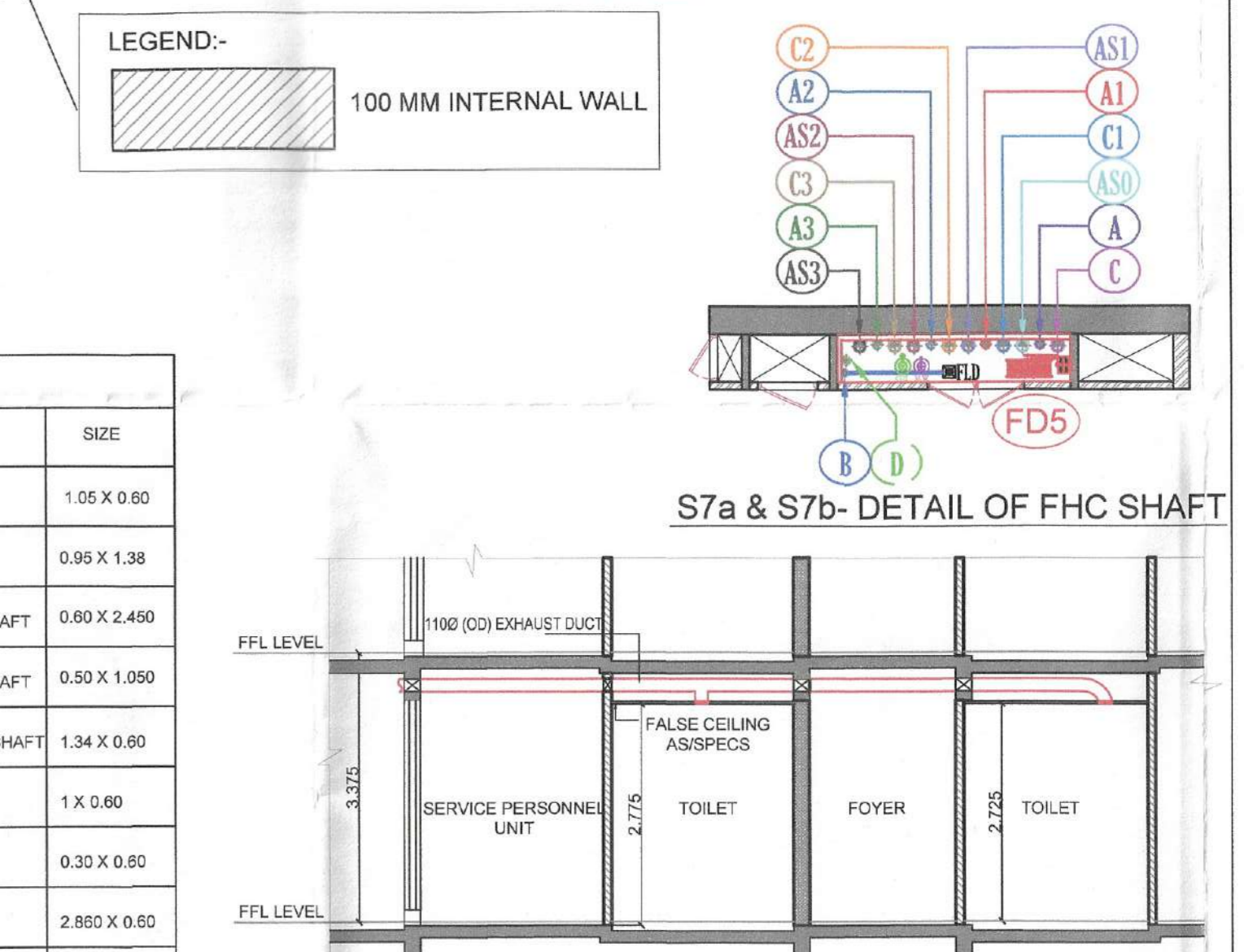


LEGEND PIPING:

S.No.	DESCRIPTION
1.	110 ØD GAS PIPE
2.	110 ØD WASTE PIPE
3.	110 ØD KITCHEN WASTE PIPE
4.	110 ØD WASHING MACHINE WASTE PIPE
5.	110 ØD GARAGE ROOM WASTE PIPE
6.	110 ØD WPC BATH WATER PIPE
7.	110 ØD WPC KITCHEN DRAIN PIPE
8.	110 ØD WPC UTILITY BALCONY DRAIN PIPE
9.	110 ØD WPC BATH WATER PIPE
10.	110 ØD WPC BALCONY DRAIN PIPE
11.	DOMESTIC WATER SUPPLY IN TAKE (Ø100)
12.	DOMESTIC WASHING MACHINE WATER SUPPLY (Ø100) (FLOOR)
13.	FLOORING WATER SUPPLY IN TAKE (Ø100)
14.	60Ø DOMESTIC WATER SUPPLY AREA TO TERRACE OUT
15.	50Ø FLOORING WATER SUPPLY AREA TO TERRACE OUT
16.	110 ØD DOMESTIC WATER SUPPLY IN TAKE FOR LOWER FLOOR (Ø100)
17.	110 ØD FLOORING WATER SUPPLY IN TAKE FOR LOWER FLOOR (Ø100)
18.	AS PER WATER SUPPLY INSTRUMENT DIAGRAM

LEGEND FIRE FIGHTING PIPES:

S.No.	DESCRIPTION
A1	100Ø FIRE FIGHTING PIPE FOR ZONE-1
A2	100Ø FIRE FIGHTING PIPE FOR ZONE-2
A3	100Ø FIRE FIGHTING PIPE FOR ZONE-3
A4	100Ø FIRE FIGHTING PIPE FOR ZONE-4
A5	100Ø FIRE FIGHTING PIPE FOR ZONE-5
A6	100Ø FIRE FIGHTING PIPE FOR ZONE-6
A7	100Ø FIRE FIGHTING PIPE FOR ZONE-7
A8	100Ø FIRE FIGHTING PIPE FOR ZONE-8
A9	100Ø FIRE FIGHTING PIPE FOR ZONE-9
A10	100Ø FIRE FIGHTING PIPE FOR ZONE-10
A11	100Ø FIRE FIGHTING PIPE FOR ZONE-11
A12	100Ø FIRE FIGHTING PIPE FOR ZONE-12
A13	100Ø FIRE FIGHTING PIPE FOR ZONE-13
A14	100Ø FIRE FIGHTING PIPE FOR ZONE-14
A15	100Ø FIRE FIGHTING PIPE FOR ZONE-15
A16	100Ø FIRE FIGHTING PIPE FOR ZONE-16
A17	100Ø FIRE FIGHTING PIPE FOR ZONE-17
A18	100Ø FIRE FIGHTING PIPE FOR ZONE-18
A19	100Ø FIRE FIGHTING PIPE FOR ZONE-19
A20	100Ø FIRE FIGHTING PIPE FOR ZONE-20
A21	100Ø FIRE FIGHTING PIPE FOR ZONE-21
A22	100Ø FIRE FIGHTING PIPE FOR ZONE-22
A23	100Ø FIRE FIGHTING PIPE FOR ZONE-23
A24	100Ø FIRE FIGHTING PIPE FOR ZONE-24
A25	100Ø FIRE FIGHTING PIPE FOR ZONE-25
A26	100Ø FIRE FIGHTING PIPE FOR ZONE-26
A27	100Ø FIRE FIGHTING PIPE FOR ZONE-27
A28	100Ø FIRE FIGHTING PIPE FOR ZONE-28
A29	100Ø FIRE FIGHTING PIPE FOR ZONE-29
A30	100Ø FIRE FIGHTING PIPE FOR ZONE-30
A31	100Ø FIRE FIGHTING PIPE FOR ZONE-31
A32	100Ø FIRE FIGHTING PIPE FOR ZONE-32
A33	100Ø FIRE FIGHTING PIPE FOR ZONE-33
A34	100Ø FIRE FIGHTING PIPE FOR ZONE-34
A35	100Ø FIRE FIGHTING PIPE FOR ZONE-35
A36	100Ø FIRE FIGHTING PIPE FOR ZONE-36
A37	100Ø FIRE FIGHTING PIPE FOR ZONE-37
A38	100Ø FIRE FIGHTING PIPE FOR ZONE-38
A39	100Ø FIRE FIGHTING PIPE FOR ZONE-39
A40	100Ø FIRE FIGHTING PIPE FOR ZONE-40
A41	100Ø FIRE FIGHTING PIPE FOR ZONE-41
A42	100Ø FIRE FIGHTING PIPE FOR ZONE-42
A43	100Ø FIRE FIGHTING PIPE FOR ZONE-43
A44	100Ø FIRE FIGHTING PIPE FOR ZONE-44
A45	100Ø FIRE FIGHTING PIPE FOR ZONE-45
A46	100Ø FIRE FIGHTING PIPE FOR ZONE-46
A47	100Ø FIRE FIGHTING PIPE FOR ZONE-47
A48	100Ø FIRE FIGHTING PIPE FOR ZONE-48
A49	100Ø FIRE FIGHTING PIPE FOR ZONE-49
A50	100Ø FIRE FIGHTING PIPE FOR ZONE-50
A51	100Ø FIRE FIGHTING PIPE FOR ZONE-51
A52	100Ø FIRE FIGHTING PIPE FOR ZONE-52
A53	100Ø FIRE FIGHTING PIPE FOR ZONE-53
A54	100Ø FIRE FIGHTING PIPE FOR ZONE-54
A55	100Ø FIRE FIGHTING PIPE FOR ZONE-55
A56	100Ø FIRE FIGHTING PIPE FOR ZONE-56
A57	100Ø FIRE FIGHTING PIPE FOR ZONE-57
A58	100Ø FIRE FIGHTING PIPE FOR ZONE-58
A59	100Ø FIRE FIGHTING PIPE FOR ZONE-59
A60	100Ø FIRE FIGHTING PIPE FOR ZONE-60
A61	100Ø FIRE FIGHTING PIPE FOR ZONE-61
A62	100Ø FIRE FIGHTING PIPE FOR ZONE-62
A63	100Ø FIRE FIGHTING PIPE FOR ZONE-63
A64	100Ø FIRE FIGHTING PIPE FOR ZONE-64
A65	100Ø FIRE FIGHTING PIPE FOR ZONE-65
A66	100Ø FIRE FIGHTING PIPE FOR ZONE-66
A67	100Ø FIRE FIGHTING PIPE FOR ZONE-67
A68	100Ø FIRE FIGHTING PIPE FOR ZONE-68
A69	100Ø FIRE FIGHTING PIPE FOR ZONE-69
A70	100Ø FIRE FIGHTING PIPE FOR ZONE-70
A71	100Ø FIRE FIGHTING PIPE FOR ZONE-71
A72	100Ø FIRE FIGHTING PIPE FOR ZONE-72
A73	100Ø FIRE FIGHTING PIPE FOR ZONE-73
A74	100Ø FIRE FIGHTING PIPE FOR ZONE-74
A75	100Ø FIRE FIGHTING PIPE FOR ZONE-75
A76	100Ø FIRE FIGHTING PIPE FOR ZONE-76
A77	100Ø FIRE FIGHTING PIPE FOR ZONE-77
A78	100Ø FIRE FIGHTING PIPE FOR ZONE-78
A79	100Ø FIRE FIGHTING PIPE FOR ZONE-79
A80	100Ø FIRE FIGHTING PIPE FOR ZONE-80
A81	100Ø FIRE FIGHTING PIPE FOR ZONE-81
A82	100Ø FIRE FIGHTING PIPE FOR ZONE-82
A83	100Ø FIRE FIGHTING PIPE FOR ZONE-83
A84	100Ø FIRE FIGHTING PIPE FOR ZONE-84
A85	100Ø FIRE FIGHTING PIPE FOR ZONE-85
A86	100Ø FIRE FIGHTING PIPE FOR ZONE-86
A87	100Ø FIRE FIGHTING PIPE FOR ZONE-87
A88	100Ø FIRE FIGHTING PIPE FOR ZONE-88
A89	100Ø FIRE FIGHTING PIPE FOR ZONE-89
A90	100Ø FIRE FIGHTING PIPE FOR ZONE-90
A91	100Ø FIRE FIGHTING PIPE FOR ZONE-91
A92	100Ø FIRE FIGHTING PIPE FOR ZONE-92
A93	100Ø FIRE FIGHTING PIPE FOR ZONE-93
A94	100Ø FIRE FIGHTING PIPE FOR ZONE-94
A95	100Ø FIRE FIGHTING PIPE FOR ZONE-95
A96	100Ø FIRE FIGHTING PIPE FOR ZONE-96
A97	100Ø FIRE FIGHTING PIPE FOR ZONE-97
A98	100Ø FIRE FIGHTING PIPE FOR ZONE-98
A99	100Ø FIRE FIGHTING PIPE FOR ZONE-99
A100	100Ø FIRE FIGHTING PIPE FOR ZONE-100



TYPICAL HORIZONTAL VENTILATION SECTION FOR TOILET

TYPICAL HORIZONTAL VENTILATION CALCULATION FOR W.C.

S.NO	LOCATION	AREA	HEIGHT	VOLUME	ACH	DESIGN CFM	SELECTED CFM	SELECTED EXHAUST FAN
1.1	TYPICAL MECHANICAL VENTILATION FOR WC & TOILET							
1.1	Bedroom 4 toilet	60.06	8.94	537	12	107.39	100	1 # 100 CFM INLINE FAN
1.2	Spu Toilet	40.26	8.94	360	12	71.98	100	1 # 100 CFM INLINE FAN

TOWER-4 FAR AREA AT UNIT 1 PER FLOOR
(All Distances are in Meter & Areas in Sqm)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
1	1	3.900	0.650	2.535
2	1	3.150	4.875	15.356
3	1	7.975	3.075	24.523
4	1	4.150	4.205	17.451
5	1	3.900	0.670	2.613
6	1	19.100	7.650	146.115
7	1	1.725	2.200	3.795
8	1	4.150	4.300	17.850
9	1	5.500	1.800	9.900
10	1	3.450	1.950	6.728
TOTAL(A)				247.101

UNIT-1 FAR AREA CALCULATION = ADDITION(A) - REDUCTION (B)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
S1	1	0.625	0.250	0.156
S2	1	1.225	0.300	0.368
S3	1	0.300	0.725	0.218
S4	1	1.050	0.600	0.630
S5	1	1.000	0.300	0.315
TOTAL				1.686

UNIT-1 FAR AREA CALCULATION = ADDITION(A) - REDUCTION (B)

= 247.101 - 1.686

= **245.414 SQMT**

FAR AREA AT UNIT 2 PER FLOOR
(All Distances are in Meter & Areas in Sqm)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
1C	1	3.900	0.650	2.535
2	1	3.150	4.875	15.356
3	1	7.975	3.075	24.523
4	1	4.150	4.205	17.451
5	1	3.900	0.670	2.613
6A	1	18.925	7.650	144.770
7A	1	1.850	2.200	4.110
8	1	4.150	4.350	18.053
9	1	5.500	1.800	9.900
10	1	3.450	1.950	6.728
TOTAL(A)				245.344

DEDUCTION (B)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
S1	1	0.625	0.250	0.156
S2	1	1.225	0.300	0.368
S3	1	0.300	0.725	0.218
S4	1	1.050	0.600	0.630
S5	1	1.050	0.300	0.315
TOTAL				1.686

UNIT-2 FAR AREA CALCULATION = ADDITION(A) - REDUCTION (B)

= 245.344 - 1.686

= **243.658 SQMT**

CORE FAR AREA AT TYPICAL FLOOR
(All Distances are in Meter & Areas in Sqm)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
C1	1	5.011	1.194	5.983
C2	1	1.194	0.495	0.591
C3	1	6.001	1.506	9.036
C4	1	1.987	4.802	9.542
C5	1	1.248	0.516	0.644
C6	1	8.119	4.802	39.007
C7	1	9.600	8.848	84.941
TOTAL(A)				162.128

UNIT-2 FAR AREA CALCULATION = ADDITION(A) - REDUCTION (B)

= 243.658 - 162.128

= **81.530 SQMT**

NON FAR AREA (STAIRCASE) (D)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
N1	1	1.800	2.180	3.918
N2	1	1.700	1.250	2.125
N3	1	6.200	7.000	43.400
N4	1	2.800	5.199	14.557
TOTAL NON FAR AREA (D)				63.970

NON FAR AREA (DUCTION) (E)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
L3	1	3.000	2.200	6.600
NON FAR AREA (E)				6.600

TOTAL NON FAR AREA CALCULATION (D-E) =

= 63.970 - 6.600

= **57.370 SQMT**

TOTAL CORE FAR AREA CALCULATION = ADDITION(A) - REDUCTION (B)

= 162.128 - 80.598

= **81.530 SQMT**

TOTAL TYPICAL FLOOR FAR AREA CALCULATION = (TOTAL TYPICAL FLOOR UNIT 1 FAR AREA) + (TOTAL TYPICAL FLOOR UNIT 2 FAR AREA) + (TOTAL TYPICAL FLOOR CORE FAR AREA)

= 245.414 + 81.530 + 243.658

= **570.602 SQMT**

TOWER-4 TOTAL REFUGE AREA AT 16TH, 24TH & 33RD LVL
(All Distances are in Meter & Areas in Sqm)

ITEM	NO.S	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.M T.) = NO.X LENGTH X WIDTH
R1	1	11.000	1.950	21.450
R2	1	10.200	0.700	7.140
R3	0.5	0.700	0.700	0.245
R4	0.667	0.200	0.900	0.135
R5	0.667	0.186	0.900	0.123
R6	0.5	0.700	0.700	0.245
TOTAL(A)				30.508

GROSS AREA AT 17TH, 25TH & 33TH FLOOR(FAR+NON FAR AREA)

= 600.158 (A)

GROSS AREA AT 16TH, 24TH & 33RD FLOOR(FAR AREA +NON FAR AREA)

= 600.158 (B)

(FAR+NON FAR)

TOTAL GROSS AREA=(A+B)

= 1200.317

NO. OF PERSONS= (TOTAL GROSS AREA/12.5)

= 96.025

REFUGE AREA REQUIRED = (NO. OF PERSON X 3)

= 288.08 (C)

AREA ADDITIONAL FOR WHEEL CHAIR (Ø1.8 FOR UP TO 200 PERSON)

= 0.9 (D)

REFUGE AREA REQUIRED (NO. OF PERSON X 3 + AREA ADDITIONAL FOR WHEEL CHAIR)

= 297.98 (C+D)

REFUGE AREA PROVIDED

= 30.508 SQM

Sanctioned to be read with this office MEMO NO. DATED: _____

Member Secretary B.P.A.C. S.T.P. (HQ) Member B.P.A.C. S.T.P. (G) Chairman B.P.A.C. C.T.S.E. (HQ) Member B.P.A.C. C.T.S.E. (G) Member B.P.A.C. S.T.P. (HQ) Member B.P.A.C. S.T.P. (G)

1. BUILDING HAS AUTOMATIC SPRINKLER SYSTEM WHEREVER REQUIRED BY NBC.

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

3. MECHANICAL VENTILATION WITH 100% POWER BACK-UP FOR SERVICE AREAS.

PROJECT:

PROPOSED GROUP HOUSING COLONY MEASURING 5.875 ACRES UNDER TOD POLICY DATED 09.02.2016 (LICENCE NO. 50 OF 2019 DATED 07.03.2019) IN SECTOR -49, GURUGRAM BEING DEVELOPED BY ELAN ENCLAVE PRIVATE LIMITED UNDER COLLABORATION WITH V.A. AGRICULTURE PVT LTD

ARCHITECT'S SEAL & SIGNATURE

OWNER'S SEAL & SIGNATURE

GIAN P. NATHUR ARCHITECT B. Arch., M. CA, I.T.A. CA No. 801769

For ELAN ENCLAVE PRIVATE LIMITED Authorised Signatory

Checked and found ok for Public Health (Internal) Services only subject to comments in forwarding sheet

MAY-2025. Scale: 1:75

Drawing Title: TOWER-4 16TH, 24TH & 33RD LVL PLAN (REFUGE FLOOR) & AREA DETAIL

Drawing No: A-T4-05