

Algona Sanitary Sewer Connection Inspection Program Public Informational Meeting

Date: October 15, 2024 at 6pm

Algona Public Library - Conference Room A

Presenters:

Kevin Graves, P.E.

Emma Nollenberger, E.I.T.

whks

engineers + planners + land surveyors

Meeting Objectives



Objective One

What is inflow and infiltration?



Objective Two

Why are we doing this program?



Objective Three

Discuss program approach and details



Objective Four

Frequently asked questions

What is I/I?

Inflow and Infiltration



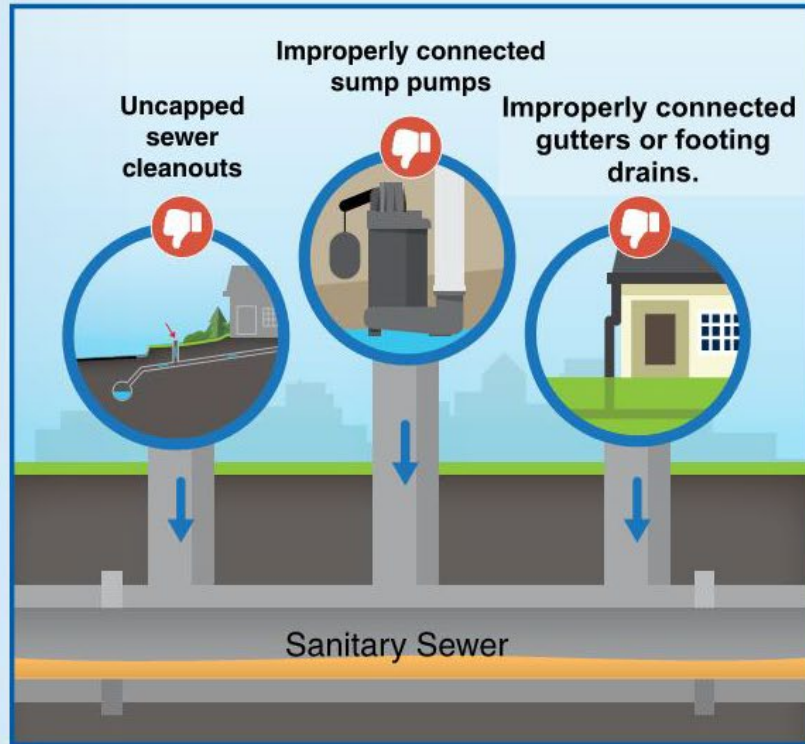
INFLOW

- A Roof Drain Connection
- B Sump Pump or Foundation Drain Connection
- C Deteriorated Manhole
- D Uncapped or Broken Clean-Out
- E Storm Cross Connection

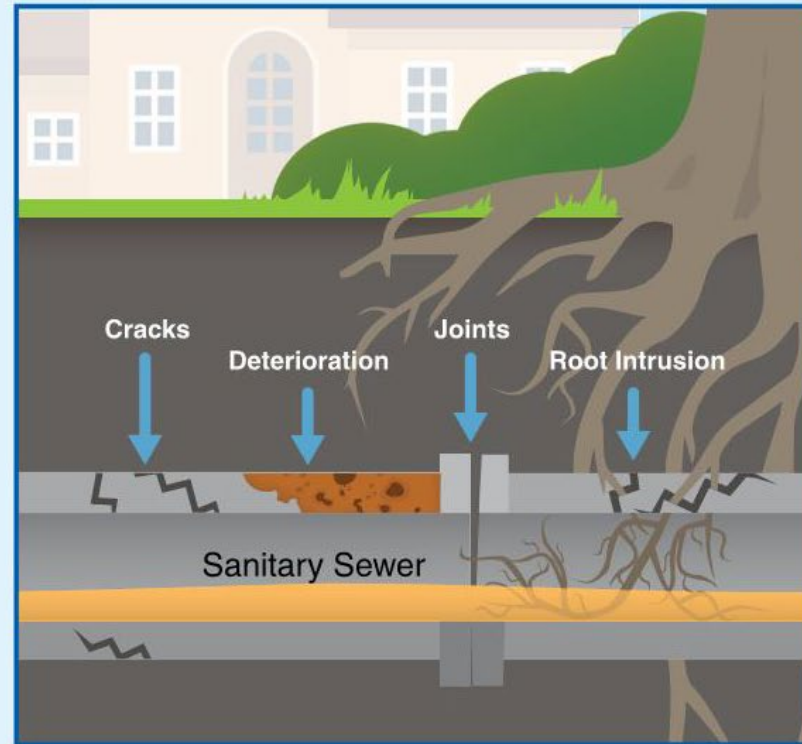
INFILTRATION

- F Faulty Manhole Cover/Frame
- G Root Intrusion
- H Open Joints
- I Faulty Service Connection
- J Broken or Cracked Pipe

Some Sources of I/I



Inflow is clear water that quickly enters the wastewater system after rainfall events from sources such as sewer cleanouts, sump pumps, gutters, building foundation drains, and broken maintenance hole covers.



Infiltration is clear water that gradually enters the wastewater system below ground through cracks and openings in sewer service lines and joints, and public sewer mains and deteriorated maintenance holes.

I/I in Algona

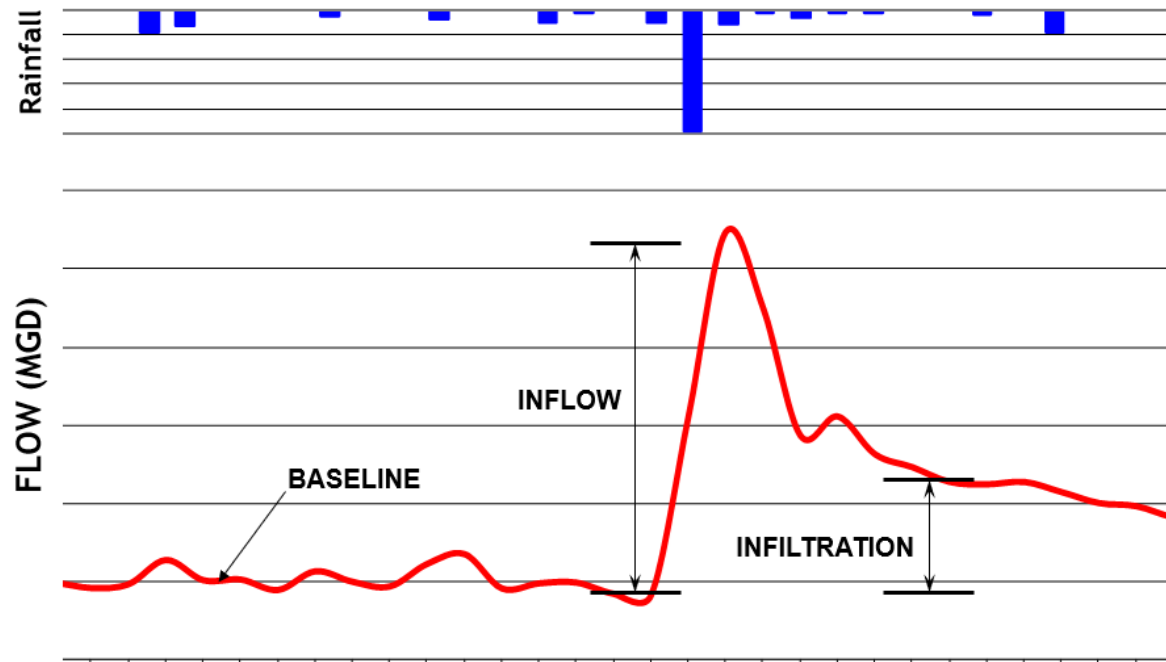
Algona System Description:

Average Dry Weather (ADW) flow (MGD): 1.32

Average Wet Weather (AWW) flow (MGD): 2.72

Peak Instantaneous Wet Weather (PIWW) flow (MGD): 6.08

**460%
Average**



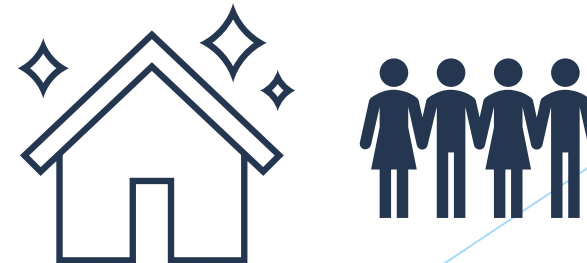
Consequences of Excessive I/I

- ▶ Low customer satisfaction
- ▶ Costs greater than needed
- ▶ Potential health risks
- ▶ Property damage
- ▶ Regulatory actions
- ▶ Sanitary sewer overflows
- ▶ Extra costs for WWTF upgrades



Why are we doing this Program?

- ▶ Lateral & sump pump inspection programs are typically the MOST cost effective method to reduce I/I in the system
 - ▶ Priority for this program is footing/roof drain connections
 - ▶ Sump inspections are supplemental
- ▶ Removing I/I from the sanitary sewer:
 - **Saves money:** Reduces future rate increases
 - **It's the neighborly thing to do:** Reduces potential for backups & property damage



Sanitary Sewer Connection Inspection Program Approach

- ▶ Ordinance Review
- ▶ Public Info
- ▶ Public Meetings
- ▶ Scheduling
- ▶ Inspections



Key Aspects to Ordinance Review

- ▶ Title 13 of Algona's Code of Ordinances prohibits clear water connections
- ▶ Ordinance allows City to verify compliance
 - ▶ Key Aspects:
 - Sump pumps, beaver drains, footing drains, roof drain, etc. are prohibited from discharging to sanitary sewer
 - 30 days to schedule inspection, 90 days to correct sump deficiencies, 365 days to correct lateral deficiencies
 - City can issue \$100/month surcharge for no inspection or not correcting violations within above timeframes

- ▼ Title 13 - PUBLIC SERVICES
 - ▼ Chapter 13.04 - SEWER SERVICE SYSTEM
 - ▶ Article I. - General Provisions
 - ▶ Article II. - Building Sewers and Connections
 - ▶ Article III. - Use of Public Sewers
 - ▶ Article IV. - Private Sewer Systems
 - ▼ Article V. - Surface Runoff and Groundwater Discharge to Sanitary Sewer

Public Info

Algona Sanitary Sewer Connection Inspection Program

Updated 8/05/24

Received a Letter? [Click Here to Schedule an Inspection.](#)

Have a Question? Please call (833) 401-9467

A Public Informational Meeting will be held on **October 15, 2024 at 6:00 PM**. The meeting will be held at the **Algona Public Library, Conference Room A**.

The meeting will discuss scheduling inspections, length of inspections, proper sump pump/footing drain connections and other miscellaneous items.

Information from the meeting will be posted in the [Notices](#) section.

Want to know more about the program? Review the information below.

- Who is getting an inspection?
- Why is this important?
- What should I do?
- What is an inspection?
- What's the next step?

Who is getting an inspection?

The City of Algona is implementing a **mandatory** inspection program to verify that clear water from sump pumps, footing drains, seepage systems, or roof drains is not connected to the sanitary sewer. Properties within targeted areas of the City which have experienced backup issues recently will be required to get an inspection. See this [map](#) to determine if your property will require an inspection.



[Home](#) » [Wastewater Treatment](#) »



- Wastewater Treatment ▾
- Sanitary Sewer Connection Inspection Program

Wastewater Treatment Facility Improvements

Inflow and Infiltration

Sewer Rate Information

[Learn more about the Sanitary Sewer Connection Inspection Program here](#)

- [Map of areas to be inspected](#)
- [Frequently Asked Questions](#)
- [Schedule an inspection online](#) (log-in and password are included in the notification letter about the public meeting)
- To schedule an inspection by phone, call (833) 401-9467.

The City of Algona is partnering with WHKS & Co. to conduct mandatory inspections of sanitary sewer connections in targeted neighborhoods beginning the fall of 2024 and continuing through the spring of 2025. Inspections will be performed in approximately 400 homes, starting with areas of the city that have a history of sewer backups. The goal of the program is to identify homes that have illegal connections to the sanitary sewer system. The excess water from these illegal connections can overload the sanitary sewer system and cause sewer backups.

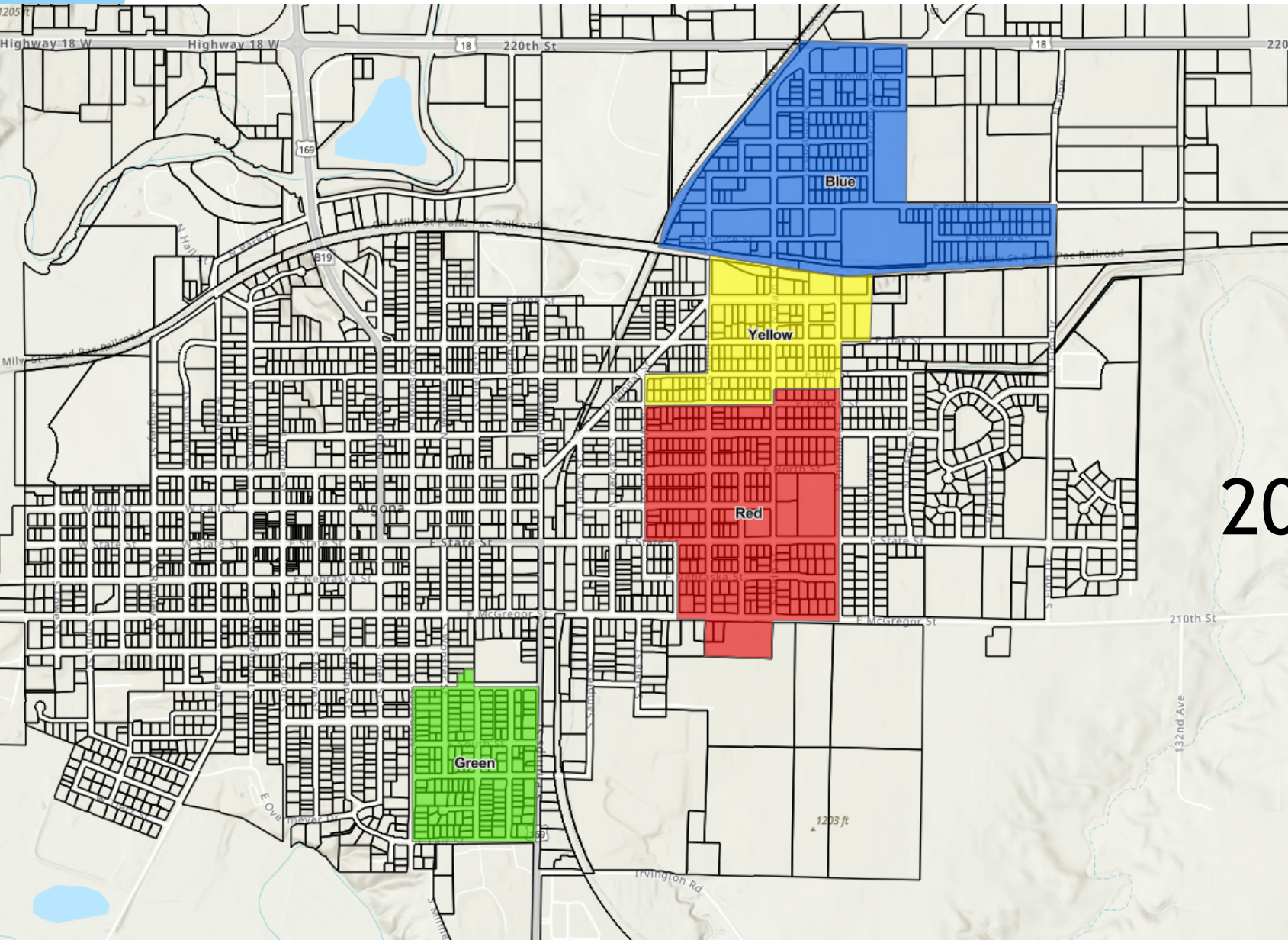
Information available in print and on the web at

- www.AlgonaSump.com
- City of Algona Social Media

City of Algona Website

- www.algonaiowa.gov





2024 & 2025 - Inspection Sectors

Invitation to attend public info meeting and schedule inspection (red sector only).

Invite will be sent to additional sectors in spring 2025

whks



112 W. Call Street, Algona, IA 50511
Phone: 515-295-2411
www.algonaiowa.gov

DATE: October 3, 2024
TO: John Sample
Inspection for building at 123 Sample ST
Login: 123456789
Password (case sensitive): 123a
RE: Sanitary Sewer Connection Inspection Program

Dear Property Owner:

The purpose of this letter is to notify you of an upcoming, mandatory sanitary sewer inspection program in your neighborhood and an associated public meeting.

Beginning this October, the City will conduct mandatory inspections of sanitary sewer connections in targeted areas of the City that have experienced sewer backups in recent years. The City has hired WHKS & Co. to coordinate and conduct the inspections on behalf of the City, at no cost to property owners.

The inspection will check footing (foundation) drains, sump pumps, and other potential sources of clear water that may be illegally connected to the sanitary sewer system. During significant rainfall events, excess clear water entering the system through these sources can overload the sanitary sewer, which can lead to basement backups and require pumping into the river.

The City will host a public informational meeting on **October 15th at 6:00 pm at the Algona Public Library Conference Room A**. The meeting will discuss the program, inspection scheduling, proper sewer connections, and other related topics.

Property owners must schedule a mandatory sewer inspection within 30 days of the date of this notice. Owners who do not schedule an inspection, within the 30-day timeframe are subject to a \$100/month surcharge on their sanitary sewer bill until an inspection is completed. We encourage residents to schedule their inspections as soon as possible. Appointments are available beginning Monday, October 21st.

How to schedule an inspection: Inspections may be scheduled in one of two ways:

- 1) Visit www.AlgonaSump.com and use the login and password provided at the top of this letter.
- 2) Call WHKS & Co. toll-free at (833) 401-9467 between 8am–5pm on Monday–Thursday and 8am–12pm on Friday. If calling after hours, please leave a message with your name and phone number, and you will receive a call back on the next business day.

Inspections typically are completed in 30 minutes. An adult must be present during the inspection.

Your anticipated cooperation is greatly appreciated in helping to complete this program. For more information about the program and scheduling your inspection, please visit www.AlgonaSump.com or call (833) 401-9467.

Sincerely,

Jacob Tjaden
City Administrator

EXAMPLE

Scheduling

- ▶ All inspections are scheduled, no door-to-door inspections
- ▶ Scheduling is fast and easy
- ▶ Schedule through website or telephone
- ▶ Residents will receive a letter when it is time for their sector to schedule inspections.



Scheduling and Info Website AlgonaSump.com

Algona Sump

HOME

PROGRAM INFORMATION

FAQS

NOTICES

CONTACT

SCHEDULE INSPECTION

Algona Sanitary Sewer Connection Inspection Program

Updated 8/05/24

Received a Letter? [Click Here](#) to Schedule an Inspection.

Have a Question? Please call (833) 401-9467

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Want to know more about the program? Review the information below.

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- [Why is this important?](#)
- [What should I do?](#)
- [What is an inspection?](#)
- [What's the next step?](#)

Who is getting an inspection?

The City of Algona is implementing a **mandatory** inspection program to verify that clear water from sump pumps, footing drains, seepage systems, or roof drains is not connected to the sanitary sewer. Properties within targeted areas of the City which have experienced backup issues recently will be required to get an inspection. See [this map](#) to determine if your property will require an inspection.

whks

Scheduling and Info Website AlgonaSump.com



112 W. Call Street, Algona, IA 50511
Phone: 515-295-2411
www.algonaiowa.gov

Log In

Login number

Password

Log In

DATE: October 3, 2024

TO: John Sample

Inspection for building at 123 Sample ST

Login: 123456789

Password (case sensitive): 123a

RE: Sanitary Sewer Connection Inspection Program

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The inspection will check footing (foundation) drains, sump pumps, roof drains, and other potential sources of clear water that may be illegally connected to the sanitary sewer collection system. During significant rainfall events, excess clear water entering the system through illegal connections can overload the sanitary sewer, which can lead to basement backups and require bypassing flow directly into the river.

The City will host a **public informational meeting on Tuesday, October 15th at 6:00 pm at the Algona Public Library Conference Room A.** The meeting will cover the need for the program, inspection scheduling, proper sewer

Scheduling and Info Website

AlgonaSump.com

Schedule Inspection

This building does not have its inspection completed.



Schedule Inspection

Schedule an inspection of

ST, Algona, IA



Edit Notes

Provide special instructions for inspectors or other information about your property.

Scheduling and Info Website AlgonaSump.com

Scheduling Calendar

whks

| | | | | | | |
|----|----|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |

April 22
Click the time below to schedule.

- 7:15am - 7:30am
- 7:30am - 7:45am
- 9:15am - 9:30am
- 9:45am - 10:00am
- 10:30am - 10:45am
- 11:00am - 11:15am
- 11:15am - 11:30am
- 11:30am - 11:45am
- 11:45am - 12:00pm
- 12:00pm - 12:15pm
- 12:15pm - 12:30pm
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- 3:45pm - 4:00pm
- 5:00pm - 5:15pm
- 5:15pm - 5:30pm
- 5:45pm - 6:00pm
- 6:00pm - 6:15pm

Scheduling and Info Website

AlgonaSump.com

Residents Welcome Screen

Schedule Inspection

You have an inspection appointment scheduled for April 21, 8:00 AM



[Schedule Inspection](#)

Select a time for an inspection.



[Edit Notes](#)

Provide special instructions for inspectors or other information about your property.

Scheduling and Info Website

AlgonaSump.com

Resident Log Out & Appointment Confirmation

You are Logged Out

Yay!

You have logged out. You have an inspection appointment scheduled for 04/21/2015 8:00 AM Thank you for participating in this program.

Inspector Identification

ALGONA – SUMP/LATERAL INSPECTOR



Justin Martinek



All inspections are scheduled



No door-to-door



WHKS logos on:
Badges
Clothing
Vehicles

The Inspection

- ▶ Completed in under 30 minutes
- ▶ Adult must be present
- ▶ Inspector will televise lateral to ~20 ft beyond foundation
- ▶ Inspector looks at:
 - Sump pumps
 - Beaver drains
 - Roof drains
 - Site grading
- ▶ Notice of Violation and instructional diagrams given, if needed

Inspection Outcomes

- ▶ Pass

- ▶ No further action needed
- ▶ Letter will be mailed within 10 days confirming pass



112 W. Call Street; Algona, IA 50511
Phone: 515-295-2411
www.algonaiowa.gov

Inspection Outcomes

▶ Follow-Up

▶ Sump

- ▶ Schedule follow up which City Staff will perform

▶ Lateral

- ▶ Schedule follow up on plumber inspection day



SUMP PUMP & LATERAL FOLLOW-UP INSPECTION REQUIRED NOTICE

For

Owner's Name(s): _____
Address: _____
Date of Issue: _____
Schedule Follow – Up By: _____

SUMP PUMP FOLLOW-UP

During the sump pump inspection, we were not able to confirm the discharge location of one or more of the following items: sump pump, seepage system, roof drain, or exterior drain. Your inspection will not be complete until the discharge location is confirmed. You must schedule a Follow-Up Inspection appointment with the City of Algona to complete the inspection process.

To-Do:

_____ Please call WHKS within 10 days of receiving this Notice to schedule a sump pump Follow-Up Inspection. The Follow-Up Inspection is required to complete the inspection process. There is no charge for scheduling a Follow-Up Inspection.

LATERAL FOLLOW-UP

During the lateral inspection, we were not able to gain access to the sewer lateral to inspect for a footing drain connection. To gain access to the lateral a plumber will need to install a wye on the sewer stack or remove and reinstall a toilet. There is no cost associated with the plumber or Follow-Up inspection. The inspection process is not complete without the Follow-Up inspection.

To-Do:

_____ Please call WHKS within 10 days of receiving this Notice to schedule a lateral Follow-Up Inspection. The Follow-Up Inspection is required to complete the inspection process. There is no charge for scheduling a Follow-Up Inspection.

The Follow-Up plumber assisted inspection time is scheduled for: _____

WHKS & Co.

Phone: 1-833-401-9467

Hours: Mon – Thurs 8 AM – 5:00 PM, Fri 8 AM – 12PM

If calling after hours, please leave your name and phone number and we will call you back within one business day.

Inspection Outcomes

▶ Failure

▶ Sump

- ▶ Receive violation notice and repair within 90 days

▶ Lateral

- ▶ Receive violation notice and repair within 365 days

- ▶ Reinspection must be scheduled after repair

VIOLATION NOTICE

For

Owner's Name(s): _____
Address: _____
Date of Issue: _____
Comply with City Ordinance by: _____

___ **SUMP PUMP VIOLATION** (90 days to repair and schedule reinspection)

To-Do After Repair:

___ Please use property login information to schedule your reinspection at algonasump.com or call WHKS at the phone number below after the work is complete to schedule a reinspection (Required by Ordinance).

___ **FOOTING DRAIN VIOLATION** (365 days to repair and schedule reinspection)

To-Do After Repair: (two options)

___ **City Reinspection** Please use property login information to schedule your reinspection at algonasump.com or call WHKS at the phone number below after the work is complete to schedule a reinspection (Required by Ordinance).

OR

___ **Contractor/Plumber Reinspection** When footing drain is repaired, have the licensed contractor/plumber televise the sewer lateral as part of the repair. Please see video requirements on the attached inspection form. Video (on a USB-drive) and inspection form can be dropped off at Algona City Hall. If done properly, this will count towards your reinspection. If not done properly, it will not count as a reinspection.

Additional Information

Please visit algonasump.com for more information. Including inspection report and copy of lateral video (if applicable). Please allow 10 business days for report and video.

Chapter 13 of the Municipal Code of Ordinances prohibits clear water connections into the sanitary sewer. Ordinance can be reviewed at algonasump.com.

Inspection report will be mailed to property owner within 10 business days.

WHKS & Co. Toll-Free Inspection Scheduling Phone Number

Phone: 1-833-401-9467

Hours: Mon – Thurs 8 AM – 5:00 PM, Fri 8 AM – 12PM

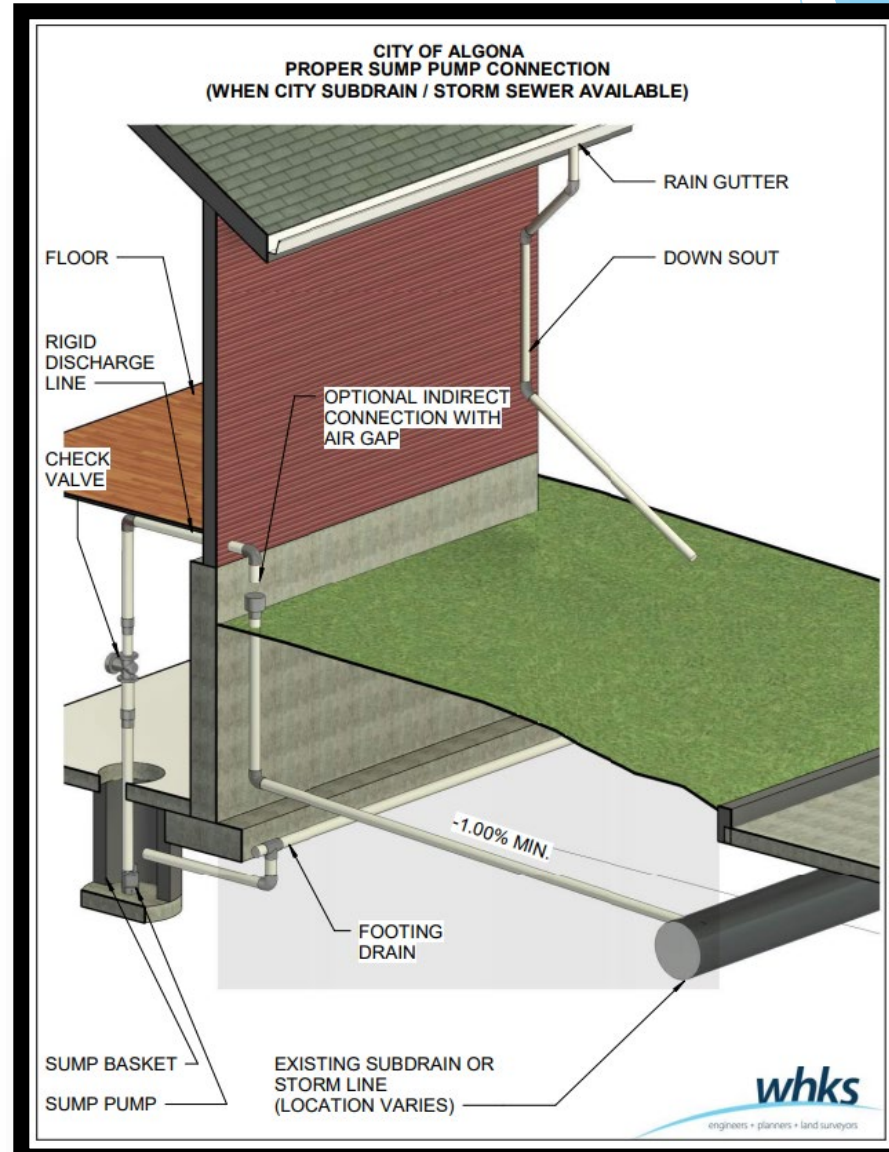
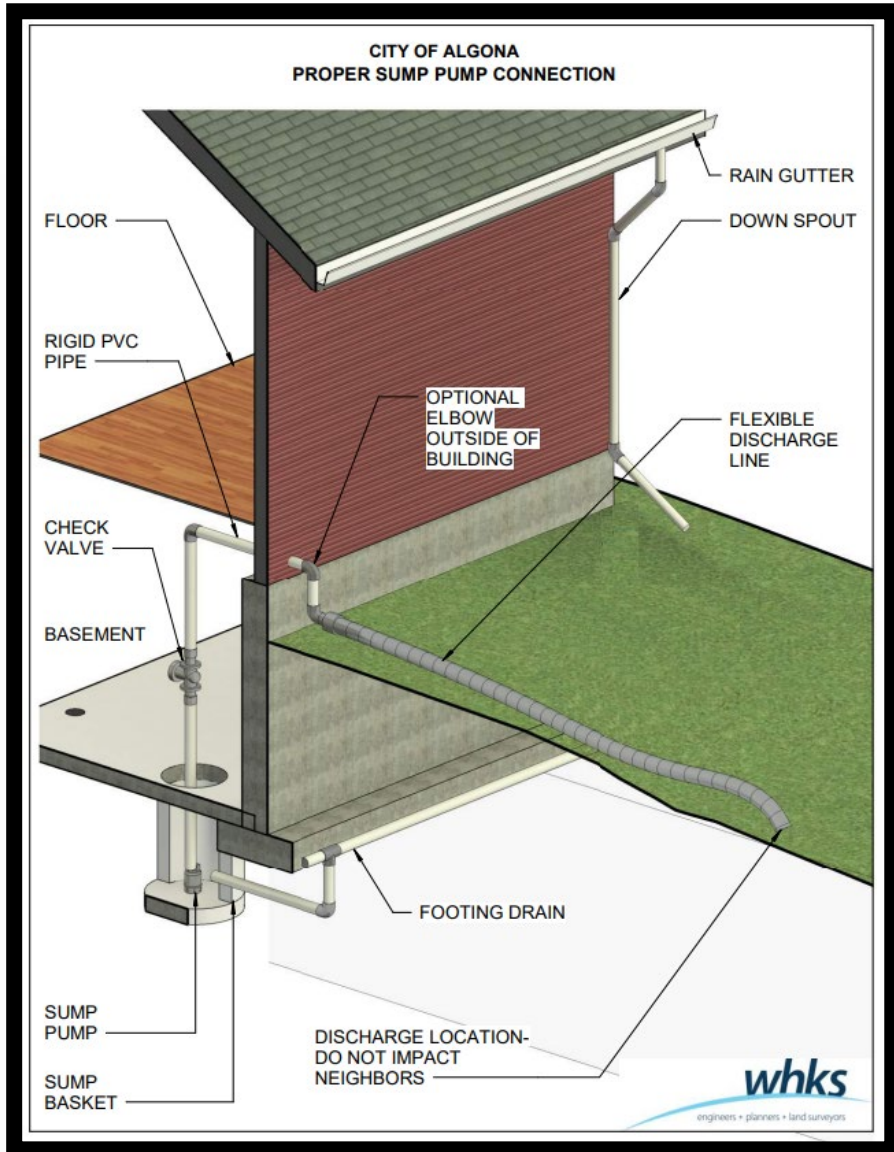
If calling after hours, please leave your name and phone number and we will call you back within one business day.

Cost Share Program

- ▶ Failure - Lateral

- ▶ City is considering possible cost share program for lateral connection violations

Sump Pump and Lateral Diagrams



Installation Examples: Footing Drain Connection



**Tap in Lateral Past Foundation
*IMPROPER***

Installation Examples: Sump Pumps



Rigid Pipe to Outside
PROPER



Flex Hose to Drain
IMPROPER

Installation Examples: Sump Pumps

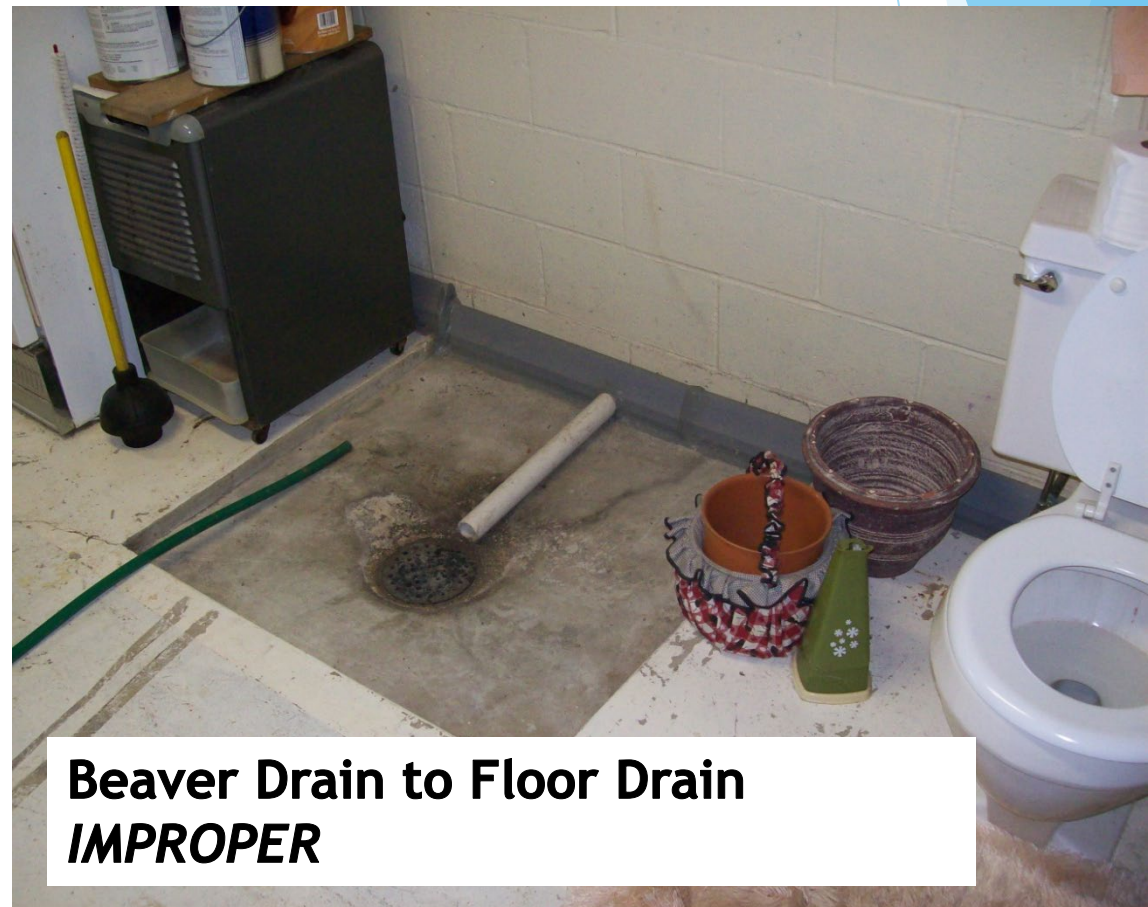


**Rigid Pipe to Outside
PROPER**



**Flex Hose to Outside
IMPROPER**

Installation Examples: Beaver Drains



Installation Examples: Sump Pump with direct connection



**Rigid Pipe to Outside
PROPER**



**Sump Pump to Floor Drain
IMPROPER**

Inspection Form

City of Algona
Sump Pump and Lateral Inspection Report

A. Initial Inspection

1. Owner and Address:
 - a. Owner Name(s): _____
 - b. Address: _____
 - c. Occupant(s) Name (If different than owner): _____
 - d. Owner Address (If not current occupant): _____
2. Date of Initial Inspection: _____
3. What Year was the Building Constructed? _____ (ex. 1959)
4. Building Type (Residential, Apt., Commercial, Industrial, etc.): _____
5. History of Backups or Flooding? Yes No
If marked yes, please provide previous flooding dates, source of the flooding (if known), and any actions taken: _____
6. Does building have:
 - a. Yes No Exterior grading slopes toward the building?
 - b. Yes No Roof drains that go into the ground?
 - c. Yes No Basement?
 - d. Yes No Seepage collection (beaver) system?
 - e. Yes No Sump pit?
 - f. Yes No Lateral inspection conducted?
7. If building has a **roof drain** that goes into the ground, which of the following apply?
 - a. It is properly constructed to discharge to open air or storm system.
 - b. It is improperly constructed to discharge into the sanitary sewer system.
 - c. Discharge location not determined.
8. If there is a **seepage collection (beaver) system**, which of the following apply?
 - a. It is properly constructed to discharge into a sump pit.
 - b. It is improperly constructed to discharge into the sanitary sewer system.
 - c. Discharge location not determined.
9. If there is a **sump pit**, which of the following apply?
 - a. Pump is properly installed to discharge outside the basement through rigid piping.
 - b. Pump is improperly installed to discharge into the sanitary sewer system.
 - c. Pump has the capability of discharging into the sanitary sewer system (ex. flex hose).
 - d. There is a pit with no pump. Plumbing is checked as (a) (b) or (c) if present.
 - e. Discharge location not determined.
10. If **lateral inspection** is conducted, fill in information below.
 - a. No Suspect Foundation Drain Found
 - b. Suspect Foundation Drain Found
 - c. Suspect Foundation Drain not determined. (Note Why in Comments)
11. If lateral inspection is conducted, fill in information below.
 - a. General Information
 - i. Pipe Diameter (inches) _____
 - ii. Pipe Material (VCP, PVC, DIP, RCP, CMP, CIP, Obg, other) _____
 - iii. CCTV Start Location (i.e. Sewer main, Toilet, Sewer stack, etc) _____
 - iv. CCTV Start Distance from Foundation Wall _____
(i.e. Along the alignment of the pipe, how far is the foundation from point of insertion? ft)
 - b. Observations (Note footage (ft) of each instance)
 - i. Roots _____

- ii. Mineral/Unknown Deposits _____
- iii. Chipped/Cracked Pipes _____
- iv. Offset Joints _____
- v. Sags/Deflections _____
- vi. Suspect Foundation Drains _____

12. Other Comments (exterior drains, uncapped cleanouts, inactive sump pit, suspect foundation drain, etc.): _____

13. Photos Taken of Interior Sumps and Collection System and Building Exterior? Yes No

14. Lateral Inspection Video Submitted on USB-drive (required for lateral inspection)? Yes No

Video is required to show the point of insertion into the sanitary sewer to 20-feet past the repair (if reinspection) or foundation (initial inspection). Address only needs to be displayed at the beginning of the video. Footage needs to be displayed on the screen at all times. Failure to comply with these requirements or provide a clear video for City review will void the inspection.
File name _____

15. If 7b, 8b, 9b, 9c, 9d, or 10b is checked, a Violation Notice will be given to the Occupant or Owner directing them to correct the violation by (date): _____

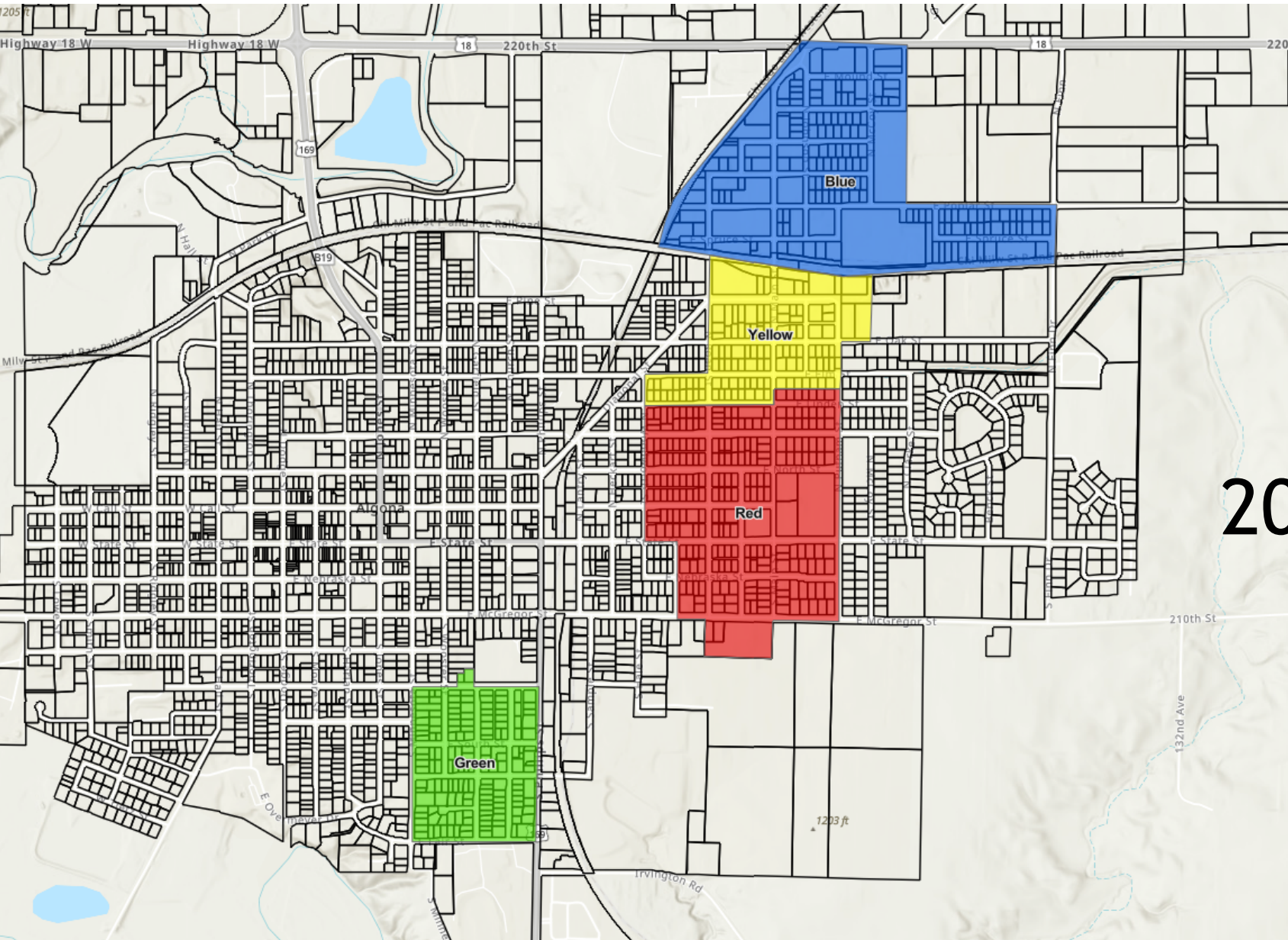
PASS _____

FAIL _____

CITY FOLLOW-UP _____



DIAGRAM: roof drains into ground, exterior drains, improper grading, sump pits and pumps, sump pump discharges, beaver systems, sanitary grinder pumps, footing drain connections, etc.



2024 & 2025 - Inspection Sectors

Approximate Inspection Timeline

| Item | Sector | Date |
|-----------------------------|--------|---|
| Public Information Meeting | | October 15, 2024 (Red Sector) March 2025 (Remaining Sectors) |
| Inspections: | | |
| South Main Neighborhood | Red | October/November 2024 |
| North Main Neighborhood | Yellow | March/April 2025 |
| Garrigan Neighborhood | Blue | April/May 2025 |
| Jerome/Kennedy Neighborhood | Green | May/June 2025 |
| All Inspections Completed | | 2025 |

Next Steps

1. Contact us by phone or login to website to schedule the appointment.



Questions?



Contact and Project Information

- ▶ Contact/ Project information
 - Emma Nollenberger, E.I.T. (507) 288-3923
 - Scheduling Website: AlgonaSump.com
 - Call toll- free: (833) 401-9467