

April 18, 2016

Dear Neighbors:

HRSD invites you to attend an Open House to learn about the project to rehabilitate 8,200 linear feet of neighborhood pipes and manholes installed in the 1940s. To minimize disruption, the contractor will line the pipes using cured-in-place pipe (CIPP), a rehabilitation method that will require very little digging in the public right of way. The contractor will access the pipes through the existing sewer manholes. This project, which is needed to reduce the possibility of pipeline failures, will take place along portions of Pin Oak Road, Villa Road, James River Drive, River Road, Post Street, Ferguson Avenue, and Randolph Road. Construction areas will typically be limited to sections of 500 linear feet, and comprehensive traffic control plans will be implemented to lessen inconvenience. Representatives of HRSD and its engineering consultant will be available during the Open House to explain the project and respond to questions. *Frequently Asked Questions* on the back of this page provide more information about the project.

Project Open House

Date: Thursday, April 28, 2016

Time: Come at your convenience
Between 4:30 p.m. – 6:30 p.m.

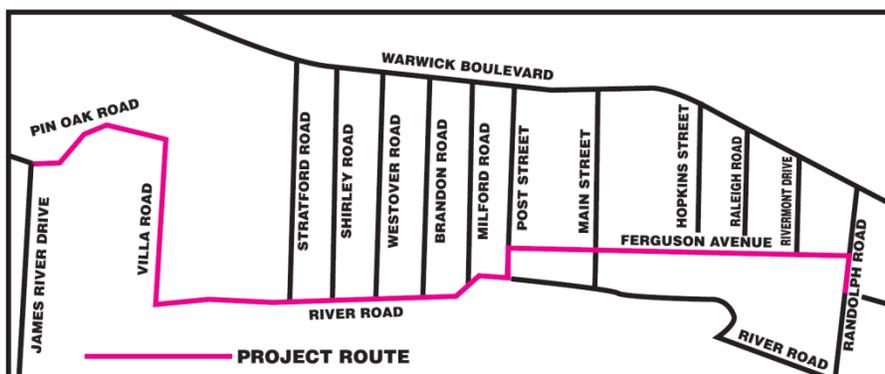
Place: Main Street Library
110 Main Street
Newport News, VA 23601

Anticipated Project Schedule

Design Completion: Winter 2016

Public Open House: April 28, 2016

Construction: Summer 2016—Winter 2017



Come to the Open House at your convenience and:

- See the project route
- Discover more about the less invasive CIPP process to be used
- Discuss the project with representatives of HRSD and our engineering consultant
- Ask questions

If you are unable to attend this public meeting and would like to obtain more information, share your concerns or arrange to speak with project staff, please contact:

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Frequently Asked Questions

Why is this project necessary?

A. This project will rehabilitate infrastructure that has reached the end of its useful life. As a sewer system ages, the connections between pipe joints, around manholes, and at the manhole's frame and cover weaken. This allows ground water and rain water runoff to enter into the sewer system. Ground water and rain water runoff are known as infiltration and inflow (I&I). This project will provide updated infrastructure that will prevent the I&I from entering the sewer system and help ensure HRSD's ability to protect public health and the environment for decades to come.

Will the project affect traffic in the neighborhood?

A. Disruptions to traffic will be minimized, and in most cases, a single lane of traffic will be maintained. No planned detours are anticipated but flagging will be used to help safely direct traffic as needed. Because a few streets are narrow, small sections of on-street parking will be temporarily prohibited within the work zone while there is active work. You will be notified when on-street parking will not be available if your property is adjacent to one of these areas.

What sort of noise should I expect during construction?

A. The typical construction noises such as equipment engines and back-up alarms, bypass pumping and pipe hoses, materials being delivered, diesel generators and air compressors, sawing and the like should be anticipated.

Why is a bypass system needed?

A. The bypass piping will run above ground within the city right-of-way as will bypass pumps. These pumps will operate automatically in response to sewage flows to maintain your sewer service while the new pipe lining is being installed. The pumps and pipes will be installed and remain on site for each section of active work until that section is completed. The system will then be disassembled and moved to the next section of active work, throughout the project duration.

Will access to properties along the route be maintained during construction?

A. Yes. The contractor will ensure that access to residences and at least one entrance to businesses will be maintained throughout construction. This will be achieved through the temporary installation of bypass ramps rather than burying the temporary pipe across each driveway, ensuring minimal impact. Trash and mail services will not be affected. If necessary, the contractor will move trash containers from within a work zone to an area accessible for pickup, and will be responsible for returning them to each residence.

What are the general working hours for the project?

A. Work will typically take place Monday through Friday during daylight hours (7 a.m. - 7 p.m.). However, there may be times when extended hours, work at night, or weekend work may be necessary.

Will there be any interruptions to my sewer or water service?

A. Your sewer service will be temporarily interrupted if work is to be performed on the sewer lateral pipe that serves your property. If your lateral is one of the few that requires additional repairs, a member of the project team will contact you to discuss and make any necessary arrangements. The contractor will again notify you just before your lateral is to be rehabilitated so you can plan appropriately. Your sewer service typically will be restored within several hours. Your water service should not be affected by this project.

Will construction affect the existing pavement?

A. The work for this project will be located within the city right of way. Much of the construction will be "trenchless," meaning the contractor will not need to dig up the street to perform the work. However, the small areas around manhole frames and covers and lateral pipes that may be disturbed will be restored to the same or better conditions upon completion of the project.

Will material and equipment be stored on-site? Where will construction workers park?

A. The contractor will keep some supplies within the active work zone, in the public right-of way. Construction workers will not be allowed to park their personal vehicles on the public streets. However, work trucks will be allowed to park within the active work zone.

Cured-In-Place-Pipe Rehabilitation

What is cured-in-place pipe (CIPP) lining?

CIPP is one of several trenchless methods used to rehabilitate existing pipelines. Little to no digging is involved in this process, making it potentially more cost-effective and less disruptive than traditional "dig and replace" pipe repair methods. CIPP is a jointless, seamless, "pipe-within-a-pipe" process.



What happens during the CIPP process?



The sewer must first be prepared for lining; this includes cleaning the line, removing roots, sediment and grease from the sewer (public and/or private lines) and cutting out intruding connections. The sewer lines and manholes are inspected using closed circuit television (CCTV). Like many types of pipe renewal/replacement, CIPP requires bypass pumping, which re-routes sewer flow around the section of pipe being rehabilitated. This ensures your sewer service is not interrupted. The lining process involves the insertion of a resin-saturated flexible lining into an existing sewer pipe using the manholes located within the street. The lining looks like a very large sock or

flexible tube. Either air or water, under pressure, is forced into the tube, which turns the lining inside out and causes it to expand to fit tightly against the existing sewer walls. Hot air or water is circulated throughout the tube to harden the resin. When the curing process is completed (4-8 hours), a new "pipe-within-a-pipe" has been created, eliminating cracks and holes that allow rainwater and roots to enter the sewer and cause operational problems such as stoppages and overflows.

What are the benefits of CIPP?

CIPP has many advantages, including the following:

- CIPP allows for rehabilitation of pipes without disturbing roads, curbs, gutters, etc. or other utilities.
- The smooth interior reduces friction, thus increasing flow capacity.
- Private connections are made without further digging.
- This can be a faster and cost effective method.

The finished product has a 50-year design life, the same as a brand new pipe.

Bypass Piping and Pumping System

Why is bypass piping and pumping needed?

The sewer system carries wastewater from homes and businesses through pipes to a treatment plant. When sewage pump stations or pipelines require upgrades or replacement, a temporary bypass pumping solution is needed to maintain your sewer service while the existing service is being worked on. These bypass systems ensure that the sewer system remains operational by using a temporary line and pump setup to continue conveying flows.



How does bypass piping and pumping work?

Because the flow of sewage cannot simply be diverted and service cannot be stopped, it must be “bypassed”—or temporarily pumped around the pipe being repaired or replaced. To do this, pumps capable of pumping all of the wastewater from homes and businesses are brought in, as well as pipes that collect and convey the flow on site to continue sewer service.

What will the system look like?

The pumps are usually set up near manholes and the pump’s pipes will be inserted from the pumps into the manholes. You will also see a pipe, which often looks like a fire hose, running in front of each home from the starting or collecting manhole to the next manhole. These hoses allow access to driveways or entrances with the use of a driveway ramp.

