
8							0.0
9							0.0
10							0.0
Total							115.6

Group 3 Superstructure and concreting

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
2	Concrete Lorry Mixer	CNP 044	1	109	50%	5	101.0
3	Concrete Pump	CNP 047	1	109	50%	5	101.0
4	Poker Vibrator, hand-held, electric	Other	2	102	100%	0	105.0
5	tower crane (electric)	CNP 049	1	95	100%	0	95.0
6	Bar Bender and cutter (electric)	CNP 021	3	90	50%	0	91.8
7							0.0
8							0.0
9							0.0
10							0.0
Total							109.7

Group 4 Finishing

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Drill, Hand-held (battery)	Other	3	89	50%	5	85.8
2	Jig-saw, hand-held, wood (electric)	Other	1	99	50%	5	91.0
3	Saw, wire	Other	2	101	50%	5	96.0
4	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							105.7

Other: reference to "Sound power levels of other commonly used PME"

NSR			Monthly Construction Noise Level at Each NSR dB(A) (OVERALL)																									
			2014	2015													2016											
Row ID	AP ID	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)	**69**	**69**	**69**	**72**	**72**	**72**	**72**	**72**	**72**	**72**	**66**	**66**	**66**	**66**	**66**	**66**	60	60	60	60	60	60	60	60	60
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)	**67**	**67**	**67**	**70**	**70**	**70**	**70**	**70**	**70**	**70**	63	63	63	63	63	63	58	58	58	58	58	58	58	58	58
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)	**66**	**66**	**66**	**69**	**69**	**69**	**69**	**69**	**69**	**69**	63	63	63	63	63	63	58	58	58	58	58	58	58	58	58
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	65	65	65	**68**	**68**	**68**	**68**	**68**	**68**	**68**	61	61	61	61	61	61	56	56	56	56	56	56	56	56	56
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	63	63	63	**67**	**67**	**67**	**67**	**67**	**67**	**67**	60	60	60	60	60	60	55	55	55	55	55	55	55	55	55
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	64	64	64	**67**	**67**	**67**	**67**	**67**	**67**	**67**	60	60	60	60	60	60	56	56	56	56	56	56	56	56	56
7	N301	Hampton Place	61	61	61	64	64	64	64	64	64	64	58	58	58	58	58	58	53	53	53	53	53	53	53	53	53
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	63	63	63	66	66	66	66	65	65	65	60	60	60	60	60	60	58	58	58	58	58	58	57	57	57
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	63	63	63	66	66	66	66	66	66	66	60	60	60	60	60	60	58	58	58	58	58	58	58	58	58
10	N601	Nam Cheong Estate Block 4 Cheong Shun House	62	62	62	65	65	65	65	65	65	65	60	60	60	60	60	60	58	58	58	58	58	58	58	58	58
11	N701	Fu Cheong Estate Fu Yun House	**66**	**66**	**66**	**67**	**67**	**67**	**67**	**67**	**67**	**67**	65	65	65	65	65	65	64	64	64	64	64	64	64	64	64
12	N811	Planned Residential Development on Nam Cheong Station	68	68	68	71	71	71	71	71	71	71	64	64	64	64	64	64	58	58	58	58	58	58	58	58	58
13	N812	Planned Residential Development on Nam Cheong Station	68	68	68	71	71	71	71	71	71	71	64	64	64	64	64	64	58	58	58	58	58	58	58	58	58
14	N813	Planned Residential Development on Nam Cheong Station	64	64	64	68	68	68	68	68	68	68	61	61	61	61	61	61	55	55	55	55	55	55	55	55	55
15	N814	Planned Residential Development on Nam Cheong Station	64	64	64	68	68	68	68	68	68	68	61	61	61	61	61	61	55	55	55	55	55	55	55	55	55
16	N815	Planned Residential Development on Nam Cheong Station	64	64	64	68	68	68	68	68	68	68	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54

		Max. Construction Noise Level at each NSR dB(A)					
	NSR ID	2014	2015	2016	Limit	Remarks
		Dec				
1	N101	**69**	**72**	**66**	65	(2)
2	N102	**67**	**70**	63	65	(2)
3	N103	**66**	**69**	63	65	(2)
4	N201	65	**68**	61	65	(2)
5	N202	63	**67**	60	65	(2)
6	N203	64	**67**	60	65	(2)
7	N301	61	64	58	75	
8	N401	63	66	60	75	
9	N501	63	66	60	75	
10	N601	62	65	60	75	
11	N701	**66**	**67**	65	65	(2)
12	N811	68	71	64	75	(3)
13	N812	68	71	64	75	(3)
14	N813	64	68	61	75	(3)
15	N814	64	68	61	75	(3)
16	N815	64	68	60	75	(3)

Note (1) Not Used

(2) Construction Noise assessment criteria for school is 70dB(A) at normal school days and is reduced to 65dB(A) during examination period. The more conservative 65dB(A) criteria is applied in this construction noise impact assessment.

(3) Predicted Noise level at N811 to N815 (Nam Cheong Station Development) include noise contribution from proposed FEHD project, but NOT include noise contribution from Nam Cheong Station Development itself

NSR			Monthly Construction Noise Level at Each NSR dB(A) (the Project)																									
			2014	2015												2016												
Row ID	AP ID	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)	**69**	**69**	**69**	**72**	**72**	**72**	**72**	**72**	**72**	**72**	**65**	**65**	**65**	**65**	**65**	**65**	59	59	59	59	59	59	59	59	59
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)	**67**	**67**	**67**	**70**	**70**	**70**	**70**	**70**	**70**	**70**	63	63	63	63	63	63	57	57	57	57	57	57	57	57	57
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)	**66**	**66**	**66**	**69**	**69**	**69**	**69**	**69**	**69**	**69**	62	62	62	62	62	62	56	56	56	56	56	56	56	56	56
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	65	65	65	**68**	**68**	**68**	**68**	**68**	**68**	**68**	61	61	61	61	61	61	55	55	55	55	55	55	55	55	55
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	63	63	63	**67**	**67**	**67**	**67**	**67**	**67**	**67**	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	63	63	63	**67**	**67**	**67**	**67**	**67**	**67**	**67**	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54
7	N301	Hampton Place	60	60	60	64	64	64	64	64	64	64	57	57	57	57	57	57	51	51	51	51	51	51	51	51	51
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	61	61	61	65	65	65	65	65	65	65	58	58	58	58	58	58	52	52	52	52	52	52	52	52	52
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	62	62	62	65	65	65	65	65	65	65	58	58	58	58	58	58	52	52	52	52	52	52	52	52	52
10	N601	Nam Cheong Estate Block 4 Cheong Shun House	60	60	60	64	64	64	64	64	64	64	57	57	57	57	57	57	51	51	51	51	51	51	51	51	51
11	N701	Fu Cheong Estate Fu Yun House	61	61	61	64	64	64	64	64	64	64	57	57	57	57	57	57	51	51	51	51	51	51	51	51	51
12	N811	Planned Residential Development on Nam Cheong Station	68	68	68	71	71	71	71	71	71	71	64	64	64	64	64	64	58	58	58	58	58	58	58	58	58
13	N812	Planned Residential Development on Nam Cheong Station	68	68	68	71	71	71	71	71	71	71	64	64	64	64	64	64	58	58	58	58	58	58	58	58	58
14	N813	Planned Residential Development on Nam Cheong Station	64	64	64	68	68	68	68	68	68	68	61	61	61	61	61	61	55	55	55	55	55	55	55	55	55
15	N814	Planned Residential Development on Nam Cheong Station	64	64	64	68	68	68	68	68	68	68	61	61	61	61	61	61	55	55	55	55	55	55	55	55	55
16	N815	Planned Residential Development on Nam Cheong Station	64	64	64	68	68	68	68	68	68	68	60	60	60	60	60	60	54	54	54	54	54	54	54	54	54

	Max. Construction Noise Level at each NSR dB(A)					
	NSR ID	2014	2015	2016	Limit	Remarks
		Dec				
1	N101	**69**	**72**	65	65	(2)
2	N102	**67**	**70**	63	65	(2)
3	N103	**66**	**69**	62	65	(2)
4	N201	65	**68**	61	65	(2)
5	N202	63	**67**	60	65	(2)
6	N203	63	**67**	60	65	(2)
7	N301	60	64	57	75	
8	N401	61	65	58	75	
9	N501	62	65	58	75	
10	N601	60	64	57	75	
11	N701	61	64	57	65	(2)
12	N811	68	71	64	75	(3)
13	N812	68	71	64	75	(3)
14	N813	64	68	61	75	(3)
15	N814	64	68	61	75	(3)
16	N815	64	68	60	75	(3)

Note (1) Not Used

(2) Construction Noise assessment criteria for school is 70dB(A) at normal school days and is reduced to 65dB(A) during examination period. The more conservative 65dB(A) criteria is applied in this construction noise impact assessment.

(3) Predicted Noise level at N811 to N815 (Nam Cheong Station Development) include noise contribution from proposed FEHD project, but NOT include noise contribution from Nam Cheong Station Development itself

| Row | 1 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 2 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 3 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 4 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 5 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 6 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 7 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 8 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 9 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 10 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 11 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 12 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 13 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 14 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 15 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 16 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

Appendix 5-9
Construction Noise Levels due to XRL Project according to AEIAR-143/2009

Concurrent construction noise impact to be considered due to XRL project to nearby NSRs – Summary

NSR			CNLadd (dB(A) (Already with facde effect)																									
XRL_Site Q			2014	2015													2016											
Row ID	AP ID	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
XRL Site Q (Bored Piles, Pile Cap)																												
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)																										
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)																										
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)																										
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
7	N301	Hampton Place																										
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	0																									
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	0																									
10	N601	Nam Cheong Estate Block 4 Cheong Shun House																										
11	N701	Fu Cheong Estate Fu Yun House	52																									
12	N801	Planned Residential Development on Nam Cheong Station																										
13	N802	Planned Residential Development on Nam Cheong Station																										
14	N803	Planned Residential Development on Nam Cheong Station																										
15	N804	Planned Residential Development on Nam Cheong Station																										
16	N805	Planned Residential Development on Nam Cheong Station																										
17																												
18																												
19																												
20																												
XRL Site S (Site Office)																												
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)																										
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)																										
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)																										
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
7	N301	Hampton Place																										
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	51	51	51	51	51	51	51																			
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	0	0	0	0	0	0	0																			
10	N601	Nam Cheong Estate Block 4 Cheong Shun House																										
11	N701	Fu Cheong Estate Fu Yun House	0	0	0	0	0	0	0																			
12	N801	Planned Residential Development on Nam Cheong Station																										
13	N802	Planned Residential Development on Nam Cheong Station																										
14	N803	Planned Residential Development on Nam Cheong Station																										
15	N804	Planned Residential Development on Nam Cheong Station																										
16	N805	Planned Residential Development on Nam Cheong Station																										
17																												
18																												
19																												
20																												
XRL Site T (Site Office)																												
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)																										
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)																										
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)																										
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)																										
7	N301	Hampton Place																										
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48			
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
10	N601	Nam Cheong Estate Block 4 Cheong Shun House																										
11	N701	Fu Cheong Estate Fu Yun House	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
12	N801	Planned Residential Development on Nam Cheong Station																										
13	N802	Planned Residential Development on Nam Cheong Station																										
14	N803	Planned Residential Development on Nam Cheong Station																										
15	N804	Planned Residential Development on Nam Cheong Station																										
16	N805	Planned Residential Development on Nam Cheong Station																										
17																												
18																												
19																												
20																												
XRL Overall																												
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	N301	Hampton Place	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	53	53	53	53	53	53	53	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	0	0	0
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	N601	Nam Cheong Estate Block 4 Cheong Shun House	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	N701	Fu Cheong Estate Fu Yun House	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	N801	Planned Residential Development on Nam Cheong Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	N802	Planned Residential Development on Nam Cheong Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	N803	Planned Residential Development on Nam Cheong Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	N804	Planned Residential Development on Nam Cheong Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	N805	Planned Residential Development on Nam Cheong Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17																												
18																												
19																												
20																												

XRL – updated construction schedule

Wong, Tak

From: exrl6.rdo@hyd.gov.hk
Sent: Tuesday, April 02, 2013 2:07 PM
To: usw-env.sysdepot@scottwilson.com.hk
Cc: '4710'; dessp.u@hyd.gov.hk; Kwok Kakin; lfylo@fehd.gov.hk; lukty@archsd.gov.hk; satshs@archsd.gov.hk; Thomas Wong; USW-ENV Sai Yee Street vehicle depot; vypleung@fehd.gov.hk; Wong Takkwong
Subject: Re: 9AX 034 (182GK) SYS Depot - Request for Further Information of XRL Project

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Thomas,

Please find the below our inputs for your reference:

Site Q
- reinstatement of Sham Mong Road being carried out. Scheduled to be completed in early 2014.
- reprovisioning of Bored-piles and pile caps near Nam Cheong Station is scheduled to be carried out from mid 2013 to end 2014.
- Nam Cheong Station Development is carrying out piling works. Details may have to consult the developer (SHK).

Site R
- reinstatement of Sham Mong road being carried out. Scheduled to be completed in early 2014.

Site S
- being used as site office for footbridge reinstatement works. Footbridge reinstatement works is scheduled to be completed in mid 2013. Site office expected to be maintained till early 2015

Site T
- being used as site office for E&M contracts. Expected to be maintained till mid 2016.

Hope the above is of help. Thanks.

Regards,

Tony W K LIN
E/XRL(6)
Railway Development Office
Highways Department
Tel: 2762 4087

From: <usw-env.sysdepot@scottwilson.com.hk>
To: <exrl6.rdo@hyd.gov.hk>
Cc: "'4710'" <4710@p-t-group.com>, <lfylo@fehd.gov.hk>, <vypleung@fehd.gov.hk>, <satshs@archsd.gov.hk>, <lukty@archsd.gov.hk>, <dessp.u@hyd.gov.hk>, "USW-ENV Sai Yee Street vehicle depot" <usw-env.sysdepot@scottwilson.com.hk>, "Wong Takkwong" <wong.takkwong@scottwilson.com.hk>, "Kwok Kakin" <kwok.kakin@scottwilson.com.hk>
Date: 2013/03/25 下午 06:13

Predicted construction noise level of corresponding NSRs, NSRs locations and Works Areas in XRL Project, as per approved EIA report AEIAR 143/2009 "*Hong Kong Section of Guangzhou - Shenzhen - Hong Kong Express Rail Link*"

834000 E
822000 N
821000 N
833000 E
CHING CHEUNG ROAD
WEST KOWLOON CORRIDOR
NAM CHEONG ESTATE
NCV - NAM CHEONG VENTILATION BUILDING
WEST KOWLOON HIGHWAY
LCW - LAI CHI KOK WORKS AREA
TSING SHA HIGHWAY
MLW - MEI LAI ROAD WORKS AREA
NCB - NAM CHEONG BARGING POINT
MEI FU SUN CHUEN
MATCH LINE
FOR CONTINUATION SEE DWG. NO. NOL/ERL/300/C/XRL/ENS/M50/008
L
M
N
O
P
R
S
T
Y

LEGEND:
- WORKS AREA
- PROPOSED SELECTED ALIGNMENT
- UNDERGROUND FACILITIES
- PERMANENT ABOVEGROUND FACILITIES
- SCHEME BOUNDARY

0 40 80 120 160 200
METRES
1 : 8000

PLOT DRV: R:\ustnset\MTR\PLOTDRIVER\WINDOWS\A3 COLOUR.plt
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FILENAME: p:\projects\60046742\DRAWING\000\KENSR\NOL_ERL_300_C_XRL_ENS_M50_007C.dgn

REV	DESCRIPTION	BY	DATE	APPROVED

DRAWN	DXL
DESIGNED	TWF
CHECKED	KCC
APPROVED	PL
DATE	20/AUG./2008

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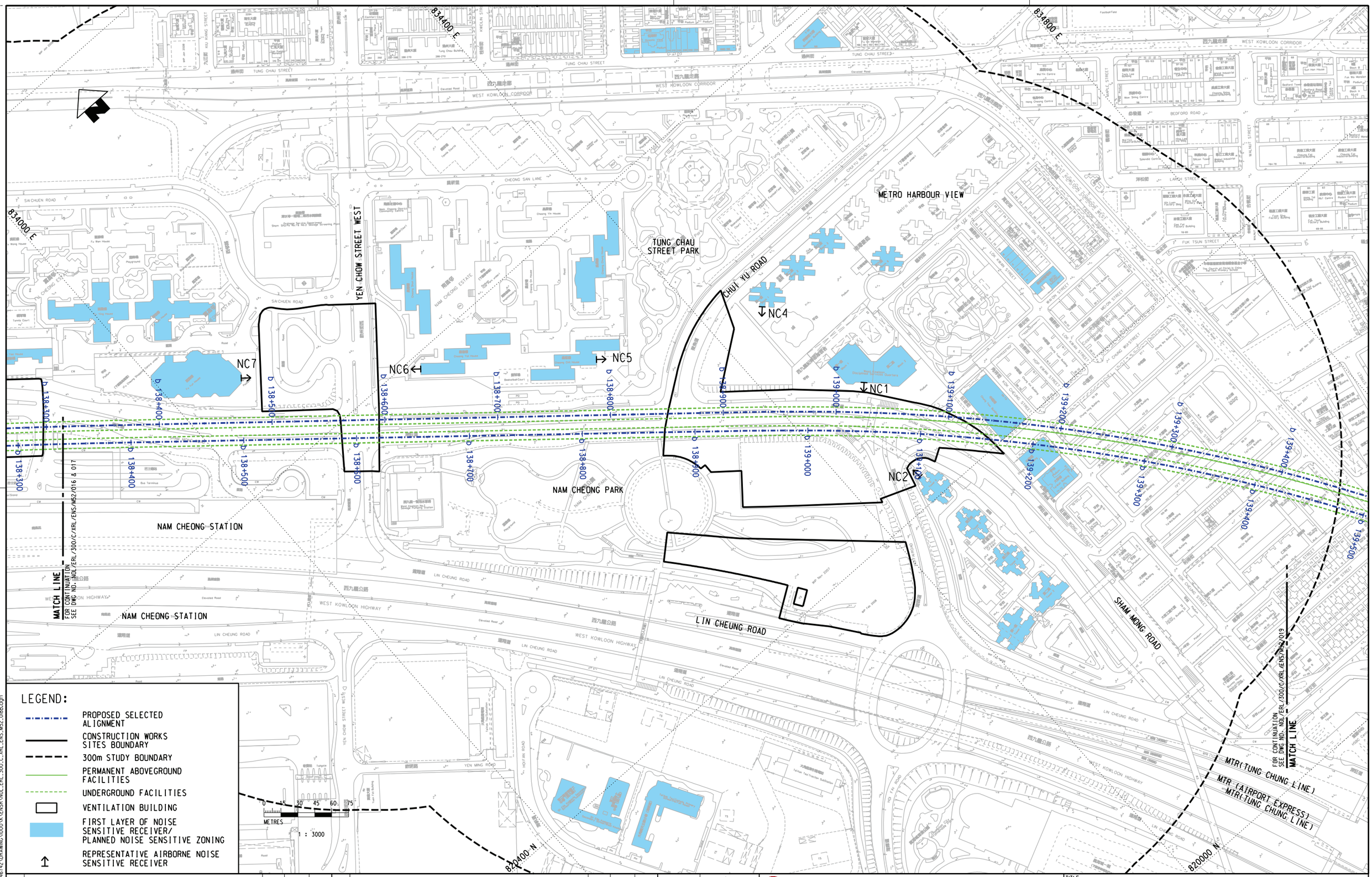
MTR
EXPRESS RAIL LINK
ORIGINATOR
ENSR | AECOM
CADD REF.
NOL_ERL_300_C_XRL_ENS_M50_007C.dgn

TITLE
NOL / ERL-300
ENVIRONMENTAL IMPACT ASSESSMENT
GROUND LEVEL WORKS AREA

SCALE 1 : 8000 (A3)
FIGURE NO. NOL/ERL/300/C/XRL/ENS/M50/007
REV. C



LEGEND:

- PROPOSED SELECTED ALIGNMENT
- CONSTRUCTION WORKS SITES BOUNDARY
- 300m STUDY BOUNDARY
- PERMANENT ABOVEGROUND FACILITIES
- UNDERGROUND FACILITIES
- VENTILATION BUILDING
- FIRST LAYER OF NOISE SENSITIVE RECEIVER/ PLANNED NOISE SENSITIVE ZONING
- REPRESENTATIVE AIRBORNE NOISE SENSITIVE RECEIVER

REV	DESCRIPTION	BY	DATE	APPROVED
REV	DESCRIPTION	BY	DATE	APPROVED

DRAWN	GXH
DESIGNED	TWF
CHECKED	KCC
APPROVED	PL
DATE	19/AUG./2008

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MTR

EXPRESS RAIL LINK

ORIGINATOR

ENSR | AECOM

CADD REF.

NOL_ERL_300_C_XRL_ENS_M52_018B.dgn

TITLE

NOL / ERL-300
ENVIRONMENTAL IMPACT ASSESSMENT
LOCATIONS OF REPRESENTATIVE AIRBORNE NOISE SENSITIVE RECEIVERS

SCALE	FIGURE NO.	REV.
1 : 3000 (A3)	NOL/ERL/300/C/XRL/ENS/M52/018	B

PLOT DRV: R:\ustrset\MRVPLOTDRVER\WINDOWS\A3 COLOUR.pltPRINTED BY: WUW 2009-5-9 13:04:47
MODELNAME: Default
FILENAME: P:\projects\600456\DRAWING\000\XENSR\NOL_ERL_300_C_XRL_ENS_M52_018B.dgn

Appendix 5-8 Construction Noise Calculation – Mitigated Scenario

NSR: NC5 - Cheong Chit House, Nam Cheong Estate

Act No.	Construction Element	SWL	Dist[1]	SPL[2]	2009	2010												2011												2012												2013												2014											
					Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
Works Area L: Mei Lei Road Consturction																																																																				
87	Possession of Site	100	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	Shaft Piling	99	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	Excavate Shaft	93	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	Drill & Blast Tunnelling	101	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	TBM Removal	99	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	TBM Removal	99	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area M: Lai Chi Kok Works Area																																																																			
93	Excavate Shaft	105	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	Possession of work site	113	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	Storage at work site	101	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	Possession of works area	113	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	Storage at works area	101	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	Remove foundations	108	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area N, O: Lai Chi Kok Works Area																																																																		
99	Remove Superstructures	100	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	Remove Foundations	103	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	Remove Superstructures	100	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	Remove Foundations	105	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	Remove Superstructures	100	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	Remove Foundations	103	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	Reprovisioning of Bridge	106	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area P: Nam Cheong Ventilation																																																																		
106	Possession of site	107	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	Diaphragm Wall	109	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	Bulk Excavation/Fill - Soft	109	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	Concrete Works	106	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	TBM Erection	105	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	TBM Driving	111	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	Ventilation building construction	104	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area Q: Nam Cheong Works Area																																																																		
113	Possession of site	107	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	Demolition of Existing Pile Cap	114	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	Extention of H-piles	111	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116	Removal of Bored Piles	107	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117	Piling Works	108	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	Construction of Pile Cap	106	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area R: Nam Cheong Works Area																																																																	
119	Site storage	101	241	49	0	0	0	0	0	0	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	Diversion of utils	108	201	56	0	0	0	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area S: Nam Cheong Works Area																																																																	
121	Diversion of utils	108	87	65	0	0	0	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122	Site storage	101	178	51	0	0	0	0	0	0	0	0	0	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	Remove Superstructures	100	245	47	0	0	0	47	47	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	Remove Foundations	103	245	50	0	0	0	0	0	0	0	50	50	50	50	50	50	50	50	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	Reprovisioning of Bridge	106	245	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area T: Nam Cheong Works Area																																																																	
126	Possession of site	112	259	59	0	0	0	0	0	0	59	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	Site storage	101	259	48	0	0	0	0	0	0	0	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Works Area Y: Nam Cheong Works Area																																																																	
128	Conveyor Belt	89	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	Nan Cheong Barge point	114	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total SPL, dB(A)				-	-	-	66	66	66	67	67	66	66	66	66	66	66	66	66	66	66	66	66	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	54	54	54	54	54	53	51	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Exceedance				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Remarks:

1. Noise sources at more than 300m from the sensitive receiver are not considered in cumulative noise assessment due to large distance attenuation effect.
2. For the calculation of sound pressure levels (SPL), the PMEs adopted for the different construction activities are assumed to be placed at the notional source position of the corresponding construction site according to the 'Technical Memorandum on Noise from Construction Work other than Percussive Piling' by EPD.

Noise Exceedance

The use of PME would not be visible when viewed from the assessment facade of NSR. The NSR is considered to be totally screened. According to GW-TM, a noise reduction of 10 dB(A) would be achieved.

Appendix 5-8 Construction Noise Calculation – Mitigated Scenario

NSR: NC6 - Cheong Yat House, Nam Cheong Estate

| Act No. | Construction Element | SWL | Dist[1] | SPL[2] | 2009 | 2010 | | | | | | | | | | | | 2011 | | | | | | | | | | | |

Appendix 5-8 Construction Noise Calculation – Mitigated Scenario

NSR: NC7 - Fu Yun House, Fu Cheong Estate

| Act No. | Construction Element | SWL | Dist[1] | SPL[2] | 2009 | 2010 | | | | | | | | | | | | 2011 | | | | | | | | | | | |

Appendix 5-8 Construction Noise Calculation – Mitigated Scenario

NSR: NC8 - Fu Hoi House, Fu Cheong Estate

| Act No. | Construction Element | SWL | Dist[1] | SPL[2] | 2009 | 2010 | | | | | | | | | | | | 2011 | | | | | | | | | | | |

Appendix 5-10
Detailed Calculation of Fixed Plant Noise Impact Assessment

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Sir Ellis Kadorie Secondary School (West Kowloon)
Assessment Point **N101**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	195	100%	3	53.8	3	0	0	0	42.2
2	Exhaust Fan		90	1		100%	0	53.8	3	0	0	0	39.2
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	193	100%	3	53.7	3	-10	0	0	32.3
4	Exhaust Fan		90	1		100%	0	53.7	3	-10	0	0	29.3
5	Transformers	SW louvre of transformer room on G/F	90	2	168	100%	3	52.5	3	-10	0	0	33.5
6	Exhaust Fan		90	1		100%	0	52.5	3	-10	0	0	30.5
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	195	100%	3	53.8	3	-10	0	0	32.2
8	Exhaust Fan		90	1		100%	0	53.8	3	-10	0	0	29.2
9	AHU	SW louvre of AHU room on UG/F	90	1	168	100%	0	52.5	3	-5	0	0	35.5
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	151	100%	7	51.6	3	-10	0	0	38.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.6	3	-10	0	0	31.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	130	100%	5	50.3	3	-10	0	0	37.5
13	Exhaust Fan	room on UG/F	90	1		100%	0	50.3	3	-10	0	0	32.7
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	117	100%	10	49.3	3	-10	0	0	43.2
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	99	100%	0	47.9	3	0	0	0	45.1
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	182	100%	5	53.2	3	-10	0	0	34.6
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	130	100%	3	50.3	3	-10	0	0	35.7
18	Generator	NE louvre of generator room on 3/F	90	1	137	100%	0	50.7	3	-10	0	0	32.3
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	182	100%	3	53.2	3	-10	0	0	32.8
20	PAU	SW louvre of PAU room on 4/F	90	2	171	100%	3	52.6	3	-10	0	0	33.4
21	Generator	NE louvre of generator room on LR/F	90	1	158	100%	0	52.0	3	0	0	0	41.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	153	100%	3	51.7	3	0	0	0	44.3
23	Exhaust Fan		90	1		100%	0	51.7	3	0	0	0	41.3
												Predicted Noise Level due to building service equipment / dB(A)	52.3

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	118	7%	0	49.4	3	-10	0	-12	47.8
2	Grinding	Transport Workshop Section on G/F	108	1	118	7%	0	49.4	3	-10	0	-12	39.8
3	Hammering[7]	Transport Workshop Section on G/F	113	1	118	3%	0	49.4	3	-10	0	-15	41.8
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	118	17%	0	49.4	3	-10	0	-8	34.4
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	118	100%	0	49.4	3	-10	0	0	32.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	118	67%	0	49.4	3	-10	3	-2	22.8
7	Parts Welding	Transport Workshop Section on G/F	88	1	118	67%	0	49.4	3	-10	0	-2	29.8
8	Screw Driver	Transport Workshop Section on G/F	100	1	118	17%	0	49.4	3	-10	0	-8	35.8
9	Tyre Changer	Transport Workshop Section on G/F	98	1	118	67%	0	49.4	3	-10	0	-2	39.4
												Predicted Noise Level due to depot activities / dB(A)	50.1

Predicted Total Fixed Plant Noise Level / dB(A) 54.4

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formu la was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Sir Ellis Kadorie Secondary School (West Kowloon)
Assessment Point **N102**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	233	100%	3	55.3	3	0	0	0	40.7
2	Exhaust Fan		90	1		100%	0	55.3	3	0	0	0	37.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	230	100%	3	55.2	3	-10	0	0	30.8
4	Exhaust Fan		90	1		100%	0	55.2	3	-10	0	0	27.8
5	Transformers	SW louvre of transformer room on G/F	90	2	199	100%	3	54.0	3	-10	0	0	32.0
6	Exhaust Fan		90	1		100%	0	54.0	3	-10	0	0	29.0
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	233	100%	3	55.3	3	-10	0	0	30.7
8	Exhaust Fan		90	1		100%	0	55.3	3	-10	0	0	27.7
9	AHU	SW louvre of AHU room on UG/F	90	1	199	100%	0	54.0	3	-5	0	0	34.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	193	100%	7	53.7	3	-10	0	0	36.3
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	53.7	3	-10	0	0	29.3
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	174	100%	5	52.8	3	-10	0	0	35.0
13	Exhaust Fan	room on UG/F	90	1		100%	0	52.8	3	-10	0	0	30.2
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	160	100%	10	52.1	3	-10	0	0	40.5
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	134	100%	0	50.5	3	0	0	0	42.5
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	223	100%	5	54.9	3	-10	0	0	32.8
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	174	100%	3	52.8	3	-10	0	0	33.2
18	Generator	NE louvre of generator room on 3/F	90	1	180	100%	0	53.1	3	-10	0	0	29.9
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	218	100%	3	54.8	3	-10	0	0	31.2
20	PAU	SW louvre of PAU room on 4/F	90	2	208	100%	3	54.4	3	-10	0	0	31.6
21	Generator	NE louvre of generator room on LR/F	90	1	194	100%	0	53.8	3	0	0	0	39.2
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	186	100%	3	53.4	3	0	0	0	42.6
23	Exhaust Fan		90	1		100%	0	53.4	3	0	0	0	39.6
												Predicted Noise Level due to building service equipment / dB(A)	50.3

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	161	7%	0	52.1	3	-10	0	-12	45.1
2	Grinding	Transport Workshop Section on G/F	108	1	161	7%	0	52.1	3	-10	0	-12	37.1
3	Hammering[7]	Transport Workshop Section on G/F	113	1	161	3%	0	52.1	3	-10	0	-15	39.1
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	161	17%	0	52.1	3	-10	0	-8	31.7
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	161	100%	0	52.1	3	-10	0	0	29.3
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	161	67%	0	52.1	3	-10	3	-2	20.1
7	Parts Welding	Transport Workshop Section on G/F	88	1	161	67%	0	52.1	3	-10	0	-2	27.1
8	Screw Driver	Transport Workshop Section on G/F	100	1	161	17%	0	52.1	3	-10	0	-8	33.1
9	Tyre Changer	Transport Workshop Section on G/F	98	1	161	67%	0	52.1	3	-10	0	-2	36.7
												Predicted Noise Level due to depot activities / dB(A)	47.4

Predicted Total Fixed Plant Noise Level / dB(A) 52.1

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Sir Ellis Kadorie Secondary School (West Kowloon)
Assessment Point **N103**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	248	100%	3	55.9	3	-10	0	0	30.1
2	Exhaust Fan		90	1		100%	0	55.9	3	-10	0	0	27.1
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	247	100%	3	55.8	3	-10	0	0	30.2
4	Exhaust Fan		90	1		100%	0	55.8	3	-10	0	0	27.2
5	Transformers	SW louvre of transformer room on G/F	90	2	225	100%	3	55.0	3	-10	0	0	31.0
6	Exhaust Fan		90	1		100%	0	55.0	3	-10	0	0	28.0
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	248	100%	3	55.9	3	-10	0	0	30.1
8	Exhaust Fan		90	1		100%	0	55.9	3	-10	0	0	27.1
9	AHU	SW louvre of AHU room on UG/F	90	1	225	100%	0	55.0	3	-10	0	0	28.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	197	100%	7	53.9	3	-10	0	0	36.1
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	53.9	3	-10	0	0	29.1
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	172	100%	5	52.7	3	-10	0	0	35.0
13	Exhaust Fan	room on UG/F	90	1		100%	0	52.7	3	-10	0	0	30.3
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	159	100%	10	52.0	3	-10	0	0	40.5
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	155	100%	0	51.8	3	-10	0	0	31.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	232	100%	5	55.3	3	-10	0	0	32.5
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	172	100%	3	52.7	3	-10	0	0	33.3
18	Generator	NE louvre of generator room on 3/F	90	1	180	100%	0	53.1	3	-10	0	0	29.9
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	235	100%	3	55.4	3	-10	0	0	30.6
20	PAU	SW louvre of PAU room on 4/F	90	2	224	100%	3	55.0	3	-10	0	0	31.0
21	Generator	NE louvre of generator room on LR/F	90	1	213	100%	0	54.6	3	0	0	0	38.4
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	209	100%	3	54.4	3	0	0	0	41.6
23	Exhaust Fan		90	1		100%	0	54.4	3	0	0	0	38.6
												Predicted Noise Level due to building service equipment / dB(A)	48.1

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	159	7%	0	52.0	3	-10	0	-12	45.2
2	Grinding	Transport Workshop Section on G/F	108	1	159	7%	0	52.0	3	-10	0	-12	37.2
3	Hammering[7]	Transport Workshop Section on G/F	113	1	159	3%	0	52.0	3	-10	0	-15	39.2
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	159	17%	0	52.0	3	-10	0	-8	31.8
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	159	100%	0	52.0	3	-10	0	0	29.4
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	159	67%	0	52.0	3	-10	3	-2	20.2
7	Parts Welding	Transport Workshop Section on G/F	88	1	159	67%	0	52.0	3	-10	0	-2	27.2
8	Screw Driver	Transport Workshop Section on G/F	100	1	159	17%	0	52.0	3	-10	0	-8	33.2
9	Tyre Changer	Transport Workshop Section on G/F	98	1	159	67%	0	52.0	3	-10	0	-2	36.8
												Predicted Noise Level due to depot activities / dB(A)	47.5

Predicted Total Fixed Plant Noise Level / dB(A) 50.8

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formu la was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)
Assessment Point **N201**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	272	100%	3	56.7	3	-10	0	0	29.3
2	Exhaust Fan		90	1		100%	0	56.7	3	-10	0	0	26.3
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	270	100%	3	56.6	3	-10	0	0	29.4
4	Exhaust Fan		90	1		100%	0	56.6	3	-10	0	0	26.4
5	Transformers	SW louvre of transformer room on G/F	90	2	244	100%	3	55.7	3	-10	0	0	30.3
6	Exhaust Fan		90	1		100%	0	55.7	3	-10	0	0	27.3
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	272	100%	3	56.7	3	-10	0	0	29.3
8	Exhaust Fan		90	1		100%	0	56.7	3	-10	0	0	26.3
9	AHU	SW louvre of AHU room on UG/F	90	1	244	100%	0	55.7	3	-10	0	0	27.3
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	226	100%	7	55.1	3	-10	0	0	34.9
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	55.1	3	-10	0	0	27.9
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	202	100%	5	54.1	3	-10	0	0	33.6
13	Exhaust Fan	room on UG/F	90	1		100%	0	54.1	3	-10	0	0	28.9
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	189	100%	10	53.5	3	-10	0	0	39.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	175	100%	0	52.9	3	-10	0	0	30.1
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	259	100%	5	56.3	3	-10	0	0	31.5
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	202	100%	3	54.1	3	-10	0	0	31.9
18	Generator	NE louvre of generator room on 3/F	90	1	210	100%	0	54.4	3	-10	0	0	28.6
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	259	100%	3	56.3	3	-10	0	0	29.8
20	PAU	SW louvre of PAU room on 4/F	90	2	248	100%	3	55.9	3	-10	0	0	30.1
21	Generator	NE louvre of generator room on LR/F	90	1	235	100%	0	55.4	3	-10	0	0	27.6
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	230	100%	3	55.2	3	-10	0	0	30.8
23	Exhaust Fan		90	1		100%	0	55.2	3	-10	0	0	27.8
												Predicted Noise Level due to building service equipment / dB(A)	44.8

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	192	7%	0	53.6	3	-10	0	-12	43.6
2	Grinding	Transport Workshop Section on G/F	108	1	192	7%	0	53.6	3	-10	0	-12	35.6
3	Hammering[7]	Transport Workshop Section on G/F	113	1	192	3%	0	53.6	3	-10	0	-15	37.6
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	192	17%	0	53.6	3	-10	0	-8	30.2
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	192	100%	0	53.6	3	-10	0	0	27.8
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	192	67%	0	53.6	3	-10	3	-2	18.6
7	Parts Welding	Transport Workshop Section on G/F	88	1	192	67%	0	53.6	3	-10	0	-2	25.6
8	Screw Driver	Transport Workshop Section on G/F	100	1	192	17%	0	53.6	3	-10	0	-8	31.6
9	Tyre Changer	Transport Workshop Section on G/F	98	1	192	67%	0	53.6	3	-10	0	-2	35.2
												Predicted Noise Level due to depot activities / dB(A)	45.9

Predicted Total Fixed Plant Noise Level / dB(A) 48.4

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formu la was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)
Assessment Point **N202**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	310	100%	3	57.8	3	-10	0	0	28.2
2	Exhaust Fan		90	1		100%	0	57.8	3	-10	0	0	25.2
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	308	100%	3	57.8	3	-10	0	0	28.2
4	Exhaust Fan		90	1		100%	0	57.8	3	-10	0	0	25.2
5	Transformers	SW louvre of transformer room on G/F	90	2	283	100%	3	57.0	3	-10	0	0	29.0
6	Exhaust Fan		90	1		100%	0	57.0	3	-10	0	0	26.0
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	310	100%	3	57.8	3	-10	0	0	28.2
8	Exhaust Fan		90	1		100%	0	57.8	3	-10	0	0	25.2
9	AHU	SW louvre of AHU room on UG/F	90	1	283	100%	0	57.0	3	-10	0	0	26.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	261	100%	7	56.3	3	-10	0	0	33.7
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	56.3	3	-10	0	0	26.7
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	236	100%	5	55.5	3	-10	0	0	32.3
13	Exhaust Fan	room on UG/F	90	1		100%	0	55.5	3	-10	0	0	27.5
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	222	100%	10	54.9	3	-10	0	0	37.6
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	214	100%	0	54.6	3	-10	0	0	28.4
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	295	100%	5	57.4	3	-10	0	0	30.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	236	100%	3	55.5	3	-10	0	0	30.6
18	Generator	NE louvre of generator room on 3/F	90	1	244	100%	0	55.7	3	-10	0	0	27.3
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	297	100%	3	57.4	3	-10	0	0	28.6
20	PAU	SW louvre of PAU room on 4/F	90	2	286	100%	3	57.1	3	-10	0	0	28.9
21	Generator	NE louvre of generator room on LR/F	90	1	274	100%	0	56.7	3	-10	0	0	26.3
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	268	100%	3	56.6	3	-10	0	0	29.4
23	Exhaust Fan		90	1		100%	0	56.6	3	-10	0	0	26.4
												Predicted Noise Level due to building service equipment / dB(A)	43.4

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	225	7%	0	55.0	3	-10	0	-12	42.2
2	Grinding	Transport Workshop Section on G/F	108	1	225	7%	0	55.0	3	-10	0	-12	34.2
3	Hammering[7]	Transport Workshop Section on G/F	113	1	225	3%	0	55.0	3	-10	0	-15	36.2
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	225	17%	0	55.0	3	-10	0	-8	28.8
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	225	100%	0	55.0	3	-10	0	0	26.4
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	225	67%	0	55.0	3	-10	3	-2	17.2
7	Parts Welding	Transport Workshop Section on G/F	88	1	225	67%	0	55.0	3	-10	0	-2	24.2
8	Screw Driver	Transport Workshop Section on G/F	100	1	225	17%	0	55.0	3	-10	0	-8	30.2
9	Tyre Changer	Transport Workshop Section on G/F	98	1	225	67%	0	55.0	3	-10	0	-2	33.8
												Predicted Noise Level due to depot activities / dB(A)	44.5

Predicted Total Fixed Plant Noise Level / dB(A) 47.0

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formu la was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)
Assessment Point **N203**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	312	100%	3	57.9	3	-10	0	0	28.1
2	Exhaust Fan		90	1		100%	0	57.9	3	-10	0	0	25.1
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	310	100%	3	57.8	3	-10	0	0	28.2
4	Exhaust Fan		90	1		100%	0	57.8	3	-10	0	0	25.2
5	Transformers	SW louvre of transformer room on G/F	90	2	289	100%	3	57.2	3	-10	0	0	28.8
6	Exhaust Fan		90	1		100%	0	57.2	3	-10	0	0	25.8
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	312	100%	3	57.9	3	-10	0	0	28.1
8	Exhaust Fan		90	1		100%	0	57.9	3	-10	0	0	25.1
9	AHU	SW louvre of AHU room on UG/F	90	1	289	100%	0	57.2	3	-10	0	0	25.8
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	259	100%	7	56.3	3	-10	0	0	33.7
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	56.3	3	-10	0	0	26.7
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	233	100%	5	55.3	3	-10	0	0	32.4
13	Exhaust Fan	room on UG/F	90	1		100%	0	55.3	3	-10	0	0	27.7
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	220	100%	10	54.8	3	-10	0	0	37.7
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	295	100%	5	57.4	3	-10	0	0	30.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	233	100%	3	55.3	3	-10	0	0	30.7
18	Generator	NE louvre of generator room on 3/F	90	1	241	100%	0	55.7	3	-10	0	0	27.3
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	299	100%	3	57.5	3	-10	0	0	28.5
20	PAU	SW louvre of PAU room on 4/F	90	2	288	100%	3	57.2	3	-10	0	0	28.8
21	Generator	NE louvre of generator room on LR/F	90	1	277	100%	0	56.9	3	-10	0	0	26.1
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	273	100%	3	56.7	3	-10	0	0	29.3
23	Exhaust Fan		90	1		100%	0	56.7	3	-10	0	0	26.3
												Predicted Noise Level due to building service equipment / dB(A)	43.4

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	218	7%	0	54.8	3	-10	0	-12	42.5
2	Grinding	Transport Workshop Section on G/F	108	1	218	7%	0	54.8	3	-10	0	-12	34.5
3	Hammering[7]	Transport Workshop Section on G/F	113	1	218	3%	0	54.8	3	-10	0	-15	36.5
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	218	17%	0	54.8	3	-10	0	-8	29.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	218	100%	0	54.8	3	-10	0	0	26.6
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	218	67%	0	54.8	3	-10	3	-2	17.5
7	Parts Welding	Transport Workshop Section on G/F	88	1	218	67%	0	54.8	3	-10	0	-2	24.5
8	Screw Driver	Transport Workshop Section on G/F	100	1	218	17%	0	54.8	3	-10	0	-8	30.4
9	Tyre Changer	Transport Workshop Section on G/F	98	1	218	67%	0	54.8	3	-10	0	-2	34.1
												Predicted Noise Level due to depot activities / dB(A)	44.8

Predicted Total Fixed Plant Noise Level / dB(A) 47.2

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formu la was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Hampton Place
Assessment Point **N301**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	390	100%	3	59.8	3	0	0	0	36.2
2	Exhaust Fan		90	1		100%	0	59.8	3	0	0	0	33.2
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	386	100%	3	59.7	3	-10	0	0	26.3
4	Exhaust Fan		90	1		100%	0	59.7	3	-10	0	0	23.3
5	Transformers	SW louvre of transformer room on G/F	90	2	349	100%	3	58.9	3	-10	0	0	27.2
6	Exhaust Fan		90	1		100%	0	58.9	3	-10	0	0	24.1
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	390	100%	3	59.8	3	-10	0	0	26.2
8	Exhaust Fan		90	1		100%	0	59.8	3	-10	0	0	23.2
9	AHU	SW louvre of AHU room on UG/F	90	1	349	100%	0	58.9	3	-5	0	0	29.1
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	354	100%	7	59.0	3	-10	0	0	31.0
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	59.0	3	-10	0	0	24.0
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	335	100%	5	58.5	3	-10	0	0	29.3
13	Exhaust Fan	room on UG/F	90	1		100%	0	58.5	3	-10	0	0	24.5
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	321	100%	10	58.1	3	-10	0	0	34.4
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	291	100%	0	57.3	3	0	0	0	35.7
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	382	100%	5	59.6	3	-10	0	0	28.1
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	335	100%	3	58.5	3	-10	0	0	27.5
18	Generator	NE louvre of generator room on 3/F	90	1	341	100%	0	58.6	3	-10	0	0	24.4
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	375	100%	3	59.5	3	-10	0	0	26.5
20	PAU	SW louvre of PAU room on 4/F	90	2	365	100%	3	59.2	3	-10	0	0	26.8
21	Generator	NE louvre of generator room on LR/F	90	1	350	100%	0	58.9	3	0	0	0	34.1
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	340	100%	3	58.6	3	0	0	0	37.4
23	Exhaust Fan		90	1		100%	0	58.6	3	0	0	0	34.4
												Predicted Noise Level due to building service equipment / dB(A)	45.0

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	320	7%	0	58.1	3	-10	0	-12	39.1
2	Grinding	Transport Workshop Section on G/F	108	1	320	7%	0	58.1	3	-10	0	-12	31.1
3	Hammering[7]	Transport Workshop Section on G/F	113	1	320	3%	0	58.1	3	-10	0	-15	33.1
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	320	17%	0	58.1	3	-10	0	-8	25.7
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	320	100%	0	58.1	3	-10	0	0	23.3
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	320	67%	0	58.1	3	-10	3	-2	14.1
7	Parts Welding	Transport Workshop Section on G/F	88	1	320	67%	0	58.1	3	-10	0	-2	21.1
8	Screw Driver	Transport Workshop Section on G/F	100	1	320	17%	0	58.1	3	-10	0	-8	27.1
9	Tyre Changer	Transport Workshop Section on G/F	98	1	320	67%	0	58.1	3	-10	0	-2	30.7
												Predicted Noise Level due to depot activities / dB(A)	41.5

Predicted Total Fixed Plant Noise Level / dB(A) 46.6

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formu la was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR Hampton Place
Assessment Point **N301**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	390	100%	3	59.8	3	0	0	0	36.2
2	Exhaust Fan		90	1		100%	0	59.8	3	0	0	0	33.2
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	386	100%	0	59.7	3	-10	0	0	23.3
4	Exhaust Fan		90	1		100%	0	59.7	3	-10	0	0	23.3
5	Transformers	SW louvre of transformer room on G/F	90	2	349	100%	3	58.9	3	-10	0	0	27.2
6	Exhaust Fan		90	1		100%	0	58.9	3	-10	0	0	24.1
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	390	100%	0	59.8	3	-10	0	0	23.2
8	Exhaust Fan		90	1		100%	0	59.8	3	-10	0	0	23.2
9	AHU	SW louvre of AHU room on UG/F	90	0	349	100%	0	58.9	3	-5	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	354	100%	7	59.0	3	-10	0	0	31.0
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	59.0	3	-10	0	0	24.0
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	335	100%	5	58.5	3	-10	0	0	29.3
13	Exhaust Fan	room on UG/F	90	1		100%	0	58.5	3	-10	0	0	24.5
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	321	100%	0	58.1	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	291	100%	0	57.3	3	0	0	0	35.7
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	382	100%	0	59.6	3	-10	0	0	23.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	335	100%	0	58.5	3	-10	0	0	24.5
18	Generator	NE louvre of generator room on 3/F	90	0	341	100%	0	58.6	3	-10	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	375	100%	0	59.5	3	-10	0	0	23.5
20	PAU	SW louvre of PAU room on 4/F	90	1	365	100%	0	59.2	3	-10	0	0	23.8
21	Generator	NE louvre of generator room on LR/F	90	0	350	100%	0	58.9	3	0	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	340	100%	3	58.6	3	0	0	0	37.4
23	Exhaust Fan		90	1		100%	0	58.6	3	0	0	0	34.4
												Predicted Noise Level due to building service equipment / dB(A)	43.7

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	320	7%	0	58.1	3	-10	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	320	7%	0	58.1	3	-10	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	320	3%	0	58.1	3	-10	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	320	17%	0	58.1	3	-10	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	320	100%	0	58.1	3	-10	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	320	67%	0	58.1	3	-10	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	320	67%	0	58.1	3	-10	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	320	17%	0	58.1	3	-10	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	320	67%	0	58.1	3	-10	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 43.7

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Nam Cheong Estate Block 6 Cheong Chit House
Assessment Point **N401**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	321	100%	3	58.1	3	-10	0	0	27.9
2	Exhaust Fan		90	1		100%	0	58.1	3	-10	0	0	24.9
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	326	100%	3	58.3	3	-10	0	0	27.7
4	Exhaust Fan		90	1		100%	0	58.3	3	-10	0	0	24.7
5	Transformers	SW louvre of transformer room on G/F	90	2	364	100%	3	59.2	3	-10	0	0	26.8
6	Exhaust Fan		90	1		100%	0	59.2	3	-10	0	0	23.8
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	321	100%	3	58.1	3	-10	0	0	27.9
8	Exhaust Fan		90	1		100%	0	58.1	3	-10	0	0	24.9
9	AHU	SW louvre of AHU room on UG/F	90	1	364	100%	0	59.2	3	-10	0	0	23.8
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	278	100%	7	56.9	3	0	0	0	43.1
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	56.9	3	0	0	0	36.1
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	268	100%	5	56.6	3	0	0	0	41.2
13	Exhaust Fan	room on UG/F	90	1		100%	0	56.6	3	0	0	0	36.4
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	274	100%	10	56.7	3	0	0	0	45.8
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	340	100%	0	58.6	3	-10	0	0	24.4
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	294	100%	5	57.4	3	0	0	0	40.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	268	100%	3	56.6	3	0	0	0	39.5
18	Generator	NE louvre of generator room on 3/F	90	1	271	100%	0	56.7	3	0	0	0	36.3
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	327	100%	3	58.3	3	-10	0	0	27.7
20	PAU	SW louvre of PAU room on 4/F	90	2	322	100%	3	58.2	3	10	0	0	47.9
21	Generator	NE louvre of generator room on LR/F	90	1	334	100%	0	58.5	3	0	0	0	34.5
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	349	100%	3	58.8	3	-5	0	0	32.2
23	Exhaust Fan		90	1		100%	0	58.8	3	-5	0	0	29.2
												Predicted Noise Level due to building service equipment / dB(A)	52.4

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	276	7%	0	56.8	3	-5	0	-12	45.4
2	Grinding	Transport Workshop Section on G/F	108	1	276	7%	0	56.8	3	-5	0	-12	37.4
3	Hammering[7]	Transport Workshop Section on G/F	113	1	276	3%	0	56.8	3	-5	0	-15	39.4
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	276	17%	0	56.8	3	-5	0	-8	32.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	276	100%	0	56.8	3	-5	0	0	29.6
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	276	67%	0	56.8	3	-5	3	-2	20.4
7	Parts Welding	Transport Workshop Section on G/F	88	1	276	67%	0	56.8	3	-5	0	-2	27.4
8	Screw Driver	Transport Workshop Section on G/F	100	1	276	17%	0	56.8	3	-5	0	-8	33.4
9	Tyre Changer	Transport Workshop Section on G/F	98	1	276	67%	0	56.8	3	-5	0	-2	37.0
												Predicted Noise Level due to depot activities / dB(A)	47.7

Predicted Total Fixed Plant Noise Level / dB(A) 53.7

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR: Nam Cheong Estate Block 6 Cheong Chit House
Assessment Point: **N401**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	321	100%	3	58.1	3	-10	0	0	27.9
2	Exhaust Fan		90	1		100%	0	58.1	3	-10	0	0	24.9
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	326	100%	0	58.3	3	-10	0	0	24.7
4	Exhaust Fan		90	1		100%	0	58.3	3	-10	0	0	24.7
5	Transformers	SW louvre of transformer room on G/F	90	2	364	100%	3	59.2	3	-10	0	0	26.8
6	Exhaust Fan		90	1		100%	0	59.2	3	-10	0	0	23.8
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	321	100%	0	58.1	3	-10	0	0	24.9
8	Exhaust Fan		90	1		100%	0	58.1	3	-10	0	0	24.9
9	AHU	SW louvre of AHU room on UG/F	90	0	364	100%	0	59.2	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	278	100%	7	56.9	3	0	0	0	43.1
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	56.9	3	0	0	0	36.1
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	268	100%	5	56.6	3	0	0	0	41.2
13	Exhaust Fan	room on UG/F	90	1		100%	0	56.6	3	0	0	0	36.4
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	274	100%	0	56.7	3	0	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	340	100%	0	58.6	3	-10	0	0	24.4
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	294	100%	0	57.4	3	0	0	0	35.6
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	268	100%	0	56.6	3	0	0	0	36.4
18	Generator	NE louvre of generator room on 3/F	90	0	271	100%	0	56.7	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	327	100%	0	58.3	3	-10	0	0	24.7
20	PAU	SW louvre of PAU room on 4/F	90	1	322	100%	0	58.2	3	10	0	0	44.8
21	Generator	NE louvre of generator room on LR/F	90	0	334	100%	0	58.5	3	0	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	349	100%	3	58.8	3	-5	0	0	32.2
23	Exhaust Fan		90	1		100%	0	58.8	3	-5	0	0	29.2
												Predicted Noise Level due to building service equipment / dB(A)	49.4

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	276	7%	0	56.8	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	276	7%	0	56.8	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	276	3%	0	56.8	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	276	17%	0	56.8	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	276	100%	0	56.8	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	276	67%	0	56.8	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	276	67%	0	56.8	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	276	17%	0	56.8	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	276	67%	0	56.8	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 49.4

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Nam Cheong Estate Block 5 Cheong Yat House
Assessment Point **N501**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	293	100%	3	57.3	3	-10	0	0	28.7
2	Exhaust Fan		90	1		100%	0	57.3	3	-10	0	0	25.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	299	100%	3	57.5	3	-10	0	0	28.5
4	Exhaust Fan		90	1		100%	0	57.5	3	-10	0	0	25.5
5	Transformers	SW louvre of transformer room on G/F	90	2	344	100%	3	58.7	3	-10	0	0	27.3
6	Exhaust Fan		90	1		100%	0	58.7	3	-10	0	0	24.3
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	293	100%	3	57.3	3	-10	0	0	28.7
8	Exhaust Fan		90	1		100%	0	57.3	3	-10	0	0	25.7
9	AHU	SW louvre of AHU room on UG/F	90	1	344	100%	0	58.7	3	-10	0	0	24.3
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	266	100%	7	56.5	3	0	0	0	43.5
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	56.5	3	0	0	0	36.5
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	264	100%	5	56.4	3	0	0	0	41.3
13	Exhaust Fan	room on UG/F	90	1		100%	0	56.4	3	0	0	0	36.6
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	274	100%	10	56.8	3	-10	0	0	35.8
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	336	100%	0	58.5	3	-10	0	0	24.5
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	271	100%	5	56.6	3	0	0	0	41.1
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	264	100%	3	56.4	3	0	0	0	39.6
18	Generator	NE louvre of generator room on 3/F	90	1	265	100%	0	56.4	3	0	0	0	36.6
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	303	100%	3	57.6	3	-10	0	0	28.4
20	PAU	SW louvre of PAU room on 4/F	90	2	301	100%	3	57.6	3	10	0	0	48.4
21	Generator	NE louvre of generator room on LR/F	90	1	316	100%	0	58.0	3	0	0	0	35.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	332	100%	3	58.4	3	-5	0	0	32.6
23	Exhaust Fan		90	1		100%	0	58.4	3	-5	0	0	29.6
												Predicted Noise Level due to building service equipment / dB(A)	51.9

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	267	7%	0	56.5	3	-5	0	-12	45.7
2	Grinding	Transport Workshop Section on G/F	108	1	267	7%	0	56.5	3	-5	0	-12	37.7
3	Hammering[7]	Transport Workshop Section on G/F	113	1	267	3%	0	56.5	3	-5	0	-15	39.7
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	267	17%	0	56.5	3	-5	0	-8	32.3
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	267	100%	0	56.5	3	-5	0	0	29.9
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	267	67%	0	56.5	3	-5	3	-2	20.7
7	Parts Welding	Transport Workshop Section on G/F	88	1	267	67%	0	56.5	3	-5	0	-2	27.7
8	Screw Driver	Transport Workshop Section on G/F	100	1	267	17%	0	56.5	3	-5	0	-8	33.7
9	Tyre Changer	Transport Workshop Section on G/F	98	1	267	67%	0	56.5	3	-5	0	-2	37.3
												Predicted Noise Level due to depot activities / dB(A)	48.0

Predicted Total Fixed Plant Noise Level / dB(A) 53.4

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR Nam Cheong Estate Block 5 Cheong Yat House
Assessment Point **N501**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	293	100%	3	57.3	3	-10	0	0	28.7
2	Exhaust Fan		90	1		100%	0	57.3	3	-10	0	0	25.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	299	100%	0	57.5	3	-10	0	0	25.5
4	Exhaust Fan		90	1		100%	0	57.5	3	-10	0	0	25.5
5	Transformers	SW louvre of transformer room on G/F	90	2	344	100%	3	58.7	3	-10	0	0	27.3
6	Exhaust Fan		90	1		100%	0	58.7	3	-10	0	0	24.3
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	293	100%	0	57.3	3	-10	0	0	25.7
8	Exhaust Fan		90	1		100%	0	57.3	3	-10	0	0	25.7
9	AHU	SW louvre of AHU room on UG/F	90	0	344	100%	0	58.7	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	266	100%	7	56.5	3	0	0	0	43.5
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	56.5	3	0	0	0	36.5
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	264	100%	5	56.4	3	0	0	0	41.3
13	Exhaust Fan	room on UG/F	90	1		100%	0	56.4	3	0	0	0	36.6
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	274	100%	0	56.8	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	336	100%	0	58.5	3	-10	0	0	24.5
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	271	100%	0	56.6	3	0	0	0	36.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	264	100%	0	56.4	3	0	0	0	36.6
18	Generator	NE louvre of generator room on 3/F	90	0	265	100%	0	56.4	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	303	100%	0	57.6	3	-10	0	0	25.4
20	PAU	SW louvre of PAU room on 4/F	90	1	301	100%	0	57.6	3	10	0	0	45.4
21	Generator	NE louvre of generator room on LR/F	90	0	316	100%	0	58.0	3	0	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	332	100%	3	58.4	3	-5	0	0	32.6
23	Exhaust Fan		90	1		100%	0	58.4	3	-5	0	0	29.6
												Predicted Noise Level due to building service equipment / dB(A)	49.8

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	267	7%	0	56.5	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	267	7%	0	56.5	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	267	3%	0	56.5	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	267	17%	0	56.5	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	267	100%	0	56.5	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	267	67%	0	56.5	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	267	67%	0	56.5	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	267	17%	0	56.5	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	267	67%	0	56.5	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 49.8

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Nam Cheong Estate Block 4 Cheong Shun House
Assessment Point **N601**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	326	100%	3	58.3	3	-10	0	0	27.8
2	Exhaust Fan		90	1		100%	0	58.3	3	-10	0	0	24.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	331	100%	3	58.4	3	-10	0	0	27.6
4	Exhaust Fan		90	1		100%	0	58.4	3	-10	0	0	24.6
5	Transformers	SW louvre of transformer room on G/F	90	2	378	100%	3	59.5	3	-10	0	0	26.5
6	Exhaust Fan		90	1		100%	0	59.5	3	-10	0	0	23.5
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	326	100%	3	58.3	3	-10	0	0	27.8
8	Exhaust Fan		90	1		100%	0	58.3	3	-10	0	0	24.7
9	AHU	SW louvre of AHU room on UG/F	90	1	378	100%	0	59.5	3	-10	0	0	23.5
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	301	100%	7	57.6	3	-5	0	0	37.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	57.6	3	-5	0	0	30.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	301	100%	5	57.6	3	-5	0	0	35.2
13	Exhaust Fan	room on UG/F	90	1		100%	0	57.6	3	-5	0	0	30.4
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	311	100%	10	57.9	3	-10	0	0	34.7
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	373	100%	0	59.4	3	-10	0	0	23.6
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	304	100%	5	57.7	3	0	0	0	40.1
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	301	100%	3	57.6	3	0	0	0	38.4
18	Generator	NE louvre of generator room on 3/F	90	1	301	100%	0	57.6	3	0	0	0	35.4
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	336	100%	3	58.5	3	-10	0	0	27.5
20	PAU	SW louvre of PAU room on 4/F	90	2	335	100%	3	58.5	3	10	0	0	47.5
21	Generator	NE louvre of generator room on LR/F	90	1	350	100%	0	58.9	3	0	0	0	34.1
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	366	100%	3	59.3	3	-5	0	0	31.7
23	Exhaust Fan		90	1		100%	0	59.3	3	-5	0	0	28.7
												Predicted Noise Level due to building service equipment / dB(A)	50.0

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	303	7%	0	57.6	3	-5	0	-12	44.6
2	Grinding	Transport Workshop Section on G/F	108	1	303	7%	0	57.6	3	-5	0	-12	36.6
3	Hammering[7]	Transport Workshop Section on G/F	113	1	303	3%	0	57.6	3	-5	0	-15	38.6
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	303	17%	0	57.6	3	-5	0	-8	31.2
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	303	100%	0	57.6	3	-5	0	0	28.8
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	303	67%	0	57.6	3	-5	3	-2	19.6
7	Parts Welding	Transport Workshop Section on G/F	88	1	303	67%	0	57.6	3	-5	0	-2	26.6
8	Screw Driver	Transport Workshop Section on G/F	100	1	303	17%	0	57.6	3	-5	0	-8	32.6
9	Tyre Changer	Transport Workshop Section on G/F	98	1	303	67%	0	57.6	3	-5	0	-2	36.2
												Predicted Noise Level due to depot activities / dB(A)	46.9

Predicted Total Fixed Plant Noise Level / dB(A) 51.8

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR: Nam Cheong Estate Block 4 Cheong Shun House
Assessment Point: **N601**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	326	100%	3	58.3	3	-10	0	0	27.8
2	Exhaust Fan		90	1		100%	0	58.3	3	-10	0	0	24.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	331	100%	0	58.4	3	-10	0	0	24.6
4	Exhaust Fan		90	1		100%	0	58.4	3	-10	0	0	24.6
5	Transformers	SW louvre of transformer room on G/F	90	2	378	100%	3	59.5	3	-10	0	0	26.5
6	Exhaust Fan		90	1		100%	0	59.5	3	-10	0	0	23.5
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	326	100%	0	58.3	3	-10	0	0	24.7
8	Exhaust Fan		90	1		100%	0	58.3	3	-10	0	0	24.7
9	AHU	SW louvre of AHU room on UG/F	90	0	378	100%	0	59.5	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	301	100%	7	57.6	3	-5	0	0	37.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	57.6	3	-5	0	0	30.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	301	100%	5	57.6	3	-5	0	0	35.2
13	Exhaust Fan	room on UG/F	90	1		100%	0	57.6	3	-5	0	0	30.4
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	311	100%	0	57.9	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	373	100%	0	59.4	3	-10	0	0	23.6
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	304	100%	0	57.7	3	0	0	0	35.3
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	301	100%	0	57.6	3	0	0	0	35.4
18	Generator	NE louvre of generator room on 3/F	90	0	301	100%	0	57.6	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	336	100%	0	58.5	3	-10	0	0	24.5
20	PAU	SW louvre of PAU room on 4/F	90	1	335	100%	0	58.5	3	10	0	0	44.5
21	Generator	NE louvre of generator room on LR/F	90	0	350	100%	0	58.9	3	0	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	366	100%	3	59.3	3	-5	0	0	31.7
23	Exhaust Fan		90	1		100%	0	59.3	3	-5	0	0	28.7
												Predicted Noise Level due to building service equipment / dB(A)	47.1

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	303	7%	0	57.6	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	303	7%	0	57.6	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	303	3%	0	57.6	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	303	17%	0	57.6	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	303	100%	0	57.6	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	303	67%	0	57.6	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	303	67%	0	57.6	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	303	17%	0	57.6	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	303	67%	0	57.6	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 47.1

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Fu Cheong Estate Fu Yun House
Assessment Point **N701**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	291	100%	3	57.3	3	-10	0	0	28.7
2	Exhaust Fan		90	1		100%	0	57.3	3	-10	0	0	25.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	296	100%	3	57.4	3	0	0	0	38.6
4	Exhaust Fan		90	1		100%	0	57.4	3	0	0	0	35.6
5	Transformers	SW louvre of transformer room on G/F	90	2	347	100%	3	58.8	3	0	0	0	37.2
6	Exhaust Fan		90	1		100%	0	58.8	3	0	0	0	34.2
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	291	100%	3	57.3	3	0	0	0	38.7
8	Exhaust Fan		90	1		100%	0	57.3	3	0	0	0	35.7
9	AHU	SW louvre of AHU room on UG/F	90	1	347	100%	0	58.8	3	-10	0	0	24.2
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	303	100%	7	57.6	3	0	0	0	42.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	57.6	3	0	0	0	35.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	319	100%	5	58.1	3	0	0	0	39.7
13	Exhaust Fan	room on UG/F	90	1		100%	0	58.1	3	0	0	0	34.9
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	332	100%	10	58.4	3	-10	0	0	34.1
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	375	100%	0	59.5	3	-10	0	0	23.5
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	284	100%	5	57.1	3	0	0	0	40.7
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	319	100%	3	58.1	3	0	0	0	37.9
18	Generator	NE louvre of generator room on 3/F	90	1	313	100%	0	57.9	3	0	0	0	35.1
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	306	100%	3	57.7	3	0	0	0	38.3
20	PAU	SW louvre of PAU room on 4/F	90	2	311	100%	3	57.8	3	0	0	0	38.2
21	Generator	NE louvre of generator room on LR/F	90	1	328	100%	0	58.3	3	-10	0	0	24.7
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	344	100%	3	58.7	3	0	0	0	37.3
23	Exhaust Fan		90	1		100%	0	58.7	3	-10	0	0	24.3
												Predicted Noise Level due to building service equipment / dB(A)	50.3

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	298	7%	0	57.5	3	-5	0	-12	44.8
2	Grinding	Transport Workshop Section on G/F	108	1	298	7%	0	57.5	3	-5	0	-12	36.8
3	Hammering[7]	Transport Workshop Section on G/F	113	1	298	3%	0	57.5	3	-5	0	-15	38.8
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	298	17%	0	57.5	3	-5	0	-8	31.3
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	298	100%	0	57.5	3	-5	0	0	28.9
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	298	67%	0	57.5	3	-5	3	-2	19.8
7	Parts Welding	Transport Workshop Section on G/F	88	1	298	67%	0	57.5	3	-5	0	-2	26.8
8	Screw Driver	Transport Workshop Section on G/F	100	1	298	17%	0	57.5	3	-5	0	-8	32.7
9	Tyre Changer	Transport Workshop Section on G/F	98	1	298	67%	0	57.5	3	-5	0	-2	36.4
												Predicted Noise Level due to depot activities / dB(A)	47.1

Predicted Total Fixed Plant Noise Level / dB(A) 52.0

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR: Fu Cheong Estate Fu Yun House
Assessment Point: **N701**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	291	100%	3	57.3	3	-10	0	0	28.7
2	Exhaust Fan		90	1		100%	0	57.3	3	-10	0	0	25.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	296	100%	0	57.4	3	0	0	0	35.6
4	Exhaust Fan		90	1		100%	0	57.4	3	0	0	0	35.6
5	Transformers	SW louvre of transformer room on G/F	90	2	347	100%	3	58.8	3	0	0	0	37.2
6	Exhaust Fan		90	1		100%	0	58.8	3	0	0	0	34.2
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	291	100%	0	57.3	3	0	0	0	35.7
8	Exhaust Fan		90	1		100%	0	57.3	3	0	0	0	35.7
9	AHU	SW louvre of AHU room on UG/F	90	0	347	100%	0	58.8	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	303	100%	7	57.6	3	0	0	0	42.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	57.6	3	0	0	0	35.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	319	100%	5	58.1	3	0	0	0	39.7
13	Exhaust Fan	room on UG/F	90	1		100%	0	58.1	3	0	0	0	34.9
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	332	100%	0	58.4	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	375	100%	0	59.5	3	-10	0	0	23.5
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	284	100%	0	57.1	3	0	0	0	35.9
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	319	100%	0	58.1	3	0	0	0	34.9
18	Generator	NE louvre of generator room on 3/F	90	0	313	100%	0	57.9	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	306	100%	0	57.7	3	0	0	0	35.3
20	PAU	SW louvre of PAU room on 4/F	90	1	311	100%	0	57.8	3	0	0	0	35.2
21	Generator	NE louvre of generator room on LR/F	90	0	328	100%	0	58.3	3	-10	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	344	100%	3	58.7	3	0	0	0	37.3
23	Exhaust Fan		90	1		100%	0	58.7	3	-10	0	0	24.3
												Predicted Noise Level due to building service equipment / dB(A)	48.8

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	298	7%	0	57.5	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	298	7%	0	57.5	3	-5	0	-12	0.0
3	Hammering [7]	Transport Workshop Section on G/F	113	0	298	3%	0	57.5	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	298	17%	0	57.5	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	298	100%	0	57.5	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	298	67%	0	57.5	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	298	67%	0	57.5	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	298	17%	0	57.5	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	298	67%	0	57.5	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 48.8

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N801**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	128	100%	3	50.1	3	-10	0	0	35.9
2	Exhaust Fan		90	1		100%	0	50.1	3	-10	0	0	32.9
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	133	100%	3	50.5	3	0	0	0	45.5
4	Exhaust Fan		90	1		100%	0	50.5	3	0	0	0	42.5
5	Transformers	SW louvre of transformer room on G/F	90	2	183	100%	3	53.3	3	0	0	0	42.8
6	Exhaust Fan		90	1		100%	0	53.3	3	0	0	0	39.7
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	128	100%	3	50.1	3	0	0	0	45.9
8	Exhaust Fan		90	1		100%	0	50.1	3	0	0	0	42.9
9	AHU	SW louvre of AHU room on UG/F	90	1	183	100%	0	53.3	3	-10	0	0	29.7
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	154	100%	7	51.7	3	0	0	0	48.3
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.7	3	0	0	0	41.3
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	177	100%	5	53.0	3	0	0	0	44.8
13	Exhaust Fan	room on UG/F	90	1		100%	0	53.0	3	0	0	0	40.0
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	191	100%	10	53.6	3	-10	0	0	38.9
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	126	100%	5	50.0	3	0	0	0	47.8
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	177	100%	3	53.0	3	0	0	0	43.0
18	Generator	NE louvre of generator room on 3/F	90	1	169	100%	0	52.6	3	0	0	0	40.4
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	143	100%	3	51.1	3	0	0	0	44.9
20	PAU	SW louvre of PAU room on 4/F	90	2	149	100%	3	51.5	3	0	0	0	44.5
21	Generator	NE louvre of generator room on LR/F	90	1	167	100%	0	52.5	3	-10	0	0	30.5
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	182	100%	3	53.2	3	0	0	0	42.8
23	Exhaust Fan		90	1		100%	0	53.2	3	-10	0	0	29.8
												Predicted Noise Level due to building service equipment / dB(A)	56.5

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	146	7%	0	51.3	3	-5	0	-12	50.9
2	Grinding	Transport Workshop Section on G/F	108	1	146	7%	0	51.3	3	-5	0	-12	42.9
3	Hammering[7]	Transport Workshop Section on G/F	113	1	146	3%	0	51.3	3	-5	0	-15	44.9
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	146	17%	0	51.3	3	-5	0	-8	37.5
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	146	100%	0	51.3	3	-5	0	0	35.1
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	146	67%	0	51.3	3	-5	3	-2	25.9
7	Parts Welding	Transport Workshop Section on G/F	88	1	146	67%	0	51.3	3	-5	0	-2	32.9
8	Screw Driver	Transport Workshop Section on G/F	100	1	146	17%	0	51.3	3	-5	0	-8	38.9
9	Tyre Changer	Transport Workshop Section on G/F	98	1	146	67%	0	51.3	3	-5	0	-2	42.5
												Predicted Noise Level due to depot activities / dB(A)	53.3

Predicted Total Fixed Plant Noise Level / dB(A) 58.2

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR: Planned Residential Development on Nam Cheong Station
Assessment Point: **N801**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	128	100%	3	50.1	3	-10	0	0	35.9
2	Exhaust Fan		90	1		100%	0	50.1	3	-10	0	0	32.9
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	133	100%	0	50.5	3	0	0	0	42.5
4	Exhaust Fan		90	1		100%	0	50.5	3	0	0	0	42.5
5	Transformers	SW louvre of transformer room on G/F	90	2	183	100%	3	53.3	3	0	0	0	42.8
6	Exhaust Fan		90	1		100%	0	53.3	3	0	0	0	39.7
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	128	100%	0	50.1	3	0	0	0	42.9
8	Exhaust Fan		90	1		100%	0	50.1	3	0	0	0	42.9
9	AHU	SW louvre of AHU room on UG/F	90	0	183	100%	0	53.3	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	154	100%	7	51.7	3	0	0	0	48.3
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.7	3	0	0	0	41.3
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	177	100%	5	53.0	3	0	0	0	44.8
13	Exhaust Fan	room on UG/F	90	1		100%	0	53.0	3	0	0	0	40.0
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	191	100%	0	53.6	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	126	100%	0	50.0	3	0	0	0	43.0
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	177	100%	0	53.0	3	0	0	0	40.0
18	Generator	NE louvre of generator room on 3/F	90	0	169	100%	0	52.6	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	143	100%	0	51.1	3	0	0	0	41.9
20	PAU	SW louvre of PAU room on 4/F	90	1	149	100%	0	51.5	3	0	0	0	41.5
21	Generator	NE louvre of generator room on LR/F	90	0	167	100%	0	52.5	3	-10	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	182	100%	3	53.2	3	0	0	0	42.8
23	Exhaust Fan		90	1		100%	0	53.2	3	-10	0	0	29.8
												Predicted Noise Level due to building service equipment / dB(A)	54.9

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	146	7%	0	51.3	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	146	7%	0	51.3	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	146	3%	0	51.3	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	146	17%	0	51.3	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	146	100%	0	51.3	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	146	67%	0	51.3	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	146	67%	0	51.3	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	146	17%	0	51.3	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	146	67%	0	51.3	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 54.9

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N802**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	130	100%	3	50.3	3	-10	0	0	35.7
2	Exhaust Fan		90	1		100%	0	50.3	3	-10	0	0	32.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	135	100%	3	50.6	3	0	0	0	45.4
4	Exhaust Fan		90	1		100%	0	50.6	3	0	0	0	42.4
5	Transformers	SW louvre of transformer room on G/F	90	2	186	100%	3	53.4	3	0	0	0	42.6
6	Exhaust Fan		90	1		100%	0	53.4	3	0	0	0	39.6
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	130	100%	3	50.3	3	0	0	0	45.7
8	Exhaust Fan		90	1		100%	0	50.3	3	0	0	0	42.7
9	AHU	SW louvre of AHU room on UG/F	90	1	186	100%	0	53.4	3	-10	0	0	29.6
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	151	100%	7	51.6	3	0	0	0	48.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.6	3	0	0	0	41.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	173	100%	5	52.8	3	0	0	0	45.0
13	Exhaust Fan	room on UG/F	90	1		100%	0	52.8	3	0	0	0	40.2
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	187	100%	10	53.4	3	-10	0	0	39.1
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	126	100%	5	50.0	3	0	0	0	47.8
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	173	100%	3	52.8	3	0	0	0	43.2
18	Generator	NE louvre of generator room on 3/F	90	1	166	100%	0	52.4	3	0	0	0	40.6
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	145	100%	3	51.2	3	0	0	0	44.8
20	PAU	SW louvre of PAU room on 4/F	90	2	151	100%	3	51.6	3	0	0	0	44.5
21	Generator	NE louvre of generator room on LR/F	90	1	168	100%	0	52.5	3	-10	0	0	30.5
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	184	100%	3	53.3	3	0	0	0	42.7
23	Exhaust Fan		90	1		100%	0	53.3	3	-10	0	0	29.7
												Predicted Noise Level due to building service equipment / dB(A)	56.5

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	144	7%	0	51.1	3	-5	0	-12	51.1
2	Grinding	Transport Workshop Section on G/F	108	1	144	7%	0	51.1	3	-5	0	-12	43.1
3	Hammering[7]	Transport Workshop Section on G/F	113	1	144	3%	0	51.1	3	-5	0	-15	45.1
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	144	17%	0	51.1	3	-5	0	-8	37.7
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	144	100%	0	51.1	3	-5	0	0	35.3
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	144	67%	0	51.1	3	-5	3	-2	26.1
7	Parts Welding	Transport Workshop Section on G/F	88	1	144	67%	0	51.1	3	-5	0	-2	33.1
8	Screw Driver	Transport Workshop Section on G/F	100	1	144	17%	0	51.1	3	-5	0	-8	39.1
9	Tyre Changer	Transport Workshop Section on G/F	98	1	144	67%	0	51.1	3	-5	0	-2	42.7
												Predicted Noise Level due to depot activities / dB(A)	53.4

Predicted Total Fixed Plant Noise Level / dB(A) 58.2

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR: Planned Residential Development on Nam Cheong Station
Assessment Point: **N802**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	130	100%	3	50.3	3	-10	0	0	35.7
2	Exhaust Fan		90	1		100%	0	50.3	3	-10	0	0	32.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	135	100%	0	50.6	3	0	0	0	42.4
4	Exhaust Fan		90	1		100%	0	50.6	3	0	0	0	42.4
5	Transformers	SW louvre of transformer room on G/F	90	2	186	100%	3	53.4	3	0	0	0	42.6
6	Exhaust Fan		90	1		100%	0	53.4	3	0	0	0	39.6
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	130	100%	0	50.3	3	0	0	0	42.7
8	Exhaust Fan		90	1		100%	0	50.3	3	0	0	0	42.7
9	AHU	SW louvre of AHU room on UG/F	90	0	186	100%	0	53.4	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	151	100%	7	51.6	3	0	0	0	48.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.6	3	0	0	0	41.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	173	100%	5	52.8	3	0	0	0	45.0
13	Exhaust Fan	room on UG/F	90	1		100%	0	52.8	3	0	0	0	40.2
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	187	100%	0	53.4	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	126	100%	0	50.0	3	0	0	0	43.0
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	173	100%	0	52.8	3	0	0	0	40.2
18	Generator	NE louvre of generator room on 3/F	90	0	166	100%	0	52.4	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	145	100%	0	51.2	3	0	0	0	41.8
20	PAU	SW louvre of PAU room on 4/F	90	1	151	100%	0	51.6	3	0	0	0	41.4
21	Generator	NE louvre of generator room on LR/F	90	0	168	100%	0	52.5	3	-10	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	184	100%	3	53.3	3	0	0	0	42.7
23	Exhaust Fan		90	1		100%	0	53.3	3	-10	0	0	29.7
												Predicted Noise Level due to building service equipment / dB(A)	54.9

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	144	7%	0	51.1	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	144	7%	0	51.1	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	144	3%	0	51.1	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	144	17%	0	51.1	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	144	100%	0	51.1	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	144	67%	0	51.1	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	144	67%	0	51.1	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	144	17%	0	51.1	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	144	67%	0	51.1	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 54.9

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N803**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	130	100%	3	50.3	3	-10	0	0	35.7
2	Exhaust Fan		90	1		100%	0	50.3	3	-10	0	0	32.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	135	100%	3	50.6	3	0	0	0	45.4
4	Exhaust Fan		90	1		100%	0	50.6	3	0	0	0	42.4
5	Transformers	SW louvre of transformer room on G/F	90	2	186	100%	3	53.4	3	0	0	0	42.6
6	Exhaust Fan		90	1		100%	0	53.4	3	0	0	0	39.6
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	130	100%	3	50.3	3	0	0	0	45.7
8	Exhaust Fan		90	1		100%	0	50.3	3	0	0	0	42.7
9	AHU	SW louvre of AHU room on UG/F	90	1	186	100%	0	53.4	3	-10	0	0	29.6
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	151	100%	7	51.6	3	0	0	0	48.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.6	3	0	0	0	41.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	173	100%	5	52.8	3	0	0	0	45.0
13	Exhaust Fan	room on UG/F	90	1		100%	0	52.8	3	0	0	0	40.2
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	187	100%	10	53.4	3	-10	0	0	39.1
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	126	100%	5	50.0	3	0	0	0	47.8
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	173	100%	3	52.8	3	0	0	0	43.2
18	Generator	NE louvre of generator room on 3/F	90	1	166	100%	0	52.4	3	0	0	0	40.6
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	145	100%	3	51.2	3	0	0	0	44.8
20	PAU	SW louvre of PAU room on 4/F	90	2	151	100%	3	51.6	3	0	0	0	44.5
21	Generator	NE louvre of generator room on LR/F	90	1	168	100%	0	52.5	3	-10	0	0	30.5
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	184	100%	3	53.3	3	0	0	0	42.7
23	Exhaust Fan		90	1		100%	0	53.3	3	-10	0	0	29.7
												Predicted Noise Level due to building service equipment / dB(A)	56.5

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	144	7%	0	51.1	3	-5	0	-12	51.1
2	Grinding	Transport Workshop Section on G/F	108	1	144	7%	0	51.1	3	-5	0	-12	43.1
3	Hammering[7]	Transport Workshop Section on G/F	113	1	144	3%	0	51.1	3	-5	0	-15	45.1
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	144	17%	0	51.1	3	-5	0	-8	37.7
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	144	100%	0	51.1	3	-5	0	0	35.3
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	144	67%	0	51.1	3	-5	3	-2	26.1
7	Parts Welding	Transport Workshop Section on G/F	88	1	144	67%	0	51.1	3	-5	0	-2	33.1
8	Screw Driver	Transport Workshop Section on G/F	100	1	144	17%	0	51.1	3	-5	0	-8	39.1
9	Tyre Changer	Transport Workshop Section on G/F	98	1	144	67%	0	51.1	3	-5	0	-2	42.7
												Predicted Noise Level due to depot activities / dB(A)	53.4

Predicted Total Fixed Plant Noise Level / dB(A) 58.2

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR: Planned Residential Development on Nam Cheong Station
Assessment Point: **N803**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	130	100%	3	50.3	3	-10	0	0	35.7
2	Exhaust Fan		90	1		100%	0	50.3	3	-10	0	0	32.7
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	135	100%	0	50.6	3	0	0	0	42.4
4	Exhaust Fan		90	1		100%	0	50.6	3	0	0	0	42.4
5	Transformers	SW louvre of transformer room on G/F	90	2	186	100%	3	53.4	3	0	0	0	42.6
6	Exhaust Fan		90	1		100%	0	53.4	3	0	0	0	39.6
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	130	100%	0	50.3	3	0	0	0	42.7
8	Exhaust Fan		90	1		100%	0	50.3	3	0	0	0	42.7
9	AHU	SW louvre of AHU room on UG/F	90	0	186	100%	0	53.4	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	151	100%	7	51.6	3	0	0	0	48.4
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	51.6	3	0	0	0	41.4
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	173	100%	5	52.8	3	0	0	0	45.0
13	Exhaust Fan	room on UG/F	90	1		100%	0	52.8	3	0	0	0	40.2
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	187	100%	0	53.4	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	219	100%	0	54.8	3	-10	0	0	28.2
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	126	100%	0	50.0	3	0	0	0	43.0
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	173	100%	0	52.8	3	0	0	0	40.2
18	Generator	NE louvre of generator room on 3/F	90	0	166	100%	0	52.4	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	145	100%	0	51.2	3	0	0	0	41.8
20	PAU	SW louvre of PAU room on 4/F	90	1	151	100%	0	51.6	3	0	0	0	41.4
21	Generator	NE louvre of generator room on LR/F	90	0	168	100%	0	52.5	3	-10	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	184	100%	3	53.3	3	0	0	0	42.7
23	Exhaust Fan		90	1		100%	0	53.3	3	-10	0	0	29.7
												Predicted Noise Level due to building service equipment / dB(A)	54.9

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	144	7%	0	51.1	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	144	7%	0	51.1	3	-5	0	-12	0.0
3	Hammering [7]	Transport Workshop Section on G/F	113	0	144	3%	0	51.1	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	144	17%	0	51.1	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	144	100%	0	51.1	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	144	67%	0	51.1	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	144	67%	0	51.1	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	144	17%	0	51.1	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	144	67%	0	51.1	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 54.9

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N804**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	191	100%	3	53.6	3	-10	0	0	32.4
2	Exhaust Fan		90	1		100%	0	53.6	3	-10	0	0	29.4
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	196	100%	3	53.9	3	0	0	0	42.2
4	Exhaust Fan		90	1		100%	0	53.9	3	0	0	0	39.1
5	Transformers	SW louvre of transformer room on G/F	90	2	247	100%	3	55.8	3	0	0	0	40.2
6	Exhaust Fan		90	1		100%	0	55.8	3	0	0	0	37.2
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	191	100%	3	53.6	3	0	0	0	42.4
8	Exhaust Fan		90	1		100%	0	53.6	3	0	0	0	39.4
9	AHU	SW louvre of AHU room on UG/F	90	1	247	100%	0	55.8	3	-10	0	0	27.2
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	208	100%	7	54.4	3	0	0	0	45.6
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	54.4	3	0	0	0	38.6
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	227	100%	5	55.1	3	0	0	0	42.7
13	Exhaust Fan	room on UG/F	90	1		100%	0	55.1	3	0	0	0	37.9
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	241	100%	10	55.6	3	-10	0	0	36.9
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	278	100%	0	56.9	3	-10	0	0	26.1
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	185	100%	5	53.4	3	0	0	0	44.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	227	100%	3	55.1	3	0	0	0	40.9
18	Generator	NE louvre of generator room on 3/F	90	1	220	100%	0	54.9	3	0	0	0	38.1
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	206	100%	3	54.3	3	0	0	0	41.7
20	PAU	SW louvre of PAU room on 4/F	90	2	211	100%	3	54.5	3	0	0	0	41.5
21	Generator	NE louvre of generator room on LR/F	90	1	229	100%	0	55.2	3	-10	0	0	27.8
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	244	100%	3	55.8	3	0	0	0	40.2
23	Exhaust Fan		90	1		100%	0	55.8	3	-10	0	0	27.2
												Predicted Noise Level due to building service equipment / dB(A)	53.6

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	200	7%	0	54.0	3	-5	0	-12	48.2
2	Grinding	Transport Workshop Section on G/F	108	1	200	7%	0	54.0	3	-5	0	-12	40.2
3	Hammering[7]	Transport Workshop Section on G/F	113	1	200	3%	0	54.0	3	-5	0	-15	42.2
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	200	17%	0	54.0	3	-5	0	-8	34.8
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	200	100%	0	54.0	3	-5	0	0	32.4
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	200	67%	0	54.0	3	-5	3	-2	23.2
7	Parts Welding	Transport Workshop Section on G/F	88	1	200	67%	0	54.0	3	-5	0	-2	30.2
8	Screw Driver	Transport Workshop Section on G/F	100	1	200	17%	0	54.0	3	-5	0	-8	36.2
9	Tyre Changer	Transport Workshop Section on G/F	98	1	200	67%	0	54.0	3	-5	0	-2	39.8
												Predicted Noise Level due to depot activities / dB(A)	50.5

Predicted Total Fixed Plant Noise Level / dB(A) 55.4

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room louvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N804**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	191	100%	3	53.6	3	-10	0	0	32.4
2	Exhaust Fan		90	1		100%	0	53.6	3	-10	0	0	29.4
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	196	100%	0	53.9	3	0	0	0	39.1
4	Exhaust Fan		90	1		100%	0	53.9	3	0	0	0	39.1
5	Transformers	SW louvre of transformer room on G/F	90	2	247	100%	3	55.8	3	0	0	0	40.2
6	Exhaust Fan		90	1		100%	0	55.8	3	0	0	0	37.2
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	191	100%	0	53.6	3	0	0	0	39.4
8	Exhaust Fan		90	1		100%	0	53.6	3	0	0	0	39.4
9	AHU	SW louvre of AHU room on UG/F	90	0	247	100%	0	55.8	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	208	100%	7	54.4	3	0	0	0	45.6
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	54.4	3	0	0	0	38.6
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	227	100%	5	55.1	3	0	0	0	42.7
13	Exhaust Fan	room on UG/F	90	1		100%	0	55.1	3	0	0	0	37.9
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	241	100%	0	55.6	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	278	100%	0	56.9	3	-10	0	0	26.1
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	185	100%	0	53.4	3	0	0	0	39.6
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	227	100%	0	55.1	3	0	0	0	37.9
18	Generator	NE louvre of generator room on 3/F	90	0	220	100%	0	54.9	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	206	100%	0	54.3	3	0	0	0	38.7
20	PAU	SW louvre of PAU room on 4/F	90	1	211	100%	0	54.5	3	0	0	0	38.5
21	Generator	NE louvre of generator room on LR/F	90	0	229	100%	0	55.2	3	-10	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	244	100%	3	55.8	3	0	0	0	40.2
23	Exhaust Fan		90	1		100%	0	55.8	3	-10	0	0	27.2
												Predicted Noise Level due to building service equipment / dB(A)	52.1

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	200	7%	0	54.0	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	200	7%	0	54.0	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	200	3%	0	54.0	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	200	17%	0	54.0	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	200	100%	0	54.0	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	200	67%	0	54.0	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	200	67%	0	54.0	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	200	17%	0	54.0	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	200	67%	0	54.0	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 52.1

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room louvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Daytime & Evening Time Periods

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N805**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	197	100%	3	53.9	3	-10	0	0	32.1
2	Exhaust Fan		90	1		100%	0	53.9	3	-10	0	0	29.1
3	Water Pumps	NW louvre of chiller pump room on G/F	90	2	203	100%	3	54.1	3	0	0	0	41.9
4	Exhaust Fan		90	1		100%	0	54.1	3	0	0	0	38.9
5	Transformers	SW louvre of transformer room on G/F	90	2	254	100%	3	56.1	3	0	0	0	39.9
6	Exhaust Fan		90	1		100%	0	56.1	3	0	0	0	36.9
7	Chillers	NW louvre of chiller plant room on UG/F	90	2	197	100%	3	53.9	3	0	0	0	42.1
8	Exhaust Fan		90	1		100%	0	53.9	3	0	0	0	39.1
9	AHU	SW louvre of AHU room on UG/F	90	1	254	100%	0	56.1	3	-10	0	0	26.9
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	210	100%	7	54.5	3	0	0	0	45.5
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	54.5	3	0	0	0	38.5
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	228	100%	5	55.2	3	0	0	0	42.6
13	Exhaust Fan	room on UG/F	90	1		100%	0	55.2	3	0	0	0	37.8
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	9	242	100%	10	55.7	3	-10	0	0	36.9
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	282	100%	0	57.0	3	-10	0	0	26.0
16	PAU	NE louvre of PAU room 1 on 3/F	90	3	190	100%	5	53.6	3	0	0	0	44.2
17	PAU	NE louvre of PAU room 2 on 3/F	90	2	228	100%	3	55.2	3	0	0	0	40.8
18	Generator	NE louvre of generator room on 3/F	90	1	222	100%	0	54.9	3	0	0	0	38.1
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	2	212	100%	3	54.5	3	0	0	0	41.5
20	PAU	SW louvre of PAU room on 4/F	90	2	217	100%	3	54.7	3	0	0	0	41.3
21	Generator	NE louvre of generator room on LR/F	90	1	235	100%	0	55.4	3	-10	0	0	27.6
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	250	100%	3	56.0	3	0	0	0	40.0
23	Exhaust Fan		90	1		100%	0	56.0	3	-10	0	0	27.0
												Predicted Noise Level due to building service equipment / dB(A)	53.4

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	1	204	7%	0	54.2	3	-5	0	-12	48.0
2	Grinding	Transport Workshop Section on G/F	108	1	204	7%	0	54.2	3	-5	0	-12	40.0
3	Hammering[7]	Transport Workshop Section on G/F	113	1	204	3%	0	54.2	3	-5	0	-15	42.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	1	204	17%	0	54.2	3	-5	0	-8	34.6
5	Vehicle Washing	Transport Workshop Section on G/F	88	1	204	100%	0	54.2	3	-5	0	0	32.2
6	Vehicle Welding	Transport Workshop Section on G/F	78	1	204	67%	0	54.2	3	-5	3	-2	23.0
7	Parts Welding	Transport Workshop Section on G/F	88	1	204	67%	0	54.2	3	-5	0	-2	30.0
8	Screw Driver	Transport Workshop Section on G/F	100	1	204	17%	0	54.2	3	-5	0	-8	36.0
9	Tyre Changer	Transport Workshop Section on G/F	98	1	204	67%	0	54.2	3	-5	0	-2	39.6
												Predicted Noise Level due to depot activities / dB(A)	50.4

Predicted Total Fixed Plant Noise Level / dB(A) 55.2

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage
The maximum allowable SWLs of the plant room lourvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable
SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Reprovisioning of FEHD Sai Yee Street Vehicle Depot at Yen Ming Road, Kowloon Reclamation Area

Operational Noise Impact Assessment - Fixed Plant (Nighttime Period)

NSR Planned Residential Development on Nam Cheong Station
Assessment Point **N805**

No.	Item	Locations	Maximum Allowable SWL [6] / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Building Service Equipment													
1	Transferred Water Pumps	NW louvre of transferred tank pump room on G/F	90	2	197	100%	3	53.9	3	-10	0	0	32.1
2	Exhaust Fan		90	1		100%	0	53.9	3	-10	0	0	29.1
3	Water Pumps	NW louvre of chiller pump room on G/F	90	1	203	100%	0	54.1	3	0	0	0	38.9
4	Exhaust Fan		90	1		100%	0	54.1	3	0	0	0	38.9
5	Transformers	SW louvre of transformer room on G/F	90	2	254	100%	3	56.1	3	0	0	0	39.9
6	Exhaust Fan		90	1		100%	0	56.1	3	0	0	0	36.9
7	Chillers	NW louvre of chiller plant room on UG/F	90	1	197	100%	0	53.9	3	0	0	0	39.1
8	Exhaust Fan		90	1		100%	0	53.9	3	0	0	0	39.1
9	AHU	SW louvre of AHU room on UG/F	90	0	254	100%	0	56.1	3	-10	0	0	0.0
10	Water Pumps	NE louvre of water vehicle filing and automatic washing system	90	5	210	100%	7	54.5	3	0	0	0	45.5
11	Exhaust Fan	water tank and water pump room on UG/F	90	1		100%	0	54.5	3	0	0	0	38.5
12	Water Pumps	NE louvre of potable flushing and make up water and water pump	90	3	228	100%	5	55.2	3	0	0	0	42.6
13	Exhaust Fan	room on UG/F	90	1		100%	0	55.2	3	0	0	0	37.8
14	Exhaust Fans	SE louvre of exhaust fan room on UG/F	90	0	242	100%	0	55.7	3	-10	0	0	0.0
15	Exhaust Fan	SW louvre of TBE room on UG/F	90	1	282	100%	0	57.0	3	-10	0	0	26.0
16	PAU	NE louvre of PAU room 1 on 3/F	90	1	190	100%	0	53.6	3	0	0	0	39.4
17	PAU	NE louvre of PAU room 2 on 3/F	90	1	228	100%	0	55.2	3	0	0	0	37.8
18	Generator	NE louvre of generator room on 3/F	90	0	222	100%	0	54.9	3	0	0	0	0.0
19	Cooling Towers	NW façade of cooling tower plant room on 4/F	90	1	212	100%	0	54.5	3	0	0	0	38.5
20	PAU	SW louvre of PAU room on 4/F	90	1	217	100%	0	54.7	3	0	0	0	38.3
21	Generator	NE louvre of generator room on LR/F	90	0	235	100%	0	55.4	3	-10	0	0	0.0
22	Heat Pumps	SW louvre of heat pump plant room on LR/F	90	2	250	100%	3	56.0	3	0	0	0	40.0
23	Exhaust Fan		90	1		100%	0	56.0	3	-10	0	0	27.0
												Predicted Noise Level due to building service equipment / dB(A)	51.9

No.	Item	Locations	Measured SWL / dB(A)	Quantity	Distance from source to NSR /m	On-time % over 30 mins	Correction Factor / dB(A)						Predicted Noise Level [5] dB(A) Leq,30min
							Quantity [1]	Distance [2]	Façade	Barrier [3]	Tonal	On-time % [4]	
Depot Activities													
1	Sand Blasting	Transport Workshop Section on G/F	116	0	204	7%	0	54.2	3	-5	0	-12	0.0
2	Grinding	Transport Workshop Section on G/F	108	0	204	7%	0	54.2	3	-5	0	-12	0.0
3	Hammering[7]	Transport Workshop Section on G/F	113	0	204	3%	0	54.2	3	-5	0	-15	0.0
4	Roller Brake Tester	Transport Workshop Section on G/F	99	0	204	17%	0	54.2	3	-5	0	-8	0.0
5	Vehicle Washing	Transport Workshop Section on G/F	88	0	204	100%	0	54.2	3	-5	0	0	0.0
6	Vehicle Welding	Transport Workshop Section on G/F	78	0	204	67%	0	54.2	3	-5	3	-2	0.0
7	Parts Welding	Transport Workshop Section on G/F	88	0	204	67%	0	54.2	3	-5	0	-2	0.0
8	Screw Driver	Transport Workshop Section on G/F	100	0	204	17%	0	54.2	3	-5	0	-8	0.0
9	Tyre Changer	Transport Workshop Section on G/F	98	0	204	67%	0	54.2	3	-5	0	-2	0.0
												Predicted Noise Level due to depot activities / dB(A)	0.0

Predicted Total Fixed Plant Noise Level / dB(A) 51.9

Notes:

[1] Correction Factor for quantity = 10 log (quantity)

[2] Distance correction for SWL = 20 log (distance) + 8

[3] With reference to IND-TM, a negative correction of 10dB(A) will be applied to for noise source totally screened by barrier or building such that no direct line of site between the noise source and NSR. On the other hand, a negative correction of 5dB(A) will be applied for the noise source partially screened by substantial barrier.

[4] Correction for on-time percentage = 10 log (on-time %

[5] Detailed design of the plant rooms is not yet available at this stage

The maximum allowable SWLs of the plant room louvres / equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL - DC + FC - BC + OC + TC

SPL	Sound Pressure Level / dB(A)
Max SWL	Maximum allowable Sound Power Level / dB(A)
DC	Distance Attenuation / dB(A)
FC	Façade Correction / dB(A) (i.e. 3dB(A))
BC	Barrier Correction / dB(A)
OC	On-time % Correction / dB(A)
TC	Tonal Correction / dB(A)

[6] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as in-take / discharge silencers, acoustic louvre, acoustic silencer would be installed as appropriate to achieve the required SWL.

[7] 3 dB(A) correction for impulsiveness has been taken into account in the measured SWL (110 + 3 = 113 dB(A

Appendix 5-11
Detailed Calculations of Construction Noise Impact Assessment and Complete PME Inventory (Mitigated Scenario)

FEHD Mobilization and Hoarding

Group 1 Site Mobilisation and Hoarding

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Loader, wheel (Back-hoe) (All) #	QPME list	1	104	50%	5	96.0
2	Excavator, Tracked (All) #	QPME list	1	99	50%	5	91.0
3	Lorry, with crane, 5.5t<GVH<38t (All)	Other	1	105	50%	0	102.0
4	Generaotr (All)	QPME list	1	89	100%	0	89.0
5	Breaker, mini-robot mounted (Act 1) #	Other	0	115	50%	5	0.0
6	Air Compressor (Act 1)	CNP 001	0	100	50%	0	0.0
7	Concrete Lorry Mixer (Act 2) #	CNP 044	1	109	100%	5	104.0
8	Poker Vibrator, hand-held, electric (Act 2)	Other	2	102	100%	0	105.0
9							0.0
10							0.0
Total							109.0

Group 2 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 3 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 4 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

#: Use of Temporary noise barrier

Other: reference to "Sound power levels of other commonly used PME"

FEHD Foundation

Group 1 Piling (Driven H Pile)

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane	QPME list	3	101	100%	0	105.8
2	Generator, portable	Other	1	100	50%	0	97.0
3	Generator	QPME list	1	89	100%	0	89.0
4	Driven H-Pile Rig (controlled under CNP)						0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							106.4

Group 2 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 3 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

Group 4 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

#: Use of Temporary noise barrier
Other: reference to "Sound power levels of other commonly used PME"

FEHD Superstructure

Group 1 Pile Cap Cosntruction

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Excavator, Tracked (Act 1)	QPME list	2	99	50%	0	99.0
2	Lorry, with crane, 5.5t<GVH<38t (Act 1)	Other	2	105	50%	0	105.0
3	Mobile Crane (Act 1)	QPME list	1	101	50%	0	98.0
4	Concrete lorry Mixer (Act 2) #	CNP 044	0	109	50%	5	0.0
5	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
6	Bar Bender and cutter (electric) (All)	CNP 021	1	90	70%	0	88.5
7							0.0
8							0.0
9							0.0
10							0.0
Total							106.7

Group 2 Superstructure and concreting

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
2	Concrete Lorry Mixer #	CNP 044	1	109	50%	5	101.0
3	Concrete Pump #	CNP 047	1	109	50%	5	101.0
4	Poker Vibrator, hand-held, electric	Other	2	102	100%	0	105.0
5	Tower crane (electric)	CNP 049	1	95	100%	0	95.0
6	Bar Bender and cutter (electric)	CNP 021	3	90	50%	0	91.8
7							0.0
8							0.0
9							0.0
10							0.0
Total							109.7

Group 3 Finishing

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Drill, Hand-held (battery)	Other	3	89	50%	5	85.8
2	Jig-saw, hand-held, wood (electric)	Other	1	99	50%	5	91.0
3	Saw, wire	Other	2	101	50%	5	96.0
4	Lorry, with crane, 5.5t<GVH<38t	Other	2	96	50%	0	96.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							99.8

Group 4 not used

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1							0.0
2							0.0
3							0.0
4							0.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							10.0

#: Use of Temporary noise barrier
Other: reference to "Sound power levels of other commonly used PME"

MTRC Nam Cheong Station Property Development

Group 1 Site Mobilisation

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Loader, wheeled (backhoe) (All)	QPME list	1	104	50%	0	101.0
2	Excavator, Tracked (All)	QPME list	1	99	50%	0	96.0
3	Lorry, with crane, 5.5t<GVH<38t (All)	Other	1	105	50%	0	102.0
4	Generaotr (All)	QPME list	1	89	100%	0	89.0
5	Breaker, Excavator mounted (Act 1)	Other	1	122	50%	0	119.0
6	Air Compressor (Act 1)	CNP 001	1	100	50%	0	97.0
7	Concrete Lorry Mixer (Act 2) #	CNP 044	0	109	100%	5	0.0
8	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
9							0.0
10							0.0
Total							119.2

Group 2 Piling

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Mobile Crane (Act 1&2)	QPME list	2	101	50%	0	101.0
2	Lorry, 5.5t<GVH<38t (Act 1&2)	Other	2	105	50%	0	105.0
3	Generator (Act 1&2)	QPME list	1	89	100%	0	89.0
4	Bored Pile Oscillator (Act 1)	CNP 165	2	115	50%	0	115.0
5	Concrete Lorry Mixer (Act 2)	CNP 044	0	109	50%	0	0.0
6	Poker Vibrator, hand-held, electric (Act 2)	Other	0	102	100%	0	0.0
7	Air Compressor (Act 1)	CNP 001	1	100	50%	0	97.0
8							0.0
9							0.0
10							0.0
Total							115.6

Group 3 Superstructure and concreting

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
2	Concrete Lorry Mixer #	CNP 044	1	109	50%	5	101.0
3	Concrete Pump #	CNP 047	1	109	50%	5	101.0
4	Poker Vibrator, hand-held, electric	Other	2	102	100%	0	105.0
5	tower crane (electric)	CNP 049	1	95	100%	0	95.0
6	Bar Bender and cutter (electric)	CNP 021	3	90	50%	0	91.8
7							0.0
8							0.0
9							0.0
10							0.0
Total							109.7

Group 4 Finishing

	Equipment	TM Ref. / other Ref.	No. of Items	SWL/Item dB(A)	On-time %	Noise Barrier Reduction	Total SWL dB(A)
1	Drill, Hand-held (battery)	Other	3	89	50%	5	85.8
2	Jig-saw, hand-held, wood (electric)	Other	1	99	50%	5	91.0
3	Saw, wire	Other	2	101	50%	5	96.0
4	Lorry, with crane, 5.5t<GVH<38t	Other	2	105	50%	0	105.0
5							0.0
6							0.0
7							0.0
8							0.0
9							0.0
10							0.0
Total							105.7

#: Use of Temporary noise barrier

Other: reference to "Sound power levels of other commonly used PME"

12:17:35 PM 12:17:43 PM

NSR			Monthly Construction Noise Level at Each NSR dB(A) (OVERALL)																									
			2014	2015													2016											
Row ID	AP ID	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)	63	63	63	64	64	64	64	64	64	64	64	64	64	64	64	64	56	56	56	56	56	56	56	56	56	56
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	54	54	54	54	54	54	54	54	54	54
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)	60	60	60	61	61	61	61	61	61	61	61	61	61	61	61	61	54	54	54	54	54	54	54	54	54	54
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	59	59	59	59	59	59	59	59	59	59	60	60	60	60	60	60	53	53	53	53	53	53	53	53	53	53
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	52	52	52	52	52	52	52	52	52	52
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	58	58	58	58	58	58	58	58	58	58	59	59	59	59	59	59	53	53	53	53	53	53	53	53	53	53
7	N301	Hampton Place	55	55	55	56	56	56	56	56	56	56	56	56	56	56	56	56	51	51	51	51	51	51	51	51	51	51
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	60	60	60	60	60	60	60	59	59	59	59	59	59	59	59	59	57	57	57	57	57	57	56	56	56	56
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	57	57	57	57	57	57	57	57	57	57
10	N601	Nam Cheong Estate Block 4 Cheong Shun House	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	57	57	57	57	57	57	57	57	57	57
11	N701	Fu Cheong Estate Fu Yun House	65	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
12	N811	Planned Residential Development on Nam Cheong Station	61	61	61	62	62	62	62	62	62	62	62	62	62	62	62	62	52	52	52	52	52	52	52	52	52	52
13	N812	Planned Residential Development on Nam Cheong Station	61	61	61	62	62	62	62	62	62	62	62	62	62	62	62	62	52	52	52	52	52	52	52	52	52	52
14	N813	Planned Residential Development on Nam Cheong Station	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	49	49	49	49	49	49	49	49	49	49
15	N814	Planned Residential Development on Nam Cheong Station	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	49	49	49	49	49	49	49	49	49	49
16	N815	Planned Residential Development on Nam Cheong Station	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	49	49	49	49	49	49	49	49	49	49

		Max. Construction Noise Level at each NSR dB(A)					
	NSR ID	2014	2015	2016	Limit	Remarks
		Dec				
1	N101	63	64	64	65	(2)
2	N102	61	61	61	65	(2)
3	N103	60	61	61	65	(2)
4	N201	59	60	60	65	(2)
5	N202	58	58	58	65	(2)
6	N203	58	59	59	65	(2)
7	N301	55	56	56	75	
8	N401	60	60	59	75	
9	N501	59	59	59	75	
10	N601	58	59	59	75	
11	N701	65	64	64	65	(2)
12	N811	61	62	62	75	(3)
13	N812	61	62	62	75	(3)
14	N813	58	59	59	75	(3)
15	N814	58	59	59	75	(3)
16	N815	58	58	58	75	(3)

Note (1) Not Used

(2) Construction Noise assessment criteria for school is 70dB(A) at normal school days and is reduced to 65dB(A) during examination period. The more conservative 65dB(A) criteria is applied in this construction noise impact assessment.

(3) Predicted Noise level at N811 to N815 (Nam Cheong Station Development) include noise contribution from proposed FEHD project, but NOT include noise contribution from Nam Cheong Station Development itself

NSR			Monthly Construction Noise Level at Each NSR dB(A) (the Project)																								
			2014	2015												2016											
Row ID	AP ID	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	N101	Sir Ellis Kadorie Secondary School (West Kowloon)	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	53	53	53	53	53	53	53	53	53
2	N102	Sir Ellis Kadorie Secondary School (West Kowloon)	60	60	60	61	61	61	61	61	61	61	61	61	61	61	61	61	51	51	51	51	51	51	51	51	51
3	N103	Sir Ellis Kadorie Secondary School (West Kowloon)	59	59	59	60	60	60	60	60	60	60	60	60	60	60	60	60	50	50	50	50	50	50	50	50	50
4	N201	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	49	49	49	49	49	49	49	49	49
5	N202	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	57	57	57	57	57	57	57	57	57	57	58	58	58	58	58	58	48	48	48	48	48	48	48	48	48
6	N203	Tai Kok Tsui Catholic Primary School (Hoi Fan Raod)	57	57	57	58	58	58	58	58	58	58	58	58	58	58	58	58	48	48	48	48	48	48	48	48	48
7	N301	Hampton Place	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	45	45	45	45	45	45	45	45	45
8	N401	Nam Cheong Estate Block 6 Cheong Chit House	55	55	55	55	55	55	55	55	55	55	56	56	56	56	56	56	46	46	46	46	46	46	46	46	46
9	N501	Nam Cheong Estate Block 5 Cheong Yat House	55	55	55	56	56	56	56	56	56	56	56	56	56	56	56	56	46	46	46	46	46	46	46	46	46
10	N601	Nam Cheong Estate Block 4 Cheong Shun House	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	45	45	45	45	45	45	45	45	45
11	N701	Fu Cheong Estate Fu Yun House	54	54	54	55	55	55	55	55	55	55	55	55	55	55	55	55	45	45	45	45	45	45	45	45	45
12	N811	Planned Residential Development on Nam Cheong Station	61	61	61	62	62	62	62	62	62	62	62	62	62	62	62	62	52	52	52	52	52	52	52	52	52
13	N812	Planned Residential Development on Nam Cheong Station	61	61	61	62	62	62	62	62	62	62	62	62	62	62	62	62	52	52	52	52	52	52	52	52	52
14	N813	Planned Residential Development on Nam Cheong Station	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	49	49	49	49	49	49	49	49	49
15	N814	Planned Residential Development on Nam Cheong Station	58	58	58	59	59	59	59	59	59	59	59	59	59	59	59	59	49	49	49	49	49	49	49	49	49
16	N815	Planned Residential Development on Nam Cheong Station	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	49	49	49	49	49	49	49	49	49

	Max. Construction Noise Level at each NSR dB(A)					
	NSR ID	2014	2015	2016	Limit	Remarks
		Dec				
1	N101	63	63	63	65	(2)
2	N102	60	61	61	65	(2)
3	N103	59	60	60	65	(2)
4	N201	58	59	59	65	(2)
5	N202	57	58	58	65	(2)
6	N203	57	58	58	65	(2)
7	N301	54	55	55	75	
8	N401	55	56	56	75	
9	N501	55	56	56	75	
10	N601	54	55	55	75	
11	N701	54	55	55	65	(2)
12	N811	61	62	62	75	(3)
13	N812	61	62	62	75	(3)
14	N813	58	59	59	75	(3)
15	N814	58	59	59	75	(3)
16	N815	58	58	58	75	(3)

Note (1) Not Used

(2) Construction Noise assessment criteria for school is 70dB(A) at normal school days and is reduced to 65dB(A) during examination period. The more conservative 65dB(A) criteria is applied in this construction noise impact assessment.

(3) Predicted Noise level at N811 to N815 (Nam Cheong Station Development) include noise contribution from proposed FEHD project, but NOT include noise contribution from Nam Cheong Station Development itself

| Row | 1 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 2 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 3 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 4 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 5 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 6 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 7 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 8 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 9 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 10 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 11 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 12 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 13 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 14 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 15 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |

| Row | 16 | | | | | | | | | Monthly Construction Noise Level at Each NSR dB(A) | | | | | | | | |