1613.0 Determination of Maximum Absorption Capacity.

(A) Irrigation/disposal field size shall be computed from Table 16-3.

(B) In order to determine the absorption quantities of questionable soils other than those listed in Table 16-3, the proposed site shall be permitted to be subjected to percolation tests acceptable to the Authority Having Jurisdiction.

(C) When a percolation test is required, no gray water system shall be permitted if the test shows the absorption capacity of the soil is less than 33.8L/m^2 (0.83 gal./$ft.^2$) or exceeds 208.6L/m^2 (5.12 gal./$ft.^2$) of leaching area per 24 hours.

1614.0 Holding Tank Construction (See Figures 16-1, 16-2, 16-3 and 16-4.).

(A) Plans for holding tanks shall be submitted to the Authority Having Jurisdiction for approval. Such plans shall show all dimensions, structural calculations, bracings, and such other pertinent data as required. A capacity of not less than 189L (50 gal.) is required.

(B) Each holding tank shall be vented as required by Chapter 9 and the vent size shall be determined based on the total gray water drainage fixture units in accordance with Table 7-4 of this code. Holding tanks shall have a locking, gasketed access opening or approved equivalent to allow for inspection and cleaning.

(C) Each holding tank shall have its rated capacity permanently marked on the unit. In addition, a sign stating: "GRAY WATER IRRIGATION SYSTEM, DANGER — UNSAFE WATER" shall be permanently marked on the holding tank.

(D) Each holding tank installed above ground shall have an emergency drain separate from that connecting the tank with the irrigation/disposal fields and an overflow drain. The emergency and overflow drains shall have permanent connections to the building drain or building sewer, upstream of septic tanks, if any. The overflow drain shall not be equipped with a shutoff valve.

(E) Gray water entering the holding tank shall pass through an approved filter. The overflow and emergency drainpipes shall be not less in size than the inlet pipe. Unions or equally effective fittings shall be provided for all piping connected to the holding tank.

(F) Each holding tank shall be structurally designed to withstand anticipated earth or other loads. Holding tank covers shall be capable of supporting an earth load of not less than 1,500kg/m^2 (300 lbs./$ft.^2$) when the tank is designed for underground installation.

(G) If a holding tank is installed underground, the system must be designed so that the tank overflow will gravity drain to the existing sewer line or septic tank. The tank shall be protected against sewer line backflow by a backwater valve.

1615.0 Color and Information (see Figures 16-1, 16-2, 16-3, and 16-4).

All gray water systems shall have a purple background with black uppercase lettering, with the words:

"CAUTION: NONPOTABLE WATER,
DO NOT DRINK."

The minimum size of the letters and length of the color field shall conform to Table 6-1 of this code. Where used, a colored identification band shall be indicated every 6m (20 ft.), not less than once per room, and shall be visible from the floor level. Marking is not required for pipe manufactured with purple color integral to the pipe, and marked with black uppercase lettering to read, "CAUTION: NONPOTABLE WATER, DO NOT DRINK" in intervals not to exceed 1.5m (5 ft.). All valves, except fixture supply control valves, shall be equipped with a locking feature.

1616.0 Valves.

All valves, including the three-way valve, shall be readily accessible and approved by the Authority Having Jurisdiction. A backwater valve installed pursuant to this code shall be provided on all holding tank drain connections to the sanitary drain or sewer piping.

1617.0 Trap.

Gray water piping discharging into the holding tank or having a direct connection to the sanitary drain or sewer piping shall be downstream of an approved liquid seal type trap(s). If no such trap(s) exists, an approved vented running trap shall be installed upstream of the connection to protect the building from any possible waste or sewer gases.

1618.0 Irrigation/Disposal Field Construction (See Figure 16-5).

(A) Perforated sections shall be not less than 80mm (3 in.) in diameter and shall be constructed of perforated high-density polyethylene pipe, perforated ABS pipe, perforated PVC pipe, or other approved materials, provided that sufficient openings are available for distribution of the gray water into the trench area. Material, construction, and perforation of the pipe shall be in compliance with the appropriate absorption