

DESIGN OF SEPTIC TANK TWO UP FLOW FILTERS.

No. of dwellings	-- 10 Nos.
No. of Users	-- 5X10 = 50nos.
Rate of water supply is	-- 150 LPH/Day.
Then flow of sewage per day	-- 50x150= 7,500 Lts/Day.
Detention period is	-- 18 Hrs.
Tank capacity	-- $\frac{7,500 \times 18}{24} = 5,625$ Lts.

The tank is to be cleared every year. So the sludge storage capacity at the rate of 15Lts./person/year.

-- 50x15 = 750
-- 7500+750 = 8250

With provision for future expansion let the total capacity be 8,300 lts. or 8.3 m³.

Septic tank having the capacity of	-- 8.3 m ³
Depth of liquid as	-- 2.00
Plan of the Tank	-- $\frac{8.3}{2.0} = 4.15$

Breadth of the Tank	-- 2.00
Length of the Tank	-- 2.08
Free board of the Tank	-- 0.30
Total depth of the Tank	-- 1.70+0.30m = 2.00m
PROVIDE SEPTIC TANK OF THE SIZE	-- 2.08x2.00x1.70

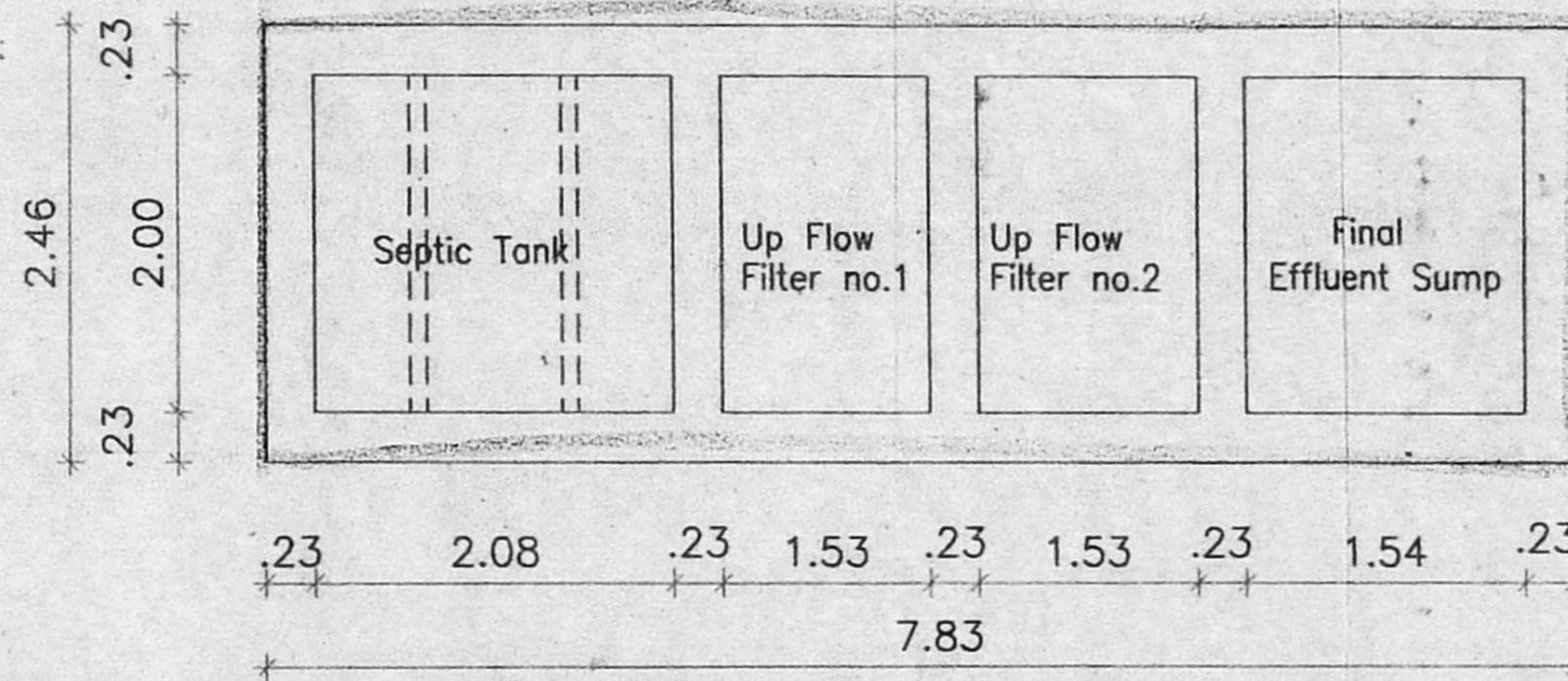
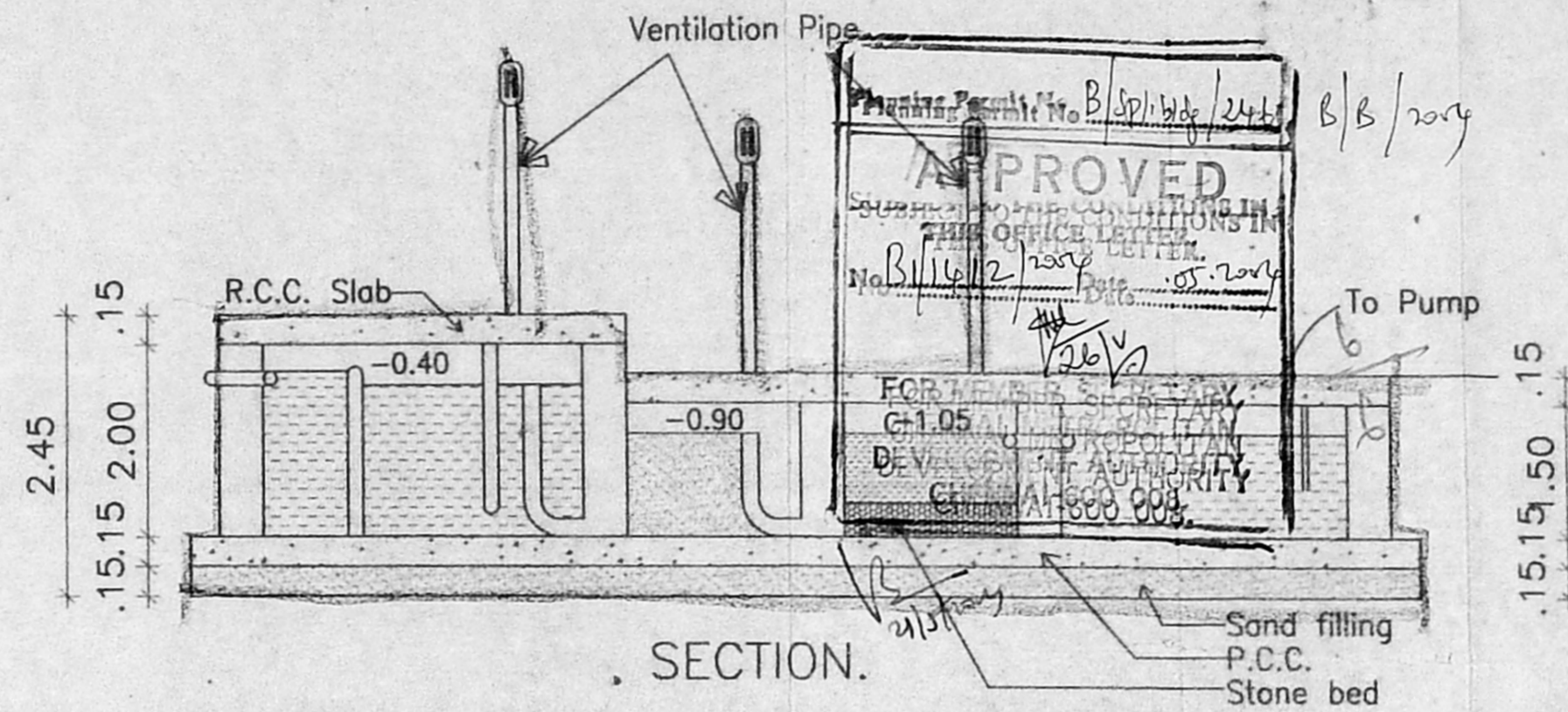
UP FLOW FILTERS

Discharge for 75persons	-- 7,500 Lts.
Volume	-- 7.50x0.98=7.35
Depth	-- 1.50m-0.30m =1.20
Plan area required	-- $\frac{7.35}{1.20} = 3.675$ m ²

SIZE OF THE FINAL EFFLUENT SUMP	-- 3.06x2.00x1.50
UP FLOW FILTER NO.1	-- 1.50x2.00x1.50
UP FLOW FILTER NO.2	-- 1.50x2.00x1.50

DETAIL OF SEPTIC TANK.

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CMDA (B) No. 1
C. No. B1/1412/2014
Asst.
Scrutiny
P. A. 20/3/2014
21/4/2014
A.P.
D.P.

PROPOSED RESIDENTIAL BUILDING AT
PLOT NO.36, ANNAI INDIRA NAGAR,
OKKIAM THORAPAKKAM, CHENNAI.

OLD S.NO: 281
OLD S.NO: 281/37

All Dimensions are in Metre.

Colour Index

Proposed

Owner's Signature/Power Agent

S. Nameppan

Anbarasan

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Architect's Signature