

PLOT AREA (A) = 14670 SQM

Average runoff coefficient (C) = 0.7

Design rainfall intensity = 90 mm/hr
(5 year storm interval over 25 year period)

Storm intensity for 15 minutes
Retention (I) = $90 \times 15 / 60 = 22.5$ mm

Expected runoff Q = $C \times I \times A$
= $0.7 \times (22.5 / 1000) \times 14670$
= 231 cubic meters

Proposed no. of Rainwater
Harvesting pits = 4 (Four)

Water retention capacity of
Each RWHP pit = $231 / 4 = 57.75$ cum, SAY 58 cum

Design details of Typical RWHP Pit of 58 cum capacity

Assumed water depth in RWHP pit = 3 m

Required plan area = $58 / 3 = 19.33$ sqm

Assumed clear width of RWHP pit = 2.7 m

Length of RWHP pit = $19.33 / 2.7 = 7.16$ m

M.H	MAN HOLE SIZE=900Ømm DEPTH=910 TO 1670mm
M.H	MAN HOLE SIZE=1220Ømm DEPTH=1680 TO 2290mm
M.H	MAN HOLE SIZE=1520Ømm DEPTH=2300 TO 4500mm

	400Ø STORM WATER PIPE LINE
	200Ø STORM WATER PIPE LINE
	150Ø STORM WATER PIPE LINE
G.L.	GROUND LEVEL
I.L.	INVERT LEVEL
C.L.	CONNECTION LEVEL
D.C.	DE-SILTING / OIL GREASE CHAMBER
RWHP	RAIN WATER HARVESTING PIT DETAIL
CB	CATCH BASIN (450x450mm)
250Ø	R.C.C.PIPE

	PIPE	DIA OF MANHOLE
		300Ø SEWER PIPE LINE
		250Ø SEWER PIPE LINE
		200 Ø SEWER PIPE LINE
G.L.	GROUND LEVEL	
I.L.	INVERT LEVEL	
C.L.	CONNECTION LEVEL	



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