

PO Box 9413 Glendale, CA 91226

Date: 7 March 2024

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#### SEWER LINE INSPECTION REPORT

Client Name: Michael Barnes Sewer Line Access: 3" cleanout in driveway.

Property Address: 9976 Tujunga Canyon Blvd,

Tujunga, CA 91042

\*This video is not public and will not show up on internet search results. The provided link is required to view this video.

Sewer Line Video Link(s): https://youtu.be/-g9fgey8vE4

### **Disclaimer (limits liability):**

Please see our terms of service at the end of this report document for a description of what our inspection covers and for our limited liability statement. If you do not agree with these terms please contact us for a full refund. Thank you.

### **Repair Recommendations:**

No repair is recommended at this time.

#### Maintenance recommendations:

The sewer line should be reviewed with a video inspection every few years in order to spot changes as they occur in the system. It is advised to have the line inspected after any major earthquake.

# Photographic path of sewer line:

Important note: All locations below are provided based on our best attempts at isolating the path of the main sewer line and its important transitions. Locations and depth estimates are not always accurate. Your contractor is ultimately responsible for verifying or accepting these locations before excavating any portion of the system.





Cleanout in driveway.

Transition from plastic to clay pipe. Depth about 5 ½'.



Connection to city sewer line. Depth about 6'.



Additional small wall cleanout. Not used for today's inspection.

### Drain pipe under the structure:

While the pipe under the building is outside of the scope of this inspection, we sometimes are able to view portions of that pipe. This section of the system is known as the "building drainage system". The selections below describe any pipe viewed under the structure today.

Х	Not viewed today		Has some cast iron pipe		Has some plastic pipe	
	Consisted of some clay pipe		Had few to no roots visible		Has moderate to heavy roots	
	Was clogged visibly		Some wear and tear		Worn out & ready to replace	

Important note – Pipe under a building can sometimes leak without any obvious indication of this on the video inspection, it is perhaps this point above all others which is why we do not focus on the pipe under the building. While we can tell you some information about this pipe it is advised to consult your general home inspection report to see if they spotted any leaking under the building as well.

# **General findings:**

The focus of our inspection today is the Main Sewer Line. This is the portion of the system which is exterior to the house. This pipe travels from just outside of the house to the connection to the city sewer line. Our inspection covers the portion of this pipe which is visible to the inspection camera during the course of our inspection.

Important note: Most sewer lines will have side connections coming into the pipe which we will pass on our way through the pipe with the camera. The camera does not turn down these side lines unless directly guided by the pipe. These side connections may be sinks or toilets, second sewer lines from another side of the house, ADU lines or even sometimes neighbor's sewer lines connecting to the main line. Commonly these side lines are discontinued and terminated in the ground. No comment can be made about any section of pipe which we cannot directly see with the camera.

# **Overview of access and availability for maintenance:**

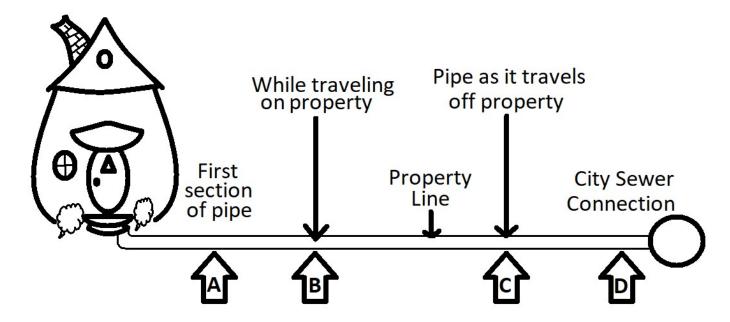
Access into the sewer system is very important. A good access will allow for roots to be removed from the system or other maintenance to be done. When we get into the system through a small access point or when there is excessive distance or too many turns, the line will require additional access to be installed in order to allow for proper maintenance or sometimes even to complete the inspection out to the city sewer line.

Blue = Functioning well. Yellow = Not ideal but functioning. Red = Repair is recommended.

		Access could be improved but	Additional access is needed for
Х	Access is sufficient	might work for maintenance	regular maintenance
	Inspection successful from	A review inspection may be	Portions of pipe require review
Х	existing access	able to see pipe more clearly	inspection

# Materials included in the main sewer line:

The main sewer line often transitions to different materials as it travels out to the city sewer connection. Any of these materials seen today are listed below.



## Pipe materials:

A: Plastic

**B: Plastic** 

C: Clay

D: Clay

# Clay section of pipe findings: Also see the Important general information about sewer lines section

		Moderate cracking; slightly	Heavy cracking allows for
Χ	Some cracking. Average for clay	below average condition	sewage to leak from system
	Some misalignment in joints.	Moderate misalignment in	Heavy shifts in pipe obstruct
Х	Average condition for clay.	joints; slightly below average	maintenance/allow leaking
		Minor roots should be cleared	Heavy roots should be cleared
Х	Few or no roots in clay pipe	in a year	now.
Х	Slope is adequate	Some pooling water in line	Slope is unacceptably poor
		Clay is functioning at a slightly	Clay requires repair. Line is in
Х	Clay is functioning well.	below average level.	unacceptable condition.
	Clay was clearly visible to	Review video might show this	Review inspection required to
Χ	camera	pipe more clearly.	know condition of clay pipe.

# Plastic section of pipe findings: Also see the Important general information about sewer lines section

Х	Functioning well		Not perfect but is functioning	Requires repair	
			Some pooled water; imperfect	Slope is unacceptably poor and	
Х	Slope is acceptable	Χ	slope; still functioning well	requires repair	
			Minor roots intrude through	Roots intruding through poorly	
Х	No heavy roots in line.		isolated joints; still functioning	installed joints; repair	
			Some dents without affecting	Pipe kinked, cracked or broken	
Х	No significant damage noted		function	and requires repair	

# **Additional findings:**

IMPORTANT: Please see the *Important general information about sewer lines* section at the bottom of this report for information about the pipe found in this sewer system. Some of that information will address what actions are essential for the system to function well or even which actions might damage the pipe.

Note – This report does not represent a guarantee for the sewer line but is an opinion about its condition.

# **Important general information about sewer lines:**

Each material used in sewer lines is different and there are some important things to know about the materials in your sewer. Below you can find important general information regarding the types of sewer pipes which are addressed in this report.

General data about cast iron pipe:

Cast iron pipe was originally a very reliable option for sewer lines. It is a strong pipe however it does rust over time. Cast iron has an expected service period of between 50 and 80 years before it will usually begin leaking. Cast iron pipe can clog at any time in its service period, even long before it requires replacement. The inside of this type of pipe is very rough and can catch and hold onto paper towels or wet wipes. Anything which does not disintegrate easily can catch inside a cast iron pipe and eventually cause a temporary clog. This is not a true failure of the material but caused by using the pipe in a way it was not intended. When cast iron pipe is under a structure it can sometimes begin to leak without giving an obvious indication of this to a video inspection. This is perhaps the main reason why our inspection focuses on pipe exterior to the structure.

### General data about clay pipe:

Clay pipe is the most common material we see in use in main sewer lines. This pipe material has been around for thousands of years. The best benefit of a clay pipe is that it does not rust or erode over time. This allows it to have a longer potential service period than any other pipe material. However clay is not flexible and earthquakes or heavy root intrusions can break a clay system if the stress placed on the pipe is greater than its ability to resist.

In most clay sewer lines we see defects of some kind. Often this will consist of some cracking, root intrusion, poorly sloped section or misaligned/offset pipe. We hope to help determine how well the pipe is functioning in order to determine if a repair is recommended. If the clay pipe doesn't look close to backing up and isn't allowing sewage to flow out of the system into the surrounding soil it is considered functional for the purposes of this report. About one out of a thousand clay sewer lines we inspect will be perfect. Perfection is not the standard for determining if a repair is recommended for sewer lines.

#### General data about plastic pipe:

Plastic is an excellent material for sewer line applications. It does not rust and it is flexible. The joints of the pipe do not allow for root intrusion when it is properly installed. This provides a trouble free use from plastic for a very long expected service period. This material might last more than a hundred years before wearing out.

There are different types and chemical compounds for plastic sewer lines. While each of these has its own characteristics, all plastic pipes rated for use in sewer systems tends to be very good as far as material quality is concerned.

#### General data about fiberglass liners:

Fiber glass lining systems are a relatively new way to repair an aging sewer system. These are known as a trenchless repair as they require less digging to install. A liner can be installed into a damaged pipe only so long as the pipe is not collapsed.

The liner is installed down into the existing damaged line. Once the liner hardens in place it forms a new pipe inside of the previous material.

Liners can be great upgrades or repairs for a sewer system. If installed correctly they often prevent heavy root intrusion, stop leaks and reinforce the structure of the existing pipe.

Liners must not be installed so that they obstruct the city sewer line. If they are pushed too far into the main sewer line they will enter deeply into the city sewer which is a significant issue requiring repair. For this reason code requires that liners not approach closer than 4" to the city sewer pipe.

#### General data about concrete pipe:

Concrete was a material used broadly in urban areas of Los Angeles. The advantage of concrete was that it allowed for steel reinforcement to be placed within the pipe. Concrete pipe erodes when used as a sewer pipe. The cement begins to break down leaving loose and exposed rock in the place of solid structure. Essentially it begins to lose its ability to hold together and crumbles when it has eroded too much. While this takes time to fail, it is often best to repair the concrete pipe before it reaches its worst stages of deterioration as it can save considerably on the cost of the repair to do it before any section of the pipe is collapsed.

In January of 2007 concrete was eliminated from the permissible materials for new sewer installations in Los Angeles. Sewer water erodes the cement out of the concrete. The City can at times require a city inspection of the main sewer line before granting certain building permits. Examples of this might be adding a guest house to the property or a adding a new bathroom to a garage. The city inspector may require concrete to be replaced if this should occur.

#### **General data about Tar paper (Orangeburg) pipe:**

Orangeburg pipe is a type of tar paper rolled many layers thick to create a tube. The pipe has an average life expectancy of 30 to 40 years. As it gets older water softens the pipe walls and roots begin to penetrate the pipe. It will also begin to collapse in on itself with the pressure exerted on it by roots or earth. Unfortunately cleanings designed to remove roots from the pipe can damage the soft paper walls of the pipe. Orangeburg which allows for root intrusion or which is deformed should be replaced.

#### **General data about fiber-cement pipe:**

Fiber-cement is a type of pipe which is made out of a cement based material which uses fibers for much of its strength. Sometimes these fibers are made out of asbestos. Fiber-cement pipe is not used for new construction. It is difficult to estimate how long a fiber-cement sewer line will continue to work. The material is relatively new compared to pipes which have been used for hundreds or thousands of years. What can be said is that very few fiber-cement pipes have been seen to be failing compared to those which are still functioning well. With this material two things are important. First you will want to do review inspections at least once every few years to check on its condition and second you should avoid any unnecessary cleaning of the fiber-cement pipe. It will do better left alone unless it really needs a cleaning and then only on the advice of a qualified contractor.

# Terms of service and limit of liability:

In the interest of making contracts and service terms more understandable we include the first two important notes on our Terms of Service.

**Important**: Our Company does not guaranty or warranty sewer lines. We inspect the sewer line to the best of our ability given the condition and construction of the pipe and the access used for the inspection. No statement in this report

represents any promise for the continued service of the sewer system. Conditions can change and important defects in a sewer system can sometimes be missed during inspection. Our inspectors do the best they can and are very good at what they do, but errors sometimes cannot be avoided. If you are unsatisfied with these terms before or after an inspection you can contact us for a full refund. Our liability is limited to the fee paid for the inspection.

**Important**: For many sewer lines removing roots as they grow into the pipe is essential to the continued function of the line as well as essential to preventing the roots from getting so thick that they cause damage. Hydrojet is not completely without risk. Rarely the sewer pipe will be in weakened condition to the degree that it will worsen noticeably through the action of cleaning the roots out of the line. This is not common but can happen. Out of two hundred hydrojet cleanings damage might occur one time or less with our company. Since the pipe was already in weakened condition, root intruded and perhaps lacking sufficient soil exterior to the pipe to property support it, this type of damage can not be considered the fault of the cleaning tool or the technician. Existing damage is not obvious on an original inspection however it may be present. It is possible a rock is pressing on the exterior of the pipe and contributes to damage when the pipe is jostled. Since it can be difficult to prove fault or innocence in such an instance of new damage or worsened condition of the sewer line, for the purposes of our work it will be considered that the fault does not lay on the technician who performed the hydrojetting.

This can be compared to a lifesaving medical procedure which has a better than 99% chance of success. Root removal is not completely without risk however it is essential to preventing worsening conditions in many sewer lines. Our liability for hydrojet cleaning is limited to the cost of the service.

# Sewer Line Inspection & Hydrojetting Terms of Service

- 1. For the purposes of this document the term INSPECTOR shall refer to LA Sewer Inspectors LLC or its technician on site. The term CLIENT shall refer to the person/s that is listed as client at the top of this report. No other person outside of CLIENT is acknowledged as having a contract with INSPECTOR, real or implied.
- 2. The use of our services is done under the Terms of Service detailed here. Use of the written sewer report, hydrojetting service or verbal or videoed inspection properties constitutes agreement with these Terms of Service. If these Terms of Service are not satisfactory CLIENT is required to inform INSPECTOR within 30 business days or before any close of escrow, whichever is sooner for a full refund of the service fee. After that point if CLIENT is unsatisfied with the quality of the report then please contact INSPECTOR about requesting a refund of the fee. Receipt of refund of the service fee shall complete any obligation from INSPECTOR to CLIENT whether original or incurred. No additional liability shall be incumbent on INSPECTOR beyond the return of the inspection fee.
- 3. INSPECTOR agrees to attempt a hydrojet cleaning and/or camera inspection of the home/building(s) main sewer line and if successful to provide CLIENT with a video and written report identifying the defects that INSPECTOR both observed and deemed material. INSPECTOR may offer comments as a courtesy, but these comments will not comprise the bargained for report. The report is only supplementary to a seller's disclosure. CLIENT understands that the inspection covers only the portions of the Main Sewer Line which were examined by video camera on the date of this work. Main Sewer Line is defined for this

document as the waste drainage pipe exterior to the structure which extends between the structure and the connection to the city owned sewer line. CLIENT understands that improperly designed or maintained sewer systems may inhibit complete inspection necessitating maintenance, repair or additional access before a review inspection can be performed successfully.

- 4. The inspection and report are for the use of CLIENT only, who gives INSPECTOR permission to discuss observations with real estate agents, owners, repair persons, and other interested parties. INSPECTOR shall be the sole owner of the report and all rights to it. INSPECTOR accepts no responsibility for use or misinterpretation by third parties, and third parties who rely on it in any way do so at their own risk and release INSPECTOR (including employees and business entities) from any liability whatsoever. INSPECTOR's inspection of the property and the report are in no way a guarantee or warranty, express or implied, regarding the future use, operability or suitability of the home/building main sewer line. All warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, are expressly excluded to the fullest extent allowed by law.
- 5. INSPECTOR assumes no liability for the cost of repair or replacement of unreported or reported defects, damages or deficiencies either current or arising in the future related to the inspection or hydrojetting of pipe on property. CLIENT acknowledges that the liability of INSPECTOR, its agents and/or employees, for claims or damages, costs of defense or suit, attorney's fees and expenses arising out of or related to INSPECTOR's negligence or breach of any obligation under this Agreement, including errors and omissions in the inspection, the report or the hydrojet shall be limited to liquidated damages in an amount equal to the cost of the inspection or hydrojetting contracted with INSPECTOR for this property on the date of this report, and this liability shall be exclusive. CLIENT waives any claim for consequential, exemplary, special or incidental damages or for the loss of the use of the home/building. The parties acknowledge that the liquidated damages are not intended as a penalty but are intended (i) to reflect the fact that actual damages may be difficult and impractical to ascertain; (ii) to allocate risk among the INSPECTOR and CLIENT; and (iii) to enable the INSPECTOR to perform the inspection/hydrojet at the current fee without charging more.
- 6. INSPECTOR does not perform engineering, architectural, Sewer Replacement Contracting, or any other job function requiring an occupational license in the jurisdiction where the inspection is taking place.
- 7. In the event of a claim against INSPECTOR, CLIENT agrees to supply INSPECTOR with the following: (1) written notification of adverse conditions within 14 days of discovery; and (2) access to the premises. CLIENT agrees to hold INSPECTOR harmless for any and all claims relating to conditions that are altered or repaired prior to INSPETOR receiving written notice

or the ability to verify conditions via access to the premises. Failure to comply with the above conditions will release INSPECTOR and its agents from any and all obligations or liability of any kind.

- 9. The parties agree that any litigation arising out of this Agreement shall be filed only in the Court having jurisdiction in the County in which the INSPECTOR has its principal place of business. In the event that CLIENT fails to prove any claims against INSPECTOR in a court of law, CLIENT agrees to pay all legal costs, expenses and fees of INSPECTOR in defending said claims.
- 10. If any court declares any provision of these Terms of Service invalid, the remaining provisions will remain in effect. This Agreement represents the entire agreement between the parties. All prior communications are merged into this Agreement, and there are no terms or conditions other than those set forth herein. No statement or promise of INSPECTOR or its agents shall be binding unless reduced to writing and signed by INSPECTOR. No change shall be enforceable against any party unless it is in writing and signed by the parties. This Agreement shall be binding upon and enforceable by the parties and their heirs, executors, administrators, successors and assignees. CLIENT shall have no cause of action against INSPECTOR after one year from the date of the inspection.
- 11. Payment of the fee to INSPECTOR is due upon completion of the on-site inspection. The CLIENT agrees to pay all legal and time expenses incurred in collecting due payments, including attorney's fees, if any. If CLIENT is a corporation, LLC, or similar entity, the person signing this Agreement on behalf of such entity does personally guaranty payment of the fee by the entity.
- 12. If CLIENT requests a re-inspection or later service, the re-inspection or later service shall also be subject to all the terms and conditions set forth in this agreement.
- 13. This Agreement is not transferable or assignable.
- 14. Should any provision of this Agreement require judicial interpretation, the Court shall not apply a presumption that the term shall be more strictly construed against one party or the other by reason of the rule of construction that a document is to be construed more strictly against the party who prepared it.