

BETHLEHEM TOWNSHIP'S STORMWATER PROGRAM

The Environmental Protection Agency (EPA) is charged with regulating stormwater pursuant to the Clean Water Act (CWA). Portions of the stormwater requirements of the federal CWA are administered under the Pennsylvania Department of Environmental Protection (PADEP) Municipal Separate Storm Sewer System (MS4) Program. As part of the MS4 permit, Bethlehem Township is faced with new unfunded mandates, resulting in the need to spend considerably more money over the five-year permit cycle than ever before to improve water quality and address the requirements set forth by PADEP.

WHAT IS THE PURPOSE OF THE STORMWATER UTILITY FEE?

All stormwater revenue will be placed into a dedicated fund used only for Bethlehem Township's stormwater program, such as the operation, maintenance, and improvement of stormwater infrastructure. The funds cover costs associated with the following:

- Operation and Maintenance of Stormwater Infrastructure
- Regulatory Compliance
- Capital Improvement Projects

Visit www.bethlehetownship.org/stormwater to stay informed about the Township's Stormwater Program.

Several areas of Bethlehem Township flood frequently and pose threats to safety and property. The capital improvements plan identifies solutions to mitigate flooding and lessen the impacts associated with it. Regular flooding of Easton Avenue and Santee Road results in:



INACCESSIBLE PROPERTIES



IMPASSABLE ROADWAYS



TRIPS PREVENTED



Car Rescue on Santee near Easton
Source: WFMZ.com



Recent Flooding at Easton and Santee

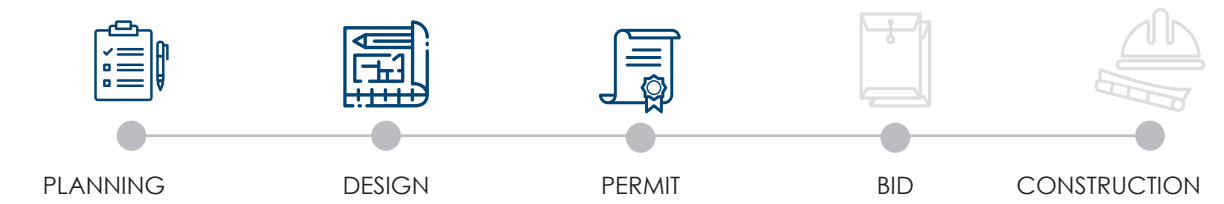
Bethlehem Township owns roughly 95 linear miles of stormwater pipes, 4,500 inlets, over 30 stormwater detention basins.

PRIORITY CAPITAL IMPROVEMENTS

1 WALNUT STREET DRAINAGE IMPROVEMENTS

Walnut Street Drainage Improvements will mitigate flooding along Walnut Street, and Willow Park Road.

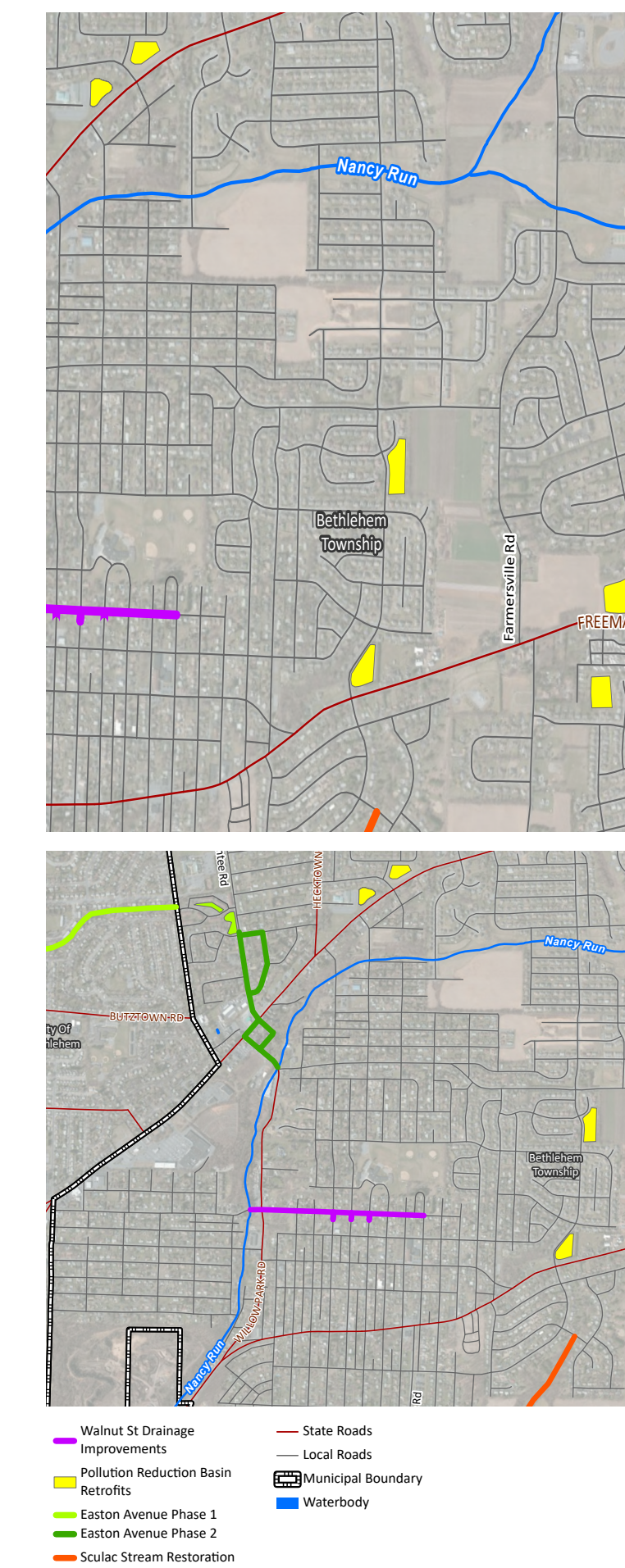
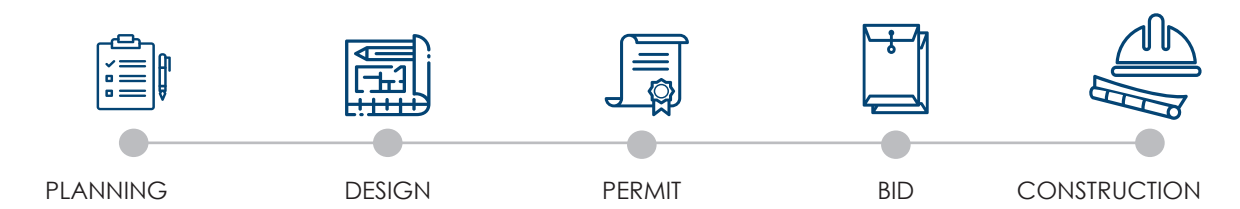
Properties have been flooded in this area for years, and drainage improvements studies date to 2003. The project is being designed with a goal of having construction begin in 2024 once financing is obtained.



2 POLLUTION REDUCTION BASIN RETROFITS

Basin Retrofits at seven existing basins throughout the Township will improve local water quality and meet a portion of the Township's Pollution Reduction Plan (PRP) requirements from PADEP. Retrofitting the basins will allow for greater stormwater retention and for pollutants to be reduced through the infiltration process.

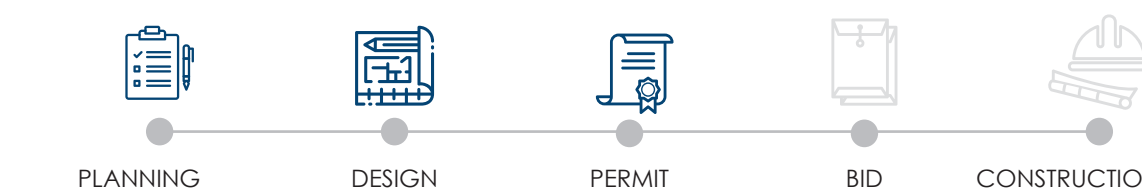
Bethlehem Township's MS4 permit requires the Township to meet certain pollution reduction requirements. While some pollution reduction measures have been incorporated into the flooding mitigation projects, these only partially meet the requirements of the permit. The remaining permit requirements will be met by retrofitting existing detention basins so that they clean and retain more of the stormwater they receive. These retrofits will clean stormwater runoff to standards imposed on the Township via state and federal mandates. Construction began in 2023 for one project.



3 EASTON/SANTEE FLOOD MITIGATION PROJECT - PHASE 1

Phase 1 of the Easton/Santee Flood Mitigation Project involves improvements to four detention basins to reduce flooding during smaller storms. In addition to mitigation of flooding, the improvements will meet some of the water quality improvements required by the state. Substantial flooding has occurred in this area for decades.

The Township/Authority continue to pursue grant funding to offset project costs. The balance of costs are anticipated to be funded through a PENNVEST low interest loan. Coordination with the City has been ongoing.



4 EASTON/SANTEE FLOOD MITIGATION PROJECT - PHASE 2

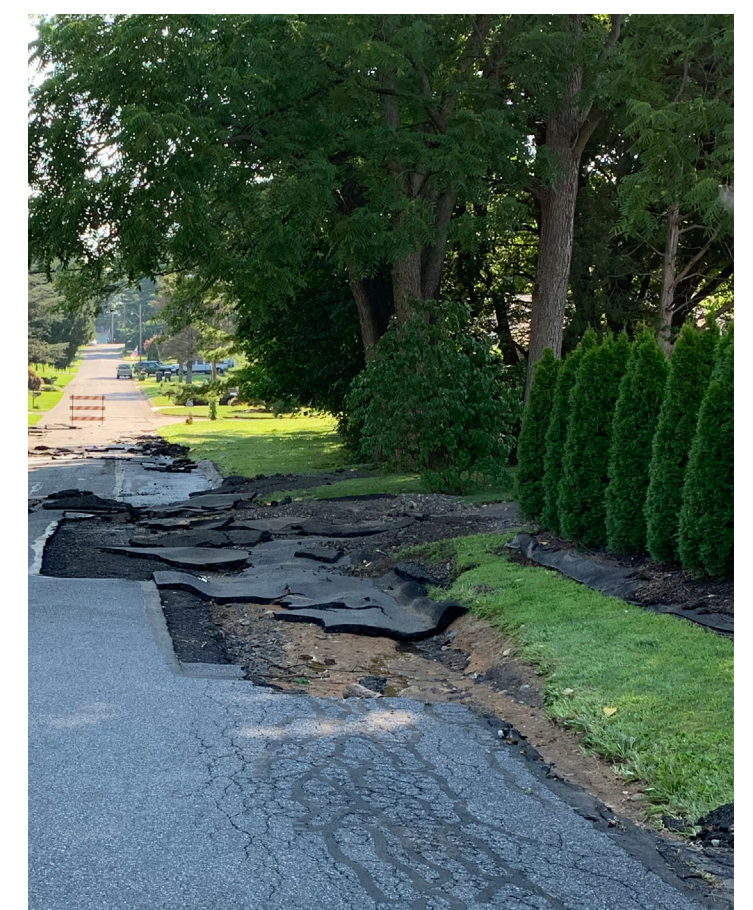
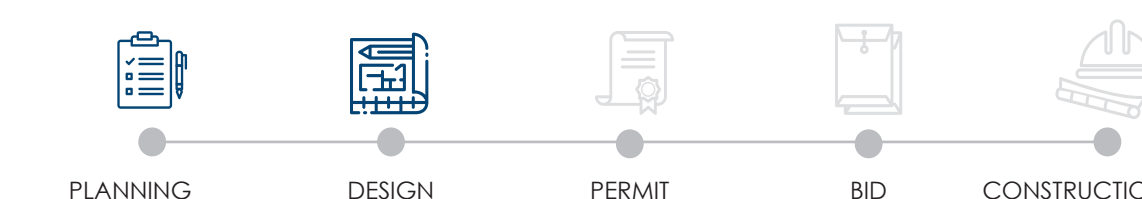
Phase 2 of the Easton/Santee Flood Mitigation Project will improve conveyance of runoff from Clifton Avenue and Santee Road to Nancy Run during larger storms. The planned improvements will be refined based on modeling of the Nancy Run Watershed which is ongoing.

Design is planned to begin after modeling efforts. Permitting and financing will define the actual schedule.



5 SCULAC STREAM RESTORATION

A stormwater channel upstream of Sculac Drive has experienced severe erosion impacting adjacent sanitary sewer infrastructure and residential yards and structures. A study was initiated to make improvements which may also provide PRP credits. Design has begun for initial work in the lower reach of the channel.



BETHLEHEM TOWNSHIP
STORMWATER ENGINEER

