CASE STUDY: Popi's Italian Restaurant

Stormwater Pioneers

Philadelphia Water introduced the Stormwater Pioneers program in 2014 to recognize the very best in stormwater management on private property. It showcases innovation, excellence, the ability to overcome technical challenges and a true dedication by the property owners, developers, engineers and designers to reduce runoff.

Stormwater Grants

Philadelphia Water offers grants to non-residential customers to help fund stormwater management improvements on their properties. The Stormwater Management Incentives Program (SMIP) began in 2012 as a collaborative effort between Philadelphia Water and the Philadelphia Industrial Development Corporation. In addition to grants, Philadelphia Water offers credits on stormwater bills when property owners manage stormwater from their impervious surfaces. The SMIP program is a partnership between Philadelphia Water and business owners city-wide. In addition to rate relief benefits for business owners and improved stormwater management, SMIP projects help the City of Philadelphia achieve its goal of creating more green space across the city.

Project Background

Popi's Italian Restaurant is a family-run business that opened in South Philadelphia in 1993. Gina Rucci, co-owner of the restaurant, purchased an adjoining parking lot in 2013. She first learned of the SMIP program when she received a stormwater bill for her property. Gina applied for the SMIP grant in September of 2014 and ultimately was awarded $94,860 to construct two rain gardens on the parking lot adjacent to the restaurant.

Construction of the project began in June 2015, and was completed in about one month. Pavement was removed from part of the parking lot along 20th Street to allow for construction of the front rain garden. The second rain garden was formed by deepening a shallow vegetated area in the rear of the lot.

The table below summarizes the project details:

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Schuylkill River</th>
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<tbody>
<tr>
<td>Sewer System Type</td>
<td>Combined Sewer System</td>
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<tr>
<td>Stormwater Tools</td>
<td>2 Rain Gardens</td>
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<tr>
<td>Greened Acres</td>
<td>0.74 GAs</td>
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<tr>
<td>Volume of Water Managed</td>
<td>11,400 Gallons</td>
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The rain gardens are designed to capture all the water that drains from the parking lot during a one-inch storm—about 11,400 gallons of rainfall (equivalent to almost 163 bathtubs). During a rainstorm, runoff from the parking lot is directed to both rain gardens. There, the water is soaked up by the plants and allowed to infiltrate back into the ground, keeping it out of the City’s sewers. This stormwater management practice, along with similar structures across the city, is helping to reduce untreated sewage and stormwater from flowing into our rivers and streams when it rains.

In addition to protecting our waterways, the landscaped rain gardens also add beauty and value to Popi’s Restaurant. A variety of plants, trees and grasses, including Sedges, Variegated Liriope, Black Eyed Susans, River Birch, Goldenrod, Winter Berry Holly and Asters were used to create a green space that is vibrant throughout the entire year. River stone enhances the landscape features and breaks up the flow of water to prevent erosion in the garden. The parking lot was also re-striped to provide more efficient use of the space and create room for additional trees that complement the garden.

Bill Savings

Prior to construction of the rain gardens, the parking lot was assessed a stormwater charge of $355.52 per month. With the installation of two rain gardens and additional impervious surface removal during construction, the stormwater charge is now $130.20 per month, a 60 percent monthly decrease and a savings of $2,700 per year in stormwater charges. In addition to the $94,860 grant, Gina paid $5,000 dollars in construction costs, which she will get back in reduced fees in less than two years.

How to Be a Pioneer

Philadelphia Water is selecting projects each year to be Stormwater Pioneers. Qualifying projects include Stormwater Management Incentive Program (SMIP) grant winners, stormwater billing credit recipients or development projects that meet Philadelphia Water’s Stormwater Regulations.

Learn More About Stormwater Credits & Grants

For more information about managing stormwater, getting a credit on your water bill or applying for a grant, visit: www.phila.gov/water/wu/stormwater. Think your property may be eligible for a grant? Call us at 215-685-6070.

Commercial property owners can also virtually add stormwater management tools to their property and instantly see estimated billing savings with Philadelphia Water’s Credits Explorer app: http://water.phila.gov/swexp