#### **Introductions and Welcome**

Rebecca Zito, of Pittsburgh Water and Sewer Authority (PWSA), welcomed the group, reviewed the meeting's agenda, and introduced Anna Flores, the Project Manager, along with Dave Anthony, Wade Trim Project Manager.

#### **Project Overview and Goals**

Ana Flores stated that the City has significant stormwater challenges. The stormwater infrastructure was built over a hundred years ago, at a time when the City's population was smaller, and communities had more green space and less impervious surfaces. In addition, today, rainfall is not even throughout the year and quick, severe storms dump more rainwater than can be accommodated in the stormwater system.

Ana presented the concept of combined sewer systems and explained the impact on water quality and flooding. She explained the changes being implemented locally to address the impacts, including the passing of the Allegheny County Stormwater Ordinance, Act 167, the creation of a Stormwater Division at PWSA, and the development of PWSA's Green First Plan.

Ana explained that the Green First Plan is designed to keep rainwater out of the system by focusing on the sewer sheds that contribute the most to the system. The Plan examined the top 30 sewer sheds and identified six priority watersheds, based on the criteria of risk, opportunity, development, and synergies. Sewer shed A42, which contains the Thomas and McPherson project, is one of the six priority sewer sheds.

Ana explained that the Thomas and McPherson project area, located within this sewer shed, was selected because of the amount of space in the right of way to be able to retrofit for green infrastructure. Ana described the concept of green stormwater infrastructure and showed examples throughout the City.

# **Preliminary Design Findings**

Dave Anthony, of Wade Trim, explained that the consultant team selected solutions that could be used based on the street typologies – boulevards, frontage streets/connectors, residential side streets and alleys.

Dave explained that the intervention for the boulevards would utilize the median space. While keeping the boulevard trees, the intervention would provide new inlets, along with existing inlets, to divert stormwater into aggregate storage at the end of the median to capture, or detain, the water and slowly release it. Dave noted that an

arborist would assist in the design and construction to ensure that there would be not damage to the trees.

For frontage/connector streets, Dave explained that one recommended solution is to create underground storage by using inlets and catch basins to gather water and divert it into storage under the parking lane of both sides of the road. This alternative does not change the appearance of the road. A second alternative is to add permeable paving in the parking lane. This alternative creates a subtle change in the pavement, drawing attention to a narrower traffic lane, and possibly resulting in traffic calming.

Dave explained that the proposed solution for retrofitting the alleys is to install permeable pavers in the center, allowing water to percolate into underground storage, and repave the alley after installation of the storage.

#### **Questions and Answers**

- Will the arborist be conflict-free or will they be an employee of PWSA or the contractor?
  - The arborist will be a consultant to the contractor. In the past, these projects have engaged the City Forester. PWSA can arrange for follow up by the City Forester.
- What do we need to make the case if there is damage during construction?
  - o Photographic evidence during construction is required.
  - There will be a representative on site to act as a community liaison for PWSA.
- Should homeowners have photo evidence of the health of trees before the project begins?
  - PWSA and the consultant team will produce a tree protection plan.
- Where are the sewers located?
  - PWSA and the consultant team will come back to the community at the 60% design completion stage with a detailed plan. At that point, the project will have a detailed site plan with location of utilities, sewer laterals, and the main sewer line.

- What is the value of old growth compared to a new sapling? What does it take to replace an old tree?
  - An older tree absorbs more water and, therefore, we want to stay away from them unless they need to be replaced. The tree survey is identifying at-risk trees in addition to mapping trees in the project area. The advantage of replacing old growth with healthy trees will allow water to be absorbed by the tree as well as the storage. The City Forester has a formula for the amount and size of new trees required to replace existing trees.
- Wasn't there another green infrastructure option being recommended?
  - At the first community meeting, there was another option that was recommended for frontage streets/connectors to add bioretention swales. The swales extend landscaping into the parking lane, capturing the runoff at the surface. The bioswales would require potentially eliminating parking or being placed in areas where parking is restricted, such as at intersections. Based on community feedback, we are not going forward with that option.
- I was not at that meeting and might prefer a bioswale in front of my property to keep people from parking in front of my driveway.
- Why aren't you using the sidewalks for green infrastructure?
  - We are looking at the right-of-way from curb edge to curb edge. We are staying away from the sidewalks because a number of residents have decorative sidewalk materials and we want to be as minimally disruptive as possible.
- Could green infrastructure be developed in the grassy area between the sidewalk and the curb?
  - That is not the current plan. We can look into it, but there may be utilities located there. We are minimizing utility conflicts to maximize storage.
- Will water leak into our yards from the storage areas?
  - The storage area has an impenetrable barrier to prevent that.

- Is this project related to the storm events on Washington Boulevard?
  - The discharge for A42 is located just beyond Washington Boulevard. The more water that is managed at the top of the watershed, the more capacity there is lower in the watershed. This project is one of many projects to control stormwater.
- If PWSA undertakes the projects in the watershed, it will make a dent but not prevent flooding on Washington Boulevard?
  - PWSA is working with PennDOT and the Army Corps of Engineers to address the problem. In addition to the amount of stormwater, Washington Boulevard is a bowl at the intersection with Verona Road. There is a three-pronged initiative to address the flooding: manage stormwater upstream; recreate the stream (that was once Negley Run) adjacent to the road; and reconfigure the road.
- Who is funding this project?
  - Funds have been allocated through the capital budget of PWSA's Stormwater Division. In addition, PWSA is seeking ALCOSAN Growing Greener funds and other grants.
- Aren't there problems with storing water?
  - Think of it as capturing, not storing, the water for no more than 72 hours.
    The water will be captured in the aggregate and released slowly back into the system.
- Why not consider bioretention?
  - This solution requires much more maintenance than solutions below the surface. This might be a good solution in a park or other larger area but may not be consistent with the existing streetscape.
- Who will be responsible for maintenance?
  - PWSA will be responsible for maintenance. They will also return to monitor, after five to ten years, to determine how the system is performing.
- Where will the storage units be located?
  - o They will be in the 6700 and 6800 blocks of Thomas and McPherson.

- Will you be narrowing Thomas and McPherson?
  - The street will not be changed in the 6700 and 6800 blocks. The extension of the island is proposed for the 6900 block.
- Will the solution vary block by block?
  - We are not suggesting one solution overall because we want to respond to the design typology. We also would like to talk to folks on each block. If anyone is interested in being a block captain, please let us know.
- There is an existing database for outreach could put a notice in the bill.
  - Even though some folks get there bills electronically and others are not residing in the home, we could look into put notices in the mailed billing statements.
- I have seen new catch basins being constructed in our neighborhood. Will they work with this design?
  - Catch basins are being replaced across the City. Surveyors are gathering information on all of the catch basins and the intent is for them to work with the proposed solutions.

#### **Project Schedule**

Dave Anthony presented an overview of the construction schedule. He noted that, by the end of this summer, the team will be at 60 % design with information about specific locations and solutions. At that time, there will be another community meeting to review this information and talk about the construction strategy and sequencing to minimize impact. He added that the design will be completed by winter 2019 and the construction is planned to take place from the Spring of 2020 into the Fall of 2020.

- Some cars in the neighborhood are not moved during the day.
  - We will need to develop a solution for that during construction.
- What government entity has mandated this project?
  - This project has not been mandated. However, PWSA has been mandated to improve the water quality in our rivers and to reduce the combined sewer overflows by the City and the Environmental Protection Agency.

- When a property sells, the owner needs to send a \$25 check for a dye test. Is that \$25 going to this project or will our rates go up?
  - The fee is for places with separated sewers. In areas, such as this part of the City, with combined sewers, it does not make sense to separate the laterals, since they are connecting to a combined sewer. Currently there is a line item in the PWSA bill for sewer infrastructure.
- Is this project related to Mayor Peduto's announcement about aggressively repaving our streets?
  - This project is not part of that initiative, but we are coordinating with the City's Department of Mobility and Infrastructure (DOMI).
- Are we a test site?
  - There are other green infrastructure installations in the region.
- What is the experience locally with clogs?
  - We have a green infrastructure site in Carrick. It is approximately 5 years old and is performing well.
- Are these products new?
  - o They have been around for years, though not necessarily in this region.
- Why didn't you take a parking lot? Is Westinghouse Park too far away for this?
  - We are testing out green infrastructure in the right-of-way, in publicly held land.
- How will you measure the effectiveness?
  - We have developed hydrologic models to assess effectiveness.
- Will the contractors who bid on this project have experience with these projects?
  - The contractors who bid will be required to have experience. In addition, PWSA will provide oversight to the installation.