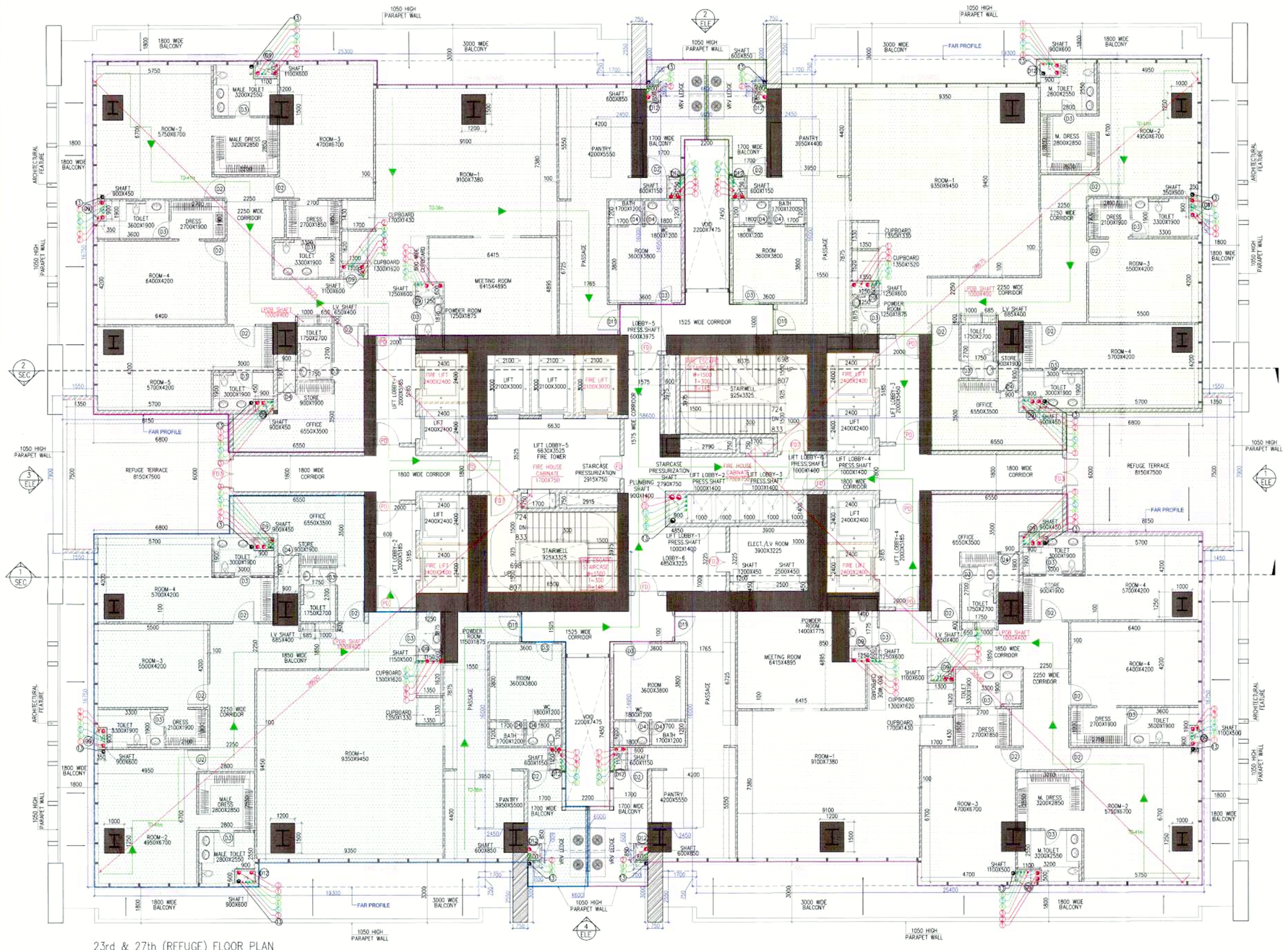
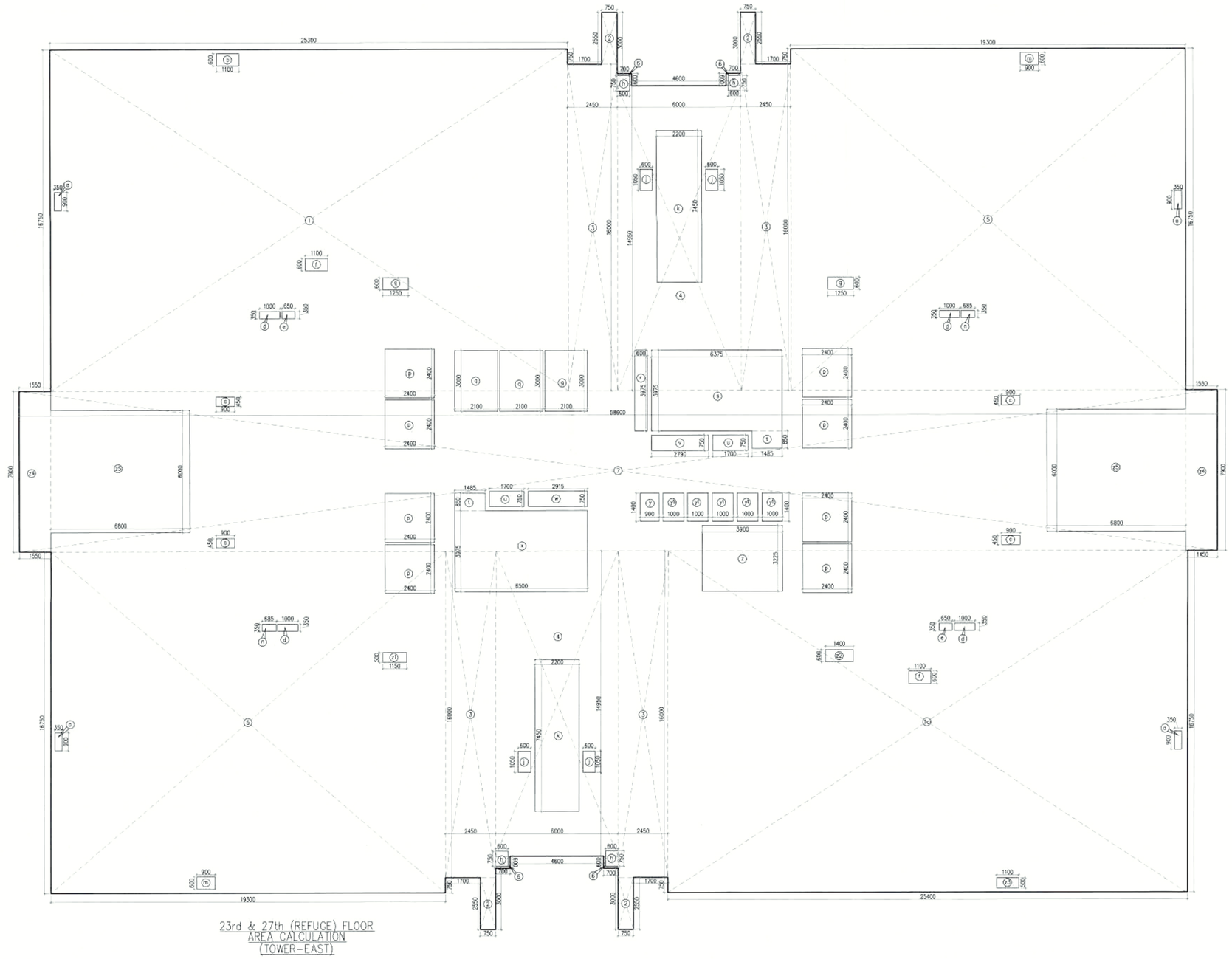


23rd & 27th (REFUGE) FLOOR PLAN
(TOWER-EAST)
SERVICE APARTMENT



23rd & 27th (REFUGE) FLOOR
AREA CALCULATION
(TOWER-EAST)

FLOOR	LVL	NO. STEPS	TOTAL NO. STEPS
23rd	+100250	671–697	27
27th	+116450	780–806	27

Tower-E Tp & Core: Calculation of Refuge area

Gross Floor Area of Refuge&Floor Above Refuge = 4184 Sqm.

As per NBC Part-4 Clause 4.3, per person floor 12.5sqm per person is considered.

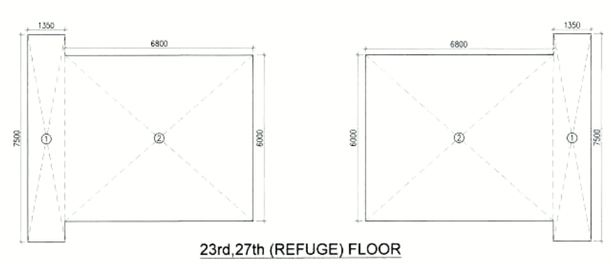
Gross Occupant Load = 335 Pax. (Calculated as 4184/12.5 sqm)

As per NBC Clause E-4(d), per person refuge area needs to be calculated based on 0.3 sqm per person.

Refuge Area Required at 5th Floor=335 x 0.3 Sqm/Person = 0.9 Sqm (0.9 Sqm/100 occupants for wheelchair space)

Refuge Area Required = 98.120 sqm.

Refuge Area Provided= 101.850 sqm.



23rd,27th (REFUGE) FLOOR

SCHEDULE OF JOINERY

ITEM NO	TAG	DETAILS	SIZE WIDTH	SIZE HEIGHT	LOCATION
1	D-	LED MIN FIRE RATED HDF HARDWOOD DOOR	1100	2400	LIFT LOBBY CORRIDOR ENTRY DOOR
2	D11	60 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2400	ALL MAIN ENTRY DOOR (REFUGE FLOOR)
3	D12	120 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2100	ELECTRIC SHAFT
4	D13	120 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2400	CORRIDOR (REFUGE FLOOR)
5	D-13	60 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2100	SERVICE SHAFT
6	D17	FIRE DOOR	1200	2400	STAIRCASE DOOR PRESSURIZED DOOR
7	D	ALUMINIUM GLAZED DOOR	1200	2400	BALCONY DOOR
8	D1	HDF HARDWOOD DOOR	1200	2400	ENTRY DOOR
9	D2	HDF HARDWOOD DOOR	1000	2400	BEDROOM DOORS
10	D3	HDF HARDWOOD DOOR	850	2400	KITCHEN DOORS/TOILET DOOR
11	D4	HDF HARDWOOD DOOR	750	2400	UTILITY/BALCONY/TOILET DOORS
12	D5	SLIDING HDF HARDWOOD DOOR	950	2400	CARETAKER ROOM TOILET
13	D6	MS GLASS DOOR	900	2400	EHCL
14	D8	HDF HARDWOOD DOOR	1200	2400	MACHINE ROOM TERRACE
15	D9	HDF HARDWOOD DOOR	750	2100	PLUMBING SHAFT
16	D10	HDF HARDWOOD DOOR	1000	2400	HANDICAP TOILET (STILT)
17	D11	ALUMINIUM DOOR	1800	2400	KITCHEN DOOR (OPENING IN BALCONY)
18	D12	HDF HARDWOOD DOOR	600	2100	SHAFT DOOR
19	F2	120 MIN FIRE RATED HDF FIRE RATED DOOR	1200	2400	PRIVATE LIFT LOBBY

23rd,27th (REFUGE) FLOOR AREA CALCULATION

GROSS – A									
1	=	2	X	1.350	X	7.500	=	20.250	**SQM**
2	=	2	X	6.800	X	6.000	=	81.600	**SQM**
						TOTAL	=	**101.850**	**SQM**
GROSS AREA OF 23rd,27th (REFUGE) FLOOR	=	**2039.237**	**SQM**						
GROSS AREA OF 17th & 18th, 24th TO 26th ,28th TO 30th FLOOR	=	**2011.884**	**SQM**						
TOTAL	=	**4050.831**	**SQM**						
REFUGE AREA REQUIRED	=	**4050.831X0.3/12.5**	=	**ADDITIONAL SPACE TO ACCOMMODATE ONE WHEEL CHAIR SPACE**					
	=	**97.220**	=	**0.9**					
	=	**98.120**	**SQM**						
REFUGE AREA PROVIDED	=	**101.850**	**SQM**						

LEGENDS :

01.	1	150Ø SOIL PIPE
02.	2	150Ø WASTE PIPE
03.	3	75Ø VENT PIPE
04.	4	25 DWS PIPE DN. 5 TAKE
05.	5	40 FWS PIPE DN. 5 TAKE
06.	6	25 DWS PIPE DN. 5 TAKE FROM HYD
07.	7	25 DWS PIPE RISER TO GRET FROM BASEMENT PLANT ROOM
08.	8	25 DWS PIPE RISER TO GRET FROM SERVICE FLOOR PLANT ROOM
09.	9	25 FWS PIPE RISER TO GRET FROM BASEMENT PLANT ROOM
10.	10	25 FWS PIPE RISER TO GRET FROM SERVICE FLOOR PLANT ROOM
11.	11	20Ø SOIL PIPE
12.	12	20Ø WASTE PIPE
13.	13	15Ø RAIN WATER PIPE
14.	14	20Ø RAIN WATER PIPE

(23rd & 27th) REFUGE FLOOR AREA CALCULATION (TOWER-EAST)

GROSS – A									
1	=	1	X	25.300	X	16.750	=	423.775	SQM
1a	=	1	X	25.400	X	16.750	=	425.450	SQM
2	=	4	X	0.750	X	2.550	=	7.650	SQM
3	=	4	X	2.450	X	16.000	=	156.800	SQM
4	=	2	X	6.000	X	14.950	=	179.400	SQM
5	=	2	X	19.300	X	16.750	=	646.550	SQM
6	=	4	X	0.700	X	0.600	=	1.680	SQM
7	=	1	X	58.600	X	7.900	=	462.940	SQM
						TOTAL	=	**2304.245**	**SQM**
GROSS – B									
a	=	4	X	0.350	X	0.900	=	1.260	SQM
b	=	1	X	1.100	X	0.600	=	0.660	SQM
c	=	4	X	0.900	X	0.450	=	1.620	SQM
d	=	4	X	1.000	X	0.350	=	1.400	SQM
e	=	2	X	0.650	X	0.350	=	0.455	SQM
f	=	2	X	1.100	X	0.600	=	1.320	SQM
g	=	2	X	1.250	X	0.600	=	1.500	SQM
h	=	4	X	0.600	X	0.750	=	1.800	SQM
j	=	4	X	0.600	X	1.050	=	2.520	SQM
k	=	2	X	2.200	X	7.450	=	32.780	SQM
m	=	2	X	0.900	X	0.600	=	1.080	SQM
n	=	2	X	0.685	X	0.350	=	0.480	SQM
p	=	8	X	2.400	X	2.400	=	46.080	SQM
q	=	3	X	2.100	X	3.000	=	18.900	SQM
r	=	1	X	0.600	X	3.975	=	2.385	SQM
s	=	1	X	6.375	X	3.975	=	25.341	SQM
t	=	2	X	1.485	X	0.850	=	2.525	SQM
u	=	2	X	1.700	X	0.750	=	2.550	SQM
v	=	1	X	2.790	X	0.750	=	2.093	SQM
w	=	1	X	2.915	X	0.750	=	2.186	SQM
x	=	1	X	6.500	X	3.975	=	25.838	SQM
y	=	1	X	0.900	X	1.400	=	1.260	SQM
y1	=	5	X	1.000	X	1.400	=	7.000	SQM
z	=	1	X	3.900	X	3.225	=	12.578	SQM
z1	=	1	X	1.150	X	0.500	=	0.575	SQM
z2	=	1	X	1.400	X	0.600	=	0.840	SQM
z3	=	1	X	1.100	X	0.500	=	0.550	SQM
z4	=	2	X	1.550	X	7.900	=	24.490	SQM
z5	=	2	X	6.800	X	6.000	=	81.600	SQM
						TOTAL	=	**303.663**	**SQM**

TOTAL FAR AREA OF (23rd & 27th) REFUGE FLOOR AREA CALCULATION (TOWER-EAST)	=	**GROSS - A**	-	**GROSS – B**	
	=	**2304.245**	-	**303.663**	
	=		**2000.582**		**SQM**

BUILT UP AREA OF (23rd & 27th) REFUGE FLOOR AREA CALCULATION (TOWER-EAST)

GROSS – C									
s	=	1	X	6.375	X	3.975	=	25.341	SQM
t	=	2	X	1.485	X	0.850	=	2.525	SQM
x	=	1	X	6.500	X	3.975	=	25.838	SQM
z	=	1	X	3.900	X	3.225	=	12.578	SQM
z4	=	2	X	1.550	X	7.900	=	24.490	SQM
z5	=	2	X	6.800	X	6.000	=	81.600	SQM
						TOTAL	=	**172.370**	**SQM**

TOTAL BUILT UP AREA OF (23rd & 27th) REFUGE FLOOR AREA CALCULATION (TOWER-EAST)	=	**FAR AREA**	+	**GROSS – C**	
	=	**2000.582**	+	**172.370**	
	=		**2172.952**		**SQM**
TOTAL NON FAR AREA OF(23rd & 27th) REFUGE FLOOR AREA CALCULATION (TOWER-EAST)	=	**BUILT UP AREA**	-	**FAR AREA**	
	=	**2172.952**	-	**2000.582**	
	=		**172.370**		**SQM**

Note :-

1. BUILDING WILL BE DESIGNED (STRUCTURES) AS PER RELEVANT IS CODES FOR EARTH QUAKE RESISTANCE.

PROJECT

REVISED BUILDING PLANS OF COMMERCIAL COLONY(TOD) MEASURING 17.4875 ACRES (LICENCE NO. 240 OF 2007 DATED 25.10.2007) AND 6.99025 ACRES (LICENCE NO. 239 OF 2007 DATED 25.10.2007, LICENCE NO. 241 OF 2007 DATED 25.10.2007 & LICENCE NO. 199 OF 2008 DATED 8.12.2008) TOTALLING **24.47775 ACRES** IN SECTOR-62, GURUGRAM MANESAR URBAN COMPLEX BEING DEVELOPED BY PIONEER URBAN LAND & INFRASTRUCTURE LTD.

CLIENT

PIONEER URBAN LAND & INFRASTRUCTURE LTD.

Pioneer Urban
Ground Floor
Near GOLF Course Extension Road,
Sector-62,
Gurugram -122001 Haryana

DESIGN ARCHITECT

RSP
RSP Design consultants (India) Pvt. Ltd.
103, First Floor, Restech Business Tower, Sector: 48, Sohna Road Gurgaon, 122018, India TEL: 4706868 FAX: 4706818
HEAD OFFICE:NO.30, MUSEUM ROAD, BANGALORE-560 001
TEL: 25596868 FAX:25596818
EMAIL: rsp@rspindia.net ; www.rspindia.net

ASSOCIATE ARCHITECT

RSMS ARCHITECTS
RSMS ARCHITECTS PVT. LTD.
69,Nora Niwas Bhawani Kunj
(Behind D2), Vasant Kunj,
New Delhi-110070.
Tel.: 011-26898616,26898617
www.rsms-arch.com

DTP(HQ) ATP(HQ)

Checked and found ok for Public Health (Internal) Service only subject to comments in inforwarding letter No. 2610-03 dt 23.7.24

Executive Engineer (HQ)
for CHief Engineer
HSVP, Panchkula

SANCTION
TO BE READ WITH I.L.O OFFICE
MEMO NO.:
DATED :

ARCHITECT'S SEAL & SIGNATURE	OWNER'S SEAL & SIGNATURE

JUNE.-2024	Scale : 1:100
Drawing Title:- 23rd & 27th(REFUGE) FLOOR PLAN & AREA CALCULATION (TOWER EAST)	Drawing No:- ES-06 28082024-3