### **LESSON 3: KEY CONCEPTS**

# **Purpose of Sewer Camera Inspection**

- A sewer camera inspection is an attempt to gain a better understanding of the general condition, integrity, and functionality of the main drain laterals: from the house to the street or septic system and directly under the house.
- It is not an exhaustive inspection to pinpoint every drain line deficiency. The sewer camera inspection looks for visible defects, including obstructions, offsets, bellies, breaks, rust and scaling, and other visible conditions.
- Future performance cannot be predicted or guaranteed. Further investigation and testing by a licensed plumber may be necessary to identify the presence and/or severity of certain conditions.

### Sewer Camera Inspections Help identify the following:

- Types of Material
- Connection Issues
- Drainage or Stoppage Issues
- Location Purposes
- General Integrity of Main Drainpipe (where water has spent the most time)

# Limitations of a Sewer Camera Inspection

#### **General Limitations**

- The sewer camera inspection is limited to the accessible areas of the main drain laterals, specifically to the street or septic system and directly under the house. Branch lines and vents cannot be accessed with the camera. Drain cleanout configurations/defects can limit access and will be noted as a defect, if present. Accessibility is further limited if a roof sewer vent is utilized as the point of access.
- Certain defects and conditions are not observable with a sewer camera inspection, such as pipe wall thickness and leaks. Further investigation and testing by a licensed plumber may be necessary to identify the presence and/or severity of certain conditions.

### **Specific Limitations**

- **Cleanouts Not Located** The cleanouts could not be located at this time. Recommend further information from the homeowner.
- **Drain Cleanout Cap** Seized The drain line could not be inspected due to the cap being seized in place at the time of inspection. Removal risked damage to the property. Further evaluation and/or repair by a licensed plumber is advised.
- *Improper Drain Cleanout Installation* The drain cleanouts are directed on the same lateral and/or improperly installed. As indicated above, one or more lateral lines could not be viewed at the time of the inspection.
- *One Cleanout* The main drain line is equipped with only one cleanout. This is not uncommon for the age of the home. As indicated above, one or more lateral lines could not be viewed at the time of the inspection.

### Why a sewer camera cannot locate a leak

- 1. Inside versus Outside cannot see water escaping outside pipe, only inside conditions
- 2. Matter of Interpretation only see monitor display with limited angles and light
- 3. Wall Thickness cannot measure with a camera; may not go all the way through pipe

4. Build up or Scaling - particularly with cast iron, calcium, soap scum, grease, debris...could only be cracks or holes in the buildup, not the actual pipe

# **Exceeding TREC SOP Minimum Requirements**

A sewer camera inspection exceeds the TREC Standards of Practice, while maintaining the non-invasive nature of the inspection. It involves removing a readily accessible "panel" (the drain cleanout cap) much akin to an electrical or HVAC panel cover. Then utilizing an extension camera to view interior conditions.

### Additional forms of testing

Often employed by Licensed Plumbers that are considered invasive in nature and may require the owner's consent to proceed. Examples may include:

- *Plumbing Scopes* utilizing specialized camera equipment to view the interior of pipes as well as pinpoint the location of deficiencies with sonar devices.
- *Hydrostatic Drain Test* drain lines are isolated with inflatable test plugs, filled with water to establish a "head load," and then monitored for an extended time-period. If the water level (hydro) remains static over time the drain lines are watertight. If the water level drops over time, leaks may be present.
- *Visual Invasive Investigation* manually removing fixtures or digging to unearth concealed drain lines in order to visually identify deficiencies

#### **Discussion of Limitations**

**Hydrostatic test** – invasive requires homeowner's approval pull toilets)





**Sewer Camera** – non-invasive and typically does not cause damage; simple tool that helps inspectors complete their assessment

- Does not cause damage to property; might fail under test
- Secondary tool that helps inspectors complete their assessment
- Similar to removing a removing an electrical or HVAC panel and exploring with a mirror or camera.
- A sewer camera is a useful secondary tool for plumbers to use in combination with water tests.





# **Inspector's Expectations (Professional)**

**Generalist** - Professional Home Inspectors are generalist by trade. We are trained and licensed to review the structural integrity, functionality and safety of systems and components associated with residential properties.

**Unbiased Description** - Our goal is to provide an unbiased description of observable and accessible conditions, so that clients can make sound financial decisions based on their own resources when purchasing real property.

**Further Evaluation** - As part of that decision-making process, we often refer clients to qualified or license specialists for further evaluation.

**Main Job** – identify defects; not to identify materials.

## Realtor's Expectations (Buyers and Listings)

Realtor's Greatest Fear - losing the deal or client walks away

#### **Agent's Pain Points**

- Option Period timeliness of useful information
- Inspection Fee an important step in the process of due diligence
- Repair Costs Once condition is known, the sellers are typically responsible for repairs/improvements
- Integrity Builds and Protects agent's integrity with the client (drives reviews and referrals)

#### Seller's Agent Pain Points

- Cost of Repairs loss of equity for their client
- Disclosures reveal information that could hinder sale of home

# **Client's Expectations**

#### **General Condition**

A sewer camera inspection, while limited in nature, provides the client with additional information during the option period concerning the general condition of main drain lateral lines and whether further investigation is warranted.

Sewer Camera inspection will help identify the following:

- Types of Material
- Connection Issues
- Drainage or Stoppage Issues
- Location Purposes
- General Integrity of Main Drainpipe (majority of water)

### **Drain Line Assessments**

- Rarely an elective activity usually forced upon in emergency situations
- Digging destroys landscaping additional costs
- Minimizes Risk weighed against financial resources
- Future Budget Planning replacement of older systems
- Documented Opinion verifiable video and pictures
- Negotiation Leverage options period repairs or allowances
- Further evaluation justifies further investigative expenses