

WATER SUPPLY AND PLUMBING SYSTEM

Water Supply System

➤ A water supply system or water supply network is a network of pipes that supplies water to the buildings in an area. A water supply system typically includes:

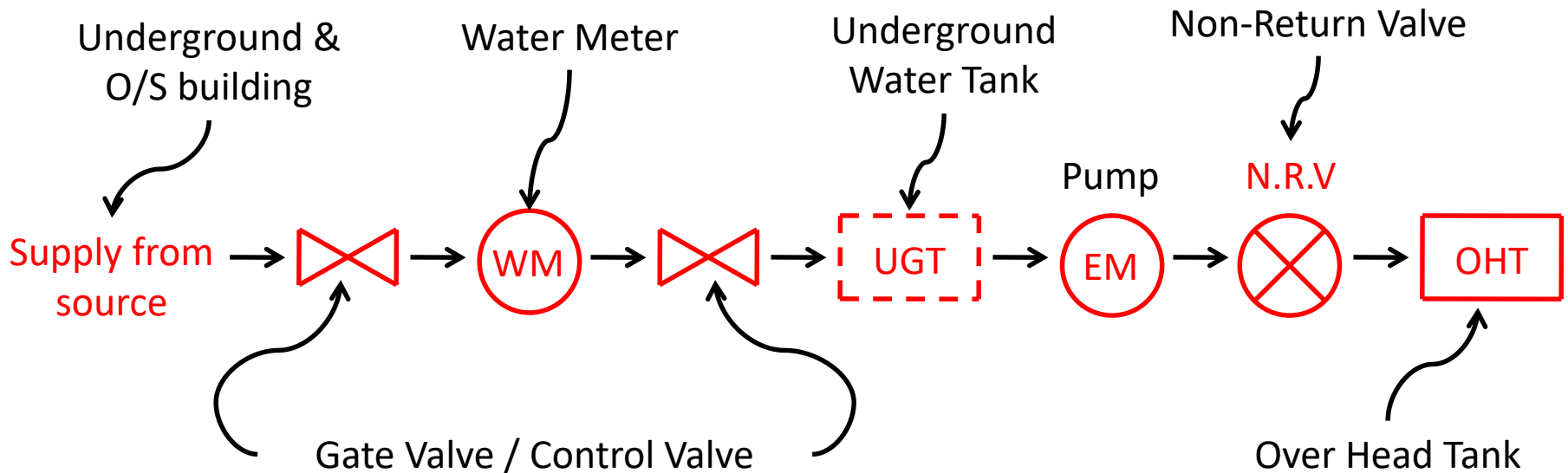
1. A drainage basin .
2. A raw water collection point.
3. Water purification facilities.
4. Water storage facilities.
5. Additional water pressurizing components such as pumping stations.
6. A pipe network for distribution of water to the consumers.

Plumbing System

- Plumbing is the system of pipes, drains fittings, valves, valve assemblies, and devices installed in a building for the distribution of water for drinking, heating and washing.
- Plumbing is usually distinguished from water supply system, in that a plumbing system serves one building, while water supply system serves a group of buildings.

Characteristics

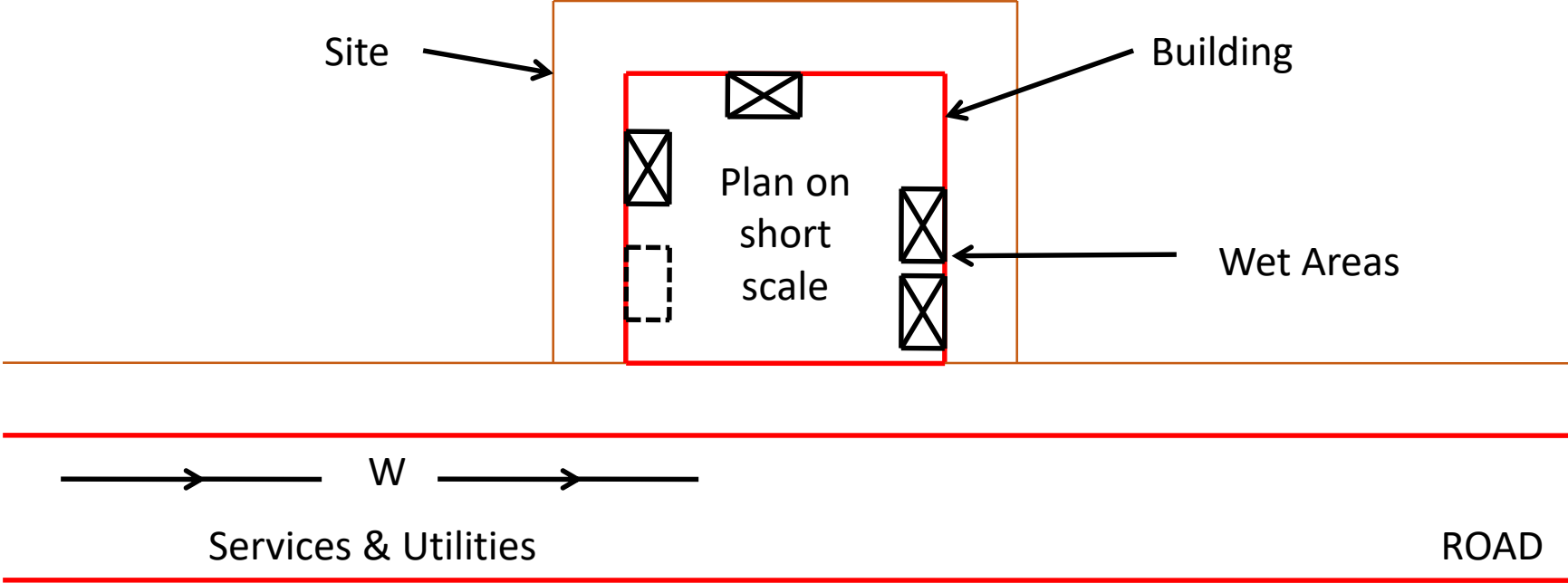
1. Entire system is based on gravity flow and augmented by lift pumps and ensures no air locking in the entire pipe layout.
2. Development of Flow Diagram



Characteristics

3. In any building where water supply is required is called a wet area e.g. kitchen, bath, laundry, food preparation area, washing area etc.
4. Identify wet areas on all the floors and prepare a key plan for the entire building showing location of wet areas on all the floors showing proper notes.

Characteristics



Characteristics

5. Water supply drawings are single line drawings and are not mentioned with any size, material or other characteristics related to the pipes.
6. Water supply layout drawings show straight lines with proper symbols of other items and are dark intensity lines.
7. The lines running in the floor are shown as continuous lines and the lines running in the wall are shown with broken lines.

Characteristics

8. Water supply drawings show both hot and cold water layout.
9. Least length route of the pipe should be adopted.
10. Unnecessary water pipes in the walls or floors should be avoided.
11. Water supply pipes may be:
 1. Concealed
 2. Exposed
 3. Combined

Characteristics

12. All hot water pipes must be properly insulated especially when exposed.
13. All water pipes entering any wet area must have gate valves provided on the exterior wall before branching in wet areas.
14. Water pipes embedded in building floor must be avoided for any leakage.