

CHAUDHARY RESIDENCE

Rain Garden



Pre-Rain Garden Conditions

Three rain gardens were installed on the Chaudhary property to treat storm water from both the property and offsite. Prior to installation, rain falling on the Chaudhary property was directed, unfiltered, into the road. The storm water eventually made its way to Highland Lake and the Mississippi River via the storm sewer system. This excess runoff from impervious surfaces can cause:

- An influx of sediments, nutrients and pollutants
- Algae blooms and unwanted aquatic vegetation
- An increase in water temperatures.

PROJECT SPECS

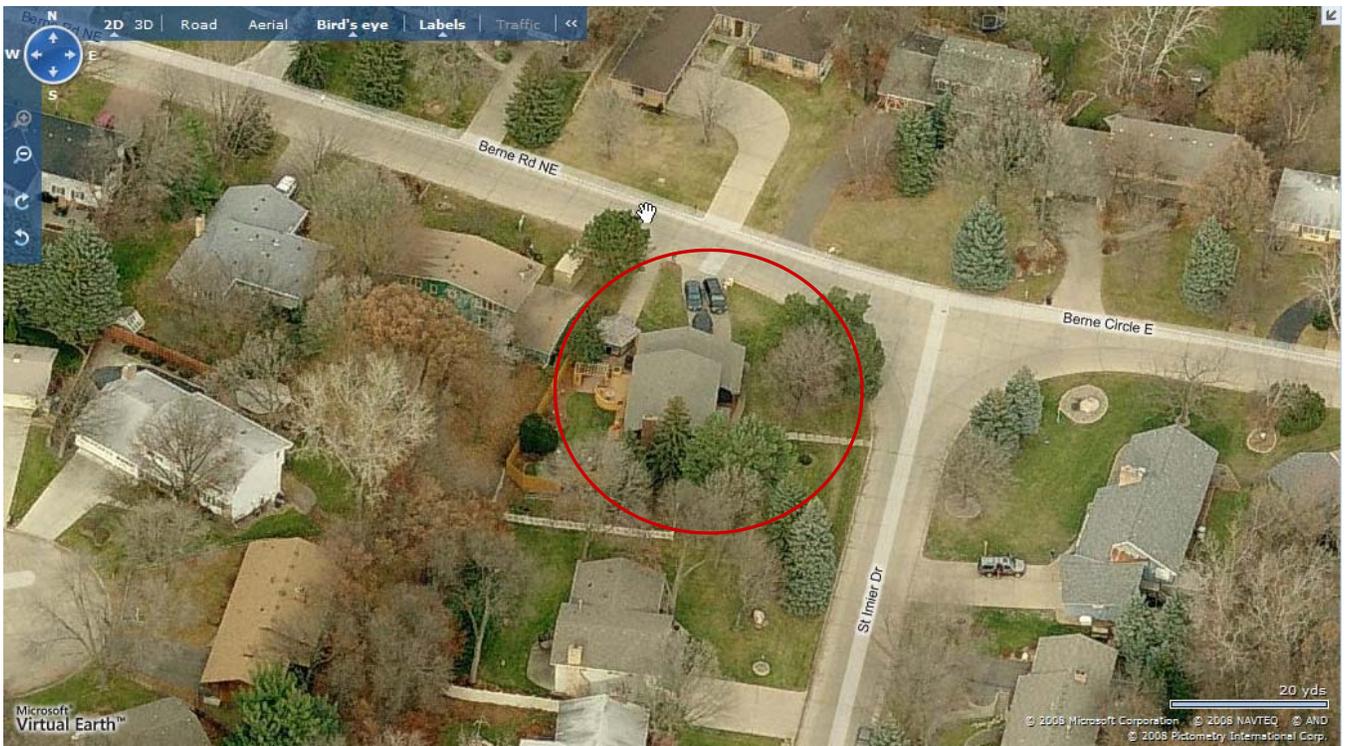
Date Planted September 2008

Rain Gardens Installed 3

Total Planting Area ~1,000 ft²

Design Assistance Provided By.....ACD

Cost-share Funds Provided Home Owner funded



Retaining Wall Rain Garden

Before rain garden construction, the site consisted of mown turf and a few non-native plantings. All rain falling on the lawn and roof of the house ran into the street, unimpeded, where it entered the storm sewer system.



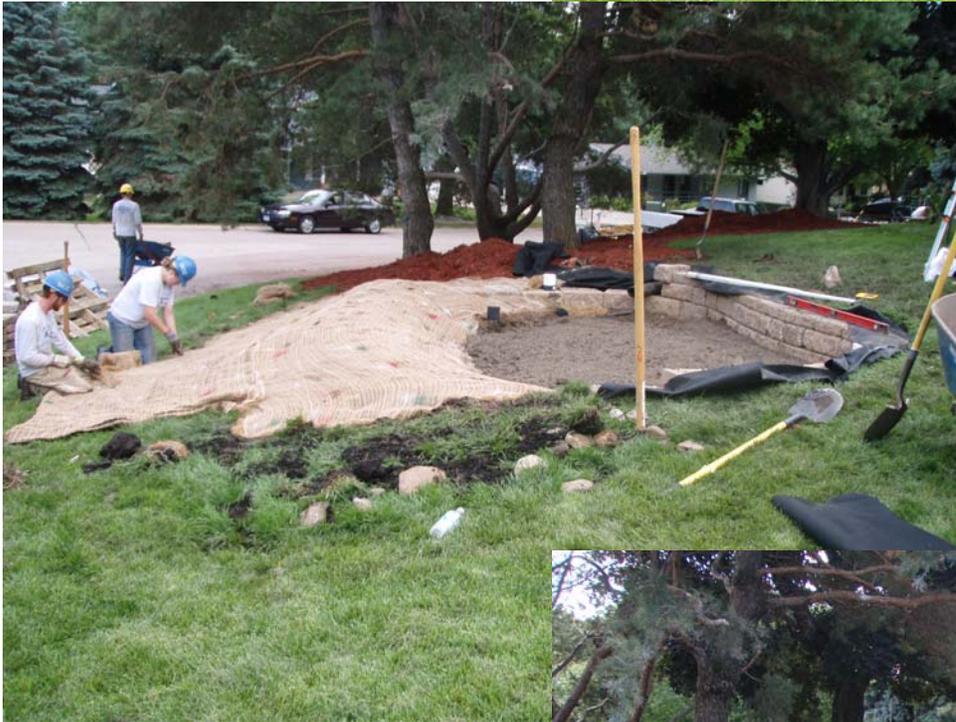
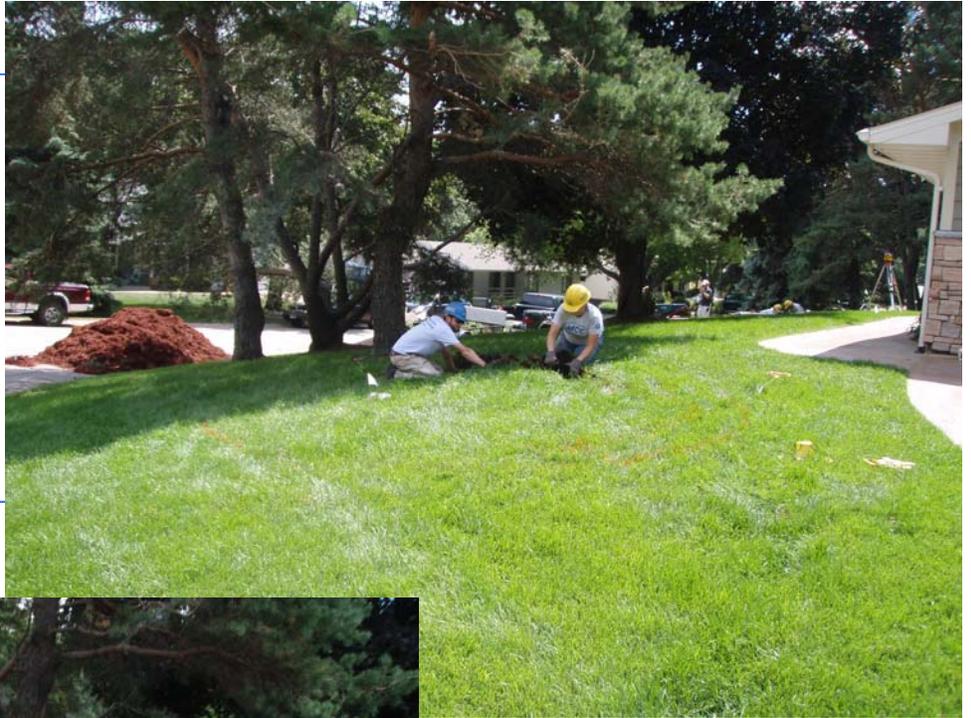
The site was over excavated and later backfilled with a light sandy soil to allow quick infiltration of storm water directed into the rain garden via downspout.

The completed rain garden was planted with a variety of native plants. Water directed to the garden is quickly absorbed in the soil and used by the plants.



Berm Rain Garden

Before rain garden construction, the site consisted of mown turf. All rain falling on the lawn and roof of the garage ran into the street, unimpeded, where it entered the storm sewer system.



A basin was excavated, a berm constructed, and the garden area was backfilled with rain garden soil. Storm water enters via overland flow and downspouts.

The completed rain garden was planted with a variety of native plants. Water directed to the garden is quickly absorbed in the soil and used by the plants. The garden also has both an outlet and overflow to allow excess water to escape.



Curb Cut Rain Garden

The site was deeply excavated and backfilled with rain garden soil to provide a high water treatment and detention capacity.



A pre-treatment chamber was installed at the inflow to remove sediment and debris, prolonging the life of the rain garden.

The curb cut rain garden is designed to treat storm water from offsite. When street work is completed, storm water will flow from the street-side gutter into the rain garden for treatment.

