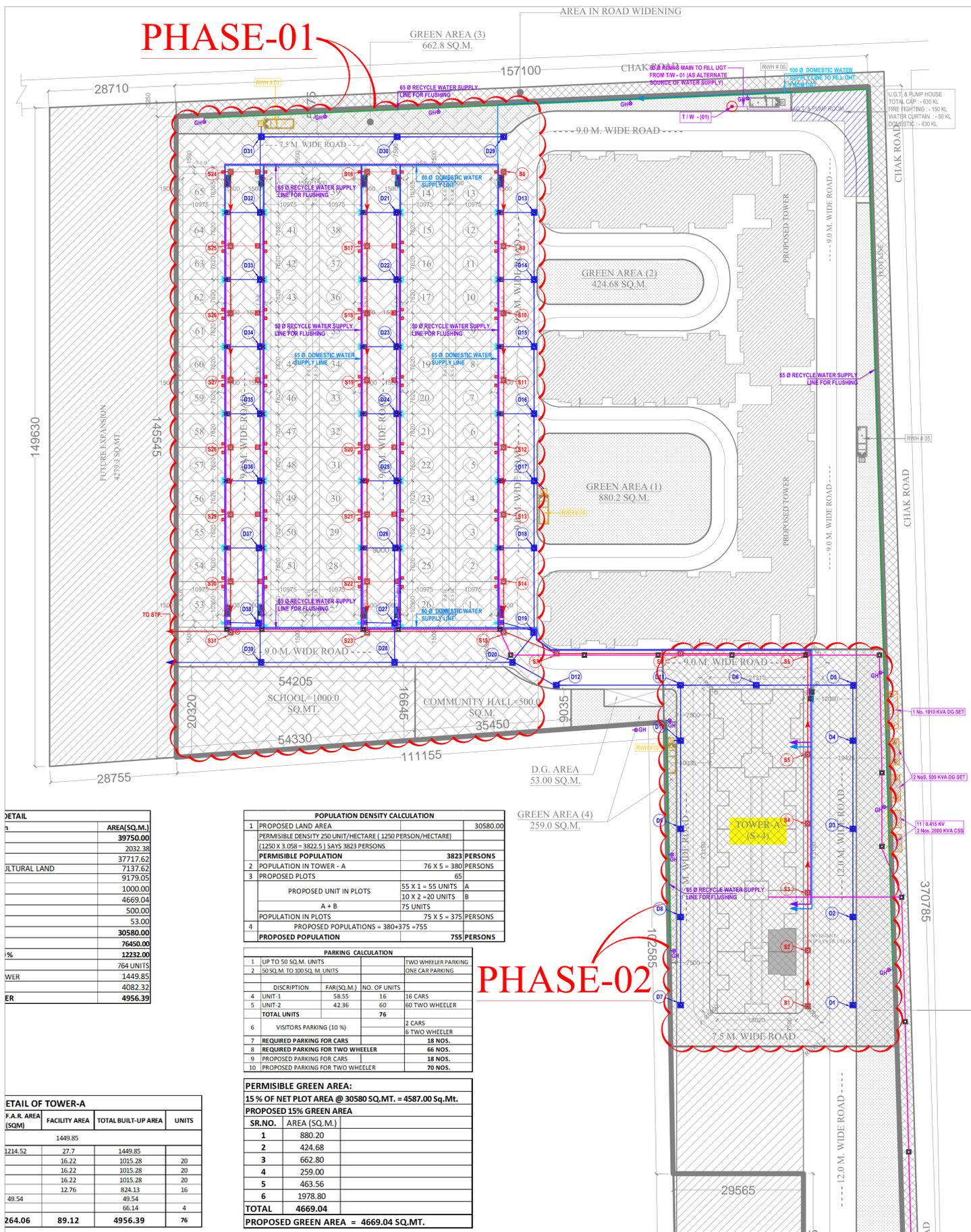


PHASE-01



- ### NOTES : DRAINAGE SYSTEM
- THE SIZE OF CATCHPIT SHALL BE AS UNDER (INNER SIZES)
 - a) Service Catchpit 1100 m. depth 600 m. dia.
 - b) 900 to 1650 m. depth 800 m. dia.
 - c) 1650 to 2250 m. depth 1200 m. dia.
 - d) Above 2250 m. depth 1500 m. dia.
 - The levels of drainage lines has been worked out on the basis of certain ground level and for certain pipe lengths between two catchpits. The invert levels has to be strictly followed. However, the slope of line may be slightly changed.
 - For any discrepancy / omission the matter should refer to the consultants before execution.
 - Catchpit shall be provided at following places :-
 - a) At the start of each drain line.
 - b) At every junction and position where there is change of size, gradient and alignment.
 - c) At not more than 15 meter interval in straight length.
 - The structural design of catchpit / pipe bedding has to be done for local field conditions such as filled up soil / black cotton soil / high sub soil conditions.
 - This drawing shall be read along with the detailed landscape plan & ground floor plan of respective building for exact location of appurtenances / catchpit etc.
 - Drainage line under the road shall be encased with 150 thick, pcc 1:2:4 around.
 - Catchpit cover should be finished with finished formation level as per landscape drawing. The cover of catch pit shall be square as per appurtenances drawing & should be coordinated with landscape drawing.
 - This drawing shall be coordinated with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.
 - Material of pipe :-
 - a) Up to 250 m. dia. :- UPVC / DVC (SNA) Pipe with rubber ring joint as per IS : 16098 (part-1) or (part-2) (Hollowcore / foamcore or PE-DWC type)
 - b) 300 m.m. & above dia. :- RCC (NP-3) Pipe with rubber ring joint
 - In the areas subject to subsidence or filled up soil (due to excess excavation at site for construction of basements) the drain lines & catchpit should be laid on suitable support or concrete grade supported on piles or suitable foundation as per structural design.
 - In case where drain are laid in high subsoil conditions catchpits should be constructed in r.c.c. grade m-25.
 - The width of trench for sewer and drainage should be d+400mm. (d= o.d. of pipe).
 - 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.
 - Before taking up the execution, the feasibility of connection of drain with the outside drainage may please be checked. any discrepancy may be reported to the consultant.

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.		SERVICE CATCH PIT (INSIDE PLOT) SIZE: 600 X 600 X L (1) 1000
2.		SERVICE CATCH PIT (OUTSIDE PLOT) SIZE: 600 X 600 X L (1) 1100
3.		CATCH PIT
4.		2000 SERVICE CONNECTION PIPE
5.		UNDER GROUND PIPE DRAIN
6.		RAIN WATER HARVESTING PIT
7.		SAUCER DRAIN

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.		RISING MAIN LINE (FROM TW TO U.G.T.)
2.		MUNICIPAL WATER SUPPLY PIPE LINE
3.		RECYCLED WATER SUPPLY LINE FOR FLUSHING
4.		RECYCLED WATER SUPPLY LINE FOR HORTICULTURE
5.		DOMESTIC WATER SUPPLY LINE
6.		PROPOSED TUBE WELL
7.		GARDEN HYDRANT
8.		MASONRY CHAMBER FOR ISOLATING VALVE
9.		AIR RELEASE VALVE

- ### NOTES : WATER SUPPLY
- The depth of domestic water supply main shall be - 800 mm
 - The depth of recycled water supply main shall be - 800 mm
 - The depth of rising main shall be - 1000 mm
 - Pipe material for external water supply - recycle / tube well rising main / municipal line shall be - UPVC / SCAI 60

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.		POLE LIGHT (HEIGHT - 5.5 M)
2.		L.V. MANHOLE (300 X 300 X 450 MM DEEP)
3.		1500 L.V. PIPE
4.		1000 L.V. PIPE
5.		400 L.V. PIPE
6.		FEEDER PILLAR

DETAIL

AREA (SQ.M.)
39750.00
2032.38
37717.62
7137.62
9779.05
1000.00
4669.04
500.00
53.00
30580.00
76450.00
12232.00
764 UNITS
1449.85
4082.32
4956.39

POPULATION DENSITY CALCULATION

1	PROPOSED LAND AREA	30580.00
2	PERMISSIBLE DENSITY 250 UNIT/HECTARE (1250 PERSON/HECTARE) (1250 X 3.059 = 3822.5) SANS 3823 PERSONS	3823 PERSONS
3	PERMISSIBLE POPULATION	3823 PERSONS
4	POPULATION IN TOWER - A	76 X 5 = 380 PERSONS
5	PROPOSED PLOTS	65
6	PROPOSED UNIT IN PLOTS	55 X 1 = 55 UNITS A
7		10 X 2 = 20 UNITS B
8	A + B	75 UNITS
9	POPULATION IN PLOTS	75 X 5 = 375 PERSONS
10	PROPOSED POPULATION = 380+375 = 755	755 PERSONS

PARKING CALCULATION

1	UP TO 50 SQ.M. UNITS	TWO WHEELER PARKING		
2	50 SQ.M. TO 100 SQ.M. UNITS	ONE CAR PARKING		
3	DISCRPTION	FARI (SQ.M.)	NO. OF UNITS	NO. OF CARS
4	UNIT-1	58.55	16	16 CARS
5	UNIT-2	42.36	60	60 TWO WHEELER
6	TOTAL UNITS	76		
7	VISITORS PARKING (10 %)		2 CARS	
8	REQUIRED PARKING FOR CARS		18 NOS.	
9	REQUIRED PARKING FOR TWO WHEELER		66 NOS.	
10	PROPOSED PARKING FOR CARS		18 NOS.	
11	PROPOSED PARKING FOR TWO WHEELER		70 NOS.	

PERMISSIBLE GREEN AREA:

15% OF NET PLOT AREA @ 30580 SQ.MT. = 4587.00 Sq.MT.

PROPOSED 15% GREEN AREA

SR.NO.	AREA (SQ.M.)
1	880.20
2	424.68
3	662.80
4	259.00
5	463.56
6	1978.80
TOTAL	4669.04

PROPOSED GREEN AREA = 4669.04 SQ.MT.

DETAIL OF TOWER-A

F.A.R. AREA (SQ.M)	FACILITY AREA	TOTAL BUILT-UP AREA	UNITS
1449.85			
214.52	27.7	1449.85	
	16.22	1015.28	20
	16.22	1015.28	20
	16.22	1015.28	20
	12.76	824.13	16
		49.54	
		66.14	4
264.06	89.12	4956.39	76

- ### NOTES : SEWERAGE SYSTEM
- THE SIZE OF MANHOLE SHALL BE AS UNDER (INNER SIZES)
 - a) Service Manhole 1100 m. depth 600 x 600 m.
 - b) 900 to 1650 m. depth 800 m. dia.
 - c) 1650 to 2250 m. depth 1200 m. dia.
 - d) Above 2250 m. depth 1500 m. dia.
 - 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.
 - For any discrepancy / omission the matter should refer to the consultants before execution.
 - 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.
 - 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.
 - 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.
 - 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.
 - Sewer line under the road shall be encased with 150 thick, pcc 1:2:4 around.
 - 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 coordinated with landscape drawing.
 - This drawing shall be coordinated with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.
 - Material of pipe :-
 - a) Up to 250 m. dia. :- UPVC / DVC (SNA) Pipe with rubber ring joint as per IS : 16098 (part-1) or (part-2) (Hollowcore / foamcore or PE-DWC type)
 - b) 300 m.m. & above dia. :- RCC (NP-3) Pipe with rubber ring joint
 - In the areas subject to subsidence or filled up soil (due to excess excavation at site for construction of basements) the sewer lines & manhole should be laid on suitable support or concrete grade supported on piles or suitable foundation as per structural design.
 - In case where sewers are laid in high subsoil conditions manholes should be constructed in r.c.c. grade m-25.
 - The width of trench for sewer and drainage should be d+400mm. (d= o.d. of pipe).
 - 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.

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.		SERVICE MANHOLE (INSIDE PLOT) SIZE: 600 X 600 X L (1) 1000
2.		SERVICE MANHOLE (OUTSIDE PLOT) SIZE: 600 X 600 X L (1) 1100
3.		MANHOLE
4.		1600 SERVICE CONNECTION PIPE
5.		SEWER LINE

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. KM / 19B01 / ES - 06

Design of Sewerage system FOR KESHAV MAJESTIC

S.No.	Line No.	Length	Pipe Size(mm)	Slope (1 in)	Ground Level(mm)	Crown Level(mm)	Invert Level(mm)	Depth(mm)	S.No.	Line No.	Type of Manhole
1	S1	S2	11.00	200	200	0.000	0.000	-800	-855	800	855
2	S2	S3	12.00	200	200	0.000	0.000	-855	-915	855	915
3	S3	S4	14.00	200	200	0.000	0.000	-915	-985	915	985
4	S4	S5	22.00	200	200	0.000	0.000	-985	-1105	985	1105
5	S5	S6	27.00	200	200	0.000	0.000	-1105	-1230	1105	1230
6	S6	S7	27.00	200	200	0.000	0.000	-1230	-1365	1230	1365
7	S7	S15	12.00	200	100	0.000	0.000	-1365	-1485	1365	1485
8	S8	S9	14.00	200	200	0.000	0.000	-1485	-1555	1485	1555
9	S9	S10	14.00	200	100	0.000	0.000	-1555	-1695	1555	1695
10	S10	S11	14.00	200	200	0.000	0.000	-1695	-1765	1695	1765
11	S11	S12	14.00	200	200	0.000	0.000	-1765	-1835	1765	1835
12	S12	S13	14.00	200	200	0.000	0.000	-1835	-1905	1835	1905
13	S13	S14	14.00	200	200	0.000	0.000	-1905	-1975	1905	1975
14	S14	S15	10.00	200	200	0.000	0.000	-1975	-2025	1975	2025
15	S15	S23	10.00	200	200	0.000	0.000	-2025	-2095	2025	2095
16	S16	S17	14.00	200	200	0.000	0.000	-800	-870	800	870
17	S17	S18	14.00	200	200	0.000	0.000	-870	-940	870	940
18	S18	S19	14.00	200	200	0.000	0.000	-940	-1010	940	1010
19	S19	S20	14.00	200	200	0.000	0.000	-1010	-1080	1010	1080
20	S20	S21	14.00	200	200	0.000	0.000	-1080	-1150	1080	1150
21	S21	S22	14.00	200	200	0.000	0.000	-1150	-1220	1150	1220
22	S22	S23	10.00	200	200	0.000	0.000	-1220	-1290	1220	1290
23	S23	S31	30.00	200	200	0.000	0.000	-2095	-2245	2095	2245
24	S24	S25	14.00	200	200	0.000	0.000	-800	-870	800	870
25	S25	S26	14.00	200	200	0.000	0.000	-870	-940	870	940
26	S26	S27	14.00	200	200	0.000	0.000	-940	-1010	940	1010
27	S27	S28	14.00	200	200	0.000	0.000	-1010	-1080	1010	1080
28	S28	S29	14.00	200	200	0.000	0.000	-1080	-1150	1080	1150
29	S29	S30	14.00	200	200	0.000	0.000	-1150	-1220	1150	1220
30	S30	S31	10.00	200	200	0.000	0.000	-1220	-1290	1220	1290
31	S31	STP	12.00	200	200	0.000	0.000	-2245	-2305	2245	2305

Design of Drainage System For KESHAV MAJESTIC

S.No.	Line No.	Length	Pipe Dia	Slope (1 in)	Ground Level	Crown	Invert Level	Depth	Line	Manhole	Type of Manhole
1	D1	D2	19.000	250	300	0.000	0.000	-400	-463	650	463
2	D2	D3	19.000	250	300	0.000	0.000	-463	-526	463	526
3	D3	D4	19.000	250	300	0.000	0.000	-526	-589	526	589
4	D4	D5	12.000	250	300	0.000	0.000	-589	-629	589	629
5	D5	D6	21.000	250	300	0.000	0.000	-629	-699	629	699
6	D6	D11	16.000	250	300	0.000	0.000	-699	-752	699	752
7	D7	D8	19.000	250	300	0.000	0.000	-752	-815	752	815
8	D8	D9	19.000	250	300	0.000	0.000	-815	-878	815	878
9	D9	D10	19.000	250	300	0.000	0.000	-878	-941	878	941
10	D10	RW-2	1.000	250	300	0.000	0.000	-941	-941	941	941
11	D10	D11	11.000	250	300	0.000	0.000	-941	-928	891	928
12	D11	D12	27.000	250	300	0.000	0.000	-928	-1018	928	1018
13	D12	D20	10.000	250	300	0.000	0.000	-1018	-1051	1018	1051
14	D13	D14	19.000	250	300	0.000	0.000	-1051	-1108	1051	1098
15	D14	D15	14.000	250	300	0.000	0.000	-1098	-1145	1098	1145
16	D15	D16	14.000	250	300	0.000	0.000	-1145	-1192	1145	1192
17	D16	D17	14.000	250	300	0.000	0.000	-1192	-1239	1192	1239
18	D17	RW-4	3.000	250	300	0.000	0.000	-1239	-1249	1239	1249
19	D17	D18	14.000	250	300	0.000	0.000	-1239	-1260	1239	1260
20	D18	D19	18.000	250	300	0.000	0.000	-1260	-1317	1260	1317
21	D19	D20	8.000	250	300	0.000	0.000	-1317	-1346	1317	1346
22	D20	D28	26.000	250	300	0.000	0.000	-1346	-1416	1346	1416
23	D21	D22	14.000	250	300	0.000	0.000	-400	-447	400	447
24	D22	D23									