



AGENDA
CITY OF CEDAR FALLS, IOWA
COMMITTEE OF THE WHOLE MEETING
MONDAY, MARCH 07, 2022
6:30 PM AT COMMUNITY CENTER, 528 MAIN STREET

Call to Order by the Mayor

- [1.](#) Infiltration & Inflow Reduction Program.
(20 Minutes, City Engineer David Wicke & Water Reclamation Manager Mike Nyman)



Item 1.

North Cedar Heights Area Road Reconstruction & Park Drive Infiltration and Inflow Project





North Cedar Heights Area Road Reconstruction

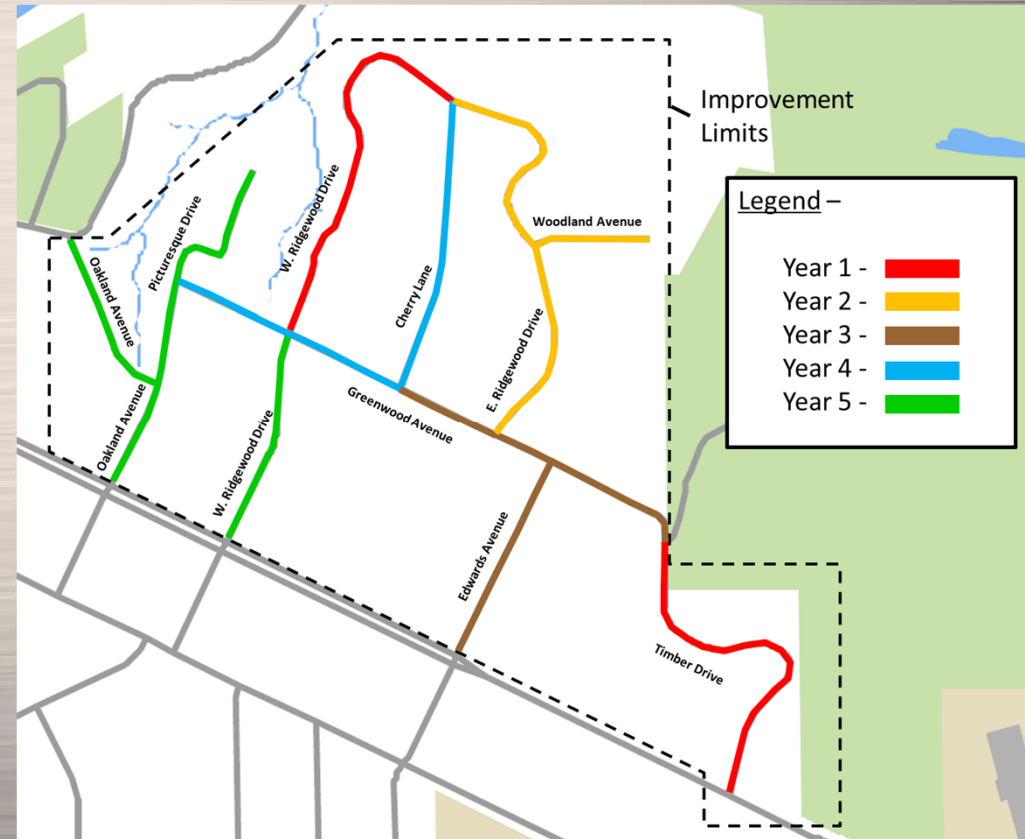
Item 1.

Why Reconstruct?

- Very Narrow Existing Roadways (13' – 19')
- No Curb
- Minimal Storm Water Control
- Sanitary Lines are Dated and Park Drive Lift Station is overwhelmed from wet weather I&I
- Re-Define Roadway/ROW

When?

- Start in 2022 – End in 2026
- Order of Reconstruction May Vary





What is I & I?

Item 1.

- Infiltration and Inflow of “clean” water into sanitary system
- Indirect or direct connection to sanitary sewer
- Flow increases dramatically
- Pump stations unable to move all this water



Infiltration



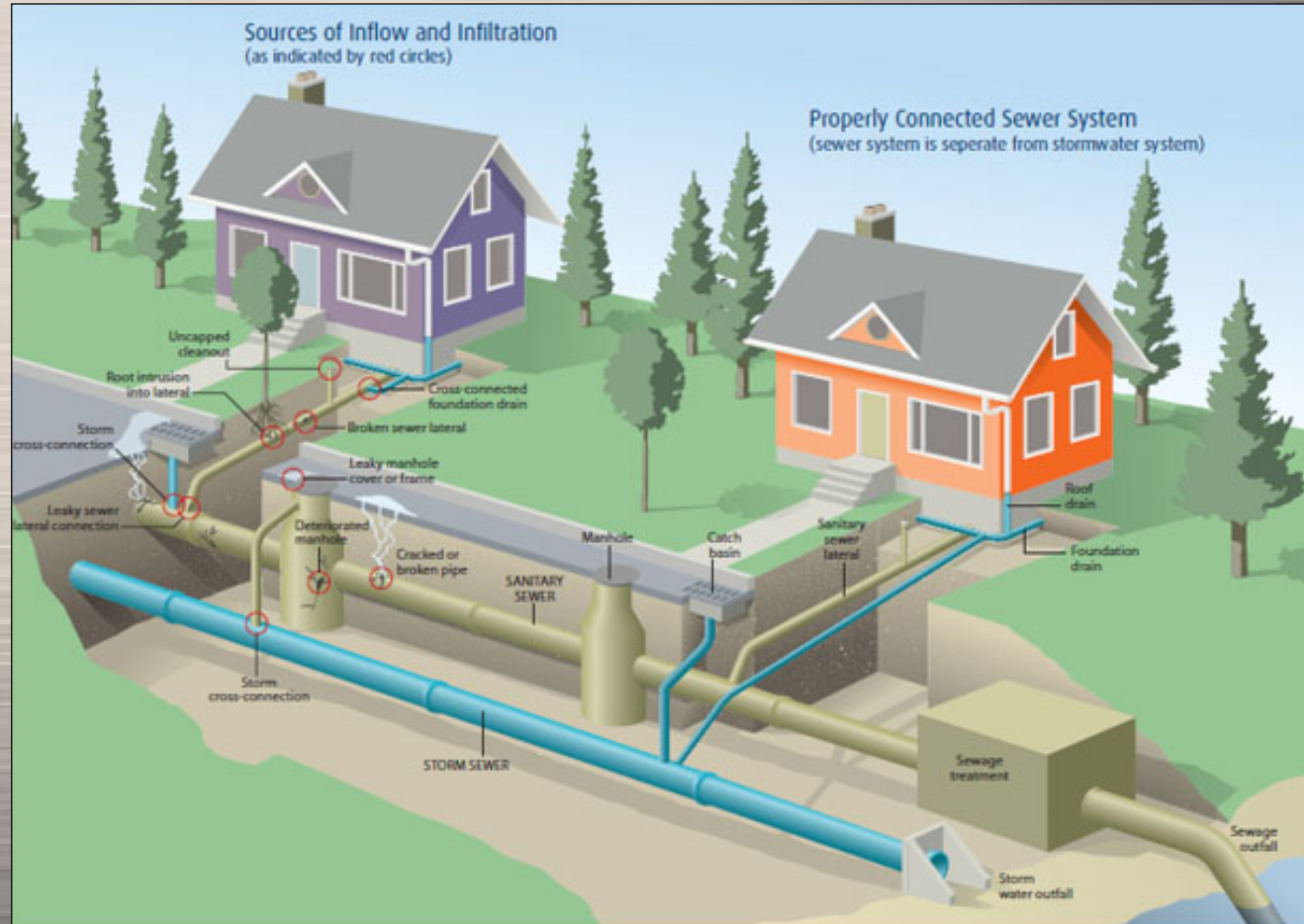
Inflow

Park Drive Lift Station I&I Reduction Program

Item 1.

Normal Flow:
25,000 – 30,000
Gallons per day

Wet Weather:
Up to 900,000
Gallons per day





Federal Regulations

Item 1.

- Back-ups and Overflows are “prohibited” by IDNR permit
- Overflows (SSO’s) in the past have drawn EPA and IDNR attention
- USEPA and IDNR Inspections Require Action
- Public side addressed – Lining, New Lift Station & Forcemain
- In extreme wet weather issue remains (900,000 gallons flow)

Park Drive Lift Station I&I Reduction Program

Item 1.



Park Drive Lift Station

- ◆ Manhole
- ➔ Gravity Sewer
- ▬ Road Reconstruction 2022-2026
- Lift Station
- ▬ Force Main

Proposed Change to Code of Ordinances

Item 1.

Sec. 7-196. - Discharge of stormwater or groundwater into city sanitary sewer system.

The discharge of water from any roof, surface, ground, sump pump, footing tile or from any other natural precipitation source into the city sanitary sewer collection system has the potential to cause damage to property and to overload the city wastewater collection, conveyance and treatment system. Such discharge may result in the backup of sewage into living quarters of residential dwellings, or into other buildings or structures in the city, thereby creating a potential public health hazard, and potentially exceeding the capacity of the city wastewater collection, conveyance and treatment system. Therefore, the city finds that it is essential to the maintenance of public health, safety, comfort, and welfare, to the minimization of damage to property, and to the maintenance of the functioning and capacity of the city wastewater collection, conveyance and treatment system, that the provisions of this division be strictly enforced. **Since Ordinance No. 1275 was adopted on February 10, 1969, this Code has prohibited the discharge of stormwater from any dwelling, building or other structure into the city's sanitary sewer system. The provisions of this division shall apply to every dwelling, building or other structure in the city, for the construction of which a city building permit was issued after February 10, 1969.**

(Code 2017, § 7-259; Ord. No. 2842, § 1, 5-4-2015; Ord. No. 2850, § 1, 7-6-2015)

Proposed Policy For Removing Illegal Connections

Item 1.

Purpose, Applicability, Definitions

- This policy is intended to set a process for eliminating illegal connections in conjunction with street reconstruction projects going forward
- “**Illegal connection**”: any foundation drain, footing drain, footing tile, sump pump, roof drain, etc. That discharges into the sanitary sewer

Proposed Policy For Removing Illegal Connections

Item 1.

Disconnection

- Engineering and Water Reclamation coordinate inspections where illegal connections are suspected
- New sub-drain or storm sewer for reconnection
- Owner has 60 days from end of road reconstruction project to hire a plumber to correct connection
- Owner will schedule a city inspection to verify proper disconnection and reconnection

Proposed Policy For Removing Illegal Connections

Item 1.

Financial Assistance

- Financial assistance for pre-1969 buildings
- Building owner may be reimbursed up to \$4,000 of actual cost
- Illegal connection must be corrected within 60 days of adjacent road reconstruction completion
- Application for reimbursement must be submitted within 30 days of final city inspection

Proposed Policy For Removing Illegal Connections

Item 1.

Surcharge Fee & Rebuttal Presumption

- Building owners that do not correct illegal connections will be charged \$100/month
- It will be assumed that an illegal connection exists in all buildings where the owner refuses to allow an inspection



Next Steps

Item 1.

1. Ordinance Change – 1st Reading: March 21
2. Ordinance Change – 2nd Reading: April 4
3. Ordinance Change – Final Reading and Resolution for Sanitary Sewer Cross-Connection Policy: April 18
4. In-home inspections for North Cedar Heights Area: April/May

Cedar Falls, Iowa Sanitary Sewer Cross Connection Policy

The following elements shall constitute the Cedar Falls, Iowa Sanitary Sewer Cross Connection Policy:

1. Purpose

This policy is in conjunction with a change to Sec. 7-196 of the City of Cedar Falls Code of Ordinances, which prohibits all stormwater and groundwater connections to sanitary sewers. This ordinance previously exempted buildings constructed before 1969 from this requirement. Federal and state laws prohibit stormwater and groundwater connections to sanitary sewer from all buildings regardless of the year. The ordinance change will no longer exempt pre-1969 buildings. This will allow the city to comply with federal and state laws and problem areas where the sanitary sewer is receiving too much clear water that does not need to be treated. This policy is meant to establish how the City will proceed going forward correcting illegal connections to the sanitary sewer.

2. Applicability

The provisions of this policy shall be applied only within the boundaries of adjacent street reconstruction.

3. Definitions

For purposes of this policy, an “illegal connection” is any foundation drain, footing drain, footing tile, sump pump, or similar system or device intended to collect and convey groundwater along, adjacent to, beside or under the foundation or basement of any building in a manner that connects with the sanitary sewer system, or any downspout, drain, or similar system or device intended to collect and convey surface waters in a manner that connects with the sanitary sewer system.

For the purposes of this policy, “clear water” will collectively mean ground water and rain water.

4. Disconnection

Prior to reconstruction of any city streets, if the city identifies that buildings/houses along that street are contributing groundwater or rainwater to the sanitary sewer, the City will conduct mandatory inspections to determine all illegal connections. This may also be accompanied by smoke testing to identify damaged sanitary sewer service connections or mains that might be allowing clear water into the sanitary sewer. Homeowners or business owners will be notified of any illegal connections found on their property. As part of the street reconstruction, if not currently existing, the City will attempt where possible to install a storm sewer or subdrain. The homeowner or business owner will be required to disconnect illegal connections and reconnect them to the storm sewer or subdrain within 60 days of the completion date of the adjacent street reconstruction. A City inspection will be required to verify the illegal connections have been corrected properly.

5. Financial Assistance for Disconnection:

Sanitary sewer system customers completing the disconnection of an illegal connection from the sanitary sewer system as provided in this policy may be entitled to a financial assistance payment from the city for actual costs incurred for said disconnection, which may also include the cost to install backflow prevention devices. The maximum amount to be reimbursed is \$4,000 per property... This financial assistance will only be available for corrected connections on houses/buildings that had a building permit issued before February 10, 1969. Financial assistance shall be subject to compliance with the provisions of this article for an approved disconnection procedure. Such payment shall be subject to the submittal of invoices, vouchers and documentation clearly establishing the costs incurred. To qualify for the financial assistance, the approved disconnection procedure must be completed within 60 days of the completion date of the adjacent road reconstruction. The sanitary sewer system customer must submit a written application for assistance in complete form to the city no later than thirty (30) days after a city inspector approves the correction. The payment of financial assistance by the City under this section shall not be deemed to give rise to any liability on the part of the city for work performed by a contractor or any other person.

6. Approved Disconnection Procedure:

The approved disconnection procedure for a direct or indirect illegal connection to the sanitary sewer system for purposes of the financial assistance under this article must fully comply with the following and must conform to current standards adopted as administrative policy by the city building official:

- I. **Approved System:** An approved system for the termination of illegal connections must be used. The approved system shall consist of a sump pump and sump pit with a discharge to an approved yard location or to a storm sewer or sub drain.
 - II. **Licensed Contractor:** All work for an approved disconnection procedure shall be performed by a master plumbing contractor duly licensed by the city.
 - III. **Plugging of Existing Connection:** Any direct or indirect illegal connection to the sanitary sewer system serving the building shall be permanently plugged meeting current building code
 - IV. **Floor Drain Connection Prohibited:** The new system shall be installed in such a manner that direct or indirect flow from the foundation drain to a floor drain shall not be possible.
 - V. **Post Construction Inspection:** The installation of the sump pump and associated facilities work shall be inspected by the city. The sanitary sewer customer shall be responsible to schedule the post construction inspection.
- 7. Surcharge Fee for Illegal Connections:** Any sanitary sewer customer who is found to have an illegal connection during mandatory city inspections shall be subject to a monthly user fee of \$100 if they do not have the illegal connection corrected within 60 days after the completion

of the adjacent road reconstruction. This fee will be for the extraneous flow contributed to the sanitary sewer system. The payment will be in addition to all other sanitary sewer user charges and shall continue to accrue from month to month until such time as the city determines through inspection either that the direct or indirect illegal connection no longer exists. Extraneous flow fees remaining unpaid may be assessed against the property for collection in the same manner as a property tax, as provided in state law.

- 8. Rebuttal Presumption:** In areas where the City determines the need for mandatory inspections prior to adjacent road reconstruction, it will be assumed that every building has an illegal connection until proven otherwise through inspection. In the event the owner of a house/building refuses the inspection, it will be assumed this building has an illegal connection and the owner will be charged the noncompliance fee as previously described in this policy. The fee will be charged monthly until it is proven through inspection that there is no illegal connection.