
Appendix C

Revised Sewerage Impact Assessment

**Section 16 Planning Application
for Proposed Residential
Development with Minor
Relaxation of Plot Ratio
Restriction at Lots 1027, 1029,
1030, 1034A, 1034B, 1039 (Part),
1040, 1042 RP, 1043 RP, 1044 RP
(Part), 1045, 1047, 2233 (Part),
2251 S.A RP, 2256 RP, 2315 (Part)
and 2316 RP (Part) in D.D. 92 and
Adjoining Government Land (New
Lot to be known as Lot 2644 in
D.D. 92), Kwu Tung South, Sheung
Shui, New Territories**

Report on
Sewerage Impact Assessment

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November 2025

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1. INTRODUCTION

- 1.1 Binnies Hong Kong Limited (Binnies) has been commissioned to carry out sewerage impact assessment in support of a planning application for proposed residential development with minor relaxation of plot ratio restriction on the Approved Kwu Tung South Outline Zoning Plan (OZP) No. A/NE-KTS/22 at various lots in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), (hereafter referred to as the “Application Site”) under Section 16 (S16) of the Town Planning Ordinance (the Ordinance) (CAP. 131). The Application Site is now zoned “Comprehensive Development Area (3)” (“CDA(3)”).
- 1.2 The Application Site is bounded by Kwu Tung Road to the north, Hang Tau Road to the east, and Sheung Yue River as well as existing meander and some existing planting area to the west. Access to the Application Site is via Hang Tau Road (**KT3/SIA/001**). The Application Site covers an area of approximately 2 ha.
- 1.3 The Applicant had previously obtained rezoning agreement from the Board (under application No. Y/NE-KTS/15) for proposed residential development on 28 October 2022 (the Approved Scheme). To realise residential development at the subject “CDA(3)” zone, the Applicant now submits a refined scheme for the Board’s consideration under S16 of the Ordinance.
- 1.4 The Proposed Development consists of 1,062 units, club house and car parking facilities with a maximum plot ratio of 2.012. A summary of key information of the Proposed Development is shown below in **Table 1.1**.

Table 1.1 Development Information

	Proposed Development
<i>Site Area</i>	About 19,591 m ²
<i>Plot Ratio</i>	Not more than 2.012
<i>Total Domestic Gross Floor Area (GFA)</i>	Not more than 39,400 m ²
<i>No. of Residential Units</i>	1,062
<i>Anticipated Population¹</i>	2,868

- 1.5 This report presents the findings of a sewerage impact assessment to support the Proposed Development at the Application Site. The objectives of this sewerage impact assessment are to:
- examine the existing and planned sewerage facilities in the region;
 - estimate the sewage flows to be generated from the Proposed Development; and
 - formulate and evaluate options for sewage treatment and disposal for the Proposed Development.
- 1.6 The tentative completion year of the project is 2032.

¹ The anticipated population is based on an assumption of 2.7 occupants per unit.

2. EXISTING AND PLANNED SEWERAGE FACILITIES IN THE AREA

Existing Sewerage Facilities in the Area

- 2.1 The Application Site is presently unsewered. An existing 500 mm diameter public sewer was laid along Kwu Tung Road to the north of the Application Site, which subsequently discharges to a manhole of a branch sewer of the Western Trunk Sewer (WTS) at Kam Tsin Road adjacent to De La Salle Secondary School (**Figure KT3/SIA/002**).
- 2.2 The WTS lies beneath Castle Peak Road Kwu Tung Section, which runs along the northern side of Fanling Highway between Kwu Tung and Shek Wu Hui. This network connects to Shek Wu Hui Sewage Treatment Works (STW) located at the northern part of Shek Wu Hui.
- 2.3 The Shek Wu Hui STW provides primary and secondary treatments with effluent discharged to the Indus River and then via Shenzhen River to Deep Bay. The capacity of the STW has been upgraded from 60,000 m³/d (ADWF) to 80,000 m³/d (ADWF) in 2002, providing secondary treatment serving Sheung Shui and Fanling districts.
- 2.4 To cope with the other growth of the NENT and expansion of sewage catchment, upgrading works of Shek Wu Hui STW from 93,000 m³/d to 105,000 m³/d has commenced in 2015 and completed in 2019.

Other Planned Sewerage Facilities in the Area

- 2.5 A planning study for North East New Territories (NENT) had been carried out by Government's consultants. According to the finding of the Planning and Development Study on NENT, a comprehensive network of sewerage has been proposed for the Kwu Tung North New Development Area and adjoining areas. Sewage will be collected by gravity sewers and discharged via a pumping station near the trained River Beas to Shek Wu Hui STW.
- 2.6 Upgrading of Shek Wu Hui STW under the Main Work Stage 1 under Shek Wu Hui Effluent Polishing Plant (SWHEPP) improvement scheme has commenced in September 2019 to further upgrade the capacity to 140,000 m³/d. The Remaining Stages of the improvement scheme will eventually upgrade the capacity to 190,000 m³/d with a targeted completion in 2034.

3. ESTIMATED SEWAGE TO BE GENERATED FROM THE PROPOSED DEVELOPMENT

3.1 The Master Layout Plan of the Proposed Development is shown in **Annex A**. The volume of sewage that will be generated by the Proposed Development is approximately 792.0 m³/d upon full occupation. Detailed calculation of design flow of swimming pool is shown in **Annex C**. The design assumptions are presented below in **Table 3.1**.

Table 3.1 Estimated Sewage Flow from the Proposed Development

GFA	- Domestic	39,400 m ²
	- Clubhouse	1,773 m ²
	- Swimming pool	1,197 m ²
	- No. of Units	1,062
Design Population / Employee	- Domestic, R2	2,868 persons
	- Clubhouse ²	60 employees
Global unit flow factor ³	- Domestic, R2	0.27 m ³ /d per person
	- Clubhouse, J11	0.28 m ³ /d per employee
Predicted ADWF	- Domestic, R2	774.4 m ³ /d
	- Clubhouse	16.8 m ³ /d
Total Predicted ADWF		792.0 m³/d
Other Sewage Flow	Sewage generated from backwashing of swimming pool (Peak Flow)*	8.3 L/s

* Backwashing of swimming pool would be conducted in sequential portions of the filters.

3.2 The sewage will be of domestic nature; no industrial wastewater will be generated.

² A density of 3.3 employees per 100m² GFA (private commercial community, social & personal services) is adopted in accordance with "Commercial and Industrial Floor Space Utilization Survey" conducted by PlanD in 2004/05.

³ Refer to Guidelines for Estimating Sewage Flows (GESF) published by EPD in March 2005.

4. PROPOSED SEWERAGE STRATEGY FOR THE PROPOSED DEVELOPMENT

4.1 The Proposed Development lies within the catchment of Shek Wu Hui STW and is in the vicinity of the WTS branch sewer along Fanling Highway. The estimated sewage to be generated from the Proposed Development is approximately 792.0 m³/d. This is equivalent to about 0.75% of the design capacity (105,000 m³/d) of the Shek Wu Hui STW after the upgrading works at 2019. It is noted a S16 planning application (A/KTN/54) for minor relaxation of maximum plot ratio and/ or building height for several sites in the Kwu Tung North NDA and Fanling North NDA has been approved by Town Planning Board. According to Sewerage Impact Assessment Review for the S16 planning application (A/KTN/54), the treatment capacities of Shek Wu Hui STW are expected to be upgraded to 140,000 m³/d in 2025. As the Proposed Development will utilize 0.57% of the expected design capacity of Shek Wu Hui STW in 2025, it is expected the remaining spare capacity could cater for the sewage generated by Proposed Development.

4.2 The WTS comprising pipes of diameters ranging from 600 mm to 1800 mm was commissioned in 2002 to serve the Kwu Tung area and other communities in the vicinity, including communal sewers serving the sewered area at Hang Tau and Kam Tsin.

4.3 An existing 500 mm diameter public sewer was laid along Kwu Tung Road to the north of the Application Site. The layout of the public sewer is shown on **Figure KT3/SIA/002 and 004 to 010**. The sewage will be discharged to Shek Wu Hui STW via Tsung Pak Long Sewage Pumping Station (SPS) for disposal to River Indus and in turn to Deep Bay.

Proposed Sewage Disposal Scheme

4.4 It is proposed that the sewage generated from the Proposed Development will be discharged to the existing 500mm diameter sewer at the north of the Application Site for disposal at Shek Wu Hui STW via Tsung Pak Long SPS.

4.5 To convey the sewage generated by Proposed Development to the existing sewer near the junction of Kam Hang Road and Kwu Tung Road, a new gravity sewer is proposed connecting from the north of the Application Site to the existing sewer at manhole FMH1030367. The proposed sewer will be constructed along Kam Hang Road and Kwu Tung Road and its length is about 100m. The layout of the proposed sewage disposal scheme is shown on **Figure KT3/SIA/003**.

4.6 The estimated sewage generated from the Proposed Development is 792.0 m³/d. The estimation of sewage flow generated by existing/planned developments is shown on **Table 4.1**. The detailed estimation of sewage flow generated by Catchment 6 and 7 is shown in **Annex D**. The capacity calculations for the existing sewers, which include estimated sewage generated of existing/planned developments, starting from the discharge point to Tsung Pak Long SPS are provided in **Annex B**. A detailed sewerage map is provided in **Figure KT3/SIA/004 to 010**.

4.7 The calculation for the backwash sewage generated by the swimming pool of the Proposed Development is shown in **Annex C**.

4.8 Based on the calculations shown in **Annex B**, there are segments of existing sewers that would operate close to or slightly above its capacity under condition with the planned/proposed development. Referring to **Figure KT3/SIA/003**, sewer pipe upgrading works by the project proponent have been proposed for the segments that are directly contributed by the application site. The remaining sewer upgrading works are to be proposed by others.

Section 16 Planning Application for Proposed Residential Development with Minor Relaxation of Plot Ratio Restriction at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories

Report on Sewerage Impact Assessment

Table 4.1 Estimation of Sewage Flow Generated by Existing/Planned Developments

	Existing/ Planned Development	Eden Place	Residential Development (Valais I and II) at Kwu Tung South ⁽¹⁾	Proposed Development at the Application Site (Residential)	KTS CDA(2) (Application No. Y/NE-KTS/14)	KTS CDA(1) ⁽²⁾ (Application No. A/NE-KTS/506)		Residential Development at Hang Tau Tai Po (Application No. A/NE-KTS/13)	Village areas at north of Kam Hang Road at Kam Tsin	Areas adjacent to existing sewerage network near	Yin Kong Village and nearby areas			CDA Site in Kwu Tung North (Application No. Y/KTN/2)	Golf Parkview	Oi Yuen (Application No. Y/FSS/15)	Proposed Houses (Application No.: A/NE-KTS/460)	Residential Development (Application No. A/NE-KTS/466)	Beas River Equestrian Centre	CE52/2017 Tai Tau Leng Public Housing	Application No. A/NE-KTS/525	Application No. A/NE-KTS/538	Application No. A/NE-KTS/541	
	Catchment No.	1	2	3	B	F		C	5	6	7		E	8	A	9	10	11	12	13	14	15		
	Site Area (m ²)	56,313	156,170	19,591	31,050	37,560		18,723	-	Please refer to Annex D.	Please refer to Annex D.	Please refer to Annex D	15,409	-	31,623	-	5,627	-	-	-	-	-		
	Plot Ratio	-	0.4	2.012	3.0	3.059		1.23	-				-	-	3.0	-	0.48	-	-	-	-	-	-	-
	Development GFA (m ²)	-	62,468	39,400	92,208	114,880		26,170	-				29,789	-	89,583	-	2,700	-	-	-	-	-	-	-
	Average Flat Size (m ²)	-	189.3	-	-	43.52		-	-				-	-	-	-	-	-	-	-	-	-	-	-
	Number of Units	9	330	1062	1,427	2,589		320	-				527	-	676	-	19	-	-	-	-	-	-	-
	Average PPF	2.8	-	2.7	-	2.7		-	-				-	-	-	-	-	-	-	-	-	-	-	-
	Design Population	25	1042	2,868	-	6,991		-	115				-	125	-	-	-	-	-	-	-	-	-	-
	Global unit flow factor (m ³ /d)	0.37	0.37	0.27	-	0.27		-	0.37				-	0.37	-	-	-	-	-	-	-	-	-	-
	Clubhouse/restaurant, etc (m ³ /d)	-	-	16.8	-	128.6		-	-				-	-	-	-	-	-	-	-	-	-	-	-
	Predicted ADWF (m ³ /d)	9.25	385.5	792.0	1,153.0	800	1366.4	343.0 ⁽⁴⁾	42.6	1,605.08 ⁽⁵⁾	578.88 ⁽⁵⁾	293.72 ⁽⁵⁾	492.0 ⁽⁴⁾	46.3	798.8 ⁽⁴⁾	2.2 ⁽⁴⁾	49.0 ⁽⁴⁾	272 ⁽⁴⁾	3,057.0 ⁽⁴⁾	45.8 ⁽⁶⁾	4.5 ⁽⁶⁾	2.1 ⁽⁶⁾		
	Swimming Pool Backwash Flowrate (m ³ /d)	-	-	18.0 (8.3L/s) ⁽³⁾	(14.4L/s) ⁽³⁾		31.5 (8.3L/s) ⁽³⁾	(0.125L/s) ⁽³⁾	-	-	-	-	(3.5L/s) ⁽³⁾	-	(5.8L/s) ⁽³⁾	-	-	-	-	-	-	-		
	Peak Flow (m ³ /s) ⁽⁷⁾	0.0004	0.018	0.045	0.068	0.037	0.0716	0.02	0.002	0.0743	0.0268	0.0136	0.0263	0.0021	0.0428	0.0001	0.00227	0.0315	0.142	0.00212	0.00021	0.0001		
	Manhole to be connected	FMH 103 034 8	FMH1030358	FMH1030 367	FMH10 30367	FMH10 30382	FMH10 30386	FMH1029683		FMH 102 154 4	FMH10 21550	FMH1021543		FMH1023220		FMH10 29682	FMH1029 681	FM H10 286 16	FMH10 23220	FMH10 29681	FMH1029667			

Note:

(1) Data for Development 1 (i.e. Valais) as in A/NE-KTS/228 approved on Jul 7, 2006.

(2) Data for Planned Development KTS CDA(1) is based on the assumption of plot ratio 3.059.

(3) Peak flow (no peaking factor required) generated from backwashing of swimming pool.

(4) Data for Planned Development as enclosed by EPD on Jul 16, 2021.

(5) Detailed estimation of sewage is shown in Annex D.

(6) Latest data enclosed by EPD

(7) Peak Flow after in-take of the Proposed Development (Peak factor: 4)

- 4.9 Information from DSD indicates the design capacity of Tsung Pak Long SPS is 21,070m³/d. According to the approved SIA Report from the proposed residential development (TPB Application No. Y/NE-KTS/14) prepared by Ramboll Hong Kong Limited, it is envisaged there will be additional planned developments in Tsung Pak Long and Hang Tau. Detailed checking on the capacity of Tsung Pak Long SPS due to the planned development is shown in **Annex E**.
- 4.10 Based on the calculation in Annex E, including the Proposed Development, the total sewage conveyed to TPLSPS is estimated to be 17,877.8 m³/d (Equivalent to 84.8% utilization of TPLSPS). However, we understand if considering peak flow conditions, as indicated in Annex G5, the TPLSPS may not have sufficient capacity to cater the peak flow generated from all planned development. However, in view that the TPLSPS can cater the ADWF from all planned development with only 84.8% utilization, and considering there is some attenuation capacity of the inlet chamber / wet well, as well as the fact many of the planned developments have not been realized, TPLSPS should have enough capacity to cater the peak flow at the time of population intake of the Proposed Development. Thus, it is considered TPLSPS has sufficient capacity to cater for the Proposed Development.
- 4.11 Despite the TPLSPS currently lacking sufficient capacity for the proposed development, it is considered as an insurmountable problem, as the inlet chamber/wet well provides attenuation capacity and many planned developments have yet to be realized. A capacity review on TPLSPS will be conducted at a later stage.

5. EVALUATION OF THE STRATEGY AND RECOMMENDATIONS FOR THE PROPOSED DEVELOPMENT

Regional sewerage strategy

- 5.1 The Proposed Development lies within the catchment of Shek Wu Hui STW. The proposed sewage disposal strategy is to discharge sewage directly via a sewer to Shek Wu Hui STW.

Land matters

- 5.2 The proposed disposal scheme involves construction of short section of pipes to connect to the existing sewer adjacent to the Application Site at Fanling Highway. The full section of the connection sewer will run along Government land. No private lot would be required.

Environmental impact

- 5.3 The proposed disposal scheme involves discharge to Shek Wu Hui STW via gravity sewers, no adverse environmental impact is anticipated.

Construction

- 5.4 The proposed disposal scheme, construction of the section of gravity sewer from the Application Site to connect with the existing public sewer would mainly involve commonly used technology such as cut and cover excavation techniques. There is no technical constraint for construction.

6. CONCLUSION

- 6.1 The Proposed Development lies within the catchment of Shek Wu Hui STW and is in the vicinity of the WTS branch sewer near Kam Tsin. The estimated sewage to be generated from the Proposed Development is approximately 792.0 m³/d.
- 6.2 Based on available information, the upgraded capacity of Shek Wu Hui STW is expected to be commissioned before or by the time of population intake of the Proposed Development. It is considered viable to provide a connection sewer by the project proponent to discharge sewage from the Proposed Development to the existing public sewer along Hang Tau Road and Kam Hang Road from Application Site.
- 6.3 Based on the calculation, segments of existing sewers would operate near and slightly above capacity and sewer pipe upgrading works have been proposed. It was also found that the Tsung Pak Long SPS could cater the ADWF from all proposed and planned developments with 84.8% utilization. It is considered that the SPS would have enough capacity to cater the peak flow due to the attenuation capacity of the inlet chamber / wet well. With the proposed mitigation works, the proposed development is technically feasible from sewerage impact point of view.

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FIGURES



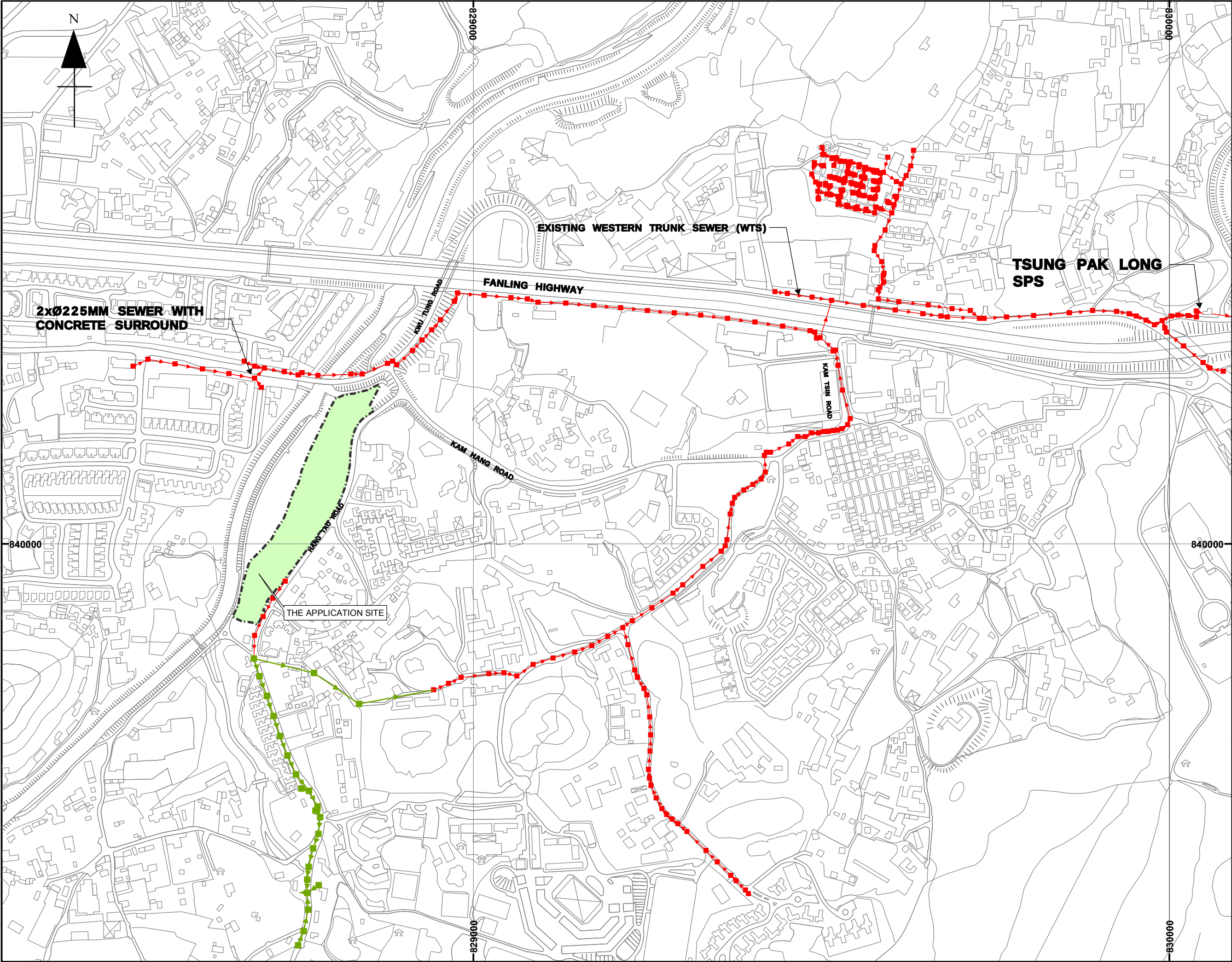
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Legend

The Application Site

Initial Kathy	Data	Checked KKL	Data
Project			
Section 16 Planning Application for Proposed Residential Development with Minor Relaxation of Plot Ratio Restriction at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP(Part), 1045, 1047, 2233 (Part), 2251 S.A RP,2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories			
Title			
Location Plan			
Figure No. KT3/SIA/001		Scale 1:20,000 @ A3	
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Plot date: 2021-07-08



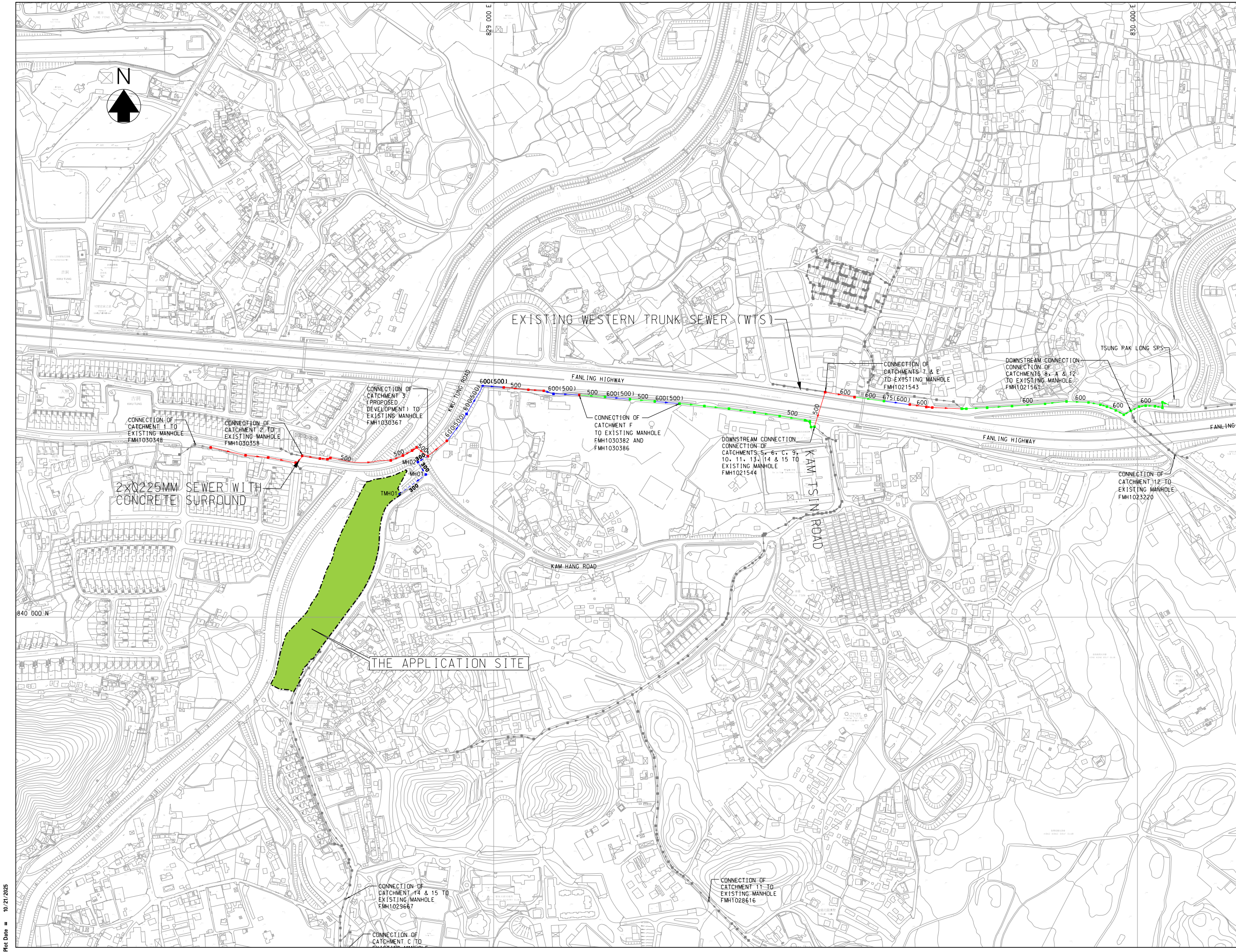
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Legend

- The Application Site
- Existing Sewer Manhole
- Existing Sewer
- Existing Rising Main

Initial Kathy	Data	Checked KKL	Data
Project Section 16 Planning Application for Proposed Residential Development with Minor Relaxation of Plot Ratio Restriction at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP(Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories			
Title Existing Public Sewerage System			
Figure No. KT3/SIA/002		Scale 1:5,000 @ A3	

Plot date: 2021-07-08



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LEGEND:

- THE APPLICATION SITE
- EXISTING RISING MAIN
- EXISTING SEWER
- EXISTING SEWER
- PROPOSED SEWER BY DEVELOPER
- PROPOSED SEWER UPGRADING BY OTHERS
- PROPOSED MANHOLE BY DEVELOPER

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Date	02/14	02/14

Project title
SECTION 16 PLANNING APPLICATION
FOR PROPOSED HOUSES AT LOTS
1027, 1029, 1030, 1034 S.A., 1034 S.B.,
1039 (PART), 1040, 1042 RP, 1043 RP,
1044 RP (PART), 1045, 1047, 2233 (PART),
2251 S.A RP, 2256 RP, 2315 (PART) AND
2316 RP (PART) IN D.O. 92 AND ADJOINING
GOVERNMENT LAND (NEW LOT TO BE KNOWN
AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH,
SHEUNG SHUI, THE NEW TERRITORIES

Drawing title

**PROPOSED SEWERAGE
DISPOSAL SCHEME**

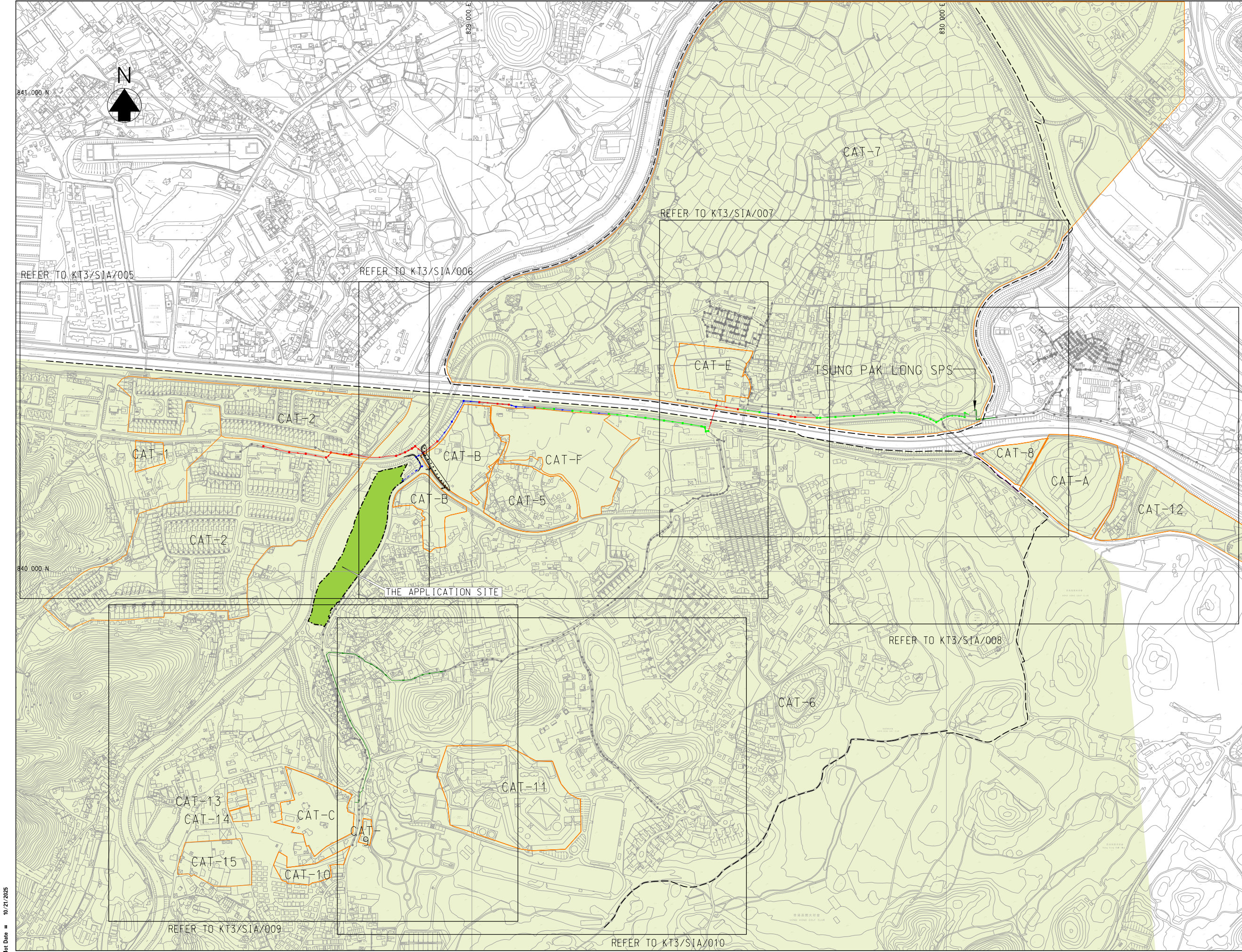
Figure no.	Revision
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LEGEND:

- THE APPLICATION SITE
- CATCHMENT
- BOUNDARY OF TPU
- EXISTING SEWER
- EXISTING RELEVANT SEWER
- PROPOSED SEWERUPGRADING BY DEVELOPER
- PROPOSED SEWER BY DEVELOPER
- EXISTING RISING MAIN
- POSSIBLE/POSSIBLE CONNECTION SEWER
- PROPOSED SEWER UPGRADED BY OTHERS
- PLANNED WORKS BY OTHERS

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Initial	ZL	NS
Date	02/14	02/14

Project title
SECTION 16 PLANNING APPLICATION
FOR PROPOSED HOUSES AT LOTS
1027, 1029, 1030, 1034 S.A, 1034 S.B,
1039 (PART), 1040, 1042 RP, 1043 RP,
1044 RP (PART), 1045, 1047, 2233 (PART),
2251 S.A RP, 2256 RP, 2315 (PART) AND
2316 RP (PART) IN D.O. 92 AND ADJOINING
GOVERNMENT LAND (NEW LOT TO BE KNOWN
AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH,
SHEUNG SHUI, THE NEW TERRITORIES

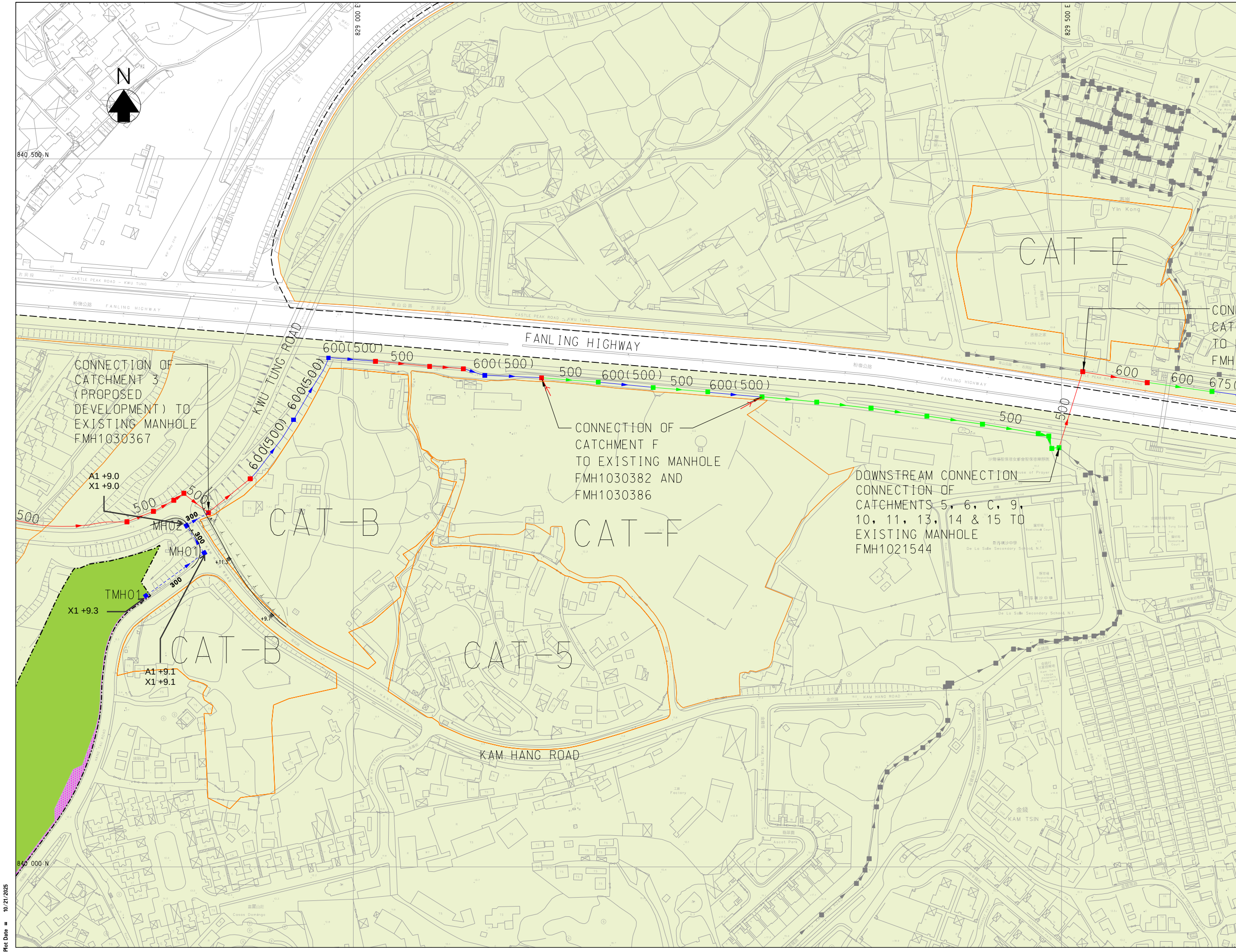
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**DETAILED SEWERAGE MAP KEY
PLAN**

Figure no.	Revision
KT3/SIA/004	-

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A1 1 : 7500

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LEGEND:

- THE APPLICATION SITE
- CATCHMENT
- BOUNDARY OF TPU
- EXISTING SEWER
- EXISTING RELEVANT SEWER
- PROPOSED SEWER BY DEVELOPER
- EXISTING RISING MAIN
- POSSIBLE/POSSIBLE CONNECTION SEWER
- PROPOSED SEWER UPGRADED BY OTHERS
- INFLOW POINT
- PLANNED WORKS BY OTHERS
- PLANNED ROAD WIDENING WORKS BY DEVELOPER
- PROPOSED MANHOLE

DESIGNED

Initial	Designed	Checked
Initial	ZL	NS
Date	02/14	02/14

Project title

SECTION 16 PLANNING APPLICATION FOR PROPOSED HOUSES AT LOTS 1027, 1029, 1030, 1034 S.A., 1034 S.B., 1039 (PART), 1040, 1042 RP, 1043 RP, 1044 RP (PART), 1045, 1047, 2233 (PART), 2251 S.A RP, 2256 RP, 2315 (PART) AND 2316 RP (PART) IN D.O. 92 AND ADJOINING GOVERNMENT LAND (NEW LOT TO BE KNOWN AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH, SHEUNG SHUI, THE NEW TERRITORIES

Drawing title

DETAILED SEWERAGE MAP (SHEET 2 TO 6)

Figure no.

KT3/SIA/006

Revision

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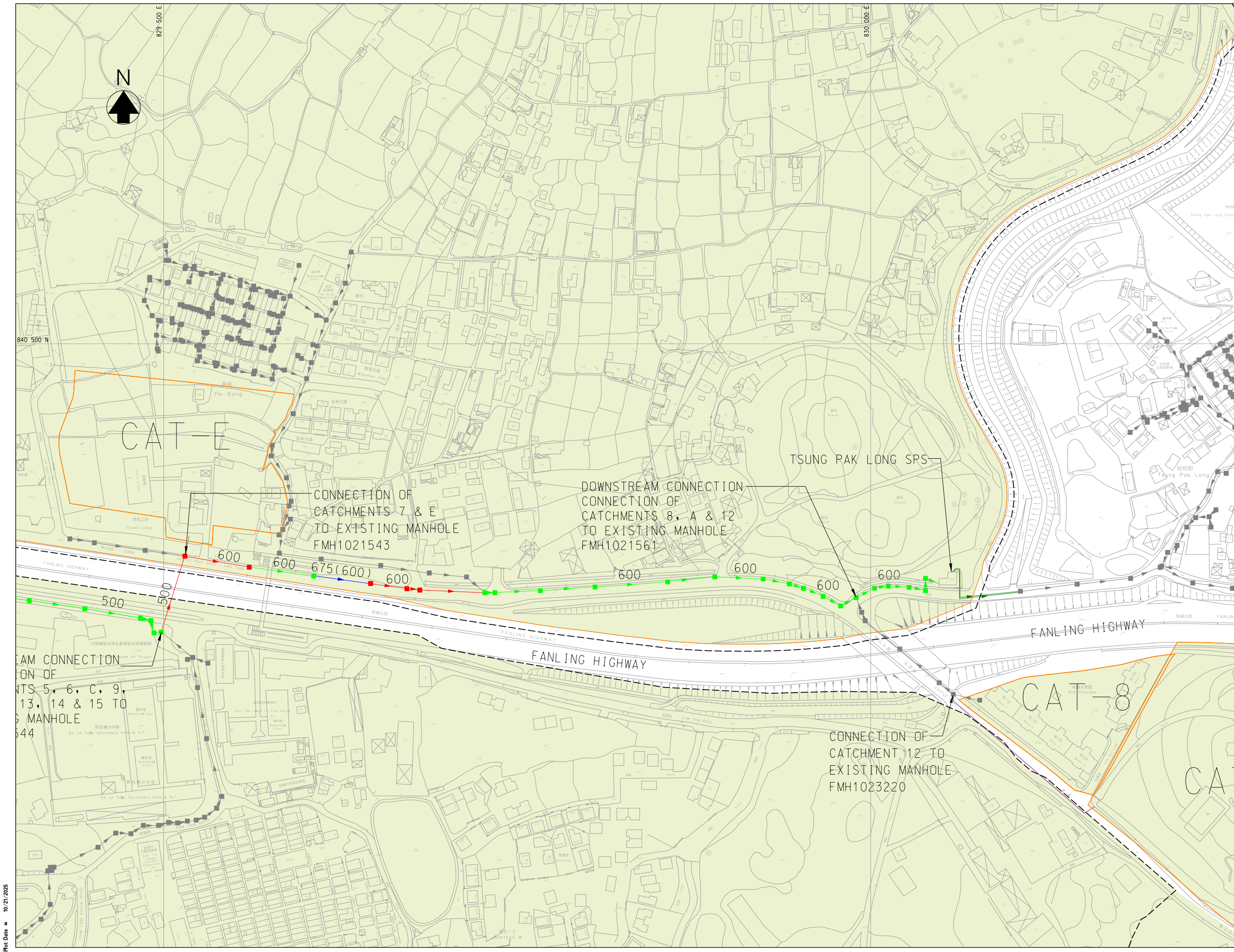
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Plot Date = 10/21/2025

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LEGEND:

- CAT-# CATCHMENT
- BOUNDARY OF TPU
- EXISTING SEWER
- EXISTING RELEVANT SEWER
- PROPOSED SEWERUPGRADING BY DEVELOPER
- PROPOSED SEWER BY DEVELOPER
- POSSIBLE/POSSIBLE CONNECTION SEWER
- PROPOSED SEWER UPGRADED BY OTHERS
- INFLOW POINT

	Designed	Checked
Initial	ZL	NS
Date	02/14	02/14

Project title
SECTION 16 PLANNING APPLICATION
FOR PROPOSED HOUSES AT LOTS
1027, 1029, 1030, 1034 S.A, 1034 S.B,
1039 (PART), 1040, 1042 RP, 1043 RP,
1044 RP (PART), 1045, 1047, 2233 (PART),
2251 S.A RP, 2256 RP, 2315 (PART) AND
2316 RP (PART) IN D.O. 92 AND ADJOINING
GOVERNMENT LAND (NEW LOT TO BE KNOWN
AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH,
SHEUNG SHUI, THE NEW TERRITORIES

Drawing title

**DETAILED SEWERAGE MAP
(SHEET 3 TO 6)**

Figure no.	Revision
KT3/SIA/007	-

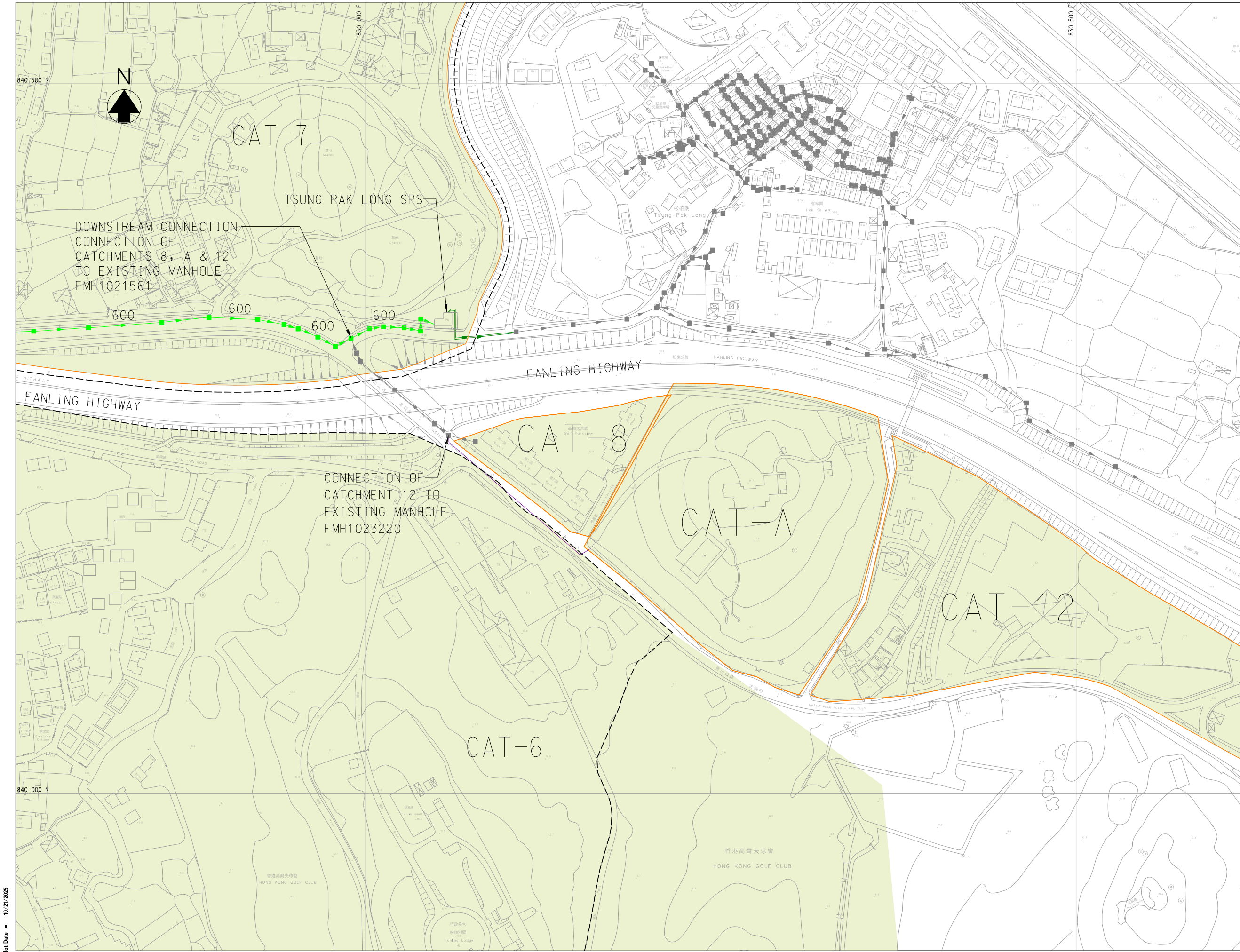
Scale

A1 1 : 2500

BINNIES HONG KONG LIMITED
賓尼斯工程顧問有限公司

Plot Date = 10/21/2025

CAD Filename = Y:\Daily Work\20251016G\KT3-SIA-008.dgn



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LEGEND:

- CAT-# CATCHMENT
- BOUNDARY OF TPU
- EXISTING SEWER
- EXISTING RELEVANT SEWER
- PROPOSED SEWERUPGRADING BY DEVELOPER
- PROPOSED SEWER BY DEVELOPER
- POSSIBLE/POSSIBLE CONNECTION SEWER
- PROPOSED SEWER UPGRADED BY OTHERS
- INFLOW POINT

	Designed	Checked
Initial	ZL	NS
Date	02/14	02/14

Project title
SECTION 16 PLANNING APPLICATION
FOR PROPOSED HOUSES AT LOTS
1027, 1029, 1030, 1034 S.A, 1034 S.B,
1039 (PART), 1040, 1042 RP, 1043 RP,
1044 RP (PART), 1045, 1047, 2233 (PART),
2251 S.A RP, 2256 RP, 2315 (PART) AND
2316 RP (PART) IN D.O. 92 AND ADJOINING
GOVERNMENT LAND (NEW LOT TO BE KNOWN
AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH,
SHEUNG SHUI, THE NEW TERRITORIES

Drawing title

**DETAILED SEWERAGE MAP
(SHEET 4 TO 6)**

Figure no.	Revision
KT3/SIA/008	-

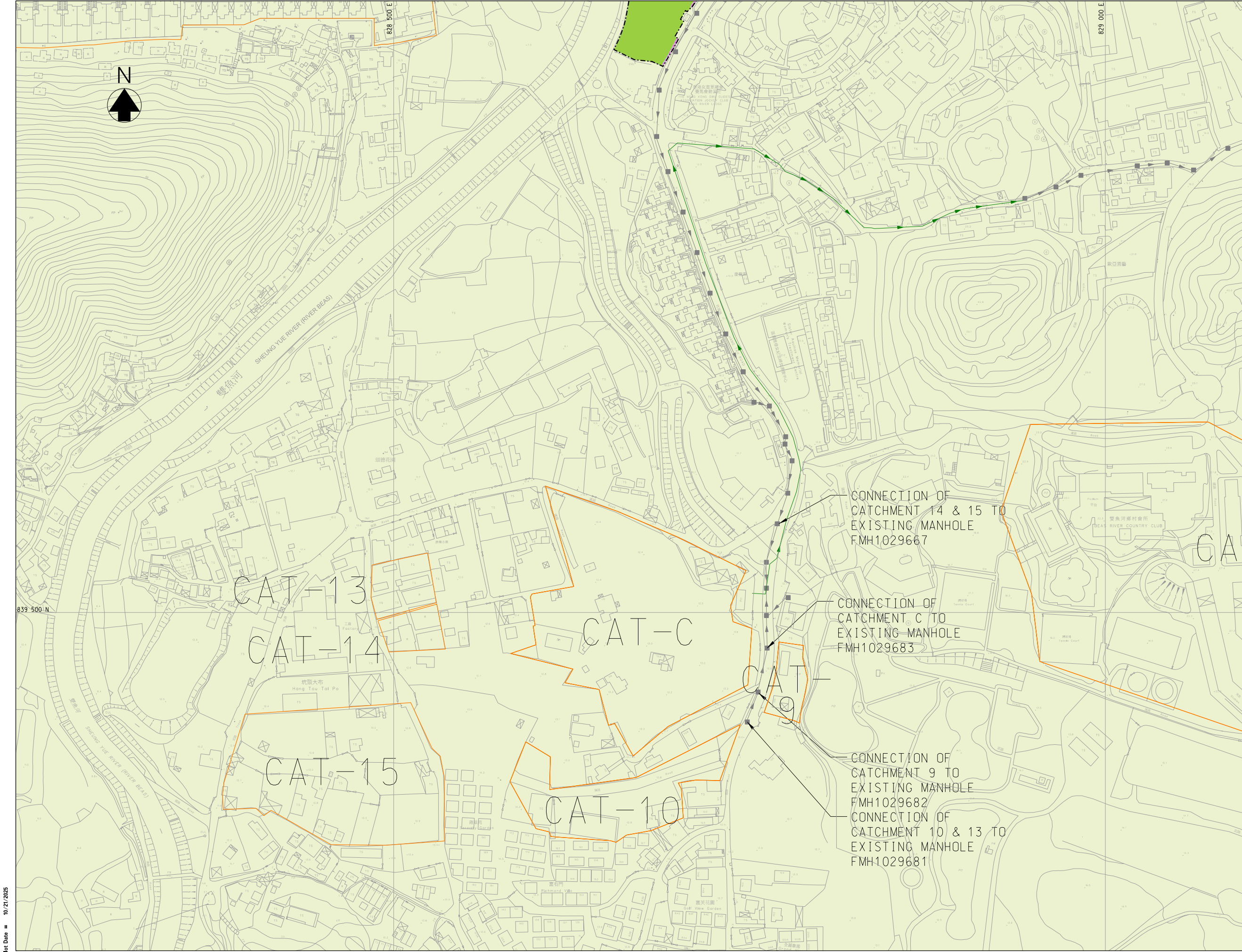
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CAD Filename = Y:\Daily Work\20251016G\KT3-SIA-008.dgn

Plot Date = 10/21/2025

CAD Filename = Y:\Daily Work\20251016\KT3-SIA-009.dgn



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LEGEND:

- CAT-# CATCHMENT
- EXISTING SEWER
- EXISTING RISING MAIN
- PLANNED ROAD WIDENING WORKS BY DEVELOPER

	Designed	Checked
Initial	ZL	NS
Date	02/14	02/14

Project title
SECTION 16 PLANNING APPLICATION
FOR PROPOSED HOUSES AT LOTS
1027, 1029, 1030, 1034 S.A, 1034 S.B,
1039 (PART), 1040, 1042 RP, 1043 RP,
1044 RP (PART), 1045, 1047, 2233 (PART),
2251 S.A RP, 2256 RP, 2315 (PART) AND
2316 RP (PART) IN D.O. 92 AND ADJOINING
GOVERNMENT LAND (NEW LOT TO BE KNOWN
AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH,
SHEUNG SHUI, THE NEW TERRITORIES

Drawing title
**DETAILED SEWERAGE MAP
(SHEET 5 TO 6)**

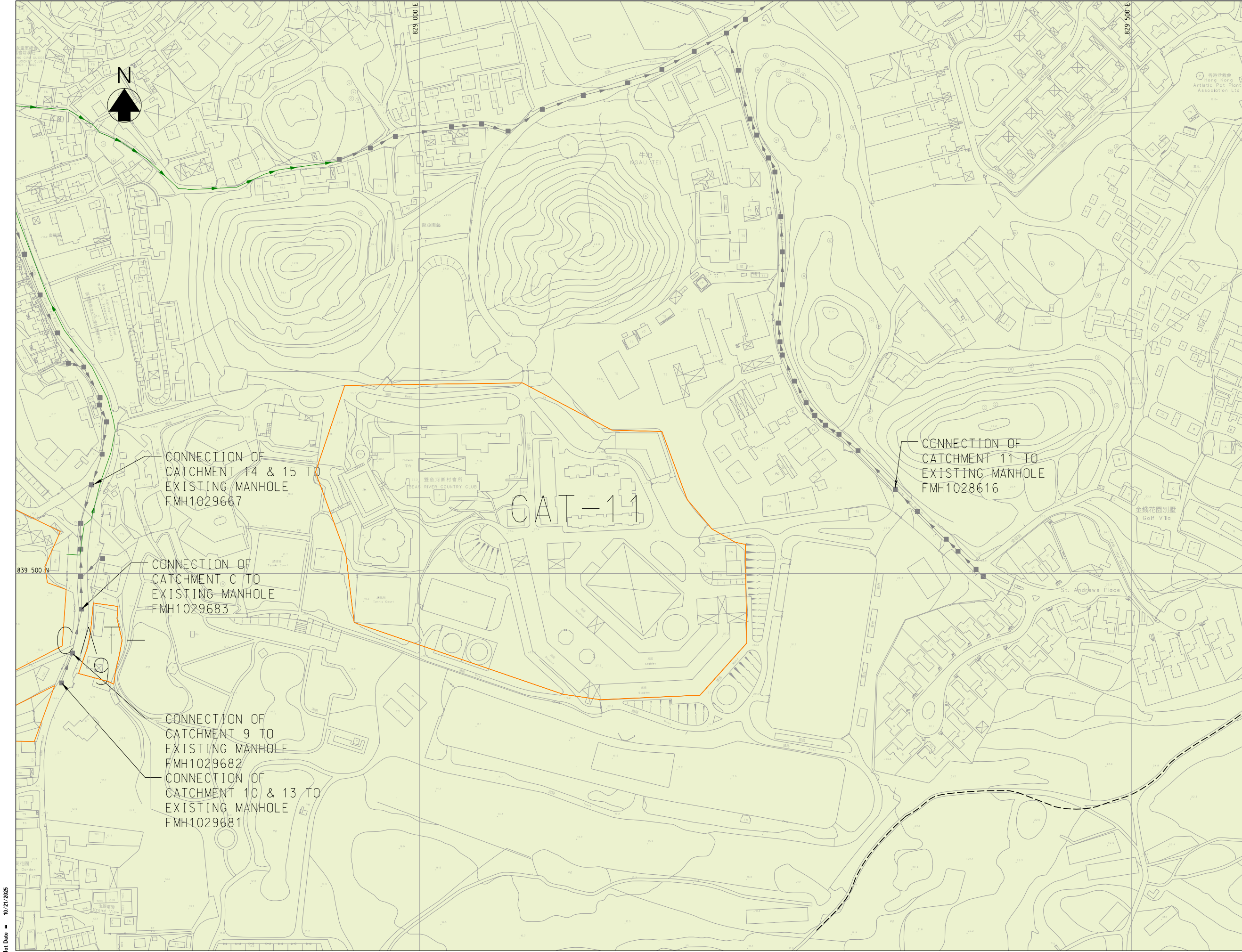
Figure no.	Revision
KT3/SIA/009	-

Scale
A1 1 : 2500

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Plot Date = 10/21/2025

CAD Filename = Y:\Daily Work\20251016G\KT3-SIA-010.dgn



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LEGEND:

CAT-# CATCHMENT

EXISTING SEWER

EXISTING RISING MAIN

	Designed	Checked
Initial	ZL	NS
Date	02/14	02/14

Project title

SECTION 16 PLANNING APPLICATION FOR PROPOSED HOUSES AT LOTS 1027, 1029, 1030, 1034 S.A, 1034 S.B, 1039 (PART), 1040, 1042 RP, 1043 RP, 1044 RP (PART), 1045, 1047, 2233 (PART), 2251 S.A RP, 2256 RP, 2315 (PART) AND 2316 RP (PART) IN D.O. 92 AND ADJOINING GOVERNMENT LAND (NEW LOT TO BE KNOWN AS LOT 2644 IN D.O. 92), KWU TUNG SOUTH, SHEUNG SHUI, THE NEW TERRITORIES

Drawing title

DETAILED SEWERAGE MAP (SHEET 6 TO 6)

Figure no.	Revision
KT3/SIA/010	-

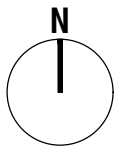
Scale

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Annex A

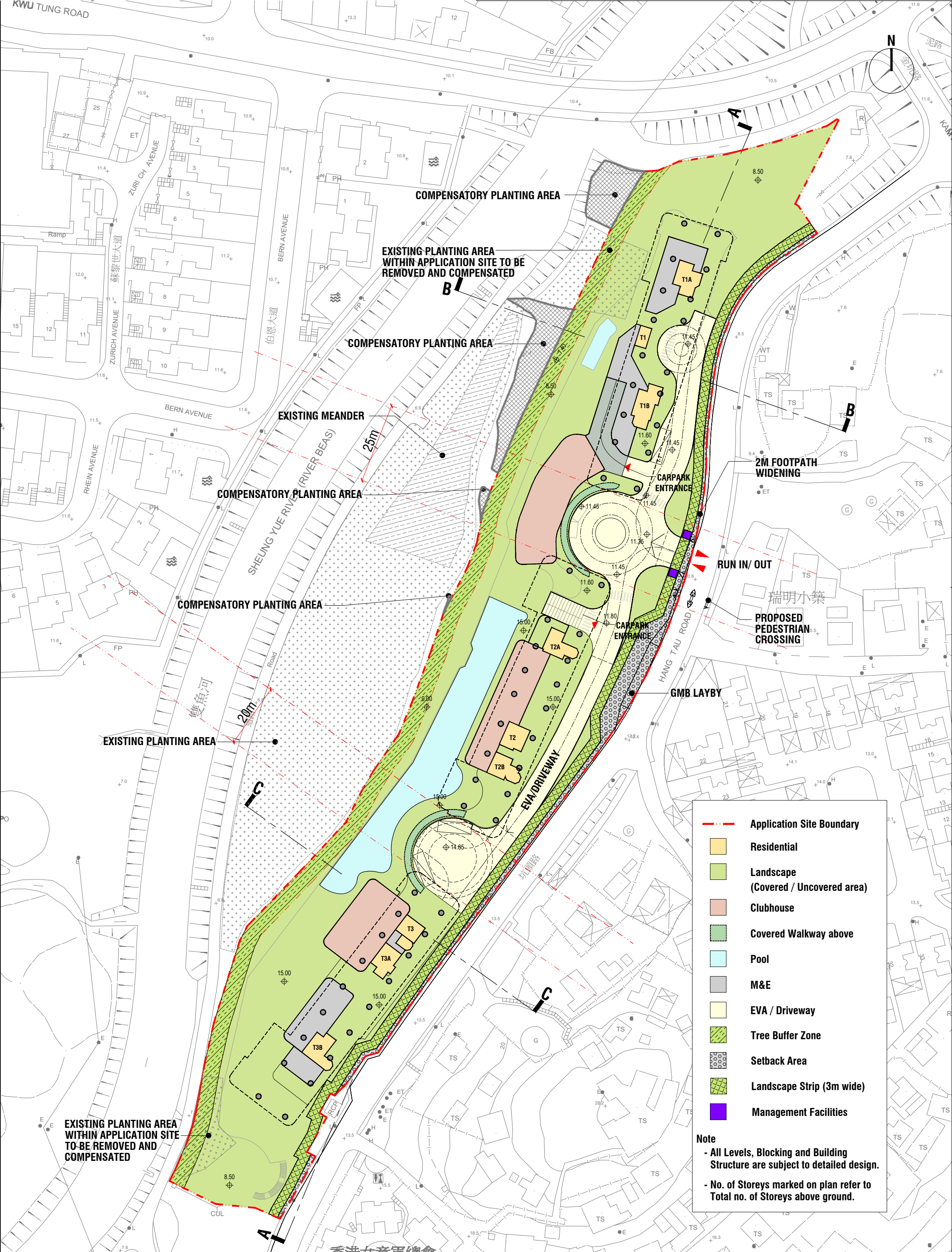
Master Layout Plan



	Application Site Boundary
	Residential
	Carpark
	M&E
	Refuse Storage & Material Recovery Chamber
	Clubhouse
	Landscape Strip (3m wide)
	Tree Buffer Zone
	Setback Area

Note

- All Levels, Blocking and Building Structure are subject to detailed design.
- No. of Storeys marked on plan refer to Total no. of Storeys above ground.



Annex B

Design Checking of Existing Sewer at Proposed Sewage Disposal Scheme

Annex B - Hydraulic Capacity Check of Existing Sewerage Pipe before In-take of Proposed Development

- Note:
- 1) Colebrook-White's equation is adopted for full-bore pipe velocity calculation.
 - 2) Pipes should be upgraded by others are highlighted in green colour.
 - 3) Catchment No. F1 and F2 denoted as the two proposed sewage discharge points in Kwu Tung Site 4 respectively.
 - 4) The existing pipes are Vitrified Clayware with a normal condition of slimed sewers. Roughness is assumed to be 1.5mm.
 - 5) A peak flow of 26.8L/s is discharged to FMH1021550 due to Yin Kong Public Toilet (Latest Information enclosed by EPD)

Pipe	Feature Number	Diameter (mm)	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Pipe Length (m)	Gradient (1 in)	Roughness (mm)	No. of Pipes	Catchment No.	ADWF (m ³ /s)	Contributing Population	Peak Factor	Design Peak Flowrate (m ³ /s)	Full Bore Velocity (m/s)	Full Bore Capacity (m ³ /s)	Utilization (%)
FMH1030348 to FMH1030349	FWD1035235	500	9.82	9.74	31.073	388	1.50	1	1	0.0001	34	8	0.001	0.977	0.192	0.4%
FMH1030349 to FMH1030350	FWD1035236	500	9.73	9.65	38.527	482	1.50	1	1	0.0001	34	8	0.001	0.877	0.172	0.5%
FMH1030350 to FMH1030353	FWD1035239	500	9.64	9.56	36.929	462	1.50	1	1	0.0001	34	8	0.001	0.896	0.176	0.5%
FMH1030353 to FMH1030355	FWD1035241	500	9.55	9.48	36.643	523	1.50	1	1	0.0001	34	8	0.001	0.841	0.165	0.5%
FMH1030355 to FMH1030358	FMD1001500	225	9.47	9.37	20.261	203	1.50	2	1	0.0001	34	8	0.001	0.805	0.064	1.3%
FMH1030358 to FMH1030359	FWD1035246	500	9.36	9.28	27.515	344	1.50	1	1, 2	0.0046	1,462	6	0.027	1.039	0.204	13.4%
FMH1030359 to FMH1030360	FWD1035247	500	9.27	9.24	18.546	618	1.50	1	1, 2	0.0046	1,462	6	0.027	0.774	0.152	18.1%
FMH1030360 to FMH1030361	FWD1035248	500	9.23	9.22	3.922	392	1.50	1	1, 2	0.0046	1,462	6	0.027	0.973	0.191	14.4%
FMH1030361 to FMH1030362	FWD1035250	500	9.21	9.02	85.318	449	1.50	1	1, 2	0.0046	1,462	6	0.027	0.908	0.178	15.4%
FMH1030362 to FMH1030363	FWD1035252	500	9.01	8.98	18.564	619	1.50	1	1, 2	0.0046	1,462	6	0.027	0.773	0.152	18.1%
FMH1030363 to FMH1030364	FWD1035253	500	8.97	8.94	14.778	493	1.50	1	1, 2	0.0046	1,462	6	0.027	0.867	0.170	16.1%
FMH1030364 to FMH1030366	FWD1035255	500	8.93	8.925	6.916	1383	1.50	1	1, 2	0.0046	1,462	6	0.027	0.515	0.101	27.1%
FMH1030366 to FMH1030367	FWD1035254	500	8.92	8.91	20.534	2053	0.60	1	1, 2	0.0046	1,462	6	0.027	0.470	0.092	29.7%
FMH1030367 to FMH1030369	FWD1035256	500	8.90	8.82	36.527	457	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.901	0.177	58.8%
FMH1030369 to FMH1030371	FWD1035257	500	8.81	8.71	50.279	503	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.858	0.169	61.7%
FMH1030371 to FMH1030373	FWD1035260	500	8.70	8.60	48.777	488	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.871	0.171	60.8%
FMH1030373 to FMH1030374	FWD1035261	500	8.59	8.53	31.310	522	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.842	0.165	62.9%
FMH1030374 to FMH1030375	FWD1035262	500	8.52	8.44	37.021	463	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.895	0.176	59.2%
FMH1030375 to FMH1030380	FWD1035280	500	8.43	8.37	22.322	372	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.999	0.196	53.0%
FMH1030380 to FMH1030381	FWD1035281	500	8.36	8.34	14.130	707	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.723	0.142	73.2%
FMH1030381 to FMH1030382	FWD1035282	500	8.33	8.26	38.068	544	1.50	1	1, 2, B	0.0179	5,733	5	0.104	0.825	0.162	64.2%
FMH1030382 to FMH1030383	FWD1035283	500	8.25	8.18	38.457	549	1.50	1	1, 2, F1, B	0.0272	8,696	5	0.150	0.821	0.161	93.2%
FMH1030383 to FMH1030384	FWD1035284	500	8.17	8.09	37.336	467	1.50	1	1, 2, F1, B	0.0272	8,696	5	0.150	0.891	0.175	85.9%
FMH1030384 to FMH1030385	FWD1035285	500	8.08	8.01	37.173	531	1.50	1	1, 2, F1, B	0.0272	8,696	5	0.150	0.835	0.164	91.7%
FMH1030385 to FMH1030386	FWD1035286	500	8.00	7.92	37.690	471	1.50	1	1, 2, F1, B	0.0272	8,696	5	0.150	0.887	0.174	86.3%
FMH1030386 to FMH1030387	FWD1035287	500	7.91	7.84	37.538	536	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.931	0.183	106.5%
FMH1030387 to FMH1030388	FWD1035288	500	7.83	7.76	37.842	541	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.927	0.182	106.9%
FMH1030388 to FMH1030389	FWD1035289	500	7.75	7.67	38.940	487	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.978	0.192	101.4%
FMH1030389 to FMH1030390	FWD1035290	500	7.66	7.58	38.925	487	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.978	0.192	101.4%
FMH1030390 to FMH1030391	FWD1035291	500	7.57	7.49	38.958	487	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.978	0.192	101.4%
FMH1030391 to FMH1030392	FWD1035292	500	7.48	7.47	6.302	630	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.858	0.168	115.6%
FMH1030392 to FMH1030393	FWD1035293	500	7.47	7.46	7.846	785	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	0.768	0.151	129.1%
FMH1030393 to FMH1021544	FWD1035294	500	7.45	7.44	4.123	412	0.60	1	1, 2, F1, F2, B	0.0430	13,756	4	0.195	1.064	0.209	93.2%
FMH1021544 to FMH1021543	FWD1022560	500	7.44	6.86	54.856	95	1.50	1	1, 2, F1, F2, B, C, 5, 6, 9, 10, 11, 13, 14, 15	0.0706	22,587	4	0.305	1.986	0.390	78.3%
FMH1021543 to FMH1021545	FWD1022564	600	6.41	6.06	45.093	129	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.372	1.911	0.540	68.8%
FMH1021545 to FMH1021546	FWD1022565	600	5.96	5.87	44.902	499	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.372	0.969	0.274	135.8%
FMH1021546 to FMH1021547	FWD1022566	600	5.85	5.67	39.000	217	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.372	1.473	0.416	89.3%
FMH1021547 to FMH1021548	FWD1022567	600	5.67	5.02	24.832	38	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.372	3.514	0.994	37.4%
FMH1021548 to FMH1021549	FWD1022568	600	5.00	4.83	8.088	48	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.372	3.149	0.890	41.8%
FMH1021549 to FMH1021550	FWD1022569	600	4.83	4.48	44.891	128	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.372	1.916	0.542	68.7%
FMH1021550 to FMH1021551	FWD1022570	600	4.48	4.47	5.633	563	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	0.911	0.258	154.7%
FMH1021551 to FMH1021552	FWD1022571	600	4.47	4.37	31.087	311	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.229	0.347	114.8%
FMH1021552 to FMH1021553	FWD1022572	600	4.35	4.24	37.583	342	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.172	0.331	120.3%
FMH1021553 to FMH1021554	FWD1022573	600	4.23	4.06	50.307	296	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.259	0.356	112.0%
FMH1021554 to FMH1021555	FWD1022574	600	4.06	3.93	32.485	250	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.371	0.388	102.8%
FMH1021555 to FMH1021556	FWD1022575	600	3.93	3.84	32.982	366	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.131	0.320	124.6%
FMH1021556 to FMH1021557	FWD1022576	600	3.84	3.78	17.605	293	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.265	0.358	111.5%
FMH1021557 to FMH1021558	FWD1022577	600	3.78	3.75	9.245	308	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.234	0.349	114.3%
FMH1021558 to FMH1021559	FWD1022578	600	3.74	3.68	13.719	229	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.433	0.405	98.4%
FMH1021559 to FMH1021560	FWD1022579	600	3.68	3.65	12.954	432	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	1.042	0.295	135.4%
FMH1021560 to FMH1021561	FWD1022580	600	3.65	3.63	11.251	563	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0797	25,497	4	0.399	0.912	0.258	154.6%
FMH1021561 to FMH1021562	FWD1022581	600	3.63	3.60	13.323	444	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0895	28,627	4	0.444	1.027	0.290	152.8%
FMH1021562 to FMH1021563	FWD1022583	600	3.60	3.58	8.798	440	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0895	28,627	4	0.444	1.032	0.292	152.0%
FMH1021563 to FMH1021564	FWD1022584	600	3.58	3.53	13.370	267	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0895	28,627	4	0.444	1.325	0.375	118.4%
FMH1021564 to FMH1021565	FWD1022585	600	3.53	3.48	10.724	214	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0895	28,627	4	0.444	1.480	0.418	106.0%
FMH1021565 to FMH1021566	FWD1022587	600	3.47	3.46	7.247	725	0.60	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0895	28,627	4	0.444	0.897	0.254	174.9%
FMH1021566 to XPS1000860	FWD1022588	600	3.45	3.41	9.858	246	1.50	1	1, 2, F1, F2, B, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0895	28,627	4	0.444	1.380	0.390	113.6%

Annex B - Hydraulic Capacity Check of Existing Sewerage Pipe (After In-take of Proposed Development)

Note:

- 1) Colebrook-White's equation is adopted for full-bore pipe velocity calculation.
- 2) Pipes should be upgraded by others are highlighted in green colour. Pipes are directly contributed by the proposed development are highlighted in yellow color.
- 3) Catchment No. F1 and F2 denoted as the two proposed sewage discharge points in Kwu Tung Site 4 respectively.
- 4) The existing pipes are Vitrified Clayware with a normal condition of slimed sewers. Roughness is assumed to be 1.5mm.
- 5) A peak flow of 26.8L/s is discharged to FMH1021550 due to Yin Kong Public Toilet (Latest Information enclosed by EPD)

Pipe	Feature Number	Diameter (mm)	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Pipe Length (m)	Gradient (1 in)	Roughness (mm)	No. of Pipes	Catchment No.	ADWF (m³/s)	Contributing Population	Peak Factor	Design Peak Flowrate (m³/s)	Full Bore Velocity (m/s)	Full Bore Capacity (m³/s)	Utilization (%)
FMH1030348 to FMH1030349	FWD1035235	500	9.82	9.74	31.073	388	1.50	1	1	0.0001	34	8	0.001	0.977	0.192	0.4%
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FMH1030350 to FMH1030353	FWD1035239	500	9.64	9.56	36.929	462	1.50	1	1	0.0001	34	8	0.001	0.896	0.176	0.5%
FMH1030353 to FMH1030355	FWD1035241	500	9.55	9.48	36.643	523	1.50	1	1	0.0001	34	8	0.001	0.841	0.165	0.5%
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FMH1030358 to FMH1030359	FWD1035246	500	9.36	9.28	27.515	344	1.50	1	1, 2	0.0046	1,462	6	0.027	1.039	0.204	13.4%
FMH1030359 to FMH1030360	FWD1035247	500	9.27	9.24	18.546	618	1.50	1	1, 2	0.0046	1,462	6	0.027	0.774	0.152	18.1%
FMH1030360 to FMH1030361	FWD1035248	500	9.23	9.22	3.922	392	1.50	1	1, 2	0.0046	1,462	6	0.027	0.973	0.191	14.4%
FMH1030361 to FMH1030362	FWD1035250	500	9.21	9.02	85.318	449	1.50	1	1, 2	0.0046	1,462	6	0.027	0.908	0.178	15.4%
FMH1030362 to FMH1030363	FWD1035252	500	9.01	8.98	18.564	619	1.50	1	1, 2	0.0046	1,462	6	0.027	0.773	0.152	18.1%
FMH1030363 to FMH1030364	FWD1035253	500	8.97	8.94	14.778	493	1.50	1	1, 2	0.0046	1,462	6	0.027	0.867	0.170	16.1%
FMH1030364 to FMH1030366	FWD1035255	500	8.93	8.925	6.916	1383	1.50	1	1, 2	0.0046	1,462	6	0.027	0.515	0.101	27.1%
FMH1030366 to FMH1030367	FWD1035254	500	8.92	8.91	20.534	2053	0.60	1	1, 2	0.0046	1,462	6	0.027	0.470	0.092	29.7%
FMH1030367 to FMH1030369	FWD1035256	500	8.90	8.82	36.527	457	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.901	0.177	89.4%
FMH1030369 to FMH1030371	FWD1035257	500	8.81	8.71	50.279	503	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.858	0.169	93.8%
FMH1030371 to FMH1030373	FWD1035260	500	8.70	8.60	48.777	488	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.871	0.171	92.4%
FMH1030373 to FMH1030374	FWD1035261	500	8.59	8.53	31.310	522	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.842	0.165	95.6%
FMH1030374 to FMH1030375	FWD1035262	500	8.52	8.44	37.021	463	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.895	0.176	90.0%
FMH1030375 to FMH1030380	FWD1035280	500	8.43	8.37	22.322	372	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.999	0.196	80.6%
FMH1030380 to FMH1030381	FWD1035281	500	8.36	8.34	14.130	707	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.723	0.142	111.3%
FMH1030381 to FMH1030382	FWD1035282	500	8.33	8.26	38.068	544	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.825	0.162	97.6%
FMH1030382 to FMH1030383	FWD1035283	500	8.25	8.18	38.457	549	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.821	0.161	104.3%
FMH1030383 to FMH1030384	FWD1035284	500	8.17	8.09	37.336	467	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.891	0.175	96.1%
FMH1030384 to FMH1030385	FWD1035285	500	8.08	8.01	37.173	531	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.835	0.164	102.5%
FMH1030385 to FMH1030386	FWD1035286	500	8.00	7.92	37.690	471	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.887	0.174	96.5%
FMH1030386 to FMH1030387	FWD1035287	500	7.91	7.84	37.538	536	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.931	0.183	131.1%
FMH1030387 to FMH1030388	FWD1035288	500	7.83	7.76	37.842	541	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.927	0.182	131.6%
FMH1030388 to FMH1030389	FWD1035289	500	7.75	7.67	38.940	487	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.978	0.192	124.8%
FMH1030389 to FMH1030390	FWD1035290	500	7.66	7.58	38.925	487	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.978	0.192	124.8%
FMH1030390 to FMH1030391	FWD1035291	500	7.57	7.49	38.958	487	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.978	0.192	124.8%
FMH1030391 to FMH1030392	FWD1035292	500	7.48	7.47	6.302	630	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.858	0.168	142.2%
FMH1030392 to FMH1030393	FWD1035293	500	7.47	7.46	7.846	785	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.768	0.151	159.0%
FMH1030393 to FMH1021544	FWD1035294	500	7.45	7.44	4.123	412	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	1.064	0.209	114.7%
FMH1021544 to FMH1021543	FWD1022560	500	7.44	6.86	54.856	95	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 9, 10, 11, 13, 14, 15	0.0798	25,520	4	0.350	1.986	0.390	89.8%
FMH1021543 to FMH1021545	FWD1022564	600	6.41	6.06	45.093	129	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	1.911	0.540	77.1%
FMH1021545 to FMH1021546	FWD1022565	600	5.96	5.87	44.902	499	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	0.969	0.274	152.2%
FMH1021546 to FMH1021547	FWD1022566	600	5.85	5.67	39.000	217	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	1.473	0.416	100.1%
FMH1021547 to FMH1021548	FWD1022567	600	5.67	5.02	24.832	38	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	3.514	0.994	41.9%
FMH1021548 to FMH1021549	FWD1022568	600	5.00	4.83	8.088	48	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	3.149	0.890	46.8%
FMH1021549 to FMH1021550	FWD1022569	600	4.83	4.48	44.891	128	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	1.916	0.542	77.0%
FMH1021550 to FMH1021551	FWD1022570	600	4.48	4.47	5.633	563	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	0.911	0.258	172.2%
FMH1021551 to FMH1021552	FWD1022571	600	4.47	4.37	31.087	311	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.229	0.347	127.7%
FMH1021552 to FMH1021553	FWD1022572	600	4.35	4.24	37.583	342	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.172	0.331	133.9%
FMH1021553 to FMH1021554	FWD1022573	600	4.23	4.06	50.307	296	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.259	0.356	124.6%
FMH1021554 to FMH1021555	FWD1022574	600	4.06	3.93	32.485	250	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.371	0.388	114.4%

Annex B - Hydraulic Capacity Check of Existing Sewerage Pipe at Proposed scheme (After In-take of Proposed Development)

- Note:
- 1) Colebrook-White's equation is adopted for full-bore pipe velocity calculation.
- 2) Pipes should be upgraded by others are highlighted in green colour.
- 3) Catchment No. F1 and F2 denoted as the two proposed sewage discharge points in Kwu Tung Site 4 respectively.
- 4) The existing pipes are Vitrified Clayware with a normal condition of slimed sewers. Roughness is assumed to be 1.5mm.
- 5) A peak flow of 26.8L/s is discharged to FMH1021550 due to Yin Kong Public Toilet (Latest Information enclosed by EPD)

Pipe	Feature Number	Diameter (mm)	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Pipe Length (m)	Gradient (1 in)	Roughness (mm)	No. of Pipes	Catchment No.	ADWF (m ³ /s)	Contributing Population	Peak Factor	Design Peak Flowrate (m ³ /s)	Full Bore Velocity (m/s)	Full Bore Capacity (m ³ /s)	Utilization (%)
FMH1030348 to FMH1030349	FWD1035235	500	9.82	9.74	31.073	388	1.50	1	1	0.0001	34	8	0.001	0.977	0.192	0.4%
FMH1030349 to FMH1030350	FWD1035236	500	9.73	9.65	38.527	482	1.50	1	1	0.0001	34	8	0.001	0.877	0.172	0.5%
FMH1030350 to FMH1030353	FWD1035239	500	9.64	9.56	36.929	462	1.50	1	1	0.0001	34	8	0.001	0.896	0.176	0.5%
FMH1030353 to FMH1030355	FWD1035241	500	9.55	9.48	36.643	523	1.50	1	1	0.0001	34	8	0.001	0.841	0.165	0.5%
FMH1030355 to FMH1030358	FMD1001500	225	9.47	9.37	20.261	203	1.50	2	1	0.0001	34	8	0.001	0.805	0.064	1.3%
FMH1030358 to FMH1030359	FWD1035246	500	9.36	9.28	27.515	344	1.50	1	1, 2	0.0046	1,462	6	0.027	1.039	0.204	13.4%
FMH1030359 to FMH1030360	FWD1035247	500	9.27	9.24	18.546	618	1.50	1	1, 2	0.0046	1,462	6	0.027	0.774	0.152	18.1%
FMH1030360 to FMH1030361	FWD1035248	500	9.23	9.22	3.922	392	1.50	1	1, 2	0.0046	1,462	6	0.027	0.973	0.191	14.4%
FMH1030361 to FMH1030362	FWD1035250	500	9.21	9.02	85.318	449	1.50	1	1, 2	0.0046	1,462	6	0.027	0.908	0.178	15.4%
FMH1030362 to FMH1030363	FWD1035252	500	9.01	8.98	18.564	619	1.50	1	1, 2	0.0046	1,462	6	0.027	0.773	0.152	18.1%
FMH1030363 to FMH1030364	FWD1035253	500	8.97	8.94	14.778	493	1.50	1	1, 2	0.0046	1,462	6	0.027	0.867	0.170	16.1%
FMH1030364 to FMH1030366	FWD1035255	500	8.93	8.925	6.916	1383	1.50	1	1, 2	0.0046	1,462	6	0.027	0.515	0.101	27.1%
FMH1030366 to FMH1030367	FWD1035254	500	8.92	8.91	20.534	2053	0.60	1	1, 2	0.0046	1,462	6	0.027	0.470	0.092	29.7%
FMH1030367 to FMH1030369	FWD1035256	500	8.90	8.82	36.527	457	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.901	0.177	89.4%
FMH1030369 to FMH1030371	FWD1035257	600 (500)	8.81	8.71	50.279	503	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.965	0.273	58.0%
FMH1030371 to FMH1030373	FWD1035260	600 (500)	8.70	8.60	48.777	488	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.980	0.277	57.1%
FMH1030373 to FMH1030374	FWD1035261	600 (500)	8.59	8.53	31.310	522	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.947	0.268	59.0%
FMH1030374 to FMH1030375	FWD1035262	500	8.52	8.44	37.021	463	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.895	0.176	90.0%
FMH1030375 to FMH1030380	FWD1035280	500	8.43	8.37	22.322	372	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.999	0.196	80.6%
FMH1030380 to FMH1030381	FWD1035281	600 (500)	8.36	8.34	14.130	707	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.813	0.230	68.8%
FMH1030381 to FMH1030382	FWD1035282	600 (500)	8.33	8.26	38.068	544	1.50	1	1, 2, B, 3	0.0271	8,666	5	0.158	0.928	0.262	60.3%
FMH1030382 to FMH1030383	FWD1035283	500	8.25	8.18	38.457	549	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.821	0.161	104.3%
FMH1030383 to FMH1030384	FWD1035284	600 (500)	8.17	8.09	37.336	467	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	1.002	0.283	59.3%
FMH1030384 to FMH1030385	FWD1035285	500	8.08	8.01	37.173	531	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.835	0.164	102.5%
FMH1030385 to FMH1030386	FWD1035286	600 (500)	8.00	7.92	37.690	471	1.50	1	1, 2, F1, B, 3	0.0363	11,629	4	0.168	0.997	0.282	59.6%
FMH1030386 to FMH1030387	FWD1035287	500	7.91	7.84	37.538	536	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.931	0.183	131.1%
FMH1030387 to FMH1030388	FWD1035288	500	7.83	7.76	37.842	541	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.927	0.182	131.6%
FMH1030388 to FMH1030389	FWD1035289	500	7.75	7.67	38.940	487	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.978	0.192	124.8%
FMH1030389 to FMH1030390	FWD1035290	500	7.66	7.58	38.925	487	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.978	0.192	124.8%
FMH1030390 to FMH1030391	FWD1035291	500	7.57	7.49	38.958	487	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.978	0.192	124.8%
FMH1030391 to FMH1030392	FWD1035292	500	7.48	7.47	6.302	630	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.858	0.168	142.2%
FMH1030392 to FMH1030393	FWD1035293	500	7.47	7.46	7.846	785	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	0.768	0.151	159.0%
FMH1030393 to FMH1021544	FWD1035294	500	7.45	7.44	4.123	412	0.60	1	1, 2, F1, F2, B, 3	0.0522	16,690	4	0.240	1.064	0.209	114.7%
FMH1021544 to FMH1021543	FWD1022560	500	7.44	6.86	54.856	95	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 9, 10, 11, 13, 14, 15	0.0798	25,520	4	0.350	1.986	0.390	89.8%
FMH1021543 to FMH1021545	FWD1022564	600	6.41	6.06	45.093	129	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	1.911	0.540	77.1%
FMH1021545 to FMH1021546	FWD1022565	600	5.96	5.87	44.902	499	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	0.969	0.274	152.2%
FMH1021546 to FMH1021547	FWD1022566	675 (600)	5.85	5.67	39.000	217	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	1.588	0.568	73.4%
FMH1021547 to FMH1021548	FWD1022567	600	5.67	5.02	24.832	38	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	3.514	0.994	41.9%
FMH1021548 to FMH1021549	FWD1022568	600	5.00	4.83	8.088	48	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	3.149	0.890	46.8%
FMH1021549 to FMH1021550	FWD1022569	600	4.83	4.48	44.891	128	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.417	1.916	0.542	77.0%
FMH1021550 to FMH1021551	FWD1022570	600	4.48	4.47	5.633	563	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	0.911	0.258	172.2%
FMH1021551 to FMH1021552	FWD1022571	600	4.47	4.37	31.087	311	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.229	0.347	127.7%
FMH1021552 to FMH1021553	FWD1022572	600	4.35	4.24	37.583	342	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.172	0.331	133.9%
FMH1021553 to FMH1021554	FWD1022573	600	4.23	4.06	50.307	296	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.259	0.356	124.6%
FMH1021554 to FMH1021555	FWD1022574	600	4.06	3.93	32.485	250	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.371	0.388	114.4%
FMH1021555 to FMH1021556	FWD1022575	600	3.93	3.84	32.982	366	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.131	0.320	138.7%
FMH1021556 to FMH1021557	FWD1022576	600	3.84	3.78	17.605	293	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.265	0.358	124.1%
FMH1021557 to FMH1021558	FWD1022577	600	3.78	3.75	9.245	308	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.234	0.349	127.1%
FMH1021558 to FMH1021559	FWD1022578	600	3.74	3.68	13.719	229	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.433	0.405	109.5%
FMH1021559 to FMH1021560	FWD1022579	600	3.68	3.65	12.954	432	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	1.042	0.295	150.6%
FMH1021560 to FMH1021561	FWD1022580	600	3.65	3.63	11.251	563	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 9, 10, 11, 13, 14, 15	0.0888	28,430	4	0.444	0.912	0.258	172.0%
FMH1021561 to FMH1021562	FWD1022581	600	3.63	3.60	13.323	444	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0986	31,561	4	0.489	1.027	0.290	168.2%
FMH1021562 to FMH1021563	FWD1022583	600	3.60	3.58	8.798	440	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0986	31,561	4	0.489	1.032	0.292	167.4%
FMH1021563 to FMH1021564	FWD1022584	600	3.58	3.53	13.370	267	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0986	31,561	4	0.489	1.325	0.375	130.4%
FMH1021564 to FMH1021565	FWD1022585	600	3.53	3.48	10.724	214	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0986	31,561	4	0.489	1.480	0.418	116.7%
FMH1021565 to FMH1021566	FWD1022587	600	3.47	3.46	7.247	725	0.60	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0986	31,561	4	0.489	0.897	0.254	192.7%
FMH1021566 to XPS1000860	FWD1022588	600	3.45	3.41	9.858	246	1.50	1	1, 2, F1, F2, B, 3, C, 5, 6, 7, E, 8, A, 9, 10, 11, 13, 14, 15	0.0986	31,561	4	0.489	1.380	0.390	125.2%

Discharge from Proposed Development to public sewer																
Pipe	Feature Number	Diameter (mm)	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Pipe Length (m)	Gradient (1 in)	Roughness (mm)	No. of Pipes	Catchment No.	ADWF (m ³ /s)	Contributing Population	Peak Factor	Design Peak Flowrate (m ³ /s)	Full Bore Velocity (m/s)	Full Bore Capacity (m ³ /s)	Utilization (%)
TMH01 to MH01	-	300	9.3	9.1	43.11	215.55	0.6	1	3	0.00917	2868	6	0.06332	1.16859213	0.0826029	76.66%

Annex C

Backwash Calculation

Project Section 16 Planning Application for Proposed Residential Development at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories

Subject Annex C Backwash Calculation

Design Assumption

1. The backwash is assumed to be performed on a daily basis.
2. The backwash is assumed to be performed with 1 metre square area each time. Therefore, multiple iterations are required to backwash the entire filter.

Estimated Sewage generated by swimming pool

Plan Area of Swimming Pool, A	=	1197	m ²
Average Depth of Pool, D	=	1.5	m
Volume of Water in Swimming Pool, V	=	A x D	
	=	1795.50	m ³

Turnover Period, T	=	6	hour
Surface Loading Rate of Filter, R _f	=	20.0	m ³ /m ² /hr
Filter Area Required	=	V ÷ T ÷ R _f	
	=	14.96	m ²

Proposed backwash are conducted in 15 sequential portions.

Area of filter per sequential portion, A _F	=	1.00	m ²	
	<	1.00	m ²	<u>OK</u>

Volume generated by backwash for each sequential portion

Backwash Duration, T _b	=	3	min
Backwash Flow Rate, Q	=	30.0	m ³ /m ² /hr

Total Volume generated by Backwashing of Swimming Pool, V _b	=	Q x A _F x T _b x 1hr / 60min
	=	1.50 m ³

Discharge Volume for Each Sequential Portion, V _d	=	1.50	m ³
Discharge Duration for each iteration, T _d	=	3	min

Discharge rate	=	V _d ÷ T _d
	=	1.5 ÷ 3min
	=	0.50 m ³ /min
	=	0.008 m ³ /s
	=	8.3 L/s

Total backwash duration	=	15 x 3 mins
	=	45 mins

Remark:

6 hours of turnover period is adopted in accordance with the Clause 9 of Chapter 132CA Swimming Pools Regulation for a typical open air swimming pool.

Annex D

Detailed Estimation of Sewerage of Catchments 6 and 7

Project Section 16 Planning Application for Proposed Residential Development at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories

Subject Annex D Estimated Sewerage generated by Catchment 6

GESF Table T-1	<u>Design Assumptions</u>	
	1. Unit flow factor is adopted in accordance with <i>Guideline Guidelines for Estimating Sewage Flows (GESF)</i> published by EPD in March 2005.	
	2. Average Household Size of 2.7 is adopted.	
	<u>Estimated Sewage generated by Kam Tsin Village</u>	
	Average Dry Weather Flow, ADWF	= 1147.00 m ³ /d
		= 0.0133 m ³ /s
	<i>Provided by EPD in according to the latest village sewerage study under CE58/2020 (DS).</i>	
	<u>Estimated Sewage generated by The Royal Oaks</u>	
	Total number of Residential units	= 44 blocks
	Total number of residents	= 119 persons
GESF Table T-1	Unit Flow Factor	= 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF	= 43.96 m ³ /d
		= 0.0005 m ³ /s
	<i>Number of residential units is extracted from: http://hk.centadata.com/basicinfo.aspx?type=2&code=GEPPWPPEPS&ref=CD2_Detail</i>	
	<u>Estimated Sewage generated by Ascot Park</u>	
	Total number of Residential units	= 19 blocks
	Total number of residents	= 51 persons
	Unit Flow Factor	= 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF	= 18.98 m ³ /d
		= 0.0002 m ³ /s
GESF Table T-1	<i>Number of residential units is extracted from: http://hk.centadata.com/basicinfo.aspx?type=2&code=GEPPWPPEPS&ref=CD2_Detail</i>	
	<u>Estimated Sewage generated by St. Andrews Place</u>	
	Total number of Residential units	= 26 blocks
	Total number of residents	= 70 persons
	Unit Flow Factor	= 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF	= 25.97 m ³ /d
		= 0.0003 m ³ /s
	<i>Number of residential units is extracted from: http://hk.centadata.com/basicinfo.aspx?type=2&code=GEPPWPPEPS&ref=CD2_Detail</i>	
	<u>Estimated Sewage generated by Goodwood Park</u>	
	Total number of Residential units	= 13 blocks
GESF Table T-1	Total number of residents	= 35 persons
	Unit Flow Factor	= 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF	= 12.99 m ³ /d
		= 0.0002 m ³ /s
	<i>Number of residential units is extracted from: http://hk.centadata.com/basicinfo.aspx?type=2&code=GEPPWPPEPS&ref=CD2_Detail</i>	
	<u>Estimated Sewage generated by La Regent Park</u>	
	Total number of Residential units	= 42 blocks
	Total number of residents	= 113 persons
	Unit Flow Factor	= 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF	= 41.96 m ³ /d
GESF Table T-1		= 0.0005 m ³ /s
	<i>Number of residential units is counted from GeoInfo Map.</i>	
	<u>Estimated Sewage generated by Casas Domingo</u>	
	Total number of Residential units	= 44 blocks
	Total number of residents	= 119 persons
	Unit Flow Factor	= 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF	= 43.96 m ³ /d
		= 0.0005 m ³ /s
	<i>Number of residential units is extracted from: http://hk.centadata.com/basicinfo.aspx?type=2&code=BDDBBPPEPS&ref=CD2_Detail</i>	

Project Section 16 Planning Application for Proposed Residential Development at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New

Subject Annex G4 Estimated Sewerage generated by Catchment 6

<u>Design Assumptions</u>	
1. Unit flow factor is adopted in accordance with <i>Guideline Guidelines for Estimating Sewage Flows (GESF)</i> published by EPD in March 2005.	
2. Average Household Size of 2.7 is adopted.	
<u>Estimated Sewage generated by Beas River Country Park</u>	
GESF Table T-2	Total number of employees = 100 persons
	Unit Flow Factor = 1.58 m ³ /d per person
	Average Dry Weather Flow, ADWF = 158.00 m ³ /d
	= 0.0018 m ³ /s
<u>Estimated Sewage generated by De La Salle Secondary School</u>	
GESF Table T-2	Total number of students = 625 persons
	Unit Flow Factor = 0.04 m ³ /d per person
GESF Table T-2	Total number of staffs = 86 persons
	Unit Flow Factor = 0.2800 m ³ /d per person
Average Dry Weather Flow, ADWF = 49.08 m ³ /d	
= 0.0006 m ³ /s	
<i>Number of students and staffs is extracted from: http://www.delasalle.edu.hk/CustomPage/62/2016-2017%20%E5%AD%B8%E6%A0%A1%E5%A0%B1%E5%91%8A.pdf</i>	
<u>Estimated Sewage generated by Kam Tsin Village Ho Tung School</u>	
GESF Table T-2	Total number of students = 548 persons
	Unit Flow Factor = 0.04 m ³ /d per person
GESF Table T-2	Total number of staffs = 44 persons
	Unit Flow Factor = 0.2800 m ³ /d per person
Average Dry Weather Flow, ADWF = 34.24 m ³ /d	
= 0.0004 m ³ /s	
<i>Number of students and staffs is extracted from: https://www.chsc.hk/psp2018/sch_detail.php?lang_id=1&sch_id=198&return_page=sch_list.php%3Flang_id%3D1%26search_mode%3D%26frmMode%3Dpagebreak%26sch_name%3D%26sch_id%3D198</i>	
<u>Estimated Sewage generated by Kam Tsin Village Ho Tung Kindergarten</u>	
GESF Table T-2	Total number of students = 105 persons
	Unit Flow Factor = 0.04 m ³ /d per person
GESF Table T-2	Total number of staffs = 11 persons
	Unit Flow Factor = 0.28 m ³ /d per person
Average Dry Weather Flow, ADWF = 7.28 m ³ /d	
= 0.0001 m ³ /s	
<i>Number of students and staffs is extracted from: https://kgp2018.azurewebsites.net/edb/schoolinfo.php?schid=6270&lang=tc&district=&category=&voucher=&schoolname=Kam+Tsin+Village+Ho+Tung+Kindergarten+</i>	
<u>Estimated Sewage generated by St. Paul's House of Prayer</u>	
GESF Table T-1	Total number of residents = 51 persons
	Unit Flow Factor = 0.37 m ³ /d per person
GESF Table T-2	Assumed number of staffs = 10 persons
	Unit Flow Factor = 0.28 m ³ /d per person
Average Dry Weather Flow, ADWF = 21.67 m ³ /d	
= 0.0003 m ³ /s	
<i>Number of students and staffs is extracted from: http://www.srspc.org.hk/tc/retreat_house.php</i>	
<u>Estimated Sewage generated by Golf Villa</u>	
Total number of residents = 48.6 persons	
Unit Flow Factor = 0.37 m ³ /d per person	
Average Dry Weather Flow, ADWF = 17.98 m ³ /d	
= 0.0002 m ³ /s	
<u>Sub-total for Catchment 6</u>	
Average Dry Weather Flow, ADWF = 1623.06 m ³ /d	

Project Section 16 Planning Application for Proposed Residential Development at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New

Subject Annex G4 Estimated Sewerage generated by Catchment 7

<u>Design Assumptions</u>	
1. Unit flow factor is adopted in accordance with <i>Guideline Guidelines for Estimating Sewage Flows (GESF)</i> published by EPD in March 2005.	
2. Average Household Size of 2.7 is adopted.	
3. Assumed floor area per employee is adopted in accordance with <i>Commercial and Industrial Floor Space Utilization Survey (CIFSUS)</i> .	
<u>Estimated Sewage generated by Storage Area located to the West and East of Yin Kong Road</u>	
CIFSUS Table 8	Assumed Storage Area = 8537 m ²
	Assumed floor area per employee = 250.00 m ² /d per person
GESF Table T-2	Total number of employees = 34 persons
	Unit Flow Factor = 0.18 m ³ /d per person
	Average Dry Weather Flow, ADWF = 6.12 m ³ /d
	= 0.0001 m ³ /s
<u>Estimated Sewage generated by Yin Kong First Lane, Crouching Drogan Villa, Wisemen Villa and nearby Residential Blocks</u>	
EPD	Total number of Residential units = 282 units
	Total number of residents = 761 persons
GESF Table T-1	Unit Flow Factor = 0.37 m ³ /d per person
	Average Dry Weather Flow, ADWF = 281.72 m ³ /d
	= 0.0033 m ³ /s
<u>Estimated Sewage generated by Yin Kong Playground, Basketball Court and Yin Kong Tsuen Recreation Centre</u>	
CIFSUS Table 8	Assumed Recreation Activity Areas = 629 m ²
	Assumed floor area per employee = 30.00 m ² /d per person
GESF Table T-2	Total number of employees = 21 persons
	Unit Flow Factor = 0.28 m ³ /d per person
	Average Dry Weather Flow, ADWF = 5.88 m ³ /d
	= 0.0001 m ³ /s
<u>Estimated Sewage generated by Yin Kong Public Toilet</u>	
EPD	Peak Flow = 26.8 L/s
	= 0.0268 m ³ /s
<u>Sub-total for Catchment 7</u>	
	Average Dry Weather Flow, ADWF (Connect to FMH1021543) = 293.72 m ³ /d
	Peak Flow (Connect to FMH1021550) = 0.0268 m ³ /s

Annex E

Capacity Checking of Tsung Pak Long Sewage Pumping Station

Project Section 16 Planning Application for Proposed Residential Development at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories

Subject Annex E Capacity Checking of Tsung Pak Long Sewage Pumping Station

<u>Information of Tsung Pak Long Sewage Pumping Station (TPL SPS)</u>		
Design Capacity of TPL SPS, F_{cap}	=	21070.0 m ³ /d
<u>Existing Situation (From Historical Flow Records)</u>		
Peak Daily Flow (2018)	=	8700 m ³ /d
Peak Daily Flow (2019)	=	5275 m ³ /d
Peak Daily Flow adopted, F_{peak}	=	8700 m ³ /d
<u>Planned Developments</u>		<u>ADWF</u>
From EPD Beas River Equestrian Centre	=	272.0 m ³ /d
From EPD CE52/2017 Tai Tau Leng Public Housing	=	3057.0 m ³ /d
From EPD A/NE-KTS/460	=	2.2 m ³ /d
From EPD A/NE-KTS/466	=	49.0 m ³ /d
From EPD Y/NE-KTS/13	=	343.0 m ³ /d
From Binnies-SIA A/NE-KTS/506	=	2166.4 m ³ /d
From EPD Y/NE-KTS/14	=	1153.0 m ³ /d
From EPD Y/KTN/2	=	492.0 m ³ /d
From EPD Y/FSS/15	=	798.8 m ³ /d
From EPD A/NE-KTS/525	=	45.8 m ³ /d
From EPD A/NE-KTS/538	=	4.5 m ³ /d
From EPD A/NE-KTS/541	=	2.1 m ³ /d
Sub-total, $F_{planned}$	=	8385.8 m ³ /d
<u>Capacity Checking of TPL SPS</u>		
Total Planned Flow to TPL SPS, F_{cur}	=	$F_{peak} + F_{planned}$
	=	17085.8 m ³ /d
Proposed Development, F_{pro}	=	792.0 m ³ /d
Total Flow to TPL SPS, F_{total}	=	$F_{cur} + F_{pro}$
	=	17877.8 m ³ /d
	<	F_{cap}
		84.8% usage
		OK

Project Section 16 Planning Application for Proposed Residential Development at Lots 1027, 1029, 1030, 1034A, 1034B, 1039 (Part), 1040, 1042 RP, 1043 RP, 1044 RP (Part), 1045, 1047, 2233 (Part), 2251 S.A RP, 2256 RP, 2315 (Part) and 2316 RP (Part) in D.D. 92 and Adjoining Government Land (New Lot to be known as Lot 2644 in D.D. 92), Kwu Tung South, Sheung Shui, New Territories

Subject Annex E Capacity Checking of Tsung Pak Long Sewage Pumping Station

		Information of Tsung Pak Long Sewage Pumping Station (TPL SPS)	
Installed Pump Rate, F_{cap}		=	220.0 L/s
		Existing Situation (From Historical Flow Records)	
Peak Daily Flow (2018)		=	8700 m ³ /d
Peak Daily Flow (2019)		=	5275 m ³ /d
Peak Daily Flow adopted, F_{peak1}		=	8700 m ³ /d
		Planned Developments	
		ADWF	
From EPD	Beas River Equestrian Centre	=	272.0 m ³ /d
From EPD	CE52/2017 Tai Tau Leng Public Housing	=	3057.0 m ³ /d
From EPD	A/NE-KTS/460	=	2.2 m ³ /d
From EPD	A/NE-KTS/466	=	49.0 m ³ /d
From EPD	Y/NE-KTS/13	=	343.0 m ³ /d
From Binnies-SIA	A/NE-KTS/506	=	2166.4 m ³ /d
From EPD	Y/NE-KTS/14	=	1153.0 m ³ /d
From EPD	Y/KTN/2	=	492.0 m ³ /d
From EPD	Y/FSS/15	=	798.8 m ³ /d
From EPD	A/NE-KTS/525	=	45.8 m ³ /d
From EPD	A/NE-KTS/538	=	4.5 m ³ /d
From EPD	A/NE-KTS/541	=	2.1 m ³ /d
Sub-total, $F_{planned}$		=	8385.8 m ³ /d
		Capacity Checking of TPL SPS	
ADWF of Proposed Development, F_{pro}		=	792.0 m ³ /d
Total Planned Flow to TPL SPS, F_{cur}		=	$F_{pro} + F_{planned}$
		=	9177.8 m ³ /d
Contributing Population		=	33992
Peak Factor		=	3.0
Backwash (peak) from Swimming Pool of Proposed Development, F_s		=	21.6 m ³ /d
Peak Planned Flow to TPL SPS, F_{peak2}		=	$F_{cur} \times \text{Peak Factor} + F_s$
		=	27555 m ³ /d
Total Peak Flow to TPL SPS, P_{peak}		=	$F_{peak1} + F_{peak2}$
		=	36255.0 m ³ /d
		=	419.6 L/s
		>	F_{cap}
			190.7% usage
		NOT OK	

Annex F

Manhole Survey Report

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1030375

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)

SOFFIT
(井頸底)

~

STEPS
(腳踏)

0

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

490 X 660

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.3

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030374

C

500

VC

0.86

8.44

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030380

C

500

VC

0.87

8.43

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

A

X

Site Manhole Photo Sheet

Manhole: FMH1030375
Date of Survey : 20-29 Dec 2023

Depth of Cover : 0.87m



Location View

Field Phototographs: 1
Remarks:

Manhole

Field Phototographs: 2
Remarks:



Internal View

Field Phototographs: 3
Remarks:

Internal View

Field Phototographs: 4
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030380

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)
SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)
SOFFIT
(井頸底)

~

STEPS
(腳踏)

0

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

500 x 500

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.19

UPSTREAM
REFERENCE 上游 資
料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030375

C

500

VC

0.83

8.36

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030380

C

500

VC

0.83

8.36

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

A

X

Site Manhole Photo Sheet

Manhole: FMH1030380
Date of Survey : 20-29 Dec 2023

Depth of Cover : 0.83m



Location View

Field Phototgraphs: 5
Remarks:



Manhole

Field Phototgraphs: 6
Remarks:



Internal View

Field Phototgraphs: 7
Remarks:

Internal View

Field Phototgraphs: 8
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1030381

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)

SOFFIT
(井頸底)

~

STEPS
(腳踏)

0

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

480 x 500

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.16

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030380

C

500

VC

0.83

8.33

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030382

C

500

VC

0.83

8.33

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1030381
Date of Survey : 20-29 Dec 2023

Depth of Cover : 0.83m



Location View

Field Phototographs: 9
Remarks:



Manhole

Field Phototographs: 10
Remarks:



Internal View

Field Phototographs: 11
Remarks:

Internal View

Field Phototographs: 12
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030382

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)
SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)
SOFFIT
(井頸底)

~

STEPS
(腳踏)

0

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

480 x 500

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.07

UPSTREAM
REFERENCE 上游 資
料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030382

C

500

VC

0.82

8.25

B

C

D

E

F

DOWNSTREAM
REFERENC
下遊 資料

COND
CRITY

X

FMH1030383

C

500

VC

0.82

8.25

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A



X

Site Manhole Photo Sheet

Manhole: FMH1030382
Date of Survey : 20-29 Dec 2023

Depth of Cover : 0.82m



Location View

Field Photographs: 13
Remarks:

Manhole

Field Photographs: 14
Remarks:



Internal View

Field Photographs: 15
Remarks:

Internal View

Field Photographs: 16
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030383

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)
SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)
SOFFIT
(井頸底)

~

STEPS
(腳踏)

0

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

800 x 690

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

8.97

UPSTREAM
REFERENCE 上游 資
料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030383

C

500

VC

0.8

8.17

B

C

D

E

F

DOWNSTREAM
REFERENC 下游 資料

COND
CRITY

X

FMH1030384

C

500

VC

0.8

8.17

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A



X

Site Manhole Photo Sheet

Manhole: FMH1030383
Date of Survey : 20-29 Dec 2023

Depth of Cover : 0.8m



Location View

Field Phototographs: 17
Remarks:

Manhole

Field Phototographs: 18
Remarks:



Internal View

Field Phototographs: 19
Remarks:

Internal View

Field Phototographs: 20
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1030384

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)

SOFFIT
(井頸底)

~

STEPS
(腳踏)

1

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

750 x 750

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.01

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030384

C

500

VC

0.92

8.09

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030385

C

500

VC

0.93

8.08

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A



X

Site Manhole Photo Sheet

Manhole: FMH1030384
Date of Survey : 20-29 Dec 2023

Depth of Cover : 0.93m



Location View

Field Phototographs: 21
Remarks:



Manhole

Field Phototographs: 22
Remarks:



Internal View

Field Phototographs: 23
Remarks:

Internal View

Field Phototographs: 24
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030385

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

C

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

~

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

CHAM(井膽)

SOFFIT
(井頸底)

~

STEPS
(腳踏)

1

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

790 x 760

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.15

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030384

C

500

VC

1.1

8.05

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030386

C

500

VC

1.155

7.995

Y

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1030385
Date of Survey : 20-29 Dec 2023

Depth of Cover : 1.155m



Location View

Field Phototographs: 32
Remarks:

Manhole

Field Phototographs: 33
Remarks:



Internal View

Field Phototographs: 34
Remarks:

Internal View

Field Phototographs: 35
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030386

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

650

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

2

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 680

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1240 x 670

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.57

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030385

C

500

VC

1.6

7.97

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030387

C

500

VC

1.66

7.91

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1030386
Date of Survey : 20-29 Dec 2023

Depth of Cover : 1.66m



Location View

Field Phototographs: 28
Remarks:

Manhole

Field Phototographs: 29
Remarks:



Internal View

Field Phototographs: 30
Remarks:

Internal View

Field Phototographs: 31
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030387

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

700

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

4

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 680

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

10.18

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030386

C

500

VC

2.3

7.88

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030388

C

500

VC

2.35

7.83

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

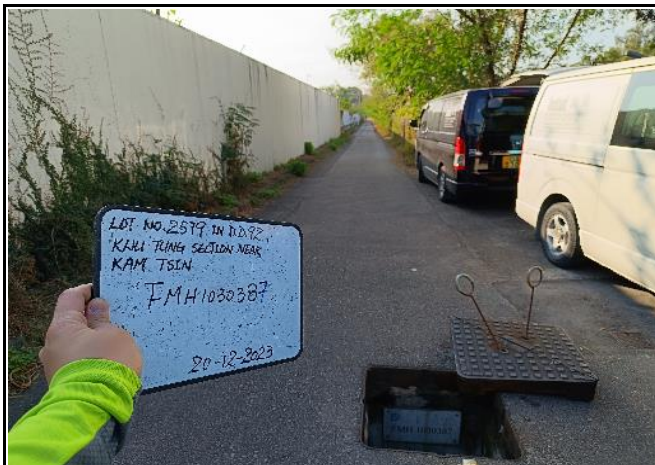
A

X

Site Manhole Photo Sheet

Manhole: FMH1030387
Date of Survey : 20-29 Dec 2023

Depth of Cover : 2.35m



Location View

Field Phototgraphs: 25
Remarks:



Manhole

Field Phototgraphs: 25a
Remarks:



Internal View

Field Phototgraphs: 26
Remarks:

Internal View

Field Phototgraphs: 27
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030388

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1150

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

5

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 750

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

10.83

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030387

C

500

VC

3.05

7.78

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030389

C

500

VC

3.08

7.75

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

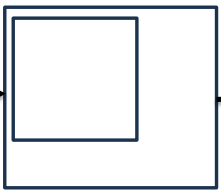
Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X



Site Manhole Photo Sheet

Manhole: FMH1030388
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.08m



Location View

Field Phototographs: 36
Remarks:

Manhole

Field Phototographs: 37
Remarks:



Internal View

Field Phototographs: 38
Remarks:

Internal View

Field Phototographs: 39
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1030389

SURVEY
DATE
日期

20-Dec-2023

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 750

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

10.69

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030388

C

500

VC

3.03

7.66

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030390

C

500

VC

3.03

7.66

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X



Site Manhole Photo Sheet

Manhole: FMH1030389
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.03m



Location View

Field Phototographs: 40
Remarks:

Manhole

Field Phototographs: 41
Remarks:



Internal View

Field Phototographs: 42
Remarks:

Internal View

Field Phototographs: 43
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030390

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

650

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

6

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 680

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1230 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

10.41

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030389

C

500

VC

2.82

7.59

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030391

C

500

VC

2.84

7.57

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1030390
Date of Survey : 20-29 Dec 2023

Depth of Cover : 2.84m



Location View

Field Phototographs: 44
Remarks:

Manhole

Field Phototographs: 45
Remarks:



Internal View

Field Phototographs: 46
Remarks:

Internal View

Field Phototographs: 47
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1030391

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

640

CHAM(井膽)
SOFFIT
(井頸底)

S

STEPS
(腳踏)

6

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 680

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

10.03

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030390

C

500

VC

2.5

7.53

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1030392

C

500

VC

2.55

7.48

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1030391
Date of Survey : 20-29 Dec 2023

Depth of Cover : 2.55m



Location View

Field Phototographs: 48
Remarks:



Manhole

Field Phototographs: 49
Remarks:



Internal View

Field Phototographs: 50
Remarks:

Internal View

Field Phototographs: 51
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1030392

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)
SHAPE (型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

~

650

CHAM(井膽)
SOFFIT (井頸底)

S

STEPS
(腳踏)

5

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 680

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.82

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030391

C

500

VC

2.3

7.52

B

C

D

E

F

DOWNSTREAM
REFERENC 下游 資料

COND
CRITY

X

FMH1030393

C

500

VC

2.35

7.47

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

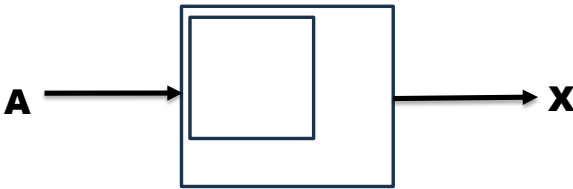
N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1030392
Date of Survey : 20-29 Dec 2023

Depth of Cover : 2.35m



Location View

Field Phototographs: 52
Remarks:

Manhole

Field Phototographs: 53
Remarks:



Internal View

Field Phototographs: 54
Remarks:

Internal View

Field Phototographs: 55
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1030393

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

520

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

5

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

20-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

690 X 690

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

680 X 680

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

20

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

10

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1030392

C

500

VC

2.5

7.5

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021544

C

500

VC

2.55

7.45

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A
↓

X
→

Site Manhole Photo Sheet

Manhole: FMH1030393
Date of Survey : 20-29 Dec 2023

Depth of Cover : 2.55m



Location View

Field Phototographs: 56
Remarks:

Manhole

Field Phototographs: 57
Remarks:



Internal View

Field Phototographs: 58
Remarks:

Internal View

Field Phototographs: 59
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021544

SURVEY
DATE
日期
(dia.)

20-Dec-2023

SIZE (mm)
蓋長闊

575 X 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

550 X 550

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1250 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

10.01

UPSTREAM
REFERENCE 上游 資料
PIPE
SHAPE 渠筒
型號
PIPE SIZE (dia.)
渠筒大小
BACKDROP
DIAM (mm)
PIPE MATERIAL
渠筒物料
LINING MATERIAL
DEPTH OF COVER (m)
渠筒深度
INVERT
LEVEL (m)

INCOMING PIPES	A	GN	C	500		VC		2.3	7.71
	B	FMH1030393	C	500		VC		2.57	7.44
	C								
	D								
	E								
	F								

DOWNSTREAM
REFERENCE 下游 資料
COND
CRITY

OUTGOING PIPES	X	FMH1021543	C	600		VC		2.57	7.44
	Y			X					

CONDITIONS (Y if
attention required)

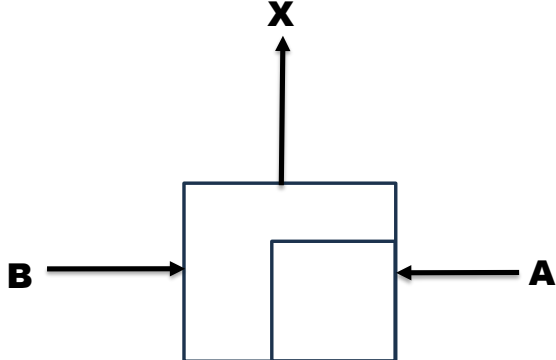
COVER N STEPS /
LADDERS N SHAFT N CHAMBER N BENCHING N OTHER N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1021544
Date of Survey : 20-29 Dec 2023

Depth of Cover : 2.57m



Location View

Field Phototographs: 60
Remarks:

Manhole

Field Phototographs: 61
Remarks:



Internal View

Field Phototographs: 62
Remarks:

Internal View

Field Phototographs: 63
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021543

SURVEY
DATE
日期
(dia.)

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

9.96

UPSTREAM
REFERENCE 上游 資料
PIPE
SHAPE 渠筒
型號
PIPE SIZE (dia.)
渠筒大小
BACKDROP
DIAM (mm)
PIPE MATERIAL
渠筒物料
LINING MATERIAL
DEPTH OF COVER (m)
渠筒深度
INVERT
LEVEL (m)

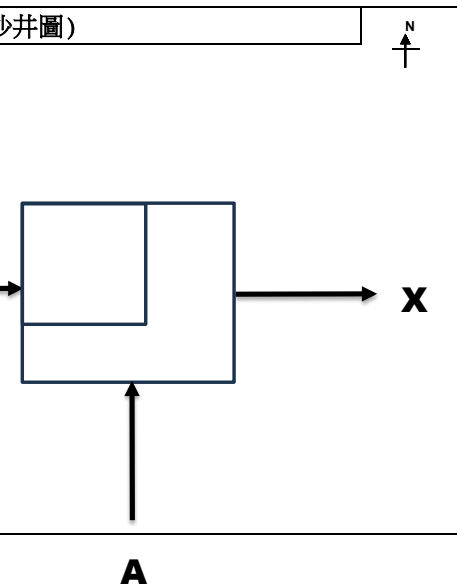
INCOMING PIPES	A	FMH1021544	C	600		VC		3	6.96
	B	GNB	C	600		VC		3.45	6.51
	C								
	D								
	E								
	F								

	3.55	6.41

CONDITIONS (Y if
attention required)

COVER N STEPS /
LADDERS N SHAFT N CHAMBER N BENCHING N OTHER N

REMARKS



Site Manhole Photo Sheet

Manhole: FMH1021543
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.55m



Location View

Field Phototographs: 75
Remarks:



Manhole

Field Phototographs: 76
Remarks:



Internal View

Field Phototographs: 77
Remarks:

Internal View

Field Phototographs: 78
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021545

SURVEY
DATE
日期
(dia.)

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

9.58

UPSTREAM
REFERENCE 上游 資料
PIPE
SHAPE 渠筒
SHAPE 渠筒
PIPE SIZE (dia.)
渠筒大小
BACKDROP
DIAM (mm)
PIPE MATERIAL
渠筒物料
LINING MATERIAL
DEPTH OF COVER (m)
渠筒深度
INVERT
LEVEL (m)

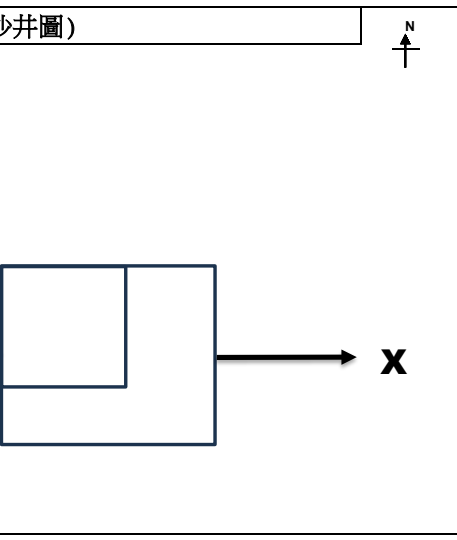
INCOMING PIPES	A	FMH1021543	C	600		VC		3.55	6.03
	B								
	C								
	D								
	E								
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CONDITIONS (Y if
attention required)

COVER N STEPS /
LADDERS N SHAFT N CHAMBER N BENCHING N OTHER N

REMARKS



Site Manhole Photo Sheet

Manhole: FMH1021545
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.62m



Location View

Field Phototgraphs: 79
Remarks:

Manhole

Field Phototgraphs: 80
Remarks:



Internal View

Field Phototgraphs: 81
Remarks:

Internal View

Field Phototgraphs: 82
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021546

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

570

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

8

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

560 X 560

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

9.39

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021545

C

600

VC

3.53

5.86

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021547

C

600

VC

3.54

5.85

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Manhole: FMH1021546
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.54m

Manhole: FMH1021546
Date of Survey : 20-29 Dec 2023



Location View

Field Photographs: 83

Remarks:



Manhole

Field Phototgraphs: 84

Remarks:



Internal View

Field Photographs: 85

Remarks:

Internal View

Field Photographs: 86

Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021547

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

600

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

8

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

560 x 560

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

8.77

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021546

C

600

VC

3.09

5.68

B

C

D

E

F

DOWNSTREAM
REFERENC
下遊 資料

COND
CRITY

X

FMH1021548

C

600

VC

3.1

5.67

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021547
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.1m



Location View

Field Phototographs: 87
Remarks:



Manhole

Field Phototographs: 88
Remarks:



Internal View

Field Phototographs: 89
Remarks:

Internal View

Field Phototographs: 90
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021548

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

8.43

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型號

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021547

C

600

VC

3.41

5.02

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021549

C

600

VC

3.43

5

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

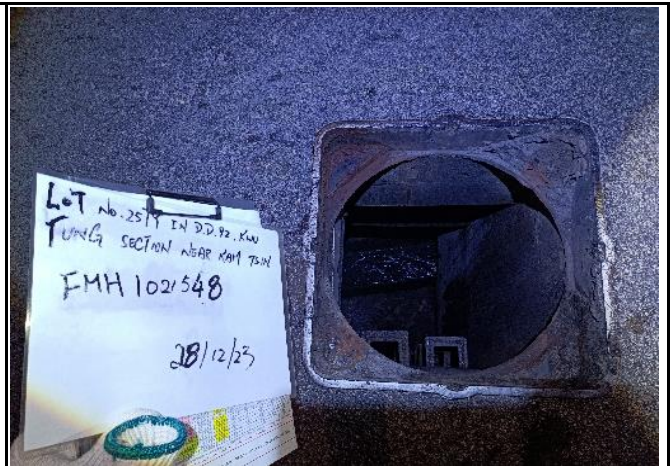


X

Site Manhole Photo Sheet

Manhole: FMH1021548
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.43m



Location View

Field Phototographs: 91
Remarks:

Manhole

Field Phototographs: 92
Remarks:



Internal View

Field Phototographs: 93
Remarks:

Internal View

Field Phototographs: 94
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021549

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE (型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1600

CHAM(井膽)
SOFFIT (井頸底)

S

STEPS
(腳踏)

7

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

8.43

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021548

C

600

VC

3.6

4.83

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENC 下游 資料

COND
CRITY

X

FMH1021550

C

600

VC

3.6

4.83

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021549
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.6m



Location View

Field Phototgraphs: 99
Remarks:

Manhole

Field Phototgraphs: 100
Remarks:



Internal View

Field Phototgraphs: 101
Remarks:

Internal View

Field Phototgraphs: 102
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021550

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

M

COVER(井蓋)
SHAPE (型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1860

CHAM(井膽)
SOFFIT (井頸底)

S

STEPS
(腳踏)

7

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

8.01

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021549

C

600

VC

3.52

4.49

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021551

C

600

VC

3.53

4.48

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021550
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.53m



Location View

Field Phototographs: 95
Remarks:

Manhole

Field Phototographs: 96
Remarks:



Internal View

Field Phototographs: 97
Remarks:

Internal View

Field Phototographs: 98
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021551

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

590

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

7

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

560 X 560

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

8.17

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021550

C

600

VC

3.7

4.47

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021552

C

600

VC

3.71

4.46

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

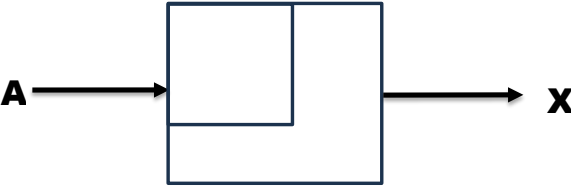
N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1021551
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.7m



Location View

Field Phototographs: 72
Remarks:

Manhole

Field Phototographs: 73
Remarks:



Internal View

Field Phototographs: 73a
Remarks:

Internal View

Field Phototographs: 74
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021552

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY(平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1600

CHAM(井膽)
SOFFIT(井頸底)

S

STEPS
(腳踏)

7

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.88

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021551

C

600

VC

3.5

4.38

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021553

C

600

VC

3.53

4.35

Y

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021552
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.53m



Location View

Field Phototographs: 103
Remarks:

Manhole

Field Phototographs: 104
Remarks:



Internal View

Field Phototographs: 105
Remarks:

Internal View

Field Phototographs: 106
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021553

SURVEY
DATE
(日期)

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

7.73

UPSTREAM
REFERENCE 上游 資料
PIPE
SHAPE 渠筒
SHAPE 渠筒
PIPE SIZE (dia.)
渠筒大小
BACKDROP
DIAM (mm)
PIPE MATERIAL
渠筒物料
LINING MATERIAL
DEPTH OF COVER (m)
渠筒深度
INVERT
LEVEL (m)

INCOMING PIPES	A	FMH1021552	C	600		VC		3.5	4.23
	B								
	C								
	D								
	E								
	F								

	3.5	4.23

CONDITIONS (Y if
attention required)

COVER N STEPS /
LADDERS N SHAFT N CHAMBER N BENCHING N OTHER N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

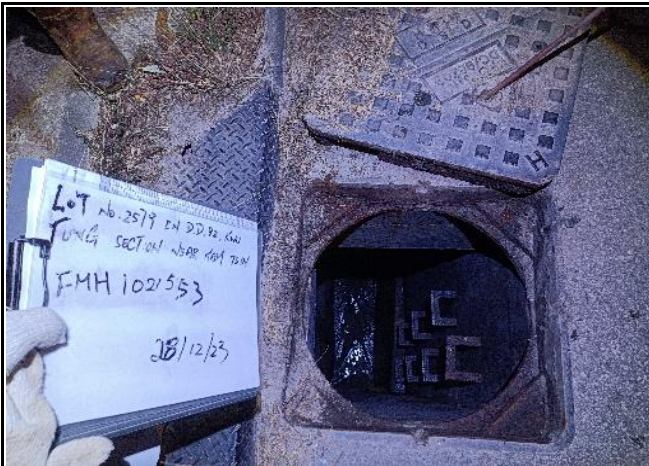


X

Site Manhole Photo Sheet

Manhole: FMH1021553
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.5m



Location View

Field Phototgraphs: 107
Remarks:

Manhole

Field Phototgraphs: 108
Remarks:



Internal View

Field Phototgraphs: 109
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021554

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY(平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1460

CHAM(井膽)
SOFFIT
(井頸底)

S

STEPS
(腳踏)

8

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.47

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021553

C

600

VC

3.41

4.06

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021555

C

600

VC

3.45

4.02

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

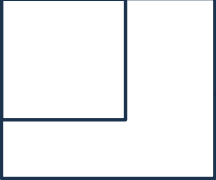
Plan of Manhole(沙井圖)

N

↑

A

X



Site Manhole Photo Sheet

Manhole: FMH1021554
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.41m



Location View

Field Phototographs: 110
Remarks:



Manhole

Field Phototographs: 111
Remarks:



Internal View

Field Phototographs: 112
Remarks:

Internal View

Field Phototographs: 113
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021555

SURVEY
DATE
日期
(dia.)

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

7.47

UPSTREAM
REFERENCE 上游 資料
PIPE
SHAPE 渠筒
型號
PIPE SIZE (dia.)
渠筒大小
BACKDROP
DIAM (mm)
PIPE MATERIAL
渠筒物料
LINING MATERIAL
DEPTH OF COVER (m)
渠筒深度
INVERT
LEVEL (m)

INCOMING PIPES	A	FMH1021554	C	600		VC		3.54	3.93
	B								
	C								
	D								
	E								
	F								

	3.55	3.92

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

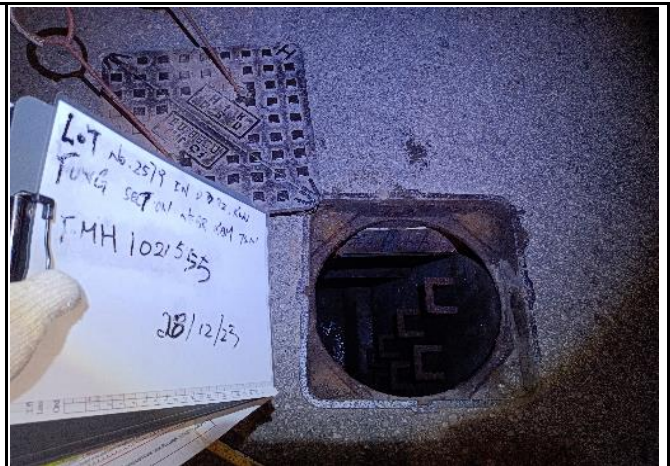
N
↑



Site Manhole Photo Sheet

Manhole: FMH1021555
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.54m



Location View

Field Photographs: 114
Remarks:

Manhole

Field Photographs: 115
Remarks:



Internal View

Field Photographs: 116
Remarks:

Internal View

Field Photographs: 117
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021556

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

E

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

700

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

8

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

560 X 560

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.35

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021555

C

600

VC

3.5

3.85

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021557

C

600

VC

3.51

3.84

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021556
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.51m



Location View

Field Phototographs: 118
Remarks:

Manhole

Field Phototographs: 119
Remarks:



Internal View

Field Phototographs: 120
Remarks:

Internal View

Field Phototographs: 121
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021557

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1600

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

9

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.15

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
型狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021556

C

600

VC

3.36

3.79

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021558

C

600

VC

3.37

3.78

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

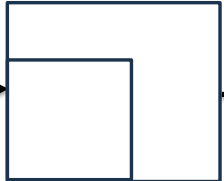
Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X



Site Manhole Photo Sheet

Manhole: FMH1021557
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.37m



Location View

Field Phototographs: 122
Remarks:

Manhole

Field Phototographs: 123
Remarks:



Internal View

Field Phototographs: 124
Remarks:

Internal View

Field Phototographs: 125
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021558

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY(平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1530

CHAM(井膽)
SOFFIT(井頸底)

S

STEPS
(腳踏)

8

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.2

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021557

C

600

VC

3.44

3.76

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021559

C

600

VC

3.46

3.74

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

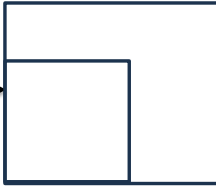
Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

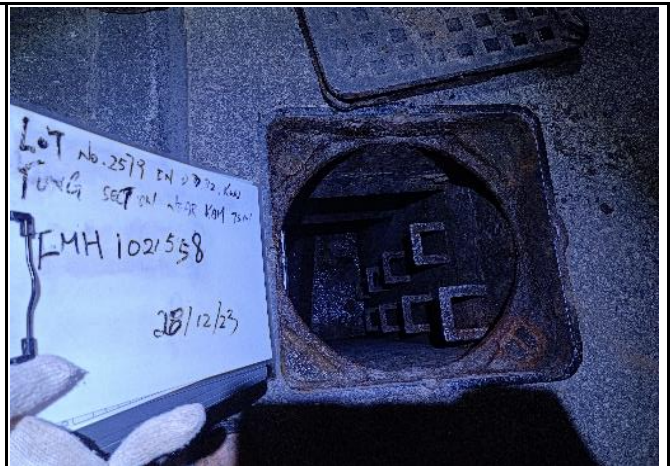
X



Site Manhole Photo Sheet

Manhole: FMH1021558
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.46m



Location View

Field Phototographs: 126
Remarks:

Manhole

Field Phototographs: 127
Remarks:



Internal View

Field Phototographs: 128
Remarks:

Internal View

Field Phototographs: 129
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021559

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1500

CHAM(井膽)
SOFFIT
(井頸底)

S

STEPS
(腳踏)

9

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 2800

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.19

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021558

C

600

VC

3.5

3.69

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021560

C

600

VC

3.51

3.68

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

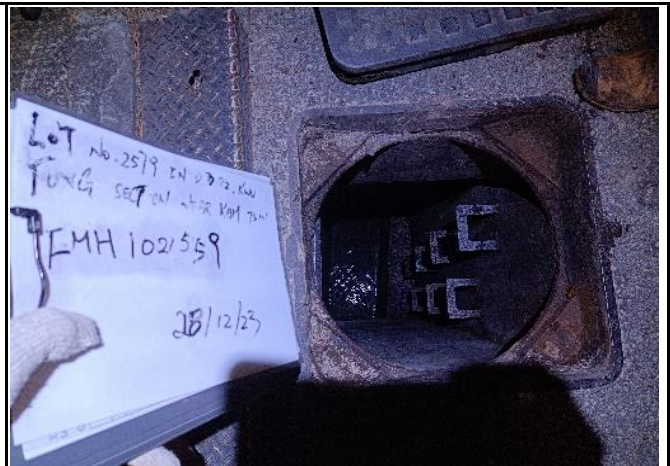
A

X

Site Manhole Photo Sheet

Manhole: FMH1021559
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.51m



Location View

Field Phototgraphs: 130
Remarks:

Manhole

Field Phototgraphs: 131
Remarks:



Internal View

Field Phototgraphs: 132
Remarks:

Internal View

Field Phototgraphs: 133
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021560

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY(平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1500

CHAM(井膽)
SOFFIT(井頸底)

S

STEPS
(腳踏)

9

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1200

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

6.91

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021559

C

600

VC

3.25

3.66

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021561

C

600

VC

3.27

3.64

Y

X

OUTGOING
PIPES

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

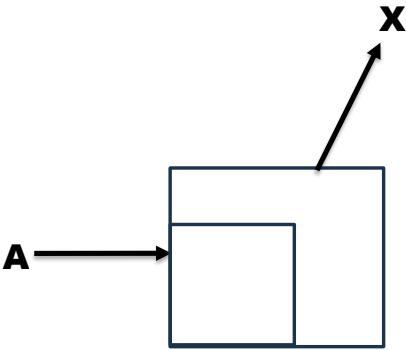
N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1021560
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.26m



Location View

Field Phototographs: 134
Remarks:

Manhole

Field Phototographs: 135
Remarks:



Internal View

Field Phototographs: 136
Remarks:

Internal View

Field Phototographs: 137
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021561

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1620

CHAM(井膽)
SOFFIT
(井頸底)

S

STEPS
(腳踏)

9

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

(dia.)

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.12

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021560

C

600

VC

3.49

3.63

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021562

C

600

VC

3.5

3.62

Y

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

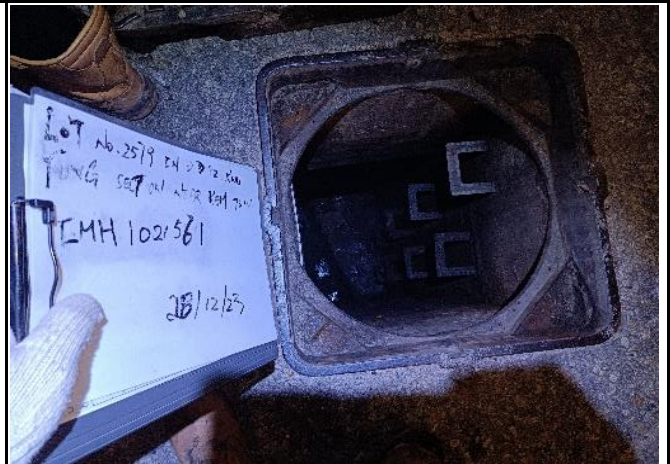
X



Site Manhole Photo Sheet

Manhole: FMH1021561
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.49m



Location View

Field Phototgraphs: 138
Remarks:

Manhole

Field Phototgraphs: 139
Remarks:



Internal View

Field Phototgraphs: 140
Remarks:

Internal View

Field Phototgraphs: 141
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021562

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)

SHAPE
(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)

SIDE
ENTRY (平

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1820

CHAM(井膽)

SOFFIT
(井頸底)

S

STEPS
(腳踏)

9

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.31

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021561

C

600

VC

3.7

3.61

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021563

C

600

VC

3.71

3.6

Y

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

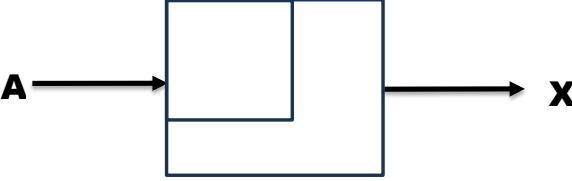
N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1021562
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.71m



Location View

Field Phototgraphs: 142
Remarks:

Manhole

Field Phototgraphs: 143
Remarks:



Internal View

Field Phototgraphs: 144
Remarks:

Internal View

Field Phototgraphs: 145
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021563

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY(平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1930

CHAM(井膽)
SOFFIT(井頸底)

S

STEPS
(腳踏)

10

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.46

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021562

C

600

VC

3.86

3.6

B

C

D

E

F

INCOMING PIPES

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021564

C

600

VC

3.86

3.6

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N

↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021563
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.86m



Location View

Field Phototgraphs: 68
Remarks:



Internal View

Field Phototgraphs: 70
Remarks:

Manhole

Field Phototgraphs: 69
Remarks:



Internal View

Field Phototgraphs: 71
Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021564

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

1850

CHAM(井膽)
SOFFIT
(井頸底)

S

STEPS
(腳踏)

10

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.46

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021563

C

600

VC

3.93

3.53

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

FMH1021565

C

600

VC

3.93

3.53

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑

A

X

Site Manhole Photo Sheet

Manhole: FMH1021564
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.93m



Location View

Field Phototographs: 146
Remarks:

Manhole

Field Phototographs: 147
Remarks:



Internal View

Field Phototographs: 148
Remarks:

Internal View

Field Phototographs: 149
Remarks:

NODE REFERENCE

Manhole Record Form

MANHOLE NO.
(沙井號碼)

FMH1021565

SURVEY
DATE
(日期)

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

740 X 740

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

COVER
LEVER
(mPD)

7.4

UPSTREAM
REFERENCE 上游 資料
PIPE
SHAPE 渠筒
SHAPE 渠筒
PIPE SIZE (dia.)
渠筒大小
BACKDROP
DIAM (mm)
PIPE MATERIAL
渠筒物料
LINING MATERIAL
DEPTH OF COVER (m)
渠筒深度
INVERT
LEVEL (m)

INCOMING PIPES	A	FMH1021564	C	600		VC		3.93	3.47
	B								
	C								
	D								
	E								
	F								

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
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CONDITIONS (Y if
attention required)

COVER N STEPS /
LADDERS N SHAFT N CHAMBER N BENCHING N OTHER N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

Site Manhole Photo Sheet

Manhole: FMH1021565

Depth of Cover : 3.93m

Date of Survey : 20-29 Dec 2023



Location View

Field Phototographs: 64

Remarks:



Manhole

Field Phototographs: 65

Remarks:



Internal View

Field Phototographs: 66

Remarks:

Internal View

Field Phototographs: 67

Remarks:

NODE REFERENCE

Manhole Record Form

LOCATION
(地點)

Lot No2579 IN DD.92 KWU TUNG

MANHOLE NO.
(沙井號碼)

FMH1021566

YEAR LAID

STATUS
(狀況)

PU

FUNCTION
(功能)

F

NODE TYPE
(沙井類型)

F

COVER(井蓋)
SHAPE(型狀)

D

HINGED
(鐵鏈)

N

LOCK
(鎖)

N

DUTY
(井蓋負重)

H

SHAFT(井頸)
SIDE ENTRY (平)

N

REGULAT
COURSES

0

DEPTH (mm)
(井頸高度)

2050

CHAM(井膽)
SOFFIT
(井頸底)

S

STEPS
(腳踏)

10

LADDERS
(梯)

N

LNDGS

N

SURVEY
DATE
日期

28-Dec-2023

SIZE (mm)
蓋長闊

575 x 575

TOXIC
ATMOSPHERE

N

SIZE (mm)
井頸長闊

760 X 760

EVIDENCE OF
VERMIN

N

SIZE (mm)
井膽長闊

1350 x 1350

CONSTRUCT
CODE

I

DEPTH OF
FLOW (mm)

30

DEPTH
OF SILT

0

HEIGHT
SURCH
(mm)

COVER
LEVER
(mPD)

7.38

UPSTREAM
REFERENCE 上游 資料

PIPE
SHAPE 渠筒
形狀

PIPE SIZE (dia.)
渠筒大小

BACKDROP
DIAM (mm)

PIPE MATERIAL
渠筒物料

LINING MATERIAL

DEPTH OF COVER (m)
渠筒深度

INVERT
LEVEL (m)

A

FMH1021565

C

600

VC

3.93

3.45

B

C

D

E

F

DOWNSTREAM
REFERENCE 下游 資料

COND
CRITY

X

XPS1000860

C

600

VC

3.93

3.45

Y

X

CONDITIONS (Y if
attention required)

COVER

N

STEPS /
LADDERS

N

SHAFT

N

CHAMBER

N

BENCHING

N

OTHER

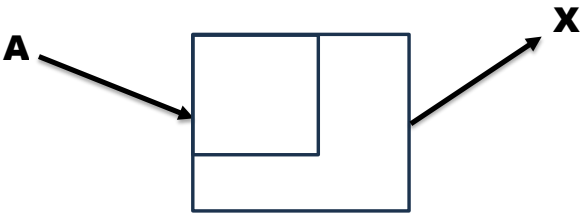
N

REMARKS

Location Sketch(地點草圖)

Plan of Manhole(沙井圖)

N
↑



Site Manhole Photo Sheet

Manhole: FMH1021566
Date of Survey : 20-29 Dec 2023

Depth of Cover : 3.93m



Location View

Field Phototgraphs: 150
Remarks:

Manhole

Field Phototgraphs: 151
Remarks:



Internal View

Field Phototgraphs: 152
Remarks:

Field Phototgraphs:
Remarks: