Attachment 8: Replacement Pages of Drainage Impact Assessment

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#### **LIST OF DRAWINGS**

cation Plan

LILY16/MLP/001 Proposed Development Layout

LILY16/DIA/001 Aerial Photographs

LILY16/DIA/002 Catchment Plan & Existing Drainage Networks

LILY16/DIA/003 Proposed Drainage Works

#### **APPENDICES**

Appendix A Existing Topography Plan

Appendix B Hydraulic Calculation of Proposed Drainage Works

Appendix C Example of Catchpit with Trap

	Name	Signature	Date
Prepared	Vicky CHEUNG	V~Y	January 2024
Checked	Kenneth CHAN	en	January 2024
Reviewed	Sylvia CHAN	> elian	January 2024

#### 3. DRAINAGE IMPACT ASSESSMENT

3.1 As change in land use would affect the amount of surface runoff flowing into the existing drainage system, the paved / unpaved ratio of the Application Site before and after the Proposed Development were reviewed and summarized in *Table 2*. A greenery ratio of 20% is adopted in the Proposed Development.

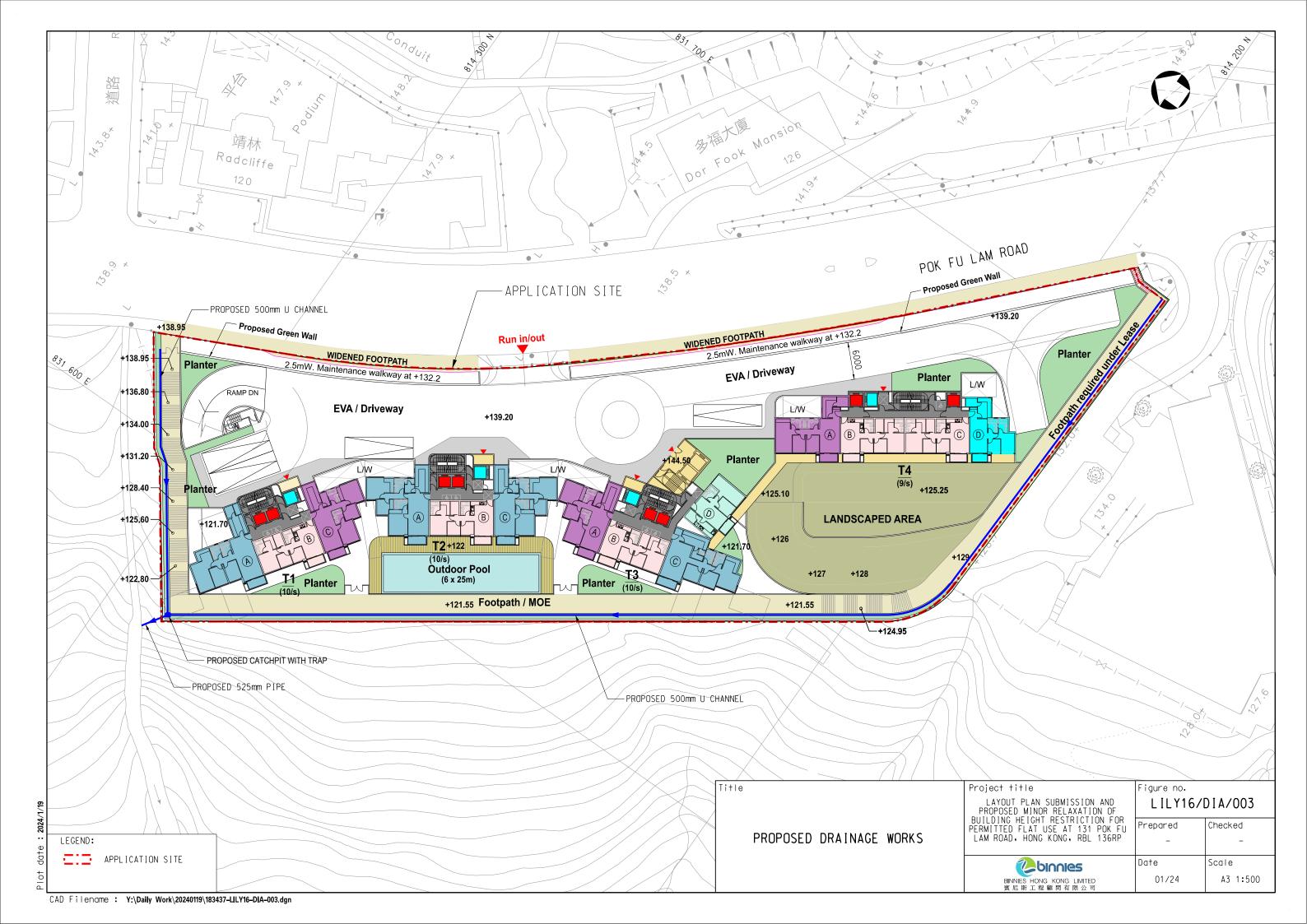
Table 2 --- Paved / Unpaved Ratio of the Application Site

	Before Development	After Development
Paved Area	5,408 (84%)	5,164 m <sup>2</sup> (80%)
Unpaved Area	1,052 (16%)	1,296 m <sup>2</sup> (20%)

3.2 There is no significant change in the paved / unpaved ratio of the Application Site due to the Proposed Development. The change in surface runoff discharging into the downstream drainage system is therefore considered insignificant.

#### Drainage Works within the Application Site

- 3.3 To properly convey the surface runoff from the Application Site after the Proposed Development, internal drainage works are proposed. It is proposed to convey the surface runoff from the Application Site by 500 mm u-channel for discharge to the adjacent natural stream via a 525 mm dia. outlet drain. The layout and hydraulic calculation of the proposed drainage works are enclosed in *Drawing No. LILY16/DIA/003* and *Appendix B* respectively.
- A catchpit with trap will be constructed prior to connection to the downstream public stormwater drainage system. The proposed catchpit is designed to settle the sand and denser particles found in surface runoff from the adjacent storage area by gravity. A man access with desilting opening will be provided for maintenance use. The catchpit is made reference to Civil Engineer and Development Department (CEDD)'s Standard Drawings which is enclosed in *Appendix C*.

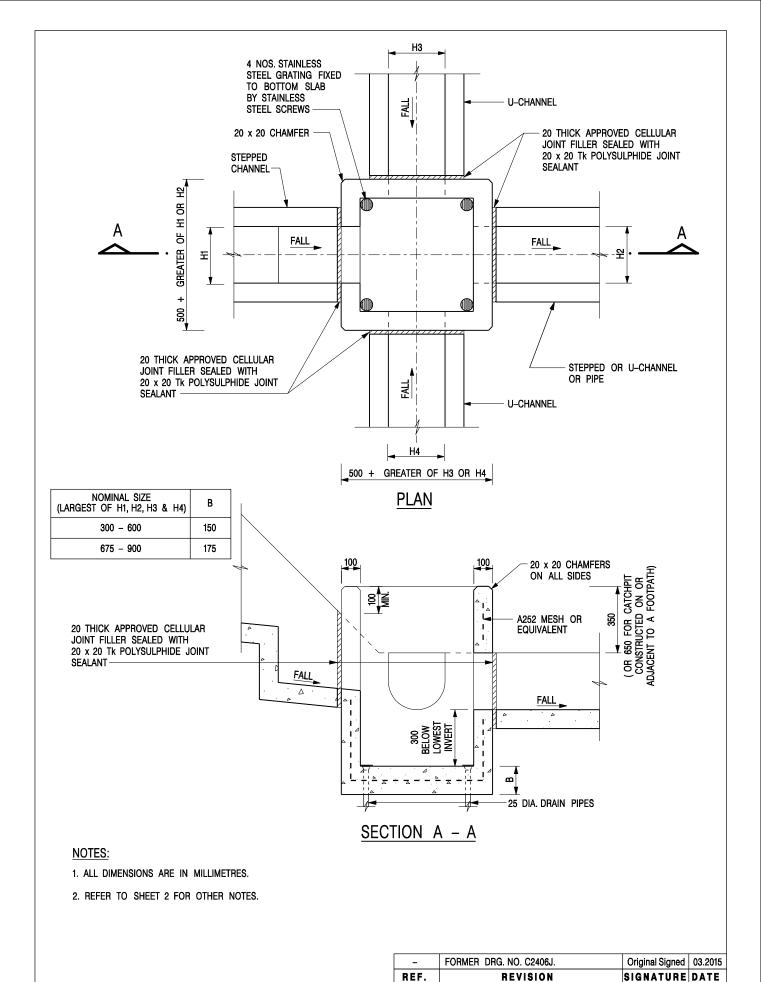


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**Appendix C** 

**Example of Catchpit with Trap** 

January 2024 Binnies



CATCHPIT WITH TRAP (SHEET 1 OF 2)

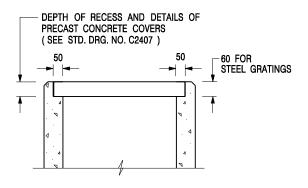
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1:20 DRAWING NO.

DATE JAN 1991 C2406 /1

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# ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

#### NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETRES.
- 2. ALL CONCRETE SHALL BE GRADE 20 /20.
- 3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
- 4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
- 5. CONCRETE TO BE COLOURED AS SPECIFIED.
- UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
- 7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
- FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2 ) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407 ) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
- 9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE ) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
- 10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043 ) AT 300 ℃ STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
- 11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
- SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

İ	REF.	REVISION	SIGNATURE	DATE
	-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
	Α	MINOR AMENDMENT.	Original Signed	04.2016

CATCHPIT WITH TRAP (SHEET 2 OF 2)

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