

# INFRASTRUCTURE STUDY GROUP

CITY OF LATHRUP VILLAGE  
27400 Southfield Road, Lathrup Village, Michigan 48076

## SERVICE LINE MATERIAL IDENTIFICATION RECOMMENDATION TO CITY COUNCIL

SEPTEMBER 26, 2022

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### **2022 Water Service Line Identification Recommendation:**

Goal: To identify the service line material composition that delivers water to every building within Lathrup Village.

Background: As a result of the Flint water crisis, the State of Michigan has issued regulations requiring the identification and replacement of lead and galvanized water service lines. The State requires that at least 5% of the City's known lead and galvanized lines are replaced every year until all lead and galvanized service lines have been replaced. The City is required to pay all cost associated with water service line replacements and is using funds allocated for this specific purpose from the Capital Improvement Bond (CIB). To date, the City has identified 21 services lines in need of replacement. 20 of these service lines have already been replaced at no cost to these residents-- the remaining one is slated for replacement this fall.

As part of the regulations, the State also requires municipalities that have more than 1,500 water customers with unknown service line composition to conduct exterior stop box excavations. The stop box contains the valve where the water lines from the City's water main and home service line meet. These excavations provide visual identification of the material going both in and out of the stop box. The preliminary distribution system material inventory (DSMI) identified 1,638 customers in the City with unknown service line material, and therefore, the City of Lathrup Village falls into this category. The number of homes required for excavation is determined based upon the number of excavations required to achieve a 95% confidence interval. For our

City, that number is 315. The 315 homes designated for excavation were chosen using a uniform random process provided by the State of Michigan. As of August 31, 2022, 244 of these excavations have occurred and only 1 lead service line has been found via this process, which was on the private side of the stop box.

Further, to ensure the health and safety of all of our residents, each building must undergo a verification of the water service line at the point where it enters the building. More specifically, the first 18 inches (or the distance to the first shut off valve, whichever is less) must be inspected and the service line material recorded. This requires verification at every customer site that must be completed by December 31, 2024. This verification can occur in one of two ways; the building owner can do a self-test or the City can hire a contractor to enter the building to do the inspection. The self-test does not have an associated cost, whereas a contractor will charge the City a cost per inspection for each building. As such, in order to reduce the amount of taxpayer dollars spent on inspections, the City needs to incite residents and business owners to conduct these self-tests.

The City is currently asking water customers to use the NPR Online Self-test. This tool walks the individual through an easy identification process that uses a magnet and a coin. The test takes about 5 minutes and concludes with the individual uploading a picture of their service line. This picture is subsequently reviewed by the City's plumbing inspector to verify the tester's material determination. To date, 275 of these self-tests have been conducted and almost all of the 25 lead/galvanized services lines identified have been discovered using this process. The self-test is the preferred method (versus using a contractor) for identification because:

- It does not have a cost associated with it
- It does not require a contractor to enter the building
- There are no administrative scheduling issues or costs to get into homes and businesses
- It is 90 to 95% reliable with some follow-up verifications performed by our DPW

For over a year, the City has used a number of means to urge residents to conduct the self-test including using Facebook posts, the weekly eNewsletter, the Your Town magazine, announcements at Council\Planning Commission meetings, placing the self-test link on water bills, etc. Unfortunately, despite these varied means, only a small percentage of residents have

conducted the self-test. In fact, there have not be any self-tests conducted since mid-May. If a contractor needs to be used for the currently remaining 1,142 water customers, it would cost the city approximately \$34,260 to \$57,100 (based upon an estimated \$30 to \$50 per building inspection).

### **RECOMMENDATION:**

In order to facilitate the remaining 1,142 required service line material identifications while using the fewest tax dollars possible, the Study Group is recommending a two track approach.

#### Track 1: Increasing the self-test compliance rate

As noted above, the City has used a variety of methods, with limited success, to encourage the residents to participate in the self-test process. Because every self-test saves the taxpayers money, the City needs to conduct a coordinated plan that inspires our residents to act. In addition to the means of communication already cited, the administration should attempt to generate some excitement in the community about conducting these tests. This can include creative methods like contests, raffles, prizes and any other techniques that will act as an incentive. This effort should also include an education campaign to make residents understand that if they do not do the self-test, it will cost the City money, require a worker to enter their home (not ideal in COVID times), require them to be at home during the day, etc. An education campaign that highlights the significant inconvenience of a site visit to the property owner should also help to act as an incentive for customers to conduct their self-test. Lastly, other additional methods of communication should be considered including temporary yard signs, post card/letter mailings, emails, text blasting, knocking on doors with a fact sheet, etc. The Study Group feels the City Administration should begin this effort immediately, as every building owner that does the self-test means less cost to the City.

#### Track 2: Secure a Contractor for In-home Testing

While it would be ideal for all residents and business owners to do a self-test, the reality is that this simply will not happen. In fact, getting over half the residents to do the self-test would be an accomplishment. Given this realization, the use of a contractor to identify the material in the remaining buildings is a necessity. The cost of a contractor doing the material identification is estimated to be about \$30 to \$50 per building (should the decision to replace the City's water

meters be made, the meter installation contractor can do the material identification for a significantly lower price—about \$6 per building—a savings of approximately \$27,500 to \$50,250 relative to a separate contractor.). As this cost is water system-related, CIB funds can be used for this purpose and are available given the first two years of the project are significantly under budget. In addition, the City Engineer and administration is working on increasing an existing DWAM grant to include funds for use to help offset these home inspection costs.

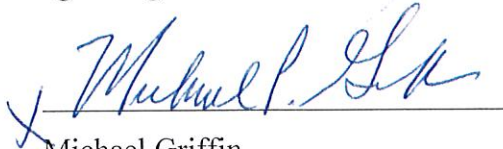
Because there will be many hundreds (possibly even more than a thousand) buildings to verify, the Study Group is recommending the City begin the process of identifying and securing a contractor immediately. While the deadline of December 31, 2024 is still off in the future, the magnitude of this project along with the **significant** difficulties of scheduling and coordinating in-home visits will require an ample amount of time to complete. This process can and should be occurring in parallel with Track 1 discussed above.

Beginning this process might also provide the strongest possible incentive yet for customers to conduct their self-test. That is, when they are contacted directly to schedule a site visit and also reminded they must be at the site during the inspection, we believe a large number of customers will opt to do the self-test instead of enduring the inconvenience. Beginning this process in parallel (or shortly after Track 1), should result in a significant reduction in the number of costly site visits, saving the City additional funds.

This recommendation is made by the following voting members of the Infrastructure Committee:



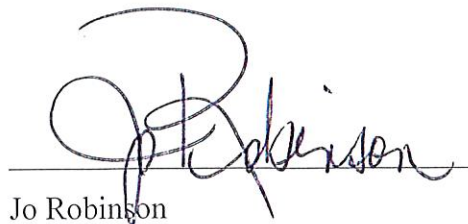
Bruce Kantor, Committee Chair  
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