THE CITY OF WATERTOWN

PUBLIC WORKS COMMISSION MEETING AGENDA

TUESDAY, SEPTEMBER 13, 2022 AT 5:30 PM

COUNCIL CHAMBERS, SECOND FLOOR, MUNICIPAL BUILDING - 106 JONES STREET

By Phone or GoToMeeting: Members of the media and the public may attend by calling:
(Toll Free): 1 877 309 2073 or 1 (646) 749-3129 **Access Code:** 196-221-861
or https://meet.goto.com/196221861
Please join meeting from your computer, tablet or smartphone. All public participants' phones will be muted during the meeting except during the public comment period.

1. **CALL TO ORDER**
2. **COMMENTS AND SUGGESTIONS FROM CITIZENS PRESENT**

   Each individual who would like to address the Committee will be permitted up to three minutes for their comments
3. **REVIEW AND APPROVE MINUTES**
   - A. Public Works Commission meeting minutes from August 10, 2022
4. **BUSINESS**
   - A. Cady Street Bridge 2023 Rehabilitation Project update and public information meeting
   - B. Jenny Newlun of N710 N Water Street has requested solid waste and recycle service from the City of Watertown.
   - C. Review and discuss: Country Club Lane sanitary sewer backups
   - D. Review and take possible action: Amend Chapter 24, Article IV, §24-8 (C)(1) Public Works Commission
5. **ADJOURNMENT**

Persons requiring other reasonable accommodations for any of the above meetings, may contact the office of the City Clerk at mdunneisen@CityofWatertown.org, phone 920-262-4006

A quorum of any City of Watertown Council, Committee, Board, Commission, or other body, may be present at this meeting for observing and gathering of information only

PUBLIC WORKS COMMISSION
Wednesday, August 10, 2022

Commission members present: Alders Bartz, Romlein, Ruetten, Wetzel
City employees present:
Public Works Director/City Engineer Jaynllen Holloway
Assistant City Engineer Andrew
Waste Water Treatment Manager Peter Hartz

1. Chairman Wetzel called the meeting to order at 5:31 p.m.

2. Comments and suggestions from citizens present
None present

3. Review and approve minutes from July 26, 2022
Motion to approve Ald. Romlein
2nd Ald. Bartz
Carried by unanimous voice vote

4. A. Review and take possible action: Change Order No. 1/Final with Thunder Road for $1,080.00.
The City's 2022 crack sealing contractor, Thunder Road, has completed all 2022 scheduled work. Change Order No. 1 increases the contract price by $1,080.00 to a final contract price of $38,352.75 to reflect final quantities completed by Thunder Road. There is adequate funding available in the Seal Coat Reserve account for said change order.
Motion to approve Ald. Romlein
2nd Ald. Ruetten
Carried by unanimous voice vote

4. B. Update, no action needed: Sidewalk Concern/Repair at 919 Harvey Avenue.
The Engineering Department received a complaint regarding sidewalk condition at 919 Harvey Avenue.Engineering investigated and found defective sections of sidewalk within the public right-of-way. A letter has been prepared for the owner(s), however, due more needed repairs after a recent (this week) inspection it has been determined that the best path forward is to push this notice/repair to 2023 in order to find better repair options.
Motion to approve Ald. Bartz
2nd Ald. Romlein
Carried by unanimous voice vote

4. C. Review and take possible action: Change Order No. 3 with Wolf Paving for $71,376.80 for Milling & Shaping Air Park Drive
Air Park Drive between Berres Bros. eastern parking lot and S. Twelfth Street is scheduled to be resurfaced in 2022. The original scope of work included having City crews remove the existing asphalt pavement and shaping the roadway. The Engineering Division sought a quote from Wolf Paving to mill the existing asphalt pavement and shape the roadway to grade in lieu of City crews performing the work. City crew time and equipment rate to perform pavement removal with available staff and equipment is comparable to the cost for Wolf Paving to mill and grade the roadway. Whereas the cost to complete the work is comparable, Wolf Paving can mill all pavement in a matter of days vs. weeks using City crews. Due to the high traffic counts on Air Park Drive, minimizing project duration will minimize inconvenience to businesses, residents, and the traveling public looking to use this portion of Air Park Drive. In addition, Wolf completing said work allows City crews to focus on other 2022 work areas and stay on schedule. The 2022 Annual Street reserve account budget was reviewed prior to bringing this change order forward. There is adequate funding in said account to add Air Park Drive milling and shaping to Wolf Paving's 2022 contract..
In answer to a question from Ald. Bartz, PWD/CE Holloway stated that the project is to begin near the end of August.
Motion to approve Ald. Romlein
2nd Ald. Ruetten
Carried by unanimous voice vote

4. D. Review and take action – Water Department, approve engineering design work with Robert E. Lee and Associates, Inc. for $14,900

The water department solicited engineering design work from two engineering companies for West Main Street utility extensions to serve future development west of Welsh Road (to end just east of the roundabout) sign work is needed this year to complete the watermain, valve, service, and hydrant replacements early next year to stay ahead on pace with future planned projects and potential development. Staff recommends approving RE Lee's quote to complete the engineering design work as noted above as they provided the low quote at $14,900 vs. Ruekert – Mielke at $27,240.
WWTM Hartz stated that parts need to be ordered ASAP as some are 30 weeks out. Ald. Ruetten received an affirmative answer when he asked if there is enough available indoor storage for all the parts.
Motion to approve Ald. Ruetten
2nd Ald. Romlein
Carried by unanimous voice vote

4. E. Review and take action - Water Department, approve Financial Assistance Agreement with Wisconsin Department of Natural Resources for the 2022 Private Lead Service Line Project funding
This Financial Assistance Agreement is the last component to the 2022 Private Lead Service Line Project and a required resolution is needed from City Council to begin the disbursement of funds to pay our contractor. This FAA from WDNR does not get released until after the contracts are signed by both parties, which has now been completed.
WWTM Hartz has aggressively asked for more services to be replaced compared to last year. There are 1,500 private side service lines and 500 public side service lines to uninstall and replace in the City.
Ald. Ruetten asked for a time to commence this year's program and WWTM Hartz stated that next week would be ideal.
Motion to approve Ald. Romlein
2nd Ald. Bartz
Carried by unanimous voice vote

4. F. Review and take action - Water Department, approve extending technical services agreement with Strand Associates, Inc. to continue our "on-Demand" task order support for our drinking water projects in progress.
The Water Department has partnered with Strand Associates for both our private lead service replacement projects in addition to working with them on our corrosion control treatment optimization requirements since 2020 by utilizing specific task orders for projects as they arise. Currently we are required to continue working on our lead abatement program and are actively engaged with our corrosion control pilot project to minimize lead in the drinking water. We wish to continue our partnership as needed and recommend an extension of the technical services provided with Strand Associates. Cost is not something set as we use them "on-demand" with specific task orders.
Motion to approve Ald. Romlein
2nd Ald. Ruetten
Carried by unanimous voice vote

4. G. Review and update – Wastewater Department, water quality trade approved and incorporated into our permit to discharge or the Wisconsin Pollution Discharge Elimination System permit (WPDES) to be publicly noticed.
The wastewater team recently finished all the required improvements as planned and set in motion back in September of 2015. A recap of accomplishments includes many years of piloting chemical treatment options, working in the collection system on pollutant reduction measures, purchasing property adjacent to the wastewater treatment facility, working with Ducks Unlimited, Wisconsin DNR, Jefferson County Land & Water Department, The US-Fish and Wildlife, and Applied Technologies to restore former wetlands and tall grass prairie practices for pollutant trading – AKA the Water Quality Trade project or WQT.

5. Adjournment
Motion to adjourn Ald. Romlein
2nd Ald. Bartz
Carried by unanimous voice vote
Meeting adjourned at 6:28 p.m.

Respectfully submitted,
Bob Wetzel
Public Works Commission Chair

Note: These minutes are uncorrected, and any corrections made thereto will be noted in the proceedings at which these minutes are approved.

THE CITY OF WATERTOWN

ENGINEERING DEPARTMENT

Jaynellen J. Holloway, P.E.
920.262.4050

Andrew Beyer, P.E.
920.262.4052

Maureen McBroom, ENV SP
920.206.4264

Ritchie M. Piltz, CSI
920.262.4034

Administrative Assistant
Wanda Fredrick 920.262.4060

MEMO

TO: Chairperson Wetzel and Commission Members

FROM: Andrew Beyer, P.E.

DATE: September 8, 2022

RE: Public Works Commission Meeting of September 13, 2022

Agenda Item:

Cady Street Bridge 2023 Rehabilitation Project update and public information meeting

BACKGROUND:

Cady Street Bridge 2023 Rehabilitation Project update and public information meeting

The City of Watertown received Wisconsin Department of Transportation funding to rehabilitate the Cady Street Bridge and extend its service life approximately twenty years. The Local Bridge Program covers 80% of construction project costs using State/Federal funds with the remaining 20% being funded through the project sponsor (City). The proposed project scope of work includes removing the existing concrete overlay (originally installed in 1989); install a new concrete overlay to protect the bridge deck slab; concrete surface repairs to sidewalk, deck, and piers; and bridge approach reconstruction. Additional bridge railing repair work may also be included in the project scope of work. The City has worked closely with WisDOT and the City's consulting design engineer, Ayres Associates, to potentially advance the rehabilitation project from 2026 to 2023 with the intention of having the Cady Street Bridge rehabilitated and in good order prior to the Main Street (Cole Memorial) Bridge Reconstruction project scheduled for 2025 (advanceable date for reconstruction is 2024). Cady Street is currently the designated pedestrian detour route during the Main Street (Cole Memorial) Bridge Rehabilitation project. WisDOT staff has stated that the timeline for the 2023 Cady Street Bridge Rehab project is tight but is working with the City to meet 2023 project deadlines. WisDOT has also stated that the 2023 advanceable project date is not guaranteed and may be postponed depending on the following: DNR project approvals, asbestos inspection results, endangered species (bats), historical concerns, Wisconsin Bureau of Aeronautics coordination, etc.

WisDOT requires two Public Involvement Meetings (PIMs) for Local Bridge Program projects. The first is scheduled during the September 13th Public Works Commission meeting. The second meeting is scheduled on September 20th at the City of Watertown Common Council Meeting. The PIM press release is attached for reference.

Enclosed:

- Public Information Meeting Press Release

THE CITY OF WATERTOWN

City Hall Main Office
106 Jones Street
Watertown, WI 53094
920-262-4000
ci.watertown.wi.us

FOR IMMEDIATE RELEASE
CONTACT: Andrew Beyer, 920.262.4060, AndrewB@CityofWatertown.org

PUBLIC INVOLVEMENT MEETING NOTICE

Watertown, Wis. (September 8, 2022) – Improvements to Cady Street Bridge at Rock River to be discussed at September 13th Public Involvement Meeting

Planned improvements for Cady Street in the City of Watertown, Jefferson County, will be discussed at a Public Involvement meeting on Tuesday, September 13, 2022. The meeting will be held at 5:30 PM at the Watertown City Hall, 106 Jones Street, Watertown, WI 53094, Room 2044.

The project involves improvements to the Cady Street roadway and bridge at the crossing of Rock River just east of the intersection with State Highway 26 Business. The existing concrete bridge deck will be resurfaced and railings may be repaired and painted. Approximately 80 feet of roadway approaches will be reconstructed. The project is scheduled for construction in 2023. Cady Street will be closed to traffic at the bridge during construction.

A variety of exhibits and maps will be featured at the Public Involvement meeting, and representatives from the City of Watertown Public Works Department and Ayres Associates will be available to discuss the project and answer questions. The public is encouraged to attend to examine the proposed improvements and discuss any concerns they might have.

Individuals who are unable to attend on September 13th can contribute comments about the Cady Street bridge project by contacting the following individuals:

Andrew Beyer, Assistant City Engineer
Watertown Public Works Department
106 Jones Street
Watertown, WI 53094
920.262.4060
AndrewB@CityofWatertown.org

Kristofer Olson, Project Engineer
Ayres Associates, Inc.
3376 Packerland Drive
Ashwaubenon, WI 54115
920.327.7803
olsonk@AyresAssociates.com

City of Watertown mission statement: To provide for, protect, and serve the citizens and businesses of Watertown in an efficient, strategic, and measured manner, while creating a community culture where close knit connections are key, that is rich in small town values balanced with modern conveniences, that is poised for development, and is an idyllic community that leverages location and outdoor opportunity.

From: Jenny Newlun <crazeeboxer@yahoo.com>
Sent: Friday, September 2, 2022 4:56:34 PM
To: Stacy Winkelman <StacyW@CityofWatertown.org>
Subject: Re: Garbage Pick Up Needed

Stacy,

We at N710 N Water Street would like approval to get garbage pickup at our residence for the monthly cost of $19.08 which will be billed to us.

Thanks,
Jen

Sent from Yahoo Mail for iPhone<https://overview.mail.yahoo.com/?.src=iOS>

THE CITY OF
WATERTOWN

DPW – STREET & SOLID WASTE DIVISION

Stacy Winkelman
Interim Supt/Office Manager

Jason Heller
Interim Foreman/Equip Operator

Jane Flanigan
Admin Asst

September 8, 2022

Alderperson Wetzel & Commission Members:

I have one item on the agenda for your review and approval. It is regarding a request for solid waste and recycling services.

Jenny Newlun of N710 N. Water Street has submitted a request for City of Watertown services for solid waste and recycling services. I have attached the email received from Ms. Newlum. This address is outside City limits; however we currently provide service to several residents outside City limits, including a property right next to Ms. Newlun. If approved by this Commission, our office will send a monthly invoice of $19.08 for these services.

If you have any questions on these items, please feel free to contact me.

Respectfully submitted,

Stacy Winkelman
Interim Supt/Office Manager

Enclosure

811 S. First Street • Watertown, WI 53094 • Phone 920.262.4080 Fax: 920.262.4082
stacyw@cityofwatertown.org jasonh@cityofwatertown.org jflanigan@cityofwatertown.org

Opportunity Runs Through It

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To: Stacy Winkelman <StacyW@CityofWatertown.org>
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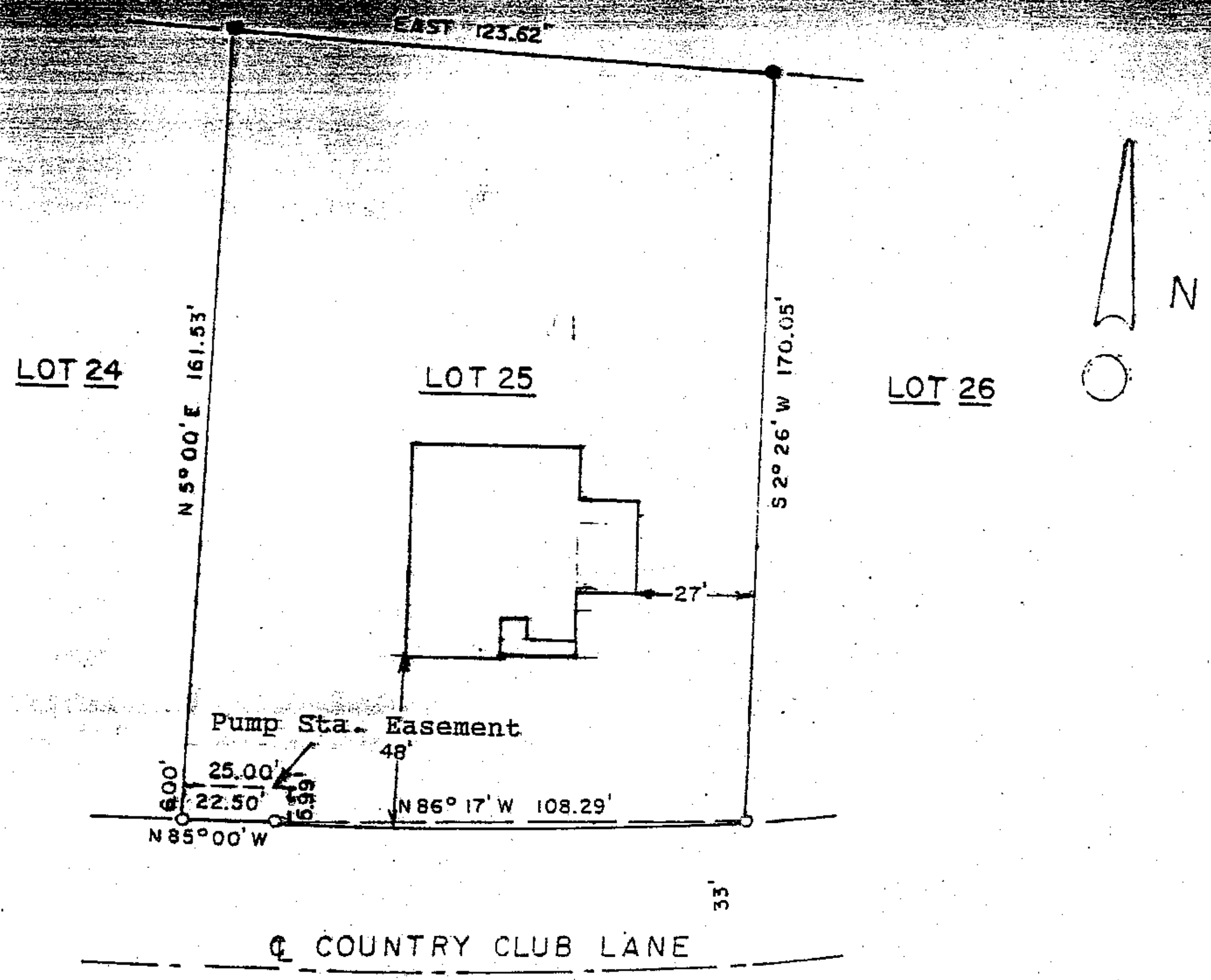
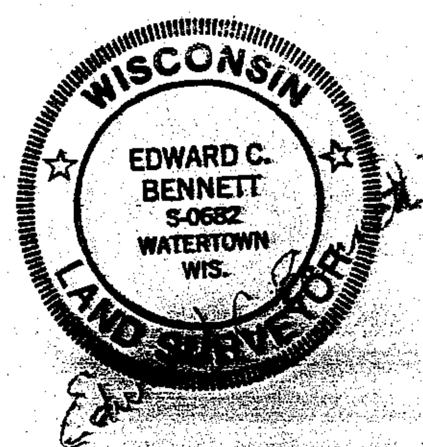
Thanks,
Jen

Sent from Yahoo Mail for iPhone<https://overview.mail.yahoo.com/?.src=iOS>

LOT 25, COUNTRY CLUB ESTATES, CITY OF WATERTOWN, DODGE COUNTY, WISCONSIN.



OWNER: John Bernhardt
720 N. Plankinton Ave.
Milwaukee, WI 53203



Scale of Map: 1 Inch—40 feet

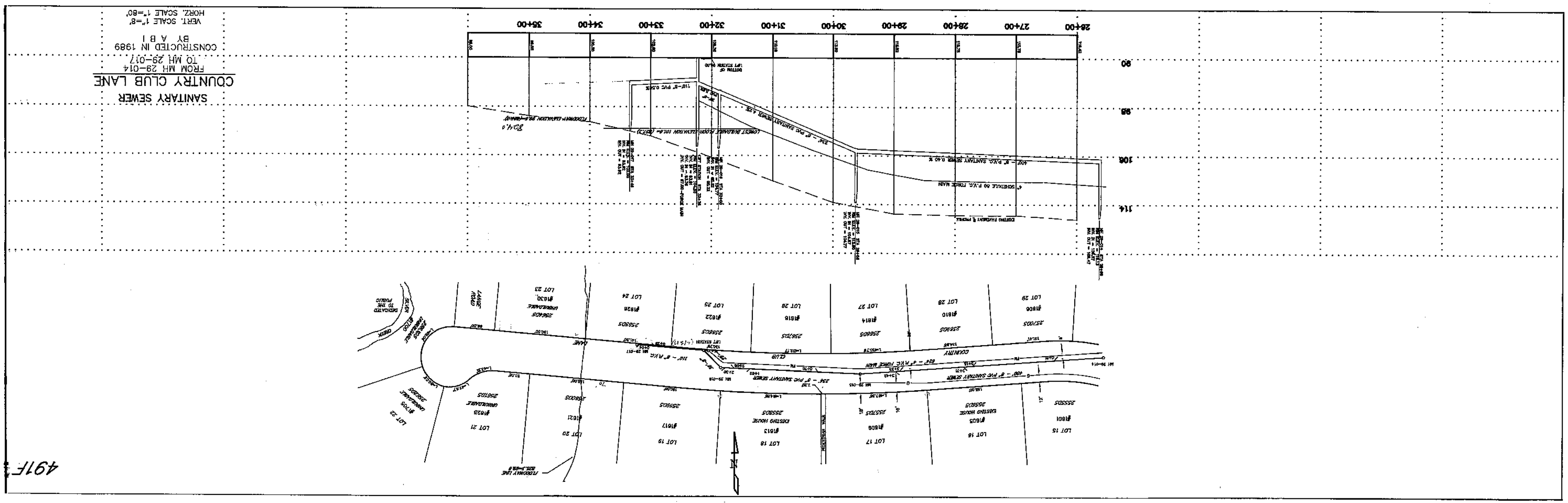
0" 20" 40"

STATE OF WISCONSIN } ss.
DODGE COUNTY }

LEGEND

- Iron Pipes Found
- Iron Rod Found
- Iron Pin Found
- Stone Mon. Found
- R.C.A.M.
- 1" x 24" Iron Pipes Set, 1.13 lbs./ft.
- 2" x 30" Iron Pipes Set, 3.65 lbs./ft.
- [illegible] Set, 1.50 lbs./ft.
- [illegible] Set, 4.17 lbs./ft.
- [illegible]

[illegible] map is a true representation thereof and shows the size and location of the property, its [illegible] apparent easements and roadways and visible encroachments, if any. [illegible] of the property, and also those who purchase, mortgage, or guarantee the title thereto, within [illegible]


SANITARY SEWER
COUNTRY CLUB LANE
FROM MH 29-014
TO MH 29-017
CONSTRUCTED IN 1989
BY A B I
VERT. SCALE 1"=8'
HORZ. SCALE 1"=80'
491F

Information below on sewer backflow valves is a summary from some research found on the internet (these are not my words) - P. Hartz

A sewer backflow valve can prevent waste water backups, particularly from a public sewer. Sewer backflow is a term used in plumbing for unexpected and unwanted flow of water in reverse direction. Normal plumbing allows wastewater to flow from a home to the city sewer, but backflow is the exact opposite.

When backflow happens, there can be a serious health risk due to contaminated waste water entering your premises. Backflow occurs when the municipal drainage system or city sewer overflow and sends water back through a sewer pipe into your home. Immediate proper clean-up is required to prevent risk of disease and further damage to property. To prevent this problem, many homes would benefit greatly from a sewer backflow valve.

A sewer backflow valve is designed to do one function only: It prevents backflow from a municipal drainage system or city sewer into your home.

What causes a sewer backflow?

Sanitary sewers work by the force and principal of gravity. So wastewater flows in the direction of the natural slope of the pipe. This is the main reason that the sewer mains owned and maintained by the city are typically located between 10′ and 15′ deep. In many areas they are much deeper than that. Sewer backflow can be triggered by a number of different situations, some examples follow:

- A blockage (in either a private or city sewer pipe) caused by tree roots, construction mishaps, plumbing system deterioration.
- Insufficient capacity due to residential growth
- Cracks in the pipe
- A back-pitched drain system
- A surcharge due to heavy rain or a large snow melt

In an office and home plumbing system, blockages are often caused by accumulation of grease, hair, and any physical obstruction in the pipe. It may even include napkins, diapers, cigarette butts, toilet paper, and

more. When your sewer pipe is blocked, wastewater has no chance of flowing in the right direction, hence backflow.

But the most serious and damage causing sewer backflow conditions occur when a public sewer system becomes surcharged.

If the backflow comes from your city sewer, the most common culprit is a flood or any massive amount of water either from rain or a snow melt.

Failure of a sump pump can also possibly lead to sewer backflow, but nowhere near as severe as that of a public sewer surcharge.

There are three main types of sewer backflow valves. The price range to purchase and install can vary greatly, depending on the valve. And the effectiveness of the valve can likewise vary greatly. Each sewer backflow valve has its own attributes, which must be considered carefully before installation.

Sewer check valve

As sewer valves go, a check valve is the least expensive, and the type most often installed. A check valve does not prevent backwater 100%, so it is ideal for short-term backups lasting less than a full day. Like all sewer valves, once the flapper closes, water use inside the building must be limited. When a public sewer backup recedes, the check valve will automatically allow the waste water from your home to escape, and run out to the public sewer. A check valve should be cleaned once a year to ensure the flap opens and closes fully.

Automated flood gate

An automatic flood gate valve is the most sophisticated and 100% effective way to stop waste water and the damage associated with it. An automatic flood gate valve works on air pressure, and (as its name implies) is fully automatic. Once closed, its stainless steel knife edge stops backwater 100% over prolonged periods of time. Like all specialized plumbing devices, this device should be installed only by a licensed plumber.

If installed incorrectly not only will it not work properly, but the product warranty will be void. Because an automatic flood gate valve is larger than the typical sewer backwater valve (mainly due to the air chamber), the installation must be considered and planned out carefully.

Manual sewer gate valve

A manual sewer valve, as its name implies, must be opened and closed manually. That means one must anticipate when a backwater condition will arise. And likewise, one must know when the backwater has receded. While a dependable device, the chance of misuse and backwater damage occurring regardless, make this a device for only very particular situations.

How, Where, and When to install a sewer backflow valve

In the case of installing a sewer backflow valve, most people fail to realize the implications of an improper installation. Not only will sewer backwater remain a problem, but an incorrectly installed sewer valve can actually exasperate the problem. As an example, a sewer backwater valve must be the the first fitting on the house side of the inside of the foundation wall. Installation and maintenance can be simple, but sometimes are quite cumbersome. If there is any sort of outlet before a sewer backwater valve, backwater can rush out of it with incredible force. The waste water damage can exceed that of before the sewer valve was improperly installed.

A sewer backflow valve can be installed in the main sewer pipe outside of your home or in the basement at the farthest exit point from the home. The device is installed downstream to prevent sewage from flowing into your sewer pipe above the device. Installation depends on the manufacturer's assembly instruction, but usually there are only three different versions: Threaded and Glued method which involves a threaded T device into pipe, Compression Fitting method which relies on pressure washer to seal around pipe, and Bell (hub) and plain end of pipe. In any of the three cases, an improper installation will lead to waste water leakage, a failure of the device, or both.

In addition, many buildings, due to their design, are not a candidate for a sewer valve. Always consult a licensed professional before installing any type of backflow preventer.

The following are the three most common installation errors:

1. ***When a house sewer also accepts rain water flow from the roof, or area drains, a sewer backwater valve cannot typically be installed.***

2. Installing a sewer backwater valve on the house side of the trap is an improper installation. If the trap plugs leak, or blow off, you will be flooded with waste water.

3. If adequate pitch of the pipe is not available, the valve will neither open or close properly. In addition the house drain may suffer from frequent clogs.

If a backflow preventer is installed maintenance is required

Regardless of the installation method and type, a specialized sewer backflow prevention device has internal seals, springs, and moving parts. It means they are subject to wear and tear over time. All sewer backflow valve devices require periodic maintenance, and more importantly should be tested by a knowledgeable person.

Even a sewer backflow preventer or valve test should be performed annually by a knowledgeable individual, preferably the licensed firm that installed it. Even a partially blocked device will not function properly. If the gate of a valve has not moved in a long period of time, it can become stuck in the open position just when you need it the most.

City of Watertown Water Systems
WASTEWATER (920) 262-4085 • WATER (920) 262-4075
800 Hoffmann Drive • P.O. Box 477 • Watertown WI 53094-0477

To: Chairman Wetzel and members of the Public Works Commission September 9, 2022
From: Peter Hartz – Water Systems Manager

Re: Agenda item – September 13, 2022 - Public Works Commission meeting

Wastewater Department:

1. Review and discuss – Rain Event on June 15, 2022 – surface flooding, basement backups and response plans during rain events or power outages. (Country Club Lane complaint)

We have 18 outlying lift stations in Watertown plus the 1 main pump station at the wastewater plant. 2 outlying lift stations have permanent stand by emergency generators (the largest outlying stations) and the remainder are smaller stations where we will trailer a portable generator and set it (them) up, then move around with the truck mounted generator and leapfrog around pumping stations down and checking the generators we set up. None of the wastewater list stations were designed to handle flood waters (storm water) or the inflow – infiltration from groundwater or storm water during heavy rain events. Watertown has a lot of combined sewers remaining that we are working on disconnecting from the sanitary laterals; those are home primarily constructed prior to 1970 where the foundation tiles (interior & exterior) are combined with the sanitary lateral.

The lift stations are spread all over the city, we identify most by the road they are located on or near; here is our list - Fifth ward (N Church St.), Allerman (Richards Ave.), Front St., Hidde (E. Main St.), Riverside Park (Anne St.), Carlson Place, Boughton St., River Lawn, Oak Ridge Ct., 702 N. Water St., Hinze (Silver Creek Rd.), Fox Creel (Fox Creek Dr.), Country Club (1134 N. Water St.), 18th Hole (1622 Country Club Ln.), Grandview (Beacon Dr.), Spaulding St., South Concord (West Haven Dr.), Watertown East (Hall & Boughton)

Here is a list of our generators and where they are located – (portables are pick-up & trailer units)

Unit Location	Make	KW	Model	Diesel fuel tank size	Run time under normal load full tank of fuel
Main Plant	Cummins	2000	DQKC-5568528	4000 gallons	91 hours
Hidde Lift Station	Kohler	135	135ROZJ	230 gallons	48 hours
Boughton St. Lift Station	Kohler	50	50REOZJC	230 gallons	62 hours
Pickup Mounted - #1	Onan	25	DKAF-3371155	60 gallons	27 hours
Trailer Unit - #2	Generac	45	MMG45	78 gallons	30 hours
Trailer Unit - #3	Generac	45	MMG45IF4	78 gallons	30 hours
Trailer Unit - #4	Onan	25	DKAF-3371155	60 gallons	27 hours
Trailer Unit - #5	Onan	25	DKAF-5996146	60 gallons	27 hours

The list station on Country Club Lane in question is the last in a line of 3 stations (we call that one 18th hole). Putting a generator at that station will not solve the clear water infiltration problem experienced during heavy rain events coupled with power outages. If that station has a generator and the other 2 downstream do not it will cause an overflow somewhere else. Issues identified for placing a generator at the 18th Hole is that the easement small (6' by 25'), Country Club Lane has limited space but is a better however utilities present limit both sites due to lack of space to site a generator next to the wet well and control panels.

The Country Club subdivision dates to the 1960's and all the early homes all had septic systems, I would hope those earlier homes didn't have the sumps or foundation tiles going to their septic systems. Likely none did. The city put in sanitary when the septic systems started failing so back in 1989. And for the 18th Hole lift station there are 32 homes on the sanitary line that drain to that lift station the homeowner in question is in the lowest area of the sanitary drainage basin. All the other 30+ homes are contributing factors to the sanitary sewer when the power is out, however those homes all have private wells so in theory there is a limited amount of wastewater that could be discharged in the event of a neighborhood wide power outage.

The sanitary manholes and collection system were constructed with PVC pipe so good joint connections, but no system is 100% watertight. Looking at the as-built plan they do show elevations as a reference and show the flood elevation line near the howe owners house and Silver Creek. As it sounds the home has a finished basement with a full bathroom, and I'm not sure where the sump discharges, but know the home has 2 sumps which tells me the groundwater is very high on the end by Silver Creek. Plus, the as-built lift station plans show the lowest buildable floor elevation of 827.3' and the home in question looks to be located where it wouldn't allow a basement, I don't know the basement elevation. The as-builts also show that the lot to the west is unbuildable but I see a house there now so not sure what transpired to allow a home to be built on that lot but understand it does not have a basement and sits on a concrete slab.

While adding a generator will pump the excess clear water, it does not solve the basement back up issues as the problem is not with the city sanitary sewer system in that location – the problem is clear water entering the city sewer system from other areas, i.e., private laterals from cracks, inflow – infiltration into the sanitary, or illegal clear water connections. During power outages and rain events the sumps will fill up and if the power is out (without battery backups) the water will spill out of the sump and into a floor drain or into the basement. The 18th hole lift station can hold approximately 2,000 gallons of water (not counting the collection pipe holding capacity, we have 2 pumps each rated at 125 gallons per minute) – and with the power out the homes in that area are not able to pump water since they all have private wells so during the power outage duration the water usage drops and there is ample volume to hold normal usage even if everyone flushes all their toilets during the power outage (assuming the toilets are the only means of holding water when a well pump is inoperable; 3 per home at 5 gallons each = less than 500 gallons). Another estimate is if each water pressure tank holds 25 gallons, then the maximum amount of water would be 800 gallons available + the above volume of 500 gallons = 1,300 gallons; still less than the wet well holding volume.

In the meantime, I have been trying for a few years to move forward with our inspections and enforcement of the city codes related to this issue of clear water entering the sanitary sewer - current codes in existence that reference our sanitary laterals are City Code §508-8. The questions focus on what this might cost for the homeowners notified of the issues found. Most would need a new sanitary lateral and others possibly a sump pump installed – some concerns and feedback received is that in making those corrections then the groundwater discharge to the surface would further exacerbate the surface water flooding issues and inundate the storm water system so it's a larger issue the city if faced with so moving along slow.

During events such as this past one in June, staff must first respond and address the wastewater treatment plant, assure the plant is operational before leaving to address other issues in the collection system. Staff did respond to the lift station with a portable generator, but first the generator had to be set and started at the Spaulding lift station, then the Country Club list station, after that the 18th hole lift station was set up with a generator. I was not able to determine how high the water rose in Silver Creek, or the storm water ditch drainage system during the rain event. That dictates how well the storm water drains, the city storm water system in that entire subdivision is not improved with a piped collection system, its all on the surface of the ground on either side of the road no real collection system that I can see and if there was it would still go to silver creek like it does now. A quick estimate of surface water during the rain event could be done by using the road right of way surface area (that does not include the yard acreage); there is approximately 3.6 acres of drainage area from a storm. With 1" of rain on 1 acre of land equaling 27,154 gallons of water there would be 97,750 gallons of water, we measured just under 4" of rain that day in less than 2 hours. 4" on 3.6 acres = 391,000 gallons of rainwater. These are just quick back of napkins estimates for discussion. We had reports of 6" of rain on the north side of the city from multiple locations. June rain event preceding the 15th include 06/04 – 06/08 totaling 1.85", 06/11 event of 0.10", and 06/13 event of 0.80" all of which saturated the soils which slows infiltration into the ground.

Since there is a history of the basement backing up during intense rain events, in my opinion; I think in this situation a sanitary sewer check valve would be a reasonable low-cost solution to that isolated problem, power outage or not when it rains heavy, they seem to have issues with clear water entering the sanitary lateral from collection system. (And its clear water that pushes back the sewer waste into the basement – the sewage in the basement is most likely from the homeowners own lateral; a cleanse of sorts of their own waste pushed backwards). Perhaps a neighborhood plan would be to have every one of those 32 homes inspect the private laterals and get rid of the cracks and such that are leaking water, in addition to communicating that dumping storm water into the sanitary lateral is not only illegal but floods the neighbor's basement. That may help as we mobilize and bring a generator in the future.

The wastewater utility does have plans for a generator at the Spaulding Lift Station in the budget and planned for purchase in 2022 – that is coming to a future meeting.

Sincerely,
Peter Hartz

Water Systems Manger

Chapter 508. Wastewater Facilities

Article II. Sewer Use

§ 508-8. Use of public sewers.

A. Unpolluted water exclusion.
[Amended by Ord. No. 00-26]

(1) Purpose. In adopting this subsection, the Watertown Common Council finds that the discharge of clear or unpolluted water from roofs, surfaces, groundwater sump pumps, footing tile, swimming pools, subsurface drainage, unpolluted cooling or process water, or other natural precipitation into the City sewerage system will, and has on numerous occasions in the past, flood and overload the sanitary sewerage system to such an extent as to cause significant and grave damage to the property of large numbers of City residents. Such damage is caused by the backup of sewage into the living quarters of residents and, in addition to other damage, creates a hazard to health. The Common Council, therefore, finds it essential to the maintenance of health, to the minimization of damage to property, and to meet applicable state regulations that the provisions of this subsection be strictly enforced to avoid emergencies in the future.

(2) Definition and regulation. No water from any roof, surface, groundwater sump pump, footing tile, swimming pool, subsurface drainage, unpolluted cooling or process water, or other natural precipitation shall be discharged into the sanitary sewerage system. Dwellings and other buildings and structures which require, because of infiltration of clear or unpolluted water into basements, crawl spaces and the like, a sump pump discharge system shall have a permanently installed discharge line, which shall not at any time discharge clear or unpolluted water into the sanitary sewerage system except as herein provided. A permanent installation shall be one which provides for year-round discharge capability to either the outside of the dwelling, building or structure, or is connected to the City storm sewer, or discharges through the curb and gutter to the street. It shall consist of a rigid discharge line without valving or quick connections for altering the path of discharge.

(3) Disconnection. If it is determined by City personnel that any person, firm or corporation is causing clear or unpolluted water to enter into the City sanitary sewerage system, within 60 days after such inspection the property owner shall disconnect and/or remove the same. Any disconnects or openings in the sanitary sewerage system shall be closed or repaired in an effective, workmanlike manner, as provided by the Wastewater Treatment Plant Operator or his designated agent.

(4) Inspection.

(a) Every person owning a building that discharges into the City sanitary sewerage system shall allow an employee of the City of Watertown Wastewater Treatment Plant, or his designated representative, to inspect the building to confirm that there is no sump pump or other prohibited discharge into the sanitary sewerage system. In lieu of having the City inspect his property, any person may furnish a certificate from a licensed plumber, certifying that his property is in compliance with this subsection.

(b) Any person refusing to allow his property to be inspected or refusing to furnish a plumber's certificate within 14 days of the date the City employees or their designated representatives are denied admittance to his property shall immediately become subject to the surcharge herein provided. Any property found to violate this subsection shall make the necessary changes to comply with this subsection and furnish proof of the changes within 60 days.

(5) Sump pump inspections. Each sump pump connection identified may be reinspected on basis in conjunction with yearly water meter inspections.

(6) Surcharge. A surcharge of $100 per month is hereby imposed and added to every sewer billing 60 days after inspection to owner-occupied properties which are not in compliance with this subsection. A surcharge of $100 per month is hereby imposed and will be billed monthly 60 days after inspection to the owners of properties not owner-occupied (rentals) which are not in compliance with this subsection. All properties found during yearly reinspection to have violated this subsection shall be subject to the one-hundred-dollar-per-month penalty for all months between the last inspection and the current inspection.
[Amended by Ord. No. 01-45]

(7) Temporary connection to sanitary sewer. If a determination is made that a property owner is discharging clear or unpolluted water into the sanitary sewer, upon recommendation by the Public Works Commission the property owner may be allowed to continue to discharge clear or unpolluted water into the sanitary sewer during the winter months (November 1 to April 1) if there is no storm sewer on the abutting street. The purpose of this exception is to prevent the discharge of water onto the City street which would produce the accumulation of ice and result in hazardous driving conditions.

B. Disposal of unpolluted water. Stormwater and all other unpolluted water shall be discharged to a storm sewer or natural outlet. The discharge of unpolluted water into a natural outlet or storm sewer shall comply with applicable state and federal regulations.

C. General discharge prohibitions. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will interfere with the operation or performance of the wastewater facilities. These general prohibitions apply to all such users of the City's wastewater facilities, whether or not the user is subject to national categorical pretreatment standards or any other national, state or local pretreatment standards or requirements. A user may not contribute the following substances to the City's wastewater facilities:

(1) Any substance which creates a fire or explosion hazard in the wastewater facilities, including but not limited to waste streams with a closed cup flash point of less than 140° F. or 60° C. using the test methods specified in 40 CFR 261.21. Prohibited materials include, but are not limited to, gasoline, kerosene, fuel oil, naphtha, benzene, toluene, ethylbenzene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides, and any other substance which the City, the state or the EPA has notified the user is a fire or explosion hazard to the system.

(2) Solid or viscous substances, either whole or ground, in quantities or of such size capable of causing obstruction to the flow in sewers or other interference with the proper operation of the wastewater facilities, such as, but not limited to, ashes, cinders, disposable diapers, glass grinding or polishing wastes, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, unground garbage, whole blood, paunch manure, hair and fleshings, bones, entrails, sanitary napkins, paper dishes, cups, milk containers, other paper products, grass clippings, gas, beer or distillery slops, residues, chemical or paint residues and bulk solids.

(3) Any waters or wastes having a pH lower than 5.0 or greater than 9.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater facilities.

(4) Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the City's Wastewater Treatment Plant, or exceed the limitation set forth in a categorical pretreatment standard. A toxic pollutant shall include, but not be limited to, any pollutant identified pursuant to Section 307(a) of the Act.

(5) Any substance which results in the presence of toxic gases, vapors or fumes within the wastewater facilities in a quantity that may cause a public nuisance or hazard to life or acute worker health and safety problems.

(6) Any substance which may cause the City's Wastewater Treatment Plant's effluent or any other product of the wastewater treatment plant, such as residues, sludges or scums, to be unsuitable for

reclamation and reuse or to interfere with the reclamation process. In no case shall a s discharged to the wastewater treatment plant cause the wastewater treatment plant noncompliance with sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act, any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, or the Toxic Substances Control Act, or state criteria applicable to the sludge management method being used.

(7) Any substance which will cause the wastewater treatment plant to violate its WPDES and/or state disposal system permit or the receiving water quality standards.

(8) Any wastewater with objectionable color not removed in the wastewater treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.

(9) Any wastewater having a temperature which will inhibit biological activity in the wastewater treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the wastewater treatment plant which exceeds 40° C. (104° F.) unless the wastewater treatment plant is designed to accommodate such temperature.

(10) Any pollutants, including oxygen-demanding pollutants (BOD, etc.), released at a flow rate and/or pollutant concentration so as to constitute a slug and/or may cause interference to the wastewater treatment plant.

(11) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Water Systems Manager in compliance with applicable state or federal regulations.

(12) Any wastewater which causes a hazard to human life or creates a public nuisance.

(13) Any water or waste containing fats, wax, grease, petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, whether emulsified or not, in excess of 100 mg/l or containing substances which may solidify or become viscous at temperatures between 32° and 140° F. (0° and 60° C.).

D. Specific pollutant limitations.

(1) The following are the maximum concentrations acceptable for discharge into the City of Watertown sewer system:

Recommended Pollutant Limitations

Pollutant	**Concentration (mg/l)**
Arsenic	0.15
Cadmium	0.50
Chromium	2.6
Copper	1.5
Cyanide	2.3
Lead	0.5
Mercury	<0.0002
Molybdenum	0.1
Nickel	3.5
Selenium	0.24
Silver	5.0
Zinc	5.0

(2) Effluent limitations promulgated by federal or state authorities shall apply in any instance where they are more stringent. Dilution of any wastewater discharge for the purpose of satisfying these requirements shall be considered a violation of this chapter.

E. Hauled wastes. The City may allow wastewater which is hauled via truck or other conveyan discharged to the wastewater facilities. All discharges, including trucked or hauled pollutants sewer shall be as regulated by a sewer use permit/written agreement. Prior to such discharge, the City may require a written report from the hauler describing the quantity, source of wastewater, laboratory analysis of the pollutants/constituents, and other information as deemed necessary by the City. The City shall require that written permission and discharge conditions be issued by the City to the hauler prior to discharge of any hauled wastewater.

F. Interceptors. Grease, oil or sand interceptors shall be provided in accordance with § **419-8P** of this Code. Those businesses required by state law to have a grease trap and which fail to maintain them by clearing them out regularly when full shall be fined $300 per event. Each business shall keep a maintenance log on its grease traps.

G. Preliminary treatment facilities. Where preliminary treatment, flow-equalization facilities or interceptors are provided for any wastewater, they shall be effectively operated and maintained continuously in satisfactory and effective condition by the owner at his expense and shall be available for inspection by the authorized representatives of the City at all reasonable times.

H. Monitoring facilities. The City may require to be provided and operated, at the user's own expense, monitoring facilities to allow inspection, sampling and flow measurement of the user's wastewater(s). The monitoring facility should normally be situated on the user's premises, but the City may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles. There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility, sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the user. Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the City's requirements and all applicable local construction standards and specifications. When required, construction shall be completed within 90 days following written notification by the City.

I. Inspection and sampling.

(1) The City shall inspect the facilities of any user to ascertain whether the purpose of this chapter is being met and all requirements are being complied with. Persons or occupants of premises where wastewater is created or discharged shall allow the City or its representatives ready access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, records examination or in the performance of any of their duties. The City, approval authority and EPA shall have the right to set up on the user's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations. Where a user has security measures in force which would require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security personnel so that, upon presentation of suitable identification, personnel from the City, approval authority and EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibilities. In all cases where tests are conducted by the City for the purpose of checking to determine if a previously found violation of this chapter has been corrected, the cost of such tests shall be charged to the user and added to the user's sewer service charge. In those cases where the City determines that the nature or volume of a particular user's wastewater requires more frequent than normal testing, the City may charge such user for the tests, after giving the user 10 days' written notice of its intention to do so, and the cost thereof shall be added to the user's sewer service charge. Where industrial wastes are discharged into a public sewer, for the purpose of determining sewer service charges, the user, at its own expense, shall sample and analyze its discharge and report the test results to the City in accordance with the requirements of the sewer service charge portion of this chapter. All such tests shall be as ordered by the City and shall be conducted by qualified personnel and in accordance with applicable standards. Measurements of strength and volume, for the purpose of determining sewer service charges, shall be made in accordance with § **508-19** of this chapter.

(2) A minimum of four grab samples will be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics. For all other pollutants, twenty-four-hour composite samples must be obtained through flow-proportional composite sampling techniques where feasible. The wastewater facilities may waive flow-proportional composite sampling for any industrial discharger that demonstrates that flow-proportional sampling is infeasible. In such cases, samples may be obtained through time-

proportional composite sample techniques or through a minimum of four grab samples w discharger demonstrates that this will provide a representative sample of the efflue discharged.

J. Special agreements. No statement contained in this section shall be construed as preventing any special agreement or arrangement between the City and any industrial concern whereby an individual waste of unusual strength or character, not subject to categorical pretreatment standards, may be accepted by the City for treatment, subject to payment therefor by the industrial concern, in accordance with applicable ordinances and any supplemental agreement with the City.

K. The Water Systems Manager may require yearly reports by dischargers that discharge industrial waste and toxic and hazardous substances to the City's Wastewater Treatment Plant. Reports would include but not be limited to flow and organic or inorganic compounds that may be present due to the industrial activity at that location.

THE CITY OF WATERTOWN

ENGINEERING DEPARTMENT

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MEMO

TO: Chairperson Wetzel and Commissioners

FROM: Jaynellen J. Holloway, P.E.

DATE: September 9, 2022

RE: Public Works Commission Agenda Narrative for September 13, 2022

Agenda Items:

Review and take possible action: Amend Chapter 24, Article IV, §24-8 (C)(1) Public Works Commission

BACKGROUND

Review and take possible action: Amend Chapter 24, Article IV, §24-8 (C)(1) Public Works Commission: Earlier this year, City Attorney Chesebro brought forth to Common Council housekeeping ordinance updates for its review and approval. Common Council approved them. He recently identified another housekeeping ordinance update that he brought to the Mayor's and my attention. He pointed out that the statement, "It may appoint a manager" was vague and needed clarification. Attorney Chesebro offers the following ordinance amendment:

"~~It may appoint a manager~~. It appoints the Public Works Director/City Engineer as manager."

The justification for the ordinance amendment is the Public Works Director/City Engineer oversees the Public Works Department, of which the Water Utility and Wastewater Utility are divisions under. Attached is the ordinance and draft ordinance amendment for your review.

Attachments:
Review and take possible action: Amend Chapter 24, Article IV, §24-8 (C)(1) Public Works Commission:

- Chapter 24, Article IV, §24-8 (C)(1) Public Works Commission
- Draft Ordinance

Article IV **Public Works Commission**

[Adopted as § 2.05 (first paragraph) and (5) and § 17.01 of the former City Code]

§ 24-8 **Public Works Commission.**

[Amended by Ord. No. 71-61; Ord. No. 92-34; Ord. No. 02-45]

A.

Composition. The Public Works Commission, hereinafter referred to as the "Commission" shall consist of four Alderpersons from the Common Council and one citizen member from the community at large to take entire charge and management of the said utilities under the general control and supervision of the Common Council.

[Amended 10-4-2016 by Ord. No. 16-18; 12-17-2019 by Ord. No. 19-29]

B.

Appointment.

(1)

The members of the Commission shall be appointed by the Mayor, subject to the confirmation of the Common Council.

(2)

Annually, after the spring election each year, the Mayor shall appoint the four Aldermanic members to the Commission for the term of one year. In the first meeting of the Common Council in January, commencing with the year of 2003, the Mayor shall make his citizen appointments for a four-year term.

(3)

In case of a vacancy in the Commission due to death, resignation, removal or for any other cause whatsoever, such vacancy shall be filled by an appointment by the Mayor for the unexpired term.

C.

Administrative functions of the Commission.

(1)

The Commission shall make such rules and regulations for its own proceedings and for the government of its department as it shall deem necessary and proper in addition to but not inconsistent with the rules and regulations herein contained and not inconsistent with law. It may appoint a manager.

(2)

All utility receipts shall be paid to the City Clerk/Treasurer's office.

[Amended by Ord. No. 10-30]

(3)

The Commission shall have entire charge and management of the Water Utility and the Wastewater Utility and as such shall have supervision over the buildings, grounds and all matters connected therewith and shall see that all ordinances of the City and all rules and regulations of the Commission are complied with; that the conditions of all contracts by or with the Commission are faithfully complied with; and that the assessments of the water rates are duly made, collected and paid into the City treasury. The Commission shall keep records of all extensions, additions, changes, alterations and attachments made to the system of waterworks, and all meters and the locations thereof, and it shall perform such other duties as the Common Council or the Mayor may prescribe.

[Amended by Ord. No. 10-30]

ORDINANCE TO AMEND CHAPTER 24, ARTICLE IV, §24-8 (C)(1) PUBLIC WORKS COMMISSION OF THE CITY OF WATERTOWN GENERAL ORDINANCES

SPONSOR: ALDERPERSON BOB WETZEL
FROM: PUBLIC WORKS COMMISSION

THE COMMON COUNCIL OF THE CITY OF WATERTOWN DOES ORDAIN AS FOLLOWS:

SECTION 1. Chapter 24, Article IV, §24-8 (C)(1) Public Works Commission, is hereby amended as follows;

(1) The Commission shall make such rules and regulations for its own proceedings and for the government of its department as it shall deem necessary and proper in addition to but not inconsistent with the rules and regulations herein contained and not inconsistent with law. ~~It may appoint a manager.~~ It appoints the Public Works Director/City Engineer as manager.

SECTION 2. All ordinances or parts of ordinances inconsistent with the provisions of this ordinance are hereby repealed.

SECTION 3. This ordinance shall take effect and be in force the day after its passage and publication.

DATE:	*September 20, 2022*		*October 4, 2022*	
READING:	*1ST*		*2ND*	
	YES	*NO*	*YES*	*NO*
DAVIS				
LAMPE				
RUETTEN				
BARTZ				
LICHT				
SMITH				
SCHMID				
WETZEL				
ROMLEIN				
MAYOR MCFARLAND				
TOTAL				

ADOPTED _____

_____

CITY CLERK

APPROVED _____

_____

MAYOR