## Holy Cross Catholic Church in Mt. Airy Leads our Neighborhood in a Stormwater Management Improvement Project: Being good stewards of our earth is their calling.

Written by Veronica Alvarado on August 1, 2024

If you happen to drive down East Mount Airy Ave between Boyer and Chew, you cannot help but notice the huge excavators and concrete pipes and other large construction machinery as Holy Cross Catholic Church transforms its grounds into a state-of-the-art stormwater management campus. Once the project is completed, estimated for late-August, you will not see most of the complex underground infrastructure that is being put in place to address thousands of gallons of runoff water. That water will now be redirected to a stormwater system through rain gardens and a sophisticated drainage system that promises to yield a significant reduction of their monthly stormwater charges. When asked about the environmental impact he hopes this project will have on the church grounds, Steve Monheim, project liaison and parishioner at Holy Cross, said, "The savings in water costs is beneficial, but more importantly since the area is known to flood in heavy rains, the new stormwater management system will help mitigate some of that with the increase of permeable surfaces throughout the campus. Additionally, native plants and vegetation planted will promote a more natural ecosystem with added green space, instead of merely an asphalt parking lot."

The project has been in the works since 2018, according to those involved with the grant proposal writing process. Monheim recalls, "Our journey began in 2018 with the award of a separate grant from the Community Design Collaborative (CDC) of Philadelphia to Holy Cross. In 2019, we conducted three meetings to gather input from over 40 members and neighbors of Holy Cross along with Holy Cross school students, teachers, and staff from Independent Mission Schools (IMS). In 2020, our CDC design team completed the conceptual design plan for the Holy Cross Campus entitled "Conceptual Design for a Campus Sustainability Master Plan." One of the many improvements conceptualized in that sustainability master plan was the design of a stormwater management project with the following goals: to maximize the stormwater capture onsite to help restore the natural water cycle and relieve current area flooding conditions; to decrease the stormwater management charges by up to 80%; to improve and increase the campus green space for the benefit and beauty of the community and the school children; and to provide ongoing education and a living classroom to the school children and community on the benefits of Green Stormwater Infrastructure (GSI).

Thomas Halliwell, Principal Engineer at Grist, LLC is managing the grant and is the engineer of record on the project. He says the project will capture and infiltrate more than 1.3 million gallons of rainwater per year, enough to fill the Olympic swimming pool in Paris more than twice.

After two amendments, the grant awarded to Holy Cross Parish in January 2022 by the Philadelphia Water Department (PWD) through the Stormwater Management Improvement Program (SMIP) has exceeded \$1 million. The grant will fund improvements to manage the stormwater runoff from the buildings and hard surfaces of the Holy Cross Campus.

Ground-breaking on the project began in May 2024, and the improvements will be completed by the end of the summer, just in time to welcome the school children back to campus. Holy Cross will have two subsurface stormwater infiltration basins. These basins will manage some of the street right-of-way and most of the stormwater runoff from Holy Cross's parking lots and driveways. Once completed, the parking lot and driveways above the basins will be repaved with little to indicate what lies below the surface.

There will also be one large rain garden in the existing paved area behind the school and convent. This rain garden will bring greenery to this part of the campus, manage runoff from some of the parking lot, and help to establish a more orderly traffic flow in the parking lot. In addition, there will be four smaller rain gardens to manage runoff from existing rooftops. Along with these improvements, Holy Cross neighbors will see new additional curbs, landscaped areas, and

painted striping that will make the campus look green, refreshed, and more orderly. (Excerpts from Press Release written by Steve Monheim, June 2022)

We would like to congratulate all who have participated in this project, seeing it from ideation to construction and its imminent completion, God willing. The Holy Cross community is most excited to be able to truly see the fruits of being good stewards of our earth, as their Catholic faith calls them to be.

And lastly, thank you to our Mt. Airy neighbors and community for your continuous support and patience with any inconveniences these improvements may have caused.

**Veronica Alvarado** is an active parishioner at Holy Cross Parish in the Mt. Airy neighborhood of Philadelphia. Her role as marketing and development director allows her to feed her passion to evangelize, connect people, and create opportunities for encounter with Christ for those in her community and beyond.