City: City of Johnston

Title of Project: Greenwood Hills Watershed Improvements

City's Population: 20,500

In a few sentences, give a summary of the project and why it was needed:

Severe erosion was swallowing up backyards in a greenbelt area on Johnston's west side. Thirty-two residents' yards were literally falling into a creek bed. With every rainfall, more was lost. Not only did this create unsafe conditions, it had an impact on property values, neighborhood aesthetics and a deterioration of water quality.

This greenbelt was deteriorating as a result of limited stormwater management regulations at the time the 300 acre upstream drainage area was developed.

As communities grow, they often experience more stormwater runoff problems due to the increase in areas that don't absorb stormwater. Rainfall and snowmelt that would normally infiltrate into the soil becomes runoff. This increases both the volume and rate of runoff, which leads to flooding, streambank erosion, and potential damages to public and private property and water quality.

While the City has adopted stringent stormwater management requirements for new developments, there remain many previously developed areas where improvements are necessary. In a normal year, 90% of the rain events in central Iowa bring 1.25 inches of rain or less. The City's goal is to absorb as much of this rainfall on the land as possible, so we can significantly reduce erosion and flash flooding and improve the quality of water in our community. The Greenwood Hills watershed improvement project is the largest stormwater improvement project in Johnston to date.

Explain the specific role of your city in this project:

Johnston's Community Development Department worked closely with contractors to come up with the best solutions for improving the severe erosion taking place in Greenwood Hills. Several meetings were held with neighbors as part of an extensive public feedback campaign.

The project included the development of a pond. A small park will be developed on the south side of the pond adjacent to NW 86th Street. Park plans are still being worked through, but residents can expect a playground feature, small shelter and fishing pier. It's how the City of Johnston is taking an eyesore and turning it into a popular amenity that is also good for the environment.

The project design included a pond with a forebay and fishing pier that was to serve as a storm water detention facility, natural stabilization methods of nearly a ¼ mile of stream bank, installation of a raingarden, reconstruction of the existing trail, and new landscaping. All of the improvements were designed to reduce erosion and improving water quality. The city saw an opportunity to take an eyesore and turn it into a beautiful neighborhood park with a pond, recreation trail connections, and new landscaping. Residents currently can enjoy the trails, open space and the pier that extends over the pond. Future additions include a playground feature and small shelter.
In a few sentences, what future impact will this project have on your community?

The Greenwood Hills project is converting a deteriorated drainage greenbelt into a gem in the City’s park system which is located immediately adjacent to one of the City’s most heavily traveled arterial roadways. This project will serve as an educational opportunity to demonstrate innovated stormwater management techniques while neighbors located adjacent to the project will enjoy higher property values and increased quality of life. Visitors from throughout Central Iowa will be able to fish from the pier and frolic in a new park. The adjacent trail will offer a safe and beautiful path for bikers, walkers and runners and serves as a major connection in the City’s nearly 40 mile trail network. The environment will improve. The threat of flooding and erosion will dramatically decrease.

**Total cost of project:** $3,392,000

**List where funding came from.** (grants, donations, city funds, etc):

- city's stormwater utility fee

**Total time project took/projected to take for completion. Please include start date and end date.** (To qualify the project must be operating or completed between January 1, 2015 and December 31, 2015):

- January 2014 to September 2015

**Resources.** (Please list Web sites judges may reference if they seek additional information.):

- www.cityofjohnston.com/greenwoodhills