

Water Feature

Before



Description:

The Safe House lawn contained a therapeutic fountain. For two years, the fountain was nonfunctional. When running, the fountain provided a serene outdoor setting for the women. After the basin made from a tarp was torn by the children and the fountain dried up, a fig tree overgrew the area and the submersible water pump broke and was removed. This left no designated relaxation area for the women in the delicate time of their recovery.

Needs:

- Durable
- Long-lasting and efficient pump
- Decorative shrubbery

Gathered from conversations with residents and staff

Steps

1. Remove fig tree
2. Remove damaged tarp
3. Remove and wash cement bowls
4. Move rocks away from edge of basin
5. Dig hole 0.4m deep in the shape of the basin
6. Place basin in hole
7. Fill in dirt around it
8. Level cement bowls on cinderblocks with each bowl at a different height
9. Replace rocks around basin
10. Run hosing from the inlet of the top bowl to the bottom of the basin
11. Secure hose to rebar to hold secure and allow the water to flow only into the bowl
12. Install pump to the end of the hose in the basin
13. Fill approximately $\frac{3}{4}$ of the basin with water

Materials

Large Kidney Fiberglass basin 2mx1.1mx.4m
 2m head, 0.3l/sec flow Submersible Pump
 Spade
 Flowers
 (3) Cement Bowls
 5m 15mm diameter hose
 (3) 15mm elbows
 Rebar
 Cinderblocks

After



Observations & Recommendations:

The size and the shape was a good fit for the yard. Fiberglass or another rugged material is recommended to prevent children from breaking it. The rocks create a finished boundary, hide the lip of the basin, and prevent dirt from blowing into the water. The pump specifications can change, but be sure the head is larger than the vertical distance between the pump and the hose outlet. A 0.3liter/sec flow rate was good for the cement bowls we used, but is more than a slight trickle. Be sure the bowls drip where intended and no water is spilling out. If water gets below the pump inlet, the pump will permanently break. A plastic bucket with holes in the top provides an adequate filter by taking water only from the top, leaving the sand on the bottom undisturbed.