

# ***MS4 PERMIT INFORMATION***

## **PERMITTEE**

City of Carter Lake  
950 Locust St.  
Carter Lake, Iowa 51510

## **IDENTITY AND LOCATION OF FACILITY:**

City of Carter Lake MS4  
Carter Lake, Iowa 51510

## **IOWA NPDES PERMIT NUMBER:**

78-12-0-00

**DATE OF ISSUANCE:** July 1, 2021

**DATE OF EXPIRATION:** June 30, 2026

**RECEIVING WATERCOURSES:** Missouri River, Carter Lake

**EPA NUMBER:** IA0078891



The following is the Municipal Separate Storm Sewer System Annual Report for the City of Carter Lake, Iowa, prepared in accordance with Part III of the Municipal Separate Storm Water System (MS4) Permit Number 78-12-0-00. This report summarizes storm water compliance activities within the boundaries of the City of Carter Lake.

The City of Carter Lake is committed to the prevention of storm water pollution and has implemented a management program that includes the following areas:

- ❖ Public Education and Outreach on Storm Water Impacts
- ❖ Public Involvement and Participation
- ❖ Illicit Discharge Detection and Elimination
- ❖ Construction Site Storm Water Runoff Control
- ❖ Post-Construction Storm Water Management
- ❖ Pollution Prevention/Good Housekeeping

This permit covers all areas within the boundaries of the City of Carter Lake totaling approximately 2 square miles which is drained by the city’s Municipal Separate Storm Sewer System (MS4) and any other areas added while this permit is in effect.

This permit authorizes all existing or new storm water point source discharges to waters of the State from the MS4. This permit also authorizes the discharge of storm water co-mingled with flows contributed by process wastewater, non-process wastewater, or storm water associated with industrial activity provided such discharges are authorized under separate NPDES permits, as required by law. This permit does not authorize discharges to the MS4.

***REPORTING REQUIREMENTS:***

Section A. Public Education and Outreach on Storm Water Impacts.

- Articles in City Newspaper. In the past, public education articles have been published in the newsletter, unfortunately that has not happened in FY2023. The City will make sure these are published going forward.
- Telephone Hotline Number. A telephone number for reporting storm water related problems is published on the City of Carter Lake website. And included in the monthly newsletter. ***The numbers are (712)347-6320 or (712)847-0535.***
- Storm Drain Labeling. A program was developed to label all storm sewer intakes. All storm sewer intakes have been identified and mapped and the drains have been labeled. Carter Lake Maintenance periodically will check the inlet markings for legibility. “No Dumping” placards have been installed on all drains and they have been marked for ongoing compliance.



- Stormwater Web page. Since 2006 the City of Carter Lake has maintained a webpage for storm water related education, this site was revised in 2022. The current webpage is:

<https://cityofcarterlake.com/departments/city-hall-department/storm-water-management/>

- In 2015 the City of Carter Lake became a member of the Iowa Storm Water Education Program (ISWEP). That membership has been renewed for FY 2023. Membership provides storm water education, certification programs, storm water training and educational materials. Informational brochures and related storm water materials can be found at City Hall front entry way. Copies of said printed materials are included in **Appendix A**.



### Section B. Public Involvement and Participation.

- The current Stormwater Advisory Committee will be re-established in FY2024. Once the new committee is re-established, there will be training, and two (2) Storm Water Committee meetings will be completed by the conclusion of FY 2024. Public Notice requirements will be followed.

### Section C. Illicit Discharge Detection and Elimination

- Illicit Discharge Prohibition Ordinance. The current code book includes Chapter 110 – Storm Water Utility and Chapter 136 – Storm Water Control. Ordinance # 633 was adopted, amending Chapter 136. Effective July 1, 2014, Storm Water Service Charges were repealed. There were no changes, additions or deletions to the storm water ordinances in FY 2023. **Appendix B**
- The City’s illicit discharge ordinance was adopted in July 2007. And examination of the ordinance by Joe Griffin in 2017 indicates that its contents meet the requirements in the MS4 permit.
- The City has inspected all the outfalls for dry weather flows and the presence of non-storm water discharges and continues to periodically check them. Dry weather flows are visually checked for odor, color, clarity, etc.
- No illicit connections have been detected.
- The City has a map of its public storm sewer system including all outfalls and piping.
- The city has had no new storm sewer lines in several years, so no lines have been televised.
- Street sweeping is handled by the City Maintenance Department and disposed of in Nebraska.
- The City reports all swimming pool discharges are directed to the sanitary sewer system.
- The City’s road salt is stored under cover.

- Documentation of Storm Water station inspections. **Appendix C**

#### Section D. Construction Site Storm Water Runoff Control

- A Construction Site Storm Water Runoff Control ordinance was passed and approved by the City Council on May 21, 2007. This ordinance was amended July 15, 2013, with Ordinance #633. A copy of Ordinance #633 is included in this report in **Appendix B**
- Construction Site Review and Inspection Program. All construction plans are reviewed for compliance. An inspection checklist is used for all construction site inspection activities.

#### Section E. Post-Construction Storm Water Management

- A Post-Construction Runoff Control ordinance was passed and approved by the City Council on May 21, 2007. This ordinance was amended on July 15, 2013, with Ordinance #633. A copy of this ordinance can be found in **Appendix B**
- The City's post-construction ordinance states that all developments of any area of land shall provide engineering documents and calculations that detail the proposed means for accommodating post construction runoff. It further states that all detention facilities must provide detention of the initial 2 inches of rainfall onto impervious areas and that the storage volume shall be adequate to limit the post-construction rate of runoff from 5-year, 10-year and 100-year storm water events to no greater than the rate from the pre-construction rates.
- The City's contracted building official reviews the post-con plans
- Post-con structures are on both public and private property. The City inspects private structures only when complaints are received. If corrective action needs to be implemented, the City notifies the responsible party which is then given a stipulated amount of time to correct the deficiencies.
- Watershed Management Plan – was developed in 2008 and adopted in 2009. It is available on the City website in the link shown previously in this report.

#### Section F. Pollution Prevention/Good Housekeeping

- Operation and Maintenance of MS4. A program for inspection, maintaining and cleaning all components of the MS4 including street sweeping and storm sewer, manhole and lift station inspections and maintenance was established and maintained. Documentation of the maintenance programs for FY2023 can be found in **Appendix C**.
- Pesticide and Fertilizer Management Program. A pesticide and fertilizer management program will be reviewed and updated by the City of Carter Lake.

- The employees of Carter Lake Maintenance Department will take part in online training over the winter months of 2023-24 to become educated on Storm Water matters and concerns.
1. The status of implementing the components of the stormwater permit.
    - The City of Carter Lake has completed most of the requirements as stated in Part II of the NPDES permit for the fiscal year ending September 30, 2023.
  2. Summary of data, including monitoring data that is generated within the reporting period including narrative description of storm water quality improvements. (only required where an illicit discharge is suspected.)
    - No known illicit discharges have been witnessed or discovered.
  3. Estimate of previous fiscal year's expenditures for implementation of the requirements of this permit and the budget for the current fiscal year. \$5,000 budgeted for improvements and maintenance.
  4. A summary describing the number and nature of inspections, enforcement actions, illicit discharges discovered, ordinances adopted, public education programs conducted, components of the MS4 cleaned, stream restoration activities, meetings held, and any other actions taken by the permittee required by this permit during the reporting period.
    - Weekly inspections of manholes, and storm sewers. NO illicit discharges have been noted. In late 2020 the City purchased a used street sweeper from the City of Council Bluffs for \$13,000 due to the previous machine was beyond repair.

No meetings of the Storm Water Committee members were held in FYE 9-30-2023.

MS4 cleaning and maintenance performed. No illicit discharges were detected or reported by residents or staff.

The City of Carter Lake was not subject to any storm water enforcement actions during the FYE 9-30-2023 reporting period.

Currently, the Prairie Flower Casino expansion is under construction and storm water retention holding cells are built under the parking lot. The City is working to assist with completing the final stages of the plans for moving the storm water away from Avenue H.

## ***APPENDIX: A***

Brochures/Educational Material Available to the Public

October 1, 2022, through September 30, 2023

Soil Quality Restoration

Bioretention Cells

Stormwater Wetlands

Permeable Pavers

Rain Gardens

Homeowners Guide: Winder Salt Use

The Scoop on Dog Poop

Everyone Lives on waterfront property

### **City webpage for stormwater**

**<https://cityofcarterlake.com/departments/city-hall-department/storm-water-management/>**

## STORM WATER MANAGEMENT

### What is Storm Water?

Storm water is water from rain or melting snow. It flows from rooftops, over paved streets, sidewalks and parking lots, across bare soil, and through lawns and storm drains. As it flows, runoff collects and transports soil, pet waste, salt, pesticides, fertilizer, oil and grease, litter and other pollutants. This water drains directly into our lake. Polluted storm water runoff can have many adverse effects on plants, fish, animals, and people.

The public plays an active role in helping keep storm water clean. The best way to protect our water sources through storm water management is to limit what enters storm sewers and waterways. Anything that enters a storm sewer system is discharged untreated into the lake we use for swimming, fishing, and boating. The primary method to control storm water quality is through the use of best management practices (BMP).

### QUICK LINKS

[Iowa DNR Storm Water Information](#)

[Iowa Storm Water Information](#)

[Watershed Management Plan](#)

### The Best Management Practices the City of Carter Lake has in place currently:

- Carter Lake Club Rain Gardens
- P Street Garden French Drain
- French Drains located on Ave. Q between 13th and 14th Street
- City Hall Complex Rain Garden
- Carter Lake Public Library Rain Garden
- Bio-Swale located at 1500 Lindwood Drive

### How to Help Prevent Storm Water Runoff Pollution:

- Use fertilizers sparingly and sweep up driveways, sidewalks, and gutters.
- Seed bare spots in your yard
- Compost your yard waste
- Direct downspouts away from paved surfaces; consider a rain garden to capture runoff
- Take your car to the carwash instead of washing it in the driveway.
- Check your car for leaks and recycle your motor oil
- Pick up after your pet
- Never dump anything down storm drains or into the lake
- Residents are encouraged to submit complaints on storm water issues. Call 712-347-6320 or 712-847-0535.

## Make a Positive Impact

Things you can do to make a positive impact.

What is storm water? Storm water is rainwater and snowmelt that drains into storm drains found at street corners or the low points on the sides of city streets. Unlike the water we use inside our homes, storm water receives NO treatment before it enters a body of water like a lake, creek, or river. Why should I care what goes down the storm drain? Everyone should be concerned with what goes down their storm drain because it ends up in our lake, where residents swim, boat, and fish. Pollution of storm water can and does result in the death of fish and impacts the quality and the depth of our lake. What is a watershed? A watershed is an area of land which drains to the same place, such as a river, lake, or stream. Water that is not absorbed by the land after rainfall or a snow event runs along the surface of the land and this water is known as storm water runoff.

- Simple Lawn Care Procedures Help prevent storm water pollution with simple lawn care steps. Try to keep grass clippings and leaves out of the streets and storm drains. Start with raking and bagging up excess grass clippings and leaves. Do not over fertilize your lawn and avoid fertilizing or mowing your lawn before a forecasted rain to prevent chemicals from running off into the storm drains.
- Pick up Trash and Recycle Improve our environment by picking up any trash you find and recycling everything you can. Garbage is a common pollutant found in our lake which can easily be prevented. Remember to throw away your own trash and do not litter!
- Build a Rain Barrel and experience numerous benefits from saving rain water. Rain barrels are a system that collects and stores rainwater from your roof that would otherwise be lost to runoff and diverted to storm drains and waterways. They reduce the amount of runoff we have and the number of pollutants that enter our waterways. Rain barrels can be used as a source of water for lawn and gardening activities, in return lowering your monthly water bill.

## Storm Drains

Everyone should be concerned with what goes down their storm drain because it ends up in our lake, where residents swim, boat, and fish. Pollution of storm water can and does result in the death of fish and impacts the quality and the depth of our lake.

### Picking up dog poop may be unpleasant but try drinking it!!!

Pet waste washes into our storm drains and pollutes our lakes. Please pick up after your pet at home and in the parks. The City provides pet waste stations in all our parks, and we encourage you to use them. Protect water quality by learning more and doing more at [www.iowastormwater.org](http://www.iowastormwater.org)



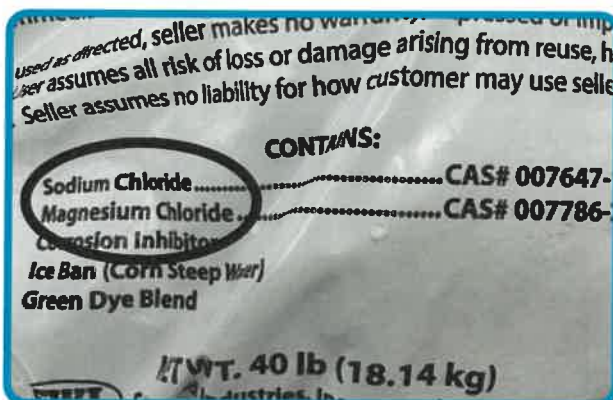
### Storm Water Complaint Form

- [Form](#)
- [Managing Storm Water In Iowa Communities – Implementing New Requirements](#)

# Homeowners Guide: Winter Salt Use



**Street to Stream, No Treatment in Between**  
Many use salt to deice driveways, sidewalks and other surfaces for safety purposes. What you may not know is that the salt eventually washes off those surfaces into storm drains in your neighborhood that feed directly into local waterways without filtration. Deicers reduce the freezing point of water that converts snow and ice into a liquid. Most deicers contain chlorides that are harmful to the environment.



## The Concern with Chlorides

Salts contain pollutants called chlorides. Once chlorides get into the soil and water they don't go away. They harm aquatic life, vegetation, soils, concrete and cause rust on vehicles. The most commonly used salt is sodium chloride, magnesium and calcium chlorides are used too. Monitoring conducted in Iowa and neighboring states has revealed elevated chloride levels in streams. Iowa's waterways are freshwater not saltwater.



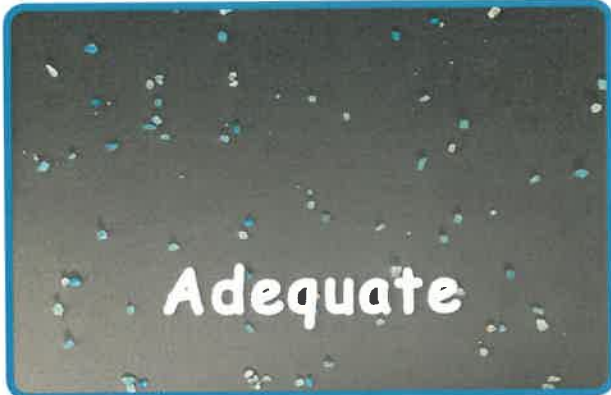
## What You Can Do

- ✓ Shovel, plow, or snow blow first
- ✓ Only use what you need in critical areas, more is not always better
- ✓ Sweep off any dry excess product and place it back in the container
- ✓ Use a hand spreader to more evenly spread the salt, avoid using cup or handfuls of salt
- ✓ Know that the most commonly used salt, sodium chloride, is not effective at temperatures below 15°F
- ✓ Use sand for traction during freezing rain/ice events

# Homeowners Guide: Winter Salt Use Continued



## Know How Much to Use



According to Wisconsin's SaltWise Program, a 12 ounce coffee mug full of salt is enough to treat a 20-foot driveway or 10 sidewalk squares.

## Try Anti-Icing Ahead of the Snow Storm Using Salt Brine

Anti-icing is adding salt brine to pavement surfaces before a snow storm. It breaks the bonds between snow and ice and the pavement surface. A salt brine can be made by adding 13 lb of salt in 5 gallons of water to make the recommended 23.3% salt brine solution ([https://www.cti.uconn.edu/cti/Sustainable\\_Winter\\_Operations\\_Resources.asp](https://www.cti.uconn.edu/cti/Sustainable_Winter_Operations_Resources.asp)). Mix the brine until all of the salt is dissolved.

It is recommended by University of Connecticut that a masonry sprayer be used to apply the liquid several hours before a storm. They recommend to start by applying about 0.25–0.5 gallons to a 10' x 50' area. Application rates should be adjusted based on experience. Spray in a row pattern with several inches of space between rows of spray. Don't over apply and cause slippery conditions. It is not recommended before freezing rain events.



## Other Deicers

There are alternative products that contain acetates, formates and organic products derived from beets and corn. These deicers don't contain chlorides. They don't persist in the environment and biodegrade. However, they can potentially decrease oxygen concentrations if they reach waterbodies. Some of the impacts may be reduced if the stormwater runoff is held in a basin or filtered through a stormwater practice. They generally are less corrosive and have less impact on vegetation.

## Additional Resources

<https://www.wisaltwise.com/Partner-Resources>  
[https://www.cti.uconn.edu/cti/Sustainable\\_Winter\\_Operations\\_Resources.asp](https://www.cti.uconn.edu/cti/Sustainable_Winter_Operations_Resources.asp)  
<https://www.pca.state.mn.us/sites/default/files/p-tr1-11.pdf>  
<https://www.iwla.org/water/stream-monitoring/salt-watch>

# STORMWATER WETLANDS

## Stormwater Quality and Quantity Management



### WHAT ARE STORMWATER WETLANDS?

A stormwater wetland is a man made management practice that provides a natural way to treat and remove pollutants from stormwater runoff before it enters a stream, river, or lake. As stormwater is captured in the wetland, pollutant removal is achieved through various mechanisms. Vegetation aids in this process helping to slow, settle and uptake nutrients through biochemical reactions.

### WHY INSTALL STORMWATER WETLANDS?

Urbanized landscapes generate large quantities of stormwater runoff during rain storms. As stormwater flows off buildings and homes, into streets, down storm drains, and into local water bodies, it picks up pollutants that negatively affect water quality. Stormwater wetlands provide an opportunity to manage the quantity and quality of stormwater runoff from a large area of urban development. Without the use of stormwater wetlands or other stormwater management practices, polluted water would flow directly into water bodies.



## STORMWATER WETLAND COMPONENTS

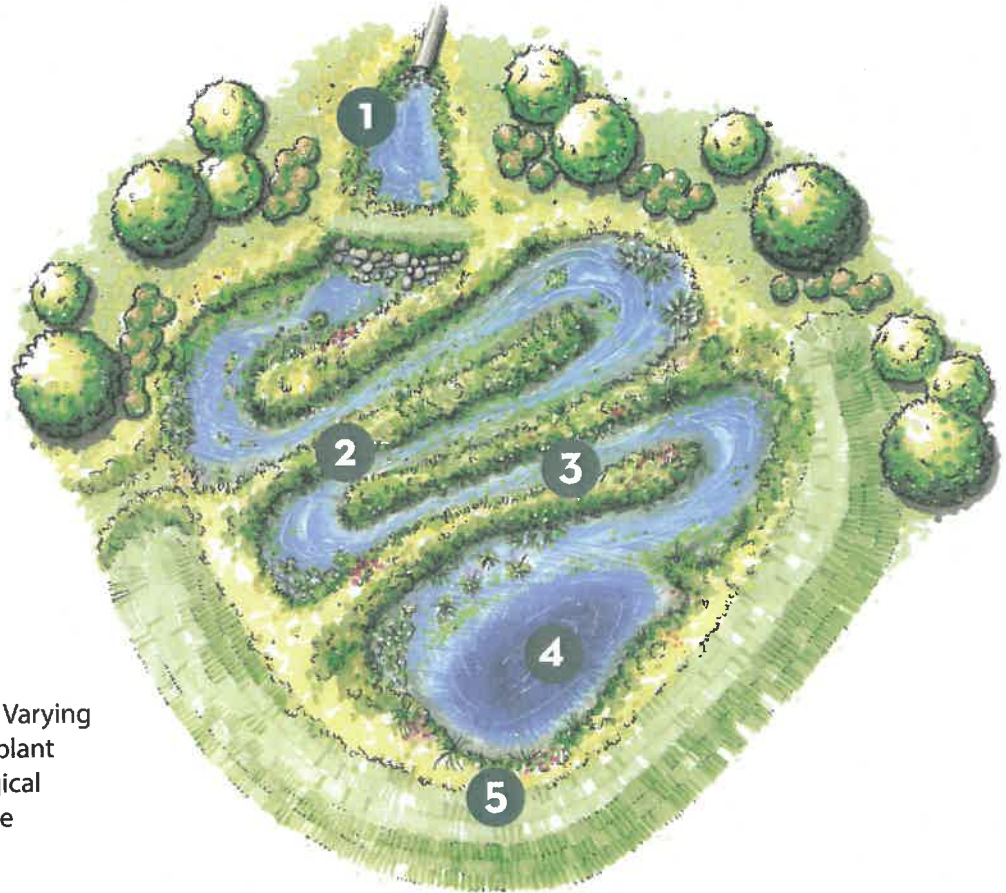
- 1 Forebay:** Eroded soil is captured from incoming runoff before entering the wetland. Over time, buildup of eroded soils can be removed from the forebay allowing for easier maintenance. This prevents damage to the wetland and plants and increases overall longevity of the wetland.

- 2 Microtopography:** A series of small berms and depressions designed to increase the distance water has to travel. This "stormwater maze" forces water to weave slowly through the wetland promoting pollutant removal.

- 3 Areas of Shallow Water:** Varying depths of water promote plant growth allowing for biological uptake which helps remove pollutants.

- 4 Pools:** Deep pools reduce the suspension of sediment, reduce thermal pollution, and increase habitat.

- 5 Outlet:** A primary function of a stormwater wetland is to help slow down stormwater. Aligning with this goal, the outlet of the wetland is intentionally designed to release water slowly to improve downstream environmental conditions.



# STORMWATER WETLAND SITE SELECTION

Stormwater wetlands are able to treat flow at the end of a drainage swale or stormwater pipe. Many urban areas have limited space to install retrofit practices. Stormwater wetlands often can be located in parks or open space areas at the outlet of stormwater pipes or drainage swales. Unlike other options, they can be used to treat runoff from large drainage areas with a single end of pipe practice. That creates efficiencies by treating a larger area with only one stormwater practice to inspect and maintain.

A public area allows the community to control the installation, maintenance and use of the wetland and buffer area. They are perfect for greenways and park space and provide additional community benefits such as recreation, habitat and education.

## STORMWATER PIPE AND SURFACE DRAINAGE MAP



These maps are a good source of reference to determine potential wetland sites.

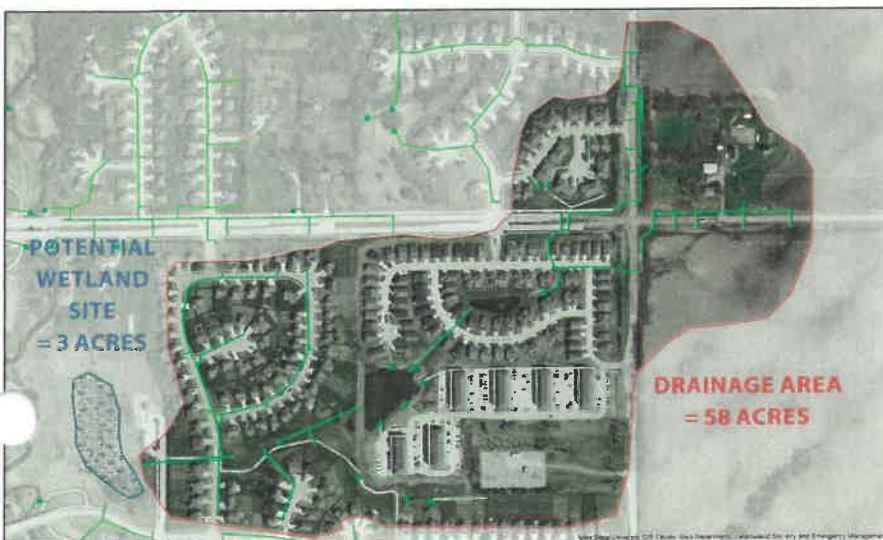
- Look for pipe outlets and drainage swales that flow to open space or public areas near a stream.
- Check the sites to be sure there is enough elevation change to bring the stormdrain water to the surface and into the wetland and to a wetland outlet.
- Avoid existing wetlands and sensitive areas.

● UNSUITABLE WETLAND SITE  
• too close to stream  
• not enough space

▲ POTENTIAL WETLAND SITE WITH PIPE REDIRECT  
• utilize nearby area  
• move pipe outlet

★ SUITABLE WETLAND SITE  
• adequate space  
• elevation considerations

→ STORMDRAIN PIPES AND OUTLETS



## DRAINAGE AREA AND WETLAND SIZE GUIDANCE

- 10 acres minimum drainage area
- 3-5% of drainage area needed to treat water quality volume
- 6-12% of drainage area needed to manage large flood events

Once a potential wetland site is identified:

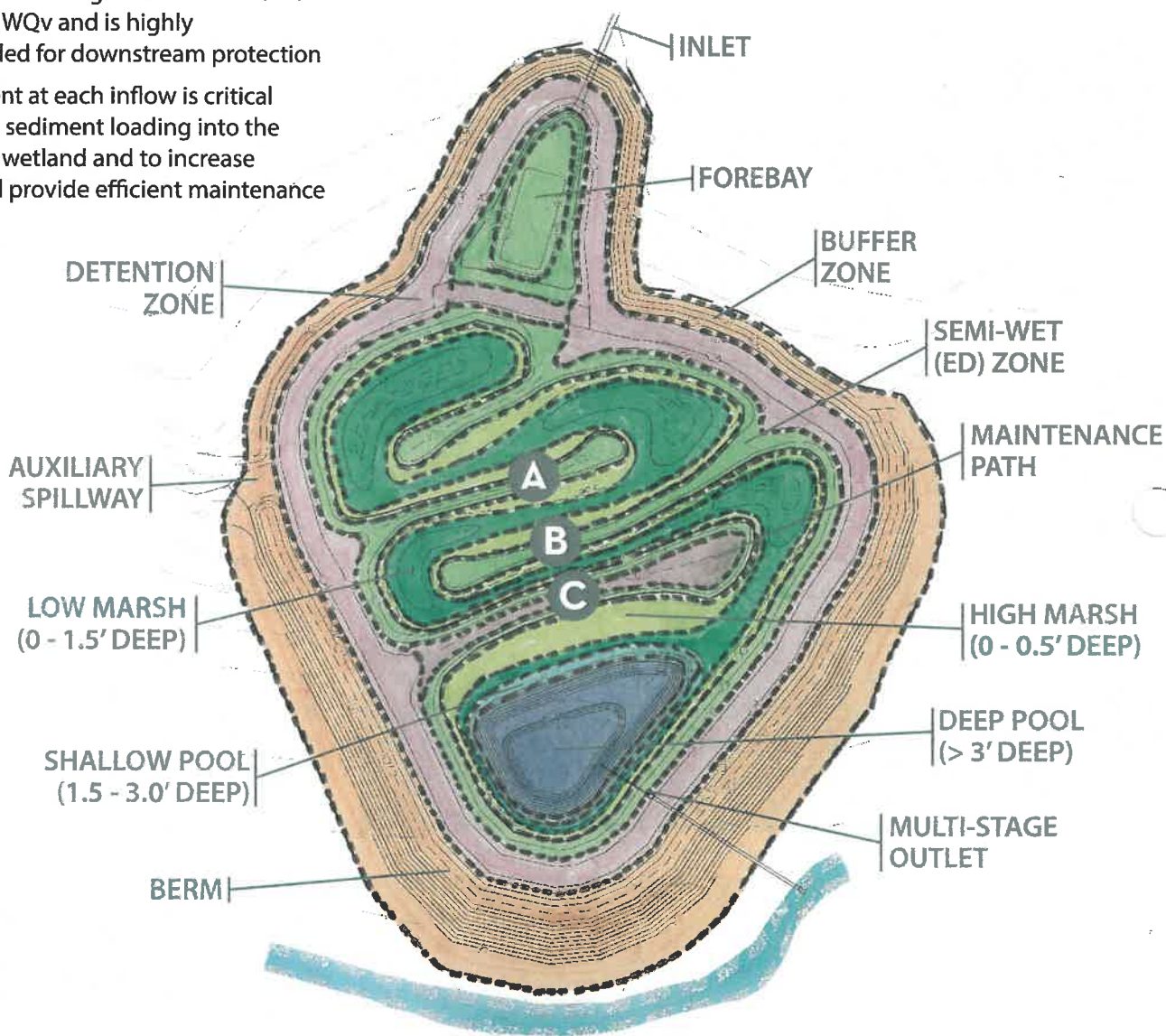
- Determine the drainage area to check if wetland site is adequate.
- An engineer can further study the site feasibility.

# DESIGN ELEMENTS

Stormwater wetlands can be designed to address both stormwater quality and quantity using the unified sizing criteria. Refer to the Iowa Stormwater Management Manual for complete design guidelines and calculation worksheets.

## DESIGN HIGHLIGHTS

- Be able to pass or manage all the storm events safely through the wetland
- Minimum treatment is for water quality volume storage in the permanent pool (1.25" 24 hour rain)
- Channel protection volume (1 year storm) can usually be managed within the same footprint as WQv and is highly recommended for downstream protection
- Pre-treatment at each inflow is critical to minimize sediment loading into the stormwater wetland and to increase lifespan and provide efficient maintenance



## WETLANDS IN ACTION



### Removes Pollutants through Settling

Eroded soil is a major pollutant prevalent in Iowa waters. When stormwater is slowed down in the stormwater wetland, eroded soil settles out and improves water clarity.



### Slows Down Stormwater

Instead of rapidly flowing directly into a water resource, the stormwater from a contributing water course now slowly flows through the wetland providing temporary water storage and other benefits.



### Removes Pollutants through Biological Uptake

Plants present in wetlands have special chemical and biological functions that can help remove pollutants through biological uptake. These biological processes remove nutrients such as phosphorus and nitrates, and common pollutants in Iowa waterways.



### Supports Wildlife and Habitat

Wetlands support a wide variety of plant and animal life. Typical wetland species have sturdy stems, leaves, and flowers that provide a great habitat for birds, animals, and invertebrates.

## FEATURED STORMWATER WETLANDS

Ankeny is a leader in utilizing wetlands across their city to manage and treat stormwater runoff. Several wetlands were installed in the Prairie Trail Development as part of a stormwater treatment train. The wetlands slow down the runoff and remove pollutants before moving to the next stormwater structure. A wetland constructed adjacent to Fourmile Creek and north of 36th Street was built to address sediment and nutrients in the runoff from 55 acres which would have flowed untreated directly into the creek. These wetlands also provide habitat for a variety of wildlife species as well as educational opportunities for the public.



Prairie Trail Development

# STORMWATER WETLANDS OF IOWA



**1** Spencer - Partnership with Walmart

**2** Webster City - Riverside Park

**3** Ankeny - 36th St. and Fourmile Creek

**4** Cedar Falls - University of Northern Iowa

**5** Des Moines - Northeast Corner of Easter Lake

**6** Storm Lake - Abner Bell Wetland



# PERMEABLE PAVERS

## Transportation and Stormwater Infrastructure



Business district in West Union is permeable from storefront to storefront.



### WHAT ARE PERMEABLE PAVERS?

Permeable pavers are a stormwater management practice used in place of traditional concrete or asphalt to decrease stormwater runoff. Unlike traditional surfaces, permeable pavers allow water to infiltrate into a layer of rock. Water then moves into the soil or to a subsurface drain.

### WHY INSTALL PERMEABLE PAVERS?

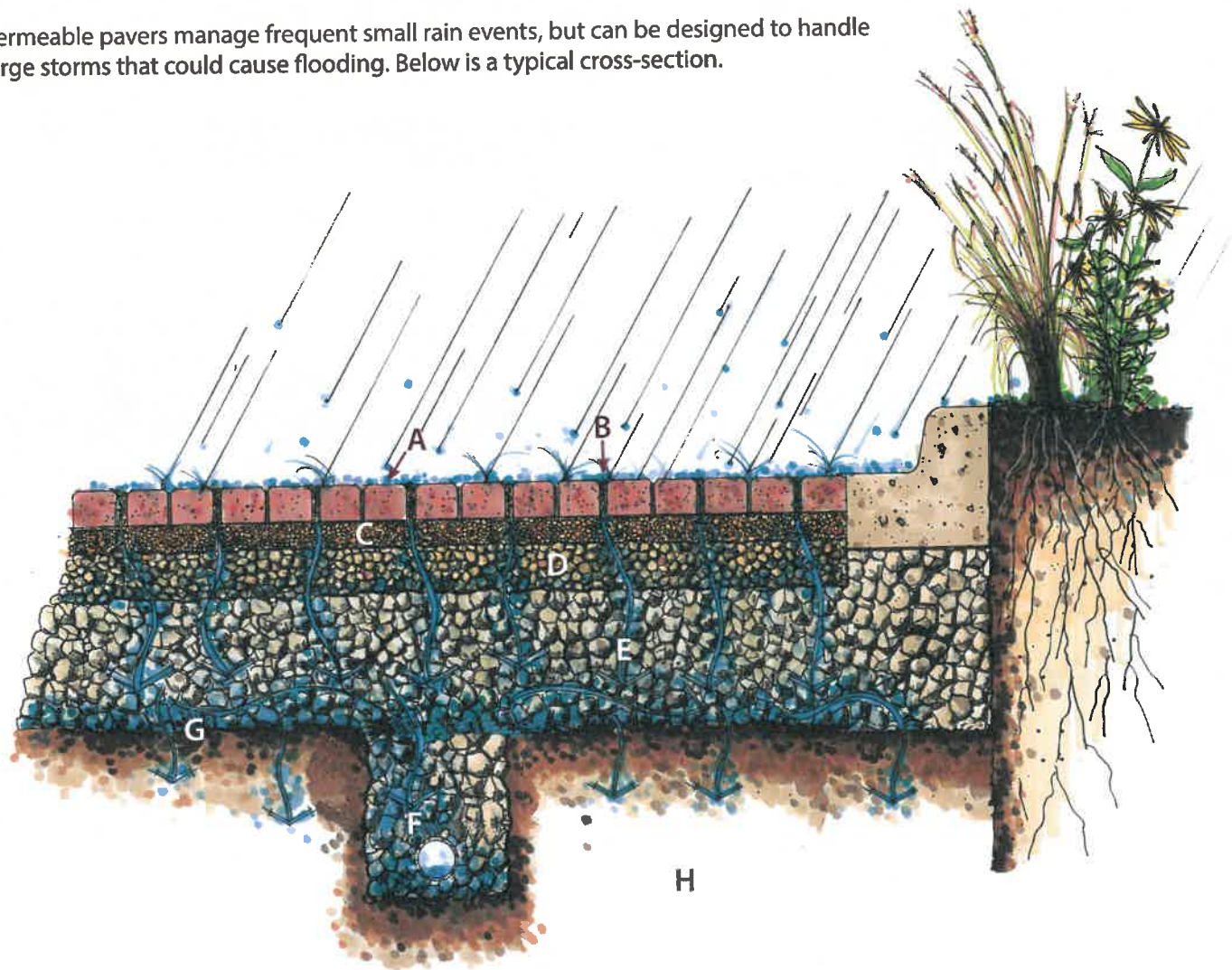
Permeable pavers are installed to protect water quality and reduce the volume of stormwater runoff. The process allows the water to percolate slowly through the rock layer, filtering out many pollutants. This process also slows the water down, stabilizing stream flows and reducing flood potential.

### WHERE TO INSTALL?

With careful planning and design, permeable pavers can be installed where traditional pavement is found. Areas such as driveways, roads, alleys, and parking lots are all suitable locations for pavers.

# PERMEABLE PAVER COMPONENTS

Permeable pavers manage frequent small rain events, but can be designed to handle large storms that could cause flooding. Below is a typical cross-section.



- A. Pavers: solid concrete pavers that fit together with slight gaps
- B. Granular Fill: gaps in pavers usually filled with a small granite chip to allow water to pass through
- C. Setting Bed Aggregate: 2" layer of clean crushed 3/8" stone (ASTM No. 8)
- D. Filter Aggregate: 4" layer of 3/4" to 1" clean crushed stone (ASTM No. 57)
- E. Storage Aggregate: 12" layer of 1.5" to 3" clean stone (ASTM No. 2) (depth varies, depending on storage volume)
- F. Subdrain: Perforated subdrain tile ensures the system never stays saturated
- G. Fabric: high flow geotextile fabric
- H. Existing Soils: soils under the rock layer

## PERMEABLE PAVER INSTALLATION



**Step 1** Removal of concrete and excavation



**Step 2** Installation of perforated subdrain tile



**Step 3** Leveling and compacting aggregate



**Step 4** Laying pavers

## PERMEABLE PAVER MAINTENANCE

- » Develop a maintenance plan and inspect pavement routinely.
- » Ensure pavers infiltrate during rain events (no ponding or runoff).
- » Pavers should be cleaned with a vacuum truck on a scheduled basis to avoid plugging.
- » Sand should not be used on pavers because it plugs pore spaces.
- » Remove built up dirt/leaves/grass/other organic material.
- » Stabilize surrounding soil immediately to prevent sediment from moving onto pavers.
- » Avoid staging of landscaping materials (mulch or soil) on pavers.

# PERMEABLE PAVERS OF IOWA



1



4



2



5



3



6

1 Davenport - Residential Street

2 Storm Lake - Parking Stalls

3 Charles City - Residential Intersection

4 Dubuque - Alleyway

5 Grinnell - Public Library Walkway

6 Clinton - Business District Retrofit



# RAIN GARDENS

## Green Infrastructure For Stormwater Management



### WHAT ARE RAIN GARDENS?

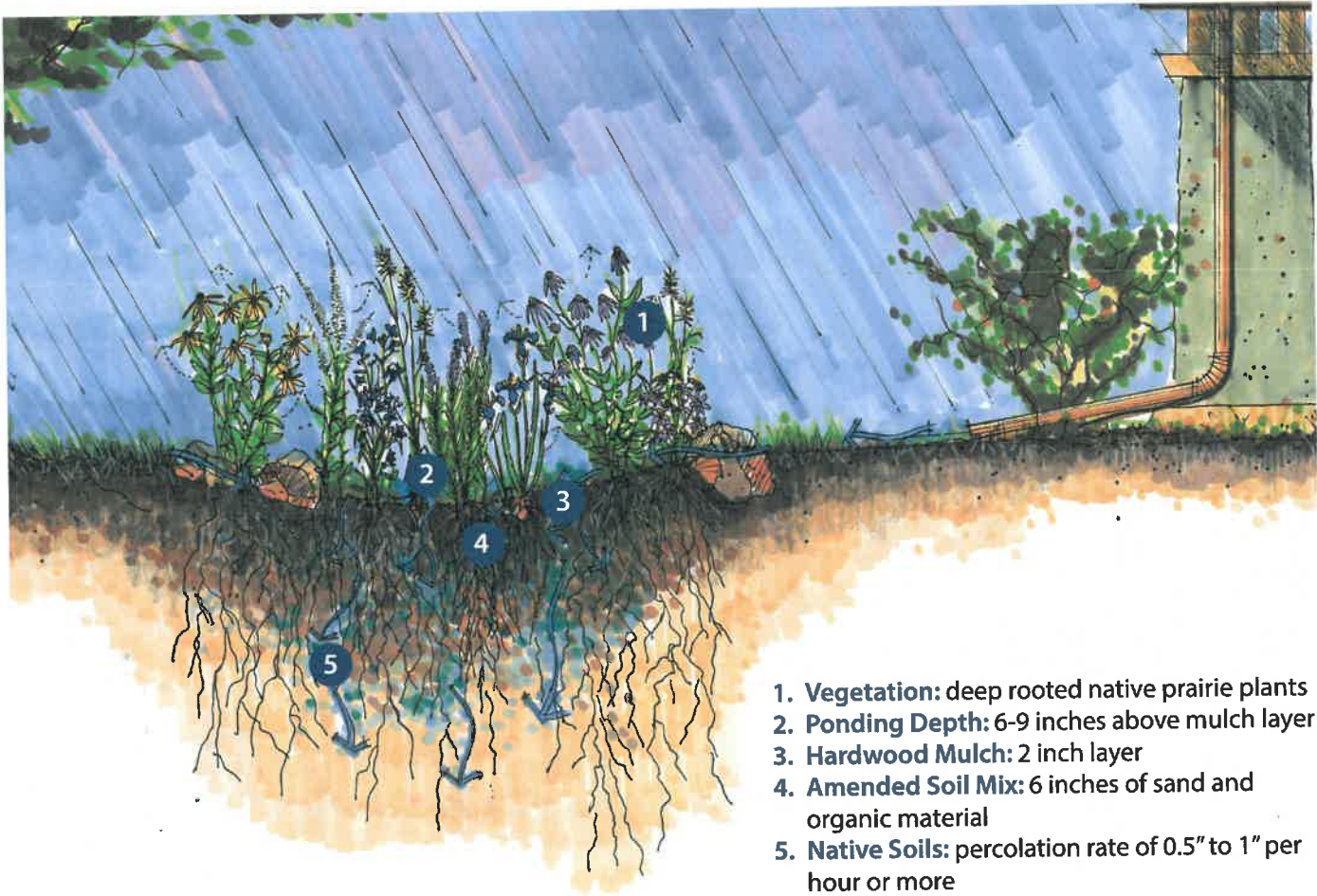
A rain garden is a landscaped depression that captures rainwater runoff from roofs, driveways, streets, or parking lots. Runoff captured in a rain garden is temporarily ponded before infiltrating and percolating down through the natural soils. These soils must have adequate percolation rates that allow water to drain in 12 to 24 hours. This allows time for plants to use the water and for the pollutants to be filtered out.

### WHY INSTALL RAIN GARDENS?

Installing a rain garden helps restore a landscape's ability to manage water more sustainably. Historically, the prairies and savannas of Iowa held and infiltrated most rainfall, and surface runoff was rare. Rainfall was absorbed and moved down through the soil to become groundwater flow. Cool, clean groundwater fed and maintained rivers, streams, wetlands and lakes.

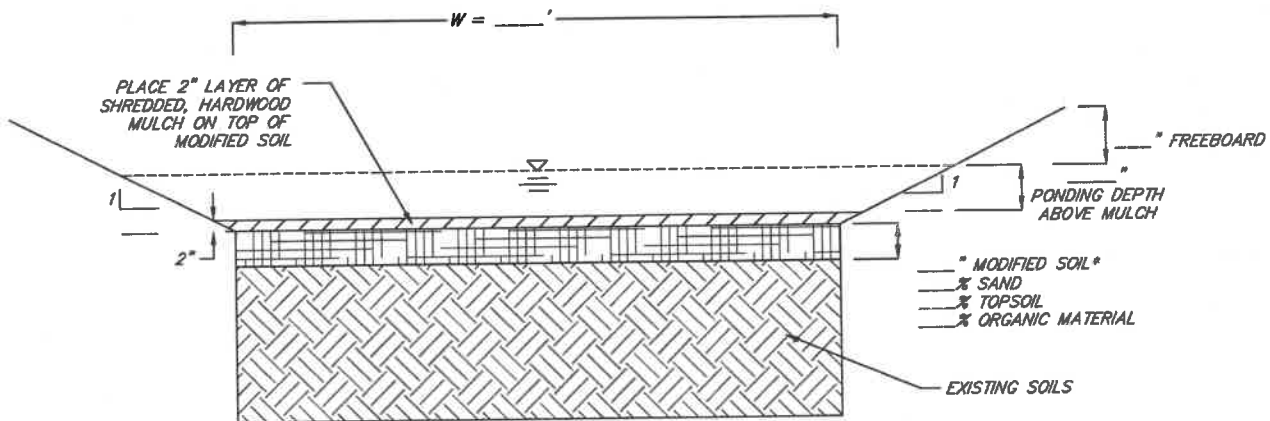
Today, our impervious and compacted urban surfaces shed dirty runoff with almost every rain. This dirty runoff goes to receiving streams, which causes water quality problems and contributes to flooding. Rain gardens help reduce runoff and protect water quality.

# RAIN GARDEN COMPONENTS



1. **Vegetation:** deep rooted native prairie plants
2. **Ponding Depth:** 6-9 inches above mulch layer
3. **Hardwood Mulch:** 2 inch layer
4. **Amended Soil Mix:** 6 inches of sand and organic material
5. **Native Soils:** percolation rate of 0.5" to 1" per hour or more

# RAIN GARDEN CROSS SECTION



RAIN GARDEN AREA  
 L \_\_\_ ' x W \_\_\_ ' = \_\_\_\_\_ SF

**\*SOILS NOTE**  
 - MODIFIED SOIL LAYER WILL BE INSTALLED \_\_\_\_\_ (Y/N)  
 - SUITABLE HIGH QUALITY TOPSOIL IS AVAILABLE AND DEPTH OF TOPSOIL IS 12" OR GREATER. THEREFORE MODIFIED SOIL WILL NOT BE INSTALLED. \_\_\_\_\_ (Y/N)

# RAIN GARDEN INSTALLATION



**Step 1** Layout the rain garden



**Step 2** Excavate existing soil



**Step 3** Fill with amended soil



**Step 4** Plant and mulch

## RAIN GARDEN DESIGN CONSIDERATIONS

- » Must be more than 10 feet from buildings
- » Avoid utilities by marking location prior to install
- » Floor of the rain garden must be level
- » Conduct percolation tests prior to install
- » Determine size by impervious area draining into the garden and percolation rate
- » Pondered water should infiltrate with 12-24 hours
- » Slopes leading into the rain garden should be 3:1
- » Use the Iowa Rain Garden Manual to ensure the rain garden is designed and installed correctly



Know the direction water flows on your property. Rain gardens should be located in an area that has the ability to intercept runoff.

# RAIN GARDENS OF IOWA



1



4



2



5



3



6

1 Iowa City - Fire Station

2 Coralville - Fire Station

3 Des Moines - Easter Lake Neighborhood

4 Okoboji - High School

5 Coralville - Forever Green

6 Clear Lake - Residence



[rainscapingiowa.org](http://rainscapingiowa.org)



[iowastormwater.org](http://iowastormwater.org)



United States Department of Agriculture  
Natural Resources Conservation Service  
[ia.nrcs.usda.gov](http://ia.nrcs.usda.gov)



[polk-swcd.org](http://polk-swcd.org)



[iowaagriculture.gov](http://iowaagriculture.gov)



[iowasrf.com](http://iowasrf.com)

# BIORETENTION CELLS

## Green Infrastructure For Stormwater Management



### WHAT ARE BIORETENTION CELLS?

Bioretention cells (or biocells) are one of the most widely used green infrastructure practices for managing stormwater. They are landscaped depressions that capture stormwater runoff from impervious surfaces such as parking lots or streets. Above ground, biocells look like a flower garden. Below ground, biocells have an engineered subgrade design to filter pollutants out of stormwater runoff.

### WHY INSTALL BIORETENTION CELLS?

Bioretention cells are installed to protect water quality. In most communities, dirty stormwater goes into storm sewers and discharges into local water bodies without treatment. Sediment, heavy metals, oils and greases, and bacteria are transported directly to urban streams. Biocells capture and

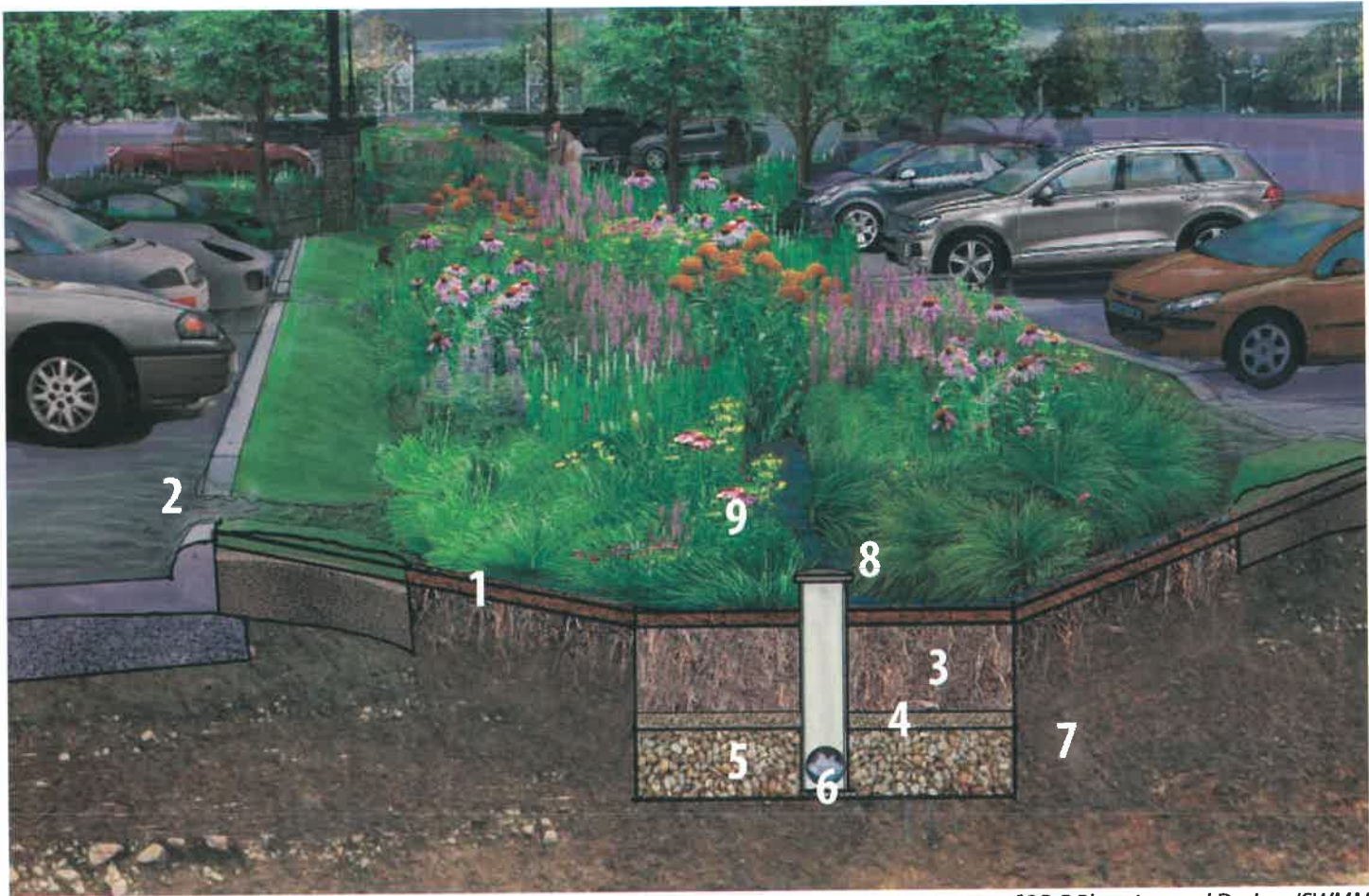
breakdown these pollutants and slowly release cool, clean water.

Bioretention cells can also help reduce the flashiness of flows in urban streams because they capture, treat, and slowly release the majority of runoff events. This helps to reduce stream corridor erosion, which threatens adjacent property and infrastructure. It is also a major source of sediment in our streams.

### WHERE ARE BIOCELLS INSTALLED?

Biocells are installed where water can't infiltrate and percolate downward through the existing soils at an adequate rate. Large scale developments typically disturb and compact soils, which reduce their ability to infiltrate and percolate water. The engineered subgrade of biocells ensures that captured water readily moves down through a sandy soil media to filter out pollutants.

# BIORETENTION CELL COMPONENTS



*Illustration Courtesy of RDG Planning and Design, ISWMM*

- 1** Hardwood Mulch: 2"-3" mulch
- 2** Curb cut or other inlet: Allows water into the bioretention cell
- 3** Modified Soil: 18"-30" modified soil (sand, topsoil, compost)
- 4** Stone Choker Layer: 2" thick washed 3/8" chip
- 5** Stone Base Layer: 8"-12" thick washed 1" rock
- 6** Subdrain: Perforated subdrain tile ensures the system never stays saturated.
- 7** Existing Soils: Typically altered and compacted soils with poor percolation rates.
- 8** Overflow Standpipe: Non-perforated pipe to ensure designed ponding depth of 6"-9". Flows exceeding designed ponding depth exit through the standpipe.
- 9** Plants: Plantings provide a pleasing appearance, protect the soil surface, and take up water and nutrients.

# BIORETENTION CELL DESIGN CONSIDERATIONS

## WATER QUALITY VOLUME CALCULATION

$$WQv = P \times Rv \times DA \times 43,560 \text{ SF/ac} \times 1\text{ft}/12 \text{ in}$$

## REQUIRED SURFACE AREA CALCULATION

$$Af = WQv \times df / \{K \times (hf + df) \text{ tf}\}$$

## SOIL MEDIA

Research continues to refine the best blend for bioretention media to capture pollutants. Current recommendations include the blending of the three components within allowable material ranges:

75%-90% Sand

0 - 25% Topsoil

0 - 10% Compost

## Additional Considerations:

- Biocells are typically designed to manage the WQv (1.25" of rain) but can be designed to manage larger rainfall events.
- Biocells must be installed downslope at least 10 ft away from buildings with basements (30-40 ft preferred).
- There must be 2 feet of separation between the bottom of the cell and normal high water table.
- Provide pretreatment of runoff to minimize sediment loading within the biocell.
- Native plants are recommended for their deep roots that make them drought resistant. The deep roots of native plants also help maintain high organic matter levels and high porosity.
- Modified soil percolates at 1" per hour, so water shouldn't pond more than 6-9 hours before moving into the soil media.
- Do not use bioretention on brownfield sites or adjacent to hotspots or other sensitive areas unless special precautions are used to overcome risk of groundwater contamination.



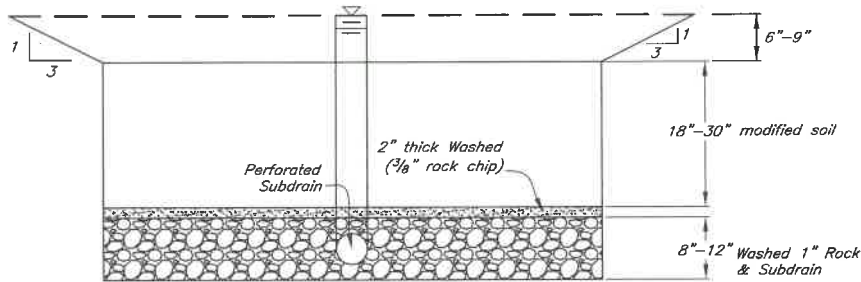
Pre-treatment swale for Ankeny biocell

## Biocell Design Highlights:

- Follow the guidelines in the Iowa Stormwater Management Manual (ISWMM) Chapter 2E-4.
- Delineate drainage areas into two acres of impervious surface per biocell.
- Identify the subdrain outlet location.
- Calculate the WQv in cubic feet.
- Determine the ponding depth (6"-9").
- Calculate the required surface area.
- Determine subdrain and overflow pipe size.
- Determine the elevation of the top of the overflow pipe.
- Calculate the quantities of materials (rock, chip, sand, compost, topsoil, mulch, tile, etc.).
- Develop a planting plan.

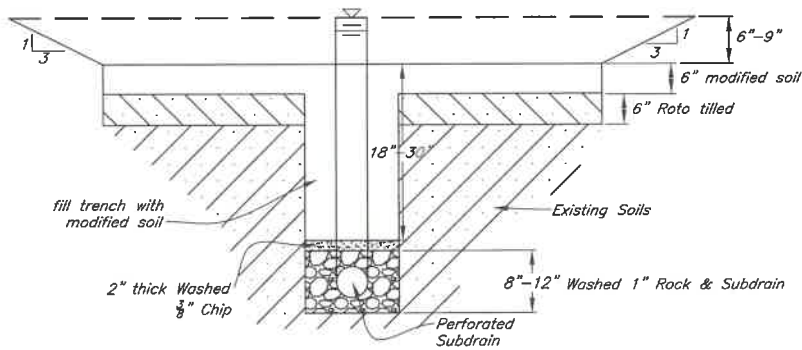
# BIORETENTION PRACTICES

Bioretention practices in Iowa include bioretention cells, enhanced rain gardens, rain gardens and bioswales. Biocells, enhanced rain gardens and rain gardens are constructed with a level bottom. They capture and infiltrate runoff, but they do not have a conveyance function. Large runoff events either bypass biocells or exit via the outlet standpipe. Bioswales have a conveyance function, and are constructed with a sloping bottom. Bioswales capture and infiltrate small rains and convey large rains.



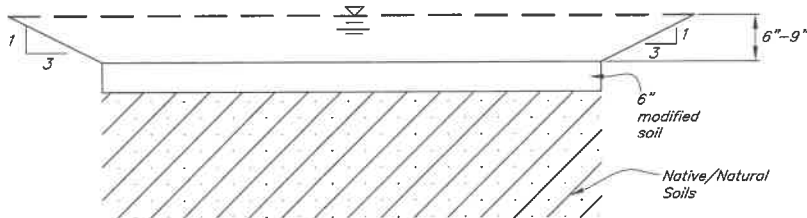
## BIORETENTION CELLS

- recommended when percolation rates are less than 0.5 inches/hour
- feature a fully engineered subgrade.
- rely on specified soil media to filter stormwater
- design guidelines are in Chapter 2E-4 of the Iowa Stormwater Management Manual



## ENHANCED RAIN GARDENS

- recommended when percolation rates are at or near 0.5 inches/hour
- have a partially engineered subgrade
- rely on specified soil media and native soils to filter stormwater
- design guidelines are in the Iowa Rain Garden Design and Installation Manual



## RAIN GARDENS

- recommended when percolation rates are 1 inch/hour or greater
- rely on native soils to filter stormwater
- 6 inches of amended soil may be specified
- design guidelines are in the Iowa Rain Garden Design and Installation Manual

## BIOSWALES

- Recommended where there is concentrated flow of water, positive grade, and larger drainage areas
- Use below ground cross section of an enhanced rain garden
- Relies on rock or earth berms to hold and infiltrate small rains
- Provides alternative to storm sewers
- Design guidelines are in Chapter 2I-3 of the Iowa Stormwater Management Manual



Dickinson County Bioswale

## BIORETENTION CELL INSTALLATION



**STEP 1** Excavation and Installation of the Subdrain



**STEP 2** Installation of Rock and Overflow Pipe



**STEP 3** Placing the Soil Media



**STEP 4** Planting and Mulching

*(Notice the overflow standpipe is set 9 inches above the bioretention cell surface to pond water.)*

## BIORETENTION CELL MAINTENANCE

- » Develop a maintenance plan.
- » Manage vegetation to maintain a pleasing appearance.
- » Perform weed control as needed.
- » If native vegetation is used, consider burning annually if local code allows.
- » Inspect annually for scour erosion at point of entry.
- » Inspect annually for sediment accumulation. Biocells trap sediment that will need to be removed.
- » Remove accumulated trash and debris.
- » Mulch can float and smother small plants or plug outlets. Reposition mulch to maintain a 2" uniform layer.
- » Replace mulch and dead plants until the plant community is well established.

# BIORETENTION CELLS OF IOWA



**1** Cedar Falls - University of Northern Iowa Campus

**4** Ames - Public Works

**2** Des Moines - The Cathedral Church of St. Paul

**5** Spirit Lake - Overlooking East Okoboji Lake

**3** West Union - Business District

**6** Iowa City - Fire Station



[rainscapingiowa.org](http://rainscapingiowa.org)



[iowastormwater.org](http://iowastormwater.org)



[ia.nrcs.usda.gov](http://ia.nrcs.usda.gov)



[polk-swcd.org](http://polk-swcd.org)



[iowaagriculture.gov](http://iowaagriculture.gov)



[iowasrf.com](http://iowasrf.com)

# SOIL QUALITY RESTORATION

## Improving Soil Health



**WITH COMPOST**

**WITHOUT COMPOST**

### WHAT IS SOIL QUALITY RESTORATION?

Soil quality restoration (SQR) is the process of improving soil health on new or existing lawns. The process uses tillage, aeration, and compost to increase infiltration and organic matter content. Soil quality restoration leads to healthier, more functional soils and to landscapes that can absorb more rain and shed less runoff.



### WHY RESTORE SOIL QUALITY?

Grading activities associated with urban development create poor quality soils that are compacted and low in organic matter. Yards with poor soil quality require more time, money, water, and fertilizer to stay green and maintain a lush appearance. Problems such as standing water, inability to mow after rainfall, patchy grass, and poor grass establishment are associated with poor soil quality. These soil conditions also contribute to water quality issues by shedding runoff during rainfall

events; and by transporting pesticides, sediments, and fertilizers to nearby water bodies. Soil quality restoration reduces compaction, increases pore space in the soil, and improves organic matter content. This improves the health and functionality of soils. Organic matter gives the landscape the ability to act like a sponge and absorb rain. Soils rich in organic matter also support entire ecosystems of beneficial organisms (microbes, worms, insects) that contribute to healthy lawns.

# HOW TO IMPROVE YOUR LAWN

The soil quality restoration method chosen depends if the ground is bare or if the lawn has already been established.

## Establishing New Lawns

Restoring your yard to an 8 inch layer of healthy, de-compacted soils requires a combination of tillage, topsoil, and/or compost. Soil quality restoration is best when performed as part of the final landscaping with new construction.

- » Contact Iowa One Call to have utilities located.
- » Deep tillage (4-8 inches) breaks up compacted soils.
- » Adding 1-3 inches of compost will increase organic matter.
- » Seed with turf grass or lay sod.

## Improving Existing Lawns

Create healthier soils by adding organic matter to an existing lawn.

- » Contact Iowa One Call to have utilities located.
- » Locate and mark in-ground sprinklers and invisible fences.
- » Mow lawn to a height of 2 inches.
- » Aerate the lawn with a plug or deep tine aerator.
- » Apply 1/2 to 3/4 inch of compost to increase the organic matter content of the lawn.
- » Apply grass seed over patchy turf, if needed, with a species that matches current yard grass.



*This new lawn will benefit from restoration to create healthy soils.*



*Poor soil often results in lawns with this patchy appearance.*

## USE QUALITY COMPOST

Quality compost for soil quality restoration is made from yard waste such as grass clippings and leaves. It is best to purchase compost that was made at a reputable facility because they maximize important variables including temperature, moisture, oxygen, and microbial activity to yield high quality compost.

The proper temperature is essential to destroy weed seeds and pathogenic organisms. The compost is also tested to ensure it is high quality. Good compost contains many beneficial microorganisms. It should be loose and granular, dark colored, and moist. It should also have an earthy smell and be free from debris, rocks, sticks, and trash.

## COMPOST APPLICATION

Compost can be spread on bare ground or over existing lawns in a number of ways, depending on the size of the project.



*Walk behind spreader*



*Pneumatic blower truck*



*Shovel and rake by hand*

# SOIL QUALITY RESTORATION: IMPROVING AN EXISTING LAWN



*Poor quality residential lawn prior to soil quality restoration.*



*Aerating lawn before spreading compost.*



*Compost spread over an existing lawn.*



*Residential lawn one year after soil quality restoration.*

## ESTABLISHMENT MAINTENANCE

While soil quality restoration reduces future yard work, some maintenance is required during the first 7-10 days while grass establishes. Below is a list of possible maintenance requirements:

- » Identify areas of thicker compost and pull grass blades through compost layer with a rake.
- » Do not let grass be completely covered for more than three days.
- » Overseed areas without turfgrass and do not disturb those areas.
- » Water as needed if seeded, depending upon rainfall.
- » Loosen areas of crusted or compacted compost with a rake.
- » Temporarily control erosion in steep areas.
- » Clean compost off impervious surfaces (driveways and sidewalks).

# REASONS TO PERFORM SOIL QUALITY RESTORATION



Lack of water infiltration



Patchy or unhealthy grass growth



Compacted soil or subsoil

## DO IT YOURSELF

Below are some helpful tips if you choose to complete a soil quality restoration yourself:

- » Locate sprinklers, invisible fences, and call Iowa One Call to mark utilities before aerating the lawn.
- » Borrow or rent equipment needed (aerator) from your local hardware or rental store.
- » Buy yard waste compost in bulk from local composting facility or a retailer reselling in smaller quantities.
- » Add 1/2 to 3/4 inch of compost to yard. For better results, repeat in a year or two.
- » Spread compost using a wheelbarrow, shovel, and rake; or rent a walk behind spreader.
- » Ensure compost is evenly spread to prevent thick spots that completely cover grass, killing it.
- » Follow establishment maintenance guidelines on previous page.

## HOW MUCH COMPOST DO YOU NEED?

Square Feet (sf) x Depth (in) x .0031 = Cubic Yards (CY) of compost needed.

For example:

To apply a 1/2 inch on a 5,000 sf yard =  $5,000 \times .50 \text{ in} \times .0031 = 7.75 \text{ CY}$

To determine tons of compost to purchase in bulk, convert compost cubic yards to tons.

\_\_\_\_\_ CY x 1,200 lbs/CY of compost = \_\_\_\_\_ lbs compost needed.

Divide \_\_\_\_\_ lbs of compost by 2,000 = \_\_\_\_\_ tons needed.



Compost stockpile delivered to a residential driveway for application. If rain is in the forecast, spread it quickly or protect pile with tarps to keep compost dry and prevent it from washing into the street and down the storm drain.



[rainscapingiowa.org](http://rainscapingiowa.org)



[iowastormwater.org](http://iowastormwater.org)



Natural Resources Conservation Service  
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[polk-swcd.org](http://polk-swcd.org)



[iowaagriculture.gov](http://iowaagriculture.gov)



[iowasrf.com](http://iowasrf.com)

***APPENDIX B:***

Ordinance # 633 and 639 regarding storm sewer

ORDINANCE NO. 633

AN ORDINANCE TO AMEND CHAPTER 136, OF THE CODE OF  
ORDINANCES OF THE CITY OF CARTER LAKE

BE IT ORDAINED BY THE CITY COUNCIL OF  
THE CITY OF CARTER LAKE, IOWA

Section 1. That Chapter 136, "Storm Water Control" of the Code of Ordinances of the City of Carter Lake, Iowa, is hereby repealed in its entirety and the following adopted in lieu thereof:

**PURPOSE.** To provide guidance as well as govern the handling and treatment of storm water within the boundaries of the City of Carter Lake, Iowa.

**PERMITS.**

No development or construction project shall be permitted without the submittal and approval of a construction site runoff control plan and a post-development storm water management plan that is adequate to serve, or unless there has been a determination by the Building Inspector and Maintenance Manager that such plans are not necessary.

The City of Carter Lake Building Inspector and Maintenance Manager shall approve both the construction site runoff control plan and a post-development storm water management plan. In addition, the storm water plans shall also be provided to the City of Carter Lake Planning Board as part of the Commercial or Industrial project approval process.

**CONSTRUCTION SITE RUN OFF CONTROL - Soil and Water Pollution Prevention Plan (SWPPP).**

Comply with all current minimum mandatory requirements for SWPPPs promulgated by the Iowa Department of Natural Resources in connection with the issuance of a State NPDES General Permit No.2. Projects less than one (1) acre must consult with Building Inspection Office and comply with City guidelines.

The City of Carter Lake building inspector shall inspect the construction site run off control measures at least every seven (7) days for compliance, adequacy, effectiveness and condition. Deficiencies or failure to maintain the construction control measures may result in a "stop work order" until the deficiency or maintenance issue is resolved to the satisfaction of the inspector.

**POST-DEVELOPMENT RUN OFF CONTROL - Storm Water Management Plan.**

A. All areas within the proposed parcel(s) shall be developed to comply with Statewide Urban Design Standards (SUDAS) and shall manage water quality volume of 1.25 inches by infiltration processes according to the Iowa Stormwater Management Manual.

B. The plan must be designed to prevent the post-development rate of runoff from the subdivision or site planned development from exceeding the predevelopment rate of runoff for a five-year to a 100 year, 24-hour storm as defined by the Iowa Stormwater Management Manual.

C. Adequate overland relief with a proper easement established for storms larger than a 100 year storm as defined by the Iowa Stormwater Management Manual shall be provided.

D. The design is to be completed and signed by a licensed engineer.

#### **WATER QUALITY CRITERIA**

A. Post-development runoff shall be captured and treated by water quality Best Management Practices (BMP), as recognized by the SUDAS and the Iowa Stormwater Management Manual, to prevent or minimize water quality impacts from land development. The applicant shall use the below information to comply with this criterion:

1. Structural and non-structural practices shall be designed to capture and treat the Water Volume (WQv). The WQv shall be computed as specified in the Iowa Stormwater Management Manual.

2. This criterion shall be met using practices from the Stormwater Technology section in the Iowa Stormwater Management Manual. BMPs or combinations of BMPs shall be selected that achieve the highest pollutant load reduction for the pollutants of concern.

B. The design is to be completed and signed by a licensed engineer.

The developer/contractor shall provide an adequate means or method for the control of construction waste. The control measure must ensure that solid building materials, chemicals, concrete truck wash out and sanitary waste are contained and disposed of in an approved manner.

No construction, excavating, clearing, grubbing or other soil disturbing activity requiring a State of Iowa NPDES permit shall be allowed until a copy of the State permit is provided with the application for a City permit and the City approves the application.

If necessary the storm water plan provided to the City of Carter Lake shall incorporate a means to accommodate or redirect existing storm water that may be entering the development or project site from adjacent property(s) or streets. The City of Carter Lake Planning Board, Maintenance Manager and Building Inspector shall approve the accommodation for the storm water from adjacent areas.

The storm water plan for a development or project may not negatively impact an adjacent property or street.

The City of Carter Lake building inspector and/or City Maintenance Supervisor shall inspect the post-development run off control measures annually for compliance, adequacy, effectiveness and condition.

#### **PENALTIES**

Any person violating any of the provisions of this chapter shall be guilty of a civil municipal infraction.

The City of Carter Lake at their discretion may perform maintenance on a storm water detention facility or swale such as to remove standing water, replace grass, mow, perform insect control and remove sediment. Costs of the maintenance will be

billed back to the landowner. A 24-hour notice will be give to the landowner prior to the City performing the required maintenance.

SECTION 2. Repealer. All ordinances or parts of ordinances in conflict with the provisions of the ordinance are hereby repealed.

SECTION 3. Severability Clause. If any of the provisions of this Ordinance are for any reason declared illegal or void, the lawful provisions of this Ordinance which are severable from said unlawful provisions shall remain in full force and effect.

SECTION 4. Effective Date. This Ordinance shall be in full force and effect from and after its final passage and publication.

Attest:

PASSED  
AND July 15, 2013  
APPROVED

Doreen Mowery  
DOREEN MOWERY, City Clerk

Russell D Kramer  
RUSSELL KRAMER, Mayor

The undersigned as City Clerk of Carter Lake, Iowa does hereby certify that on Aug 7, 2013, I posted true and exact copies of the foregoing ordinance in four public places to-wit: City Hall, Carter Lake Senior Center, Peoples National Bank and Owen Memorial Library all within the limits of the City of Carter Lake, Iowa.

Doreen Mowery  
DOREEN MOWERY, City Clerk

FIRST CONSIDERATION: May 20, 2013  
SECOND CONSIDERATION: June 17, 2013  
THIRD CONSIDERATION: July 15, 2013

DEFINITIONS.

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this Article, shall have the meanings hereinafter designated.

Adequate /Adequacy means in compliance with original plan.

Best management practices (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of the MS4 and waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

City means the City of Carter Lake, Iowa.

Construction Site Runoff Control Plan refers to SWPPP.

Discharge means any addition or introduction of any pollutant, storm water, or any other substance whatsoever into the municipal separate storm sewer system (MS4) or into waters of the United States.

Environmental Protection Agency or EPA means the United States Environmental Protection Agency, or any duly authorized official of said agency.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the federal Clean Water Act.

NPDES means the National Pollutant Discharge Elimination System.

NPDES permit means a permit issued by EPA (or by the State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Pollutant means dredged spoil; solid waste; incinerator residue; sewage; garbage; sewage sludge; filter backwash; munitions; chemical wastes; biological materials; toxic materials; radioactive materials; heat; wrecked or discarded equipment; rock; sand; cellar dirt; and industrial, municipal, recreational, and agricultural waste discharged into water or into the municipal separate storm sewer system.

Storm water means any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snow melt.

Storm water discharge associated with industrial activity means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR part 122. For the categories of industries identified in paragraphs (i) through (x) of this definition the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm

water. For the categories of industries identified in paragraph (xi) of this definition, the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraphs (i)-(xi) of this definition) include those facilities designated under the provisions of 40 CFR §122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" :

SUDAS means Statewide Urban Design and Specifications

Development and Construction Project including clearing, grading and excavation activities except: operations that result in the disturbance of less than one acre of total land area which is not part of a larger common plan of development or sale:

SWPPP means storm water pollution prevention plan.

Water in the state means ground-water, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, wetlands, marshes, inlets, canals inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, navigable or non-navigable, and including the bed and banks of all watercourses and bodies of surface water that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

ORDINANCE NO. 639

AN ORDINANCE TO AMEND CHAPTER 110 OF THE CODE  
OF ORDINANCES OF THE CITY OF CARTER LAKE

BE IT ORDAINED BY THE CIYT COUNCIL OF  
THE CITY OF CARTER LAKE, IOWA

SECTION 1. That Chapter 110.4, entitled "Effective Date of Stormwater Service Charges" of the Code of Ordinances of the City of Carter Lake, Iowa, is hereby repealed in its entirety effective June 30, 2014.

SECTION 2. That Chapter 110.7, entitled "Rate Structure and Stormwater Service Charge" of the Code of Ordinances of the City of Carter Lake, Iowa is hereby repealed in its entirety effective June 30, 2014.

SECTION 3. That Chapter 110.13, entitled "Billing and Collection" of the Code of Ordinances of the City of Carter Lake, Iowa, is hereby repealed in its entirety effective June 30, 2014.

SECTION 4. Repealer. All ordinances or parts of ordinances in conflict with the provisions of the ordinance are hereby repealed.

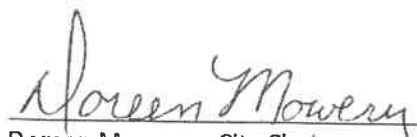
SECTION 5. Severability Clause. If any of the provisions of this Ordinance are for any reason declared illegal or void, the lawful provisions of this Ordinance which are severable from said unlawful provisions shall remain in full force and effect.

SECTION 6. Effective Date. This ordinance shall be in full force and effect on July 1, 2014; after its final passage and publication.

PASSED AND APPROVED June 16, 2014.

  
Gerald Waltrip, Mayor

Attest:

  
Doreen Mowery - City Clerk

FIRST CONSIDERATION: April 21, 2014

SECOND CONSIDERATION: *May 19, 2014*

THIRD CONSIDERATION: *June 16, 2014*

The undersigned as City Clerk of Carter Lake, Iowa does hereby certify that on June 26, 2014, I posted true and exact copies of the foregoing ordinance in four public places to wit: City Hall, Carter Lake Senior Center, Peoples National Bank and Owen Memorial Library all within the limits of the City of Carter Lake, Iowa.

*Doreen Mowery*  
Doreen Mowery – City Clerk

**TITLE V – BUILDING AND PROPERTY REGULATIONS  
MISCELLANEOUS**

**CHAPTER 136**

**STORM WATER REGULATIONS**

**136.01 Purpose**

**136.02 Applicability**

**136.03 Permits**

**136.04 Requirements**

**136.05 Detention Ponds (Surface)**

**136.06 Detention Cells (Subsurface)**

**136.07 Penalties**

**136.01 PURPOSE.** The purpose of this chapter is to provide guidance as well as govern the handling and treatment of storm water within the boundaries of the City.

**136.02 APPLICABILITY.** The provisions of this chapter apply to all new developments or construction projects that disturb any area of land.

**136.03 PERMITS.** No development or construction project shall be permitted without the submittal and approval of a post construction storm water plan and a construction site runoff control plan. The City Building Inspector and Maintenance Manager shall approve both the post construction storm water plan and construction site runoff control plan. In addition, the storm water plan shall also be provided to the City of Carter Lake Planning Board as part of the commercial or industrial project approval process. No construction, excavating, clearing, grubbing or other soil disturbing activity requiring a State of Iowa NPDES permit shall be allowed until a copy of the State permit is provided with the application for a City permit and the City approves the application.

**136.04 REQUIREMENTS.**

1. **Prohibited Discharge.** It is unlawful for the discharge of anything other than storm water or allowable non-storm water pollutants for which a NPDES permit has been granted into a storm water collection system. Floor drains and other potential sources of pollutants shall be considered discharges even if no actual pollutants have been observed entering the storm water system from such a source.

2. **Construction Site Runoff Control.** Any development or project that disturbs any area of land by clearing, grubbing, or excavation shall provide a plan for the control of runoff and sedimentation. The plan shall identify the best management practices (BMPs) to be used and detail their construction and placement. All control measures shall be maintained until any permanent storm water control measures are in place and established and/or operational for the development. The developer/contractor shall provide an adequate means or method for the control of construction waste. The control measure must ensure that solid building materials, chemicals, concrete truck wash out and sanitary waste are contained and disposed of in an approved manner. The City Building Inspector shall inspect the construction site runoff control measures at least every seven (7) days and within two (2) days of a ½-inch or greater rain event for compliance, adequacy, effectiveness and condition. Deficiencies or failure to maintain the construction control measures may result in a

“stop work order” until the deficiency or maintenance issue is resolved to the satisfaction of the inspector.

3. Post Construction Site Runoff Control. All developments of any area of land shall provide the City Planning Board, City Maintenance Manager and City Building Inspector engineering documents and calculations that detail the proposed means for accommodating post construction runoff, as established in the City of Carter Lake Storm Water Drainage Design Standards (January 2001). The design of the site sediment and erosion control plan and pollution prevention plan shall conform to the best management practices in the Environmental Protection Agencies (EPA) Storm Water Management for Construction Activities, EPA Document No. EPA-833-R-92-001 Chapter 3. The plan shall meet the following objectives:

- A. Prevent loss of soil during and after construction by storm water runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse.
- B. Prevent sedimentation of storm sewers, receiving streams or lakes and/or air pollution with dust and particulate matter.
- C. Prevent the discharge of hazardous material into storm water systems.
- D. Prevent petroleum oils and lubricants discharge into storm water systems.
- E. Minimize the impact on the current City storm water systems.
- F. Minimize the area required for surface storm water storage areas.
- G. Maximize the percolation of the storm water into the water table.

All detention facilities must provide detention for an initial 2-inch of rainfall per impervious acre (paving or building roof) of storm water runoff for 24 hours. The storage volume shall be adequate to limit the post construction storm water discharge rate to the pre-construction discharge rate for the 5-, 10-, and 100-year storm water events. If necessary the storm water plan provided to the City of Carter Lake shall incorporate a means to accommodate or redirect existing storm water that may be entering the development or project site from adjacent property or streets. The City of Carter Lake Planning Board, Maintenance Manager, and Building Inspector shall approve the accommodation for the storm water from adjacent areas. The storm water plan for a development or project may not negatively impact an adjacent property or street.

**136.05 DETENTION PONDS (SURFACE).** Reference Appendix A to the ordinance codified in this chapter (Ordinance No. 626) for the City of Carter Lake Storm Water Drainage Design Standards (January 2001) and additional information regarding storage facilities. Any storm water detention pond or drainage swale shall be designed and constructed to provide an easily maintained bottom and side slopes. These areas shall be seeded or sodden with grass. The facility or swale shall be routinely mowed. Subsurface drains or other methods shall be used to dry the bottom of the detention area or swale to prevent ruts when mowing. The subsurface drains shall be designed to encourage infiltration. The percolation rate may be used in computing the capacity of the detention facility. The rate of infiltration shall be determined by the performance of no less than three percolation tests at spaced intervals in the area and at the depth that the in-ground storage facility will be constructed. The information will be provided as part of the documentation submitted with the plan submittal. The design of the storm water retention facilities may use the parking

surfaces for temporary impoundment provided the area is designed for this use. Any surface retention pond or storage facility used for the temporary holding of storm water shall be drained within a 24-hour period following a storm event. Any surface retention pond designed to contain a permanent quantity of water shall be provided with a means to control water-breeding insects either through chemical means, aeration equipment or pumping equipment. All retention ponds should be designed with a minimal slope of 4:12 to facilitate maintenance and access and egress from the holding area. If the detention area design or available area does not meet the recommended minimal slope then fencing or other means of security shall be provided around the entire detention area. A separate drawing sheet shall be provided depicting details of the detention ponds construction, level of water in the pond at the design rain events noted in the City of Carter Lake Storm Water Drainage Design Standards (January 2001). The drawing sheet(s) shall include the design criteria used as the basis of the design and document compliance with this chapter. An Iowa licensed professional engineer shall seal the drawing.

**136.06 DETENTION CELLS (SUBSURFACE).** The use of underground percolation wells or galleries and storage structures is encouraged. The capacity of the underground detention structure shall be the equivalent of an above ground detention structure. The percolation rate may be used in computing the capacity of the detention facility. The rate of infiltration shall be determined by the performance of no less than three percolation tests at spaced intervals in the area and at the depth that the in-ground storage facility will be constructed. The information will be provided as part of the documentation submitted with the plan submittal. A separate drawing sheet shall be provided depicting details of the underground detention cell construction, level of water in the cell at the design rain events noted in the City of Carter Lake Storm Water Drainage Design Standards (January 2001). The drawing sheet(s) shall include the design criteria used as the basis of the design and document compliance with this chapter. An Iowa licensed professional engineer shall seal the drawing.

**136.07 PENALTIES.** Any person violating any of the provisions of this chapter shall be guilty of a civil municipal infraction. The City, at its discretion, may perform maintenance on a storm water detention facility or swale such as to remove standing water, replace grass, mow, insect control, and remove sediment. Costs of the maintenance will be billed back to the landowner. A 24-hour notice will be given to the landowner prior to the City performing the required maintenance.

## ***APPENDIX C:***

Maintenance Documentation

October 1, 2022, through September 30, 2023

Weekly inspections and maintenance of storm sewers, sewers and lift stations

Manhole inspections

Street sweeping for storm water:

## 7th and Steele Generator (STORM)

SER #	148348-0707	
MOD #	SED40FJJ4T2	
ENGINE	5030TF270	JOHN DEERE
BRAND	KATOLIGHT	

DATE	HOURS		DESCRIPTION
	PUMP 1	PUMP 2	
1/14/2022			OK
1/21/2022			OK
2/4/2022			OK
3/23/2022			OK
5/13/2022			OK
6/24/2022			OK
7/1/2022			OK
7/8/2022			OK
7/15/2022			OK
7/28/2022			OK
8/5/2022			OK
8/26/2022			OK
9/16/2022			OK
9/23/2022			OK
9/30/2022			OK
10/7/2022			OK
10/28/2022			Battery
11/11/2022			battery
11/21/2022			battery/leaves
12/9/2022			battery
12/30/2022			battery gen problems
1/6/2023			Broken Parts
1/13/2023			Broken Parts
1/20/2023			Broken Parts
1/27/2023			Broken Parts
2/3/2023			Broken Gen
3/3/2023			Broken Gen
3/17/2023			Broken Gen
3/31/2023			broken
4/14/2023			broken
4/18/2023			bad 20amp fuse & transfer switch
5/19/2023			bad 20amp fuse & transfer switch
6/2/2023			bad 20amp fuse & transfer switch
6/16/2023			bad 20amp fuse & transfer switch
8/11/2023			bad 20amp fuse & transfer switch
9/22/2023			bad 20amp fuse & transfer switch

# Wood Ave Generator (STORM)

SER # 143492-1-0407  
MOD # SED200FRJ4T3 33478  
ENGINE 6068HF485 JOHN DEERE  
BRAND KATOLIGHT

DATE	HOURS		DESCRIPTION
	PUMP 1	PUMP 2	
1/14/2022			DIRTY
1/21/2022			DIRTY
3/3/2022			DIRTY
5/13/2022			DIRTY
6/24/2022			DIRTY
7/1/2022			OK
7/8/2022			OK
7/15/2022			OK
7/28/2022			OK
8/5/2022			needs cleaned
8/26/2022			OK
9/16/2022			DIRTY
9/23/2022			DIRTY
9/30/2022			DIRTY
10/7/2022			Cleaned Ethan 10/04/2022
10/28/2022			OK
11/11/2022			OK
11/21/2022			ok/leaves
12/9/2022			ok/leaves
12/30/2022			OK
1/6/2023			OK
1/13/2023			OK
1/20/2023			OK
1/27/2023			OK
2/3/2023			OK
3/3/2023			OK
3/17/2023			OK
3/31/2023			OK
4/14/2023			OK
5/19/2023			OK
6/2/2023			needs cleaned
6/16/2023			OK
8/11/2023			OK
9/22/2023			OK
10/13/2023			OK

# 9th and Willow (STORM)

SER # 2064228  
MOD # 1711620050  
ENGINE 63543  
BRAND GENERAC 2000 series

DATE	HOURS		DESCRIPTION
	PUMP 1	PUMP 2	
1/14/2022			OK
1/21/2022			OK
2/4/2022			OK
5/13/2022			OK
6/24/2022			keep having to reset pump/ poss bad switch
7/1/2022			OK
7/8/2022			OK
7/15/2022			OK
7/28/2022			OK
8/5/2022			OK
8/26/2022			dirty
9/16/2022			dirty
9/23/2022			dirty
9/30/2022			dirty
10/7/2022			Cleaned Ethan 10/04/2022
10/28/2022			OK
11/11/2022			OK
11/21/2022			ok/leaves
12/9/2022			ok/leaves
12/30/2022			OK
1/6/2023			OK
1/13/2023			OK
1/20/2023			OK
1/27/2023			OK
2/3/2023			OK
3/3/2023			OK
3/17/2023			OK
3/31/2023			OK
4/14/2023			OK
5/19/2023			OK
6/2/2023			cleaned 6/1/23
6/16/2023			OK
8/11/2023			OK
9/22/2023			OK
10/13/2023			OK

## 9th and Willow (STORM)

SER # 2064228  
MOD # 1711620050  
ENGINE 63543  
BRAND GENERAC 2000 series

DATE	HOURS		DESCRIPTION
	PUMP 1	PUMP 2	
1/14/2022			OK
1/21/2022			OK
2/4/2022			OK
3/3/2022			OK
5/13/2022			OK
6/24/2022			OK
7/1/2022			OK
7/8/2022			OK
7/15/2022			OK
7/28/2022			OK
8/5/2022			needs cleaned
8/26/2022	18486	16588	OK
9/16/2022			OK
9/23/2022			dirty
9/30/2022			dirty
10/7/2022			Cleaned Ethan 10/04/2022
10/28/2022	18583	17467	OK
11/11/2022	18610	17665	OK
11/21/2022	18633	17824	OK
12/9/2022	18677	18119	OK
12/30/2022			ok gen fixed
1/6/2023	18769	18526	Dirty
1/13/2023			dirty
1/20/2023	18809	18723	Dirty
1/27/2023	18817	18730	Dirty
2/3/2023	18852	18919	Dirty
3/3/2023	18896	19018	OK
3/17/2023	18911	19033	OK
3/31/2023	18925	19047	OK
4/14/2023	18939	19060	OK
5/19/2023	18976	19084	OK
6/2/2023	18988	19098	ok Getting Dirty
6/16/2023	19001	19112	ok Dirty
8/11/2023	19052	19169	ok Cleaned
9/22/2023	19091	19293	OK
10/13/2023	19112	19301	OK

**SERVICE SHEET STREET SWEEPER****OUT-PS3744****IN-PS3745**

<b>DATE</b>	<b>TECH</b>	<b>DISCRIPTION</b>
7/19/2019	Flip	diagnose no hopper dump, found bad compact control coils, ordered qty.2 from sweeper parts sales, P.O. #23453, replaced coils, 10-15 gallons hrdraulic fluid
2/7/2022	RS	sweep, locust, 9th, maybry park, willow, 11th
6/24/2022	RS	sweep, Parade route
7/5/2022	RS	sweep Parade route
12/13/2022	RS	sweep 9th, 13th, Ave Q
3/16/2023	EC	9th, Q to 13th, 13th st
4/1/2023		Had hydraulic issues with gutter brooms. Ordered new brooms from Michael Todd
4/12/2023	All	Swept with sweeper and Bobcat (9th, Q to 13th, 13th St)
5/16/2023	All	Swept with sweeper and Bobcat (9th, Q to 13th, 13th St)
6/8/2023		Swpet with Sweeper and Bobcat (9th, Q to 13th, 13th St)
7/3/2023		Swept with sweeper and Bobcat (9th, Q to 13th, 13th St)
8/15/2023		Swept with sweeper and Bobcat (9th, Q to 13th, 13th St)
9/28/2023		ran only street sweeper on mains
10/9/2023		ran sweeper on mains

11/10/23

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	7:59		1317	Linwood			EC
2	8:59			Lindwood & Surfwood			EC
3	9:02		1309	Janbrook			EC
4	9:05		1309	Dorene			EC
5	8:05			Dorene & Surfwood			EC
6	8:07			Holiday & Dorene			EC
7	8:07		1329	Holiday			EC
8	8:10		1329	Mayper			EC
10	8:10			Mayper & Dorene			EC
11	8:12		3710	N 17th			EC
12	8:15			Cedar & Neptune			EC
13	8:16			Cedar & Neptune			EC
14	8:17		1504	Cedar			EC
15	8:18			14th & Cedar			EC
16	8:20			13th & Cedar			EC
17	8:21		1314	Ave N			EC
18	8:23			15th & Ave N			EC
19	8:24			17th & Ave N			EC
20	8:26		1516	Hiatt			EC
21	8:27			15th & Hiatt			EC
22	8:28		1314	Silver Lane			EC
23	8:29			15th & Silver Lane			EC
24	8:30		1533	Silver Lane			EC
25	8:33		1532	Ave O			EC
26	8:34			15th & Ave O			EC
27	8:35		1522	Ave O			EC
28	8:37		1331	Walker			EC
29	8:39			15th & Walker			EC
30	8:42		1540	Walker			EC
31	8:44			17th & Walker			EC
32	8:45		1513	Cachelin			EC
33	8:46			15th & Cachelin			EC
34	8:48		1326	Cachelin			EC
35	8:51			14th & Ave P			EC
36	9:06		4337	14th			EC
37	N/A			Shoal Dr & Ave Q			EC
38	9:06			15th & Ave Q			EC
39	9:07			15th & Stella			EC
40	9:08		1515	Stella			EC

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41	9:29		1543	Stella			EC
42	9:30		1543	Murray			EC
43	9:30		1523	Murray			EC
44	9:32			15th & Murray			EC
45	9:33			15th & Ave P			EC
46	9:34		1528	Ave P			EC
47	9:34			In the ball field on Ave P			EC
48	9:35			17th & Q			EC
49	9:35		1802	Ave Q			EC
50	9:39			17th & Waters Edge Court			EC
51	9:40		1070	Waters Edge Court			EC
52	9:41			Cul De Sac in Waters Edge Court			EC
53	9:41			Cul De Sac in Shoal Pointe Dr			EC
54	9:46		1023	Shoal Pointe Dr			EC
55	9:44		1019	Shoal Dr			EC
56	9:48		1015	Shoal Dr			EC
57	9:49		1013	Shoal Dr			EC
58	9:49		1012	Shoal Dr			EC
59	9:51			Cul De Sac in Shoal Dr			EC
60	9:53			CLC 1-16 & Carolina Dr			EC
61	1:07		26	CLC			EC
62	1:08		20	CLC			EC
63	9:53			16-66 CLC			EC
64	1:10		59	CLC			EC
65	1:11		51	CLC			EC
66	9:55			67-98 CLC & Ave Q			EC
67	1:13		95	CLC			EC
68	1:14		90	CLC			EC
69	1:16		121	CLC			EC
70	1:17		127	CLC			EC
71	9:56			99-129 CLC & Ave Q			EC
72	1:19		4325	12th St			EC
73	1:20		4310	12th St			EC
74	1:21		1213	Ave P			EC
75	1:22			11th & Ave P			EC
76	1:24		4317	11th St			EC
77	9:57			130-160 CLC & Ave Q			EC
78	1:26		157	CLC			EC
79	1:27		139	CLC			EC

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80	1128		145	CLC			EC
81	1130		166	CLC			EC
82	959			161-189 CLC & Ave Q			EC
83	1131		4318	10th			EC
84	1132		1003	Ave P			EC
85	1134		903	Ave P			EC
86	1136		195	CLC			EC
87	1138		198	CLC			EC
88	1139			8th & R			EC
89	1144		4418	.8th			EC
90	1246			8th & Ave Q			EC
91	1247		4317	8th			EC
92	107			7th & Ave Q			EC
93	108		4411	7th			EC
94	111			6th & Ave Q			EC
95	112		4412	Nth 6th			EC
96	113			Wavecrest Park			EC
97	116		109	Shoreline			EC
98	119		110	Shoreline			EC
99	121		114	Shoreline			EC
100	123		102	Shoreline			EC
101	124		210	Shoreline			EC
102	125		180	Marina Court			EC
103	128		130	Marina Court			EC
104	130		4320	Marina Court			EC
105	132		4304	N 9th			EC
106	134		1004	N 9th			EC
107	134			Cachelin			EC
108	136		1200	11th & Cachelin			EC
109	140		1202	Cachelin			EC
110	141			Ave O			EC
111	143		1007	11th & Ave O			EC
112	149		640	Ave O			EC
113	152		990	Key Circle			EC
114	153		940	Key Circle			EC
115	154		760	Key Circle			EC
116	155		830	Key Circle			EC
117	158		1005	Key Circle			EC
118	201			Silver Lane			EC
				11th & Silver Lane			EC

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119	203		1202	Silver Lane			EC
120	206		1203	Hiatt			EC
121	207			11th & Hiatt			EC
122	209		1005	Hiatt			EC
123	211			9th & Redick			EC
124	251		802	Redick			EC
125	253		1002	Redick			EC
126	254			11th & Redick			EC
127	256		1206	Redick			EC
128	257		1117	Willow Dr			EC
129	258			11th & Willow Dr			EC
130	259		1001	Willow Dr			EC
131	300			11th & Mayper			EC
132	302		1201	Mayper			EC
133	303		1217	Mayper			EC
134	305		1217	Dorene			EC
135	306		1201	Dorene			EC
136	307			11th & Dorene			EC
137	309			11th & Janbrook			EC
138	310		1117	Janbrook			EC
139			1217	Linwood			EC
140			1201	Linwood			EC
141				11th & Lindwood			EC
142				7th St Ally by 2910 7th			EC
143				Alley behind Senior Center			EC
144				Locust St Across from Golf Course			EC
145				5th & Locust			EC
146				Ally by car wash at 5th & Locust			EC
147				7th St Alley by Driggers			EC
148			554	Ave J Behind house in alley			EC
149				Owen Parkway in planter in Cul de sac			EC
150				Owen Parkway manhole behind building by cul de sac			EC
151							EC
152							
153							
154							
155							
156							
157							

MANHOLE SHORT LIST

DATE

06/25/23

*Kevin Clark*

MANHOLE	TIME	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	850	1317	Lindwood			
2	851		Surfwood & Lindwood			
3	854		Dorene & Surfwood			
4	856		Dorene & Holiday			
5	858		Mayper & Dorene			
6	901	3712	N 17th St			
7	906		Neptune & Cedar			
8	907		N 15th & Ave N			
9	909		N 15th & Hiatt St			
10	911		N 15th & Silver Lane			
11	912		N 15th & Ave O			
12	913		N 15th & Walker St			
13	913		N 15th & Cachelin Dr			
14	915		N 15th & Ave P			
15	916		N 15th & Murray			
16	919		N 15th & Stella			
17	921		N 15th & Ave Q			
18	924	4317	N 11th St			
19	926		N 11th & Ave P			
20	927		N 11th & Cachelin Dr			
21	928		N 11th & Ave O			
22	930		N 11th & Silver Lane			
23	931		N 11th & Hiatt St			
24	934		N 11th & Redick Blvd			
25	935		N 11th & Willow Dr			
26	938		N 11th & Mayper Dr			
27	940		N 11th & Dorene Blvd			
28	941		N 11th & Janbrook Blvd			
29	942		N 11th & Lindwood Dr			
30	944	2910	N 7th St			
31	951	111	Locust St			

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
1		11/3/2023	1317	Linwood			EC
2				Lindwood & Surfwood			EC
3			1309	Janbrook			EC
4			1309	Dorene			EC
5				Dorene & Surfwood			EC
6				Holiday & Dorene			EC
7			1329	Holiday			EC
8			1329	Mayper			EC
10				Mayper & Dorene			EC
11			3710	N 17th			EC
12				Cedar & Neptune			EC
13				Cedar & Neptune			EC
14			1504	Cedar			EC
15				14th & Cedar			EC
16				13th & Cedar			EC
17			1314	Ave N			EC
18				15th & Ave N			EC
19				17th & Ave N			EC
20			1516	Hiatt			EC
21				15th & Hiatt			EC
22			1314	Silver Lane			EC
23				15th & Silver Lane			EC
24			1533	Silver Lane			EC
25			1532	Ave O			EC
26				15th & Ave O			EC
27			1522	Ave O			EC
28			1331	Walker			EC
29				15th & Walker			EC
30			1540	Walker			EC
31				17th & Walker			EC
32			1513	Cachelin			EC
33				15th & Cachelin			EC
34			1326	Cachelin			EC
35				14th & Ave P			EC
36			4337	14th			EC
37	N/A			Shoal Dr & Ave Q			EC
38				15th & Ave Q			EC
39				15th & Stella			EC
40			1515	Stella			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
41			1543	Stella			EC
42			1543	Murray			EC
43			1523	Murray			EC
44				15th & Murray			EC
45				15th & Ave P			EC
46			1528	Ave P			EC
47				In the ball field on Ave P			EC
48				17th & Q			EC
49			1802	Ave Q			EC
50				17th & Waters Edge Court			EC
51			1070	Waters Edge Court			EC
52				Cul De Sac in Waters Edge Court			EC
53				Cul De Sac in Shoal Pointe Dr			EC
54			1023	Shoal Pointe Dr			EC
55			1019	Shoal Dr			EC
56			1015	Shoal Dr			EC
57			1013	Shoal Dr			EC
58			1012	Shoal Dr			EC
59				Cul De Sac in Shoal Dr			EC
60				CLC 1-16 & Carolina Dr			EC
61			26	CLC			EC
62			20	CLC			EC
63				16-66 CLC			EC
64			59	CLC			EC
65			51	CLC			EC
66				67-98 CLC & Ave Q			EC
67			95	CLC			EC
68			90	CLC			EC
69			121	CLC			EC
70			127	CLC			EC
71				99-129 CLC & Ave Q			EC
72			4325	12th St			EC
73			4310	12th St			EC
74			1213	Ave P			EC
75				11th & Ave P			EC
76			4317	11th St			EC
77				130-160 CLC & Ave Q			EC
78			157	CLC			EC
79			139	CLC			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
80			145	CLC			EC
81			166	CLC			EC
82				161-189 CLC & Ave Q			EC
83			4318	10th			EC
84			1003	Ave P			EC
85			903	Ave P			EC
86			195	CLC			EC
87			198	CLC			EC
88				8th & R			EC
89			4418	8th			EC
90				8th & Ave Q			EC
91			4317	8th			EC
92				7th & Ave Q			EC
93			4411	7th			EC
94				6th & Ave Q			EC
95			4412	Nth 6th			EC
96				Wavcrest Park			EC
97			109	Shoreline			EC
98			110	Shoreline			EC
99			114	Shoreline			EC
100			102	Shoreline			EC
101			210	Marina Court			EC
102			180	Marina Court			EC
103			130	Marina Court			EC
104			4320	N 9th			EC
105			4304	N 9th			EC
106			1004	Cachelin			EC
107				11th & Cachelin			EC
108			1200	Cachelin			EC
109			1202	Ave O			EC
110				11th & Ave O			EC
111			1007	Ave O			EC
112			640	Key Circle			EC
113			990	Key Circle			EC
114			940	Key Circle			EC
115			760	Key Circle			EC
116			830	Key Circle			EC
117			1005	Silver Lane			EC
118				11th & Silver Lane			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
119							
120			1202	Silver Lane			EC
121			1203	Hiatt			EC
122				11th & Hiatt			EC
123			1005	Hiatt			EC
124				9th & Redick			EC
125			802	Redick			EC
126			1002	Redick			EC
127				11th & Redick			EC
128			1206	Redick			EC
129			1117	Willow Dr			EC
130				11th & Willow Dr			EC
131			1001	Willow Dr			EC
132				11th & Mayper			EC
133			1201	Mayper			EC
134			1217	Mayper			EC
135			1217	Dorene			EC
136			1201	Dorene			EC
137				11th & Dorene			EC
138				11th & Janbrook			EC
139			1117	Janbrook			EC
140			1217	Linwood			EC
141			1201	Linwood			EC
142				11th & Lindwood			EC
143				7th St Ally by 2910 7th			EC
144				Alley behind Senior Center			EC
145				Locust St Across from Golf Course			EC
146				5th & Locust			EC
147				Ally by car wash at 5th & Locust			EC
148				7th St Alley by Driggers			EC
149			554	Ave J Behind house in alley			EC
150				Owen Parkway in planter in Cul de sac			EC
151				Owen Parkway manhole behind building by cul de sac			EC
152							
153							
154							
155							
156							
157							

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
1	730	10/13/2023	1317	Linwood			EC
2	732	10/13/2023		Lindwood & Surfwood			EC
3	733	10/13/2023	1309	Janbrook			EC
4	735	10/13/2023	1309	Dorene			EC
5	736	10/13/2023		Dorene & Surfwood			EC
6	737	10/13/2023		Holiday & Dorene			EC
7	738	10/13/2023	1329	Holiday			EC
8	740	10/13/2023	1329	Mayper			EC
10	741	10/13/2023		Mayper & Dorene			EC
11	743	10/13/2023	3710	N 17th			EC
12	744	10/13/2023		Cedar & Neptune			EC
13	745	10/13/2023		Cedar & Neptune			EC
14	746	10/13/2023	1504	Cedar			EC
15	747	10/13/2023		14th & Cedar			EC
16	747	10/13/2023		13th & Cedar			EC
17	748	10/13/2023	1314	Ave N			EC
18	749	10/13/2023		15th & Ave N			EC
19	750	10/13/2023		17th & Ave N			EC
20	752	10/13/2023	1516	Hiatt			EC
21	752	10/13/2023		15th & Hiatt			EC
22	754	10/13/2023	1314	Silver Lane			EC
23	756	10/13/2023		15th & Silver Lane			EC
24	757	10/13/2023	1533	Silver Lane			EC
25	758	10/13/2023	1532	Ave O			EC
26	759	10/13/2023		15th & Ave O			EC
27	800	10/13/2023	1522	Ave O			EC
28	801	10/13/2023	1331	Walker			EC
29	802	10/13/2023		15th & Walker			EC
30	803	10/13/2023	1540	Walker			EC
31	805	10/13/2023		17th & Walker			EC
32	807	10/13/2023	1513	Cachelin			EC
33	809	10/13/2023		15th & Cachelin			EC
34	810	10/13/2023	1326	Cachelin			EC
35	811	10/13/2023		14th & Ave P			EC
36	812	10/13/2023	4337	14th			EC
37	N/A	10/13/2023		Shoal Dr & Ave Q			EC
38	814	10/13/2023		15th & Ave Q			EC
39	816	10/13/2023		15th & Stella			EC
40	1031	10/13/2023	1515	Stella			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
41	1032	10/13/2023	1543	Stella			EC
42	1033	10/13/2023	1543	Murray			EC
43	1035	10/13/2023	1523	Murray			EC
44	1036	10/13/2023		15th & Murray			EC
45	1038	10/13/2023		15th & Ave P			EC
46	1039	10/13/2023	1528	Ave P			EC
47	1041	10/13/2023		In the ball field on Ave P			EC
48	1044	10/13/2023		17th & Q			EC
49	1046	10/13/2023	1802	Ave Q			EC
50	1050	10/13/2023		17th & Waters Edge Court			EC
51	1051	10/13/2023	1070	Waters Edge Court			EC
52	1052	10/13/2023		Cul De Sac in Waters Edge Court			EC
53	1054	10/13/2023		Cul De Sac in Shoal Pointe Dr			EC
54	1057	10/13/2023	1023	Shoal Pointe Dr			EC
55	1059	10/13/2023	1019	Shoal Dr			EC
56	1101	10/13/2023	1015	Shoal Dr			EC
57	1102	10/13/2023	1013	Shoal Dr			EC
58	1103	10/13/2023	1012	Shoal Dr			EC
59	1105	10/13/2023		Cul De Sac in Shoal Dr			EC
60	1107	10/13/2023		CLC 1-16 & Carolina Dr			EC
61	1119	10/13/2023	26	CLC			EC
62	1122	10/13/2023	20	CLC			EC
63	1108	10/13/2023		16-66 CLC			EC
64	1123	10/13/2023	59	CLC			EC
65	1125	10/13/2023	51	CLC			EC
66	1109	10/13/2023		67-98 CLC & Ave Q			EC
67	1126	10/13/2023	95	CLC			EC
68	1127	10/13/2023	90	CLC			EC
69	1129	10/13/2023	121	CLC			EC
70	1130	10/13/2023	127	CLC			EC
71	1111	10/13/2023		99-129 CLC & Ave Q			EC
72	1131	10/13/2023	4325	12th St			EC
73	1133	10/13/2023	4310	12th St			EC
74	1134	10/13/2023	1213	Ave P			EC
75	1136	10/13/2023		11th & Ave P			EC
76	1137	10/13/2023	4317	11th St			EC
77	1113	10/13/2023		130-160 CLC & Ave Q			EC
78	1139	10/13/2023	157	CLC			EC
79	1141	10/13/2023	139	CLC			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
80	1143	10/13/2023	145	CLC			EC
81	1144	10/13/2023	166	CLC			EC
82	1115	10/13/2023		161-189 CLC & Ave Q			EC
83	1145	10/13/2023	4318	10th			EC
84	1147	10/13/2023	1003	Ave P			EC
85	1150	10/13/2023	903	Ave P			EC
86	1238	10/13/2023	195	CLC			EC
87	1240	10/13/2023	198	CLC			EC
88	1242	10/13/2023		8th & R			EC
89	1243	10/13/2023	4418	8th			EC
90	1244	10/13/2023		8th & Ave Q			EC
91	1246	10/13/2023	4317	8th			EC
92	1248	10/13/2023		7th & Ave Q			EC
93	1250	10/13/2023	4411	7th			EC
94	1251	10/13/2023		6th & Ave Q			EC
95	1252	10/13/2023	4412	Nth 6th			EC
96	N/A	10/13/2023		Wavcrest Park			EC
97	1255	10/13/2023	109	Shoreline			EC
98	1256	10/13/2023	110	Shoreline			EC
99	1257	10/13/2023	114	Shoreline			EC
100	1259	10/13/2023	102	Shoreline			EC
101	103	10/13/2023	210	Marina Court			EC
102	104	10/13/2023	180	Marina Court			EC
103	105	10/13/2023	130	Marina Court			EC
104	1235	10/13/2023	4320	N 9th			EC
105	1236	10/13/2023	4304	N 9th			EC
106	107	10/13/2023	1004	Cachelin			EC
107	108	10/13/2023		11th & Cachelin			EC
108	109	10/13/2023	1200	Cachelin			EC
109	110	10/13/2023	1202	Ave O			EC
110	111	10/13/2023		11th & Ave O			EC
111	112	10/13/2023	1007	Ave O			EC
112	114	10/13/2023	640	Key Circle			EC
113	115	10/13/2023	990	Key Circle			EC
114	116	10/13/2023	940	Key Circle			EC
115	117	10/13/2023	760	Key Circle			EC
116	118	10/13/2023	830	Key Circle			EC
117	120	10/13/2023	1005	Silver Lane			EC
118	121	10/13/2023		11th & Silver Lane			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
119	123	10/13/2023	1202	Silver Lane			EC
120	124	10/13/2023	1203	Hiatt			EC
121	125	10/13/2023		11th & Hiatt			EC
122	126	10/13/2023	1005	Hiatt			EC
123	127	10/13/2023		9th & Redick			EC
124	128	10/13/2023	802	Redick			EC
125	129	10/13/2023	1002	Redick			EC
126	130	10/13/2023		11th & Redick			EC
127	131	10/13/2023	1206	Redick			EC
128	132	10/13/2023	1117	Willow Dr			EC
129	133	10/13/2023		11th & Willow Dr			EC
130	136	10/13/2023	1001	Willow Dr			EC
131	137	10/13/2023		11th & Mayper			EC
132	139	10/13/2023	1201	Mayper			EC
133	140	10/13/2023	1217	Mayper			EC
134	141	10/13/2023	1217	Dorene			EC
135	142	10/13/2023	1201	Dorene			EC
136	145	10/13/2023		11th & Dorene			EC
137	147	10/13/2023		11th & Janbrook			EC
138	148	10/13/2023	1117	Janbrook			EC
139	150	10/13/2023	1217	Linwood			EC
140	153	10/13/2023	1201	Linwood			EC
141	155	10/13/2023		11th & Lindwood			EC
142	156	10/13/2023		7th St Ally by 2910 7th			EC
143	157	10/13/2023		Alley behind Senior Center			EC
144	158	10/13/2023		Locust St Across from Golf Course			EC
145	201	10/13/2023		5th & Locust			EC
146	202	10/13/2023		Ally by car wash at 5th & Locust			EC
147	203	10/13/2023		7th St Alley by Driggers			EC
148	205	10/13/2023	554	Ave J Behind house in alley			EC
149	207	10/13/2023		Owen Parkway in planter in Cul de sac			EC
150	209	10/13/2023		Owen Parkway manhole behind building by cul de sac			EC
151							
152							
153							
154							
155							
156							
157							

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
1	712	9/22/2023	1317	Linwood			EC
2	714	9/22/2023		Lindwood & Surfwood			EC
3	714	9/22/2023	1309	Janbrook			EC
4	716	9/22/2023	1309	Dorene			EC
5	717	9/22/2023		Dorene & Surfwood			EC
6	718	9/22/2023		Holiday & Dorene			EC
7	720	9/22/2023	1329	Holiday			EC
8	721	9/22/2023	1329	Mayper			EC
10	722	9/22/2023		Mayper & Dorene			EC
11	724	9/22/2023	3710	N 17th			EC
12	725	9/22/2023		Cedar & Neptune			EC
13	726	9/22/2023		Cedar & Neptune			EC
14	726	9/22/2023	1504	Cedar			EC
15	728	9/22/2023		14th & Cedar			EC
16	728	9/22/2023		13th & Cedar			EC
17	730	9/22/2023	1314	Ave N			EC
18	731	9/22/2023		15th & Ave N			EC
19	731	9/22/2023		17th & Ave N			EC
20	733	9/22/2023	1516	Hiatt			EC
21	735	9/22/2023		15th & Hiatt			EC
22	736	9/22/2023	1314	Silver Lane			EC
23	737	9/22/2023		15th & Silver Lane			EC
24	738	9/22/2023	1533	Silver Lane			EC
25	738	9/22/2023	1532	Ave O			EC
26	730	9/22/2023		15th & Ave O			EC
27	731	9/22/2023	1522	Ave O			EC
28	731	9/22/2023	1331	Walker			EC
29	733	9/22/2023		15th & Walker			EC
30	735	9/22/2023	1540	Walker			EC
31	736			17th & Walker			EC
32	737		1513	Cachelin			EC
33	738			15th & Cachelin			EC
34	741		1326	Cachelin			EC
35	742			14th & Ave P			EC
36	743		4337	14th			EC
37	N/A			Shoal Dr & Ave Q			EC
38	744			15th & Ave Q			EC
39	745			15th & Stella			EC
40	747		1515	Stella			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
41	748		1543	Stella			EC
42	749		1543	Murray			EC
43	750		1523	Murray			EC
44	752			15th & Murray			EC
45	752			15th & Ave P			EC
46	754		1528	Ave P			EC
47	756			In the ball field on Ave P			EC
48	757			17th & Q			EC
49	758		1802	Ave Q			EC
50	759			17th & Waters Edge Court			EC
51	800		1070	Waters Edge Court			EC
52	801			Cul De Sac in Waters Edge Court			EC
53	802			Cul De Sac in Shoal Pointe Dr			EC
54	803		1023	Shoal Pointe Dr			EC
55	805		1019	Shoal Dr			EC
56	807		1015	Shoal Dr			EC
57	809		1013	Shoal Dr			EC
58	810		1012	Shoal Dr			EC
59	811			Cul De Sac in Shoal Dr			EC
60	812			CLC 1-16 & Carolina Dr			EC
61	815		26	CLC			EC
62	816		20	CLC			EC
63	819			16-66 CLC			EC
64	820		59	CLC			EC
65	821		51	CLC			EC
66	822			67-98 CLC & Ave Q			EC
67	823		95	CLC			EC
68	838		90	CLC			EC
69	840		121	CLC			EC
70	842		127	CLC			EC
71	843			99-129 CLC & Ave Q			EC
72	845		4325	12th St			EC
73	847		4310	12th St			EC
74	851		1213	Ave P			EC
75	947			11th & Ave P			EC
76	949		4317	11th St			EC
77	951			130-160 CLC & Ave Q			EC
78	952		157	CLC			EC
79	955		139	CLC			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
80	957		145	CLC			EC
81	958		166	CLC			EC
82	1018			161-189 CLC & Ave Q			EC
83	1019		4318	10th			EC
84	1021		1003	Ave P			EC
85	1023		903	Ave P			EC
86	1032		195	CLC			EC
87	1034		198	CLC			EC
88	1035			8th & R			EC
89	1036		4418	8th			EC
90	1037			8th & Ave Q			EC
91	1039		4317	8th			EC
92	1040			7th & Ave Q			EC
93	1043		4411	7th			EC
94	1045			6th & Ave Q			EC
95	covered		4412	Nith 6th			EC
96	1050			Wavcrest Park			EC
97	1053		109	Shoreline			EC
98	1054		110	Shoreline			EC
99	1055		114	Shoreline			EC
100	1057		102	Shoreline			EC
101	1059		210	Marina Court			EC
102	1101		180	Marina Court			EC
103	1102		130	Marina Court			EC
104	1105		4320	N 9th			EC
105	1107		4304	N 9th			EC
106	1109		1004	Cachelin			EC
107	1111			11th & Cachelin			EC
108	1114		1200	Cachelin			EC
109	1115		1202	Ave O			EC
110	1117			11th & Ave O			EC
111	1118		1007	Ave O			EC
112	1130		640	Key Circle			EC
113	1132		990	Key Circle			EC
114	1135		940	Key Circle			EC
115	1140		760	Key Circle			EC
116	1150		830	Key Circle			EC
117	1254		1005	Silver Lane			EC
118	1257			11th & Silver Lane			EC

<u>MANHOLE</u>	<u>TIME</u>	<u>DATE</u>	<u>ADDRESS</u>	<u>STREET</u>	<u>TYPE</u>	<u>CLEAN</u>	<u>INSPECTED BY</u>
119	1258		1202	Silver Lane			EC
120	101		1203	Hiatt			EC
121	102			11th & Hiatt			EC
122	107		1005	Hiatt			EC
123	110			9th & Redick			EC
124	112		802	Redick			EC
125	114		1002	Redick			EC
126	117			11th & Redick			EC
127	118		1206	Redick			EC
128	149		1117	Willow Dr			EC
129	151			11th & Willow Dr			EC
130	155		1001	Willow Dr			EC
131	158			11th & Mayper			EC
132	202		1201	Mayper			EC
133	204		1217	Mayper			EC
134	206		1217	Dorene			EC
135	209		1201	Dorene			EC
136	212			11th & Dorene			EC
137	213			11th & Janbrook			EC
138	215		1117	Janbrook			EC
139	216		1217	Linwood			EC
140	218		1201	Linwood			EC
141	220			11th & Lindwood			EC
142	221			7th St Ally by 2910 7th			EC
143	222			Alley behind Senior Center			EC
144	223			Locust St Across from Golf Course			EC
145	225			5th & Locust			EC
146	226			Ally by car wash at 5th & Locust			EC
147	228			7th St Alley by Driggers			EC
148	229		554	Ave J Behind house in alley			EC
149	231			Owen Parkway in planter in Cul de sac			EC
150	234			Owen Parkway manhole behind building by cul de sac			EC
151							
152							
153							
154							
155							
156							
157							

16/23/2023

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MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	733		1317	Linwood			
2	735			Lindwood & Surfwood			
3	737		1309	Janbrook			
4	738		1309	Dorene			
5	739			Dorene & Surfwood			
6	740			Holiday & Dorene			
7	742		1329	Holiday			
8	743		1329	Mayper			
10	747			Mayper & Dorene			
11	749		3710	N 17th			
12	751			Cedar & Neptune			
13	752			Cedar & Neptune			
14	752		1504	Cedar			
15	753			14th & Cedar			
16	754			13th & Cedar			
17	756		1314	Ave N			
18	757			15th & Ave N			
19	758			17th & Ave N			
20	759		1516	Hiatt			
21	800			15th & Hiatt			
22	801		1314	Silver Lane			
23	803			15th & Silver Lane			
24	804		1533	Silver Lane			
25	805		1532	Ave O			
26	806			15th & Ave O			
27	807		1522	Ave O			
28	808		1331	Walker			
29	809			15th & Walker			
30	810		1540	Walker			
31	811			17th & Walker			
32	812		1513	Cachelin			
33	813			15th & Cachelin			
34	814		1326	Cachelin			
35	814			14th & Ave P			
36	816		4337	14th			
37	817			Shoal Dr & Ave Q			
38	818			15th & Ave Q			
39	819			15th & Stella			
40	820		1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41	821		1543	Stella			
42	822		1543	Murray			
43	823		1523	Murray			
44	824			15th & Murray			
45	825			15th & Ave P			
46	826		1528	Ave P			
47	827			In the ball field on Ave P			
48	829			17th & Q			
49	831		1802	Ave Q			
50	832			17th & Waters Edge Court			
51	833		1070	Waters Edge Court			
52	834			Cul De Sac in Waters Edge Court			
53	835			Cul De Sac in Shoal Pointe Dr			
54	837		1023	Shoal Pointe Dr			
55	838		1019	Shoal Dr			
56	840		1015	Shoal Dr			
57	841		1013	Shoal Dr			
58	842		1012	Shoal Dr			
59	843			Cul De Sac in Shoal Dr			
60	844			CLC 1-16 & Carolina Dr			
61	846		26	CLC			
62	848		20	CLC			
63	850			16-66 CLC			
64	851		59	CLC			
65	852		51	CLC			
66	854			67-98 CLC & Ave Q			
67	856		95	CLC			
68	8900		90	CLC			
69	913		121	CLC			
70	914		127	CLC			
71	916			99-129 CLC & Ave Q			
72	917		4325	12th St			
73	918		4310	12th St			
74	919		1213	Ave P			
75	920			11th & Ave P			
76	921		4317	11th St			
77	923			130-160 CLC & Ave Q			
78	924		157	CLC			
79	925		139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80	926		145	CLC			
81	927		166	CLC			
82	929			161-189 CLC & Ave Q			
83	930		4318	10th			
84	931		1003	Ave P			
85	932		903	Ave P			
86	933		195	CLC			
87	934		198	CLC			
88	935			8th & R			
89	N/A		4418	8th			
90	937			8th & Ave Q			
91	938		4317	8th			
92	939			7th & Ave Q			
93	942		4411	7th			
94	943			6th & Ave Q			
95	945		4412	Nth 6th			
96	949			Wavcrest Park			
97	948			Shoreline			
98	951			Shoreline			
99	953			Shoreline			
100	955			Shoreline			
101	956			Shoreline			
102	958			Shoreline			
103	1000		210	Marina Court			
104	1002		180	Marina Court			
105	1003		130	Marina Court			
106	1004		4320	N 9th			
107	1007		4304	N 9th			
108	1008		1004	Cachelin			
109	1009			11th & Cachelin			
110	1011		1200	Cachelin			
111	1015		1202	Ave O			
112	1016			11th & Ave O			
113	1017		1007	Ave O			
114	1018		640	Key Circle			
115	1019		990	Key Circle			
116	1021		940	Key Circle			
117	1022		760	Key Circle			
118	1024		830	Key Circle			
			1005	Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119	1026		1202	Silver Lane			
120	1027		1203	Hiatt			
121	1029			11th & Hiatt			
122	1031		1005	Hiatt			
123	1033			9th & Redick			
124	1051		802	Redick			
125	1053		1002	Redick			
126	1055			11th & Redick			
127	1056		1206	Redick			
128	1058		1117	Willow Dr			
129	1859			11th & Willow Dr			
130	1100		1001	Willow Dr			
131	1101			11th & Mayer			
132	1103		1201	Mayer			
133	1104		1217	Mayer			
134	1105		1217	Dorene			
135	1107		1201	Dorene			
136	1108			11th & Dorene			
137	1109			11th & Janbrook			
138	1112		1117	Janbrook			
139	1113		1217	Linwood			
140	1115		1201	Linwood			
141	1116			11th & Lindwood			
142	1119			7th St Ally by 2910 7th			
143	1118			Alley behind Senior Center			
144	1119			Locust St Across from Golf Course			
145	1120			5th & Locust			
146	1121			Ally by car wash at 5th & Locust			
147	1122			7th St Alley by Driggers			
148	1123		554	Ave J Behind house in alley			
149	1127			Owen Parkway in planter in Cul de sac			
150	1130			Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

4/6/23 Ethan C.

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	8:06		1317	Linwood			
2	8:15			Lindwood & Surfwood			
3	8:17		1309	Janbrook			
4	8:18		1309	Dorene			
5	8:19			Dorene & Surfwood			
6	8:21			Holiday & Dorene			
7	8:22		1329	Holiday			
8	8:24		1329	Mayper			
10	8:25			Mayper & Dorene			
11	8:26		3710	N 17th			
12	8:28			Cedar & Neptune			
13	8:29			Cedar & Neptune			
14	8:30		1504	Cedar			
15	8:32			14th & Cedar			
16	8:33			13th & Cedar			
17	8:35		1314	Ave N			
18	8:36			15th & Ave N			
19	8:37			17th & Ave N			
20	8:38		1516	Hiatt			
21	8:40			15th & Hiatt			
22	8:41		1314	Silver Lane			
23	8:42			15th & Silver Lane			
24	8:43		1533	Silver Lane			
25	8:46		1532	Ave O			
26	8:48			15th & Ave O			
27	8:49		1522	Ave O			
28	8:56		1331	Walker			
29	9:05			15th & Walker			
30	9:06		1540	Walker			
31	9:08			17th & Walker			
32	9:10		1513	Cachelin			
33	9:11			15th & Cachelin			
34	9:13		1326	Cachelin			
35	9:15			14th & Ave P			
36	9:16		4337	14th			
37	9:16			Shoal Dr & Ave Q			
38	9:17			15th & Ave Q			
39	9:18			15th & Stella			
40	9:19		1515	Stella			



MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41	9:20		1543	Stella			
42	9:21		1543	Murray			
43	9:23		1523	Murray			
44	9:24			15th & Murray			
45	9:25			15th & Ave P			
46	9:26		1528	Ave P			
47	9:28			In the ball field on Ave P			
48	9:46			17th & Q			
49	9:46		1802	Ave Q			
50	9:49			17th & Waters Edge Court			
51	9:49		1070	Waters Edge Court			
52	9:49			Cul De Sac in Waters Edge Court			
53	9:51			Cul De Sac in Shoal Pointe Dr			
54	9:53		1023	Shoal Pointe Dr			
55	9:54		1019	Shoal Dr			
56	9:55		1015	Shoal Dr			
57	9:57		1013	Shoal Dr			
58	9:57		1012	Shoal Dr			
59	9:59			Cul De Sac in Shoal Dr			
60	10:00			CLC 1-16 & Carolina Dr			
61	10:01		26	CLC			
62	10:03		20	CLC			
63	10:04			16-66 CLC			
64	10:06		59	CLC			
65	10:07		51	CLC			
66	10:10			67-98 CLC & Ave Q			
67	10:12		95	CLC			
68	10:13		90	CLC			
69	10:15		121	CLC			
70	10:16		127	CLC			
71	10:17			99-129 CLC & Ave Q			
72	10:18		4325	12th St			
73	10:19		4310	12th St			
74	10:21		1213	Ave P			
75	10:36			11th & Ave P			
76	10:37		4317	11th St			
77	10:39			130-160 CLC & Ave Q			
78	10:41		157	CLC			
79	10:46		139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80	10:47		145	CLC			
81	10:48		166	CLC			
82	10:50			161-189 CLC & Ave Q			
83	10:51		4318	10th			
84	10:52		1003	Ave P			
85	N/A		903	Ave P			
86	10:55		195	CLC			
87	10:57		198	CLC			
88	10:59			8th & R			
89	10:59		4418	8th			
90	11:00			8th & Ave Q			
91	11:01		4317	8th			
92	11:03			7th & Ave Q			
93	11:04		4411	7th			
94	11:05			6th & Ave Q			
95	11:07		4412	Nth 6th			
96	11:09			Wavcrest Park			
97	11:11		109	Shoreline			
98	11:12		110	Shoreline			
99	11:14		114	Shoreline			
100	11:15		102	Shoreline			
101	11:17		210	Shoreline			
102	11:18		180	Marina Court			
103	11:20		130	Marina Court			
104	11:23		4320	Marina Court			
105	11:23		4304	N 9th			
106	11:25		1004	N 9th			
107	11:26			Cachelin			
108	11:27		1200	11th & Cachelin			
109	11:30		1202	Cachelin			
110	11:32			Ave O			
111	11:35		1007	11th & Ave O			
112	11:35		640	Ave O			
113	11:36		990	Key Circle			
114	11:37		940	Key Circle			
115	11:38		760	Key Circle			
116	11:40		830	Key Circle			
117	11:43		1005	Key Circle			
118	11:44			Silver Lane			
				11th & Silver Lane			

under vehicle

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119	11:46		1202	Silver Lane			
120	11:47		1203	Hiatt			
121	11:48			11th & Hiatt			
122	11:50		1005	Hiatt			
123	12:49			9th & Redick			
124	12:50		802	Redick			
125	12:50		1002	Redick			
126	12:51			11th & Redick			
127	12:52		1206	Redick			
128	12:53		1117	Willow Dr			
129	12:54			11th & Willow Dr			
130	12:55		1001	Willow Dr			
131	12:56			11th & Mayer			
132	12:57		1201	Mayer			
133	12:59		1217	Mayer			
134	13:00		1217	Dorene			
135	1:01		1201	Dorene			
136	1:03			11th & Dorene			
137	1:04			11th & Janbrook			
138	1:05		1117	Janbrook			
139	1:06		1217	Linwood			
140	1:07		1201	Linwood			
141	1:08			11th & Lindwood			
142	1:10			7th St Ally by 2910 7th			
143	1:11			Alley behind Senior Center			
144	1:14			Locust St Across from Golf Course			
145	1:17			5th & Locust			
146	1:17			Ally by car wash at 5th & Locust			
147	1:12			7th St Alley by Driggers			
148	1:21		554	Ave J Behind house in alley			
149	1:23			Owen Parkway in planter in Cul de sac			
150	1:23			Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

MANHOLE SHORT LIST

DATE 3-31-03

*Randy*

MANHOLE	TIME	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	801	1317	Lindwood			RS
2	802		Surfwood & Lindwood			RS
3	803		Dorene & Surfwood			RS
4	805		Dorene & Holiday			RS
5	806		Mayper & Dorene			RS
6	808	3712	N 17th St			RS
7	809		Neptune & Cedar			RS
8	812		N 15th & Ave N			RS
9	814		N 15th & Hiatt St			RS
10	815		N 15th & Silver Lane			RS
11	816		N 15th & Ave O			RS
12	817		N 15th & Walker St			RS
13	818		N 15th & Cachelin Dr			RS
14	820		N 15th & Ave P			RS
15	821		N 15th & Murray			RS
16	822		N 15th & Stella			RS
17	823		N 15th & Ave Q			RS
18	825	4317	N 11th St			RS
19	826		N 11th & Ave P			RS
20	827		N 11th & Cachelin Dr			RS
21	828		N 11th & Ave O			RS
22	830		N 11th & Silver Lane			RS
23	831		N 11th & Hiatt St			RS
24	833		N 11th & Redick Blvd			RS
25	837		N 11th & Willow Dr			RS
26	838		N 11th & Mayper Dr			RS
27	839		N 11th & Dorene Blvd			RS
28	840		N 11th & Janbrook Blvd	JETTED		RS
29	841		N 11th & Lindwood Dr			RS
30	845	2910	N 7th St			RS
31	848	111	Locust St			RS
						RS

Shon C. ~~3/24/23~~  
3/24/23

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE CLEAN	INSPECTED BY
1	8:55		1317	Linwood		
2	8:56			Lindwood & Surfwood		
3	8:58		1309	Janbrook		
4	9:00		1309	Dorene		
5	9:01			Dorene & Surfwood		
6	9:02		1329	Holiday & Dorene		
7	9:03		1329	Dorene		
8	9:03			Mayper		
10	9:05			Mayper & Dorene		
11	9:07		3710	N 17th		
12	9:06			Cedar & Neptune		
13	9:09			Cedar & Neptune		
14	9:10		1504	Cedar		
15	9:11			14th & Cedar		
16	9:11			13th & Cedar		
17	9:13		1314	Ave N		
18	9:14			18th & Ave N		
19	9:15			17th & Ave N		
20	9:17		1516	Hlatt		
21	9:18			15th & Hlatt		
22	9:20		1314	Silver Lane		
23	9:21			15th & Silver Lane		
24	9:22		1533	Silver Lane		
25	9:24		1532	Ave O		
26	9:25			15th & Ave O		
27	9:26		1522	Ave O		
28	9:27		1331	Walker		
29	9:28			15th & Walker		
30	9:29		1540	Walker		
31	9:30			17th & Walker		
32	9:31		1513	Cachelin		
33	9:34			15th & Cachelin		
34	9:36		1326	Cachelin		
35	9:37			14th & Ave P		
36	9:37		4337	14th		
37				Shoal Dr & Ave Q		
38	9:39			15th & Ave Q		
39	9:39			15th & Stella		
40	9:40		1515	Stella		

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41	9:40		1543	Stella			
42	9:41		1543	Murray			
43	9:42		1523	Murray			
44	9:43			15th & Murray			
45	9:44			15th & Ave P			
46	9:45		1528	Ave P			
47	9:55			In the ball field on Ave P			
48	9:56		1802	17th & Q			
49	9:57			Ave Q			
50	9:59			17th & Waters Edge Court			
51	10:00		1070	Waters Edge Court			
52	10:03			Cul De Sac in Waters Edge Court			
53	10:03			Cul De Sac in Shoal Pointe Dr			
54	10:03		1023	Shoal Pointe Dr			
55	10:05		1019	Shoal Dr			
56	10:06		1015	Shoal Dr			
57	10:06		1013	Shoal Dr			
58	10:08		1012	Shoal Dr			
59	10:09			Shoal Dr			
60	10:11			Cul De Sac in Shoal Dr			
61	10:16		26	CLC			
62	10:17		20	CLC			
63	10:18			16-66 CLC			
64	10:19		59	CLC			
65	10:20		51	CLC			
66	10:23			CLC			
67	10:24			67-98 CLC & Ave Q			
68	10:26		95	CLC			
69	10:26		90	CLC			
70	10:43		121	CLC			
71	10:44		127	CLC			
72	10:45			99-129 CLC & Ave Q			
73	10:50		4325	12th St			
74	10:49		4310	12th St			
75	10:48		1213	Ave P			
76	10:46			11th & Ave P			
77	10:45		4317	11th St			
78	10:52			130-160 CLC & Ave Q			
79	10:53		157	CLC			
80	10:55		139	CLC			

~~Randy~~ Randy 3-29-23

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80	901		145	CLC			RS
81	902		166	CLC			RS
82	904						RS
83	905		4318	161-189 CLC & Ave Q			RS
84	906		1003	10th			RS
85	908		903	Ave P			RS
86	912		195	Ave P			RS
87	914		198	CLC			RS
88	916			CLC			RS
89	917		4418	8th & R			RS
90	919			8th			RS
91	920		4317	8th & Ave Q			RS
92	922			8th			RS
93	923		4411	7th & Ave Q			RS
94	925			7th			RS
95	926			6th & Ave Q			RS
96	928		4412	Nth 6th			RS
97	930			Wavcrest Park			RS
98	931		109	Shoreline			RS
99	932		110	Shoreline			RS
100	934		114	Shoreline			RS
101	935		102	Shoreline			RS
102	936		210	Shoreline			RS
103	937		180	Marina Court			RS
104	909		130	Marina Court			RS
105	910		4320	Marina Court			RS
106	940		4304	N 9th			RS
107	941		1004	N 9th			RS
108	942			Cachelin			RS
109	944		1200	11th & Cachelin			RS
110	945		1202	Cachelin			RS
111	946			Ave O			RS
112	947		1007	11th & Ave O			RS
113	948		640	Ave O			RS
114	949		990	Key Circle			RS
115	950		940	Key Circle			RS
116	951		760	Key Circle			RS
117	954		830	Key Circle			RS
118	956		1105	Key Circle			RS
				Silver Lane			RS
				11th & Silver Lane			RS

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120	957		1202	Silver Lane			RS
121	959		1203	Hiatt			RS
122	1001			11th & Hiatt			RS
123	1003		1005	Hiatt			RS
124	1004		802	9th & Redick			RS
125	1011		1002	Redick			RS
126	1012			Redick			RS
127	1013		1206	11th & Redick			RS
128	1015		1117	Redick			RS
129	1016			Willow Dr			RS
130	1016		1001	11th & Willow Dr			RS
131	1018			Willow Dr			RS
132	1020		1201	11th & Mayper			RS
133	1021		1217	Mayper		Cleaned	RS
134	1022		1217	Mayper			RS
135	1023		1201	Dorene			RS
136	1024			Dorene			RS
137	1025			11th & Dorene			RS
138	1027		1117	11th & Janbrook			RS
139	1027		1217	Janbrook			RS
140	1027		1201	Linwood			RS
141	1031			Linwood			RS
142	1033			11th & Lindwood			RS
143	1034			7th St Ally by 2910 7th			RS
144	1037			Alley behind Senior Center			RS
145	1038			Locust St Across from Golf Course			RS
146	1039			5th & Locust			RS
147	1040			Ally by car wash at 5th & Locust			RS
148	1042			7th St Alley by Driggers			RS
149	1045		554	Ave J Behind house in alley			RS
150	1047			Owen Parkway in planter in Cul de sac			RS
151				Owen Parkway manhole behind building by cul de sac			RS
152							
153							
154							
155							
156							
157							

3/10/23 Ethan C.

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2							
3			1309	Lindwood & Surfwood			
4			1309	Janbrook			
5				Dorene			
6				Dorene & Surfwood			
7			1329	Holiday & Dorene			
8			1329	Dorene			
10				Mayper			
11			3710	Mayper & Dorene			
12				N 17th			
13				Cedar & Neptune			
14				Cedar & Neptune			
15			1504	Cedar			
16				14th & Cedar			
17			1314	13th & Cedar			
18				Ave N			
19				15th & Ave N			
20				17th & Ave N			
21			1516	Hiatt			
22				15th & Hiatt			
23			1314	Silver Lane			
24				15th & Silver Lane			
25			1533	Silver Lane			
26			1532	Ave O			
27				15th & Ave O			
28			1522	Ave O			
29			1331	Walker			
30				15th & Walker			
31			1540	Walker			
32				17th & Walker			
33			1513	Cachelin			
34			1326	15th & Cachelin			
35				Cachelin			
36			4337	14th & Ave P			
37				14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella			
				Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

3/10/23 Steve

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80							
81			145	CLC			
82			166	CLC			
83			4318	161-189 CLC & Ave Q			
84			1003	10th			
85			903	Ave P			
86			195	Ave P			
87			198	CLC			
88				CLC			
89			4418	8th & R			
90				8th			
91				8th & Ave Q			
92			4317	8th			
93				7th & Ave Q			
94			4411	7th			
95				6th & Ave Q			
96			4412	Nth 6th			
97				Wavcrest Park			
98			109	Shoreline			
99			110	Shoreline			
100			114	Shoreline			
101			102	Shoreline			
102			210	Shoreline			
103			180	Marina Court			
104			130	Marina Court			
105			4320	Marina Court			
106			4304	N 9th			
107			1004	N 9th			
108				Cachelin			
109			1200	11th & Cachelin			
110			1202	Cachelin			
111				Ave O			
112			1007	11th & Ave O			
113			640	Ave O			
114			990	Key Circle			
115			940	Key Circle			
116			760	Key Circle			
117			830	Key Circle			
118			1105	Key Circle			
				Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayper			
132			1201	Mayper			
133			1217	Mayper			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Dorene			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Ally by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

3/3/23 STEVE

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1							
2			1317	Linwood			
3			1309	Lindwood & Surfwood			
4			1309	Jenbrook			
5				Dorene			
6				Dorene & Surfwood			
7			1329	Holiday & Dorene			
8			1329	Dorene			
10				Mayper			
11			3710	Mayper & Dorene			
12				N 17th			
13				Cedar & Neptune			
14			1504	Cedar & Neptune			
15				Cedar			
16				14th & Cedar			
17			1314	13th & Cedar			
18				Ave N			
19				15th & Ave N			
20			1516	17th & Ave N			
21				Hlatt			
22			1314	15th & Hlatt			
23				Silver Lane			
24			1533	15th & Silver Lane			
25			1532	Silver Lane			
26				Ave O			
27			1522	15th & Ave O			
28			1331	Ave O			
29				Walker			
30			1540	15th & Walker			
31				Walker			
32			1513	17th & Walker			
33				Cachelin			
34			1326	15th & Cachelin			
35				Cachelin			
36			4337	14th & Ave P			
37				14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella			
				Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

3/3/23 Ehamc.

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82							
83			4318	161-189 CLC & Ave Q			
84			1003	10th			
85			903	Ave P			
86			195	Ave P			
87			198	CLC			
88				CLC			
89			4418	8th & R			
90				8th			
91				8th & Ave Q			
92			4317	8th			
93				7th & Ave Q			
94			4411	7th			
95				6th & Ave Q			
96			4412	Nth 6th			
97				Wavcrest Park			
98			109	Shoreline			
99			110	Shoreline			
100			114	Shoreline			
101			102	Shoreline			
102			210	Marina Court			
103			180	Marina Court			
104			130	Marina Court			
105			4320	N 9th			
106			4304	N 9th			
107			1004	Cachelin			
108				11th & Cachelin			
109			1200	Cachelin			
110			1202	Ave O			
111				11th & Ave O			
112			1007	Ave O			
113			640	Key Circle			
114			990	Key Circle			
115			940	Key Circle			
116			760	Key Circle			
117			830	Key Circle			
118			1105	Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayper			
132			1201	Mayper			
133			1217	Mayper			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Ally by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

Alton C. 02/03/23

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1							
2			1317	Linwood			
3			1309	Lindwood & Surfwood			
4			1309	Janbrook			
5				Dorene			
6				Dorene & Surfwood			
7			1329	Holiday & Dorene			
8			1329	Dorene			
10				Mayper			
11			3710	Mayper & Dorene			
12				N 17th			
13				Cedar & Neptune			
14			1504	Cedar & Neptune			
15				Cedar			
16				14th & Cedar			
17			1314	13th & Cedar			
18				Ave N			
19				15th & Ave N			
20			1516	17th & Ave N			
21				Hiatt			
22			1314	15th & Hiatt			
23				Silver Lane			
24			1533	15th & Silver Lane			
25			1532	Silver Lane			
26				Ave O			
27			1522	15th & Ave O			
28			1331	Ave O			
29				Walker			
30			1540	15th & Walker			
31				Walker			
32			1513	17th & Walker			
33			1326	Cachelin			
34				15th & Cachelin			
35				Cachelin			
36			4337	14th & Ave P			
37				14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella			
				Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				18-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

Slevek 2-3-2023

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80							
81			145	CLC			
82			166	CLC			
83				161-189 CLC & Ave Q			
84			4318	10th			
85			1003	Ave P			
86			903	Ave P			
87			195	CLC			
88			198	CLC			
89				8th & R			
90			4418	8th			
91				8th & Ave Q			
92			4317	8th			
93				7th & Ave Q			
94			4411	7th			
95				6th & Ave Q			
96			4412	Nth 6th			
97				Wavcrest Park			
98			109	Shoreline			
99			110	Shoreline			
100			114	Shoreline			
101			102	Shoreline			
102			210	Marina Court			
103			180	Marina Court			
104			130	Marina Court			
105			4320	N 9th			
106			4304	N 9th			
107			1004	Cachelin			
108				11th & Cachelin			
109			1200	Cachelin			
110			1202	Ave O			
111				11th & Ave O			
112			1007	Ave O			
113			640	Key Circle			
114			990	Key Circle			
115			940	Key Circle			
116			760	Key Circle			
117			830	Key Circle			
118			1105	Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayer			
132			1201	Mayer			
133			1217	Mayer			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Ally by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

*Cleaned*

MANHOLE SHORT LIST

*Aaron Chambers*

DATE 02/16/23

MANHOLE	TIME	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	8:05	1317	Lindwood			
2	8:08		Surfwood & Lindwood			
3	8:11		Dorene & Surfwood			
4	8:12		Dorene & Holiday			
5	8:13		Mayper & Dorene			
6	8:18	3712	N 17th St			
7	8:18		Neptune & Cedar			
8	8:25		N 15th & Ave N			
9	8:29		N 15th & Hiatt St			
10	8:29		N 15th & Silver Lane			
11	8:30		N 15th & Ave O			
12	8:31		N 15th & Walker St			
13	8:32		N 15th & Cachelin Dr			
14	8:34		N 15th & Ave P			
15	8:35		N 15th & Murray			
16	8:37		N 15th & Stella			
17	8:40		N 15th & Ave Q			
18	8:43	4317	N 11th St			
19	8:43		N 11th & Ave P			
20	8:44		N 11th & Cachelin Dr			
21	8:45		N 11th & Ave O			
22	8:46		N 11th & Silver Lane			
23	8:47		N 11th & Hiatt St			
24	8:47		N 11th & Redick Blvd			
25	8:49		N 11th & Willow Dr			
26	8:50		N 11th & Mayper Dr			
27	8:52		N 11th & Dorene Blvd			
28	8:54		N 11th & Janbrook Blvd			
29	8:56		N 11th & Lindwood Dr			
30	8:59	2910	N 7th St			
31	9:03	111	Locust St			

1/13/2023 STW

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1							
2			1317	Linwood			
3			1309	Lindwood & Surfwood			
4			1309	Janbrook			
5				Dorene			
6				Dorene & Surfwood			
7			1329	Holiday & Dorene			
8			1329	Dorene			
10				Mayper			
11			3710	Mayper & Dorene			
12				N 17th			
13				Cedar & Neptune			
14			1504	Cedar & Neptune			
15				Cedar			
16				14th & Cedar			
17			1314	13th & Cedar			
18				Ave N			
19				15th & Ave N			
20			1516	17th & Ave N			
21				Hiatt			
22			1314	15th & Hiatt			
23				Silver Lane			
24			1533	15th & Silver Lane			
25			1532	Silver Lane			
26				Ave O			
27			1522	15th & Ave O			
28			1331	Ave O			
29				Walker			
30			1540	15th & Walker			
31				Walker			
32			1513	17th & Walker			
33				Cachelin			
34			1326	15th & Cachelin			
35				Cachelin			
36			4337	14th & Ave P			
37				14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella			
				Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41							
42			1543	Stella			
43			1543	Murray			
44			1523	Murray			
45				15th & Murray			
46			1528	15th & Ave P			
47				Ave P			
48				In the ball field on Ave P			
49				17th & Q			
50			1802	Ave Q			
51				17th & Waters Edge Court			
52			1070	Waters Edge Court			
53				Cul De Sac in Waters Edge Court			
54				Cul De Sac in Shoal Pointe Dr			
55			1023	Shoal Pointe Dr			
56			1019	Shoal Dr			
57			1015	Shoal Dr			
58			1013	Shoal Dr			
59			1012	Shoal Dr			
60				Cul De Sac in Shoal Dr			
61				CLC 1-16 & Carolina Dr			
62			26	CLC			
63			20	CLC			
64				16-66 CLC			
65			59	CLC			
66			51	CLC			
67				67-98 CLC & Ave Q			
68			95	CLC			
69			90	CLC			
70			121	CLC			
71			127	CLC			
72				99-129 CLC & Ave Q			
73			4325	12th St			
74			4310	12th St			
75			1213	Ave P			
76				11th & Ave P			
77			4317	11th St			
78				130-160 CLC & Ave Q			
79			157	CLC			
			139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82							
83			4318	161-189 CLC & Ave Q			
84			1003	10th			
85			903	Ave P			
86			195	Ave P			
87			198	CLC			
88				CLC			
89			4418	8th & R			
90				.8th			
91			4317	8th & Ave Q			
92				8th			
93			4411	7th & Ave Q			
94				7th			
95			4412	6th & Ave Q			
96				Nth 6th			
97				Wavecrest Park			
98			109	Shoreline			
99			110	Shoreline			
100			114	Shoreline			
101			102	Shoreline			
102			210	Marina Court			
103			180	Marina Court			
104			130	Marina Court			
105			4320	N 9th			
106			4304	N 9th			
107			1004	Cachelin			
108				11th & Cachelin			
109			1200	Cachelin			
110			1202	Ave O			
111				11th & Ave O			
112			1007	Ave O			
113			640	Key Circle			
114			990	Key Circle			
115			940	Key Circle			
116			760	Key Circle			
117			830	Key Circle			
118			1105	Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120			1202	Silver Lane			
121			1203	Hiatt			
122				11th & Hiatt			
123			1005	Hiatt			
124			802	9th & Redlick			
125			1002	Redlick			
126				Redlick			
127				11th & Redlick			
128			1206	Redlick			
129			1117	Willow Dr			
130				11th & Willow Dr			
131			1001	Willow Dr			
132				11th & Mayer			
133			1201	Mayer			
134			1217	Mayer			
135			1217	Dorene			
136			1201	Dorene			
137				11th & Dorene			
138				11th & Janbrook			
139			1117	Janbrook			
140			1217	Linwood			
141			1201	Linwood			
142				11th & Lindwood			
143				7th St Alley by 2910 7th			
144				Alley behind Senior Center			
145				Locust St Across from Golf Course			
146				5th & Locust			
147				Ally by car wash at 5th & Locust			
148				7th St Alley by Driggers			
149			554	Ave J Behind house in alley			
150				Owen Parkway in planter in Cul de sac			
151				Owen Parkway manhole behind building by cul de sac			
152							
153							
154							
155							
156							
157							

Cleared





Ethan C. 01/06/23

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1516	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

Steve 1/6/2023

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82			161-189	CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavcrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayper			
132			1201	Mayper			
133			1217	Mayper			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Alley by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

Skipped

10/50/22 STAGE

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				16th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoel Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41							
42			1543	Stella			
43			1543	Murray			
44			1523	Murray			
45				15th & Murray			
46				15th & Ave P			
47			1528	Ave P			
48				In the ball field on Ave P			
49				17th & Q			
50			1802	Ave Q			
51				17th & Waters Edge Court			
52			1070	Waters Edge Court			
53				Cul De Sac in Waters Edge Court			
54				Cul De Sac in Shoal Pointe Dr			
55			1023	Shoal Pointe Dr			
56			1019	Shoal Dr			
57			1015	Shoal Dr			
58			1013	Shoal Dr			
59			1012	Shoal Dr			
60				Cul De Sac in Shoal Dr			
61				CLC 1-16 & Carolina Dr			
62			26	CLC			
63			20	CLC			
64				16-66 CLC			
65			59	CLC			
66			51	CLC			
67				67-98 CLC & Ave Q			
68			95	CLC			
69			90	CLC			
70			121	CLC			
71			127	CLC			
72				99-129 CLC & Ave Q			
73			4325	12th St			
74			4310	12th St			
75			1213	Ave P			
76				11th & Ave P			
77			4317	11th St			
78				130-160 CLC & Ave Q			
79			157	CLC			
			139	CLC			

12-30-22

Randy

2

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80	8:15		145	CLC			RS
81	8:17		166	CLC			RS
82	8:19						RS
83	8:21		4318	161-189 CLC & Ave Q			RS
84	8:23		1003	10th			RS
85	8:24		903	Ave P			RS
86	8:28		195	Ave P			RS
87	8:29		198	CLC			RS
88	8:31			CLC			RS
89	8:32		4418	8th & R			RS
90	8:34			8th			RS
91	8:35		4317	8th & Ave Q			RS
92	8:37			8th			RS
93	8:38		4411	7th & Ave Q			RS
94	8:40			7th			RS
95	8:41		4412	6th & Ave Q			RS
96	8:44			Nth 6th			RS
97	8:45			Wavecrest Park			RS
98	8:46		109	Shoreline			RS
99	8:46		110	Shoreline			RS
100	8:51		114	Shoreline			RS
101	8:52		102	Shoreline			RS
102	8:53		210	Shoreline			RS
103	8:56		180	Marina Court			RS
104	8:57		130	Marina Court			RS
105	8:56		4320	Marina Court			RS
106	8:55		4304	N 9th			RS
107	9:20		1004	N 9th			RS
108	9:21			Cachelin			RS
109	9:22		1200	11th & Cachelin			RS
110	9:24		1202	Cachelin			RS
111	9:25			Ave O			RS
112	9:26		1007	11th & Ave O			RS
113	9:26		640	Ave O			RS
114	9:29		990	Key Circle			RS
115	9:30		940	Key Circle			RS
116	9:31		760	Key Circle			RS
117	9:32		830	Key Circle			RS
118	9:38		1105	Key Circle			RS
				Silver Lane			RS
				11th & Silver Lane			RS

12-30

Gandy

Need to replace lid  
11th + Hiatt

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119	940		1202	Silver Lane			RS
120	941		1203	Hiatt			RS
121				11th & Hiatt			Frozen lake
122	944		1005	Hiatt			RS
123	946						RS
124	947		802	9th & Redick			RS
125	1001		1002	Redick			RS
126	1001			Redick			RS
127	1003			11th & Redick			RS
128	1005		1206	Redick			RS
129	1006		1117	Willow Dr			RS
130	1007			11th & Willow Dr			RS
131	1007		1001	Willow Dr			RS
132	1011			11th & Mayer			RS
133	1012		1201	Mayer			RS
134	1014		1217	Mayer			RS
135	1015		1217	Dorene			RS
136	1016		1201	Dorene			RS
137	1017			11th & Dorene			RS
138	1017			11th & Janbrook			RS
139	1021		1117	Janbrook			RS
140	1022		1217	Linwood			RS
141	1023		1201	Linwood			RS
142	1026			11th & Lindwood			RS
143	1027			7th St Ally by 2910 7th			RS
144	1031			Alley behind Senior Center			RS
145	1032			Locust St Across from Golf Course			RS
146	1032			5th & Locust			RS
147	1034			Ally by car wash at 5th & Locust			RS
148	1037			7th St Alley by Driggers			RS
149	1039		554	Ave J Behind house in alley			RS
150	1043			Owen Parkway in planter in Cul de sac			RS
151				Owen Parkway manhole behind building by cul de sac			RS
152							
153							
154							
155							
156							
157							

MANHOLE SHORT LIST

DATE 12-16-22

*Randy*

MANHOLE	TIME	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1	106	1317	Lindwood			RS
2	108		Surfwood & Lindwood			RS
3	109		Dorene & Surfwood			RS
4	113		Dorene & Holiday			RS
5	114		Mayper & Dorene			RS
6	118	3712	N 17th St			RS
7	119		Neptune & Cedar			RS
8	121		N 15th & Ave N			RS
9	122		N 15th & Hiatt St			RS
10	123		N 15th & Silver Lane			RS
11	124		N 15th & Ave O			RS
12	125		N 15th & Walker St			RS
13	126		N 15th & Cachelin Dr			RS
14	127		N 15th & Ave P			RS
15	128		N 15th & Murray			RS
16	129		N 15th & Stella		spoon	RS
17	130		N 15th & Ave Q			RS
18	132	4317	N 11th St			RS
19	134		N 11th & Ave P			RS
20	135		N 11th & Cachelin Dr			RS
21	136		N 11th & Ave O			RS
22	139		N 11th & Silver Lane		spoon	RS
23	141		N 11th & Hiatt St			RS
24	142		N 11th & Redick Blvd			RS
25	145		N 11th & Willow Dr			RS
26	146		N 11th & Mayper Dr			RS
27	147		N 11th & Dorene Blvd		spoon	RS
28	149		N 11th & Janbrook Blvd			RS
29	150		N 11th & Lindwood Dr			RS
30	152	2910	N 7th St			RS
31	154	111	Locust St			RS

Chambers 12/09/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

12/9/22 Steve

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavcrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119				Silver Lane			
120			1202	Hiatt			
121			1203	11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr		X	
130			1001	Willow Dr			
131				11th & Mayper		X	
132			1201	Mayper			
133			1217	Mayper			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Ally by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

Chambers 12/22/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-86 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				89-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nith 6th			
96				Wavcrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayer			
132			1201	Mayer			
133			1217	Mayer			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Ally by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

visit 11/20/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

Chambers 11/08/2020

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82							
83			4318	161-189 CLC & Ave Q			
84			1003	10th			
85			903	Ave P			
86			195	Ave P			
87			198	CLC			
88				CLC			
89			4418	8th & R			
90				8th			
91				8th & Ave Q			
92			4317	8th			
93			4411	7th & Ave Q			
94				7th			
95				6th & Ave Q			
96			4412	Nth 6th			
97				Wavcrest Park			
98			109	Shoreline			
99			110	Shoreline			
100			114	Shoreline			
101			102	Shoreline			
102			210	Shoreline			
103			180	Marina Court			
104			130	Marina Court			
105			4320	Marina Court			
106			4304	N 9th			
107			1004	N 9th			
108				Cachelin			
109			1200	11th & Cachelin			
110			1202	Cachelin			
111				Ave O			
112			1007	11th & Ave O			
113			640	Ave O			
114			990	Key Circle			
115			940	Key Circle			
116			760	Key Circle			
117			830	Key Circle			
118			1105	Key Circle			
				Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120			1202	Silver Lane			
121			1203	Hiatt			
122				11th & Hiatt			
123			1005	Hiatt			
124				9th & Redick			
125			802	Redick			
126			1002	Redick			
127				11th & Redick			
128			1206	Redick			
129			1117	Willow Dr			
130				11th & Willow Dr			
131			1001	Willow Dr			
132				11th & Mayer			
133			1201	Mayer			
134			1217	Mayer			
135			1217	Dorene			
136			1201	Dorene			
137				11th & Dorene			
138				11th & Janbrook			
139			1117	Janbrook			
140			1217	Linwood			
141			1201	Linwood			
142				11th & Lindwood			
143				7th St Ally by 2910 7th			
144				Alley behind Senior Center			
145				Locust St Across from Golf Course			
146				5th & Locust			
147				Ally by car wash at 5th & Locust			
148				7th St Alley by Driggers			
149			554	Ave J Behind house in alley			
150				Owen Parkway in planter in Cul de sac			
151				Owen Parkway manhole behind building by cul de sac			
152							
153							
154							
155							
156							
157							

Arthur Chambers 11/18/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51				Waters Edge Court			
52			1070	Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

WVBS 11/18/20

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavcrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120			1202	Silver Lane			
121			1203	Hiatt			
122				11th & Hiatt			
123			1005	Hiatt			
124				9th & Redick			
125			802	Redick			
126			1002	Redick			
127			1206	11th & Redick			
128			1117	Redick			
129				Willow Dr			
130				11th & Willow Dr			
131			1001	Willow Dr			
132				11th & Mayper	X		
133			1201	Mayper			
134			1217	Mayper			
135			1217	Dorene			
136			1201	Dorene			
137				11th & Dorene			
138				11th & Janbrook			
139			1117	Janbrook			
140			1217	Linwood			
141			1201	Linwood			
142				11th & Lindwood			
143				7th St Ally by 2910 7th			
144				Alley behind Senior Center			
145				Locust St Across from Golf Course			
146				5th & Locust	X		
147				Ally by car wash at 5th & Locust			
148				7th St Alley by Driggers			
149			554	Ave J Behind house in alley			
150				Owen Parkway in planter in Cul de sac			
151				Owen Parkway manhole behind building by cul de sac			
152							
153							
154							
155							
156							
157							

Apr 11/11/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1							
2			1317	Linwood			
3			1309	Lindwood & Surfwood			
4			1309	Janbrook			
5				Dorene			
6				Dorene & Surfwood			
7			1328	Holiday & Dorene			
8			1329	Dorene			
10				Mayper			
11			3710	Mayper & Dorene			
12				N 17th			
13				Cedar & Neptune			
14				Cedar & Neptune			
15			1504	Cedar			
16				14th & Cedar			
17			1314	13th & Cedar			
18				Ave N			
19				15th & Ave N			
20				17th & Ave N			
21			1516	Hiatt			
22				15th & Hiatt			
23			1314	Silver Lane			
24				15th & Silver Lane			
25			1533	Silver Lane			
26			1532	Ave O			
27				15th & Ave O			
28			1522	Ave O			
29			1331	Walker			
30				15th & Walker			
31			1540	Walker			
32				17th & Walker			
33			1513	Cachelin			
34			1326	15th & Cachelin			
35				Cachelin			
36			4337	14th & Ave P			
37				14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella			
				Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavcrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			802	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayer			
132			1201	Mayer			
133			1217	Mayer			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Ally by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

Steve  
11/4/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Shoal Dr			
60				Cul De Sac in Shoal Dr			
61				CLC 1-16 & Carolina Dr			
62			26	CLC			
63			20	CLC			
64				16-66 CLC			
65			59	CLC			
66			51	CLC			
67				67-98 CLC & Ave Q			
68			95	CLC			
69			90	CLC			
70			121	CLC			
71			127	CLC			
72				99-129 CLC & Ave Q			
73			4325	12th St			
74			4310	12th St			
75			1213	Ave P			
76				11th & Ave P			
77			4317	11th St			
78				130-160 CLC & Ave Q			
79			157	CLC			
			139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1							
2			1317	Linwood			
3				Lindwood & Surfwood			
4			1309	Janbrook			
5			1309	Dorene			
6				Dorene & Surfwood			
7				Holiday & Dorene			
8			1329	Dorene			
10			1329	Mayper			
11				Mayper & Dorene			
12			3710	N 17th			
13				Cedar & Neptune			
14				Cedar & Neptune			
15			1504	Cedar			
16				14th & Cedar			
17				13th & Cedar			
18			1314	Ave N			
19				15th & Ave N			
20				17th & Ave N			
21			1516	Hiatt			
22				15th & Hiatt			
23			1314	Silver Lane			
24				15th & Silver Lane			
25			1533	Silver Lane			
26			1532	Ave O			
27				15th & Ave O			
28			1522	Ave O			
29			1331	Walker			
30				15th & Walker			
31			1540	Walker			
32				17th & Walker			
33			1513	Cachelin			
34				15th & Cachelin			
35			1326	Cachelin			
36				14th & Ave P			
37			4337	14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella			
				Stella			

11/7/20  
 [Signature]

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavecrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

*Cleaned*

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119			1202	Silver Lane			
120			1203	Hiatt			
121				11th & Hiatt			
122			1005	Hiatt			
123				9th & Redick			
124			602	Redick			
125			1002	Redick			
126				11th & Redick			
127			1206	Redick			
128			1117	Willow Dr			
129				11th & Willow Dr			
130			1001	Willow Dr			
131				11th & Mayer			Checked
132			1201	Mayer			
133			1217	Mayer			
134			1217	Dorene			
135			1201	Dorene			
136				11th & Dorene			
137				11th & Janbrook			
138			1117	Janbrook			
139			1217	Linwood			
140			1201	Linwood			
141				11th & Lindwood			
142				7th St Alley by 2910 7th			
143				Alley behind Senior Center			
144				Locust St Across from Golf Course			
145				5th & Locust			
146				Ally by car wash at 5th & Locust			
147				7th St Alley by Driggers			
148			554	Ave J Behind house in alley			
149				Owen Parkway in planter in Cul de sac			
150				Owen Parkway manhole behind building by cul de sac			
151							
152							
153							
154							
155							
156							
157							

Hand 10/28/2022

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1							
2			1317	Linwood			
3			1309	Lindwood & Surfwood			
4			1309	Janbrook			
5				Dorene			
6				Dorene & Surfwood			
7			1329	Holiday & Dorene			
8			1329	Dorene			
10				Mayper			
11				Mayper & Dorene			
12			3710	N 17th			
13				Cedar & Neptune			
14				Cedar & Neptune			
15			1504	Cedar			
16				14th & Cedar			
17			1314	13th & Cedar			
18				Ave N			
19				15th & Ave N			
20				17th & Ave N			
21			1516	Hlatt			
22				15th & Hlatt			
23			1314	Silver Lane			
24				15th & Silver Lane			
25			1533	Silver Lane			
26			1532	Ave O			
27				15th & Ave O			
28			1522	Ave O			
29			1331	Walker			
30				15th & Walker			
31			1540	Walker			
32				17th & Walker			
33			1513	Cachelin			
34				15th & Cachelin			
35			1326	Cachelin			
36				14th & Ave P			
37			4337	14th			
38				Shoal Dr & Ave Q			
39				15th & Ave Q			
40			1515	15th & Stella Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41							
42			1543	Stella			
43			1543	Murray			
44			1523	Murray			
45				15th & Murray			
46			1528	15th & Ave P			
47				Ave P			
48				In the ball field on Ave P			
49				17th & Q			
50			1802	Ave Q			
51				17th & Waters Edge Court			
52			1070	Waters Edge Court			
53				Cul De Sac in Waters Edge Court			
54				Cul De Sac in Shoal Pointe Dr			
55			1023	Shoal Pointe Dr			
56			1019	Shoal Dr			
57			1015	Shoal Dr			
58			1013	Shoal Dr			
59			1012	Shoal Dr			
60				Cul De Sac in Shoal Dr			
61				CLC 1-16 & Carolina Dr			
62			26	CLC			
63			20	CLC			
64				16-88 CLC			
65			59	CLC			
66			51	CLC			
67				67-98 CLC & Ave Q			
68			95	CLC			
69			90	CLC			
70			121	CLC			
71			127	CLC			
72				99-129 CLC & Ave Q			
73			4325	12th St			
74			4310	12th St			
75			1213	Ave P			
76				11th & Ave P			
77			4317	11th St			
78				130-160 CLC & Ave Q			
79			157	CLC			
			139	CLC			

Steve 10/28/22

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80							
81			145	CLC			
82			166	CLC			
83				161-189 CLC & Ave Q			
84			4318	10th			
85			1003	Ave P			
86			903	Ave P			
87			195	CLC			
88			198	CLC			
89				8th & R			
90			4418	8th			
91				8th & Ave Q			
92			4317	8th			
93				7th & Ave Q			
94			4411	7th			
95				6th & Ave Q			
96			4412	Nth 6th			
97				Wavcrest Park			
98			109	Shoreline			
99			110	Shoreline			
100			114	Shoreline			
101			102	Shoreline			
102			210	Marina Court			
103			180	Marina Court			
104			130	Marina Court			
105			4320	N 9th			
106			4304	N 9th			
107			1004	Cachelin			
108				11th & Cachelin			
109			1200	Cachelin			
110			1202	Ave O			
111				11th & Ave O			
112			1007	Ave O			
113			640	Key Circle			
114			990	Key Circle			
115			940	Key Circle			
116			760	Key Circle			
117			830	Key Circle			
118			1105	Silver Lane			
				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120			1202	Silver Lane			
121			1203	Hiatt			
122				11th & Hiatt			
123			1005	Hiatt			
124				9th & Redick			
125			802	Redick			
126			1002	Redick			
127				11th & Redick			
128			1206	Redick			
129			1117	Willow Dr			
130				11th & Willow Dr			
131			1001	Willow Dr			
132				11th & Mayper			
133			1201	Mayper			
134			1217	Mayper			
135			1217	Dorene			
136			1201	Dorene			
137				11th & Dorene			
138				11th & Janbrook			
139			1117	Janbrook			
140			1217	Linwood			
141			1201	Linwood			
142				11th & Lindwood			
143				7th St Ally by 2910 7th			
144				Alley behind Senior Center			
145				Locust St Across from Golf Course			
146				5th & Locust			
147				Ally by car wash at 5th & Locust			
148				7th St Alley by Driggers			
149				Ave J Behind house in alley			
150			554	Owen Parkway in planter in Cul de sac			
151				Owen Parkway manhole behind building by cul de sac			
152							
153							
154							
155							
156							
157							

Handwritten note: \*C/inspect

10/21/22

Estimote

**MANHOLE TIME DATE ADDRESS STREET TYPE CLEAN INSPECTED BY**

1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

**MANHOLE    TIME    DATE    ADDRESS    STREET    TYPE    CLEAN    INSPECTED BY**

41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

**MANHOLE TIME DATE ADDRESS STREET TYPE CLEAN INSPECTED BY**

80			145	CLC		
81			166	CLC		
82				161-189 CLC & Ave Q		
83			4318	10th		
84			1003	Ave P		
85			903	Ave P		
86			195	CLC		
87			198	CLC		
88				8th & R		
89			4418	8th		
90				8th & Ave Q		
91			4317	8th		
92				7th & Ave Q		
93			4411	7th		
94				6th & Ave Q		
95			4412	Nth 8th		
96				Wavcrest Park		
97			109	Shoreline		
98			110	Shoreline		
99			114	Shoreline		
100			102	Shoreline		
101			210	Marina Court		
102			180	Marina Court		
103			130	Marina Court		
104			4320	N 9th		
105			4304	N 9th		
106			1004	Cachelin		
107				11th & Cachelin		
108			1200	Cachelin		
109			1202	Ave O		
110				11th & Ave O		
111			1007	Ave O		
112			640	Key Circle		
113			990	Key Circle		
114			940	Key Circle		
115			760	Key Circle		
116			830	Key Circle		
117			1105	Silver Lane		
118				11th & Silver Lane		



10/13/2022  
10/14/2022

46  
54

MANHOLE TIME DATE ADDRESS STREET TYPE CLEAN INSPECTED BY

1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hlatt			
21				15th & Hlatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

**MANHOLE    TIME    DATE    ADDRESS    STREET    TYPE    CLEAN    INSPECTED BY**

41			1543	Stella				
42			1543	Murray				
43			1523	Murray				
44				15th & Murray				
45				15th & Ave P				
46			1528	Ave P				
47				In the ball field on Ave P				
48				17th & Q				
49			1802	Ave Q				
50				17th & Waters Edge Court				
51			1070	Waters Edge Court				
52				Cul De Sac in Waters Edge Court				
53				Cul De Sac in Shoal Pointe Dr				
54			1023	Shoal Pointe Dr				
55			1019	Shoal Dr				
56			1015	Shoal Dr				
57			1013	Shoal Dr				
58			1012	Shoal Dr				
59				Cul De Sac in Shoal Dr				
60				CLC 1-16 & Carolina Dr				
61			26	CLC				
62			20	CLC				
63				16-68 CLC				
64			59	CLC				
65			51	CLC				
66				67-98 CLC & Ave Q				
67			95	CLC				
68			90	CLC				
69			121	CLC				
70			127	CLC				
71				99-129 CLC & Ave Q				
72			4325	12th St				
73			4310	12th St				
74			1213	Ave P				
75				11th & Ave P				
76			4317	11th St				
77				130-160 CLC & Ave Q				
78			157	CLC				
79			139	CLC				

**MANHOLE TIME DATE ADDRESS STREET TYPE CLEAN INSPECTED BY**

80			145	CLC		
81			166	CLC		
82				161-189 CLC & Ave Q		
83			4318	10th		
84			1003	Ave P		
85			903	Ave P		
86			195	CLC		
87			198	CLC		
88				8th & R		
89			4418	8th		
90				8th & Ave Q		
91			4317	8th		
92				7th & Ave Q		
93			4411	7th		
94				6th & Ave Q		
95			4412	Nth 6th		
96				Wavcrest Park		
97			109	Shoreline		
98			110	Shoreline		
99			114	Shoreline		
100			102	Shoreline		
101			210	Marina Court		
102			180	Marina Court		
103			130	Marina Court		
104			4320	N 9th		
105			4304	N 9th		
106			1004	Cachelin		
107				11th & Cachelin		
108			1200	Cachelin		
109			1202	Ave O		
110				11th & Ave O		
111			1007	Ave O		
112			640	Key Circle		
113			990	Key Circle		
114			940	Key Circle		
115			760	Key Circle		
116			830	Key Circle		
117			1105	Silver Lane		
118				11th & Silver Lane		

**MANHOLE      TIME      DATE      ADDRESS      STREET      TYPE CLEAN      INSPECTED BY**

119			1202	Silver Lane		
120			1203	Hlatt		
121				11th & Hlatt		
122			1005	Hlatt		
123				9th & Redick		
124			802	Redick		
125			1002	Redick		
126				11th & Redick		
127			1206	Redick		
128			1117	Willow Dr		
129				11th & Willow Dr		
130			1001	Willow Dr		
131				11th & Mayper		
132			1201	Mayper		
133			1217	Mayper		
134			1217	Dorene		
135			1201	Dorene		
136				11th & Dorene		
137				11th & Janbrook		
138			1117	Janbrook		
139			1217	Linwood		
140			1201	Linwood		
141				11th & Lindwood		
142				7th St Ally by 2910 7th		
143				Alley behind Senior Center		
144				Locust St Across from Golf Course		
145				5th & Locust		
146				Ally by car wash at 5th & Locust		
147				7th St Alley by Driggers		
148			554	Ave J Behind house in alley		
149				Owen Parkway in planter in Cul de sac		
150				Owen Parkway manhole behind building by cul de sac		
151						
152						
153						
154						
155						
156						
157						

2 REV 7/5/2024

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavecrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120			1202	Silver Lane			
121			1203	Hiatt			
122				11th & Hiatt			
123			1005	Hiatt			
124			802	9th & Redick			
125			1002	Redick			
126				Redick			
127			1206	11th & Redick			
128			1117	Redick			
129				Willow Dr			
130				11th & Willow Dr			
131			1001	Willow Dr			
132			1201	11th & Mayer			
133			1217	Mayper			
134			1217	Mayper			
135			1201	Dorene			
136				Dorene			
137				11th & Dorene			
138			1117	11th & Janbrook			
139			1217	Janbrook			
140			1201	Linwood			
141				Linwood			
142				11th & Lindwood			
143				7th St Ally by 2910 7th			
144				Alley behind Senior Center			
145				Locust St Across from Golf Course			
146				5th & Locust			
147				Ally by car wash at 5th & Locust			
148			554	7th St Alley by Driggers			
149				Ave J Behind house in alley			
150				Owen Parkway in planter in Cul de sac			
151				Owen Parkway manhole behind building by cul de sac			
152							
153							
154							
155							
156							
157							

*Clean*

Steve 9/23/2022

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			
2				Lindwood & Surfwood			
3			1309	Janbrook			
4			1309	Dorene			
5				Dorene & Surfwood			
6				Holiday & Dorene			
7			1329	Dorene			
8			1329	Mayper			
10				Mayper & Dorene			
11			3710	N 17th			
12				Cedar & Neptune			
13				Cedar & Neptune			
14			1504	Cedar			
15				14th & Cedar			
16				13th & Cedar			
17			1314	Ave N			
18				15th & Ave N			
19				17th & Ave N			
20			1516	Hiatt			
21				15th & Hiatt			
22			1314	Silver Lane			
23				15th & Silver Lane			
24			1533	Silver Lane			
25			1532	Ave O			
26				15th & Ave O			
27			1522	Ave O			
28			1331	Walker			
29				15th & Walker			
30			1540	Walker			
31				17th & Walker			
32			1513	Cachelin			
33				15th & Cachelin			
34			1326	Cachelin			
35				14th & Ave P			
36			4337	14th			
37				Shoal Dr & Ave Q			
38				15th & Ave Q			
39				15th & Stella			
40			1515	Stella			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41			1543	Stella			
42			1543	Murray			
43			1523	Murray			
44				15th & Murray			
45				15th & Ave P			
46			1528	Ave P			
47				In the ball field on Ave P			
48				17th & Q			
49			1802	Ave Q			
50				17th & Waters Edge Court			
51			1070	Waters Edge Court			
52				Cul De Sac in Waters Edge Court			
53				Cul De Sac in Shoal Pointe Dr			
54			1023	Shoal Pointe Dr			
55			1019	Shoal Dr			
56			1015	Shoal Dr			
57			1013	Shoal Dr			
58			1012	Shoal Dr			
59				Cul De Sac in Shoal Dr			
60				CLC 1-16 & Carolina Dr			
61			26	CLC			
62			20	CLC			
63				16-66 CLC			
64			59	CLC			
65			51	CLC			
66				67-98 CLC & Ave Q			
67			95	CLC			
68			90	CLC			
69			121	CLC			
70			127	CLC			
71				99-129 CLC & Ave Q			
72			4325	12th St			
73			4310	12th St			
74			1213	Ave P			
75				11th & Ave P			
76			4317	11th St			
77				130-160 CLC & Ave Q			
78			157	CLC			
79			139	CLC			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80			145	CLC			
81			166	CLC			
82				161-189 CLC & Ave Q			
83			4318	10th			
84			1003	Ave P			
85			903	Ave P			
86			195	CLC			
87			198	CLC			
88				8th & R			
89			4418	8th			
90				8th & Ave Q			
91			4317	8th			
92				7th & Ave Q			
93			4411	7th			
94				6th & Ave Q			
95			4412	Nth 6th			
96				Wavecrest Park			
97			109	Shoreline			
98			110	Shoreline			
99			114	Shoreline			
100			102	Shoreline			
101			210	Marina Court			
102			180	Marina Court			
103			130	Marina Court			
104			4320	N 9th			
105			4304	N 9th			
106			1004	Cachelin			
107				11th & Cachelin			
108			1200	Cachelin			
109			1202	Ave O			
110				11th & Ave O			
111			1007	Ave O			
112			640	Key Circle			
113			990	Key Circle			
114			940	Key Circle			
115			760	Key Circle			
116			830	Key Circle			
117			1105	Silver Lane			
118				11th & Silver Lane			

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119							
120			1202	Silver Lane			
121			1203	Hiatt			
122				11th & Hiatt			
123			1005	Hiatt			
124			802	9th & Redick			
125			1002	Redick			
126				Redick			
127			1206	11th & Redick			
128			1117	Redick			
129				Willow Dr.			
130				11th & Willow Dr			
131			1001	Willow Dr			
132				11th & Mayper			
133			1201	Mayper			
134			1217	Mayper			
135			1217	Dorene			
136			1201	Dorene			
137				11th & Dorene			
138				11th & Janbrook		X	
139			1117	Janbrook			
140			1217	Linwood			
141			1201	Linwood			
142				11th & Lindwood			
143				7th St Ally by 2910 7th			
144				Alley behind Senior Center			
145				Locust St Across from Golf Course			
146				5th & Locust			
147				Ally by car wash at 5th & Locust			
148				7th St Alley by Driggers			
149			554	Ave J Behind house in alley			
150				Owen Parkway in planter in Cul de sac			
151				Owen Parkway manhole behind building by cul de sac			
152							
153							
154							
155							
156							
157							

9-16-22

*[Handwritten signature]*

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
1			1317	Linwood			RS
2	736			Lindwood & Surfwood			RS
3	738		1309	Janbrook			RS
4	735		1309	Dorene			RS
5	740			Dorene & Surfwood			RS
6	742			Holiday & Dorene			RS
7	744		1329	<del>Holiday Dorene</del>			RS
8	745		1329	Mayper			RS
10	747			Mayper & Dorene			RS
11	748		3710	N 17th			RS
12	747			Cedar & Neptune			RS
13	750			Cedar & Neptune			RS
14	751			Cedar			RS
15	752		1504				RS
16	752			14th & Cedar			RS
17	754			13th & Cedar			RS
18	813		1314	Ave N			RS
19	814			15th & Ave N			RS
20	815			17th & Ave N			RS
21	818		1516	Hiatt			RS
22	822			15th & Hiatt			RS
23	824		1314	Silver Lane			RS
24	824			15th & Silver Lane			RS
25	825		1533	Silver Lane			RS
26	827		1532	Ave O			RS
27	828			15th & Ave O			RS
28	827		1522	Ave O			RS
29	830		1331	Walker			RS
30	831			15th & Walker			RS
31	832		1540	Walker			RS
32	833			17th & Walker			RS
33	834		1513	Cachelin			RS
34	835			15th & Cachelin			RS
35	836		1326	Cachelin			RS
36	838			14th & Ave P			RS
37	837		4337	14th			RS
38	840			<del>School Dr &amp; Ave Q</del>			RS
39	841			15th & Ave Q			RS
40	841		1515	15th & Stella Stella			RS

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
41	843		1543	Stella			RS
42	844		1543	Murray			RS
43	845		1523	Murray			RS
44	846			15th & Murray			RS
45	847			15th & Ave P			RS
46	848		1528	Ave P			RS
47	850			In the ball field on Ave P			RS
48	852			17th & Q			RS
49	853		1802	Ave Q			RS
50	854			17th & Waters Edge Court			RS
51	855		1070	Waters Edge Court			RS
52	855			Cul De Sac in Waters Edge Court			RS
53	856			Cul De Sac in Shoal Pointe Dr			RS
54	857		1023	Shoal Pointe Dr			RS
55	901		1019	Shoal Dr			RS
56	902		1015	Shoal Dr			RS
57	902		1013	Shoal Dr			RS
58	903		1012	Shoal Dr			RS
59	904			Cul De Sac in Shoal Dr			RS
60	905			CLC 1-16 & Carolina Dr			RS
61	907		26	CLC			RS
62	908		20	CLC			RS
63	909			16-66 CLC			RS
64	911		59	CLC			RS
65	916		51	CLC			RS
66	918			67-98 CLC & Ave Q			RS
67	919		95	CLC			RS
68	920		90	CLC			RS
69	921		121	CLC			RS
70	922		127	CLC			RS
71	923			99-129 CLC & Ave Q			RS
72	924		4325	12th St			RS
73	925		4310	12th St			RS
74	927		1213	Ave P			RS
75	928			11th & Ave P			RS
76	930		4317	11th St			RS
77	931			130-160 CLC & Ave Q			RS
78	932		157	CLC			RS
79	934		139	CLC			RS

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
80	9:35		145	CLC			RS
81	9:37		166	CLC			RS
82	9:38			161-189 CLC & Ave Q			RS
83	9:39		4318	10th			RS
84	9:40		1003	Ave P			RS
85	9:41		903	Ave P			RS
86	9:42		195	CLC			RS
87	9:44		198	CLC			RS
88	9:46			8th & R			RS
89	9:47		4418	8th			RS
90	9:48			8th & Ave Q			RS
91	9:49		4317	8th			RS
92	9:51			7th & Ave Q			RS
93	7:52		4411	7th			RS
94	9:54			6th & Ave Q			RS
95	9:54		4412	Nth 6th			RS
96	9:56			Wavcrest Park			RS
97	9:58		109	Shoreline			RS
98	9:59		110	Shoreline			RS
99	10:01		114	Shoreline			RS
100	10:02		102	Shoreline			RS
101	10:03		210	Marina Court			RS
102	10:03		180	Marina Court			RS
103	10:04		130	Marina Court			RS
104	9:43		4320	N 9th			RS
105	9:49		4304	N 9th			RS
106	10:07		1004	Cachelin			RS
107	10:08			11th & Cachelin			RS
108	10:08		1200	Cachelin			RS
109	10:12		1202	Ave O			RS
110	10:13			11th & Ave O			RS
111	10:14		1007	Ave O			RS
112			640	Key Circle			RS
113			990	Key Circle			RS
114			940	Key Circle			RS
115			760	Key Circle			RS
116			830	Key Circle			RS
117	10:15		1105	Silver Lane			RS
118	10:17			11th & Silver Lane			RS

root growing in 10th RS

MANHOLE	TIME	DATE	ADDRESS	STREET	TYPE	CLEAN	INSPECTED BY
119	1018		1202	Silver Lane			AS
120	1019		1203	Hiatt			AS
121	1022			11th & Hiatt			AS
122	1022		1005	Hiatt			AS
123	1024			9th & Redick			AS
124	1025		802	Redick			AS
125	1027		1002	Redick			AS
126	1028			11th & Redick			AS
127	1029		1206	Redick			AS
128	1031		1117	Willow Dr			AS
129	1032			11th & Willow Dr			AS
130	1033		1001	Willow Dr			AS
131	1035			11th & Mayper	needs spawmed		AS
132	1037		1201	Mayper	needs spawmed		AS
133	1038		1217	Mayper			AS
134	1039		1217	Dorene			AS
135	1040		1201	Dorene			AS
136	1041			11th & Dorene			AS
137	1042			11th & Janbrook			AS
138	1043		1117	Janbrook			AS
139	1045		1217	Linwood			AS
140	1045		1201	Linwood			AS
141	1047			11th & Lindwood			AS
142				7th St Ally by 2910 7th			SL
143				Alley behind Senior Center			SL
144				Locust St Across from Golf Course			SL
145				5th & Locust			SL
146				Ally by car wash at 5th & Locust			SL
147				7th St Alley by Driggers			SL
148			554	Ave J Behind house in alley			SL
149				Owen Parkway in planter in Cul de sac			SL
150				Owen Parkway manhole behind building by cul de sac			SL
151							
152							
153							
154							
155							
156							
157							





