

Private Property Inflow And Infiltration Inspection Procedures For Contractors

Purpose

The purpose of the private property inflow and infiltration (I/I) inspection is to reduce the flow of clear water into the sanitary sewer system via cross connections (inflow) from sump pumps, foundation drains, roof leaders, cisterns, and other clean water sources connected to the sanitary sewer system. In addition, the program aims to reduce indirect flow of clean water into the sanitary sewer system (infiltration) through pipe and pipe joint defects.

Property owners who hire a private contractor for the I/I inspection will need to complete the inspection using the City of Golden Valley's Inflow/Infiltration Compliance Inspection form, available on the City website. Inspectors will require access to the basement or lowest level in the home or building and access to all sewer cleanouts, sump pump(s), and sump pump plumbing.

The televised portion of the I/I inspection is to note defects in the sanitary sewer lateral, which result in infiltration and ex-filtration (untreated sewage flow or leakage out of the pipe, which is a violation of the Federal Clean Water Act).

Camera And Recording Equipment Specifications

Sewer service camera equipment must meet or exceed Vivax vCam-5Type-CP inspection camera system with USB, SD card recorder specifications. Vivax vCam 5 specifications are as follows:

- Self-leveling color camera head, no smaller than 1.4" O.D. X s2" L
- Camera 300 pixels, 460 lines (h) resolution
- Key board for on-screen text
- On-screen digital footage counter
- An accurate footage counter (footage not measured by reel revolutions)
- One-touch JPEG snapshots to USB or SD card
- 3x zoom for close-up viewing
- USB or SD card recorder
- Variable light intensity
- Video and audio output
- Minimum 200 feet of video push cable
- Camera brush skids

Equal or alternate specifications may be submitted in advance to the City for approval. Please allow three weeks for approval process.

Sewer Service Inspection Criteria And Process

- Inflow/Infiltration Compliance Inspection form must have the "Service Lateral Inspection Findings" section completely filled out for the inspection to be complete.
- The inspector is required to note all defects and footage location in the sanitary sewer lateral on the compliance inspection form and an audio description recorded on USB, SD card, or hard drive.
- The inspection must be completed from a stack cleanout or toilet flange located at the furthest point from where the sanitary sewer lateral exits the building.
- All connections must be verified by flowing water into drains, referencing the source, and reporting them on the video.
- Any connection that cannot be verified is considered to be an unknown connection and must be exposed to verify source.
- All cleanouts are required to be opened and inspected (including photos of the opened cleanout riser) for illegal connections; cleanout inspection requires documented footage location on the form and audio description recorded on USB, SD card or hard drive.
- All floor drains will need to be opened and inspected (including photos of the drain, the surrounding area, and the nearest foundation wall).
- Any foundation drains found will need to be opened and the discharge point verified (including photos).
- All external drains will need to be opened and the discharge point verified (including photos).
- Defects/items that require documentation include, but are not limited to:
 - roots
 - offset pipe joints
 - mineral deposits
 - unknown deposits
 - sag/pipe deflection
 - cracked pipes
 - chipped pipes
 - other defects/issues not listed but visibly seen in the inspection (ie, infiltration, structural damage, etc)
 - 4-inch to 6-inch transition
 - length of service
 - location of final cleanout
 - location of all cleanouts
 - broken/damaged or missing pipe
 - foundation drain connections

Sewer Service Further Investigation Issues

Properties found in need of further investigation have one or more of the following:

- unable to access sewer lateral due to unlocated cleanouts (behind walls, under flooring, etc)
- unable to complete inspection of sewer lateral due to roots, solid deposition, crushed pipe, etc
- unknown connections (unable to verify connection flowing water into sewer lateral)

Sump Pump/Roof Leader Inspection Criteria And Process

- Inflow/Infiltration Compliance Inspection form must have the “Sump Pumps” and “Foundation Drains” sections completely filled out for the inspection to be complete.
- Every sump pump on the property is required to be inspected (including photos of the opened basket, the surrounding area, and the discharge pipe, both interior and exterior). Total number of sump pumps must be noted.
- Sump pump discharge piping is required to be rigid pipe. Flexible pipe, shut-off valves, plumbing tees, and wyes are not allowed.
- Correctly plumbed sump pump discharges outside of the building using rigid pipe. Pipe discharge should be a minimum of 10-feet from building.
- Sump pumps that do not discharge outside are incorrectly plumbed and are considered non-compliant.
- Roof leaders are required to discharge outside of the building; any roof leaders and or cisterns discharging into foundation drains are non-compliant.

Completed Inspection

1. Property owner is to sign the completed Inflow/Infiltration Compliance Inspection form and retain a copy for their records.
2. A copy of the completed Inflow/Infiltration Compliance Inspection form and video link is required to be delivered to the City of Golden Valley for review.
3. The City’s Utilities Maintenance Supervisor or his/her designee will review the video and compare it with the completed Inflow/Infiltration Compliance Inspection form.
4. The City will issue either a Certificate of Compliance or a Correction Notice once the review is complete. If a correction notice is issued, the required repairs must be made and a post-repair televised inspection must be performed in order to receive Certificate of Compliance.
5. The completed forms will be mailed to the address on the Inflow/Infiltration Compliance Inspection form, unless a different address is noted.

Contractor’s Signature

Contractor completing the Inflow and Infiltration Compliance Inspection has read and understands the conditions of the Private Property Inflow and Infiltration Inspection Procedures for Contractors.

Company name		Inspector name	
Copy of plumbers license On file _____ (or) Attached _____			
License number	Bond	Date	

Section 1.03: Violation A Misdemeanor Or Petty Misdemeanor

Every person violates a chapter, section, subdivision, paragraph or provision of this City Code when such person performs an act thereby prohibited or declared unlawful, or fails to act when such failure is thereby prohibited or declared unlawful, and upon conviction thereof shall be punished as for a misdemeanor, or as for a petty misdemeanor, except as otherwise stated in specific provisions herein, as set forth in the specific chapter in which the section, subdivision, paragraph or provision violated appears. Upon conviction for a crime, the actor may be convicted of either the crime charged if it is a misdemeanor, or a petty misdemeanor as an included offense necessarily proved if the misdemeanor charge were proved.

Source: City Code
Effective Date: 6-30-88

Staff Use Only

Copy to contractor File copy City staff signature **X** _____



This document is available in alternate formats upon a 72-hour request. Please call 763-593-8006 (TTY: 763-593-3968) to make a request. Examples of alternate formats may include large print, electronic, Braille, audiocassette, etc.

