



Township of
RADNOR
PENNSYLVANIA

South Devon Area Flood Reduction and West Wayne Preserve Wooded Wetlands Restoration & Habitat Enhancement Project

Project Narrative

Radnor Township engaged Meliora Design to design a project to reduce the probability of flooding on South Devon Avenue and directly downstream of Friends of the Radnor Trail Park [FORT]. Meliora Design determined that the 10-year, 1 hour rain event was the most common, impactful storm that affected Radnor Township. Since Radnor Township is fully developed, the only available land for stormwater management projects is most often Township owned property. Recent stormwater management projects include those constructed at the South Wayne Municipal parking Lot, North Wayne Field Parking Lot, and the Cowan Park Parking Lot. The West Wayne Preserve, formerly known as the Levin Tract, was purchased by the Township specifically to be used for stormwater management.

The Township is addressing stormwater management on a watershed basis: the South Wayne Municipal Lot project is in the Ithan Creek Watershed; the Cowan and North Wayne Field Projects are in the Gulph Creek Watershed and the South Devon area is in the Darby Creek Watershed.

It has been brought forth by residents, and observed by Township staff, that certain severe storms cause flooding on South Devon Avenue and along the tributary to Little Darby Creek that leaves FORT. To that end, Meliora Design created a plan to reduce the probability of flooding for the 10-year, one hour event in the area, using the West Wayne Preserve and FORT. We should all understand that stormwater management facilities, including the one being built at the West Wayne Preserve and FORT, are finite in capacity. Storms greater than the 10year/1 hour event, or many storms over a period of days, will be greater than the capacity of this project. That does not mean the system is not functioning; it just means the rain event is greater than the capacity of the system.

The proposed project is comprised of two phases, the first phase being work at the West Wayne Preserve, the second phase at FORT.

The work taking place at the West Wayne Preserve will consist of grading the area to detain stormwater runoff. Via an outlet structure, the runoff is slowly released through an existing pipe [which will be rehabilitated] under the Radnor Trail. A myriad of plantings will provide evapotranspiration. To complete this work, 406 trees will be removed, of which 60 trees are deemed viable. The current stand of trees in the West Wayne Preserve are a declining, over mature stand of ash and other pioneer species, with very aggressive invasive understory species, and with no regeneration of native plants. The Township's Arborist estimates that if left untouched, the entire wooded parcel will give way to a 100% invasive dominant stand in 15 to 20 years. The Township will be replanting the area with 106 trees, 95 shrubs, 852 live stakes, 1,411 bare root and woody shrubs, and 2 plus acres of upland seeding. The new landscape will

be sustainable, diverse, longevity driven, and aesthetically pleasing. This project received approval from the Shade Tree Commission, Parks and Recreation Board, and the Board of Commissioners.

The work taking place at FORT consists of three facets: reconstructing the existing parking lot to porous paving, installing a large sub-surface stormwater management system in the dog walking area, and installing storm sewer in West Wayne Avenue to reduce the amount of runoff that accumulates under the bridge. During the construction period dog walkers are encouraged to contact Tammy Cohen, Director of Parks and Recreation, at tcohen@radnor.org or 610-688-5600, extension 141.

It is anticipated that the first phase at West Wayne Preserve will be completed in early 2024, and the second phase at FORT will be completed by July of 2024. Please note the anticipated completion dates can be affected by weather conditions.

This four-million-dollar project is funded by grants from the Commonwealth of Pennsylvania, National Fish and Wildlife Foundation, and the U.S. Fish and Wildlife Service, totaling nearly one million dollars. The balance of the project is funded by the Radnor Township Stormwater Fund.

We understand that the project affects usage of the park for the short term, but once completed it will be another step in Radnor Township providing stormwater management to our residents, reforestation of the West Wayne Preserve, and appropriate habitat enhancement. We respectfully request that all inquiries, except as noted above, be directed to: westwaynepreserveareaplan@radnor.org. In this was we will make sure all questions are answered by the appropriate party.

Construction of a project of this magnitude requires a team effort:

- Dennis Capella, Engineering Project Manager
- John Rockwell Hosbach, Township Arborist
- Quality Control Inspections, Incorporated
- Tammy Cohen, Parks & Recreation Director
- Meliora Design, Incorporated
- MECO Construction, Incorporated

I thank you in advance for your patience and understanding during the construction of this important stormwater management, reforestation, and wildlife habitat creation project.

Stephen F. Norcini, PE
Township Engineer