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Long Lake

Runoff Reduction Plan

The Runoff Reduction Plan Set provides aerial views and a cross section of the rain garden.
A separate plan is developed for the garage rock trench.

Silt fence must be installed below any areas of excavation or where excavated or construction materials are placed.

All areas disturbed during construction to be seeded with a lawn grass mix.

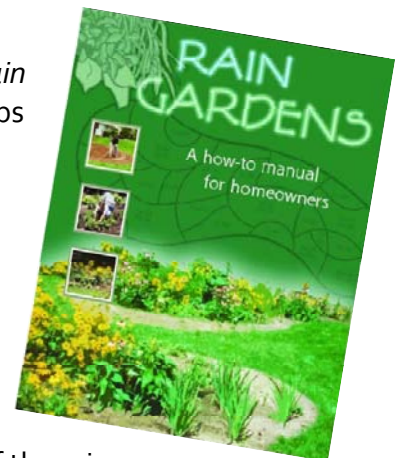
Rain garden location is indicated on the site diagram.

- Confirm utility locations with owner and/or Diggers Hotline prior to beginning construction. Previously checked utilities for planning purposes indicate that utilities are clear of installation locations.
- Be sure to avoid the use of heavy equipment within the proposed rain garden location; it will compact the soil and decrease infiltration.
- Rain garden size, cross sections, planting layouts and plant lists, and project quantities are found in the plan set.

Installing rain gardens

The process for installing the rain garden is outlined in detail in the *Rain Gardens: A how-to manual for homeowners* publication. The basic steps are as follows:

1. **Dig the rain garden** (page 12) The rain garden will be 8 inches deep and level at its base. An extra foot is excavated then filled with a 70/30 sand compost mixture. The edges of the garden will slope from ground level to the garden's base.
2. **Level the rain garden** (page 12). It is essential that the base of the rain garden is flat in order to prevent uneven pooling of water within the garden. To maximize infiltration capacity, the water must soak into the ground evenly throughout the garden's base.
3. **Making the berm** – (page 14). See the cross-section diagram. The berm for the rain garden (downhill side only) is covered with erosion control fabric then planted to grass. The top of the earthen berm will be 10 inches above the base of the garden, and the top of the rock overflow will be 8 inches above the garden's base.



4. **Create rock swale to carry water to and from the rain garden.** The rock swales will be sloped to carry water and underlain with filter fabric which is covered by 2-4 inch rock. Larger rocks may be included in the swale uphill from the rain garden for appearance. The swale will be sloped to carry water away from the house and to the rain garden. The overflow swale will be placed to overflow to the currently well-vegetated area.
5. **Plant the rain garden** (page 16). Plant the garden with species from the lists and table provided. Transplant day lilies from on-site to down-slop on top and side of rain garden as indicated on site plan.

Begin by laying down 3 inches of shredded bark or wood mulch. To plant, separate the mulch, dig a hole, sprinkle organic soil amendment, and place the plant in the hole. Press the soil gently around the plant roots and replace the mulch, being careful to keep mulch ½ inch from the stem of plants. Plant recommendations and spacing are included in the tables.

6. **Water immediately after planting.** Plan to water daily for the first few weeks or until the plants are well established. If plants wilt or droop, a repeated watering during the day may be necessary. Once plants are established, water only if prolonged dry periods occur.

Information for maintaining your rain garden is also included in the rain gardens publication (page 17). Like all gardens, it will require some weeding and watering. This is especially important during the first year or so after the garden is installed. Since the plants are native, however, they should require minimal care once established.