

SPECIFICATIONS

Road:-

Minimum width for two-way traffic as per local regulations. Concrete Road with bituminous cover with high-quality concrete pavers. The road construction materials are soil, aggregates (coarse and fine), bitumen, binders, and admixtures. The use of each material is exclusive to each layer. Soil as a naturally occurring or processed material finds its use as subgrade material. The coarse and fine aggregate mixture forms the sub-base, which is 300 mm thick. The aggregate of size 0–10 mm mixed with bitumen forms the base, which is coarse and 150 mm thick. Bitumen, such as cutback bitumen, emulsion, and asphalt, finds application in bitumen mix, tack coat, and prime coat.

Water Line:-

- **Main Supply Line:** Secure main water supply with adequate pressure.
- **Distribution:** Plan vertical risers and horizontal distribution for all floors.
- **Sewage and Vent:** -Outline systems for proper drainage

The water line is connected to the water source, which will be a municipal water treatment plant, a well, or another water supply source.

Pipelines, pumping stations, and control valves are installed to convey water from the main pump station to various parts of the building and site. The distribution network is designed to optimise flow rates, pressure levels, and water quality and built throughout the system.

NOTE:- 100 ∅ G.I. sump pump rising main to stormwater drain/manhole

Drainage System :-

Establish primary drainage channels to collect and divert stormwater away from residential and commercial areas. These channels can be open ditches, underground pipes, or a combination of both.

- **Sewage and Vent:** Outline systems for proper drainage and venting.
- **Stormwater Management:** Include design for stormwater drains and retention systems.
- **Fixtures:** Use water-efficient fixtures and appliances to minimize consumption.

Electricity system :-

Power Distribution

- **Main Electrical Room:** Designate space for switchgear, transformers, and panel boards.
- **Subpanels:** Allocate subpanels on each floor for lighting, receptacles, and appliances.

Lighting

- **Interior Lighting:** Specify energy-efficient LED fixtures in common areas and units.
- **Exterior Lighting:** Design for safety and aesthetics around the building and parking areas.

Emergency Power

- **Generators:** Include backup generators for emergency lighting and critical systems.
- **UPS:** Provide uninterruptible power supplies for essential systems.

L.T./L.V. line, 430 V Fiddler pillar, Ip-43, Street lights, will be provided. A 600x600 mm manhole will be provided for the L.T., L.V., and H.T. lines. Street light design: 6.0 metre to 9.0 metre height. High-voltage electricity from the grid to lower voltages suitable for distribution to buildings and facilities within Group housing. Substations may also include transformers for voltage regulation.

Overhead or underground power lines distribute electricity from substations to individual buildings, streets, Distribution lines are sized and configured based on projected electricity demand and load requirement.

Landscaping :-

Designated areas for parks, gardens, and recreational spaces are essential for community engagement and leisure activities. These areas may include kids play area, trees, shrubs, flower beds, and seating arrangements.

S.T.P. :-

The S.T.P. treats wastewater from the site to remove contaminants and pollutants before discharge into the environment. Treatment processes may include screening, sedimentation, biological treatment (such as activated sludge or bio filtration), and disinfection to meet regulatory standards and protect public health and the environment.

Sewer line:-

A 300 mm to 600 mm diameter R.C.C. sewer line will be provided. The manhole size will be 900 mm dia (main), and the sub-branchline will be 600 mm dia of the manhole provided.

Fire Alarm System:-

- **Detection:** Include smoke detectors, heat detectors, and manual pull stations throughout the building.
- **Monitoring:** Centralized monitoring with integration for emergency response.

Sprinkler Systems:-

- **Design:** Specify a comprehensive sprinkler system (wet, dry, or pre-action).
- **Hydraulic Calculations:** Conduct calculations for water supply and pressure requirements.