

November 16, 2020  
 Mayor & City Council Members  
 City of Waverly

**EXECUTIVE SUMMARY OF THE**  
**2019-20**  
**PUBLIC WORKS DEPARTMENT**  
**ANNUAL REPORT**

Highlights of the 2019-20 fiscal year for the Public Works Department are summarized for quick review. The following 10 divisions represent the Public Works Department's primary areas of responsibility. This executive summary is not meant to be inclusive of all activities, but rather a snapshot of the highlights over the past year. Detailed information is provided in the attached annual report.

**Division 1 – Public Works Administration**

Public Works Administration is responsible for coordinating and overseeing public improvement projects. Over the past year many projects were either under construction or in the study phase. (Cost includes employee charges to project.) Projects include:

<b><u>Projects</u></b>	<b><u>Initiated</u></b>	<b><u>Finalized</u></b>	<b><u>Cost</u></b>
Airport Land Acquisition (Cost = Land \$ minus Grant \$)	June 2012	Sept. 2020	\$126,399
IA Hwy 3 (Bremer Ave.) Reconstruction 2017 & 2018 \$12.1M IDOT project with local cost share	April 2016	2019	\$4,200,000
20 <sup>th</sup> Street NW Recon. – Ph. 1 RR Crossing Impr. At 20 <sup>th</sup> St. NW & 5 <sup>th</sup> Ave. NW 2018	Jan. 2017	not final	-
Cedar River Parkway (East) 2018	Jan. 2017	Nov. 2019	\$9,998,506
Airport Runway 29 Extension 2018	Aug. 2017	not final	-
Adams Pkwy Bridge Repair & Horton Rd. 2018	June 2018	Aug. 2019	\$445,606
WPC Facility Improvements 2020	March 2018	not final	-
Cedar Lane Reconstruction 2019	Aug. 2016	May 2020	\$984,092
Bituminous Seal Coat Program 2019	Jan. 2019	Sept. 2019	\$157,748
Slurry Seal Program 2019	Jan. 2019	Oct. 2019	\$193,000
Crack Cleaning & Filling Project 2019	March 2019	Sept. 2019	\$20,937
Sanitary Sewer Manhole Rehab 2019	March 2019	Nov. 2019	\$20,974
Asphalt Patching – Spring 2019	March 2019	July 2019	\$26,734
Dog Park Sidewalk 2019 (Total \$35,000 Donated by Brian Harvey)	March 2019	July 2019	\$34,987
4 <sup>th</sup> St. SW & 10 <sup>th</sup> St. SW Improvements 2020	Aug. 2018	not final	-
20 <sup>th</sup> Street NW Improvements 2020	June 2019	not final	-
Downtown Alley Reconstruction 2019	July 2019	Oct. 2019	\$31,000

<b>Projects</b> (Cont'd)	<b>Initiated</b>	<b>Finalized</b>	<b>Cost</b>
E. Bremer Ave. San. Sewer Main Ext. 2019	July 2019	Feb. 2020	\$197,980
Infrastructure Modeling – Water & Sewer	June 2019	Feb. 2020	\$74,000
Airport Obstruction Removal 2020	April 2019	June 2020	\$160,110
Business 218 North Resurfacing 2020	May 2019	not final	-
Rolling Prairie Trail Extension 2021	March 2019	not final	-
School Ped Ramp Construction 2019	April 2019	Sept. 2019	\$14,407
Cedar River Park (Youth Ballfields)	Sept. 2019	not final	-
Asphalt Patching – Fall 2019	Aug. 2019	Nov. 2019	\$83,286
GIS Data Collection 2019	June 2019	not final	-
Bituminous Seal Coat 2020	Jan. 2020	not final	-
Downtown Alley Reconstruction 2020	March 2020	not final	-
Crack Cleaning & Filling 2020	March 2020	not final	-
Sanitary Sewer Lining Project 2020	March 2020	June 2020	\$89,728
Asphalt Patching – Spring 2020	April 2020	June 2020	\$21,871
Old WPC Dome Demolition	April 2020	not final	-
Traffic Study 2020	Sept. 2019	not final	-
Public Services – North Addition 2021	Dec. 2019	non final	-

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Total value of work **finalized** between July 2019 thru June 2020 **\$ 16,881,365**

<b>Subdivision w/ Public Infrastructure</b>	<b>Final Plat Approved</b>	<b>Public Improve. Accepted</b>	<b>Streets Lots (Feet)</b>
Cedar River Parkway Extension (east)		Nov. 2019	5,721
Whitetail Bluff (35 Lots & 1,821 LF Street)	July 20, 2020	not final	
Total Completed for <b>July 2019 thru June 2020</b>			0 <u>0</u>
Newly Accepted Streets			= 1.08 mi

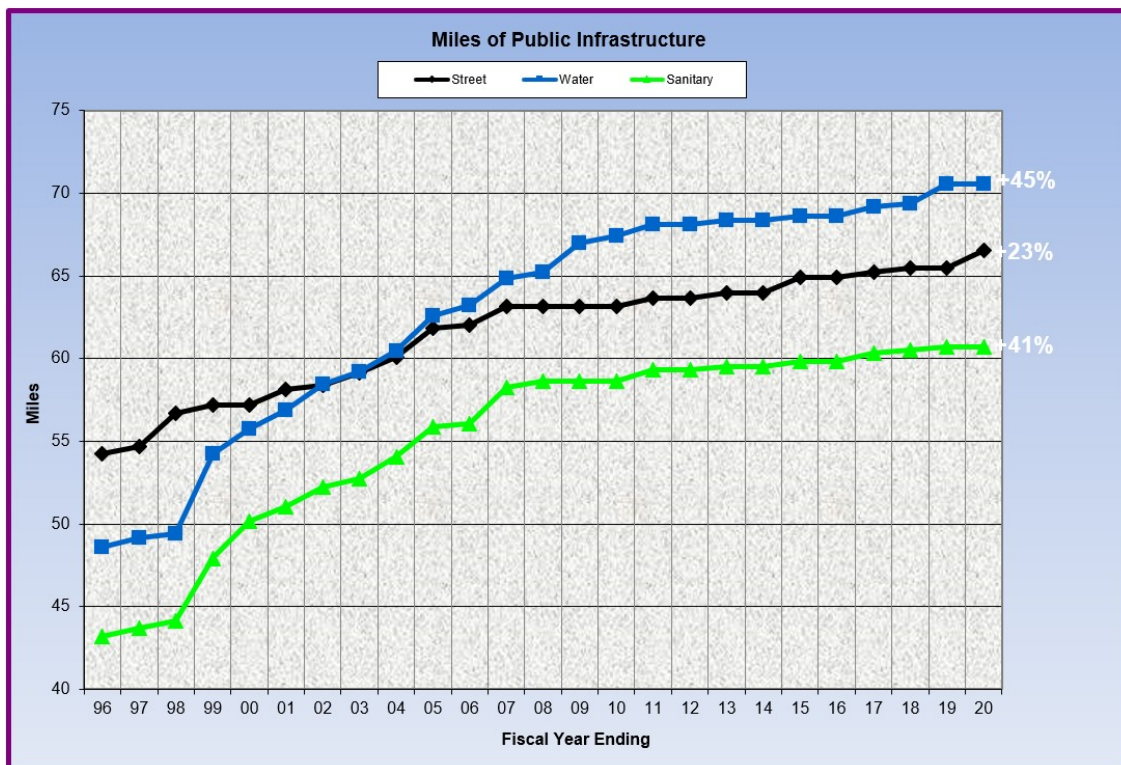
Public Works Administration is also responsible for coordinating and overseeing the general operations and budgets of 10 divisions. Division leaders are responsible for the daily operations and report to the Public Services Superintendent or the Director of Public Works. The 2018-19 actual and the 2019-20 budgeted division expenditures were:

Division	2018-19 Actual	2019-20 Budget
Public Works Administration	\$ 266,718	\$ 284,582
Engineering	263,212	319,723
General Infrastructure Maintenance	303,587	370,975
Equipment Services	312,616	326,875

Street RUT	1,304,167	1,563,756
Airport	\$ 83,135	\$ 77,740
Water (Service, Misc., Int.)	2,086,659	1,968,473
Water Pollution Control (Service, Misc., Int.)	1,206,272	1,150,366
Sewer Line Maintenance	329,916	337,329
Solid Waste	<u>1,470,327</u>	<u>1,532,088</u>
	<b>\$ 7,626,609</b>	<b>\$ 7,551,907</b>

Due to the complexity of City budgeting and financing, the above table is intended to only be a snapshot. The timing of various equipment purchases or projects absorbed into the annual operating budgets can distort year-to-year comparisons. Detailed information is available in the City's FY 2019-20 annual audit.

The increasing amount of public infrastructure has and will create maintenance challenges in coming years. The graph below shows how the total miles of streets, water mains and sanitary sewer mains have increased over the last 24 years. The maintenance needs of the new infrastructure will increase with age. To date the full-time staffing levels within these areas have remained unchanged for over three decades. A proactive equipment replacement schedule and technological advances are allowing the City to maintain excellent service. However, continued growth will inevitably require that additional staff is hired in order to maintain an acceptable and expected level of service to the community.



In an effort to increase public awareness a Public Works quarterly newsletter is mailed to every address within Waverly. The public response to the newsletter is very

favorable. Articles highlight the services provided to the public and information on public works projects. Additionally, since January 2014 the Director of Public Works has joined the Mayor on KWAY Radio 99.3 every Monday morning the day of a council meeting. The Mayor highlights topic of interest on the Council's agenda the Director discusses active public works projects and current Public Services operations such as leaf collection in the fall or special collection week in the spring. In March 2019 the radio updates the Director were suspended due to the COVID-19 pandemic.

## **Division 2 – Engineering Division**

The Engineering Division continues to prepare plans and specifications for smaller scale projects. Inspection and administration of projects are performed on all sizes and types of work as the staffing schedule allows. The design or review of construction drawings are the responsibility of the City Engineer. Consultants continue to fulfill an important role and are utilized for large projects or to design work requiring specialized expertise.

## **Division 3 – General Infrastructure Maintenance**

This division had previously been called “Streets General” with the name change occurring in FY 2016-17.

A primary responsibility of the General Infrastructure Maintenance Division is to finance and/or inspect the following infrastructure:

- Inspect and perform routine maintenance on the dam.
- Inspect trail bridges every four years.
- Finance the USGS Cedar River Gage on Adams Parkway Bridge.
- Finance communitywide street lighting, entrance signs and traffic signals.

Additionally, the local property tax support of the Waverly Municipal Airport is shown as an expense and transfer of monies to the Airport Fund.

## **Division 4 – Equipment Services Division**

This division is responsible for the routine maintenance and repairs of City vehicles. A five-year equipment replacement schedule forecast is maintained allowing for the timely and economical replacement of vehicles and major items of equipment.

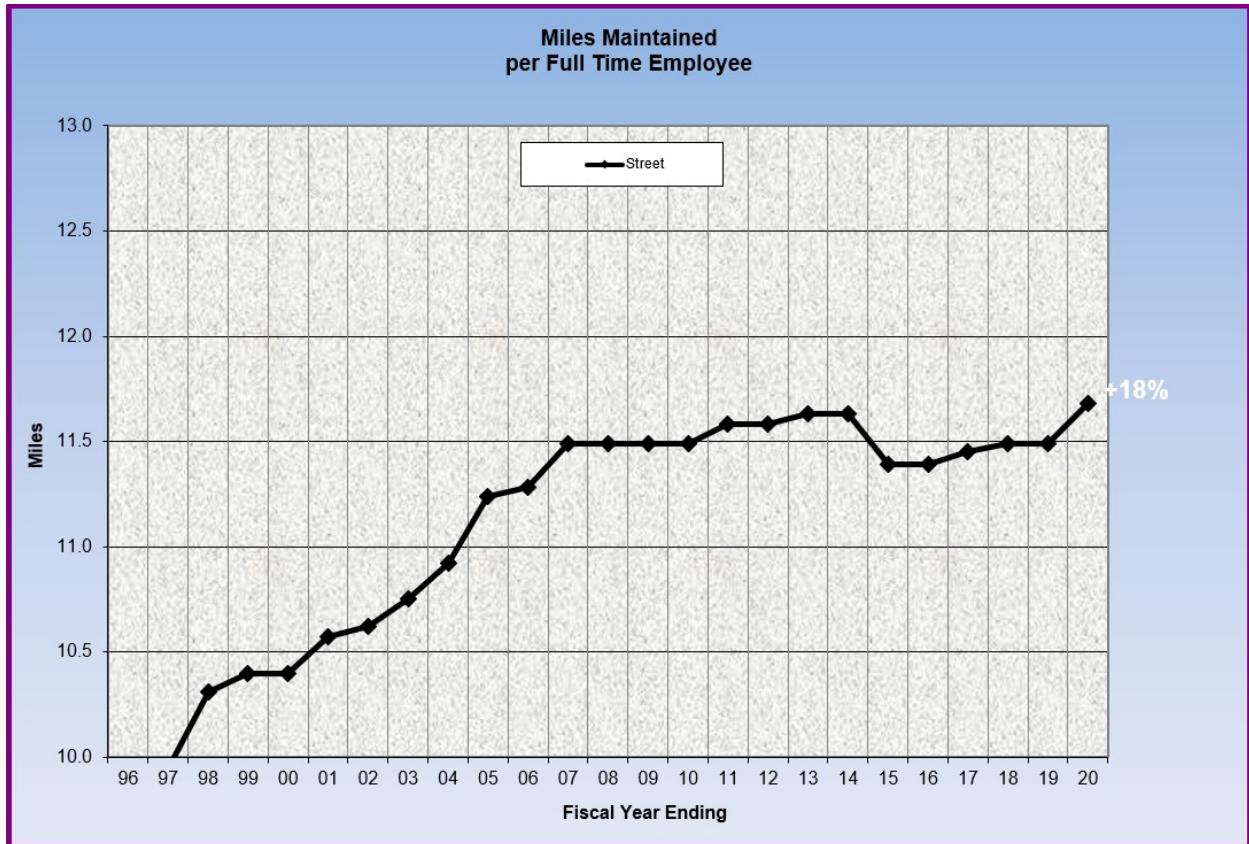
### **Looking to the Future**

- Continuing education is important to staying knowledgeable on vehicle technology advances.

## **Division 5 – Street - RUT Division**

The City owns 66.6 miles of roads, has 2.0 miles of joint jurisdiction (city/county roads) and there are 7.0 miles of state roads through Waverly. Of the 75.6 total miles, the City

is responsible for maintaining 69.6 miles. In the fiscal year 2019-20 the City officially added 1.08 miles street from the completion of the Cedar River Parkway extension from 8<sup>th</sup> Street SE to E. Bremer Avenue. The number of miles of city, county and state roadways was recalculated in September 2006. In the coming years, as time permits, we hope to develop and maintain a detailed breakdown of the number of miles of arterial, collector and residential streets and alleys. The detail would also show the number of miles that are paved or unpaved and curbed or ditched.



The graph above illustrates the community’s growth with new subdivisions increasing the average miles of streets per employee. While the new streets have a low initial maintenance cost, they do immediately impact street sweeping and snow removal efforts. In FY 2014-15 the Streets & Sanitation Foreman had his allocation of time revised from 50/50 to 70/30 to more accurately reflect where his time was spent. This resulted in an adjustment to the average miles of street maintained per full-time employee.

Again, this year the City contracted the seal coating of an estimated 110 blocks in an effort to cover the entire City every 7 years which is the average life of a seal coat. City crews continue to asphalt surface patch in advance of the seal coating.

Maintenance efforts are directed to asphalt patching, seal coating, street sweeping, sign maintenance, aggregate shoulder and alley maintenance, and painting pavement

markings. During the winter months the department is primarily responsible for snow removal, tree trimming and removal of ash trees from the public right-of-ways.

In March 2019, a new Division of Vegetation Management in the Leisure Services Department took over the maintenance of vegetation in roadsides, detention basins, open channel waterways, and trees with the right-of-way.

### **Looking to the Future**

- Work continues on defining and refining the Street Division's core services related to repairing and maintaining pavements, signage, pavement markings, aggregate shoulders and alleys. Additional core services include snow plowing, street sweeping and assisting the new Vegetation Management Division with tree removal and maintenance.

### **Division 6 – Water Division**

The Water Division continues to monitor water quality and perform routine maintenance on valves, hydrants and water main leaks. The Water Division performed 1,813 Iowa One-Call locates for water mains, sanitary sewer and storm sewers.

On average 955,333 gallons of water per day were pumped with 74% of it accounted for through customer billing or known uses like hydrant flushing. The remaining 26% is likely lost through leaks. A leak detection program has helped reduce the unaccounted water by identifying targeted repair work. Our goal is to have over 80% accountability for the water pumped into the water distribution system.

In October 2018 the Iowa DOT completed the reconstruction Bremer Avenue (IA 3). The roadway reconstruction project also included the replacement or addition of approximately 1.2 miles of additional water main along Bremer Avenue from 20<sup>th</sup> Street West to 8<sup>th</sup> Street East.

January 2020 – Completed the 2020 Water Distribution Modeling and Evaluation by WHKS & Co.

### **Looking to the Future**

- Fall 2020 – Completing the GIS mapping of the water distribution system by Midland GIS.
- Completion of the Public Services Center for Operations & Disaster Response final phase in 2021 remains a top priority and allows for the relocation of the Water and Line Maintenance Divisions.

### **Division 7 – Water Pollution Control**

In March 2018 WHKS & Co. was hired to develop and design the wastewater treatment improvements as described in the Engineer's Report for Nutrient Reduction Strategy dated December 7, 2016. The recommended improvements in Alternative No. 2-

Conversion to an EBNR A20 Process with Oxidation Ditches include the construction of an oxidation ditch system, main lift station improvements, primary clarifier improvements, demolition of trickling filter and RBCs, conversion of the intermediate clarifier to a fourth final clarifier, installation of a chemical feed system to supplement phosphorus removal, biosolids storage improvements, and associated site work.

### Looking to the Future

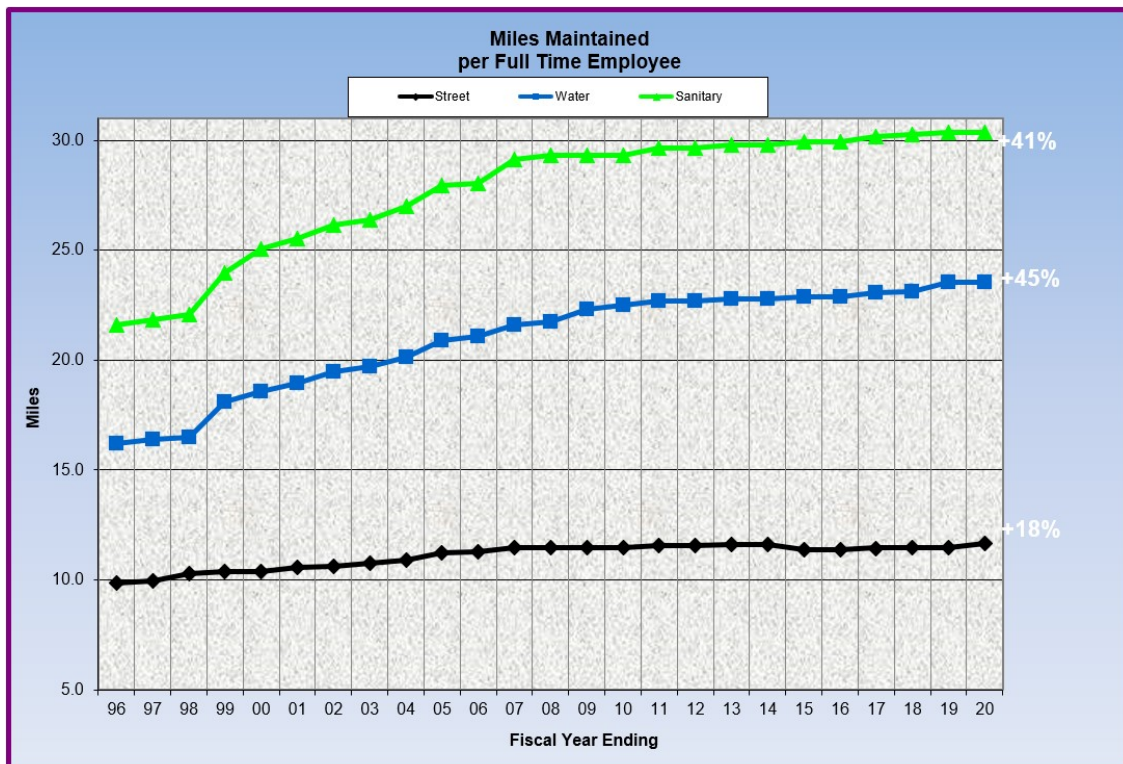
- The schedule for the improvements described above is to complete design by the fall of 2020 and to complete construction by the end of 2022.

### Division 8 – Storm & Sanitary Sewer Line Maintenance Division

This division continued to primarily maintain, clean and televise sanitary and storm sewer lines. Starting in March 2012 the Water Division started performing the utility locates. Additional work included catch basin and manhole repair, sewer taps, and the repair of sewer mains.

The updated Sanitary Sewer Capacity Analysis was completed in January 2020 and helps identify weaknesses within the existing system and the impact of future development on the system. The report determined that there are no “fatal flaws” within the existing system, but there are areas of concern identified for future upgrades.

January 2020 – Completed the 2020 Sanitary Collection System Modeling and Evaluation by WHKS & Co.



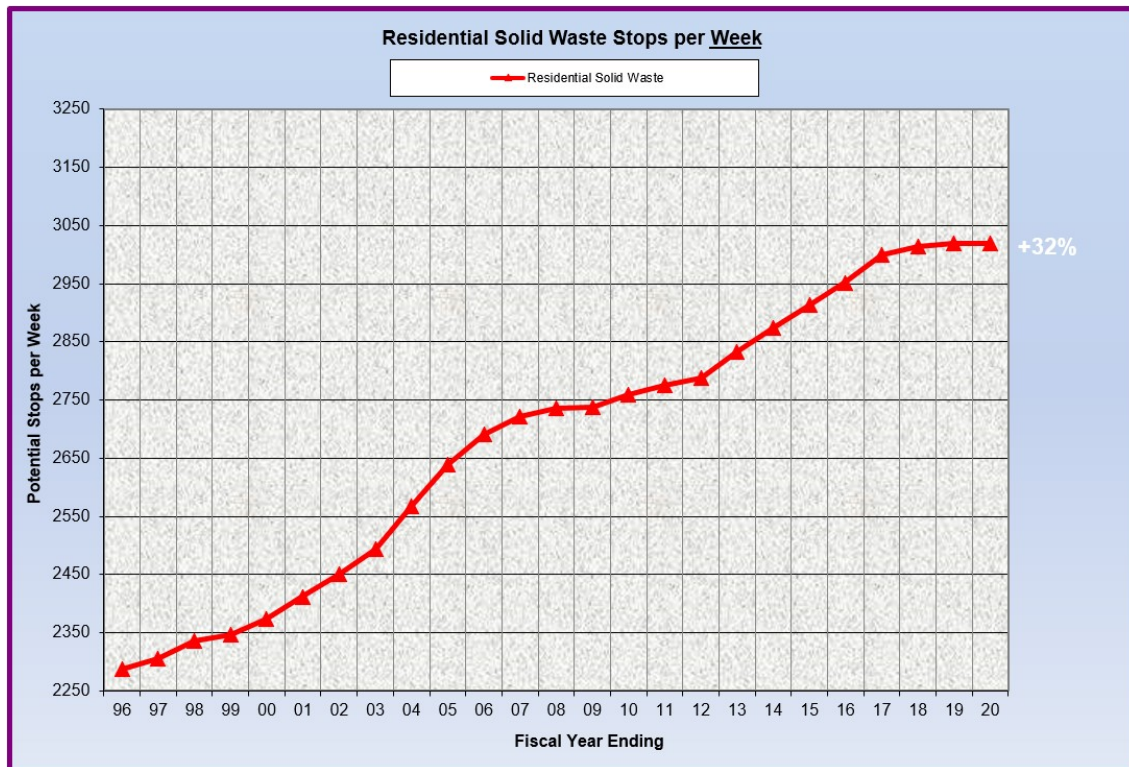
## Looking to the Future

- Maintaining an acceptable 7-year inspection, cleaning and televising have not been achieved for many years. Core duties and responsibilities are being reassessed to achieve the 7-year schedule. Manhole and storm intake fixture adjustments are now a core function of the Streets Division.
- Fall 2020 – Complete GIS mapping of the sanitary sewer and storm sewer collection systems by Midland GIS.
- Completion of the Public Services Center for Operations & Disaster Response final phase in 2021 remains a top priority and allows for the relocation of the Water and Line Maintenance Divisions.

## Division 9 - Solid Waste/Recycling Division

The yard waste and recycling programs remain very successful. Usage of the Yard Waste Site and Recycling Center is stable without significant changes in vehicle count or volume. The Recycling Center is open Monday-Friday from 7:00 a.m. – 5:30 p.m. and every Saturday from 8:00 a.m. – 4:00 p.m., except holidays.

In April of 2014 the City began commingled curbside collection of recyclables. The rapid increase in cost to dispose of the commingled recyclables is concerning. In March 2017 the cost was \$30 per ton and in by March 2019 the cost had risen to \$124 per ton. The cost to landfill solid waste is \$44 per ton.





## **Looking to the Future**

- In the coming years, as the community continues to grow, the volume of commercial waste (dumpsters) may exceed the capacity of the existing resources. Options would include adding a commercial truck and additional personnel or allowing private haulers cover the additional accounts.
- The processing and accumulation of wood mulch remains a concern. The additional amount is likely the result from the removal of ash trees. Beginning in the summer of 2018 wood mulch delivery was made available to rural residents near Waverly in an effort to draw down the stockpile.

## **Division 10 – Waverly Municipal Airport**

In November 2018 the Waverly Municipal Airport welcomed Waverly Air Services as the contract Airport Manager and Swieter Aircraft Services as the contract Fixed-Base Operator. The City entered into 5-year renewable contract for FBO and Airport Manager services.

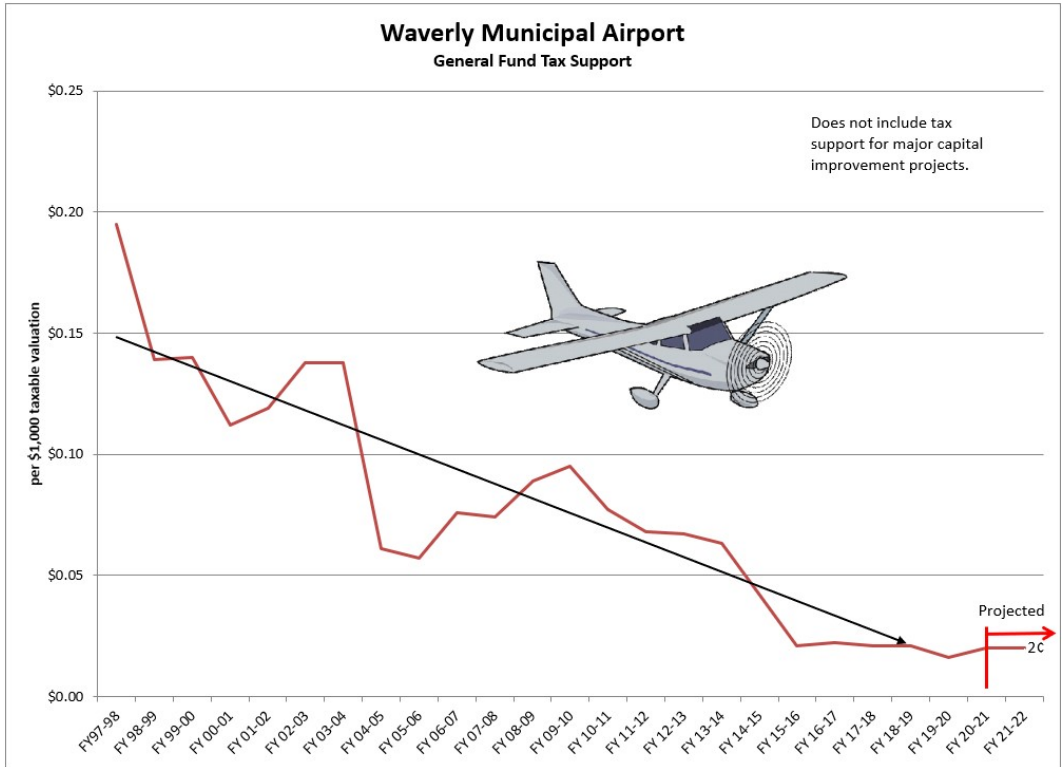
The annual property tax support for the Airport continues to decrease and by the year 2021 the routine operations and maintenance of the facility is leveling off at a property tax rate of 2¢ as seen in the graph below. Major capital projects would continue to need the City's financial support.

Spring 2020 – Completed Obstruction Removal Project

Winter 2020 – Completed Addition of Credit Card Fueling (by FBO)

## **Looking to the Future**

- Fall 2020 – Complete 400-ft Runway 29 Extension Project
- Replace Obsolete Security Cameras
- Upgrade Electrical Power Supply to T-Hangars and Individual Hangars
- Reconstruct Hangar Taxiways
- Construct New T-Hangars



## Conclusion

As a department we continue to strive for excellence in community service and efficiency of operations. In the coming years we hope to see the infrastructure and operational recommendations implemented to better serve the citizens of Waverly, our customers, and meet the needs of a growing community.

Respectfully submitted,

Michael J. Cherry, P.E.  
Director Public Works & City Engineer

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **ADMINISTRATION**

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The Administration consists of the Director and Office Coordinator. The major functions related to Administration are direction of present and future work programs, budget preparation and control, centralized record maintenance, inter/intra departmental coordination, billing and purchasing, and problem solving relevant to personnel and public relations. All of these areas relate to the ten Divisions of the Public Works Department (Administration, Engineering, General Infrastructure Maintenance, Equipment Services, Streets-RUT, Airport, Water, Water Pollution Control, Storm & Sanitary Sewer Line Maintenance, & Solid Waste).

We utilize the City's web site ([www.waverlyia.com](http://www.waverlyia.com)), Cable 82 TV announcements, newspaper articles and releases, radio announcements, Facebook, and personal communication to inform the citizens of Waverly pertaining to the work performed by our department, when and where the work is to be accomplished, and the priorities with which work will be performed.

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **ENGINEERING**

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The Engineering Division oversees all public works improvements, which include designs, inspections, surveys, and final certification of projects. Various types of work include the following:

**Projects – Sewer, Water, Street, Subdivisions**

Planning  
Design  
Inspection  
Project Administration  
Review

**Mapping**

Water  
Storm Sewer  
Sanitary Sewer  
Streets  
Subdivisions  
Zoning

### **PUBLIC IMPROVEMENT PROJECTS**

*“Total Cost” includes all pay apps, invoices & employee charges.*

#### **Airport Land Acquisition**

**Initiated:** June 2012  
**Location:** Waverly Municipal Airport - 1710 35<sup>th</sup> Street NW  
**Description:** This is a land acquisition project for the expansion of the runway safety zone and extension of the runway.  
**Engineer:** McClure Engineering Co., Clive, Iowa  
**Cost:** \$1,820,809  
**Total Grant \$ Rec'd:** \$1,694,410  
**Finalized:** September 22, 2020. This is the date we received the final dollars for Schmidt relocation/moving expenses and Janssen easement expenses.

#### **IA Highway 3 (Bremer Avenue) Reconstruction 2017 & 2018 - An IDOT Project**

**Initiated:** April 2016 Bid Letting: February 21, 2017  
**Location:** IA Highway 3 (Bremer Avenue) from 8<sup>th</sup> Street NE to 20<sup>th</sup> Street NW  
**Description:** The Iowa DOT reconstructed IA Highway 3 (Bremer Avenue) through Waverly in 2017 & 2018. The City of Waverly's expense will be for the installation of the new water main (100%), the new storm sewer (50%), and the parking lanes (100%).  
**Engineer:** WHKS & Co, Mason City, Iowa (City's water main and streetscaping)  
**Contractor:** Skyline Construction, Decorah, Iowa (IDOT's contractor)  
**Payments to IDOT:** \$1,500,000 + \$1,094,120 + \$1,094,120 = \$3,688,240  
**Additional City Expenses:** \$511,760  
**Finalized:** Project was substantially completed by the end of 2018.

## **20<sup>th</sup> Street NW Recon. – Ph. 1 RR Crossing Improvements at 20<sup>th</sup> St. NW & 5<sup>th</sup> Ave. NW 2018**

**Initiated:** January 2017  
**Location:** 20<sup>th</sup> Street NW railroad crossing and 5<sup>th</sup> Avenue NW railroad crossing.  
**Description:** Reconstruction of RR crossings at 20<sup>th</sup> Street NW & 5<sup>th</sup> Avenue NW. Crossing gates will be installed at 20<sup>th</sup> Street NW.  
**Engineer:** McClure Engineering  
**Contractor:** Croell, Inc., New Hampton, Iowa  
**Total Cost:** \$1,873,272  
**Finalized:** not final - As of Sept. 2020, the City is still waiting for contractor to complete the backfilling of one new sidewalk panel. This project is expected to be finalized on October 19, 2020.

## **Cedar River Parkway (East) Improvement 2018**

**Initiated:** January 2017  
**Location:** From the intersection of Cedar River Parkway and 8<sup>th</sup> Street SE eastward to East Bremer Avenue (Hwy. 3)  
**Description:** Construction of new bridge and 1-mile of new roadway.  
**Engineer:** Stanley Consultants (with WHKS & Co. as a sub-engineering firm for the bridge.)  
**Contractor:** Cramer & Associates, Grimes, Iowa  
**Total Cost:** \$9,998,506  
**Finalized:** November 11, 2019

## **Airport Runway 29 Extension 2018**

**Initiated:** August 2017  
**Location:** Waverly Municipal Airport - 1710 35<sup>th</sup> Street NW  
**Description:** Extension of runway by 400 feet.  
**Engineer:** McClure Engineering, Clive, Iowa  
**Contractor:** J.B. Holland, Decorah, Iowa  
**Total Cost:** \$  
**FAA Design Grant:** \$ 137,637  
**FAA Construction Grant:** \$1,357,031  
**Finalized:**

## **Adams Parkway Bridge Repair & Horton Road Impr. 2018**

**Initiated:** June 2018  
**Location:** Adams Parkway Bridge & Horton Road (Horton Rd. repairs were removed from the project to keep costs down.)  
**Description:** Adam's Parkway bridge deck overlay, deck repairs, etc. and milling, joint repair and overlay.  
**Engineer:** WHKS & Co., Mason City, Iowa  
**Contractor:** Cramer & Assoc., Grimes, Iowa  
**Total Cost:** \$445,606  
**Finalized:** August 5, 2019

## **WPC Facility Improvements 2020**

**Initiated:** March 2018  
**Location:** WPC Facility  
**Description:** Currently under design with anticipated construction in 2021. Project to include the construction of an oxidation ditch system, main lift station improvements, primary clarifier improvements, demolition of trickling filter and RBCs, conversion of the intermediate clarifier to a fourth final clarifier, installation of a chemical feed system to supplement phosphorus removal, biosolids storage improvements, and associated site work.  
**Engineer:** WHKS & Co., Mason City, Iowa  
**Contractor:**  
**Total Cost:** \$  
**Finalized:** under design

## **Cedar Lane Reconstruction 2019**

**Initiated:** August 2016  
**Location:** Cedar Lane, between Brown Lane & 2<sup>nd</sup> Avenue NE  
**Description:** Phase 1 of 2 – Reconstruction of Cedar Lane with full-depth concrete pavement. (Phase 2 from Brown Lane to Horton Rd. is scheduled for 2021.)  
**Engineer:** VJ Engineering, Cedar Falls, Iowa  
**Contractor:** K. Cunningham, Cedar Falls, Iowa  
**Total Cost:** \$984,092  
**Finalized:** May 4, 2020

## **Bituminous Seal Coat Program 2019**

**Initiated:** January 2019  
**Location:** Southwest Waverly  
**Description:** Seal coating of streets in southwest Waverly, including double-sealing of park's parking lots.  
**Engineer:** City  
**Contractor:** Blacktop Services, Humboldt, Iowa  
**Total Cost:** \$157,748  
**Finalized:** September 19, 2019

## **Slurry Seal Program 2019**

**Initiated:** January 2019  
**Location:** 11<sup>th</sup> Street SW & 2<sup>nd</sup> Avenue SW at RR tracks; Park 2<sup>nd</sup> Avenue NW & Park 26<sup>th</sup> Street NW, 4<sup>th</sup> Avenue NW & 17<sup>th</sup> Street NW, and parking lot south of Cobblestone Inn.  
**Description:** Slurry sealing portions of streets and the parking lot south of Cobblestone Inn.  
**Engineer:** City  
**Contractor:** Fahrner Asphalt Sealers, Dubuque, Iowa (NOTE: Had lots of issues with Fahrner this year. They started about 3 weeks past the completion date and were charged 19 days of liquidated damages. They also used the wrong oil when starting the slurry sealing the parking lot.)  
**Total Cost:** \$193,000  
**Finalized:** October 17, 2019

### **Crack Cleaning & Filling Project 2019**

**Initiated:** March 2019  
**Location:** 12<sup>th</sup> Street NW (between W. Bremer & 5<sup>th</sup> Avenue NW), 5<sup>th</sup> Avenue NW (between 12<sup>th</sup> Street NW and 1<sup>st</sup> Street NW), and 2<sup>nd</sup> Avenue NE and Impala Subd.  
**Description:** Cleaning of cracks in streets and sealing.  
**Engineer:** City  
**Contractor:** Kluesner Const., Farley, Iowa  
**Total Cost:** \$20,937  
**Finalized:** September 9, 2019

### **Sanitary Sewer Manhole Rehab 2019**

**Initiated:** March 2019  
**Location:** Portions of southwest and northwest Waverly  
**Description:** Repair and installation of a protective liner inside sanitary sewer manholes that are deemed to be in poor condition or have stormwater infiltration issues.  
**Engineer:** City  
**Contractor:** Josh's Construction, Dubuque, Iowa  
**Total Cost:** \$20,974  
**Finalized:** November 4, 2019

### **Asphalt Patching – Spring 2019**

**Initiated:** March 2019  
**Location:** Various streets in Waverly  
**Description:** Repair of utility street cuts with full-depth asphalt.  
**Engineer:** City  
**Contractor:** Heartland Asphalt, Mason City, Iowa  
**Total Cost:** \$26,734  
**Finalized:** July 1, 2019

### **Dog Park Sidewalk 2019**

**Initiated:** March 2019  
**Location:** City's Dog Park on 8<sup>th</sup> Street SE (east of WPC Facility)  
**Description:** Construction of a sidewalk loop within the Dog Park.  
**Engineer:** City  
**Contractor:** Feldman Concrete, Farley, Iowa  
**Total Cost:** \$35,000 - Donation by Brian Harvey (Total cost = \$34,982)  
**Finalized:** July 15, 2019

#### **4<sup>th</sup> Street SW & 10<sup>th</sup> Street SW Improvements 2020**

**Initiated:** August 2018  
**Location:** 4<sup>th</sup> Street SW between 2<sup>nd</sup> Avenue SW & 8<sup>th</sup> Avenue SW and 10<sup>th</sup> Street SW between W. Bremer & 2<sup>nd</sup> Avenue SW.  
**Description:** Reconstruction of both roadways with 4<sup>th</sup> Street being slightly widened and changed to a 3-lane roadway. Improvements will include roadway reconstruction, water main & services, sanitary sewer main & services, storm sewer replacement, and improved street lighting.  
**Engineer:** Snyder & Associates, Cedar Rapids, Iowa  
**Contractor:** Wicks Construction, Decorah, Iowa  
**Total Cost:** \$  
**Finalized:**

#### **20<sup>th</sup> Street NW Improvements 2020**

**Initiated:** June 2019  
**Location:** 20<sup>th</sup> Street NW between 5<sup>th</sup> Avenue NW and RR tracks.  
**Description:** Reconstruction of roadway and replacement of some storm sewer. (This portion of the roadway was initially to have been completed with the railroad section, but was pulled out due to budget constraints.)  
**Engineer:** McClure Engineering, Clive, Iowa  
**Contractor:** Baker Enterprises, Waverly, Iowa  
**Total Cost:** \$  
**Finalized:**

#### **Downtown Alley Reconstruction 2019**

**Initiated:** July 2019  
**Location:** South-side alley in the 100 block of East Bremer Avenue  
**Description:** reconstruction of alley with concrete  
**Engineer:** City  
**Contractor:** Feldman Concrete, Dyersville, Iowa  
**Total Cost:** \$31,000  
**Finalized:** October 7, 2019

#### **E. Bremer Ave. Sanitary Sewer Main Extension 2019**

**Initiated:** July 2019  
**Location:** North side of E. Bremer Avenue to 39<sup>th</sup> Street NE  
**Description:** Approximately 1,500 feet of 8-inch sanitary sewer extension improvements along the north side of E. Bremer Avenue to 39<sup>th</sup> Street NE for the Titan Machinery relocation site.  
**Engineer:** WHKS & Co., Mason City, Iowa  
**Contractor:** Boomerang Corp., Anamosa, Iowa  
**Total Cost:** \$197,980  
**Finalized:** February 10, 2020



## **Infrastructure Modeling – Water Distribution System and San. Sewer Collection System**

**Initiated:** June 2019  
**Location:** Entire Waverly  
**Description:** Updating the 2010 Water Distribution and Sanitary Sewer Collection reports  
**Engineer:** WHKS & Co., Mason City, Iowa  
**Total Cost:** \$74,000  
**Finalized:** February 24, 2020

## **Airport Avionics Room 2020 – Did not receive GAVI Grant – No Project**

**Initiated:** April 2019 – Applied for GAVI Grant, but did not receive  
**Location:** Waverly Municipal Airport - 1710 35<sup>th</sup> Street NW  
**Description:** Construction of an Avionic's Room on the west side of the bulk hangar.

## **Airport Obstruction Removal 2020**

**Initiated:** April 2019  
**Location:** Waverly Municipal Airport - 1710 35<sup>th</sup> Street NW  
**Description:** The Clan and Schmidt properties have structures and trees that are deemed obstructions and compromise the safety of airport operations. Both properties have been purchased by the City and now need to be cleared of the obstructions.  
**Engineer:** McClure Engineering, Clive, Iowa  
**Contractor:** Schrader Excavating & Grading, Walford, Iowa  
**Total Cost:** \$160,110  
**Finalized:** June 15, 2020

## **Business 218 North Resurfacing 2020**

**Initiated:** May 2019  
**Location:** Business 218 North from West Bremer Avenue to the City Limits  
**Description:** Asphalt resurfacing of Business 218 North from the intersection of West Bremer Avenue north to the City Limits. Additionally, two-foot wide paved shoulders will be added from West Bremer Avenue to 35<sup>th</sup> Street NW.  
**Engineer:** WHKS & Co., Mason City, Iowa  
**Contractor:** Heartland Asphalt, Mason City, Iowa  
**Total Cost:** \$  
**Finalized:**

## **Rolling Prairie Trail Extension 2021**

**Initiated:** March 2019  
**Location:** Along 10<sup>th</sup> Avenue SW from Heritage Way to 16<sup>th</sup> Street SW.  
**Description:** Construction of the final section of the bike/pedestrian trail that will complete a 40-mile hard-surface trail system from Bristow to Readlyn.  
**Funding:** Received TAP funds of \$184,000  
**Engineer:** WHKS & Co., Mason City, Iowa  
**Contractor:**  
**Total Cost:** \$  
**Finalized:**

### **School Ped Ramp Construction 2019**

**Initiated:** April 15, 2019  
**Location:** W-SR High School and West Cedar Elementary School  
**Description:** Construction of pedestrian ramps.  
**Engineer:** City  
**Contractor:** Feldman Concrete, Farley, Iowa  
**Total Cost:** \$14,407  
**Finalized:** September 9, 2019

### **Cedar River Park (Youth Ballfields) – Phase 1 Grading Project**

**Initiated:** September 2019  
**Location:** North of Soccer Fields  
**Description:** Construction and development of a youth ballfield sports complex.  
**Engineer:** Hall & Hall Engineering, Hiawatha, Iowa  
**Contractor:** Mehmert Tiling, Lime Springs, Iowa  
**Total Cost:** \$  
**Finalized:**

### **Asphalt Patching – Fall 2019**

**Initiated:** August 2019  
**Location:** Various  
**Description:** Asphalt patching of utility street cut areas.  
**Engineer:** City  
**Contractor:** Heartland Asphalt, Mason City, Iowa  
**Total Cost:** \$83,286  
**Finalized:** November 18, 2019

### **GIS Data Collection 2019**

**Initiated:** June 2019  
**Location:** Citywide  
**Description:** Collection of water valve & hydrant locations; sanitary sewer manhole locations and depths; storm sewer manhole and intake locations and depths.  
**Engineer:** Midland GIS Solutions (Later purchased by SAM), Maryville, Missouri  
**Total Cost:** \$  
**Finalized:**

### **Bituminous Seal Coat 2020**

**Initiated:** January 2020  
**Location:** West Waverly (District 2)  
**Description:** Seal coating of approximately 110 city blocks.  
**Engineer:** City  
**Contractor:** Blacktop Service Co., Humbolt, Iowa  
**Total Cost:** \$  
**Finalized:**

### **Downtown Alley Reconstruction 2020**

**Initiated:** March 2020  
**Location:** South-side alley in the 300 block of West Bremer Avenue  
**Description:** Reconstruction of Alley  
**Engineer:** City  
**Contractor:** Feldman Concrete, Farley, Iowa  
**Total Cost:** \$49,769  
**Finalized:** July 6, 2020

### **Crack Cleaning & Filling 2020**

**Initiated:** March 2020  
**Location:** 2<sup>nd</sup> Ave. SW (from 4<sup>th</sup> St. SW to 16<sup>th</sup> St. SW), 12<sup>th</sup> Street NW (from Park Ave. to City Limits) and Augusta Lane (south end)  
**Description:** Cleaning and filling cracks in streets  
**Engineer:** City  
**Contractor:** Kluesner Construction, Farley, Iowa  
**Total Cost:** \$  
**Finalized:**

### **Sanitary Sewer Lining Project 2020**

**Initiated:** March 2020  
**Location:** 2<sup>nd</sup> Street NW  
**Description:** Lining of \$1,740 feet of the City's 8-inch and 12-inch sanitary sewer main by CIP Pipe Liner within 2<sup>nd</sup> Street NW from Bremer Ave. to 5<sup>th</sup> Ave. NW.  
**Engineer:** City  
**Contractor:** Municipal Pipe Tool, Hudson, Iowa  
**Total Cost:** \$89,728 (Included repair by Barry Smith of a section of collapsed sewer main and street patch of area.)  
**Finalized:** June 1, 2020

### **Asphalt Patching – Spring 2020**

**Initiated:** April 2020  
**Location:** Various  
**Description:** Asphalt patching of utility street cut areas.  
**Engineer:** City  
**Contractor:** Kluesner Construction, Farley, Iowa  
**Total Cost:** \$21,871  
**Finalized:** June 15, 2020

### **Reconstruct T-Hangar Taxilanes 2021** - Did not receive state funding

### **Airport Concrete Apron Rehab –**

Received \$30,000 from CARES Act that was used to pay airport expenses. Will use extra money in Airport account to pay for concrete repair work at the airport.

### **Old WPC Dome Demolition 2020**

**Initiated:** April 2020  
**Location:** Brookwood Park  
**Description:** Demolition of old concrete trickling filter structure from the original WPC site in SE Waverly (Brookwood Park)  
**Engineer:** WHKS & Co., Rochester, Minnesota  
**Contractor:**  
**Total Cost:** \$  
**Finalized:**

### **Traffic Study 2020**

**Initiated:** September 2019  
**Location:** Citywide  
**Description:** The study will primarily focus on 15 signalized intersections and 18 non-signalized intersections.  
**Engineer:** Snyder & Associates, Cedar Rapids, Iowa  
**Total Cost:** \$  
**Finalized:** Not finalized. Traffic decreased due to the COVID-19 pandemic causing the shutdown of businesses & schools. Also the closure and reconstruction of 4<sup>th</sup> Street SW and 10<sup>th</sup> Street SW changed traffic patterns.

### **Public Services – North Addition 2021**

**Initiated:** December 2019  
**Location:** 2900 5<sup>th</sup> Avenue NW  
**Description:** Construction of final phase or north addition of Public Services which will house the Street Division's vehicles and equipment. The Water and Sewer Line Maintenance Divisions will move into the first phase of building that is currently occupied by the Street Division.  
**Engineer:** Farnsworth Group, Waukee, Iowa (previously known as Design Alliance)  
**Contractor:**  
**Total Cost:** \$  
**Finalized:**

## SUBDIVISIONS

### Whitetail Bluff Addition

**Final Plat Approved:** July 20, 2020  
**Location:** Southwest corner of Adams Parkway and the Cedar River. (Between Waverly Utilities and Waverly Area Veterans Post)  
**New Street:** 2,087 feet  
**New Water Main:** 2,365 feet (Plastic water main and services was approved.)  
**New Sanitary Sewer:** 2,870 feet -- 17 new manholes  
**New Storm Sewer:** 815 feet -- 12 new manholes & intakes  
**No. of Lots:** 35  
**Engineer:** Matthew Shock, STS Civil  
**Developer:** JDM Property Holdings (Steve Kerian)  
**Accepted:**

# Final Agenda Memos from Public Improvement Projects

# Final Agenda Memos from Public Improvement Projects



**AGENDA MEMORANDUM**

City Council Meeting

November 4, 2019

**SUBJECT:** Cedar River Parkway (East) Improvements 2018  
Accept and Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Accept the Cedar River Parkway (East) Improvements 2018 project as complete.
- Approve Contract Modification 7 (A.K.A. Change Order 7) in the amount of a \$4,190.08 increase.
- Approve Contract Modification 8 for the final adjustment of contract quantities in the amount of a \$17,253.31 decrease.
- Approve Pay Application No. 22 in the amount of \$558,163.64 as the final payment to Cramer & Associates of Grimes, Iowa.

**Summary Statement**

Cramer & Associates has completed the Cedar River Parkway (East) Improvements 2018 project in accordance with the contract documents. The total cost of the completed work is \$7,810,695.33. Contract Modification 7 is for miscellaneous changes to street and pedestrian signage, and pavement markings. Contract Modification 8 is a final adjust contract quantities to match the as-built condition.

**Expenditure Required**

Design Services, Stanley.....	\$ 672,287
Appraisal Services, Valuation Services and BCC Real Estate.....	17,750
Property Acquisition.....	730,274
Construction & Admin. Services, Stanley – N.T.E.....	695,000
Construction Estimate	
Winter Tree Cutting – Benton’s Sand & Gravel’s – Final.....	22,500
Road & Bridge – Cramer & Associates’ Bid.....	8,147,318
Contract Modifications– Cramer & Associates	
No. 1.....	960
No. 2.....	638
No. 3.....	( 17,246)
No. 4.....	( 1,114)
No. 5.....	( 322,046)
No. 6.....	15,248
No. 7.....	4,190
No. 8.....	( 17,253)
Public Works Administration – Estimate.....	50,000
<b>Total Estimated Cost of the Project.....</b>	<b>\$ 9,998,506</b>



**Source of Funds**

<u>Account #307</u>	
FY 2017-18 Bond Proceeds .....	\$ 1,235,000
Bond Proceeds .....	9,000,000
State or Federal Funding Assistance .....	None
<b>Total Financing</b> .....	<b>\$ 10,235,000</b>

**Policy**

The Cedar River Parkway (CRP) project follows recommendations cited in the following documents:

- Waverly Strategic Planning Report – November 12, 2013
- Waverly Comprehensive Plan Update – October 24, 2011
- Parks Open Space Plan – April 28, 2011
- Waverly, Iowa Smart Planning Workshop (Report) – October 2010
- Hazard Mitigation Plan – June 15, 2009
- Long-Term Community Recovery – December 2008

**Project Concern**

None

**Alternative**

N/A

**Background Information**

The Cedar River Parkway project corridor closely follows the alignment of a planned arterial roadway that will accommodate a growing community. In the early 1970s the alignment was originally considered by the Iowa DOT. In 1998 the City of Waverly initiated a corridor study to address congestion mitigation and development opportunities within the community. In 2001 the roadway section from west IA 3 to 4<sup>th</sup> Street SW was completed.

In April 2012 the City completed the National Environmental Policy Act (NEPA) process, an hydraulic analysis of the roadway and bridge design impact on the Cedar River floodplain in southeast Waverly and preliminary plans for the roadway corridor from 4<sup>th</sup> Street SW across the Cedar River to east IA 3. A Finding of No Signification Impact (FONSI) was subsequently issued, effectively clearing the project for construction.

In 2015 the roadway section from 4<sup>th</sup> Street SW to 8<sup>th</sup> Street SE was completed.

Sept. 13, 2010 .....	Approve Consultant Selection
Jan. 16, 2017 .....	Approve Professional Services Agreement with Stanley Consultants
Jan. 16, 2017 .....	Approve Appraisal Services Agreement with Valuation Services
Jan. 31, 2017 .....	Neighborhood Information & Public Input Meeting #1
Feb. 2017 – Jan. 2018 .....	Right-of-Way Discussions and Acquisitions
May 23, 2017 .....	Neighborhood Information & Public Input Meeting #2
July 10, 2017 .....	Set Public Hearing on Intent to Commence a Public Impr. Project w/ Acquisitions
August 17, 2017 .....	Hold Public Hearing on Intent to Commence a Public Impr. Project w/ Acquisitions
October 2, 2017 .....	Approve Fair Market Acquisition Valuations
Oct. 23, 2017 .....	Review Check Plans and Project Letting Schedule
Dec. 19, 2017 .....	Bid Tree Clearing
Jan. 8, 2018 .....	Set Public Hearing Date for CRP Improvements

Jan. 8, 2018..... Award Contract - Winter Tree Cutting – *Removed from Agenda*  
Jan. 8, 2018..... Approve Acquisition Settlements for Parcels 2, 3, 6, 8 and 9 – *Removed from Agenda*  
Jan. 15, 2018..... Award Contract - Winter Tree Cutting  
Jan. 15, 2018..... Approve Acquisition Settlements for Parcels 2, 3, 6, 8 and 9  
Feb. 5, 2018..... Approve Acquisition Settlements for Parcels (5 & 10)  
Feb. 6, 2018..... Bid Opening for CRP Improvements  
Feb. 19, 2018..... Hold Public Hearing for CRP Improvements  
Feb. 19, 2018..... Award Contract for CRP Improvements  
Feb. 19, 2018..... Approve Contract Documents - Winter Tree Cutting  
Feb. 19, 2018..... Approve PSA Supplemental Agreement #1 for Const. Admin. Services  
Feb. 19, 2018..... Acquisition Settlements for Parcels 4 and 7  
Feb. 20 – Mar. 31, 2018..... Tree Cutting  
March 5, 2018..... Approve Contract Documents for CRP Improvements  
Mar. 28, 2018..... Acquisition Settlements for Parcel 1 – Condemnation Board  
Apr. 2, 2018..... Finalize – Winter Tree Cutting  
Sep. 10, 2018..... Approve Contract Modifications 1 through 5 (Change Orders)  
May 20, 2019..... Approve Contract Modification 6 (Change Order 6)  
Apr. 2018 – Aug. 2019..... Construction Window  
**Nov. 4, 2019..... Accept and Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

**Attachments:** Statement of Project Completion – Letter from Stanley Consultants  
Contract Modification 7  
Contract Modification 8  
Pay Application No. 22 (FINAL)



AGENDA MEMORANDUM
City Council Meeting
August 5, 2019

SUBJECT: Adams Parkway Bridge Repair 2019 – Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 1 in the amount of a \$40,972.37 increase.
• Accept the Adams Parkway Bridge Repair 2019 project as complete.
• Approve Pay Estimate No. 3 in the amount of \$21,741.43 as the final payment to Cramer & Associates of Grimes, Iowa.

Summary Statement

Cramer & Associates has completed the Adams Parkway Bridge Repair 2019 project in accordance with the contract documents. The total cost of the completed work is \$375,168.65. Change Order No. 1 – Final Adjustment of Quantities is for a net increase of \$40,972.37 to the contract sum. The majority of the additional costs comes from tripling the quantity of Class A Bridge Deck repair from 82.5 SY to 264.6 SY; an additional 22.9 SY of Bridge Approach Pavement, and extra work to repair the north utility vault.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Design, WHKS & Co., Final Cost (\$ 33,937), Construction Observ. & Admin., WHKS & Co., Est. Cost (33,000), Project & Contract Admin. by City, Estimate (3,500), Bridge Repairs, Cramer & Assoc., Final Cost (375,169), and Total Cost of the Project (\$ 445,606).

Source of Funds

Table with 2 columns: Description and Amount. Rows include FY 2018-19, Acct. No. 316, Adams Pkwy Bridge Repair (\$ 345,000), FY 2019-20, Acct. No. 316 (83,000), FY 2019-20, Additional LOST and/or RUT funding (17,606), and Total Financing for the Project (\$ 445,606).

Policy

The proposed 2019 bridge repair and roadway improvements are consistent with one or more of the following planning documents:

- Waverly Strategic Planning Report - November 21, 2013
• Waverly Comprehensive Plan Update – October 24, 2011

### **Project Concern**

There are additional costs of nearly \$41,000 from tripling the quantity of Class A Bridge Deck repair from 82.5 SY to 264.6 SY; an additional 22.9 SY of Bridge Approach Pavement, and extra work to repair the north utility vault.

A significant portion of the additional construction costs are offset by a substantial underrun on the project observation and administration performed by WHKS & Co. The net result is a \$17,600 project account overrun.

### **Alternative**

None. The bridge repairs were necessary and the additional funding can come from fund balances in Local Option Sales Tax (LOST) or Road Use Tax (RUT).

### **Background Information**

The Adams Parkway Bridge Repair project has been in the planning for several years and is identified in the bi-annual bridge inspection reports. The bridge repair work was originally planned for 2018 but was rescheduled around the reconstruction of IA 3 to avoid traffic detour issues. ~~The Horton Road Improvements are located along the last ¼ mile within the City Limits. This section of roadway predates the 2000 asphalt overlay that was performed south to the Adams Parkway Bridge.~~ Coordination of the bridge work and the asphalt overlay was intended to lower the overall cost of bidding the work separately and to also minimize the inconvenience to the public.

June 18, 2018.....	Approve Professional Services Agreement
November 2018.....	Finalize Plans
December 3, 2018.....	Set Public Hearing Date
January 8, 2019.....	Bid Opening
January 21, 2019.....	Hold Public Hearing
January 21, 2019.....	Award Project
February 18, 2019.....	Approve Contract Documents
February 18, 2019.....	Approve Construction Administration and Observation Services
May 6 – June 28, 2019.....	Construction Window
<b>August 5, 2019.....</b>	<b>Finalize Project</b>

Respectfully submitted,

James Bronner  
City Administrator

**Attachments:** Statement of Project Completion  
Change Order #1  
Pay Estimate #3 - final



AGENDA MEMORANDUM
City Council Meeting
May 4, 2020

SUBJECT: Cedar Lane Reconstruction 2019
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 2 in the amount of a \$1,387.50 decrease.
• Accept the Cedar Lane Reconstruction 2019 project as complete.
• Approve Pay Application No. 5 in the amount of \$8,680.62.
• Approve Pay Application No. 6 in the amount of \$41,723.65 as the final payment to K. Cunningham Construction Co., Inc. of Cedar Falls, Iowa.

Summary Statement

K. Cunningham Construction Co., Inc. has completed the Cedar Lane Reconstruction 2019 project in accordance with the contract documents. The total cost of the completed work is \$834,472.94. Change Order No. 2 – Final Adjustment of Quantities is for a net decrease of \$1,387.50 to the contract sum.

The reconstruction of Cedar Lane had lots of delays due to a very rainy fall. Over a six-week period in September and October there were only 12 days when the weather and site conditions were suitable for working. The total number of working days was exceeded by 9 days (54 vs 45 by contract) but the lengthy weather pattern limited productivity. Therefore, the recommendation is to waive all liquidated damages related to weather delays as noted in Change Order No. 2.

City staff is working with the Waverly Ski Club to coordinate the final restoration work between their two driveways and is also working with a contractor to resolve some localized drainage concerns.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Design, VJ Engineering – Final 2016 (\$ 68,343), Right-of-Way Research, VJ Engineering – Final 2016 (2,197), Construction Staking & Plan Updates, VJ Engineering – Final 2019 (24,080), Construction, K. Cunningham’s Bid (838,114), Construction, Change Order No. 1 (( 2,254)), Construction, Change Order No. 2 (( 1,388)), Miscellaneous Restoration and Drainage Work by Others, Estimate (10,000), Project Administration and Inspection, City (45,000), and Total Cost of the Project (\$ 984,092).

Source of Funds

Table with 2 columns: Description and Amount. Rows include Account #310 LOST FY 2016-17 (\$ 76,120), Account #310 G.O. Bond FY 2019-20 (958,336), and Total Financing for the Project (\$ 1,034,456).

**Policy**

The repair and maintenance of roadways follows recommendations cited in the following documents for the maintenance and construction of infrastructure:

- Waverly Goal Setting Report – August 2014
- Waverly Comprehensive Plan Update – October 24, 2011
- Park and Open Space Master Plan – 2011

**Project Concern**

None.

**Alternative**

None proposed.

**Background Information**

The reconstruction of the Cedar Lane roadway and other corridor improvements has been discussed periodically over the past two decades. The project lacked momentum due to the Cedar River floods of 1999 and 2008. Additionally, an insufficient funding source did not allow for a complete project, but did allow for widening the roadbed and stabilizing the riverbank in a few locations. The Cedar Lane Reconstruction 2017 project was postponed in February 2017 and rescheduled by the City Council, during the FY2018-19 budget discussions, for construction in late 2019. The Phase 1 project reconstructed Cedar Lane from 2<sup>nd</sup> Avenue NE to Brown Lane with a full-depth concrete pavement. The final Phase 2 project, from Brown Lane to Horton Road, is proposed for FY2024-25. Below is a list of past milestones:

- 2017 Scheduled Phase 1 Reconstruction from 2<sup>nd</sup> Avenue NE to Brown Lane (Phase 2 in 2021)
- 2014 Shown in Council’s August 2014 Goal Setting Report
- 2014 Phase 1 shown in FY2014-15 Budget, LOST Funding, 2017 Project
- 2011 Park and Open Space Master Plan - Shown as a high priority project to improve pedestrian/bicycle accommodations and safety
- 2010 Riverbank stabilization (Rip-Rap) south of Brown Lane
- 2008 500-yr Cedar River flood in June
- 2006 Shoulder widening near Ski Club
- 1999 Riverbank stabilization (Rip-Rap) northwest of Evans Street
- 1999 100-yr Cedar River flood in July
- ‘98-99 Cedar Lane Reconstruction Study and Task Force

**Important Dates**

- August 1, 2016..... Council Approves Engineering Agreement
- November 1, 2016..... Neighborhood Meeting No. 1
- January 10, 2017..... Neighborhood Meeting No. 2
- February 20, 2017..... Council - Project Update and Plan Review
- February 20, 2017..... Council Sets ~~Public Hearing~~ Postpones project
- October 1, 2018..... Council Approves Engineering Agreement
- December 17, 2018..... Council Sets Public Hearing Date
- January 29, 2019..... Bid Letting
- February 18, 2019..... Council Holds Public Hearing and Awards Contract

March 18, 2019..... Council Approves Contract Documents  
February 10, 2020..... Approve Change Order No. 1  
July 8 thru late Oct. 2019..... Construction Window  
April 2020..... Final Restoration and Pavement Smoothing  
**May 4, 2020..... Finalize Project**  
May-June, 2020..... Final Restoration at Ski Club and Miscellaneous Drainage Work, by Others

Respectfully submitted,

James Bronner  
City Administrator

Attachments: Change Order No. 2, Final  
Statement of Project Completion  
Pay Application No. 5  
Pay Application No. 6, Final



AGENDA MEMORANDUM
City Council Meeting
September 9, 2019

SUBJECT: Bituminous Seal Coat Program 2019 – Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 1 in the amount of a \$7,608.89 decrease.
• Accept the 2019 Bituminous Seal Coat Program as complete.
• Approve Pay Estimate No. 2 in the amount of \$18,723.43 as the final payment to Blacktop Service Co. of Humboldt, Iowa.

Summary Statement

Blacktop Services Co. has completed the Bituminous Seal Coat Program 2019 in accordance with the contract documents. The total cost of the completed work is \$100,263.81. Change Order No. 1 – Final Adjustment of Quantities is for a net decrease of \$7,608.89 to the contract sum.

This project involved the seal coating of approximately 90 City blocks.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Construction Cost for Roads, Park Lots, Slurry Seal at 1st Avenue SE Parking Lot, Slurry Seal on Various City Streets, and Project Design, Adm. & Insp. Est. Total Cost of the Project: \$157,748.

Source of Funds

Table with 2 columns: Account and Amount. Rows include Account #306 FY 2019-20 (\$200,000), Account #306 FY 2018-19 (\$32,000), and Account #342 FY 2017-18 for Various Park Pkg Lots/Cemetery Imp. (\$25,000). Total Financing for the Project: \$193,000.

Policy

The Bituminous Seal Coat Program 2019 follows recommendations cited in the following documents for the preservation of City streets and infrastructure:

- Waverly Strategic Planning Report – November 12, 2013
• Waverly Comprehensive Plan Update – October 24, 2011



**Background Information:**

The Bituminous Seal Coat Program is part of the City’s annual improvement plan for maintaining the residential street system. City crews perform roadway repairs and patching prior to the hired contractor applying the bituminous seal coat. Seal coating is a thin surface treatment that helps to improve the longevity of an asphaltic pavement. This year’s project involves the seal coating of approximately 90 City blocks.

January 21, 2019 ..... Set Public Hearing Date  
March 5, 2019 ..... Bid Letting  
March 18, 2019 ..... Hold Public Hearing  
March 18, 2019 ..... Award Project  
April 1, 2019 ..... Approve Contract, Bonds and Insurance  
June 3 – Aug. 16, 2019 ..... Construction Window  
**September 9, 2019 ..... Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

**Attachments:** Statement of Project Completion  
Change Order #1  
Pay Estimate #2 - final



**AGENDA MEMORANDUM**

City Council Meeting  
October 7, 2019

**SUBJECT:** Slurry Seal Program 2019 – Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Approve Change Order No. 1 in the amount of a \$2,321.00 decrease.
- Accept the Slurry Seal Program 2019 project as complete.
- Approve Pay Estimate No. 1 in the amount of \$45,754.56.
- Approve Pay Estimate No. 2 in the amount of \$2,408.14 as the final payment to Fahrner Asphalt Sealers of Dubuque, Iowa.

**Summary Statement**

Fahrner Asphalt Sealers of Dubuque, Iowa, has completed the Slurry Seal Program 2019 project in accordance with the construction documents. The cost of the completed work is \$48,162.70.

**Expenditure Required**

Construction Cost – Bituminous Seal Coat - Roads.....	\$ 84,493	
Construction Cost – Bituminous Seal Coat – Park Lots.....	15,771	
Construction Cost – Slurry Seal 1 <sup>st</sup> Avenue SE Parking Lot.....	11,870	
Construction Cost – Slurry Seal Various City Streets.....	36,293	
Project Design, Adm. & Insp. Est.....	8,500	
<b>Total Cost of the Project.....</b>		<b>\$ 156,927</b>

**Source of Funds**

Account #306 FY 2019-20.....	\$ 200,000	
Account #306 FY 2018-19.....	( 32,000)	
Account #342 FY 2017-18 for Various Park Pkg Lots/Cemetery Imp.....	25,000	
<b>Total Financing for the Project.....</b>		<b>\$ 193,000</b>

**Policy**

The Slurry Seal Program 2019 follows recommendations cited in the following documents for the preservation of City streets and infrastructure:

- Waverly Strategic Planning Report – November 12, 2013
- Waverly Comprehensive Plan Update – October 24, 2011

**Background Information:**

This project involves placing a thin asphaltic surface treatment similar the seal coating. However, rather than sprinkling aggregate chips on bituminous oil, the aggregate chips are pre-coated with oil prior to placing.

January 21, 2019..... Set Public Hearing Date  
March 5, 2019..... Bid Letting  
March 18, 2019..... Hold Public Hearing  
March 18, 2019..... Award Project  
April 15, 2019..... Approve Contract, Bonds and Insurance  
June 3 – Aug. 16, 2019..... Construction Window  
**October 7, 2019..... Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

Attachments: Change Order No. 1  
Statement of Project Completion  
Pay Application No. 1  
Pay Application No. 2 (Final)



AGENDA MEMORANDUM
City Council Meeting
September 9, 2019

SUBJECT: Crack Cleaning and Filling Project 2019
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the Crack Cleaning and Filling Project 2019 as complete.
Approve Pay Estimate No. 2 in the amount of \$6,359.53 as the final payment to Kluesner Construction Inc. of Farley, Iowa.

Summary Statement

Kluesner Construction Inc. of Farley, Iowa, has completed the Crack Cleaning and Filling Project 2019 in accordance with the construction documents. The cost of the completed work is \$17,237.03.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Construction Cost, Project Design, Admin. & Inspection Est., and Total Cost of the Project (\$20,937).

Source of Funds

Table with 2 columns: Description and Amount. Rows include Road Use Tax Fund - Acct #6761 and Total Financing for the Project (\$20,000).

Policy Issues

n/a

Alternatives

n/a

Background Information

This project involved cleaning the cracks with compressed air and then sealing them with bituminous oil.

- March 5, 2019 Bid Letting
March 18, 2019 Award Project
July 8 - August 30, 2019 Construction Window
September 9, 2019 Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments: Statement of Project Completion
Pay Application No. 2, Final



**AGENDA MEMORANDUM**

City Council Meeting

November 4, 2019

**SUBJECT:** Sanitary Sewer Manhole Rehabilitation 2019  
Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Accept the Sanitary Sewer Manhole Rehabilitation 2019 project as complete.
- Approve Pay Estimate No. 2 in the amount of \$7,559.30 as the final payment to Josh’s Construction of Dubuque, Iowa.

**Summary Statement**

Josh’s Construction has completed the Sanitary Sewer Manhole Rehabilitation 2019 project in accordance with the contract documents. The total cost of the completed work is \$18,674.30.

**Expenditure Required**

Construction Cost, Josh’s Construction’s, final.....	\$ 18,674	
Project Design, Admin. & Inspection Est.....	<u>2,300</u>	
<b>Total Cost of the Project.....</b>		<b>\$ 20,974</b>

**Source of Funds**

Sanitary Sewer Improvement – CIP Fund #362.....	\$ <u>40,000</u>	
<b>Total Financing for the Project.....</b>		<b>\$ 40,000</b>

**Policy Issues**

n/a

**Alternatives**

n/a

**Background Information**

This project involves repairing and installing a protective liner inside sanitary sewer manholes that are deemed to be in poor condition or have storm water infiltration issues.

March 5, 2019.....	Bid Letting
March 18, 2019.....	Award Project
April – Sept. 2019.....	Construction Window
<b>Nov. 4, 2019.....</b>	<b>Finalize Project</b>

Respectfully submitted,

James Bronner  
City Administrator

**Attachment:** Statement of Project Completion  
Pay Application No. 2, Final





AGENDA MEMORANDUM
City Council Meeting
July 1, 2019

SUBJECT: Citywide Asphalt Patching - Spring 2019
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the Citywide Asphalt Patching - Spring 2019 project as complete.
Approve Pay Estimate No. 1 in the amount of \$26,733.24 as the final payment to Heartland Asphalt of Mason City, Iowa.

Summary Statement

Heartland Asphalt has completed the Citywide Asphalt Patching - Spring 2019 project in accordance with the contract documents. The total cost of the completed work is \$26,733.24.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Construction Cost, Heartland Asphalt, Bid (\$20,514), Additional Quantity (\$6,220), and Total Cost of the Project (\$26,734).

Source of Funds

Table with 2 columns: Description and Amount. Rows include RUT & Utility Company Reimbursements (\$26,734) and Total Financing for the Project (\$26,734).

Policy Issues

n/a

Alternatives

n/a

Background Information

This project involves repairing asphalt paved streets that have had utility cuts. This project will also include the leveling of an area on 8th Street SW in the Waverly Business Park.

- March 5, 2019 Bid Letting
March 18, 2019 Award Project
April 29 - June 7, 2019 Construction Window
July 1, 2019 Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachment: Statement of Project Completion
Pay Application No. 1, Final



AGENDA MEMORANDUM
City Council Meeting
July 15, 2019

SUBJECT: Dog Park Sidewalk 2019
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Pay Application No. 1 in the amount of a \$29,907.90.
• Accept the Dog Park Sidewalk 2019 as complete.
• Approve Pay Estimate No. 2 in the amount of \$1,574.10 as the final payment to Feldman Concrete of Dyersville, Iowa.

Summary Statement

Feldman Concrete has completed the Dog Park Sidewalk 2019 project in accordance with the contract documents. The total cost of the completed work is \$31,482.00. A final adjustment of quantities is for a net increase of \$2,353.00 to the original contract sum of \$29,129.00.

Expenditure Required

Table with 2 columns: Expenditure Item, Amount. Rows include Construction Cost, Project Design, Admin. & Inspection, Final Restoration & Seeding, and Total Cost of the Project.

Source of Funds

Table with 2 columns: Source of Funds, Amount. Rows include Donation by Brian Harvey and Total Financing for the Project.

Policy Issues

n/a

Alternatives

n/a

Background Information

This project the construction of 4-inch thick x 4-foot wide concrete sidewalk within the Waverly's Dog Park.

Timeline table with 2 columns: Date, Event. Rows include Bid Letting, Award Project, Construction Window, and Finalize Project.

Respectfully submitted,

James Bronner  
City Administrator

Attachment: Pay Application No. 1  
Statement of Project Completion  
Pay Application No. 2



*New walking path.*





**AGENDA MEMORANDUM**

City Council Meeting

October 7, 2019

**SUBJECT:** Downtown Alley Reconstruction 2019  
Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Accept the Downtown Alley Reconstruction 2019 project as complete.
- Approve Pay Estimate No. 1 in the amount of \$27,660.00 as the final payment to Feldman Concrete of Dyersville, Iowa.

**Summary Statement**

Feldman Concrete of Dyersville, Iowa, has completed the Downtown Alley Reconstruction 2019 project in accordance with the construction documents. The final cost of the completed work is \$27,660.00.

**Expenditure Required**

Construction Cost, Feldman Concrete, Final.....	\$ 27,660
Project Design, Admin. & Inspection Est.....	3,340
<b>Total Cost of the Project.....</b>	<b>\$ 31,000</b>

**Source of Funds**

G.O. Bond – CIP Fund #309 (FY2018-19 Fund Balance as of 6/30/19)..	\$ 65,371
G.O. Bond – CIP Fund #309 (FY2019-20 Funding).....	75,000
<b>Total Financing for the Project.....</b>	<b>\$ 140,371</b>

**Policy Issues**

n/a

**Alternatives**

n/a

**Background Information**

This project involves rehabbing or reconstructing the south-side alley in the 100 block of East Bremer Avenue.

July 2, 2019.....	Bid Letting
July 15, 2019.....	Award Project
Aug. - Sept. 2019.....	Construction Window
<b>Oct. 7, 2019.....</b>	<b>Finalize Project</b>

Respectfully submitted,

James Bronner  
City Administrator

Attachments: Statement of Project Completion, Pay Application No.1 (final pay)



AGENDA MEMORANDUM
City Council Meeting
February 10, 2020

SUBJECT: E. Bremer Avenue Sanitary Sewer Extension 2019
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 1 in the amount of an \$18,700.19 decrease.
• Accept the E. Bremer Avenue Sanitary Sewer Extension 2019 as complete.
• Approve Pay Estimate No. 1 in the amount of \$156,220.72.
• Approve Pay Estimate No. 2 in the amount of \$8,222.14 as the final payment to Boomerang Corp. of Anamosa, Iowa.

Summary Statement

Boomerang Corp. of Anamosa, Iowa, has completed the E. Bremer Avenue Sanitary Sewer Extension 2019 project in accordance with the contract documents. The total cost of the completed work is \$164,442.86. Change Order No. 1 – Final Adjustment of Quantities is for a net decrease of \$18,700.19 to the contract sum.

Tiedt Nursery of Waverly, Iowa, has agreed to complete the final grading, seeding and mulch of disturbed areas in the spring for the original contract unit prices. The total estimated cost is \$4,050.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Design, WHKS & Co., Final (\$ 21,987), Construction Cost, Boomerang, Final (164,443), Seeding and Mulching, Tiedt Nursery, Estimate (4,050), Project Administration & Inspection by City, Estimate (7,500), and Total Cost of the Project (\$ 197,980).

Source of Funds

Table with 2 columns: Description and Amount. Rows include Local Funding TBD, FY 2019-20 (\$ 177,980), Connection Fee - Titan Machinery (20,000), and Total Financing for the Project (\$ 197,980).

Policy

The proposed 2019 improvement project is consistent with one or more of the following planning documents:

- Waverly Comprehensive Plan Update – October 24, 2011

**Project Concern**

n/a

**Alternative**

n/a

**Project Concern**

The project was an immediate need to accommodate a development project and there are no funds budgeted for the work in FY 2019-20. Additionally, the developer planned to occupy the new facilities by April 2020.

**Alternative**

The new business could have installed a septic system. This option was not ideal because there was interest in developing the land west of 39<sup>th</sup> Street NE and the sanitary sewer extension was still needed to serve this area.

**Background Information**

In 1977 the city limits were expanded eastward to the present boundary. In 1986 the City completed a sanitary sewer extension project that stopped at the waterway approximately 1,300 feet short of 39<sup>th</sup> Street NE.

July 1, 2019.....	Approve WHKS Engineering Design Agreement
July 2019.....	Design Work
Aug. 19, 2019.....	Set Public Hearing Date
Sept. 23, 2019.....	Letting
Oct. 7, 2019.....	Hold Public Hearing
Oct. 7, 2019.....	Award Contract
Nov. 4, 2019.....	Approve Contract Documents
Nov. to Dec. 2019.....	Construction Window
<b>February 10, 2020.....</b>	<b>Finalize Project</b>
April 2020.....	Titan Occupancy
May 2020.....	Complete Seeding and Mulching

Respectfully submitted,

James Bronner  
City Administrator

- Attachments: Statement of Project Completion  
Change Order #1  
Pay Estimate #1  
Pay Estimate #2 - final



**AGENDA MEMORANDUM**

City Council Meeting

February 24, 2020

**SUBJECT:** Infrastructure Modeling – Water Distribution System and Sanitary Sewer Collection System  
- Presentation and Review of Final Reports

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

Representatives from WHKS & Co. will give a summary review of the updated Water Distribution System and Sanitary Sewer Collection System Reports.

**Summary Statement**

The new 2020 reports update the 2010 Water Distribution and Sanitary Sewer Collection reports. The City has maintained water and sanitary sewer infrastructure reports for many decades with updates performed every 7-10 years. The reports assess the capacity and condition of the infrastructure, and provide recommendations for addressing existing or emerging concerns.

**Expenditure Required**

Design, WHKS & Co., Not-to-Exceed.....	\$ 71,900	
Project Administration by City, Estimate.....	<u>2,100</u>	
<b>Total Cost of the Project.....</b>		<b>\$ 74,000</b>

**Source of Funds**

Water Revenue FY 2019-20 (budgeted \$25,000).....	\$ 36,350	
Sewer Revenue FY 2019-20 (budgeted \$25,000).....	<u>37,650</u>	
<b>Total Financing for the Project.....</b>		<b>\$ 74,000</b>

**Policy**

The proposed 2020 improvement project is consistent with one or more of the following planning documents:

- Water Distribution Modeling and Evaluation Report - 2010
- Sanitary Collection System Modeling & WPC Facility Facilities Plan Report - 2010
- Waverly Comprehensive Plan Update – October 24, 2011

**Project Concern**

None.

**Alternative**

N/A.

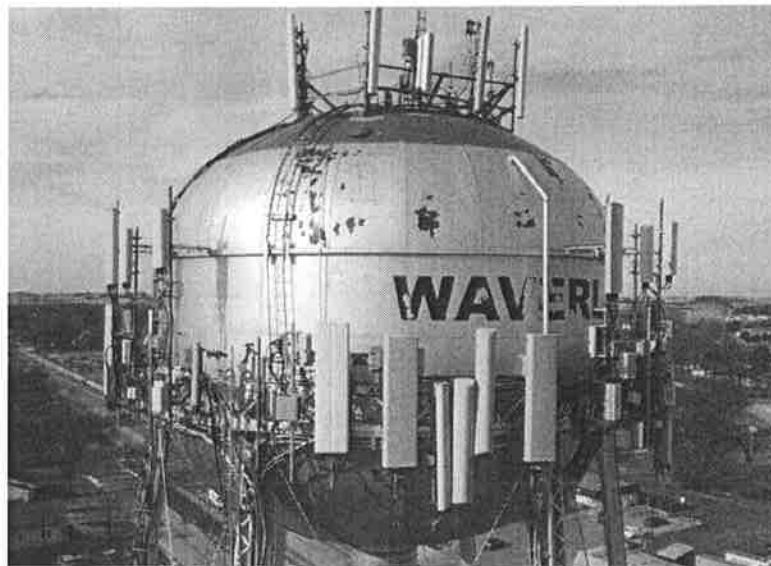
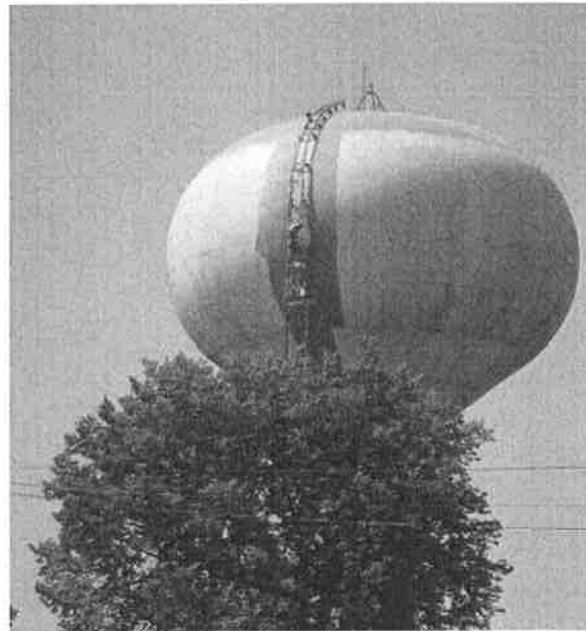
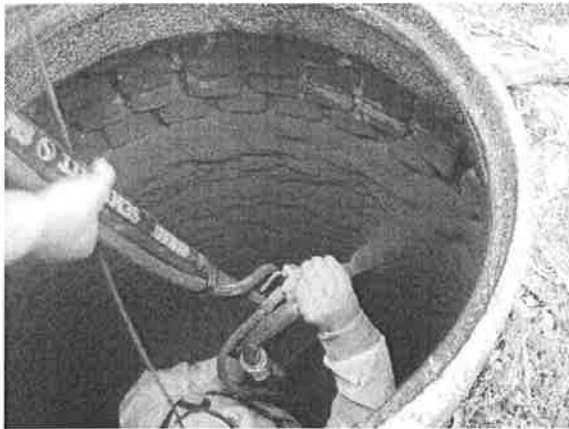
**Background Information**

The City has maintained water and sanitary sewer infrastructure reports for many decades with updates performed every 7-10 years.

June 3, 2019.....Approve WHKS Professional Services Agreement  
Summer 2019.....Modeling Work  
January 2020.....Submit Prefinal Reports  
**February 24, 2020.....Review Final Reports**

Respectfully submitted,

James Bronner  
City Administrator





AGENDA MEMORANDUM
City Council Meeting
June 15, 2020

SUBJECT: Airport Obstruction Removal Project 2020
• Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 4 in the amount of a \$12,067.50 decrease.
• Accept the Airport Obstruction Removal Project 2020 as completed.
• Approve Pay Application No. 4 in the amount of \$6,111.54 as the final payment to Schrader Excavating and Grading Company of Walford, Iowa.

Summary Statement

Schrader Excavating and Grading Company has completed the Airport Obstruction Removal Project 2020 in accordance with the contract documents. The total cost of the completed work is \$122,230.75. Change Order No. 4 is for the final adjustment of quantities.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Design & Insp., Public Works Administration, Asbestos Testing, Obstruction Removal Cost, and various Change Orders, totaling \$160,110.

Source of Funds

Table with 2 columns: Description and Amount. Rows include IDOT Airport Development Grant and Acct #331 Land Acquisition, totaling \$199,400.

Policy

The Airport Obstruction Removal 2020 project follows recommendations cited in the following document for the maintenance and preservation of public infrastructure and facilities:

- Waverly Airport 5-year CIP - December 3, 2018

Project Concern

None.

Alternative

NA

### Background Information

In the summer of 2017 the City acquired the Clan Properties, LLC parcel west of Runway 11 and Business 218; and in the summer of 2019 the City acquired the Schmidt parcel on the north side of the runway. Both properties have structures and trees that are deemed obstructions and compromise the safety of airport operations.

April 11, 2019..... Airport Commission reviewed and approved Airport Development application  
April 15, 2019..... City Council approves Airport Development application for Obstruction Removal  
April 26, 2019..... Deadline for filing Iowa DOT Airport Development application  
August 2019..... Notice of Airport Development grants awarded  
September 12, 2019..... Airport Commission reviewed and approved IDOT funding agreement  
October 7, 2019..... Council Approve IDOT AIP Agreement, McClure’s Task #4, Impact7G Agreement  
Fall 2019..... Design Work  
January 20, 2020..... Set Public Hearing Date  
February 11, 2020..... Bid Letting  
February 17, 2020..... Public Hearing Date  
February 17, 2020..... Award Project  
March 2, 2020..... Approve Contract Documents  
March 3, 2020..... Begin Project  
March 16, 2020..... Approve Airspace Easement Agreement for Janssen Property  
April 6, 2020..... Approve Change Order No. 1  
May 4, 2020..... Approve Change Orders No. 2 & 3, and Pay App No. 2  
Spring 2020..... Construction Window  
**June 15, 2020..... Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

Attachments: Change Orders No. 4  
Statement of Project Completion (McClure Engineering)  
Pay Application No. 4



**AGENDA MEMORANDUM**

City Council Meeting  
September 9, 2019

**SUBJECT:** School Ped Ramp Construction 2019  
Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Accept the School Ped Ramp Construction 2019 project as complete.
- Approve Pay Estimate No. 1 in the amount of \$13,406.60 as the final payment to Feldman Concrete of Dyersville, Iowa.

**Summary Statement**

Feldman Concrete has completed the School Ped Ramp Construction 2019 project in accordance with the plans. The total cost of the completed work is \$13,406.60. A final adjustment of quantities is for a net increase of \$1,650.60 to the original contract sum of \$11,756.00.

**Expenditure Required**

Pedestrian Ramp Construction – Feldman Concrete, Final .....	\$ 13,407
Project Administration & Inspection Cost Estimate .....	<u>1,000</u>
<b>Total Estimated Cost of the Project .....</b>	<b>\$ 14,407</b>

**Source of Funds**

CIP Acct. #304, Sidewalk Program Const. FY2019-20 .....	\$ <u>40,000</u>
<b>Total Financing for the Project .....</b>	<b>\$ 40,000</b>

**Policy**

The School Ped Ramp Construction 2019 project is part of the ongoing citywide program to develop and maintain a pedestrian friendly community for all citizens with or without disabilities. The City's efforts include inspecting and repairing sidewalks and the construction of pedestrian ramps and curbed street crossings. To ensure compliance, the City of Waverly follows recommendations and requirements cited in federal and state documents for the design and construction of pedestrian accommodations.

**Project Concern**

None.

**Alternative**

None.



**Background Information**

In 2011 the City implemented the citywide sidewalk repair program and citywide pedestrian ramp construction program. Waverly is divided into 7 districts for sidewalk repairs and pedestrian ramp construction and one district is completed each year. At the February 2019 Council Budget Session, the programs were suspended indefinitely in lieu of a complaint driven approach.

April 15, 2019 ..... W-SR High School class requests Council action to install ped ramps.  
July 15, 2019 ..... Approve Quote  
July 16 – Aug. 22, 2019 ..... Construction Window  
**September 9, 2019 ..... Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

Attachments: Pay Application No. 1  
Statement of Project Completion

**Before**



**High School**

**After**



**West Cedar**



**West Cedar/Waverly Homes**





**AGENDA MEMORANDUM**

City Council Meeting

November 18, 2019

**SUBJECT:** Citywide Asphalt Patching - Fall 2019  
Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Accept the Citywide Asphalt Patching - Fall 2019 project as complete.
- Approve Pay Estimate No. 1 in the amount of \$79,786.22 as the final payment to Heartland Asphalt of Mason City, Iowa.

**Summary Statement**

Heartland Asphalt has completed the Citywide Asphalt Patching - Fall 2019 project in accordance with the contract documents. The total cost of the completed work is \$79,786.22.

**Expenditure Required**

Construction Cost, Heartland Asphalt, Final.....	\$ 79,786	
Project Design, Admin. & Inspection Est.....	3,500	
<b>Total Cost of the Project.....</b>		<b>\$ 83,286</b>

**Source of Funds**

RUT & Utility Company Reimbursements.....	\$ 83,286	
<b>Total Financing for the Project.....</b>		<b>\$ 83,286</b>

**Policy Issues**

n/a

**Alternatives**

n/a

**Background Information**

This project involves repairing asphalt paved streets that have had utility cuts.

August 27, 2019..... Bid Letting  
 September 9, 2019..... Award Project  
 Sept. 16 – Oct. 18, 2019..... Construction Window  
**November 18, 2019..... Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

Attachment: Statement of Project Completion  
Pay Application No. 1, Final



AGENDA MEMORANDUM
City Council Meeting
July 6, 2020

SUBJECT: Downtown Alley Reconstruction 2020
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the Downtown Alley Reconstruction 2020 project as complete.
Approve Change Order No. 1 in the amount of a \$1,615.90 decrease as the final adjustment of project quantities.
Approve Pay Estimate No. 3 in the amount of \$2,156.63 as the final payment to Feldman Concrete of Dyersville, Iowa.

Summary Statement

Feldman Concrete of Dyersville, Iowa, has completed the Downtown Alley Reconstruction 2020 project in accordance with the construction documents. The final cost of the completed work is \$38,235.10.

This project involved rehabbing or reconstructing the south-side alley in the 300 block of West Bremer Avenue. Additionally, there was extensive curb and gutter replacement on the west side of 3rd Street SW to correct poor drainage.

Expenditure Required

Table with 2 columns: Expenditure Item, Amount. Rows include Construction Cost, Asphalt Street Patch, Project Design, and Total Cost of the Project (\$49,769).

Source of Funds

Table with 2 columns: Source of Funds, Amount. Rows include G.O. Bond - CIP Fund #309 (FY2018-19), G.O. Bond - CIP Fund #309 (FY2019-20), and Total Financing for the Project (\$109,371).

Policy Issues

n/a

Alternatives

n/a

**Background Information**

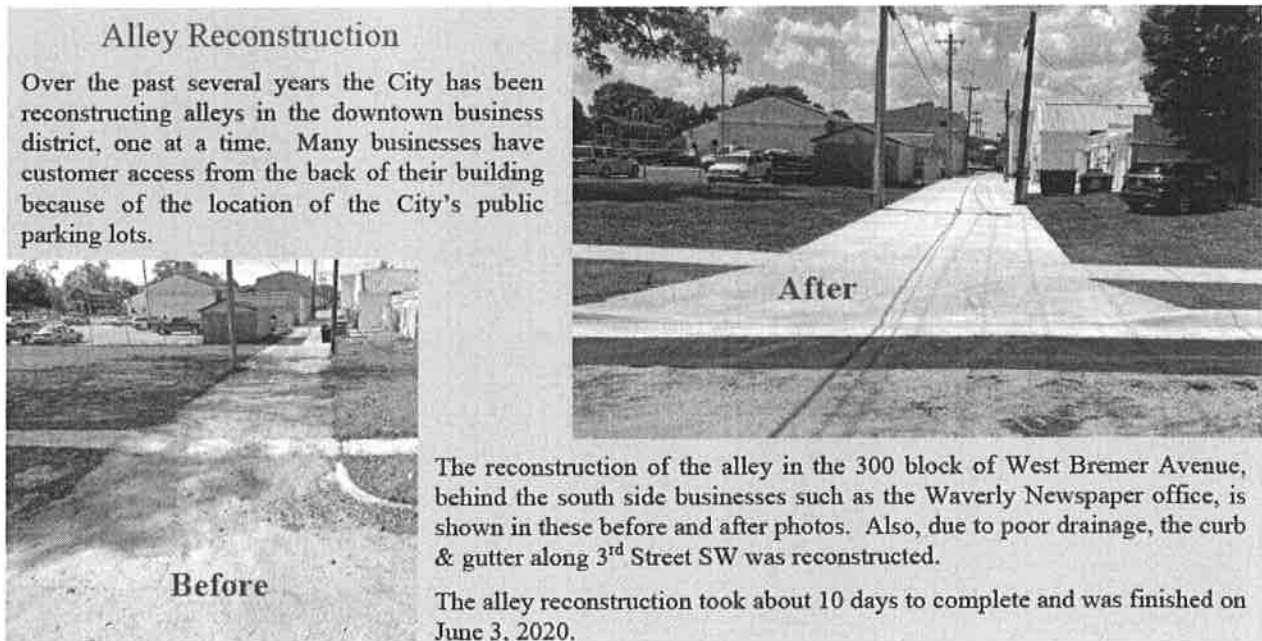
This project involves rehabbing or reconstructing the south-side alley in the 300 block of West Bremer Avenue.

March 2, 2020.....Set Public Hearing Date  
March 24, 2020.....Bid Letting  
April 6, 2020.....Hold Public Hearing  
April 6, 2020.....Award Project  
May 4, 2020.....Approve Contract, Bonds and Insurance  
May – August, 2020.....Construction Window  
**July 6, 2020.....Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

**Attachments:** Statement of Project Completion  
Change Order No. 1  
Pay Application No. 3





**AGENDA MEMORANDUM**

City Council Meeting

June 1, 2020

**SUBJECT:** Sanitary Sewer Lining by CIP Pipe Liner 2020  
Finalize Project

**Prepared By:** Mike Cherry, Director of Public Works & City Engineer

**Recommended City Council Action**

- Approve Change Order No. 2 in the amount of a \$400.00 decrease to the project cost.
- Accept the Sanitary Sewer Lining by CIP Pipe Liner 2020 project as complete.
- Approve Pay Request No. 2 in the amount of \$23,365.25.
- Approve Pay Request No. 3 in the amount of \$3,734.75 as the final payment to Municipal Pipe Tool of Hudson, Iowa.

**Summary Statement**

Change Order No. 2 reflects the final adjustment of contract quantities.

**Expenditure Required**

Construction Cost, Municipal Pipe Tool's bid.....	\$ 64,322	
Change Order No. 1, by MPT.....	10,773	
Change Order No. 2, by MPT.....	( 400)	
Sanitary Sewer Repair, by Barry Smith Exc.....	5,877	
Street Patch, by Kluesner.....	4,656	
Project Design, Admin. & Inspection, Estimate.....	<u>4,500</u>	
<b>Total Cost of the Project.....</b>		<b>\$ 89,728</b>

**Source of Funds**

Sanitary Sewer Improvement – CIP Fund #362.....	\$ <u>90,485</u>	
<b>Total Financing for the Project.....</b>		<b>\$ 90,485</b>

**Policy Issues**

n/a

**Alternatives**

n/a

**Background Information**

This project involves lining 1,740 feet the City’s 8-inch and 12-inch sanitary sewer main by CIP Pipe Liner within 2<sup>nd</sup> Street NW from Bremer Avenue to 5<sup>th</sup> Avenue NW.

March 24, 2020..... Bid Letting  
April 6, 2020..... Award Project  
May 4, 2020..... Approve Change Order No. 1  
April 2020..... Construction Window  
**June 1, 2020..... Finalize Project**

Respectfully submitted,

James Bronner  
City Administrator

Attachments: Statement of Project Completion  
Change Order No. 2, Final  
Pay Request No. 2  
Pay Request No. 3, Final



AGENDA MEMORANDUM
City Council Meeting
June 15, 2020

SUBJECT: Asphalt Patching - Spring 2020
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the Asphalt Patching - Spring 2020 project as complete.
Approve Pay Estimate No. 1 in the amount of \$21,870.53 as the final payment to Kluesner Construction of Farley, Iowa.

Summary Statement

Kluesner Construction has completed the Asphalt Patching - Spring 2020 project in accordance with the bid documents. The total cost of the completed work is \$21,870.53.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Construction Cost, Kluesner, Bid (\$10,766), Additional Quantity (11,105), and Total Cost of the Project (\$21,871).

Source of Funds

Table with 2 columns: Description and Amount. Rows include RUT & Utility Company Reimbursements (\$21,871) and Total Financing for the Project (\$21,871).

Policy Issues

n/a

Alternatives

n/a

Background Information

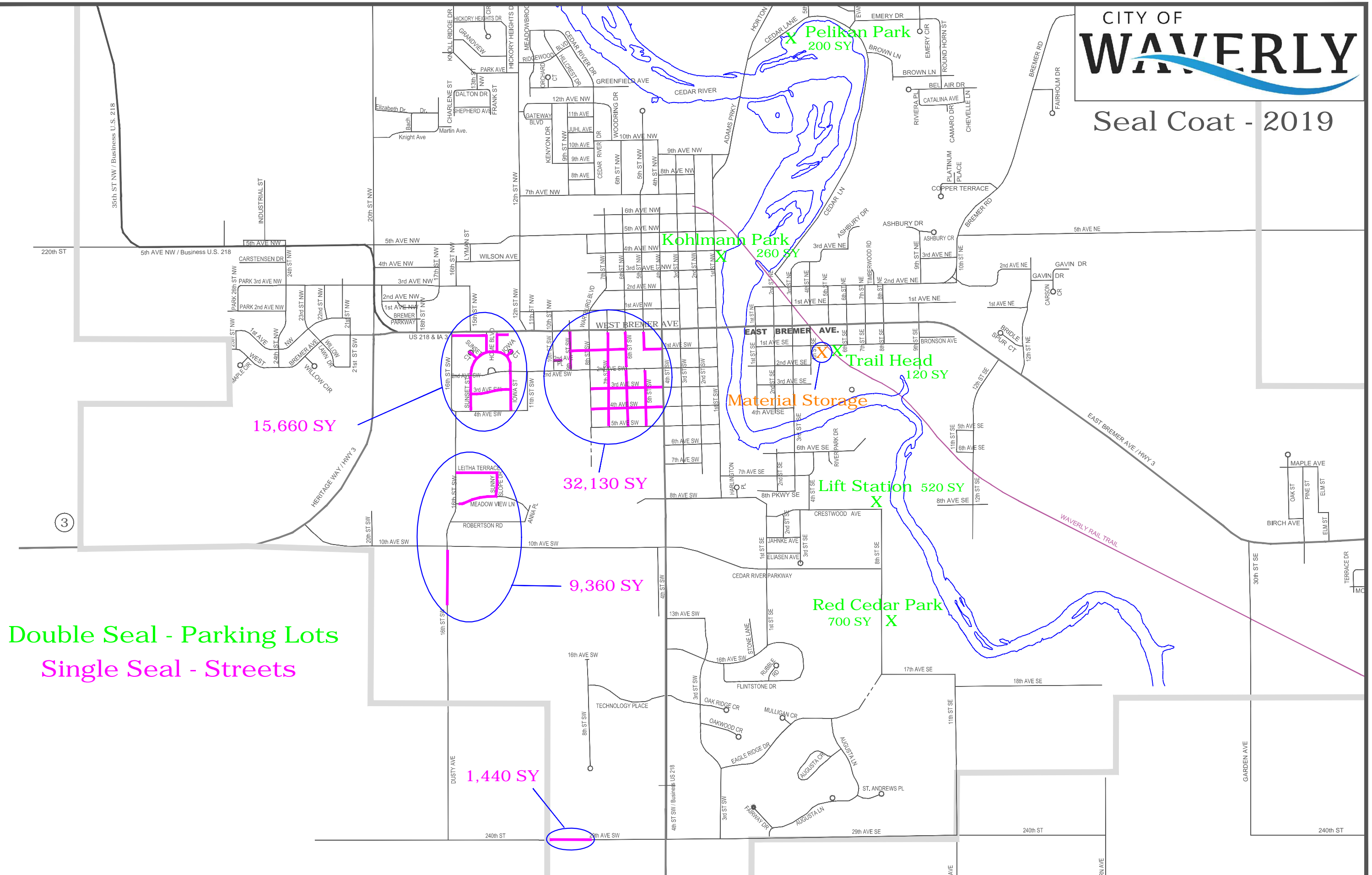
This project involves repairing asphalt paved streets that have had utility cuts. This project will also include the leveling of an area on 8th Street SW in the Waverly Business Park.

- April, 21, 2020 Bid Letting
May 4, 2020 Award Project
May 2020 Construction Window
June 15, 2020 Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachment: Statement of Project Completion
Pay Application No. 1, Final



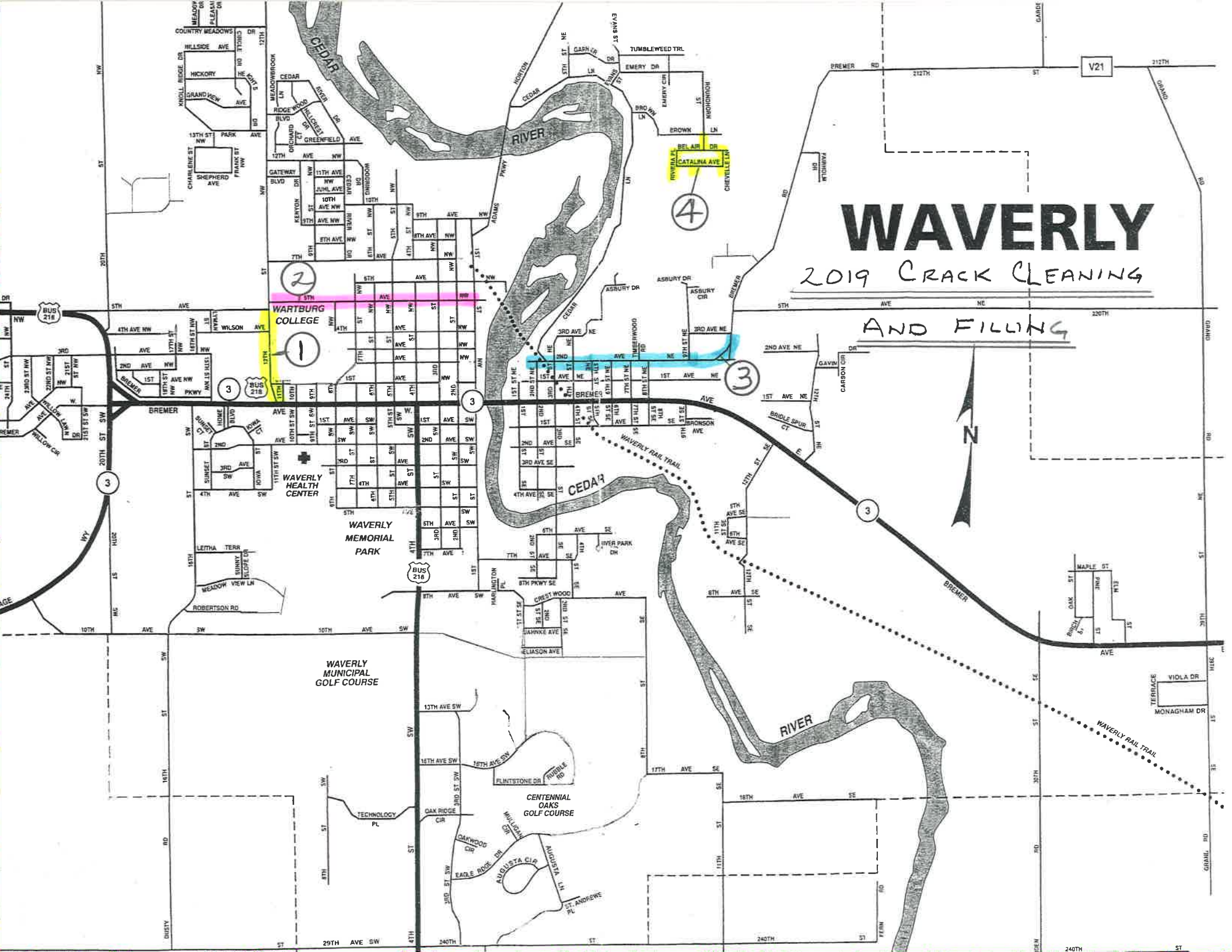
Double Seal - Parking Lots  
Single Seal - Streets



# WAVERLY

## 2019 CRACK CLEANING

## AND FILLING



### City Projects - FY2019-20

Fiscal Year Ending 6/30/2020

Revised 7/1/2020

X = Final or Latest Agenda Memo & Contract Summary in Folder	Project Packet #	Hand-written on packet	Fund #	Contractor & Project	Original Contract	Change Orders	Other Adjustments	New Contract Amount	Expense or Capitalize	Under Design	Account Number	Expensed	Source of Funds (from Agenda Memos)	
										or Construction in Progress (CIP) or Finalized				
X	1			<b>Airport Land Acquisition</b>										
			331	McClure Engineering	Purchased Schmidt property for \$380,000 - Last remaining parcel for the Airport Land Acquisition project. Actual purchase to be made in FY2019-20 Approved FAA Grant Agreement - July 15, 2019									
			331	Relocation & Moving Expenses (Schmidt) Includes Janssen Easement & Trees	Paid \$36,187.33 Paid \$22,889.50 Total Paid \$59,076.83				Expense	Complete 4/20/20			Waiting for Grant Agreement from FAA Grant Agreement <b>may</b> cover 100% of expenses of \$59,076.83	
X	2			<b>IA Highway 3 (Bremer Avenue) Reconstrucion</b>										
			312	WHKS & Co. (An Iowa DOT project) AHTS (Streetscaping Architects)	\$ 25,000.00 \$ 4,560.00		\$ (2,178.10)	\$ 22,821.90 \$ 4,077.23	Capitalize	CIP	312-750-6407	CIP Fund 312 Waverly Utilities (Street Lighting)	\$ 4,806,000 \$ 236,000	
				Iowa DOT	\$ 3,041,456.92	\$1,500,000 was paid in 11/2018. Not sure when or if anything else has been paid again.								
				<b>This is an IDOT project. The City will be charged for parking lanes, sidewalk, water main and street lights. There will also be misc. charges, such as Cent</b>									\$ 5,042,000	
X	3			<b>20th St. NW Recon. - Ph. 1 RR Crossing Improvements at 20th Street NW &amp; 5th Avenue NW 2018</b>										
			308	McClure Engineering	\$ 178,150.00		\$ 131,700.00	\$ 309,850.00	Capitalize	CIP	308-750-6407	FY 2017-18 Bond Proceeds	\$ 31,000	
				Croell, Inc. (CO #1, 2 & 3)	\$ 1,092,787.60	\$ (133,969.00)	\$ 958,818.60	Not Finalized			308-750-6499	FY-2017-18 Bond Proceeds State Funding Assistance for RR Gates & Signals	\$ 1,500,000 \$ 279,000	
				Terracon Consultants	\$ 4,550.00	\$ 250.00	\$ (257.00)	Remaining items: seeding, sidewalk & smooth roadway over			308-750-6407 308-750-6599		\$1,810,000	
				Chicago Central & Pacific (City's 10%)	\$ 16,262.98			RR tracks						
							\$ 1,289,474.58							
X	4			<b>Cedar River Parkway (East) Improvements 2018</b>										
			307	Stanley Consulstants	\$ 805,224.00	\$ 1,100.00	\$ 695,400.00	\$ 1,501,724.00	Capitalize	Finalized 11/4/19	307-750-6407			
				Benton's Sand & Gravel (Winter Tree Cutting)	\$ 21,500.00		\$ 1,000.00	\$ 22,500.00			307-750-6499	FY 2017-18 Bond Proceeds Future Bond Proceeds	\$ 1,235,000 \$ 9,000,000	
				Cramer & Associates	\$ 8,147,317.66	\$ (323,559.10)		\$ 7,823,758.56			307-750-6499		\$ 10,235,000	
				Valuation Services	\$ 14,250.00		\$ (1,500.00)	\$ 12,750.00			307-750-6499			
				Baker Enterprises (Spreading mulch on C.R.P.)	\$ 1,120.00			\$ 1,120.00			670-840-6499			
				Survey Property give to Tim Griggs				\$ 472.89			307-750-6407			
								\$ 9,362,325.45						

Latest Agenda Memo & Contract Summary in Folder	Packet #	Hand-written on packet	Fund #	Contractor & Project	Original Contract	Change Orders	Other Adjustments	New Contract Amount	Expense or Capitalize	Under Design or Construction in Progress (CIP) or Finalized	Account Number Expensed	Source of Funds (from Agenda Memos)		
X	5			<b>Airport Runway 29 Extension 2018</b>										
			330	McClure Engineering	\$ 142,620.00		\$ 159,160.00	\$ 301,780.00	Capitalize	CIP	330-750-6407	Federal Grant Request (90%)	\$ 1,497,853	
				Contraction Materials Testing (CMT)	\$ 21,301.00		\$ 21,301.00	330-750-6407			Acct. #330 Extend Runway 29, FY18	\$ 5,010		
				J.B. Holland	\$ 1,316,662.60		\$ 1,316,662.60	330-750-6499			Acct. #331 Extend Runway 29, FY21, Proposed	\$ 116,645		
				MidAmerican Energy (Bury powerline)	\$ 24,536.83		\$ 24,536.83				Acct. #333 Ostruction Removal, FY 21, Proposed	\$ 20,654		
												\$ 1,664,281		
X	6			<b>Adams Pkwy. Bridge Repair &amp; Horton Road Impr. 2019</b> (Horton Road will not be completed with this bridge project)										
		Final Papers	316	WHKS & Co.	\$ 86,810.00		\$ (17,786.53)	\$ 69,023.47	Expense	Finalized 8/5/19	316-750-6407	FY 2018-19, Acct. No. 316	\$ 345,000	
				Cramer & Associates	\$ 334,196.28	\$ 40,972.37	\$ 375,168.65						FY2019-20, Acct. No. 316	\$ 83,000
												FY2019-20, Additional LOST and/or RUT funding	\$ 17,606	
													\$ 445,606	
X	7			<b>WPC Facility Improvements 2020</b>										
			363	WHKS & Co.	\$ 770,000.00			\$ 770,000.00	Capitalize	Under Design	363-750-6407	State Revolving Funds - Loan	\$ 9,000,000	
				ATC Group Services	\$ 3,250.00		\$ 3,250.00	363-750-6499			WPC Cash Reserves	\$ 150,000		
				Contractor				363-750-6499				\$ 9,150,000		
X	8			<b>Cedar Lane Reconstruction 2019</b>										
			310	VJ Engineering (Eng. Agreements: 2017 & 2019)	\$ 70,539.50		\$ 24,079.69	\$ 94,619.19	Expense	Finalized 5/4/20	310-750-6407	Account #310 LOST FY 2016-17	\$ 76,120	
				K. Cunningham	\$ 838,114.04	\$ (3,641.10)	\$ 834,472.94	310-750-6499			Account #310 Bond FY 2019-20	\$ 958,336		
													\$ 1,034,456	
X	9			<b>Water Main Replacement 2019</b> (CUNA Water Main Realignment)										
			359	VJ Engineering	\$ 42,000.00		\$ (19,515.75)	\$ 22,484.25	Expense	No longer a project at this time.	359-750-6407	Water Fund (Cash Reserves) FY 2018-19	\$ 42,000	
													Water Fund (If Available) FY 2019-20	\$ 100,000
													LOST, RUT or Other FY 2019-20	\$ 320,000
													\$ 462,000	
X	10			<b>Bituminous Seal Coat Program 2019</b>										
			306	Blacktop Services	\$ 107,872.70	\$ (7,608.89)	\$ 100,263.81	Expense	Finalized 9/9/19	306-750-6499	306 FY2019-20	\$ 200,000		
			342	Note: Several Park's Parking Lots were also seal coated under Blacktop's contract						342-750-6499	306 FY2018-19	\$ (32,000)		
											342 FY2017-18	\$ 25,000		
												\$ 193,000		

Latest Agenda Memo & Contract Summary in Folder	Packet #	Hand-written on packet	Fund #	Contractor & Project	Original Contract	Change Orders	Other Adjustments	New Contract Amount	Expense or Capitalize	Under Design or Construction in Progress (CIP) or Finalized	Account Number Expensed	Source of Funds (from Agenda Memos)		
X	11	<b>Slurry Seal Program 2019</b>												
		306	Fahrner Asphalt Sealers	\$ 50,483.70	\$ (2,321.00)			\$ 48,162.70	Expense	Finalized 10/7/19	306-750-6499	306 FY2019-20	\$ 200,000	
												306 FY2018-19	\$ (32,000)	
												342 FY2017-18	\$ 25,000	
													\$ 193,000	
X	12	<b>Crack Cleaning &amp; Filling Project 2019</b>												
		110	Kluesner Construction	\$ 11,186.00		\$ 6,051.30		\$ 17,237.30	Expense	Finalized 9/9/19	110-210-6761	RUT Fund 6761	\$ 20,000	
X	13	<b>Sanitary Sewer Manhole Rehab 2019</b>												
		362	Josh's Construction	\$ 18,074.30		\$ 600.00		\$ 18,674.30	Expense	Finalized 11/4/19	362-750-6499	San. Sewer Imp. - CIP Fund 362	\$ 40,000	
X	14	<b>Asphalt Patching - Spring 2019</b>												
		various	Heartland Asphalt	\$ 20,513.66		\$ 6,219.58		\$ 26,733.24	Expense	Finalized 7/1/2019		001-210-6499	Streets	\$ 10,309.93
												110-210-6499	Streets	\$ 2,521.02
												600-810-6499	Water	\$ 9,182.85
												610-817[6499	Sewer	\$ 776.80
												110-210-6499	Leveling 8th St. SW	\$ 3,942.64
														\$ 26,733.24
X	15	<b>Dog Park Sidewalk 2019</b>												
		001	Feldman Concrete	\$ 29,129.00		\$ 2,353.00		\$ 31,482.00	Expense	Finalized 7/15/2019	001-430-6799	Donation by Brian Harvey	\$ 35,000	
X	16	<b>4th Street SW Improvements 2020</b>												
		4th St. SW	315	Snyder & Associates	\$ 266,250.00			\$ 266,250.00	Capitalize	CIP	315-750-6407	Local - LOST, GO, TIF, Other FY2020-21	\$ 2,950,000	
		10th St. SW	318	<i>Starting with Invoice #13, Snyder's invoices were charged 78% to 4th St. SW and 22% to 10th St. SW</i>							318-750-6407	Transfer in from Acct. 359	\$ 763,732	
				Wicks Construction - 4th Street SW	\$ 3,234,960.00		\$ 3,234,960.00	315-750-6499			Transfer in from Acct. 459	\$ 120,000		
				Wicks Construction - 10th Street SW	\$ 909,226.00		\$ 909,226.00	318-750-6499			Sanitary Sewer Funding	\$ 74,315		
											If necessary, additional water & sewer funding	\$ 120,000		
									IDOT Coop. Agree. Funding for Const. Activities	\$ 590,000				
									IDOT, TSIP Funding for Const. Activities	\$ 300,000				
													\$ 4,918,047	
X	17	<b>10th Street SW Improvements 2020</b>												
		318	Snyder & Associates	\$ 66,800.00				\$ 66,800.00	Capitalize	CIP	318-750-6407	Local Funding - GO Bond, FY2019-20	\$ 450,000	
											318-750-6499			
				<b>Project to be completed with 4th Street SW</b>										
X	18	<b>20th Street NW Improvements 2020</b> (Between 5th Ave. NW & RR Tracks)												
		319	McClure Engineering	\$ 64,000.00		\$ 43,000.00		\$ 107,000.00	Expense	CIP	319-750-6407	FY 2018-19 Bond Proceeds	\$ 770,201	
			Baker Enterprises	\$ 662,524.25				\$ 662,524.25			319-750-6499	FY 2020-21 Transfer in from Acct. 308	\$ 25,923	
													\$ 796,124	

Latest Agenda Memo & Contract Summary in Folder	Packet #	Hand-written on packet	Fund #	Contractor & Project	Original Contract	Change Orders	Other Adjustments	New Contract Amount	Expense or Capitalize	Under Design or Construction in Progress (CIP) or Finalized	Account Number Expensed	Source of Funds (from Agenda Memos)		
X	19			<b>Downtown Alley Reconstruction 2019</b>										
			309	Feldman Concrete	\$ 27,556.00		\$ 104.00	\$27,660	Expense	Finalized 10/7/19	309-750-6499	GO Bond - CIP Fund 309 FY2018-19	\$ 65,371	
												GO Bond - CIP Fund 309 FY2019-20	\$ 75,000	
													\$ 140,371	
X	20			<b>E. Bremer Avenue Sanitary Sewer Main Extension 2019</b>										
			364	WHKS &Co.	\$ 22,285.00		\$ (297.55)	\$ 21,987.45	Capitalize	Finalized 2/10/20	364-750-6407	Local Funding TBD FY2019-20	\$ 177,980	
				Boomerang	\$ 183,143.05		\$ (18,700.19)	\$ 164,442.86			364-750-6499	Connection Fee - Titan Machinery	\$ 20,000	
				Tiedt Nursery (to complete seeding in Spring 2020)	\$ 4,200.00			\$ 4,200.00			364-750-6499		\$ 197,980	
X	21			<b>Infrastructure Modeling - Water Distribution System and San. Sewer Collection System</b>										
		50%	600	WHKS &Co.	\$ 71,900.00		\$ (3,487.64)	\$ 68,412.36	Expense	Final Report 2/24/20	600-810-6490	Water Revenue FY 2019-20 (budgeted \$25,000)	\$ 36,350	
		50%	610								610-817-6490	Sewer Revenue FY 2019-20 (budgeted \$25,000)	\$ 37,650	
													\$ 74,000	
X	22			<b>Airport Avionics Room 2020</b>										
				Applied for GAVI Grant. Did not receive grant.					Capitalize	No Funding Rec'd				
				Architect									DOT GAVI Grant Req. 85% of \$184,000 = \$156,400	\$ 150,000
				Contractor									Airport Cash Reserve FY2019-20	\$ 34,000
													\$ 184,000	
X	23			<b>Airport Obstruction Removal 2020</b>										
			333	McClure Engineering	\$ 31,000.00			\$ 31,000.00	Expense	Finalized 6/15/20	333-750-6407	IDOT Airport Dev. Grant 85% of \$174,150	\$ 148,027	
				Schrader Excavating & Grading	\$ 106,415.00		\$ 15,815.75	\$ 122,230.75			333-750-6499	Acct. #331 Land Acq. FY2019-20	\$ 51,373	
				Impact7G (Asbestos)	\$ 3,380.00			\$ 3,380.00			333-750-6499		\$ 199,400	
X	24			<b>Business 218 North Resurfacing 2020</b>										
			317	WHKS & Co.	\$ 44,424.00		\$ (336.18)	\$ 44,087.82	Expense	Construction Not Yet Started	317-750-6407	Local Funding CIP Debt Proceeds FY2019-20	\$ 462,121	
				Heartland Asphalt	\$ 845,725.66			\$ 845,725.66			317-759-6499	Federal Aid (STBG Funding) FY2019-20	\$ 360,000	
												Local Funding, if necessary, LOST or RUT FY2020-21	\$ 108,000	
													\$ 930,121	
X	25			<b>Rolling Prairie Trail Extension 2021</b>										
				Applied for TAP & SRT funding through INRCOG. Rec'd TAP Funds \$184,000. Applied a 2nd time for SRT funds in 2020.					Capitalize	Waiting for Funding				
				Contractor or Engineer									CIP FY 2020-21	\$ 75,500
				SRT funds will pay more \$. If City is awarded SRT, City will decline TAP funds.									SRT Funding FY2020-21	\$ 220,500
													\$ 296,000	

Latest Agenda Memo & Contract Summary in Folder	Packet #	Hand-written on packet	Fund #	Contractor & Project	Original Contract	Change Orders	Other Adjustments	New Contract Amount	Expense or Capitalize	Under Design	Account Number Expensed	Source of Funds (from Agenda Memos)		
										or Construction in Progress (CiP) or Finalized				
X	26			<b>School Ped Ramp Construction 2019</b>										
			304	Feldman Concrete	\$ 11,756.00		\$ 1,650.60	\$ 13,406.60	Expense	Finalized 9/9/19	304-750-6499	CIP Acct. #304, Sidewalk Program Const.. FY2019-20	\$ 40,000	
X	27			<b>Youth Ballfields 2019 (Cedar River Park)</b>										
			339	Hall & Hall Engineering	\$ 308,550.00			\$ 308,550.00	Expense or Capitalize	CiP	339-750-6407	Local Funding - G.O. Bonds (FY 2020-21)	\$ 700,000	
				Mehmert Tiling	\$ 709,016.89		\$ 709,016.89	339-750-6499			Other Funding - Interfund transfer or sale of assests	\$ 600,000		
				ATC (Geo Tech)	\$ 4,700.00		\$ 4,700.00	339-750-6499				\$ 1,300,000		
X	28			<b>Asphalt Patching - Fall 2019</b>										
			various	Heartland Asphalt	\$ 46,170.13		\$ 33,616.09	\$ 79,786.22	Expense	Finalized 11/18/19	various	001-210-6499	Streets	\$ 34,733
								110-210-6499			Streets	\$ 16,375		
								600-810-6499			Water	\$ 2,499		
								110-210-7499			Leveling on Horton Road	\$ 26,180		
												\$ 79,786		
X	29			<b>GIS Data Collection 2019</b>										
			301	Midland GIS Solutions	\$ 211,564.00			\$ 211,564.00	Expense	WiP	301-750-6499			
X	30			<b>Bituminous Seal Coat 2020</b>										
			306	Blacktop Services	\$ 205,778.50			\$ 205,778.50	Expense	Start Project 7/13/20	306-750-6499	Account #306 FY 2020-21	\$ 200,000	
											Account #306 FY 2018-19 (fund balance)	\$ 64,555		
												\$ 264,555		
X	31			<b>Downtown Alley Reconstruction 2020</b>										
			309	Feldman Concrete	\$ 39,851.00	\$ (1,615.90)		\$ 38,235.10	Expense	Finalized 7/6/20	309-750-6499	G.O. Bond - CIP Fund #309 (FY2018-19 Fund Bal.)	\$ 65,371	
											G.O. Bond - CIP Fund #309 (FY2019-20 Funding)	\$ 75,000		
											Fall 2019 Alley Reconstruction Project	\$ (31,000)		
												\$ 109,371		
X	32			<b>Crack Cleaning &amp; Filling 2020</b>										
			110	Kluesner Construction	\$ 12,400.00			\$ 12,400.00	Expense	Construction Not Yet Started	110-210-6761	RUT Fund - Acct. #6761	\$ 10,000	
											RUT Fund Balance - As Needed	\$ 4,400		
												\$ 14,400		

Latest Agenda Memo & Contract Summary in Folder	Packet #	Fund #	Contractor & Project	Original Contract	Change Orders	Other Adjustments	New Contract Amount	Expense or Capitalize	Under Design or Construction in Progress (CIP) or Finalized	Account Number Expensed	Source of Funds (from Agenda Memos)	
X	33		<b>Sanitary Sewer Lining Project 2020</b>									
		362	Municipal Pipe Tool	\$ 64,322.00		\$ 10,373.00	\$ 74,695.00	Expense	Finalized 6/1/20	362-750-6499	Sanitary Sewer Improvement - CIP Fund #362	\$ 90,485
X	34		<b>Asphalt Patching - Spring 2020</b>									
		various	Kluesner Construction	\$ 10,766.02		\$ 11,104.51	\$ 21,870.53	Expense	Finalized 7/6/20	various	001-210-6499 Streets	\$ 7,542
											110-210-6499 Streets	\$ 329
											600-810-6499 Water	\$ 2,237
											610-817-6499 Sewer Line	\$ 6,979
											309-750-6499 Downtown Alley by new C&G	\$ 4,784
												\$ 21,871
X	35		<b>Airport T-Hangar Taxilanes Reconstruction 2021</b>									
			McClure Engineering	\$ -			\$ -	Expense	Waiting for Funding	xx	IDOT Airport Development Grant (80% of \$299,850)	\$ 239,880
			Contractor							xx	Acct. #331 Land Acquisition FY2019-20 Fund Bal.	\$ 59,970
												\$ 299,850
X	36		<b>Old WPC Dome Demolition 2020</b>									
		365	WHKS	\$ 19,000.00			\$ 19,000.00	Expense	Under Design	365-750-6407	CIP Acct. #365 FY2020-21	\$ 200,000
			Contractor							xx		
X	37		<b>Airport Concrete Apron Rehabilitation 2020</b>									
		004	McClure Engineering	\$ 2,750.00			\$ 2,750.00	Expense	Under Design	xx	Airport Fund Balance FY2020-21	\$ 30,000
			Contractor							xx		
X	40		<b>Traffic Study 2020</b>									
		345	Snyder & Assoc	\$ 158,100.00			\$ 158,100.00	Expense	Under Contract	345-752-4820	Account #345-752-4820 G.O. Bond FY 2019-20	\$ 185,000
X	41		<b>Public Services Center - North Addition</b>									
		302	Farnsworth Group	\$ 231,250.00			\$ 231,250.00	Capitalize	Under Design	302-750-6490	Acct. #302	
			Contractor							302-750-6499	FY 2016-21 Water & Solid Waste Transfers	\$ 1,000,000
											FY2021-22 Bond	\$ 1,900,000
												\$ 2,900,000

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **GENERAL INFRASTRUCTURE MAINTENANCE**

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A primary responsibility of the General Infrastructure Maintenance Division is to finance and/or inspect the following infrastructure:

- Inspect and perform routine maintenance on the dam.
- Pay for traffic signal maintenance.
- Inspect trail bridges every four years.
- Finance the USGS Cedar River Gage on Adams Parkway Bridge.
- Finance community wide street lighting, entrance signs and traffic signals.

Additionally, the local property tax support of the Waverly Municipal Airport is shown as an expense and transfer of monies to the Airport Fund.



City of Waverly  
**Department of Public Works**  
 FY2019-20

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**EQUIPMENT SERVICES**

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The Equipment Services Division is responsible for routine maintenance and repairs for City vehicles; purchases parts utilized and inventoried for vehicles; and performs welding or fabrications that may be needed.

Equipment Services also prepares the specifications and bid documents for the purchasing of new equipment and vehicles and the sale of used equipment and vehicles.

**Vehicle Repairs**

	2015-16	2016-17	2017-18	2018-19	2019-20
Service Jobs	564	676	597	386	561
New Tires	86	94	101	102	115
Tire Repairs	33	49	40	30	32
Batteries	3	30	15	12	18
Antifreeze (Gals)	74	67	35	26	20
Oil Changes	194	198	148	117	102
Oil (Gals)	467	496	504	638	667
Total Parts (\$)	\$ 77,076	\$ 115,810	\$ 96,052	\$ 99,832	\$ 103,337
Total Labor Charged	\$ 38,487	\$ 52,308	\$ 51,770	\$ 55,864	\$ 54,362

**Fuel Purchased**

	2015-16	2016-17	2017-18	2018-19	2019-20
Unleaded Fuel (Gals)	24,415	22,988	21,010	25,936	26,833
Unleaded Fuel (\$)	\$ 53,826	\$ 47,099	\$ 59,116	\$ 66,793	\$ 63,161
Diesel Fuel (Gals)	44,284	45,910	41,791	46,500	44,026
Diesel Fuel (\$)	\$ 185,553	\$ 101,284	\$ 123,358	\$ 140,020	\$ 119,452

City of Waverly - Public Works  
Equipment Services  
**Vehicles & Equipment Purchased**  
FY 2019-20

Department / Division	Vehicle or Equipment Purchased & Make / Model	Bid Date	Low Bidder	Low Bid \$	Trade-In \$	Net Bid \$	Trade-In	Date Received
Public Works / Sewer Maint	2019 H&H Skid Load Trailer	07/25/19	Patten Trailers Urbana	\$6,067	\$1,500	\$4,567	1997 Stokes Welding Skid Loader Trailer	July 2019
Public Works / Streets	2020 Freightliner 108SD Cab & Chassis	11/12/19	Don's Truck / Fairbank	\$80,050	\$22,000	\$58,050	2007 Sterling Hook Lift Dump Truck	June 2020
Public Works / Streets & Solid Waste	2020 Gehl AL750 Compact Wheel Loader	12/31/19	Star Equipment Cedar Rapids	\$71,095	\$12,296	\$65,198	2003 Bobcat Skid Loader	April 2020
Public Work / Streets	2020 Massey Ferguson 7720S 4WD Tractor w/Cab	01/20/20	Deike Imp Waverly	\$140,798	\$35,000	\$105,798	2001 Fendt 411 w/Loader	May 2020
Public Works / Equip Services	2020 Dodge Ram 2500 3/4 ton 4x4 Pickup	01/15/20	Krueger Auto Waverly	\$28,870	-	\$28,870	-	May 2020
Public Works / Sewer Maint	2020 Dodge Ram 3500 1-ton pickup	01/15/20	Krueger Auto Waverly	\$33,954	\$10,125	\$23,829	2009 Ford F350 Pickup	May 2020
Public Works / Sewer Maint	Brand X Fiberglass Body for Dodge Cab & Chassis	02/03/20	Stellar Truck Mason City	\$15,998	-	\$15,998	-	July 2020
Public Works / Streets	Skeleton Grapple /Bucket Attachment	02/03/20	Star Equipment Cedar Rapids	\$4,700	-	\$4,700	-	Feb. 2020
Public Works / Streets	2020 Kage Innovation SBK96 Snowfire System (Snow Pusher)	04/01/20	Star Equipment Cedar Rapids	\$7,550	-	\$7,550	-	April 2020
Public Works / Streets & Solid Waste	2006 Doosan G25E-5 Fork Lift	04/24/20	Big River Equip Waterloo	\$21,050	-	\$21,050	-	May 2020



City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **STREETS - RUT**

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The Street Division involves many diverse areas. These areas will be summarized individually to overview the annual events. The Street Division maintains approximately 75+ miles/ 1,162 blocks of primary streets, 10 miles of gravel roads and alleys, and numerous municipal-owned parking lots.

Street Maintenance and Reconstruction

- Seal Coat Program
- Pothole Repair
- Crack Sealing

Snow Removal

Painting

- Line Striping
- Curb Painting
- School Crossing Signs
- Dry Run Walk Bridges

Special Collection Week (Furniture, Appliances, Tires, Yard Waste, & Brush)

Fall Leaf Pickup

Mowing

Street Sweeping

Road Grading

Alley Maintenance

Street Signs

- Maintenance
- Replacement

Emergency Response

- Flash Flooding
- Storm Damage Cleanup
- Other Manpower Needs

Parking Lot Maintenance

City of Waverly - Public Works  
Streets - RUT  
**Work Hours Per Core Services**  
FY 2019-20

<b><u>Streets</u></b>	<b><u>Hours</u></b>	<b><u>Painting</u></b>	<b><u>Hours</u></b>
Shoulder Work/Recon	<u>1,231</u>	Line Striping,	
Road Grading	<u>21</u>	Curbs & X-Walks	<u>540</u>
Alleys	<u>59</u>		
Cold Mix Patching /			
Durapatching	<u>866</u>	<b><u>Snow Removal</u></b>	
Street Sweeping	<u>754</u>	Sand Hauling	<u>35</u>
Weed Mowing /		Snow Fence	<u>38</u>
Tree Trimming	<u>1,553</u>	Snow Plowing	<u>436</u>
Rock / Chips Hauling	<u>239</u>	Snow Removal	<u>270</u>
		Sanding	<u>203</u>
<b><u>Maintenance</u></b>		<b><u>Signs</u></b>	
Catch Basins	<u>168</u>	Repair &/or Replace	<u>127</u>
Bridges	<u>4</u>	New Installations	<u>162</u>
Culverts	<u>11</u>		
Manholes	<u>455</u>	<b><u>Special Projects</u></b>	
Dry Run	<u>0</u>	Airport	<u>14</u>
Building Maintenance	<u>145</u>	Yard Waste	<u>168</u>
Equipment Maintenance	<u>804</u>	Spring Clean-up &	
		Fall & Winter Clean-up	<u>32</u>
		Mulch & Compost	
		Deliveries	<u>55</u>
		Water Dept	
		Solid Waste Dept	<u>1,091</u>
		Sewer Maintenance	<u>13</u>
		WPC Dept	
		Recycling Center	<u>40</u>
		Cemetery Dept	
		Golf Course Dept	<u>20</u>
		Equip Services	<u>2</u>
		Parks Dept	<u>21</u>
		Hospital	<u>1</u>
		Meetings / Training	<u>84</u>

City of Waverly - Public Works  
Streets - RUT  
**Street Maintenance & Construction**  
2019-20

MATERIAL COMPARISON REPORT

Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20
Asphalt Patch					
Tons	152	145	154	161	192
Cost (\$)	\$16,723	\$15,918	\$16,585	\$18,300	\$22,464
Road Rock					
Tons	779	509	254	994	1,147
Cost (\$)	\$7,156	\$4,681	\$2,375	\$9,446	\$11,123
3/8" Chips					
Tons	56	92	173	64	151
Cost (\$)	\$665	\$1,116	\$2,106	\$795	\$1,502
CRS-2 Oil					
Gallons	2,714	1,480	5,474	1,665	3,308
Cost (\$)	\$4,750	\$2,591	\$8,072	\$3,163	\$5,956

STREET MAINTENANCE (BLOCKS)

Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20
Single Seal Coat (Bid)	100	100	100	100	90
Double Seal Coat	3	0	1	0	0
Slurry Seal Coat	0	8	22	10	7

STREET RECONSTRUCTION

	Linear Feet	Miles
2015-16		
2nd Avenue SW Reconst. (10th Ave. SW to 4th St. SW)	1,056	0.2
2nd Street NW Reconst. (Bremer Ave. to 3rd Ave. NW)	298	0.06
2016-17		
16th Street SW (4th Ave. SW to Meadow View)	1,420	0.27
2017-18		
no street project	0	0
2018-19		
no street project	0	0
2019-20		
Cedar Lane (2nd Ave. NE to Brown Lane)	4,814	0.91

Note: The 20th St. NW Reconstruction - Ph. 1 RR Crossing Improvements at 20th St. NW & 5th Ave. NW 2018 - project has not yet been finalized (1,100 LF)

NEW STREET CONSTRUCTION

		Linear Feet	Miles
2015-16			
Cedar River Parkway (4th St. SW to 8th Street SE)		4,456	0.84
2019-20			
Cedar River Parkway (8th Street SE to E. Bremer)		5,721	1.08

Note: Whitetail Bluff subdivision started street construction in 2020.

SNOW REMOVAL MATERIAL COMPARISON

Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20
Rock Salt					
Tons	661	989	821	852	729
Cost (\$)	\$54,360	\$79,073	\$61,172	\$69,367	\$64,195
Ice Sand					
Tons	0	321	30	8	120
Cost (\$)	\$0	\$1,900	\$270	\$188	\$1,082

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **AIRPORT**

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### **Airport Commission Members (Since)**

Eric Bagelmann (January 2018)	Active
Dennis Hansen (May 2006)	Active
Lee Hinrichs (September 2018)	Active
Mike Sherer (December 2019)	Active
Jane Wollenzien (May 2014)	Active

Irvin Swieter, Swieter Aircraft Services – FBO (November 2018 – October 2023) 5-yr Agreement  
Irvin Swieter, Waverly Air Services – Airport Manager (November 2018 – October 2023) 5-yr Agreement  
Kris Glaser, Council Liaison (January 2020)  
Tim Kangas, Council Liaison (March 2015 – December 2019)  
Mike Cherry, City Engineer (April 1997)

### **Highlights for July 2019 - June 2020**

#### Land Acquisition

The Airport Land Acquisition 2012 project requires acquisition of real property and easements in order to expand the safety zone and also lengthen the runway 400 feet. The following parcels have been purchased or an easement (E) has been obtained (see attached drawing):

Parcels #2, 4 & 7 – William Lowe - \$570,000  
Parcels #3 & 10 – James & Sandra Janssen - \$155,500  
Parcels #6 & 6E – Glen & Kathy Burkle - \$150,000  
Parcel #8E – Mueller Farms - \$6,965  
Parcels #1 & 9 – Eugene & Jolene Miller (Clan Properties, LLC) - \$393,856  
Parcel #5 – Marvin & Margene Schmidt - \$380,000

#### Airport Obstruction Removal

Removal of Clan (Milller) & Schmidt structures and trees by Schrader Excavating of Walford, Iowa for \$122,231.

#### Airport Runway 29 Extension 2018

- On April 15, 2019 Council approved a contract with J.B. Holland of Decorah, Iowa for the construction of the Runway 29 Extension project. This project will extend the runway eastward by 400 feet.

The Runway 29 Extension project was approved by the FAA and the cost will be funded 90% by the Federal Aviation Trust Fund and funded 10% locally through the city's urban renewal authority.



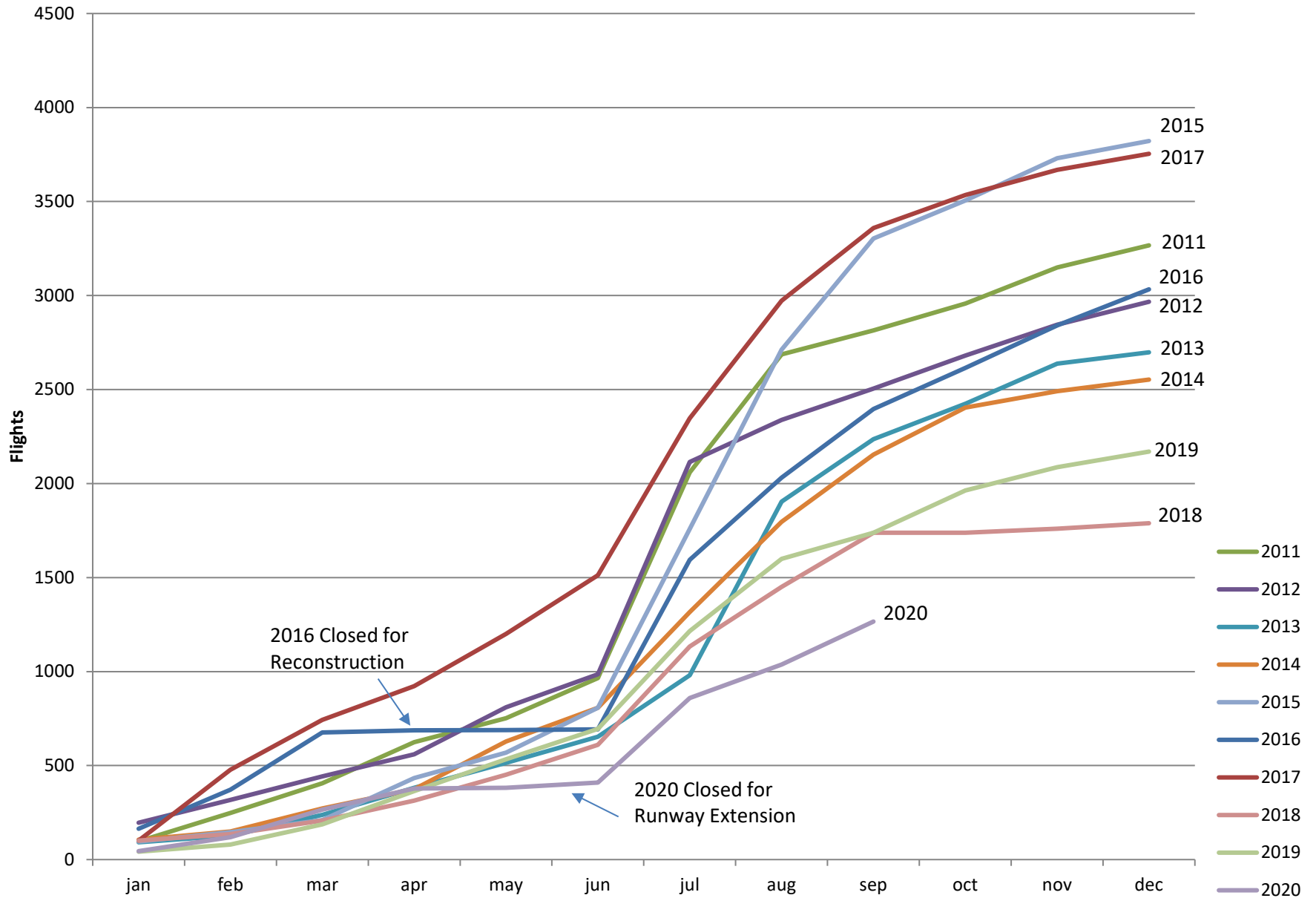
**Looking to the Future:**

- Winter 2020 - Addition of Credit Card Fueling (by FBO)
- Add Avionic Maintenance Room
- Replace Obsolete Security Cameras
- Upgrade Electrical Power Supply to T-Hangars and Individual Hangars
- Reconstruct Hangar Taxiways
- Construct New T-Hangars

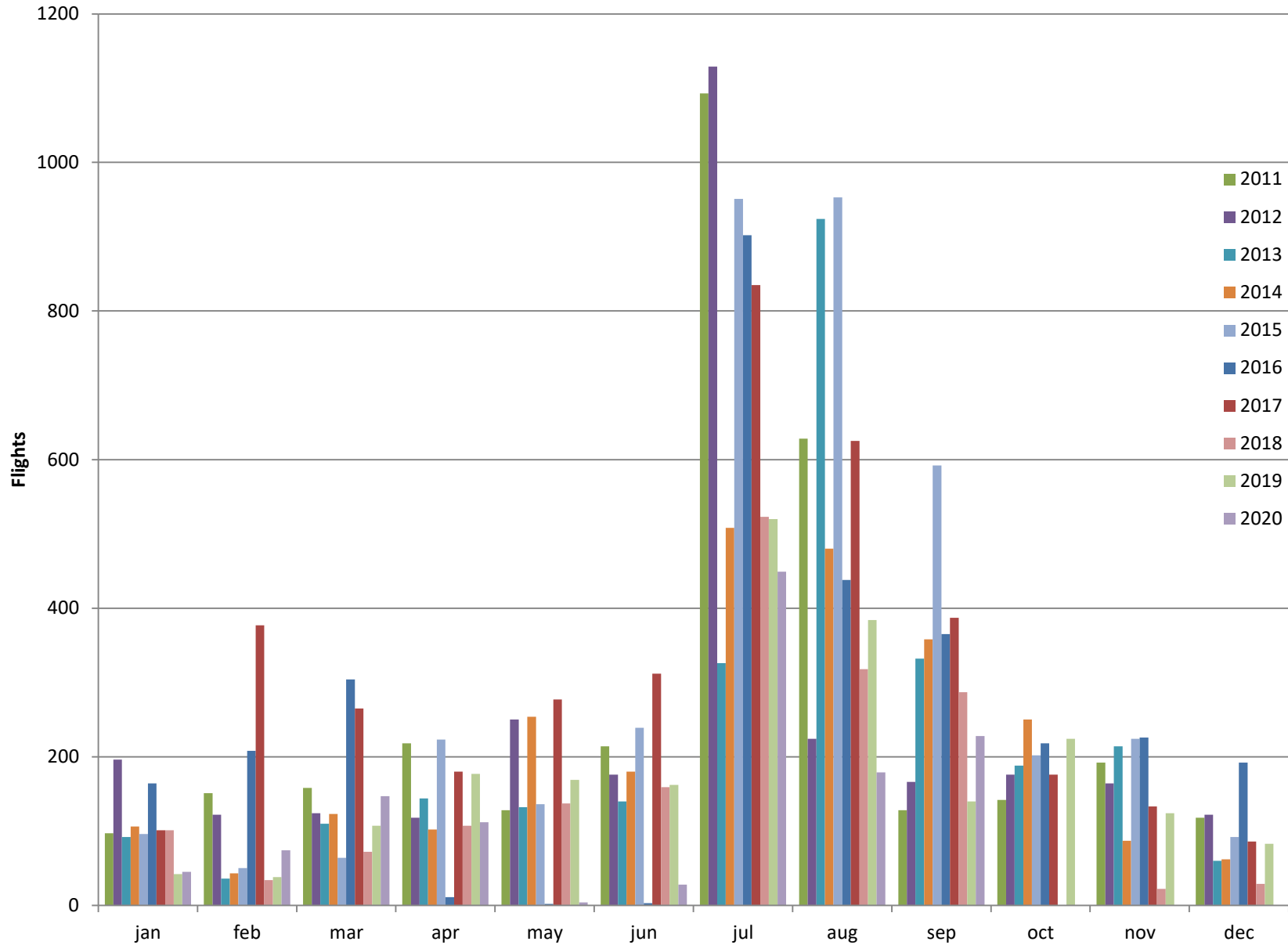
**Report Summary:**

The Waverly Airport continues providing valued services to the community and the surrounding region. The Airport Commission is proud of the advancements that have been made and appreciate the City's support and help in those efforts. Waverly is a steadily growing community and the Airport continues to provide a significant economic benefit at minimal cost to the City's tax payers.

# Total Flights Per Year



# Flight Report



City of Waverly  
**Department of Public Works**  
FY 2019-20

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## WATER

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The Water Division is responsible for the operation and maintenance of the total water system including wells, towers, piping, pumps, controls, hydrants, and other equipment within the City of Waverly. This division performs or provides programs as follows: replacement of older system valves and hydrants, valve box raising and replacement, valve turning, hydrant flushing and flow testing, water main repair, water main testing and installation, water quality testing, answers customer complaints on taste, smell, usage, or questions regarding water quality as per articles that appear in the newspapers.

The Water Division supplies water to Waverly residents and industry utilizing four wells, three towers, and approximately 76 miles of water main. This includes 709 fire hydrants, 1379 water main valves, over 552 hydrant valves, and 4,333 meters. The pumping capacity of the system is approximately 5,300 gallons per minute and total storage of 1,750,000 gallons elevated. The average daily pumpage for FY 2019-20 was 955,333 gallons per day.

During FY 2019-20, the Water Division continued to locate and correct water leaks. The Water Division also responded to 1,813 Iowa One Calls and located underground utilities for water, sanitary sewer and storm sewer. Our billing to pumpage accountability has been calculated at 74.3%.

### FUTURE PROJECTS

1. Continue replacement of older system valves and hydrants.
2. Continue education on the ever-changing regulations set forth by the IDNR and USEPA to insure a safe drinking water system.
3. Continue with the Source Water Protection Plan to reduce or eliminate certain contaminants from entering our ground water source and to educate the public on the importance of such a plan.

City of Waverly - Public Works  
**Water**  
**Core Services**  
 FY 2019-20

<b>Water Meters</b>	<b>Totals</b>
New Meter Installations	74
Meters Replaced	25
Seasonal In	54
Seasonal Out	58
ERTs	125
Meters Tested & Repaired	69
Hyd. Meters / Hose Bib Meter	97

<b>Water Service Lines</b>	<b>Totals</b>
Capped Services	3
Service Line Taps	3
Sound Detection	25

<b>Water Mains</b>	<b>Totals</b>
Repaired	12
Replaced	0
Sound Detection	21
Large Taps (4"-6"-8")	0

<b>Water Valves</b>	<b>Totals</b>
Valves Operated	169
Valves Installed	3
Valves Repaired	3
Valves Replaced	2

<b>Water Valve Boxes</b>	<b>Totals</b>
Boxes Repaired	24
Boxes Installed	4
Boxes Cleaned	34
Boxes Raised	16
Boxes Lowered	6

<b>Number of Locates</b>	<b>Totals</b>
Iowa One Call Tickets	1,813
Structures Located from IOC Tickets	5,439
Responses Entered	1,813

<b>Hydrants</b>	<b>Totals</b>
Flushed	406
Repaired	125
Replaced	0
Installed	1
Painted	82
Flagged	5

<b>Water Towers</b>	<b>Visits</b>
Interior	89
Exterior	89
Exterior Maintenance (hours)	10

<b>Wells</b>	<b>Visits</b>
Interior	1,120
Exterior	1,120
Exterior Maintenance (hours)	35

<b>Other Projects</b>	<b>Total</b>
Contractors	394
Other City Departments	100

<b>Service Center</b>	<b>Hours</b>
Record Keeping (# of Hours)	510
Equipment Maintenance (Hrs)	88
Building Maintenance (Hrs)	40
Customer Care	121
Call Outs (Law Center/SCADA Alarms)	41

<b>Number of Samples Taken</b>	<b>Totals</b>
Bacteria	126
Chlorine	1,550
Fluoride	1,580
Nitrate	62

City of Waverly - Public Works  
Water  
**Operational Data & Gallons Pumped**  
FY 2019-20

**Operational Data for Water System Repairs**

	2015-16	2016-17	2017-18	2018-19	2019-20
Main Lines	14	12	24	14	12
Service Lines	12	13	32	11	4
4" Valves Installed	2	1	2	2	1
6" Valves Installed	2	1	1	1	2
8" Valves Installed	1	1	1	0	0
12" Valves Installed	0	0	0	0	0
Service Lines Capped	8	4	6	3	3
3/4" Taps Made	3	5	2	2	2
1"-2" Taps Made	13	15	30	3	1
4" Taps Made	1	0	0	0	0
6" Taps Made	8	5	0	0	0
8" Taps Made	2	4	0	0	0

**Gallons Pumped Versus Gallons Billed**

	Gallons Pumped	Estimated Unmetered Gallons*	Gallons Billed	Percent Accountable
2019-20	349,624,000	9,521,000	250,099,000	74%
2018-19	341,884,000	13,058,000	243,332,000	75%
2017-18	358,615,000	19,588,000	250,852,000	75%
2016-17	356,489,000	46,187,000	247,064,000	82%
2015-16	352,702,000	46,184,000	254,403,000	85%

\* Estimated Unmetered Gallons are for hydrant flushing, watermain flushing, sewer jet machine, street sweeper, Fire Department, water leaks, etc.

**Water Consumption**

Salesman Gallons	94,800
Salesman Revenue	\$480
City Consumption Gallons	9,521,000
Highest Pumping Day	1,411,000
Lowest Pumping Day	724,000
Average Pumping Day	955,333
Total Gallons Pumped	349,624,000

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **WATER POLLUTION CONTROL**

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The Water Pollution Control Division operates and maintains the wastewater treatment facilities for the City. These facilities are the treatment plant, main lift station, and nine smaller lift stations. The testing and monitoring of industrial discharges plus disposal of biosolids are also the responsibility of the WPC Division. The efficient operation and maintenance of these facilities are required by permits and monitored by State and Federal agencies, DNR and EPA. The daily average treatment of wastewater for fiscal year 2019-20 was 1,404,000 gallons.

The WPC Facility and staff conducted several tours throughout the school year to elementary, high school, and Wartburg College classes. Staff has also made classroom or site presentations to different classes or interested groups.

This completes a brief overview of the past fiscal year. Although not a complete summary, it does not represent the knowledge and expertise needed to operate and maintain an efficient WPC Facility. It is our method of recycling the very precious resource of water. This is one reason that some cities are referring to their waste treatment facilities as Water Reclamation Facilities.

### CURRENT PROJECTS

1. Upgrade of WPC Plant to Activated Sludge Process (from Trickling Filter/RBC Process), for Nutrient Reduction.

### FUTURE PROJECTS

1. Eastgate Lift Station
2. Flow measurement at each outfall as well as influent.

### PROBLEM AREAS OR AREAS OF CONCERN

1. Shortage of qualified and accessible land for biosolids application.
2. The need to upgrade process controls.
3. Budgets must continue to reflect the need to upgrade lift stations and aging equipment.

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: July, 2019

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DAY	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MG/L	EFF. Cu LBS/DAY	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY			
1	Mon.	0.000	2.120														8.1	62	
2	Tues.	0.000	2.360	6	118								13	256	<0.50	0	8.3	62	
3	Wed.	0.000	2.380	6	119	1.81	35.93	14.4	285.83	0.0246	0.4883		13	258	<0.50	0	8.3	62	7.5
4	Thurs.	0.000	2.260														8.1	62	
5	Fri.	0.000	2.240														8.1	62	
6	Sat.	0.000	2.100																
7	Sun.	0.000	2.130																
8	Mon.	0.000	2.090														8.1	61	
9	Tues.	0.000	2.090														8.1	61	
10	Wed.	0.000	1.940	6	97	1.78	28.80	15.1	244.31	0.0348	0.5631		15	243	<0.50	0	8.3	62	5.2
11	Thurs.	0.000	1.860														8.0	62	
12	Fri.	0.283	1.497	4	50								13	162	<0.50	0	8.3	62	
13	Sat.	0.220	1.410																
14	Sun.	0.286	1.404																
15	Mon.	0.285	1.395														8.0	64	
16	Tues.	0.282	1.268														8.0	64	
17	Wed.	0.278	1.392	7	81	2.21	25.66	17.4	202.00	0.0226	0.2624		13	151	<0.50	0	8.3	65	1.0
18	Thurs.	0.063	1.667														8.0	65	
19	Fri.	0.000	1.790	7	105								16	239	<0.50	0	8.3	67	
20	Sat.	0.000	1.670																
21	Sun.	0.000	1.710																
22	Mon.	0.000	1.540														8.0	65	
23	Tues.	0.000	1.660														8.0	65	
24	Wed.	0.195	1.385	4	46	2.51	28.99	17.6	203.30	0.0275	0.3176		14	162	<0.50	0	8.0	64	8.6
25	Thurs.	0.278	1.232														7.9	64	
26	Fri.	0.265	1.215	6	61								15	152	<0.50	0	8.0	65	
27	Sat.	0.306	1.094																
28	Sun.	0.247	1.363																
29	Mon.	0.275	1.245														7.8	66	
30	Tues.	0.270	1.190														7.9	65	
31	Wed.	0.271	1.129	6	56	2.63	24.76	21.1	198.67	0.0400	0.3766		14	132	<0.50	0	8.2	64	3.1

TOTAL	3.8	51.826	52.0	733		144.14		1134.11		2.0080	126.0	1754	0.0	0.0					25.4
AVERAGE	0.1	1.672	5.8	81		28.83		226.82		0.4016	14.0	195	<0.50	0.0			8.1	64	5.1
MAX	0.3	2.380	7.0	119		35.93		285.83		0.5631	16.0	258	<0.50	0.0			8.3	67	8.6
MIN	0.0	1.094	4.0	46		24.76		198.67		0.2624	13.0	132	0.0	0.0			7.8	61	1.0

7 DAY AVERAGE																			
WEEK 1	0.0	2.227	6.0	119		35.93		285.83		0.4883	13.0	257	<0.50	0.0			8.2	62	7.5
WEEK 2	0.1	1.756	5.0	74		28.80		244.31		0.5631	14.0	202	<0.50	0.0			8.2	62	5.2
WEEK 3	0.1	1.556	7.0	93		25.66		202.00		0.2624	14.5	195	<0.50	0.0			8.1	65	1.0
WEEK 4	0.2	1.356	5.0	54		28.99		203.30		0.3176	14.5	157	<0.50	0.0			8.0	65	8.6



**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: August, 2019

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DAY	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MG/L	EFF. Cu LBS/DAY	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DAY	FINAL MG/L	FINAL LBS/DAY			
1	Thurs.	0.255	1.145														8.0	64	
2	Fri.	0.281	1.079		7	63							16	144	<0.50	0	8.2	65	
3	Sat.	0.222	1.048																
4	Sun.	0.250	1.120																
5	Mon.	0.250	1.140														8.0	66	
6	Tues.	0.263	1.127														7.9	66	
7	Wed.	0.261	1.089		6	54	2.93	26.61	19.4	176.20	0.0288	0.2616	13	118	<0.50	0	8.2	66	
8	Thurs.	0.245	1.045														7.9	67	
9	Fri.	0.242	1.008		5	42							11	92	<0.50	0	8.2	67	
10	Sat.	0.083	1.057																
11	Sun.	0.000	1.190																
12	Mon.	0.000	1.330														8.0	67	
13	Tues.	0.000	1.230														8.0	67	
14	Wed.	0.000	1.180		7	69	3.03	29.82	20.9	205.68	0.0353	0.3474	16	157	<0.50	0	8.2	68	
15	Thurs.	0.000	1.260														7.9	67	
16	Fri.	0.000	1.190		6	60							13	129	<0.50	0	8.3	67	
17	Sat.	0.000	1.260																
18	Sun.	0.000	1.220																
19	Mon.	0.000	1.230														7.9	67	
20	Tues.	0.000	1.390														8.0	67	
21	Wed.	0.000	1.210		5	50	3.27	33.00	22.1	223.02	0.0311	0.3138	14	141	<0.50	0	8.2	68	
22	Thurs.	0.000	1.250														7.9	67	
23	Fri.	0.000	1.190		5	50							9	89	<0.50	0	8.2	67	
24	Sat.	0.000	1.070																
25	Sun.	0.000	1.170																
26	Mon.	0.000	1.140														8.0	67	
27	Tues.	0.000	1.160														7.9	67	
28	Wed.	0.000	1.120		7	65	3.48	32.51	23.6	220.44	0.0351	0.3279	9	84	<0.50	0	8.2	66	
29	Thurs.	0.188	0.952									0.0000					7.9	66	
30	Fri.	0.257	0.823		8	55							10	69	<0.50	0	8.1	67	
31	Sat.	0.201	0.819																

TOTAL	3.0	35.242	56.0	508			121.93			825.34			1,2507	111.0	1024	0.0	0.0			0.0
AVERAGE	0.1	1.137	6.2	56			30.48			206.33			0.2501	12.3	114	<0.50	0.0	8.1	67	0.0
MAX	0.3	1.390	8.0	69			33.00			223.02			0.3474	16.0	157	0.0	0.0	8.3	68	0.0
MIN	0.0	0.819	5.0	42			26.61			176.20			0.0000	9.0	69	0.0	0.0	7.9	64	0.0

7 DAY AVERAGE																				
WEEK 1	0.3	1.107	6.5	59			26.61			176.20			0.2616	14.5	131	<0.50	0.0	8.1	65	0.0
WEEK 2	0.1	1.149	6.0	55			29.82			205.68			0.3474	13.5	125	<0.50	0.0	8.1	67	0.0
WEEK 3	0.0	1.251	5.5	55			33.00			223.02			0.3138	13.5	135	<0.50	0.0	8.1	67	0.0
WEEK 4	0.0	1.157	6.0	58			32.51			220.44			0.3279	9.0	87	<0.50	0.0	8.0	67	0.0

# City of Waverly

## MONTHLY MONITORING REPORT

Date: September, 2019

DISCHARGE SERIAL # 001 - # 002

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	DIGESTER CONTENTS					TRICKLING FILTER RECIRC. FLOW MGD	BOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		RAW ph	RAW TEMP. °F			
		FLOW MGD	TEMP °F	ph	VOL. ACID MG/L	ALKALIN. MG/L		INF. MG/L	INF. LBS/DA Y	INF. PHOS. MG/L	INF. PHOS. LBS/DA Y	INF. TOTAL N (as N) MG/L	INF. TOTAL N (as N) LBS/DA Y	INF. TKN (as N) MG/L	INF. TKN (as N) LBS/DA Y	INF. MG/L	INF. LBS/DA Y					
1	Sun.	1.080					1.08															
2	Mon.	1.070	98	7.05			1.09														7.4	63
3	Tues.	1.150	98	7.09	270	2920	1.01														7.4	63
4	Wed.	1.070	98	7.05			1.09														7.4	63
5	Thurs.	1.160	97	7.08			1.00	155	1500	4.78	46.24	35.4	342.47	32.5	314.42	212	2051			7.4	63	
6	Fri.	1.090	96	7.08	165	2810	1.07	155	1409							236	2145			7.4	63	
7	Sat.	1.020					1.14															
8	Sun.	1.110					1.05															
9	Mon.	1.280	97	7.04	165	2680	0.88														7.5	63
10	Tues.	1.250	97	7.01			0.91														7.6	65
11	Wed.	1.200	97	7.08			0.96	159	1591	5.11	51.14	30.1	301.24	26.7	267.21	232	2322			7.5	64	
12	Thurs.	1.310	97	7.02			0.85														7.4	66
13	Fri.	1.160	97	7.05	155	2540	1.00	295	2854							572	5534			7.4	66	
14	Sat.	1.570					0.59															
15	Sun.	2.050					0.11															
16	Mon.	1.630	97	7.00	145	2450	0.53														7.4	62
17	Tues.	1.490	97	6.98			0.67														7.6	64
18	Wed.	1.460	97	7.05			0.70	137	1668	4.54	55.28	27.4	333.63	24.6	299.54	180	2192			7.5	62	
19	Thurs.	1.950	97	7.09	140	2500	0.21	114	1854							168	2732			7.5	63	
20	Fri.	1.750	98	6.93			0.41														7.4	64
21	Sat.	1.790					0.37															
22	Sun.	1.720					0.44															
23	Mon.	1.580	97	6.98	140	2430	0.58														7.6	64
24	Tues.	1.570	97	6.95			0.59														7.4	62
25	Wed.	1.470	97	7.02			0.69	133	1631	5.24	64.24	24.1	295.46	20.9	256.23	200	2452			7.5	63	
26	Thurs.	1.430	98	6.94			0.73														7.3	64
27	Fri.	1.350	97	7.03	140	2420	0.81	149	1678							220	2477			7.5	62	
28	Sat.	1.290					0.87															
29	Sun.	1.350					0.81															
30	Mon.	1.380	97	6.95	140	2420	0.78														7.6	64

TOTAL	41.780					23.020	1297.0	14184		216.91		1272.81		1137.40	2020.0	21905					
AVERAGE	1.393	97.2	7.0			0.767	162.1	1773		54.23		318.20		284.35	252.5	2738			7.5	63.5	
MAX	2.050	98.0	7.1			1.140	295.0	2854		64.24		342.47		314.42	572.0	5534			7.6	66.0	
MIN	1.020	96.0	6.9			0.110	114.0	1409		46.24		295.46		256.23	168.0	2051			7.3	62.0	

7 DAY AVERAGE																					
WEEK 1	1.091					1.069	155.0	1454		46.24		342.47		314.42	224.0	2098			7.4	63.0	
WEEK 2	1.269					0.891	227.0	2223		51.14		301.24		267.21	402.0	3928			7.5	63.0	
WEEK 3	1.731					0.429	125.5	1761		55.28		333.63		299.54	174.0	2462			7.5	63.0	
WEEK 4	1.487					0.673	141.0	1654		64.24		295.46		256.23	210.0	2464			7.5	63.0	

Signature: \_\_\_\_\_  
 Certification Number: 3989

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: October, 2019

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Tues.	0	0	1.870													7.9	67	
2	Wed.	0	0	2.180	9	164	3.36	61.09	22.2	403.62	0.0382	0.6945	17	309	0.56	10	8.1	66	649.0
3	Thurs.	0	0	2.030													8.0	63	
4	Fri.	0	0	2.380	9	179							13	258	<0.50	0	8.2	62	
5	Sat.	0	0	2.570															
6	Sun.	0	0	2.410															
7	Mon.	0	0	2.450													8.1	61	
8	Tues.	0	0	2.460													8.1	60	
9	Wed.	0	0	2.210													8.1	60	
10	Thurs.	0	0	2.310	9	173	1.81	34.87	17.1	329.44	0.0254	0.4893	16	308	<0.50	0	8.3	62	40.0
11	Fri.	0	0	2.030	7	119							12	203	<0.50	0	8.2	60	
12	Sat.	0	0	1.890															
13	Sun.	0	0	1.880															
14	Mon.	0	0	1.810													8.2	58	
15	Tues.	0	0	1.820													8.1	57	
16	Wed.	0	0	1.620													8.1	58	
17	Thurs.	0	0	1.620	7	95	2.23	30.13	20.9	282.38	0.0269	0.3634	12	162	<0.50	0	8.2	59	24.1
18	Fri.	0	0	1.590	7	93							10	133	<0.50	0	8.2	59	
19	Sat.	0	0	1.500															
20	Sun.	0	0	1.580															
21	Mon.	0	0	1.710													8.1	61	
22	Tues.	0	0	1.660													8.2	59	
23	Wed.	0	0	1.790	6	90	2.40	35.83	17.7	264.24	0.0227	0.3389	13	194	<0.50	0	8.3	59	10.9
24	Thurs.	0	0	1.820													8.1	57	
25	Fri.	0	0	1.740	7	102							11	160	<0.50	0	8.3	57	
26	Sat.	0	0	1.650															
27	Sun.	0	0	1.600															
28	Mon.	0	0	1.530													8.1	57	
29	Tues.	0	0	1.470													8.1	56	
30	Wed.	0	0	1.430	6	72	2.64	31.49	20.5	244.49	0.0233	0.2779	9	107	<0.50	0	8.3	57	16.0
31	Thurs.	0	0	1.540													8.2	55	

TOTAL	0.0	58.150	67.0	1084			193.40		1524.16		2.1641	113.0	1834	0.6	10.2				740.0	
AVERAGE	0.0	1.876	7.4	120			38.68		304.83		0.4328	12.6	204	0.6	1.1			8.2	60	148.0
MAX	0.0	2.570	9.0	179			61.09		403.62		0.6945	17.0	309	0.6	10.2			8.3	67	649.0
MIN	0.0	1.430	6.0	72			30.13		244.49		0.2779	9.0	107	0.6	0.0			7.9	55	10.9

7 DAY AVERAGE																				
WEEK 1	0.0	2.270	9.0	171			61.09		403.62		0.6945	15.0	284	0.6	5.1			8.1	64	649.0
WEEK 2	0.0	2.084	8.0	146			34.87		329.44		0.4893	14.0	256	<0.50	0.0			8.2	60	40.0
WEEK 3	0.0	1.634	7.0	94			30.13		282.38		0.3634	11.0	147	<0.50	0.0			8.1	59	24.1
WEEK 4	0.0	1.684	6.5	96			35.83		264.24		0.3389	12.0	177	<0.50	0.0			8.2	58	10.9

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: November, 2019

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. ph	EFF. TEMP.°F.	E. COLI #/100 ML	
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y				FINAL MG/L
1	Fri.			1.340	7	78							10	112	<0.50	0	8.3	55		
2	Sat.			1.390																
3	Sun.			1.380																
4	Mon.			1.300													8.1	58		
5	Tues.			1.290													8.1	56		
6	Wed.			1.320	9	99	2.77	30.49	25.6	281.83	0.0291	0.3204	11	121	<0.50	0	8.2	56		
7	Thurs.			1.330													8.1	53		
8	Fri.			1.230	9	92							15	154	<0.50	0	8.2	54		
9	Sat.			1.160																
10	Sun.			1.140																
11	Mon.			1.040													8.1	53		
12	Tues.			1.020													8.1	51		
13	Wed.			1.150	9	86	2.94	28.20	27.4	262.79	0.0317	0.3040	15	144	<0.50	0	8.2	52		
14	Thurs.			1.130													8.1	53		
15	Fri.			1.120	9	84							14	131	<0.50	0	8.2	54		
16	Sat.			1.090																
17	Sun.			1.120																
18	Mon.			1.140													8.0	55		
19	Tues.			1.180													8.0	55		
20	Wed.			1.310	14	153	3.37	36.82	29.0	316.84	0.0355	0.3879	16	175	<0.50	0	8.1	55		
21	Thurs.			1.230													7.9	57		
22	Fri.			1.260	9	95							14	147	0.56	6	8.1	54		
23	Sat.			1.230																
24	Sun.			1.290																
25	Mon.			1.300	16	173	3.89	42.18	29.7	322.01	0.0363	0.3936	20	217	4.65	50	8.1	55		
26	Tues.			1.290													8.0	55		
27	Wed.			1.240													8.0	54		
28	Thurs.			1.100													8.1	52		
29	Fri.			1.200													8.0	54		
30	Sat.			1.230																

TOTAL	0.0	36.550	82.0	861		137.69		1183.46		1.4058	115.0	1200	5.2	56.3						0.0
AVERAGE	0.0	1.218	10.3	108		34.42		295.87		0.3515	14.4	150	2.6	7.0			8.1	54		0.0
MAX	0.0	1.390	16.0	173		42.18		322.01		0.3936	20.0	217	4.7	50.4			8.3	58		0.0
MIN	0.0	1.020	7.0	78		28.20		262.79		0.3040	10.0	112	0.6	0.0			7.9	51		0.0

7 DAY AVERAGE																				
WEEK 1	0.0	1.336	8.0	89		30.49		281.83		0.3204	10.5	116	<0.50	0.0			8.2	56		0.0
WEEK 2	0.0	1.124	9.0	89		28.20		262.79		0.3040	15.0	149	<0.50	0.0			8.1	53		0.0
WEEK 3	0.0	1.170	11.5	119		36.82		316.84		0.3879	15.0	153	<0.50	0.0			8.0	55		0.0
WEEK 4	0.0	1.244	12.5	134		42.18		322.01		0.3936	17.0	182	2.6	28.2			8.1	54		0.0

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: December, 2019

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML	
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y				FINAL MG/L
1	Sun.			1.300																
2	Mon.			1.300														8.1	52	
3	Tues.			1.380														8.1	53	
4	Wed.			1.340	10	112	2.92	32.63	25.4	283.86	0.0421	0.4705	16	179	<0.50	0	8.2	54		
5	Thurs.			1.340														8.0	54	
6	Fri.			1.220	9	92							13	132	<0.50	0	8.2	54		
7	Sat.			1.260																
8	Sun.			1.240																
9	Mon.			1.130														8.0	55	
10	Tues.			1.050														8.1	53	
11	Wed.			1.030	8	69	3.27	28.09	27.8	238.81	0.0345	0.2964	13	112	<0.50	0	8.2	51		
12	Thurs.			1.120														8.1	51	
13	Fri.			1.090	8	73							13	118	<0.50	0	8.2	52		
14	Sat.			1.010																
15	Sun.			1.010																
16	Mon.			1.060														8.0	52	
17	Tues.			1.080														8.0	53	
18	Wed.			1.030	7	60	3.67	31.53	26.6	228.50	0.0486	0.4175	14	120	<0.50	0	8.2	51		
19	Thurs.			1.120														8.0	51	
20	Fri.			1.040	8	69							16	139	<0.50	0	8.2	52		
21	Sat.			0.960																
22	Sun.			1.040																
23	Mon.			1.050														8.2	51	
24	Tues.			1.030														8.1	51	
25	Wed.			0.970														8.1	53	
26	Thurs.			0.990	6	50	3.75	30.96	27.2	224.58	0.0322	0.2659	11	91	<0.50	0	8.1	53		
27	Fri.			0.960	6	48							9	72	<0.50	0	8.1	51		
28	Sat.			1.150																
29	Sun.			1.050																
30	Mon.			1.080														8.0	52	
31	Tues.			1.200														7.9	49	

TOTAL	0.0	34.630	62.0	572		123.21		975.75		1.4502	105.0	963	0.0	0.0						0.0
AVERAGE	0.0	1.117	7.8	71		30.80		243.94		0.3626	13.1	120	<0.50	0.0			8.1	52		0.0
MAX	0.0	1.380	10.0	112		32.63		283.86		0.4705	16.0	179	<0.50	0.0			8.2	55		0.0
MIN	0.0	0.960	6.0	48		28.09		224.58		0.2659	9.0	72	0.0	0.0			7.9	49		0.0

7 DAY AVERAGE																				
WEEK 1	0.0	1.306	9.5	102		32.63		283.86		0.4705	14.5	156	<0.50	0.0			8.1	53		0.0
WEEK 2	0.0	1.096	8.0	71		28.09		238.81		0.2964	13.0	115	<0.50	0.0			8.1	52		0.0
WEEK 3	0.0	1.043	7.5	65		31.53		228.50		0.4175	15.0	130	<0.50	0.0			8.1	52		0.0
WEEK 4	0.0	1.027	6.0	49		30.96		224.58		0.2659	10.0	81	<0.50	0.0			8.1	52		0.0

## City of Waverly

### MONTHLY MONITORING REPORT

Date: January, 2020

DISCHARGE SERIAL # 001 - # 002

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	DIGESTER CONTENTS					TRICKLING FILTER RECIRC. FLOW MGD	BOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		RAW ph	RAW TEMP. °F
		FLOW MGD	TEMP °F	ph	VOL. ACID MG/L	ALKALIN. MG/L		INF. MG/L	INF. LBS/DA Y	INF. PHOS. MG/L	INF. PHOS. LBS/DA Y	INF. TOTAL N (as N) MG/L	INF. TOTAL N (as N) LBS/DA Y	INF. TKN (as N) MG/L	INF. TKN (as N) LBS/DA Y	INF. MG/L	INF. LBS/DA Y		
1	Wed.	1.330	95	6.78			0.83											7.4	54
2	Thurs.	1.250	97	6.98			0.91	108	1126	4.30	44.83	23.7	247.07	18.2	189.74	180	1877	7.6	53
3	Fri.	1.170	97	6.97	170	2650	0.99	74	722							132	1288	7.4	53
4	Sat.	1.090					1.07												
5	Sun.	1.190					0.97												
6	Mon.	1.130	96	7.03			1.03											7.0	60
7	Tues.	1.070	97	6.96	323	2720	1.09											7.9	54
8	Wed.	1.050	97	6.98			1.11	103	902	4.58	40.11	30.4	266.21	24.5	214.55	176	1541	7.5	53
9	Thurs.	1.130	97	6.96			1.03											7.5	53
10	Fri.	1.000	97	7.00	170	2750	1.16	121	1009							176	1468	7.5	53
11	Sat.	0.990					1.17												
12	Sun.	1.030					1.13												
13	Mon.	1.000	97	6.93	175	2650	1.16											7.8	53
14	Tues.	0.990	97	6.91			1.17											7.6	53
15	Wed.	0.910	97	6.97			1.25	104	789	4.56	34.61	31.4	238.31	24.2	183.66	176	1336	7.5	53
16	Thurs.	0.910	97	6.92			1.25											7.8	52
17	Fri.	0.950	97	6.99	175	2630	1.21	123	975							198	1569	7.4	52
18	Sat.	0.920					1.24												
19	Sun.	0.860					1.30												
20	Mon.	0.910	97	6.91	175	2560	1.25											7.7	53
21	Tues.	0.980	97	6.90			1.18											7.9	53
22	Wed.	1.020	97	6.97			1.14	154	1310	4.45	37.86	38.1	324.11	35.9	305.39	228	1940	7.5	52
23	Thurs.	0.960	97	6.91			1.20											7.8	54
24	Fri.	1.010	97	6.92	165	2480	1.15	163	1373							268	2257	7.5	54
25	Sat.	0.900					1.26												
26	Sun.	0.940					1.22												
27	Mon.	1.000	97	6.88	278	2360	1.16											7.8	53
28	Tues.	0.910	97	6.90			1.25											7.9	52
29	Wed.	0.900	97	6.89			1.26	168	1261	6.60	49.54	41.2	309.25	39.9	299.49	230	1726	7.6	52
30	Thurs.	0.930	97	6.90			1.23											7.8	53
31	Fri.	0.880	97	6.91	160	2360	1.28	144	1057							208	1527	7.5	53

TOTAL	31.310					35.650	1262.0	10524		206.94		1384.95		1192.83	1972.0	16528			
AVERAGE	1.010	96.9	6.9			1.150	126.2	1052		41.39		276.99		238.57	197.2	1653		7.6	53.3
MAX	1.330	97.0	7.0			1.300	168.0	1373		49.54		324.11		305.39	268.0	2257		7.9	60.0
MIN	0.860	95.0	6.8			0.830	74.0	722		34.61		238.31		183.66	132.0	1288		7.0	52.0

7 DAY AVERAGE																			
WEEK 1	1.176					0.984	91.0	924		44.83		247.07		189.74	156.0	1582		7.5	54.8
WEEK 2	1.027					1.133	112.0	956		40.11		266.21		214.55	176.0	1505		7.6	54.6
WEEK 3	0.920					1.240	113.5	882		34.61		238.31		183.66	187.0	1452		7.7	54.6
WEEK 4	0.963					1.197	158.5	1342		37.86		324.11		305.39	248.0	2099		7.7	53.0

Signature: \_\_\_\_\_  
 Certification Number: 3989

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: February, 2020

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML	
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y				FINAL MG/L
1	Sat.			0.950																
2	Sun.			1.010																
3	Mon.			1.020														7.8	51	
4	Tues.			0.920														7.9	49	
5	Wed.			0.910	14	106	3.09	23.45	23.3	176.83	0.0283	0.2148	6	46	2.91	22		8.1	49	
6	Thurs.			1.010	8	67							6	51	2.02	17		8.1	50	
7	Fri.			0.870														7.9	50	
8	Sat.			0.840																
9	Sun.			0.880																
10	Mon.			0.900														7.9	51	
11	Tues.			0.890														8.1	50	
12	Wed.			0.860	5	36	3.63	26.04	28.1	201.54	0.0296	0.2123	7	50	<0.50	0		8.2	49	
13	Thurs.			0.810														8.1	47	
14	Fri.			0.910	4	30							5	38	<0.50	0		8.2	45	
15	Sat.			0.870																
16	Sun.			0.960																
17	Mon.			0.970														8.0	50	
18	Tues.			0.920														8.1	49	
19	Wed.			0.810	5	34	3.60	24.32	25.0	168.89	0.0252	0.1702	6	41	<0.50	0		8.3	48	
20	Thurs.			0.930														8.1	47	
21	Fri.			0.870	4	29							5	36	<0.50	0		8.3	47	
22	Sat.			0.960																
23	Sun.			1.010																
24	Mon.			1.030														8.0	50	
25	Tues.			0.950														8.1	50	
26	Wed.			0.900	4	30	3.73	28.00	26.8	201.16	0.0226	0.1696	4	30	<0.50	0		8.3	50	
27	Thurs.			0.940														8.1	48	
28	Fri.			0.840	4	28							5	35	<0.50	0		8.3	48	
29	Sat.			0.890																

TOTAL	0.0	26.630	48.0	361		101.80		748.42		0.7670	44.0	326	4.9	39.1						0.0
AVERAGE	0.0	0.918	6.0	45		25.45		187.11		0.1917	5.5	41	2.5	4.9				8.1	49	0.0
MAX	0.0	1.030	14.0	106		28.00		201.54		0.2148	7.0	51	2.9	22.1				8.3	51	0.0
MIN	0.0	0.810	4.0	28		23.45		168.89		0.1696	4.0	30	2.0	0.0				7.8	45	0.0

7 DAY AVERAGE																				
WEEK 1	0.0	0.956	11.0	87		23.45		176.83		0.2148	6.0	48	2.5	19.6				8.0	50	0.0
WEEK 2	0.0	0.870	4.5	33		26.04		201.54		0.2123	6.0	44	<0.50	0.0				8.1	48	0.0
WEEK 3	0.0	0.904	4.5	31		24.32		168.89		0.1702	5.5	38	<0.50	0.0				8.2	48	0.0
WEEK 4	0.0	0.947	4.0	29		28.00		201.16		0.1696	4.5	33	<0.50	0.0				8.2	49	0.0

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: March, 2020

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML	
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y				FINAL MG/L
1	Sun.			1.070																
2	Mon.			0.910														8.1	50	
3	Tues.			1.060																
4	Wed.			1.130	3	28	3.55	33.46	24.6	231.84	0.0203	0.1913	5	47	<0.50	0	8.2	50		
5	Thurs.			1.120														8.2	50	
6	Fri.			1.080	3	27							4	36	<0.50	0	8.3	49		
7	Sat.			1.050														8.2	49	
8	Sun.			1.210																
9	Mon.			1.500														8.2	53	
10	Tues.			2.000														8.2	50	
11	Wed.			2.200	5	92	2.29	42.02	17.3	317.42	0.0247	0.4532	12	220	<0.50	0	8.3	51		
12	Thurs.			1.830														8.2	50	
13	Fri.			1.670	4	56							7	97	<0.50	0	8.3	50		
14	Sat.			1.560																
15	Sun.			1.510																
16	Mon.			1.400														8.2	51	
17	Tues.			1.400														8.2	50	
18	Wed.			1.520	3	38	2.51	31.82	17.2	218.04	0.0210	0.2662	5	63	<0.50	0	8.3	51		
19	Thurs.			2.450														8.1	51	
20	Fri.			2.070	5	86							9	155	<0.50	0	8.3	49		
21	Sat.			2.010																
22	Sun.			1.910																
23	Mon.			1.750														8.2	49	
24	Tues.			1.670														8.2	50	
25	Wed.			1.610	3	40	2.05	27.53	15.6	209.47	0.0182	0.2444	6	81	<0.50	0	8.3	51		
26	Thurs.			1.580														8.2	51	
27	Fri.			1.580	4	53							6	79	<0.50	0	8.3	52		
28	Sat.			1.640																
29	Sun.			1.580																
30	Mon.			1.630														8.2	51	
31	Tues.			1.730														8.2	52	

TOTAL	0.0	48.430	30.0	420			134.82			976.76		1.1551	54.0	779	0.0	0.0				0.0	
AVERAGE	0.0	1.562	3.8	53			33.70			244.19		0.2888	6.8	97	<0.50	0.0			8.2	50	0.0
MAX	0.0	2.450	5.0	92			42.02			317.42		0.4532	12.0	220	<0.50	0.0			8.3	53	0.0
MIN	0.0	0.910	3.0	27			27.53			209.47		0.1913	4.0	36	<0.50	0.0			8.1	49	0.0

7 DAY AVERAGE																					
WEEK 1	0.0	1.060	3.0	28			33.46			231.84		0.1913	4.5	42	<0.50	0.0			8.2	50	0.0
WEEK 2	0.0	1.710	4.5	74			42.02			317.42		0.4532	9.5	159	<0.50	0.0			8.2	51	0.0
WEEK 3	0.0	1.766	4.0	62			31.82			218.04		0.2662	7.0	109	<0.50	0.0			8.2	50	0.0
WEEK 4	0.0	1.677	3.5	46			27.53			209.47		0.2444	6.0	80	<0.50	0.0			8.2	51	0.0



## City of Waverly

### MONTHLY MONITORING REPORT

Date: April, 2020

DISCHARGE SERIAL # 001 - # 002

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

		DIGESTER CONTENTS					TRICKLING FILTER RECIRC. FLOW MGD	BOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS			
DAY OF MONTH	DAY OF WEEK	FLOW MGD	TEMP °F	ph	VOL. ACID MG/L	ALKALIN. MG/L		INF. MG/L	INF. LBS/DA Y	INF. PHOS. MG/L	INF. PHOS. LBS/DA Y	INF. TOTAL N (as N) MG/L	INF. TOTAL N (as N) LBS/DA Y	INF. TKN (as N) MG/L	INF. TKN (as N) LBS/DAY	INF. MG/L	INF. LBS/DA Y	RAW ph	RAW TEMP.°F
1	Wed.	1.620	97	6.90			0.54	90	1216	3.36	45.40	19.8	267.51	13.3	179.69	152	2054	7.6	51
2	Thurs.	1.630	96	6.84			0.53											7.6	51
3	Fri.	1.470	97	6.85			0.69	108	1324							182	2231	7.7	51
4	Sat.	1.410					0.75												
5	Sun.	1.420					0.74												
6	Mon.	1.410	97	6.86			0.75											7.6	51
7	Tues.	1.410	97	6.88	254	1720	0.75											7.7	51
8	Wed.	1.340	97	6.86	185	1710	0.82	109	1218	4.26	47.61	23.8	265.98	16.0	178.81	176	1967	7.8	51
9	Thurs.	1.270	97	6.89	185	1710	0.89	122	1292							228	2415	7.7	51
10	Fri.	1.290					0.87												
11	Sat.	1.270	97	6.88			0.89											7.7	51
12	Sun.	0.750					1.41												
13	Mon.	2.330	96	6.82			-0.17											7.7	52
14	Tues.	1.330	97	6.91			0.83											7.8	51
15	Wed.	1.280	96	6.90	232	1840	0.88	89	950	5.53	59.03	26.1	278.62	19.2	204.96	240	2562	7.8	52
16	Thurs.	1.290	97	6.89			0.87											7.8	51
17	Fri.	1.210	98	6.85	158	1910	0.95	213	2149							376	3794	7.7	52
18	Sat.	1.260					0.90												
19	Sun.	1.300					0.86												
20	Mon.	1.170	97	6.88	330	2160	0.99											7.7	52
21	Tues.	1.240	97	6.88			0.92											7.8	53
22	Wed.	1.280	97	6.86	153	1980	0.88	99	1057	4.89	52.20	29.6	315.99	23.5	250.87	268	2861	7.8	52
23	Thurs.	1.230	97	6.89			0.93											7.7	52
24	Fri.	1.170	97	6.87	153	1980	0.99	92	898							178	1737	7.8	53
25	Sat.	1.150					1.01												
26	Sun.	1.220					0.94												
27	Mon.	1.130	97	6.87	345	2280	1.03											7.8	54
28	Tues.	1.150	97	6.86			1.01											7.7	55
29	Wed.	1.090	97	6.87	169	1970	1.07	76	691	5.14	46.73	31.0	281.81	25.9	235.45	244	2218	7.7	53
30	Thurs.	1.120	97	6.89			1.04											7.8	53

TOTAL	39.240						25.560	998.0	10795		250.97		1409.91		1049.78	2044.0	21839		
AVERAGE	1.308	96.9	6.9				0.852	110.9	1199		50.19		281.98		209.96	227.1	2427	7.7	52.0
MAX	2.330	98.0	6.9				1.410	213.0	2149		59.03		315.99		250.87	376.0	3794	7.8	55.0
MIN	0.750	96.0	6.8				-0.170	76.0	691		45.40		265.98		178.81	152.0	1737	7.6	51.0

7 DAY AVERAGE																			
WEEK 1	1.481						0.679	99.0	1270		45.40		267.51		179.69	167.0	2142	7.6	51.0
WEEK 2	1.369						0.791	115.5	1255		47.61		265.98		178.81	202.0	2191	7.7	51.0
WEEK 3	1.250						0.910	151.0	1550		59.03		278.62		204.96	308.0	3178	7.8	51.0
WEEK 4	1.190						0.970	95.5	977		52.20		315.99		250.87	223.0	2299	7.8	53.2

Signature: \_\_\_\_\_  
 Certification Number: 3989

# City of Waverly

## MONTHLY MONITORING REPORT

Date: May, 2020

DISCHARGE SERIAL # 001 - # 002

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	DIGESTER CONTENTS					TRICKLING FILTER RECIRC. FLOW MGD	BOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		RAW ph	RAW TEMP. °F	
		FLOW MGD	TEMP °F	ph	VOL. ACID MG/L	ALKALIN. MG/L		INF. MG/L	INF. LBS/DA Y	INF. PHOS. MG/L	INF. PHOS. LBS/DA Y	INF. TOTAL N (as N) MG/L	INF. TOTAL N (as N) LBS/DA Y	INF. TKN (as N) MG/L	INF. TKN (as N) LBS/DA Y	INF. MG/L	INF. LBS/DA Y			
1	Fri.	1.090			198	2070	1.07	91	827								212	1927		
2	Sat.	1.160	97	6.87			1.00												7.7	53
3	Sun.	0.960					1.20													
4	Mon.	1.050	97	6.89	450	2340	1.11												7.8	54
5	Tues.	1.330	97	6.87			0.83												7.7	55
6	Wed.	1.050	97	6.87			1.11												7.5	53
7	Thurs.	1.090	97	6.88			1.07	169	1536	4.58	41.63	28.3	257.26	23.1	209.99	270	2454	7.4	53	
8	Fri.	1.010	97	6.88	338	2260	1.15	126	1061							200	1685	7.4	53	
9	Sat.	0.970					1.19													
10	Sun.	1.030					1.13													
11	Mon.	1.000	97	6.83	353	2220	1.16											7.6	54	
12	Tues.	0.990	97	6.82			1.17											7.8	54	
13	Wed.	1.130	97	6.87			1.03	150	1414	6.13	57.77	27.8	261.99	25.1	236.55	208	1960	7.5	54	
14	Thurs.	1.090	97	6.84			1.07											7.8	56	
15	Fri.	1.010	97	6.89	338	2290	1.15	136	1146							216	1819	7.4	54	
16	Sat.	1.010					1.15													
17	Sun.	1.660					0.50													
18	Mon.	1.300	97	6.90	308	2630	0.86											7.6	56	
19	Tues.	1.530	97	6.90			0.63											7.5	55	
20	Wed.	1.690	97	6.97			0.47	120	1691	3.82	53.84	22.4	315.72	17.3	243.84	164	2312	7.5	55	
21	Thurs.	1.620	97	6.91			0.54											7.6	56	
22	Fri.	1.450	97	6.98	375	2710	0.71	101	1221							144	1741	7.5	55	
23	Sat.	1.410					0.75													
24	Sun.	1.410					0.75													
25	Mon.	1.430	96	6.93			0.73											7.5	56	
26	Tues.	1.550	96	6.95	360	2730	0.61											7.6	57	
27	Wed.	1.560	96	6.99			0.60	143	1860	3.85	50.09	22.8	296.64	16.6	215.97	206	2680	7.6	56	
28	Thurs.	2.040	97	6.95			0.12											7.6	58	
29	Fri.	2.180	97	7.00	465	2910	-0.02											7.4	57	
30	Sat.	1.970					0.19													
31	Sun.	1.860					0.30													

TOTAL AVERAGE	41.630					25.330	1036.0	10757		203.34		1131.61		906.35	1620.0	16579				
MAX	1.343	96.9	6.9			0.817	129.5	1345		50.83		282.90		226.59	202.5	2072		7.6	55.0	
MIN	2.180	97.0	7.0			1.200	169.0	1860		57.77		315.72		243.84	270.0	2680		7.8	58.0	
	0.960	96.0	6.8			-0.020	91.0	827		41.63		257.26		209.99	144.0	1685		7.4	53.0	

7 DAY AVERAGE																				
WEEK 1	1.104					1.056	130.0	1182		41.63		257.26		209.99	241.0	2191		7.6	53.6	
WEEK 2	1.031					1.129	138.0	1237		57.77		261.99		236.55	204.0	1822		7.6	53.5	
WEEK 3	1.403					0.757	128.0	1418		53.84		315.72		243.84	190.0	2065		7.5	53.6	
WEEK 4	1.550					0.610	122.0	1541		50.09		296.64		215.97	175.0	2211		7.6	56.4	

Signature: \_\_\_\_\_  
 Certification Number: 3989

**City of Waverly**  
**MONTHLY MONITORING REPORT**  
DISCHARGE SERIAL # 001 - # 002

Date: June, 2020

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Mon.			1.620													8.2	58	
2	Tues.			1.600													8.2	60	
3	Wed.			1.590	6	80	2.68	35.54	22.2	294.39	0.0394	0.5225	19	252	<0.50	0	8.3	61	
4	Thurs.			2.360													8.1	60	
5	Fri.			1.850	7	108							24	370	<0.50	0	8.3	60	
6	Sat.			1.750															
7	Sun.			1.690															
8	Mon.			1.490													7.9	61	
9	Tues.			4.070													8.0	61	
10	Wed.			2.490	14	291	2.30	47.76	17.3	359.26	0.0472	0.9802	48	997	0.73	15	8.1	62	
11	Thurs.			2.450													8.0	60	
12	Fri.			2.330	9	175							22	428	<0.50	0	8.2	60	
13	Sat.			2.050															
14	Sun.			1.990															
15	Mon.			1.800													8.0	60	
16	Tues.			1.800													7.9	61	
17	Wed.			1.690	15	211	3.60	50.74	28.9	407.33	0.102	1.4376	67	944	2.30	32	8.2	61	
18	Thurs.			1.790													8.0	62	
19	Fri.			1.960	12	196							30	490	0.78	13	8.2	63	
20	Sat.			2.160															
21	Sun.			2.340															
22	Mon.			4.160													8.0	62	
23	Tues.			3.000													8.0	62	
24	Wed.			2.570	12	257	1.54	33.01	13.0	278.64	0.0364	0.7802	30	643	<0.50	0	8.3	61	
25	Thurs.			2.560													8.0	62	
26	Fri.			2.400	9	180							22	440	<0.50	0	8.3	62	
27	Sat.			3.080															
28	Sun.			2.200															
29	Mon.			2.040													8.1	63	
30	Tues.			2.000													8.1	63	
				0.000															

TOTAL	0.0	66.880	84.0	1498		167.05		1339.62		3.7205	262.0	4565	3.8	60.3					0.0
AVERAGE	0.0	2.157	10.5	187		41.76		334.91		0.9301	32.8	571	1.3	7.5			8.1	61	0.0
MAX	0.0	4.160	15.0	291		50.74		407.33		1.4376	67.0	997	2.3	32.4			8.3	63	0.0
MIN	0.0	0.000	6.0	80		33.01		278.64		0.5225	19.0	252	0.7	0.0			7.9	58	0.0

7 DAY AVERAGE																			
WEEK 1	0.0	1.780	6.5	94		35.54		294.39		0.5225	21.5	311	<0.50	0.0			8.2	60	0.0
WEEK 2	0.0	2.410	11.5	233		47.76		359.26		0.9802	35.0	712	0.7	7.6			8.0	61	0.0
WEEK 3	0.0	1.934	13.5	204		50.74		407.33		1.4376	48.5	717	1.5	22.6			8.1	61	0.0
WEEK 4	0.0	2.853	10.5	219		33.01		278.64		0.7802	26.0	542	<0.50	0.0			8.1	62	0.0

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **STORM AND SANITARY SEWER LINE MAINTENANCE**

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The Storm/Sanitary Sewer Maintenance Division was established in FY 1990-91. Its function is to maintain the sewer systems and assist the Street, WPC, and Water Divisions as needed with major projects. Its purpose is two-fold: to establish an effective annual maintenance program to control long-term upkeep costs and to establish a more efficient operation of our sewer systems. This will utilize the budgeted money more efficiently, reduce waste water treatment costs, and upgrade instead of maintain our storm/sanitary sewers.

The following is a brief overview of some projects during FY 2019-20. This is not a total summary, but does give an idea of the versatility of this division and the expertise required. Of our 310,000 feet of sanitary sewer mains, over 86,000 feet were cleaned and 6,600 feet were televised. Several problem areas are being scheduled for repair or replacement as time and funds become available.

### FUTURE PROJECTS

1. Update sanitary and storm sewer GIS mapping as more discrepancies are found.
2. Continue upgrade of existing sanitary manholes to decrease infiltration problems.
3. Continue work on storm sewer intakes and catch basins and replace old brick structures with poured concrete structures.
4. Continue televising of sewer lines to locate problem areas.
5. Continue cleaning and maintaining storm and sanitary sewer lines.
6. Continue routine cleaning of maintenance lines.
7. Maintain a five-year sanitary sewer cleaning schedule.

### AREA OF CONCERN

1. Infiltration and inflow problems must continue to be addressed with some major financing.
2. Tree roots in sanitary sewer lines.
3. Undersized storm water collection system.

## Storm and Sanitary Sewer Line Maintenance

Fiscal Year 2019-20

	<u>2015-16<sup>1</sup></u>	<u>2016-17</u>	<u>2017-18<sup>2</sup></u>	<u>2018-19</u>	<u>2019-20</u>	<u>Units</u>
<b><u>Sanitary Sewer Maintenance</u></b>						
Lines Flushed	25,182	97,579	61,503	29,698 <sup>3</sup>	86,403	Feet
Manholes Cleaned		217	3	5	34	Each
<b><u>Storm Sewer Maintenance</u></b>						
Lines Flushed		384	6,578	5,287	6,632	Feet
Intakes & MH Cleaned		28	21	57	29	Each
<b><u>Televising Lines</u></b>						
Sanitary Sewer	2,405	8,707	7,689	3,450	4,169	Feet
Storm Sewer		33	120	360	2,231	Feet
<b><u>Jetting Sewer Mains</u></b>						
Water Used	26,500	260,937	133,200	95,925	189,750	Gallons
<b><u>Lines Repaired</u></b>						
Sanitary Sewer		1	0	1	5	Each
Storm Sewer		3	7	3	8	Each
<b><u>Intakes Repaired</u></b>						
		0	0	2	0	Each
<b><u>Manholes Repaired</u></b>						
		2	18	0	0	Each
<b><u>Sewer Call-Outs</u></b>						
<i>During &amp; after hours</i>		27	10	12	18	Each
<b><u>Other Division Work</u></b>						
Streets - Snow Plowing		69.8	36.6	18.2	20	Hours
Water - Leak Repairs		126.7	100.4	200.6	180	Hours
WPC - Lift Stations		19.6	16.6	19	4	Hours
Leisure Serv. - Cem. Graves	8	1	13	40	27	Each
Leisure Serv. - Golf Course		0	0	0	3	Hours
Engineering - Inspections		1	0	0	1	Hours

<sup>1</sup> For 2015-16 the Line Maintenance crew did not keep good records; hence the many blanks.

<sup>2</sup> During 2017-18: September, February & March records were missing.

<sup>3</sup> Designated area of focus was smaller and contains newer lines than prior years.

Note: Removed "IA One Call Locates" line for the FY2019-20 Annual Report. The locates now show up in the Water Division.

## Storm and Sanitary Sewer Line Maintenance

Fiscal Year 2019-20

### **Miscellaneous:**

*Cleaned out waterways, detention areas & Dry Run. Cleaned drains for Water Dept., Law Center, bike trail bathrooms, hospital pits & drains and pumped Airport septic. Started root-treating problem sewer mains ourselves (over 1,995 LF done last year).*

City of Waverly  
**Department of Public Works**  
FY 2019-20

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## **SOLID WASTE**

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### **Recycling**

Voluntary Drop-Off Program  
Curbside Collection Program

### **Refuse Collection**

Residential  
Commercial  
Yard Waste – Drop-Off Site

### **Refuse Container (Dumpster)**

Repair

### **Special Collections**

Waverly Horse Sale – Fall & Spring  
Chamber – Agriculture Appreciation Day  
Bremer County Fair  
Special Collection Weeks – Spring  
Other Special Events

The Solid Waste Division collects refuse once a week from residential customers and up to five days per week from commercial. Garbage to be pickup in the City of Waverly needs to be in a City-owned garbage container or dumpster. Residential customers are able to rent a 35- or 65-gallon City-owned garbage container. Commercial customers can use either a City dumpster or a city-owned garbage container. Curbside recycling runs every other week. The average stops per day is 364. It is a one-man operation, which one refuse collector runs each month. Consideration needs to be given to weekly curbside recycling.

The Recycling Center is open Monday through Friday from 7:00 a.m. to 5:30 p.m. and from 8:00 a.m. to 4:00 p.m. on Saturdays. Local civil volunteer groups, when available, continue to work during Recycling Saturdays as a community service.

Two part-time employees operate the Recycling Center each day, each working half a day, including each Saturday. There is a total of four part-time employees who work in the center. The average number of cars through the center each day is 159.

### **Yard Waste Site**

Along with the Recycling Center, the City also operates a Yard Waste Site from April through November. Four part-time employees also operate the Yard Waste Site. Leaves, grass clippings, garden waste, trees, and branches are accepted at no charge. Appliances, furniture, tires, and carpeting are also collected here for a fee while it is open.

City of Waverly – Public Works  
Solid Waste Division  
**Recycling Statistics**  
FY 2019-20

Recycling Center Car Count – Monday - Saturday  
Total..... 46,872                      Daily Average..... 159

Recycling Center Car Count – Saturday only  
Total..... 10,499                      Monthly Average..... 875

Curbside Recycling Stops  
Total..... 40,273                      Monthly Average..... 3,939

Total Weight of the Recycled Products from the Recycling Center and Curbside Recycling Route: 1,026 tons

Total Weight of the Recycled Products from the Curbside Recycling Route:  
852,880 pounds (376 tons)

Revenue from the recycled products: \$22,924.60

- In April 2020 the City started receiving revenue from the paper products recycled again. This included: office paper (white and colored), cardboard, magazines, newspapers, and books.

Other items or material recycled by the City of Waverly:

- 11 tons of steel, old sewer castings, signs, poles, plow blades, and miscellaneous pieces
- 56 tires
- 470 appliances
- 2,800 gallons of oil
- 369 electronics (computers, televisions, monitors, and printers)

Yard Waste Site car count: 22,896  
(July - Nov 2019 and March – June 2020):

Monthly average: 2,289

Busiest months were October 2019 and May 2020

470 tons of yard waste were turned into compost.

1759 tons of brush and trees were ground up to make wood mulch.



City of Waverly - Public Works  
Solid Waste Division  
**Employee Hours**  
FY 2019-20

<b><u>Refuse Collections</u></b>	<b><u>Hours</u></b>
Residential	1,611
Commercial	2,199
Black Hawk Co. Landfill	967
Temporary Dumpsters	439
Corrugated Collection	452
Special Pickups	108
Curbside Recycling Pick-up	893
Recycle Center Duties	652
Container Exchanges	210
Building/Vehicle Maintenance	372
Dumpster Repairs	536
Misc. Activity (training, etc)	19
<b><u>Other Divisions</u></b>	
Street Division	
Snow Plowing & Removal	236
Other (Patching, Mowing, Tree Trimming, Etc)	196
Water Division Projects	0
Sewer Maintenance Projects	24
Other Departments	176

City of Waverly  
**Car Count**  
**Recycling Center and Yard Waste Site**  
 FY 2019-20

**Recycling Center**

Month	# of Days	Weekdays		Saturdays		Monthly Total	Daily Average
		# of Cars	% of Total	# of Cars	% of Total		
July '19	26	4,045	82%	885	18%	4,930	190
Aug '19	27	3,680	77%	1,079	23%	4,759	176
Sep '19	24	2,898	77%	876	23%	3,774	157
Oct '19	27	3,351	80%	812	20%	4,163	154
Nov '19	24	3,012	72%	1,165	28%	4,177	174
Dec '19	24	3,560	79%	967	21%	4,527	189
Jan '20	26	3,350	79%	865	21%	4,215	162
Feb '20	25	2,693	69%	1,234	31%	3,927	157
Mar '20	26	2,260	77%	657	23%	2,917	112
Apr '20	13	1,326	80%	333	20%	1,659	128
May '20	25	2,959	77%	860	23%	3,819	153
Jun '20	26	3,239	81%	766	19%	4,005	154
<b>Totals</b>		<b>36,373</b>		<b>10,499</b>		<b>46,872</b>	<b>159</b>

**Recycling Center - Car Count History**

Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20
Weekdays	27,733	29,126	30,434	32,839	36,373
Saturdays	8,479	8,858	9,658	10,241	10,499
<b>Totals</b>	<b>36,212</b>	<b>37,984</b>	<b>40,092</b>	<b>43,080</b>	<b>46,872</b>

**Yard Waste Site - Car Count History**

Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20
<b>Totals</b>	<b>23,400</b>	<b>25,010</b>	<b>20,767</b>	<b>22,123</b>	<b>22,896</b>

City of Waverly - Public Works

Solid Waste Division

**Curbside Recycling**

**Number of Residential/Commercial Stops**

FY 2019-20

<u>Week Beginning</u>	<u>Mon</u>	<u>Tues</u>	<u>Wed</u>	<u>Thurs</u>	<u>Fri</u>	<u>Weekly Totals</u>	<u>Total</u>
07/01/19	322	254	323	240	308	1,447	
07/15/19	321	291	321	358	336	1,627	3,074
07/29/19	336	295	342	408	393	1,774	
08/12/19	325	300	365	395	372	1,757	
08/27/19	345	315	351	391	381	1,783	5,314
09/10/19	361	346	373	413	367	1,860	
09/24/19	335	393	346	368	360	1,802	3,662
10/08/19	422	506	413	456	423	2,220	
10/22/19	393	453	401	378	368	1,993	4,213
11/05/19	335	385	351	386	372	1,829	
11/19/19	338	312	344	376	358	1,728	3,557
12/03/19	352	316	363	416	378	1,825	
12/17/19	366	269	363	385	343	1,726	3,551
12/31/19	343	341	331	415	381	1,811	
01/14/20	355	365	342	391	350	1,803	
01/28/20	315	351	358	383	345	1,752	5,366
02/11/20	362	444	351	376	327	1,860	
02/25/20	358	407	320	408	324	1,817	3,677
03/11/20	315	317	340	381	341	1,694	
03/25/20	338	362	357	398	405	1,860	3,554
04/08/20	355	357	390	416	378	1,896	
04/22/20	351	327	381	418	390	1,867	3,763
05/06/20	326	333	331	415	405	1,810	
05/20/20	345	331	348	424	449	1,897	3,707
06/01/20	403	370	354	399	423	1,949	
06/15/20	381	345	390	444	326	1,886	3,835
<b>Total for the FY 2019-20</b>							<b>47,273</b>
Average Daily Stops							364

City of Waverly

**Recycling Quantities**  
2019-20

**Sorted Recycling Collected at Recycling Center**

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Paper, Bond	lbs.	3,395	3,945	3,785	2,525	950	3,330	2,395	2,650	5,730	-	6,515	-	35,220
Slick Paper / Magazines	lbs.	6,275	6,485	5,085	4,320	6,180	3,725	6,105	6,485	6,560	-	8,200	-	59,420
Newsprint	lbs.	6,095	7,435	5,395	4,845	7,850	6,370	13,285	8,730	9,760	-	8,380	-	78,145
Corrugation/Chipboard	lbs.	84,365	77,340	74,775	93,245	76,515	83,365	71,325	73,847	70,120	56,720	68,260	79,040	908,917
#3, 4, 5, 6, 7 Plastics	lbs.	9,340	5,640	3,980	8,260	8,940	4,320	4,340	8,540	5,000	-	10,700	5,760	74,820
Steel / Alum	lbs.	215	215	140	180	90	215	415	55	-	-	8,172	12,301	21,998
Books	lbs.	2,520	5,530	2,720	1,905	2,020	845	3,455	3,365	7,245	-	3,145	-	39,450
Styrofoam**	lbs.	620	560	480	560	480	1,000	520	720	560	400	800	880	7,580
Clear Glass*	lbs.	8,960	9,100	4,460	8,280	4,500	4,100	9,160	4,120	4,420	4,480	9,120	9,220	79,920
<b>Totals - Sorted Recycling</b>		<b>121,785</b>	<b>116,250</b>	<b>100,820</b>	<b>124,120</b>	<b>107,525</b>	<b>107,270</b>	<b>111,000</b>	<b>108,512</b>	<b>109,395</b>	<b>61,600</b>	<b>123,292</b>	<b>107,201</b>	<b>1,298,770</b>

\*City takes glass to City of Cedar Falls and they recycle at no cost to us.

Total Tons **649**

\*\*City takes styrofoam to City of Cedar Falls and they recycle at no cost to us.

**Commingled Recycling Picked up Curbside**

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
<b>Totals - Commingled Recycling</b>	lbs.	<b>69,380</b>	<b>56,820</b>	<b>72,520</b>	<b>62,940</b>	<b>56,860</b>	<b>59,060</b>	<b>71,220</b>	<b>57,240</b>	<b>73,740</b>	<b>62,500</b>	<b>46,380</b>	<b>64,220</b>	<b>752,880</b>

Aluminum, Cardboard, Slick Paper, Newspapers, Bond Paper, Plastics & Metal Cans

Total Tons **376**

**TOTAL RECYCLING**

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
<b>TOTALS - Sorted &amp; Commingled Recycling</b>	lbs.	<b>191,165</b>	<b>173,070</b>	<b>173,340</b>	<b>187,060</b>	<b>164,385</b>	<b>166,330</b>	<b>182,220</b>	<b>165,752</b>	<b>183,135</b>	<b>124,100</b>	<b>169,672</b>	<b>171,421</b>	<b>2,051,650</b>

Total Tons **1,026**

**Motor Oil Collected at Recycling Center**

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Motor Oil	gal.	250	200	250	350	600	225	100	50	100	50	300	325	2,800

City of Waverly

Solid Waste and Recycling Revenues

FY 2019-20

Date	Solid Waste				Recyclables Collected at Recycling Center & YWS				Total Recyclable Revenue	Total SOLID WASTE & RECYCLABLE REVENUE
	Utility Billing 670-840-4500	Sticker Sales 670-840-4552	Temp. Dumpsters & Misc.	Total Solid Waste Revenue	Paper Products	Steel & Aluminum	Metro Redemption	Recycled Bulky Items*		
Jul-19	\$ 124,807.21	\$ 1,180.00	\$ 475.00	\$ 126,462.21	\$ -	\$ 126.30	\$ 148.90	\$ 1,354.00	\$ 1,629.20	\$ 128,091.41
Aug-19	123,602.36	4,310.00	352.93	128,265.29	-	50.40	431.85	1,386.00	1,868.25	130,133.54
Sep-19	117,215.52	2,362.93	576.65	120,155.10	-	100.50	104.85	1,335.16	1,540.51	121,695.61
Oct-19	130,470.42	195.00	901.20	131,566.62	-	54.20	260.75	2,371.45	2,686.40	134,253.02
Nov-19	118,577.56	1,170.00	126.20	119,873.76	-	215.20	198.30	1,043.00	1,456.50	121,330.26
Dec-19	132,201.05	207.00	429.20	132,837.25	-	86.20	143.05	625.00	854.25	133,691.50
Jan-20	128,248.03	2,838.75	132.71	131,219.49	-	63.30	259.50	707.00	1,029.80	132,249.29
Feb-20	117,155.50	34.00	175.00	117,364.50	-	232.80	295.45	433.50	961.75	118,326.25
Mar-20	128,829.96	2,165.00	225.00	131,219.96	-	9.09	-	296.00	305.09	131,525.05
Apr-20	122,341.00	195.00	331.61	122,867.61	176.85	74.40	149.35	977.60	1,378.20	124,245.81
May-20	124,631.98	2,145.00	402.93	127,179.91	834.60	94.20	100.30	1,527.00	2,556.10	129,736.01
Jun-20	126,816.62	4,779.50	857.88	132,454.00	491.46	77.85	213.75	2,295.20	3,078.26	135,532.26
<b>TOTALS</b>	<b>\$1,494,897.21</b>	<b>\$21,582.18</b>	<b>\$ 4,986.31</b>	<b>\$ 1,521,465.70</b>	<b>\$ 1,502.91</b>	<b>\$ 1,184.44</b>	<b>\$ 2,306.05</b>	<b>\$ 14,350.91</b>	<b>\$19,344.31</b>	<b>\$ 1,540,810.01</b>
Received from Black Hawk County Landfill to assist with funding of recycling & waste reduction: 8/1/2019										\$ 3,580.29
<b>TOTAL REVENUES</b>										<b>\$ 1,544,390.30</b>

\*Residents pay the City to dispose or recycle any of their bulky items (appliances, furniture, etc.). The City then pays a disposal fee to the Black Hawk County Landfill or a fee to a specific recycling company to recycle appliances, electronics, etc.

City of Waverly  
**Solid Waste Landfill Disposal Quantities**

		2015-16	2016-17	2017-18	2018-19	2019-20
		Tons	Tons	Tons	Tons	Tons
July	<i>Residential:</i>	164	140	159	164	180
	<i>Commercial:</i>	204	183	210	234	252
		<b>368</b>	<b>323</b>	<b>369</b>	<b>398</b>	<b>431</b>
August	<i>Residential:</i>	146	169	176	173	174
	<i>Commercial:</i>	199	251	233	258	238
		<b>345</b>	<b>420</b>	<b>409</b>	<b>431</b>	<b>412</b>
September	<i>Residential:</i>	136	160	149	149	156
	<i>Commercial:</i>	223	268	224	235	256
		<b>358</b>	<b>428</b>	<b>372</b>	<b>383</b>	<b>412</b>
October	<i>Residential:</i>	152	140	159	156	161
	<i>Commercial:</i>	217	233	248	266	263
		<b>369</b>	<b>372</b>	<b>407</b>	<b>423</b>	<b>425</b>
November	<i>Residential:</i>	147	149	155	165	150
	<i>Commercial:</i>	209	225	217	222	217
		<b>355</b>	<b>374</b>	<b>372</b>	<b>387</b>	<b>367</b>
December	<i>Residential:</i>	140	145	143	146	167
	<i>Commercial:</i>	214	205	179	209	219
		<b>354</b>	<b>350</b>	<b>322</b>	<b>355</b>	<b>386</b>
January	<i>Residential:</i>	124	144	155	138	152
	<i>Commercial:</i>	171	205	234	189	226
		<b>295</b>	<b>349</b>	<b>389</b>	<b>327</b>	<b>378</b>
February	<i>Residential:</i>	125	124	123	144	121
	<i>Commercial:</i>	202	189	197	195	199
		<b>327</b>	<b>313</b>	<b>320</b>	<b>339</b>	<b>320</b>
March	<i>Residential:</i>	122	153	145	138	136
	<i>Commercial:</i>	211	217	214	224	225
		<b>333</b>	<b>370</b>	<b>359</b>	<b>362</b>	<b>361</b>
April	<i>Residential:</i>	138	133	133	158	174
	<i>Commercial:</i>	224	221	242	258	187
		<b>362</b>	<b>354</b>	<b>375</b>	<b>416</b>	<b>361</b>
May	<i>Residential:</i>	134	166	158	173	173
	<i>Commercial:</i>	247	252	267	267	213
		<b>381</b>	<b>419</b>	<b>425</b>	<b>440</b>	<b>386</b>
June	<i>Residential:</i>	155	163	134	152	173
	<i>Commercial:</i>	237	228	221	220	250
		<b>391</b>	<b>391</b>	<b>355</b>	<b>372</b>	<b>423</b>
Total Residential		1,683	1,787	1,788	1,858	1,919
Total Commercial		2,556	2,677	2,684	2,777	2,745
<b>Grant Total</b>		<b>4,239</b>	<b>4,464</b>	<b>4,472</b>	<b>4,635</b>	<b>4,663</b>

City of Waverly - Public Works  
Solid Waste Division  
**Bulky Items Collection**

FY 2019-20

	2019						2020						Total	
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Special Collection Week	May		June
<b>Appliances w/Freon</b>	<i>*Yard Waste Site Closed</i>													
Refrigerators	4	5	9	5	11	1	2	2	2	3	4	9	4	61
Freezers	0	2	3	2	0	1	0	0	1	2	1	2	1	15
Air Conditioners	1	6	0	0	3	1	0	1	0	0		0	3	15
Dehumidifiers	11	9	2	8	8	2	1	1	1	1	3	9	10	66
<b>Appliances w/out Freon</b>														
Water Heater/Furnace	1	1	1	0	1	5	1	2	0	1	1	1	1	16
Water Softener	0	0	2	3	4	1	0	1	1	0		1	0	13
Stove	2	0	1	4	3	2	1	1	0	2	2	2	2	22
Washer	3	4	5	1	6	1	1	2	0	2	6	6	3	40
Dryer	0	1	0	1	1	3	1	1	1	4	5	3	5	26
Dishwasher	3	3	0	4	4	3	2	2	1	2	1	3	4	32
Humidifier	1	0	1	0	1	0	0	0	0	0		0	1	4
Gas Grill	5	3	4	3	2	0	1	0	0	4	11	14	9	56
Microwave	9	16	9	7	8	5	4	7	2	3	5	21	8	104
<b>Electronics</b>														
Televisions	40	37	37	25	27	22	11	12	18	19	21	36	35	340
Monitors	0	0	0	0	0	0	0	1	0	0		3	1	5
Printers	2	1	3	1	0	1	0	1	2	2	1	3	4	21
Computers	0	0	0	0	1	0	0	1	1	0		0	0	3
<b>Tires</b>														
Car	7	4	6	8	2	4	0	0	0	2	3	8	3	47
Truck	0	1	0	0	0	0	0	3	3	0		1	0	8
Tractor	0	0	0	0	0	0	0	0	0	0		1	0	1
<b>TOTAL</b>	89	93	83	72	82	52	25	38	33	47	64	123	94	895

*\*Bulky Items are collected at the Public Services site during the winters months that the Yard Waste Site is closed.*