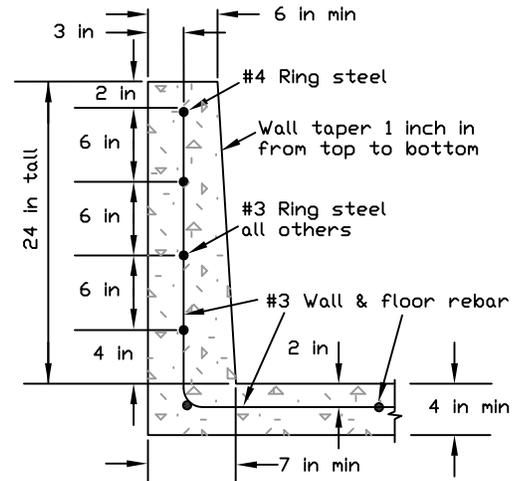
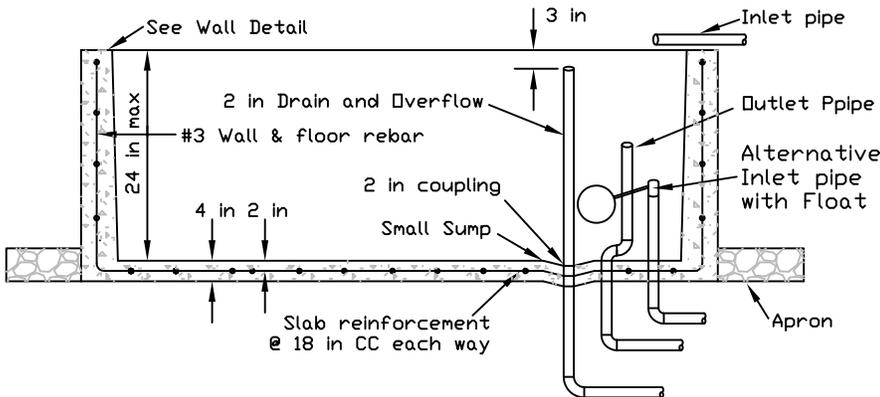


PLAN VIEW

Note: Reinforcing steel in floor and vertical wall bars are #3, 3/8 in. Ring steel is as follows: First three rings are #3, 3/8 in. and the top ring is #4, 1/2 in diameter. Minimum splice length is 12 inches.

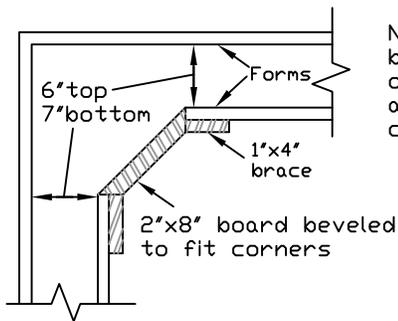


WALL DETAIL



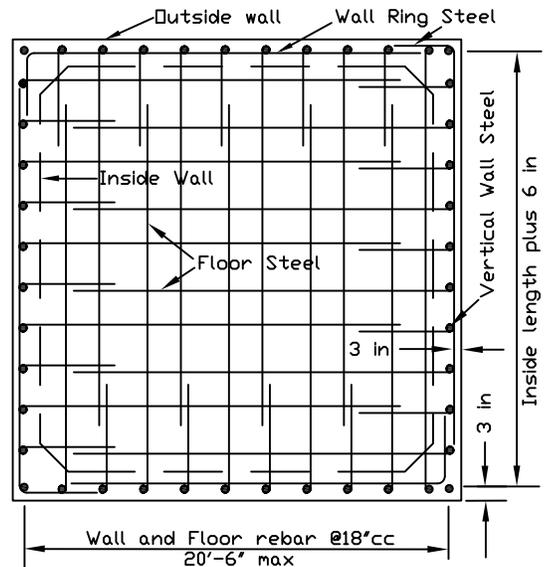
SECTION

Note: See General Notes on sheet 2 for more information. Drawing is not to scale. Plumbing may vary.



CORNER DETAIL

Note: Corner section beveled for easy removal of forms. Section shape also increases amount of concrete at corners.



FLOOR STEEL

OF SHEET 2
DRAWING NO. TX-DWG-9003



SQUARE CONCRETE WATERING FACILITY
POURED REINFORCED CONCRETE FLOOR WITH FORMED REINFORCED CONCRETE WALLS MAXIMUM 2 FT HEIGHT AND MAXIMUM 20 FT WIDTH

DRAWN BY: HF CHECKED BY: JC
APPROVED BY: _____
DATE: 11/02/2011
FILE: TX-DWG-9003

GENERAL NOTES:

1. Foundation

Foundation is prepared by leveling, smoothing, and compacting the area where facility is to be constructed. The foundation area shall be free of debris and rocks or pebbles larger than 1/2 inch in diameter. A minimum of 6 inch layer of sand is required between bottom of floor and sub grade when sub grade is a high clay soil subject to significant swelling and shrinking with wetting and drying. The inlet, outlet, overflow, and drain pipes should be positioned before final smoothing of the foundation.

2. Reinforcing

Reinforcing steel is tied in place by tying the vertical bars to the four ring bars. Splices of reinforcing bars shall be overlapped at least 12 inches. When splices occur at a corner, there will be an 18 inch overlap. Rig the intervening tie bars so that the horizontally projecting leg is 2 inches below the finished surface of the floor slab. Tie the floor slab reinforcement in place so that it is 2 inches below the finished surface of the floor slab. The slab reinforcement will rest of the horizontally projecting legs of the vertical bars. Alternate rebar lengths or splice locations may be used if approved prior to installation. Vary the starting corner, direction, or starting length so that the splices on adjacent bars do not occur at the same location.

3. Concrete

The concrete for the floor slab and wall is poured as one unit after the vertical bars, the intervening tie bars, and the slab reinforcement are in place. The concrete must meet or exceed a 3000 psi, 28 day strength test. This may be accomplished by use of a minimum of 5 1/2 sacks of cement per cubic yard of concrete and approximately 6 to 7 gallons of water per sack of cement. Care should be used in placing the concrete to avoid segregation. Top of the floor slab should be troweled to a reasonably smooth finish. Tamp the concrete into the forms as it is poured to insure tight bond to reinforcing steel and to yield a dense concrete reasonably free of voids. After the forms are removed all exposed voids should be filled with cement - sand mortar and the entire surface scrubbed to accomplish a dense smooth surface.

4. Plumbing

Plumbing shall be new 2 inch galvanized steel, copper, bronze, PVC plastic Sch-40 unthreaded or Sch-80 threaded, or PE pipe (160 PSI minimum). PVC pipe shall be made of ultraviolet resistant materials or shall have a durable coating of ultraviolet resistant paint to protect from deterioration due to sunlight. All fittings shall comply with the ASTM standard for the type of fitting and material used. Outlet pipe swivel will be made of a 2 inch coupling in the floor, two 2 inch Street Ells and a length of 2 inch pipe, all threaded. Swivel is optional.

Double check valves or other measures prescribed in local plumbing codes are required at the watering facility inlets when the watering facilities are connected to waterlines that have domestic users.

Watering facilities shall be equipped with water inlet pipe, drainage outlet and overflow outlets as either individual outlets or combinations of outlets. Overflow outlets will be piped to a stable point of release.

Water Facility Dimension and Volume data, ft - in								Other	Other
Wall Top Inside Length	9	9-4	10	11	19	19-4	20		
Wall Outside Length	10	10-4	11	12	20	20-4	21		
Water Volume, Gallons at 1.75 ft	1034	1113	1280	1552	4675	4841	5183		
Tot. Water Vol., Gallons at top	1184	1275	1466	1778	5348	5539	5929		

OF 2	SHEET 2	DRAWING NO. TX-DWG-9003	REVISIONS DATE	 NRCS Natural Resources Conservation Service		SQUARE CONCRETE WATERING FACILITY POURED REINFORCED CONCRETE FLOOR WITH FORMED REINFORCED CONCRETE WALLS MAXIMUM 2 FT HEIGHT AND MAXIMUM 20 FT WIDTH	DRAWN BY: HF	CHECKED BY: JC
							APPROVED	BY: