



# Water Infrastructure Project FAQs

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## Why is the City doing this project?

In short it is because we are required to by the State.

The State of Michigan recently adopted new lead and copper rules<sup>1</sup> that require Cities to remove and replace lead service lines at public cost. The service line is the pipe that runs from the water main into the house. These replacements must be completed within 20 years, although Pleasant Ridge is working with the State to extend our timeline to 30 years due to the large project cost.

Nearly all our water mains are the original ones installed in the 1920s and are approaching 100 years old. Most of our water mains are 6 inches in diameter, whereas 8 inches is the minimum standard used today. Our water mains are made of Iron, which builds up deposits inside of the pipe over time, meaning that our water mains are functionally operating with a smaller diameter. This reduces flow capacity and can lead to pressure drops during times of high-water use and when a fire hydrant is opened.

Given that we have fire flow and water pressure issues, and that we will have to dig up the street to drill into the main for every service line replacement, it only makes sense to replace the water mains while we replace lead service lines to meet the State's mandate.

Refer to [www.cityofpleasantry.org/water](http://www.cityofpleasantry.org/water) for presentation materials and a video from the Water Infrastructure Town Hall held in April of 2021 for more detail on the coming water system improvements.

## Does the City have a problem with lead levels in our water?

No. Our water quality meets and exceeds all Federal and State standards, including lead levels. Replacing lead service lines will eliminate lead from our water system, but in the meantime, residents can be assured that our water quality is good. Refer to the following link for water quality testing results for all Michigan water suppliers, including Pleasant Ridge: [https://www.michigan.gov/mileadsafe/0,9490,7-392-104591\\_92796-500553--00.html](https://www.michigan.gov/mileadsafe/0,9490,7-392-104591_92796-500553--00.html)

## Will the City be replacing lead water service lines?

Yes, all lead service lines will be replaced at City cost. Please note that none of the water mains are lead, only the service lines that run from the main into the house.

## What is the timeline for this project?

This project will be completed over the course of 20-30 years. We expect to raise about \$800,000 of revenue annually, but the cost to replace the water main and service lines varies by street. Many of the streets with a high number of lead service lines are estimated to cost about \$1.6 million to replace the main and lead

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<https://ars.apps.lara.state.mi.us/AdminCode/DownloadAdminCodeFile?FileName=R%20325.10101%20to%20R%20325.12820.pdf>

service lines, so that's about two years' worth of revenue. We will be replacing a water main about every year or every other year over the course of the project, depending on how revenues and project costs align.

### I already know that my service line is copper. Can it remain?

Yes, any copper service lines will remain. Galvanized steel and lead will be replaced.

### How can I tell if my service line is lead?

The City has completed a preliminary materials analysis using records available in the office. The water meter installers will be noting the material of the service line coming into the house during the 2021 water meter replacement project. Once we have that information, we will send letters out to each house notifying residents of the information we have about their water service line. In the meantime, a preliminary inventory is available online at: <https://cityofpleasantridge.org/wp-content/uploads/2018/01/PreliminaryMaterialInventory.pdf>

### What will this cost us financially out of pocket?

Water rates were raised 35% for FY22 starting July 1, 2021, and ending June 30, 2022. The City Commission has placed a 3.5 mill property tax millage request on the November 2021 ballot that, if approved, would allow water rates to return to previous levels.

It is difficult to say what the exact cost will be for each household given that different water usage patterns and property values will create some variance. However, if the property tax millage is approved, it will result in a 6% total annual local tax + utility bill cost for residents.

If the property tax millage does not pass in November of this year, water rates will remain at their new, higher level.

### How were water rates adjusted this year?

Water rates consist of a flat ready to serve charge and a water and sewer usage rate. The ready to serve charge about doubled, to \$82.50 per billing period, while the water and sewer usage rate increased from \$78.75 last year to \$106.15 this current year.

Raising revenue via a flat fee increases costs more for low water users, while increasing the usage rate raises costs more for high water users. Our goal was to use both flat fee and usage rate increases to keep the cost increase as equal as possible across the board for low, medium, and high-water users (on a percentage increase basis). Nearly all water users will see about a 35% increase in utility bill costs due to the water rate increase for FY22.

### What is the water infrastructure millage on the November election ballot?

The City Commission has placed a 3.5 mill property tax request on the November election ballot. This property tax would raise the revenue necessary to complete the water infrastructure project instead of having to raise that revenue through water rates. If approved, the property tax millage would take effect July 1, 2022, and water rates would be reduced back to their previous levels.

## What will be the disruption to streets, yards etc. when service lines are replaced?

Replacing the water mains will require some excavation of the street. There are a few methods that can be used with different levels of disruptiveness. Open trench requires digging up everything, while directional drilling uses a few holes in the ground.

To replace the service line, they must dig a hole in the street where the service line meets the main, and where the stop box is located at the sidewalk. They pull the new line through the ground from these two locations and in the basement, so the process does not require trenching through yards.

We have replaced a few service lines on Amherst, addresses 1 through 10. You can see what the disruption looks like - the concrete repairs have not yet been made so where there is asphalt cold patch is where they had to dig to replace the service lines. No water main work has been done on Amherst yet, these first few service line replacements were done so that we could get familiar with the process.

## I have decorative paving or other improvements in my yard, will they be replaced/restored?

The City will be doing basic concrete restoration, but it is unlikely that we will be bearing the extra cost for restoration of higher-level improvements such as expensive landscaping, blue stone pavers, etc. Those repair costs will fall to the homeowner. The City cannot bear the extra cost for bespoke restoration work on private property at public expense, as that would be spending public money on private improvements and would raise the overall cost of the project. We'll try to limit the disruption to the minimum necessary, of course.

## What do I need to do to prepare for lead service line replacement?

For now, nothing. You will want to make sure that your water meter remains accessible in the basement and is not blocked by walls or other obstructions. You should also keep in mind that the area around the stop box in your yard will eventually be dug up if you have a lead service line and any landscaping or hard scape improvements will not be replaced, other than standard concrete or grass seed.

## What role is the water meter replacement project going to play in this?

The water meter replacement project is separate. Water meters need to be replaced every 25 years or so, and we are at the point where meters need to be replaced. The installers are noting what the service line material is coming into the house to provide us with one more data point to inform the lead service line replacement project.

## Are the water mains in the street? If yes, how will they be replaced given most of the streets were replaced recently?

Yes, the mains run under the street. Part of how we prioritize which project to do will depend on the age and condition of the street. The first streets were rebuilt in the 90s, so they are nearly 30 years old. Our streets are generally in good shape, so this is only a secondary consideration in how we will prioritize projects.

Mains can be replaced either by open trench or by directional drilling which requires fewer points of excavation, but we must dig down to the main where lead service lines tap into the main, so there is going to be disruption to the streets. It's unfortunate that we must dig up streets that are in good condition, but we are responding to a State mandate so we do not have a choice.

## Can we put the new water mains under the sidewalk instead of the street?

Placing the new water mains under the sidewalk can reduce maintenance costs in the future because it does not require cutting into the street for maintenance or repairs.

Each street will be evaluated as we get into project design to figure out the best approach and location for the new main. We will consider the width of the right of way, impact on trees, conflicts with other utilities, number of lead service lines, and which method we will be using to replace the main (directional drill or open trench).

The following considerations will inform project design for each water main replacement:

- **Right of Way Width:** Some streets have 50-foot-wide rights of way and are constricted, while other streets have a 60-foot wide right of way. There is not much room to work with in narrower rights-of-way.
- **Age:** Some streets are getting close to 30 years old, and the water infrastructure project will take 30 years to complete, so even the recently reconstructed streets could be around 30 years old when we do those mains. Some streets, like Elm Park Blvd, Poplar Park, Kensington, etc. are already starting to show wear and need concrete work. The condition of the street and the need for concrete repairs will also be a consideration as we design these projects.
- **Trees and Restoration:** Yard restoration could be an issue with several homes that have bushes, pavers, etc. If we open-cut the entire length, all the street trees would have to be removed, increasing project cost and impact. Directional drilling could reduce the number of trees that would have to be removed, but more would need to be removed to accommodate a gate valve, hydrant, or service lead installation for a sidewalk water main location compared to a street location.
- **Design Requirements and Separation:** We must follow Ten States Standards<sup>2</sup> for permitting. One of the requirements includes maintaining a horizontal distance of 10 feet from existing sewers and structures. That can be a challenge at times in constrained areas.

## Did the City consider financing to complete this project quicker?

We did consider financing the project through loans or by selling bonds, but even at low 2% interest rates it increased the total cost of the project by \$8.5 million. That is a 33% increase in what we project to be the total project cost. Even if labor and materials increase faster than inflation, we think there is a good chance that the total project cost still ends up being cheaper using pay as you go rather than financing it.

Another issue is that we cannot bond for the entire cost of this project because there is a limit on how much bond debt we can issue, and that limit is lower than what we would need to borrow to do this project.

Finally, many of our streets are still relatively new and in good shape. Spreading this project out over 30 years helps us coordinate the water main projects with the street maintenance projects. Kensington is the first street we intend on doing partly because the concrete on that street is in worse shape than most other PR streets. Our oldest streets are now about 25 years old, so as the streets continue to age and require more maintenance work, we will coordinate that work with water infrastructure work to the best of our ability.

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<sup>2</sup> <https://www.health.state.mn.us/communities/environment/water/tenstates/index.html>