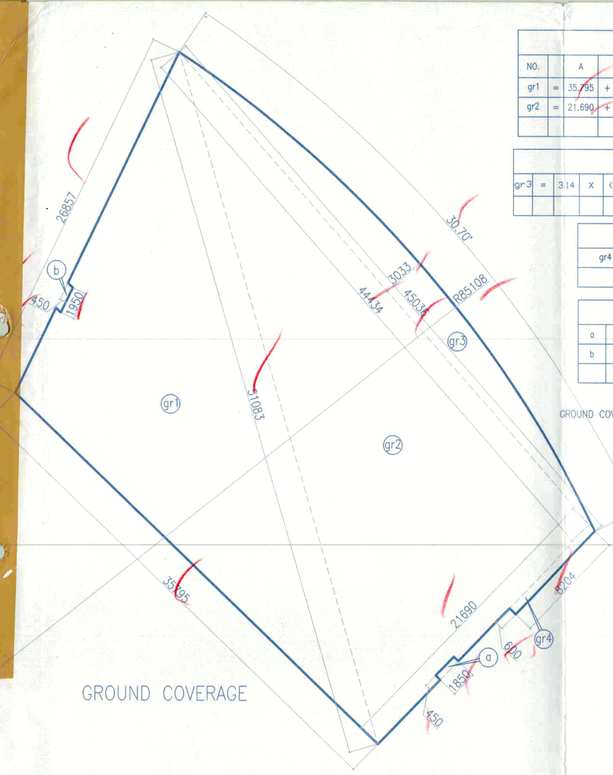


GROUND COVERAGE

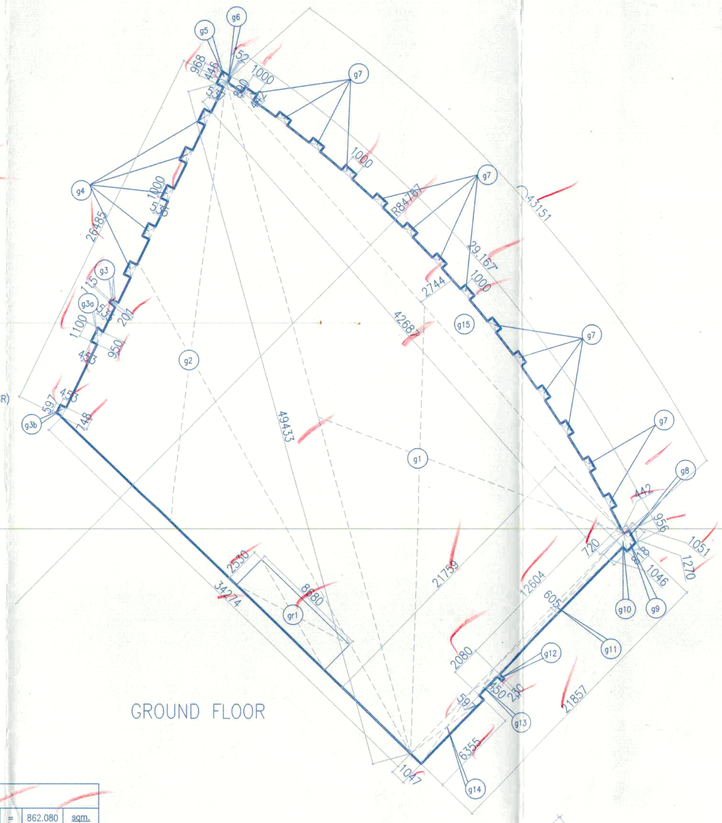
ADDITION -GR1(GROUND COVERAGE)													
NO.		A		B		C				S	AREA OF = S(S-A)(S-B)(S-C)		AREA (SQM.)
gr1	=	35.755	+	26.857	+	51.083	/	2	=	56.868	208026.784		456.100
gr2	=	21.690	+	51.083	+	44.434	/	2	=	58.604	230520.748		480.126
						TOTAL			=				936.225

ADDITION - GR2(GROUND COVERAGE)															
gr3	=	3.14	X	(85.108*85.108)	X	30.7/360	-	0.5	X	(85.108-3.033)	X	45.036	=	91.499	sqm.
										TOTAL			=	91.499	sqm.

ADDITION -GR3(GROUND COVERAGE)							
gr4	=	0.600	X	8.204	=	4.922	sqm.
				TOTAL	=	4.922	sqm.

DEDUCTION -GR(GROUND COVERAGE)							
a	=	0.600	X	1.850	=	0.833	sqm.
b	=	0.450	X	1.950	=	0.877	sqm.
				TOTAL	=	1.710	sqm.

GROUND COVERAGE OF OFFICE TOWER = ADDITION (GR1) + ADDITION (GR2) + ADDITION (GR3) - DEDUCTION (GR)
= 936.225 + 91.499 + 4.922 - 1.710
= 998.405 - 21.960
= 1030.846 SQM



GROUND FLOOR

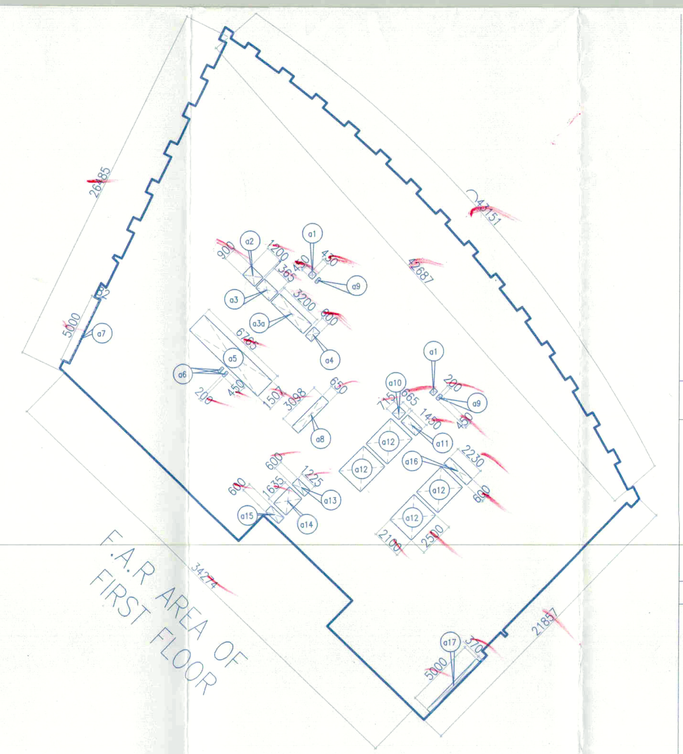
ADDITION -G1(GROUND FLOOR)													
NO.		A		B		C				S	AREA OF = S(S-A)(S-B)(S-C)		AREA (SQM.)
g1	=	21.759	+	42.687	+	49.433	/	2	=	56.940	214310.868		462.937
g2	=	49.433	+	34.274	+	26.485	/	2	=	55.096	185875.483		431.133
g8	=	0.956	+	1.051	+	0.442	/	2	=	1.225	0.045		0.211
g9	=	1.051	+	1.270	+	0.818	/	2	=	1.570	0.183		0.428
g10	=	1.046	+	1.270	+	0.720	/	2	=	1.518	0.142		0.377
						TOTAL			=				895.086

ADDITION -G2(GROUND FLOOR)															
g3	=	0.5	X	(0.115+0.201)	X	0.535	X	2	=	0.169	sqm.				
g3a	=	0.5	X	(1.100+0.950)	X	0.453			=	0.464	sqm.				
g3b	=	0.5	X	(0.597+0.748)	X	0.453			=	0.305	sqm.				
g4	=			0.535	X	1.000	X	5	=	2.675	sqm.				
g5	=	0.5	X	(0.968+0.890)	X	0.537			=	0.499	sqm.				
g6	=			0.152	X	0.446			=	0.068	sqm.				
g7	=			1.000	X	0.442	X	14	=	6.188	sqm.				
g11	=			12.604	X	0.605			=	7.625	sqm.				
g12	=			0.450	X	0.230			=	0.104	sqm.				
g13	=			2.080	X	0.592			=	1.242	sqm.				
g14	=			6.355	X	1.047			=	6.654	sqm.				
						TOTAL			=	25.992	sqm.				

ADDITION - G3(GROUND FLOOR)															
g15	=	3.14	X	(84.767*84.767)	X	29.167/360	-	0.5	X	(84.767-2.744)	X	42.687	=	77.327	sqm.
										TOTAL			=	77.327	sqm.

DEDUCTION -GR(GROUND FLOOR)							
gr1	=	8.680	X	2.530	=	21.960	sqm.
				TOTAL	=	21.960	sqm.

FAR AREA OF GROUND FLOOR = ADDITION (G1) + ADDITION (G2) + ADDITION (G3) - DEDUCTION (GR)
= 895.086 + 25.992 + 77.327 - 21.960
= 998.405 - 21.960
= 976.445 SQM



F.A.R AREA OF FIRST FLOOR

DEDUCTION -A(FIRST FLOOR)										
a1	=	0.430	X	0.450	X	2	=	0.387	sqm.
a2	=	1.200	X	0.900			=	1.080	sqm.
a3	=	1.365	X	0.900			=	1.229	sqm.
a3a	=	3.200	X	0.900			=	2.880	sqm.
a4	=	0.600	X	0.900			=	0.540	sqm.
a5	=	6.765	X	1.500			=	10.148	sqm.
a6	=	0.200	X	0.450	X	2	=	0.180	sqm.
a7	=	0.082	X	5.000			=	0.410	sqm.
a8	=	0.650	X	3.098			=	2.014	sqm.
a9	=	0.200	X	0.450	X	2	=	0.180	sqm.
a10	=	0.665	X	0.715			=	0.475	sqm.
a11	=	1.450	X	0.715			=	1.037	sqm.
a12	=	2.100	X	2.500	X	4	=	21.000	sqm.
a13	=	1.225	X	0.600			=	0.735	sqm.
a14	=	1.225	X	1.635			=	2.003	sqm.
a15	=	1.225	X	0.600			=	0.735	sqm.
a16	=	2.230	X	0.600			=	1.338	sqm.
a17	=	0.370	X	5.000			=	1.850	sqm.
				TOTAL			=	48.220	sqm.

FAR AREA OF FIRST FLOOR = TOTAL AREA OF GROUND FLOOR - DEDUCTION(A)
= 976.445 - 48.220
= 928.225 SQM

F.A.R AREA OF TYPICAL FLOOR(2nd, 4th,6th,8th & 12th)

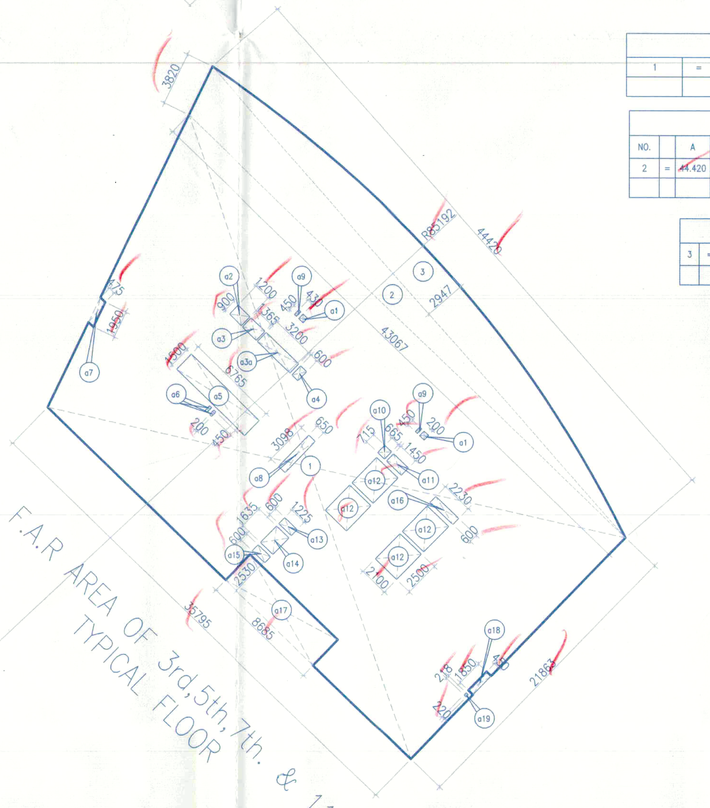
ADDITION -1(TYPICAL FLOOR)								
1	=	0.5	X	(43.068+35.795)	X	21.863	=	862.080 sqm.
						TOTAL	=	862.080 sqm.

ADDITION -2(TYPICAL FLOOR)													
NO.		A		B		C				S	AREA OF = S(S-A)(S-B)(S-C)		AREA (SQM.)
2	=	44.420	+	43.067	+	3.820	/	2	=	45.654	6093.263		78.059
						TOTAL			=				78.059

ADDITION -3(TYPICAL FLOOR)															
3	=	3.14	X	(85.192*85.192)	X	30.224/360	-	0.5	X	(85.192-2.947)	X	44.420	=	86.611	sqm.
										TOTAL			=	86.611	sqm.

DEDUCTION -A(TYPICAL FLOOR)									
a1	=	0.430	X	0.450	X	2	=	0.387	sqm.
a2	=	1.200	X	0.900			=	1.080	sqm.
a3	=	1.365	X	0.900			=	1.229	sqm.
a3a	=	3.200	X	0.900			=	2.880	sqm.
a4	=	0.600	X	0.900			=	0.540	sqm.
a5	=	6.765	X	1.500			=	10.148	sqm.
a6	=	0.200	X	0.450	X	2	=	0.180	sqm.
a7	=	0.475	X	1.950			=	0.926	sqm.
a8	=	0.650	X	3.098			=	2.014	sqm.
a9	=	0.200	X	0.450	X	2	=	0.180	sqm.
a10	=	0.665	X	0.715			=	0.475	sqm.
a11	=	1.450	X	0.715			=	1.037	sqm.
a12	=	2.100	X	2.500	X	4	=	21.000	sqm.
a13	=	1.225	X	0.600			=	0.735	sqm.
a14	=	1.225	X	1.635			=	2.003	sqm.
a15	=	1.225	X	0.600			=	0.735	sqm.
a16	=	2.230	X	0.600			=	1.338	sqm.
a17	=	8.685	X	2.530			=	21.973	sqm.
a18	=	0.450	X	1.850			=	0.833	sqm.
a19	=	0.220	X	0.218			=	0.048	sqm.
				TOTAL			=	69.740	sqm.

FAR AREA OF 2nd,4th,6th,8th & 12th (TYPICAL) FLOOR = ADDITION(1) + ADDITION(2) + ADDITION(3) - DEDUCTION(A)
= 862.080 + 78.059 + 86.611 - 69.740
= 1026.75 - 69.740
= 957.01 SQM



F.A.R AREA OF 3rd,5th,7th, & 11th TYPICAL FLOOR

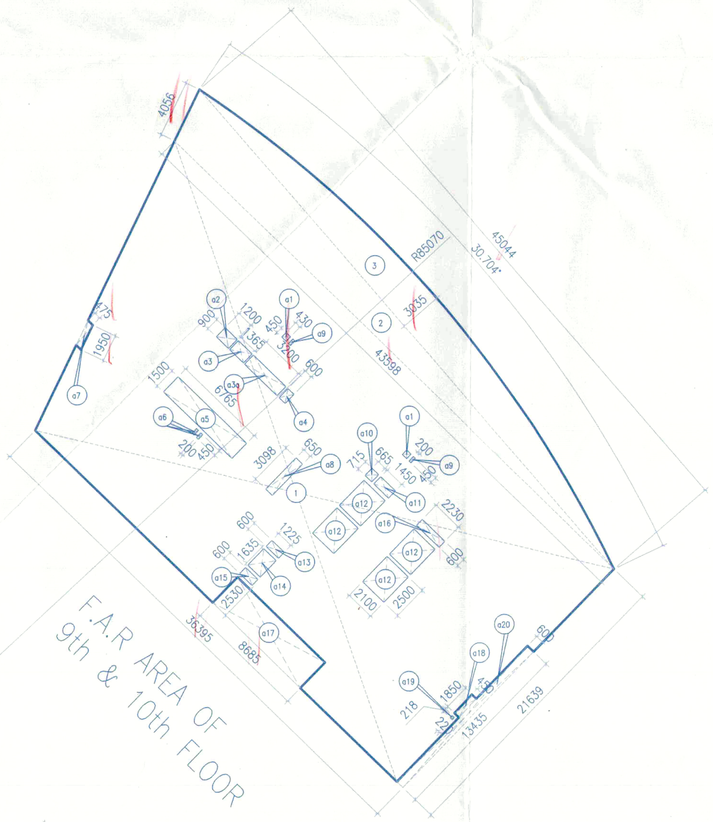
ADDITION -3(TYPICAL FLOOR)								
1	=	0.5	X	(43.068+35.795)	X	21.863	=	862.080 sqm.
						TOTAL	=	862.080 sqm.

ADDITION -2(TYPICAL FLOOR)													
NO.		A		B		C				S	AREA OF = S(S-A)(S-B)(S-C)		AREA (SQM.)
2	=	44.420	+	43.067	+	3.820	/	2	=	45.654	6093.263		78.059
						TOTAL			=				78.059

ADDITION -1(TYPICAL FLOOR)															
3	=	3.14	X	(85.192*85.192)	X	30.224/360	-	0.5	X	(85.192-2.947)	X	44.420	=	86.611	sqm.
										TOTAL			=	86.611	sqm.

DEDUCTION -A(TYPICAL FLOOR)									
a1	=	0.430	X	0.450	X	2	=	0.387	sqm.
a2	=	1.200	X	0.900			=	1.080	sqm.
a3	=	1.365	X	0.900			=	1.229	sqm.
a3a	=	3.200	X	0.900			=	2.880	sqm.
a4	=	0.600	X	0.900			=	0.540	sqm.
a5	=	6.765	X	1.500			=	10.148	sqm.
a6	=	0.200	X	0.450	X	2	=	0.180	sqm.
a7	=	0.475	X	1.950			=	0.926	sqm.
a8	=	0.650	X	3.098			=	2.014	sqm.
a9	=	0.200	X	0.450	X	2	=	0.180	sqm.
a10	=	0.665	X	0.715			=	0.475	sqm.
a11	=	1.450	X	0.715			=	1.037	sqm.
a12	=	2.100	X	2.500	X	4	=	21.000	sqm.
a13	=	1.225	X	0.600			=	0.735	sqm.
a14	=	1.225	X	1.635			=	2.003	sqm.
a15	=	1.225	X	0.600			=	0.735	sqm.
a16	=	2.230	X	0.600			=	1.338	sqm.
a17	=	8.685	X	2.530			=	21.973	sqm.
a18	=	0.450	X	1.850			=	0.833	sqm.
a19	=	0.220	X	0.218			=	0.048	sqm.
				TOTAL			=	69.740	sqm.

FAR AREA OF 3rd,5th,7th & 11th (TYPICAL) FLOOR = ADDITION(1) + ADDITION(2) + ADDITION(3) - DEDUCTION(A)
= 862.080 + 78.059 +86.611 - 69.740
= 1026.75 - 69.740
= 957.01 SQM



F.A.R AREA OF 9th & 10th FLOOR

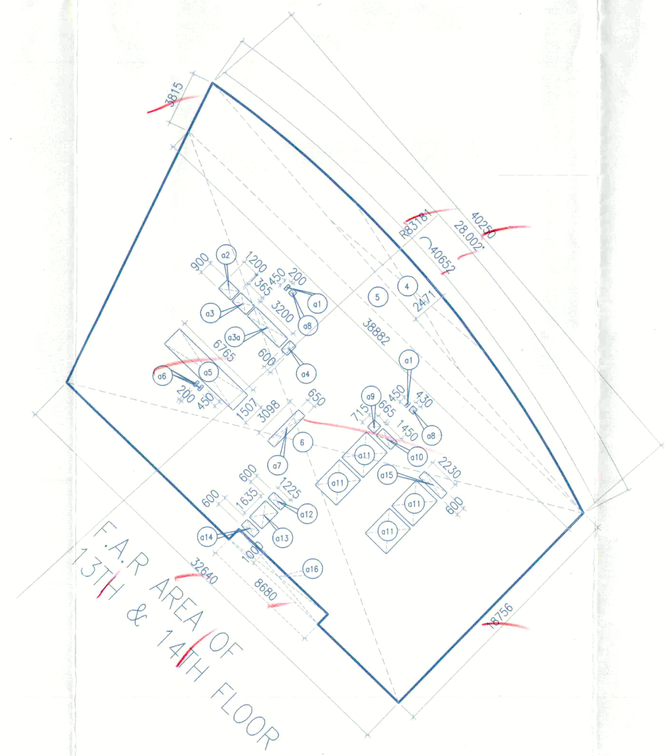
ADDITION -1								
1	=	0.5	X	(43.598+36.595)	X	21.639	=	865.484 sqm.
						TOTAL	=	865.484 sqm.

ADDITION -2													
NO.		A		B		C				S	AREA OF = S(S-A)(S-B)(S-C)		AREA (SQM.)
2	=	4.056	+	43.598	+	45.044	/	2	=	46.349	7037.563		83.889
						TOTAL			=				83.889

ADDITION -3															
3	=	3.14	X	(85.070*85.070)	X	30.704/360	-	0.5	X	(85.070-2.035)	X	45.044	=	90.502	sqm.
										TOTAL			=	90.502	sqm.

DEDUCTION -A									
a1	=	0.430	X	0.450	X	2	=	0.387	sqm.
a2	=	1.200	X	0.900			=	1.080	sqm.
a3	=	1.365	X	0.900			=	1.229	sqm.
a3a	=	3.200	X	0.900			=	2.880	sqm.
a4	=	0.600	X	0.900			=	0.540	sqm.
a5	=	6.765	X	1.500			=	10.148	sqm.
a6	=	0.200	X	0.450	X	2	=	0.180	sqm.
a7	=	0.475	X	1.950			=	0.926	sqm.
a8	=	0.650	X	3.098			=	2.014	sqm.
a9	=	0.200	X	0.450	X	2	=	0.180	sqm.
a10	=	0.665	X	0.715			=	0.475	sqm.
a11	=	1.450	X	0.715			=	1.037	sqm.
a12	=	2.100	X	2.500	X	4	=	21.000	sqm.
a13	=	1.225	X	0.600			=	0.735	sqm.
a14	=	1.225	X	1.635			=	2.003	sqm.
a15	=	1.225	X	0.600			=	0.735	sqm.
a16	=	2.230	X	0.600			=	1.338	sqm.
a17	=	8.685	X	2.530			=	21.973	sqm.
a18	=	0.450	X	1.850			=	0.833	sqm.
a19	=	0.220	X	0.218			=	0.048	sqm.
a20	=	0.600	X	13.435			=	8.061	sqm.
				TOTAL			=	77.801	sqm.

FAR AREA OF 9th & 10th FLOOR = ADDITION 1) + ADDITION (2) + ADDITION (3) - DEDUCTION (A)
= 865.484 + 83.889 + 90.502 - 77.801
= 1039.875 - 77.801
= 962.074 SQM



F.A.R AREA OF 13TH & 14TH FLOOR

ADDITION -4(13th & 14th FLOOR)															
4	=	3.14	X	(83.181*83.181)	X	28.002/360	-	0.5	X	(83.181-2.473)	X	40.249	=	65.665	sqm.
										TOTAL			=	65.665	sqm.

ADDITION -5(13th & 14th FLOOR)													
NO.		A		B		C				S	AREA OF = S(S-A)(S-B)(S-C)		AREA (SQM.)
5	=	40.250	+	38.882	+	3.815	/	2	=	41.474	4952.094		70.371
						TOTAL			=				70.371

ADDITION -6(13th & 14th FLOOR)									
6	=	0.5	X	(38.882+32.639)	X	18.756	=	670.724	sqm.
						TOTAL	=	670.724	sqm.

DEDUCTION -A(13TH & 14TH FLOOR)									
a1	=	0.200	X	0.450	X	2	=	0.180	sqm.
a2	=	1.200	X	0.900			=	1.080	sqm.
a3	=	1.365	X	0.900			=	1.229	sqm.
a3a	=	3.200	X	0.900			=	2.880	sqm.
a4	=	0.600	X	0.900			=	0.540	sqm.
a5	=	6.765	X	1.500			=	10.148	sqm.
a6	=	0.200	X	0.450	X	2	=	0.180	sqm.
a7	=	0.650	X	3.098			=	2.014	sqm.
a8	=	0.430	X	0.450	X	2	=	0.387	sqm.
a9	=	0.200	X	0.715			=	0.143	sqm.
a10	=	1.450	X	0.715			=	1.037	sqm.
a11	=	2.100	X	2.500	X	4	=	21.000	sqm.
a12	=	1.225	X	0.600			=	0.735	sqm.
a13	=	1.225	X	1.635			=	2.003	sqm.
a14	=	1.225	X	0.600			=	0.735	sqm.
a15	=	2.230	X	0.600			=	1.338	sqm.
a16	=	8.680	X	1.000			=	8.680	sqm.
				TOTAL			=	54.307	sqm.

FAR AREA OF 13th & 14th FLOOR = ADDITION(4) + ADDITION(5) + ADDITION(6) - DEDUCTION(A)
= 65.665 + 70.371 + 670.724 - 54.307
= 806.76 - 54.307
= 752.453 SQM

Note :-

1. BUILDING WILL BE DESIGNED (STRUCTURES) AS PER RELEVENT IS CODES FOR EARTH QUAKE RESISTANCE.
2. THE BUILDING COMPLY WITH FIRE NORMS

LEGEND:-

Project:

PROPOSED COMMERCIAL COLONY AREA MEASURING 2.961 ACRES. (LICENCE NO. 110 OF 2010 DATED 29-12-2010) IN SECTOR-82-A, GURGAON MANESAR URBAN COMPLEX BEING DEVELOPED BY SH. TEJPAL S/O SH. BADAM SINGH AND SMT. SAKUNTALA DEVI W/O SH. TEJPAL IN COLLABORATION WITH M/S VATIKA LTD.

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JULY-2011 | Scale : 1:200 | N

Drawing Title:- ARAE CALCULATION OF ALL FLOOR (BLOCK-D)

Drawing No:- D-05

VATIKA TOWN SQUARE