

Town of Bethany -- Subdivision Regulations

APPENDIX A - WATER SOURCE SPECIFICATIONS

PART I - NATURAL WATER SOURCE.

In cases where natural water sources are practical.

A. WATER SOURCE

1. The minimum capacity shall be 250,000 GALLONS.
2. The lift from the water source to the HYDRANT shall not exceed 15 FT.
3. The water source shall be a year round supply.
4. The cistern at the water source shall be at least a 4 X 4 X 8 FT. Galley with 2 X 8 IN Slots all the way around. The galley shall rest on an approved slab. The galley shall be deep enough so as to provide for a year round water source.
5. The pipe connecting the galley with the DRAFTING BASIN shall be a minimum of 15 IN diameter and shall be deep enough to prevent freezing. The run must be level and true.

B. FIRE DEPARTMENT CONNECTION.

1. The fire department connection shall consist of a dry type HYDRANT and a DRAFTING BASIN combination. The HYDRANT shall be located 8 FT. from the center of the DRAFTING BASIN opening.
2. The HYDRANT shall be connected to the DRAFTING BASIN with a minimum of a 8 IN diameter pipe and must be connected to the DRAFTING BASIN 6 IN from the bottom.
3. The water source may be a higher elevation than the HYDRANT, in which case the DRAFTING BASIN will not be necessary.
4. The HYDRANT shall consist of one 4 1/2 IN suction port and two 2 1/2 IN suction ports. These ports shall have NATIONAL STANDARD THREADS.
5. The HYDRANT must be elevated so as to be 3 FT. from the center of the 4 1/2 IN suction port to the ground surface. The 4 1/2 IN suction port must face the ACCESS LOT.
6. The HYDRANT must have a shut off valve below the freeze line. Drainage must be provided below the valve.
7. The DRAFTING BASIN must have an access door which swings (open) away from the ACCESS LOT and allows at least two 6 IN suction hoses with cylindrical strainers to be dropped in at the same time (30 X 30 IN minimum opening). The door must have the ability to be locked.
8. The DRAFTING BASIN must be a minimum of 5 X 5 FT. wide and must be 6 IN above grade.

9. The DRAFTING BASIN must be water proof and be deep enough to accept the 15 IN pipe from the water source. The DRAFTING BASIN must contain a minimum of 1,000 gallons year round.

10. All connections must be air tight from the DRAFTING BASIN to the HYDRANT.

11. The HYDRANT and the DRAFTING BASIN must have barricades for protection. These barricades must be place in such a way as not to interfere with the operation of the HYDRANT, DRAFTING BASIN, and fire apparatus.

12. The HYDRANT and the DRAFTING BASIN must be close enough to the ACCESS LOT to allow fire apparatus using 10 FT., 6 IN suction hose to complete the connection.

C. FLOW REQUIREMENTS

1. The HYDRANT and the DRAFTING BASIN, by themselves, must be capable of supplying a minimum of 1,000 gallons per minute, with a fire department pumper, operating at 100% capacity at 150 PSI through 10 FT. of 6 IN suction hose.

D. THE ACCESS LOT

1. The ACCESS LOT shall be at least 100 FT. long and 15 FT. deep, with the deepest point at the HYDRANT, DRAFTING BASIN.

2. The ACCESS LOT must be an approved paved lot. the shape must be tapered in such a way as to allow easy entrances and exits by fire apparatus traveling in either direction.

3. The ACCESS LOT shall be large enough to provide for one pumper, one tanker, and two member vehicles at the same time.

E. DIAGRAMS.

1. See attachments.

PART II - STORAGE TANKS

In cases were natural water sources are not practical.

A. WATER SOURCE

1. RESIDENTIAL ZONES - The minimum capacity of tanks shall be 20,000 gallons.

2. ALL OTHER ZONES - The minimum capacity of tanks shall be 40,000 gallons.

3. The tanks shall be constructed of fiberglass.

4. The tanks must be buried.

5. The tanks shall be contiguous, not partitioned.

6. The tanks shall provide for at least one access port, one fire department connection, and a vent.

7. The access port shall be large enough to allow a 6 IN suction hose to be dropped in.
8. The tanks and connections must be water proof.
9. The access port and the fire department connection must be close enough to the ACCESS LOT to allow a fire department pumper using 10 FT. of 6 IN suction hose to complete the connection.
10. The tanks shall be initially filled to capacity with clean water.
11. Run-off from the surrounding terrain shall not enter the tanks.

B. ACCESS LOT

1. See Part I, Section D.

C. FIRE DEPARTMENT CONNECTION

1. The fire department connection shall be of a dry hydrant type connected directly to the tank.
2. This dry hydrant shall be a 6 IN diameter schedule 40 PVC plastic pipe.
3. The dry hydrant shall consist of the following:
 - a. A SUPPORTED 90 degree dry hydrant head with a 6 IN female coupling using NATIONAL STANDARD THREADS, and cap.
 - b. Connecting pipe.
 - c. The connecting pipe shall run within 6 IN of the tank bottom.
 - d. A SUPPORTED double 2 1/2 IN NATIONAL STANDARD THREAD clappered siamese fill pipe.