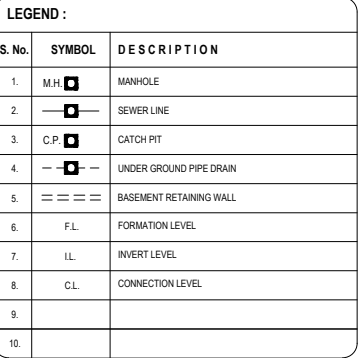


DETAILS OF SEWER LINES												
Manhole No.		Length	Dia.	Slope	MH Top Level Upper End		Invert Level	Depth	MH Top Level Lower End		Invert Level	Depth
From	To	(m)	(mm)	1 in	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
S1	S2	37	250	200	0.75	-1.30	2.05	0.75	-1.49	2.24		
S2	S3	62	250	250	0.75	-1.49	2.04	0.75	-1.73	2.48		
S3	S4	37	250	250	0.75	-1.73	2.48	0.75	-1.88	2.63		
S4	S5	25	250	250	0.75	-1.88	2.63	0.75	-1.98	2.73		
S5	S6	40	250	250	0.75	-1.98	2.73	0.75	-2.14	2.89		
S6	S7	30	250	300	0.75	-2.14	2.89	0.75	-2.24	2.99		
S7	S8	42	250	300	0.75	-2.24	2.99	0.75	-2.38	3.13		
S8	S9	35	250	300	0.75	-2.38	3.13	0.75	-2.50	3.25		
S9	S10	18	250	300	0.75	-2.50	3.25	0.75	-2.56	3.31		
S10	STP	5	250	300	0.75	-2.56	3.31	0.75	-2.57	3.32		



THE SIZE OF MANHOLE SHALL BE AS UNDER (INNER SIZES)

a) Upto 800 mm dia.	900 x 600 mm.
b) 800 to 1650 mm. depth	900 mm. dia.
c) 1650 to 2250 mm. depth	1200 mm. dia.
d) Above 2250 mm. depth	1500 mm. dia.

2. The levels of sewer line has been worked out on the basis of certain ground level and for certain pipe lengths between two manholes, the invert levels have to be strictly followed. However, the slope of line may be slightly changed.

3. For any discrepancy / omission the matter should refer to the consultants before execution.

4. Manhole shall be provided at following places :-

- At the start of each sewer line.
- At every junction and point where there is change of size, gradient and alignment.
- At not more than 45 meter interval in straight length.
- Where the diameter of pipe is increased the crown of the pipe shall be fixed at the same level and necessary slope shall be given in the invert of the manhole chamber.

5. The structural design of manholes / pipe bedding has to be done for local field conditions such as filled up soil / black cotton soil / high sub soil conditions.

6. This drawing shall be read along with the detailed landscape plan & ground plan of respective building for exact location of appurtenances / man holes etc.

7. Manhole cover under the road shall be encased with 150 thick, pc 12.4 all round.

8. Sewer line should be finished with finished formation level as per landscape drawing.

9. The bedding of manhole shall be square as per appurtenances drawing & should be co-ordinated with landscape drawing.

10. This drawing shall be coordinated with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.

11. Material of pipe :- RCC (N.P) Pipe with rubber ring joint

12. In the areas subject to subsidence or filled up soil (due to excess excavation at site for construction of manholes) the sewer lines & manholes should be laid on suitable support or concrete grade supported on piles or (as found feasible) as per structural design.

13. In case where sewers are laid in high subsoil conditions manholes should be constructed in r.c.c. grade m-15.

14. The width of trench for sewer and drainage to be 4' 000mm (i.e. $\phi + d$, of pipe).

15. Shoring / timbering should be adequate to prevent caving-in of the trench walls of subdrains of areas adjacent to the trench. an engineer-in-charge in conjunction with a structural engineer should provide adequate arrangement to prevent caving-in.

RO	26-09-2015	ISSUED AS G.F.C.
Rev. No.	Date	Revision

Project : **PROPOSED GARDENIA AT
PLOT NO-GH-11, SECTOR 75,NOIDA**

Title : **LAYOUT PLAN**

Subtitle :
EXTERNAL DRAINAGE SYSTEM

Drawing Released For :

<input type="checkbox"/> APPROVAL	<input type="checkbox"/> SUBMISSION
<input type="checkbox"/> ADVANCE COPY	<input checked="" type="checkbox"/> CONSTRUCTION

Drg. No : GH-11 / ES-01

Scale : 1:475 Drawn By : Amit Kamboj

Date : Sep. 2015 Design By : Nitesh Kumar

Ckd By : **Anand Havelia**

Architects :
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