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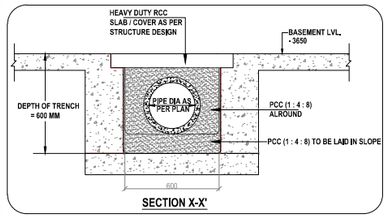
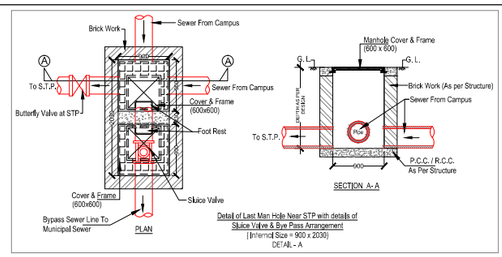
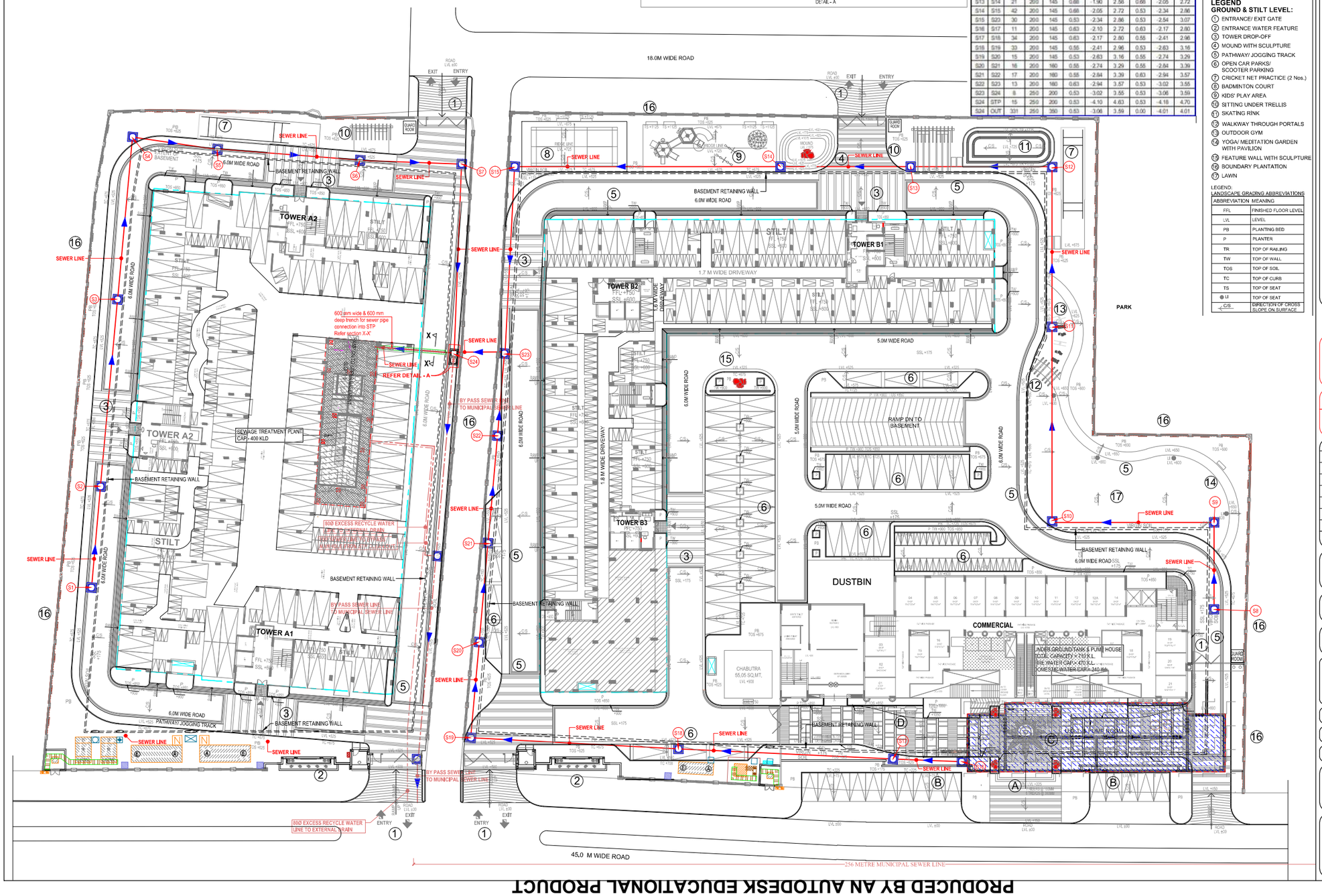


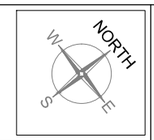
SECTION X-X'



Detail of Last Man Hole Near STP with details of Sluice Valve & Sye Pass Arrangement
[Internal Size = 900 x 2030]
DETAIL - A

DETAILS OF SEWER LINES										
Manhole No.		Length	Dia.	Slope	MH Top Level	Invert Level	Depth	MH Top Level	Invert Level	Depth
					Upper End			Lower End		
From	To	(m)	(mm)	1 in	(m)	(m)	(m)	(m)	(m)	(m)
S1	S2	16	200	145	0.53	-1.10	1.62	0.53	-1.21	1.73
S2	S3	30	200	145	0.53	-1.21	1.73	0.53	-1.41	1.94
S3	S4	25	200	145	0.53	-1.41	1.94	0.63	-1.58	2.21
S4	S5	14	200	145	0.63	-1.58	2.21	0.53	-1.68	2.21
S5	S6	22	200	145	0.53	-1.68	2.21	0.53	-1.83	2.36
S6	S7	16	200	145	0.53	-1.83	2.36	0.53	-1.94	2.47
S7	S24	30	200	145	0.53	-1.94	2.47	0.53	-2.15	2.68
S8	S9	14	200	145	0.53	-1.10	1.62	0.60	-1.19	1.79
S9	S10	25	200	145	0.60	-1.19	1.79	0.60	-1.36	1.96
S10	S11	31	200	145	0.60	-1.36	1.96	0.66	-1.58	2.25
S11	S12	25	200	145	0.68	-1.58	2.25	0.63	-1.75	2.38
S12	S13	22	200	145	0.63	-1.75	2.38	0.66	-1.90	2.56
S13	S14	21	200	145	0.68	-1.90	2.58	0.66	-2.05	2.72
S14	S15	42	200	145	0.68	-2.05	2.72	0.53	-2.34	2.86
S15	S23	30	200	145	0.53	-2.34	2.86	0.53	-2.54	3.07
S16	S17	11	200	145	0.63	-2.10	2.72	0.63	-2.17	2.80
S17	S18	34	200	145	0.63	-2.17	2.80	0.55	-2.41	2.96
S18	S19	33	200	145	0.55	-2.41	2.96	0.53	-2.63	3.16
S19	S20	15	200	145	0.53	-2.63	3.16	0.55	-2.74	3.29
S20	S21	16	200	160	0.55	-2.74	3.29	0.55	-2.84	3.39
S21	S22	17	200	160	0.55	-2.84	3.39	0.63	-2.94	3.57
S22	S23	13	200	160	0.63	-2.94	3.57	0.53	-3.02	3.55
S23	S24	8	250	200	0.53	-3.02	3.55	0.53	-3.06	3.59
S24	STP	15	250	300	0.53	-4.10	4.63	0.53	-4.16	4.70
S24	OUT	331	250	350	0.53	-3.06	3.59	0.00	-4.01	4.01





LEGEND: COMMERCIAL AREA

- (A) ENTRY/ DROP-OFF AREA
- (B) VISITORS/ COMMERCIAL CAR PARKING
- (C) EVENT PLAZA
- (D) PLANTING BED WITH SEATING

LEGEND GROUND & STILT LEVEL:

- (1) ENTRANCE/ EXIT GATE
- (2) ENTRANCE WATER FEATURE
- (3) TOWER DROP-OFF
- (4) MOUND WITH SCULPTURE
- (5) PATHWAY/ JOGGING TRACK
- (6) OPEN CAR PARKS/ SCOOTER PARKING
- (7) CRICKET NET PRACTICE (2 Nos.)
- (8) BADMINTON COURT
- (9) KIDS' PLAY AREA
- (10) SITTING UNDER TRELLIS
- (11) SKATING RINK
- (12) WALKWAY THROUGH PORTALS
- (13) OUTDOOR GYM
- (14) YOGA/ MEDITATION GARDEN WITH PAVILION
- (15) FEATURE WALL WITH SCULPTURE
- (16) BOUNDARY PLANTATION
- (17) LAWN

LEGEND:
LANDSCAPE GRADING ABBREVIATIONS

ABBREVIATION	MEANING
FFL	FINISHED FLOOR LEVEL
LVL	LEVEL
PB	PLANTING BED
P	PLANTER
TR	TOP OF RAILING
TW	TOP OF WALL
TOS	TOP OF SOIL
TC	TOP OF CURB
TS	TOP OF SEAT
LI	TOP OF SEAT
C/S	DIRECTION OF CROSS SLOPE ON SURFACE

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.	M.H.	MANHOLE
2.		SEWER LINE
3.		BASEMENT RETAINING WALL

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 :- uPVC / DWC (SN8) Pipe with rubber ring joint as per IS : 16098 (part-1) or (part-2) (hollowcore / foamcore or PE-DWC type)
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.

NOTE: EXTERNAL MUNICIPAL SEWER LEVEL TO BE VERIFIED AT SITE BEFORE THE LAYING OF THE SITE SEWERAGE ANY DISCREPANCIES IN LEVELS TO BE IMMEDIATELY REPORTED

SPECIAL NOTES :

This drawing shall be read in conjunction with Appurtenance Details drawing no. MR / 17B08 / ES - 05

rev. no.	date	revision
R6	02.07.2018	Issued as GFC
R5	15.06.2018	Drawing revised as per arch. comment
R4	16.05.2018	Issued as an advance copy for approval
R3	30.03.2018	Tower - B ESS location revised
R2	08.02.2018	Drawing revised as per final Arch. plan
R1	03.11.2017	U.G.T. & S.T.P Location revised
R0	03.07.2017	Issued for approval

project
MIGSUN ROOF GROUP HOUSING
AT VILLAGE :- SIKROAD, GHAZIABAD

title
LAYOUT PLAN

subtitle
EXTERNAL SEWERAGE SYSTEM

drawing released for
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☐ ADVANCE COPY ■ CONSTRUCTION

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scale 1 : 300	designed by Badri Vishal
date 03.07.2017	checked by Anand Havelia

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