

Sump Pump Inspection & Water Meter Replacement

June 16, 2021

6:00pm

Byron City Hall

Bryan Kaemingk, P.E. – Project Manager

BYRON *Minnesota*
Where Neighbors Become Family. Welcome Home.

whks

Meeting Objectives

- **What is Infiltration and Inflow?**
- **Why are we doing this program?**
- **Discuss program approach and details**
- **Frequently asked questions**

What is I/I?

Inflow and Infiltration



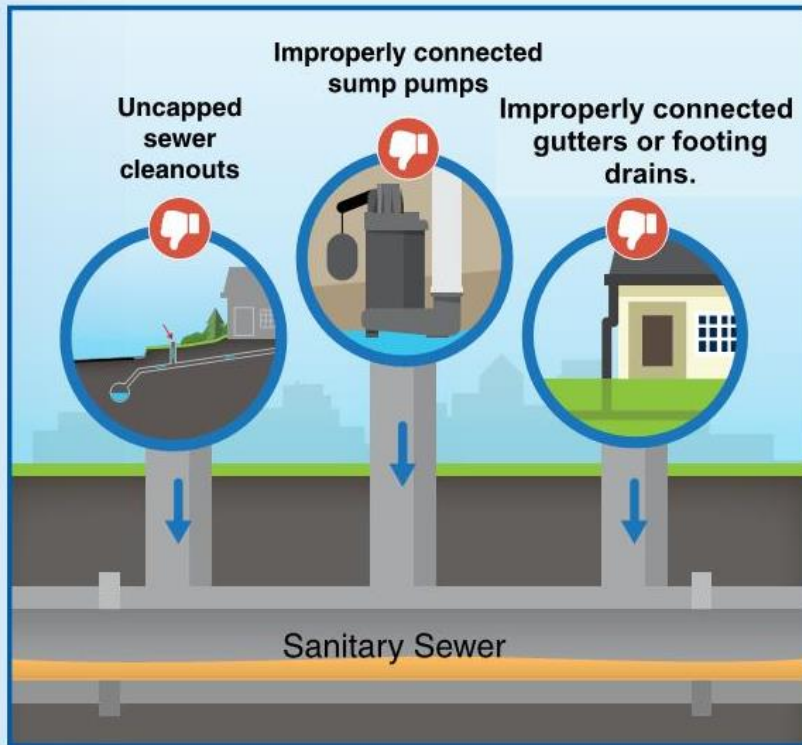
INFLOW

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

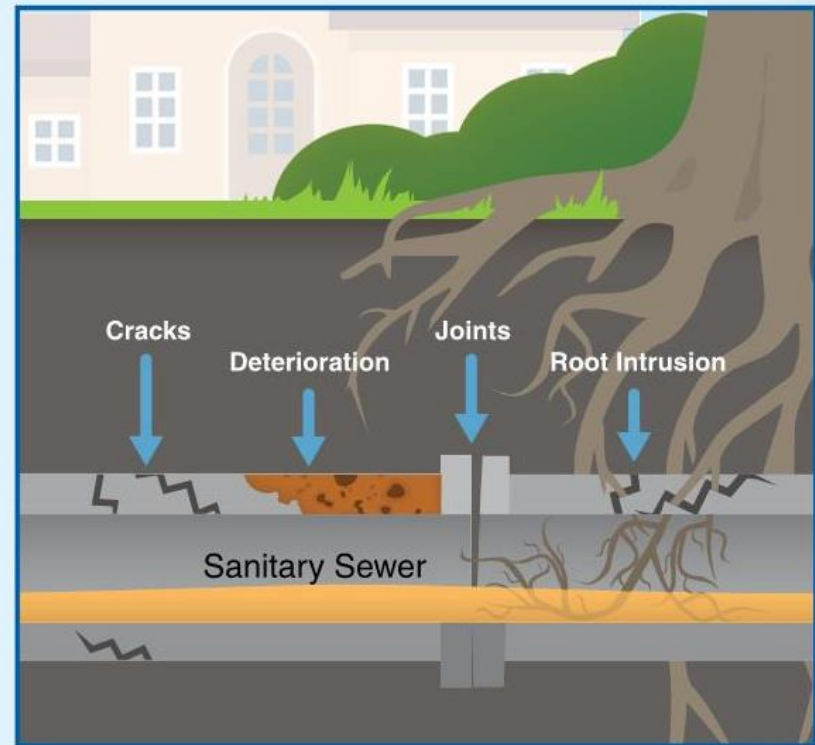
INFILTRATION

- 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.

Consequences of Excessive I/I



Low customer satisfaction
Costs greater than needed
Potential health risks
Property damage
Regulatory actions

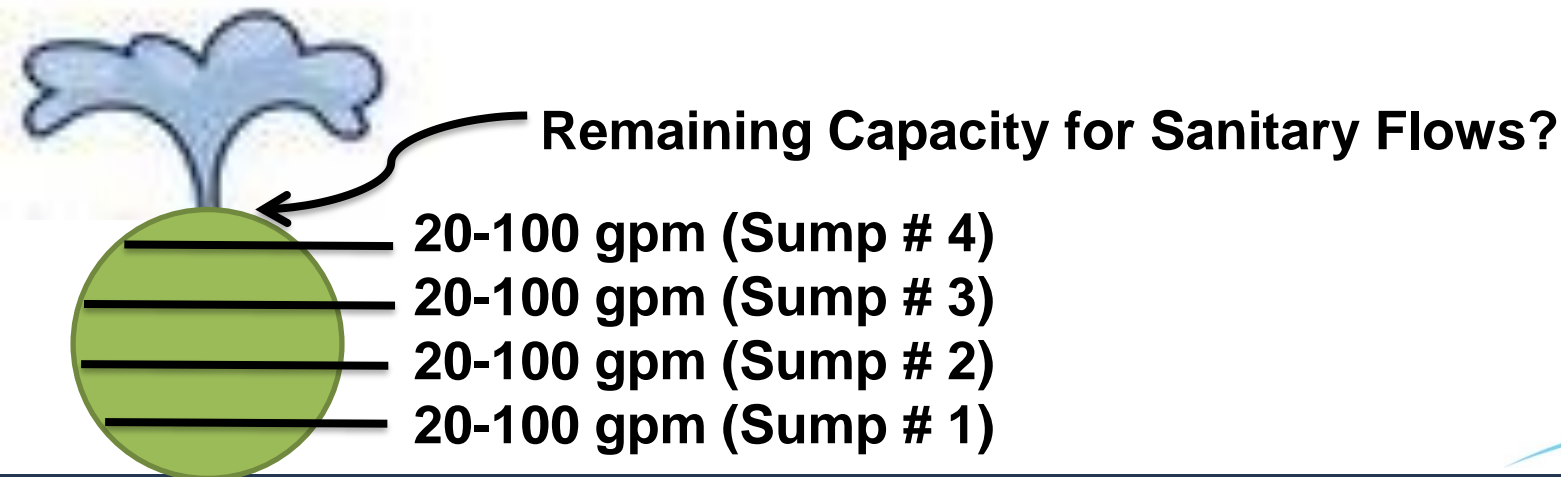
I/I's Effects on Byron



- **Sanitary Sewer Backups into Homes**
- **Sewer Infrastructure Size Increase**
- **Wastewater Treatment Plant Upgrades**
- **Sewer Rate Increases**

Why a Sump Pump Program?

- **A few sump pumps can make a big difference**
 - Typical sump pump 20-100 gpm a piece
 - Typical 8” sewer capacity 350 gpm.
 - As few as **FOUR** pumps can take up the pipe capacity and cause a backup in the neighborhood.



Sump Pump Program Approach

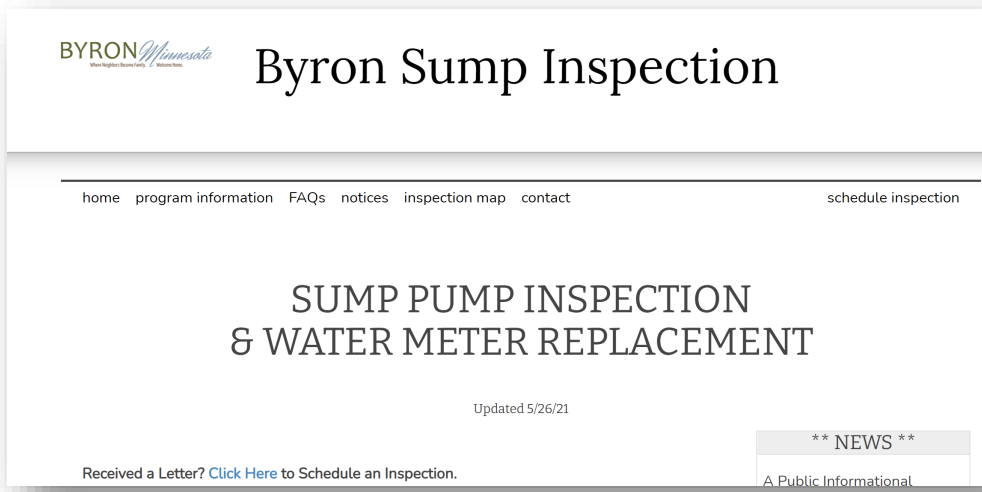
- **Ordinance Modification**
- **Public Info**
- **Public Meetings**
- **Scheduling**
- **Inspections**

Key Aspects to Ordinance Revision

City Ordinance 20-06 prohibits clear water connections.

- Sump pumps, beaver drains, footing drains, etc are prohibited from discharging to sanitary sewer
- Rigid discharge piping, no valves or flex hose
- Sump pits must have pumps
- City, City's representative, or private plumber inspects
- Timeline
 - 30 days to inspect
 - 90 days to correct sump pump deficiencies
- City can issue \$100/month surcharge for violations or no inspection

Public Information



Information available in print and on the web at

- www.ByronSump.com
- City of Byron Social Media

A successful program benefits the City by

- reducing backups,
- protecting health, and
- Controlling costs



**Byron Sump Pump Inspection
& Water Meter Replacement**
Phone: (507) 775-3400
ByronSump.com

June 4, 2021

To: John Doe
Inspection for building at 123 Sample St
Login:Sample Password (case sensitive):Sample

RE: Sump Pump Inspection & Water Meter Replacement Program –
MEETING AND INSPECTION INVITE

The City of Byron's Ordinance 20-06 prohibits the discharge of clear water into the sanitary sewer system. Clear water from any roof, surface, ground, sump pump, footing drain, swimming pool, seepage collection system ("beaver system"), or other natural precipitation is prohibited from discharging or draining into the sanitary sewer.

The City will be conducting mandatory sump pump inspections to verify that sump pumps, roof drains, and other clear water sources are not connected to the sanitary sewer system. The City is coordinating the clear water inspections with water meter replacements. Typically, water meters for each property are replaced every 10 to 15 years due to age and condition. All meters within the inspection area are older than 15 years and need replacement.

If you are receiving this letter, your property is scheduled for an inspection in 2021. Visit Byronsump.com for program details.

Property Owners Must Schedule Mandatory Sump Pump Inspection.

Per ordinance, within 30 days (from the date of this letter) you must schedule an inspection to avoid a \$100/month surcharge on your sewer bill. For fairness to all residents, inspection of all buildings with a sewer is mandatory even if the building does not have a basement or sump pump.

Please visit ByronSump.com to schedule an inspection. Your login and password to schedule an appointment is listed at the top of this letter. You can also contact City Hall at (507) 775-3400 between 7:30am-5pm on Monday-Thursday, 7:30am-1:30pm on Friday, to schedule an appointment. If calling after hours, please leave a message with your name and phone number and they will return your call the next business day. Typical inspections are completed in 30 minutes. **Before the inspection make sure there is clear and easy access to your sump pump (if applicable) and water meter. This will allow the inspection and water meter replacement to occur in a timely matter.**

The City will host a **public informational meeting on Wednesday, June 16, 2021 at 6:00 pm at Byron City Hall** to discuss the need for the program, the scheduling of inspections, proper connection, and other miscellaneous items. **The Meeting will also be broadcast via Zoom. Go to ByronSump.com for Zoom meeting information.**

For more information about the program and scheduling your inspection please visit Byronsump.com or call (507) 775-3400.

Sincerely,

City of Byron

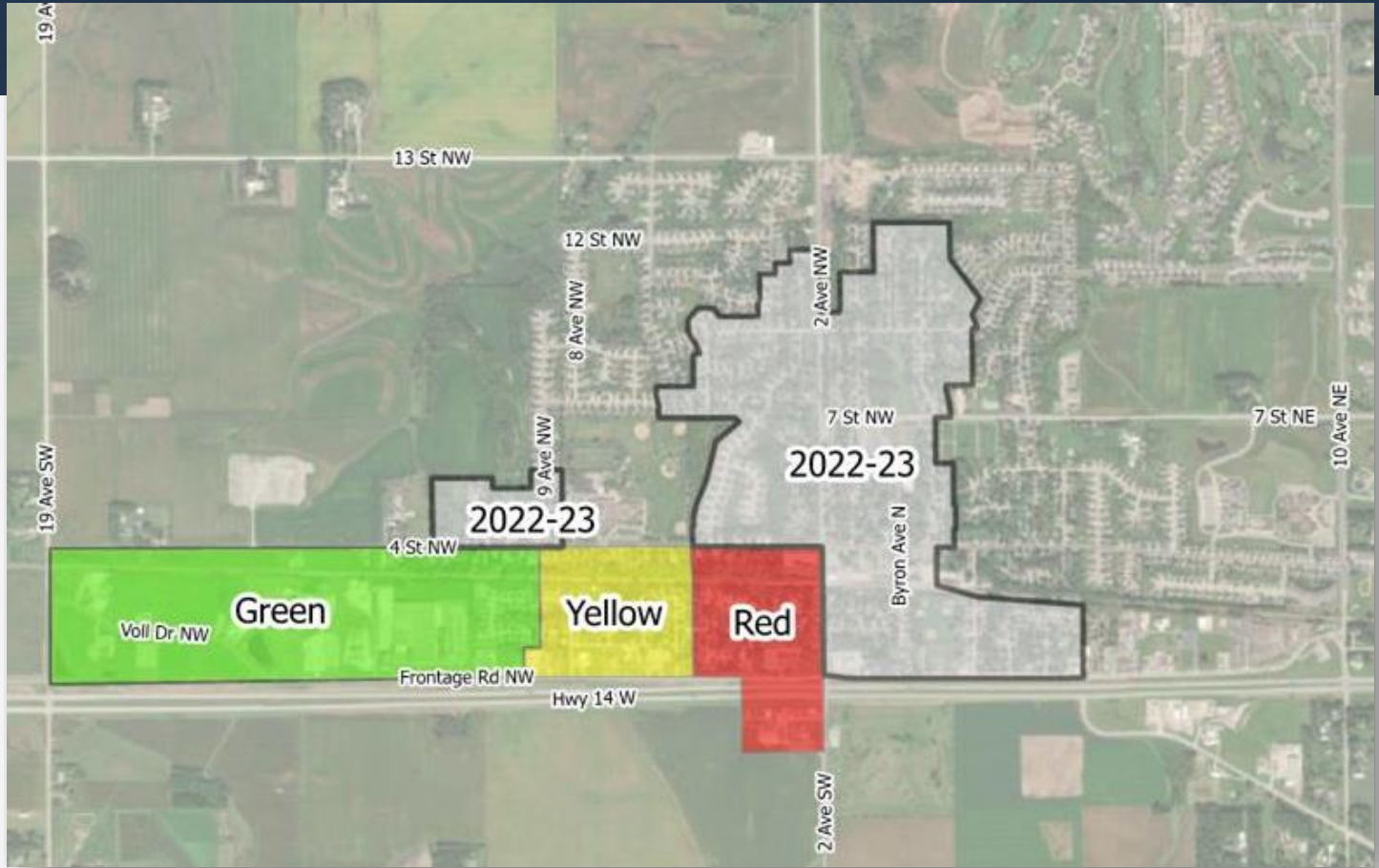
Invitation
to attend
public info
meeting
and
schedule
inspection

whks

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.**

Sectors



Interactive map available at
ByronSump.com

Scheduling and Info Website

ByronSump.com



Byron Sump Inspection

[home](#) [program information](#) [FAQs](#) [notices](#) [inspection map](#) [contact](#)

[schedule inspection](#)

SUMP PUMP INSPECTION & WATER METER REPLACEMENT

Updated 5/26/21

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

** NEWS **

A Public Informational

Scheduling and Info Website

ByronSump.com

Schedule Inspection

This building does not have an inspection scheduled.



Schedule Inspection

Select a time for an inspection of 1234 test sample Ave.



Edit Notes

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

Scheduling and Info Website

ByronSump.com

Scheduling Calendar

			1	2	3	4	<h3>April 22</h3> <p>Click the time below to schedule.</p> <ul style="list-style-type: none">7:15am - 7:30am7:30am - 7:45am9:15am - 9:30am9:45am - 10:00am10:30am - 10:45am11:00am - 11:15am11:15am - 11:30am11:30am - 11:45am11:45am - 12:00pm12:00pm - 12:15pm12:15pm - 12:30pm12:45pm - 1:00pm2:00pm - 2:15pm2:15pm - 2:30pm2:30pm - 2:45pm2:45pm - 3:00pm3:00pm - 3:15pm3:15pm - 3:30pm3:30pm - 3:45pm3:45pm - 4:00pm5:00pm - 5:15pm5:15pm - 5:30pm5:45pm - 6:00pm6:00pm - 6:15pm
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	

Scheduling and Info Website

ByronSump.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.

The logo for whks, featuring the lowercase letters 'whks' in a blue, sans-serif font, with a blue curved line underneath.

Inspector Identification

- **City Staff performing all inspections.**
- **All inspections are scheduled**
- **No door-to-door**
- **City**
 - **Badges**
 - **Clothing**
 - **Vehicles**

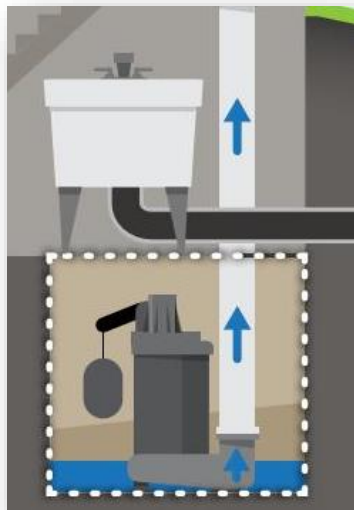
COVID-19 Safety

- 1. If requested, we will wear masks into your homes for inspection**
- 2. We will take temperatures of our inspectors each day**
- 3. We will eliminate the signature at the end of the inspection to make it contactless.**
- 4. We request you maintain a distance of 6' from inspector.**

What are we doing?

Sump Pump Inspection & Water Meter Replacement

- Completed in 30 minutes
- Adult must be present

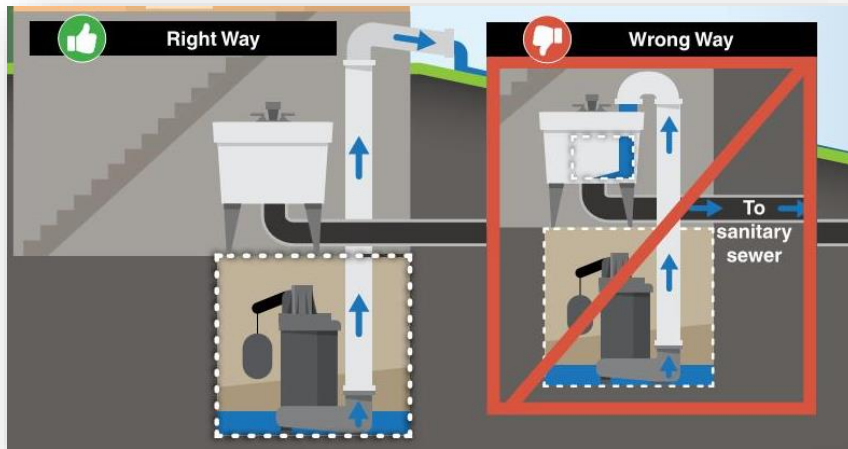


Water Meter Replacement

- Coordinating replacement with Sump Inspections! Two Birds with one stone!
- Used to measure the amount of water used at your property.
- Typical meters are replaced every 10 to 15 years due to age and condition.
- New Style installed which is more accurate and can be read remotely.



Sump Pump Inspection



- Sump Inspection looks at:
 - Sump pumps
 - Beaver drains
 - Roof drains
 - Site grading
- Notice of Violation and instructional diagrams given if needed
- May Need a follow up Inspection

Installation Examples: Sump Pumps

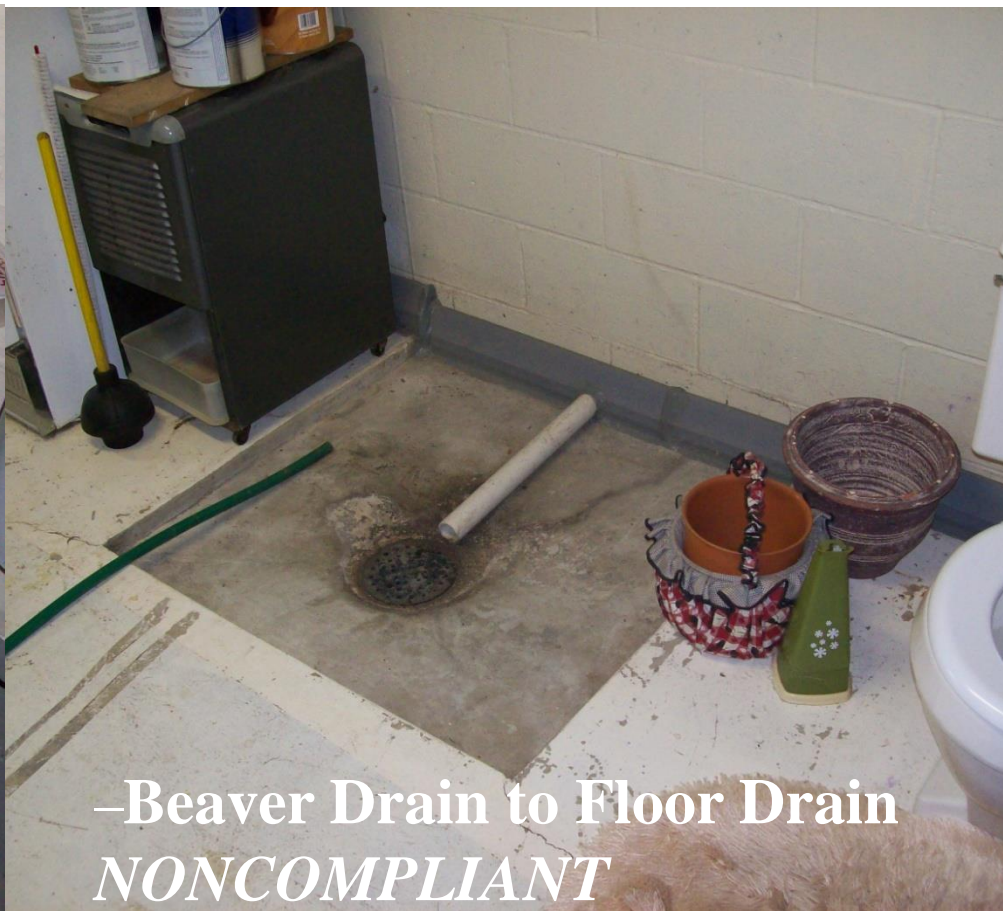


-Rigid Pipe to Outside
COMPLIANT



-Flex Hose to Drain
NONCOMPLIANT

Installation Examples: Beaver Drains



Installation Examples: Beaver Drain / Tile



-Tile into Floor Drain under Cover
NONCOMPLIANT

Inspection Form

Inspector _____
 Plumbing License Number _____

Page 1 of 2

City of Byron

Sump Pump Inspection Report w/ Water Meter Replacement

A. Initial Inspection

1. Owner and Address:
 - a. Owner Name(s): _____
 - b. Address: _____
 - c. Occupants Name (If different): _____
 - d. Owner Address (s): (If different) _____
2. Date of Initial Inspection: _____
3. Date of construction and Building Type? Building built in year _____ (ex. 1959)
 Note residential, apt., commercial, industrial: _____
4. History of backups or flooding? Note date, source, and actions taken: _____
5. Does building have:
 - a. Yes No Exterior grading sloping towards 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?
6. 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.
7. 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.
8. If there is a **sump pit**, which of the following apply?
 - a. Pump is properly plumbed to discharge outside the basement through rigid piping.
 - b. Pump is improperly plumbed 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.
9. Water Meter Information (Internal – Only City Staff are authorized to install water meters)
 - a. Water Meter Replaced Yes No
 - b. Final Meter Reading _____
 - c. New Meter ID Number _____
 - d. New EndPoint ID Number _____
 - e. Water Service Material (Copper, Lead, Galvanized, Plastic, Other) _____
10. Other comments (exterior drains, uncapped cleanouts, inactive sump pit, suspect foundation drain etc):

11. Photos taken of Interior Sumps and Collection System, Water Meter and Building Exterior?
 Yes No
12. If 6b, 7b, 8b, 8c, 8d or 9b was checked, a Violation Notice was given to the Occupant or Owner directing them to correct the violation by (date): _____

PASS _____ FAIL _____ City Follow-Up _____

Property Address _____

Page 2 of 2
UPFORM 05/06/2021



B. Subsequent Inspection – Date _____

1. Inspection conducted by _____
2. Does the building now comply with the applicable Ordinance for the City of Byron?
 Yes No

The inspection is not considered completed till reviewed by the City of Byron. The City will review the submitted documentation to verify requirements are met. Results provided by the contractor/plumber may differ from the City review.

I hereby verify that the building stated above has been inspected for the above-described sump pump, lateral (if applicable) and the information set forth above is true and correct to the best of my knowledge.

 Occupant/Owner

Date _____

I hereby verify that the building stated above has been inspected for the above-described sump pump, lateral (if applicable) and the information set forth above is true and correct to the best of my knowledge.

 Inspector
 Licensed Plumbers: sign with license #.

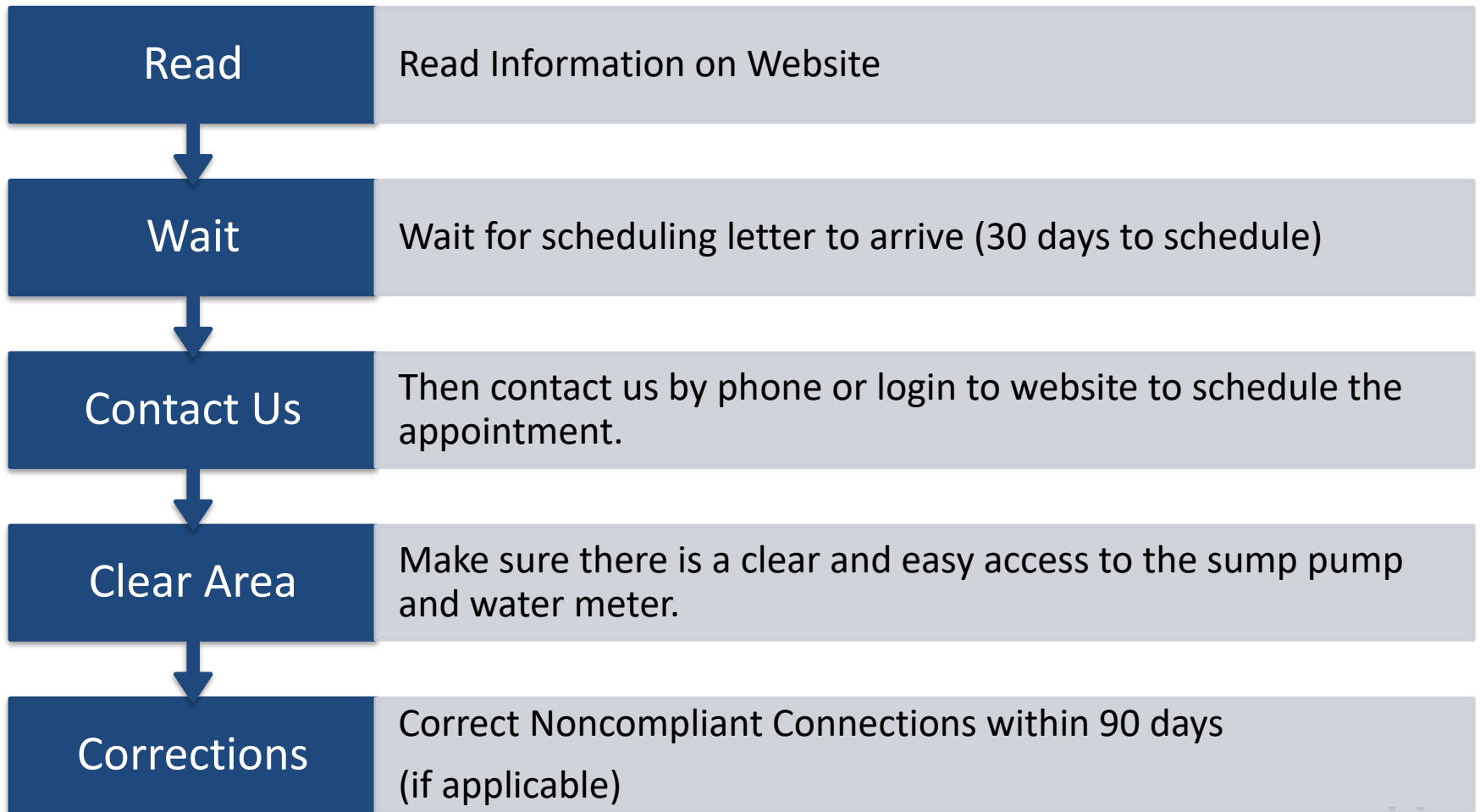
Date _____

Internal Use – Does the City of Byron approve of inspection result? Yes No
 If no, Why _____

Approximate Inspection Timeline

Item	Date
Public Information Meeting	June 16, 2021
Sump Pump Inspections & Water Meter Replacements	Red Sector June 2021 Yellow Sector July 2021 Green Sector August 2021
All Inspections Completed	Fall 2021
Other sections of the City	2022-2023

Next Steps



Contact and Project Information

- Contact/ Project information
 - Scheduling Website: ByronSump.com
 - Call City Hall: 507-775-3400

 - Bryan Kaemingk, P.E. 507-288-3923

Questions?

BYRON *Minnesota*
Where Neighbors Become Family. Welcome Home.

whks