

# Site 6: F. X. Browne, Inc.

## **BMPs:** Constructed Stormwater Wetland

**Address:** 1101 S. Broad St., Lansdale, PA 19446

**Property owner:** F. X. Browne, Inc.

**Website:** [www.fxbrowne.com](http://www.fxbrowne.com)

**Watershed:** Perkiomen Creek

F. X. Browne, Inc. is a nationally-recognized environmental consulting firm with experience in lake and watershed management, water and wastewater engineering, environmental planning, stormwater management, and low-impact site development.

Seeking to enhance a turf grass detention basin located at their corporate headquarters in Lansdale, PA, F. X. Browne, Inc. obtained a \$5,000 grant from the Partnership for the Delaware Estuary to retrofit the basin into a constructed wetland. Contributing their own expertise to the effort, F. X. Browne designed the stormwater wetland and obtained the necessary approvals. Construction was completed within two weeks in July of 2003.

After the “traditional” detention basin was converted into a wetland stormwater treatment system, the basin now retains stormwater for longer periods of time. Sediments and pollutants like oil and grease from the parking lot are removed as the stormwater slowly flows through the basin filled with beautiful native plantings. This also allows water to filter back into the ground, recharging the groundwater table.



### **Planning your visit:**

Groups of five or more people must call to schedule a visit in advance.

### **Contact Info:**

Dr. Frank Browne  
[fxbrowne@fxbrowne.com](mailto:fxbrowne@fxbrowne.com)  
(215) 362-3878

### **Hours:**

M-F  
8AM– 5PM

### **Parking:**

Parking is available in adjacent office parking lot.

This project demonstrated how traditional stormwater basins can be converted into wetland treatment systems through a combination of re-contouring the basin, restricting the outlet pipe, and planting the basin with wetland plants.



During construction, cattails were completely removed from the basin, allowing for native vegetation to establish in the wetland.

Since installation, F. X. Browne, Inc. has observed shifts in the number and location of native wetland plantings. Certain species, including asters and blue vervain, have spread from their original planting location. Other species such as boneset remain in the basin, but have not spread.

Due to the variety of plant life and plentiful water, F. X. Browne expects to see more diversity in the animal community in the wetland basin. Initial observations revealed that there are many more beneficial insects in the wetland basin

than there were in the traditional basin. Birds and small mammals feed on the insects and plants. Providing habitat for wildlife is an additional benefit of constructed stormwater wetlands.

**The constructed stormwater wetland basin includes the following Native Plants:**

- Boneset**
- Cardinal Flower**
- Aster spp.**
- Goldenrod spp.**
- Smartweed spp.**
- Rush spp.**
- Sedge spp.**
- New York Ironweed**
- Joe Pye Weed**
- Blue Vervain**
- Iris spp.**
- Switchgrass**
- Little Bluestem**



F. X. Browne’s vision for the wetland basin includes using it as teaching and learning tool. Future plans include monitoring stormwater before and after it enters the basin to determine the extent of water quality improvement. They also plan to use the wetland to observe the natural growth characteristics of many native wetland species, and apply the data to later projects. Finally, F. X. Browne plans to perform a more formal animal survey to document the types of wildlife that the basin will attract.

Updates on the constructed stormwater wetland, including photos and monitoring information, will be posted on F. X. Browne’s website.

