

# PUBLIC WORKS COMMISSION MEETING AGENDA

# TUESDAY, DECEMBER 10, 2024 AT 5:30 PM

## COUNCIL CHAMBERS, SECOND FLOOR, MUNICIPAL BUILDING - 106 JONES STREET, WATERTOWN, WI 53094

Virtual Meeting Info: https://us06web.zoom.us/join Meeting ID: 225 151 7335 Passcode: 589577 One tap mobile +16469313860

https://us06web.zoom.us/j/9178580897?pwd=eUOpCUyvIV65zIPMYImMdPU1LVLx5I.1

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 minutes from November 20, 2024
- B. Public Works minutes from November 12, 2024

## 4. **BUSINESS**

- <u>A.</u> Review and take possible action: Wastewater Facilities Plan approval and public hearing date
- B. Review and take possible action: Approve and verify the remaining funding breakouts for the private lead service replacement program in census tracts (CT) CT1002, CT9620, and CT City Wide
- <u>C.</u> Review and take possible action: Hire Mead Hunt to provide engineering design and construction related services for the biosolids dryer project for \$344,000
- D. Review and take possible action: Approve the purchase of a Combination Sewer Cleaner Truck
- E. Review and take possible action: Hire Strand Associates to complete phase 1 route refinement and preliminary design for the West Side Sanitary Sewer Interceptor project for \$28,500
- F. Discussion: Storm Water Utility billing overview
- G. Review and take possible action: Hart Street Drainage Study
- H. Review and take possible action: Modified US Cellular Lease Agreement for 106 Jones Street Communications Tower

# 5. ADJOURNMENT

Persons requiring other reasonable accommodations for any of the above meetings, may contact the office of the City Clerk at <a href="mailto:mdunneisen@CityofWatertown.org">mdunneisen@CityofWatertown.org</a>, 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 Meeting – Special Agenda Wednesday, November 20, 2024

Attendees: Alders Board, Smith, Bartz, and Wetzel and Commissioner Thompson.

Also present: Mayor Emily McFarland, City Attorney Steve Chesebro, DPW Director/Engineer Andrew Beyer, Parks and Recreation Director Kristine Butteris, Alders Davis and Lampe.

1. Call to Order – Alderman Board called the meeting to order at 4:30 p.m.

Roll call of members, with all Public Works Commission members present.

- 2. Business
  - A. Convene into closed session per 19.85(1)(g) to confer with legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved (Riverside Park Restroom)

# Motion by Wetzel, supported by Thompson to move into closed session. Motion carried unanimously by roll call vote.

B. Reconvene to open session.

# *Motion by Thompson, supported by Bartz, to return to open session. Motion carried unanimously.*

2. Adjournment Motion by Wetzel, supported by Bartz, to adjourn. Motion carried.

Meeting concluded at 5:28 p.m.

Respectfully submitted by Steve Board, Chair.

# Public Works Commission Meeting Tuesday, November 12, 2024

Those present: Alders Board, Bartz, Smith and Wetzel, and Commissioner Thompson. Also present: Water Systems Manager Peter Hartz, Stormwater Project Manager Maureen McBroom, Public Works Director/Engineer Andrew Beyer, Ariana Schmidt from Ehlers, Katie Hassig from Applied Technology, and Zach Goodrow.

- 1. Call to Order Meeting was called to order by Chair Steve Board at 5:30 p.m. with a quorum present.
- 2. Comments and suggestions from citizens present. None given.
- 3. Review & Approve Minutes
  - a. Public Works Minutes from October 22, 2024

# Motion by Smith supported by Wetzel to approve the minutes of the October 22, 2024, Public Works Commission. Motion carried.

- 4. Business
  - a. Update, no action required, Stormwater Program

Stormwater Project Manager Maureen McBroom provided an update of six projects:

- i. Riverside Creek Management System
- ii. New Stormwater BMPs/Development Projects (5 total)
- iii. Watertown Waterways Improvement Program (WWIP) (Water Quality Trading). First practice completed for phosphorous reduction.
- iv. City-wide flood control plan.
- v. Wisconsin Emergency Management Pre-Disaster Flood Resilience Grant Opportunity.
- vi. Downtown Main Street reconstruction Project: Green Stormwater Infrastructure (added green infrastructure).

No action taken.

 Review and Take Possible Action: Summary of Phase 2 findings of water rate application prepared by Ehlers and submitted to PSC.
 Peter Hartz and Ariana Schmidt presented the findings of the water rate study. Discussed water rates per Public Service Commission. Based on PSC guidelines would expect rates to increase 16.22%, and average of \$72.67 average increase/resident/year.

# Motion by Bartz, supported by Thompson, to submit application to the PSC for test year 2025 at the benchmark ROR. Motion carried unanimously.

c. Review and Discuss: Presentation of final Wastewater Facilities Plan Engineering Report by Applied Technologies.

Katie Hassig, P.E., Applied Technologies, presented the final Wastewater Facilities Plan.

The 20-year facility plan, as required by the DNR, would require no new structures, equipment replacement, and a phased approach.

- Near-term (two years), has an estimated total expense of \$9,098,000.
- Mid-term projects have an estimated expense of \$10,261,000.
- Long-term projects have an estimated expense of \$14,063,000.

No increase in rates is anticipated because of Near-Term projects. Total budget for the new 20-year plan is \$34,000,000.

Recommendation: Approve implementation of plan recommendations as presented in option(s).

- Option A Do nothing.
- Option B Approve breaking out immediate process needs using cash investments from the identified Near-Term improvements to include: Engineering design and construction related services for Influent screens, grit removal system, ultraviolet disinfection, and centrifuge controls following the schedule below:
  - Verify DNR review is not needed for the immediate equipment upgrades – November 2024
  - Begin Design November 2024
  - Bidding December 2025
  - Award of Contract January 2025
  - Begin Construction March 2025
  - Final Completion/Startup of Facilities April 2026
- Option C Approve the remaining process improvements identified as Near-Term improvements following the schedule below.
  - Conduct public hearing November 2024
  - Submit Facility Plan to DNR December 2024
  - DNR Approval of Facilities Plan March 2025
  - Near Term Improvements
  - Begin Design January 2025
  - Submit Plans and Specifications to the DNR September 2025
  - Bidding November 2025

- DNR Approval of Plans and Specifications December 2025
- Submit Clean Water Fund Loan Application December 2025
- Award of Contract January 2026
- Begin Construction March 2026
- Final Completion/Startup of Facilities May 2027
- Option D –Approve the wastewater facilities plan improvements identified to include all immediate, near, mid- and long-term process needs following the schedule below:
  - Conduct public hearing November 2024
  - Submit Facility Plan to DNR December 2024
  - DNR Approval of Facilities Plan March 2025
  - Near Term Improvements
  - Begin Design January 2025
  - Submit Plans and Specifications to the DNR September 2025
  - Bidding November 2025
  - DNR Approval of Plans and Specifications December 2025
  - Submit Clean Water Fund Loan Application December 2025
  - Award of Contract January 2026
  - Begin Construction March 2026
  - Final Completion/Startup of Facilities May 2027
  - Mid Term improvements January 2028
  - Long Term improvements January 2030
- Option E approve separate plan identified and discussed as follows:
  - Commissioners to include language of action item.
- d. Review and Take Possible Action: Approve Wastewater Facilities Plan Implementation option(s) as discussed.
  Motion by Bartz, supported by Wetzel, to proceed with Option D, with the near term and immediate work to be self-funded; and the midterm and long-term project funding to be TBD.
  Motion carried unanimously.
- 5. Adjournment

# Motion by Bartz, supported by Smith to adjourn. Motion carried.

# Meeting adjourned at 7:27 p.m.

Respectfully submitted by Steve Board, Chair.



# Water Systems

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

To: Chairman Board and members of the Public Works Commission From: Peter Hartz – Water Systems Manager December 10, 2024

Re: December 10, 2024, Public Works Commission agenda item

### Water Systems:

Review and take possible action: - Wastewater Facilities Plan approval and public hearing date

#### Background:

- On June 13, 2023, this commission approved hiring Applied Technologies to update the wastewater facilities plan as our previous plan was outdated, and we had a mandate from WDNR to address influent BOD loadings to the wastewater treatment plant as we were noted to be consistently over the design loadings.
- On May 14, 2024, with the presentation of the Compliance Maintenance Annual Report, this commission
  was updated on the progress with our wastewater facilities plan, it was delayed due to the sensitive nature
  of working with future growth projections from some businesses in the city.
- On November 12, 2024, this commission was presented with the Wastewater Facilities Plan and approved moving forward with the presented option D:

<u>Option D</u> – Approve the wastewater facilities plan improvements identified to include all immediate, near, mid and long term process needs following the schedule below:

Conduct public hearing – December 2024, Submit Facility Plan to DNR – December 2024, DNR Approval of Facilities Plan – March 2025, Near – Term Improvements, Begin Design – January 2025, Submit Plans and Specifications to the DNR – September 2025, Bidding – November 2025, DNR Approval of Plans and Specifications – December 2025, Submit Clean Water Fund Loan Application – December 2025, Award of Contract – January 2026, Begin Construction – March 2026, Final Completion/Startup of Facilities – May 2027, Mid – Term improvements – January 2028, Long – Term improvements – January 2030

Included with the packet is the executive summary of the Wastewater Facilities Plan, note on page 1-9 the following: It is estimated that the current utility rates are sufficient for the additional revenue requirements for the proposed Near-Term project. The final cost allocation and user charge rates will be determined from a user charge study after final project costs, CWFP impacts, and method of financing are determined.

Budget Goal: Aligns with investments and infrastructure planning.

*Financial Impact:* Near-term improvements estimated at \$9,098,000, Mid-term improvements estimated at \$10,261,000, and Long-Term improvements estimated at \$14,063,000.

**Recommendation:** Approve The Wastewater Facility Plan.

Sincerely, Peter Hartz

Water Systems Manger

# Chapter 1 EXECUTIVE SUMMARY

The City of Watertown owns and operates a 5.2 million gallon per day (mgd) advanced wastewater treatment plant (WWTP) that serves all property within the City limits and discharges treated effluent to the Rock River. The WWTP's previous Facility Plan was completed in 2000, and a new wastewater treatment plant was constructed in 2004. The City is currently meeting its permitted discharge standards; however, plant loadings have begun to exceed design values outlined in the previous Facility Plan. The City authorized this Facility Plan to evaluate wastewater treatment alternatives for the planning area over a 20-year period (2027 through 2047) for the following reasons:

- 1. Influent loadings to the WWTP are exceeding the plant's rated capacity.
- 2. Existing treatment plant components are becoming obsolete due to age and condition.
- 3. The existing plant has reached the end of its 20-year design life.
- 4. To provide a plan for adequate capacity for future growth over the next 20 years.

The population of the City of Watertown was 24,357 in 2022 and is projected to grow to 27,492 by the year 2047. Waste load projections were developed based on the population growth and waste loads from major industrial dischargers. Figure 1-1 through Figure 1-5 present the existing and projected flows and pollutant loadings at the WWTP. These figures show that the existing plant is currently at 90-110% of rated plant capacity for BOD, TSS and TKN loading and will increase to 110-130% of its design capacity by the year 2047.

The WWTP has consistently met current effluent limits in its discharge permit. This excellent treatment performance is due to the diligence and hard work of the plant's operating staff. However, as the existing facilities and equipment age, it will be difficult to meet increasingly stringent discharge limits in the future.

An analysis of infiltration and inflow (I/I) indicated that the Watertown WWTP is experiencing excessive inflow. The City is drafting a new ordinance to require disconnection of drain tiles, and the WWTP will continue its current regime for handling and repairing I/I sources.





FIGURE 1-1 Annual Average Plant Flows

FIGURE 1-2 Annual Average BOD Loading







FIGURE 1-3 Annual Average TSS Loading

FIGURE 1-4 Annual Average TKN Loading







# FIGURE 1-5 Annual Average TP Loading

Annual average design flows and loadings for the year 2047 were calculated by estimating residential and industrial flows and loadings. Design year flows were determined to remain less than the rated capacity of the WWTP. Therefore, the existing design flows will be used for capacity analysis and equipment sizing. Current peaking factors were used to calculate design maximum month, peak week, and peak day loadings. Results are summarized in Table 1-1.

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	Flow (mgd)	BOD (lb/d)	TSS (lb/d)	NH3-N (lb/d)	TKN (lb/d)	TP (lb/d)
Annual Average	5.2	8,300	7,100	750	1,100	180
Maximum Month	8.8	13,900	15,000	1,000	1,400	400
Peak Week	10.4	16,300	19,500	1,300	1,900	550
Peak Day	24	29,100	44,500	2,000	2,800	710
Peak Hour	27	-	-	-	-	-

	Table 1-1			
<b>Influent Flows and</b>	Loadings,	Design	Year	2047

Evaluations of selected facilities at the Watertown WWTP were performed, focusing on the areas identified at the Facility Plan Kickoff meeting and subsequent update meetings. The capacities of the facilities were compared to the current wasteloads and projected design year 2047 waste loads. Deficiencies and shortfalls were discussed, and alternatives for upgrading the existing facilities were identified and evaluated via present worth economic analyses.

A majority of the recommended plan includes replacing in kind the aging equipment that has reached the end of its 20-year design life. Upgrades to select treatment process will be completed to allow the Watertown WWTP to handle the projected flows and loadings for the design year 2047. The plan is outlined in a phased approach, with required upgrades being separated into near-term (0-2 years), mid-term (3-5 years), or long-term (5-10 years) improvements. These improvements are described below and summarized in Table 1-2 through Table 1-4. The phase timelines and specific unit process improvements can be modified by the City based on facility needs and equipment condition.

Mid-term improvements will be made to the Raw Sewage Pump Station with provisions to operate a sixth raw sewage pump using a portable standby generator. The primary influent force mains will be equipped with electrically actuated valves for remote flushing of grit buildup in either pipe. Long-term improvements include the replacement of the raw sewage pumps in kind.

The Preliminary Treatment facilities will be upgraded in the near term with replacement fine screens, grit removal and grit washing equipment rated for the same hydraulic capacity as the existing systems.

Near-term Primary Treatment improvements include replacement of the primary sludge and scum pumps. Mid-term improvements include the addition of primary sludge line cleanouts to control vivianite buildup in the pipelines, and replacement of the mixers. The primary scum well will also be modified to reroute the subnatant to the headworks of the WWTP to avoid the buildup of fats, oils, and grease downstream of the Primary Clarifiers. Long-term improvements include replacing the primary clarifier mechanisms and drives.

The Secondary Treatment facilities will continue utilizing the existing activated sludge system, but the aging blowers and fine bubble diffusers will be upgraded in the mid-term to accommodate the increase in waste loads at the plant and maintain compliance with effluent limits. The Secondary Splitter Structure will be upgraded with isolation gate valves to allow the two treatment trains to operate in parallel, and the aging chemical feed system will be replaced. Chemical phosphorus removal will continue to be the primary system used to meet effluent total phosphorus limits throughout the planning period. Long-term improvements include replacing the secondary sludge pumps, mixers, and final clarifier mechanisms and drives. The ultraviolet disinfection system will be replaced in the near term to match the disinfection capacity with the 27 mgd hydraulic capacity of the existing system. A structural analysis of the cascade aerator and effluent outfall will be completed as part of the mid-term improvements to ensure the structures remain in good condition throughout the planning period.

Mid- and long-term improvements to the Biosolids Handling facilities will include replacing the aging boiler, centrifuges, sludge grinders, polymer system, and sludge discharge conveyors. The anaerobic digesters date from the 1970s, so a structural assessment of the digesters and digester covers will be completed to ensure they will remain in good condition through the planning period. Other improvements include replacing the anaerobic digester mixers, waste gas burner and ancillary gas safety equipment.

Several miscellaneous upgrades will be made throughout the wastewater treatment facilities, including the near-term replacement of the transformer near the Raw Sewage Pump Station, standby power generator and automatic transfer switch, instrumentation and control systems, fire alarm, gas monitoring system, and HVAC systems. The site's storm water pumps will be replaced in kind within the planning period.

Unit Process	No.	Size/Capacity
Preliminary Treatment		
Fine Screens	2	13.5 mgd, each
Grit Removal System Upgrades	1	18-ft Dia, 20-ft depth
Primary Treatment		
Primary Sludge and Scum Pumps	4	54 gpm, each
Disinfection		
UV Disinfection System	1	27 mgd
Biosolids Treatment		
Polymer System	2	94 lb/hr, each
Miscellaneous Improvements		
Transformers/Electrical Service Upgrade	1	N/A
SCADA Improvements	1	N/A
Gas Monitoring System Replacement	1	N/A
Fire Alarm System Replacement	1	N/A

# TABLE 1-2 Summary of Near-Term Plant Improvements



Unit Process	No.	Size/Capacity
Raw Sewage Pumping		
Auxiliary Generator Upgrades	1	N/A
Primary Treatment		
Scum Well Upgrades	1	N/A
Scum Well Pump	1	250 gpm
Scum Well Mixer	1	N/A
Secondary Treatment		
Secondary Splitter Upgrades	1	N/A
Aeration Basin Concrete Rehabilitation	1	N/A
Aeration Blowers*	3	3,000 scfm, each
Fine Bubble Diffusers*	1	N/A
Chemical Feed Pumps	3	5-30 gpm, each
Chemical Storage Tank	1	10,000 gal
Biosolids Treatment		
Primary Sludge Line Cleanout Improvements	1	N/A
Anaerobic Digester Structural Assessment	1	N/A
Centrifuges	2	1,500 lb/hr, each
Sludge Grinders	2	170 gpm, each
Sludge Discharge Conveyor	1	N/A
Miscellaneous Improvements		
Cascade Aeration Assessment	1	N/A
Effluent Outfall Assessment	1	N/A
Generator/ATS	1	N/A
HVAC System Improvements*	1	N/A

# TABLE 1-3 Summary of Mid-Term Plant Improvements



Dual Fueled Boiler

Waste Gas Burner

Storm Water Pumps

**Miscellaneous Improvements** 

Summary of Long-Term Pl	<del>4</del> Iant Imp	provements
Unit Process	No.	Size/Capacity
Raw Sewage Pumping		
Raw Sewage Pumps	5	4,700 gpm, each
Primary Treatment		
Primary Clarifier Mechanisms/Drives	2	85-ft Dia, 12-ft SWD
Secondary Treatment	·	
Anoxic Mixers	3	1,500 gpm, each
Mixed Liquor Recycle Pumps	3	2,600 gpm, each
Return Sludge Pumps	3	2,300 gpm, each
Waste Sludge Pumps	2	380 gpm, each
Final Scum Pump	1	150 gpm, each
Final Clarifier Mechanisms/Drives	2	90-ft Dia, 16-ft SWD
<b>Biosolids Treatment</b>		
Anaerobic Digester Mixers	5	9,000 gpm, each

1

1

2

3,400 MBh

7,900 scf/hr

1,670 gpm, each

TABLE 1 /

The estimated capital costs and debt service for the three projects are shown in Table 1-5, with the debt service estimated using the September 2024 Clean Water Fund (CWF) interest rate of 2.365%.

## **Table 1-5 Debt Service Estimate**

Project	Project Cost	Loan Amount	Annual Principal and Interest Payment
Near-Term Improvements	\$9,098,000	\$8,188,000	\$519,000
Mid-Term Improvements	\$10,261,000	\$9,235,000	\$585,000
Long-Term Improvements	\$14,063,000	\$12,657,000	\$802,000

It is estimated that the current utility rates are sufficient for the additional revenue requirements for the proposed Near-Term project. The final cost allocation and user charge rates will be determined from a user charge study after final project costs, CWFP impacts, and method of financing are determined

The steps and anticipated schedule for implementing the recommended plant are outlined below:

Conduct Public Hearing	December 2024
Submit Facility Plan to DNR	December 2024
DNR Approval of Facility Plan	March 2025
Near-Term Improvements	
Begin Design	January 2025
Submit Plans and Specifications to the DNR	September 2025
Bidding	November 2025
DNR Approval of Plans and Specifications	December 2025
Submit Clean Water Fund Application	December 2025
Award of Contract	January 2026
Begin Construction	March 2026
Final Completion/Startup of Facilities	May 2027
Mid-Term Improvements	January 2028
Long-Term Improvements	January 2030

## NOTICE OF PUBLIC HEARING

Pursuant to Wisconsin Department of Natural Resources NR 110.09(4), notice is hereby given by the Common Council of the City of Watertown, Wisconsin, that a public hearing will be held on the 17th day of December, 2024, in the Council Chambers of the Municipal Building, 106 Jones Street, Watertown, Wisconsin, at 7:00 p.m., or shortly thereafter, to consider the adoption of a facility plan for the City of Watertown Wastewater Treatment Plant. The proposed facility plan outlines potential improvements to the Wastewater Treatment Plant to occur over the next several years.

A copy of the facility plan is available for public review during normal business hours, Monday through Friday, between 8:00 a.m. and 4:30 p.m. in the Finance Department of City Hall, 106 Jones Street, Watertown, WI 53094. A copy of the facility plan will also be available at the public hearing. All persons wishing to be heard are invited to attend. Written comments may be submitted to the City of Watertown Wastewater Division at phartz@watertownwi.gov.

# CITY OF WATERTOWN Andrew Beyer, P.E. Director of Public Works/City Engineer

PUBLISH:

December 3, 2024 and December 10, 2024

(BLOCK AD)



Water Systems

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

To: Chairman Board and members of the Public Works CommissionDecember 10, 2024From: Peter Hartz – Water Systems Manager

Re: December 10, 2024, Public Works Commission agenda item

### Water Systems:

*Review and take possible action*: Approve and verify funding breakouts for the private lead service replacement program in census tract (CT) CT1002, CT9620, and CT City Wide remaining.

Background:

- In 2020, the city set a goal of replacing all the lead services by 2030. The city started in 2021, backing up projects in 2018, 2019, 2020 and replacing all the partial services that were left while doing the public side water service. A total of 150 were replaced in 2021, 456 replaced in 2022, and 102 replaced in 2023. Over those years a total of 708 lead services were replaced. At the end of 2023 the Department of Natural Resources exhausted the private lead service replacement funds. New opportunities were sought by the city which included the Bipartisan Infrastructure Law-funded Lead Service Line (LSL) Replacement funding which was incorporated into the regular Safe Drinking Water Loan Program (SDWLP) State Fiscal Year (SFY) 2025 funding cycle.
- May 14, 2024 the PWC is provided an update regarding the submittal of applications for funding the replacement of all remaining lead water services in the city of Watertown. Watertown chooses to include the entire city and all remaining lead services with a completion goal of 3 years.
- November 4, 2024 DNR issues press release and shares the statewide project ranking for the SFY 2025 private lead service replacement funding, Watertown ranks very well and will be funded for a total of shared project rankings for the private lead service replacement program. This breakdown is very close to the estimated PF/loan calculations prepared by Strand. All costs not funded through private or remaining cost (public) PF should come in the form of a 0.25% interest loan. All our applications received at least 50% private PF with the breakdown as follows:

Census	Project	LSL	Requested	Private	Private	Allocated	Private Side	Remaining	Remaining	Remaining	Remaining
Tract	#	PERF	Costs	Costs	PF %	Private PF	Loan	Costs	Cost PF %	Cost PF	Costs Loan
(CT)		Score								Allocation	
1002	5/39-	307	\$3 334 100	\$3 334 100	100%	\$3 33/ 100	¢0	\$0	10%	\$0	0.2
1002	0400	007	ф0,00 <del>4</del> ,100	φ0,00 <del>4</del> ,100	10070	φ0,00 <del>4</del> ,100	φυ	φυ	1070	φU	φU
	05										
9620	5439-	276	\$1,771,000	\$1,771,000	75%	\$1,328,250	\$442,750	\$0	10%	\$0	\$0
	07										
City-	5439-	274	\$8,915,700	\$3,415,698	50%	\$1,707,849	\$1,707,849	\$5,550,002	10%	\$550,000	\$4,950,002
Wide	08										
	1	Total	\$14.020.800	\$8.520.798		\$6.370.199	\$2.150.599	\$5.550.002		\$550.000	\$4.950.002
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• November 15, 2024 – the water department mails out individual letters to all customers who have a tead, galvanized or unknown water service in the City of Watertown, over 1,078 letters are sent.

Regarding the PSC program requirements, the attached final decision lays all of that out. This program, which mirrors City Code 512-87 (Amd. Ord 20-27) will allow the City to offer eligible customers a grant to pay for up to 50% of the cost to replace the private-side LSL, to a maximum grant amount of \$5,000. Any cost above this amount will be provided in the form of a loan to the property owner over a 10-year period at a 2.5% interest rate to pay back the SDWLP loan.

Any significant changes to the PSC's program must first receive approval from the PSC. Because we now know exactly how much funding the city will receive for each of the three applications, the actual expenses can be somewhat narrowed down, as we anticipated the total grant cost to be 50% of \$7,000,000 or \$3,500,000 over three years. However, until the project is Bid out and awarded, we won't know actual costs and how the various WDNR PF allocations will shake out. This might have to involve a conversation with both the PSC to see if their approval is needed based on the WDNR PF allocations or upcoming Bid results.

The total number of private LSLs to be replaced is 1,109. CT 1002 contains 433 private LSLs and will be provided 100% PF from the WDNR, so no loan is expected to be needed for property owners. CT 9620 contains 230 private LSLs and will be provided with 75% PF from the WDNR. The remaining 25% is expected to be funded through the PSC program using water rates, so no loan is expected for the property owners. The remaining 50% is expected to be funded through the PSC program using the PSC program using water rates, so no loan is expected for the WDNR. The remaining 50% is expected to be funded through the PSC program using water rates, so no loan is expected for the WDNR. The remaining 50% is expected to be funded through the PSC program using water rates, so no loan is expected for the property owners. There are 440 public LSLs in the City, which are categorized as "Remaining Costs" and will be provided 10% PF from the WDNR. The remainder of the costs will be taken out as a loan from the WDNR.

Actual costs won't be known until the project is Bid out so the PF percentages can be allocated against an actual cost.

*Financial Impact:* This project was included in the 2025 capital improvement budget that was approved on 11/19/2024, the approved project funding source was the SDWLP, new debt must be recuperated from the water customers following City of Watertown City Code 512-87 (Amd. Ord 20-27).

<u>Recommendation</u>: Support and approve funding allocations and sources for the 2025 Private and Public Lead Service Replacement City-Wide Program.

Sincerely, Peter Hartz

Water Systems Manger

# AUTHORIZATION TO REPLACE PRIVATE LEAD SERVICE LINE

(OR PRIVATE GALVANIZED STEEL SERVICE LINE DOWNSTREAM OF A KNOWN LEAD SERVICE

## Temporary Easement for Construction, and Hold Harmless Agreement

The owner of the property at the physical address below OWNER NAME ("Owner") grants to Watertown Utilities and its employees, agents, and contractors and to the City of Watertown building inspector and his or her designees ("City building inspector"), the right to enter and access the following real property: PROPERTY ADDRESS and the improvements thereupon ("Property") for the purpose of removing and replacing the private water service line at the Property if it is determined to be either lead or galvanized steel and downstream of a lead water service. Additionally, the Owner grants to Watertown Utilities and its employees, agents, and contractors and to the City building inspector and his or her designees the right to enter and access the Property prior to engaging in any removal or replacement activity in order to verify that the private water service, or a portion thereof, is made of lead or is galvanized steel and has been known to have had contact with a public lead service.

The Owner and Watertown Utilities agree to the following:

(1) Compliance with Laws. All work performed on the Property by Watertown Utilities or its employees, agents, or contractors, shall be conducted in compliance with all federal, state and local laws, orders, regulations, and ordinances.

(2) Scope of Work. The Scope of Work shall be set forth in the Narrative Description of Private Lead/Galvanized Steel Service Replacement.

(3) Representative on Site. Owner, or Owner's tenant who must be at least 18 years old, will be at the Property on the date and at the time scheduled for the water service line replacement.

(4) Hours. Watertown Utilities and the City building inspector shall have access to the property as needed to perform and inspect the work during regular business hours after lateral installation.

(5) Insurance. Watertown Utilities shall require its contractors and subcontractors to maintain liability insurance coverage which includes Watertown Utilities, the City of Watertown, their employees, and design consultant, as additional insureds under the policy.

HOLD HARMLESS, WAIVER OF LIABILITY, ASSUMPTION OF RISK AND (6) INDEMNIFICATION OF THE CITY OF WATERTOWN. In consideration for participation in the 2025-2027 Lead Water Service Line Replacement Program provided by the City of Watertown, at reduced cost, I, the undersigned, in full recognition and appreciation of any dangers and hazards inherent in lateral replacement and other necessary activities inherent to this type of construction on private property to which myself, and those present on my property will be exposed to, do hereby voluntarily agree to assume all of the risk and responsibilities surrounding my property, and further, I do for myself, my heirs, and personal representative(s), hereby agree to defend, hold harmless, indemnify, release and forever discharge the City of Watertown, its affiliated, officers, officials, departments, committees, employees, agents, representatives, successors, assigns and volunteers from and against any and all claims, demands, actions or causes of actions of any sort on account of my participation, including but not limited to damage to personal property, personal injury, or death which may result. I further understand that any costs incurred for medical treatment or illness or injury resulting from the lateral replacement construction on my property shall be my sole and exclusive responsibility.

I, the undersigned, agree and intend that this Release, Waiver of Liability, Assumption of Risk and Indemnification Agreement extends to all acts, failures, negligence or otherwise and is intended to be as broad and inclusive as is permitted by the laws of the State of Wisconsin in which the activities are being conducted and that if any portion thereof is held to be invalid, it is agreed that the balance, notwithstanding, shall continue in full legal force and effect.

I have read this Release, Waiver of Liability, Assumption of Risk, and Indemnification Agreement, and fully understand its terms. I understand that I have given up substantial rights by signing it and intend by my signature(s) for it to be a complete and unconditional release of any and all risk and liability to the greatest extent allowed by law.

(7) Duration. The temporary construction easement shall be effective as of the date indicated below by Owner and shall remain in effect until completion of the construction or upon written request for cancellation and acceptance by both parties. All other terms of this agreement shall remain in effect, including but not limited to those outlined in section 6 above.

(8) Conformed Copies Valid. Owner shall return this signed agreement in the enclosed, selfaddressed, postage paid envelope to Watertown Utilities at PO BOX 477 Watertown, Wisconsin by no later than two weeks (14 days) from the date of receipt of this agreement.

Today's date:

Please sign below before returning this form to Watertown Utilities.

Contion	1	140 m	р
Secuon	4,	nem	D.

I, OWNER NAME		am the owner of the
property atPROPERTY ADDRE	SS	
Watertown Utilities:	Owner:	
Print Name: Pete Hartz	Print Name <u>:</u>	
Sign: Pete Hartz	Sign:	
Title: Watertown Water Systems Manager	Date:	
	Phone Number:	
	Email Address:	

This form is to obtain your consent for Watertown Utilities and its contractors to replace your private water service line, due to the determination that the service line is made of either lead or galvanized steel that is downstream of lead service. We believe your water service line is made of lead or galvanized steel, which pose a significant health threat.

Watertown Utilities is engaged in a program to replace lead or galvanized steel water service lines in the City of Watertown for the 2025-2027 lead service reconstruction areas. Watertown Utilities plans to replace all public and private side water service lines believed to be made of lead or galvanized steel. The public side of the water service extends from the water main to the curb stop, also called the shut-off valve. Ordinarily, the privately-owned side of a water service line, meaning the portion of the line that extends from the curb stop to the water meter inside a property, is the sole responsibility of the property owner. However, starting in 2025 and continuing through the end of 2027, Watertown Utilities will receive a grant from the Wisconsin Department of Natural Resources (DNR) to aid in the expense of replacing the privately-owned side of lead or galvanized steel water service lines. Additionally, Watertown Utilities has an existing program with the Public Service Commission of Wisconsin (PSCW) to privide a grant of no more than one-half of the customer's replacement cost up to a maximum of \$5,000. Any remaining amounts due after allocation of the DNR and PSCW grants will be financed with the property owner over a 10-year period with an annual interest rate of 2.5%.

The expense of removing and replacing your private water service line, if determined to be made of lead or galvanized steel, will be wholly or partially covered by the DNR and PSCW grants if you authorize Watertown Utilities to arrange for the removal and replacement and provide Watertown Utilities, its agents and contractors, the City of Watertown building inspector, and the building inspector's designees, with access to your property for that purpose. Moreover, if it is determined that the location of your water meter or your connection to the public water system, or both, must be moved to comply with City ordinances, the work can be done in conjunction with the water service line removal and replacement and the expense will be covered by the DNR grant.

You must sign and submit this agreement for Watertown Utilities to replace your water service line. You own the water service line, and Watertown Utilities will replace it with your consent.

# Narrative Description of Private Lead/Galvanized Steel Service Replacement SCOPE OF WORK



- 1. Owner hereby authorizes Watertown Utilities, its employees, agents, and contractors, and the City building inspector and his or her designees, to enter upon the Property to do the following:
  - a. Ascertain whether the private water service line is made of either lead or galvanized steel that is downstream of a known lead service.
  - b. If the private water service line is made of lead or galvanized steel, to remove and replace the water service line with copper piping from the curb stop up to and including the water meter set in the basement.
  - c. If deemed necessary, relocate the water meter, or relocate the connection to the public water system, or both, to conform to City ordinances.
- 2. The replacement of the water service line is expected to be conducted by excavating at the curb stop, pulling or boring new water service piping, penetrating through the basement wall or floor, installing inlet and outlet valves and connecting the meter setting to the building's internal plumbing. A hole will be made in the basement floor or wall to accept the water service line. If this pulling and boring technique cannot be used, as determined by Watertown Utilities or its employees, agents, or contractors, an open cut excavation will be made from the curb stop to the foundation wall in which water service piping will be placed. From there, the replacement shall be conducted by penetrating through the basement wall or floor, installing inlet and outlet valves and connecting the meter setting to the building's internal plumbing. The service line will be grounded in compliance with applicable building codes.
- 3. Extraordinary physical or other structural obstacles, such as porches, stairs, walls, private walks, or fences that must be removed will be restored "in-kind" if deemed necessary to perform the private water service line replacement.
- 4. Watertown Utilities, its employees, agents, and contractors, shall restore the exterior work site to its prereplacement condition as follows:

- a. Restoration of the Owner's side of the private water service line is limited to the excavation and impacted lawn areas. Impacted lawn areas shall be backfilled to include no less than 6" of topsoil.
- b. The hole in the basement wall or floor made to accept the water service line shall be patched within three days.
- 5. Owner shall be responsible for the restoration or repair of any removed non-structural obstacles, such as, but not limited to landscaping, trees, shrubs, and flower beds.
- 6. Watertown Utilities, its employees, agents, and contractors, shall keep the Property free of liens resulting from the private lead or galvanized steel service line replacement activities.
- 7. Watertown Utilities anticipates that the excavation for the pulling and boring technique will be six (6) feet by eight (8) feet at the curb stop. If open cut excavation must be used, the excavation will be approximately three (3) five (5) feet wide from the curb stop to the foundation wall.
- 8. The owner will continue to own the water service materials being replaced by the City between the curb stop and the water meter & in the home, and shall continue to own/be otherwise responsible for the water service materials beyond the curb stop & in the home
- 9. Contractors of Watertown Utilities engaged to complete the replacement of the private water service line will televise the private sanitary sewer lateral before completing any construction activities on-site and will televise the private sanitary sewer lateral following the completion of the private water service replacement. Owner has right to view both the pre-construction and post construction televising of their private sanitary lateral within 10 days of the completion of the private water service replacement.

Unless Owner notifies Watertown Utilities of any damage to the private sanitary sewer within 10 days after reviewing the televising, Owner hereby releases and holds harmless Watertown Utilities, its employees, the City of Watertown, its employees, and the City building inspector and his or her designees, from any and all damages, losses or injuries caused by or which relate to the replacement of the private water service in any way whatsoever, including damages or losses which were caused, in whole or in part, by negligence.

SFY 2025 Lead Service Line R	eplacemer	it Prograi	m draft Funding Lis	st								11/04/2024	
		LSL PERF		Census Tract or	Requested	Private Side	Private Side	Private Side PF	Private Side	Remaining	Remaining	Remaining Cost	Remaining Costs
M unicipality	Project #	Score	Project Manager	Municipal?	Costs	Costs	PF %	Allocation	Loan \$s	Costs	Costs PF %	PF Allocation	Loan \$s
WATERTOWN, CITY OF	5439-09	307	Liz Higgins	CT	\$3,334,100	\$3,334,100	100%	\$3,334,100	0\$	\$0	10%	0\$	\$¢
MANITOWOC, CITY OF	5191-19	294	Blythe Cassidy	CT	\$5,574,800	\$5,474,800	100%	\$5,474,800	\$0	\$100,000	20%	\$20,000	\$80,000
GREEN BAY, CITY OF	5331-32	285	Kate Leja-Brennan	CT	\$990,000	\$990,000	75%	\$742,500	\$247,500	\$0	20%	\$0	\$0
TWO RIVERS, CITY OF	4920-51	281	Ben Aerts	CT	\$1,977,536	\$679,214	100%	\$679,214	\$0	\$1,298,322	20%	\$259,664	\$1,038,657
KENOSHA, CITY OF	4825-09	280	Michelle Brietzman	CT	\$7,700,000	\$4,235,000	100%	\$4,235,000	\$0	\$3,465,000	20%	\$693,000	\$2,772,000
WATERTOWN, CITY OF	5439-07	276	Liz Higgins	CT	\$1,771,000	\$1,771,000	75%	\$1,328,250	\$442,750	0\$	10%	\$0	\$0
ASHLAND, CITY OF	4759-29	275	Casey Sweeney	Municipal	\$843,680	\$625,808	100%	\$625,808	\$0	\$217,872	55%	\$119,830	\$98,043
FOND DU LAC, CITY OF	5142-17	275	Erika Mills	CT	\$1,155,000	\$1,155,000	75%	\$866,250	\$288,750	\$0	20%	\$0	\$0
WATERTOWN, CITY OF	5439-08	274	Liz Higgins	Municipal	\$8,915,700	\$3,415,698	50%	\$1,707,849	\$1,707,849	\$5,500,002	10%	\$550,000	\$4,950,002
WAUSAU, CITY OF	4930-22	268	Kate Leja-Brennan	CT	\$14,959,156	\$7,768,218	100%	\$7,768,218	\$0	\$7,190,938	15%	\$1,078,641	\$6,112,297
RACINE, CITY OF	4887-22	267	Sarah Bolitho	Municipal	\$3,275,000	\$1,512,500	100%	\$1,512,500	\$0	\$1,762,500	45%	\$793,125	\$969,375
MILWAUKEE, CITY OF <sup>1</sup>	4851-47	263	Ryan Atkinson	Municipal	\$34,220,000	\$12,320,000	100%	\$12,320,000	\$0	\$21,900,000	55%	\$7,191,843	\$14,708,157
OSHKOSH, CITY OF	4874-19	261	Erika Mills	CT	\$2,000,000	\$1,760,000	100%	\$1,760,000	\$0	\$240,000	15%	\$0	\$240,000
FOND DU LAC, CITY OF	5142-18	260	Erika Mills	CT	\$1,332,100	\$1,332,100	100%	\$1,332,100	\$0	\$0	20%	\$0	\$0
THORP, CITY OF	4922-19	258	Michelle Brietzman	Municipal	\$254,425	\$194,425	50%	\$97,213	\$97,213	\$60,000	40%	\$0	\$60,000
WEST ALLIS, CITY OF	5404-10	258	Dan Noreika	CT	\$1,692,350	\$1,692,350	100%	\$1,692,350	¢0	\$0	15%	\$0	\$¢
WEST ALLIS, CITY OF	5404-11	256	Dan Noreika	CT	\$1,277,650	\$1,277,650	50%	\$638,825	\$638,825	0\$	15%	0\$	\$0
WHITEWATER, CITY OF	5650-02	252	Brian Boelkow	Municipal	\$3,606,400	\$1,171,940	100%	\$1,171,940	0\$	\$2,434,460	40%	0\$	\$2,434,460
SOUTH MILWAUKEE, CITY OF <sup>2</sup>	4907-12	251	Ben Aerts	CT	\$10,232,230	\$4,796,990	75%	\$3,597,743	\$1,199,248	\$5,435,240	10%	\$0	\$1,345,226
APPLETON, CITY OF	4755-06	250	Blythe Cassidy	CT	\$618,975	\$618,975	100%	\$618,975	\$0	\$0	%0	\$0	¢\$
REESEVILLE, VILLAGE OF	4891-06	243	Cameron Batchelor	Municipal	\$16,500	\$16,500	50%	\$8,250	\$8,250	\$0	40%	\$0	\$¢
ELKHORN, CITY OF	5525-11	241	Erika Mills	Municipal	\$1,605,000	\$631,620	25%	\$157,905	\$473,715	\$973,380	%0	\$0	\$0
FOND DU LAC, CITY OF	5142-16	240	Erika Mills	Municipal	\$457,500	\$296,940	50%	\$148,470	\$148,470	\$160,560	20%	0\$	\$0
SPOONER, CITY OF	4911-10	234	Liz Higgins	Municipal	\$749,250	\$252,038	100%	\$252,038	\$0	\$497,213	55%	\$0	\$0
SHEBOYGAN, CITY OF	4901-13	234	Sarah Bolitho	CT	\$500,000	\$495,000	50%	\$247,500	\$247,500	\$5,000	20%	0\$	\$0
OSHKOSH, CITY OF	4874-18	232	Erika Mills	Municipal	\$2,320,000	\$2,320,000	50%	\$1,160,000	\$1,160,000	0\$	15%	\$0	\$0
WALWORTH, VILLAGE OF	5652-04	229	Ryan Atkinson	Municipal	\$348,134	\$133,825	50%	\$66,912	\$66,912	\$214,309	35%	0\$	¢0
RICHLAND CENTER, CITY OF	4893-08	228	Kate Leja-Brennan	Municipal	\$594,000	\$264,000	75%	\$198,000	\$66,000	\$330,000	40%	\$0	\$0
NORTH FOND DU LAC, VILLAGE OF	4863-16	228	Erika Mills	Municipal	\$307,846	\$181,398	50%	\$90,699	\$90,699	\$126,448	25%	\$0	\$0
WEYAUWEGA, CITY OF	4936-04	220	Ashley Jimenez	Municipal	\$734,173	\$372,657	50%	\$186,328	\$186,328	\$361,516	40%	\$0	\$0
SHOREWOOD, VILLAGE OF	5630-03	220	Kate Leja-Brennan	СТ	\$8,160,000	\$2,372,787	75%	\$1,779,590	\$593,197	\$5,787,214	%0	\$0	\$0
SHEBOYGAN, CITY OF	4901-14	214	Sarah Bolitho	Municipal	\$4,465,000	\$4,400,000	50%	\$2,200,000	\$2,200,000	\$65,000	20%	\$0	\$0
SOUTH MILWAUKEE, CITY OF	4907-11	212	Ben Aerts	сŢ	\$436,570	\$254,021	50%	\$127,010	\$127,010	\$182,549	10%	\$0	\$0
SOUTH MILWAUKEE, CITY OF	4907-10	206	Ben Aerts	J	\$781,520	\$200,200	50%	\$100,100	\$100,100	\$581,320	10%	\$0	\$0
CEDARBURG, CITY OF	5628-03	194	Michelle Brietzman	Municipal	\$1,935,000	\$1,463,000	%0	\$0	\$1,463,000	\$472,000	%0	\$0	\$0
MARSHFIELD, CITY OF	5364-11	0	Dan Noreika	CT - 102	\$14,700	\$14,700	75%	\$11,025	\$3,675	\$0	30%	\$0	\$0
MARSHFIELD, CITY OF	5364-12	0	Dan Noreika	CT - 103	\$316,050	\$316,050	100%	\$316,050	\$0	\$0	30%	\$0	\$0
MARSHFIELD, CITY OF	5364-13	0	Dan Noreika	CT - 104	\$46,200	\$46,200	75%	\$34,650	\$11,550	\$0	30%	\$0	\$0
MARSHFIELD, CITY OF	5364-14	0	Dan Noreika	CT - 105	\$69,300	\$69,300	75%	\$51,975	\$17,325	\$0	30%	\$0	\$0
MARSHFIELD, CITY OF	5364-15	0	Dan Noreika	CT - 106	\$192,500	\$192,500	100%	\$192,500	\$0	\$0	30%	\$0	\$0
MARSHFIELD, CITY OF	5364-10	0	Dan Noreika	Municipal	\$5,806,929	\$0	75%	\$0	\$0	\$5,806,929	30%	\$0	\$0
<sup>1</sup> cut-off for public side principal forgi	veness - parti	al funding			\$135,586,274			\$58,832,637	\$11,585,866			\$10,706,103	\$34,808,217
<sup>2</sup> cut-off for public side loan funds - p.	artial funding			,								Total PF	Total Loan
											Totals:	\$69,538,740	\$46,394,083



6230-LS-100

# PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of the City of Watertown, as a Water Public Utility, for Authority to Implement a Financial Assistance Program for Customer-Side Lead Service Line Replacement, in the City of Watertown, Dodge and Jefferson Counties, Wisconsin

# FINAL DECISION

This is the Final Decision by the Public Service Commission (Commission) on the application of Watertown Water Department (applicant), pursuant to Wis. Stat. § 196.372, for authority to implement a financial assistance program for property owners in replacing customerside water service lines containing lead. The application is GRANTED, subject to the conditions in this Final Decision.

# Introduction

On May 30, 2023, the applicant, as the water public utility of the City of Watertown, filed an application seeking Commission approval to implement a financial assistance program for replacing lead service lines (LSLs) owned by its retail customers. (<u>PSC REF#: 469267</u>.) On July 3, 2023, the Commission determined the application to be complete in accordance with Wis. Stat. § 196.372(3)(am). (<u>PSC REF#: 471936</u>.) The Commission issued a Notice of Investigation on July 13, 2023. (<u>PSC REF#: 472733</u>.)

No party requested intervention in this docket, and no hearing was required or held.

Wisconsin Stat. § 196.372(3)(d) provides that:

[i]f a hearing is not held on an application, the commission shall take final action on the application within 90 days after the application is determined to be complete. The chairperson of the commission may extend the time period for an additional 90 days for good cause. If the commission fails to take final action within the initial 90-day period, or the extended 90-day time period, the commission is considered to have granted its approval.

In this docket, the initial 90-day deadline for Commission action is October 1, 2023.

Prior to this application, the Commission considered the approval of financial assistance programs. In its April 13, 2023 Final Decision for Edgerton Municipal Water Utility's LSL financial assistance program, the Commission delegated the authority for LSL financial assistance programs to the Administrator of the Division of Water Utility Regulation and Analysis. (<u>PSC REF#: 464176</u>.)

## **Findings of Fact**

1. The applicant is a public utility as defined under Wis. Stat. § 196.01(5)(a) that provides water service to approximately 3,083 retail customers in Dodge County and 5,648 customers in Jefferson County.

2. The applicant's proposed program consists of grants of no more than one-half the customer's replacement cost up to a maximum of \$5,000. Any remaining amounts due could be financed with the applicant over a 10-year period with an annual interest rate of 2.5 percent. The estimated total program cost is \$7,000,000 to complete the approximately 1,000 remaining LSL replacements over the next three years. The applicant's current annual revenue from total water sales is \$5,649,819, and the estimated impact of the financial assistance program, including administrative costs, financed over 20 years, is an increase in rates of approximately 3.2 percent.

 The financial assistance program requires Commission review and approval under Wis. Stat. § 196.372(2)(c).

5. The applicant has been granted the authority in a municipal ordinance to provide utility customers financial assistance for the purpose of replacing service lines containing lead, pursuant to Wis. Stat. § 196.372(2)(a).

6. The proposed program implements measures to require that either the utility-owned main or service line connected to the customer-owned service line does not contain lead or is replaced at the time the customer-owned service line is replaced, pursuant to Wis. Stat. § 196.372(2)(b).

7. The proposed program limits grants provided as financial assistance to a property owner to no more than one-half of the total costs to the owner of replacing the customer-side water service line containing lead, meeting the requirement in Wis. Stat. § 196.372(3)(e)2.a.

9. The percentage of the cost of replacing the customer-side water service line containing lead that the applicant intends to provide in financial assistance will be the same for each owner in a class of customers, meeting the requirement in Wis. Stat. § 196.372(3)(e)3.a.

10. There are no potential environmental effects associated with the strictly financial action at issue in this docket. Therefore, the docket does not require the preparation of an environmental impact statement under Wis. Stat. § 1.11 nor an environmental assessment.

If implemented as conditioned by this Final Decision, the actions described in the application are not unjust, unreasonable, or unfairly discriminatory, as required by Wis. Stat.
 § 196.372(3)(e)1.

## **Conclusions of Law**

1. The Commission has authority under Wis. Stat. §§ 1.11, 44.40, 196.02, 196.025, 196.395, and 196.372 to issue a Final Decision authorizing the applicant to implement a program to provide financial assistance to owners of property in replacing customer-side service lines containing lead.

2. The Commission has authority under Wis. Stat. § 15.02(4) to delegate to the Administrator of the Division of Water Utility Regulation and Analysis those functions vested by law as enumerated above. It has delegated the authority to the Administrator of the Division of Water Utility Regulation and Analysis to issue a Final Decision for the proposed financial assistance program.

 The applicant's program to provide financial assistance to property owners replacing customer-side water service lines containing lead meets the requirements in Wis. Stat. §196.372(3).

4. The Commission may impose any term, condition, or requirement necessary to protect the public interest pursuant to Wis. Stat. §§ 196.02 and 196.395.

5. The application contemplates a utility financial assistance program, a financial action that does not have the potential to significantly affect the quality of the human environment under Wis. Admin. Code § PSC 4.10 or Wis. Stat. § 1.11(2)(c), and requires neither an environmental impact statement nor an environmental assessment.

## Opinion

## **Project Description and Purpose**

The applicant is a Wisconsin water public utility that provides drinking water to approximately 3,083 retail customers in Dodge County and 5,648 customers in Jefferson County. In 2022, the applicant's revenue from water sales totaled \$5,442,790. The applicant filed an application with the Commission on May 30, 2023 seeking authority to implement a financial assistance program for customer-side LSL replacement.

The applicant intends to treat galvanized service lines as lead-containing galvanized service lines in the distribution system. Based on its application, the applicant estimates that there are approximately 1,000 customer-side LSLs currently in the distribution system. The estimate represents approximately 13.56 percent of the system's service lines.

With its application to the Commission, the applicant requests to offer financial assistance to customers so it can remove and replace all LSLs connected to its distribution system over the next three years.

## **Financial Assistance Description**

At least 45 days prior to commencement of a utility project, the applicant will provide written notice to the owner of the property where it intends to replace LSLs. Customers will be required to respond to the 45-day notice within 30 days. All property owners will be eligible for the financial assistance program.

The applicant's proposed financial assistance program will allow for all customers to be eligible over the life of the program.

The applicant proposes to offer eligible customers a grant to pay for up to 50 percent of the cost to replace the customer-side LSL, to a maximum grant amount of \$5,000. The applicant will provide additional financial assistance available in the form of a loan for the remaining replacement costs. The applicant will finance the loan over a 10-year period with an annual interest rate of 2.5 percent.

The applicant indicates that the City of Watertown (City) intends to use non-compliance penalties in conjunction with requirements of the program under the ordinance. The applicant will seek customer compliance through service disconnection or other procedures provided for

under its tariffs. Once the applicant makes a determination to disconnect service, it will use a process similar to what it currently uses for billing arrears. The applicant prepared a draft tariff for disconnection and submitted it in conjunction with its financial assistance program application. The proposed program requires property owners to replace LSLs connected to a utility-side LSL at the same time the applicant replaces the utility-side line.

## **Estimated Program Costs**

The applicant completed replacement of approximately 550 customer-side LSLs in 2021 and 2022 utilizing the Wisconsin Department of Natural Resources (DNR) Safe Drinking Water Loan Program (SDWLP) funds. Using this experience, the applicant estimated an approximate cost of \$7,000,000 to replace all the remaining 1,000 LSLs in the distribution system. \$3,500,000, or 50 percent, would be provided as grants. The applicant budgeted \$1,205,000 annually, broken down by \$1,166,667 for grant program expenses, \$5,000 for loan costs, and \$33,333 for administrative costs annually. The Commission finds it reasonable to require the applicant to track its expenses in the following manner:

- Grant program costs should be estimated in a subaccount in Account 664 (Customer Installation Expense): The applicant estimates incurring a total of \$1,166,667 in 2023.
- 2. Loan program costs (costs to administer loans) should be estimated in different subaccount in Account 664: The applicant estimates \$5,000 of loan costs in 2023.
- Loan program costs (loans provided to customers) should be estimated in a subaccount in Account 124 (Other Investments): The applicant estimates \$1,166,667 of loan costs in 2023.

4. Administrative costs should be estimated in a subaccount different from that in Item 1 in Account 664 (Customer Installation): The applicant will record administrative costs in this account. The applicant anticipates incurring an estimated \$33,333 in administrative costs.

The Commission also finds it reasonable to require the applicant to submit an application for a conventional water rate case no later than three years from the effective date of the Final Decision in this docket.

## **Rate Recovery – Method for Funding**

In its application, the applicant proposed to cash fund the program prior to receiving bond proceeds from the SDWLP. The applicant is not requesting any deferral of costs. The applicant's revenue from water sales was \$5,442,790 according to the 2022 PSC Annual Report. The estimated annual costs of this program, \$1,205,000, would equal 22.14 percent of its current revenue from water sales.

The SDWLP has not yet provided details on the applicant's financial award. If the SDWLP awards principal forgiveness funds and requires particular conditions, for example, funds set aside for disadvantaged communities, the applicant must still ensure that it is tracking funds, in particular, any utility funds used to award customers for replacing their LSLs, and that the program still complies with this Final Decision and the requirements under Wis. Stat. § 196.372.

## **Environmental Review**

The Commission is reviewing a utility financial assistance program only, not the water service line replacements themselves. Because there are no potential environmental effects

associated with the strictly financial action at issue in this docket, the docket does not require the preparation of an environmental impact statement under Wis. Stat. § 1.11 or an environmental assessment.

## Sufficiency of the Application Under Wis. Stat. § 196.372(3)(a)

A water public utility that seeks Commission approval for this type of program must provide the Commission with "an application that includes a description of the proposed financial assistance" and "a description of the method for funding the financial assistance" that the applicant will provide, as well as "a description of the customers served by the water public utility that would be eligible for financial assistance," along with any other relevant information that the Commission requests. Wis. Stat. § 196.372(3)(a).

In addition to the information that is expressly required by the statue, the Commission's Application Checklist requested that the applicant provide more details about its program. (PSC REF#: 469268, PSC REF#: 469269.) The Application Checklist expressly requested information about how the program would comply with Wis. Stat. § 196.372(2)(a) and (b). The applicant filed a copy of the municipal ordinance that permits the applicant to provide financial assistance to private property owners and requires that customers replace their service lines containing lead pursuant to Wis. Stat. § 196.372(2)(a). The ordinance permits the applicant to provide the financial assistance and requires owners to replace their LSLs. The application materials demonstrate that the applicant has a plan to ensure that either the utility-owned main or service line connected to the customer-owned service line does not contain lead or is replaced at the same time the customer-owned service line is replaced. The applicant also provided information responding to the other items on the Application Checklist.

The Commission finds that the applicant submitted information responsive to each category required by statute and each item on the Application Checklist and therefore finds that the program meets requirements set forth in Wis. Stat. § 196.372(2)(a).

## Compliance with Wis. Stat. §§ 196.372(3)(e)2. and 196.372(3)(e)3.

Wisconsin Stat. § 196.372(3)(e)2. provides that the Commission may not approve an application unless all of the following conditions are met:

- Grants provided as financial assistance to a property owner may not exceed
   50 percent of the cost to replace the customer-side water service line. Wis. Stat.
   § 196.372(3)(e)2.a.
- Any loan provided to a property owner may not be forgiven by the utility or the municipality. Wis. Stat. § 196.372(3)(e)2.b.

Additionally, Wis. Stat. § 196.372(3)(e)3. provides that the Commission may not approve an application unless the application satisfies one of the following conditions:

- If the utility intends to provide financial assistance as a percentage of the cost of replacing the property owner's portion of the service line, the percentage must be the same for each owner in a class of customers. Wis. Stat. § 196.372(3)(e)3.a.
- If the utility intends to provide financial assistance as a specified dollar amount, the amount must be the same for each owner in a class of customers. Wis. Stat.
   § 196.372(3)(e)3.b.

The applicant certifies that grants will not exceed one-half of the owner's replacement costs, and loans provided by the applicant and the City for the remainder will not be forgiven. The grant and loan portions of the financial assistance in sum will cover 100 percent of the cost

of replacing the property owner's portion of the service line. Thus, the Commission concludes that the application complies with Wis. Stat. §§ 196.372(3)(e)2.a. and b.

## Compliance with Wis. Stat. § 196.372(3)(e)1.

In order to approve an application, the Commission must find that the overall program is not unjust, unreasonable, or unfairly discriminatory. Wis. Stat. § 196.372(3)(e)1. The Commission has no indication that the applicant's proposed financial assistance program is unjust, unreasonable, or potentially unduly discriminatory; therefore, the Commission finds that the actions described in the applicant's application are not unjust, unreasonable, or unduly discriminatory.

## Tariffs

The applicant included a draft proposed tariff in its application, which is presented in Appendix A. The Commission concludes that the tariffs as proposed would provide for reasonable implementation of the applicant's financial assistance program.

## Conclusion

Watertown Municipal Water Utility, as a water public utility, is authorized to implement a financial assistance program for replacement of customer-side water service lines containing lead proposed in its May 30, 2023 application, subject to the conditions in this Final Decision.

## Order

1. The applicant's application for authority to provide financial assistance to replace customer-side water service lines containing lead is approved, with conditions.

2. The tariff provisions authorized in this docket shall take effect no sooner than one day after the day the applicant has: (a) filed these rates and tariff provisions with the

Commission; and (b) made them available to the public at locations where customer payments are accepted, on the applicant's website, or in a form and place that is otherwise readily accessible to the public, pursuant to Wis. Stat. § 196.19 and Wis. Admin. Code § PSC 185.33(1)(f). If a copy of the new tariff provisions is not made available to the public when they are filed with the Commission, the new tariff provisions shall take effect one day after the day they are made available to the public.

3. The applicant shall receive approval from the Commission prior to making any significant changes to its financial assistance program.

4. The applicant shall record its program expenses and revenues in subaccounts created in the following manner:

a. Grant Program costs: Account 664 subaccount

b. Loan Program costs (costs to administer loans): Account 664 subaccount

c. Loan Program costs (loans provided to customers): Account 124

d. Administrative Costs: Account 664 subaccount

5. The applicant shall submit an application for a conventional water rate case no later than three years from the effective date of this Final Decision.

6. The applicant shall file with the Commission, as part of its annual report to the Commission, a report of the number of service lines replaced, as well as program expenses and revenues in a manner that is consistent with the prescribed subaccounts described in Order Point No. 4.

7. The Final Decision takes effect on the date of service.
Section 4, Item B.

Docket 6230-LS-100

8. Jurisdiction is retained.

Dated at Madison, Wisconsin, this 26<sup>th</sup> day of September, 2023.

For the Commission:

Aul P. Gol

Andrew P. Galvin Administrator Division of Water Utility Regulation and Analysis

APG:RJP:alf:krl DL:01954670

See attached Notice of Rights

#### PUBLIC SERVICE COMMISSION OF WISCONSIN 4822 Madison Yards Way P.O. Box 7854 Madison, Wisconsin 53707-7854

#### NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE PARTY TO BE NAMED AS RESPONDENT

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

#### PETITION FOR REHEARING

If this decision is an order following a contested case proceeding as defined in Wis. Stat.  $\S$  227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat.  $\S$  227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

#### PETITION FOR JUDICIAL REVIEW

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision.<sup>1</sup> The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

<sup>&</sup>lt;sup>1</sup> See Currier v. Wisconsin Dep't of Revenue, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.

## Docket 6230-LS-100

Appendix A

## Watertown Water Department

## Water Rate File Changes

New

LSL-1 LSL-2 Public Service Commission of Wisconsin

## Watertown Water Department

## Financial Assistance for Replacement of Customer-Side Service Lines Containing Lead (LSLs)

The Utility has established a financial assistance program to assist property owners with the costs associated with the removal and replacement of customer-side service lines containing lead (LSLs) connected to the Utility's water distribution system. For purposes of the financial assistance program, the customer-side service line is from the curb stop to the property's water meter.

## A. <u>Utility Inspection and Inventory</u>

In order to implement the financial assistance program, the Utility may request that the property owner permit an authorized Utility employee or representative reasonable access to the property in order to inspect and determine or confirm the customer-side service line's construction material.

## B. LSL Replacement in Conjunction with Utility-Side Replacement

In the event the Utility has planned replacement of the Utility-side line or water main containing lead, the LSL connected to the Utility's distribution system must be replaced at the same time.

At least 45 days prior to the scheduled date of the Utility-side replacement, the Utility shall notify the property owner in writing of the scheduled date of the replacement. The property owner must schedule replacement of the LSL within 30 days of receiving the 45 day notice from the Utility. The LSL replacement must coincide with the Utility's replacement of the Utility's line or water main containing lead.

## C. <u>LSL Replacement Without Utility-Side Replacement</u>

If the Utility identifies that a customer-side service line contains lead, the Utility shall notify the property owner that the customer-side service line contains lead and must be replaced. Unless the Utility grants an extension, the property owner must replace the LSL within 36 months of notification.

Schedule No. LSL-1

Amendment No. 44

Sheet No.

## **RATE FILE**

## Public Service Commission of Wisconsin

## Watertown Water Department

## Financial Assistance for Replacement of Customer-Side Service Lines Containing Lead (LSLs)

## D. <u>LSL Replacement – Financial Assistance Program</u>

The Utility shall make financial assistance available to all property owners who have an LSL. The Utility will make financial assistance available to such property owners in the form of a grant by covering up to 50% of the costs associated with the replacement of a LSL if done in conjunction with an identified Utility project. The maximum grant amount shall not exceed \$5,000. The Utility may make additional financial assistance available in the form of a loan for up to another 50% of the replacement costs. In order to receive financial assistance, a property owner must submit Utility Program Specific Requirements.

## E. Loan Agreement and Process

Upon request, the Utility will provide financial assistance to the property owner in the form of a loan for up to 50% of the LSL replacement costs. Loans are only available upon completion of the LSL replacement and meeting all other Utility program specific requirements. The property owner may make a loan request by submitting an application for assistance to the Utility within 30 days of the completion of the LSL replacement.

## F. Loan Agreement Term and Repayment

The term of the loan will include a 10 year repayment period with an interest charge of 2.5 percent. The loan will be repaid in equal installments invoiced to the property owner, annually. Loan repayments that are past due may be placed on the property tax roll as provided in Section 66.0809, Wisconsin Statutes. The Utility shall not forgive the amount loaned to a property owner.

Schedule No. LSL-1

Sheet No.

Amendment No. 44

## RATE FILE

## Public Service Commission of Wisconsin

## Watertown Water Department

## Financial Assistance for Replacement of Customer-Side Service Lines Containing Lead (LSLs) and Disconnection

The Utility may disconnect water service in accordance with Schedule X-1 and Wis. Admin. Code § PSC 185.37 when one of the following occurs:

## A. Failure to Provide Access to Inventory Customer-Side Service Line

If the property owner does not provide the requested reasonable access for inspections to determine or confirm the customer-side service line's construction material as described in Schedule LSL-1, the Utility may proceed to disconnect water service following the notification and disconnection procedures set forth in the Utility's tariffs and Wis. Admin. Code § PSC 185.37. Reconnection charges shall apply.

## B. Failure to Replace LSL When Required as Part of a Utility Replacement

If the property owner does not replace the LSL, or any necessary and reasonable agreement with the customer is not in place as described in Schedule LSL-1, the Utility may refuse to reconnect the property owner's water service or may proceed to disconnect water service following the notification and disconnection procedures set forth in Schedule X-1 and Wis. Admin. Code § PSC 185.37. Reconnection charges shall apply.

## C. Failure to Replace LSL When Not Required as Part of a Utility Replacement

If the property owner does not replace the LSL by the date specified by the Utility pursuant to Schedule LSL-1, the Utility may proceed to disconnect water service following the notification and disconnection procedures set forth in Schedule X-1 and Wis. Admin. Code § PSC 185.37. Reconnection charges shall apply.

Amendment No. 44

Sheet No.

#### AN ORDINANCE

#### TO AMEND SECTION 512-87 "WATER LATERAL CONNECTION" OF CHAPTER 512, "WATER AND SEWERS" "ARTICLE VI. WATER AND SEWER LATERAL CONTROL" OF THE CITY OF WATERTOWN GENERAL ORDINANCES

Sponsor: Alderperson Pasch Committee: Public Works Commission

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

SECTION 1. Section 512-87, "Water Lateral Connection" is hereby amended to read and include as follows:

\* \*

#### A. Water Lateral Connection.

No person, firm or corporation shall establish or permit to be established, replace or permit to be replaced any water lateral, unless otherwise provided herein. No water lateral shall be established whereby potable water is transmitted from the public water supply of the City of Watertown to a private building, residence, or other private property unless such water lateral has been connected, installed, and supplied by the City of Watertown Water Department, unless otherwise provided herein.

#### 8. Lead Service Lines.

**Purpose.** Lead service lines have the potential to leach lead into drinking water. Disturbing or reconnecting to an existing lead service line may increase lead levels in drinking water. Elevated lead levels in drinking water have been determined to cause health problems in young children, pregnant women, and their unborn children, and are also potentially harmful to adults. The City Council therefore finds it in the public interest to establish a comprehensive program for removing and replacing all lead service lines within and connected to the Watertown Water Utility distribution system.

#### · C. Authority.

This section is enacted pursuant to Sections 62.11(5) and 196.372, Wisconsin Statutes.

#### D. Definitions.

This section shall be interpreted so that the intent and purpose described may be accomplished. Words and phrases shall be understood according to common meanings unless the contrary is clearly indicated. Definitions of terms used in this section are listed below:

#### CUSTOMER-SIDE LEAD SERVICE LINE OR CUSTOMER-SIDE LSL

A customer-side service line constructed of lead or galvanized material.

#### **CUSTOMER-SIDE SERVICE LINE**

The property owner's water service line from the outlet of the curb stop to the inlet of the customer's water meter. The outlet joint of the curb stop is considered customer owned.

#### **DISTRIBUTION SYSTEM**

The network of water pipes, including mains and service lines, owned and operated by Watertown Water Utility.

#### LEAD SERVICE LINE OR LSL

A water service line constructed of lead or galvanized pipe. The term *covers* both a customer-side lead or galvanized service line and/or a utility-side lead or galvanized service line.

#### NON-COMPLIANCE PENALTIES

These may include, but not necessarily be limited to, violation citations, elimination of financial assistance, service disconnection, or other actions deemed permissible by the PSC and/or Watertown Water Utility.

#### PLUMBING CONTRACTOR

A person, firm, corporation, or other entity licensed by the State of Wisconsin to perform plumbing work in the City of Watertown ("City").

#### PREQUALIFIED PLUBMING CONTRACTOR

A plumbing contractor who has gone through the City of Watertown's approval process and been placed on Watertown Water Utility's prequalified plumbing contractor list.

#### PROPERTY

Real property as defined in Section 70.03, Wisconsin Statutes.

#### **PROPERTY OWNER**

A person or legal entity, or his/her or its representative, having an ownership interest, legal or equitable, in the property. The term property owner includes an estate or trust.

#### PSC

Public Service Commission of Wisconsin.

#### WWU

The abbreviation will identify Watertown Water Utility, the city utility responsible for operating the city's public water system.

#### UTILITY MANAGER

The Water Systems Manager of the WWU or his or her designee.

#### UTILITY-SIDE LEAD SERVICE LINE OR UTILITY-SIDE LSL

A Utility-side Service Line constructed of lead or galvanized pipe.

#### UTILITY-SIDE SERVICE LINE

The utility owned portion of the water service line, comprised of any material, from the water main to the outlet of the curb stop, including the curb stop.

#### E. Lead Service Line Replacement Requirement.

(1) As provided in this ordinance, all existing lead service lines connected to the WWU distribution system shall be replaced with water service lines constructed of materials approved by the City.

- (2) Where both the customer-side and utility-side service lines are constructed or lead, the replacement of both sides of the service line will be completed at the same time following the process set out in section 512-87(G).
- (3) Where only the customer-side service line is constructed of lead, the replacement of the customer-side LSL shall be completed within thirty-six (36) months of notification by WWU following the process set out in section 512-87(H).

#### F. Identification of Customer-Side lead Service Lines.

- (1) WWU will create a contact list of homes that potentially have lead service lines based on the building's date of construction.
- (2) Upon notice from WWU, a property owner or customer who exercises control over a property connected to the WWU distribution system will schedule an inspection of the customer-side service line by an authorized WWU water operator in order to allow WWU to confirm the service line's material of construction. WWU may use various methods to contact the property owner or customer, including but not limited to phone calls, bill stuffers, emails, mailers, and door-to-door contact.
- (3) In the event that a property owner or customer refuses or fails to provide access to the interior of any improvement in order to accomplish such inspection, the utility manager may take the steps necessary to complete the inspection and confirm the service line's material of construction, including and up to the issuance of non-compliance penalties.
- (4) As an alternative to WWU inspection, the property owner or customer, at their expense, may arrange to have a plumbing contractor perform the inspection and provide inspection results to WWU.
- (5) Upon confirmation that a customer-side service line is constructed of lead, WWU will notify the property owner of the requirement to replace the customer-side lead service line following the steps detailed in sections 512-87(G) and 512-87(H)., depending on the circumstance.
- (6) WWU will create and maintain records of all inspected, identified and replaced lead service lines in the city, until such time that no lead service lines exist.

# G. Replacement of Customer-Side Lead Service Lines in conjunction with replacement of Utility-Side Lead Service Lines or planned City street reconstruction projects.

- (1) Utility-side service lines will be replaced as part of a city street reconstruction project if possible. Before undertaking a utility-side service line project, WWU will identify those properties that connect to the utilityside service lines planned for replacement.
- (2) Prior to scheduling the replacement of utility-side service, a certified WWU water operator or WWU employee proficient at determining lead service

line materials, shall inspect all connected and affected customer-side service lines for the presence of lead.

- (3) If a customer-side service line is found to be constructed of lead, WWU will notify the property owner of that fact in writing. WWU will also notify the property owner that the property owner must replace the customer-side LSL in conjunction with WWU's scheduled replacement of the utility-side service lines, and that failure to do so may subject the property owner to non-compliance penalties.
- (4) At least forty-five (45) days prior to the date of the scheduled replacement of the utility-side service line, WWU will notify the property owner with a customer-side LSL in writing of the scheduled date of replacement of the utility-side LSL or other utility service lines or planned City street reconstruction project.
- (5) Within thirty (30) days of receipt of the replacement notice, the property owner must schedule the replacement of the customer side LSL to coincide with the scheduled replacement of the utility side service line. The property owner shall promptly notify WWU that the replacement of the customer-side LSL has been scheduled and provide the name of the plumbing contractor who will complete the replacement work.
- (6) Upon a property owner's request, WWU may assist the property owner with getting bids from plumbing contractors. WWU's contractor for utilityside service line replacement work may be available to perform customerside LSL replacement work.
- (7) Customer-side LSL replacement work must be completed at the same time as the utility-side service line is replaced unless an extension is allowed. Failure to commence customer-side LSL replacement work as required by this ordinance or to complete such work within a reasonable time after commencement of the work, may result in the issuance of non-compliance penalties.
- (8) A property owner who follows the procedures detailed herein, may be eligible to receive financial assistance for the customer-side LSL replacement.

#### H. Replacement of Customer-side Lead Service Line where only the Customer-Side portion of the Service Line is Lead.

- (1) If WWU confirms that a customer-side service line is constructed of lead and notifies the property owner of that fact in writing as provided by subsection 512-87(F) the property owner must, unless subsection 512-87(G) applies, arrange for the replacement of the customer-side LSL to be completed within thirty-six (36) months of notification. Failure to complete the replacement of the customer-side LSL within that time period may result in non-compliance penalties.
- (2) A property owner who follows the procedures detailed in both this section and

section 512-87(J), may be eligible to receive financial assistance for the customer-side LSL replacement.

#### I. Timing of replacement.

- (1) Leak or failure emergency replacement. Property owners who are required to replace a customer side portion of a lead service line due to a leak or failure emergency replacement will replace their lead service line as soon as reasonably practical but no later than 30 days of receiving written notice.
- (2) The Water Systems Manager or his designee may extend the time for replacement up to 36 months of the customer side portion of a customer-side LSL that has been identified and noticed to be replaced under this Chapter if the property owner so requests and demonstrates a compelling need, unless the extension would create an imminent threat to the health, safety or welfare of the public.

#### J. Financial Assistance for Customer-Side LSL Replacements.

- (1) WWU is authorized to establish a program to provide eligible property owners with financial assistance to replace customer-side LSLs. WWU must seek PSC approval of any WWU financial assistance program to replace customer-side LSLs. If WWU's financial assistance program has received PSC approval and has available funding, WWU may provide eligible property owners with financial assistance to replace customer-side LSLs as provided in this section.
- (2) WWU may provide an eligible property owner with financial assistance to pay the property owner's customer-side LSL replacement costs. WWU may provide a grant to pay for a percent of the property owner's customer-side LSL replacement costs. The grant may not exceed a maximum amount of five thousand dollars (\$5,000.00). Financial assistance for the remainder of the property owner's customer-side LSL replacement costs may be provided in the form of a loan.
- (3) WWU may loan an eligible property owner funds to pay the property owner's remaining customer-side LSL replacement cost after the receipt of any grant monies under section 512-87(J)(2). WWU may provide an eligible property owner a ten-year, 2.5% interest loan. A property owner shall repay the loan in yearly installments, consisting of principal and interest. Loan repayments will be invoiced yearly by WWU. Loan repayments that are past due may be placed on the property tax roll as provided in Section 66.0809, Wisconsin Statutes.
- (4) A property owner is eligible for financial assistance for the purpose of replacing the customer-side LSL if the property owner satisfies all of the following criteria:
  - (a) The property owner alone, or collectively with others, owns the entire fee simple title to the property served by the customer-side LSL.

- (b) The property owner's customer-side LSL is either attached to a util<del>hy-side</del> service line that is not a LSL, or a utility-side LSL scheduled for replacement and for which the property owner has been notified by WWU of such scheduled replacement.
- (c) The property owner agrees to have the replacement work done by a prequalified plumbing contractor in compliance with this ordinance.
- (5) Written applications for financial assistance shall include the following:
  - (a) A completed application on a form furnished by WWU signed by the eligible property owner. The completed application form shall include a certification by the property owner that attests that all eligibility criteria listed in this section are met.
  - (b) Copies of a written quote from a pre-qualified plumbing contractor for the replacement of the property owner's customer-side LSL.
- (6) A property owner will be eligible for financial assistance based on the amount included in the written quote received from the pre-qualified plumbing contractor.
- (7) After a complete application is received, and prior to the commencement of any replacement work, WWU will determine if the property owner is eligible for financial assistance, and the amount of financial assistance available as a grant and the amount of financial assistance available as a loan. Such determination will be provided in writing to the applying property owner.
- (8) Customer-side LSL replacement work must be accomplished in accordance with the Wisconsin State Plumbing Code and all applicable federal, state, and municipal laws and regulations. Work must also be done in a workmanlike manner and be coordinated with any WWU utility-side service line replacement work as required by section 512-87(G).
- (9) Upon completion of the customer-side LSL replacement and passing the necessary building/plumbing inspections, the pre-qualified plumber shall provide WWU with a copy of the invoice. Upon proof of completion satisfactory to the property owner and WWU, WWU will directly pay the plumbing contractor the amount of money approved by WWU for financial assistance for replacement of the customer-side LSL.
- (10) The total amount of money provided by WWU as financial assistance in the form of a grant and loan may not exceed the actual cost of replacement of the customer-side LSL.
- (11) Disputes regarding eligibility for financial assistance may be appealed as laid out in Chapter 10 of the Watertown Municipal Code, Administrative Review.

#### K. Severability.

If any subsection or portion of this ordinance is for any reason determined to

be invalid or unconstitutional by the decision of a court of competent jurisdiction, that subsection or portion shall be deemed severable and shall not affect the validity of the remaining subsections or portions of this ordinance.

#### L. Authority to Discontinue Service.

If a property owner fails to replace a customer-side LSL as required by this ordinance, WWU may in accordance with PSC Chapter 185.37 and discontinue water service to such property until the customer-side LSL is replaced.

• •

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.

This is to certify that I have compared the attached copy with the original record now on file in my office and that the same is a correct transcript thereof and of the whole thereof. In Testimony Whereof, I have hereunto subscribed my name and affixed the seal of the City of Watertown this  $2^{nd}$  day of November, 2020.

ADOPTED November 2, 2020			
8	June		
	COITY CLERK/TREASURER		
APPROVED	November 2, 2020		
	N/m		
	MAYOR		
	$\sim V$		



## Water Systems

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

To: Chairman Board and members of the Public Works CommissionDecember 10, 2024From: Peter Hartz – Water Systems Manager

Re: December 10, 2024, Public Works Commission agenda item

#### Water Systems:

**<u>Review and take possible action</u>** Hire Mead Hunt to provide engineering design and construction related services for the biosolids dryer project for \$344,000.

Background:

- April of 2023, we circled back on our previous biosolids and methane gas evaluation and hired Mead
   -Hunt to review and study a conceptual biosolids dryer, with a grant from Wisconsin Focus On
   Energy. Furthermore, on December 19, 2023, we moved forward with our application for the U.S.
   Department
   of Energy (DOE) grant application for a combined heat and power engine to pair with the biosolids
   dryer project.
- May 14, 2024 entered into agreement with Mead Hunt for the Department of Energy Solar project grant and support services.
- September 24, 2024 Biosolids Dryer Project and presentation presented to the PWC by Mead Hunt. Action by PWC was approved to pursue the contract proposal for engineering and project management.
- November 19, 2024 the wastewater department capital budget was approved and included the biosolids dryer project in the 2025 capital outlay.

*<u>Financial Impact</u>*: This project was included in the 2025 capital improvement budget that was approved on 11/19/2024, the approved project including these engineering services was estimated to be \$10,000,000.

<u>*Recommendation:*</u> Hire Mead Hunt to provide engineering design and construction related services for the biosolids dryer project for \$344,000

Sincerely, Peter Hartz

Water Systems Manger



October 22, 2024

Mr. Pete Hartz Water System Manager City of Watertown 800 Hoffmann Drive Watertown, WI 53094

Subject: Proposal for Engineering Services to Complete Detailed Design and Bid Documents For Installing a Biosolids Dryer City of Watertown, Wisconsin | Wastewater Treatment Plant Mead & Hunt Proposal No. M4666751-242245.01

Dear Mr. Hartz,

Mead & Hunt, Inc. (Mead & Hunt) is pleased to present this proposal to the City of Watertown, Wisconsin (Watertown), for engineering services for the detailed design and installation of a biosolids dryer at its wastewater treatment plant (WWTP). The engineering services will include finalizing the design, creating bid documents for a biosolids dryer, and providing services to support bidding for this project to general contractors.

This proposal was prepared upon the authorization of the Watertown Public Works Board during the September 24, 2024, meeting. It builds upon two previous biosolids dryer projects completed in 2024 by Mead & Hunt for Watertown.

#### **Project Understanding and Approach**

Watertown owns and operates a municipal WWTP with an average day design flow of 5.29 MGD. The wastewater treatment is based on an extended aeration-activated sludge process. Regular operation of the treatment process produces approximately 220,000 gallons of primary solids and waste-activated sludge, which are pumped to anaerobic digesters. Digested sludge (averaging about 200,000 gallons per day) is periodically removed and then dewatered for land application. Land disposal of solids is becoming a more challenging solution.

In January 2024, Mead & Hunt completed a study of sludge drying technologies for Watertown. Conclusions from the feasibility study include:

- Sludge drying is viable for Watertown
- Several different types of dryers can be integrated into the existing treatment process

All sludge dryers have the potential to generate a product that meets the State of Wisconsin's Class A requirements. Class A sludge increases the number of land application sites. No sludge dryer can remove per- and polyfluoroalkyl substances (PFAS) from sludge. Still, most dryers are compatible with pyrolysis, an advanced sludge treatment process that has shown promise for removing PFAS from solids.

In October 2024, Mead & Hunt completed a second project that developed conceptual designs of four different biosolids drying approaches. The four alternative approaches were:

- A 'typical' sludge drying approach using a single direct-fired belt dryer to serve as a baseline.
- All electric sludge drying approach using the Shincci sludge dryer/dehumidifier
- A unique 'biological' drying approach using the Bioforcetech drum dryer
- A new sludge destruction technological approach using supercritical water oxidation (SCWO) equipment from 374Water.

The outcome of this conceptual design work was a recommendation to finalize the design of a biosolids dryer that follows the typical sludge drying approach, modified to avoid using a direct-fired dryer. This recommendation was presented to the Public Works Board (Board) on September 24, 2024, and received the Board's support.

Mead & Hunt will complete a detailed design and create bid documents for a biosolids dryer process train located in the existing sludge storage building (sometimes referred to as "the barn") at Watertown's WWTP. Sludge conveying will be added to the existing conveying equipment to redirect dewatered biosolids from the centrifuges to the new dryer(s). Provisions will be included to return operation to the existing sludge processing approach whenever the sludge dryer train is offline for routine, periodic maintenance. A sludge hopper may be included to assist with balancing the dewatering process with the sludge drying process. Dried biosolids will be transferred from the dryer train over a divider wall to a storage area. A new electrical room will be designed to house all the electrical power and instrument control equipment. The new electrical room will be in the barn and will include dedicated HVAC equipment to minimize dust and control temperature within the room.

#### **Scope of Services**

Mead & Hunt proposes the following Scope of Services to complete this project.

#### Task 1 | Site Visit for the Design Team and Data Collection

The design team visiting the WWTP will include the project manager and

electrical/controls and mechanical/utility engineers. The design team will initially meet with WWTP staff for a kickoff meeting to review the project and confirm the project goals, objectives, schedule, and project deliverables. Following the meeting, the design team will conduct a walk-through of the existing facility to help familiarize the design staff with the existing treatment process train and any areas that could become part of this project. The design team will be on-site for approximately one day.

#### Deliverable(s)

- Meeting notes
- Site visit summary

#### Task 2 | Finalize Process and Instrumentation Diagrams

The design team will use the process flow diagram that was developed as part of the conceptual design as the basis for the process and instrumentation diagrams (P&IDs) that will show the conveying systems, sludge hopper, biosolids dryer(s), utilities, and all instruments that will be used to monitor/control this sludge dryer train. Draft copies of the P&IDs will be sent to WWTP staff for review and comment. The design team will review all comments from WWTP staff and either make changes to the P&IDs or prepare a written response for WWTP staff to review.

#### Deliverable(s)

- Draft P&IDs
- Any written responses to review comments

#### Task 3 | Finalize Selection and Sizing of Treatment Equipment

The design team will build on the work completed during the conceptual design project to finalize the sizing and selection of the sludge drying equipment. Critical items that must be selected include the conveyors, sludge hopper, and dryer. The design team will, whenever possible, identify at least three potential suppliers for any critical selected equipment unless otherwise directed by Watertown. The design team will obtain updated or revised quotations and catalog cut sheets for the critical equipment. This information will be used to develop the final engineer's planning level cost estimate and to prepare detailed drawings for the new system.

A dryer equipment workshop will review the most reasonable dryer equipment options for this project and discuss procurement options. Clear direction for the dryer equipment will be necessary to obtain clear direction to support the preparation of plans and equipment specifications.

WWTP staff will be provided with a summary table of equipment for review and comment. The design team will review the remarks from WWTP staff and adjust the equipment selection based on comments or prepare written responses for WWTP staff to review when we do not implement the comments.

#### Deliverable(s)

- Notes from the Dryer equipment workshop
- Summary table of equipment

#### Task 4 | Detailed Engineering Stage 1 (30% Complete)

The design team will use the information from Tasks 1 through 3 to begin Stage 1 of the detailed design for the sludge drying system. Equipment location and components will be shown on plans that will form the basis for the final bid set for the construction of the system. The design team will provide enough detail to define the project's scope, the major equipment's location, and other critical project elements.

Stage 1 of the detailed design will include:

- Task 4A Site Civil/Site Design
  - The site civil/site design will include the following:
    - Overall site plan
    - Location of all sludge drying equipment
    - Coordination with access and general traffic flow and patterns
  - Note that surveying and geotechnical work are not included in this scope of work but may be required.
- Task 4B Structural Design
  - Stage 1 detailed design of the modifications to the barn floor to add foundation pads for the dryer and sludge hopper along with pads for the conveyor. Design of the partition wall separating the dryer equipment of the dried biosolids storage area will be started. The structural design of the electrical room will also be completed as part of this task.
- Task 4C Process Mechanical Design & Yard Piping
  - The design team will initiate the layout of the conveyors, hopper, dryer, and other mechanical components to support the biosolids dryer. Generalized sizing and material selection, primary heat trace needs (if any), and insulation requirements will all be part of this process design. Process mechanical design will include the following:
    - Dewater sludge conveyor to the hopper
    - Sludge hopper
    - Sludge conveyor from hopper to dryer
    - Biosolids dryer
    - Dried solids conveyor from drier to storage area
    - All utilities (excluding electrical and controls) such as water, ventilation, and floor drains
- Task 4D Electrical Design
  - The design team will complete Stage 1 of the detailed electrical power design for the dryer treatment train. Power for the system will come from the existing power panel within the dewatering area. Design services for a new power feed system have not been included but can be added if needed. This electrical design task will entail developing a detailed load list of the sludge drying equipment. This equipment list will be used to evaluate an overall WWTP electrical load and the size of power distribution equipment.

- Task 4E Controls Concept
  - The new dryer train will require modifications to the existing plant-wide control network. The design team will work with WWTP staff to determine and define hardware and software preferences to help make sure the dryer train interfaces with the existing control network. The preliminary control strategy is based on the following:
    - The dryer treatment train will operate 24 hours a day, 7 days a week, using the sludge hopper to balance loading between the existing dewatering equipment and the biosolids dryer.
    - The instrumentation's primary function is to control, monitor, and report the biosolids drying operation. Startup and shutdown of the dryer treatment train will be a manual operation.
  - The design team will develop control network diagrams to represent the control system.

#### Deliverable(s) for Task 4

- 30% Complete plan set to include:
  - Preliminary structural installation and removal drawings, including site layout, foundation plans, equipment supports, and in-ground concrete structures
  - Preliminary floor drain installation drawings of the immediate project area, along with interconnection to the existing sludge building drain network
  - Preliminary process mechanical installation and removal drawings, P&IDs, and 2D plans
  - Preliminary process electrical and instrumentation (PEI) installation drawings, plan, input/output (I/O), and single-line diagrams, panelboard schedule
  - Preliminary process mechanical, process electrical, and general construction scopes of work
  - o Preliminary equipment list
  - Preliminary description of operations (DOO)

#### Task 5 | Project Workshop

The design team will host an in-person project workshop for WWTP staff to review Stage 1 of the detailed design. The design work represented by the draft plans represents the 30% complete design of the project. The purpose of this workshop is to review information developed from Tasks 2, 3, and 4. Draft copies of the plan set will be provided to staff a minimum of 3 days before this workshop. The meeting minutes will note all questions and comments from WWTP staff. The objective of this meeting is to have a general agreement on the detailed design with WWTP staff to support advancing to finalizing the detailed design.

#### Deliverable(s)

• Meeting minutes

#### Task 6 | Detailed Design Completion Stage 2 (90% Complete)

The design team will use the information from Tasks 2 through 5 to complete the detailed design of the dryer treatment system or train consisting of sludge conveying, drying, and dried biosolids storage. This stage advances the design to meet the Wisconsin Department of Natural Resources (WDNR) or other permit application level of detail requirements.

Copies of the Stage 2 detailed design plans will be provided to WWTP staff for review and comment. The design team will review comments from WWTP staff and either make changes to the plan set or prepare written responses for WWTP staff to review.

#### Deliverable(s)

- 90% complete plan set including:
  - Final structural installation and removal drawings, including site layout, foundation plans, equipment supports, and in-ground concrete structures
  - Final floor drain installation drawings of the immediate project area, along with interconnection to the existing sludge building drain network
  - o Final process mechanical installation and removal drawings, P&IDs, and 2D plans
  - Final process electrical and instrumentation (PEI) installation drawings, plan, input/output (I/O), and single-line diagrams, panelboard schedule
  - Final process mechanical, process electrical, and general construction scopes of work
  - Final equipment list
  - Final description of operations (DOO)
- Any written responses to review comments

#### Task 7 | Prepare Budgetary Estimate and Construction Schedule

Using the plan set developed in Task 6, the design team will develop a final planning-level construction cost estimate that would include a level of accuracy of  $\pm 25\%$  for Watertown to use for project budgeting. The cost will be based on quotations for major equipment, construction trade labor, and equipment/tools/materials for projects of this type. Estimates for contingency, construction-related services, and contractor equipment markup will also be included.

The design team will prepare a preliminary schedule for the project's construction using a weekly time increment.

#### Deliverable(s)

- Final planning-level construction cost estimate (+/-25%)
- Preliminary Construction Schedule

#### Task 8 | Completion of Bid Documents (100% Complete)

The design team will advance the detailed design to the final bid documents for this project. Written project specifications will be provided for the sludge drying equipment. The specification booklet would follow the general standards of practice using 16 divisions as follows:

- Division 0 Bidding and Contract Requirements
- Division 1 General Requirements
- Division 2 Site Work
- Division 3 Concrete
- Division 4 Masonry
- Division 5 Metals
- Division 6 Wood and Plastic
- Division 7 Thermal and Moisture Control
- Division 8 Doors and Windows
- Division 9 Finishes
- Division 10 Specialties
- Division 11 Equipment
- Division 12 Furnishings
- Division 13 Instrumentation
- Division 14 Conveying Systems
- Division 15 Mechanical
- Division 16 Electrical

It is anticipated that not all of these divisions will be necessary for this project. The final number of divisions used will be determined after detailed design is complete.

It is assumed that Watertown will provide all front-end documents that comprise Divisions 0 and 1 in an electronic format compatible with Microsoft Word for the design team to add to the project specifications. If such documents are unavailable, the design team will provide Watertown copies of Divisions 0 and 1 from other municipal projects for review to be tailored to this specific project.

The design team estimates that the plan set for the bid documents will include approximately 38 pages comprised of the following:

- Cover page with the project location
- Standard key and legend sheets (6)
- P&ID (1)
- Major Equipment Tables (1)
- Instrumentation and Controls (2)
- Demolition (2)
- Mechanical (3)

- Plumbing/Utilities (2)
- Civil/structural (8)
- Electrical (3)
- Details (9)

WWTP staff will be provided electronic copies of the bid documents. Printed copies would be available upon request.

#### Deliverable(s)

• Bid documents, including equipment specifications and project plans

#### Task 9 | Application for WWTP Improvements to the WDNR

The design team will complete the application to the WDNR for approval to improve the WWTP. Mead & Hunt will prepare an engineering report summarizing the reason for improving the WWTP if necessary. After submitting the application, the design team will follow up on the WDNR review process to answer questions or comments.

#### Deliverable(s)

• WDNR application with supporting documents

#### Task 10 | Project Bidding Services

The design team will lead the contractor bidding process using a traditional design-bid-build format. The design team will:

- Advertise the project per WDNR requirements
- Host one in-person pre-bid meeting at the WWTP to help contractors become familiar with the project
- Respond to any questions from contractors that may be received.
- Issue addendums as necessary (assumed to be no more than two)
- Lead the contractor bid opening meeting
- Prepare a bid tabulation of any contractor bids that are received
- Complete a review of the apparent low bidder's documentation for conformance with the project requirements
- Issue an award recommendation to Watertown
- Prepare a notice of award to the selected contractor as directed by Watertown

#### Deliverable(s)

- Project Advertisement
- Host Pre-bid meeting
- Respond to Contractors questions

- Prepare Addendums, if needed
- Lead Bid opening and prepare bid tabulation
- Prepare an award recommendation to Watertown
- Prepare the Notice of Award to the selected contractor as directed by Watertown

Once the contract for this project is awarded, the design team will provide Watertown with a separate proposal for engineering services during construction to include equipment submittal review, contractor requests for information, review, and approval of pay requests, site work progress inspections, equipment checkout, final walkthrough of the project, start-up, and preparation of an operation and maintenance manual complete with as-built drawings.

#### Assumptions

The following assumptions apply to this proposal and are not included in the project schedule or cost.

- WWTP staff familiar with the current dewatering and dewatered sludge storage areas will be available to answer questions from the design team during the site visit and thereafter.
- Plan sets of the existing buildings and equipment are available in an electronic format and will be provided within 1 week after the kickoff meeting
- All utilities are available to meet the equipment needs. The various utilities required to support the wastewater treatment system will not require capacity upgrades.

#### Exclusions

The following exclusions apply to this proposal and are not included in the project schedule or cost.

- Engineering services during construction (ESDC).
- Dedicated electrical power feed to the new motor control center.
- Geotechnical and site survey studies.
- Sampling and testing labor and fees.
- Environmental permitting, permit submittal, and permit application fees.
- Equipment procurement
- Contracts for any subcontractors
- Construction management
- As-built documents
- Programming (such as the facility supervisory control and data acquisition (SCADA), PLC, human-machine interface (HMI), or other).
- Training of operators.

#### **Project Schedule**

Mead & Hunt is prepared to begin work on this project within 2 weeks of receiving a signed contract and notice to proceed. The total project should be completed in approximately 6 months. The following is an estimate of the schedule:

#### **Project Schedule**

Task	Descriptions	Anticipated Completion/Duration
1	Site visit and data collection	Within 2 weeks of contract issuance and execution
2	P&ID Completion	Within 2 weeks of contract issuance and execution
3	Final Equipment Selection	Within 3 weeks of site visit
4	30% Complete	8 weeks after Tasks 2 & 3 are finished
5	30% Review Workshop	Within 2 weeks after Task 4 is completed
6	90% Complete	8 weeks after Task 5 is complete
7	Planning Level Cost	4 weeks after Task 6 is complete
8	Bid Documents (100% Complete)	4 weeks after Task 6 is complete
9	WDNR Application	2 weeks after Task 8 is complete
10	Bid Support	2 weeks after Task 8 is complete

#### Compensation

Mead & Hunt is pleased to provide the services summarized in Tasks 1 through 10 on a time and material basis, not to exceed a total project cost of \$344,000 without prior written authorization by Watertown.

Mead & Hunt will provide Watertown with monthly updates regarding the work performed, budget, and schedule.

If required, out-of-scope services requested by Watertown will be performed on a time and materials. Before executing any out-of-scope services, Mead & Hunt will issue a change order for Watertown to sign authorizing the out-of-scope work.

The costs in this proposal exclude any sales and use tax, goods and services tax, gross receipts tax, value-added tax, or similar taxes. Upon award of the contract, and prior to work starting, Mead & Hunt requires that Watertown provide either a signed tax exemption certificate, or the applicable sales tax rate, for the project. The final cost of the project will increase to include the cost of all applicable taxes if exemptions do not apply.

#### Authorization

The Scope of Services and Compensation stated in this proposal are valid for a period of thirty (30) days from date of submission. If authorization to proceed is not received during this period, this proposal may be withdrawn or modified by Mead & Hunt.

Signatures of authorized representatives of Watertown and Mead & Hunt shall convert this proposal to an Agreement between the two parties, and receipt of one signed copy shall be considered authorization to proceed with the work described in the Scope of Services. All services shall be performed in accordance with the agreement attached as Attachment A, hereto.

We appreciate the opportunity to offer our services for this project. We welcome any questions regarding this proposal and look forward to working with you on this and future projects.

Sincerely,

MEAD & HUNT, INC.

Jonathan Butt, PE Market Leader – MW One Water

Manish Smestra

Manish Shrestha, PE, PMP Business Unit Leader – One Water

MEAD & HUNT PROPOSAL NO. M4666751-242245.01 ACCEPTED BY:

CLIENT:	
SIGNATURE:	
TITLE:	
DATE:	

Mead & Hunt considers the project approach, design, pricing, data, and other business considerations contained in this proposal to be proprietary and confidential business information to be used solely for the purpose of evaluating the proposal. This document and the information contained herein shall not be used for any purpose other than as stated above and shall not be used, duplicated, or disclosed to any other party without Mead & Hunt's prior written consent.

## Attachment A

# Professional Services Terms and Conditions of Agreement



#### MEAD AND HUNT, INC.

#### PROFESSIONAL SERVICES TERMS AND CONDITIONS OF AGREEMENT

These Terms and Conditions of Agreement form the Agreement under which services are to be performed by Mead and Hunt, Inc. (hereinafter "Consultant") upon acceptance of the attached Proposal by the Client. The Scope of Work, Project Cost and Project Schedule sections of the attached Proposal are incorporated by reference into these Terms and Conditions of Agreement and are part of the Agreement.

#### Article 1. Scope of Work

It is understood that the Scope of Work and the Project Schedule defined in the Proposal are based, in part, on the information provided by the Client. If this information is incomplete or inaccurate, or if site conditions are encountered which materially vary from those indicated by the Client, or if the Client directs Consultant to change the original Scope of Work established by the Proposal, a written amendment to this Agreement equitably adjusting the costs and/or performance time thereunder, shall be executed by the Client and Consultant as soon as practicable in accordance with Article 30 below. In the event that the Client and Consultant cannot agree upon the terms and conditions of such amendment, either party may terminate this Agreement immediately upon written notice to the other in accordance with Article 10, Termination.

Consultant shall perform only the services specified in the Scope of Work portion of the Proposal or an amendment thereto as referenced above. Services provided by Consultant shall be subject to the provisions of this Agreement, including these Terms and Conditions of Agreement, any supplemental conditions incorporated herein, and any written amendments as referenced above. Consultant shall invoice its costs, and Client shall provide payment for all services provided in accordance with Article 2 below.

#### Article 2. Fees, Billing and Payment

Unless otherwise limited in the Proposal, purchase order, or work order, Consultant's fee estimate is effective for thirty (30) days from the date of the Proposal. Thereafter, Consultant shall have the right to modify its fee estimate.

The fees stated in a Proposal, purchase order, or work order constitute an estimate of the tasks and fees required to perform the Scope of Work. The Scope of Work often cannot be fully defined during the initial planning stages of a project. As the Project progresses, facts uncovered may reveal a change in direction, which may alter the Scope of Work. If Client requests modifications or changes in the Scope of Work related to the Project, or if the during Project development the Scope of Work changes resulting in changes to the estimated tasks and fees required to perform the Scope of Work, then the time of performance of the services by Consultant and the fees associated therewith shall be revised and accepted in accordance with Article 30 before Consultant undertakes any additional work beyond the originally defined Scope of Work.

The Client recognizes that Consultant's fee estimate does not include potentially applicable sales and use taxes. Tax-exempt certificates are to be provided by the Client in connection with the acceptance of the Proposal or the applicable purchase order or work order. Taxes will be added to all invoices as applicable,



unless/until a properly completed and valid tax-exemption form is received.

To the extent applicable, the Client recognizes meal costs will be charged based on per diem basis and construction managers and site engineers will charge hotel and meal costs on a per diem basis.

The Client recognizes that time is of the essence with respect to payment of Consultant's invoices, and that timely payment is a material part of the consideration of this Agreement.

Invoices will be submitted by Consultant monthly, and shall be due and payable within thirty (30) calendar days of the invoice date. If the Client objects to all or any portion of an invoice, the Client shall so notify Consultant within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice, if any, not in dispute. In the event that Consultant and the Client cannot resolve the dispute regarding invoiced amounts within thirty (30) days after receipt by Consultant of the aforementioned notice, the dispute shall be submitted to dispute resolution pursuant to Article 12, below.

Payment shall be made via electronic means (EFT/ACH) directly to Consultant. A remittance advice or payment notification to <u>accountsreceivable@meadhunt.com</u> is required. Where electronic means are not available or not feasible, payment shall be mailed to:

Mead and Hunt, Inc. Attn: Accounts Receivable, Mead & Hunt 2440 Deming Way Middleton, WI 53562

The Client shall pay an additional charge of one-and-one-half (1.5) percent (or the maximum percentage allowed by law, whichever is lower) of the invoiced amount per month for any payment received by Consultant more than thirty (30) calendar days from the date of the invoice, excepting any portion of the invoiced amount in dispute or resolved in favor of Client. Payment of invoices is in no case subject to unilateral discounting or setoffs by the Client.

Application of the percentage rate indicated above as a consequence of the Client's late payments does not constitute any willingness on Consultant's part to finance the Client's operation and no such willingness should be inferred.

If the Client fails to pay undisputed invoiced amounts within thirty (30) calendar days of the date of the invoice, Consultant may at any time, without waiving any other claim against the Client or the right to pursue any other remedy against the Client and without thereby incurring any liability to the Client, suspend this Agreement, as provided for in Article 9, Suspension, or terminate this Agreement, as provided for in Article 10, Termination.

# Mead

#### Article 3. Confidentiality

Consultant and Client shall hold confidential all business or technical information marked as confidential or proprietary obtained from the other or its affiliates under this Agreement for a period of five (5) years after obtaining such information, and during that period shall not disclose such information without the other's consent except to the extent required for (1) performance of services under this Agreement; (2) compliance with professional standards of conduct for preservation of the public safety, health and welfare; (3) compliance with any law, regulation, ordinance, subpoena, court order or governmental request; or (4) protection of the disclosing party against claims or liabilities arising from performance of services under this Agreement. In the event disclosure may be required for any of the foregoing reasons, the disclosing party will, except where immediate notification is required by law or regulation or is, in the judgement of the receiving party's counsel required to limit that party's liability, notify the other party in advance of disclosure. The confidential information does not include any data or information which the receiving party can prove (a) was in the receiving party's lawful possession prior to its disclosure by the disclosing party: (b) is later lawfully obtained by the receiving party from a third party without notice to the receiving party of any obligation of confidentiality or other restrictions with respect to use thereof; (c) is independently developed by the receiving party; (d) is, or later becomes, available to the public through no breach of an obligation of confidentiality by the receiving party; or (e) is approved for disclosure in writing by the disclosing party. Notwithstanding anything to the contrary herein, one archive copy of confidential information or documents containing confidential information may be retained by legal counsel of receiving party for the sole purpose of identifying its obligations under this Agreement and any copy may be retained pursuant to any statute, regulation, administrative opinion or any similar legal requirement or to evidence compliance with a professional duty.

#### Article 4. Independent Contractor Relationship

The relationship between the Client and Consultant created under this Agreement is that of principal and independent contractor. Consultant shall serve as an independent contractor to the Client and shall be responsible for selecting the means and methods that services will be provided under this Agreement. It is specifically understood that, irrespective of any assignability provisions, Consultant may retain subcontractors to perform services usually and customarily performed by subcontractors. Should Consultant determine it appropriate or necessary to rely on a subcontractor where it is not customary to do so, Consultant shall obtain prior written approval or subsequent written confirmation from the Client.

#### Article 5. Standard of Care

Consultant will perform the Services in accordance with the standards of care and diligence normally practiced by consulting firms performing services of a similar nature in the same locale.

#### Article 6. Opinions on Cost

Consultant may be asked to provide opinions of probable Project or construction cost costs as part of the professional services under this Agreement. Consultant's opinions of cost are based on Consultant's



experience and judgment. Provided, however, Consultant cannot and does not guarantee that construction proposals, bids or actual construction or Project costs will not exceed estimates provided by Consultant. Consultant is not responsible for variations between actual construction bids or costs and Consultant's opinions regarding probable construction costs.

#### Article 7. Timeliness of Performance

Consultant acknowledges that timely performance of its services is an important element of this Agreement. Consultant will put forth reasonable efforts to complete the work according to the schedule attached in the Proposal.

If Consultant discerns that the schedule shall not be met for any reason, it shall so notify the Client as soon as practically possible so that a mutually agreed on revised schedule can be established.

#### Article 8. Force Majeure

Consultant shall not be considered in default because of any delays in the completion of the work due to causes beyond the control and without the fault or negligence of Consultant or its subcontractors, including but not restricted to, an act of God or of a public enemy, civil unrest, fire, flood, area-wide strike, freight embargo, unusually severe weather, governmental action, pandemic, epidemic or supplier delay. In the event Consultant has knowledge of any actual or potential delay, Consultant shall notify Client in writing of such cases of delay and their probable extent and, upon such notification, Consultant's performance obligations hereunder shall be suspended.

#### Article 9. Suspension

Upon fourteen (14) calendar days written notice to Consultant, the Client may suspend Consultant's work.

If payment of Consultant's invoices is not maintained on a thirty (30) calendar-day current basis by the Client, Consultant may, by fourteen (14) calendar days' written notice to the Client, suspend further work until payment is restored to a current basis.

Suspension for any reason exceeding forty-five (45) calendar days shall, at Consultant's option, make this Agreement subject to renegotiation or termination, as provided for elsewhere in this Agreement. Any suspension shall extend the time schedule for performance in a manner that is satisfactory to both the Client and Consultant, and Consultant shall be compensated for services performed and charges incurred prior to the suspension date, regardless of the reason for the suspension.

#### Article 10. Termination

The Client or Consultant may terminate this Agreement with or without cause, and such termination shall be effective upon fourteen (14) days' written notice to the other party.



Either party may also terminate this Agreement upon written notice to the other party in the event that the other party becomes insolvent; files a petition in bankruptcy; is adjudicated bankrupt; has an assignee; referee, receiver or trustee appointed in any creditor action; has a petition in bankruptcy filed against it which is not vacated within thirty (30) days or suffers any action analogous thereto.

In the event such termination becomes necessary, the party effecting termination shall so notify the other party, and termination will become effective fourteen (14) calendar days after receipt of the termination notice. Irrespective of which party shall effect termination or the cause therefor, the Client shall within thirty (30) calendar days of termination remunerate Consultant for services rendered and costs reasonably incurred, in accordance with Consultant's fee schedule. Costs shall include those incurred up to the time of termination.

#### Article 11. Notice to Parties

All notices required or permitted under this Agreement shall be in writing and shall be made to the parties' below:

Consultant's Project Manager: Jon Butt, PE 6737 W Washington Streeet, Suite 3500 West Allis, WI 53214 Jon.Butt@meadhunt.com

For Notices made pursuant to Article 12: Legal Department: Mead and Hunt, Inc. 6737 W Washington Street, Suite 3500 West Allis, WI 53214 notices@meadhunt.com Client Project Manager: Pete Hartz 800 Hoffmann Drive Watertown, WI 53094s phartz@watertownwi.gov

For Notices made pursuant to Article 12: Client Legal Department (optional) Address Address Email

#### Article 12. Dispute Resolution

Client and Consultant shall provide written notice of a dispute within a reasonable time after the event giving rise to the dispute. Client and Consultant agree to negotiate any dispute between them in good faith for a period of thirty (30) days following such notice. Client and Consultant may agree to submit any dispute to mediation, but such mediation shall not be required as a prerequisite to initiating a lawsuit to enforce this Agreement. Either party shall have the right to litigate the claim, dispute or other matter in question in any state or federal court in the State in which the Project is located. In connection therewith, each party agrees to submit to the jurisdiction of such court.

In the event that legal action is brought by either party against the other in the Courts (including action to enforce or interpret any aspect of this agreement), each party shall be responsible for its own legal costs.



Client and Consultant agree to seek recourse only against each other as incorporated (or similar business entities) and not each other's officers, employees, directors or shareholders.

#### Article 13. Choice of Law

This Agreement shall be governed and construed in accordance with the laws of the State in which the Project is located, without reference to conflicts of law principles. Each party hereto consents to the exclusive jurisdiction of the state and federal courts in the State in which the Project is located for any actions, suits or proceedings arising out of or relating to this Agreement.

#### Article 14. Indemnification

Subject to the limitations provided in Article 15, Consultant agrees to indemnify and hold harmless Client, its directors, officers, stockholders, employees, agents, successors and assigns from and against any and all claims, demands, causes of action, liability and costs which arise out of or result from any negligent act, omissions or willful misconduct of Consultant or Consultant's employees, agents or subcontractors in the performance of services under this Agreement; provided, however, Consultant will not be obligated to indemnify Client with respect to costs or damages to the extent such costs or damages are caused by or incurred as a result of negligence or intentional misconduct of Client or Client's subcontractors, agents or employees.

#### Article 15. Limitation of Liability

NEITHER PARTY WILL BE LIABLE FOR OR REQUIRED TO INDEMNIFY THE OTHER FOR SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, DELAY OR LIQUIDATED DAMAGES, LOSS OF INVESTMENT OR BUSINESS INTERRUPTION, REGARDLESS OF HOW CHARACTERIZED AND EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHICH ARISE FROM THE PERFORMANCE OF THIS AGREEMENT OR IN CONNECTION WITH THIS AGREEMENT, AND REGARDLESS OF THE FORM OF ACTION (WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE).

CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS SO, TO THE FULLEST EXTENT PERMITTED BY LAW, CONSULTANT'S LIABILITY, AND THAT OF ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS AND SUBCONTRACTORS, ARISING OUT OF BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE OR ANY OTHER CAUSE OF ACTION, SHALL BE LIMITED TO \$100,000 OR CONSULTANT'S FEE, WHICHEVER IS GREATER.

#### Article 16. Insurance

Consultant shall maintain the following insurance coverage during the time it is performing services hereunder. Consultant disclaims any duty to defend Client. Client agrees that it shall not tender the defense of any claim arising out of or related to this Agreement to Consultant.

- A. Worker's Compensation: of a form and in an amount as required by state law
- B. Employer's Liability:
  - \$1,000,000 each accident \$1,000,000 disease, each employee \$1,000,000 disease, policy limit
- C. Automobile Liability (including all owned, hired and non-owned vehicles): \$1,000,000 each accident
- D. Commercial General Liability (bodily injury and property damage combined single limit):
  \$1,000,000 each incident
  \$2,000,000 annual aggregate
- E. Errors and Omissions: \$5,000,000 each incident \$10,000,000 annual aggregate

#### Article 17. Review of Contractors Work

In the course of performing services under this Agreement, Consultant may be asked to review drawings, specifications, or pay applications from contractors engaged to perform work in connection with the project for which the Proposal is submitted or to observe such contractor's construction as it progresses. Any such review shall be limited to a review of the general conformance with the design concept of the project and the general compliance with information given in the contractor's documents and as may otherwise be noted by Consultant on such drawings and specifications. Such review shall in no way limit the liability of the contractor or be deemed an indication that Consultant has accepted or approved the drawings, specifications or work in any manner.

#### Article 18. Construction Means and Methods, Safety, and Conduct

Unless otherwise expressly stated in Consultant's Proposal, this Agreement shall not be construed as



imposing upon or providing to Consultant the responsibility or authority to direct or supervise construction means, methods, techniques, sequence or procedures of construction selected by the parties or subcontractors or the safety precautions and programs incident to the work of the parties or subcontractors.

Consultant shall be responsible for providing personal protective equipment and safety training for its own employees.

Client and Consultant understand their respective obligations to provide a respectful work environment for their employees. Both parties agree that harassment on the job (unwelcome verbal, physical or other behavior that is related to sex, race, age or other protected class status) will not be tolerated and will be addressed in a timely manner and in compliance with anti-harassment laws.

#### Article 19. Ownership and Use of Documents and Concepts

Client acknowledges that Consultant reports, drawings, boring logs, field data, field notes, laboratory test data, calculations, estimates and other similar documents ("Records") are instruments of professional services, not products.

Consultant will retain these Records for a period of three (3) years following completion of this Project. During this time, Consultant will reasonably make available these records to the Client.

Electronic files may contain viruses which can be inadvertently transmitted. It is the sole responsibility of Client to check for viruses before loading the files, and Client is solely responsible for intercepting and disabling any viruses which could be inadvertently transmitted with the electronic files. Client hereby agrees to indemnify and hold Consultant harmless against all claims of any nature resulting from viruses transmitted with the electronic files.

Consultant shall not be responsible for any deviations, alterations, modifications or additions in the electronic data in comparison to the documents originally released by the Consultant to the Client. Consultant shall not be responsible for any reuse of the electronic data by Client or any other party for this Project, or any other project without the prior express written consent of Consultant. Client shall defend, indemnify and hold completely harmless Consultant against any claims, damages or losses arising out of any deviations, alterations, modifications or additions in the electronic data in comparison to the documents originally released by the Consultant to the Client or any reuse of the electronic data without prior express written consent of Consultant.

All documents, including the electronic files that are transferred by Consultant to Client, are Instruments of Service of Consultant created for this Project only, and are not intended to be deemed a sale of the files and data, and NO REPRESENTATION OR WARRANTY IS MADE, EITHER EXPRESS OR IMPLIED, CONCERNING THE MERCHANTABILITY OF THE FILES AND DATA OR THEIR FITNESS FOR A PARTICULAR PURPOSE.

Copies of documents that may be relied upon by Client are limited to the originally released documents that



contain signatures and seals of the professional employee(s) of Consultant. Any damages resulting from deviations from such originally released and signed or sealed electronic files will be at the Client's sole risk.

Consultant is not responsible for damages arising out of the use by the Client or the Client's agents of any Consultant data or report for any purpose other than its original purpose as defined in the Proposal.

While Client agrees that any patentable or copyrightable concepts developed by Consultant as a result of this Agreement shall remain the sole and exclusive property of Consultant, Client shall retain a right, without the right to grant sublicenses under any patents or copyrights of Consultant, to use any information or recommendations generated by Consultant during the performance of this Agreement. Client shall have the right to assign such right to any party who buys from client the assets of Client relating to the information or recommendations generated by Consultant under this Agreement. Nothing in this Article 19 shall restrict Consultant from using any methods, techniques or concepts developed by it under this Agreement for its benefit or the benefit of any third party.

#### Article 20. Subsurface Exploration

In those situations where Consultant performs subsurface exploration, the Client, to the extent of its knowledge, will furnish to Consultant information identifying the type and location of utilities and other human-made objects beneath the surface of the Project site. Consultant will take reasonable precautions to avoid damaging these utilities or objects. Prior to penetrating the site's surface, Consultant will furnish Client a plan indicating the locations intended for penetration. Consultant will not be responsible for damages arising out of contact with unidentified subsurface utilities or objects.

#### Article 21. Extent of Study

Client recognizes that actual environmental or geological conditions may vary from conditions encountered at locations where Consultant makes visual observations, obtains samples or performs other explorations as part of its services under this Agreement. Consultant's failure to discover potential environmental contamination, geological conditions or other conditions through appropriate techniques does not guarantee the absence of environmental contamination, geological conditions or other conditions at a site.

#### Article 22. Hazardous Substances

In the event that services performed under this Agreement involve hazardous substances, as defined in 40 CFR Part 302, including hazardous waste, whether or not such involvement was known or contemplated at the time this Agreement was made or when services performed by Consultant commenced under this Agreement, the following additional terms and conditions shall apply to this Agreement.

Any and all samples collected or received by Consultant or its subcontractors on behalf of Client which contain hazardous substances including hazardous waste will be, after completion of testing and at Client's expense, either returned to Client, or using a manifest signed by Client as a generator, be transported to a location selected by Client for final disposal. Client shall pay all costs associated with the storage, transport



and disposal of all such samples. Client agrees and recognizes that Consultant is acting as a bailee and at no time assumes title to any such samples or substances.

Consultant warrants that when making hazardous waste determinations on behalf of Client, Consultant will use the standard of care and diligence normally practiced by consulting firms performing similar services in the same locale. Consultant, if requested by Client, will gather bids from various hazardous waste transporters and/or treatment, storage or disposal facilities (TSDFs) that are appropriately licensed or permitted by state, federal and/or local authorities to accept the waste generated by the Client. Client acknowledges that although Consultant may gather bids from various hazardous waste transporters or TSDFs, that Client has ultimately selected such transporter or TSDF. Client understands that Consultant make any other warranties or representations other than expressly written in this paragraph related to such transporters or TDSFs. Client acknowledges that Consultant at no time assumes title to waste generated from Client's facility or site.

Client acknowledges that Consultant has no responsibility as an operator, arranger, generator, treater, storer, transporter, disposer, emitter, discharger or releaser of hazardous substances, air or water pollutants or other contaminants found or identified in conjunction with work performed hereunder.

#### Article 23. Third Party Rights

Except as specifically stated in this Agreement, this Agreement does not create any rights or benefits to parties other than Client and Consultant. The services provided by Consultant hereunder are for the Client only.

#### Article 24. Assignment

Neither party to this Agreement shall assign its duties and obligations hereunder without the prior consent of the other party except as provided in Article 4.

#### Article 25. Lien Notice

Consultant hereby notifies Client that persons or companies performing, furnishing or procuring labor, services, materials, plans or specifications for construction on Client's land may have lien rights on Client's land and buildings if not paid.

#### Article 26. Waiver

No waiver by either party of any term or condition set forth herein or the breach by the other party of any such term or condition, whether by conduct or otherwise, in any one or more instances, shall be deemed or construed as a further or continuing waiver of any such term, condition or breach or a waiver of any other term, condition or breach.


### Article 27. Headings

The subject headings in this Agreement are for convenience only and are not determinative of the substance of the subject clause.

### Article 28. Entire Agreement

The parties agree that this Agreement, together with proposals and attachments as referenced or incorporated herein, represents the entire and integrated agreement between the Client and Consultant and supersedes all prior communications, negotiations, representations, quotations, offers or agreements, either written or oral between the parties hereto, with respect to the subject matter hereof, and no agreement or understanding varying or extending this Agreement shall be binding upon either Party, other than by a written agreement signed by both the Client and Consultant. If additional documents represent the agreement of the parties, such documents must be itemized in Consultant's proposal. The parties agree that the provisions of these terms and conditions of this Agreement shall control over and govern as to any subsequent form or document signed by the Parties, such as Client's purchase orders, work orders, task orders, etc. and that such documents may be issued by Client to Consultant as a matter of convenience to the parties without altering any of the terms or provisions hereof.

### Article 29. Severability

If any provision or part of a provision of this Agreement is declared to be invalid by any tribunal of competent jurisdiction, such part shall be deemed automatically adjusted, if possible, to conform to the requirements for validity, but if such adjustment is not possible, it shall be deemed deleted from this Agreement as though it had never been included herein. In either case, the balance of any such provision and of this Agreement shall remain in full force and effect.

### Article 30. Contract Amendments

Any amendments to the Proposal or these Terms and Conditions of Agreement shall be executed by means of a written contract amendment, signed by the Client and Consultant. Changes to the Agreement will not become effective until the contract amendment has been signed by both parties. The contract amendment will document the specific changes to the Agreement along with any resulting adjustment in cost and/or schedule.

### Article 31. Execution of Agreement

These Terms and Conditions of Agreement are cross referenced in Consultant's Proposal and are accepted when the Proposal is executed by the Client or when the Client authorizes Consultant to proceed with the Scope of Work. Client's representative represents that he/she is duly authorized to enter into and sign this Agreement. The parties agree that Consultant's Proposal may be executed by Client and delivered to Consultant via facsimile or other electronic means, and such facsimile or other electronic copy will constitute an original.

<Jon.Butt@meadhunt.com> ovember 15, 2024 10:22 AM z nrestha; Annie Weidert

on Energy Inquiry- Watertown Solar and Sludge Dryer

imate for the staff hours we included as the basis for the dryer final

Hours
82
 628
 848
390
 33
1,981

questions.



## MEMO

### Water Systems

To: Public Works Committee

From: Tim Hayden

Date: 10/22/24

### Subject: Purchase of Combination Sewer Cleaner Truck

### Background

The Wastewater Department recognizes the critical importance of maintaining the collection system to ensure consistent quality and reliability for our customers. A combination sewer cleaner truck is our most essential tool for this purpose, and its optimal performance is crucial. To maintain reliability and prevent operational inefficiencies, we schedule replacement every ten years. This approach allows us to maximize the truck's service life without compromising on reliability as it ages.

This truck is used to clean \_\_\_\_\_ miles of sewer, and 18 lift stations annually. It also performs hydro-excavations, enhancing employee safety and reducing the risk of damage to underground utilities in areas unsuitable for traditional excavation methods.

### **Budget Goal**

The 2025 budget has allocated \$600,000 for the purchase of this vehicle, and the recommended truck falls well within this target

### **Financial Impact**

Item	Cost
Base Price	\$532 <i>,</i> 551.00
Trade-In Value	-\$51,000.00
Demonstrator Discount	-\$16,500.00
Add-Ons	+\$10,257.00
Total Cost	\$475 <i>,</i> 308.00



# MEMO

### Recommendation

After careful review of the bids received, the Wastewater team recommends awarding the bid to RNOW for the purchase of a 2025 Super Products Camel MAXX 1200 Ejector at a total cost of \$475,308. This price includes a trade-in value of \$51,000 for the old truck and a demonstrator discount of \$16,500.

This recommendation is based on RNOW's high evaluation score, which reflects their superior technical specifications, warranty and support services, and overall value. This acquisition aligns with our budgetary goals and operational needs, ensuring we continue to provide high-quality service to our community.

76





Voice: 414-541-5700 Fax: 414-543-9797

### **Quoted To:**

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

Accepted By:

Sign above to accept quotation and place order

Customer Fax: 920-262-4082

C	ustomer ID	Good	Thru	Payment Terms	Sa	ales Rep
W	ATERTOWN	10/2	5/24	DUE ON DELIVERY		JAS
Quantity	Item			Description	Unit Price	Amount
	FREIGHTLIN	R ®	CHASSI	S		
1.00	FREIGHTLINER CHA	SSIS	2025 Fre 370HP, 3	eightliner 108SD, Cummins L9 3000RDS Transmission	113,102.17	113,102.17
	Super Pro	ducts®	SEWER	TRUCK BODY MODEL		
1.00	SP 0008777		Super P 12 YD (9	roducts - Eject Type Camel MAXXX / 9.2m) Combination Sewer Cleaner	419,280.00	419,280.00
1.00			- Powde	r coat paint finish, white (Standard)		
			VACUU	M SYSTEM		
1.00			- 8" vacu 824, 18"	uum system, "Roots type PD Model hg. and 4500 cfm		-
			WATER	SYSTEM		
1.00			- Single	Piston Water Pump		
1.00			- Water	Pump 80 GPM @ 2000 PSI		
1.00			- 1500 G Polyethe	allon Water Tanks made of elene		

### Thank you for the opportunity to quote

SUBMITTED BY

	77
TOTAL	Contir
Freight	
Sales Tax	Continued
Subtotal	Continued



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### **Quoted To:**

**CITY OF WATERTOWN** 811 S. FIRST STREET WATERTOWN, WI 53094 USA

#### Quote Number: 2024-10486 Quote Date: Sep 25, 2024 Page: 2

Section 4, Item D. V

Accepted By:

Sign above to accept quotation and place order

**Customer Fax:** 920-262-4082

Customer ID	Good Thru	Payment Terms	Sales Rep
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
		WATER SYSTEM OPTIONS		
1.00		- Winter recirculation		
1.00		- Low water warning light and alarm with		
		water capacity digital display		
1.00		- Water Capacity Digital Display at front		
		control panel		
1.00		- Retractable hose reel with live center with		
		50' x 1/2" hose		
1.00		- Washdown Handgun Included		
		HOSE REEL		
1.00		- 800' of 1" hose		
1.00		- Leader Hose 1" x 10'		
1.00		- 270 Degree Rotation with 18" Extension		
		Standard		
1.00		- Fully automatic power level wind		
1.00		- Hose reel tensioning system		
1.00		- Hose reel digital counter (Automatic)		
		DEBRIS BODY		

### Thank you for the opportunity to quote

SUBMITTED BY

	78
TOTAL	Conti <del>r</del>
Freight	
Sales Tax	Continued
Subtotal	Continued



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### **Quoted To:**

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

# OUOTATSection 4, Item D.Quote Number:2024-10486Quote Date:Sep 25, 2024Page:3

Accepted By:

Sign above to accept quotation and place order

Customer Fax: 920-262-4082

Customer ID	Good Thru	Payment Terms	Sales Rep
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
1.00		- Camel Body 12yd Capacity		
1.00		- Hydraulic Powered Tailgate Standard		
1.00		- Ejection Style Body - Full Eject		
1.00		- Internal Body Flush Out System		
		CONTROL SYSTEM		
1.00		- Wireless remote		
1.00		- LCD Screen at Control Panel for system		
		operations and status		
1.00		- Blower engagement control at front panel		
1.00		- Mid Mounted Passenger-side Controls		
		Included		
		FILTRATION SYSTEM		
1.00		- Centrifugal Cyclone separator Standard		
1.00		- Secondary Filter - Microstrainer		
1.00		- Pleated final filter assembly 10 Micron		
		BOOM		

### Thank you for the opportunity to quote

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	Continued
Freight	
TOTAL	Continue -



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### **Quoted To:**

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

#### Section 4, Item D. Quote Number: 2024-10486 Quote Date: Sep 25, 2024 Page: 4

V

Accepted By:

Sign above to accept quotation and place order

Customer Fax: 920-262-4082

Customer ID	Good Thru	Good Thru Payment Terms	
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
1.00		- 8" Diameter Pipe Standard		
1.00		- 26' Boom Reach from centerline of unit		
1.00		- Rotation of 217 Degrees		
1.00		- Lifting Capacity 1000lb		
1.00		- Fully Hydraulic Controlled Boom		
		HYDRO EXCAVATION OPTIONS		
1.00		- All Pipe Extensions are Aluminum		
		Bandlock Style 8" (SP Style)		
1.00		- Hydro-X Kit, Bandlock Style (SP Style) with		
		Hydro-X Lance Included		
1.00		- 8" x 60" Supertube Aluminum with crown		
6.00		- 8" x 60" Supertube Aluminum Extension		
		Tubes		
1.00		- 8" x 36" Supertube Aluminum Extension		
1.00		- Fluidizing Suction Tube Nozzle 8" x 24"		
10.00		- Supertube Lock Ring 8"		
10.00		- Gaskets for Supertube O-ring 8"		
1.00		- Three Tube Rack on Tailgate Non Folding		
		with Hydro Lance Holder		
1.00		- Six Tube Rack vertical located on		
		passenger side of truck		

### Thank you for the opportunity to quote

SUBMITTED BY

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ΤΟΤΑΙ	Continued
Freight	
Sales Tax	Continued
Subtotal	Continued



Voice: 414-541-5700 Fax: 414-543-9797

### **Quoted To:**

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

#### Section 4, Item D. Quote Number: 2024-10486 Quote Date: Sep 25, 2024 Page: 5

V

Accepted By:

Sign above to accept quotation and place order

Customer Fax: 920-262-4082

Customer ID	Good Thru	Payment Terms	Sales Rep
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
		SAFETY FEATURES		
1.00		- Hose Reel Safety Screen Standard		
1.00		- LED Boom work lights		
1.00		- LED Flood light package, tailgate area,		
		power unit area		
1.00		- Cordless Rechargeable Handheld		
		Worklight		
1.00		- LED Package 2 - (2) Tailgate and (2)		
		Boom beacon omni-directional strobes		
		(GREEN & AMBER)		
1.00		- LED Package 3 - Front, Mid-ship, and		
		Rear bumper directional strobes (AMBER &		
		GREEN)		
1.00		- Front LED Arrowstick (GREEN & AMBER		
		if available)		
1.00		- Rear LED Arrowstick (GREEN & AMBER		
		if available)		
1.00		- Safety Props for Body Hoist and Tailgate		
		Standard		
1.00		- Rear Vision Camera System		
1.00		- Safety Warning Triangles (additional set +		

### Thank you for the opportunity to quote

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TOTAL	Conti <del>r</del>
Freight	
Sales Tax	Continued
Subtotal	Continued



Voice: 414-541-5700 Fax: 414-543-9797

### **Quoted To:**

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

#### Section 4, Item D. Quote Number: 2024-10486 Quote Date: Sep 25, 2024 Page: 6

V

Accepted By:

Sign above to accept quotation and place order

Customer Fax: 920-262-4082

Customer ID	Good Thru	Payment Terms	Sales Rep
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
		1 included with chassis)		
		STORAGE		
1.00		- Toolbox, 48", Lower, Curbside (Aluminum		
		with keyed door)		
1.00		- Toolbox, 48", Mid, Curb (Aluminum with		
		keyed door)		
1.00		- Toolbox, 48", Upper, Curb, Top Hinge		
		(Aluminum with keyed door)		
1.00		- Toolbox Behind the Cab 19" x 42" x		
		96" (Aluminum with keyed door)		
		ADDITIONAL ITEMS		
1.00		- Physical Copy of Instruction Manual		
		Included		
1.00		- Water Pump Rebuild Kit PN0026095		
1.00		- Warthog 1" WGR Magnum Nozzle		
1.00		- ENZ Bulldozer Nozzle 1"		
1.00		- Steering Stops to Be Adjusted to Provide		
		Tightest Turning Radius		

### Thank you for the opportunity to quote

SUBMITTED BY

	82
TOTAL	Conti <del>r</del>
Freight	
Sales Tax	Continued
Subtotal	Continued



Voice: 414-541-5700 Fax: 414-543-9797

### Quoted To:

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

Quote Number: 2024-10486 Quote Date: Sep 25, 2024 Page: 7

Accepted By:

Sign above to accept quotation and place order

Customer Fax: 920-262-4082

Customer ID	Good Thru	Payment Terms	Sales Rep
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
		WISCONSIN TITLE FEES		
1.00	TITLE FEE	Wisconsin Municipal Title and Plates	169.50	169.50
		TRADE IN OPTION		
1.00		2014 Freightliner 370 hp with Model 200 -10	Deduct	
		Yard Machine	\$51,000.00	
		OTHER POPULAR OPTIONS AVAILABLE		
1.00				
1.00		Front Compare quotem	Add \$2,251.54	
1.00		- FIOR Camera system	Add \$ 375.29	
1.00		- Duar nii system-cubside iront nii with top		
1.00		Work light installed on beso real lower left	Add \$1,647.06	
1.00		corper		
1.00		- Front Body Drain 6" knife valve 35'x6'	Add \$1,647.06	
1.00		fabric drain hose w/camlock can		
1 00		- Front Body Drain 6" knife valve 35'x6'	Add \$ 294.12	
1.00		fabric drain hose w/camlock can		
1 00		- Trash pump 3" 420GPM front of body	Add \$2,284.07	
		plumbed to front humper		
			Auu \$8,598.29	

### Thank you for the opportunity to quote

SUBMITTED BY

Steven D. Krall President



Section 4, Item D. 

V



Voice: 414-541-5700 Fax: 414-543-9797

### Quoted To:

CITY OF WATERTOWN 811 S. FIRST STREET WATERTOWN, WI 53094 USA

Quote Date:

Page:

Accepted By:

Sign above to accept quotation and place order

Quote Number: 2024-10486

8

Customer Fax: 920-262-4082

Customer ID	Good Thru	Payment Terms	Sales Rep
WATERTOWN	10/25/24	DUE ON DELIVERY	JAS

Quantity	Item	Description	Unit Price	Amount
1.00		- Vacuum booster valve	Add \$1,390.69	
1.00		- Rear Splash Shield	Add \$1,658.71	
1.00		<ul> <li>Acculevel debris level indicator~</li> </ul>	Add \$6,853.22	
1.00		- 1" Standard Nozzle Extension	Add \$ 25.53	
1.00		- Hose, 25' Cotton - Single Jacket Filler		
		Hose	Add \$ 202.22	
1.00		- Tigertail Sewer Hose Guide	Add \$ 44.00	
		AVAILABLE DEMO DISCOUNT OPTION		
1.00	DISCOUNT	DEMONSTRATOR DISCOUNT	Deduct	
		- Unit will have been demoed by RNOW Inc	\$16,500.00	
		for a specified period of time of no more		
		than 2 - 4 months		
		- Unit will come with full factory warranty		
		- Unit will be fully serviced and ready for		
		operation when delivered		
Thank ye	ou for the opportunity	v to quote	Subtotal	532,551.67

SUBMITTED BY

Steven D. Krall President

		Q/
TOTAL	532,5	4 07
Freight		
Sales Tax		
Subtotal	532,55	51.67



Sep 25, 2024

Section 4, Item D.

Vendor	Quote Received	Base Price	Tra	ade-In Value	Delivery	Demo Discount		Add Ons		Total Cost	
	On Time										
# 1	Yes	\$ 532,551.00	\$	51,000.00	\$ -	\$	16,500.00	\$	10,257.00	\$	475,308.00
# 2	Yes	\$ 566,250.00	\$	35,000.00	\$ -	\$	-	\$	9,738.65	\$	540,988.65
# 3	Yes	\$ 515,777.00	\$	60,000.00	\$ -	\$	-	\$	-	\$	455,777.00
# 4	Yes	\$ 533,593.00	\$	60,000.00	\$ -	\$	-	\$	-	\$	473,593.00
# 5	Yes	\$ 646,232.00	\$	85,000.00	\$ 2,895.00	\$	-	\$	-	\$	564,127.00
# 6	Yes	\$ 526,652.00	\$	45,000.00	\$ 2,895.00	\$	-	\$	-	\$	484,547.00

Vendor	Score	Notes:
# 1	78	Best match to the spec. Demo
		discount is a plus. Great
		working relationship. Price is
		well withing budget
# 2	70	No eject body. Hose reel
		extends, but not as far as
		RNOW. Delivery summer of
		2025. No front arrow board.
		Price is on the high end.
# 3	67	Great sales team. No eject
		body. No diagnosics on control
		panel. Not able to extend hose
		reel. Building a shop closer, but
		not available now.
# 4	65	Same as the other, but Triplex
		pump not single piston.
# 5	61	No eject body. Not able to
		extend hose reel. 11 Yards not
		12. Delivery 2026. A 15%
		deposit required. Amber lights
		only.
# 6	62	Same as the other, and it's a
		demo unit.



Water Systems

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

To: Chairman Board and members of the Public Works CommissionDecember 10, 2024From: Peter Hartz – Water Systems Manager

Re: December 10, 2024, Public Works Commission agenda item

**Review and take possible action** Hire Strand Associates to complete phase 1 route refinement and preliminary design for the West Side Sanitary Sewer Interceptor project for \$28,500.

### Background:

2002 – wastewater collections systems capacity plan was completed, in the plan sanitary sewer service areas were identified.

Southwest Interceptor Corridor Study - presented to public works commission on February 12, 2007

- Paul Lange presented a proposal from Applied Technologies to provide engineering services for the STH 26 Bypass Utility Study for sanitary sewer corridor. An evaluation was done in 2002 for a future west interceptor to service the Bypass area. The engineering study will include a 40,000 foot interceptor, 8200 feet of sewer, one lift station, and 4200 feet of force main. The new service goes west from the WWTP to Horseshoe Road, then north across HWY 19 to a point almost to the edge line of the sewer service area. Study cost is not to exceed \$26,100.
- Review West Interceptor Study presented to public works commission on August 14, 2007 Bill Erickson presented a study being done to evaluate when and where a new sanitary sewer interceptor would need to be installed on the west side to the Hwy 26 bypass scheduled for 2009 and ending 2011. This new interceptor sewer would support 20% of the City's future service area covering 2,000+ acres of land. Two routes were studied. The eastern route would require 4 lift stations to effectively move sanitary sewer flows and be 35,000 feet in length with easements totaling 2,000 feet. The western route would be 42,500 feet in length and would require 2 lift stations with easements totaling 26,000 feet. The study determined the eastern route was not feasible due to problems with gravity flow to the service areas requiring the 4 lift stations. <u>The western route has a current estimated project cost of \$14.5</u> <u>million.</u> It was noted this study lays the ground work for eventual development to occur on the southwest and northwest side of Watertown.
- April of 2023, this comes up again as a concept idea for new sub-division by Loos Homes. After taking a closer look at the wastewater engineering and capacity report from 2002 I see that this development area was not anticipated to connect to the existing sanitary sewer system in place on Milford Street. Rather this area was identified as part of The Southwest Service Area, specifically, this area is included in sub-area SW2 and mentions any additional development is to be connected via a gravity sewer system (new west interceptor) that drains into the south interceptor sewer. The new collection sewer system (new west interceptor) has not been installed, and the gravity sewer system in place along Highway A is not to be used for any additional development outside the basin area (23A) due to capacity issues identified in 2002. Since this study, Johnsonville has relocated into drainage basin 23A along with Clausen Chocolates in a new basin 31, which drains into basin 23A.

- The Southwest Service Area is the largest undeveloped outlying service area and includes seven subareas totaling approximately 1,444 acres. SW1, SW2, & SW3 are located West of the Rock River, the remaining sub-areas are located east of the Rock River – all the sub-areas in the Southwest Service Area are to use the south interceptor sewer, but getting the wastewater to drain to the south interceptor requires the installation of some or parts of the new west interceptor sewer to convey the water to the location of the south interceptor.
- Water Systems Manager reviews the collection system study and identifies the West Side Interceptor project on the CMAR report for 2017, and each year after.
- June 2023, Strand Associates completes the Milford Street sanitary sewer capacity analysis related to three proposed developments and expansions of sanitary use for the existing collection system.
- April 2024, additional development is shared in concept, all of which is outside the city limits in the West Side Interceptor identified area. Several meetings occur with the city and developer regarding sanitary sewer service for the area of development.
- May 8, 2024 CMAR presented to Public Works Commission, discussion occurs regarding the West Side Interceptor and who would fund the project (city / developer).
- June 11, 2024 Public Works Commission discusses CMAR a second time, more discussion occurs regarding the West Side Interceptor project.
- August 2024 property is annexed into the city of Watertown for a new subdivision all of which is outside the current sanitary sewer service area.
- September 16, 2024, the public works team discussed the status of the West Side Interceptor in relation to new development being planned in the drainage basin.
- October 2024 Water systems manager receives 3 quotes with the same defined scope of work, Strand \$28,500, Applied technologies \$28,650, Donahue \$85,955.

Budget Goal: Aligns with investments and infrastructure planning.

*Financial Impact:* \$28,500 for phase I scope of work, additional fiscal impact unknown as it is all developer driven and current code language requires utility improvements to be funded by developer.

Recommendation: Award project to Strand Associates for scope 1 work to begin at \$28,500.

Sincerely, Peter Hartz

Water Systems Manger

Strand Asso 910 West Wingra Drive Madison, WI 53715 (P) 608.251.4843 www.strand.com



November 6, 2024

Mr. Peter Hartz, Manager Watertown Wastewater Treatment Plant 800 Hoffman Drive Watertown, WI 53094

Re: Request for Proposal (RFP) for Southwest Interceptor Extension – Phase 1 Route Refinement and Preliminary Design

Dear Mr. Hartz:

On behalf of Strand Associates, Inc.<sup>®</sup>, thank you for the opportunity to submit our proposal for the Southwest Interceptor Extension project. We are excited at the prospect of working once again with the City of Watertown. Selection of our firm will provide the City with an interceptor design that meets long-term capacity needs and provides a constructible, cost-effective solution. This is supported by the following factors:

- Understanding of key technical issues provides the framework for a successful project.
- Familiar, trusted team provides the resources and local knowledge to deliver a streamlined project.
- Relevant railroad coordination, trenchless design, and environmental experience delivers full confidence in the management, design, and implementation of this project.

### **Project Understanding and Approach**

### Understanding of Key Technical Issues Provides the Framework for a Successful Project

The City's proposed *Southwest Interceptor* extends from the existing Manhole 23B-004 at the Wastewater Treatment Facility and runs westerly to the intersection of Milford Street/Commerce Drive and then runs southwesterly within the Milford Street right of way to the southerly city limits. The proposed interceptor extension is approximately 5,800 linear feet in length and 24 inches in diameter. Additional capacity is needed in the city collection system because of development occurring in the southwesterly sanitary sewer service area. It is anticipated that this project will be split into two separate phases and will include Phase 1 – Route Refinement and Preliminary Design, and Phase 2 – Final Design and Permitting.

Goals for the project include the following:

- Route alignment that is sensitive to environmental assets and future development concerns along the corridor
- Evaluation of trenchless construction alternatives for the Union Pacific Railroad (UPRR) crossing
- Evaluation of trenchless and open-cut trench construction alternatives for crossings under the unnamed creek and wetlands
- Streamlined coordination with the UPRR and Wisconsin Department of Natural Resources (WDNR)



Existing MH 23B-004 looking west towards the proposed sewer alignment.



Existing MH 23A-091 at Milford/Commerce looking east towards the WWTP.



Strand Asso Section 4, Item E.

Mr. Peter Hartz City of Watertown Page 3 November 6, 2024

### Thorough Approach Results in Cost-Effective Solutions Addressing Growing Capacity Needs

### **City Involvement**

Our general philosophy and approach to project management is founded on strong communication with clients. We strive to collaborate frequently and, at the same time, keep the project focused and moving forward. We look to partner with the City to obtain design feedback throughout the entire project, including productive monthly design progress meetings. Our approach will combine our knowledge of the City's sewer collection system and operating preferences, and to provide an innovative design that meets the needs of the City.

### **Report Phase, Alternatives Analysis, and Preliminary Design**

**STEP 1** – Our project approach begins with a kickoff meeting of our team members with the City. The focus of the kickoff meeting will be to review available information and establish project objectives – the 'needs' and 'wants' – to begin the preliminary design process.

**STEP 2** – This step includes analyzing existing data and gathering additional information. This will be achieved by reviewing the planning information already completed by the City, gathering our existing utility and base mapping information already on file, discussing the project with key stakeholders, and conducting site visits to review existing conditions.



**STEP 3** – With the new information in hand, the team will prepare an assessment of interceptor routing alternatives for City review and, together, select a preferred route.

Components of the alternatives analysis will include items such as environmental considerations, depth of sewer, potential utility conflicts, constructability, soil/bedrock and water table location, number of needed easements, bypass pumping requirements, costs, and other relevant items. Initiating coordination with Jefferson County, utility companies, WDNR, and other project stakeholders will be critical during this step and will continue throughout the project. After a route is selected, we will prepare preliminary plan and profile drawings and an opinion of probable construction cost (OPCC) for the project.

**STEP 4** – The final step in the report phase is to prepare a design report documenting key considerations, cost estimates, features, and design parameters for the recommended design. Our staff will make a formal presentation of the report to the City.

### Thorough Interceptor Routing Analysis Produces the Most Desirable Alignment

To assist the City in choosing the ideal alignment, we will provide a simple yet effective alignment alternative comparison. We recently provided a similar comparison for the City's Allerman Lift Station and Force Main project. A summary of key considerations in evaluating the alternatives for this project include:

- Easement acquisitions
- Consideration of trenchless construction under UPRR
- Potential impacts to environmental resources
  - o Wetlands
  - o Unnamed Creeks
  - o Northern Long-Eared Bat
- Maintenance access
- Construction costs/constructability



Figure used for the Allerman lift station force main routing analysis.

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Mr. Peter Hartz City of Watertown Page 4 November 6, 2024

### **Constructible Design Produces Seamless Transition to Construction**

**Trenchless Construction** – The crossing of the UPRR tracks will require trenchless construction. Trenchless construction can be challenging because of limited space for launch and retrieval shafts adjacent to the railroad tracks. We recognize the importance of understanding existing soil and groundwater conditions for trenchless construction during the design process. Our experience includes the design of utilities and casing pipes using horizontal directional drilling (HDD), microtunneling, and multiple auger bore and jack methods of construction for pipes ranging from 4 to 101 inches in diameter on 10 projects under railroads in the last 4 years.

**Groundwater and Soil Conditions** – The proximity of the unnamed creeks and wetlands will certainly mean high groundwater levels are likely to be encountered throughout the corridor. Obtaining geotechnical borings during final design will be critical to understand the extent of groundwater and existing soils to be encountered during construction. A preliminary review of the National Resources Conservation Services' web soil survey shows Houghton Muck through a segment of the proposed interceptor route. Houghton soils consist of deep, very poorly drained soils formed in herbaceous organic materials in depressions and floodplains.

### **Unnamed Creek Crossings and Wetland Impacts**

- Preliminary site walkthroughs and evaluation of the WDNR Surface Water Data Viewer indicate that significant sections of the corridor will likely be identified as wetlands. In addition, the proposed interceptor route crosses an unnamed creek in two separate locations. On previous similar creek crossing projects, the flow was low enough that the contractor was able to dam the creek and bypass pump around the open sewer trench. The City will need to obtain both waterway and wetland disturbance permits from the WDNR and receive a concurrence letter from the U.S. Army Corps of Engineers (ACOE). Our preliminary review indicates the unnamed creeks are not navigable waterways, nor special resource waters. This would indicate the City would be able to obtain a General Permit from the WDNR and ACOE for the creek crossings. Below is a breakdown of the General Permit process through the WDNR.



Trenchless construction will be required under UPRR railroad tracks. Pilot Tube Guided Auger Boring (PTGAB) may be required at this crossing.



Sewer alignment may encounter poor organic soils, including Houghton Muck.



Wetlands and wetland indicator soils are consistent throughout the interceptor corridor.

Mr. Peter Hartz City of Watertown Page 5 November 6, 2024

WDNR General Permit Process:

- 1. Review the appropriate General Permit Checklist to determine if the City's project meets the requirements.
- 2. Use the WDNR Water ePermitting System to begin and complete a General Permit application.
- 3. The WDNR has 30 days to review the application for completeness and notify the applicant. The WDNR can request additional information one time within these 30 days, which would pause the 30-day period until all information requested is received.
- 4. After the 30-day total review time, the WDNR will communicate a permit decision to the City.

The creek crossings and wetland impacts will be an item to discuss further with the WDNR and City during the final design phase to find the preferred approach for these crossings.

**Firm Qualifications and Project Experience** 

### Comprehensive Interceptor and Force Main Experience Delivers Full Confidence in the Management, Design, and Implementation of this Project

Our experience developing plans and designs for wastewater conveyance systems varies from projects that include sanitary flow monitoring, sanitary service area determination, and sanitary interceptor sizing, to extension and/or reinforcement of existing collection systems. In recent years, we have planned and designed more than 400 miles of sanitary sewer and pressure mains. This section describes two of our linear interceptor projects.

### West Interceptor Shorewood Sewer – Madison Metropolitan Sewerage District (MMSD), Madison, WI

We are assisting the MMSD on the West Interceptor Shorewood Relief project that is under construction. Areas along the south and west edges of Lake Mendota are served by the West Interceptor and West Interceptor Relief sewers. Original sections of the two interceptors were constructed in 1916, 1932, and 1959, with sections now reaching capacity. An additional relief sewer was added between Walnut Street and Indian Hills Park to accommodate flows through 2070. This corridor has many challenges that extend through the City of Madison and Village of Shorewood Hills, including a busy traffic corridor along University Avenue, Wisconsin and Southern

Railroad (WSOR) crossings, proximity of the University of Wisconsin Hospital, a commuter bike route, and a crowded utility corridor. We served as the Lead Engineer on this project that includes a significant public involvement, community, and agency coordination process, detailed alternatives analysis, environmental evaluations, soil borings, arborist review, permitting, and detailed interceptor design, including trenchless construction through the challenging WSOR railroad corridor.



West Interceptor Shorewood Relief preliminary alignment alternatives.

Mr. Peter Hartz City of Watertown Page 6 November 6, 2024

### Canadian Pacific and Kansas City Railway Crossing - Sanitary Sewer Construction – Dubuque, IA

From 2011 through 2022, we designed construction of approximately 6,000 lineal feet of sanitary sewer, including 36-inch and 24-inch interceptor sewer, and 15-inch, 12-inch, and 8-inch local sewers, over multiple construction phases. Pipe materials consisted of ductile iron, polyvinyl chloride (PVC) and fiber reinforced polymer (FRP) sewer. The final phase of construction included the trenchless construction (via microtunneling) of a 48-inch steel casing pipe and 36-inch Hobas sanitary sewer carrier pipe beneath the Canadian Pacific Kansas City Railyard.



Thirty-six-inch Hobas FRP Sanitary Sewer.

Forty-eight-inch microtunneling machine used for steel casing installation beneath CPKC railway.

### **Project Team**

### Familiar, Trusted Team Provides the Resources and Local Knowledge to Deliver a Streamlined Project

Our familiar project team has a combination of City experience, knowledge, and credentials and is committed to providing a project that will meet the City's needs. All team members are in our Madison office, enhancing the effectiveness and efficiency of our team communications.

### **Project Manager**

**Eric D. Vieth, P.E., Senior Associate**, has been involved in small- and large-diameter sanitary sewer conveyance projects for the last 20 years. Eric has been in involved in numerous trenchless projects involving HDD, cured-in-place pipe (CIPP) rehabilitation, auger boring, pilot tube guided auger boring (PTGAB), and microtunneling. Eric served as the Project Manager for the \$70 million Upper Bee Branch Creek Restoration Project in Dubuque, Iowa. The final phase of that project included trenchless construction of six, 8-foot-diameter steel culverts beneath the Canadian Pacific Kansas City Railway (CPKC) yard and 48-inch



steel casing pipe installed via microtunneling techniques with a 36-inch sanitary sewer carrier pipe. This project required extensive coordination with railroad staff and consultants, right-of-way acquisition, easement acquisition, and assistance with the City/Railroad Construction and Maintenance Agreement. Eric has also worked with the CSX Railroad, CN Railway, Wisconsin Southern Railroad, and UPRR on several trenchless utility projects for our municipal clients.

Eric is currently serving as the Project Manager for the City of Watertown's Allerman Lift Station and Force Main Preliminary Engineering project.

Mr. Peter Hartz City of Watertown Page 7 November 6, 2024

### **Quality Control Engineer**

**Thomas G. Stetzer, P.E., ENV SP**, will provide quality control review services for this project. Tom is a Professional Engineer in Wisconsin and has more than 18 years of municipal and utility engineering experience. Tom has led the design effort on a diverse range of sanitary sewer projects ranging from 8-inch local sewers to 63-inch interceptors. Tom has recent experience working with MMSD staff on the West Interceptor Shorewood Relief Sewer, Pump Stations (PS) 13 and 14 Improvements, Northeast Interceptor – Truax Extension Relief Sewer, PS 12 Force Main and Interceptor Relocation, Monona Southeast Interceptor Relocation and PS 7 Improvements.

Relocation, and PS 7 Improvements. Tom understands the level of detail that goes into interceptor design projects.

### **Project Engineers**

Andrew B. Constant, P.E., ENV SP, will serve as a project engineer and perform any necessary hydraulic calculations. Andy has been with our firm for 10 years and has gained extensive experience in the design and construction observation of numerous sewer interceptor, force main, and pumping station projects. Andy's experience includes design of various collection system projects for Cottage Grove, La Crosse, NEW Water, Merrimac, Onalaska, Watertown, and Whitewater, Wisconsin; the Fox Metropolitan Water Reclamation District, Illinois; Dubuque, Iowa; and the Morgantown Utility Board, West Virginia. Andy has extensive avaeriance in hydroulice, lawout, and rababilitation of all elements of wastawater coll

extensive experience in hydraulics, layout, and rehabilitation of all elements of wastewater collection systems and pumping stations, which will enable him to bring a well-rounded approach to this project.

### Andy is currently serving as the Lead Design Engineer for the City of Watertown's Allerman Lift Station and Force Main Preliminary Engineering project.

**Dakin J. Coons, P.E.**, will serve as a project engineer and perform the interceptor design. Dakin has been with our firm for more than 5 years and has experience providing sewer interceptor, force main, and sanitary lift station design and preparing permit applications for local, state, and federal agencies. Dakin also has extensive knowledge of AutoCAD Civil 3D, MicroStation, and Revit. Dakin has provided collection system design services for the Algoma Sanitary District, Manitowoc, Whitewater, Lancaster, Brooklyn, and MMSD.

### **Project Schedule**

The schedule presented below illustrates a task breakdown of the Phase 1 project.

Southwest Interceptor Design - Watertown, Wisconsin												
Scope			Jan-25			Feb-25			Mar-25			
Phase 1 - Route Refinement and Preliminary Design												
Kickoff Meeting												
Existing Data Review and Base Map Update												
Stakeholder and Agency Coordination												
Routing Analysis and Refinement												
Preliminary Report Submittal												
Progress Meeting 1 (Preliminary Report)												
Preliminary Sewer Design and OPCC												
Progress Meeting 2												
Final Report Submittal												1
Presentation at Public Works Meeting												





Mr. Peter Hartz City of Watertown Page 8 November 6, 2024

#### Level of Effort

### Design Experience and Understanding of Project Challenges Provides Appropriate Level of Effort

The table below represents the anticipated level of effort for the Phase 1 scope services for this project. A thorough and detailed routing analysis and preliminary design is a critical component of this project and having an appropriate level of effort applied during this stage will help set up the remainder of the project for success.

Southwest Interceptor - Phase 1 – Route Refinement and Preliminary Design City of Watertown January 2025 - March 2025								
	Project Manager	Project Engineer	Quality Control	Project Engineer	CAD	Office	Total	Task
Task	Vieth	Coons	Stetzer	Constant	Tech	Production	Hours	Subtotal
Overall Project Management	4					2	6	\$1,300
Kickoff Meeting	4	4					8	\$1,700
Data Collection, Existing Documentation Review, and Base Map Updates	4	8		2			14	\$2,700
Stakeholder and Agency Coordination (UPRR, Jefferson County, WDNR)	4	8					12	\$2,300
Routing Analysis and Refinement	4	8	2	2	4		20	\$4,000
Preliminary Report	4	8	1	1		2	16	\$2,900
Progress Meeting No. 1	4	4					8	\$1,700
Preliminary Sewer Design (Plan and Profile Drawings) and OPCC	4	20	2	1	4		31	\$5,700
Progress Meeting No. 2	4	4					8	\$1,700
Final Report	4	8	1			2	15	\$2,800
Presentation of Final Report at Public Works Meeting	4	4					8	\$1,700
Total Hours	44	76	6	6	8	6	146	\$28,500

We have a history of successfully working with the City and look forward to helping the City with its collection system engineering needs. If there are any questions after reviewing the enclosed information, please call.

Sincerely,

STRAND ASSOCIATES, INC.®

Eric D. Vieth, P.E., Senior Associate Project Manager

P240.929/EDV:ksn

Andrew B. Constant, P.E., ENV SP Project Engineer



Section 4, Item E. Brookfield. Wisconsin 53005

Telephone 262-784-7690 www.ati-ae.com



October 9, 2024

Mr. Peter Hartz Water and Wastewater Utilities Manager City of Watertown P.O. Box 477 Watertown, WI 53094

Re: West Side Interceptor Review

### Dear Mr. Hartz

Pursuant to your email from September 18<sup>th</sup>, Applied Technologies Inc is pleased to present this proposal to update the findings contained within the October 2007 STH 26 Bypass Utility Study (Study) and additional scope necessary to provide service to the proposed development of lands generally located in the SE <sup>1</sup>/<sub>4</sub> of Section 7, lying west of County Road A, east of E. Horseshoe Road, and south of Casey Drive. The majority of these lands lie within Sanitary Sewer Service Area SW-2 as depicted on Figure 1 of the previous Study and contained within this proposal.

The previous study evaluated two possible interceptor sewer alternatives, the Eastern Route and the Western Route and ultimately, City staff decided to proceed with the Western Route. A conceptual view of the Western Route is contained within Figure 4 attached hereto. The updated scope of work for this project consists of further route refinement and preliminary design services necessary to provide sanitary sewer service to the above described properties while ensuring that future phases of the Western Route remain viable.

Scope of Services-Phase 1 (Route Refinement and Preliminary Design Sections A & B)

- 1. Conduct a kickoff meeting with City staff to discuss project scope, schedule and expectations.
- 2. Update the base maps previously prepared. It is expected that access to the City GIS system will be provided to assist in this task. Special attention will be paid to environmental and regulatory conditions which will affect the final design.
- 3. Coordinate with the Office of the Commissioner of Railroads, County Highway Department and Department of Transportation relative to existing facilities and potential permitting issues.
- 4. Utilizing the preliminary design criteria previously developed in the Study, refine the route selection and identify easements and regulatory permits to be acquired. The refinement will utilize desktop reconnaissance supplemented by field visits to identify areas of environmental concerns, possible utility conflicts, impacts to



residents, constructability issues, and possible easement locations and issues. Published items to be utilized in this phase will include NRCS soil maps, City/County cadastral and topographic information, wetland inventory maps and wetland indicators based on mapped soils,

- 5. Following completion of the route refinement, a report will be provided to the City that identifies the selected route and will contain a list of temporary and permanent easements necessary to complete the construction.
- 6. Attend a meeting with City Staff to discuss the route refinement and any changes necessary based on City staff input.
- 7. Prepare a preliminary design for the sanitary sewer. As trenchless technology has evolved since the previous study was prepared, we anticipate that a significant portion of the project MAY be completed using trenchless methods. Project plans will include preliminary plan and profile information prepared using available published topographic and cadastral information and include pipe size and material, anticipated bury depth, bedding, backfill and restoration details necessary to generate updated cost proposals.
- 8. Prepare an opinion of probable costs based on the preliminary design information.
- 9. Meet with City Staff and present final route refinement and preliminary design. Following the meeting, we anticipate that one revision may be necessary based on City comments.
- 10. Present final report and preliminary design to the City Common Council following revisions requested by City Staff.

Following the completion of Phase 1, the next logical step would be the final design for the project, preparation of project specifications and permitting for the project prior to bidding. Below is a scope of services for this aspect of the project:

Scope of Services-Phase 2 (Final Design and Permitting)

- 1. Conduct a kickoff meeting to discuss any updates following presentation to the Common Council.
- 2. Complete a topographic survey of the selected route in accordance with our standard survey scope of work attached hereto. It is expected that the surveyor selected for the work will be responsible for contacting diggers hotline for all underground utility locations to be field marked. Obtain property and right of way information necessary to establish ownership.
- 3. Complete a wetland delineation of the project area to identify wetland areas that may be impacted by the project.
- 4. Complete a geotechnical investigation to determine existing subsurface conditions that will have an impact on the construction methods and project cost. We anticipate soil borings will be provided every 500 feet along the project route to a depth of five feet below the preliminary design invert elevation to evaluate trench conditions.
- 5. Utilizing the survey, wetland and geotechnical information, prepare design plans (90%) and specifications necessary to obtain construction bids for the project. We will utilize EJCDC specifications supplemented with City requirements.



- 6. Identify and assist the City in obtaining easements from affected property owners. This will include legal descriptions and exhibits necessary to begin negotiations.
- 7. Identify and apply for all required regulatory permits. This will include but not be limited to Wisconsin DNR and DOT, US Army Corps of Engineers, Jefferson County Highway Department and the Wisconsin Office of the Commissioner of Railroads.
- 8. Attend a meeting with City staff to discuss the 90% plans and specifications and incorporate any changes into the final documents prior to project bidding.
- 9. Prepare a final opinion of probable cost prior to bidding.
- 10. Assist the City in obtaining construction bids for a single prime construction contract using an on-line plan service.
  - a. Answer questions during bidding and issue addenda as appropriate to interpret or clarify bidding documents.
  - b. Attend the bid opening, prepare a bid tabulation and prepare a recommendation to the City for awarding the construction contract.

Optional Services if requested by the City:

- 1. Prepare an Intent to apply (ITA) and Priority Evaluation and Ranking Formula (PERF), which will allow the City to apply for a low interest loan from the Clean Water Fund.
- 2. Prepare an abbreviated Facilities Plan to define planned improvements as required to obtain Clean Water Fund financing.
- 3. Additional loan application document assistance if the City elects to pursue Clean Water Fund financing.

Since the only aspect of the project that can presently be quantified is Phase 1, we propose a budget of \$28,650 to complete the work described herein for the phase 1 scope of work.

Please review the information provided and contact our office with questions, comments or concerns. Thank you for the opportunity to assist the City with this project.

Sincerely, Applied Technologies Inc.

llum /

William A. Hein, P.E., P.L.S. CAS Department Manager

#### 1. Scope of Services and Time Limit

The Proposal or Agreement for Professional Services, hereinafter both called the Agreement, is valid for a period of 60 days. Signing of the Agreement by the Client shall be considered as authorization for Applied Technologies, Inc. (ATI) to proceed with the Scope of Services. If acceptance is not received within 60 days, ATI reserves the right to revise the Scope of Services, Compensation, schedule, and personnel commitments.

#### 2. Compensation

Compensation for the Scope of Services shall be as indicated in the Agreement, including any rate schedule or other attachments. All time spent on the Project by professional, technical, and clerical personnel will be invoiced. Unless otherwise stated, any compensation or fee estimate is considered a budget estimate only, and is not a lump-sum fee. If it becomes apparent to ATI that the total amount of compensation will exceed the budget estimate, ATI will notify the Client. Promptly thereafter, the Client and ATI shall review the matter of compensation and either the budget estimate or the remaining Scope of Services shall be revised. Rate schedules are adjusted on January 1st of each calendar year.

#### 3. Additional Services

Additional compensation shall be negotiated between the Client and ATI for Additional Services beyond the Scope of Services. Unless otherwise noted, these Additional Services will include, but not be limited to: investigating the condition of existing facilities; verifying the accuracy of drawings or information furnished by the Client; surveying and preparation of easements and right-of-way descriptions, redesign after approval of preliminary phase documents; preparation of alternative designs; bid protests; redesign and rebidding; Client-requested change orders involving redesign; restaking of construction stakes; and delays beyond the control of ATI.

#### 4. Payments to ATI

Progress invoices will be issued monthly by ATI for all services performed under the Agreement. Invoices are due and payable on receipt. Interest at the rate of 1% per month will be charged on all past due amounts.

#### 5. Professional Standards

ATI shall be responsible, to the level of competency presently maintained by other practicing professionals in the same type of work and time in the Client's community, for the professional and technical soundness, accuracy, and adequacy of all design, drawings, specifications, and other work and materials furnished under this Agreement. Professional services are not subject to, and ATI can not provide, any warranty or guarantee, express or implied, including warranties or guarantees contained in any uniform commercial code. Any such warranties or guarantees contained in any purchase orders, requisitions or notices to proceed issued by the Client are specifically objected to.

#### 6. Opinions of Cost

Since ATI has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, the opinions of probable Total Project Costs and Construction Cost are made on the basis of ATI's experience and qualifications and represent ATI's professional judgment. ATI does not guarantee that proposals, bids or actual Total Project Costs or Construction Costs will not vary from the opinions of probable cost prepared by ATI. If prior to bidding, the Client wishes greater assurance as to Total Project or Construction Costs, the Client shall employ an independent cost estimator. ATI's services to modify the Contract Documents to bring the Construction Cost within any limitation established by Client will be considered Additional Services.

#### 7. Construction Observation

During construction observation ATI shall not supervise, direct, or have control over the Contractor's work or responsibility for the means, methods, techniques, sequences, or procedures of construction, nor for construction safety precautions and programs. ATI shall not be responsible for any failure of the Contractor to comply with applicable laws, rules, regulations, ordinances, or codes. ATI can neither guarantee the performance of the construction contract by the Contractor nor assume responsibility for the Contractor's failure to furnish and perform work in accordance with the Contract Documents.

#### 8. Insurance

ATI shall procure and maintain insurance for protection from claims under workers' compensation acts, claims for damages because of bodily injury including personal injury, sickness or disease or death of any and all employees or of any person other than such employees, and from claims or damages because of injury to or destruction of property including loss of use.

#### 9. Indemnification

ATI agrees to indemnify Client from any claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation costs, arising out of claims by third parties for property damage and bodily injury, including death, caused solely by the negligence or willful misconduct of ATI in connection with the project. Client agrees to indemnify ATI from any claims, damages, losses, and costs, including, but not limited to, attorney's fees and litigation costs, arising out of claims by third parties for property damage and bodily injury, including death, caused solely by the negligence or willful misconduct of Client, Client's employees, or agents in connection with the project.

If the negligence or willful misconduct of both ATI and Client (or a person identified above for whom each is liable) is a cause of such damage or injury, the loss, cost, or expense shall be shared between ATI and Client in proportion to their relative degrees of negligence or willful misconduct and the right of indemnity shall apply for such proportion.

#### 10. Limitation of Liability

The Client agrees to limit any and all liability or claim for damages, cost of defense, or expenses levied against ATI to a sum not to exceed \$50,000 or the amount of total compensation under this Agreement, whichever is less, on account of any design defect, error, omission, or professional negligence.

#### 11. Reuse of Documents

Any reuse of documents including reports, drawings, specifications, Contract Documents and other deliverables furnished by ATI, whether in hard copy or electronic form, under this Agreement without specific written verification or adoption by ATI will be at the Client's sole risk and without liability or legal exposure to ATI. Any such reuse, verification or adoption will entitle ATI to further compensation at rates agreed upon by the Client and ATI.

#### 12. Termination

Either the Client or ATI may terminate the Agreement by giving 30 days written notice to the other party. In such an event, the Client shall pay ATI in full for all work previously authorized and performed prior to the effective date of termination. All relationships and obligations created by this Agreement shall be terminated upon completion of all applicable requirements of this Agreement.

#### 13. Dispute Resolution

In the event of a dispute arising under this Agreement, the Client and ATI shall attempt to settle the dispute by discussion between the Client's and ATI's management. If any dispute cannot be resolved in this manner, in a reasonable length of time, the Client and ATI agree to attempt non-binding mediation or other alternative dispute resolution prior to filing any legal proceedings. In the event actions are brought to enforce this Agreement, the prevailing party shall be entitled to collect its litigation costs from the other party.

#### 14. Controlling Law and Severability

This Agreement is to be governed by the law of the principal place of business of ATI. If any provisions, paragraph, word, section, or subsection of this Agreement is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, sections, and subsections shall not be affected and shall continue in full force and effect.

#### 15. Entire Agreement

This Agreement represents the entire agreement between the Client and ATI. No other terms, conditions, promises, understandings, statements, or representations, express or implied, covered in the subject matter of this Agreement exist or have been made. This Agreement cancels and supersedes all previous agreements, proposals and understandings, if any, written or oral, between the parties relating to the subject matter of this Agreement.







Section 4, Item E.

### MEMORANDUM



Date:	
To:	
Organization:	
From: John Stahl/Will Hein	
Regarding: Survey Request – Scope of Work	
Cc:	

### **SCOPE:**

The survey will be completed to show full topography of the site (including full width right of way of adjoining streets) with one-foot contours.

Typical items to be identified and located are all pavements and types of pavements, trees, shrubs, posts, water service boxes, utility poles, manholes, catch basins, inlets, culverts, fire hydrants, structure corners, property irons, perimeter fences, gates, landscape structures, driveways, retaining walls or any structure or obstacle that may impede drainage or construction.

### TASKS

- 1. Utilize U.S.G.S. elevations for field surveying, future field staking and construction.
- 2. Identify existing **AND set two new benchmarks** within the designated area, using concrete features such as top of curb or equipment or building pad. Ensure feature will remain following construction.
- 3. Identify and establish at least two Permanent survey control points on or immediately adjacent to the project area. Control point to consist of property corner or masonry nail providing northing, easting, elevation and description to assist contractor in layout of project.
- 4. Field survey existing underground utilities and other features as they are visually found on site, including but not limited to any of the following:
  - Building location, grade at building and first floor elevation
  - Structure location, grade at structure and top of wall/foundation elevations

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### INCLUDE POLE NUMBERS FOR ALL POWER POLES

- Invert elevations of all manholes in the survey area
- Outfall inverts and sizes
- Water valves, yard hydrants and valve vaults
- Electric (overhead and buried)
- Telephone (overhead and buried)
- Gas
- Deciduous trees 2" or larger (trunk diameter in inches) within site and around perimeter of site only if any.
- Coniferous trees (height in feet) within site and around perimeter of site only if any.
- Storm sewers and culverts
- Property corners and right-of-way
- Existing land features that may impact construction (retaining walls, creeks, etc.)

Please provide an AutoCAD Civil 3D drawing file of the survey, and a PDF of the drawing prepared. We will need the survey data in an electronic ASCII file format (comma delineated), in addition to a paper copy of the survey data, listing with point Number, Northing, Easting, Elevation and Descriptor. All surveyor field notes shall also be included for information along with a copy of your descriptor list. Deliverables include:

- 1. Electronic drawing file in AutoCAD Civil 3D current format.
- 2. Northings and Eastings tied to state plane coordinates and Elevations should reference USGS datum. Surveyor to list datum basis (NGVD 29 or NAVD 88)
- 3. A printed base map (PDF) with all line work, including contours, and symbols shown on a 1" = 40' scale. Ultimately the plans will be generated at 20 scale.
- 4. All control points and benchmarks shown on electronic drawing file with elevations.

### PAYMENT

The consultant may submit invoices monthly to ATI for progress payments. Such invoices will
represent the value of completed services and will be supported by documentation as required. Invoices
will be reviewed and approved by ATI prior to submission to the Owner. Following receipt of
reimbursement from the Owner, payment will be made by ATI to the consultant within 15 days for the
approved invoice amount.





# West Interceptor Route Analysis and Design





Donohue & Associates, Inc. 3311 Weeden Creek Road | Sheboygan, WI 53081 920.208.0296 | donohue-associates.com

November 6, 2024

Mr. Peter Hartz, Wastewater Manager Watertown Wastewater Treatment Plant 800 Hoffman Drive Watertown, WI 53094 phartz@watertownwi.us

Re: West Interceptor Route Analysis and Design

Dear Mr. Hartz:

The City of Watertown is contemplating expansion of their collection system into its Southwest service area. We understand this project is important for both residential and industrial growth in the community. As part of the Project Approach and Scope, we will leverage available capacity analyses, land use reports, and GIS mapping to supplement an updated Hydraulic Capacity Analysis. This will ensure the Interceptor is sized and routed as cost effectively as possible.

Appreciating the significance of the project, we have carefully and deliberately assembled an exceptional team that combines substantial interceptor design experience and excellent technical expertise. The most compelling reasons to trust the Donohue team are outlined below.

- Experienced and Proven Engineering Firm Donohue is one of the largest wastewater treatment and conveyance design firms in the United States and the second largest based in the upper Midwest. Our specialization and focus have allowed us to complete design of 500,000+ linear feet of wastewater conveyance infrastructure and more than 3,000 wastewater projects since our firm was formed 25 years ago. We have an impressive record of successful wastewater projects for large and small clients throughout the Midwest.
- 2. Exceptional and Relevant Team Experience Our proposed project manager, Joe Holzwart, PE, has successfully led multiple collection system planning, design, and construction projects. He is an attentive, proactive, and communicative project manager, traits that will prove particularly valuable to Watertown and stakeholders over the course of this project. The proposed project QC reviewer, Sandy Kimmler, PE, has led many other large sewer system projects, including the planning and design of \$20M collection system improvements for the City of Willmar, Minnesota. This work included 6.5 miles of large diameter interceptor sewer crossing waterways, wetlands, roadways, railroads, and several trenchless construction segments. These project leaders will be joined by a deep bench of Donohue support. Should Phase 2 proceed, we also have a team of subconsultants with specific expertise relative to your project, including geotechnical/tunneling, subsurface investigation, traffic signals and lighting, survey, and easement support.
- Proximity The core of our team is in Sheboygan, Wisconsin with other Wisconsin offices in Milwaukee and Appleton. This proximity makes it easy and efficient for us to meet in person with the City and project stakeholders – e.g., municipalities and businesses – during Phase 1 and 2 planning and design activities.

We appreciate your consideration for this project, and our dedicated team looks forward to the opportunity to begin working with you and the City of Watertown staff. We are confident we have the expertise, experience, and availability to deliver a successful project. We welcome any questions you may have and please feel free to contact us at the phone/email below.

Sincerely,

Autumn M. Fisher Client Services Manager & Operations Specialist afisher@donohue-associates.com | 920.803.7336

Joseph C. Holzwart, PE Project Manager jholzwart@donohue-associates.com | 920.803.7308

# **Project Team**



### **Project Team/Personnel**

Several of our proposed team members, including Joe Holzwart, Project Manager and Sandra Kimmler, QC Reviewer, have extensive collection system experience through recent and ongoing interceptor projects. The figure below contains an overview of our proposed Project Team as well as brief background summaries; Full resumes are available upon request.



Name   Role(s)   Years of Experience   Firm   Office	Relevant Qualifications and Experience
Joe Holzwart, PE Project Manager Years of Experience: 19 Donohue   Sheboygan, WI	<ul> <li>Joe is an experienced civil engineer who specializes in collection system infrastructure including sanitary sewers, interceptors, force mains, and storm sewers.</li> <li>Applicable project experience includes:         <ul> <li>Project Manager/Design Engineer: Dutchman Creek/Scott-Bayshore Interceptor Project. NEW Water Green Bay, WI</li> <li>Project Manager/Design Engineer: Ninth Street Interceptor Upgrades. NEW Water De Pere, Wisconsin</li> <li>Quality Control Review: Newton and Nelson Creek Trunk Sewer Improvements. Superior, Wisconsin</li> <li>Lead Design Engineer: Greenmeadow Sanitary Infrastructure Evaluation and Design. Waukesha, Wisconsin</li> </ul> </li> </ul>
Sandra Kimmler, PE QC/Alternatives Analysis/Engineering Report Years of Experience: 35 Donohue   Sheboygan, WI	<ul> <li>Sandra is a proven senior civil engineer highly experienced in the planning and design of sanitary sewer interceptors, force mains, storm sewers, and pump stations.</li> <li>Applicable project experience includes:         <ul> <li>Lead Civil Engineer: Water Interceptor System Master Plan. NEW Water Green Bay, WI</li> <li>Project Manager / Civil Engineer: Newberry Interceptor Sewer. Appleton, Wisconsin</li> <li>Project Manager: Greenmeadow Sanitary Infrastructure Evaluation and Design. Waukesha, Wisconsin</li> <li>Project Manager / Lead Design Engineer: Interceptor Sewer, Force Mains, and Pump Stations. Willmar, Minnesota</li> </ul> </li> </ul>
Brittany Hess, PE Lead Engineer / Alternatives Analysis Years of Experience: 16 Donohue   Sheboygan, WI Ben Grunwald Alternatives Analysis / Design	<ul> <li>Brittany has spent most of her career working within conveyance system infrastructure to help clients extend the useful life of their assets.</li> <li>Her engineering and evaluation experience includes several projects rerouting conveyance assets to better service residents located in a variety of sewer service areas.</li> <li>Ben a civil engineer with experience in the design of wastewater collection and stormwater system infrastructure and permitting.</li> <li>He is involved in identifying and evaluating design alternatives, calculating</li> </ul>
Years of Experience: 7 Donohue   Sheboygan, WI	<ul> <li>existing and future sanitary flows, and sizing and routing gravity sewers and force mains.</li> <li>Ben has had significant design roles on the Waukesha pump station consolidation projects and well as Green Bay NEW Water projects.</li> </ul>
Nate Winter Design Years of Experience: 3 Donohue   Sheboygan, WI	<ul> <li>Nate is a civil engineer who has assisted in the design of water and wastewater treatment plants.</li> <li>His experience also includes assisting the lead civil engineer in detailed construction drawings, cost estimates, and specifications.</li> <li>His design efforts have included construction of new sanitary sewer, force main, lift station, pavement, sidewalk, driveway, and lawn restoration.</li> </ul>
# Firm Qualifications



# **Firm Qualifications**

# Donohue: Wastewater-Focused Firm Built to Deliver

Donohue & Associates, Inc. is an award-winning, employee-owned wastewater specialty firm. Donohue is headquartered in Wisconsin and over half of the firm's 120<sup>+</sup> professionals are registered professional engineers.



Our impressive track record of successfully delivering complex projects is attributed to the technical experience of our senior project managers and engineers, our attention to detail, and our collaborative culture. We listen to and work closely with our clients' departments: management, engineering, operations, maintenance, procurement, and diversity. Since our beginning, Donohue has established an outstanding record for client service and technical ability. That experience allows us to meet our clients' expectations for high quality projects that are delivered within budget and on schedule.

Donohue's Midwest clients repeatedly trust to deliver their most challenging wastewater improvement projects. We have worked on over 3,500 wastewater projects for more than 400 Midwest clients since forming in 1997. As a testament to our success, Donohue continues to be ranked by ENR in the top 20 design firms in the Wastewater Treatment category. Since 2002, Donohue has received 43 Engineering Excellence awards, a testament to what can happen when the client/engineer team collaboratively develops innovative, yet practical solutions.

The Interceptor Project matrix on the following page provides a glimpse of the range of Donohue's experience with projects similar in scope to that of the West Interceptor project. Also included are a couple of brief project experience summaries that have common elements to Watertown's upcoming project. Additional project experience summaries are available upon request.

Should the project scope require sub-consulting services for Phase 2 design, Donohue partners with a wide range of providers specializing in surveying, soil analysis, wetland delineation, geotechnical services and more. Subcontractor details can be provided if desired.





# **Project Experience**

Dutchman Creek Interce	ptor NEW Water: Green Bay, Wisconsin
	Project Team: Joe Holzwart, Sandra Kimmler, Ben Grunwald
and the second	Services Provided: Study, Design, CM
	<ul> <li>Project Highlights</li> <li>4,800' and 24"</li> <li>Alternative route analysis</li> <li>Interceptor design &amp; rehabilitation</li> <li>Creek/wetland crossings, permitting, &amp; coordination</li> <li>Easement acquisition</li> <li>Trenchless construction</li> <li>Maintaining flow during construction</li> </ul>
Greenmeadow Sanitary	Sewer Interceptor: Waukesha, Wisconsin
	Project Team: Sandra Kimmler, Joe Holzwart, Tracy Webb
	Services Provided: Study, Design, CM
	Project Highlights
	<ul> <li>6,000' and 18" &amp; 36"</li> <li>Phased geotechnical investigation, surveying &amp; permitting</li> <li>Alternative route analysis</li> <li>Interceptor design development</li> <li>Creek/wetland crossings, permitting, &amp; coordination</li> <li>Easement acquisition</li> <li>Trenchless construction</li> </ul>

#### Additional Donohue Collection System Experience

The abbreviated project matrix below illustrates the breadth of Donohue's experience with projects of a similar nature to the West Interceptor project.

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# DONOHUE

SELECTED COLLECTION SYSTEM EXPERIENCE

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Interceptor, Stevens Point, WI	24"	10,000		-		•							•		•	•
Green Meadow Interceptor, Waukesha, WI	36"	9,200														
Clybourn St. MIS Rehabilitation, Milwaukee MSD, WI	72"	8,050														
West Side Pump Station Consolidation, Waukesha, WI	15" San & 16" FM	6,200		-												
Greenmeadow Interceptor, Waukesha, WI	Dual 18" & 36"	6,000		-												
South Side Pump Station Consolidation, Waukesha, WI	15", 18"	5,500														
Dutchman Creek Interceptor, Green Bay MSD, WI	24"	4,800														
Newton Creek & Nelson Creek Trunk Sewer, Superior, WI	8-30"	4,300														
Scott Bayshore Interceptor, NEW Water, Green Bay, WI	20,21,24"	3,500														
Sanitary Sewer Replacement, Sister Bay, WI	8-18"	3,400		-												
Charles Street Interceptor, DePere and Green Bay MSD, WI	18-24"	2,900														
Bruce St./Muskego Ave. MIS, Milwaukee MSD, WI	36"	2,830				•										
Reid Drive Interceptor, Appleton, WI	24"	2,372														
Newberry Interceptor, Appleton, WI	30"	1,300													•	
Southern Interceptor, Willmar, MN	48-54"	20,000		-												
US 20 & Walnut Street Interceptor, St. Joesph County, IN	15-30"	12,000														
Blue River Interceptor, Columbia City, IN	12-36"	8,000														
Millersburg Interceptor Sewer, Evansville, IN	21-30"	7,000		-		•								•		
Darrough Chapel Interceptor, Kokomo, IN	18-20"	4,250		-												
Stockwell and S-5 Interceptors, Evansville, IN	24-42"	4,200														



# Project Approach



# **Project Approach**

# Understanding

The City of Watertown is seeking proposals for a qualified engineering firm to evaluate the expansion of their sanitary sewer system for the Phase 1: Preliminary Design of a portion of the West Interceptor. According to the 2002 Sanitary Sewer System Evaluation and Capacity Plan completed by Applied Technologies, Inc. (ATI), the West Interceptor is intended to serve the North, Northwest, and portions of the Southwest service areas. SW-1 and SW-2 will flow by gravity with SW-3 being served by a future lift station and force main. Sewer service planning has evolved since the 2002 studay, and the immediate need is providing service to the SW-2 service area. The West Interceptor also includes future considerations for NW-3, SW-1 and SW-3 for increased sanitary sewer customers.



Anticipated Future Service Area Served by the West Interceptor

Residental developments, including the Loos Development Concept located in SW-2 service area, continue to expand throughout the City's southwest quandarant. These developments are consistent with the City's Planned Urban Area Land Use within the Watertown Sewer Service Area Plan. Additionally, an industrial user in the area has requested a 50% discharge increase into the City's collection system.

Currently, a 15" sewer main along S Milford St. serves the industrial contributor and a portion of the SW-2 area. A 2023 capacity analysis, conducted by Strand, indicated the Milford St. service line can provide adequate near-term capacity. However, the sewer main cannot manage increased flows generated from the Loos Development Concept, increased industrial discharge, and more planned neighborhood developments. There are also many portions of the southwest service area currently without sewer service. Therefore, the City needs to expand their system to continue to serve the residents and businesses within the sanitary sewer service area.

The 2002 study prepared by ATI identified a proposed 24" West Interceptor to serve sewer service area expansion. This report, along with an updated capacity analysis and forecasting data, will be used as a basis for this project.

# **Our Approach to Phase 1**

Donohue will work with City staff collaborating and building consensus throughout the project. To foster information sharing, idea exchange, decisionmaking, and to meet the scope requested in the proposal, we included workshops at major milestones: 1) <u>Kickoff Meeting</u>, 2) <u>Route Analysis</u>, 3) <u>Draft Preliminary Plan Review</u>, and 4) <u>Final</u> <u>Preliminary Plan Review</u>. Following each meeting, we will provide meeting notes to document discussions and decisions. Conceptual planning goals will be developed in the Kickoff Meeting to ensure we are proceeding with the proper understanding of the City's objectives and preferences.



#### DONOHUE

Our technical approach is discussed in the <u>Scope of</u> <u>Services</u> section that follows. The work completed under Phase 1 would take a southern portion of the proposed West Interceptor from planning through preliminary plans and cost. Once the preliminary plans and costs are presented, the City will determine the next step for the project.

#### Information Gathering

The first step consists of collecting and reviewing available information on future NW-3, SW-1, SW-2, and SW-3 service areas. This includes obtaining map layers like municipal boundaries, sanitary sewer infrastructure, and contours. Some of this information is likely available on the Watertown Public GIS Viewer. We will also request and review previous reports such as the 2019 Adopted Watertown Comprehensive Plan, ATI and Strand's previous work, utility information, bed rock maps, private well data, and future land use.

During this task, we will begin identifying permitting agencies. Identifying these agencies early in the project will streamline the permitting process in Phase 2. We will also request flow monitoring data and record drawings to assist with the Hydraulic Capacity Analysis task. Reviewing this data is critical to understanding how the system responds during periods of dry and wet weather and finalizing interceptor sizing. Our team will engage the City and Department of Public Works staff on any observations they have witnessed in the proposed interceptor location or other nearby conveyance assets.

#### Hydraulic Capacity Analysis

The 2002 ATI study recommended a 24" sewer for the West Interceptor. Considering the interval in time since 2002 to present, <u>we added this task to</u> the scope to confirm the proposed pipe diameter by using existing flow data, residential development data, and increased industrial flow projections.

This task is required to define the excess hydraulic capacity for future development but also provide the best value for the City of Watertown Residents. The unit cost to install an 18" (\$734/linear foot) versus a 42" plastic sanitary pipe (\$2,088/linear foot) is nearly a 250% difference (RSMeans, 2022.) While the hydraulic capacity may dictate one pipe size, it is essential to look at how upsizing pipes might unnecessarily redirect more spending to this project. The work completed under the Hydraulic Capacity Analysis task will provide the best value interceptor sizing for the City.

Donohue will review hydraulic design criteria the City may have as part of this effort. NR 110 provides a foundation and structure for this task as well. Should the project transition to construction, the capacity verification can also be incorporated into the required Amended Facility Plan when the City seeks project funding through the Wisconsin DNR Clean Water Fund Loan program. The results of this phase will supplement the Route Analysis task.

#### **Route Analysis**

Donohue will prepare and submit a Route Analysis, including cost estimate, for two or three proposed interceptor routes. The Route Analysis will contemplate various construction methods such as the cost benefit of trenchless versus open cut approaches.

Additionally, the Route Analysis will evaluate several noticeable constraints including, but not limited to the following:

- Bedrock
- Wetlands/Water Features
- Easements
- Railroad Crossing
- Ideal Tie-In Location (North 60" or South 42")

The Route Analysis will plot the specific concerns on base mapping to ensure all known obstructions are identified early in the project. The Route Analysis will be presented to the City during Workshop 2.

#### Preliminary Plans and Opinion of Probable Construction Costs (OPCC)

A preliminary plan set will be developed from the selected route alternative. This preliminary plan set will present a plan and profile of the proposed interceptor. An OPCC will be developed based on the agreed upon construction method of open cut and/or trenchless technologies. The OPCC will include engineering costs for final design and construction of the selected West Interceptor route. A Draft Final Report will be compiled to document all work completed, and this information will be presented to the City in Workshop 3. Any stakeholder comments collected during Workshop 3 or reviews will be incorporated in a Final Report and preliminary plan set which will be presented to the City in the final workshop, Workshop 4.

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The Route Analysis will include consideration of two or three route alternatives. The Route Analysis will contemplate site specific concerns, evaluate future sewer service area expansion, and construction costs, among others.



# **Scope of Services**

#### Phase 1

The Donohue team will provide the Scope of Services described in the Request for Proposals (RFP). This section describes the major Tasks of the project using language outlined in the RFP and discussions with City Staff. This has been used as a starting point for developing the Scope of Services. Based on Donohue's prior project experience and evaluation of the project, we have added additional tasks that would benefit project success.

#### Task 1 – Project Work Plan and Kickoff Meeting

- Project Kickoff Meeting: Donohue will conduct a kick-off meeting, <u>Workshop 1</u>, with the City project team. Agenda items for the kickoff meeting include introduction of project personnel and roles; Project plan and information request; Perceived project challenges and obstacles; and other topics of concern. During this meeting, we will verify the study boundaries; NW-3, SW-1, SW-2, and SW-3, and conceptual planning goals. These goals will help guide the remainder of the project and provide a metric of project success.
- 2. Project Work Plan: Donohue will prepare a Project Work Plan for the West Interceptor Route Analysis and Design project. The Work Plan will include a summary of the project, project schedule, project organization chart, communications plan for contact between the City and Donohue, project deliverables, and a QA/QC form. A draft Work Plan will be sent to the City at least 1 week before the Kickoff Meeting.
- 2. Project Quality Management: It is company policy that Quality Reviews be performed on all formal written deliverables. Reviews for quality of project concepts are conducted on an on-going basis throughout the project's duration. Donohue will use our QA/QC form that documents the QA/QC review has been completed prior to each submittal to the City. The QA/QC form will be included with each deliverable and will include the following information:
  - Document title, author, draft # and date
  - QA/QC reviewer and date of QA/QC review with reviewer initials
  - Tracking form verifying Watertown comments have been addressed.

 Task 1 Deliverables:
 Project Work Plan and In-Person

 Kickoff Meeting, Agenda and Meeting Notes

#### Task 2 – Information Gathering:

Information requests will be sent to the City in a written Information Request. Donohue will request and review existing studies, plans, flow data from 2023, and record drawings. This information will support Task 3, 4 and 5 analyses.

Base Maps: Request any available base mapping, municipal boundaries, parcels, and contours including topographic survey and subsurface details. It is assumed that the information shown on the Watertown Public GIS Viewer will be made available to the project team for use in updating base mapping.

Environmental & Regulatory Considerations: Identify environmentally sensitive areas and potential wetlands and water features. It is assumed that NRCS soil maps, City/County cadastral, topographic information, wetland inventory maps, and wetlands indicators will be available for use in this project. Wetland delineation may be necessary as part of Phase 2 services and the findings of this task will support development of the scope in Phase 2.

Utility and Property Easements: Identify possible utility conflicts, impacts to residents, possible easement locations, and constructability issues to support the easement acquisition process in Phase 2.

Permitting: Coordination with Union Pacific Railroad, County Highway Department, Department of Transportation and Wisconsin DNR on regulatory and wetland permits. Donohue will begin preliminary conversations with the agencies to support the permitting process, understand the agency expectations, and identify required permits.

#### Task 2 Deliverables:

- Information Summary
- Updated Base Maps

#### Task 3 – Hydraulic Capacity:

The team, in coordination with the City, will decide how to calculate the proposed flow from the planned neighborhood development and other undeveloped land in NW-3, SW-1, SW-2, and SW-3. We will review the 2023 Milford St. Capacity Analysis, 2002 Sanitary Sewer System Evaluation and Capacity Assurance Plan, 2019 Adopted Watertown Comprehensive Plan, and zoning.

The expected flows will be calculated based on land use, agreed upon flow generation rates per land type, and peaking factors. The proposed flow from the industrial user will also be validated by the Donohue Team. Using the agreed upon flow calculations and any conceptual planning goals that were discussed at Workshop 1, a proposed interceptor pipe diameter will be developed. Confirming the proposed interceptor pipe sizing will help to identify minimum clearances required for the utility crossings and the connection to the existing plant. The findings of this task will be presented in the workshop and deliverable in Task 4, Route Analysis.

Based on the scope presented, Donohue will not review hydraulic impacts of the proposed interceptor flow on the existing system or tie-in location. It is assumed that the existing system has enough available capacity to accommodate the proposed flow.

Task 3 Deliverables: Hydraulic Capacity Analysis to be included with Task 4 Deliverables

#### Task 4 – Route Analysis

Donohue will plot constraints and conflicts based on the information collected in Task 2. The major anticipated constraints are DNR wetland locations, water features, railroad crossing, surface elevation, and available right-of-way. Once the project constraints are mapped, identifying potential routes will be straightforward. We assume the proposed interceptor will tie-in to the existing system at a structure along the 42" or 60" sanitary sewer that discharges to the Wastewater Treatment Plant.

The Donohue team will develop two or three alternatives and costs for each route. For the routes identified, the analysis will consider sewer depth, related construction methods (open cut vs. trenchless), environmental impacts (wetlands and water features), potential utility conflicts, and required acquisition of easements. Sufficient detail will be included to verify the recommendation represents a constructible alternative.

Each route will be scored in a weighted scoring matrix. The matrix will include criterion such as conceptual planning goals, environmental impacts, cost, constructability, sewer depth and gravity conveyance, easement acquisitions, and any other criterion the City or Donohue may have identified. Each criterion will receive a weight based on the level of importance to the project. The higher the weight, the more influence that criterion has on the overall route selection. The highest score will be selected and reviewed with the City.

This information and the findings of Task 2, 3 & 4 will be outlined in the Route Analysis Memorandum and presented in <u>Workshop 2</u>.

#### Task 4 Deliverables:

- Hydraulic Capacity Analysis Findings
- Summary of Available Alternatives Mapping
- Route Analysis Technical Memorandum
- Route Analysis Workshop

#### Task 5 – Preliminary Plans and OPCC

The preliminary design will include plan and profile drawings. Specific tasks include:

- Prepare plan and profile drawings for the interceptor.
  - Drawing set will include cover sheet, legend, general notes, overall alignment location reference, and plan and profile sheets. Traffic control, erosion control, and general standard details will be included in the Phase 2 Final Design effort.
  - Project drawings will be printable on 11"x17" paper. The plan and profile sections will be aligned vertically. The drawings will show existing utilities and the proposed interceptor.
- Prepare an OPCC based on preliminary design information.
- Prepare a Draft Final Report. This report will document all work completed on the project including preliminary flow control strategy and proposed construction project schedule. The technical memorandum developed in Task 4 will be an appendix to the report.
- Present Draft Report, Preliminary Design Plan Review, and OPCC to City staff in <u>Workshop 3</u>.
- Integrate final City comments and present the Final Report to the City in <u>Workshop 4</u>.

#### Task 5 Deliverables:

- Opinion of Probable Construction Costs
- Preliminary Design
- Final Report

# Schedule



# Schedule

We have developed this schedule based on the RFP and our understanding of the project, our proposed approach, and our experience delivering similar projects. We will work with the City to refine dates upon project selection. <u>The Donohue Team is available and committed to your Project</u>.

#### City of Watertown, WI West Interceptor Route Analysis and Design Proposed Project Schedule | Donohue & Associates, Inc.

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\* A more detailed Phase 2 schedule will be developed upon determination of whether the project will proceed to Phase 2.



# Work Plan/Level of Effort



# Work Plan/Level of Effort

		Dononac	, a A330		·•						_	
	Project	QA/QC Tech	Lead	Project		Client						
	Manager	Support	Engineer	Engineer	Eng I	Advocate						
	Holzwart	Kimmler	Hess	Grunwald	Winter	Fisher	Total	Total				Total
Task	\$ 195	\$ 195	\$ 210	\$ 160	\$ 140	\$ 210	Hours	Labor		Travel	Ļ	Cost
1 Project Work Plan & Kickoff Meeting											\$	5,202
Prepare Project Work Plan	6						6	\$ 1,1	70		\$	1,170
Workshop #1 Kickoff Meeting	6		4			4	14	\$ 2,8	50	\$ 402	\$	3,252
Prepare Invoices, Progress Reports, & Schedule	4						4	\$ 7	80		\$	780
2 Information Gathering											\$	11,658
Information Request & Review	2		2	7			11	\$ 1,9	30		\$	1,930
Evaluate Topographic / Subsurface Details & Project Concerns / Considerations	2		2	10			14	\$ 2,4	10		\$	2,410
Review Existing & Required Easements with Permitting Agencies	2		5	10			17	\$ 3,0	40	\$ 188	\$	3,228
Information Summary & Updated Base Maps	2		10	10			22	\$ 4,0	90		\$	4,090
3 Hydraulic Capacity Analysis											\$	3,970
Capacity Analysis for Proposed Interceptor		10	2	10			22	\$ 3,9	70		\$	3,970
4 Route Analysis											\$	22,760
Review / Evaluate Design Assumptions	2		2	5			9	\$ 1,6	10		\$	1,610
Evaluate Two to Three Alternatives Including Mapping & Evaluation Matrix	2		5	20			27	\$ 4,6	40		\$	4,640
Constructability & Implementation Review	2	2	5	5			14	\$ 2,6	30		\$	2,630
Cost Opinions of Alternatives	2	2	5	10			19	\$ 3,4	30		\$	3,430
Route Analysis Technical Memorandum	2	2	25	5			34	\$ 6,8	30		\$	6,830
Workshop #2 Route Analysis Presentation & Route Selection	4		8	2		4	18	\$ 3,6	20		\$	3,620
5 Preliminary Plans & Opinion of Probable Construction Costs (OPCC)											\$	42,365
Preliminary Flow Control Strategy	2			5			7	\$ 1,1	90		\$	1,190
Proposed Project Schedule	2		5				7	\$ 1,4	40		\$	1,440
Preliminary Plans & Profile Drawings	5	5	20	30	80		140	\$ 22,1	50		\$	22,150
OPCC	2	2		5	5		14	\$ 2,2	80		\$	2,280
DRAFT Report	2	3	25	5			35	\$ 7,0	25		\$	7,025
Workshop #3 Present DRAFT Report, Preliminary Design Plan Review, & OPCC	4		8	2		4	18	\$ 3,6	20	\$ 402	\$	4,022
Incorporate Owner Comments. FINAL Report.			3	3	3		9	\$ 1,5	30		\$	1,530
Workshop #4 Present FINAL Report & Preliminary Design Plan Review	4		8				12	\$ 2,4	60	\$ 268	\$	2,728
Total	59	26	144	144	88	12	473	\$ 84,6	95	\$ 1,260	\$	85,955
Total Labor Dollars by Category	\$ 11,505	\$ 5,070	\$ 30,240	\$ 23,040	\$ 12,320	\$ 2,520					-	

#### City of Watertown, WI West Interceptor Route Analysis and Design Fee Estimate Summary | Donohue & Associates, Inc.



Section 4, Item E.



Wisconsin Sheboygan, Appleton, Milwaukee Indiana Indianapolis, Fort Wayne, South Bend Michigan Grand Rapids Illinois Champaign, Chicago, Naperville Minnesota Minneapolis Missouri St. Louis



# CONCEPT





June 22, 2023

Mr. Peter Hartz, Water and Wastewater Utilities Manager City of Watertown 800 Hoffmann Drive P.O. Box 477 Watertown, WI 53094

Re: Milford Street Interceptor Capacity Analysis City of Watertown, Wisconsin (City)

Dear Pete,

This letter serves to document the capacity analysis that was conducted for the City's 15-inch sanitary sewer interceptor on Milford Street, including an evaluation of existing flows and future sanitary sewer flow projections from proposed development in the Southwest Service Area.

The existing 15-inch sanitary sewer interceptor on Milford Street has a capacity of approximately 1,212 gallons per minute (gpm), and flows by gravity to the northeast before discharging into the 36-inch sanitary sewer on Hoffman Drive. A temporary flow monitor was installed in the Milford Street Interceptor from March 2021 through July 2021 as part of the Sanitary Sewer Model Creation and Calibration project, recording an average flow of 276 gpm. The peak flow observed during the flow metering period was 580 gpm, representing a 2-year recurrence interval (R.I.) event. A 10-year, 1-hour R.I. design storm was projected and run in the hydraulic model, which resulted in a peak wet weather flow of 722 gpm, or 59.6 percent of the full pipe capacity. Figure 1 displays the wet weather hydrograph for the Milford Street Interceptor under the dry weather flow, 5- and 10-year design storm scenarios.



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Mr. Peter Hartz, Water and Wastewater Utilities Manager City of Watertown Page 2 June 22, 2023

The results of the hydraulic model indicate that the Milford Street Interceptor has approximately 490 gpm of excess capacity for future sanitary sewer flows. Developers in the City have proposed two locations for near-term development in the Southwest Service Area, consisting of the Loos Development (shown in Figure 2) and the Greater Watertown Community Health Foundation (GWCHF) Neighborhood Development Plan (shown in Figure 3). Additionally, the Johnsonville factory located on Perry Way, which currently discharges at an average rate of 97 gpm to the Milford Street Interceptor, is anticipating a 50 percent expansion in the near future.



Mr. Peter Hartz, Water and Wastewater Utilities Manager City of Watertown Page 3 June 22, 2023



The Loos Development proposal consists of 48 lots of single-family residential homes. The GWCHF Neighborhood Development proposal consists of approximately 754 residential units on the west side of the railroad tracks that would require sanitary sewer service extending from the Milford Street Interceptor. Sanitary sewer flow projections for these two development proposals are calculated by multiplying the number of residential dwelling units (D.U.s) by the 2.46 capita per D.U. identified in the 2020 United States Census Bureau data, and then multiplying by the average per capita sanitary sewer flow rate of 80 gallons per capita per day (gpcd) identified in the Wisconsin Administrative Code (WAC) Chapter NR 110. The average sanitary sewer flow rate for each proposed development is then multiplied by a peaking factor of 4.0 to calculate the peak sanitary sewer flow rate that would be discharged into the Milford Street Interceptor from each proposed development. Tables 1 and 2 summarize the sanitary sewer flow projections from the proposed Loos Development and GWCHF Neighborhood Plan Development, respectively.

Mr. Peter Hartz, Water and Wastewater Utilities Manager City of Watertown Page 4 June 22, 2023

Description	Value	Unit
Number of Residential D.U.s	48	-
City Residential Density	2.46	capita per D.U.
WAC NR 110 Average Residential Flow Rate	80	gpcd
Loos Development Average Flow	9,450	gpd
Peaking Factor	4.0	-
Loos Development Peak Flow	37,800	gpd
od=gallons per day		

Description	Value	Unit
Number of Residential D.U.s	754	-
City Residential Density	2.46	capita per D.U.
WAC NR 110 Average Residential Flow Rate	80	gpcd
GWCHF Neighborhood Plan Average Flow	148,390	gpd
Peaking Factor	4.0	-
GWCHF Neighborhood Plan Peak Flow	593,560	gpd

#### Table 2 Sanitary Sewer Flow Projections-GWCHF Neighborhood Plan

Table 3 summarizes the existing flows and the anticipated future flows from the proposed expansion at the Johnsonville factory. No additional peaking factor is typically applied to industrial flows due to the consistency in daily variation from the industrial discharger.

Description	Value	Unit
Johnsonville Existing Average Flow	139,120	gpd
Proposed Expansion	50%	-
Johnsonville Additional Average/Peak Flow	69,560	gpd

Table 4 presents a summary of the future average and peak sanitary sewer flows from the three proposed developments/expansions in the City's sanitary service area.

Mr. Peter Hartz, Water and Wastewater Utilities Manager City of Watertown Page 5 June 22, 2023

Flow Condition	Average. Flow (gpd)	Average Flow (gpm)	Peak Flow (gpd)	Peak Flow (gpm)
Loos Development	9,450	7	37,800	26
GWCHF Neighborhood Plan	148,390	103	593,560	412
Johnsonville Expansion	69,560	48	69,560	48
<b>Total Future Additional Flows</b>	227,400	158	700,920	487

Approximately 158 and 487 gpm of average and peak flows, respectively, are anticipated from the three proposed developments/expansions. Based on the hydraulic modeling results for the Milford Street Interceptor for the 10-year, 1-hour design storm, the 15-inch Milford Street Interceptor has approximately 490 gpm of available capacity. Therefore, the Milford Street Interceptor would be at 100 percent capacity with the inclusion of future sanitary sewer flows from the Loos Development proposal, the GWCHF neighborhood plan proposal, and the proposed Johnsonville expansion.

An assumption that all peak flows will enter the Milford Street Interceptor at the same time and at the same upstream location was made with the above methodology. Therefore, the results of this evaluation err on the side of conservatism. It is recommended that the City conduct additional temporary flow monitoring in the 15-inch Milford Street Interceptor to better understand existing flows within the system and how the system reacts to a higher R.I. storm, as the hydraulic model was only properly calibrated to a 2-year event due to the limited wet weather data that was retrieved during the 2021 flow metering study.

Please do not hesitate to call 608-251-4843 with any questions.

Sincerely,

STRAND ASSOCIATES, INC.®

Justin R. Bilekeyon

Justin M. Bilskemper, P.E.

e D. Collins, ENV SP







# MEMO

# Engineering Division of the Public Works Department

To: Alderperson Board and Commission Members

From: Andrew M. Beyer, P.E.

Date: December 5, 2024

Subject: Public Works Commission Meeting of December 10, 2024

## Background

#### Update Only: Storm Water Billing Overview

As a result of citizen inquiries to the Public Works Commission regarding the monthly fees paid to the storm water utility, Engineering Division staff will present an overview of current rates and what the utility funds. Examples of programs and work that are funded through the Stom Water Utility include: flooding analysis and mitigation projects; Wisconsin Department of Natural Resources Municipal Separate Storm Sewer System (MS4) Permit implementation and compliance (including required illicit discharge elimination and detection program activities, construction site erosion control inspections, stormwater BMP inspections and maintenance, documentation and mapping, stormwater outreach and education programs, pollutant reduction and TMDL compliance projects, street sweeping, catch basin cleaning, snow removal/salting equipment and activities, ditch maintenance, etc.); stormwater management portions of street reconstruction projects; streambank stabilization projects; and other stormwater management planning and implementation programs.

# Budget Goal

1. Proactively maintains and improves our parks and infrastructure in an effort to ensure quality, safety and compliance

# **Financial Impact**

Future funding to reduce flooding, minimize water pollution and maintain the city's stormwater management system come from:

Various Stormwater Utility Accounts





# Recommendation

City staff to continue implementing the stormwater program with funds from the storm water utility budget. These funds are used to minimize flooding, reduce water pollution and maintain the city's stormwater management system.

#### 2024 Operational Goals

1. Proactively maintains and improves our parks and infrastructure in an effort to ensure quality, safety and compliance

# MEMO

# Engineering Division of the Public Works Department

To: Alderperson Board and Commission Members

From: Andrew M. Beyer, P.E.

Date: December 3, 2024

Subject: Public Works Commission Meeting of December 10, 2024

# Background

#### Update Only: Hart Street Drainage Study Update

Hart Street was in the City's 2022 Annual Street Program for reconstruction. However, during the design phase, the City's design consultant, Ruekert & Mielke, Inc., presented to the City that the storm water management requirements set by the City for the reconstruction of Hart Street could not be met. The City removed Hart Street from the 2022 Annual Street Program with the intention of initiating a stormwater management study of the area in and around Hart Street to further understand what stormwater controls were needed to reduce rain event flooding of the area. Funding was placed in the Stormwater Utility's 2023 budget to conduct the study. Ruekert & Mielke, Inc. was hired to perform the study in the summer of 2023.

This evening, Ruekert & Mielke, Inc. will present to the Commission their findings.

# **Budget Goal**

- 1. Proactively maintains and improves our parks and infrastructure in an effort to ensure quality, safety and compliance
- 4. Promotes and fosters innovative approaches for community development and growth

# **Financial Impact**

Future funding for design, acquisition/easements and construction of the recommended improvements to come from:

Stormwater Capital Outlay Account: 16-58-16-60





# Recommendation

City staff to continue planning for stormwater and specifically flooding improvements in the Hart Street drainage area. Design, acquisition/easements and construction activities to be incorporated into the 5-year Capital Improvement Plan.

## 2024 Operational Goals

- 1. Proactively maintains and improves our parks and infrastructure in an effort to ensure quality, safety and compliance
- 4. Promotes and fosters innovative approaches for community development and growth





# **Public Works Department**

To: Chairman Board and Commissioners

From: Andrew Beyer

Date: December 5, 2024

Subject: Review and take possible action: Modified US Cellular Lease Agreement for 106 Jones Street Communications Tower

# Background

The Public Works Commission previously approved an amended lease agreement between the City of Watertown and US Cellular on June 25, 2024, which was subsequently approved by the Common Council on July 2, 2024.

US Cellular has since requested modifications to the lease agreement. These amendments are minor and primarily involve reducing the number of exhibits in the agreement. The City's telecommunications consultant, SEH, and the City Attorney's Office have reviewed the modifications and recommend approval.

# **Budget Goal**

1. Proactively maintains and improves our parks and infrastructure in an effort to ensure quality, safety and compliance

# **Financial Impact**

There is no financial impact on the City. SEH's review fees are covered by the applicant, US Cellular.

# Recommendation

The Public Works Department – Engineering Division recommends approval of the amended lease agreement.

Enclosed: Draft lease agreement

#### SECOND AMENDMENT TO TOWER AND GROUND SPACE LEASE

This Second Amendment to Tower and Ground Space Lease ("Second Amendment") made \_\_\_\_\_\_\_, 2024, modifies that certain Tower and Ground Space Lease dated May 17, 2000, as amended by the First Amendment Tower and Ground Space Lease January 22, 2015, (collectively, the "Lease"), by and between the City of Watertown, a Wisconsin municipal corporation, hereinafter referred to as "Watertown" and United States Cellular Operating Company LLC, a Delaware limited liability company, having an address at Attention: Real Estate Lease Administration, 8410 West Bryn Mawr Avenue, Chicago, Illinois 60631, hereinafter referred to as "U.S. Cellular".

WHEREAS, Watertown and U.S. Cellular entered into the Lease which provides U.S. Cellular with the right to occupy and use the Premises located at 106 Jones Street, Watertown, Wisconsin in return for consideration to Watertown; and

WHEREAS, Watertown and U.S. Cellular desire to amend the Lease to document U.S. Cellular's intended changes to the equipment ("Modifications") at said Site; and

NOW THEREFORE, in consideration of the terms of the Lease and this Second Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Watertown and U.S. Cellular agree that the Lease is now modified as follows:

- I. Lease Exhibit A-1 is hereby deleted in its entirety and replaced with the Second Amendment Exhibit A-2.
- II. Except as specifically modified herein, the Lease shall remain in full force and effect as originally executed. The Lease and this Second Amendment shall be binding on the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, Watertown and U.S. Cellular have executed this Second Amendment as of the last signature below.

WATERTOWN: City of Watertown	U.S. CELLULAR: United States Cellular Operating Company LLC
Ву:	By:
Printed:	Printed:
Title:	Title: Vice President
Date:	Date:

#### [NOTARY PAGE TO FOLLOW]

# STATE OF WISCONSIN ) COUNTY OF JEFFERSON )

I, the undersigned, a notary public in and for the State and County aforesaid, do hereby certify that \_\_\_\_\_\_, known to me to be the same person whose name is subscribed to the foregoing Second Amendment to Tower and Ground Space Lease, appeared before me this day in person and acknowledged that he/she signed the said Amendment as his/her free and voluntary act for the uses and purposes therein stated.

Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_\_, 202\_\_\_.

Notary Public

My commission expires \_\_\_\_\_

#### STATE OF ILLINOIS ) ) COUNTY OF COOK )

I, the undersigned, a notary public in and for the State and County aforesaid, do hereby certify that \_\_\_\_\_\_, Vice President, known to me to be the same person whose name is subscribed to the foregoing Second Amendment to Tower and Ground Space Lease, appeared before me this day in person and acknowledged that, pursuant to his/her authority, he/she signed the said Amendment as his/her free and voluntary act on behalf of theU.S. Cellular, for the uses and purposes therein stated.

Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

Notary Public

My commission expires \_\_\_\_\_

## EXHIBIT A-2



## **EXHIBIT A-2 (continued)**





## EXHIBIT A-2 (continued)

#### (1) MIDBAND ANTENNA/RADIO ON 2-1/2" SCH. 40 (2-7/8" O.D.) MAST PIPE (TYP, OF EACH SECTOR), CONTRACTOR TO YERIFY EXISTING MAST PIPE DIA. NEW 2-1/2" SCH. 40 (2-7/8" O.D.) x 10" LONG GAU, MAST PIPE AND MOUNTING HARDWARE REQUIRED IF EXISTING MAST PIPE IS LESS THAN 2-7/10" O.D. SEE T-001 FOR DETAILS LEGEND: (THIS SHEET) EXISTING PROPOSED LTE PANEL ANTENNA (TYP. OF 6) MOUNT AZIMUTH 34" INTEGRATED LAA ANTENNA/RADIO (TYP. OF 3) INT MODIF A2 REQUIRED SEE MOUNT MODIFICATION REPORT REFERENCED ON G-001 FDR DETAILS (A4) MOUNT MODIFICATIONS REQUIRED SEE REPORT REFERENCED ON G-001 FOR DETAILS LTE (G5) 270 ERICSSON B12/B71 RRU4449 (TYP. OF 3) ERICSSON B2 RRU4415 (TYP. OF 3) 64 MOUNT AZIMUTH 273\* LAA/C-BAND/Do 63 270"/270" (B2) Q 0 PCS/LTE 6 270° MOUNT AZIMUTH STABILIZER ARM (TYP. OF 2 PER SECTOR); SEE MOUNT MODIFICATION REPORT REFERENCED ON G-001 FOR DETAILS ANTENNA SECTOR FRAME (TYP.) ERICSSON B5 RRU11 (TYP. OF 3)

#### **EXHIBIT A-2 (continued)**



	Antenna Position	Technology	Antenna Model	Antennia Quantity	RAD Center	Azimuth	Surge Protector Oty.	B12/B71 Radio	Radio Qty.	B2/B66 Radio	Radio Qty.	B5 Radio	Ratio Q:y.	MidBand Radio	Radio Qiy.	Cable Type	Cable Qty.
	A1	PCS/LTE	Amphenol TWIN658LU000G-T	1	148.5	30°	- 1	RRJ4449	1	RRU4415	1		~			1-14" Hybrid	1
	A2	-		-	-		-	-	-	-	-	-	~	~	-	-	-
¥ł.	49	LAA	Integrated Antenna/Radio		151.5	30"	Shared			*			× .	RRU2205	1	Shared	
1	~	DoD/C-Band	Integrated Antenna/Radio	<u> </u>	148.5	30*	Shared	-	1	-	-	1	12	AIR6472	1	Shared	-
	A4													~		~	
	A5	LTE	Amphenol TWIN658LU000G-T	1	148.5	30°	Shared	-	-	-	-	RRU11	1	-	-	Shared	-
	B1	PCS/LTE	Amphenol TWIN658LU000G-T	1	148.5	149"	1	RRU4449	1	RRU4415	1		-		~	1-1/4" Power	1
	B2	•			-	-	-	-	-	-	-		-	-	-	-	-
₹	P3	LAA	Integrated Antenna/Radio		161.5"	147"	Shared	-	~	-	-		~	RRU2205	1	Shared	-
H	50	DoD/C-Band	Integrated Antenna/Radio		148.5	150"	Shared	-	-	-	-	-	-	AIR6472	1	Shared	-
	B4	~				*			~				~	~		~	
	B5	LTE	Amphenol TWIN658LU000G-T	1	148.5	148"	Shared	-	-	-	-	RRU11	1	-	-	Shared	-
	G1	PCS/LTE	Amphenol TWIN658LU000G-T	1	148.5	270"	Shared	RRJ4449	1	RRU4415	1		~		-	Shared	-
	62	-		-	-	-	-	-	-	-	-		-	-	-	~	-
MA		LAA	Integrated Antenna/Radio		151.5	270"	Shared		-				-	RRU2205	1	Shared	-
GAN	00	DoD/C-Band	Integrated Antenna/Radio		148.5	270"	Shared		-	-	-		-	AIR6472	1	Shared	-
	G4	~								-			-	~			-
	G5	LTE	Amphenol TWIN658LU000G-T	1	148.5	270"	1	-	~	-	-	RRU11	1	-	-	1-14" Hybrid	1
Total:				6			3		3		3		3		6		3

## **EXHIBIT A-2 (continued)**

Black Text = Existing Green Text = Relocated Red Text = Proposed

**PROPOSED ANTENNA & EQUIPMENT LOADING** С