

Bath Township Center

Permeable Parking Lot and Public Rain Garden

Funding through:

OhioEPA **SWIF Grant**

Surface Water Improvement Fund

PROJECT NUMBER #10SWIF-012

The Surface Water Improvement Fund (SWIF), was created in 2008 with the passage of [Ohio House Bill 119](#) and authorizes the Ohio Environmental Protection Agency to provide grant funding to applicants such as local governments, park districts, conservation organizations and others.

The SWIF Grants are designed to improve Ohio's rivers, streams and communities in general. This will be done by addressing nonpoint source pollution, management of innovative storm water projects as well as stream and wetland restoration in Ohio's communities.

The Ohio EPA received 132 applications. Bath Township was one of 19 projects that were successful and are being awarded 2010 SWIF grants. Grants are awarded for two-year periods with effective start dates of June 1, 2010.

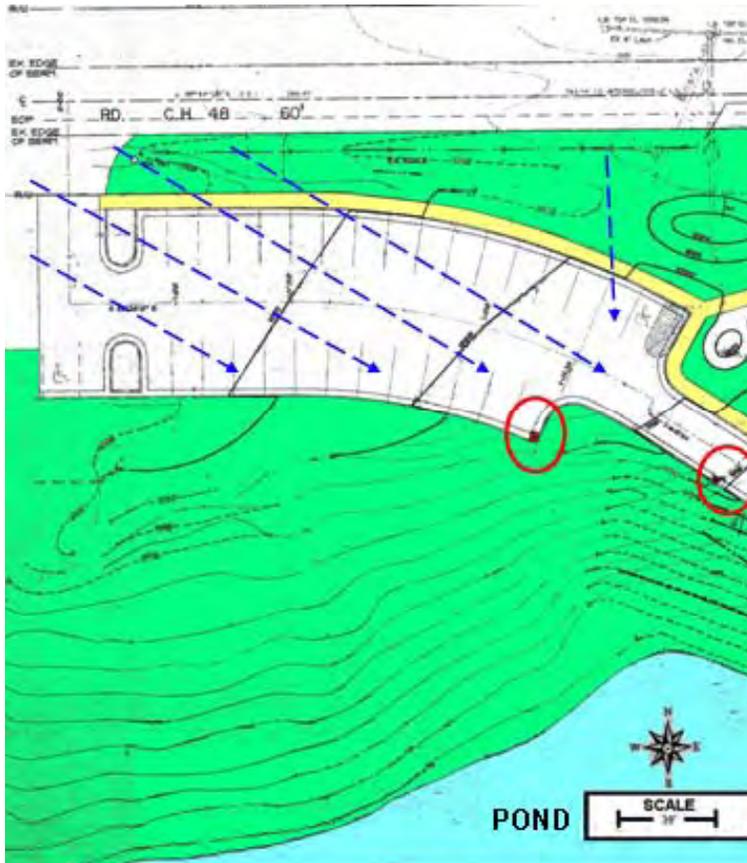
The \$34,560 grant will go toward the improvement of the parking lot of the Bath Center complex with the installation of a permeable parking area and rain garden.

This grant came at a very opportune time. After years of crack sealing and patching the Bath Township Center parking lot, repaving is now needed. In addition to being one of the target areas in the Yellow Creek Watershed Action Plan, Bath Township has an obligation to abide by the EPA's National Pollutant Discharge Elimination System (NPDES) Phase II regulations. These are regulations that have been recently implemented in communities across the county to reduce pollutants in storm water to the maximum extent practicable as to protect water quality.

SITE MAP



Parking Lot Layout



- Water Flow
- Catch Basin

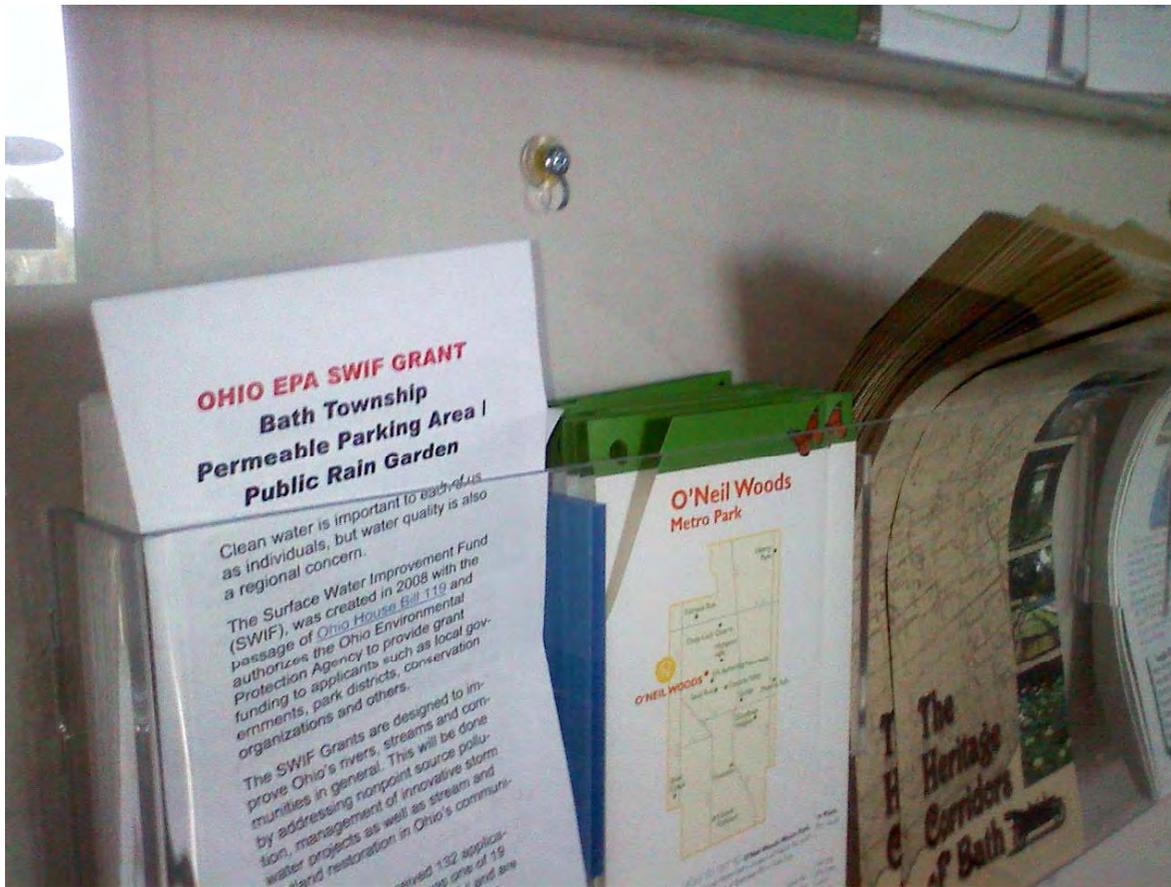
Pre Construction



- Water Flow
- Permeable Concrete
- Catch Basin

Proposed Construction

Available SWIF Project Brochure Located at the Entrance to the Trustee Meeting Room



Parking Lot Condition Pre - Construction



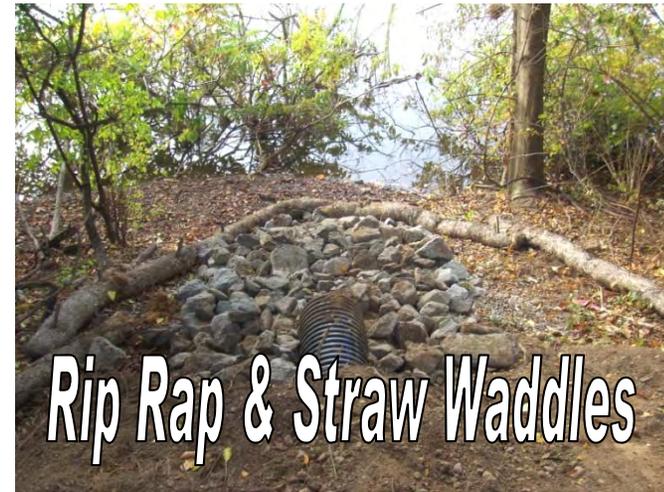
Rain Garden Location Pre - Construction



SWIF Project Sign



BMP's - During Construction



The area of disturbance for the project was seeded and strawed within four days.

The area of disturbance is roughly 8500 sq feet. The entire area was seeded with NO MOW grass seed.

Sod and Topsoil Removal



Excavation of Rain Garden



Shaping the Rain Garden Basin



Installation of Overflow Catch Basin



Overflow Outlet at Pond



Rain Garden with Four Permeable Pits



Excavation for Permeable Concrete and Outlet Pipe



Excavation for Permeable Concrete and Outlet Pipe



SWIF Project Kiosk ***Located Under the Belfry of the Bath Center Complex***



Forming for Permeable Concrete



Pouring the Permeable Concrete



Covering the Permeable Concrete for 8 Days



Permeable Concrete



Grinding of Existing Asphalt



Seeding and Strawing with No Mow Grass



Rain Garden Planting with Plugs of Native Salt Tolerant Plants



Paving the Parking Lot to Meet the Permeable Concrete



Parking Lot Condition Post Construction



Rain Garden Location Post Construction



Permeable Concrete

2500 Gallon Test



2500 Gallon Test



Rain Garden Percolation Test



10-05-10

1:32 PM

2500 Gallons

Rain Garden Percolation Test



10-05-10

2:12 PM

2500 Gallons

Rain Garden Percolation Test



10-05-10

2:59 PM

2500 Gallons

Successful completion of this project demonstrates innovative practices for passively treating and managing storm water drainage and reducing nonpoint source pollution loadings within the Bath Center Parking Area.

Annual Maintenance

Two or three times each year the permeable concrete needs to be cleaned to assure that the porosity of the pavement is maintained.

It is recommended to do this for the change of each season. Especially at the start of spring and winter.



Bath Township brooms the entire surface then uses an industrial vacuum over the entire surface.

Lastly, areas that are plugged or showing signs of not allowing water to pass through are pressure washed.



May 3, 2011
0.54 Inches of Rain



Please note: There is no water passing over the concrete.