NORTH

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.	M.H.	MANHOLE
2.		SEWER LINE
3.	F.L.	FORMATION LEVEL
4.	I.L.	INVERT LEVEL
5.	C.L.	CONNECTION LEVEL
6.		
7.		

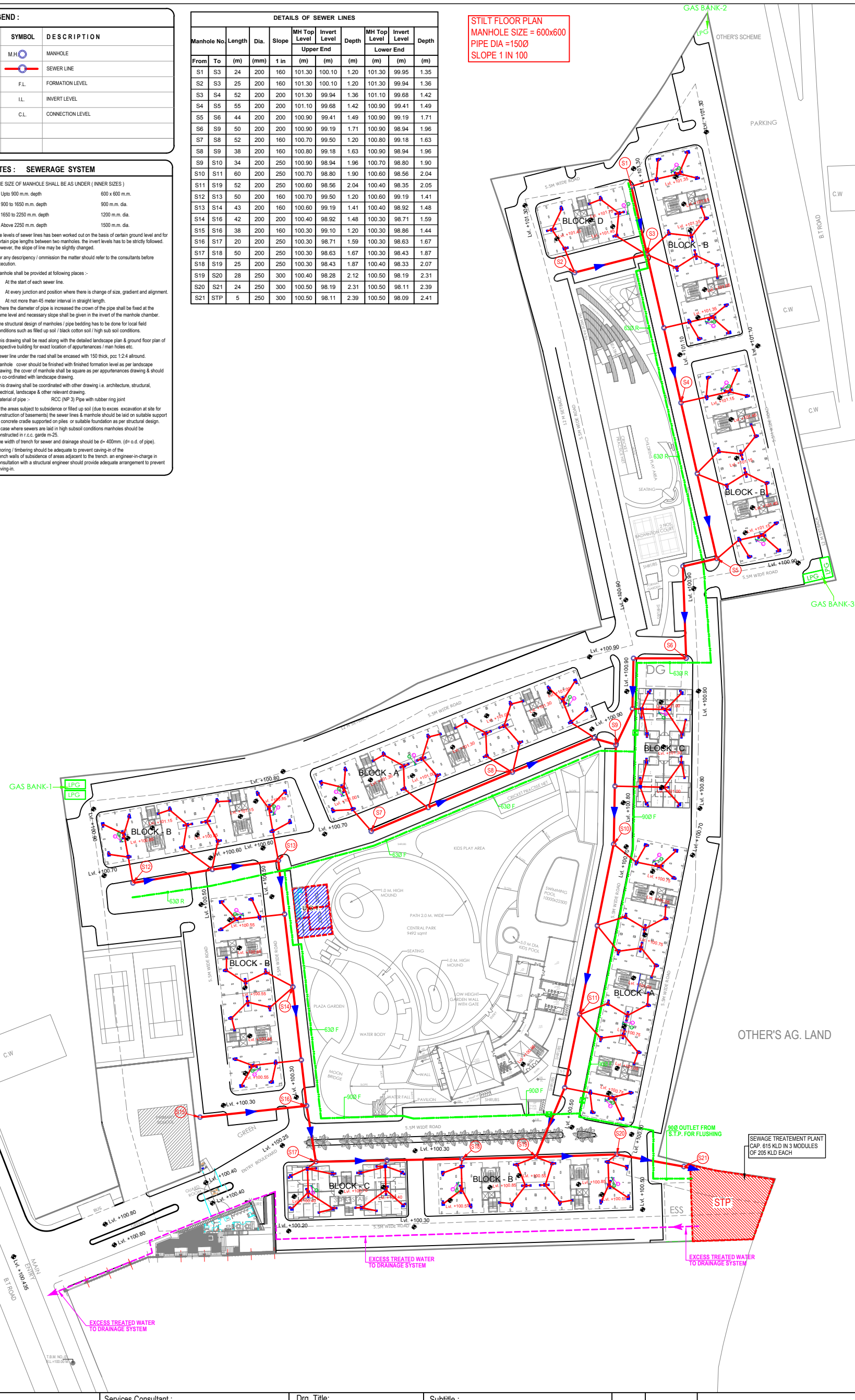
NOTES : SEWERAGE SYSTEM

1. THE SIZE OF MANHOLE SHALL BE AS UNDER (INNER SIZES)
   a) Upto 900 m.m. depth — 600 x 600 m.m.
   b) 900 to 1650 m.m. depth — 900 m.m. dia.
   c) 1650 to 2250 m.m. depth — 1200 m.m. dia.
   d) Above 2250 m.m. depth — 1500 m.m. dia.
2. the levels of sewer lines has been worked out on the basis of certain ground level and for certain pipe lengths between two manholes. the invert levels has to be strictly followed. however, the slope of line may be slightly changed.
3. For any descripency / ommission the matter should refer to the consultants before execution.
4. Manhole shall be provided at following places :-
   a) At the start of each sewer line.
   b) At every junction and position where there is change of size, gradient and alignment.
   c) At not more than 45 meter interval in straight length.
5. 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.
6. 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.
7. This drawing shall be read along with the detailed landscape plan & ground floor plan of respective building for exact location of appurtenances / man holes etc.
8. Sewer line under the road shall be encased with 150 thick, pcc 1:2:4 allround.
9. Manhole cover should be finished with finished formation level as per landscape drawing, the cover 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 (NP 3) Pipe with rubber ring joint
12. In the areas subject to subsidence or filled up soil (due to exces excavation at site for construction of basements) the sewer lines & manhole should be laid on suitable support or concrete cradle supported on piles or suitable foundation as per structural design.
13. In case where sewers are laid in high subsoil conditions manholes should be constructed in r.c.c. garde m-25.
14. The width of trench for sewer and drainage should be d+ 400mm. (d= o.d. of pipe).
15. Shoring / timbering should be adequate to prevent caving-in of the trench walls of subsidence of areas adjacent to the trench. an engineer-in-charge in consultation with a structural engineer should provide adequate arrangement to prevent caving-in.

DETAILS OF SEWER LINES

Manhole No.		Length	Dia.	Slope	MH Top Level (Upper End)	Invert Level (Upper End)	Depth	MH Top Level (Lower End)	Invert Level (Lower End)	Depth
From	To	(m)	(mm)	1 in	(m)	(m)	(m)	(m)	(m)	(m)
S1	S3	24	200	160	101.30	100.10	1.20	101.30	99.95	1.35
S2	S3	25	200	160	101.30	100.10	1.20	101.30	99.94	1.36
S3	S4	52	200	200	101.30	99.94	1.36	101.10	99.68	1.42
S4	S5	55	200	200	101.10	99.68	1.42	100.90	99.41	1.49
S5	S6	44	200	200	100.90	99.41	1.49	100.90	99.19	1.71
S6	S9	50	200	200	100.90	99.19	1.71	100.90	98.94	1.96
S7	S8	52	200	160	100.70	99.50	1.20	100.80	99.18	1.63
S8	S9	38	200	160	100.80	99.18	1.63	100.90	98.94	1.96
S9	S10	34	200	250	100.90	98.94	1.96	100.70	98.80	1.90
S10	S11	60	200	250	100.70	98.80	1.90	100.60	98.56	2.04
S11	S19	52	200	250	100.60	98.56	2.04	100.40	98.35	2.05
S12	S13	50	200	160	100.70	99.50	1.20	100.60	99.19	1.41
S13	S14	43	200	160	100.60	99.19	1.41	100.40	98.92	1.48
S14	S16	42	200	200	100.40	98.92	1.48	100.30	98.71	1.59
S15	S16	38	200	160	100.30	99.10	1.20	100.30	98.86	1.44
S16	S17	20	200	250	100.30	98.71	1.59	100.30	98.63	1.67
S17	S18	50	200	250	100.30	98.63	1.67	100.30	98.43	1.87
S18	S19	25	200	250	100.30	98.43	1.87	100.40	98.33	2.07
S19	S20	28	250	300	100.40	98.28	2.12	100.50	98.19	2.31
S20	S21	24	250	300	100.50	98.19	2.31	100.50	98.11	2.39
S21	STP	5	250	300	100.50	98.11	2.39	100.50	98.09	2.41

STILT FLOOR PLAN
MANHOLE SIZE = 600x600
PIPE DIA =150Ø
SLOPE 1 IN 100



Project:- Ashiana Umang AT JAIPUR	Services Consultant : Consummate Engineering Services (P) Ltd. cespl. Noida Office : B - 67, Sector - 67, Noida - 201 301 Tel : (0120) 2593500 (30 Lines) Lko. Office : R 006, Rohtas Plumeria, Gomti Nagar, Lucknow Tel : (0522) 6515455 e mail : mail@cespl.in, website : www.cespl.in	Drg. Title: LAYOUT PLAN	Subtitle : EXTERNAL SEWERAGE SYSTEM	
Owners Name: Ashiana Houshing Ltd, Unit no.4 & 5,Plot No.D-2,3rd Floor, Southern park, saket District Centre, Saket New Delhi - 110017 Phone no. 011- 42 65 42 65	Architect: B.sengupta architect, A305,RANGOLI,ASHIANAVILLAGEBHIWADI. PH . 09887488263	Scale: - 1 : 650	Drg. No : UMANG / ES-01	Drawn By : Amit Kamboj
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