

Why Rain Gardens?

What is a Rain Garden?

A **rain garden** is a shallow, constructed depression that is planted with deep rooted plants and grasses positioned to receive runoff from hard surfaces such as a roof, sidewalk, or road. Rain gardens slow down the rush of water from these surfaces, hold the water for a short period of time and allow it to naturally seep into the ground.

What are the Benefits?

Rain gardens are an inexpensive, simple to implement and environmentally sound solution to urban stormwater runoff. A rain garden will:

- Filter pollution from stormwater runoff,
- Minimize flooding during intense rain events,
- Recharge local groundwater,
- Improve aesthetics of the streetscape,
- Create habitat for birds and butterflies,
- Address the Urban Heat Island effect,
- And educate residents on stormwater best management practices

Why Here?

Urban stormwater runoff is the leading cause of water pollution in Thompson Run, an impaired stream to the East of the downtown.

To meet environmental permitting requirements associated with urban runoff and improve the condition of impaired waterways, the municipality has developed and implemented a stormwater management program that both tracks the municipalities progress and encourages residents to take steps on their own properties to reduce the amount and improve the quality of stormwater runoff.

How Does It Work?

The increase in impervious area—buildings, driveways, and streets—results in more stormwater overloading storm sewers and discharging directly to streams rather than filtering through the soil. The rain gardens



proposed for South Allen Street are designed such that water enters from the street and flows through the garden along a slight incline and over a check dam, mimicking a small waterfall.



The garden will act to both filter pollutants and retain water for a short period of time. If the rain event is large enough to overflow the garden, water will

pass into the storm sewer as usual, protecting the plants from prolonged flooding.

Setting an example is not the main means of influencing others; it is the only means.

— Albert Einstein —

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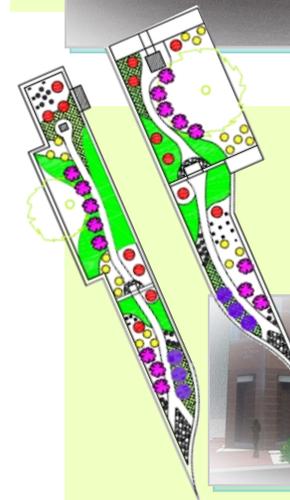
Website: www.statecollegepa.us



State College Borough

Rain Garden

Coming soon to a street near you...



Design of the Rain Garden

Choosing the right plants for a rain garden is a necessity. For a rain garden, the Borough Arborist chooses plants with the qualities of a rain garden in mind.

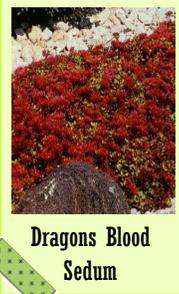
The best plants for rain gardens are:

- Resistant to the stress from temporary pooling and moving water
- Tolerant of dry conditions
- Native, non-invasive species
- Well established, deep rooted plants

Some of the plants proposed for the Allen Street Rain Garden are shown below.



Cardinal Flower



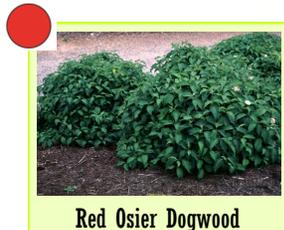
Dragons Blood Sedum



Broom Sedge



Bugleweed



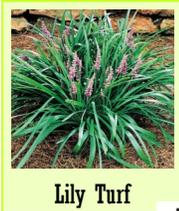
Red Osier Dogwood



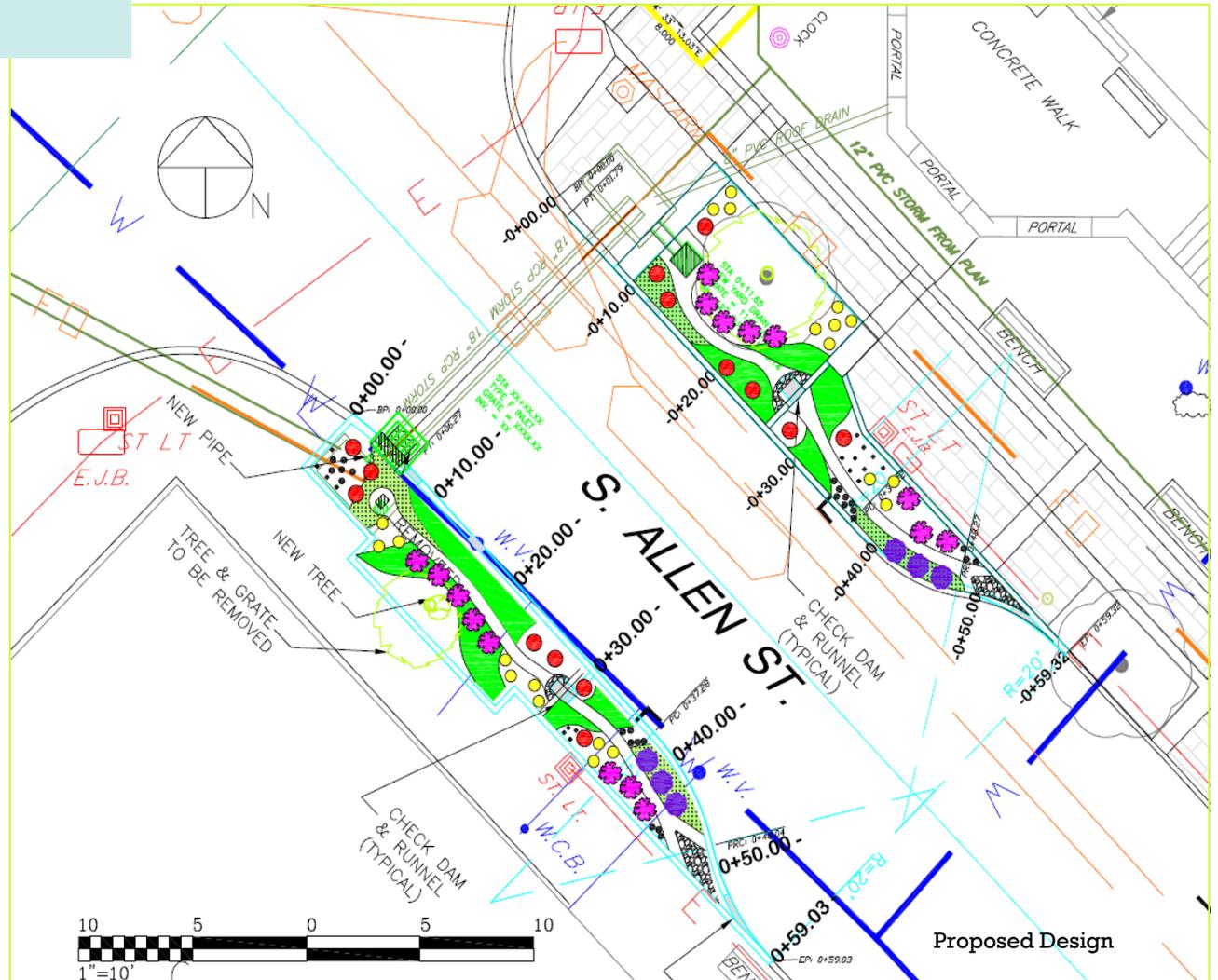
Blue Fescue



Black-eyed Susan



Lily Turf



Construction Schedule

Construction for the Allen Street Rain Garden will begin the week of May 7, 2012 and will continue for up to eight weeks. At least one lane will need to remain closed to traffic to allow for construction of the new curb, the installation of new pipe, soil preparation and the installation of a new tree on the west side of South Allen Street.

Construction is scheduled at this time to avoid any potential conflicts with Penn State Graduation or the Central Pennsylvania Festival of the Arts. After installation the gardens will be maintained by the many volunteers who currently maintain the other gardens planted in the public right of way.