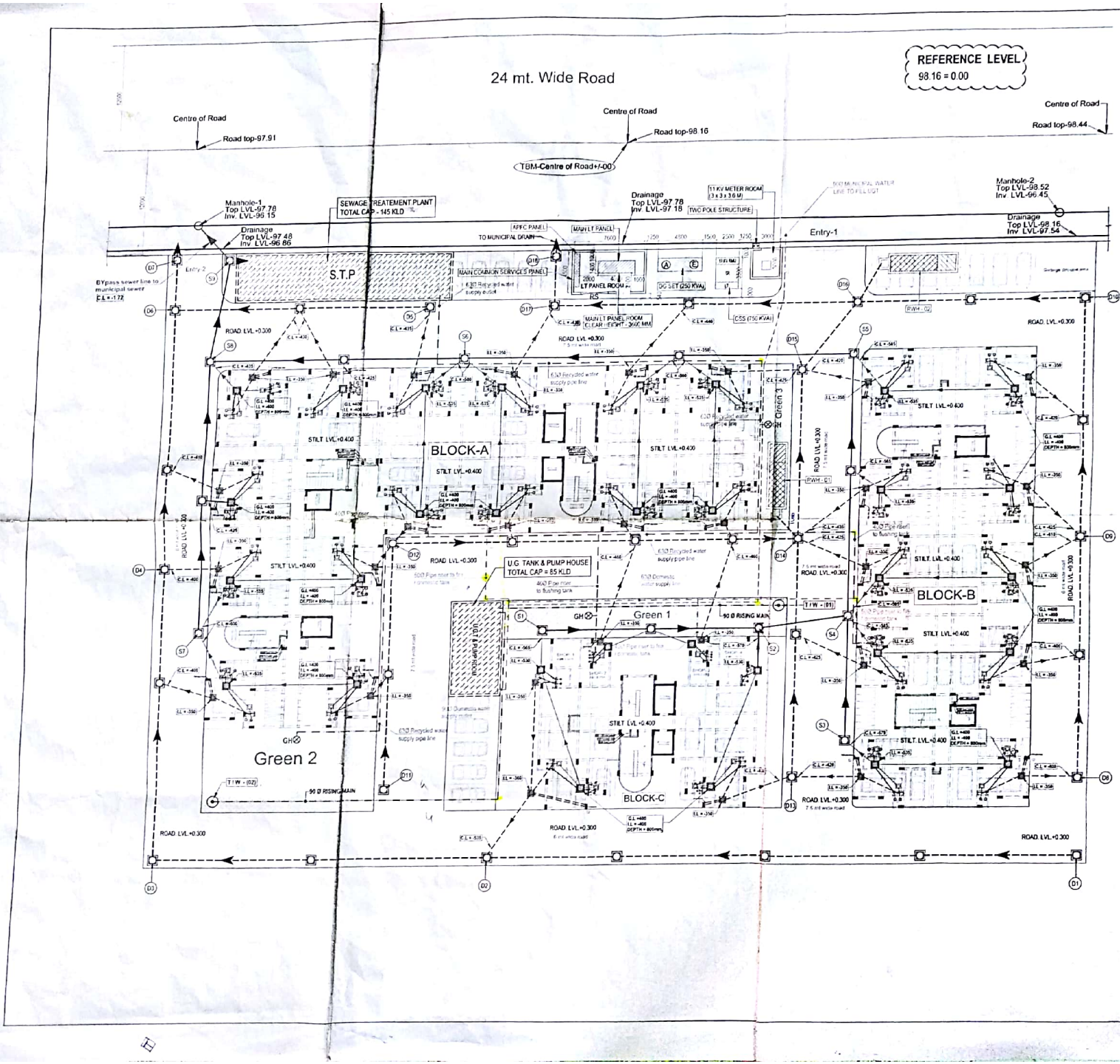

NOTES : DRAINAGE SYSTEM

1. THE SIZE OF CATCH PIT SHALL BE AS UNDER (INNER SIZES)
   a) Upto 900 m.m. depth — 600 x 600 m.m.
   b) 900 to 1050 m.m. depth — 900 m.m. dia.
   c) 1050 to 2250 m.m. depth — 1200 m.m. dia.
2. The levels of drainage 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 the line can slightly changed.
3. For any discrepancy / commission the matter should refer to the consultants before execution.
4. 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.
5. 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.
6. This drawing shall be read along with the relevant landscape plan & ground floor plan of respective building for exact location of appurtenances / catchpit etc.
7. Drainage line under the road shall be encased with 150 thick pcc 1:2:4 admixed.
8. 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 co-ordinated with landscape drawing.
9. This drawing shall be coordinated with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.
10. Material of pipe : RCC (NP 2) Pipe with rubber ring joint.
11. 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 cradle supported on piles or suitable foundation as per structural design.
12. In cases where drain are laid in high subsoil conditions manholes should be constructed in r.c.c. garter in-25.
13. The width of trench for sewer and drainage should be 0+ 400mm, 0/r o.d. of pipes.
14. Shoring / sentoning should be adequate to prevent caving in of the trench walls of subsoiling of areas adjacent to the trench, an engineer in charge in consultation with a structural engineer should provide adequate arrangement to prevent caving in.
15. 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.

INTERNAL SEWERAGE & DRAINAGE DETAIL

ALL INTERNAL MANHOLES SIZE = 600x600
ALL GULLY TRAPS SIZE = 300x300
ALL INTERNAL CATCH PITS SIZE = 600 x 600
SEWER PIPE DIA =150Ø & SLOPE 1 IN 100
DRAIN PIPE DIA =150Ø & SLOPE 1 IN 100

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1	M H	MANHOLE
2		SEWER LINE
3	C.P.	CATCH PIT
4		UNDER GROUND PIPE DRAIN
5		[illegible]
6		RISING MAIN LINE (FROM T/W TO S.T.P.)
7		[illegible]
8		RECYCLED WATER SUPPLY PIPE LINE FOR FLUSHING & HORTICULTURE
9		GARDEN HYDRANT
10		PROPOSED TUBE WELL
11		RAIN WATER HARVESTING
12	G.L.	GROUND LEVEL
13	F.L.	FINISH LEVEL
14	C.L.	CONNECTION LEVEL
15		

NOTES : WATER SUPPLY

1. The depth of domestic water supply main shall be — 1000 mm
2. The depth of hydrant water supply main shall be — 1000 mm
3. The depth of rising main shall be — 1200 mm
4. Pipe material for external water supply - recycle / potable water rising main / municipal line shall be HDPE (PE 100) PN6

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 1050 m.m. depth — 975 m.m. dia.
   c) 1050 to 2250 m.m. depth — 1200 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 can slightly changed.
3. For any discrepancy commission 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 chambers.
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 relevant landscape plan & ground floor plan of respective building for exact location of appurtenances, main sewer etc.
8. Sewer line under the road shall be encased with 150 thick pcc 1:2:4 admixed.
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 2) 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 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 cases where sewers are laid in high subsoil conditions manholes should be constructed in r.c.c. garter in-25.
14. The width of trench for sewer and drainage should be 0+ 400mm, 0/r o.d. of pipes.
15. Shoring / sentoning should be adequate to prevent caving in of the trench walls of subsoiling of areas adjacent to the trench, an engineer in charge in consultation with a structural engineer should provide adequate arrangement to prevent caving in.

Rev. No.	Date	Revision
R1	08-01-2018	Revised drainage routing
R0	29-12-2017	ISSUED AS G.F.C.

Project :
PROPOSED SAMAJWADI AWASIYA YOJANA
PLOT No.GH-9 AT KOYAL ENCLAVE EXTENSION GH9,GHZ.

Title :
LAYOUT PLAN (GH-9)

Subtitle :
EXTERNAL CO-ORDINATION SERVICES

Drawing Released For :
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Drg. No : SWAY/ GH-09 / ES-04

Scale : 1:200 **Drawn By :** Amit kamboj

Date : Dec. 2017 **Design By :** Devesh Agarwal

Ckd By : Anand Havelia

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