毅勤發展顧問有限公司
Tel 電話 [redacted]
Fax 傳真
Email 電郵
Web 網址

Date : 11th May, 2026
Our Ref. : ADCL/PLG-10341/L003

The Secretary,
Town Planning Board,
15/F., North Point Government Offices,
333 Java Road, North Point, Hong Kong

By Email

Dear Sir/Madam,

Re: Section 16 Planning Application for Proposed Temporary Shop and Services and Eating Place for a Period of 3 Years at Lot 1023 S.B RP, 1033 S.C, 1034 S.A RP (Part) in D.D. 121 and adjoining Government Land, Tong Yan San Tsuen, Yuen Long, New Territories
(Planning Application No. A/YL-TYST/1351)

We refer to the captioned application and compliance of approval conditions (c) concerning the implementation of the accepted sewerage drainage proposal under previous applications (No. A/YL-TYST/1218 and No. A/YL-TYST/1216).

According to the Authorised Person (AP) responsible for the approval conditions under previous applications (No. A/YL-TYST/1218 and No. A/YL-TYST/1216, formal submissions were made on 14.9.2023, 23.4.2024, and 23.5.2024 to the Drainage Services Department (DSD). Following these submissions, the DSD confirmed that they have no objection to taking over the relevant completed drainage works located on Government Land (please refer to the appendices).

Based on advice from the AP, the DSD has no objection to taking over the relevant completed drainage works. The works were considered to be to the DSD's satisfaction as of 25.7.2024. Accordingly, the approval conditions were deemed complied with by the specified dates of 7.10.2024 and 10.10.2024.

Thank you for your kind attention and should you have any queries, please do not hesitate to contact our Mr. Thomas LUK at [redacted]

Yours faithfully,
For and on behalf of
Aikon Development Consultancy Limited

Thomas LUK

Encl.
c.c. Client

Address 地址：
[redacted]

List of Appendices

Appendix 1

Submission of Form HBP1 and relative drawings to the Drainage Services Department dated 14.9.2023

翱翔顧問工程師有限公司
Wings & Associates Consulting Engineers Ltd.

TPB Ref.: TPB/A/YL-TYST/1216
Our Ref.: P21012/L/005

By Post and Email

Drainage Services Department
Operation & Maintenance Branch,
Mainland North Division, Yeun Long Section
Kowloon Government Offices, 405 Nathan Road, Kowloon
(Attn.: Mr. TSE Chi Wai)

14 September 2023

Dear Sir,

Temporary Shop and Services for a Period of 3 Years in "Residential (Group B) 1" Zone, Lot No. 1023 S.B RP, 1033 S.C and 1034 S.A RP (Part) in D.D.121 and Adjoining Government Land, Tong Yan San Tsuen, Yuen Long

Submission of HBP1 and relative drawings

We refer to the dated 14.7.2023 from Town Planning Board on the compliance of approval conditions, we are writing to submit the From HBP1 and relative drawings for your further comment.

Should you have any queries, please feel free to contact the undersigned at [redacted] Thank you for your kind attention.

Yours faithfully,
For and on Behalf of
WINGS & ASSOCIATES CONSULTING ENGINEERS LIMITED

Roy Lo
Senior Building Surveyor

Encl.
VT/RM

(00MC2-02-2)
HBP1
(September 2020)

Application for Technical Audit of Drainage / Water Supply Connection Works Carried Out by a Member of the Public
市民進行渠務接駁 / 供水接駁工程技術審核申請書

To the Officer(s) concerned,
致有關部門人員

I / We, the undersigned, request you to carry out a technical audit to the following works ("the works") in connection with the premises specified below:
本人／我們(下開署名者)請你們進行下列與所述樓宇有關的工程(以下簡稱"工程")技術審核:

(1) #☑ DSD – Drainage connection 渠務署 – 渠務接駁

Proposed earliest commencement date for the works is 擬最早施工日期爲：21/09/2023.

A crossed cheque payable to "The Government of the Hong Kong SAR" no. _____ for HK$ _____ being the cost of the technical audit involved including all fees, labour, materials and departmental overhead charges for this application is attached.
現附上劃線支票，抬頭人爲"香港特別行政區政府"，號碼：_____ 金額爲港元$_____，作爲支付所涉及技術審核的開支，包括所有費用、人工、物料及部門間接成本。

#☐ Prefer future communication through email (if applicable) 希望以電郵作往後通訊 (如適用)

Email address for communication is 用作通訊的電郵地址為: _____

(2) #☐ WSD – Water supply connection 水務署 – 供水接駁

Proposed earliest commencement date for the works is 擬最早施工日期爲：_____.

I agree to pay to the Government of the Hong Kong Special Administrative Region ("the Government") the cost of the technical audit involved including all fees, labour, materials and departmental overhead charges within 14 days of the presentation a Demand Note to be rendered by you.
本人同意在接獲由你們所發出的繳費通知書 14 天內，向香港特別行政區政府(以下簡稱"政府")支付所涉及技術審核的開支，包括所有費用、人工、物料及部門間接成本。

I also agree that the Government shall not in any circumstances be held liable for any delay howsoever arising in carrying out and completing the technical audit.
本人亦同意在任何情況下，不論技術審核的展開或完成出現任何阻延，政府均無須負上法律責任。

Tick in the box only if applicable 只須在適用空格內劃上✓號

Particulars of the Development 物業詳情

Lot No. 地段編號 : Lot 1034 S.A RP in D.D. 121

Address 地址 :

Name of building/Demarcation/District number 大廈名稱/地區編號

Tong Yan San Tsuen Road

Number and name of street/Estate 門牌號數及街道名稱/屋邨

Block 座 | Yuen Long | District 地區

H.K.香港 ○
Kln.九龍 ○
N.T.新界 ⊙

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* Delete whichever is/are inappropriate (請將不適用者刪去)

Owner/Developer 業主/發展商

Name 姓名/公司名稱 : (English) *~~Mr.~~ ~~Ms.~~ Well Vision Holdings Limited
(Chinese) *先生 ~~女士~~
Tel. No.: 電話號碼：[redacted]

*~~H.K. Identity Card No./~~
Business Registration No.: 香港身分證/公司註冊號碼：[redacted]
Fax No.: 傳真號碼：

Address 地址 : Flat/Room 室 | Block 座 | Floor 樓 | Name of Building 大廈名稱 [redacted]
[redacted]
[redacted]
Number and name of street, Estate and District 門牌號數、街道名稱、屋邨及地區
H.K. 香港 ○
Kln. 九龍 ○
N.T. 新界 ◉

Signature/chop 簽署/蓋章 :

Authorised Person (if different from the above owner/developer) 認可人士 (如不同於上述業主/發展商)

Name 姓名/公司名稱 : (English) *Mr. ~~Ms.~~ FOK LIK KAN
(Chinese) *先生 ~~女士~~ 霍歷勤
Tel. No.: 電話號碼：[redacted]

*H.K. Identity Card No./
~~Business Registration No.:~~
香港身分證/公司註冊號碼：
Fax No.: 傳真號碼：

Address 地址 : [redacted]
Flat/Room 室 | Block 座 | Floor 樓 | Name of Building 大廈名稱 [redacted]
[redacted]
Number and name of street, Estate and District 門牌號數、街道名稱、屋邨及地區
H.K. 香港 ○
Kln. 九龍 ◉
N.T. 新界 ○

For Drainage Connection 渠務接駁

Contractor 承建商

Name 公司名稱 : (English) Lung Kee Transportation Engineering Limited
(Chinese) [redacted]
Tel. No.: 電話號碼：[redacted]

Business Registration No.: 公司註冊號碼：[redacted]
Fax No.: 傳真號碼：[redacted]

Drainage Connections Schedule 渠務接駁表	No. & size 數量及口徑大小	Approximate date for works commencement on site 地盤開始施工的大概日期	Approximate date for works being ready for inspection 工程可供檢視的大概日期
(a) Foul sewer connections 污水渠接駁	DN250	21/09/2023	31/03/2024
(b) Storm water drain connections 雨水渠接駁			

* Delete whichever is/are inappropriate (請將不適用者刪去)

Plans showing the works are attached. Plans have been approved by the Building Authority as follows:

隨表夾附工程圖則。已獲建築事務監督批准的圖則如下：

Site Formation 地盤平整		Building 樓宇		Drainage 渠務	
BD Ref. 屋宇署檔號	Date 日期	BD Ref. 屋宇署檔號	Date 日期	BD Ref. 屋宇署檔號	Date 日期

For Water Supply Connection 供水接駁

Contractor 承建商

Name 公司名稱 : (English) (英文) _____

(Chinese) (中文) _____ Tel. No.: 電話號碼：_____

Business Registration No.: 公司註冊號碼: _____ Fax No.: 傳真號碼：_____

Please ensure that the following documents have been attached herewith and tick in the corresponding box below:

請確保已夾附相關文件無誤，並在以下空格內劃上✓號：

(1) ☐ Plans showing the alignment of proposed connection main 建議喉管接駁的圖則

(2) ☐ Inside/fire services works proposal 內部/消防供水系統施工建議書

(3) ☐ Completed form WWO542 填妥的 WWO542 表格

For official use only 本欄由署方填寫		(1) DSD 渠務署	(2) WSD 水務署
Date of receiving application 收件日期			
File ref./WSD consumer account no. 檔案編號/水務署用户編號			
Demand note (D/N) no.繳款通知書編號			
Estimated cost ($) 估計費用(元)		N.A. 不適用	
Date of issuing D/N 發單日期			
Date of settling D/N 繳款日期		N.A. 不適用	
Initial inspection 初步檢視	Date 日期		
	Inspector's name & signature 檢視人員姓名及簽署		
Additional inspections, if any 其他檢視(如有)	Date 日期		
	Inspector's name & signature 檢視人員姓名及簽署		
Inside/fire services work inspection (WSD) 內部/消防供水系統檢視(水務署)		Date 日期	
		Inspector's name & signature 檢視人員姓名及簽署	
Date of water pipe testing (WSD) 供水喉管測試(水務署)		Date 日期	
		Inspector's name & signature 檢視人員姓名及簽署	
Handover inspection 移交檢視	Date 日期		
	Inspector's name & signature 檢視人員姓名及簽署		
Date of submission of: 文件遞交日期:	Testing certificates for materials and workmanship 物料及造工檢查證書		
	As-built drawing 竣工圖則		
Engineer's checking 工程師審閱	Name, signature & date 姓名、簽署及日期		

* Delete whichever is/are inappropriate (請將不適用者刪去)

Notes 註：

1. This application form shall be read in conjunction with the "Practitioner's Guidelines", available for downloading from the Works Bureau's web-site, for other relevant details (in particular the requirements for suitable contractors to be employed by the applicant in different work items). Any non-compliance may lead to longer processing time due to clarification.
填寫本申請表格時，須一併參照環境運輸及工務局網站上的"業內執業人士指引"所提供之相關資料(尤以是申請人如擬聘請不同工種的承建商，則必須符合有關規定)。如有不符規定之處，則或須要求申請人澄清，有可能引致延誤處理申請。
2. Duplications of the completed application form shall be submitted to respective departments separately for corresponding work items included in the form to request for the related audit(s).
填妥後的申請表格，須以同一式樣，因應表格內個別工程項目的技術審核申請而分別遞交相關部門。
3. This application form shall be signed by the owner/developer of the lot or building.
本申請表格必須由有關地段或樓宇的業主或發展商簽署。
4. Plans (to a scale of 1:500 or larger) attached to this application should show details of the works with all relevant levels reduced to Principal Datum.
夾附於本表格的圖則(按 1:500 或更大的比例)應顯示全部工程細則，所有平水須按主水平基準顯示。
5. For drainage connection works, this application form shall be submitted after approval of the drainage connection plans, if any, by the Drainage Services Department, and ready for the technical audit within 14 days upon the receipt of this form by Drainage Services Department.
如屬渠務接駁工程，渠務接駁圖則 (如有的話) 必須先行獲得渠務署批准。在呈交本申請表時，渠務接駁工程應已準備妥當，好讓渠務署在收到本申請表後的 14 天內進行技術審核。
6. For drainage connection works, the concerned Chief Engineer will notify the following parties should the drainage connections be considered satisfactorily completed:
渠務接駁工程經審核認爲妥善完工，渠務署的有關總工程師會通知：

The Building Authority, with a copy to the AP 建築事務監督，並將副本抄送認可人士	if 如	Development is under the control of the Buildings Ordinance 該發展是受《建築物條例的》管制
The owner/developer 業主/發展商	if 如	Development is NOT under the control of the Buildings Ordinance 該發展**不受**《建築物條例》的管制

7. [3] For drainage connection works, the applicant understands that receipt of cheque payments by the Government does not imply the application being in order. Technical audit will only be carried out upon settlement of payments.
如屬渠務接駁工程，申請人明白政府收取其支票，並不意味其申請並無問題。署方只會在收妥付款後才進行技術審核。
8. The application for water supply connection should be submitted at least 3 months before the date for making tee connection by WSD.
供水接駁的申請，須在水務署進行三叉接駁日期之前至少三個月呈交。
9. The Authorized Person (AP) or owner/developer shall inform the corresponding Chief Engineer if the date of commencement of works or the date when the works are ready for inspection has changed.
如施工日期或可供檢查日期有所更改，認可人士、業主或發展商必須通知相關總工程師。
10. A 12-month defects liability period will commence upon satisfactory hand-over of the works to concerned department(s). Any defects found during this period shall be rectified by the AP, owner or developer to the satisfaction of the concerned department(s).
工程經妥善移交有關部門後，保養期隨即生效，爲期 12 個月。在這段期間若發現任何錯漏欠妥之處，認可人士、業主或發展商必須維修妥當，至有關部門滿意爲止。
11. Any personal information provided in this form will be used solely for purposes relating to the works or the technical audit. It may be disclosed to other government departments or agencies for the same purposes.
本表格所提供的任何個人資料只會用作有關工程或技術審核用途，這些資料可能會交予其他政府部門或機構作同樣用途。
12. Please observe the Personal Data (Privacy) Ordinance for furnishing any personal information about concerned personnel in the application form.
申請人就申請表提供有關人士的個人資料時，請注意《個人資料(私隱)條例》的相關條文。

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. ALL LEVELS ARE IN mPD UNLESS OTHERWISE STATED.
3. DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWINGS.
4. COORDINATES ARE BASED ON THE HONG KONG METRIC GRID (1980).

NOTES FOR CONCRETE WORKS

1. ALL CONCRETE WORKS ARE DESIGNED IN ACCORDANCE WITH CODE OF PRACTICE FOR THE STRUCTURAL USE OF CONCRETE 2013 AND BS8007:1987
2. CONCRETE MIX SHALL BE GRADE 40D/20 COMPLYING WITH CS1:2010 EXCEPT SECTION 7.1.
3. ALL REINFORCEMENT SHALL BE GRADE S275J0 CLASS 1 STEEL COMPLY WITH THE CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL, 2011
4. THE CONCRETE COVER FOR MANHOLE AND SUMP PUMP PIT SHALL BE 25mm.
5. THE REACTIVE ALKALI OF CONCRETE EXPRESSED AS THE EQUIVALENT SODIUM OXIDE PER CUBIC METER OF CONCRETE SHOULD NOT EXCEED 3.0kg WHEN DETERMINED IN ACCORDANCE WITH THE SPECIFICATION ITEMS GIVEN IN APPENDIX A OF PRACTICE FOR PNAP 180.
6. PFA CONCRETE TO BE USED IF NECESSARY. THE PFA CONTENT SHOULD NOT EXCEED 25% BY MASS OF THE CEMENTITIOUS CONTENT (OPC PLUS PFA) OF THE CONCRETE AND COMPLY WITH APP-33 (PNAP90) BLEND CEMENT CONTAINING PFA SHOULD COMPLY WITH BS6588:1985).
7. MINIMUM ANCHORAGE BOND LENGTH AND LAP LENGTH FOR CONCRETE GRADE 40D.

	HIGH TENSION STEEL
FULL TENSION ANCHORAGE/ LAP	35 DIA.
FULL COMPRESSION ANCHORAGE/ LAP	35 DIA.

8. DESIGN GROUND WATER LEVEL SHALL BE OF GROUND LEVEL.
9. DESIGN LOADING:
   LIVE LOAD = 5kPa
   BUILDING SURCHARGE LOAD = 10kPa
10. 75mm BLINDING LAYER SHALL BE PROVIDED

NOTES OF DRAINAGE WORKS:

(1) ALL DRAINAGE SYSTEM, PIPEWORK INSTALLATION & CONNECTION SHALL FULFILL MANUFACTURER'S REQUIREMENTS, BUILDING DEPARTMENT & DRAINAGE SERVICES DEPARTMENT REQUIREMENTS AND ALL RELEVANT REGULATIONS.

(2) WHETHER SHOWN ON THE DRAWING OR NOT, SUFFICIENT ACCESS SHALL BE PROVIDED BY MEANS OF CLEANING EYES OR OTHER APPROVED METHOD TO ENABLE ALL DRAINAGE PIPES TO BE CLEARED OF ANY OBSTRUCTION SUCH ACCESS POINTS SHALL BE SO SITED AS TO ALLOW CLEARANCE FOR THE EASY ENTRY OF CLEANING ROD / TOOL.

(3) ALL BENDS, BRANCHES OR TEE-JOINTS, ETC. SHALL HAVE AN OBTUSE ANGLE AND HAVE THE LARGEST PRACTICABLE RADIUS OF CURVATURE. THE BENDS, BRANCHES OR TEE-JOINTS SHALL NOT CHANGE IN ANY WAY OF THE CROSS SECTION OF THE PIPE AND A CLEANING EYE SHALL BE PROVIDED AT OR NEAR SUCH JOINTS.

(4) SUFFICIENT ANCHORAGE AND SUPPORT SHALL BE PROVIDED TO ALL PIPEWORKS TO TAKE UP THE WEIGHT OF THE PIPEWORK SYSTEM AND, IN ADDITION, THE THRUST DEVELOPED IN THE PIPEWORKS AND FITTINGS WHILE THE PIPES DISCHARGING RAIN WATER / SOIL AND WASTE WATER.

(5) ALL PIPES PASSING THROUGH FIRE COMPARTMENT SHOULD COMPLY WITH FRC 10.5 & 10.6. PIPEWORKS RUN THROUGH WALL AND FLOOR SHALL BE PROVIDED WITH PIPE SLEEVES OF MIN. COMMERCIAL SIZE LARGER THAN THE PIPE LINES. AFTER INSTALLATION OF PIPEWORKS, THE SPACE / GAP IN BETWEEN SHALL BE SEALED OFF WITH APPROVED TYPE OF FIRE RESISTANT SEALANT.

(6) THE CONTRACTOR SHALL ENSURE THAT NO WATER BORNE PIPING SHALL BE EMBEDDED IN ANY LOAD BEARING STRUCTURAL ELEMENT. NO DRAINAGE PIPING SHALL BE EMBEDDED IN STRUCTURAL ELEMENTS AS STATED ON PNAP 230.

(7) ALL C.I. PIPES SHOULD COMPLY WITH PNAP 282. THE JOINTS OF C.I. SOCKETED PIPES SHALL BE MADE WITH A GASKET OF HAMP OR YARN, AND SHALL BE PROPERLY CAULKED WITH METALLIC LEAD OR OTHER APPROVED MATERIAL. YET, FLANGED PIPE JOINTS SHALL BE MADE BY BOLTING THE FLANGES TOGETHER SECURELY WITH A SUITABLE METALLIC GASKET.

(8) ALL HORIZONTAL DRAINAGE PIPEWORK INSTALLATION SHALL RUN TO MIN. GRADIENT OF 1: 40 (FOR =< 100mm DIA.), 1:70 (150mm DIA.) UNLESS OTHERWISE SPECIFIED. ALSO, ALL PIPEWORK SHALL BE CONNECTED WITH SUFFICIENT CLEANING EYE AT ALL TURNS, BRANCHES AND WC POSITIONS FOR EASY MAINTENANCE IN FUTURE.

(9) HORIZONTAL VENT PIPES SHALL BE SLIGHTLY INCLINED UPWARD CONNECTED TO VENT STACK. IT SHALL ALSO BE INSTALLED WITH A CONTINUOUS FALL BACK INTO THE DISCHARGE PIPE SYSTEM.

(10) THE MANHOLE SHALL BE FITTED AT A LEVEL FLUSHED WITH FLOOR LEVEL WITH A DOUBLE SEALED CAST IRON AIR TIGHT COVER OF ADEQUATE STRENGH AND APPROVED DESIGN. THE MANHOLE COVER SHALL BE MED. DUTY TYPE DOUBLE SEAL.

(11) SHORT FORMS OF DRAIN PIPEWORK:
SP – SOIL WATER DRAIN PIPE
WP – WASTE WATER DRAIN PIPE
SWP – SOIL & WASTE WATER DRAIN PIPE
VP – VENT PIPE

(12) ABBREVIATIONS:
FD – FLOOR DRAIN & VG – VERTICAL GRATING
F/A – FROM ABOVE & F/B – FROM BELOW
T/A – TO ABOVE & T/B – TO BELOW
H/L – HIGH LEVEL & M/L – MID LEVEL &
L/L – LOW LEVEL
F/LL – FROM LOW LEVEL & F/HL – FROM HIGH LEVEL
T/LL – TO LOW LEVEL & T/HL – TO HIGH LEVEL
U/G – UNDERGROUND

(13) DIMENSIONS FOR PIPE SIZES SHOWN ON DRAWINGS ARE IN MILLIMETRE, UNLESS OTHERWISE STATED.

PIPE MATERIAL SCHEDULE

TYPE OF PIPE	DIAMETER	MATERIALS OF PIPE
SOIL AND WASTE WATER PUMPED PIPE (ABOVE GROUND & UNDER GROUND)	80 & ABOVE	DUCTILE IRON PIPE AND FITTING TO BS EN 598
SOIL AND WASTE WATER PIPE (ABOVE GROUND & UNDER GROUND)	80 & ABOVE	CAST IRON PIPES AND FITTINGS TO B.S. 437 WITH TYTON JOINT OR SOCKET JOINT, LEAD CAULKED.
SOIL AND WASTE WATER PIPE CONNECTION TO EX. PUBLIC SEWAGE MANHOLE	80 & ABOVE	POLYETHYLENE PIPE PE100 SDR 17, ELECTRO FUSION JOINT, EXTERNAL BLACK COLOUR, INTERNAL LIGHT COLOUR.

DELETE

MANHOLE SCHEDULE

FOUL WATER MANHOLE						
MANHOLE NO. FWH.–XX	COVER LEVEL (C.L.)	INVERT LEVEL (I.L.)	DISCON. TRAP INVERT LEVEL (D.T.I.L.)	TYPE	DEPTH (m) (MEASURED FROM ROAD LEVEL TO LOWEST INVERT)	OUTLET PIPE SIZE (mm)
TSMH 1	17.91	16.70	16.55	T1_1	1.36	250

NOTES FOR FILLING MATERIALS AND COMPACTION:

1. ALL EARTH FILLING MATERIAL SHALL BE OBTAINED FROM EXCAVATION ON SITE OR APPROVED BORROW AREAS OR FROM OTHER SOURCES APPROVED BY THE ENGINEER.
2. FILLING MATERIAL SHALL BE FREE FROM UNSUITABLE MATERIAL INCLUDING ORGANIC MATERIAL TOPSOIL (OR THE SURFACE LAYER OF SOIL WHICH CAN SUPPORT VEGETATION) SUPPLY, PERISHABLE MATERIALS, FROM MARSHES OR LOGS, STUMPS AND OTHER DELETERIOUS SUBSTANCES FILLING MATERIAL SHALL CONTAIN IN MATERIAL EXCEEDING 200mm IN SIZE.
3. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE A MEANS OF SCREENING THE MATERIAL TO ELIMINATE OVER-SIZED STONES.
4. UNLESS OTHERWISE SPECIFIED THE BACKFILLING MATERIAL SHALL BE GENERAL FILLING MATERIAL PLACED IN LAYERS NOT EXCEEDING 300mm THICK
5. THE INSITU DENSITY OF COMPACTION MATERIAL FORMING THE FILL SHALL NOT BE LESS THAN 95% OF THE MAXIMUM DRY DENSITY
6. THE RESULTS OF COMPACTED FILL SHALL BE SUBMITTED TO BD DURING BA14 APPLICATION
7. FILLING WORKS SHALL COMPLY WITH APP-15
8. SOIL TEST FOR BACKFILL MATERIALS SHALL COMPLY WITH APP-64

NOTES ON DEWATERING: (FOR INFORMATION ONLY)

1. SUFFICIENT NO. OF DEWATERING PUMPS SHALL BE PROVIDED TO KEEP THE EXCAVATION DRY IN CASE DEWATERING IS FOUND TO BE NECESSARY.
2. ALL THE DISCHARGED WATER PUMPED OUT FROM THE EXCAVATION SHALL BE DESILTED PRIOR TO DISCHARGE OFF SITE.
3. IN ANY CASE ANY LOSS OF FINES ARE OBSERVED DURING DEWATERING, THE LOOSEN UP SOILS SHALL BE TOPPED WITH GRANULAR MATERIAL AND BE SEALED BY CEMENT MORTAR.

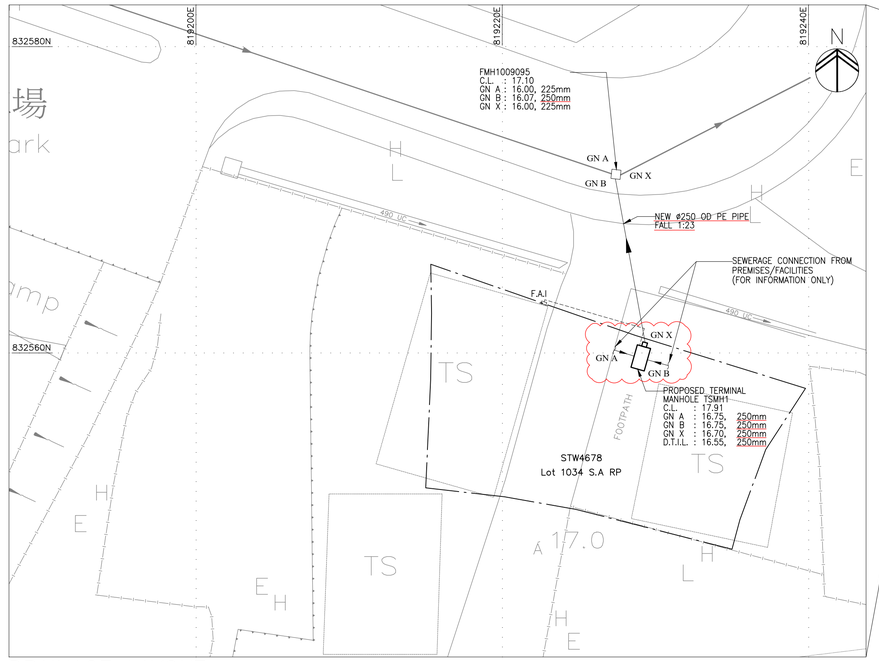
INITIAL DEFECT SURVEY:

1. PRIOR TO COMMENCEMENT OF EXCAVATION WORKS, A DEFECT SURVEY WILL BE CARRIED OUT ON EXISTING CARRIAGEWAY AND ADJACENT STRUCTURES WITHIN 25m FROM THE ALIGNMENT OF EXCAVATION WORKS, AND ANY DEFECTS FOUND WILL BE FULLY DOCUMENTED WITH COLOUR PHOTOGRAPHS.

NOTES ON PROTECTION OF EARTHWORKS AGAINST HEAVY RAINFALL:

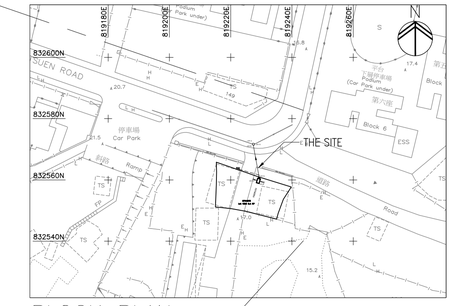
THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM MEASURES TO SAFEGUARD AGAINST FLOODING IN HEAVY RAINFALL.

1. SURFACE WATER FLOWING INTO THE SITE FROM OUTSIDE SHALL BE INTERCEPTED AND CONDUCTED FROM THE SITE TO INDICATED SAFE DISCHARGE POINT. AT EACH INTERSECTION AND ABRUPT CHANGE IN DIRECTION OF SURFACE DRAINAGE CHANNELS ANACCESSIBLE CATCHPIT SHALL BE PROVIDED. ALL DRAINAGE WORKS SHALL BE KEPT CLEAR OF DEBRIS.
2. WHERE PRACTICALLY COMPLETED DRAINAGE WORKS DISCHARGE WITHIN THE SITE, A TEMPORARY CONDUIT SHALL BE PROVIDED TO THE DISCHARGE POINTS.
3. ALL SURFACES SHALL BE GRADED AND SEALED TO ENSURE EFFICIENT RUN-OFF AND TO AVOID PONDING.
4. A METHOD OF WORKING SHALL BE ADOPTED IN WHICH THE MINIMUM OF BARE SOIL IS EXPOSED AT ANY TIME. EARTHWORK TO FORM THE FINAL FACE SHALL BE FOLLOWED UP IMMEDIATELY WITH SURFACE PROTECTION AND DRAINAGE WORKS.
5. WHERE TEMPORARY BARE SLOPE FACES ARE UNAVOIDABLE THEY SHALL BE PROTECTED WITH SHEETING WELL SECURED AGAINST THE WIND. WHERE SLOPE FACE IS TO BE TEMPORARILY EXPOSED FOR MORE THAN TWO WEEKS, TEMPORARY HARD SURFACE SHALL BE PROVIDED AND TEMPORARY DRAINS SHALL BE INSTALLED.
6. PRECAUTIONS SHALL ALWAYS BE TAKEN TO PREVENT WATER FROM ENTERING AND COLLECTING IN THE TRENCH OR SHAFT.



DRAINAGE LAYOUT

1:200

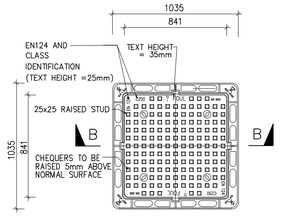


BLOCK PLAN

SCALE 1:1000

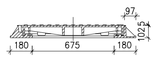
LEGEND:

- EXISTING SEWAGE PIPE
- PROPOSED SEWAGE PIPE
- VENT PIPE
- LOT BOUNDARY
- EXISTING SEWAGE MANHOLE
- PROPOSED SEWAGE TERMINAL MANHOLE
- SITE BOUNDARY



PLAN OF SEWER MANHOLE COVER

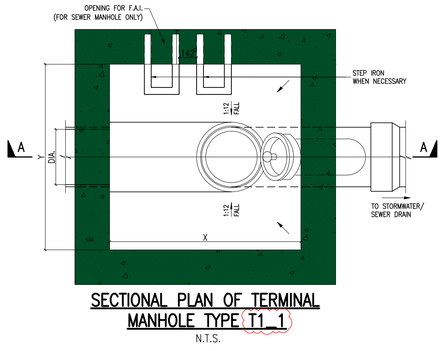
N.T.S.



SECTION B–B

N.T.S.

FRONT ELEVATION SECTION
DETAILS OF FRESH AIR INLET

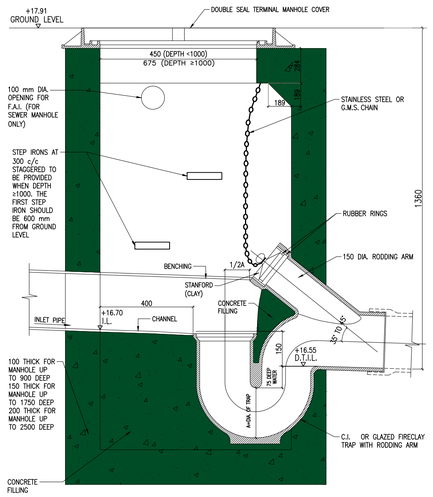


SECTIONAL PLAN OF TERMINAL MANHOLE TYPE T1_1

N.T.S.

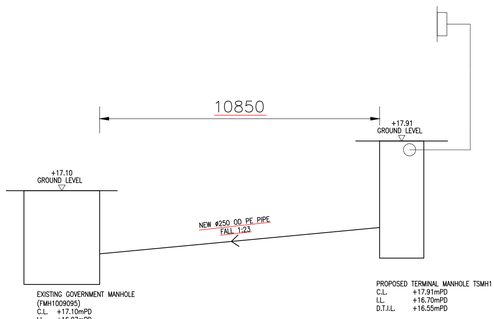
MANHOLE COVER OPENING SIZE (mm)	450	675
X (mm)	600 (MIN)	825 (MIN)
Y (mm)	(DIA. + 500)	(DIA. +500) OR 675, WHICHEVER IS GREATER

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. CONCRETE IS TO BE GRADE 30/20.
3. PIPE DIAMETER OF PIPE TO BE LESS THAN OR EQUAL TO 450 mm.
4. FOR MANHOLE COVER OPENING SIZE 675, RECESS WITH SQUARE STEEL ROD SHALL BE PROVIDED AT TOP OF MANHOLE CHAMBER FOR INSTALLING MONITORING DEVICE(S). DETAILS REFER TO DSD STANDARD DRAWING NO. DS 1099.



SECTION A–A

N.T.S.



LONGITUDINAL SECTION

N.T.S.

Client

Architect

Structural & Geotechnical Engineer

翱翔顧問工程師有限公司
WINGS & ASSOCIATES
CONSULTING ENGINEERS LTD.

Rev.	Date	Description	Drawn by	Checked by	Approved by
-	05.2023	1ST SUBMISSION	KT	RM	VT
A	06.2023	1ST AMENDMENT	KT	RM	VT

PROJECT TITLE: EXTERNAL SEWERAGE DRAINAGE WORKS AT TONG YAN SAN TSUEN, YUEN LONG LOT 1034 S.A. RP IN DD121

DRAWING TITLE: GENERAL NOTE, BLOCK PLAN, LOCATION PLAN, SECTION, DETAILS

DRAWING NO. P21012/DR/101 REV NO. A

SCALE AS SHOWN

PROJECT REF. P21012

CAD REF. External Drainage Drawing.dwg

B.D. REF.

FSD REF.

OFFICE USE:

* ALL DIMENSIONS ARE IN MILLIMETER EXCEPT OTHERWISE NOTED

Appendix 2

Letter from the Drainage Services Department for Technical Audit of Drainage Connection Works for the Proposed Development dated 13.10.2023

17/10 Rec'd by post. #P21012

Drainage Services Department
Mainland North Division
11/F, Kowloon Government Offices,
405 Nathan Road, Kowloon

渠務署
新界北渠務部
九龍彌敦道 405 號
九龍政府合署 11 樓

本署檔號 Our Ref : (011YE1) in MN 10/YL/DD121
來函檔號 Your Ref : P21012/L/007
電　　話 Telephone : (852) 2300 1627
圖文傳真 Fax : (852) 2770 4761

By Post

13 October 2023

Wings & Associates Consulting Engineers Ltd.

[redacted]

Dear Sir,

Application for Technical Audit of Drainage Connection Works for the Proposed Development at Lot Nos. 1023 S.B RP, 1033 S.C and 1034 S.A RP (Part) in D.D.121 and Adjoining Government Land, Tong Yan San Tsuen, Sha Tseng Road, Yuen Long

We refer to your submission received on 10 October 2023 regarding the captioned technical audit. Please find the enclosed your payment receipt for your retention.

Please contact our inspector Mr. M Y CHAN at [redacted] to arrange a site inspection for the subject technical audit when the drainage connection works are completed and ready for inspection.

We would draw your attention that the completion of the drainage connections under your project is subject to all conditions stated in the Practitioners' Guidelines and the Form HBP1.

You are required to submit the completed confirmation of completion form HBP1_CC, as-built drawings (both hard copies and soft copies including DGN and PDF files) of the drainage connection works, CCTV records, one separate schedule for each manhole built and the acceptance test records whichever appropriate of the connection works to this Division for record purpose upon satisfactory completion of your works. A blank copy of the manhole schedule and declaration form are enclosed for your reference.

Yours faithfully,

(Jeff C W TSE)
for Chief Engineer/Mainland North
Drainage Services Department

Encl.
c.c.
IOW/YLW – by EIMS

一般繳款單 GENERAL DEMAND NOTE

香港特別行政區政府 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

繳款單編號 (只適用於電子繳款)
Demand Note Number (for e-Payment only)
[redacted]

發單部門 Demand Note Issuing Department
DSD-MAINLAND NORTH DIVISION

發單日期 Issue Date
10/10/2023

查詢電話 Enquiry Tel: [redacted]

部門檔號 Departmental Reference
MN10/YL/DD121 P8

到期繳款日 Due Date : 24/10/2023

應繳金額 ($) Amount Payable ($) : [redacted]

名稱 Name : WELL VISION HOLDINGS LIMITED

地址 Address : [redacted]

繳款項目 Particulars	金額 Amount ($)
Being technical audit fee for 1 no. of DN250 foul sewer connections at LOT 1034 S.A RP in D.D.121, TONG YAN SAN TSUEN ROAD, YUEN LONG, N.T. as Form HBP1 Total	[redacted]

以下機印所示金額，經已收訖。RECEIVED THE SUM IMPRINTED BELOW

注意：

一. 如無註明到期繳款日，即此單已到期繳付，請盡早繳交。有關繳款細則，請參閱此繳款單背頁。

二. 郵寄付款將不獲發回收據，請保留此繳款單的上半部分作爲記錄。

三. 如對繳款單上資料有疑問，請致電左上角查詢電話與發單部門聯絡。

Notes:

1. If no due date is specified, this demand is due on presentation. Please make payment as soon as possible. For payment instructions, please see overleaf.
2. No receipts will be issued for payments by post. Please retain the upper portion of this demand note for your records.
3. For any further enquiries about the demand note, please contact the issuing department. The telephone number is shown on the top left corner of this demand note.

網上繳款 — 快捷！方便！
www.try.gov.hk → 繳交政府帳單 → 網上繳款詳情

Internet Payment — Fast ! Convenient !
www.try.gov.hk → Payment of Government Bills → Internet Payment details

Manhole / Catchpit Schedule (Accompanying with a drainage layout plan which should preferably be in a scale of 1:1 000 with the H.K. metric grid shown)

Drawing No.: _____

District: (~~TP / TM /~~ YL /~~N~~)

Location: Lot No. _____ Street Name (if applicable) _____

Manhole Type (a) : SWD Manhole / Sewer Manhole / SWD Terminal Manhole / Sewer Terminal Manhole / Catchpit (Please delete as appropriate)

Manhole Type (b) : DSD Standard Manhole Type (e.g. C1) or otherwise specify _____

Manhole / Catchpit Ref. No.: _____

Works Completion Date: _____

Date of Survey/ Inspection: _____

Co-ordinates: _____ E _____ N

Cover Level (CL) : _____ mPD

Description of Cover:

shape*: _____ *S=Square, R=Rectangular, C=Circular, A= Other (Please specify)

dimension: _____ mm

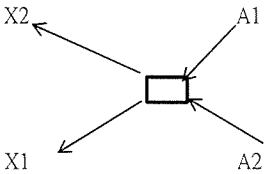
Disconnecting Trap Level (DTL) _____ mPD

Information on Incoming and Outgoing pipes

	Pipe	Invert Level (mPD)	Diameter/ Height/ Width (mm)	Shape*	Material**	Lining***	Backdrop Manhole
Incoming pipe (Information required for manhole type other than terminal manhole only)	A1						Type 1 ☐
	A2						Type II ☐
							Type III☐ Diameter _____(mm)
							(Please tick as appropriate)

	Pipe	Invert Level (mPD)	Diameter /Height /Width (mm)	Shape*	Material**	Lining***	Invert levels & Co-ordinates at their connections to public drains / sewers (mPD) (for manholes/catchpits connected to public drains / sewers only)	
Outgoing	X1						M/H / Catchpit Ref:_____ _____mPD	_____ E _____ N
	X2						M/H / Catchpit Ref:_____ _____mPD	_____ E _____ N

* C = Circular, O = Oval, R=Rectangular, A= Other (Please specify)
** C=Concrete, S=Salt Glaze Ware, I=Iron, A=Other (Please specify)
***C=Cement, B=Bitumen, CO=Concrete, A=Other (Please specify)



Pipe Orientation (clockwise)

Drainage Connection Works Carried Out by a Member of the Public
Confirmation of Completion
市民進行渠務接駁工程
竣工確認書

To the Officer(s) concerned,
致有關部門人員,

Particulars of the Development 物業詳情

Lot No. : _____
地段編號

Address :
地址

Name of building/Demarcation/District number 大廈名稱/地區編號

Number and name of street/Estate 門牌號數及街道名稱/屋邨

* H.K.香港
Kln.九龍
N.T.新界

Block 座 District 地區

Owner/Developer 業主/發展商

Name : (English) *Mr.
姓名/公司名稱 (英文) Ms. _____
(Chinese) *先生 Tel. No.:
(中文) 女士 電話號碼: _____

*H.K. Identity Card No./
Business Registration No.: Fax No.:
香港身分證/公司註冊號碼 : _____ 傳真號碼: _____

Address :
地址

Flat/Room 室 Block 座 Name of Building 大廈名稱

* H.K.香港
Kln.九龍
N.T.新界

Number and name of street, Estate and District 門牌號數、街道名稱、屋邨及地區

Signature/chop 簽署/蓋章 : _____

*Delete whichever is/are inappropriate (請將不適用者刪去)

Contractor 承建商

Name : (English)
公司名稱 (英文) _____

(Chinese) Tel. No.:
(中文) _____ 電話號碼: _____

Business Registration No.: Fax No.:
公司註冊號碼 : _____ 傳真號碼: _____

Drainage Connection Schedule 渠務接駁表	No. & Size 數量及口徑大小	Commencement date of works on site 地盤開始施工的日期	Completion date of works 工程竣工日期
(a) Foul sewer connections 污水渠接駁			
(b) Storm water drain connections 雨水渠接駁			

Latest Plans approved by the Building Authority (as follows) are attached. Certified as-built plans showing the completed drainage connection works are also attached:

已獲建築事務監督批准的最新圖則(如下)。隨表亦夾附已認證的渠務接駁竣工圖則:

Site Formation 地盤平整		Building 樓宇		Drainage 渠務	
BD Ref. 屋宇署檔號	Date 日期	BD Ref. 屋宇署檔號	Date 日期	BD Ref. 屋宇署檔號	Date 日期

Confirmation of Completion of Drainage Connection Works by Authorised Person

認可人士的渠務接駁工程竣工確認書

(If the Development is not under the control of the Buildings Ordinance and no Authorised Person is appointed for the Development, please skip this page and complete Page 4.)

(如該發展不受《建築物條例》的管制，並且沒有委任認可人士，請跳過此頁並完成第四頁。)

I confirm that the drainage connection works ("the works") of the above development have been constructed and completed in full compliance with the plans approved by the Building Authority. The certified as-built drainage plans are attached.

本人確認在上述物業進行的渠務接駁工程("工程")按已獲建築事務監督批准圖則進行並已竣工。隨表夾附已認證的渠務竣工圖則。

Authorized Person's Signature :

認可人士簽署 _____

Name : (English) *Mr.

姓名/公司名稱 (英文) Ms.

(Chinese) *先生 Tel. No.:

(中文) 女士 電話號碼:

*H.K. Identity Card No./

Business Registration No.: Fax No.:

香港身分證/公司註冊號碼 : 傳真號碼:

Address :

地址 Flat/Room 室 Block 座 Name of Building 大廈名稱

* H.K.香港

Kln.九龍

N.T.新界

Number and name of street, Estate and District 門牌號數、街道名稱、屋邨及地區

Confirmation of Completion of Drainage Connection Works by Lot Owner / Contractor
業主/承建商的渠務接駁工程竣工確認書

(To be completed by the Lot Owner / Contractor only if the Development is not under the control of the Buildings Ordinance and no Authorised Person is appointed for the Development. Documents (e.g. Certificate of Exemption from Lands Department) should be provided to show that the application is not under the control of the Buildings Ordinance.)
(只供不受《建築物條例》管制、並且沒有委任認可人士的發展之業主/承建商填寫。請附上文件(如地政總署的豁免證明書)以證明該申請並不受《建築物條例》管制。)

I confirm that the drainage connection works ("the works") of the above development have been constructed and completed. The as-built drainage plans are attached, if any.
本人確認在上述物業進行的渠務接駁工程("工程")已竣工。隨表夾附渠務竣工圖則（如有）。

Owner 業主

Signature/chop 簽署/蓋章 : _____

Name 姓名/公司名稱 : (English) (英文) *Mr. Ms. _____
(Chinese) (中文) *先生 女士 _____

*H.K. Identity Card No./
Business Registration No.:
香港身分證/公司註冊號碼 : _____

Contractor 承建商

Signature/chop 簽署/蓋章 : _____

Name 公司名稱 : (English) (英文) _____
(Chinese) (中文) _____

Business Registration No.:
公司註冊號碼 : _____

Appendix 3

Submission of Completed Confirmation of Completion Form and Relative Documents to the Drainage Services Department dated 23.4.2024

翱翔顧問工程師有限公司
Wings & Associates Consulting Engineers Ltd.

Your Ref.: (011YE1) in MN 10/YL/DD121

Our Ref.: P21012/L/012

By Post & Email

Drainage Services Department
Operation & Maintenance Branch,
Mainland North Division, Yuen Long Section
Kowloon Government Offices, 405 Nathan Road, Kowloon
(Attn: Mr. TSE Chi Wai)

23 April 2024

Dear Sir,

Submission of Completed Confirmation of Completion Form & Relative Documents

We refer to the letter dated 13.10.2023 from Drainage Services Department on the drainage connection works, we are writing to submit herewith the follow items for your onward processing: -

(1) Duly signed HBP1_CC Form; &
(2) Manhole Schedule with updated as-built drawings.

Should you have any queries, please feel free to contact the undersigned at [redacted] Thank you for your kind attention.

Yours faithfully,
For and on Behalf of
WINGS & ASSOCIATES CONSULTING ENGINEERS LIMITED

Roy Lo
Principal Building Surveyor
Encl.
VT/RM

Drainage Connection Works Carried Out by a Member of the Public
Confirmation of Completion
市民進行渠務接駁工程
竣工確認書

To the Officer(s) concerned,
致有關部門人員,

Particulars of the Development 物業詳情

Lot No. 地段編號 : Lot 1034 S.A. RP in D.D. 121

Address 地址 : Name of building/Demarcation/District number 大廈名稱/地區編號

TONG YAN SAN TSUEN ROAD

Number and name of street/Estate 門牌號數及街道名稱/屋邨

FUEN LONG

Block 座 District 地區

~~N.T.新界~~

Owner/Developer 業主/發展商

Name 姓名/公司名稱 : (English) (英文) ~~Mr.~~ Well Vision Holdings Limited

(Chinese) (中文) ~~*先生~~ 女士

Tel. No.: 電話號碼: [redacted]

~~*HK Identity Card No./~~

Business Registration No.: 香港身分證/公司註冊號碼 : [redacted]

Fax No.: 傳真號碼:

Address 地址 : [redacted]

~~*H~~ ~~K~~ ~~N.T.新界~~

Number and name of street, Estate and District 門牌號數、街道名稱、屋邨及地區

Signature/chop 簽署/蓋章 :

Contractor 承建商

Name 公司名稱 (English) (英文) Lung Kee Transportation Engineering Limited

(Chinese) (中文) 龍記陸輸工程有限公司

Business Registration No.: 公司註冊號碼 : [redacted]

Tel. No.: 電話號碼: [redacted]

Fax No.: 傳真號碼:

Drainage Connection Schedule 渠務接駁表	No. & Size 數量及口徑大小	Commencement date of works on site 地盤開始施工的日期	Completion date of works 工程竣工日期
(a) Foul sewer connections 污水渠接駁	DN250	27/12/2023	7/2/2024
(b) Storm water drain connections 雨水渠接駁			

Latest Plans approved by the Building Authority (as follows) are attached. Certified as-built plans showing the completed drainage connection works are also attached.

已獲建築事務監督批准的最新圖則(如下)。還表亦夾附已認證的渠務接駁竣工圖則:

Site Formation 地盤平整		Building 樓宇		Drainage 渠務	
BD Ref 屋宇署檔號	Date 日期	BD Ref. 屋宇署檔號	Date 日期	BD Ref. 屋宇署檔號	Date 日期

*Delete whichever is/are inappropriate (請將不適用者刪去)

Confirmation of Completion of Drainage Connection Works by Authorised Person

認可人士的渠務接駁工程竣工確認書

(If the Development is not under the control of the Buildings Ordinance and no Authorised Person is appointed for the Development, please skip this page and complete Page 4.)

(如該發展不受《建築物條例》的管制，並且沒有委任認可人士，請跳過此頁並完成第四頁。)

I confirm that the drainage connection works ("the works") of the above development have been constructed and completed in full compliance with the plans approved by the Building Authority. The certified as-built drainage plans are attached.

本人確認在上述物業進行的渠務接駁工程("工程")按已獲建築事務監督批准圖則進行並已竣工。隨表夾附已認證的渠務竣工圖則。

Authorized Person's Signature :
認可人士簽署

Name : (English) *Mr.
姓名/公司名稱 (英文) ~~Ms.~~ Lai Ka Wing

(Chinese) *先生 Tel. No.:
(中文) ~~女士~~ 黎家榮 電話號碼: [redacted]

*H.K. Identity Card No./
~~Business Registration No.~~:
香港身分證/公司註冊號碼 : [redacted] Fax No.:
傳真號碼:

Address :
地址 [redacted]

~~N.T.~~ 香港
Kln.九龍
~~New Territories~~

Number and name of street, Estate and District 門牌號數、街道名稱、屋邨及地區

Confirmation of Completion of Drainage Connection Works by Lot Owner / Contractor

業主/承建商的渠務接駁工程竣工確認書

(To be completed by the Lot Owner / Contractor only if the Development is not under the control of the Buildings Ordinance and no Authorised Person is appointed for the Development. Documents (e.g. Certificate of Exemption from Lands Department) should be provided to show that the application is not under the control of the Buildings Ordinance.)

(只供不受《建築物條例》管制，並且沒有委任認可人士的發展之業主/承建商填寫。請附上文件(如地政總署的豁免證明書)以證明該申請並不受《建築物條例》管制。)

I confirm that the drainage connection works ("the works") of the above development have been constructed and completed. The as-built drainage plans are attached, if any.

本人確認在上述物業進行的渠務接駁工程("工程")已竣工。隨表夾附渠務竣工圖則（如有）。

Owner 業主

Signature/chop 簽署/蓋章 : WELL VISION HOLDINGS LIMITED 威昇集團有限公司 陳永紹

Name 姓名/公司名稱 : (English) ~~*Mr.~~ ~~Ms.~~ Well Vision Holdings Limited

(Chinese) *先生 (中文) 女士

~~*H.K. Identity Card No./~~

Business Registration No.: 香港身分證/公司註冊號碼 : [redacted]

Contractor 承建商

Signature/chop 簽署/蓋章 : LUNG KEE TRANSPORTATION ENGINEERING LIMITED 龍記運輸工程有限公司

Name 公司名稱 : (English) Lung Kee Transportation Engineering Ltd.

(Chinese) (中文) 龍記運輸工程有限公司

Business Registration No.: 公司註冊號碼 : [redacted]

*Delete whichever is/are inappropriate (請將不適用者刪去)

Manhole / Catchpit Schedule (Accompanying with a drainage layout plan which should preferably be in a scale of 1:1 000 with the H.K. metric grid shown)

Drawing No.: P21012/DR/101(1)

District: (~~TP~~ / ~~TM~~ / YL / N)

Location: Lot No. 1034 S.A RP in D.D. 121 Street Name (if applicable) Tang Yau San Tsuen Road

Manhole Type (a) : ~~SWD Manhole~~ / ~~Sewer Manhole~~ / ~~SWD Terminal Manhole~~ / Sewer Terminal Manhole / ~~Catchpit~~ (Please delete as appropriate)

Manhole Type (b) : DSD Standard Manhole Type (e.g. C1) or otherwise specify T1-1

Manhole / Catchpit Ref. No.: TSMH 1

Works Completion Date: 11/1/2024

Date of Survey/ Inspection: _____

Co-ordinates: _____ E _____ N

Cover Level (CL) : 17.91 mPD

Description of Cover:

shape*: S *S=Square, R=Rectangular, C=Circular, A= Other (Please specify)

dimension: 841 mm

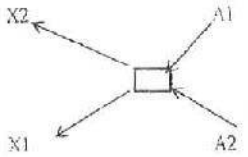
Disconnecting Trap Level (DTL) 16.85 mPD

Information on Incoming and Outgoing pipes

	Pipe	Invert Level (mPD)	Diameter/ Height/ Width (mm)	Shape*	Material**	Lining***	Backdrop Manhole
Incoming pipe (Information required for manhole type other than terminal manhole only)	A1						Type I ☐
	A2						Type II ☐
							Type III ☐ Diameter ___ (mm)
							(Please tick as appropriate)

	Pipe	Invert Level (mPD)	Diameter /Height /Width (mm)	Shape*	Material**	Lining***	Invert levels & Co-ordinates at their connections to public drains / sewers (mPD) (for manholes/catchpits connected to public drains / sewers only)	
Outgoing	X1	16.29	300	C	Black HDPE	NIL	MH / ~~Catchpit~~ Ref: FMH108905 I.L 16.26 mPD	_____ E _____ N
	X2						MH / Catchpit Ref: _____ _____ mPD	_____ E _____ N

* C = Circular, O = Oval, R=Rectangular, A= Other (Please specify)
** C=Concrete, S=Salt Glaze Ware, I=Iron, A=Other (Please specify)
***C=Cement, B=Bitumen, CO=Concrete, A=Other (Please specify)



Pipe Orientation (clockwise)

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. ALL LEVELS ARE IN mPD UNLESS OTHERWISE STATED.
3. DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWINGS.
4. COORDINATES ARE BASED ON THE HONG KONG METRIC GRID (1980).

NOTES FOR CONCRETE WORKS

1. ALL CONCRETE WORKS ARE DESIGNED IN ACCORDANCE WITH CODE OF PRACTICE FOR THE STRUCTURAL USE OF CONCRETE 2013 AND BS8007:1987
2. CONCRETE MIX SHALL BE GRADE 40D/20 COMPLYING WITH CS1:2010 EXCEPT SECTION 7.1.
3. ALL REINFORCEMENT SHALL BE GRADE S275J0 CLASS 1 STEEL COMPLY WITH THE CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL, 2011
4. THE CONCRETE COVER FOR MANHOLE AND SUMP PUMP PIT SHALL BE 25mm.
5. THE REACTIVE ALKALI OF CONCRETE EXPRESSED AS THE EQUIVALENT SODIUM OXIDE PER CUBIC METER OF CONCRETE SHOULD NOT EXCEED 3.0kg WHEN DETERMINED IN ACCORDANCE WITH THE SPECIFICATION ITEMS GIVEN IN APPENDIX A OF PRACTICE FOR PNAP 180.
6. PFA CONCRETE TO BE USED IF NECESSARY. THE PFA CONTENT SHOULD NOT EXCEED 25% BY MASS OF THE CEMENTITIOUS CONTENT (OPC PLUS PFA) OF THE CONCRETE AND COMPLY WITH APP-33 (PNAP90) BLEND CEMENT CONTAINING PFA SHOULD COMPLY WITH BS6588:1985).
7. MINIMUM ANCHORAGE BOND LENGTH AND LAP LENGTH FOR CONCRETE GRADE 40D.

	HIGH TENSION STEEL
FULL TENSION ANCHORAGE/ LAP	35 DIA.
FULL COMPRESSION ANCHORAGE/LAP	35 DIA.

8. DESIGN GROUND WATER LEVEL SHALL BE OF GROUND LEVEL.
9. DESIGN LOADING:
   LIVE LOAD = 5kPa
   BUILDING SURCHARGE LOAD = 10kPa
10. 75mm BLINDING LAYER SHALL BE PROVIDED

NOTES OF DRAINAGE WORKS:

(1) ALL DRAINAGE SYSTEM, PIPEWORK INSTALLATION & CONNECTION SHALL FULFILL MANUFACTURER'S REQUIREMENTS, BUILDING DEPARTMENT & DRAINAGE SERVICES DEPARTMENT REQUIREMENTS AND ALL RELEVANT REGULATIONS.

(2) WHETHER SHOWN ON THE DRAWING OR NOT, SUFFICIENT ACCESS SHALL BE PROVIDED BY MEANS OF CLEANING EYES OR OTHER APPROVED METHOD TO ENABLE ALL DRAINAGE PIPES TO BE CLEARED OF ANY OBSTRUCTION SUCH ACCESS POINTS SHALL BE SO SITED AS TO ALLOW CLEARANCE FOR THE EASY ENTRY OF CLEANING ROD / TOOL.

(3) ALL BENDS, BRANCHES OR TEE-JOINTS, ETC. SHALL HAVE AN OBTUSE ANGLE AND HAVE THE LARGEST PRACTICABLE RADIUS OF CURVATURE. THE BENDS, BRANCHES OR TEE-JOINTS SHALL NOT CHANGE IN ANY WAY OF THE CROSS SECTION OF THE PIPE AND A CLEANING EYE SHALL BE PROVIDED AT OR NEAR SUCH JOINTS.

(4) SUFFICIENT ANCHORAGE AND SUPPORT SHALL BE PROVIDED TO ALL PIPEWORKS TO TAKE UP THE WEIGHT OF THE PIPEWORK SYSTEM AND, IN ADDITION, THE THRUST DEVELOPED IN THE PIPEWORKS AND FITTINGS WHILE THE PIPES DISCHARGING RAIN WATER / SOIL AND WASTE WATER.

(5) ALL PIPES PASSING THROUGH FIRE COMPARTMENT SHOULD COMPLY WITH FRC 10.5 & 10.6. PIPEWORKS RUN THROUGH WALL AND FLOOR SHALL BE PROVIDED WITH PIPE SLEEVES OF MIN. COMMERCIAL SIZE LARGER THAN THE PIPE LINES, AFTER INSTALLATION OF PIPEWORKS, THE SPACE / GAP IN BETWEEN SHALL BE SEALED OFF WITH APPROVED TYPE OF FIRE RESISTANT SEALANT.

(6) THE CONTRACTOR SHALL ENSURE THAT NO WATER BORNE PIPING SHALL BE EMBEDDED IN ANY LOAD BEARING STRUCTURAL ELEMENT. NO DRAINAGE PIPING SHALL BE EMBEDDED IN STRUCTURAL ELEMENTS AS STATED ON PNAP 230.

(7) ALL C.I. PIPES SHOULD COMPLY WITH PNAP 282. THE JOINTS OF C.I. SOCKETED PIPES SHALL BE MADE WITH A GASKET OF HAMP OR YARN, AND SHALL BE PROPERLY CAULKED WITH METALLIC LEAD OR OTHER APPROVED MATERIAL. YET, FLANGED PIPE JOINTS SHALL BE MADE BY BOLTING THE FLANGES TOGETHER SECURELY WITH A SUITABLE METALLIC GASKET.

(8) ALL HORIZONTAL DRAINAGE PIPEWORK INSTALLATION SHALL RUN TO MIN. GRADIENT OF 1: 40 (FOR = < 100mm DIA.), 1:70 (150mm DIA.) UNLESS OTHERWISE SPECIFIED. ALSO, ALL PIPEWORK SHALL BE CONNECTED WITH SUFFICIENT CLEANING EYE AT ALL TURNS, BRANCHES AND WC POSITIONS FOR EASY MAINTENANCE IN FUTURE.

(9) HORIZONTAL VENT PIPES SHALL BE SLIGHTLY INCLINED UPWARD CONNECTED TO VENT STACK. IT SHALL ALSO BE INSTALLED WITH A CONTINUOUS FALL BACK INTO THE DISCHARGE PIPE SYSTEM.

(10) THE MANHOLE SHALL BE FITTED AT A LEVEL FLUSHED WITH FLOOR LEVEL WITH A DOUBLE SEALED CAST IRON AIR TIGHT COVER OF ADEQUATE STRENGH AND APPROVED DESIGN. THE MANHOLE COVER SHALL BE MED. DUTY TYPE DOUBLE SEAL.

(11) SHORT FORMS OF DRAIN PIPEWORK:
SP – SOIL WATER DRAIN PIPE
WP – WASTE WATER DRAIN PIPE
SWP – SOIL & WASTE WATER DRAIN PIPE
VP – VENT PIPE

(12) ABBREVIATIONS:
FD – FLOOR DRAIN & VG – VERTICAL GRATING
F/A – FROM ABOVE & F/B – FROM BELOW
T/A – TO ABOVE & T/B – TO BELOW
H/L – HIGH LEVEL & M/L – MID LEVEL & L/L – LOW LEVEL
F/LL – FROM LOW LEVEL & F/HL – FROM HIGH LEVEL
T/LL – TO LOW LEVEL & T/HL – TO HIGH LEVEL
U/G – UNDERGROUND

(13) DIMENSIONS FOR PIPE SIZES SHOWN ON DRAWINGS ARE IN MILLIMETRE, UNLESS OTHERWISE STATED.

PIPE MATERIAL SCHEDULE

DELETE

TYPE OF PIPE	DIAMETER	MATERIAL OF PIPE
SOIL AND WASTE WATER PUMPED PIPE (ABOVE GROUND & UNDER GROUND)	80 & ABOVE	DUCTILE IRON PIPE AND FITTING TO BS EN 598
SOIL AND WASTE WATER PIPE (ABOVE GROUND & UNDER GROUND)	80 & ABOVE	CAST IRON PIPES AND FITTINGS TO B.S. 437 WITH TYTON JOINT OR SOCKET JOINT, LEAD CAULKED.
SOIL AND WASTE WATER PIPE CONNECTION TO EX. PUBLIC SEWAGE MANHOLE	80 & ABOVE	POLYETHYLENE PIPE PE100 SDR 17, ELECTRO FUSION JOINT, EXTERNAL BLACK COLOUR, INTERNAL LIGHT COLOUR.

MANHOLE SCHEDULE

FOUL WATER MANHOLE						
MANHOLE NO. FWH.-XX	COVER LEVEL (C.L.)	INVERT LEVEL (I.L.)	DISCON. TRAP INVERT LEVEL (D.T.I.L.)	TYPE	DEPTH (m) (MEASURED FROM ROAD LEVEL TO LOWEST INVERT)	OUTLET PIPE SIZE (mm)
TSMH 1	17.91	16.70	16.55	T1_1	1.36	250

NOTES FOR FILLING MATERIALS AND COMPACTION:

1. ALL EARTH FILLING MATERIAL SHALL BE OBTAINED FROM EXCAVATION ON SITE OR APPROVED BORROW AREAS OR FROM OTHER SOURCES APPROVED BY THE ENGINEER.
2. FILLING MATERIAL SHALL BE FREE FROM UNSUITABLE MATERIAL INCLUDING ORGANIC MATERIAL TOPSOIL (OR THE SURFACE LAYER OF SOIL WHICH CAN SUPPORT VEGETATION) SUPPLY, PERISHABLE MATERIALS, FROM MARSHES OR LOGS, STUMPS AND OTHER DELETERIOUS SUBSTANCES FILLING MATERIAL SHALL CONTAIN IN MATERIAL EXCEEDING 200mm IN SIZE.
3. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE A MEANS OF SCREENING THE MATERIAL TO ELIMINATE OVER-SIZED STONES.
4. UNLESS OTHERWISE SPECIFIED THE BACKFILLING MATERIAL SHALL BE GENERAL FILLING MATERIAL PLACED IN LAYERS NOT EXCEEDING 300mm THICK
5. THE INSITU DENSITY OF COMPACTION MATERIAL FORMING THE FILL SHALL NOT BE LESS THAN 95% OF THE MAXIMUM DRY DENSITY
6. THE RESULTS OF COMPACTED FILL SHALL BE SUBMITTED TO BD DURING BA14 APPLICATION
7. FILLING WORKS SHALL COMPLY WITH APP-15
8. SOIL TEST FOR BACKFILL MATERIALS SHALL COMPLY WITH APP-64

NOTES ON DEWATERING:(FOR INFORMATION ONLY)

1. SUFFICIENT NO. OF DEWATERING PUMPS SHALL BE PROVIDED TO KEEP THE EXCAVATION DRY IN CASE DEWATERING IS FOUND TO BE NECESSARY.
2. ALL THE DISCHARGED WATER PUMPED OUT FROM THE EXCAVATION SHALL BE DESILTED PRIOR TO DISCHARGE OFF SITE.
3. IN ANY CASE ANY LOSS OF FINES ARE OBSERVED DURING DEWATERING, THE LOOSEN UP SOILS SHALL BE TOPPED WITH GRANULAR MATERIAL AND BE SEALED BY CEMENT MORTAR.

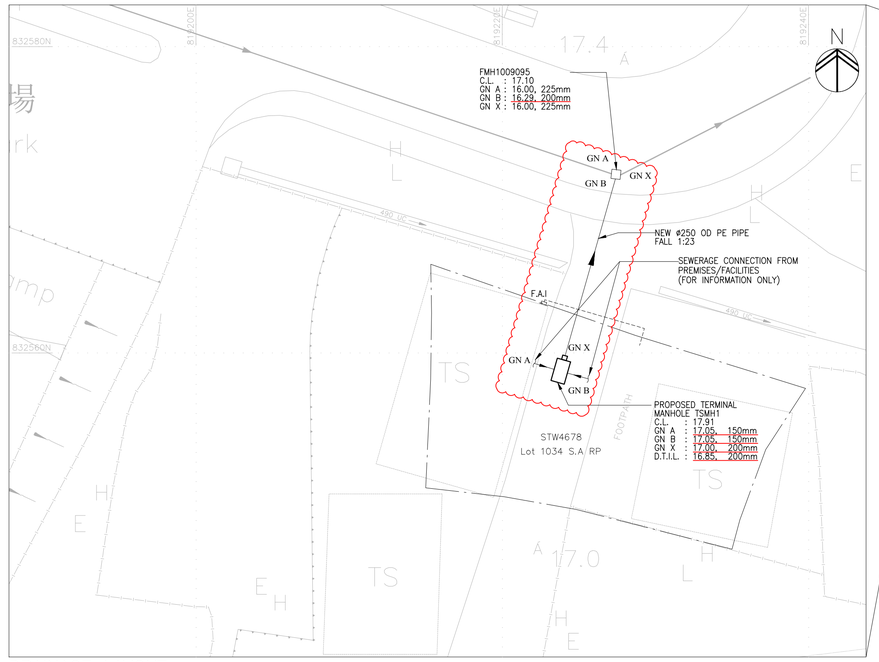
INITIAL DEFECT SURVEY:

1. PRIOR TO COMMENCEMENT OF EXCAVATION WORKS, A DEFECT SURVEY WILL BE CARRIED OUT ON EXISTING CARRIAGEWAY AND ADJACENT STRUCTURES WITHIN 25m FROM THE ALIGNMENT OF EXCAVATION WORKS, AND ANY DEFECTS FOUND WILL BE FULLY DOCUMENTED WITH COLOUR PHOTOGRAPHS.

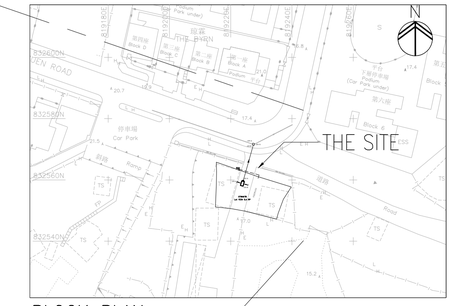
NOTES ON PROTECTION OF EARTHWORKS AGAINST HEAVY RAINFALL:

THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM MEASURES TO SAFEGUARD AGAINST FLOODING IN HEAVY RAINFALL.

1. SURFACE WATER FLOWING INTO THE SITE FROM OUTSIDE SHALL BE INTERCEPTED AND CONDUCTED FROM THE SITE TO INDICATED SAFE DISCHARGE POINT. AT EACH INTERSECTION AND ABRUPT CHANGE IN DIRECTION OF SURFACE DRAINAGE CHANNELS ANACCESSIBLE CATCHPIT SHALL BE PROVIDED. ALL DRAINAGE WORKS SHALL BE KEPT CLEAR OF DEBRIS.
2. WHERE PRACTICALLY COMPLETED DRAINAGE WORKS DISCHARGE WITHIN THE SITE, A TEMPORARY CONDUIT SHALL BE PROVIDED TO THE DISCHARGE POINTS.
3. ALL SURFACES SHALL BE GRADED AND SEALED TO ENSURE EFFICIENT RUN-OFF AND TO AVOID PONDING.
4. A METHOD OF WORKING SHALL BE ADOPTED IN WHICH THE MINIMUM OF BARE SOIL IS EXPOSED AT ANY TIME. EARTHWORK TO FORM THE FINAL FACE SHALL BE FOLLOWED UP IMMEDIATELY WITH SURFACE PROTECTION AND DRAINAGE WORKS.
5. WHERE TEMPORARY BARE SLOPE FACES ARE UNAVOIDABLE THEY SHALL BE PROTECTED WITH SHEETING WELL SECURED AGAINST THE WIND. WHERE SLOPE FACE IS TO BE TEMPORARILY EXPOSED FOR MORE THAN TWO WEEKS, TEMPORARY HARD SURFACE SHALL BE PROVIDED AND TEMPORARY DRAINS SHALL BE INSTALLED.
6. PRECAUTIONS SHALL ALWAYS BE TAKEN TO PREVENT WATER FROM ENTERING AND COLLECTING IN THE TRENCH OR SHAFT.



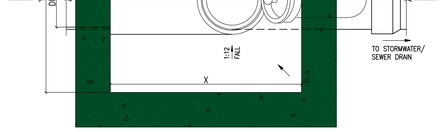
DRAINAGE LAYOUT



BLOCK PLAN
SCALE 1:1000

LEGEND:

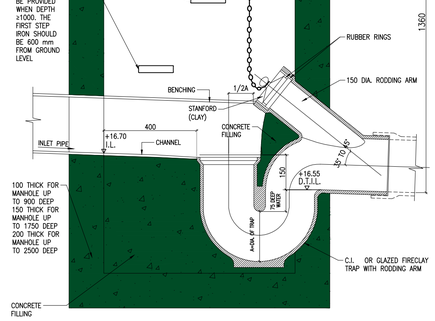
- EXISTING SEWAGE PIPE
- PROPOSED SEWAGE PIPE
- VENT PIPE
- LOT BOUNDARY
- EXISTING SEWAGE MANHOLE
- PROPOSED SEWAGE TERMINAL MANHOLE
- SITE BOUNDARY



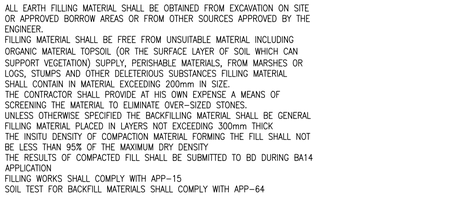
SECTIONAL PLAN OF TERMINAL MANHOLE TYPE T1_1
N.T.S.

MANHOLE COVER OPENING SIZE (mm)	450	675
X (mm)	600 (MIN)	825 (MIN)
Y (mm)	(DIA. + 500)	(DIA. +500) OR 675, WHICHEVER IS GREATER

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. CONCRETE IS TO BE GRADE 30/20.
3. PIPE DIAMETER OF PIPE TO BE LESS THAN OR EQUAL TO 450 mm.
4. FOR MANHOLE COVER OPENING SIZE 675, RECESS WITH SQUARE STEEL ROD SHALL BE PROVIDED AT TOP OF MANHOLE CHAMBER FOR INSTALLING MONITORING DEVICE(S). DETAILS REFER TO DSD STANDARD DRAWING NO. DS 1099.



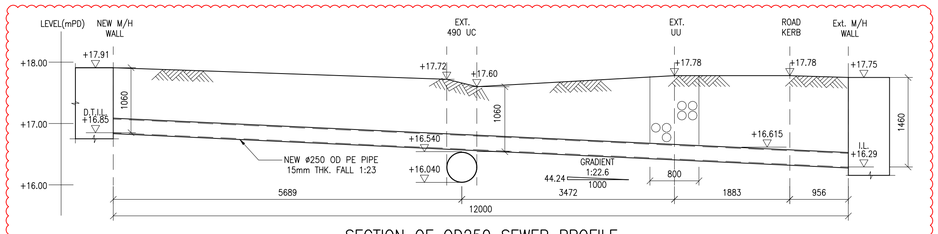
SECTION A–A
N.T.S.



PLAN OF SEWER MANHOLE COVER
N.T.S.

SECTION B–B
N.T.S.

FRONT ELEVATION SECTION
DETAILS OF FRESH AIR INLET



SECTION OF OD250 SEWER PROFILE
N.T.S.

Client

Architect

Structural & Geotechnical Engineer

翱翔顧問工程師有限公司
WINGS & ASSOCIATES
CONSULTING ENGINEERS LTD.

Rev.	Date	Description	Drawn by	Checked by	Approved by
-	05.2023	1ST SUBMISSION	KT	RM	VT
A	06.2023	1ST AMENDMENT	KT	RM	VT
B	03.2024	2ND AMENDMENT	KT	RM	VT

PROJECT TITLE: EXTERNAL SEWERAGE DRAINAGE WORKS AT TONG YAN SAN TSUEN, YUEN LONG LOT 1034 S.A. RP IN DD121

DRAWING TITLE: GENERAL NOTE, BLOCK PLAN, LOCATION PLAN, SECTION, DETAILS

DRAWING NO. P21012/DR/101 REV NO. B

SCALE AS SHOWN

PROJECT REF. P21012

CAD REF. External Drainage Drawing.dwg

B.D. REF.

FSD REF.

OFFICE USE:

* ALL DIMENSIONS ARE IN MILLIMETER EXCEPT OTHERWISE NOTED

Appendix 4

Submission of Completed Confirmation of Completion Form and Relative Documents to the Drainage Services Department dated 23.5.2024

翱翔顧問工程師有限公司
Wings & Associates Consulting Engineers Ltd.

Your Ref.: (011YE1) in MN 10/YL/DD121
Our Ref.: P21012/L/013

By Post & Email

Drainage Services Department
Operation & Maintenance Branch,
Mainland North Division, Yuen Long Section
Kowloon Government Offices, 405 Nathan Road, Kowloon
(Attn: Mr. TSE Chi Wai)

23 May 2024

Dear Sir,

Submission of Completed Confirmation of Completion Form & Relative Documents

We refer to the letter dated 13.10.2023 from Drainage Services Department on the drainage connection works and our submission letter dated 23.04.2024, we are writing to submit herewith the follow supplementary items for your onward processing: -

(1) CCTV report after completion;
(2) Air Test report after completion; &
(3) Manhole Schedule with updated as-built drawings (soft copy PDF & CAD Files).

Should you have any queries, please feel free to contact the undersigned at [redacted] Thank you for your kind attention.

Yours faithfully,
For and on Behalf of
WINGS & ASSOCIATES CONSULTING ENGINEERS LIMITED

Jackson NG
Principal Building Surveyor
Encl.
VT/RM/jn

CCTV Inspection Report

Tong Yan San Tsuen Road

1.0 **Location** : Tong Yan San Tsuen Road

2.0 **Date of Survey** : 26-Feb-24

3.0 **Statement of Conformity**

This is to certify that qualified personnel have undertaken the coding for this Works Order and reports are compiled in accordance with the contract Specification, the MSCC, the SRM and certified by the undersigned.

For and on behalf of

Excellent Pipeline T & E Ltd

Signature: _____ Date: _____

Chan Man Ho

Certificate No. 2090/14

Main Contractor : Lung Kee Transportation Engineering Ltd.

Survey Specialist : Excellent Pipeline T & E Ltd

TABLE OF CONTENTS

1. Introduction

1.1 Background

Lung Kee Transportation Engineering Ltd. to conduct CCTV inspection to Buried Water Carrying Services in Tong Yan San Tsuen Road.

1.2 Scope of Survey

Provision of specialist and equipment to carry out the CCTV inspection to identify the location of any possible structural defects along the underground or buried water carrying services and provision of Final CCTV report.

Details of Inspection

Location
Tong Yan San Tsuen Road

Field Procedures

Identify the locations of buried water carrying services to be surveyed and choose appropriate CCTV equipment for suiting the site condition.
Remove the opening and place the CCTV equipment into the manholes or chambers.
Before starting the pipe survey, the manhole condition is surveyed and recorded by the CCTV equipment.
Place the CCTV equipment in front of the pipe entrance and start the survey for locating possible defects along the pipe.

2. CCTV Survey Results

According to the assessment by our qualified CCTV coder, the survey result was summarized as followings:

ID	Location	Start MH	Finish MH	Size	Length (m)	Material	SCG	SPG	Results
1	Tong Yan San Tsuen Road	FMH1009095	FMH1009097	225	12.23	CO	1	1	Survey Finished
2	Tong Yan San Tsuen Road	FMH1009095	FMH1009094	225	50.02	CO	1	1	Survey Finished
3	Tong Yan San Tsuen Road	FMH1009095	F1	225	12.04	PE	1	1	Survey Finished

3. Conclusion Regular Checks of Leakage of Buried Water Carrying
Location:Tong Yan San Tsuen Road

ID	Start MH	Finish MH	Size	Length (m)	Major Defects	Direction	SCG	SPG
1	FMH1009095	FMH1009097	225	12.23	N/A	Downstream	1	1
2	FMH1009095	FMH1009094	225	50.02	N/A	Upstream	1	1
3	FMH1009095	F1	225	12.04	N/A	Upstream	1	1

ICG 結構評分
SCG 流水評分
SPG 結構，地質綜合評分

SCG
1 可接受
2 障礙物來阻礙漏水
3 可見將來會出現淤塞
4 短時間內會出現淤塞
5 渠筒已經淤塞

ICG
1 可接受
2 短期內未有倒塌風險
3 短期內未有倒塌風險但短期內結構開始衰老
4 將來會出現倒塌情況
5 已倒塌還有即時倒塌風險

SPG
1 無需跟進
2 制定長遠維修計劃
3 三至兩年內維修
4 一至兩年內完成維修
5 迫切緊急維修

Notes on CCTV Sewer Survey

GRANDING SYSTEM

Each pipeline has a sewer garde after CCTV survey

The highest grade of each pipeline in the survey would be the action level of it.

Grade 1	No Action Required
Grade 2	Rehabilitation can be scheduled long-term
Grade 3	Rehabilitation necessary medium-term within 3 to 5 years
Grade 4	Rehabilitation Procedure is urgent and has to be completed within 1 to 2 years, Necessary for emergency operations has to be examined.
Grade 5	Rehabilitation is urgent and short-term. In order to prevent further damage, Necessary temporary spot Repair has to be conducted on emergency level.

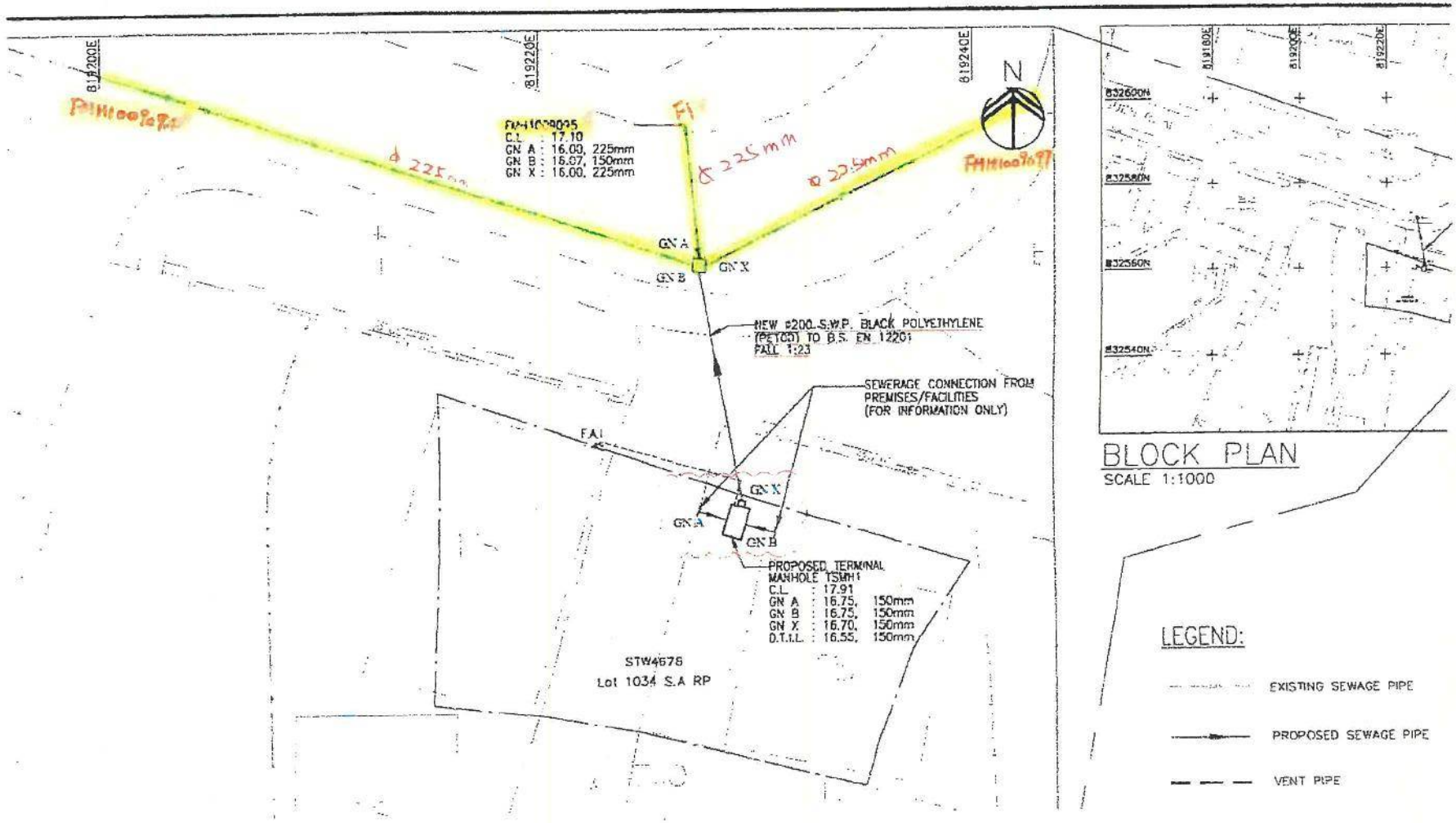
Appendix A

Location Plan

Tong Yan San Tsuen Rd

[1] - (1 of 1)

90%



Appendix B

Table and Figures for CCTV Survey And Inspection Report

Survey Report 勘測報告 : Tong Yan San Tsuen Road

Site Location 地盤位置/名稱
Tong Yan San Tsuen Road

Customer 客戶

Main Contractor 總承判商
Lung Kee Transportation Engineering Ltd.

Remark i.e. Work Order Number 備註
Tong Yan San Tsuen Road

Site Working Period 地盤工作期間
2024-02-26 - 2024-02-26

Total Surveyed Length 總檢測長度
74.29m

Total Surveyed Pipe 檢測管道數目
3

Report endorsed by : _____

Date : _____

Summary of Pipelines (Form A)

Project Location : Tong Yan San Tsuen Road

Work Order No. : Tong Yan San Tsuen Road

Summary of Pipelines (Form A)

Item 頁數	Pipe ID / Feature No. 渠筒編號	Start Node 開始點	Finish Node 終結點	Direction / Use 流向 / 功能		Pipe Size / Material 呎寸 / 物料	Surveyed Length 已檢測長度	ICG* 結構評分	SCG* 流水評分	SPG* 結構評核	Remark (Office) 小記
1	FWD1012261	FMH1009095	FMH1009097	D/S	Foul	225mm CO	12.23	1	1	1	
2	FWD1012260	FMH1009095	FMH1009094	U/S	Foul	225mm CO	50.02	1	1	1	
3	FWDXXXXXXX	FMH1009095	F1	U/S	Foul	225mm PE	12.04	1	1	1	

* 1. SCG displayed as SCG peak grade

2. Computerized Condition Grade generated as according to UK WRc SRM in result 1 ~ 5,
   Condition Grade shown in 'N/A" allow for screening of survey abandoned cases only, detail grading result refer to Form C.

3. Survey abandoned records with surveyed length underlined

Grade indicated in **"N/A"** for easy screening of survey abandoned cases only, actual condition grade refer to coding form.

Computerized Condition Grade (CCG) result	1	2	3	4	5
Unable to Start Survey - SAST - Surveyed Lenth = 0m	N/A	N/A	N/A	N/A	N/A
Survey Abandoned during survey - SAMID Surveyed Length > 0m	N/A	N/A	N/A	CCG	CCG
Survey Completed - FH - Survey Completed in any legnth > 0m	CCG	CCG	CCG	CCG	CCG

Defect Summary (Form B)

Sheet	Video	Manhole From	Manhole To	Metres	Pipe Condition										Service Condition								Misc.				
					Urgent	Cracked	Fractured	Broken	Hole	Deformed	Collapsed	Joint Displaced	Open Joint	Roots	Infiltration	Encrustation / Scale	Silt / Debris	Grease	Obstruction	Water Line (20%)	Line	Survey Abandoned	Camera Underwater	Connection / Junction	Brick Defects	Other Feature
1	0001-FMH1009095-FMH1009097	FMH1009095	FMH1009097	12.23																						
2	0002-FMH1009095-FMH1009094	FMH1009095	FMH1009094	50.02																						
3	0003-FMH1009095-F1	FMH1009095	F1	12.04																						
Sub Total					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sheet: 1

Surveyor 勘測員	Survey Date / Time 日期 / 時間	Location 地點
CHOW May	2024-02-26 12:49	Tong Yan San Tsuen Road

Start Node 起始點	Finish Node 終結點	Direction 方向	Use 用途	Material 物料	Pipe Shape 形狀	Pipe Size 呎吋 (H x W)
FMH1009095	FMH1009097	Downstream	Foul	Concrete	Circular	225mm

Video Number 錄影檔號碼	Survey Purpose 檢測目的	Pipe Cleaning Record 清洗紀錄	Weather 天氣
0001-FMH1009095-FMH1009097.mp4	Post-Cleaning Survey	5000psi	Dry

Feature No / Pipe ID FWD1012261

	Grade (Ver.) 等級 (版本) (MSCC5 Full)	Score 分數 Peak 最高	Total 加總	Mean 平均
Internal Condition Grade (ICG) 結構評分	1	0	0	0.00
Service Condition Grade (SCG) 流水評分	Peak: 1 / Mean: 1	0	0	0.00

Adjusted Internal Condition Grade 修正結構評分

ICG Supplementary Data - SRM Item 結構評分修正參數									ICG Adjustment 修正數值	Adjusted ICG Grade (Min: 1 Max: 5) 修正後級別
ii	iii	v	vi	vii	viii	ix	x	xi		
N	0	N	0	N	N	N	N	N	+0	1

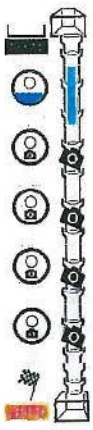
Structural Performance Grade 結構評核

Soil Type and Surcharge effect 土質及流量考量		Supplementary Data - SRM Item 修正參數		SPG Adjustment 修正數值	SPG (Min: 1 Max: 5) 修正後級別
Risk Type 風險級別	Surcharge 流量	iv	i		
Low	Rare	N	N	+0	1

Repair Priority 維修緩急

1

Distance	Code	CD	Photo No	Description	Description(Chinese)
0.00	MH			Manhole / node FMH1009095	沙井 / 般飽
0.00	WL			Water level 5%	水位
0.00	GP	1		General photograph	一般狀況照片 (非損毀)
5.05	GP	2		General photograph	一般狀況照片 (非損毀)
10.05	GP	3		General photograph	一般狀況照片 (非損毀)
12.03	GP	4		General photograph	一般狀況照片 (非損毀)
12.23	MHF			Finish node type, manhole FMH1009097	檢測終結點 - 沙井



Sheet: 1 Photo

1

Distance 0.00

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 12.23

2

Distance 5.05

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 12.23

3

Distance 10.05

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 12.23

4

Distance 12.03

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 12.23

Sheet: 2

Surveyor 勘測員	Survey Date / Time 日期 / 時間	Location 地點
CHOW May	2024-02-26 13:32	Tong Yan San Tsuen Road

Start Node 起始點	Finish Node 終結點	Direction 方向	Use 用途	Material 物料	Pipe Shape 形狀	Pipe Size 呎吋 (H x W)
FMH1009095	FMH1009094	Upstream	Foul	Concrete	Circular	225mm

Video Number 錄影檔號碼	Survey Purpose 檢測目的	Pipe Cleaning Record 清洗記錄	Weather 天氣
0002-FMH1009095-FMH1009094.mp4	Post-Cleaning Survey	5000psi	Dry

Feature No / Pipe ID FWD1012260

	Grade (Ver.) 等級 (版本) (MSCCS Full)	Score 分數 Peak 最高	Total 加總	Mean 平均
Internal Condition Grade (ICG) 結構評分	1	0	0	0.00
Service Condition Grade (SCG) 流水評分	Peak: 1 / Mean: 1	0	0	0.00

Adjusted Internal Condition Grade 修正結構評分

ICG Supplementary Data - SRM item 結構評分修正參數									ICG Adjustment 修正數值	Adjusted ICG Grade (Min: 1 Max: 5) 修正後級別
Ii	Iii	v	vi	vii	viii	ix	x	xi		
N	0	N	0	N	N	N	N	N	+0	1

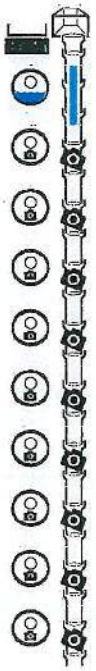
Structural Performance Grade 結構評核

Soil Type and Surcharge effect 土質及流量考量		Supplementary Data - SRM Item 修正參數		SPG Adjustment 修正數值	SPG (Min: 1 Max: 5) 修正後級別
Risk Type 風險級別	Surcharge 流量	iv	i		
Low	Rare	N	N	+0	1

Repair Priority 維修緩急

1

Distance	Code	CD	Photo No	Description	Description(Chinese)
0.00	MH			Manhole / node FMH1009095	沙井 / 設施
0.00	WL			Water level 5%	水位
0.00	GP		5	General photograph	一般狀況照片 (非損毀)
5.01	GP		6	General photograph	一般狀況照片 (非損毀)
10.03	GP		7	General photograph	一般狀況照片 (非損毀)
15.07	GP		8	General photograph	一般狀況照片 (非損毀)
20.03	GP		9	General photograph	一般狀況照片 (非損毀)
25.12	GP		10	General photograph	一般狀況照片 (非損毀)
30.04	GP		11	General photograph	一般狀況照片 (非損毀)
35.11	GP		12	General photograph	一般狀況照片 (非損毀)
40.12	GP		13	General photograph	一般狀況照片 (非損毀)



Sheet: 2

Distance	Code	CD	Photo No	Description	Description(Chinese)
45.05	GP		14	General photograph	一般狀況照片 (非損毀)
48.90	GP		15	General photograph	一般狀況照片 (非損毀)
50.02	MHF			Finish node type, manhole FMH1009094	檢測終結點 - 沙井

Sheet: 2 Photo

5

Distance 0.00

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02

6

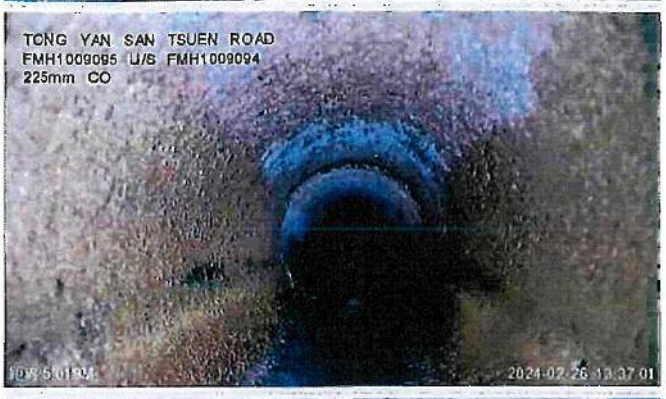
Distance 5.01

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



7

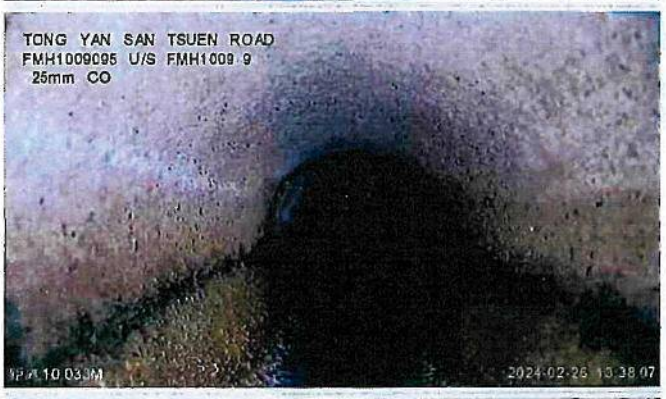
Distance 10.03

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



8

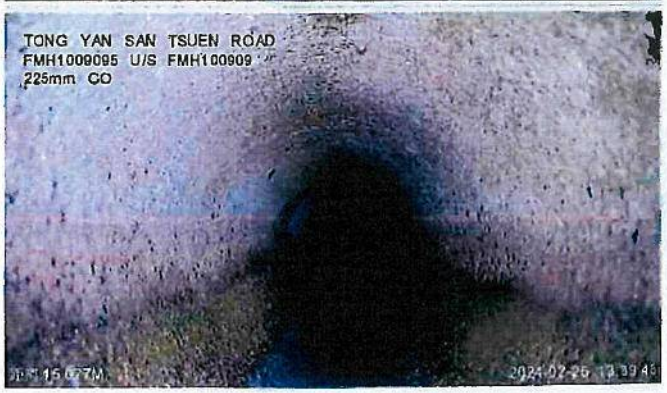
Distance 15.07

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



Sheet: 2 Photo

9

Distance 20.03

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02

10

Distance 25.12

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02

11

Distance 30.04

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02

12

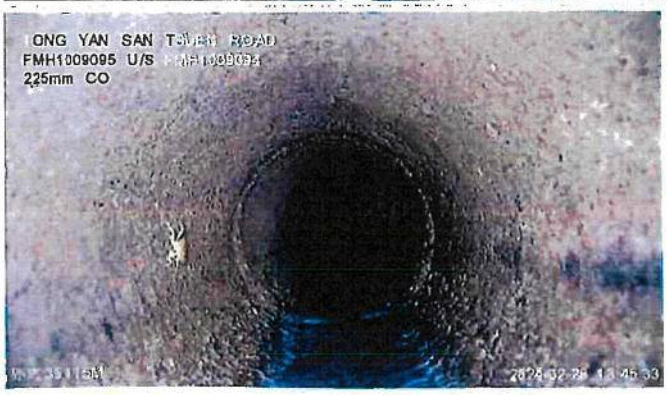
Distance 35.11

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



Sheet: 2 Photo

13

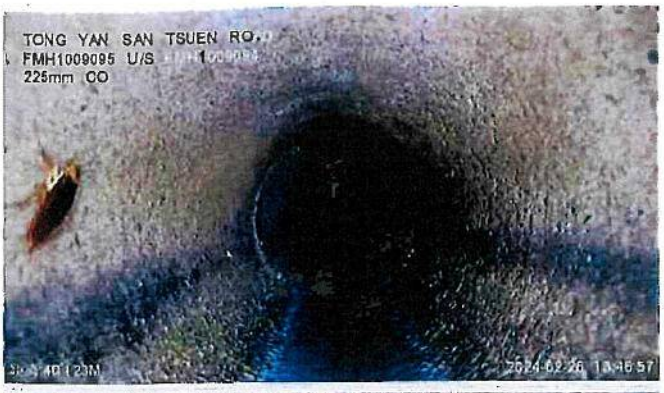
Distance 40.12

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



14

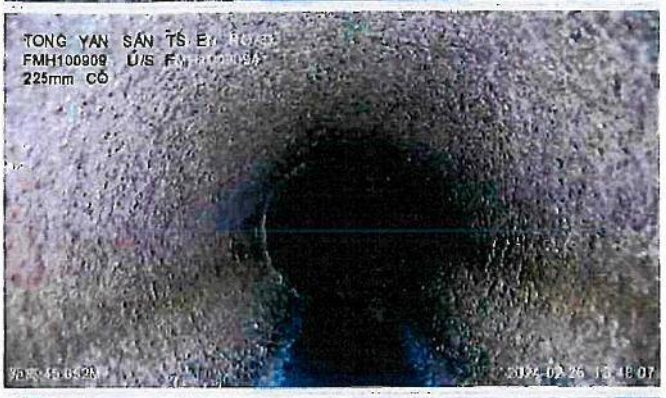
Distance 45.05

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



15

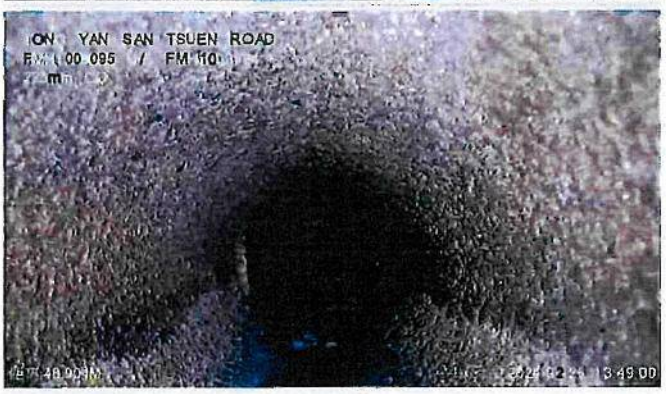
Distance 48.90

Code GP

Description General photograph

描述 一般狀況照片 (非損毀)

0.00 50.02



Sheet: 3

Surveyor 勘測員	Survey Date / Time 日期 / 時間	Location 地點
CHOW May	2024-02-26 14:13	Tong Yan San Tsuen Road

Start Node 起始點	Finish Node 終結點	Direction 方向	Use 用途	Material 物料	Pipe Shape 形狀	Pipe Size 呎吋 (H x W)
FMH1009095	F1	Upstream	Foul	Polyethylene	Circular	225mm

Video Number 錄影機號碼	Survey Purpose 檢測目的	Pipe Cleaning Record 清洗紀錄	Weather 天氣
0003-FMH1009095-F1.mp4	Post-Cleaning Survey	5000psi	Dry

Feature No / Pipe ID FWDXXXXXXX

	Grade (Ver.) 等級 (版本) (MSCC5 Full)	Score 分數 Peak 最高	Total 加總	Mean 平均
Internal Condition Grade (ICG) 結構評分	1	0	0	0.00
Service Condition Grade (SCG) 流水評分	Peak: 1 / Mean: 1	0	0	0.00

Adjusted Internal Condition Grade 修正結構評分

ICG Supplementary Data - SRM item 結構評分修正參數									ICG Adjustment 修正數值	Adjusted ICG Grade (Min: 1 Max: 5) 修正後級別
ii	iii	v	vi	vii	viii	ix	x	xi		
N	0	N	0	N	N	N	N	N	+0	1

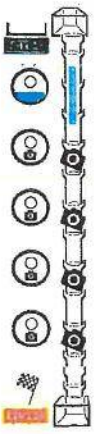
Structural Performance Grade 結構評核

Soil Type and Surcharge effect 土質及流量考量		Supplementary Data - SRM item 修正參數		SPG Adjustment 修正數值	SPG (Min: 1 Max: 5) 修正後級別
Risk Type 風險級別	Surcharge 流量	iv	I		
Low	Rare	N	N	+0	1

Repair Priority 維修緩急

1

Distance	Code	CD	Photo No	Description	Description(Chinese)
0.00	MH			Manhole / node FMH1009095	沙井 / 檢查
0.00	WL			Water level 0%	水位
0.00	GP		16	General photograph	一般狀況照片 (非損毀)
5.02	GP		17	General photograph	一般狀況照片 (非損毀)
10.03	GP		18	General photograph	一般狀況照片 (非損毀)
11.22	GP		19	General photograph	一般狀況照片 (非損毀)
12.04	MHF			Finish node type, manhole F1	檢測終結點 - 沙井

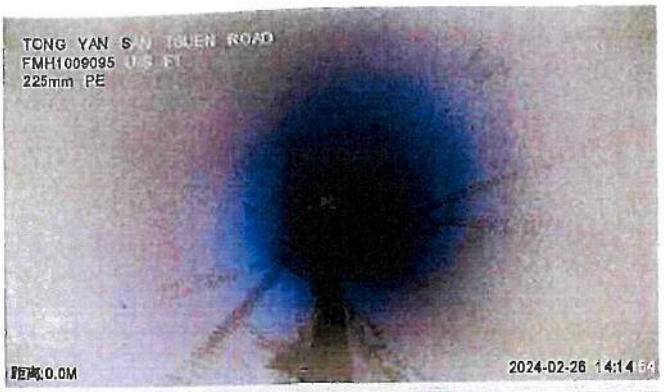


Sheet: 3 Photo

16

Distance	0.00
Code	GP
Description	General photograph
描述	一般狀況照片 (非損毀)

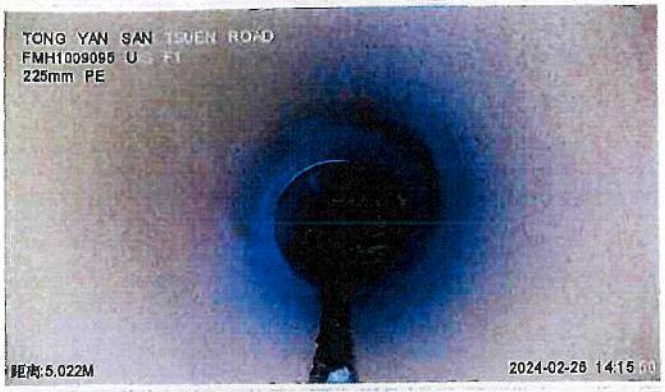
0.00 12.04



17

Distance	5.02
Code	GP
Description	General photograph
描述	一般狀況照片 (非損毀)

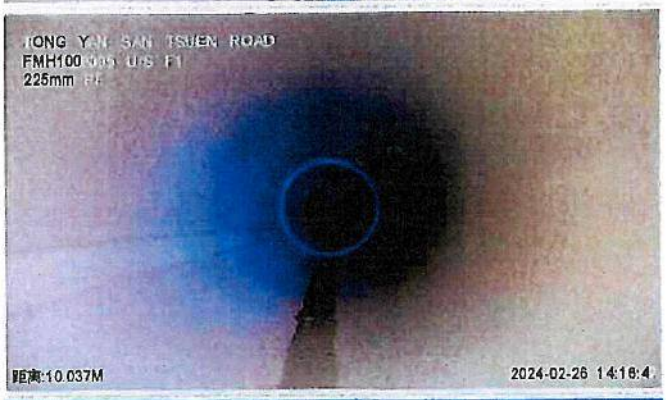
0.00 12.04



18

Distance	10.03
Code	GP
Description	General photograph
描述	一般狀況照片 (非損毀)

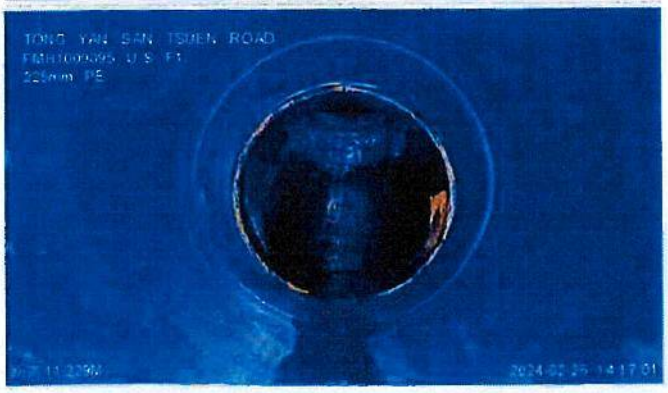
0.00 12.04



19

Distance	11.22
Code	GP
Description	General photograph
描述	一般狀況照片 (非損毀)

0.00 12.04



Computerized Condition Grade

Abbreviation

UK WRc	United Kingdom Water Research Centre Limited
SRM	Sewer Rehabilitation Manual
MSCC	Manual of Sewer Condition Classification
SCG	Service Condition Grade
ICG	Internal Condition Grade
SPG	Structural Performance Grade

SCG, ICG, SPG are generated as according to UK WRc SRM IV edition Volume I Appendix G, Appendix H & Chapter 6.

Result of calculated score may be different to various aftermarket software's due to discrepancy between MSCC 3, MSCC 4 & SRM IV edition.

(SRM IV edition Volume I Appendix G Page G/1)

Scoring of Structural Defect for ICG as according to Table G.1 & G.2, Grading Thresholds as according to Table G.3

(SRM IV edition Volume I, Appendix G, Page G/2, G/3, G/4 & G/5)

Scoring of Service Defect for SCG as according to Table H.1, Grading Thresholds as according to Table H.2.

(SRM IV edition Volume I, Appendix H, Page H/2 & H/3)

It is recommended that those sewer lengths which are given an ICG of 3, 4, or 5 should be manually assessed by the engineer.

(SRM III edition Volume II, Appendix C Page 133)

(Only grade 4 or 5 should be examined in detail – SRM V, Step 3, Computerized Scoring System)

Condition grades greater than 5 have no meaning when compared to definitions in Table 6.1, however where it is necessary to assign a priority between sewers which would otherwise have the same structural performance grade of 5, then the higher total grade can be useful.

(SRM IV edition Volume I, Chapter 6, Page 6/19)

The system is not applicable to plastics pipe and renovated sewers.

(SRMV edition Step 3,Likehood Modelling–Method 3)

Item	Value	Explanation / Source
1. Service Condition Grade	1~5	SCG, build up by scoring system indicated in "Sewer Rehabilitation Manual Fourth Edition (SRM IV)" Worst defect within 1 m length
2. Internal Condition Grade	1~5	ICG, build up by scoring system indicated in "Sewer Rehabilitation Manual Fourth Edition (SRM IV)" Worst defect within 1 m length
3. Adjustment to ICG	-2~+7	Refer to SRM IV page 6/18, 11 number of consideration factors that affecting the ICG. This information to be provided by the Engineer and Should not alter the value if case of without positive information, as follow:

Item	Pipe Condition	Adjustment
ii	Concrete Surround	-1
iii	Poor Construction	+1 or Specify by Engineer
v	Defective Pipe Gradient >10%	+1
vi	Displaced Brick NOT Defect	-1 or Specify by Engineer
vii	Brick Pipe with Heavy traffic & less than 1m Cover	+1
viii	Continuing Deterioration	+1
ix	Below Ground Water Table for Grade 2~5 pipe	+1
x	Chemical Attack with Spalling Defect	+1
xi	Ground Movement Observed	+1

4. Adjusted ICG	1~5	This item builds up by ICG plus the adjustment factors stated above to precis lonize the structural condition pipe, reflect the actual situation
5. Structural Performance Grade	1~5	Refer to SRM IV page 6/18, there are 4 number of factors that affecting the SPG. i. Soil risk factor ii. Surcharge factor iii. Collapse record iv. Brick sewer against with ground condition
6. Repair Priority	1~c	Assign a priority between sewers which would otherwise have the same structural performance grade of 5, then the higher total grade can be useful.
7. SRM Recommendation for Grading	N/A	Sewer lengths which are given an ICG of 3, 4, or 5 should be manually assessed by the engineer.

Service Condition Grade SCG

This scoring system is to identify those defects in the sewer which are likely to have an adverse impact on the operational performance of sewer system.
(SRM IV edition Volume I, Appendix H, Page H/1)

Grade	Peak Score	Mean Score	Implication	Recommendation
1	<1	<0.5	Acceptable service condition	No action required
2	1~1.9	0.5~0.9	Pipe with slightly blockage by debris / encrustation or any other material	Rehabilitation / Pipe cleaning work can be scheduled long-term.
3	2~4.9	1~2.4	Pipe block by any material likely in foreseeable future	Rehabilitation / Pipe cleaning work can be scheduled short term
4	5~9.9	2.5~4.9	Pipe may block and loose function in short period	Rehabilitation procedure is urgent and must be completed within 1 to 2 Years
5	10+	5+	Pipe totally blocked and unable to provide service	Rehabilitation is urgent and short-term.

(WRc SRM IV Vol 1 Appendix H, age H/3 Table H.2)

Internal Condition Grade ICG

The assessment of the internal condition grade is obtained from the coded defect descriptions contained in each report. The packages are designed to be used as a screen to identify those sewers which justify close scrutiny when considered with further supplementary data as described in Step 2c.2.
(SRM IV edition Volume I, Appendix G, Page G/1)

Grade(1)	Peak Score(1)	Implication(2)	Recommendation	Recommend Examined in Detail(3)	Recommend Manual Assessed by Engineer(4)	Supplementary Information Affect to SPG(5)
1	<10	Acceptable structure condition	No action required	N/A	N/A	N/A
2	10~39	Minimal collapse risk in short term but potential for further deterioration	Rehabilitation can be scheduled long-term.	N/A	N/A	N/A
3	40~79	Collapse unlikely in near future but further deterioration likely	Rehabilitation necessary medium-term within 3 to 5 years.	N/A	Yes	Yes
4	80~164	Collapse likely in foreseeable future	Rehabilitation procedure is urgent and has to be completed within 1 to 2 Years, Necessary for emergency operations has to be examined.	Yes	Yes	Yes
5	165+	Collapsed of collapsed imminent	Rehabilitation is urgent and short-term. In order to prevent further damage, Necessary temporary spot repair has to be conducted on emergency level.	Yes	Yes	N/A

(1)(WRc SRM IV Vol 1 Appendix G, Page G/5 Table G.3)
(2)(WRc SRM IV Vol 1 Chapter 6, Page 6/10 Table 6.1)
(3)(WRc SRM IV Vol 1 Appendix G, Page G/5)
(4)(SRM III Volume II Appendix C, Page 133)
(5)(SRM III Volume I Chapter 6, Page 6/16)

Internal Condition Grade ICG

Whilst the internal visual condition of the sewer tells the engineer a great deal about its structural condition, many other factors play an important if not crucial part in the likely deterioration of the sewer.

(SRM IV edition Volume I, Chapter 6, Page 6/16)

If the engineer cannot provide positive information he should not alter the original internal condition grade.

(SRM IV edition Volume I, Chapter 6, Page 6/16)

Supplementary Data affect ICG

Item	Description
ii	In the sewer is known to have a concrete surround, the condition grade should be reduced by 1.
iii	Poor construction, evident from the internal visual information, should be accounted for in the internal condition grade.
v	For defective sewers with a gradient steeper than 10% the internal condition grade should be increased by 1.
vi	In a brick sewer where there is visual evidence that displaced bricks are a feature of the construction method and not subsequent movement, the internal condition grade should be reduced accordingly
vii	If a brick sewer is under a road carrying heavy traffic, with less than one meter of cover, the internal condition grading should be increased by 1
viii	If specific evidence of continuing deterioration exists from previous surveys consideration should be given to increasing the internal condition grade by 1
ix	If the sewer is below the ground water table in high risk soil and it has an internal condition grade of 2 or more, or if the sewer is below the ground water table, in a medium risk soil and it has an internal grade of 4 or 5, then the internal condition grade should be increased by 1
x	Where the sewer is assessed as being the risk of chemical attack (see Appendix F) and the worst defect is a surface damage (spalling) defect, the internal condition grade should be increased by 1
xi	Where the sewer is presently subject to active mining subsidence (i.e. movement is actually being observed in the surface of the ground above the sewer) the internal condition grade should be increased by 1 until the movement has stopped and the sewer has been reinspected.

(Extracted from SRM IV edition Volume I, Chapter 6 Page 6/18, Page 7/18)

Structural Performance Grade SPG

This objective of this step is to assess the likelihood of structural failure (collapse) of the sewer or further deterioration. The use if inspection data to assess the hydraulic environment or operational performance of the system is dealt with as part of the appropriate investigation.

(SRM IV edition Volume I, Chapter 6, Page 6/9)

Table 6.4 Soil Risk Categories

Risk Type	Description in accordance with BS5930 : 1999
Low Risk	Silts, silty fine sands, or fine sands, medium to coarse sands
Medium Risk	low plasticity clays, fine to medium gravels, well graded sandy gravels
High Risk	medium to high plasticity clays all clay if sewer was constructed by tunneling

Table 6.5 Surcharge Risk Categories

Frequency	Description
Daily	Perhaps tidal;
Frequently	To a depth greater than 0.5m above the soffit once a year
Rarely	not at all or less than 0.5m above the soffit once a year

(SRM IV edition Volume I, Chapter 6, Page 6/17)

If the engineer cannot provide positive information, he should not alter the original internal condition grade.

(SRM IV edition Volume I, Chapter 6, Page 6/16)

Supplementary Data affect SPG

Item	Description
i	The minimum structural performance grade which should be allocated to a sewer with a history of collapsed is Grade 4 (unless structural rehabilitation has been carried out since the last collapse)
iv	Brick sewers with two or more rings of brickwork constructed in medium or high-risk soil types, should be treated as being in low risk soil type provided the ground is not exposed.

(Extracted from SRM IV edition Volume I, Chapter 6 Page 6/18, Page 7/18)

Reminder - Understanding of ICG

Discrepancy between UK SRM and Hong Kong situation for understanding defective pipe conditions:

Reference to UK WRc's **MSCC** coding principle and **SRM** computerized condition grade guideline, defects categories "Joint Displace", "Open Joint" and "Crack" are defined score 1 (JDM,OJM), 2(JDL,OJL) and 10 (CC, CL, CS), these scoring fall in grading threshold may not be able to reflect the risk of water leakage from the drainage on / above slopes which these defects are one of the major concern for slope stability in Hong Kong.

CODE OF PRACTICE ON MONITORING AND MAINTENANCE OF WATER-CARRYING SERVICES AFFECTING SLOPES (November 2006) of HKSAR clearly stated "Leakage of water from water-carrying services can be a serious risk to the stability of slopes and retaining walls even at some distance away", therefore we recommend the engineer to have manual assessment to the condition of pipes contain above said defects, even the pipe classified in low condition grade which generated by computer software.

Discrepancy between various version of UK SRM and MSCC

There was time gap in between publish date of different versions of SRM and MSCC, therefore the content of "Defect Codes" in MSCC may not match with "Score Table" in SRM. For these cases EASY CCTV made its own justification of assign of defect score.

MSCC common use header information code

Material Code		Shape Code		Use of Sewer	
CO	Concrete	C	Circular	C	Combined
CI	Cast Iron	R	Rectangular	F	Foul
VC	Vitrified Clay	U	U-shape with flat top	S	Surface Water (Storm)
DI	Ductile Iron	Z	Other	Z	Other
PVC	Polyvinyl Chloride				
MAC	Masonry Regular Course			Direction of Flow	
MAR	Masonry Randomly Course			US	Upstream
BR	Brick			DS	Downstream
RL	Resin (Lining)				
XXX	Other				
ZZZ	Unknown				

** Code not shown in above table, please refer to MSCC 3rd, 4th & 5th edition booklet

電腦運算各類渠筒評核

中文版本只作參考, 一切以英文版本為準.:

渠筒評核依照英國 WRc 機構發行之 SRM IV 版本 Volume I Appendix G, Appendix H & Chapter 6 指引計算

技術指引列明不同電腦程式可能會運算出不同結果, 評核內容大致為下列各點:

Service Condition Grade SCG 流水評分

分析報告內所撰寫影響排水功能之代碼, 從而計算出五個不同等級阻塞情況作保修分析參考:

評級	標值	平均值	評估狀況	工作建議
	WRc SRM IV Vol 1 Appendix H, Page H/3 Table H.2			
1	<1	<0.5	可接受	無須跟進
2	1-1.9	0.5-0.9	障礙物輕微阻礙流水	可以計劃清洗保修
3	2-4.9	1-2.4	可見將來會出現淤塞	短期內計劃進行清洗保修
4	5-9.9	2.5-4.9	短時間內會出現淤塞	一至兩年內須要完成清洗保修
5	10	5+	渠筒已經淤塞並失去功效	須要緊急清洗保修

Internal Condition Grade ICG 結構評分

分析報告內所撰寫影響渠筒結構之代碼, 從而計算出五個不同等級作維修計劃分析參考. 除基本結構評分外, 另有九個特定狀況用作修正結構評分:

評級	標值	評估狀況	工作建議	建議工程師 詳細閱讀報告	建議工程師 分析渠筒狀況	需進一步分析 SPG
WRc SRM IV Vol 1 Appendix G, Page G/5 Table G.3		WRc SRM IV Vol 1 Chapter 6, Page 6/10 Table 6.1		WRc SRM IV Vol 1 Appendix G, Page G/5	SRM III Volume II Appendix C, Page 133	SRM III Volume I Chapter 6, Page 6/16
1	<10	可接受	無須跟進	N/A	N/A	N/A
2	10-39	短期內未有倒塌風險 但 長遠結構會開始衰老	制定修長遠維修計劃	N/A	N/A	N/A
3	40-79	短期內未有倒塌風險 但 短期內結構會開始衰老	三至五年內進行維修	N/A	適用	適用
4	80-164	可見將來會出現倒塌情況	一至兩年內需完成維修	適用	適用	適用
5	>165	已倒塌 或 有即時倒塌風險	迫切緊急維修	適用	適用	N/A

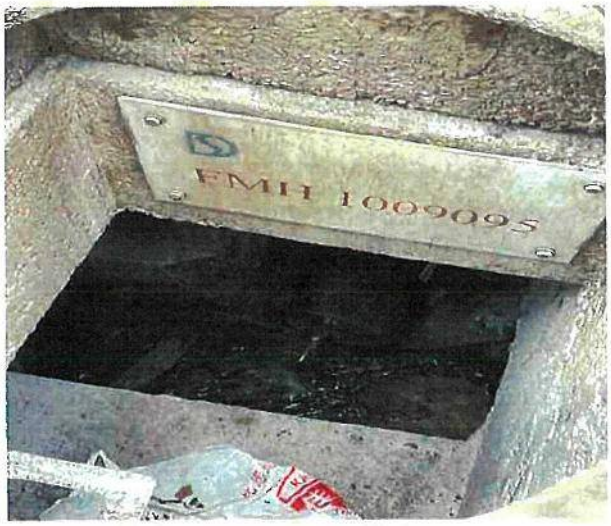
Structural Performance Grade SPG 結構評核

基於結構評分, 配合流水量及地質從而計算出五個不同等級評估渠筒衰老或倒塌之可能性:

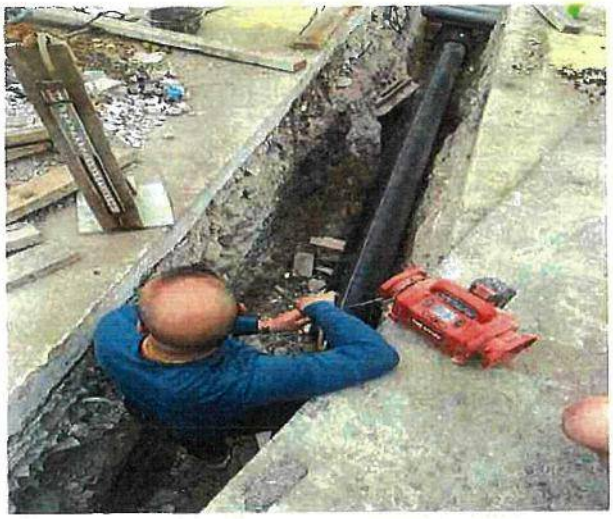
Repair Priority 維修緩急

依照技術手冊建議, 當多於一條渠筒出現相同結構評核級數時, 制定建議維修次序.

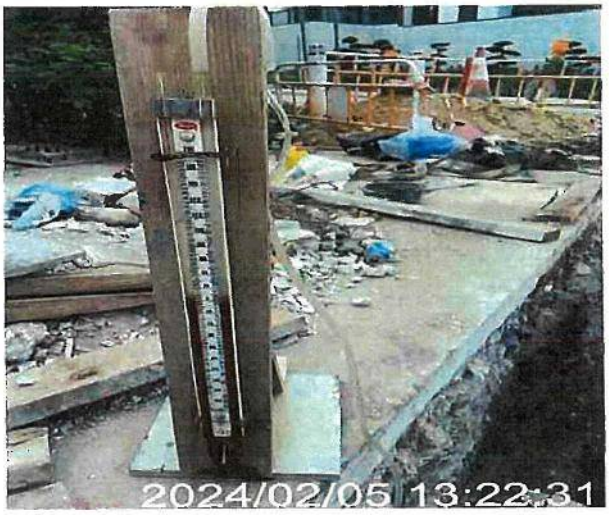
Project : Proposed Development at Lot Nos. 1023 S.B. RP, 1033 S.C and 1034 S.A. RP (Part) in D.D.121
Site Photos for Pipeline Air Test



Plugging pipe ends



Setup of air test



Reading at the start of test - 0.0mm

Reading after 15 mins - 0.0mm

PIPELINE TEST REPORT

Project : Proposed Development at LotNos. 1023 S.B. RP. 1033 S.C and 1034 S.A RP (Part) in D.D. 121 and Adjoining Geovernment Land, Tong Yan San Tsuen, Sha Tseng Road, Yuen Long.

Testing Condition : After OD250 PE pipeline is installed

Pipe No.	Location	Manhole to Manhole	Diameter (mm)	Length of Pipe (m)	Method of Test	Date of Test	Drop Result (mm)	Allowable Drop (mm)	Material of Pipe	Remarks: (Pass/Fail)
1	Lot. No. 1023, Tong Yan San Tsuen Road and Sha Tseng Road	New Backdrop Manhole to Existing FMH1009095	200mm	12.00	Air Test	5 Feb 2024	0	25	200mm dia. S.W.P. Black PE (PE100) to BS EN 12201	Pass

Tested By;

Gabriel Chan (Foreman)

In the Presence of Contractor Representative

CW Choi

Appendix 5

Letter from the Drainage Services Department dated 25.7.2024

Drainage Services Department
Mainland North Division
11/F, Kowloon Government Offices,
405 Nathan Road, Kowloon

渠務署
新界北渠務部
九龍彌敦道 405 號
九龍政府合署 11 樓

29/7 Recd
P21012

本署檔號 Our Ref : (0165J8) in MN 10/YL/DD121
來函檔號 Your Ref : P21012/L/007
電　話 Telephone : (852) 2300 1627
圖文傳真 Fax : (852) 2770 4761

By Post

25 July 2024

Wings & Associates Consulting Engineers Ltd.

[redacted]

Dear Sir,

Submission for Drainage Connection of Completion
for the Proposed Development at Lot Nos. 1023 S.B RP, 1033 S.C and 1034 S.A RP (Part) in D.D.121 and Adjoining Government Land, Tong Yan San Tsuen, Sha Tseng Road, Yuen Long

Upon satisfactory Technical Audit of HBP1 conducted on 13 March 2024, we have no objection to taking over the following drainage works located on government land:

(i) a 9.5m long 250mm (O.D.) P.E. pipe connecting with FMH1009095.

Yours faithfully,

(Jeff C W TSE)
for Chief Engineer/Mainland North
Drainage Services Department

c.c.
CBS/NTW, BD Fax: 2845 1559
SE/SS, DSD Fax: 3104 6432
SEPO/SIG, EPD Fax: 2519 0572
SEPO (Regional N)2, EPD Fax: 2685 1155
E/YL1, IOW/YLE, STO(C)/MN3 – by EIMS