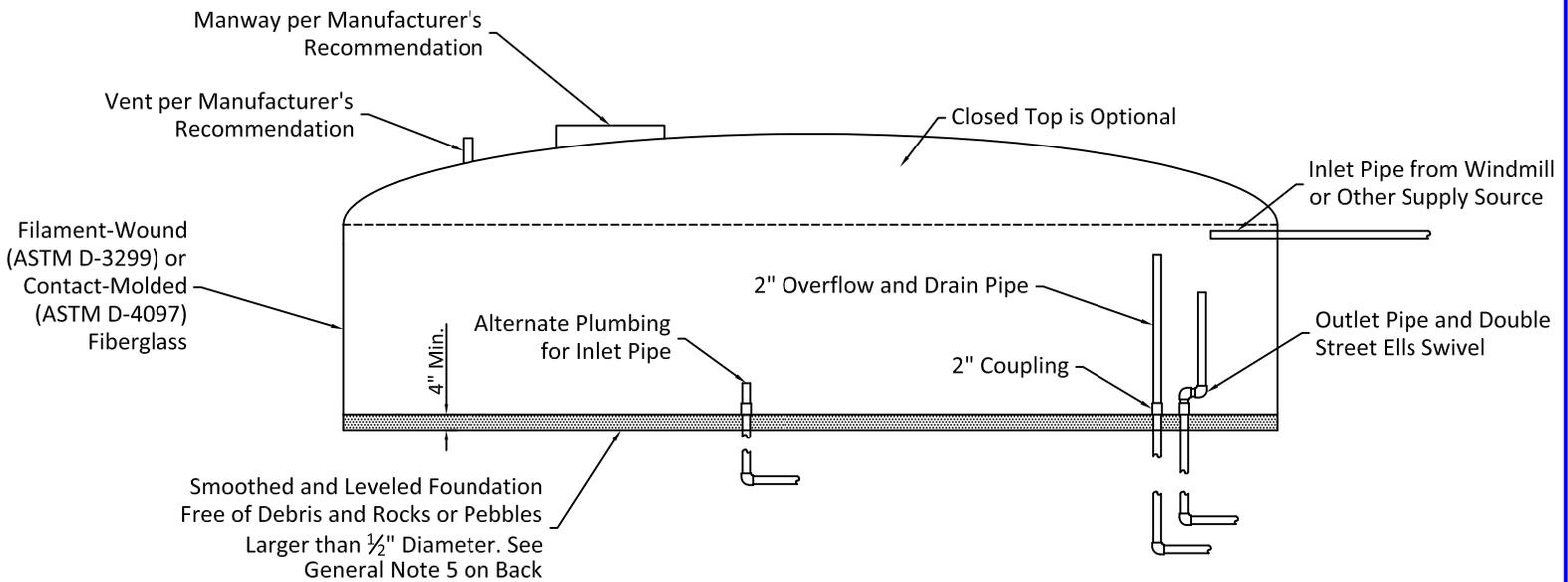


PLAN



SECTION



**GENERAL NOTES:**

1. Dimensions may vary as follows: diameter from 4-feet to 25-feet; height from 4-feet to 25-feet.
2. All fiberglass water storage facilities shall be manufactured in accordance with ASTM D-4097 or ASTM D-3299, and the manufacturer of the water storage facility shall furnish to the contractor or buyer a certification that the water storage facility supplied meets these material and manufacturing requirements.
3. Plumbing shall be new 2-inch galvanized steel, copper, bronze, or PVC plastic Sch-40 unthreaded or Sch-80 threaded, PE (160 PSI minimum) pipe. All fittings shall comply with ASTM standard for the type of fitting and material used.
  - a. Storage facilities shall be equipped with a water inlet pipe, drainage outlet and overflow outlet as either individual outlets or in combination. Overflow shall be piped to a stable or suitable point of release.
  - b. Control devices shall be installed to regulate the water level in the water storage facility and prevent unnecessary overflows
  - c. All piping may either be plumbed through the bottom or side of the water storage facility.
  - d. Double check valves or other measures prescribed in local plumbing codes are required at water storage facility inlets when water storage facilities are connected to waterlines that have domestic users.
4. All storage facilities shall be protected against overturning and sliding from wind forces and animals.
  - a. Manufacturer's recommendations.
  - b. Anchors installed per manufacturer's recommendations.
  - c. By obtaining a minimum required water depth in the water storage facility. The minimum required water depth (hw) in inches will be determined by the ratio (h/d) of the tank height (h) in feet to the tank diameter (d) in feet as shown in table.

Minimum Water Depth for Stabilization (inches)											
h/d	hw	h/d	hw	h/d	hw	h/d	hw	h/d	hw	h/d	hw
		0.6	7	1.1	13	1.6	19	2.1	30	2.6	46
0.2	2	0.7	8	1.2	14	1.7	20	2.2	33	2.7	49
0.3	3	0.8	9	1.3	15	1.8	22	2.3	36	2.8	53
0.4	5	0.9	10	1.4	16	1.9	24	2.4	39	2.9	57
0.5	6	1.0	11	1.5	17	2.0	27	2.5	42	3.0	61

To assure the minimum water depth for stability is not unknowingly withdrawn below the required depth, the water supply outlet pipe will be: 1.) fitted through the sidewall of the water storage facility at the distance "hw" above the floor of the water storage facility or 2.) made as a standpipe through the bottom of the water storage facility with the height of the standpipe within the water storage facility being the distance "hw" above the inside floor. A valve may be placed at the bottom of the water storage facility for cleanout and maintenance, but the supply outlet will not be connected to such cleanout facility.

- d. Alternative methods of anchorage may be accepted if they have been designed by a Professional Engineer licensed in Texas.

**5. Foundation:**

- a. The foundation is prepared by leveling, smoothing, and compacting the area where the water storage facility is to be placed. The foundation shall be free of debris and rocks or pebbles larger than ½-inch in diameter. All plumbing used in the floor shall be positioned prior to final smoothing of the foundation.
- b. Manufacturer's foundation recommendations or a foundation design by a Professional Engineer licensed in Texas is required for water storage facilities with wall heights greater than 10-feet.

Diameter (Ft.)	Water Storage Capacities (Gallons) - Based on Water Depth								
	Wall Height (Water Depth)								
	4' (3.75')	5' (4.75')	6' (5.75')	7' (6.75')	8' (7.75')	9' (8.75')	10' (9.75')	11' (10.75')	12' (11.75')
4	353	447	541	635	729	823	917	1,011	1,105
6	793	1,005	1,216	1,428	1,639	1,851	2,062	2,274	2,485
8	1,410	1,786	2,162	2,538	2,914	3,290	3,666	4,042	4,418
10	2,203	2,791	3,378	3,966	4,554	5,141	5,729	6,316	6,904
12	3,173	4,019	4,865	5,711	6,557	7,403	8,249	9,095	9,941
14	4,319	5,470	6,622	7,773	8,925	10,077	11,228	12,380	13,531
16	5,641	7,145	8,649	10,153	11,657	13,161	14,665	16,170	17,674
18	7,139	9,042	10,946	12,850	14,754	16,657	18,561	20,465	22,368
20	8,813	11,164	13,514	15,864	18,214	20,564	22,915	25,265	27,615
22	10,664	13,508	16,352	19,195	22,039	24,883	27,727	30,571	33,414
24	12,691	16,076	19,460	22,844	26,229	29,613	32,997	36,381	39,766
25	13,771	17,443	21,115	24,788	28,460	32,132	35,804	39,476	43,149

Capacity =  $[(3.1415 * D^2) / 4] * [(Water\ Depth) (7.481)]$   
 D = Diameter of watering facility, in feet