

PROJECT PROFILE

BICKFORD RESIDENCE

Rain Garden



Pre-Rain Garden Conditions

Rain falling on the roof of the Bickford residence was directed by downspouts, unfiltered, onto the lawn, eventually making its way to the Mississippi River via the storm sewer system. This excess runoff from impervious surfaces can cause:

- An increased risk of flooding and bank erosion
- An influx of sediments, nutrients and pollutants
- An increase in water temperatures

PROJECT SPECS

Date Planted March 2004

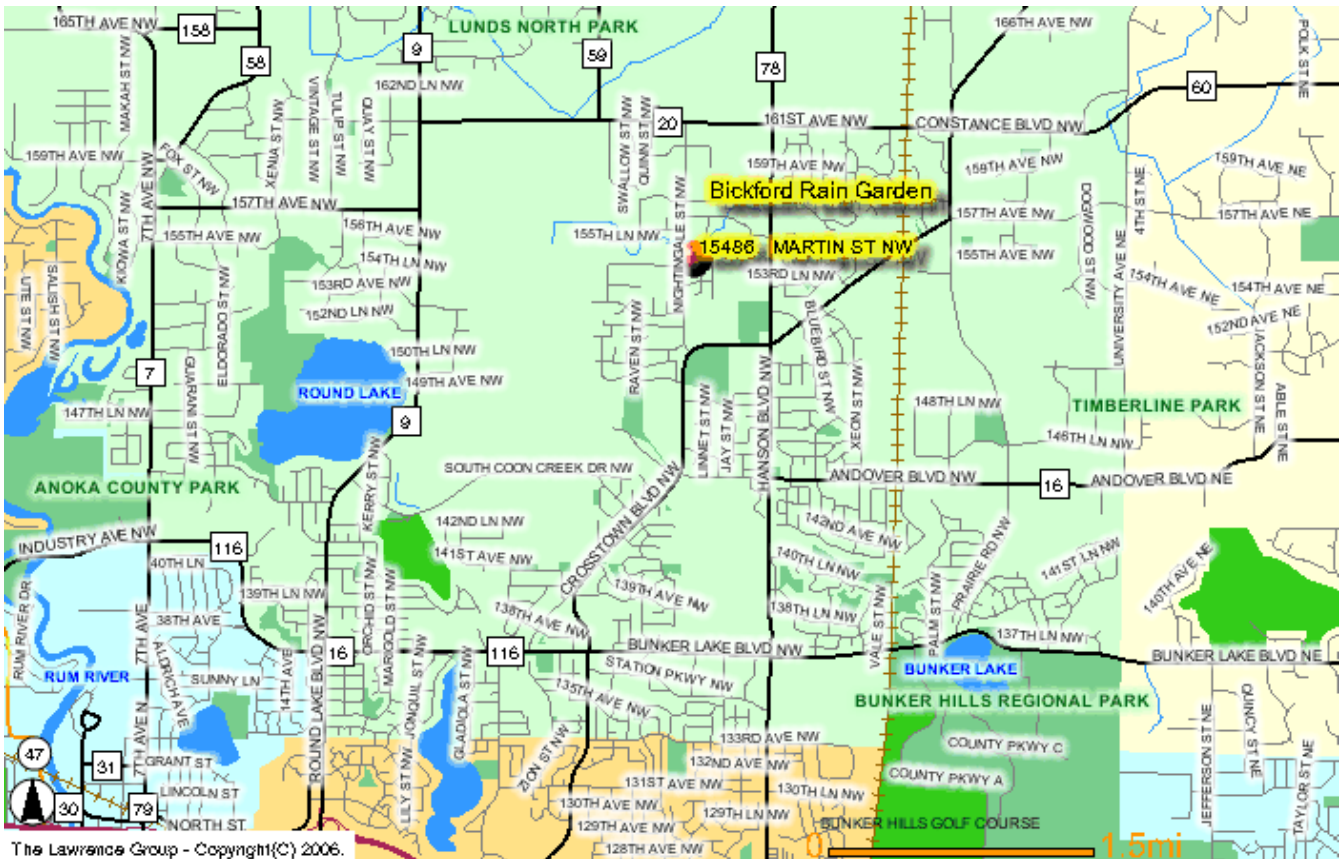
Rain Gardens Installed 1

Water Treatment Capacity 102 ft³

Water Detention Capacity 151 ft³

Homeowner Labor \$775.00

Cost-share Funds Approved \$1,415.80



Before Rain Garden Installation

The Bickford residence was already heavily landscaped using traditional design features. The total cost estimate to update the front yard landscaping was \$3,150.80, including \$775.00 worth of homeowner labor and \$810.00 worth of technical assistance from ACD. With \$1,415.80 approved in cost-share funds, the estimated homeowner cash contribution was approximately \$150.00.

September 2003



The existing landscape featured many non-native plants that required a lot of maintenance and had high water requirements. At the same time, the landscape was set up so that the water falling on the roof was quickly dispersed onto the lawn where it flowed to the street. Ultimately, the stormwater ended up in the Rum and Mississippi Rivers.

September 2003



After Rain Garden Installation



March 2004



The rain garden is designed to capture and treat stormwater falling on the roof and reduce supplemental watering.



March 2004



Water falling on the roof is directed by drain tile into the new rain garden. The rain garden can treat up to 102 ft³ of storm water.