

DESIGN OF SEPTIC TANK WITH TWO UP-FLOW FILTERS

OFFICE FSI AREA (50 SQ M PER UNIT) = 1000.0000-22 UNITS

THESE TOTAL UNITS = 22 UNITS

NO OF LITERS PER PERSON PER UNIT = 2200 L

RATE OF WATER SUPPLY = 100 LITERS/HEAD/DAY

FLOW OF SEWAGE PER DAY = 110 X 100 = 11000 LITERS

ASSUMING THE DETENTION PERIOD = 18 HOURS

TANK CAPACITY = 198000 LITERS

THE TANK WILL BE CLEANED EVERY YEAR SO BLINDING STORAGE CAPACITY AT THE RATE OF 50 LITERS FOR PER YEAR = 110 X 50 = 5500 LITERS

TOTAL TANK + BLINDING = 203500 LITERS

WITH PROVISION FOR FUTURE EXPANSION AND EXTRA LET THE TANK CAPACITY BE = 200 M³ (AVERAGE)

PLAN AREA OF THE TANK = 15.84 M² X 8.20 M² = 130.56 M²

DEPTH OF TANK = 1.8 M

BREATHING = 1.8 M

FREE BOARD OF THE TANK = 0.30 M

TOTAL HEIGHT OF THE TANK = 3.90 M X 2.00 M = 7.80 M

REQUIRED SIZE OF THE SEPTIC TANK = 4.50 M X 2.00 M X 2.00 M

WE PROVIDE THE SEPTIC TANK OF SIZE IS = 3.00 M X 2.00 M X 2.00 M

HENCE THE SEPTIC TANK IS SUFFICIENT

UP FLOW DETAILS

DISCHARGE FOR 65 PERSONS = 12375 LITERS

EXTRA FLOW TAKEN FOR FUTURE EXTENSION ADD 50% = 12375 LITERS

TOTAL DISCHARGE = 18562.5 LITERS

ASSUMING THE PERCOLATING CAPACITY OF FILTER MEDIA OF THE UP FLOW FILTER PIT AS = 120 M³ (1200 LITERS/DAY)

VOLUME OF UP FLOW FILTER PIT REQUIRED = 12.13 M³ (1.25 M³ X 10 M³)

DEPTH OF UP FLOW FILTER PIT = 2.00 M

PLAN AREA REQUIRED = 10.06 M² (2 M X 5 M)

LENGTH AND BREADTH = (5/1/2) = 2.24 M

REQUIRED SIZE OF UP FLOW FILTER PIT = 2.24 M X 2.24 M X 2.00 M

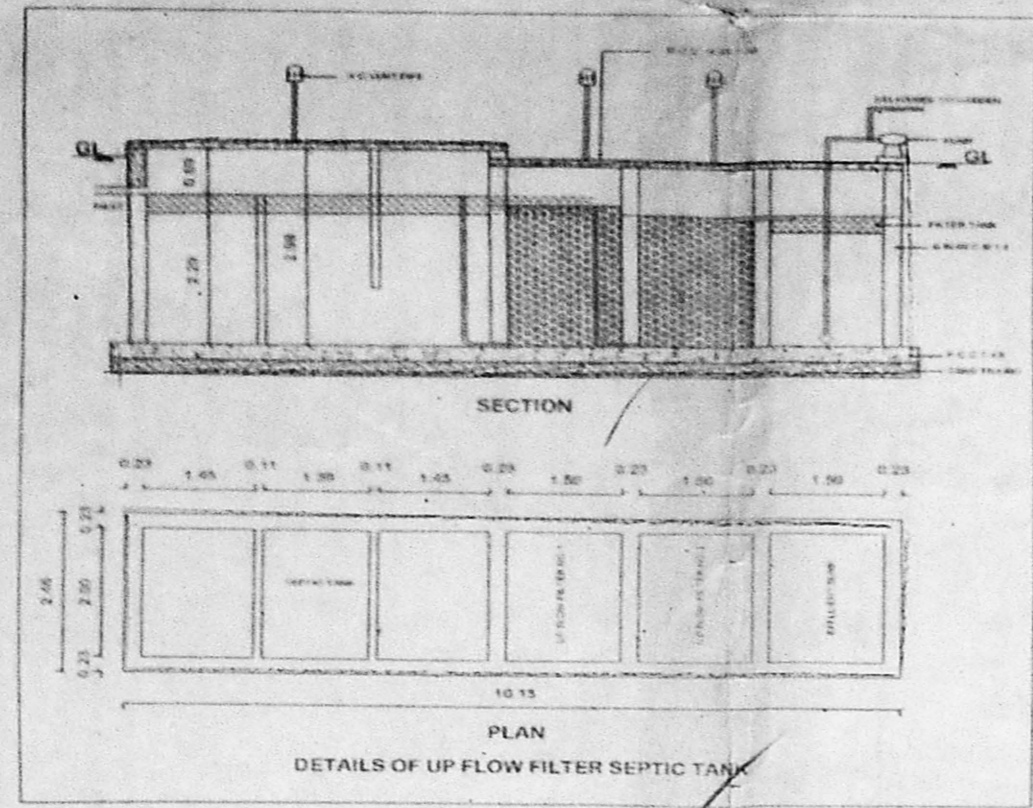
REQUIRED SIZE OF EFFLUENT (0.50 M³) = 0.50 M³

COLLECTION TANK = 2 NOS X 1.5 M X 2 M X 2 M

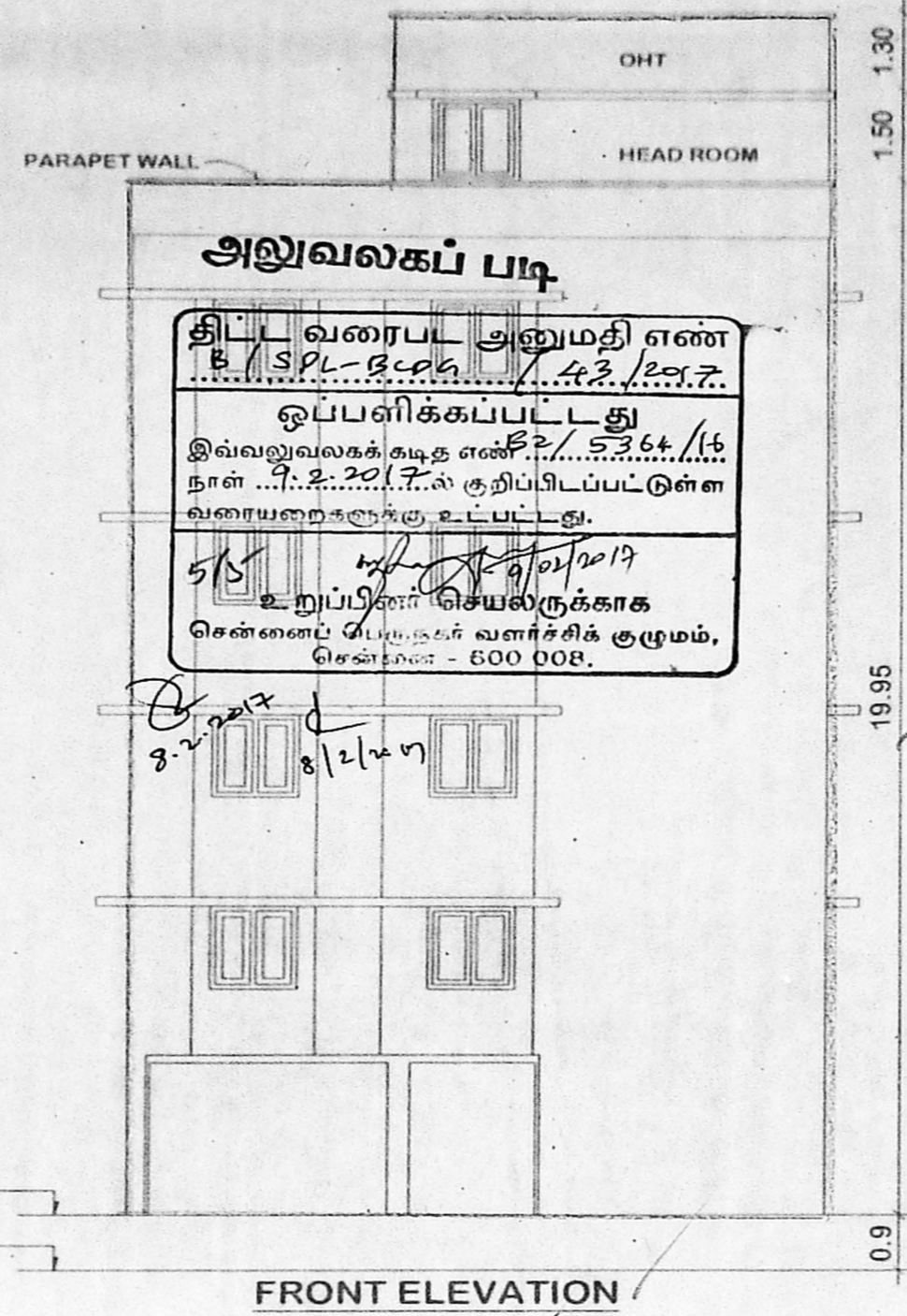
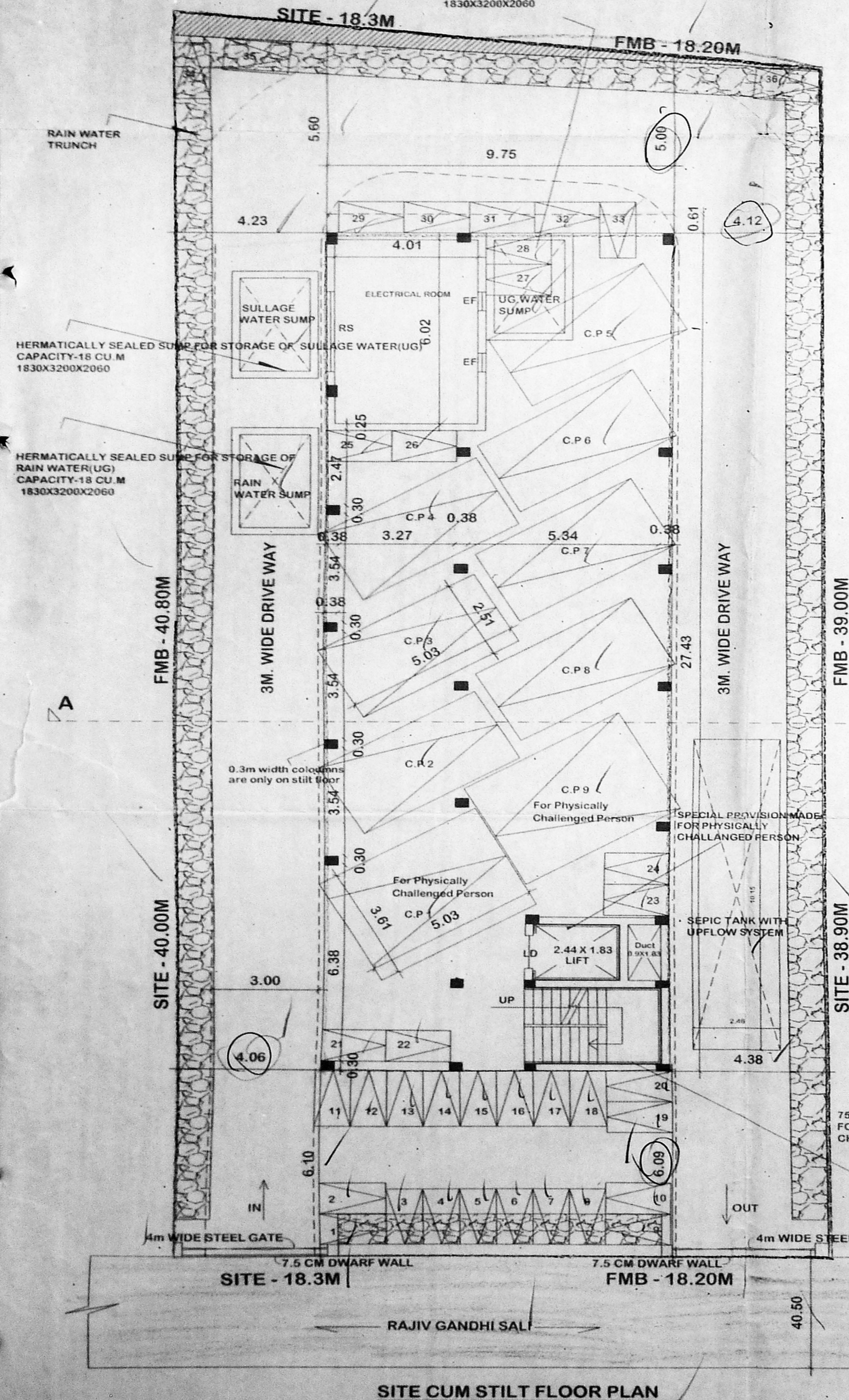
WE PROVIDE THE 2 NOS OF UP FLOW FILTERS

WE PROVIDE THE EFFLUENT COLLECTION TANK

HENCE THE SEPTIC TANK SIZE (4.50 M X 2.00 M X 2.00 M) AND EFFLUENT COLLECTION TANK SIZE (1.5 M X 2.00 M X 2.00 M) ARE SUFFICIENT FOR THE FLATS.



HERMETICALLY SEALED SUMP FOR STORAGE OF DOMESTIC WATER (UG) CAPACITY-18 CU.M 1830X3200X2060



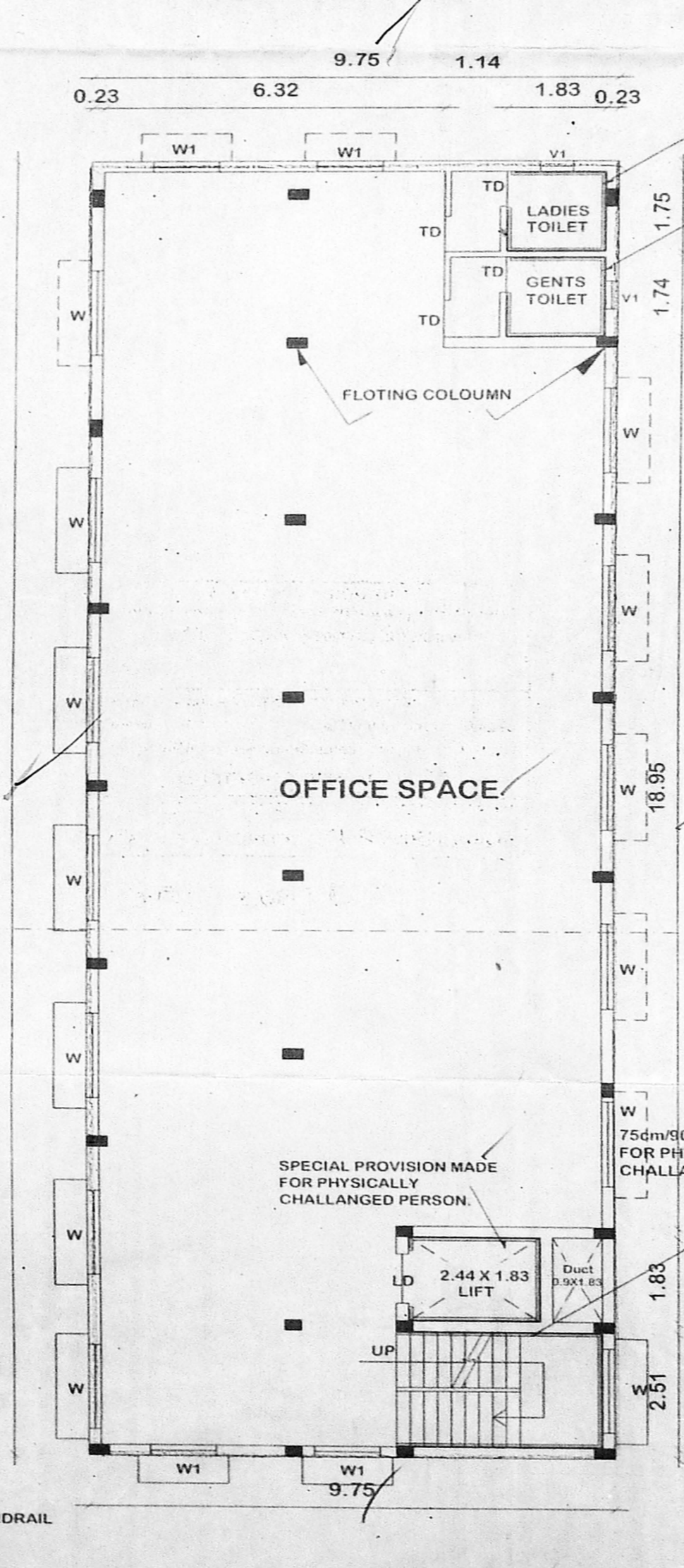
அலுவலகப் படி

திட்ட வரைபட அனுமதி எண் 8.13.12-2024/17.4.2.125.7.

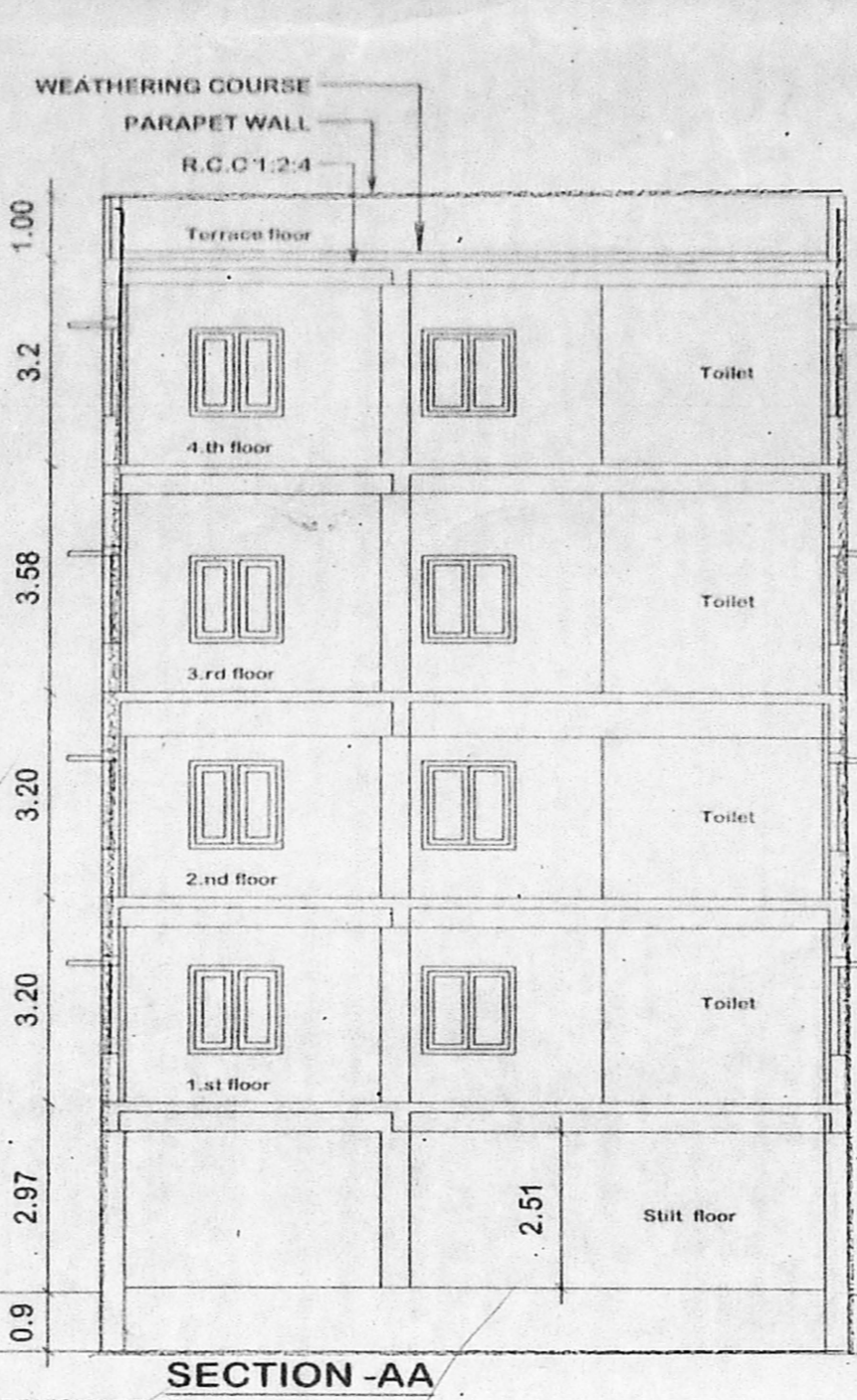
ஒப்பளிக்கப்பட்டது இவ்வலுவலகத்தின் கீழ் 2024/11.6.2024 நாள்... 2024/11.6.2024 குறிப்பிடப்பட்டுள்ள வரையறைகளுக்கு உட்பட்டது.

5/5

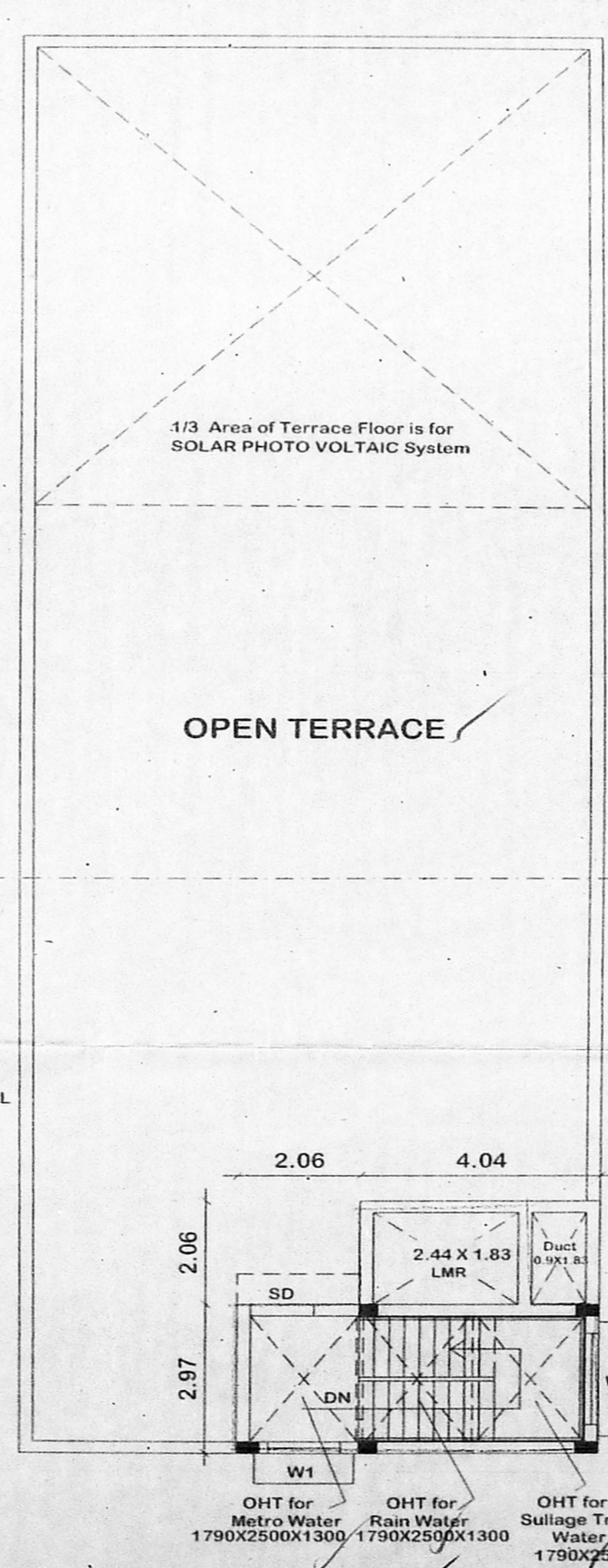
உறுப்பினர் செயலாக்காக சென்னைப் பொ.நக. வளர்ச்சித் துறை, சென்னை-600 008.



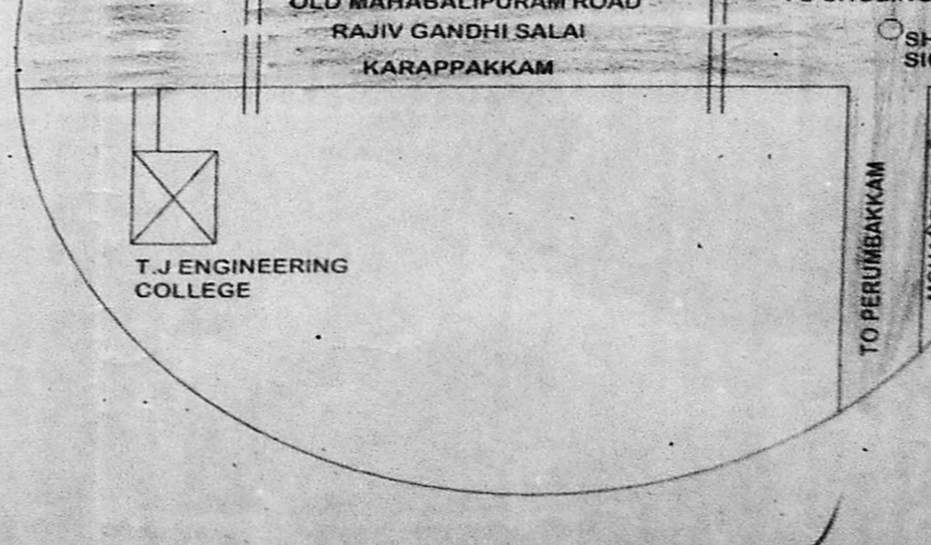
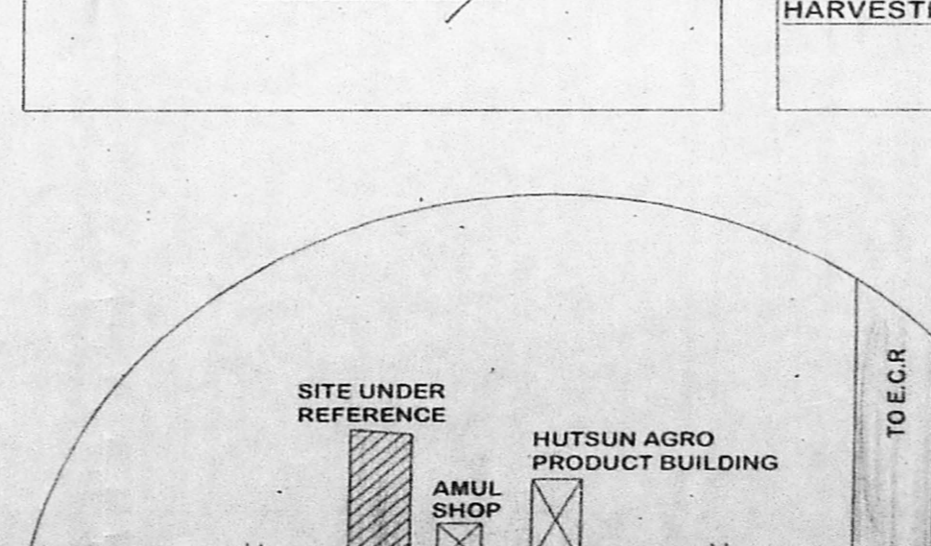
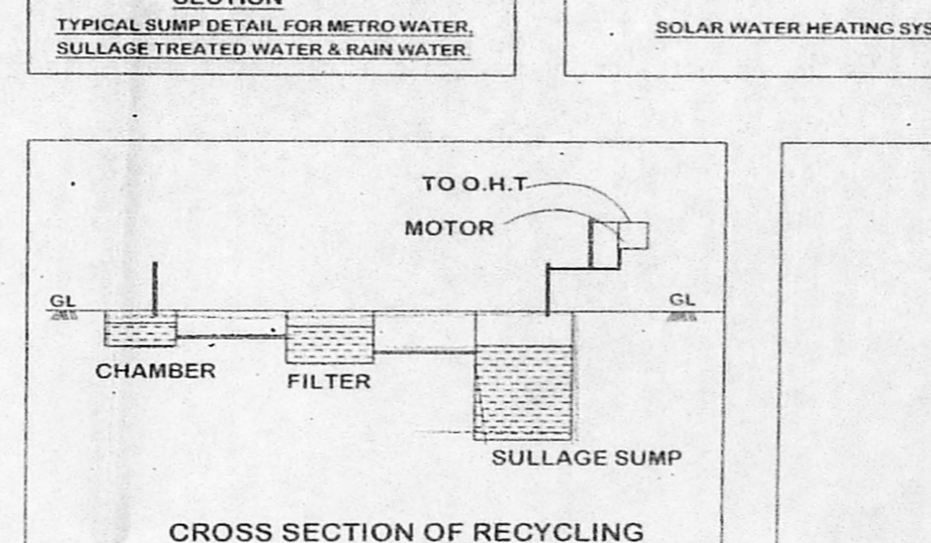
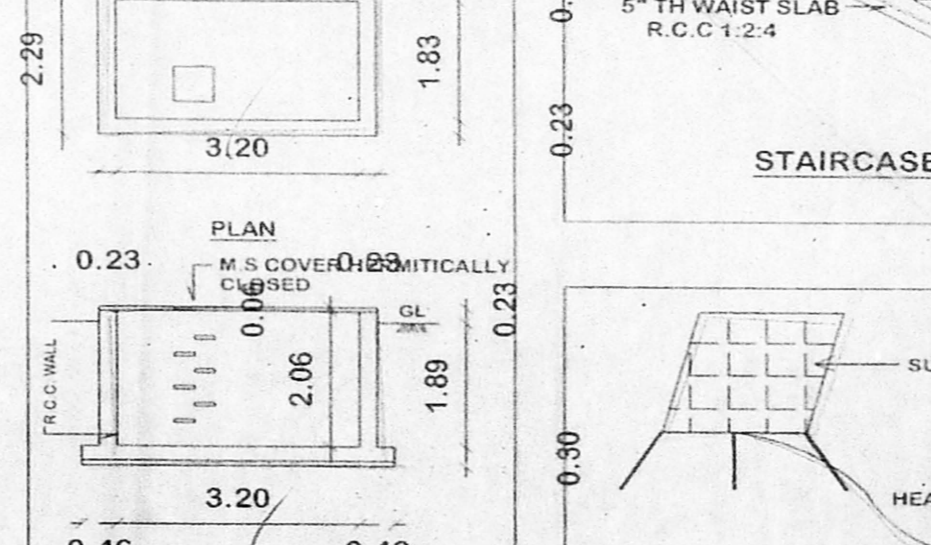
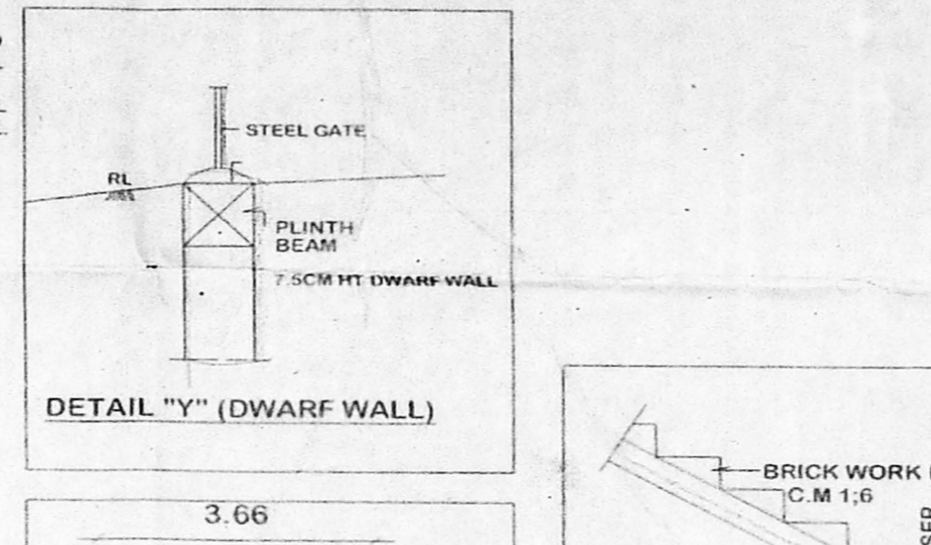
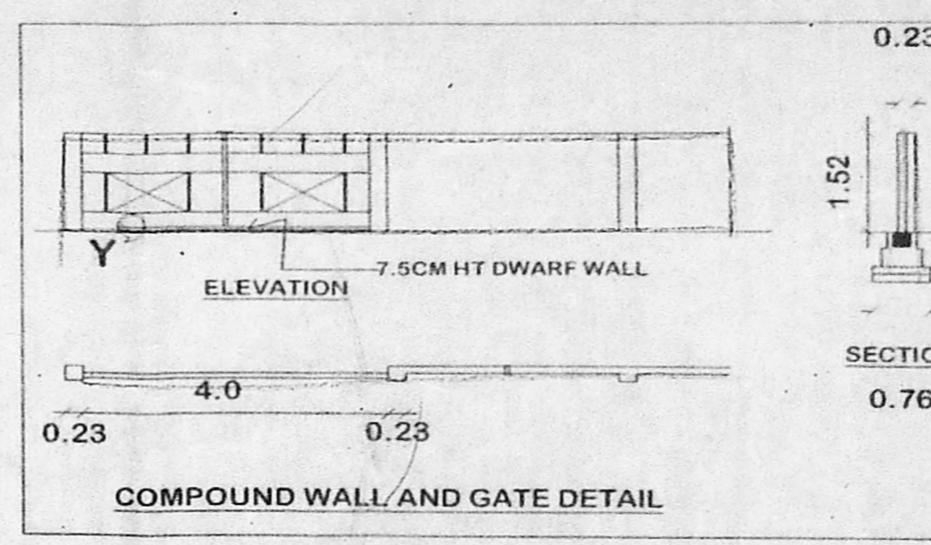
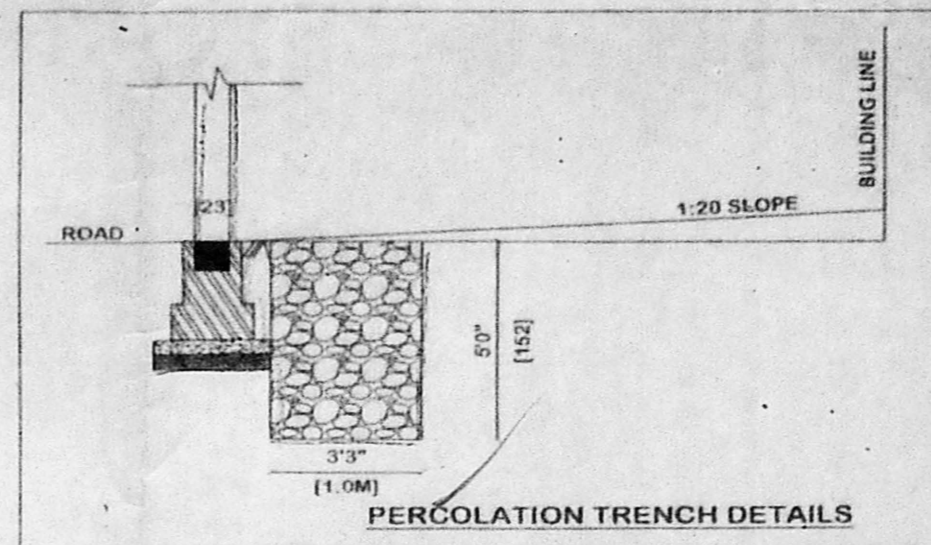
TYPICAL FLOOR PLAN OF 1st, 2nd, 3rd & 4th FLOORS



SECTION-AA



TERRACE FLOOR PLAN



KEY PLAN (not to scale)

அலுவலகப் படி

திருத்திய வரைபடம் 2

நாள் 8-12-2026

PLAN SHOWING THE PROPOSED OFFICE BUILDING AT RAJIV GANDHI SALAI (OMR), COMPRISED IN S.NO. 147/1A, 148/1A 2A(DOC), S.NO.147/1A2, 148/1A 2A(PATTA) OF KARAPAKKAM VILLAGE, SHOLINGANALLUR TALUK, WITH IN GREATER CHENNAI CORPORATION LIMIT.

ZONE 15 DIVISION

உதவியாளர் 5364/16

சுமார்ந்தாய்வு

தி.உ.

சுமார்ந்தாய்வு

தி.உ.

SPECIFICATION

FOUNDATION	: COLUMN FOOTING
BRICK WORK	: C.M 1:6 FOR SUPER STRUCTURE
PLASTERING	: C.M 1:5 FOR WALLS & 1:3 FOR CEILING
CEMENT PAINT	: 2 COATS FOR WALLS & 1 EXTRA COAT FOR CEILING
R.C.C	: 1:2:4 FOR SLABS & LINTELS
WOOD WORK	: ALL WOOD WORKS IN BEST QUALITY TIMBER
WEATHERING	: B.JELLY LIME MORTAR OVER ROOF COURSE
	: SLAB ONE LAYER OF COUNTRY TILES

DATE: / /

SCALE - 1" = 8'0"

SCHEDULE OF JOINERY

RS	ROLLING SHUTTER	8'0x7'0	183x213
LD	LIFT DOOR	3'0x7'0	91x213
SD	STAIR DOOR	3'0x7'0	91x213
TD	TOILET DOOR	2'6x7'0	75x213
D	DOOR	3'0x7'0	91x213
FG	FIXED GLAZE	6'0x3'0	183x 91
W	WINDOW	6'0x4'6	183x137
W1	WINDOW	3'0x4'6	91x137
V	VENTILATOR	3'0x2'0	91x 60
V1	VENTILATOR	2'0x2'0	60x 60

AREA STATEMENT

SUPER IMPOSED / LEAST AREA	716.67
PLOT AREA AS PER DOCUMENT	729.75
PLOT AREA AS PER PATTA	730.00
FIRST FLOOR BUILT UP AREA	267.42
SECOND FLOOR BUILT UP AREA	267.42
THIRD FLOOR BUILT UP AREA	267.42
FOURTH FLOOR BUILT UP AREA	267.42
TOTAL BUILT UP AREA	1069.68
F.S.I	1.493

COLOUR INDEX

PROPOSED	BOUNDARY
ROAD	

OWNER

Prof. K.K RAMALINGAM
M.B.B.S. FR.C.S. D.L.O.
REG. N. 4457
KKR ENT. HOSPITAL & RESEARCH INSTITUTE (P) LTD.
12/A (OLD # 807) PUNJABIAE HIGH ROAD, KILPAUK CHENNAI-10

SURESH THANGARASU
Reg.No. (CA/2012/55768)

ides architecture & interiors
Plot No.15, G.T.Thangarasa Rd,
VGP Suburban Estate, 1st Main Road,
Madhavaram, Chennai - 60

LICENSED SURVEYOR