

Infiltration



Inflow

I&I FAQ Contractor Edition

I have an influx of Redwood Falls Residents Calling to have their sewer line fixed. Who do I call to get more information? Call City Hall at 507-616-7400 or PW Coordinator Jim Doering at 507-430-5904 for information on individual residential inspection results.

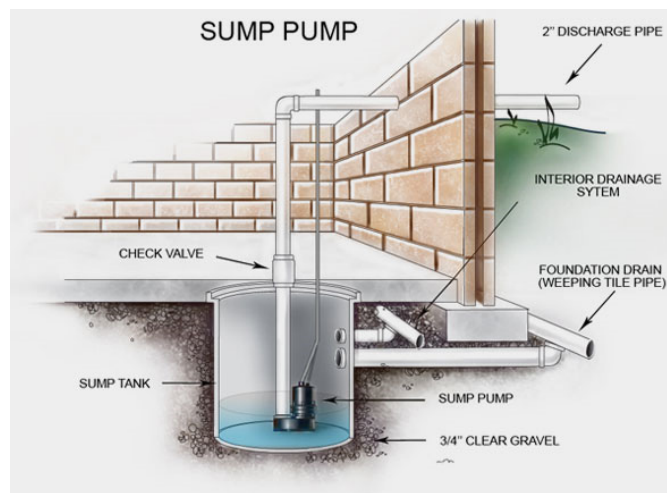
Is there help for clients offset the cost of repairs? Yes, and the key is the received notice of violation (NOV). Owners with a City issued NOV can have the repairs completed to achieve compliance and come to City Hall with the affidavit of compliance signed by their licensed plumber and current invoice. The owner then can sign a self-assessment form where the City will assess the cost of repairs, up to \$5,000.00 at 3% annual interest to the property to be paid back over 10 years. This will happen when the owner pays their taxes. i.e. $\$5,000.00/10 = \500 per year or \$250.00 added to their May and October payments in addition to their tax payment responsibility

How will I as a contractor get paid for my services? Clients that use the self-assessment process and agree to the 10-year assessment will at the time of application, will provide the City with a copy of the contractor's invoice and signed affidavit of completion. The City will then pay the contractor directly without the client having to be the middle-man. Otherwise, the client will pay you directly for services rendered. *Remember to fill out and sign the Affidavit of compliance for your client/resident so they can submit that and receive their letter of compliance LOC.*

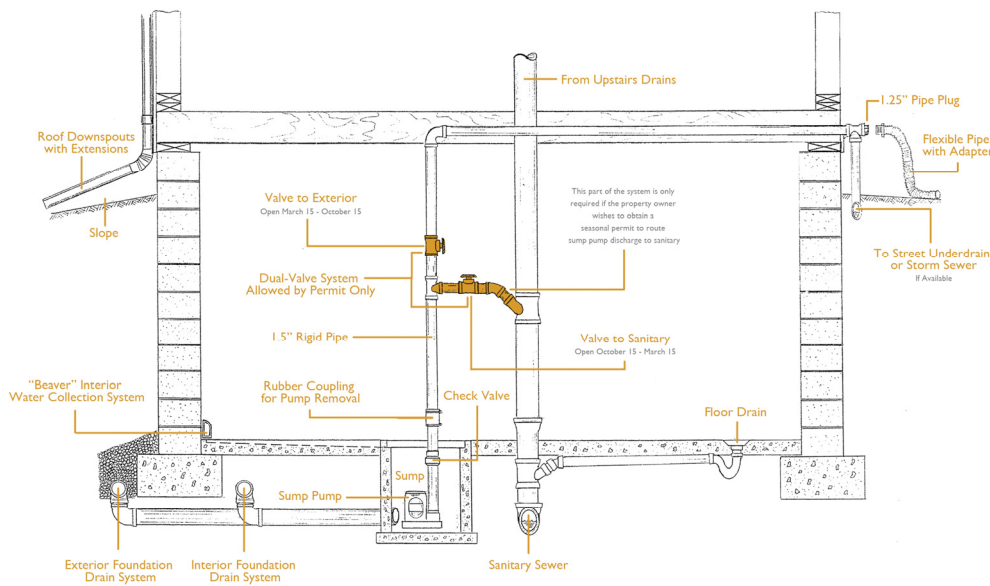
What Contractors are approved to provide I&I services? State licensed and insured plumbers and pipelayers with mini excavators or larger can repair private sewer services. For sump pump installation services, any State licensed, and insured plumber can provide service.

There is a high demand for residential fixes and so few contractors, what happens if we cannot get to job and fix the residents problems within the mandated 90 day compliance window? The City is willing to extend the compliance window as long as the contractor calls and relays their schedule as to when services can be completed. The City is willing to work with residents and their contractors as long as there is a good faith effort working to come into compliance with the ordinance.

How do I fix a non-compliant sump pump? Sump pumps are generally a straightforward fix. If they are hooked to a flexible pipe they are non-compliant and need to be hard plumbed to the exterior with PVC piping and a back flow valve. They should also be valved accordingly (two valves) if they need to discharge to the floor drain during the permitted winter months.



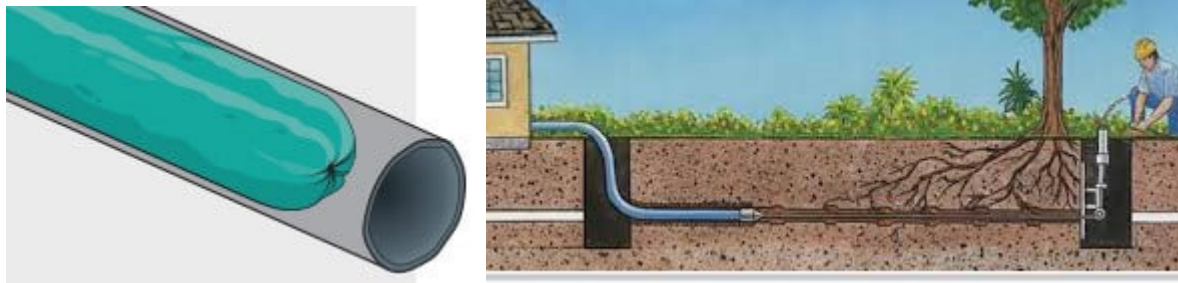
Single to exterior



Dual valve for summer and winter use

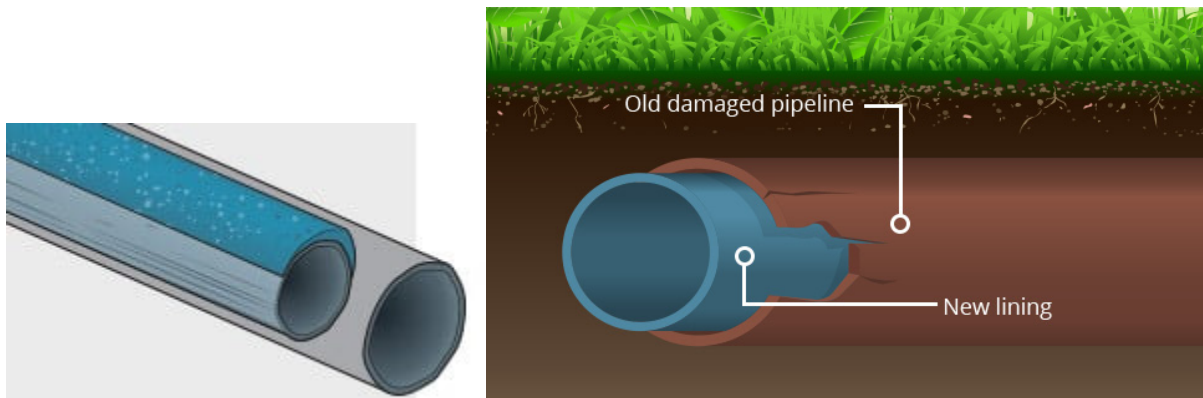
Does the entire private sewer line need to be replaced? Not in all instances, spot fixes can be an option if there is just one small area that has thrown the parcel out of compliance. i.e. a single break or missing pipe or couple offset clay sections.

WHAT FIXES ARE ACCEPTABLE TO THE CITY?



CIPP-CAST IN PLACE PIPE

A flexible felt liner impregnated with resin is inserted into the line, generally through inversion. Hot water, steam, light or ambient temperature is used to cure the resin. This is a great method with low intrusion to the residence.



SLIP-LINING/PIPE INSERTION

A new liner pipe (one with an exterior diameter smaller than the interior of the existing line) is pulled in from an installation trench. The space between the old pipe and new

liner pipe is filled with grout to prevent leaks and, depending on the type of grout, provide structural support. ***An alternative to grouting is once the existing pipe is lined, to crush the existing exterior pipe at the back of the curb and grout with sakreet or heavy clay. An exterior cleanout is also recommended for installation.***



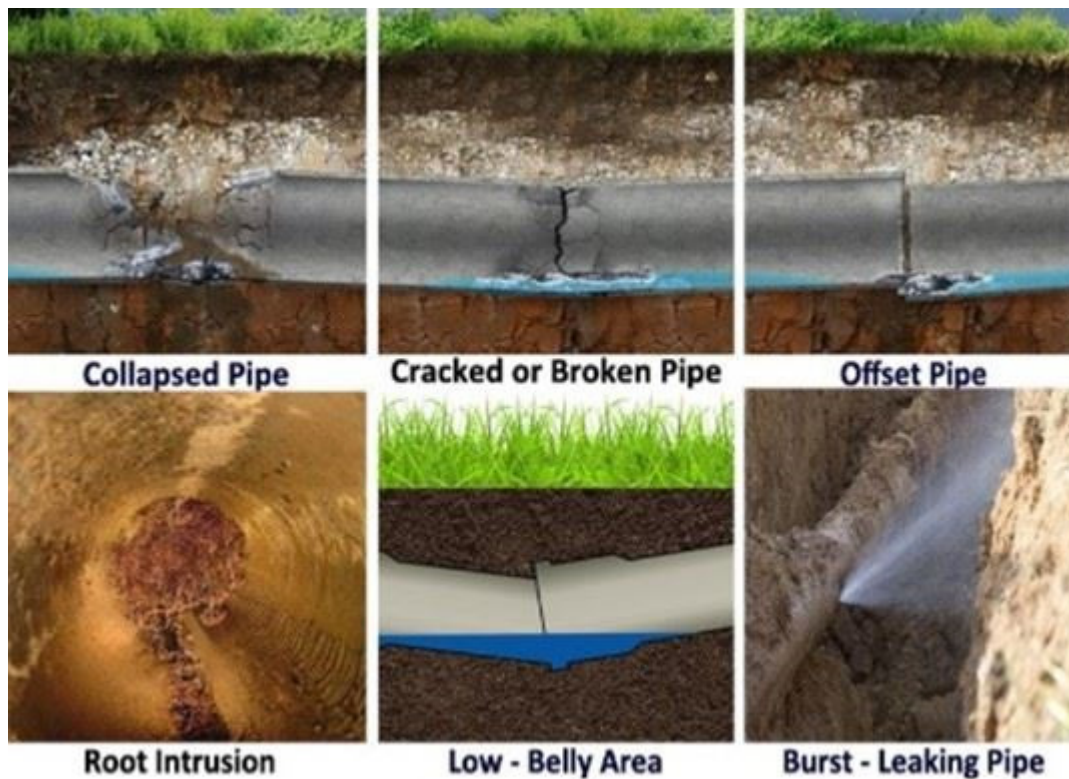
SPOT FIX

In some cases, there is only one area of bad sewer pipe. Most original sewer pipe in Redwood Falls are two-foot clay tile sections. Cases where there is only one or a couple sections of bad sewer line, it may be more economical or efficient to fix that one spot and come into compliance.

OTHER FIX TECHNOLOGIES

As a licensed plumber or certified pipe layer you may have other ideas on how to bring your system into compliance. Make sure other technologies than the ones listed here are discussed and confirmed with City Staff prior to installation.

What is being looked for during a televised inspection of a private sewer line that would cause a private sewer line to fail?



How can the property owner get a copy of the sewer inspection video and inspection report so we can view the issue and provide a competitive quote? The owner can instantly receive an emailed version of the report but can also call City Hall to set up an appointment to pick up a thumb drive containing their televised inspection and PDF inspection report.

How does a contractor know what or where the problem is on a televised private sewer line? During the televised inspection the footage of where they transition from the foundation of the house to the outside private sewer line is recorded as the camera is pushed through the private sewer line. Each segment that is not in compliance is given a NASSCO ranking and noted at what footage marker the issue lies. For example the televising shows they transitioned out of the house at 36 feet (stack was other side of the house) and offset joints with heavy tree root intrusions are marked at 38, 40, 42, 44 and has no other defects out to 99 feet where the main is. This indicates a spot fix is needed in the first 8 feet outside the house. City staff have recommends' that if a

contractor doesn't trust the provided televising, then the contractor should televise it again for accuracy.

How does the ranking system work? The numbering system is based off the severity of the defect according to NASSCO. Severe cracking, joint moving, obstructions, missing tops/pipe pieces, backups are considered 5's. 4's are 90% blockage, large cracking, water running in etc. 3's are lessor 30- 50% blockage etc. The NASSCO training is done online to be certified with a certain number of hours required and \$400+ course fee. 4's and 5's are instant fails 2 level 3s are a failure 1 level 3 or less is a pass. 3200 is a failure vs 3100 is a pass.

Televising is great, how do I know what side of the house the sewer line is on?

Normally the sewer is with the water line. The curb stop should be marked with the required Gopher One Call. Call the Redwood Falls Water Department for additional help.

Is an inspection required and who do I call? Yes, an inspection is required. The affidavit of compliance that you will be signing asks for photos of the fix as a minimum. Prior to closing the trench on a lining, plumbing of a sump pump or a spot fix call City Hall for an inspection to verify what was done. Anyone on the water department, building official or Jim Doering PW Coordinator can verify the fix.

So I lined the old defective 6" clay pipe with a 4" PVC, won't the water still intrude and run inside the clay pipe? Yes, you are correct. That is why grouting or breaking the clay behind the curb by either using heavy clay or sakreet to bulkhead the old clay pipe is necessary to stop the water infiltration. (Break as much of the old clay as possible and bulk head!)

I am slip lining the 6" clay with 4" PVC and we have pushed to the main should I pull back out of the main? Yes, do not leave the tag end of the PVC in to block the main. Contact the City Water Department to determine the size of the main and how far back you need to pull back.

We are slip lining the 6" clay with 4" PVC and we have pushed to a 45-degree fitting which dives to the main and cannot push any farther. Do I need to dig up the road and finish to the main? Not always. In most cases other than pipe failure at the wye the deficiencies under the road are ranked less than 2. In those cases, lining up to the joint and stopping is the recommended procedure.

When do I have to dig in the road? When there is a full structural pipe failure at the wye connection or under the street. However, MNDOT has objected to digging in the state highways to fix defects in private sewer connections as long as it isn't a total blockage/emergency, then other procedures will be required with the State. (editors note: most of the drops to the main under TH 67 "Broadway" have been free of defects)

Who repairs the road, curb-gutter and sidewalk if needed? It is the responsibility of the contractor to fix or sub out the road base, bituminous, curb-gutter and sidewalk if those were removed to repair the private sanitary sewer line.

Do we need a right of way permit for these services? A permit is only needed when the contractor will be removing sidewalk, curb-gutter and or digging in the road itself. Otherwise, plumbing services up to the ROW are exempt.

What are the most common problems that are being televised? Currently, root intrusions in the joint when a tree or trees are planted directly over the sanitary line. Front yards without trees have passed inspections at a higher percentage.

What happens in the winter months and the ground is frozen and it is too hard to dig and repair private sewer lines? The 90 day compliance clock suspends from November thru April and starts again May 1st.

Will the clock suspend November thru April for addressing non-compliant sump-pumps? That depends on the issue. General conversion from flexible black hose to rigid PVC pipe is interior and will not be suspended. If there is a foundation perimeter drain piped into the sanitary sewer line requiring exterior digging, then yes, that would be suspended till May 1st.