

DESIGN OF SEPTIC TANK WITH UPFLOW FILTER

No. of Dwelling - 7
No. of User - 35
No. of fixtures in units - 14 Nos

Discharge Assumings King's Factor of 6 LPM/No - 14 x 6 = 84 LPM

Septic tank surface area = $84 \times \frac{0.92}{10} = 7.72$
Say = $8m^2$

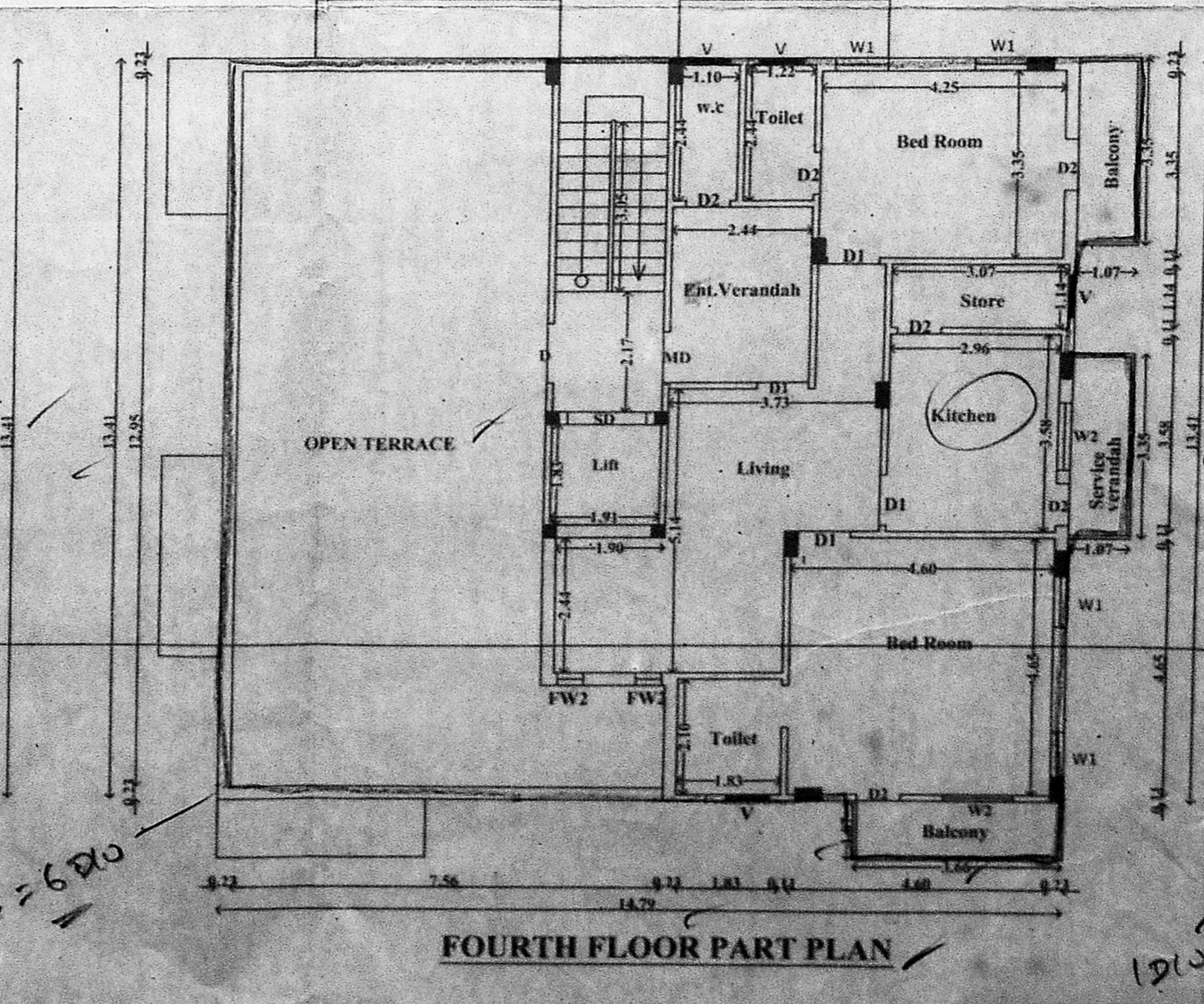
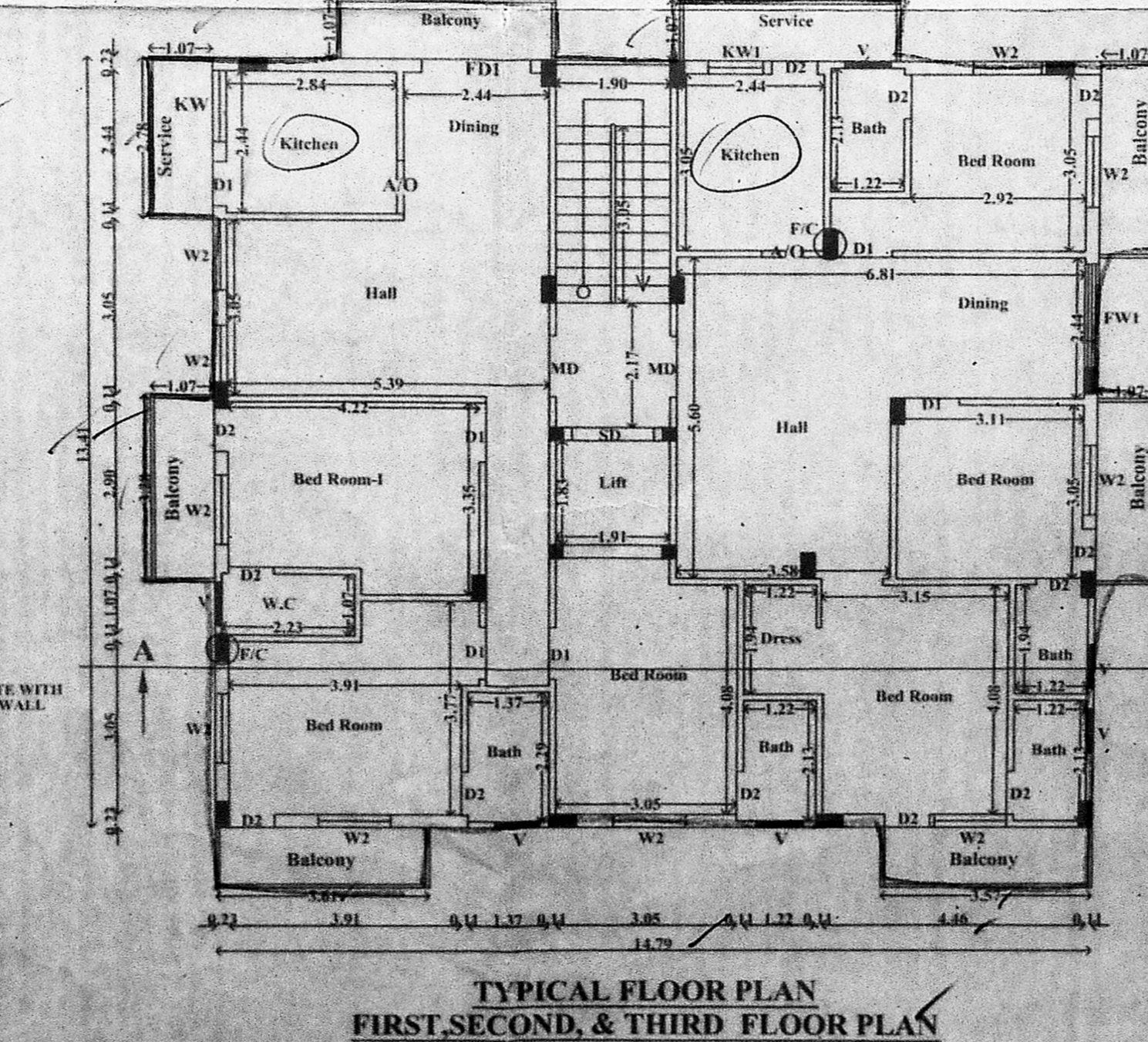
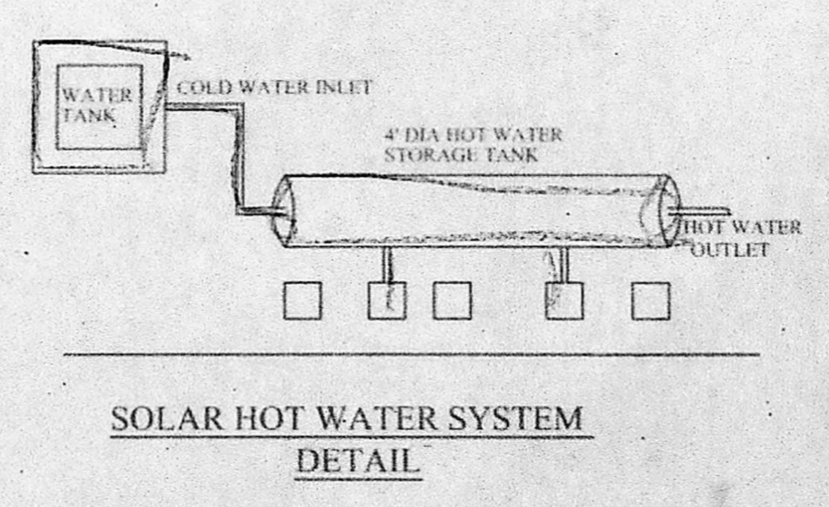
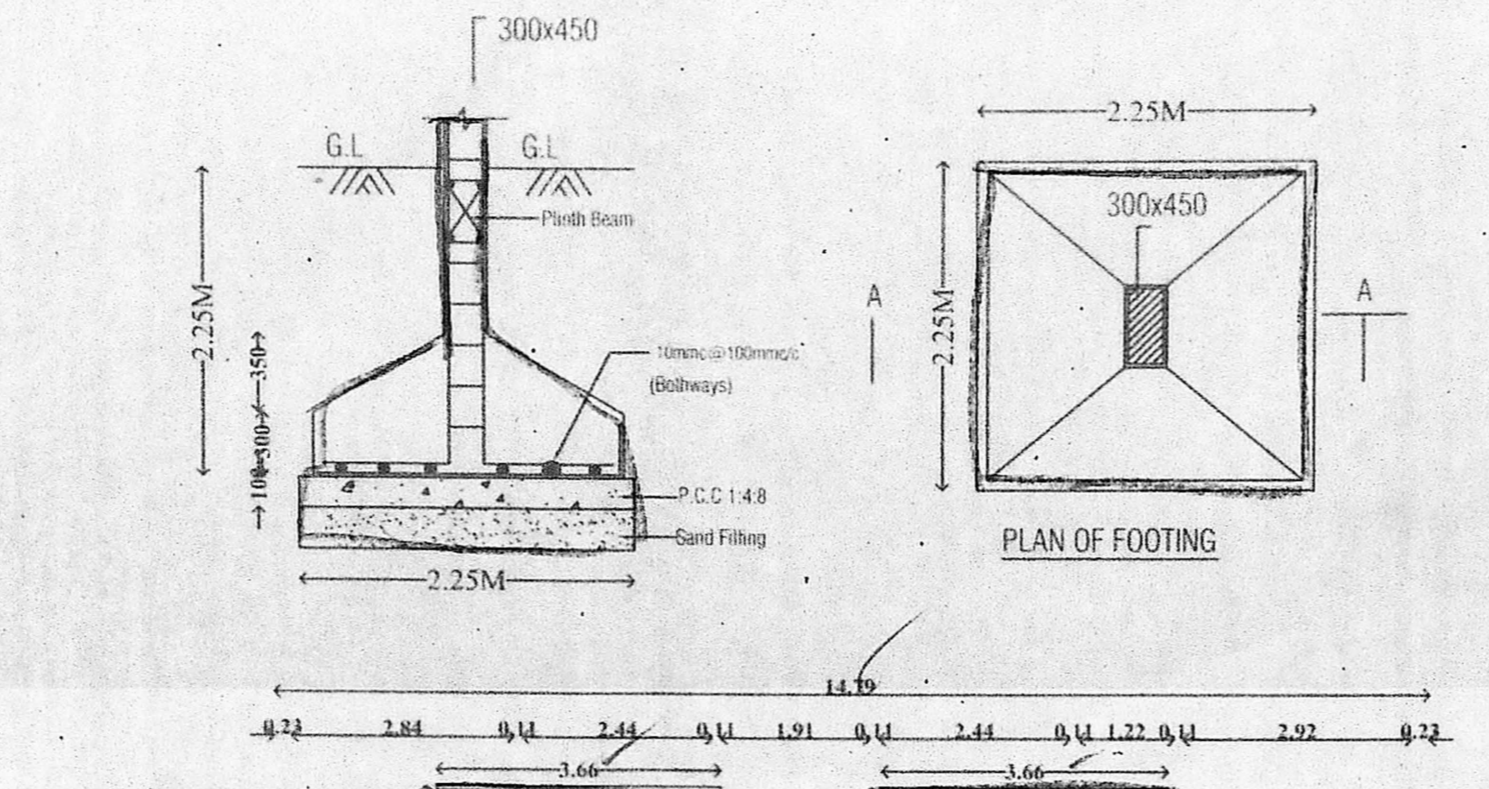
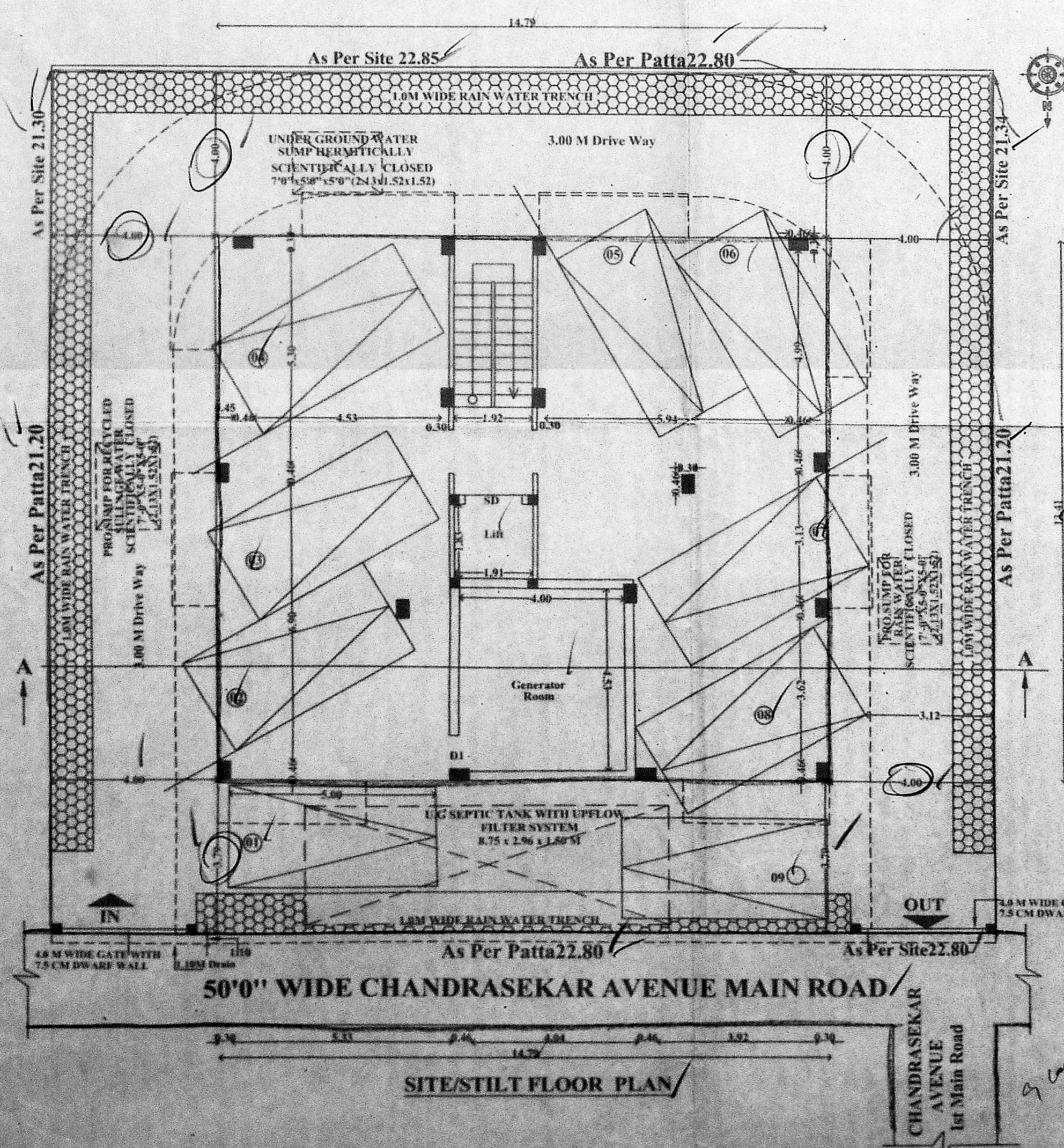
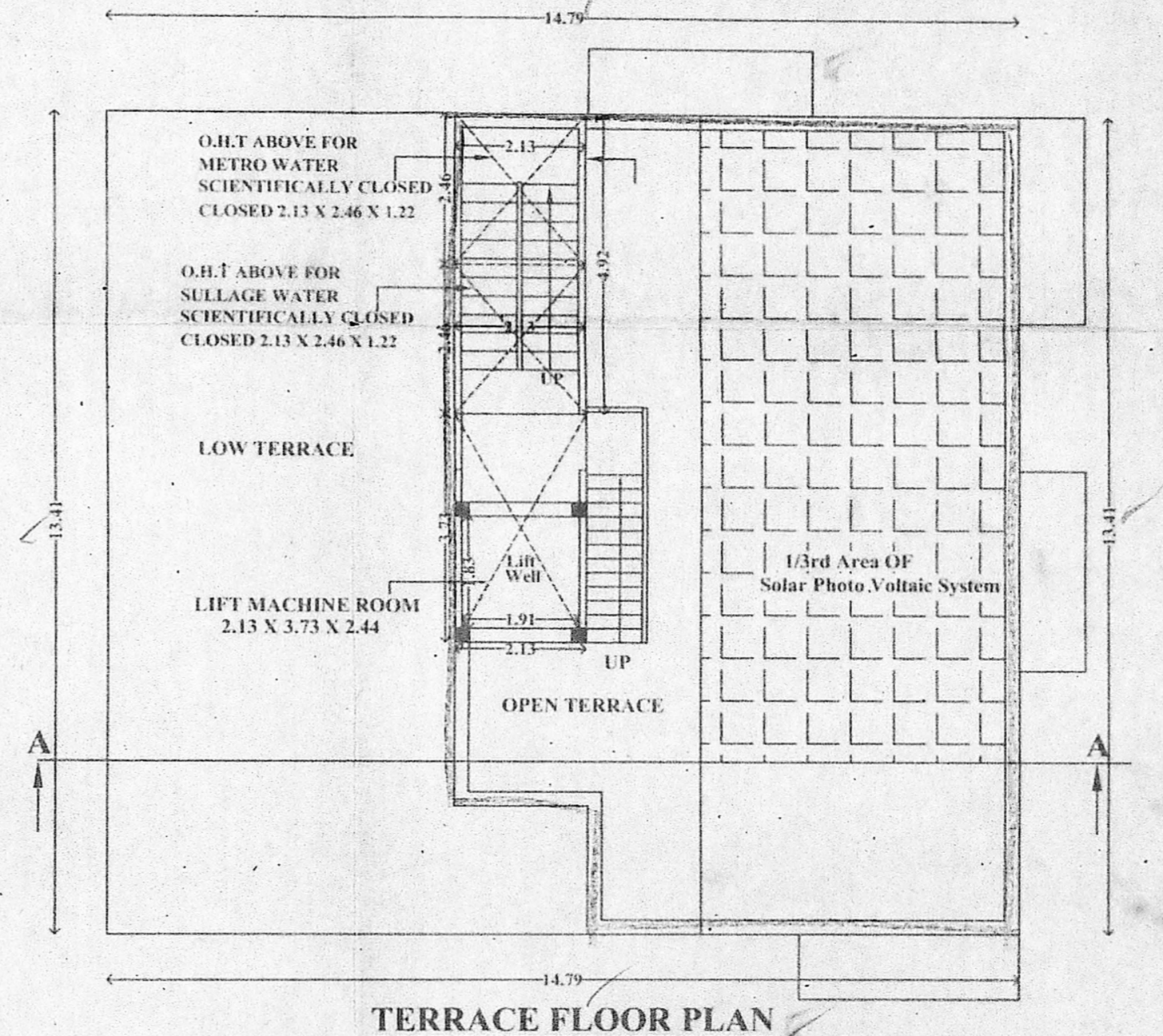
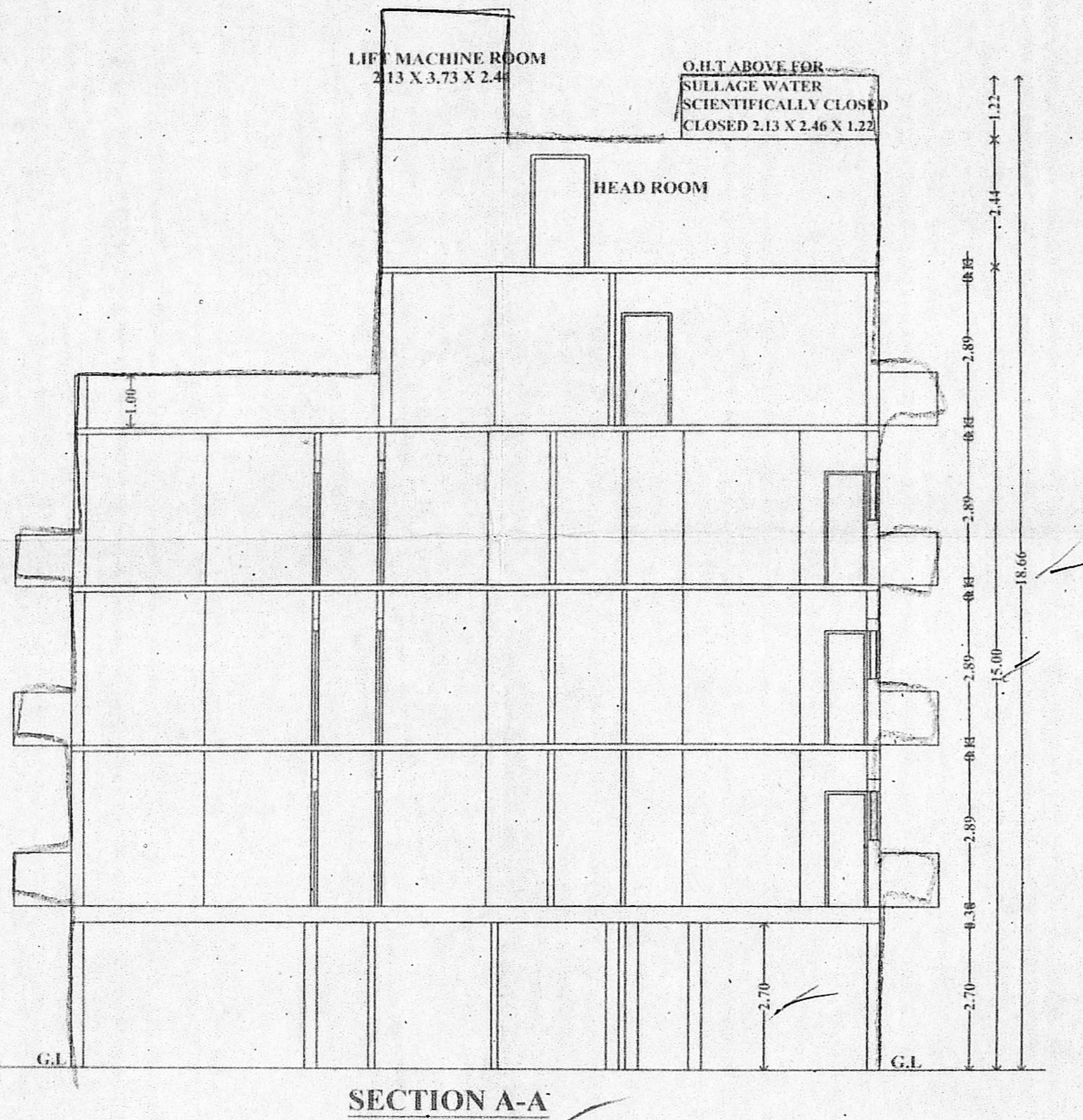
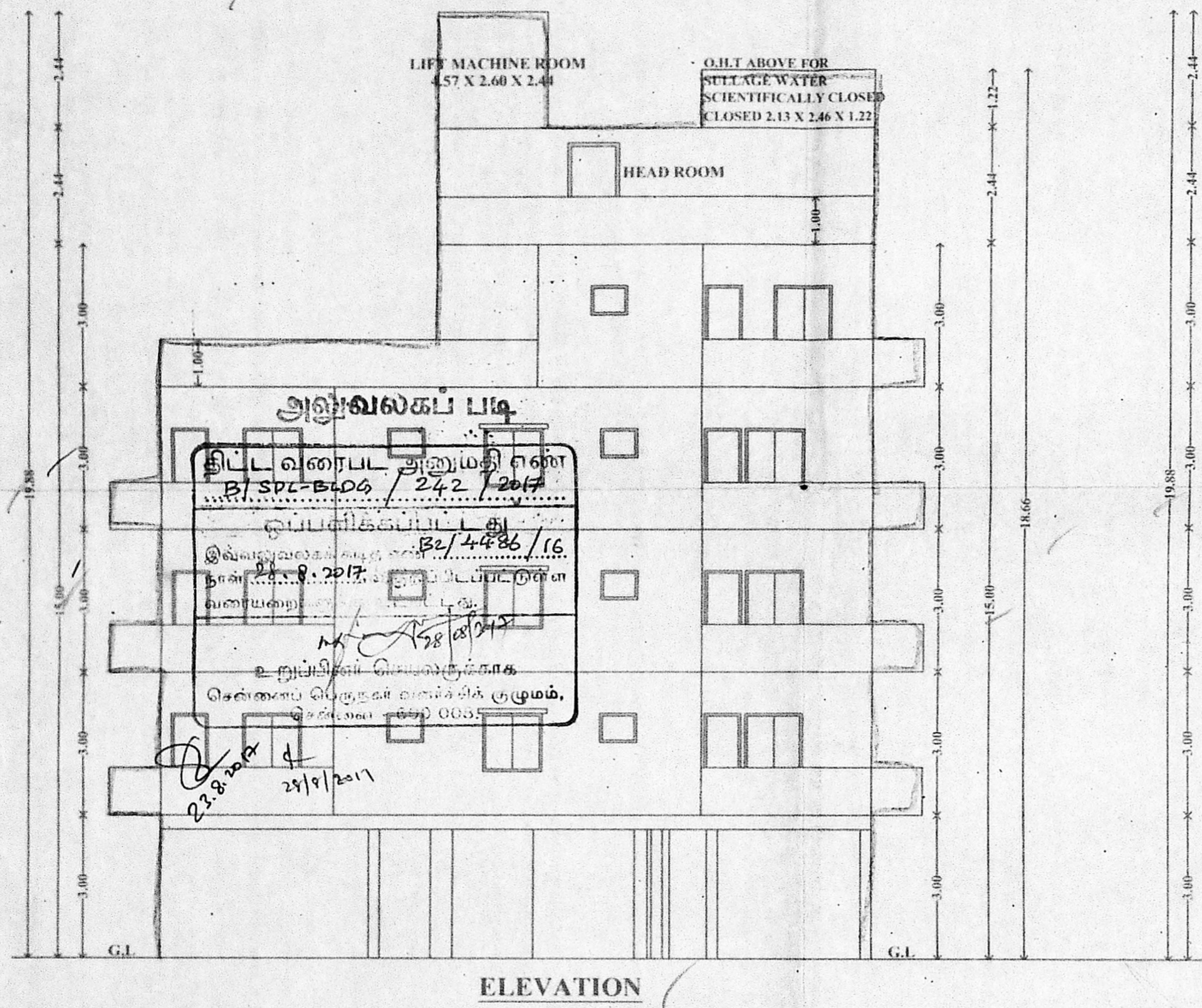
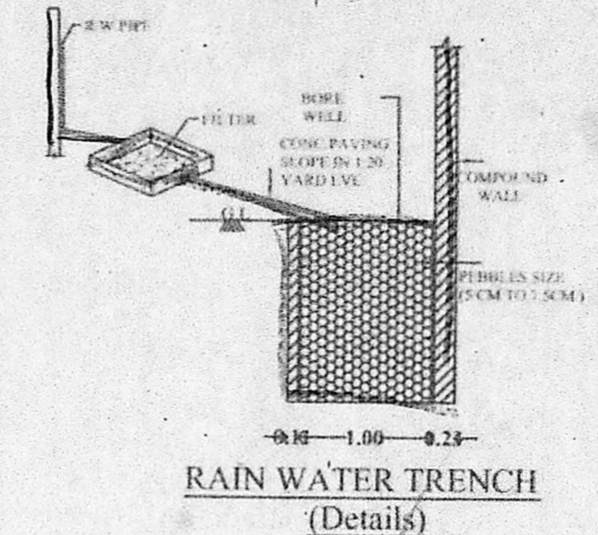
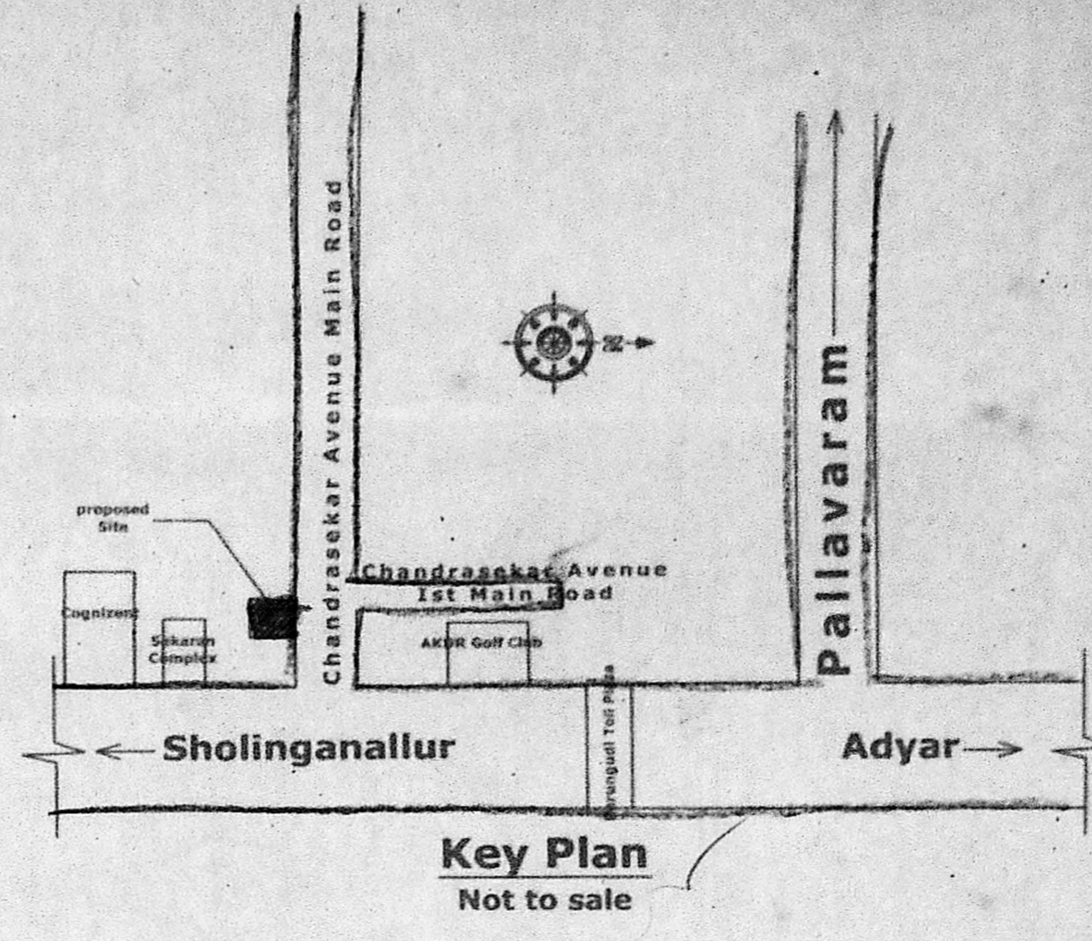
Volume of free board = $8 \times 0.3 = 2.40m^3$
Volume of sedimentation = $8 \times 0.3 = 2.40m^3$
Volume of defestation = $84 \times 0.032 = 2.68m^3$
Volume of sludge = $84 \times 365 \times 0.002 = 6.13m^3$
Total Volume = $13.61m^3$

Size of septic tank 2.55 x 3.60 x 1.50m

UPFLOW FILTER
Peak discharge for 14 Nos - 84 LPM
Volume $84 \times 0.043 = 3.61$
Take Depth = 1.20
Area required $\frac{3.61}{1.20} = 3$

Size of up flow filter I = 2.55 x 1.0 x 1.20
Size of up flow filter II = 2.55 x 1.0 x 1.20

The clean outlet water from the up flow filter shall be used for gardening.



PLAN SHOWING THE PROPOSED RESIDENTIAL BUILDING AT PLOT NO:151 & 152, CHANDRASEKARAN AVENUE MAIN ROAD, OKKIYAM THORAIPAKKAM, CHENNAI

IN S.NO:263A PART (DOCU.) AS PER PATTI S.NO:263/9 & 263/10

OF OKKIYAM THORAIPAKKAM VILLAGE, GREATER CHENNAI CORPORATION

SPECIFICATION

SAND FILLING FOR FOUNDATION AND BASEMENT
P.C.C 1:4:8 FOR FOUNDATION AND BASEMENT
200mm BLOCK WORK WALLS IN C.M. 1:5
100mm BLOCK WORK WALLS IN C.M. 1:3
ALL R.C.C WORKS M 25 GRADE CONCRETE
CEILING PLASTERING IN CEMENT MORTAR 1:3
WEATHERING COURSE USING BRICK JELLY & LIME CONCRETE IN 1:3 RATIO
CLAY TILES IN TERRACE FLOOR USING CM 1:4
WALLS & CEILING WITH CEMENT PAINT
DOORS & WINDOWS WITH ENAMEL PAINT
CERAMIC FLOORING IN CM 1:3

JOINERY DETAILS

TYPE	DESCRIPTION	SIZE METRE
MD	DOOR	1.90 X 2.13
D1	DOOR	0.91 X 2.13
D2	DOOR	0.76 X 2.13
W	WINDOW	1.83 X 1.22
W1	WINDOW	1.37 X 1.22
V	VENTILATOR	0.76 X 0.61
LD	LIFT DOOR	1.22 X 2.44

COLOUR INDEX

PROPOSED

ROAD

BOUNDARY

SCALE 1: 100

AREA STATEMENT

DESCRIPTION	AREA IN SQ.M.	AREA IN SQ.M.
PLOT EXTENT		
As Per Document	487.74	
As Per Patta	450.00	Bal. 5% NON F.S.I
As Per Super Imposed Least Area	450.00	
STILT FLOOR		18.12
FIRST FLOOR	213.40	10.57
SECOND FLOOR	213.40	10.57
THIRD FLOOR	213.40	10.57
FOURTH FLOOR	120.38	5.62
TOTAL	760.58	37.33
F.S.I	$\frac{760.58 \text{ Sq.M.}}{450.00 \text{ Sq.M.}} = 1.690$	

PARKING REIUREMENTS

CAR PARK REQUIRED 8 NOS ✓
10% VISITORS CAR 9 NOS ✓
TOTAL CAR PARK REQUIRED 9 NOS ✓
TOTAL CAR PARK PROVIDED 9 NOS ✓

S+4 = 7 DU.
I am ve
P.C.C.
see on.

Handwritten signature

OWNER

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OF C.J. KATHIRESAN BE.MLE FIV
Chartered Civil Engineer
Stability Certificate For Factory Buildings
CLASS 1, Licensee Surveyor - 1949
No. 180 Anayavaram Saini, TV Nagar
Chennai 600 023 Cell 90031 72148

LICENSED SURVEYOR