

Design Calculation for septic tank with up flow filter
 No. of Dwelling units = 8 DU
 - Residential capacity of 40 Persons
 - Total number of occupancy: 40
 - Number of users assuming single fixtures per person per hour = 40 x 6 litres per flush,
 - Only water closet and toilet flush will be connected to the septic tank
 - The sewage flow will be about 40 litres per day /person
 - Total 40 x 40 = 1600 litres

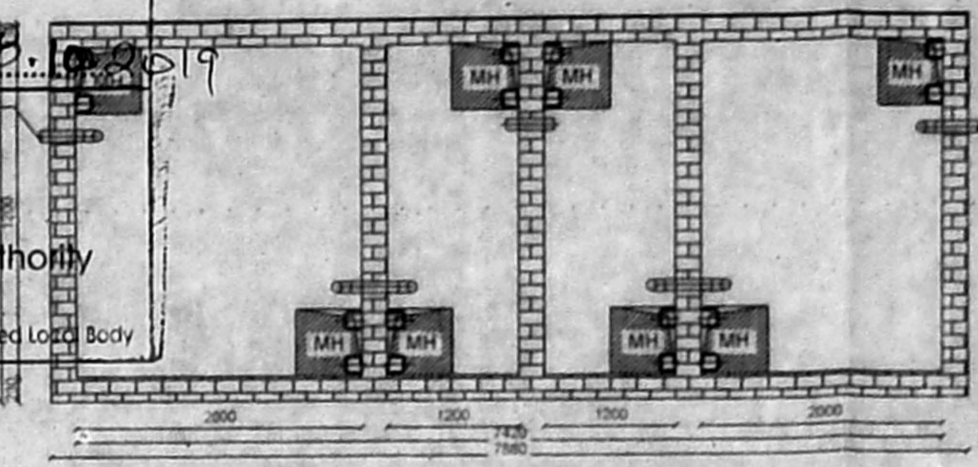
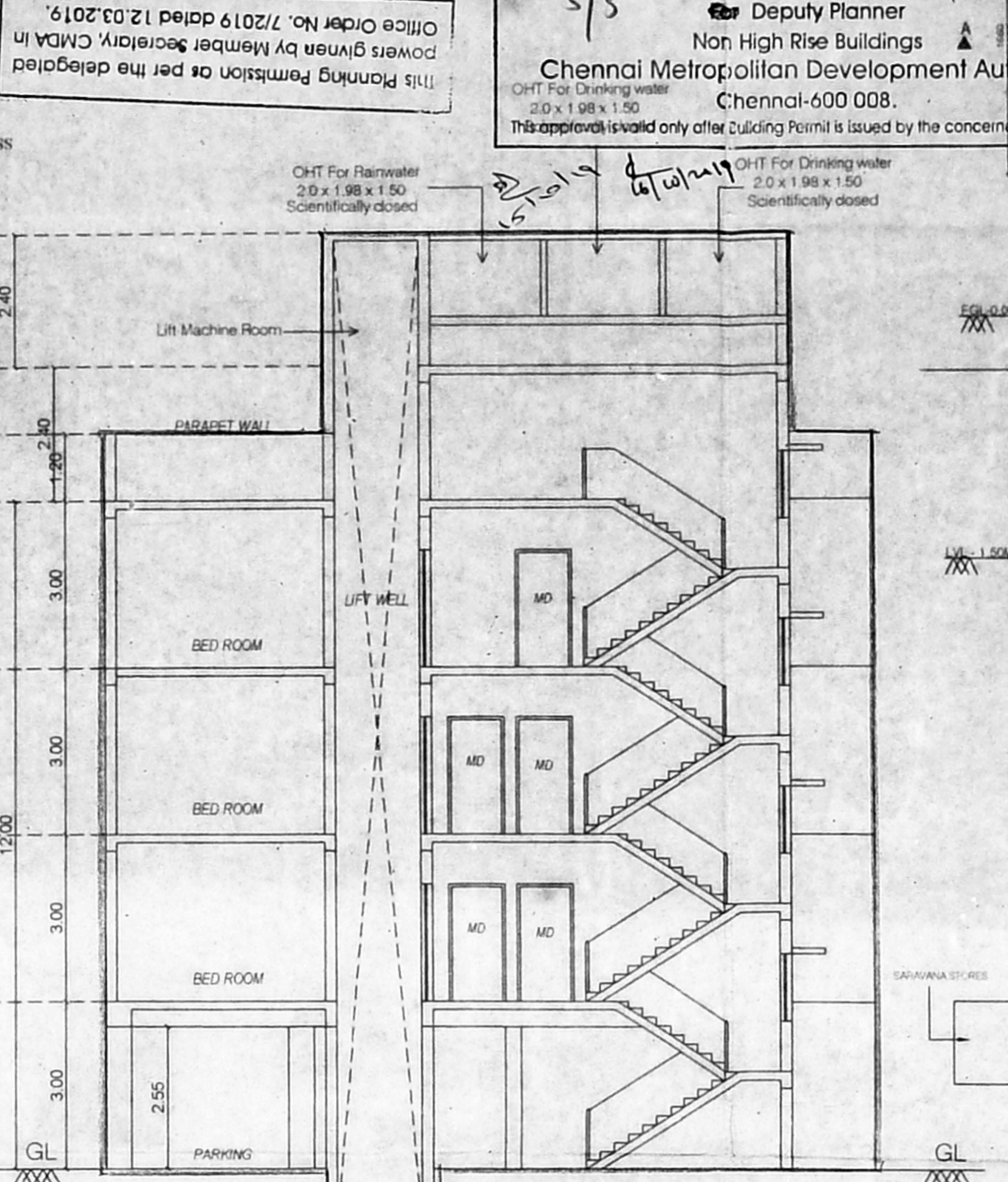
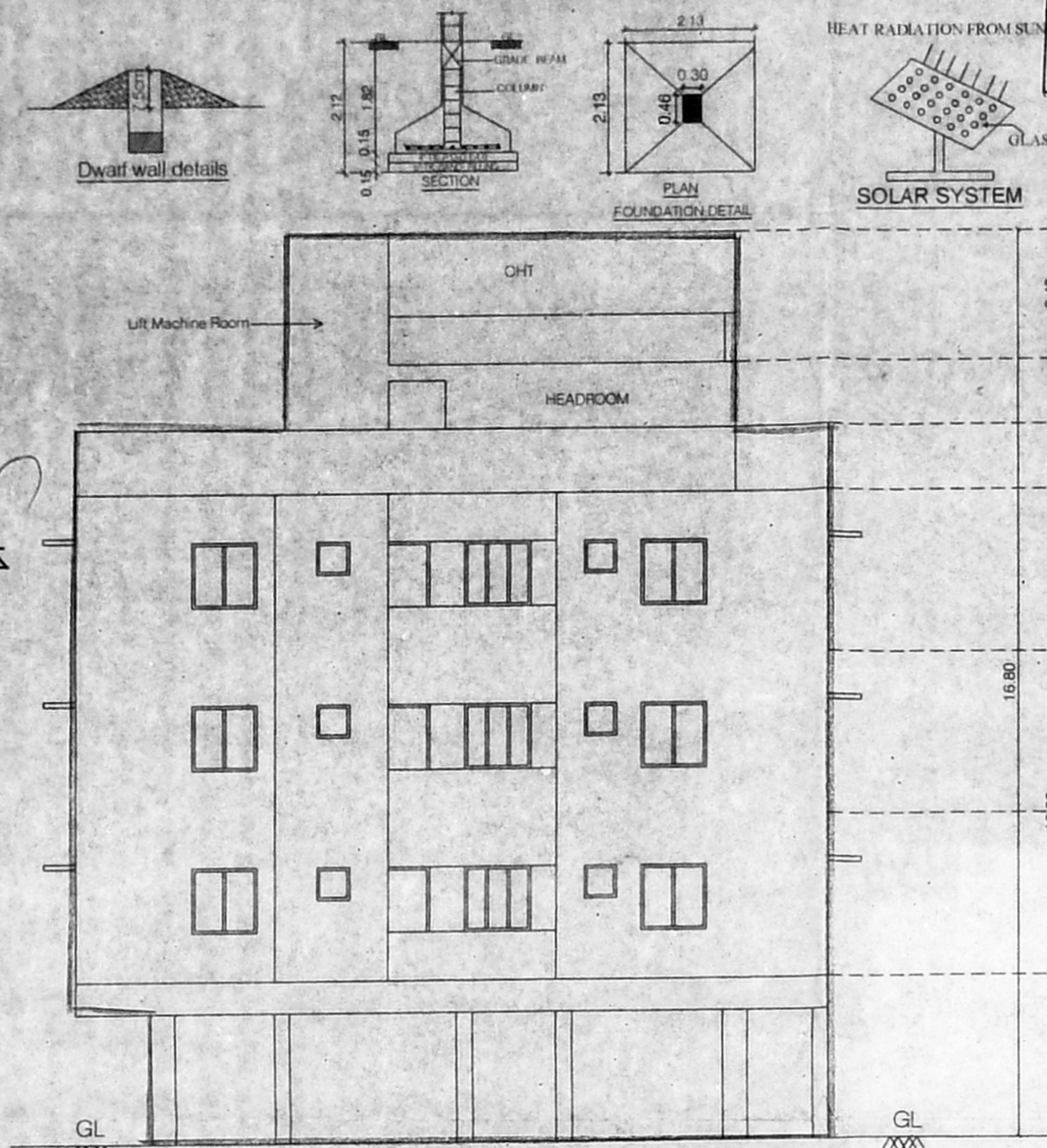
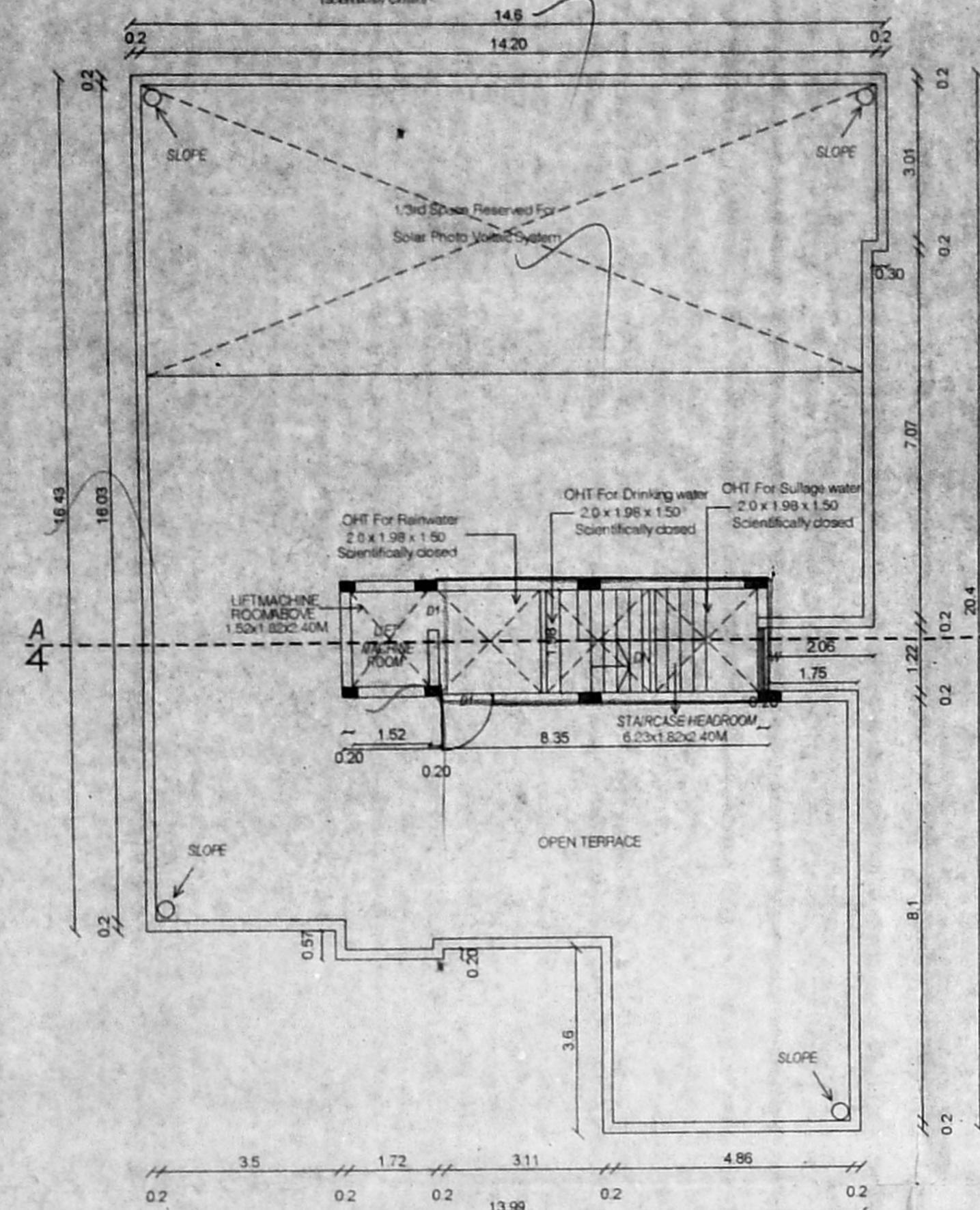
The required volume of the sedimentation tank is 2000 litres
 - Assuming the total depth of 1.5 meter for sludge digestion
 - Free board of 0.4 meter and liquid depth 1.5 meter and length 2 m and breadth 2 meter
 - Volume of sedimentation tank is 2 m x 2m x 1.5m Ld = 6.00 cum
 - Size of the upflow filter No. 2 = 2 m x 1.2 m x 1.5 m Ld
 - Size of the final collection tank /outlet tank 2 m x 1.2 m x 1.5 Ld

OFFICE COPY

LIST OF CIVIL UNITS - STIP A/UT

S.NO	DESCRIPTION	SIZE IN METER L X W X HT	VOLUME OF TANK IN M ³	QTY	MOC
1	SEPTIC TANK	2.10x1.20x1.50 LD+0.4 FB	3.78	1	RCC
2	UP FLOW FILTER -1	2.00x1.20x1.50 LD+0.6 FB	3.6	1	RCC
3	UP FLOW FILTER -2	2.00x1.20x1.50 LD+0.6 FB	3.6	1	RCC
4	FINAL EFFLUENT SUMP	2.00x1.20x1.50 LD+0.9 FB	3.6	1	RCC

PLANNING PERMISSION PROCESSED CONSTRUCTION OF
 RESIDENTIAL BUILDING AT PLOT NO: C & D,
 MANGALA NAGAR, 1ST CROSS STREET, PORUR,
 CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
 S.No. 247/1, DATED: 25/06/2018, S.N.O. 247/1A
 AS PER PLAN, PORUR VILLAGE.
 OPERATED CHENNAI CORPORATION
 DIVISION NO. 11
 1. Plot regularised by Greater Chennai Corporation
 Vide Permit no: 234/2017, Dated: 25/06/2018 &
 2. Plot Sub-Division by Greater Chennai Corporation
 Permit no: SD/WDCN11/00374/2018, Dated: 03/08/2018



JOINERY DETAILS

MD	Main Door	1.30 x 2.10
D1	Door	0.90 x 2.10
D2	Door	0.76 x 2.10
O	Opening	0.90 x 2.10
W	Window	0.90 x 2.10
W1	Window	1.22 x 1.20
FW	French window	2.44 x 2.10
V	Ventilator	0.61 x 0.60

Specification:
 Brick work: Super structure with main wall using cm 1:5 mortar
 Parapet wall cm 1:4 mortar.
 Wood work: Main door teak, and other doors kongu wood using.
 RCC work: Minimum grade of concrete m25 (1:1:2)
 Flooring: All room ceramics tiles flooring.
 Plastering work: Plastering work in c.m. 1:4.
 Weathering course: Weathering course in brick jelly concrete in c.m with two courses of flat tiles laid to detail

AREA DETAILS

S.No	PLOT AREA DETAILS IN SQ.M	
1	AS PER DOC	384.01 sq.m
2	AS PER SUB DIVISION APPROVED PLAN	383.78 sq.m

FLOOR AREA DETAILS IN SQ.M

S.NO	FLOOR	F.S.I AREA
1	STILT FLOOR	
2	FIRST FLOOR	254.57
3	SECOND FLOOR	254.57
4	THIRD FLOOR	254.57
5	TOTAL	763.71
6	TOTAL AREA	763.71
		383.78 = 1.990 F.S.I = 1.990

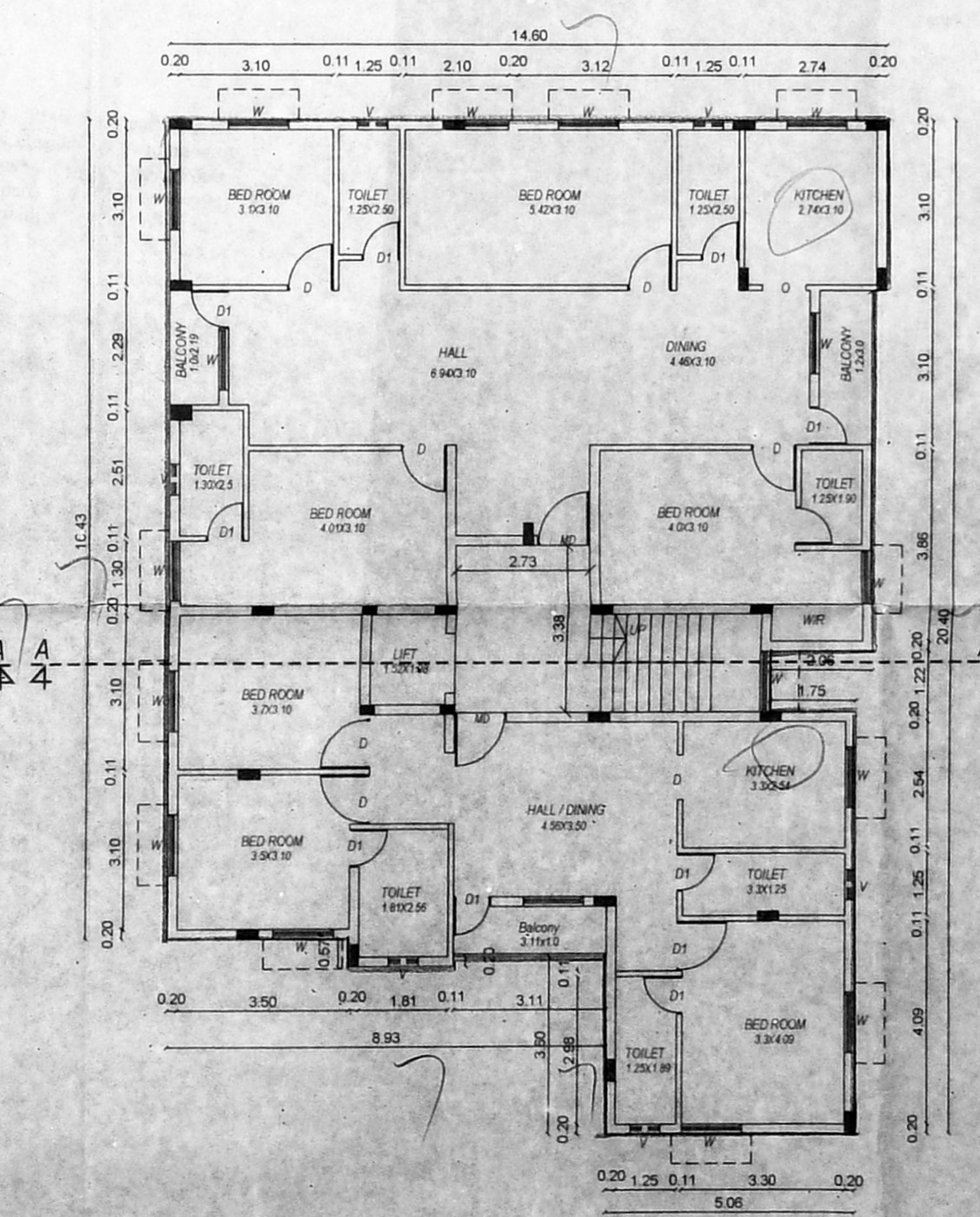
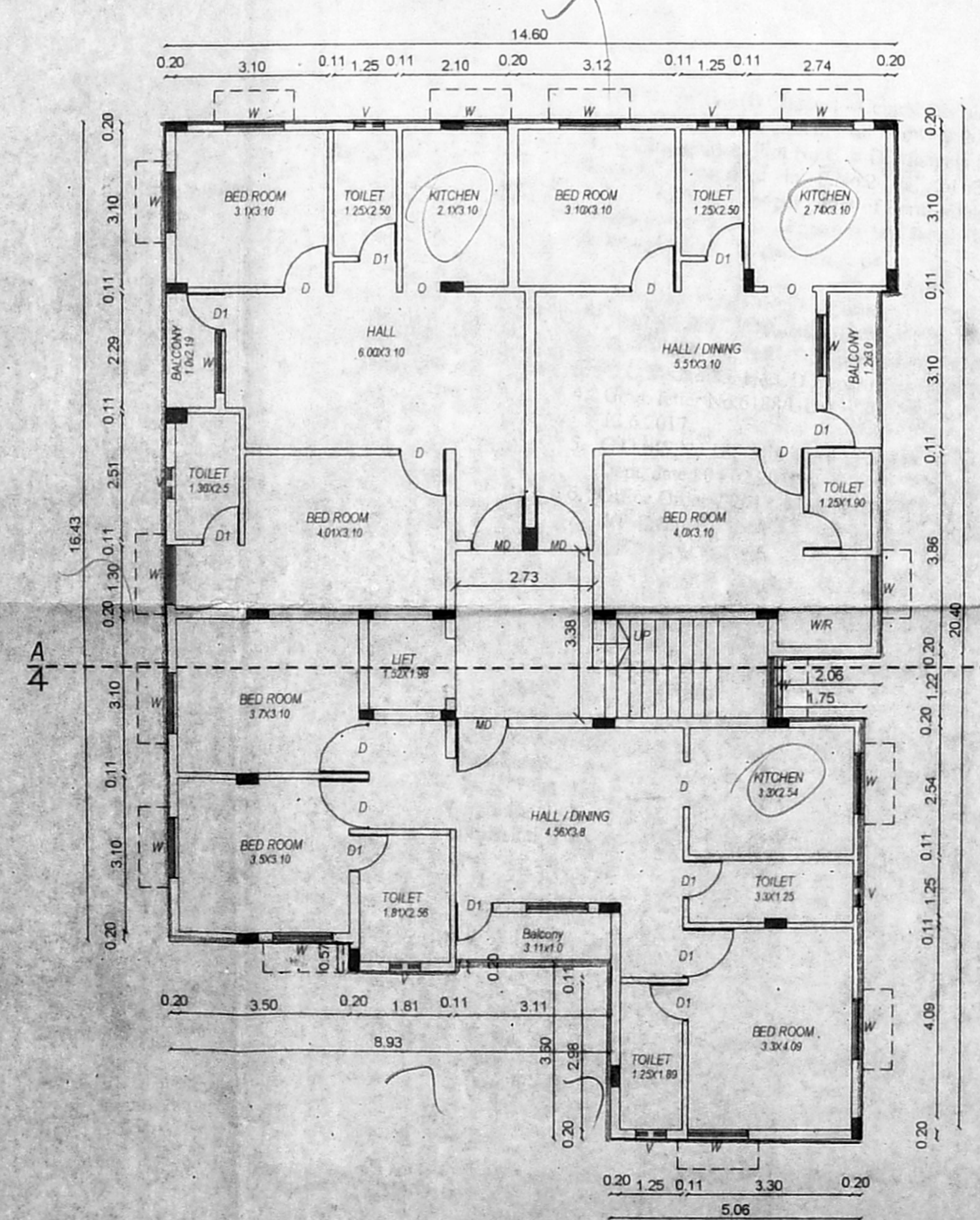
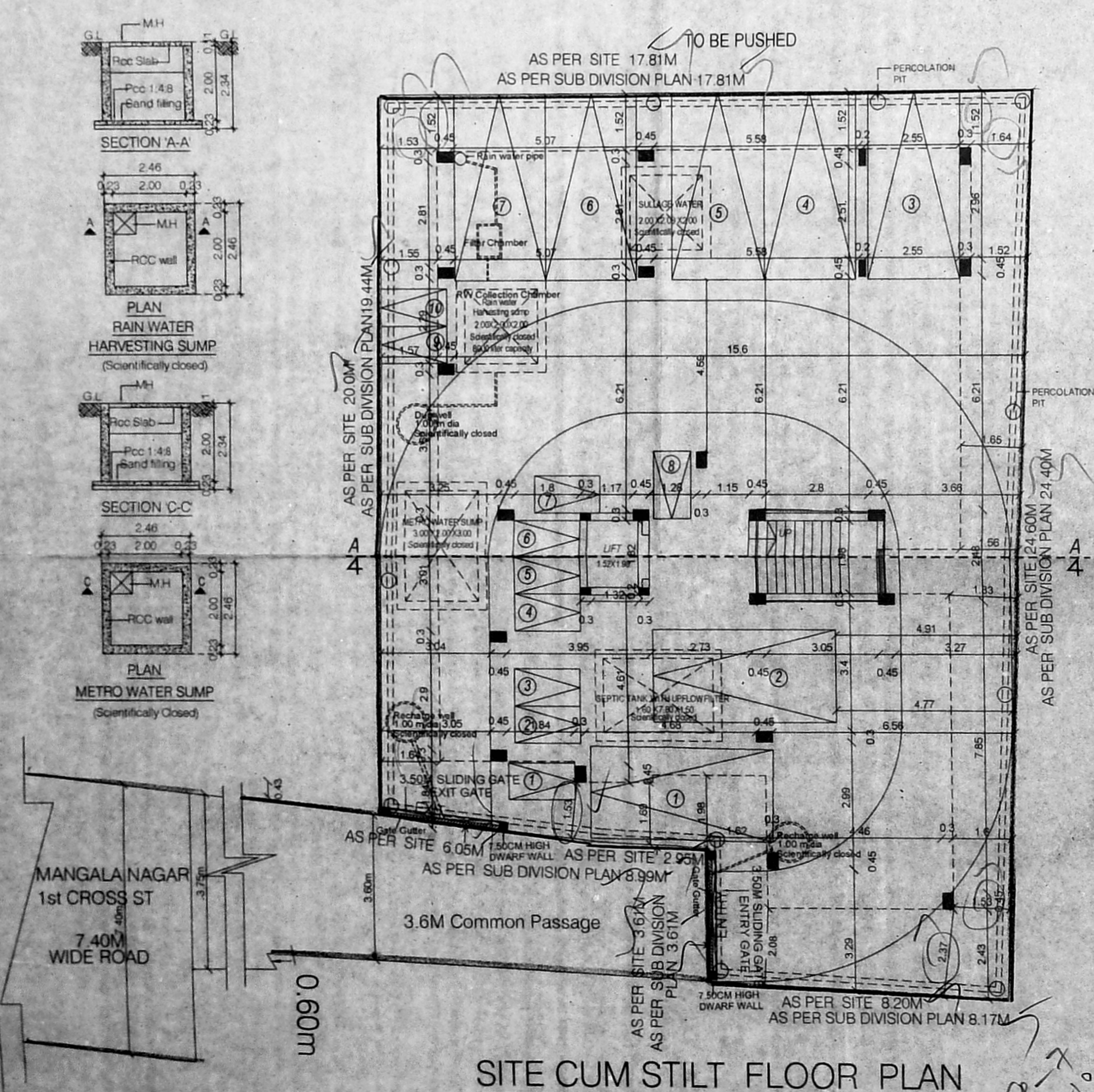
COLOR INDEX
 PROPOSED ● ROAD ● BOUNDARY ●

SCALE 1: 100

OWNER

ARCHITECT

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2x3=6du

2 du