



**Maryland Avenue Stormwater Project
Virtual Community Meeting Minutes
6:30 – 8:00 p.m. on Tuesday, June 8, 2021**

Rebecca Zito, Senior Manager of Public Affairs at PWSA welcomed the participants to the meeting, introduced the project team, and described the meeting agenda. The 34 meeting participants included local residents, project stakeholders, community organizations, and government agencies.

Ryan Quinn, Design Project Manager at PWSA provided an overview of the history of stormwater management in Pittsburgh and the stormwater issues we face today. Neighborhoods like Shadyside have combined sewer systems that were designed more than 100 years ago to collect stormwater and sewage in the same pipe. PWSA is building projects to slow the flow of stormwater into the combined sewer system to reduce flooding and overflows of sewage and stormwater to the rivers.

Ryan explained the goals of the Maryland Avenue Stormwater Project and the project components. The first phase of the Maryland Avenue project includes portions of Howe Street and Kentucky Avenue between South Negley Avenue and College Street. The project will install permeable pavers in the parking lane and underground stormwater storage with an impermeable liner. PWSA has coordinated with the City of Pittsburgh's Forestry Division to protect some existing street trees, remove some existing street trees, and replace removed trees with suitable species in suitable locations. A certified arborist will be on site during construction. PWSA will coordinate voluntary downspout disconnections into the new stormwater system with interested property owners along Howe Street West (5700 Block).

Marco Sciulli, Construction Project Manager at PWSA provided an overview of the construction schedule. The anticipated start date is June 28, 2021 and the anticipated end date is in May 2022. Construction will be completed in four phases, each 6 to 8 weeks long, with no more than 2 phases active at once. Construction will begin along Kentucky Avenue between Maryland Avenue and College Street. Final restoration of Kentucky Avenue is expected to be completed in October 2021. The project is expected to go on hiatus from November 1 to March 1 for winter. Construction will begin again the spring along Howe Street, with final restoration of Howe Street expected in May 2022. Trees will be planted as part of final restoration at a time that promotes tree health.

Marco shared the expected daily impacts of the project. Construction will take place Monday through Friday, likely 7 AM to 5 PM. Traffic signs and detours will be posted, with flaggers on site during active work. Streets will not be closed during morning and afternoon commute times. No parking signs will be posted 48 hours in advance in areas where active construction work is taking place.

Rebecca explained how PWSA will keep community members informed during the project construction. Construction updates will be posted to the project webpage every other week. Construction signs with project information and contact information will be posted in the project area. A recording of this meeting will be available at www.pgh2o.com/maryland-ave.

Discussion

- Question: What happens when the surge tanks can't handle the flow?
 - Answer: The new stormwater system is sized for the drainage area. The volume is to manage up to 1.5 inches of rain over that area. Any stormwater that doesn't enter the new stormwater system would flow to the existing storm drains and enter the sewer system.
- Question: "To meet the regulatory requirements" seems problematic. Aren't we trying to address climate changes that are likely not reflected in regulatory requirements? In other words, are you playing to where the puck was three decades ago?
 - Answer: We are working within the idea of having an affordable program while looking at the impact of severe rainstorms. We recognize the impacts of climate change and are balancing them against the level of service we can provide across the city affordably. We are also doing additional strategic city-wide stormwater planning. There is always the potential for larger storms that can overwhelm infrastructure. That will take many years to address.
- Question: The reliance on customer reporting is highly suspect. Many of us have given up, or feel there's no value in reporting anything to PWSA. Are there any actual metrics to measure flooding, and are there metrics to measure project success?
 - Answer: We are mapping and collecting information about locations and frequency of flooding to help inform project selection. In addition, we are going to create a model of the entire drainage system in the City of Pittsburgh. We will drive the model with storm sizes to then compare where it floods in the model versus in the city based on resident's data. This model will help us determine costs for level of service for stormwater. The information that you provide us about flooding is not wasted. It takes years to put it all together, but every bit of information we can get is very useful.
- Question: Criteria of 1 inch in 15 minutes - I am not entirely sure, but I think we had 2 inches in 30 minutes the other week. Does this exceed the criteria?
 - Answer: A review of the rainfall data from May 24 shows the storm was somewhere between 1.5 and 2 inches of rain within 30 to 60 minutes. The modeling that we did as part of the project design showed that the 1 inch storm in 15 minutes currently causes flooding, and those larger storms would still cause flooding after this project is constructed. Unfortunately, those larger storms are happening more and more frequently. This project along Howe Street and Kentucky Avenue is an initial phase of stormwater improvements, more phases would be needed to address larger storm sizes. After the project is constructed, we will install monitors to evaluate the project benefits and help guide future projects.
- Question: Can you detail tree maintenance strategies for these streets?
 - Answer from PWSA: We had guidance from City Forestry to create the tree plans for this project. Michael Kelley at City Forestry would be the best person for these questions.
 - Answer from City Forestry: Regarding the tree protection, we will be working with the construction crews to make sure the existing street trees are protected, and all City Forestry requirements and best practices are followed.

- Question: Are there overhead utility lines on one or both sides of the street and how will this impact species selection/install placement of the trees? Is a species list available?
 - Answer from City Forestry: There are overhead utilities. I looked at the tree plans for this project and the utility compatible species that have been planned were appropriate.

- Question: Is there any funding program available for homeowners or landlords who want to plant on their properties to help with stormwater in this phase one project area or any future phases?
 - Answer from City Forestry: That is outside of our scope of this project. (Follow-up clarification from City Forestry: Interested residents can find resources for tree planting on their properties through Tree Pittsburgh (<https://www.treepittsburgh.org/>)).

- Question: If someone chooses the downspout disconnection does this preclude them from tree or other planting on their front yard also?
 - Answer: It would not preclude, but we are not planning planting in residents' yards – only tree plantings in the public right of way. We would have to follow up about whether it is feasible to do that.

- Question: So this is a pilot project, and you're going to study it for years, before you continue with what seems obviously necessary?
 - Answer: When construction is completed in the spring of 2022, we will install flow monitoring. We conducted pre-construction monitoring with flow meters throughout the neighborhood to get an idea of how the sewer system is working without green infrastructure. There is another project on Chatham University's campus that is going into construction this year. It will also help reduce flooding in Shadyside. When we do post-construction monitoring after both projects are installed, we will be monitoring the system with 14 acres managed by green infrastructure.

- Question: How does this project interrelate with Howe project 15 years ago related to flooding?
 - Answer: The work on Howe Street 15 years ago, and the alternatives analysis completed as part of design work for this project, show that to install additional pipes in this area of the sewer system keeps flows in the sewer system. The green infrastructure projects that PWSA is installing help keep stormwater out of the overwhelmed sewer system. PWSA's approach is to combine green infrastructure with pipe networks to provide a long-term solution. The problem we are working on started back in the 1850s, when the combined sewer pipes were first constructed. Because so many previous engineered solutions provided additional problems, we are carefully studying and planning current solutions to provide long term benefits.

- Question: Can you quantify the effect, if any, of this project on the low-lying area in the 5900 block of Walnut St?
 - Answer: The sewer system in Shadyside has multiple branches to it. That part of Walnut is part of this project's downstream area and may see reduced flooding.

- Question: How long will egress from driveways be impacted?
 - Answer: Ideally, we will keep the impacts as minimal as possible.

- Question: What will happen to on street parking when you are doing all this?
 - Answer: We are trying to keep impacts to a minimum. Once the project is completed, there will be no parking restrictions as a result of the project.

- Question: We live in a 6 unit condo on Kentucky West and recently received a water line (lead pipe) replacement packet. Will that work be performed during the storm water project?
 - Answer: It will be part of the project and Zottola Construction will be performing that work.

- Question: What will be the lifetime of the “impermeable” membrane?
 - Answer: The liner is part of an underground stormwater system. There will be regular maintenance that will need to happen every year or every two years, which will include things like street sweeping for the permeable pavers. We also expect periodic maintenance after 10 years or 15 years or 25 years. We will be regularly inspecting the project. The impermeable liner itself was selected for its durability. The seams that connect the liner are heat welded and tested for water tightness. That all adds up to a lifetime of 40 years or more. We are wrapping the project bottom and sides with the impermeable liner to avoid stormwater flow toward the properties, which is a design decision based on review of geotechnical data.

- Question: When will construction start and when will it be complete?
 - Answer: June 28, 2021 to May 2022.

- Question: What water discharge requirements are placed on new construction to mitigate the demand on the combined outflow system? What is Chatham University doing to mitigate its stormwater runoff?
 - Answer: For new construction with private property development, there are codes and ordinances requirements. PWSA and the City of Pittsburgh are working on updates to the codes and ordinances for stormwater. As part of the upcoming stormwater fee, property owners like universities and hospitals will be charged for their impervious surface, to incentivize them to reduce their impervious surface and therefore stormwater runoff. Chatham University is a partner on the stormwater project we are constructing on their campus this year (Woodland Road Stormwater Project) which will provide a benefit to the public sewer system.

- Question: When is the model expected to be available?
 - Answer: We are going through two different phases of planning. The first phase is a stormwater strategic plan, which we kicked off yesterday. That strategic plan will help us determine a cost of service across the city. We are looking to have costs laid out for different levels of service for PWSA's ratepayers. In the next month or so, we will be solicitating for consultants to create the model to develop that level of service. Creating the model will take about 2 years. The model will not just look at rainfall, but overland flow and flow within the sewer pipes. The model will also build in climate change impacts. To manage a 50-year storm would be an astronomical cost for PWSA's ratepayers, so we are modeling to figure out what level of service would be affordable.

- Question: So in three years, you will be able to provide policy choices?
 - Answer: Yes, and policy choices attached to dollar figures. There will also be opportunities for the public to weigh in on the stormwater master plan process before then.

- Question: Can we still have a regular schedule to have the debris vacuumed from the sewer drains several times a year?
 - Answer: We will talk to our Operations department to get the Maryland Avenue neighborhood storm drain cleaning on a regular schedule.

- Question: The map shows taking water on Kentucky from the west side of Maryland to the east side of Kentucky. Will that cause problems to the houses on Kentucky west by adding more water to this area? Will we be susceptible to basement flooding?
 - Answer: This project was chosen for Kentucky and Howe because these streets are uphill and upstream of the areas that experience flooding regularly, so holding back some water safely here will reduce downstream flooding. Any kind of inlet capture on Kentucky and Howe is not going to create new flooding, because the water will be stored underground in lined systems.

- Question: Has anyone assessed the risk of project-induced subsidence with damage to homes? What if my foundation cracks as a result?
 - Answer: The impermeable liner underground is to prevent groundwater flow into and out of the stormwater system. Where groundwater currently goes, that is going to continue. This project is not designed to solve residents' home foundation issues, but it is designed to avoid negative impacts to foundations.

- Comment: I am referring to tree maintenance following replacement/planting and post project install, but thank you for clarification in terms of during construction.
 - Answer from City Forestry: The city will be taking over the maintenance of the trees in the long term.
 - Answer from PWSA: The planted trees will have a warranty period for establishment for the short term (1 year) after construction.

- Question: What kind of measures will be taken to reduce dust/construction related air pollution during the work?
 - Answer: Water will be used to keep the dust down, especially when saw cutting the street or sidewalk. The contractors also do not let machinery idle, to keep the fumes down.

- Comment: Ryan, in addition to the tree species relative to the plan and other tree info like maintenance planning for the long term, if/when you upload it to the project page, it would be great to also learn something about the soil spec - if it is just native soil and mulch or amended or structural soil etc. Thanks so much for all your hard work! Looking forward to seeing this all implemented.
 - Answer: Ryan Quinn will follow up with Christine Graziano after the meeting about the soil specifications.

- Question: Are there plans to facilitate school pick up near Kentucky and Negley?
 - Answer: We are reaching out to Kentucky Avenue School to coordinate traffic needs.

- Question: What is the cost of this pilot project?
 - Answer: The construction bid award was \$2.67 million.

- Comment: Be sure the city meter people/ticketers know to give a pass to people parking on other streets.
 - Answer: We will try to make sure everyone at the city is aware of the project, but I'm not sure how much we can influence tickets.

- Question: Will construction proceed in subsections say the width of a lot, and then move, or will the block be torn up entirely for 5 months?
 - Answer: The construction schedule is broken down further than the four phases. We are planning to work on smaller isolated sections at a time.

- Question: Will a new system handle only 1 inch in 15 min but also 3 inch in 15 min?
 - Answer: No, higher volumes of stormwater will overflow into the existing combined sewer system. The amount of storage volume is based on 1.5 inches of runoff over 5.5 acres. The post construction monitoring evaluation will demonstrate the system benefits for specific storms.

- Question: Will the properties on Maryland between Howe and Kentucky be required to divert their downspouts to run roof water to the surface of the street rather than to the existing below ground sewer line? If diversion of the downspouts is required, who will pay for the changes in plumbing and roofing downspouts?
 - Answer: The downspout disconnections are only for the Howe West area and it is completely voluntary. It is a low risk situation that would provide a benefit to the public sewer system. If a property owner opted in, they would have the ability to opt back out because there are no code or requirements that are being put on homeowners as part of this project. PWSA will pay the cost and construct the improvements.

- Question: Can we not get a bigger sewer pipe to take of these water problems?
 - Answer: PWSA looked at that alternative through modeling, and those larger pipes were much more expensive and disruptive. Those pipe solutions also present potential to move the flooding issues to a different part of the city. Green infrastructure helps slow the flow of stormwater, removing it from the sewer system, presenting a more holistic solution.

- Question: What is the 911 # for emergencies/issues caused by this construction?
 - Answer: Questions about construction can be directed to Rebecca Zito (412) 689-1462, rzito@pgh2o.com, Marco Sciulli (msciulli@pgh2o.com), or Bryan Martucci (bmartucci@hrgray.com). If there are things that need to be taken care of immediately, there will be an inspector on site during construction.

- Question: Has this design been used elsewhere either locally or nationally?
 - Answer: Yes. Dormont has permeable pavement in its downtown and there are other similar projects in the region, including parking lanes and parking lots. Nationally, it is an established way to manage stormwater.

- Question: How do people apply for this voluntary participation in downspout disconnects?
 - Answer: Before the pandemic, we were meeting property owners in person to discuss downspout disconnection. We are now at a point where we can meet face-to-face again. What is required is a signed agreement and a temporary easement. Work on Howe Street is one of the final project areas to move forward. There will be a deadline, but not in the next several weeks. We will be contacting property owners in the area to provide additional information. Some property owners have already opted in, and we will be following up with them as well.