SUSTAINABLE BUILDING DESIGN GUIDELINES (SBDG)

SITE AREA = 7954 S.M.
HEIGHT OF BUILDING = 77.930
LEVEL ZERO = 4.230 M.P.D.

SBDG (PNAP APP-152)			DWG NO. DEMOSTRATING COMPLIANCE
BUILDING SEPARATION			
PARA. 4(b)	~~SITE AREA < 20,000 S.M. AND PROPOSED Lp < 60m~~	~~BUDILDING SEPARATION N/A~~	N/A
	SITE AREA < 20,000 S.M. AND PROPOSED Lp > OR = 60m	MIN. P = 20% ; 20%	GP029 - GP031
	~~SITE AREA > 20,000 S.M. AND H < OR = 60m~~	~~MIN. P = 20% ; 25%~~	N/A
	~~SITE AREA > 20,000 S.M. AND H > 60m~~	~~MIN. P = 20% ; 33.3%~~	N/A
PARP. 4(a)	DESIGN REQUIREMENT (1) - Lp MAX CONTINUOUS PROJECTED FACADE LENGTH (Lp) OF BUILDING(S) ABUTTING A STREET		GP028
BUILDING SET BACK			
PARA. 7	BUILDING ABUTTING A NARROW STREET LESS THAN 15m WIDE	NO	GP028
SITE COVERAGE GREENERY			
PARA. 10	~~SITE AREA < 1,000 S.M.~~	~~S.C OF GREENERY N/A~~	
	1,000 < SITE AREA < 20,000 S.M.	MIN. S.C. OF GREENERY = 20% (MIN. 10% AT PRIMARY ZONE)	GP027
	~~SITE AREA > 20,000 S.M.~~	~~MIN. S.C. OF GREENERY = 30% (MIN. 15% AT PRIMARY ZONE)~~	N/A

CALCULATION OF GREENERY AREA

SITE AREA = 7954 S.M.

GREENERY AREA AT PRIMARY ZONE

GROUND FLOOR (LANDSCAPE GARDEN)

1	LAWN (647.255 - 2.250 x 3)	= 640.505	S.M.
2	PLANTER	= 75.031	S.M.
3	PLANTER	= 2.975	S.M.
4	PLANTER	= 4.335	S.M.
5	PLANTER (17.049- 2.175)	= 14.874	S.M.
6	PLANTER	= 14.246	S.M.
7	PLANTER	= 56.159	S.M.
8	PLANTER	= 61.379	S.M.
9	PLANTER	= 30.391	S.M.
11	PLANTER	= 3.600	S.M.
12	PLANTER	= 4.775	S.M.
13	PLANTER	= 3.999	S.M.
14	PLANTER	= 6.142	S.M.
15	PLANTER	= 2.613	S.M.
16	PLANTER	= 27.691	S.M.
17	PLANTER	= 4.240	S.M.
18	PLANTER	= 4.163	S.M.
19	PLANTER	= 3.111	S.M.
20	PLANTER	= 7.848	S.M.
21	PLANTER	= 11.209	S.M.
22	PLANTER	= 6.133	S.M.
23	PLANTER	= 6.328	S.M.
24	PLANTER	= 12.275	S.M.
25	PLANTER (13.633- 2.175)	= 11.458	S.M.
26	PLANTER	= 358.659	S.M.
27	PLANTER (41.397 - 2.175 x 5)	= 30.522	S.M.
28	TREE PIT (2.250 x 7)	= 15.750	S.M.
28a	TREE PIT (2.175 x 7)	= 15.225	S.M.
29	PLANTER (41.700- 0.180)	= 41.520	S.M.
30	PLANTER	= 47.175	S.M.
31	PLANTER	= 40.054	S.M.
32	PLANTER	= 10.544	S.M.
33	PLANTER	= 12.893	S.M.
34	PLANTER	= 3.883	S.M.
35	PLANTER	= 4.154	S.M.
36	PLANTER	= 4.154	S.M.
37	PLANTER	= 4.154	S.M.
38	PLANTER	= 4.154	S.M.
39	PLANTER	= 4.154	S.M.
40	PLANTER	= 4.154	S.M.
41	PLANTER	= 4.154	S.M.
42	PLANTER	= 5.043	S.M.
43	WATER FEATURE (47.265 x 50%)	= 23.633	S.M.
44	PLANTER	= 20.411	S.M.
45	PLANTER	= 6.752	S.M.
	TOTAL	= 1676.622	S.M.

GREENERY AREA AT PRIMARY ZONE

SECOND FLOOR (PODIUM GARDEN)

A1	PLANTER	= 213.905	S.M.
A2	LAWN	= 76.023	S.M.
A4	PLANTER	= 33.520	S.M.
A5	PLANTER	= 115.682	S.M.
A6	PLANTER	= 7.092	S.M.
A7	PLANTER	= 1.445	S.M.
	TOTAL	= 447.667	S.M.

COVERED GREENERY AREAS

C1	COVERED PLANTER	= 18.112	S.M.
C2	COVERED PLANTER	= 56.344	S.M.
C3	COVERED PLANTER	= 54.361	S.M.
C4	COVERED PLANTER	= 23.726	S.M.
C5	COVERED PLANTER	= 54.318	S.M.
C6	COVERED PLANTER	= 10.187	S.M.
C7	COVERED PLANTER	= 8.991	S.M.
C8	COVERED PLANTER	= 7.581	S.M.
C9	COVERED PLANTER	= 19.559	S.M.
C10	COVERED PLANTER	= 35.378	S.M.
	TOTAL	= 288.557	S.M.
	(AFTER 50% REDUCTION)	= 144.279	S.M.

VERTICAL GREENING

V1	VERTICAL GREENING	= 18.822	S.M.
V2	VERTICAL GREENING	= 7.290	S.M.
V3	VERTICAL GREENING	= 13.174	S.M.
V10	VERTICAL GREENING	= 145.715	S.M.
	TOTAL	= 185.001	S.M.

COVERED VERTICAL GREENING

V4	COVERED VERTICAL GREENING	= 11.474	S.M.
V5	COVERED VERTICAL GREENING	= 21.408	S.M.
V6	COVERED VERTICAL GREENING	= 3.047	S.M.
V7	COVERED VERTICAL GREENING	= 37.537	S.M.
V8	COVERED VERTICAL GREENING	= 10.051	S.M.
V9	COVERED VERTICAL GREENING	= 10.118	S.M.
	TOTAL	= 93.635	S.M.
	(AFTER 50% REDUCTION)	= 46.818	S.M.

GREENERY AREA ABOVE PRIMARY ZONE

SECOND FLOOR (PODIUM GARDEN)

A3	INACCESSIBLE LAWN	= 380.457	S.M.

ROOF FLOOR (ROOF GARDEN)

B1	PLANTER	= 85.862	S.M.
B2	LAWN	= 72.250	S.M.
B3	LAWN	= 72.250	S.M.
B4	PLANTER	= 75.281	S.M.
	TOTAL	= 305.643	S.M.

SITE COVERAGE OF GREENERY AT PRIMARY ZONE

SITE COVERAGE OF GREENERY

$$= \frac{\text{GREENERY AREA AT PRIMARY ZONE}}{\text{SITE AREA}} \times 100\%$$

$$= \frac{1676.622 + 447.667 + 144.279 + 185.001 + 46.818}{7954} \times 100\ \%$$

= 31.436 % > 10% (REQUIRED)

TOTAL SITE COVERAGE OF GREENERY

SITE COVERAGE OF GREENERY

$$= \frac{\text{TOTAL GREENERY AREA}}{\text{SITE AREA}} \times 100\%$$

$$= \frac{1676.622 + 447.667 + 144.279 + 185.001 + 46.818 + 380.457 + 305.643}{7954} \times 100\ \%$$

= 40.061 % > 20% (REQUIRED)

GREENING FEATURES CONTRIBUTE

GREENERY AREAS REQUIRED

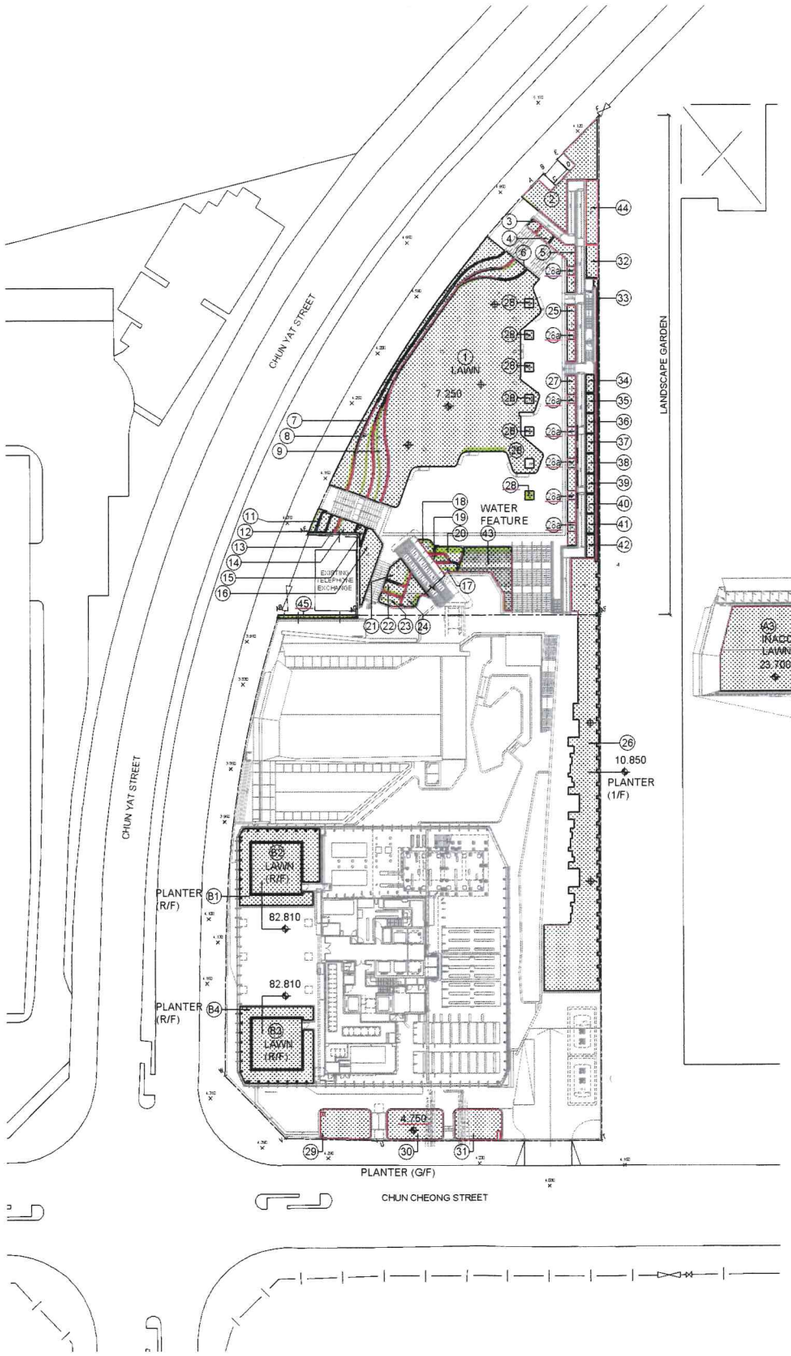
= 7954.000 x 20 % = 1590.800 S.M.

GREENING FEATURE PROVIDED

WATER FEATURE	=	23.633	S.M.
COVERED GREENERY AREAS	=	144.279	S.M.
VERTICAL GREENING	=	185.001	S.M.
COVERED VERTICAL GREENING	=	46.818	S.M.
TOTAL	=	399.731	S.M.

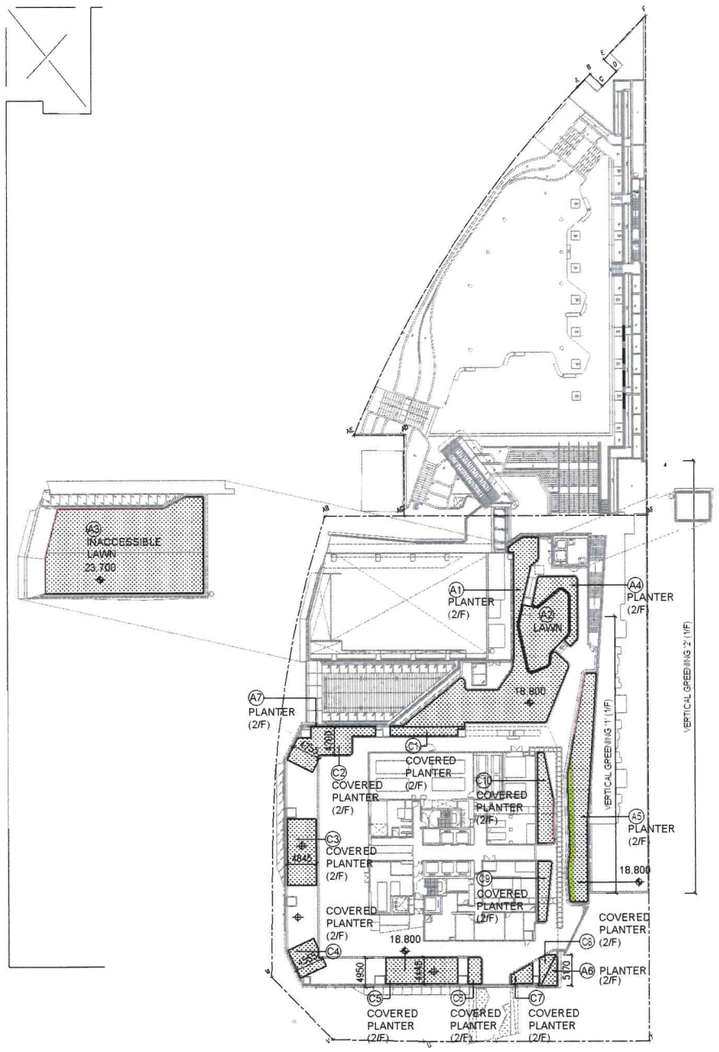
$$= \frac{\text{TOTAL GREENING FEATURE AREA}}{\text{GREENERY AREAS REQUIRED}} \times 100\ \%$$

$$= \frac{399.731}{1590.800} \times 100\ \% = 25.128\ \% < 30\%$$



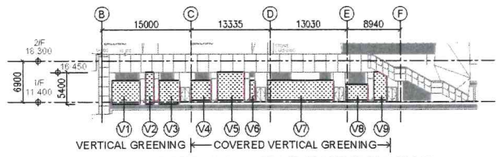
GREENERY AREA DIAGRAM AT G/F , 1/F & RF

1 500

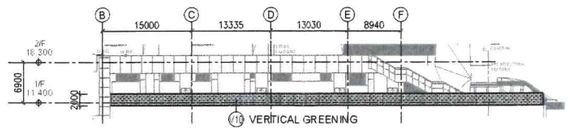


GREENERY AREA DIAGRAM AT 2/F

1 500



VERTICAL GREENING '1' AT 1/F (EAST ELEVATION)



VERTICAL GREENING '2' AT 1/F (EAST ELEVATION)

LEDGEND

6.600 TOP OF SOIL LEVEL

IRRIGATION POINT

B.D. REF NO. : 2/9201/16
F.S.D. REF NO. : FP8/23575

Rev	Date	Description	Drawn	App

Architect

ANDREW LEE KING FUN & ASSOCIATES ARCHITECTS LTD

Job No. A-1632

Project
5 CHUN CHEONG STREET
T.K.O.T.L 39 S.H ss.4 & EXT. THERETO,
T.K.O.T.L 39 S.H.R.P. & EXT. THERETO

Drawing Title
SBD CALCULATIONS (1)

	Name	Signed	Date
Drawn			
Check			
Approved			

Scale 1:500@A1

Drawing No. SK-01

Revision