PUBLIC WORKS COMMISSION MEETING AGENDA

TUESDAY, MAY 13, 2025 AT 5:30 PM

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

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=eUOpCUyvIV65zIPMYlmMdPU1LVLx5l.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 April 22, 2025
4. **BUSINESS**
   - A. Review and take possible action: Set public hearing date as May 21, 2025 for the Public Service Commission (PSC) Rate Case findings and recommendations.
   - B. Review and take possible action: Award Ultra-Violet Disinfection System base bid to Trojan Technologies for a total of $745,720
   - C. Review and approve: 2024 Compliance Maintenance Annual Report (CMAR) – Wastewater Utility permit to discharge summary.
   - D. Update, no action required: Lake Victoria Vegetation Management
   - E. Review and take action: S. Fifth Street 1000 Block right-of-way improvements
   - F. Review and take possible action: Sidewalk repair order for 207 Clark Street
5. **ADJOURNMENT**

Persons requiring other reasonable accommodations for any of the above meetings, may contact the office of the City Clerk at cityclerk@watertownwi.gov phone 920-262-4000

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

Tuesday, April 22, 2025
5:30 p.m.

The Public Works Commission met on the above date and time. The following members were present: Alderpersons Brad Blanke, Dan Bartz, Myron Moldenhauer, and Tony Arnett; Citizen member Pete Thompson. Also present: City Staff Andrew Beyer, Tim Hayden, Richie Piltz.

1. **Call to order.** Chairperson Arnett called the meeting to order at 5:30 p.m.

2. **Comments and Suggestions from Citizens Present.** There were no comments received.

3. **Review & approve minutes dated April 8, 2025.** Mr. Bartz moved to approve the minutes as presented, seconded by Mr. Thompson, and carried by unanimous voice vote.

4. **Review and take possible action: Sidewalk repair orders for 514 N. Water Street; 415 N. Sixth Street; 1508 Doctors Court.** Mr. Blanke moved to approve the repair orders for the properties listed. Mr. Bartz seconded the motion. Motion carried by unanimous voice vote.

5. **Review and take possible action: Award Rebidding of Plaza Phase II ADA Concrete Ramp Improvements Contract #10-25 Alternate Bid B to Maas Brothers Construction Co., Inc. For $145,170.00** Engineering Project Manager Richie Piltz presented the bids received for the installation of the ADA concrete on the east side of the river, near the Main St. bridge. This project had been rebid because no bids were received the first time. It was put out to bid with 3 options. Staff recommended accepting the "Alternate B" bid from Mass Brothers for $145,170 as best low bid received. Mr. Blanke asked what was the project budget, to which he was informed that $400,000 had been budgeted. Mr. Blanke also asked why Alternate B was recommended, to which staff replied the cast concrete in Alternate B will last monger, and will allow the city to select a pattern to the concrete to reflect the nearby rip rap. Mr. Moldenhauer moved to recommend awarding the bid to Maas Brothers for $145,170 for "Alternate B". Mr. Thompson seconded. Motion carried by unanimous roll call vote, 5-0.

6. **Review and take possible action: Award bid for the 2025 Private Lead Service Line Project to Five Star Energy LLC.** Assistant Water Utility Manager Tim Hayden presented the bids received for the replacement of lead service lines throughout the city. The best low bid was received from Five Star Energy LLC in the amount of $7,772,734. This is a 3-year project, continuing on work done the last few years, with the goal of replacing all lead service lines in the city. The prior round were 100% funded by the State of Wisconsin. This round is funded based on city census tracts, with tracts with lower average incomes receiving 100% State funding, and other tracts only 75% or 50%. Overall, the State will provide approximately 85% of the funding for this round, with the city portion amounting to $1,250,000. The work in year will prioritize the properties with 100% State funding. Mr. Blanke asked where the city portion of the expense will come from. Mr. Hayden responded it will come from fund balance in the Water Utility and by deferring other Water Utility projects. The goal is to get this done without requiring a rate increase. Mr. Bartz asked if there were any concerns that the recommended contractor has 32 other projects like this going on (are they overcommitted?) Mr. Hayden answered they had inquired about this and the contractor provided assurances to be able to scale up to meet the work. Mr. Thompson asked if there were any concerns about the costs being 20% than other bidders. Mr. Hayden answered they had inquired to several communities who have use the same contractor and received positive reports. Mr. Bartz moved to recommend awarding the bid to Five Star Energy LLC for $7,772,734. Mr. Moldenhauer seconded. It was noted that the resolution presented had an improperly worded last sentence indicating no city funding account was needed.

Chairperson Arnett offered a friendly amendment to change the last sentence to "A funding account for the city portion of the total cost will be determined once a SWDL award has been received from the State of Wisconsin." Mr. Bartz accepted the friendly amendment, as did Mr. Moldenhauer. Motion carried by unanimous roll call vote, 5-0.

7. **Adjournment.** Mr. Blanke moved to adjourn at 5:56 p.m., seconded by Mr. Moldenhauer. Motion carried by unanimous voice vote.

Respectfully submitted,

Tony Arnett, Chairperson

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

THE CITY OF WATERTOWN
Opportunity runs through it.

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

To: Chairman Arnett and members of the Public Works Commission May 7, 2025
From: Peter Hartz – Water Systems Manager

Re: May 13, 2025, Public Works Commission agenda items

Water Systems:

1. **Review and take possible action** Set public hearing date as May 21, 2025 for the Public Service Commission (PSC) Rate Case findings and recommendations.

   Background:

   - On July 23, 2024, this commission approved moving forward with phase 1 and having Ehlers begin the study of the water rates and provide a review of said rates that were last adjusted in April of 2017. For the water utility to continue with our private lead service replacement program, the Public Service Commission (PSC) of Wisconsin requires a review of the water rates as part of our Safe Drinking Water loan application, no funds will be awarded without the review and study of the water rates to assure adequate revenue is available for operations, capital projects, and debt service payments.
   - On October 8, 2024, this commission approved having Ehlers continue with the next steps in having Ehlers complete the PSC application (phase 2).
   - On November 12, 2024, this commission approved submitting and filing a PSC conventional rate case application.
   - April 22, 2025, after several months of question and answer with PSC, Ehlers, and Watertown Water the PSC released their findings and draft water rate adjustment recommendation. (attached)

   ,

   Budget goal: Aligns with investments and infrastructure planning.

   Financial Impact: An increase in water revenue is estimated to increase by 15.28% , this is less than what was initially estimated by Ehlers (16 – 18%).

   Recommendation: Set Public Hearing date to be May 21, 2025 – a virtual hearing as set and determined by the PSC.

Sincerely,
Peter Hartz

Water Systems Manger

Public Service Commission of Wisconsin

Summer Strand, Chairperson
Kristy Nieto, Commissioner
Marcus Hawkins, Commissioner

4822 Madison Yards Way
P.O. Box 7854
Madison, WI 53707-7854

April 22, 2025

Pete Hartz, Water Systems Manager
Watertown Water Department
P.O. Box 477
Watertown, WI 53094

Re:	Application of Watertown Water Department, Dodge and Jefferson Counties, Wisconsin, for Authority to Adjust Water Rates	6230-WR-111

Dear Pete Hartz:

Public Service Commission (Commission) staff has analyzed the Watertown Water Department (applicant) application for a water rate increase. The Commission received the application on December 3, 2024. The attached proposed exhibit (Exhibit) contains schedules showing Commission staff's proposed cost-of-service analysis and proposed rates. Commission staff intends to submit the Exhibit at the public hearing, which will be scheduled at a later date.

The revenue requirement for the 2025 test year is comprised of the following:

Operation and Maintenance Expenses	$	2,588,045
Depreciation Expense	$	1,029,873
Property Tax Equivalent and Other Taxes	$	747,940
Return on Rate Base	$	1,973,161
Total	$	6,339,019

Commission staff used a 6.30 percent rate of return on the estimated water utility net investment rate base for the 2025 test year, as recommended by Commission staff's auditor. (PSC REF#: 542050.)

Schedule 13 of the Exhibit shows the proposed rates that would increase annual revenues from water public utility service by an estimated $803,853. Commission staff estimates that $436,167 would be from general service customer charges, and $367,716 would be from public fire protection (PFP) charges. The increase in water utility revenues would result from an 8.84 percent increase in gross plant investment and a 12.01 percent increase in operating expenses since the applicant's last water conventional rate case in 2017.

The proposed overall increase in customer rates is 15.28 percent and is comprised of a 10.49 percent increase in general service charges and a 33.34 percent increase in PFP charges.

Under the rates proposed in the Exhibit, a typical Single Family Residential customer's bill would increase 18.63 percent, including PFP. Schedule 14 of the Exhibit shows Commission staff's analysis of customer bills for comparison of proposed and present rates.

Schedule X-1, Water Utility Operating Rules of Schedule 13 includes changes to the applicant's filed rules that reflect the latest requirements in Wis. Admin. Code ch. PSC 185. Commission staff will recommend these changes to the Commission.

The proposed Commission staff Exhibit is intended to provide the Commission with Commission staff's analysis and is not a final decision. After review of the attached Exhibit, the applicant may, within five business days of the date of this letter, present its own analysis and may submit any additional information it believes to be pertinent to support its position. If Commission staff does not receive a response within that time, it will assume the applicant is in agreement with the staff proposal, and Commission staff will contact the applicant to schedule the public hearing. Please note that this is the applicant's primary opportunity to address any concerns or changes to Commission staff's proposed Exhibit.

The applicant should also be aware that the Commission will base its decision on the merits of the case and that the general service and PFP rates are typically effective within 90 days of the Final Decision.

In order to receive notification of official correspondence (i.e. data requests, notices, final decisions, etc.), individuals must subscribe to the Utility ID or PSC Docket. To subscribe, go to the Commission's Electronic Records Filing (ERF) system. For help subscribing, go to Subscribing to Dockets.

If you have any questions, please contact me.

Sincerely,

Alex Hanna

Alex Hanna
Public Utility Rate Analyst
Public Service Commission of Wisconsin
Division of Water Utility Regulation and Analysis
(608) 267–2336 | Alex.Hanna@wisconsin.gov

AJH:eal:rgs DL:02070955

Attachment

cc: Mark Stevens, Watertown Water Department
Peter Curtin, Ehlers
Ariana Schmidt, Ehlers
Brian Roemer, Ehlers

Docket 6230-WR-111

Ex.-PSC-COSS and Rate Design

Watertown Water Department

Watertown Water Departmen **Schedule 1**
Docket 6230-WR-111 **Page 1 of 2**

COMPARATIVE INCOME STATEMENT

ACCT NO.	OPERATING REVENUES	2021	2022	2023	ESTIMATED 2024	TEST YEAR 2025
460	Unmetered Sales to General Customers					
	Residential	$ 0	$ 0	$ 0	$ 0	$ 0
	Multi-Family Residential	0	0	0	0	0
	Commercial	0	0	0	0	0
	Industrial	0	0	0	0	0
	Public Authority	0	0	0	0	0
	Irrigation	0	0	0	0	0
461	Metered Sales to General Customers					
	Residential	2,399,819	2,330,754	2,388,199	2,370,007	2,365,719
	Multi-Family Residential	253,060	252,803	263,906	267,250	268,650
	Commercial	509,479	521,262	514,387	497,082	496,675
	Industrial	943,856	963,813	887,852	907,815	906,850
	Public Authority	149,359	214,031	150,993	117,263	119,666
	Irrigation	0	0	0	0	0
	TOTAL GENERAL SALES	$ 4,255,573	$ 4,282,663	$ 4,205,337	$ 4,159,417	$ 4,157,560
462	Private fire protection service	$ 57,095	$ 57,743	$ 57,510	$ 57,950	$ 59,364
463	Public fire protection service	1,096,098	1,102,384	1,105,105	1,101,996	1,102,930
465	Other water sales	0	0	0	0	0
466	Sales for resale	0	0	0	0	0
467	Interdepartmental sales	0	0	0	0	0
470	Forfeited discounts	34,017	36,848	38,239	27,457	35,000
472	Rents from water property	111,538	113,304	113,304	101,187	105,000
473	Interdepartmental rents	0	0	0	0	0
474	Other water revenues	65,654	56,877	76,560	50,000	75,312
	TOTAL OPERATING REVENUES	$ 5,619,975	$ 5,649,819	$ 5,596,055	$ 5,498,007	$ 5,535,166
	OPERATING EXPENSES					
	SOURCE OF SUPPLY					
600	Operation labor	$ 0	$ 0	$ 0	$ 0	$ 0
601	Operation labor and expenses	0	0	0	0	0
602	Purchased water	0	0	0	0	0
603	Miscellaneous expenses	0	0	0	0	0
604	Rents	0	0	0	0	0
610	Maintenance supervision and engineering	0	0	0	0	0
611	Maintenance of structures and improvements	20,559	21,190	21,982	23,767	26,395
612	Maint. of collecting and impounding reservoirs	0	0	0	0	0
613	Maintenance of lake, river, and other intakes	0	0	0	0	0
614	Maintenance of wells and springs	21,147	30,902	12,984	23,594	30,000
616	Maintenance of supply mains	0	0	0	0	0
617	Maintenance of misc. water source plant	4,524	2,782	1,269	3,000	3,000
	PUMPING EXPENSES					
620	Operation supervision and engineering	0	0	0	0	0
621	Fuel for power production	0	0	0	0	0
622	Power production labor and expenses	7,119	8,319	6,969	7,375	7,450
623	Fuel or power purchased for production	331,271	319,900	371,496	335,667	325,000
624	Pumping labor and expenses	17,864	18,163	18,842	22,159	23,624
625	Expenses transferred--credit	0	0	0	0	0
626	Miscellaneous expenses	2,051	2,378	7,204	12,500	12,119
627	Rents	0	0	0	0	0
630	Maintenance supervision and engineering	0	0	0	0	0
631	Maintenance of structures and improvements	0	0	0	0	0
632	Maintenance of power production equipment	5,001	7,392	4,788	4,771	11,438
633	Maintenance of pumping equipment	6,901	7,486	6,176	8,938	9,717

Watertown Water Departmen
Docket 6230-WR-111

Schedule 1
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COMPARATIVE INCOME STATEMENT
(continued)

ACCT NO.	OPERATING EXPENSES	2021	2022	2023	ESTIMATED 2024	TEST YEAR 2025
	WATER TREATMENT EXPENSES					
640	Operation supervision and engineering	$ 0	$ 0	$ 0	$ 0	$ 0
641	Chemicals	25,725	39,750	41,449	40,000	45,000
642	Operation labor and expenses	143,949	138,809	147,864	125,684	135,077
643	Miscellaneous expenses	1,460	2,072	1,334	1,680	1,800
644	Rents	0	0	0	0	0
650	Maintenance supervision and engineering	0	0	0	0	0
651	Maintenance of structures and improvements	0	0	0	0	0
652	Maintenance of water treatment equipment	24,430	28,608	21,272	21,130	35,879
	TRANS & DISTRIBUTION EXPENSES					
660	Operation supervision and engineering	$ 66,997	$ 69,207	$ 71,730	$ 75,208	$ 76,500
661	Storage facilities expenses	0	0	0	0	0
662	Transmission and distribution expenses	48,633	51,192	46,132	59,280	48,700
663	Meter expenses	18,388	18,423	25,210	58,999	35,000
664	Customer installations expenses	0	0	0	0	0
665	Miscellaneous expenses	7,712	15,393	16,798	16,733	16,340
666	Rents	0	0	0	0	0
670	Maintenance supervision and engineering	0	0	0	0	0
671	Maintenance of structures and improvements	0	0	0	0	0
672	Maintenance of distr.reservoirs and standpipes	21,604	39,900	35,332	33,200	330,000
673	Maintenance of transmission and distr. mains	172,992	220,427	131,233	142,280	172,650
675	Maintenance of services	94,758	91,774	127,008	77,280	79,562
676	Maintenance of meters	0	0	0	0	0
677	Maintenance of hydrants	66,395	72,752	85,115	77,280	74,562
678	Maintenance of miscellaneous plant	0	0	0	0	0
	CUSTOMER ACCOUNTS EXPENSES					
901	Supervision	0	0	0	0	0
902	Meter reading labor	1,190	1,228	1,180	2,934	2,835
903	Customer records and collection expenses	78,655	94,893	71,027	196,963	203,000
904	Uncollectible accounts	0	0	0	0	0
905	Miscellaneous customer accounts expenses	0	0	0	0	0
906	Customer service and Information Expenses	0	0	0	0	0
	SALES EXPENSES					
910	Sales Expenses	0	0	0	0	0
	ADMIN. & GENERAL EXPENSES					
920	Administrative and general salaries	132,097	122,073	211,837	185,617	230,000
921	Office supplies and expenses	31,623	35,180	41,089	40,000	39,846
922	Administrative expenses transferred -- credit	0	0	0	0	0
923	Outside services employed	200,495	190,901	149,843	200,000	200,000
924	Property insurance	31,217	33,731	39,604	30,000	32,000
925	Injuries and damages	20,710	17,067	23,548	23,000	20,000
926	Employee pensions and benefits	324,989	255,589	270,681	351,533	319,368
928	Regulatory commission expenses	6,417	5,428	8,188	6,000	6,250
929	Duplicate charges -- credit	0	0	0	0	0
930	Miscellaneous general expenses	35,916	46,278	23,131	7,500	7,500
931	Rents	0	0	0	0	0
932	Maintenance of general plant	38,378	33,676	78,781	26,577	27,433
	TOTAL OPER. & MAINT. EXPENSES	$ 2,011,167	$ 2,042,863	$ 2,121,096	$ 2,240,650	$ 2,588,045
403	**DEPRECIATION EXPENSE**	1,070,670	1,070,083	989,522	1,060,269	1,029,873
404-407	**AMORTIZATION EXPENSE**	0	0	0	0	0
408	**TAXES AND TAX EQUIVALENT**	996,097	849,649	756,180	736,023	747,940
	TOTAL OPERATING EXPENSES	$ 4,077,934	$ 3,962,595	$ 3,866,798	$ 4,036,942	$ 4,365,858
	NET OPERATING INCOME	**$ 1,542,041**	**$ 1,687,224**	**$ 1,729,257**	**$ 1,461,065**	**$ 1,169,308**

Docket 6230-WR-111 **Schedule 2**

NET INVESTMENT RATE BASE

UTILITY FINANCED PLANT IN SERVICE	$	47,854,408
Less: ACCUMULATED PROVISION FOR DEPRECIATION		16,681,176
NET PLANT IN SERVICE	$	31,173,232
Plus: MATERIALS AND SUPPLIES		146,786
NET INVESTMENT RATE BASE	$	31,320,018
RATE OF RETURN ON RATE BASE		6.30%

ESTIMATED INCOME STATEMENT FOR THE 2025 TEST YEAR AND REVENUE REQUIREMENT TO YIELD A 6.30% RETURN ON NET INVESTMENT RATE BASE

		Present Rates		Increase		After Rate Increase
TOTAL OPERATING REVENUES	$	5,535,166	$	803,853	$	6,339,019
OPERATING EXPENSES:						
OPERATION & MAINTENANCE EXPENSES	$	2,588,045			$	2,588,045
DEPRECIATION EXPENSE		1,029,873				1,029,873
AMORTIZATION EXPENSE		0				0
TAXES AND TAX EQUIVALENT		747,940				747,940
TOTAL OPERATING EXPENSES	$	4,365,858			$	4,365,858
NET OPERATING INCOME (LOSS)	$	1,169,308			$	1,973,161
RATE OF RETURN ON RATE BASE		3.73%				6.30%

UTILITY FINANCED PLANT IN SERVICE AND DEPRECIATION EXPENSE
TEST YEAR 2025

ACCT NO.	ACCOUNT DESCRIPTION	Balance 12/31/2024 ($)	Major Additions Less Retirements ($)	Normal Additions ($)	Retirements ($)	Balance 12/31/2025 ($)	Test Year Rate Base Balance ($)	Depreciation Rate (%)	Depreciation Expense ($)
	INTANGIBLE PLANT								
301	Organization	0	0	0	0	0	0	N/A	0
302	Franchises and Consents	0	0	0	0	0	0	N/A	0
303	Miscellaneous Intangible Plant	0	0	0	0	0	0	N/A	0
	SOURCE OF SUPPLY								
310	Land and Land Rights	140,057	0	0	0	140,057	140,057	N/A	0
311	Structures and Improvements	811,046	0	0	0	811,046	811,046	3.20%	25,953
312	Collecting and Impounding Reservoirs	0	0	0	0	0	0	0.00%	0
313	Lake, River, and Other Intakes	0	0	0	0	0	0	0.00%	0
314	Wells and Springs	765,255	0	0	0	765,255	765,255	2.90%	22,192
316	Supply Mains	594,842	0	0	0	594,842	594,842	1.80%	10,707
317	Other Water Source Plant	0	0	0	0	0	0	0.00%	0
	PUMPING PLANT								
320	Land and Land Rights	20,662	0	0	0	20,662	20,662	N/A	0
321	Structures and Improvements	324,650	0	0	0	324,650	324,650	3.20%	9,036
323	Other Power Production Equipment	714,675	0	0	0	714,675	714,675	4.40%	31,446
325	Electric Pumping Equipment	706,965	0	0	0	706,965	706,965	ılly Depreciated	0
326	Diesel Pumping Equipment	0	0	0	0	0	0	0.00%	0
328	Other Pumping Equipment	39,665	0	0	0	39,665	39,665	4.40%	1,745
	WATER TREATMENT PLANT								
330	Land and Land Rights	16,442	0	0	0	16,442	16,442	N/A	0
331	Structures and Improvements	6,230,307	0	0	0	6,230,307	6,230,307	3.20%	199,370
332	Sand or Other Media Filtration Equipment	3,312,534	0	0	0	3,312,534	3,312,534	3.30%	109,314
333	Membrane Filtration Equipment	0	0	0	0	0	0	0.00%	0
334	Other Water Treatment Equipment	202,569	0	0	0	202,569	202,569	6.00%	12,154

UTILITY FINANCED PLANT IN SERVICE AND DEPRECIATION EXPENSE
TEST YEAR 2025
(continued)

ACCT NO.	ACCOUNT DESCRIPTION	Balance 12/31/2024 ($)	Major Additions ($)	Normal Additions ($)	Retirements ($)	Balance 12/31/2025 ($)	TEST YEAR RATE BASE BALANCE ($)	DEPRECIATION RATE (%)	DEPRECIATION EXPENSE ($)
	TRANSMISSION & DISTRIBUTION PLANT								
340	Land and Land Rights	32,763	0	0	0	32,763	32,763	N/A	0
341	Structures and Improvements	0	0	0	0	0	0	0.00%	0
342	Distribution Reservoirs and Standpipes	1,225,985	0	0	0	1,225,985	1,225,985	1.90%	23,294
343	Transmission and Distribution Mains	19,187,811	0	343,399	41,100	19,490,110	19,338,961	1.30%	251,406
345	Services	3,011,546	0	37,434	11,369	3,037,611	3,024,579	2.90%	87,713
346	Meters	2,203,845	0	470,725	11,340	2,663,230	2,433,538	5.50%	66,923
348	Hydrants	2,685,839	0	27,891	2,842	2,710,888	2,698,364	2.20%	59,364
349	Other Transmission and Distribution Plant	0	0	0	0	0	0	0.00%	0
	GENERAL PLANT								
389	Land and Land Rights	0	0	0	0	0	0	N/A	0
390	Structures and Improvements	3,603,611	0	0	0	3,603,611	3,603,611	2.90%	104,505
391	Office Furniture and Equipment	38,386	0	0	0	38,386	38,386	5.80%	2,226
391	Computer Equipment	289,121	0	0	0	289,121	289,121	ılly Depreciated	0
392	Transportation Equipment	228,828	0	0	0	228,828	228,828	ılly Depreciated	0
393	Stores Equipment	32,503	0	0	0	32,503	32,503	5.80%	1,885
394	Tools, Shop and Garage Equipment	161,989	0	0	0	161,989	161,989	5.80%	9,395
395	Laboratory Equipment	0	0	0	0	0	0	0.00%	0
396	Power Operated Equipment	75,310	0	0	0	75,310	75,310	ılly Depreciated	0
397	Communication Equipment	497,647	0	0	0	497,647	497,647	15.00%	1,246
397	SCADA Equipment	293,154	0	0	0	293,154	293,154	ılly Depreciated	0
398	Miscellaneous Equipment	0	0	0	0	0	0	0.00%	0
	TOTAL UTILITY FINANCED PLANT IN SERVICE	**47,448,007**	**0**	**879,449**	**66,651**	**48,260,805**	**47,854,408**		**1,029,873**

Docket 6230-WR-111 **Schedule 4**

Watertown Water Department

SYSTEM DEMAND RATIOS

MAXIMUM DAY SYSTEM DEMAND

TOTAL ANNUAL PUMPAGE	811,503,632	Gallons
AVERAGE DAILY PUMPAGE	2,223,298	Gallons
MAXIMUM DAY PUMPAGE	3,334,946	Gallons
FIRE FLOW:		
GAL/MIN	5,000	
DURATION (HOURS)	4.00	
TOTAL FLOW	1,200,000	Gallons
AVERAGE DAY PLUS FIRE FLOW	3,423,298	Gallons

RATIO: BASE = $\frac{2,223,298}{3,423,298}$ = 64.95%

MAX DAY = 100-BASE = 35.05%

MAXIMUM HOUR SYSTEM DEMAND

AVERAGE HOUR ON MAX DAY	138,956	Gallons
MAXIMUM HOUR PUMPAGE	208,434	Gallons
AVERAGE HOUR PLUS ONE HOUR FIRE FLOW	392,637	Gallons

RATIO: BASE = $\frac{2,223,298}{9,423,298}$ = 23.59% Use 23.59%

MAX HOUR = 100-BASE = 76.41% Use 76.41%

ALLOCATION OF UTILITY FINANCED PLANT
TO SERVICE COST FUNCTIONS

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	EXTRA-CAPACITY						CUSTOMER COSTS			
			BASE COSTS		MAX DAY		MAX HOUR					
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	INTANGIBLE PLANT												
301	Organization	0	0	0	0	0	0	0	0	0	0	0	0
302	Franchises and Consents	0	0	0	0	0	0	0	0	0	0	0	0
303	Miscellaneous Intangible Plant	0	0	0	0	0	0	0	0	0	0	0	0
	SOURCE OF SUPPLY												
310	Land and Land Rights	140,057	90,962		49,095								
311	Structures and Improvements	811,046	526,743		284,303								
312	Collecting and Impounding Reservoirs	0	0		0								
313	Lake, River, and Other Intakes	0	0		0								
314	Wells and Springs	765,255	497,003		268,252								
316	Supply Mains	594,842	386,327		208,515								
317	Other Water Source Plant	0	0		0								
	PUMPING PLANT												
320	Land and Land Rights	20,662	13,419		7,243								
321	Structures and Improvements	324,650	210,847		113,803								
323	Other Power Production Equipment	714,675	464,153		250,522								
325	Electric Pumping Equipment	706,965	459,146		247,819								
326	Diesel Pumping Equipment	0	0		0								
328	Other Pumping Equipment	39,665	25,761		13,904								
	WATER TREATMENT PLANT												
330	Land and Land Rights	16,442	10,678		5,764								
331	Structures and Improvements	6,230,307	4,046,340		2,183,967								
332	Sand or Other Media Filtration Equipment	3,312,534	2,151,361		1,161,173								
333	Membrane Filtration Equipment	0	0		0								
334	Other Water Treatment Equipment	202,569	131,561		71,008								

ALLOCATION OF UTILITY FINANCED PLANT
TO SERVICE COST FUNCTIONS
(continued)

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS		EXTRA-CAPACITY					CUSTOMER COSTS			
					MAX DAY		MAX HOUR						
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	TRANSMISSION & DISTRIBUTION PLANT												
340	Land and Land Rights	32,763	3,905	3,906	1,930	0	0	12,649	1,069	0	2,776	3,450	3,078
341	Structures and Improvements	0	0	0	0	0	0	0	0	0	0	0	0
342	Distribution Reservoirs and Standpipes	1,225,985	289,254						936,731				
343	Transmission mains	4,825,670	3,134,084		1,691,587								
343	Distribution mains	14,513,291		3,424,212				11,089,079					
345	Services	3,024,579										3,024,579	
346	Meters	2,433,538									2,433,538		
348	Hydrants	2,698,364											2,698,364
349	Other Transmission and Distribution Plant	0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL PLANT												
389	Land and Land Rights	0	0	0	0	0	0	0	0	0	0	0	0
390	Structures and Improvements	3,603,611	1,051,617	289,760	554,387	0	0	938,369	79,267	0	205,929	255,943	228,338
391	Office Furniture and Equipment	38,386	11,202	3,087	5,905	0	0	9,996	844	0	2,194	2,726	2,432
391	Computer Equipment	289,121	84,372	23,248	44,479	0	0	75,286	6,360	0	16,522	20,535	18,320
392	Transportation Equipment	228,828	66,777	18,400	35,203	0	0	59,586	5,033	0	13,076	16,252	14,499
393	Stores Equipment	32,503	9,485	2,614	5,000	0	0	8,464	715	0	1,857	2,308	2,060
394	Tools, Shop and Garage Equipment	161,989	47,272	13,025	24,921	0	0	42,181	3,563	0	9,257	11,505	10,264
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	75,310	21,977	6,056	11,586	0	0	19,610	1,657	0	4,304	5,349	4,772
397	Communication Equipment	497,647	145,225	40,015	76,559	0	0	129,586	10,947	0	28,438	35,345	31,533
397	SCADA Equipment	293,154	85,549	23,572	45,099	0	0	76,336	6,448	0	16,752	20,821	18,575
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	**47,854,408**	**13,965,021**	**3,847,893**	**7,362,025**	**0**	**0**	**12,461,144**	**1,052,633**	**0**	**2,734,643**	**3,398,814**	**3,032,236**

ALLOCATION OF TOTAL PLANT
TO SERVICE COST FUNCTIONS

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS		EXTRA-CAPACITY					CUSTOMER COSTS			
					MAX DAY		MAX HOUR						
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	INTANGIBLE PLANT												
301	Organization	0	0	0	0	0	0	0	0	0	0	0	0
302	Franchises and Consents	0	0	0	0	0	0	0	0	0	0	0	0
303	Miscellaneous Intangible Plant	0	0	0	0	0	0	0	0	0	0	0	0
	SOURCE OF SUPPLY												
310	Land and Land Rights	140,057	90,962		49,095								
311	Structures and Improvements	1,057,928	687,083		370,845								
312	Collecting and Impounding Reservoirs	0	0		0								
313	Lake, River, and Other Intakes	0	0		0								
314	Wells and Springs	1,032,757	670,735		362,022								
316	Supply Mains	594,842	386,327		208,515								
317	Other Water Source Plant	0	0		0								
	PUMPING PLANT												
320	Land and Land Rights	20,662	13,419		7,243								
321	Structures and Improvements	454,950	295,472		159,478								
323	Other Power Production Equipment	714,675	464,153		250,522								
325	Electric Pumping Equipment	1,100,309	714,608		385,701								
326	Diesel Pumping Equipment	0	0		0								
328	Other Pumping Equipment	39,665	25,761		13,904								
	WATER TREATMENT PLANT												
330	Land and Land Rights	16,442	10,678		5,764								
331	Structures and Improvements	7,425,788	4,822,758		2,603,030								
332	Sand or Other Media Filtration Equipment	4,145,730	2,692,489		1,453,241								
333	Membrane Filtration Equipment	0	0		0								
334	Other Water Treatment Equipment	202,569	131,561		71,008								

ALLOCATION OF TOTAL PLANT
TO SERVICE COST FUNCTIONS
(continued)

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS System ($)	BASE COSTS Distribution ($)	EXTRA-CAPACITY MAX DAY System ($)	EXTRA-CAPACITY MAX DAY Distribution ($)	EXTRA-CAPACITY MAX HOUR System ($)	EXTRA-CAPACITY MAX HOUR Distribution ($)	EXTRA-CAPACITY MAX HOUR Storage ($)	CUSTOMER COSTS Billing ($)	CUSTOMER COSTS Equivalent Meter ($)	CUSTOMER COSTS Equivalent Service ($)	Fire Protection ($)
	TRANSMISSION & DISTRIBUTION PLANT												
340	Land and Land Rights	32,763	3,125	4,292	1,523	0	0	13,898	983	0	2,191	3,909	2,841
341	Structures and Improvements	0	0	0	0	0	0	0	0	0	0	0	0
342	Distribution Reservoirs and Standpipes	1,429,211	337,203						1,092,008				
343	Transmission mains	4,825,670	3,134,084		1,691,587								
343	Distribution mains	20,203,487		4,766,735				15,436,751					
345	Services	4,341,576										4,341,576	
346	Meters	2,433,538									2,433,538		
348	Hydrants	3,155,922											3,155,922
349	Other Transmission and Distribution Plant	0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL PLANT												
389	Land and Land Rights	0	0	0	0	0	0	0	0	0	0	0	0
390	Structures and Improvements	3,603,611	977,763	322,155	515,436	0	0	1,043,276	73,802	0	164,468	293,421	213,290
391	Office Furniture and Equipment	38,386	10,415	3,432	5,490	0	0	11,113	786	0	1,752	3,126	2,272
391	Computer Equipment	289,121	78,447	25,847	41,354	0	0	83,703	5,921	0	13,195	23,541	17,112
392	Transportation Equipment	228,828	62,088	20,457	32,730	0	0	66,248	4,686	0	10,444	18,632	13,544
393	Stores Equipment	32,503	8,819	2,906	4,649	0	0	9,410	666	0	1,483	2,647	1,924
394	Tools, Shop and Garage Equipment	161,989	43,952	14,481	23,170	0	0	46,897	3,318	0	7,393	13,190	9,588
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	75,310	20,434	6,733	10,772	0	0	21,803	1,542	0	3,437	6,132	4,457
397	Communication Equipment	497,647	135,026	44,489	71,180	0	0	144,073	10,192	0	22,713	40,520	29,455
397	SCADA Equipment	293,154	79,541	26,207	41,931	0	0	84,871	6,004	0	13,379	23,870	17,351
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	**58,589,090**	**15,896,902**	**5,237,732**	**8,380,190**	**0**	**0**	**16,962,043**	**1,199,909**	**0**	**2,673,994**	**4,770,563**	**3,467,756**

ALLOCATION OF DEPRECIATION EXPENSE
TO SERVICE COST FUNCTIONS

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS		EXTRA-CAPACITY					CUSTOMER COSTS			
					MAX DAY		MAX HOUR						
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	INTANGIBLE PLANT												
301	Organization	0	0	0	0	0	0	0	0	0	0	0	0
302	Franchises and Consents	0	0	0	0	0	0	0	0	0	0	0	0
303	Miscellaneous Intangible Plant	0	0	0	0	0	0	0	0	0	0	0	0
	SOURCE OF SUPPLY												
310	Land and Land Rights	0	0		0								
311	Structures and Improvements	25,953	16,855		9,098								
312	Collecting and Impounding Reservoirs	0	0		0								
313	Lake, River, and Other Intakes	0	0		0								
314	Wells and Springs	22,192	14,413		7,779								
316	Supply Mains	10,707	6,954		3,753								
317	Other Water Source Plant	0	0		0								
	PUMPING PLANT												
320	Land and Land Rights	0	0		0								
321	Structures and Improvements	9,036	5,869		3,167								
323	Other Power Production Equipment	31,446	20,423		11,023								
325	Electric Pumping Equipment	0	0		0								
326	Diesel Pumping Equipment	0	0		0								
328	Other Pumping Equipment	1,745	1,133		612								
	WATER TREATMENT PLANT												
330	Land and Land Rights	0	0		0								
331	Structures and Improvements	199,370	129,483		69,887								
332	Sand or Other Media Filtration Equipment	109,314	70,995		38,319								
333	Membrane Filtration Equipment	0	0		0								
334	Other Water Treatment Equipment	12,154	7,894		4,260								

ALLOCATION OF DEPRECIATION EXPENSE
TO SERVICE COST FUNCTIONS
(continued)

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS		EXTRA-CAPACITY					CUSTOMER COSTS			
					MAX DAY		MAX HOUR						
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	TRANSMISSION & DISTRIBUTION PLANT												
340	Land and Land Rights	0	0	0	0	0	0	0	0	0	0	0	0
341	Structures and Improvements	0	0	0	0	0	0	0	0	0	0	0	0
342	Distribution Reservoirs and Standpipes	23,294	5,496						17,798				
343	Transmission mains	62,734	40,743		21,991								
343	Distribution mains	188,672		44,515				144,158					
345	Services	87,713										87,713	
346	Meters	66,923									66,923		
348	Hydrants	59,364											59,364
349	Other Transmission and Distribution Plant	0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL PLANT												
389	Land and Land Rights	0	0	0	0	0	0	0	0	0	0	0	0
390	Structures and Improvements	104,505	36,754	5,109	19,497	0	0	16,544	2,043	0	7,680	10,066	6,813
391	Office Furniture and Equipment	2,226	783	109	415	0	0	352	44	0	164	214	145
391	Computer Equipment	0	0	0	0	0	0	0	0	0	0	0	0
392	Transportation Equipment	0	0	0	0	0	0	0	0	0	0	0	0
393	Stores Equipment	1,885	663	92	352	0	0	298	37	0	139	182	123
394	Tools, Shop and Garage Equipment	9,395	3,304	459	1,753	0	0	1,487	184	0	690	905	612
395	Laboratory Equipment	0	0	0	0	0	0	0	0	0	0	0	0
396	Power Operated Equipment	0	0	0	0	0	0	0	0	0	0	0	0
397	Communication Equipment	1,246	438	61	232	0	0	197	24	0	92	120	81
397	SCADA Equipment	0	0	0	0	0	0	0	0	0	0	0	0
398	Miscellaneous Equipment	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	**1,029,873**	**362,199**	**50,344**	**192,138**	**0**	**0**	**163,037**	**20,129**	**0**	**75,687**	**99,200**	**67,138**

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES
TO SERVICE COST FUNCTIONS

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS		EXTRA-CAPACITY					CUSTOMER COSTS			
					MAX DAY		MAX HOUR						
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	SOURCE OF SUPPLY												
600	Operation labor	0	0		0								
601	Operation labor and expenses	0	0		0								
602	Purchased water	0	0										0
603	Miscellaneous expenses	0	0		0								
604	Rents	0	0		0								
610	Maintenance supervision and engineering	0	0		0								
611	Maintenance of structures and improvements	26,395	17,143		9,252								
612	Maint. of collecting and impounding reservoirs	0	0		0								
613	Maintenance of lake, river, and other intakes	0	0		0								
614	Maintenance of wells and springs	30,000	19,484		10,516								
616	Maintenance of supply mains	0	0		0								
617	Maintenance of misc. water source plant	3,000	1,948		1,052								
	PUMPING EXPENSES												
620	Operation supervision and engineering	0	0		0								
621	Fuel for power production	0	0										
622	Power production labor and expenses	7,450	7,450										
623	Fuel or power purchased for production	325,000	325,000										
624	Pumping labor and expenses	23,624	15,343		8,281								
625	Expenses transferred--credit	0	0		0								
626	Miscellaneous expenses	12,119	7,871		4,248								
627	Rents	0	0		0								
630	Maintenance supervision and engineering	0	0		0								
631	Maintenance of structures and improvements	0	0		0								
632	Maintenance of power production equipment	11,438	7,429		4,009								
633	Maintenance of pumping equipment	9,717	6,311		3,406								
	WATER TREATMENT EXPENSES												
640	Operation supervision and engineering	0	0		0								
641	Chemicals	45,000	45,000										
642	Operation labor and expenses	135,077	87,727		47,350								
643	Miscellaneous expenses	1,800	1,169		631								
644	Rents	0	0		0								
650	Maintenance supervision and engineering	0	0		0								
651	Maintenance of structures and improvements	0	0		0								
652	Maintenance of water treatment equipment	35,879	23,302		12,577								

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ALLOCATION OF OPERATION AND MAINTENANCE EXPENSES TO SERVICE COST FUNCTIONS (continued)

Schedule 7
Page 2 of 2

ACCT NO.	ACCOUNT DESCRIPTION	TOTAL ($)	BASE COSTS		EXTRA-CAPACITY					CUSTOMER COSTS			
					MAX DAY		MAX HOUR						
			System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
	TRANSMISSION & DISTRIBUTION EXPENSES												
660	Operation supervision and engineering	76,500	9,774	4,767	934	0	0	15,438	26,049	0	3,616	8,220	7,703
661	Storage facilities expenses	0	0						0				
662	Transmission lines expenses	5,672	3,684		1,988								
662	Distribution lines expenses	43,028		10,152				32,876					
663	Meter expenses	35,000									35,000		
664	Customer installations expenses	0										0	
665	Miscellaneous expenses	16,340	2,088	1,018	199	0	0	3,297	5,564	0	772	1,756	1,645
666	Rents	0	0	0	0	0	0	0	0	0	0	0	0
670	Maintenance supervision and engineering	0	0	0	0	0	0	0	0	0	0	0	0
671	Maintenance of structures and improvements	0	0	0	0	0	0	0	0	0	0	0	0
672	Maintenance of distr.reservoirs and standpipes	330,000	77,859						252,141				
673	Maintenance of transmission mains	20,110	13,061		7,049								
673	Maintenance of distribution mains	152,540		35,990				116,550					
675	Maintenance of services	79,562										79,562	
676	Maintenance of meters	0									0		
677	Maintenance of hydrants	74,562											74,562
678	Maintenance of miscellaneous plant	0	0	0	0	0	0	0	0	0	0	0	0
	CUSTOMER ACCOUNTS EXPENSES												
901	Supervision	0								0			
902	Meter reading labor	2,835								2,835			
903	Customer records and collection expenses	203,000								203,000			
904	Uncollectible accounts	0								0			
905	Miscellaneous customer accounts expenses	0								0			
906	Customer service and Information Expenses	0								0			
	SALES EXPENSES												
910	Sales Expenses	0								0			
	ADMINISTRATIVE & GENERAL EXPENSES												
920	Administrative and general salaries	230,000	56,167	9,914	21,286	0	0	32,105	54,174	15,719	7,520	17,094	16,020
921	Office supplies and expenses	39,846	9,731	1,718	3,688	0	0	5,562	9,385	2,723	1,303	2,961	2,775
922	Administrative expenses transferred -- credit	0	0	0	0	0	0	0	0	0	0	0	0
923	Outside services employed	200,000	48,841	8,621	18,510	0	0	27,918	47,108	13,669	6,539	14,865	13,931
924	Property insurance	32,000	8,683	2,861	4,577	0	0	9,264	655	0	1,460	2,606	1,894
925	Injuries and damages	20,000	4,884	862	1,851	0	0	2,792	4,711	1,367	654	1,486	1,393
926	Employee pensions and benefits	319,368	77,991	13,766	29,557	0	0	44,580	75,224	21,827	10,442	23,737	22,245
928	Regulatory commission expenses	6,250	1,526	269	578	0	0	872	1,472	427	204	465	435
929	Duplicate charges -- credit	0	0	0	0	0	0	0	0	0	0	0	0
930	Miscellaneous general expenses	7,500	1,832	323	694	0	0	1,047	1,767	513	245	557	522
931	Rents	0	0	0	0	0	0	0	0	0	0	0	0
932	Maintenance of general plant	27,433	6,699	1,182	2,539	0	0	3,829	6,462	1,875	897	2,039	1,911
	TOTAL OPERATION & MAINTENANCE EXPENSES	**2,588,045**	**887,993**	**91,443**	**194,775**	**0**	**0**	**296,131**	**484,712**	**263,955**	**68,653**	**155,348**	**145,037**

SUMMARY OF ALLOCATION OF OPERATING COSTS TO SERVICE COST FUNCTIONS

				EXTRA-CAPACITY					CUSTOMER COSTS			
		BASE COSTS		MAX DAY		MAX HOUR						
OPERATING COST	TOTAL ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	System ($)	Distribution ($)	Storage ($)	Billing ($)	Equivalent Meter ($)	Equivalent Service ($)	Fire Protection ($)
OPERATION AND MAINTENANCE	2,588,045	887,993	91,443	194,775	0	0	296,131	484,712	263,955	68,653	155,348	145,037
DEPRECIATION EXPENSE	1,029,873	362,199	50,344	192,138	0	0	163,037	20,129	0	75,687	99,200	67,138
AMORTIZATION EXPENSE	0	0	0	0	0	0	0	0	0	0	0	0
TAXES AND TAX EQUIVALENT	747,940	202,938	66,864	106,980	0	0	216,535	15,318	0	34,136	60,900	44,269
RETURN ON NET INVESTMENT RATE BASE	1,973,161	575,813	158,659	303,555	0	0	513,805	43,403	0	112,756	140,142	125,027
TOTAL	**6,339,019**	**2,028,944**	**367,310**	**797,448**	**0**	**0**	**1,189,508**	**563,562**	**263,955**	**291,232**	**455,590**	**381,471**

CUSTOMER CLASS DEMAND RATIOS

		BASE COSTS				EXTRA-CAPACITY MAX DAY DEMAND					EXTRA-CAPACITY MAX HOUR DEMAND				
CUSTOMER CLASS	Annual Volume 100 CCF	Average Day Volume CF	Percent (%)	System Adjusted Percent (%)	Distribution Adjusted Percent (%)	Extra Capacity Ratio	Volume Rate CF Per Day	Percent (%)	System Adjusted Percent (%)	Distribution Adjusted Percent (%)	Extra Capacity Ratio	Volume Rate CF Per Hour	Percent (%)	System Adjusted Percent (%)	Distribution Adjusted Percent (%)	Storage Adjusted Percent (%)
Residential	417,500	114,384	46.88%	46.88%	46.88%	2.00	228,767	41.21%	41.21%	41.21%	4.30	20,494	27.14%	28.95%	28.95%	27.14%
Multifamily Residential	62,000	16,986	6.96%	6.96%	6.96%	1.75	29,726	5.35%	5.35%	5.35%	3.90	2,760	3.66%	3.90%	3.90%	3.66%
Commercial	108,400	29,699	12.17%	12.17%	12.17%	1.50	44,548	8.02%	8.02%	8.02%	3.50	4,331	5.74%	6.12%	6.12%	5.74%
Industrial	265,000	72,603	29.76%	29.76%	29.76%	1.10	79,863	14.39%	14.39%	14.39%	2.20	6,655	8.82%	9.40%	9.40%	8.82%
Public Authority	28,800	7,890	3.23%	3.23%	3.23%	1.50	11,836	2.13%	2.13%	2.13%	3.50	1,151	1.52%	1.63%	1.63%	1.52%
Public Fire Protection	8,906	2,440	1.00%	1.00%	1.00%		160,428	28.90%	28.90%	28.90%		40,107	53.12%	50.00%	50.00%	53.12%
TOTALS	**890,606**	**244,002**	**100%**	**100%**	**100%**		**555,168**	**100%**	**100%**	**100%**		**75,498**	**100%**	**100%**	**100%**	**100%**
									50%	50%	<-- Public Fire % Limits -->			50%	50%	80%

Maximum Day Demand = 636,301 (CUBIC FEET/DAY) SUM OF GENERAL SERVICE AVERAGE AND MAXIMUM DAY EXTRA CAPACITY DEMAND

Maximum Hour Demand = 45,456 (CUBIC FEET/HR) SUM OF GENERAL SERVICE AVERAGE AND MAXIMUM HOUR EXTRA CAPACITY DEMAND

1.43 = NON-COINCIDENT / COINCIDENT RATIO FOR MAX DAY

1.63 = NON-COINCIDENT / COINCIDENT RATIO FOR MAX HOUR

CUSTOMER CLASS ALLOCATION FACTORS

NUMBER OF METERS

Meter size (inches):	5/8	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	TOTAL METERS	PERCENT
Residential	6,074	1,669	0	0	0	0	0	0	0	0	0	0	0	7,743	89.2%
Multifamily Residential	35	8	75	0	36	18	0	6	0	0	0	0	0	178	2.0%
Commercial	312	184	84	0	24	32	0	13	3	1	0	0	0	653	7.5%
Industrial	14	9	14	0	8	10	0	5	2	1	0	0	0	63	0.7%
Public Authority	7	6	11	0	5	9	0	8	1	1	0	0	0	48	0.6%
TOTALS	**6,442**	**1,876**	**184**	**0**	**73**	**69**	**0**	**32**	**6**	**3**	**0**	**0**	**0**	**8,685**	**100.0%**

EQUIVALENT METERS

ALLOCATION FACTOR:														TOTAL	
Meter size (inches):	**5/8**	**3/4**	**1**	**1-1/4**	**1-1/2**	**2**	**2-1/2**	**3**	**4**	**6**	**8**	**10**	**12**	**EQUIV.**	
Equiv. meters ratio:	**1.0**	**1.0**	**2.5**	**3.7**	**5.0**	**8.0**	**12.5**	**15.0**	**25.0**	**50.0**	**80.0**	**120.0**	**160.0**	**METERS**	**PERCENT**
Residential	6,074	1,669	0	0	0	0	0	0	0	0	0	0	0	7,743	73.9%
Multifamily Residential	35	8	188	0	180	144	0	90	0	0	0	0	0	645	6.2%
Commercial	312	184	210	0	120	256	0	195	75	50	0	0	0	1,402	13.4%
Industrial	14	9	35	0	40	80	0	75	50	50	0	0	0	353	3.4%
Public Authority	7	6	28	0	25	72	0	120	25	50	0	0	0	333	3.2%
TOTALS	**6,442**	**1,876**	**460**	**0**	**365**	**552**	**0**	**480**	**150**	**150**	**0**	**0**	**0**	**10,475**	**100.0%**

EQUIVALENT SERVICES

ALLOCATION FACTOR:														TOTAL	
Meter size (inches):	**5/8**	**3/4**	**1**	**1-1/4**	**1-1/2**	**2**	**2-1/2**	**3**	**4**	**6**	**8**	**10**	**12**	**EQUIV.**	
Equiv. services ratio:	**1.0**	**1.0**	**1.3**	**1.7**	**2.0**	**3.0**	**3.5**	**4.0**	**5.0**	**6.0**	**7.0**	**8.0**	**9.0**	**SERVICES**	**PERCENT**
Residential	6,074	1,669	0	0	0	0	0	0	0	0	0	0	0	7,743	85.2%
Multifamily Residential	35	8	98	0	72	54	0	24	0	0	0	0	0	291	3.2%
Commercial	312	184	109	0	48	96	0	52	15	6	0	0	0	822	9.0%
Industrial	14	9	18	0	16	30	0	20	10	6	0	0	0	123	1.4%
Public Authority	7	6	14	0	10	27	0	32	5	6	0	0	0	107	1.2%
TOTALS	**6,442**	**1,876**	**239**	**0**	**146**	**207**	**0**	**128**	**30**	**18**	**0**	**0**	**0**	**9,086**	**100.0%**

ALLOCATION OF SERVICE COST FUNCTIONS TO CUSTOMER CLASSES

	TOTAL ($)	Residential ($)	Multifamily Residential ($)	Commercial ($)	Industrial ($)	Public Authority ($)	Public Fire Protection ($)
BASE COSTS:							
SYSTEM	2,028,944	951,132	141,246	246,953	603,713	65,611	20,289
DISTRIBUTION	367,310	172,188	25,570	44,707	109,293	11,878	3,673
EXTRA-CAPACITY COSTS:							
MAXIMUM-DAY SYSTEM	797,448	328,603	42,699	63,989	114,716	17,001	230,440
MAXIMUM-DAY DISTRIBUTION	0	0	0	0	0	0	0
MAXIMUM-HOUR SYSTEM	0	0	0	0	0	0	0
MAXIMUM-HOUR DISTRIBUTION	1,189,508	344,402	46,387	72,784	111,843	19,338	594,754
MAXIMUM-HOUR STORAGE	563,562	152,977	20,604	32,330	49,679	8,589	299,382
CUSTOMER COSTS:							
BILLING	263,955	235,325	5,410	19,846	1,915	1,459	
EQUIVALENT METERS	291,232	215,275	17,919	38,979	9,814	9,244	
EQUIVALENT SERVICES	455,590	388,241	14,566	41,226	6,177	5,380	
FIRE PROTECTION	381,471						381,471
TOTAL COST	6,339,019	2,788,144	314,401	560,814	1,007,150	138,500	1,530,010
LESS OTHER REVENUE	274,676	124,833	14,077	25,109	45,093	6,201	59,364
COST OF SERVICE	6,064,343	2,663,312	300,325	535,705	962,057	132,299	1,470,646
REVENUE AT PRESENT RATES	5,260,490	2,365,719	268,650	496,675	906,850	119,666	1,102,930
DIFFERENCE	803,853	297,593	31,675	39,030	55,207	12,633	367,716
PERCENT INCREASE/DECREASE	**15.28%**	**12.58%**	**11.79%**	**7.86%**	**6.09%**	**10.56%**	**33.34%**

Docket 6230-WR-111 **Schedule 11**

Docket 6230-WR-111 **Schedule 12**

Watertown Water Department
Comparison of Revenue at
Present Rates, Cost of Service, and Proposed Rates

		Cost of Service		Proposed Rates		
Customer Class	**Revenue at Present Rates**	**Revenue Required**	**Increase over Present Rates**	**Revenue**	**Increase over Present Rates**	**Percent of Cost of Service**
Residential	$2,365,719	$2,663,312	12.58%	$2,668,739	12.81%	100.20%
Multifamily Residential	$268,650	$300,325	11.79%	$295,332	9.93%	98.34%
Commercial	$496,675	$535,705	7.86%	$540,223	8.77%	100.84%
Industrial	$906,850	$962,057	6.09%	$962,900	6.18%	100.09%
Public Authority	$119,666	$132,299	10.56%	$127,604	6.63%	96.45%
Public Fire Protection	$1,102,930	$1,470,646	33.34%	$1,470,655	33.34%	100.00%
Total	$5,260,490	$6,064,343	15.28%	$6,065,453	15.30%	100.02%

Docket 6230-WR-111 Schedule 13

Watertown Water Department

Proposed Water Rates and Rules

Docket 6230-WR-111

Watertown Water Department

Water Rate File Changes

Amended

F-1
Upf-1
Mg-1
Am-1
OC-1
Mpa-1
Ug-1
Sg-1
BW-1
R-1
Cz-1
LSL-1
LSL-2
X-1
X-2
X-3
X-4

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. F-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Public Fire Protection Service

Public fire protection service shall include the use of hydrants for fire protection service only and such quantities of water as may be demanded for the purpose of extinguishing fires within the service area. This service shall also include water used for testing equipment and training personnel. For all other purposes, the metered or other rates set forth, or as may be filed with the Public Service Commission shall apply.

Under Wis. Stat. § 196.03(3)(b), the municipality has chosen to have the utility bill the retail general service customers for public fire protection service.

Monthly Public Fire Protection Service Charges:

⅝ - inch meter:	$	11.60	3 - inch meter:	$	176.20
¾ - inch meter:	$	11.60	4 - inch meter:	$	291.20
1 - inch meter:	$	29.60	6 - inch meter:	$	582.00
1¼ - inch meter:	$	43.40	8 - inch meter:	$	932.00
1½ - inch meter:	$	59.40	10 - inch meter:	$	1,397.00
2 - inch meter:	$	94.40	12 - inch meter:	$	1,863.00

Customers who are provided service under Schedules Mg-1, Ug-1 or Sg-1 shall also be subject to the charges in this schedule according to the size of their primary meter. Customers who are provided service under Schedule Am-1 are exempt from these charges for any additional meters.

Under Wis. Stat. § 196.03(3)(b), the City of Watertown has elected to make the charges in this schedule applicable to non-general service customers who own property that is located both within the municipal limits and in an area where the utility has an obligation to provide water for public fire protection. Each parcel shall be billed at the ⅝-inch meter rate under this schedule.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Upf-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Private Fire Protection Service - Unmetered

This service shall consist of permanent or continuous unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes, and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow prevention devices.

Monthly Private Fire Protection Service Demand Charges:

2 - inch or smaller connection:	$	10.00
3 - inch connection:	$	19.00
4 - inch connection:	$	32.00
6 - inch connection:	$	64.00
8 - inch connection:	$	99.00
10 - inch connection:	$	154.00
12 - inch connection:	$	207.00
14 - inch connection:	$	259.00
16 - inch connection:	$	308.00

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Mg-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

General Service - Metered

Monthly Service Charges:

⅝ - inch meter:	$	9.00	3 - inch meter:	$	60.00
¾ - inch meter:	$	9.00	4 - inch meter:	$	90.00
1 - inch meter:	$	14.00	6 - inch meter:	$	165.00
1¼ - inch meter:	$	19.00	8 - inch meter:	$	220.00
1½ - inch meter:	$	24.00	10 - inch meter:	$	320.00
2 - inch meter:	$	35.00	12 - inch meter:	$	420.00

Plus Volume Charges:

First	1,600	cubic feet used each month:	$4.40 per 100 cubic feet
Next	65,000	cubic feet used each month:	$3.87 per 100 cubic feet
Over	66,600	cubic feet used each month:	$3.39 per 100 cubic feet

Billing: Bills for water service are rendered monthly and become due and payable upon issuance following the period for which service is rendered. A late payment charge of 1 percent per month will be added to bills not paid within 20 days of issuance. This late payment charge will be applied to the total unpaid balance for utility service, including unpaid late payment charges. The late payment charge is applicable to all customers. The utility customer may be given a written notice that the bill is overdue no sooner than 20 days after the bill is issued. Unless payment or satisfactory arrangement for payment is made within the next 10 days, service may be disconnected pursuant to Wis. Adm. Code ch. PSC 185.

Combined Metering: Volumetric meter readings will be combined for billing if the utility for its own convenience places more than one meter on a single water service lateral. Multiple meters placed for the purpose of identifying water not discharged into the sanitary sewer are not considered for utility convenience and shall not be combined for billing. This requirement does not preclude the utility from combining readings when metering configurations support such an approach. Meter readings from individually metered separate service laterals shall not be combined for billing purposes.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Am-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Additional Meter Rental Charge

Upon request, the utility shall furnish and install additional meters to:

A. Water service customers for the purpose of measuring the volume of water used that is not discharged into the sanitary sewer system; and

B. Sewerage service customers who are not customers of the water utility for the purpose of determining the volume of sewage that is discharged into the sanitary sewer system.

The utility shall charge a meter installation charge of $60.00 and a monthly rental fee for the use of this additional meter.

Monthly Additional Meter Rental Charges:

⅝ - inch meter:	$	4.50
¾ - inch meter:	$	4.50
1 - inch meter:	$	7.00
1¼ - inch meter:	$	9.50
1½ - inch meter:	$	12.00
2 - inch meter:	$	17.50

This schedule applies only if the additional meter is installed on the same service lateral as the primary meter and either:

A. The additional meter is ¾-inch or smaller if the metering configuration is the Addition Method; or

B. The additional meter is 2-inch or smaller for all other metering configurations.

If the additional meter is larger than 2-inch or larger than ¾-inch and installed in the Addition Method, each meter shall be treated as a separate account and Schedule Mg-1 rates shall apply.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. OC-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Other Charges

Payment Not Honored by Financial Institution Charge: The utility shall assess a $17.50 charge when a payment rendered for utility service is not honored by the customer's financial institution. This charge may not be in addition to, but may be inclusive of, other such charges when the payment was for multiple services.

Special Billing Charge: The utility shall assess a $30.00 charge to the requestor to cover administrative expenses whenever an existing customer or the property owner requests a special billing outside of the normal utility billing. This charge may not be assessed to a new customer.

Special Meter Reading Charge: The utility shall assess a $30.00 charge to the requestor whenever an existing customer or the property owner requests a special meter reading by utility personnel on a date other than the regularly scheduled meter reading. This charge may not be assessed if the customer or the property owner provides the meter reading. This charge may not be assessed to a new customer.

Missed Appointment Charge: The utility shall assess a missed appointment charge when a customer, without providing reasonable cancellation notice, fails to be present at the customer's location for an appointment scheduled with utility personnel. The utility may not apply the charge for the first such missed appointment during normal business hours. The utility shall apply the charge for the first such missed appointment after normal business hours.

During normal business hours:	$40.00
After normal business hours:	$60.00

Real Estate Closing Account Charge: The utility shall assess a $15.00 charge whenever a customer or the customer's agent requests written documentation from the utility of the customer's account status in connection with a real estate closing.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Mpa-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Public Service

Metered Service
Water used by the City of Watertown on an intermittent basis for flushing sewers, street washing, flooding skating rinks, drinking fountains, etc., shall be metered and billed according to the rates set forth in Schedule Mg-1.

Unmetered Service
Where it is impossible to meter the service, the utility shall estimate the volume of water used based on the pressure, size of opening, and the period of time the water is used. The estimated quantity shall be billed at the volumetric rates set forth in Schedule Mg-1, excluding any service charges.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Ug-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

General Water Service - Unmetered

Service may be supplied temporarily on an unmetered basis where the utility cannot immediately install a water meter, including water used for construction. Unmetered service shall be billed the amount that would be charged to a metered residential customer using 400 cubic feet of water monthly under Schedule Mg-1, including the service charge for a ⅝-inch meter. If the utility determines that actual usage exceeds 400 cubic feet of water monthly, an additional charge for the estimated excess usage shall be made according to the rates under Schedule Mg-1.

This schedule applies only to customers with a 1-inch or smaller service connection. For customers with a larger service connection, the utility shall install a temporary meter and charges shall be based on the rates set forth under Schedule Mg-1.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Sg-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Seasonal Service

Seasonal customers are general service customers who voluntarily request disconnection of water service and who resume service at the same location within 12 months of the disconnection, unless service has been provided to another customer at that location in the intervening period. The utility shall bill seasonal customers the applicable service charges under Schedule Mg-1 year-round, including the period of temporary disconnection.

Seasonal service shall include customers taking service under Schedule Mg-1, Schedule Ug-1, or Schedule Am-1.

Upon reconnection, the utility shall apply a charge under Schedule R-1 and require payment of any unpaid charges under this schedule.

Billing: Same as Schedule Mg-1, unless the utility and customer agree to an alternative payment schedule for the period of voluntary disconnection.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. BW-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Bulk Water

All bulk water supplied from the water system through hydrants or other connections shall be metered or estimated by the utility. Utility personnel or a party approved by the utility shall supervise the delivery of water.

Bulk water sales are:

A. Water supplied by tank trucks or from hydrants for the purpose of extinguishing fires outside the utility's service area;

B. Water supplied by tank trucks or from hydrants for purposes other than extinguishing fires, such as water used for irrigation or filling swimming pools; or,

C. Water supplied from hydrants or other temporary connections for general service type applications, except that Schedule Ug-1 applies for water supplied for construction purposes.

A service charge of $60.00 and a charge for the volume of water used shall be billed to the party using the water. The volumetric charge shall be calculated using the highest volumetric rate for residential customers under Schedule Mg-1. In addition, for meters that are assigned to bulk water customers for more than 7 days, the applicable service charge in Schedule Mg-1 will apply after the first 7 days.

The water utility may require a reasonable deposit for the temporary use of its equipment under this and other rate schedules. The deposit(s) collected shall be refunded upon return of the utility's equipment. Damaged or lost equipment shall be repaired or replaced at the customer's expense.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. R-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Reconnection Charges

The utility shall assess a charge to reconnect a customer, which includes reinstalling a meter and turning on the valve at the curb stop, if necessary. A utility may not assess a charge for disconnecting a customer.

During normal business hours:	$60.00
After normal business hours:	$75.00

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. Cz-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Lateral Installation Charge

The utility shall charge a customer for the actual cost of installing a water service lateral from the main through curb stop and box if these costs are not contributed as part of a subdivision development or otherwise recovered under Wis. Stats. Chapter 66.

Billing: Same as Schedule Mg-1.

RATE FILE *(DRAFT)*

Sheet No. 1 of 2
Schedule No. LSL-1
Amendment No. 45

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. Utility Inspection and Inventory

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. LSL Replacement Without Utility-Side Replacement

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.

RATE FILE *(DRAFT)*

Sheet No. 2 of 2
Schedule No. LSL-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

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

D. LSL Replacement – Financial Assistance Program

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.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. LSL-2
Amendment No. 45

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.

RATE FILE *(DRAFT)*

Sheet No. 1 of 10
Schedule No. X-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Compliance with Rules

All persons now receiving water service from this water utility, or who may request service in the future, shall be considered as having agreed to be bound by the rules and regulations as filed with the Public Service Commission of Wisconsin.

Establishment of Service

Application for water service may be made in writing on a form furnished by the water utility. The application will contain the legal description of the property to be served, the name of the owner, the exact use to be made of the service, and the size of the service lateral and meter desired. Note particularly any special refrigeration, fire protection, or water-consuming air-conditioning equipment.

Service will be furnished only if (1) the premises have a frontage on a properly platted street or public strip in which a cast iron or other long-life water main has been laid, or where the property owner has agreed to and complied with the provisions of the water utility's filed main extension rule, (2) the property owner has installed or agrees to install a service lateral from the curb stop to the point of use that is not less than 6 feet below the surface of an established or proposed grade and meets the water utility's specifications, and (3) the premises have adequate piping beyond the metering point.

The owner of a multi-unit dwelling has the option of being served by individual metered water service to each unit. The owner, by selecting this option, is required to provide interior plumbing and meter settings to enable individual metered service to each unit and individual disconnection without affecting service to other units. Each meter and meter connection will be treated as a separate water utility account for the purpose of the filed rules and regulations.

No division of the water service lateral to any lot or parcel of land shall be made for the extension and independent metering of the supply to an adjoining lot or parcel of land. Except for duplexes, no division of a water service lateral shall be made at the curb for separate supplies for two or more separate premises having frontage on any street or public service strip, whether owned by the same or different parties. Duplexes may be served by one lateral provided (1) individual metered service and disconnection is provided and (2) it is permitted by local ordinance.

Buildings used in the same business, located on the same parcel, and served by a single lateral may have the customer’s water supply piping installed to a central point so that volume can be metered in one place.

The water utility may withhold approval of any application where full information of the purpose of such supply is not clearly indicated and set forth by the applicant property owner.

RATE FILE *(DRAFT)*

Sheet No. 2 of 10
Schedule No. X-1
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Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Reconnection of Service

Where the water utility has disconnected service at the customer's request, a reconnection charge shall be made when the customer requests reconnection of service. See Schedule R-1 for the applicable rate.

A reconnection charge shall also be required from customers whose services are disconnected (shut off at curb stop box) because of nonpayment of bills when due. See Schedule R-1 for the applicable rate.

If reconnection is requested for the same location by any member of the same household, or, if a place of business, by any partner of the same business, it shall be considered as the same customer.

Temporary Metered Service, Meter, and Deposits

An applicant for temporary water service on a metered basis shall make and maintain a monetary deposit for each meter installed as security for payment for use of water and for such other charges which may arise from the use of the supply. A charge shall be made for setting the valve and furnishing and setting the meter. See Schedule BW-1 for the applicable rate.

Water for Construction

When water is requested for construction purposes or for filling tanks or other such uses, an application shall be made to the water utility, in writing, giving a statement of the amount of construction work to be done or the size of the tank to be filled, etc. Payment for the water for construction may be required in advance at the scheduled rates. The service lateral must be installed into the building before water can be used. No connection with the service lateral at the curb shall be made without special permission from the water utility. In no case will any employee of the water utility turn on water for construction work unless the contractor has obtained permission from the water utility.

Customers shall not allow contractors, masons, or other persons to take unmetered water from their premises without permission from the water utility. Any customer failing to comply with this provision may have water service discontinued and will be responsible for the cost of the estimated volume of water used.

RATE FILE *(DRAFT)*

Sheet No. 3 of 10
Schedule No. X-1
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Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Use of Hydrants

In cases where no other supply is available, permission may be granted by the water utility to use a hydrant. No hydrant shall be used until the proper meter and valve are installed. In no case shall any valve be installed or moved except by an employee of the water utility.

Before a valve is set, payment must be made for its setting and for the water to be used at the scheduled rates. Where applicable, see Schedule BW-1 for deposits and charges. Upon completing the use of the hydrant, the customer must notify the water utility to that effect.

Operation of Valves and Hydrants and Unauthorized Use of Water - Penalty

Any person who shall, without authority of the water utility, allow contractors, masons, or other unauthorized persons to take water from their premises, operate any valve connected with the street or supply mains, or open any fire hydrant connected with the distribution system, except for the purpose of extinguishing fire, or who shall wantonly damage or impair the same, shall be subject to a fine as provided by municipal ordinance. Utility permission for the use of hydrants applies only to such hydrants that are designated for the specific use.

Refunds of Monetary Deposits

All money deposited as security for payment of charges arising from the use of temporary water service on a metered basis, or for the return of a hydrant valve and fixtures if the water is used on an unmetered basis, will be refunded to the depositor on the termination of the use of water, the payment of all charges levied against the depositor, and the return of the water utility's equipment.

Service Laterals

No water service lateral shall be laid through any trench having cinders, rubbish, rock or gravel fill, or any other material which may cause injury to or disintegration of the service lateral, unless adequate means of protection are provided by sand filling or such other insulation as may be approved by the water utility. Service laterals passing through curb or retaining walls shall be adequately safeguarded by provision of a channel space or pipe casing not less than twice the diameter of the service connection. The space between the service lateral and the channel or pipe casing shall be filled and lightly caulked with an oakum, mastic cement, or other resilient material and made impervious to moisture.

In backfilling the pipe trench, the service lateral must be protected against injury by carefully hand tamping the ground filling around the pipe. There should be at least 6 inches of ground filling over the pipe, and it should be free from hard lumps, rocks, stones, or other injurious material.

RATE FILE *(DRAFT)*

Sheet No. 4 of 10
Schedule No. X-1
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Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Service Laterals (continued)

All water service laterals shall be of undiminished size from the street main into the point of meter placement. Beyond the meter outlet valve, the piping shall be sized and proportioned to provide, on all floors, at all times, an equitable distribution of the water supply for the greatest probable number of fixtures or appliances operating simultaneously.

Replacement and Repair of Service Laterals

The service lateral from the main to and through the curb stop will be maintained and kept in repair and, when worn out, replaced at the expense of the water utility. The property owner shall maintain the service lateral from the curb stop to the point of use.

If an owner fails to repair a leaking or broken service lateral from the curb to the point of metering or use within such time as may appear reasonable to the water utility after notification has been served on the owner by the water utility, the water will be shut off and will not be turned on again until the repairs have been completed.

Abandonment of Service

If a property owner changes the use of a property currently receiving water service such that water service will no longer be needed in the future, the water utility may require the abandonment of the water service at the water main. In such case, the property owner may be responsible for all removal and/or repair costs, including the water main and the utility portion of the water service lateral.

Charges for Water Wasted Due to Leaks

See Wis. Admin. Code § PSC 185.35 or Schedule X-4, if applicable.

Thawing Frozen Service Laterals

See Wis. Admin. Code § PSC 185.88 or Schedule X-4, if applicable.

Curb Stop Boxes

The curb stop box is the property of the water utility. The water utility is responsible for its repair and maintenance. This includes maintaining, through adjustment, the curb stop box at an appropriate grade level where no direct action by the property owner or occupant has contributed to an elevation problem. The property owner is responsible for protecting the curb stop box from situations that could obstruct access to it or unduly expose it to harm. The water utility shall not be liable for failure to locate the curb stop box and shut off the water in case of a leak on the owner's premises.

RATE FILE *(DRAFT)*

Sheet No. 5 of 10
Schedule No. X-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Installation of Meters

Meters will be owned, furnished, and installed by the water utility or a utility-approved contractor and are not to be disconnected or tampered with by the customer. All meters shall be so located that they shall be protected from obstructions and permit ready access for reading, inspection, and servicing, such location to be designated or approved by the water utility. All piping within the building must be supplied by the owner. Where additional meters are desired by the owner, the owner shall pay for all piping. Where applicable, see Schedule Am-1 for rates.

Repairs to Meters

Meters will be repaired by the water utility, and the cost of such repairs caused by ordinary wear and tear will be borne by the water utility.

Repair of any damage to a meter resulting from the carelessness of the owner of the premises, owner's agent, or tenant, or from the negligence of any one of them to properly secure and protect same, including any damage that may result from allowing a water meter to become frozen or to be damaged from the presence of hot water or steam in the meter, shall be paid for by the customer or the owner of the premises.

Service Piping for Meter Settings

Where the original service piping is installed for a new metered customer, where existing service piping is changed for the customer's convenience, or where a new meter is installed for an existing unmetered customer, the owner of the premises at his/her expense shall provide a suitable location and the proper connections for the meter. The meter setting and associated plumbing shall comply with the water utility's standards. The water utility should be consulted as to the type and size of the meter setting.

Turning on Water

The water may only be turned on for a customer by an authorized employee of the water utility. Plumbers may turn the water on to test their work, but upon completion must leave the water turned off.

Sprinkling Restrictions and Emergency Water Conditions

Where the municipality has a policy regarding sprinkling restrictions and/or emergency water conditions, failure to comply with such may result in disconnection of service.

See Wis. Admin. Code § PSC 185.37.

RATE FILE *(DRAFT)*

Sheet No. 6 of 10
Schedule No. X-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Failure to Read Meters

Where the water utility is unable to read a meter, the fact will be plainly indicated on the bill, and either an estimated bill will be computed or the minimum charge applied. The difference shall be adjusted when the meter is again read, that is, the bill for the succeeding billing period will be computed with the gallons or cubic feet in each block of the rate schedule doubled, and credit will be given on that bill for the amount of the bill paid the preceding period. Only in unusual cases shall more than three consecutive estimated or minimum bills be rendered.

If the meter is damaged (see Surreptitious Use of Water) or fails to operate, the bill will be based on the average use during the past year, unless there is some reason why the use is not normal. If the average use cannot be properly determined, the bill will be estimated by some equitable method.

See Wis. Admin. Code § PSC 185.33.

Complaint Meter Tests

See Wis. Admin. Code § PSC 185.77.

Inspection of Premises

During reasonable hours, any officer or authorized employee of the water utility shall have the right of access to the premises supplied with service for the purpose of inspection or for the enforcement of the water utility's rules and regulations. Whenever appropriate, the water utility will make a systematic inspection of all unmetered water taps for the purpose of checking waste and unnecessary use of water.

See Wis. Stat. § 196.171.

Vacation of Premises

When premises are to be vacated, the water utility shall be notified, in writing, at once, so that it may remove the meter and shut off the water supply at the curb stop. The owner of the premises shall be liable for prosecution for any damage to the water utility's property. See "Abandonment of Service" in Schedule X-1 for further information.

Deposits for Residential Service

See Wis. Admin. Code § PSC 185.36.

RATE FILE *(DRAFT)*

Sheet No. 7 of 10
Schedule No. X-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Deposits for Nonresidential Service

See Wis. Admin. Code § PSC 185.361.

Deferred Payment Agreement

See Wis. Admin. Code § PSC 185.38 or Schedule X-4, if applicable.

Dispute Procedures

See Wis. Admin. Code § PSC 185.39.

Disconnection and Refusal of Service

See Wis. Admin. Code § PSC 185.37.

The following is an example of a disconnection notice that the utility may use to provide the required notice to customers.

DISCONNECTION NOTICE

Dear Customer:

The bill enclosed with this notice includes your current charge for water utility service and your previous unpaid balance.

You have 10 days to pay the water utility service arrears or your service is subject to disconnection.

If you fail to pay the service arrears or fail to contact us within the 10 days allowed to make reasonable deferred payment arrangement or other suitable arrangement, we will proceed with disconnection action.

To avoid the inconvenience of service interruption and an additional charge of (amount) for reconnection, we urge you to pay the full arrears IMMEDIATELY AT ONE OF OUR OFFICES.

If you have entered into a Deferred Payment Agreement with us and have failed to make the deferred payments you agreed to, your service will be subject to disconnection unless you pay the entire amount due within 10 days.

If you have a reason for delaying the payment, call us and explain the situation.

RATE FILE *(DRAFT)*

Sheet No. 8 of 10
Schedule No. X-1
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Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Disconnection and Refusal of Service (continued)

DISCONNECTION NOTICE (continued)

PLEASE CALL THIS TELEPHONE NUMBER, (telephone number), IMMEDIATELY IF:

1. You dispute the notice of delinquent account.
2. You have a question about your water utility service arrears.
3. You are unable to pay the full amount of the bill and are willing to enter into a deferred payment agreement with us.
4. There are any circumstances you think should be taken into consideration before service is discontinued.
5. Any resident is seriously ill.

Illness Provision: If there is an existing medical emergency in your home and you furnish the water utility with a statement signed by either a licensed Wisconsin physician or a public health official, we will delay disconnection of service up to 21 days. The statement must identify the medical emergency and specify the period of time during which disconnection will aggravate the existing emergency.

Deferred Payment Agreements: If you are a residential customer and you are unable to pay the full amount of the water utility service arrears on your bill, you may contact the water utility to discuss arrangements to pay the arrears over an extended period of time.

This time payment agreement will require:

1. Payment of a reasonable amount at the time the agreement is made.
2. Payment of the remainder of the outstanding balance in monthly installments over a reasonable length of time.
3. Payment of all future water utility service bills in full by the due date.

In any situation where you are unable to resolve billing disputes or disputes about the grounds for proposed disconnection through contacts with our water utility, you may make an appeal to the Public Service Commission of Wisconsin by calling (800) 225-7729.

(WATER UTILITY NAME)

RATE FILE *(DRAFT)*

Sheet No. 9 of 10
Schedule No. X-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Collection of Overdue Bills

An amount owed by the customer may be levied as a tax as provided in Wis. Stat. § 66.0809.

Surreptitious Use of Water

When the water utility has reasonable evidence that a person is obtaining water, in whole or in part, by means of devices or methods used to stop or interfere with the proper metering of the water utility service being delivered, the water utility reserves the right to estimate and present immediately a bill for unmetered service as a result of such interference, and such bill shall be payable subject to a 24-hour disconnection of service. If the water utility disconnects the service for any such reason, the water utility will reconnect the service upon the following conditions:

A. The customer will be required to deposit with the water utility an amount sufficient to guarantee the payment of the bills for water utility service.

B. The customer will be required to pay the water utility for any and all damages to water utility equipment resulting from such interference with the metering.

C. The customer must further agree to comply with reasonable requirements to protect the water utility against further losses.

See Wis. Stat. §§ 98.26 and 943.20.

Repairs to Mains

The water utility reserves the right to shut off the water supply in the mains temporarily to make repairs, alterations, or additions to the plant or system. When the circumstances will permit, the water utility will give notification, by newspaper publication or otherwise, of the discontinuance of the water supply. No credit will be allowed to customers for such temporary suspension of the water supply.

See Wis. Admin. Code § PSC 185.87.

Duty of Water Utility with Respect to Safety of the Public

It shall be the duty of the water utility to see that all open ditches for water mains, hydrants, and service laterals are properly guarded to prevent accident to any person or vehicle, and at night there shall be displayed proper signal lighting to ensure the safety of the public.

RATE FILE *(DRAFT)*

Sheet No. 10 of 10
Schedule No. X-1
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Utility Operating Rules

Handling Water Mains and Service Laterals in Excavation Trenches

Contractors must call Digger's Hotline and ensure a location is done to establish the existence and location of all water mains and service laterals as provided in Wis. Stat. § 182.0175. Where water mains or service laterals have been removed, cut, or damaged during trench excavation, the contractors must, at their own expense, cause them to be replaced or repaired at once. Contractors must not shut off the water service laterals to any customer for a period exceeding 6 hours.

Protective Devices

A. Protective Devices in General: The owner or occupant of every premise receiving water supply shall apply and maintain suitable means of protection of the premise supply and all appliances against damage arising in any manner from the use of the water supply, variation of water pressure, or any interruption of water supply. Particularly, such owner or occupant must protect water-cooled compressors for refrigeration systems by means of high and/or low pressure safety cutout devices. There shall likewise be provided means for the prevention of the transmission of water ram or noise of operation of any valve or appliance through the piping of their own or adjacent premises.

B. Relief Valves: On all "closed systems" (i.e., systems having a check valve, pressure regulator, reducing valve, water filter, or softener), an effective pressure relief valve shall be installed at or near the top of the hot water tank or at the hot water distribution pipe connection to the tank. No stop valve shall be placed between the hot water tank and the relief valve or on the drain pipe. See applicable plumbing codes.

C. Air Chambers: An air chamber or approved shock absorber shall be installed at the terminus of each riser, fixture branch, or hydraulic elevator main for the prevention of undue water hammer. The air chamber shall be sized in conformance with local plumbing codes. Where possible, the air chamber should be provided at its base with a valve for water drainage and replenishment of air.

Cross-Connections

Every person owning or occupying a premise receiving municipal water supply shall maintain such municipal water supply free from any connection, either of a direct or of an indirect nature, with a water supply from a foreign source or of any manner of connection with any fixture or appliance whereby water from a foreign supply or the waste from any fixture, appliance, or waste or soil pipe may flow or be siphoned or pumped into the piping of the municipal water system.

See Wis. Admin. Code § NR 811.06.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. X-2
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Main Extension Rule

Water mains will be extended for new customers on the following basis:

A. Where the cost of the extension is to immediately be collected through assessment by the municipality against the abutting property, the procedure set forth under Wis. Stat. § 66.0703 will apply, and no additional customer contribution to the utility will be required.

B. Where the municipality is unwilling or unable to make a special assessment, the extension will be made on a customer-financed basis as follows:

1. The applicant(s) will advance as a contribution in aid of construction the total amount equivalent to that which would have been assessed for all property under paragraph A.

2. Part of the contribution required in paragraph B.1. will be refundable. When additional customers are connected to the extended main within 10 years of the date of completion, contributions in aid of construction will be collected equal to the amount which would have been assessed under paragraph A. for the abutting property being served. This amount will be refunded to the original contributor(s). In no case will the contributions received from additional customers exceed the proportionate amount which would have been required under paragraph A., nor will it exceed the total assessable cost of the original extension.

C. When a customer connects to a transmission main or connecting loop installed at utility expense within 10 years of the date of completion, there will be a contribution required of an amount equivalent to that which would have been assessed under paragraph A.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. X-3
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Main Installations in Platted Subdivisions

Application for installation of water mains in regularly platted real estate development subdivisions shall be filed with the utility.

If the developer, or a contractor employed by the developer, is to install the water mains (with the approval of the utility), the developer shall be responsible for the total cost of construction.

If the utility or its contractor is to install the water mains, the developer shall be required to advance to the utility, prior to the beginning of the construction, the total estimated cost of the extension. If the final costs exceed estimated costs, an additional billing will be made for the balance of the cost due. This balance is to be paid within 30 days. If final costs are less than estimated, a refund of the overpayment will be made by the water utility.

RATE FILE *(DRAFT)*

Sheet No. 1 of 1
Schedule No. X-4
Amendment No. 45

Public Service Commission of Wisconsin

Watertown Water Department

Water Customer Supplemental Rules

Compliance with Rules

All persons now receiving water service from this water utility, or who may request service in the future, shall be considered as having agreed to be bound by the rules and regulations as filed with the Public Service Commission of Wisconsin.

Thawing Frozen Service Laterals

See Wis. Admin. Code § PSC 185.88.

Deferred Payment Agreement

The utility shall offer deferred payment agreements to residential accounts and may offer such agreements to other customers. However, the utility will not offer a deferred payment agreement to a residential customer who is a tenant if any of the following criteria applies:

- The tenant has defaulted on a deferred payment agreement in the past 12 months. This criterion only applies to deferred payment agreements and not to other types of payment extensions or agreements.

Docket 6230-WR-111 **Schedule 14**

Watertown Water Department

Customer Water Bill Comparison at Present and Proposed Rates

			Monthly			Monthly Including Public Fire Protection		
Customer Type	**Meter Size**	**Volume (100 Cubic Feet)**	**Bills at Old Rates**	**Bills at New Rates**	**Percent Change**	**Bills at Old Rates**	**Bills at New Rates**	**Percent Change**
Small Residential	5/8"	2	$ 16.00	$ 17.80	11.25%	$ 24.60	$ 29.40	19.51%
Average Residential	5/8"	4	$ 23.60	$ 26.60	12.71%	$ 32.20	$ 38.20	18.63%
Large Residential	5/8"	10	$ 46.40	$ 53.00	14.22%	$ 55.00	$ 64.60	17.45%
Large Residential	5/8"	20	$ 83.80	$ 94.88	13.22%	$ 92.40	$ 106.48	15.24%
Large Residential	5/8"	40	$ 156.80	$ 172.28	9.87%	$ 165.40	$ 183.88	11.17%
Multifamily Residential	2"	205	$ 785.65	$ 836.83	6.51%	$ 855.65	$ 931.23	8.83%
Multifamily Residential	3"	140	$ 573.40	$ 610.28	6.43%	$ 703.40	$ 786.48	11.81%
Multifamily Residential	3"	180	$ 719.40	$ 765.08	6.35%	$ 849.40	$ 941.28	10.82%
Multifamily Residential	3"	215	$ 847.15	$ 900.53	6.30%	$ 977.15	$ 1,076.73	10.19%
Commercial	3"	460	$ 1,741.40	$ 1,848.68	6.16%	$ 1,871.40	$ 2,024.88	8.20%
Commercial	4"	310	$ 1,223.90	$ 1,298.18	6.07%	$ 1,438.90	$ 1,589.38	10.46%
Commercial	4"	780	$ 2,888.10	$ 3,062.36	6.03%	$ 3,103.10	$ 3,353.56	8.07%
Commercial	6"	1,765	$ 6,115.10	$ 6,476.51	5.91%	$ 6,546.10	$ 7,058.51	7.83%
Industrial	3"	960	$ 3,434.10	$ 3,642.56	6.07%	$ 3,564.10	$ 3,818.76	7.15%
Industrial	3"	2,190	$ 7,370.10	$ 7,812.26	6.00%	$ 7,500.10	$ 7,988.46	6.51%
Industrial	3"	24,145	$ 77,626.10	$ 82,239.71	5.94%	$ 77,756.10	$ 82,415.91	5.99%
Industrial	4"	7,775	$ 25,272.10	$ 26,775.41	5.95%	$ 25,487.10	$ 27,066.61	6.20%
Public Authority	3"	870	$ 3,146.10	$ 3,337.46	6.08%	$ 3,276.10	$ 3,513.66	7.25%
Public Authority	3"	1,585	$ 5,434.10	$ 5,761.31	6.02%	$ 5,564.10	$ 5,937.51	6.71%
Public Authority	4"	360	$ 1,406.40	$ 1,491.68	6.06%	$ 1,621.40	$ 1,782.88	9.96%
Public Authority	6"	1,670	$ 5,811.10	$ 6,154.46	5.91%	$ 6,242.10	$ 6,736.46	7.92%

Water Utility Cash Flow Analysis - Projected 2025-2034

City of Watertown, WI

	Budget	Projected								
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenues										
Total Revenues from User Rates[1]	$5,726,316	$6,123,707	$6,123,707	$6,123,707	$6,123,707	$6,307,418	$6,496,641	$6,496,641	$6,496,641	$6,496,641
Percent Increase to User Rates	**15.28%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**3.00%**	**3.00%**	**0.00%**	**0.00%**	**0.00%**
Cumulative Percent Rate Increase	**15.28%**	**15.28%**	**15.28%**	**15.28%**	**15.28%**	**18.74%**	**22.30%**	**22.30%**	**22.30%**	**22.30%**
Dollar Amount Increase to Revenues	**$406,462**	**$397,391**	**$0**	**$0**	**$0**	**$183,711**	**$189,223**	**$0**	**$0**	**$0**
Total Other Revenues	$355,312	$368,940	$253,472	$259,087	$253,835	$248,133	$253,379	$257,274	$284,632	$287,017
Total Revenues	$6,081,628	$6,492,647	$6,377,179	$6,382,794	$6,377,542	$6,555,551	$6,750,020	$6,753,915	$6,781,273	$6,783,658
Less: Expenses										
Operating and Maintenance[2]	$2,620,758	$3,099,381	$3,192,362	$3,288,133	$2,986,777	$3,076,380	$3,168,672	$3,263,732	$3,361,644	$3,462,493
PILOT Payment[3]	$715,227	$736,684	$758,784	$781,548	$804,994	$829,144	$854,018	$879,639	$906,028	$933,209
Net Before Debt Service and Capital Expenditures	$2,745,643	$2,656,582	$2,426,032	$2,313,113	$2,585,771	$2,650,027	$2,727,330	$2,610,544	$2,513,601	$2,387,956
Debt Service										
Existing Debt P&I	$878,183	$876,721	$870,182	$764,998	$766,087	$766,855	$767,297	$767,562	$630,100	$629,999
New (2025-2034) Debt Service P&I	$25,358	$516,665	$535,999	$637,686	$642,164	$637,121	$632,077	$769,408	$902,862	$858,670
Total Debt Service	$903,542	$1,393,386	$1,406,181	$1,402,684	$1,408,251	$1,403,976	$1,399,374	$1,536,969	$1,532,962	$1,488,669
Transfer In (Out)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Less: Capital Improvements & COI	$15,681,680	$1,743,300	$1,596,761	$2,400,000	$2,761,595	$645,000	$3,011,475	$1,437,985	$2,477,963	$1,710,390
Debt Proceeds	$15,430,800	$0	$1,265,000	$0	$0	$0	$2,010,000	$0	$1,505,000	$0
Net Annual Cash Flow	**$1,591,222**	**($480,104)**	**$688,090**	**($1,489,571)**	**($1,584,075)**	**$601,051**	**$326,480**	**($364,410)**	**$7,676**	**($811,103)**
Restricted and Unrestricted Cash Balance:										
Balance at first of year	$6,090,172	$7,681,394	$7,201,290	$7,889,380	$6,399,809	$4,815,734	$5,416,784	$5,743,265	$5,378,854	$5,386,531
Net Annual Cash Flow Addition/(subtraction)	$1,591,222	-$480,104	$688,090	-$1,489,571	-$1,584,075	$601,051	$326,480	-$364,410	$7,676	-$811,103
Balance at end of year	$7,681,394	$7,201,290	$7,889,380	$6,399,809	$4,815,734	$5,416,784	$5,743,265	$5,378,854	$5,386,531	$4,575,428
"All-in" Debt Coverage	3.04	1.91	1.73	1.65	1.84	1.89	1.95	1.70	1.64	1.60
PSC Days Cash on Hand	846	668	731	546	439	494	517	446	443	341

Legend:

Simplified Rate Case (projected eligibility)

Conventional (Full) Rate Case

Notes:

1) Revenues for 2025 are shown with current 15.28% increase being implemented June 2025. Reveneus for 2026 are full year 2025 Revenues with the 15.28% increase for an entire year. Assumes no changes in customer count or usage beyond 2026.

2) Assumes 3.00% annual inflation beyond budget year.

PUBLIC NOTICE TO ALL CUSTOMERS OF THE WATERTOWN WATER DEPARTMENT

The Watertown Water Department (Utility) has filed an application with t sion of Wisconsin (Commission) to increase water rates. The increase is necessar crease in gross plant investment and a 12.01 percent increase in operating expense ntional case was completed in 2017.

The total increase in water revenues requested is $803,853, which will result in an estimated overall rate increase of 15.28 percent over the water utility's present revenues. If the request is granted, the water bill for an average Residential customer with a □-inch or ¾-inch meter who uses 400 cubic feet of water per month will increase from $32.20 to $38.20, or 18.63 percent, including the public fire protection charge. In this rate case, the Utility is requesting Commission authorization to bill using gallons.

A public hearing on the application has been scheduled for Wednesday, May 21, 2025 at 2:00 p.m. This hearing has no physical location. Parties and Commission staff appear by Zoom. Parties and Commission staff may use the telephone connection as a backup or if no practicable internet connection exists. Members of the public attend by Zoom or by audio-only telephone connection.

Join Zoom over the internet at:
https://us02web.zoom.us/my/pschearings

To join Zoom telephone:
1. Dial: +1 312 626 6799
2. Enter: 809 513 2930 # (Meeting ID)

The Commission intends to livestream and record this hearing on YouTube. To access the livestream, go to the Commission's website at http://psc.wi.gov, click the dropdown menu labeled "News & Events", select the item labeled "Commission Calendar", navigate to the hearing for docket number 6230-WR-111, and select the "Stream Video" link that appears under "Observe".

A person may testify in this proceeding without becoming a party and without attorney representation. A person may submit this testimony in only one of the following ways:

- **Web Comment.** File a comment on the internet. Go to the Commission's website at http://psc.wi.gov, and click the dropdown menu labeled "Commission Actions". Select the item labeled "File a Public Comment". On the next page, select the "File a comment" link that appears for docket number 6230-WR-111. Web comments shall be received no later than Friday, May 23, 2025.
- **Live Comment.** Make a live comment at the hearing. The ALJ may receive live comments from any member of the public in attendance after the close of any party and Commission staff testimony. The ALJ will receive such comments by stating the name of each member of the public connected to the hearing, one at a time, and asking if they would like to comment.
- **Mail Comment.** Send a comment by U.S. Mail. All comments submitted by U.S. Mail shall be received no later than Friday, May 23, 2025, and shall be addressed to: Attn: Docket 6230-WR-111 Comments, Public Service Commission, P.O. Box 7854, Madison, WI 53707-7854.

To access the documents, schedule, and other information about this docket, go to the Commission's website at http://psc.wi.gov, select the dropdown menu labeled "eServices". Select the item labeled "Do rch (CMS)". On the next page, enter 6230-WR-111 in the spaces labeled "Case #" and select "Sear

If you have any questions, please contact the Utility at (920) 262-4075.

May 14, 2025 **WNAXLP**

THE CITY OF WATERTOWN
Opportunity runs through it.

Water Systems

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

To: Chairman Arnett and members of the Public Works Commission May 7, 2025
From: Peter Hartz – Water Systems Manager

Re: May 13, 2025, Public Works Commission agenda item

Water Systems:

***Review and take possible action*:** Award Ultra-Violet Disinfection System base bid to Trojan Technologies for a total of $745,720.00

Background: Applied Technologies on behalf of the Wastewater Department publicly opened bids for the Purchase of Ultra-Violet Disinfection System on Monday April 28, 2025, at 10:00 AM. One (1) bid was received, due to the site limitations and permit requirements only two UV systems were thought to be a match and fit, so we were not surprised to only get one bid. The Wastewater Department is recommending awarding the base bid to Trojan Technologies. The local manufacturer's representative is Mulcahy Shaw is whom we would be working directly with on the project, the purchase of the equipment is direct from Trojan Technologies.

Budget / Operational goal: Aligns with proactively maintaining and investing in infrastructure.

Financial Impact: This equipment purchase was part of the overall planned project and was included in the 2025 capital improvement budget that was approved on 11/19/2024, the budget estimate was $1,136,000.

The lead time on the equipment is 22 – 24 weeks so initiating the equipment purchase now is important to meet the project window start and completion timeline – start planned in October 2025, while the completion is planned for April 2026. One thing to note is that the price does not include any possible tariffs, at this time those do not apply, however the future regarding possible tariffs is unknown as to when or if those might happen.

Additional engineering electrical and site design, and general contractor solicitation for the installation of the equipment will need to be completed yet, the selection of the contractor will be at a later date, after the equipment purchase the remaining funds from the budget estimate is $390,280. The wastewater utility has cash available for this project.

Recommendation: Award Ultra-Violet Disinfection System base bid to Trojan Technologies for a total of $745,720.00

Sincerely,
Peter Hartz

Water Systems Manager

Applied Technologies
Engineers - Architects

Applied Technologies, Inc.
134
Bro
Telephone 262-784-7690
www.ati-ae.com

May 2, 2025

Peter Hartz
City of Watertown Wastewater Treatment Plant
800 Hoffmann Drive
Watertown, WI 53094

Subject: **EVALUATION OF BIDS**
WWTP Ultra-Violet Disinfection System
Bid Date of April 28, 2025

Dear Mr. Hartz:

We have completed our evaluation of the equipment bid opened on April 28th, 2025, for the purchase of an Ultra-Violet (UV) Disinfection System. A copy of the Tabulation of Bids listing the received bids is attached for your information.

One bid was received for the UV Disinfection System equipment. Trojan Technologies of Ontario Canada submitted the low bid price of $745,720.

The bid submitted by Trojan Technologies contained all the required documentation and a review of the preliminary technical information included with Trojan's bid showed a general conformance with the equipment specifications included as part of the bidding documents.

Based on the above information, we recommend awarding the contract to Trojan Technologies for $745,720.

Please contact me if you have any questions or need additional information.

Sincerely,
Applied Technologies, Inc.

Kathleen R. Hassing, P.E.

Attachment: Tabulation of Bids

TABULATION OF BIDS

Purchase of UV Disinfection System Equipment
City of Watertown, WI
April 28th, 2025, 10:00 a.m.

Bidder Name	Addendum No. 1 (✓)	Total Base Bid ($)	Signature (✓)	Bid Security Included (✓)
Trojan Technologies	✓	$745,720	✓	✓

April 28, 2025

Watertown Wastewater Treatment Facility, 800 Hoffman Road,
Watertown, Wisconsin 53094.

Attention: **City of Watertown and Applied Technologies, Inc.**

Re: PURCHASE OF ULTRA-VIOLET DISINFECTION SYSTEM CITY OF WATERTOWN, WI

Dear Sir/Madam,

We would like to thank you for the opportunity to provide a proposal for the Ultraviolet (UV) Disinfection System for the Watertown Wastewater Treatment Facility. The enclosed documents are based on the TrojanUVSigna™ System low-pressure high-intensity staggered inclined UV system. The proposed design consists of one (1) channels each with four (4) duty banks of UV lamps. Each bank will contain eighteen (18) lamps arranged in two (2) rows. With a total of seventy two (72) duty lamps. **When using the same dose the Signa™ system offers the lowest number of lamps (close to half of our competitors) with equivalent lower energy consumption.** Trojan used our 3rd party validated Fouling Factor of 0.94 to allow for the most efficient design possible to meet the dose requirements of the bid, and we used our 3rd party validated EOLL of 0.86.

During our >40 year history, Trojan has led the world's innovations in UV: from the introduction of the first large-scale medium-pressure lamp UV system to the commercialization of electronic ballasts and automated cleaning systems. This leadership is evidenced by the development of a high-efficiency UV reactor for the world's largest UV installation: the Catskill-Delaware Water Treatment Plant in New York City, New York, USA. These innovations along with our environmental stewardship are reasons why Trojan was awarded the 2009 Stockholm Water Prize – the industry's most prestigious award for water technology innovation and leadership. Our track record for successfully delivering large, technically-challenging projects sets Trojan apart.

I would like to take this opportunity to outline the key features that differentiate the proposed Signa™ system over other UV systems:

- Reactor and Lamp Orientation – the lamp orientation of the Signa™ system is a unique staggered, inclined array. This orientation was selected because it combines the best benefits of both horizontal and vertical lamp UV systems.
    - Like a horizontal system, it offers high disinfection performance, hydraulic benefits and is effective over a wide range of water quality. Like a vertical system, it offers maintenance benefits (e.g. easy lamp replacement).
    - The inclined arrangement overcomes the drawbacks of vertical system such as stress on quartz sleeves and debris collecting on the lamp arc length.
    - The inclined lamp position has additional benefits (over vertical systems) in that modules are more stable, less prone to vibration and are easier to remove from the channel.
    - The lamp pattern was developed specifically to maximize the reactor performance with the high powered 1,000 watt Solo Lamp™.

TROJAN UV
WATER CONFIDENCE

- The Solo Lamp™ utilized in the Signa™ system is the most powerful high efficiency low pressure high output lamp in the world. This results in the lowest lamp count which results in smaller equipment footprint as well as fewer lamps to maintain and replace.

- The Signa system incorporates a closed vessel reactor design, which means that the effluent through the reactor is controlled on all four sides (i.e. bottom, sides, and top). This design approach ensures the following reactor performance and benefits:
    - No possible short circuiting through the reactor as the entire reactor is fabricated in a controlled factory environment. Water level variations do not affect the reactor performance as it does with traditional open channel systems.
    - Water levels in the channel can fluctuate by up to 12", thereby eliminating the need to tightly regulate the water levels variation. The top of the reactor incorporates a proprietary light lock design which directs all flow through the reactor area. This design feature also provides a parking position outside of the lamp arc for the sleeve wipers when they are not in operation.
    - Lamp arc always remains submerged in the effluent. This ensures that no water to air interface is experience as typically are with vertical or inclined open channel systems. Over time the air/water interface of the lamp sleeve develops an excessive amount of fouling due to the water level fluctuation zone and over time becomes extremely difficult to remove even with strong cleaning chemicals. This fouling area then provides a possible short circuit path for the effluent due to increased fouling which then results in poor reactor performance as well as possible disinfection issues.
    - Channel floor and wall construction by the contractor are not critical since the entire reactor is factory fabricated. This means that the contractor does not need to maintain close tolerances for the channel construction as the channel floor and wall construction have no impact on the performance of the reactor.

- The Solo Lamp™ has been independently validated according to NWRI protocol to show 14% degradation over its guaranteed lifetime of an industry leading 18,000 operating hours.

- A fully automatic chemical/mechanical cleaning system (ActiClean™) is provided to maintain the quartz sleeve cleanliness. This fully automated sleeve cleaning system minimizes power consumption as well as greatly reduces operator involvement for sleeve cleaning. This feature significantly reduces the plants operating and maintenance costs (both labor and materials) as well as ensures consistent UV dose deliver as well as consistent disinfection results. The fully automatic wiper system is powered by a proven magnetically coupled drive system which results in no gears or drive screws submerged in the effluent. We have used this patented drive system in wide range of our products (WW & DW) for over 20 years, and it has proven to be an extremely reliable, effective, and low maintenance feature.

- The Solo Lamp™ is powered by a lamp driver located in a separate electrical panel. Because of the staggered orientation of the lamps, a single lamp can be changed while disinfection performance is maintained thus eliminating down time. The lamp driver is state of the art, fully digital and carries an industry best 10 year warranty.

- An integral lifting device for each UV bank means there is no need for overhead cranes. This integral lifting device provides safe, easy, and quick access to the entire UV reactor as the complete reactor including frame structure is lifted from the channel by the push of a button. The lifting system does not contain any parts such as gears or tracks submerged in the effluent.

- UV modules are rated 6P and are designed to tolerate temporary submergence and flood conditions.

The design and support of the proposed TrojanUVSigna™ system is provided by Trojan Technologies, a world leader in UV based disinfection technologies. Purchasing a UV system from Trojan Technologies offers the following advantages:

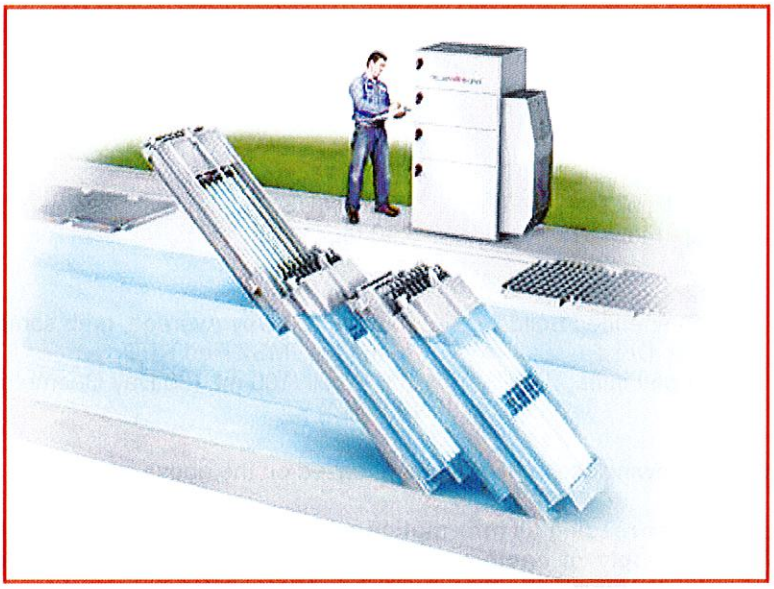
- The largest installed base of municipal systems in the world with over 12,000 municipal systems operating worldwide.
- Used lamp recycling at an EPA approved lamp recycling facility. This service is provide to the City free of charge for the life of the system
- A simple disinfection performance guarantee is provided, at no extra cost, and is valid for the life of the System.
- Also included in our support package is a 1-800 number with qualified Technicians available 24-hours / 7 days a week for plant support as well as a network of over 60 factory-trained and certified technicians located throughout North America.

We would like to thank the The City of Watertown as well as Applied Technologies for the opportunity to submit our proposal for this important project. If you have any questions or require any additional information, please do not hesitate to contact our local representative Rick Knoelke with Mulcahy Shaw (414) 640-3411 or myself at (519) 457-3400.

Best regards,

Rob Jansen
Regional Manager
Trojan Technologies

SCOPE OF SUPPLY



TROJAN
technologies™

SCOPE OF SUPPLY FOR WATERTOWN REPLACEMENT ULTRAVIOLET DISINFECTION EQUIPMENT – TROJANUVSigna™

Prepared for:	All Bidding Contractors	
Specification Section:	01 43 33 & 46 66 53	
Addendum:	01	
Trojan Quote:	229793	
Design Criteria:	Current Peak Design Flow:	27 MGD(US)
	Average Flow:	5.20 MGD(US)
	UV Transmission:	65% minimum
	Total Suspended Solids:	15 mg/L (30 Day Average, grab sample)
	Minimum Dose:	30 mJ/cm^2 MS2 Red **RED**
	Discharge Limit:	126 E.coli /100 mL (30 Day Geometric Mean, 410 Ecoli (90%ile))

We are pleased to submit the following scope of equipment based on the above criteria.

The purchaser is responsible for reading all information contained in this Supply Contract. Trojan will not be held accountable for the supply of equipment not specifically detailed in this document. Detailed installation instructions are provided with the shop drawings and are available earlier upon request. Changes to this Scope of Supply that affect selling price will be handled through a change order.

Please refer inquiries to Trojan Manufacturer's Representative:

Representative: Alex Ellis (Mulcahy Shaw) or Rich Knoelke

Phone: (414) 255 - 4463
Email: aellis@mulcahyshaw.com

This proposal has been respectfully submitted by,
Trojan Technologies

Rob Jansen
Regional Sales Manager

GENERAL CONFIGURATION

The TrojanUVSigna equipment described in this Scope of Supply consists of equipment for 1 channels with 4 duty and 0 redundant UV banks in each channel.

Unless otherwise indicated in this proposal all anchor bolts, conduit, conductors, local disconnects and transformers (if required) are the responsibility of the Installation Contractor and are not included in Trojan's Scope of Supply. Specific cable types listed below are for reference only. Selecting cables that are appropriate for the installation environmental conditions and in compliance with local code is the responsibility of the Installation Contractor.

Site to provide approved (engineered) anchor points for personnel to use as part of their fall restraint system around open channels. The anchor points must be positioned so that the preferred retractable lifeline of 8 ft (2.4 m) is of sufficient length to access the work at the channel. Refer to local safety regulation.

UV BANKS

Trojan's Responsibility:
Each bank supplied will consist of TrojanUV Solo Lamps™, quartz sleeves, supporting structures, ActiClean™ chemical/mechanical cleaning system and an automatic bank lifting mechanism. UV lamps are powered from an individual electric feed from a lamp driver located in a Power Distribution Center (PDC).

Model and Make:	TrojanUVSigna™
Quantity:	4 UV Banks / Channel Each bank will be supplied with 18 UV lamps and quartz sleeves, one (1) UV intensity sensor, one (1) ActiClean chemical-mechanical wiping system and one (1) automatic bank lifting mechanism
Rating:	Type 6P / IP68 (lamp sleeve assemblies)
Bank Frame:	One (1) frame with included hardware is provided for up to two (2) banks
Lamp Cables Length: *available routing distance)*	Lamp Cable Length 30m (98') *(refer to Trojan layout drawing for*
Approximate Weight:	18 Lamp - 570 lbs

Installation Contractor's Responsibility:
The Installation Contractor shall install, align, secure, and seal (grout) each UV bank frame in the channel per the instructions provided. The Installation Contractor shall provide solid grating downstream of the UV bank to block out UV light. Please refer to the supplied Trojan-supplied drawings for details.

SYSTEM CONTROL CENTER

Trojan's Responsibility:
A System Control Center (SCC) shall be supplied to monitor and control the UV disinfection System. Trojan will provide a PLC I/O and soft address map to aid the Installation Contractor with integration of the UV PLC and SCADA system. The UV SCC shall consist of the following:

Quantity Supplied:	1 SCC
Location:	PLC Wall Mount
Controller Type:	CompactLogix
Operator Interface:	SCC HMI Beijer -12" (Outdoor 4X Rated)
Material / Rating:	Painted Mild Steel (Type 12)
Approximate Weight:	200 lbs - Wall mount
SCADA:	EtherNet/IP
Surge Protection:	TVSS
Panel UPS:	15 min via 24VDC

Installation Contractor's Responsibility:
The Installation Contractor is responsible for mounting the SCC as indicated on the drawings. Unless otherwise indicated, the Installation Contractor is also responsible for the supply, installation and connection of the following at the SCC:

1. One (1) 110-240V, 50/60 Hz, 1 Phase, 2 Wire + GND, 1.5 kVA (minimum)
2. One (1) bond link to plant ground, in accordance with applicable codes and standards
3. One (1) Modbus communication link per UV channel, Belden 3106A (or equivalent), to PDC(s) and HSC(s) (daisy chained)
4. One (1) Cat6 Ethernet communication link to SCADA
5. One (1) 4-20 mA analog shielded twisted pair from plant flow meter
6. One (1) 4-20 mA analog shielded twisted pair from online UV Transmittance monitor
7. Control signal conductors (as required by actuator) for control of inlet gate
8. One (1) discrete, 2 conductors, 20 gauge minimum, open command to weir gate
9. One (1) discrete, 2 conductors, 20 gauge minimum, close command to weir gate
10. One (1) discrete, 2 conductors, 20 gauge minimum, remote mode indication from weir gate
11. One (1) 4-20 mA analog shielded twisted pair, 20 gauge minimum, gate position indication from weir gate
12. One (1) 24V DC, 2 conductors + GND, power to the Level Sensor Monitor (if applicable)
13. One (1) 4-20 mA analog shielded twisted pair from the Level Sensor Monitor

POWER DISTRIBUTION CENTER(S)

Trojan's Responsibility:
The Power Distribution Center (PDC) distributes power to the UV lamps and shall consist of the following:

Quantity Supplied:	2 PDC(s)
Method of Cooling:	Forced Air (Climate Controlled Room Required)
Material / Rating:	304 Stainless Steel – Type 4X (IP66)
Approximate Weight:	*AC Included* 48 Lamp PDC (Single Wide) – 1213 lbs 96 Lamp PDC (Double Wide) – 1984 lbs
Surge Protection:	Trojan Standard TVSS

*** Forced air cooled PDCs must be installed in climate-controlled room(s); ≤ 30°C (86°F)**

Installation Contractor's Responsibility:
The Installation Contractor is responsible for setting in place and bolting the PDC in location. The Installation Contractor is also responsible for the supply, installation and connection of the following at each PDC:

1. One (1) 480 / 277V, 50/60 Hz, 3 phase, 4 wire + GND, 63 kVA/PDC for double PDC & 21.1kVA for single PDC power feed with local disconnect–(provided by others)
2. One (1) bond link to plant ground in accordance with applicable codes and standards (to underside of panel)
3. One (1) bond link from each UV bank to the corresponding PDC in accordance with the applicable drawings, specifications, codes, and standards
4. One (1) bank-in-place sensor cable (by Trojan) from each UV bank to the corresponding PDC
5. One (1) UV intensity sensor cable (by Trojan) from each UV bank to the corresponding PDC
6. One (1) Modbus communication link, Belden 3106A (or equivalent) from the SCC, daisy-chained to all HSC(s) and PDC(s)
7. One (1) discrete 2 conductor cable, from Level Control Panel for low water level signal
8. Installation and termination of lamp cables from the UV banks to each PDC. (Qty: 18 per UV Bank – supplied by Trojan)

HYDRAULIC SYSTEM CENTER(S)

Trojan's Responsibility:
The Hydraulic System Center (HSC) houses the ancillary equipment required to operate the quartz sleeve cleaning system and automatic bank lifting mechanism.

Quantity Supplied:	1 HSC(s)
Materials / Rating:	304 Stainless Steel (Type 4X, IP 66)
Hydraulic Fluid:	Mineral Oil
Approximate Weight:	500 lbs
Surge Protection:	Trojan Standard TVSS
Hydraulic Hoses Length:	Hose 6.0m (20') *(refer to Trojan layout drawing for available routing distances)*

Installation Contractor's Responsibility:
The Installation Contractor is responsible for setting in place and bolting the HSC(s) as shown on the Trojan drawings. The Installation Contractor is responsible for the supply, connection and installation of the following at each HSC:

1. One (1) 480V 60Hz, 3 Phase, 3 Wire + Ground, 2.5 kVA power feed with local disconnect
2. One (1) bond link to plant ground, in accordance with applicable codes and standards
3. One (1) Modbus communication link per UV channel, Belden 3106A (or equivalent) from the SCC, daisy-chained to all HSC(s) and PDC(s)
4. Cut and crimp hydraulic hoses (hoses and connections supplied by Trojan)
5. Connection of the hydraulic hoses, total of four (4) per UV bank

WATER LEVEL CONTROLLER(S)

Trojan's Responsibility:
A level control device is required to maintain and control the effluent level in UV channel, regardless of flow rate.

Quantity Supplied:	1 Motorized Weir Gate
Material of Construction:	304 Stainless Steel
Effective Weir Length:	51 in. per weir

Installation Contractor's Responsibility:
The Installation Contractor is responsible for setting in place, bolting, grouting and sealing each level control weir trough as per Trojan's and Engineer's drawings.

WATER LEVEL CONTROLLER (MWG)

For MWG provided by Trojan:

Modulating Weir Gates (MWGs) shall be self-contained and shall be designed and manufactured by an experienced and reputable manufacturer, based on the AWWA C561 Standard for Fabricated Stainless Steel Slide Gates and AWWA C542 Standard for Electric Motor Actuators for Valves and Slide Gates in effect as of the date of this specification.

MWGs shall be designed for the following performance criteria:

- *MWG actuation speeds shall be between 10" (255 mm) and 14" (356 mm) per minute*
- *MWG maximum design rate of change of flow shall be limited to 25% of the Peak Design Flow/Channel per minute, or alternatively, flow shall be ramped up (zero to peak) or down (peak to zero) in no less than 4 minutes*

- *MWG actuators shall employ AWWA compliant, S4-50% duty class motors with a rated minimum 900 starts per hour capability*
- *MWG actuators shall employ AWWA compliant, Class B, solid-state Thyristor based switchgear capable of at least 5,000,000 modulating steps before overhaul; electromechanical type actuators and controls are not permitted*

It is the responsibility of the Plant designers to ensure the stated performance criteria are acceptable for the plant process or to modify the design accordingly.

Trojan's Responsibility
Level control devices are required to maintain and control the effluent level in the channel, regardless of flow rate.

Quantity Supplied:	01 Water Level Controller(s)
Actuator:	AUMA Electric Actuator
Material of Construction:	304 Stainless Steel
Effective Weir Width:	51 in.
Mounting Anchors:	Supplied with each Gate
Control Method:	Digital Pulsed Open/Close Position Signals from the UV SCC

Installation Contractor's Responsibility:
The Installation Contractor is responsible for setting in place, grouting and sealing the level control weir gate and the installation of the following connections at weir gate:

1. One (1) 380-480V, 50/60 Hz, 3 phase, 3 wire + GND, power feed
2. One (1) discrete, 2 conductors, 20 gauge minimum, open command from the SCC
3. One (1) discrete, 2 conductors, 20 gauge minimum, close command from the SCC
4. One (1) discrete, 2 conductors, 20 gauge minimum, remote mode indication to the SCC
5. One (1) discrete, 2 conductors, 20 gauge minimum, fault indication to the SCC
6. One (1) 4-20 mA analog shielded twisted pair, 20 gauge minimum, gate position indication to the SCC

ULTRASONIC WATER LEVEL SENSOR

Trojan's Responsibility:
One (1) Echomax XPS-10/15 ultrasonic level sensor and Siemens Milltronics monitor panel will be supplied per motorized weir gate (MWG), to monitor channel effluent levels specifically for the MWG control. The transducer will be supplied with a sufficient length of cable to distribute to the monitor panel.

Description:	Ultrasonic Sensor with monitor panel to be supplied for MWG
Quantity Supplied:	01

Disclaimer Note (*for Ultrasonic package for flow measurement option*): Please be advised that for cases where the ultrasonic level sensor package is used to calculate 'flow over weir', the resulting 'flow over weir' is only intended for UV equipment operation and disinfection purposes. This calculated flow value should not be used for any external flow reporting or overall plant operation.

Installation Contractor's Responsibility:
The Installation Contractor is responsible for mounting the bracket and transducer in the UV channel and for mounting the monitor panel adjacent to the channel. Installation Contractor shall distribute the following cable/wiring between these two components and the SCC in appropriate conduit at each sensor:

1. One (1) 24V DC, 2 conductors + GND, 36 VA power from the SCC to the Level Sensor Monitor
2. One (1) 4-20 mA analog shielded twisted pair from the Level Sensor Monitor to the SCC
3. One (1) communication link using 33 ft (10 m) of cable (supplied by Trojan) from the Level Sensing Transducer to the Level Sensor Monitor

LOW WATER LEVEL SENSOR(S)

Trojan's Responsibility:
A Gems-Warrick discrete probe Low Water Level Sensor is required downstream of the UV System to generate a low water level signal that will shut down and protect the UV System if the water level in the channel drops too low.

Quantity Supplied:	One (1) of Electrode type water level sensor per UV channel
Approximate Weight:	10 lbs (panel)

Installation Contractor's Responsibility:
The Installation Contractor is responsible for setting in place and bolting the water level sensor panel to the effluent channel wall as per Trojan's and Engineer's drawings.

LEVEL CONTROL PANEL(S)

Trojan's Responsibility:
Trojan will provide a wall mounted Level Control Panel to provide power and relays for level sensors.

Quantity Supplied:	One (1) Level Control Panel (LCP) per UV channel
Controller Dimensions:	24 x 14 x 6 in (61 x 36 x 15 cm)
Materials / Rating:	304 Stainless Steel (Type 4X)
Approximate Weight:	40 lbs

Installation Contractor's Responsibility:
The Installation Contractor is responsible for mounting the Level Control Panel (LCP) as indicated on the drawings. The Installation Contractor is also responsible for supplying mounting hardware, watertight conduit and for the supply, installation and connection of the following at each LCP:

1. One (1) 120 Volt, 1 phase, 2 wire + GND 0.12 kVA power supply
2. One (1) discrete, 2 conductor cable from the Low Level Sensor to the LCP
3. One (1) discrete, 2 conductor cable from the LCP to each PDC (for low water level signal)

ON-LINE UV TRANSMISSION MONITOR (if applicable)

Trojan's Responsibility:

Description:	One (1) Hach UVT meter containing: • one (1) submersible UVAS probe with multi-beam flash photometer, • one (1) 25' cable between the probe and the controller, • one (1) Hach SC4500 UV-254 Controller.
Enclosure Rating:	UL50E type 4X, IEC/EN 60529–IP 66, NEMA 250 type 4X Metal enclosure with a corrosion-resistant finish
Controller Dimensions:	5.7 x 5.7 x 7.6 in. (144 x 144 x 192 mm)
Altitude:	6562 ft (2000 m) maximum
Operating Temperature:	35.6 to 104°F (Probe), -4 to 113°F (Controller)
Approximate Weight:	30 lbs (includes Probe and Controller)
Probe Immersion Depth:	Minimum 6 feet
Probe Mounting:	Pole mounting hardware provided includes wall mount bracket, hardware and 6.56ft (2m) pole
Controller Mounting:	Pedestal provided
Sunroof:	****Optional** Included, with visor and mounting hardware

Installation Contractor's Responsibility:
The Installation Contractor is responsible for setting in place and mounting the Controller panel and the probe. The Installation Contractor is also responsible for the supply, installation and connection of the following at each Controller:

1. Standard One (1) 120 Volt, 1 phase, 2 wire + GND, 1 A (28 W sensor load) power supply,
2. One (1) 4-20mA DC Analog communications link between the Controller and the SCC
3. Installation of sensor communication cable between Probe and Controller (Cable supplied by Trojan)
4. Supply of the required bolts for mounting Controller to the pedestal and Probe to the channel edge

FLOW CONDITIONER

Trojan's Responsibility:
In order to ensure flow distribution to the UV System flow conditioner(s) (FC) will be supplied.

Quantity Supplied: 01
Material of Construction: 304/316 Stainless Steel
Associated Headloss per FC: 2.42 inches at Peak Flow
Approximate Weight: 496.8 lbs

Installation Contractor's Responsibility:
Contractor is responsible for mounting L-frames to channel walls.

STREAM™ CONNECTION

Trojan's Responsibility:
Stream™ Connection is a digital support tool that provides our Technical Assistance Center with instant access to the UV system to quickly diagnose and resolve UV issues. The Stream connection is a free service to streamline technical support requests. Stream provides secure and encrypted connection external to the SCADA network and configured in the UV System Control Center.

SPARE PARTS AND ADDITIONAL EQUIPMENT

Trojan's Responsibility:
The following equipment will be supplied with the UV system:

Description	Qty
1000W Solo Lamp	4
2kW Solo Lamp Driver	1
1000W Solo Sleeve	4
Signa 2 Row - Single Wiper Seal (Need 2 per Lamp, Seals Only)	4
Trojan UVSigna Operator Kit (with Wiping)	1

NOTES AND CLARIFICATIONS TO SPECIFICATION

- **Section 00 41 00-1 – Bid Form – article 3.02 Liquidated Damages**: PLEASE NOTE: Trojan assumed this applies to the eventual contractor as the language states the contractor shall pay BUT if it does apply or eventually flow down to the UV Supplier than we cannot accept an uncapped LD and would need the total amount of the LD to be capped at 5% of the bid price.

- **Section 46 66 53, article 2.4.F.9** – Clarification: (Page 5) Detailed diagnostic data is accessible only through the System/Lamp Driver Diagnostics screen. To view this information, the user must click on a specific lamp or driver and select "Get Data." This action retrieves the diagnostics from the BCB and displays them on the HMI.

  Please note that only a common alarm is shown on both the HMI and SCADA systems—this appears as either "Bank X Lamp Fault" or "Bank X Driver Fault," depending on the issue. Individual fault indicators such as lamp status, driver high temperature, or end of lamp life are not shown separately on the main interface.

- **Section 46 66 53, article 2.6.A.1.b** – Clarification: Trojan's UV Signa standard HMI has a 12" screen (AB PanelView Plus 7)

- **Section 46 66 53, article 2.6.A.1.c.1** – Clarification: Please confirm if standard alarms are acceptable. In the event of a lamp failure in a bank, a "Bank X Lamp Fault" alarm gets posted to the HMI & SCADA. Individual lamp faults are graphically shown on the Bank Overview screen.

- **Section 46 66 53, article 2.6.A.1.h.1** – Clarification: (Page 8) Please confirm if 120VAC discrete outputs are specifically required, as Trojan's standard configuration provides 24VDC contact closure outputs.

- **Section 46 66 53, article 1.4.A.8 –** Clarification: (Please confirm if UV Signa standard SCADA map is acceptable

- **Section 01 43 33, article 1.4.D** – Clarification: Please note that training will take place after start-up activities are performed.

- **Section 01 43 33, article 3.1.C** – Clarification: Please note that Trojan warranties parts during the warranty period, but not labor

MICROBIOLOGICAL PERFORMANCE TESTING

Trojan's Responsibility:
Trojan will supply a performance testing protocol to the Installation Contractor to be forwarded to the Engineer for approval. Trojan will produce the final test report (based on data supplied by the independent lab) and will forward the final report to the Installation Contractor. Trojan will also supply the services of a trained technician for conducting sampling and training the Contractor staff for 3 days

Installation Contractor's Responsibility:
The Installation Contractor is responsible for covering all associated onsite costs for performance testing (retaining an independent lab for sample analysis and services, bottles, shipment, etc.). The Installation Contractor is also responsible for completing the performance testing as per the testing protocol supplied by Trojan and approved by the Engineer.

DOCUMENTATION (SHOP DRAWINGS AND O&M MANUALS)

The following documentation will be supplied by Trojan per the following schedule:

- One (1) electronic copy of Trojan Shop Drawing Submittals within a minimum **4 – 6** weeks after receipt of written purchase order. **Note that Submittals will not be issued externally until PO is fully executed**.
- One (1) electronic copy of Trojan Standard O&M manuals at time of equipment delivery (hardcopies available upon request)

DELIVERY, START-UP AND TRAINING

- Equipment shipment to be within **22-24** weeks after approval of Shop Drawings.

Trojan's Responsibility:
The following start-up services will be provided by Trojan-certified technicians:

- Installation assistance as required by phone or fax. Technical Assistance Center 1-866-388-0488 or tac@trojantechnologies.com
- Up to 7 days in 3 trips for:
  - inspection of the final installation prior to start-up
  - start-up, testing of the installed UV equipment and classroom and/or jobsite training for operations staff
    - Note that If the Trojan's Certified Service Technician determines the Contractor work is not complete and the start-up cannot be completed in the allotted time a return visit will be scheduled at the Contractors expense.
    - If trainees are not available a return visit will be scheduled at the Contractors expense.
- One (1) trained personnel for 5 on-site days in 2 trips for performance testing (as stated above in section "MICROBIOLOGICAL PERFORMANCE TESTING")

Installation Contractor's Responsibility:
The Contractor is responsible for:

- Unloading of the components supplied by Trojan, storage of all components, if required in a clean dry environment including ActiClean™ Gel. *Note the ActiClean gel must be stored in a climate-controlled area to prevent freezing.*
- Installing the equipment outlined in the scope of Supply in accordance with contract drawings, Trojan's shop drawings, instructions and installation checklist(s).
- Supplying all conduits and conductors and components per the sites state regulations and components indicated as supplied by others.
- Completing and submitting the Checklist at least two (2) weeks prior to date requested for commissioning.
- Trojan panels with forced-air cooling design require installation in an environmentally controlled room suitable for electrical distribution or motor drive equipment.

WARRANTY

Trojan will warrant the equipment and parts for a period of 24 months from date of start-up or 30 months after shipment, whichever comes first. Warranty does not cover labor, consumables and/or wear components. Refer to attached Terms and Conditions for additional details.

- UV lamps shall be warranted for 15,000 hours prorated after 9,000 hours.
- Lamp drivers shall be warranted for 10 years, prorated after 1 year.

SELLING PRICE

- Selling price does not include any tariffs, duties or taxes that may be applicable.
- Freight included if destination is within North America.
- Incoterms 2020, Ex Works (EXW), Insurance and Freight (CIF) to destination or port will apply for all other destinations.

*** This price is valid for 90 days from the date of this letter.**

PREFERRED PAYMENT TERMS AND INVOICING MILESTONE BREAKDOWN

Net 30 Days **

- 10% upon Award of PO
- 20% upon Completion of Submittal package by Seller
- 20% upon Approval of Submittal package or approval to release to manufacturing by Owner/Engineer
- 45% upon Shipment or 30 days after Notice to Ship (whichever comes first)
- 5% upon Equipment Acceptance or 180 days after Shipment (whichever occurs first)

Please note that if UV System start-up is required within 30 days of equipment shipment, Trojan requires 95% payment unless agreed upon in writing before authorizing system Start-up.

**** In the event payments are not made or not made in a timely manner, Trojan reserves the right to charge interest on the outstanding balance at a rate of 1.5% per month or the maximum rate permitted by law, if lower, for each month or part thereof that there is an outstanding balance plus applicable storage charges and/or inventory carrying charges.**

TERMS AND CONDITIONS - ATTACHED

Trojan appreciates the opportunity to submit this proposal. Our proposal is submitted subject to and based on Trojan's standard terms and conditions, which we have attached as part of our proposal. We believe these terms and conditions are customary in the trade and respectfully reserve the opportunity to negotiate, fair and reasonable contract terms acceptable to both parties, if Trojan is selected for this project.

TROJAN technologies

TERMS AND CONDITIONS OF SALE

This document sets forth the Terms & Conditions of Sale for goods manufactured and/or supplied, and services provided, by the seller entity identified on the purchase order ("SELLER") and sold to the original purchaser thereof ("BUYER"). The term "SELLER" includes only SELLER, and none of its affiliates. Unless otherwise specifically stated in a previously-executed written purchase agreement signed by authorized representatives of SELLER and BUYER, these Terms & Conditions of Sale establish the rights, obligations and remedies of SELLER and BUYER which apply to this offer and any resulting order or contract for the sale of SELLER's goods and/or services ("Products").

1. **APPLICABLE TERMS & CONDITIONS:** These Terms & Conditions of Sale are contained directly and/or by reference in SELLER's proposal, offer, order acknowledgment, packing slip, and/or invoice documents. The first of the following acts constitutes an acceptance of SELLER's offer and not a counteroffer and creates a contract of sale ("Contract") in accordance with these Terms & Conditions of Sale: (i) BUYER's issuance of a purchase order document against SELLER's offer; (ii) acknowledgement of BUYER's order by SELLER; or (iii) commencement of any performance by SELLER pursuant to BUYER's order. Provisions contained in BUYER's purchase documents (including electronic commerce interfaces) that materially alter, add to, or subtract from the provisions of these Terms & Conditions of Sale are not a part of the Contract.

2. **CANCELLATION AND RETURN:** The whole or any part of this order may be cancelled only with the prior written consent of SELLER. If SELLER does consent to a cancellation, such consent will be given only upon payment of reasonable cancellation charges in an amount determined by SELLER and which will include recovery of costs plus reasonable profit. In addition, with respect to any Products returned on cancellation, BUYER will pay SELLER's cost of placing the returned Products in a saleable condition, sales expenses incurred by SELLER in connection with such returned Products, a reasonable restocking charge and freight costs incurred in connection with the original shipment and in connection with returning such Products to SELLER, all in such amounts as are advised to the BUYER by SELLER. SELLER may cancel all or part of any order prior to delivery without liability if the order includes any Products that SELLER determines may not comply with export, safety, local certification, or other applicable compliance requirements. If SELLER'S offer contains a cancellation schedule, such schedule shall apply in lieu of the cancellation charges stated above.

3. **DELIVERY:** Delivery will be accomplished FCA SELLER's determined shipping point; or on SELLER's discretion it will ship DDP or DAP foreign port unless otherwise expressly agreed between the parties using Incoterms® 2020. At SELLER's discretion other terms under Incoterms® 2020 may be used as required. In the event of any reference to "prepay and add" the applicable Incoterms® 2020 will be DDP or DAP at SELLER's discretion, while any reference to "collect" will be deemed to be FCA under the Incoterms® 2020 regardless of reference to reference to shipping point. In the event DDP or DAP is used for a transaction SELLER reserves the right to select the carrier and shipping mode. BUYER agrees to pay SELLER for any sales tax, brokerage fees, or other costs incurred as a result of the shipping mode chosen by SELLER. For all intents and purposes the FOB/FOD Legal title and risk of loss or damage pass to BUYER upon transfer to the first carrier, regardless of final destination and mode of transit. SELLER will use commercially reasonable efforts to deliver the Products ordered herein within SELLER's normal lead-time necessary for SELLER to deliver the Products sold hereunder. Upon prior agreement with BUYER and for an additional charge paid by BUYER, SELLER will deliver the Products on an expedited basis. Seller may, in its sole discretion, without liability or penalty, deliver partial shipments of Products to Buyer and ship the Products as they become available, in advance of the quoted delivery date. If the Products are delivered in installments, then insofar as each shipment is subject to the same Agreement, the Agreement will be treated as a single contract and not severable. Products will be boxed or crated as determined appropriate by SELLER for protection against normal handling and there will be an extra charge to the BUYER for additional packaging required by the BUYER with respect to waterproofing or other added protection. BUYER has sole responsibility for off-loading, storage and handling of the Products at the site. Where BUYER is responsible for any delay in the delivery date or installation date, the earlier of the date of delivery or the date on which the Products are ready for shipment by SELLER may be treated as the delivery date for purposes of determining the time of payment of the purchase price. Moreover, BUYER will be responsible for storage and insurance expenses with respect to such Products. Should BUYER fail to effect pick-up of Product as previously agreed in a timely manner, SELLER may, at its discretion, assess storage charges and a surcharge to the account of BUYER.

4. **INSPECTION**: BUYER will promptly inspect and accept any Products delivered pursuant to this Contract after receipt of such Products. In the event the Products do not conform to any applicable specifications, BUYER will promptly notify SELLER of such nonconformance in writing. SELLER will have a reasonable opportunity to repair or replace the nonconforming Product at its option. BUYER will be deemed to have accepted any Products delivered hereunder and to have waived any such nonconformance for such Products unless a written notification pursuant to this paragraph is received by SELLER within fourteen (14) calendar days of delivery to BUYER destination on order.

5. **PRICES & ORDER SIZES:** Prices do not include any charges for services such as insurance; brokerage fees; sales, use, inventory, or excise taxes; import or export duties; tariff, special financing fees; value added tax, income, or royalty taxes; consular fees; special permits or licenses; or other charges imposed upon the production, sale, distribution, or delivery of Products. BUYER will either pay any and all such charges or provide SELLER with acceptable exemption certificates, which obligation survives performance under this Contract. Installation, maintenance and any other services which relate to the Products are not included unless specifically set forth in the offer. SELLER reserves the right to establish minimum order sizes and will advise BUYER accordingly. Any orders below the minimum order size are subject to a fee as set out by SELLER. Notwithstanding anything to the contrary set out herein, in the event of any delay to SELLER's delivery schedule caused by BUYER or its representatives (other than for Force Majeure or delays caused by SELLER), including without limitation, a suspension of work or the project, a postponement of the delivery date or failure to timely issue of a notice of commencement or similar document, then (i) the Purchase Price shall increase by 1% for every month or partial month of such delay and this Agreement shall be construed as if the increased Purchase Price were originally inserted herein, and BUYER shall be billed by SELLER on the basis of such increased Purchase Price, or (ii) SELLER shall have the right to terminate this Contract without penalty.

6. **PAYMENTS**: All payments must be made in agreed-to currency, normally Canadian or U.S. Dollars. Unless other payment terms are expressly agreed to by SELLER or otherwise required by the SELLER, invoices are due and payable NET 30 DAYS from date of the invoice, without regard to delays for inspection or transportation, with payments to be made by check to SELLER at the address listed in the purchase order or by bank transfer to the account obtainable from SELLER's Accounts Receivable Manager. In the event payments are not made or not made in a timely manner, SELLER may, in addition to all other remedies provided at law, either: (a) declare BUYER's performance in breach and terminate this Contract for default; (b) withhold future shipments until delinquent payments are made; (c) deliver future shipments on a cash-with-order or cash-in-advance basis even after the delinquency is cured; (d) charge interest on the outstanding balance at a rate of 1.5% per month or the maximum rate permitted by law, if lower, for each month or part thereof that there is an outstanding balance plus applicable storage charges and/or inventory carrying charges; (e) repossess the Products for which payment has not been made; (f) pursue other collection efforts and recover all associated costs including reasonable attorney's fees; or (g) combine any of the above rights and remedies as is practicable and permitted by law. BUYER is prohibited from setting off any and all monies owed under this Contract from any other sums, whether liquidated or not, that are or may be due to the BUYER, which arise out of a different transaction with SELLER or any of its affiliates. Should BUYER's financial condition become unsatisfactory to SELLER in its discretion, SELLER may require payment in advance or other security. If BUYER fails to meet these requirements, SELLER may treat such failure as reasonable grounds for repudiation of this Contract, in which case reasonable cancellation charges shall be due to SELLER. BUYER hereby grants SELLER a security interest in the Products, wherever located, and whether now existing or hereafter arising or acquired from time to time, and in all accessions thereto and replacements or modifications thereof, as well as all proceeds of the foregoing, to secure payment in full of all amounts to SELLER, which payment releases the security interest but only if such payment could not be considered an avoidable transfer under applicable laws. The security interest granted hereby constitutes a purchase money security interest under the applicable Uniform Commercial Code or Personal Property Security Act or other applicable law, and SELLER is authorized to make whatever registration or notification or take such other action as SELLER deems necessary or desirable to perfect such security interest. BUYER's insolvency, bankruptcy, assignment for the benefit of creditors, or dissolution or termination of the existence of BUYER, constitutes a default under this Contract and affords SELLER all of the remedies of a secured creditor under applicable law, as well as the remedies stated above for late payment or non-payment.

7. **LIMITED WARRANTY:** Unless specifically provided otherwise in SELLER's offer, SELLER provides the following Limited Warranty. SELLER warrants that Products sold hereunder will be free from defects in material and workmanship and will, when used in accordance with the manufacturer's operating and maintenance instructions, conform to any express written

warranty pertaining to the specific goods purchased, which for Products is for a period of twelve (12) months from delivery. SELLER warrants that services furnished hereunder will be free from defects in workmanship for a period of thirty (30) days from the completion of the services. Products repaired or replaced are not covered by any warranty except to the extent repaired or replaced by SELLER, an authorized representative of SELLER, or under specific instructions by SELLER, in which cases, the Products will be covered under warranty up to the end of the warranty period applicable to the original Products. The above warranties do not include the cost of shipping and handling of returned items. Parts provided by SELLER in the performance of services may be new or refurbished parts functioning equivalent to new parts. Any non-functioning parts that are repaired by SELLER shall become the property of SELLER. Except as included in SELLER'S offer, no warranties are extended to consumable items and for normal wear and tear. SELLER's special warranties may include additional limitations. All other guarantees, warranties, conditions and representations, either express or implied, whether arising under any statute, law, commercial usage or otherwise, including implied warranties of merchantability and fitness for a particular purpose, are hereby excluded. The sole remedy for Products not meeting this Limited Warranty is replacement, repair, credit or refund of the purchase price, as determined by SELLER in its sole discretion. This remedy will not be deemed to have failed of its essential purpose so long as SELLER is willing to provide such replacement, credit or refund. To make a warranty claim, BUYER must notify SELLER in writing within 5 days of discovery of the defect in question. This notification must include a description of the problem, a copy of the applicable operator's log, a copy of BUYER's maintenance record and any analytical results detailing the problem. Any warranty hereunder or performance guarantees shall only be enforceable if (a) all equipment is properly installed, inspected regularly, and is in good working order, (b) all operations are consistent with SELLER recommendations, (c) operating conditions at the installation site have not materially changed and remain within anticipated specifications, and (d) no reasonably unforeseeable circumstances exist or arise. Products manufactured by a third party ("Third Party Product") which are not incorporated into SELLER's Products are not covered by the warranty. With respect to any Third Party Product, the warranty, if any, is provided solely through the manufacturer of such Third Party Product, the terms of which vary from manufacturer to manufacturer and Seller assumes no responsibility on their behalf. For Third Party Products, specific warranty terms may be obtained from the manufacturer's warranty statement.

8. **INDEMNIFICATION:** Indemnification applies to a party and to such party's successors-in-interest, assignees, affiliates, directors, officers, and employees ("Indemnified Parties"). SELLER is responsible for and will defend, indemnify and hold harmless the BUYER Indemnified Parties against all losses, claims, expenses or damages to the proportional extent caused by SELLER's breach of the Limited Warranty. BUYER is responsible for and will defend, indemnify and hold harmless SELLER Indemnified Parties against all losses, claims, expenses, or damages which may result from accident, injury, damage, or death due to the negligence or misuse or misapplication of any Products or the breach of any provision of this Contract by the BUYER or any third party affiliated or in privity with BUYER.

9. **PATENT PROTECTION:** SELLER shall further defend and indemnify BUYER Indemnitees from and against all Claims for actual infringement of all letters patent, trademarks, copyright or corresponding rights pertaining to goods provided under the Purchase Order, solely by reason of the sale or normal use of any goods sold to BUYER hereunder as finally determined by a court of competent jurisdiction in any suit for infringement of any U.S. patent. SELLER's warranty as to use patents only applies to infringement arising solely out of the inherent operation of the goods according to their applications as envisioned by SELLER's specifications. In case the goods are in such suit held to constitute infringement and the use of the goods is enjoined, SELLER will, at its own expense and at its option, either procure for BUYER the right to continue using such goods or replace them with non-infringing products, or modify them so they become non-infringing, or remove the goods and refund the purchase price (prorated for depreciation) and the transportation costs thereof. The foregoing states the entire liability of SELLER for patent infringement by the goods. Further, to the same extent as set forth in SELLER's above obligation to BUYER, BUYER agrees to defend, indemnify and hold harmless SELLER for patent infringement related to (x) any goods manufactured to the BUYER's design, (y) services provided in accordance with the BUYER's instructions, or (z) SELLER's goods when used in combination with any other devices, parts or software not provided by SELLER hereunder. Subject to all limitations of liability provided herein, SELLER will, with respect to any Products of SELLER's design or manufacture, indemnify BUYER from any and all damages and costs as finally determined by a court of competent jurisdiction in any suit for infringement of any U.S. or Canadian patent (or European patent for Products that SELLER sells to BUYER for end use in a member state of the E.U. or the U.K.) that has issued as of the delivery date, solely by reason of the sale or normal use of any Products sold to BUYER hereunder and from reasonable expenses incurred by BUYER in defense of such suit if SELLER does not undertake the defense thereof, provided that BUYER promptly notifies SELLER of such suit and offers SELLER either (i) full and exclusive control of the defense of such

suit when Products of SELLER only are involved, or (ii) the right to participate in the defense of such suit when products other than those of SELLER are also involved. SELLER's warranty as to use patents only applies to infringement arising solely out of the inherent operation of the Products according to their applications as envisioned by SELLER's specifications. In case the Products are in such suit held to constitute infringement and the use of the Products is enjoined, SELLER will, at its own expense and at its option, either procure for BUYER the right to continue using such Products or replace them with non-infringing products, or modify them so they become non-infringing, or remove the Products and refund the purchase price (prorated for depreciation) and the transportation costs thereof. The foregoing states the entire liability of SELLER for patent infringement by the Products. Further, to the same extent as set forth in SELLER's above obligation to BUYER, BUYER agrees to defend, indemnify and hold harmless SELLER for patent infringement related to (x) any goods manufactured to the BUYER's design, (y) services provided in accordance with the BUYER's instructions, or (z) SELLER's Products when used in combination with any other devices, parts or software not provided by SELLER hereunder.

10. **TRADEMARKS AND OTHER LABELS**: BUYER agrees not to remove or alter any indicia of manufacturing origin or patent numbers contained on or within the Products, including without limitation the serial numbers or trademarks on nameplates or cast, molded or machined components.

11. **SOFTWARE AND INTELLECTUAL PROPERTY**: All licenses to SELLER's separately provided software products are subject to the separate software license agreement(s) accompanying the software media. In the absence of such express licenses and for all other software, SELLER grants BUYER only a personal, non-exclusive license to access and use the software provided by SELLER with Products purchased hereunder solely as necessary for BUYER to enjoy the benefit of the Products. A portion of the software may contain or consist of open source software, which BUYER may use under the terms and conditions of the specific license under which the open source software is distributed. BUYER agrees that it will be bound by all such license agreements. Title to software remains with the applicable licensor(s). All SELLER contributions to the Products, the results of the services, and any other work designed or provided by SELLER hereunder may contain or result in statutory and non-statutory Intellectual Property, including but not limited to patentable subject matter or trade secrets; and all such Intellectual Property remains the sole property of SELLER; and BUYER shall not disclose (except to the extent inherently necessary during any resale of Product sold hereunder), disassemble, decompile, or any results of the Services, or any Products, or otherwise attempt to learn the underlying processes, source code, structure, algorithms, or ideas.

12. **PROPRIETARY INFORMATION AND PRIVACY**: "Proprietary Information" means any information, technical data, or know-how in whatever form, whether documented, contained in machine readable or physical components, mask works or artwork, or otherwise, which SELLER considers proprietary, including but not limited to service and maintenance manuals. BUYER and its customers, employees, and agents will keep confidential all such Proprietary Information obtained directly or indirectly from SELLER and will not transfer or disclose it without SELLER's prior written consent, or use it for the manufacture, procurement, servicing, or calibration of Products or any similar products, or cause such products to be manufactured, serviced, or calibrated by or procured from any other source, or reproduce or otherwise appropriate it. All such Proprietary Information remains SELLER's property. No right or license is granted to BUYER or its customers, employees or agents, expressly or by implication, with respect to the Proprietary Information or any patent right or other proprietary right of SELLER, except for the limited use licenses implied by law. In respect of personal data supplied by BUYER to SELLER, BUYER warrants that is duly authorized to submit and disclose these data, including but not limited to obtaining data subjects´ informed consent. SELLER will manage BUYER's information and personal data in accordance with its Privacy Policy, a copy of which is available to BUYER upon request. In respect of other data and information that SELLER may receive in connection with BUYER´s use of the Products including without limitation data that are captured by the Products and transmitted to SELLER, BUYER hereby grants SELLER a non-exclusive, worldwide, royalty-free, perpetual, non-revocable license to use, compile, distribute, display, store, process, reproduce, or create derivative works of such data as needed for Product operation and maintenance, and to aggregate such data for use in an anonymous manner, solely to facilitate marketing, sales and R&D activities of SELLER and its affiliates.

13. **SPECIAL TOOLS, DIES, JIGS, FIXTURES AND PATTERNS**: Any tools, dies, jigs, fixtures, patterns and similar items which are included or required in connection with the manufacture and/or supply of the Products will remain the property of SELLER without credit to the BUYER. SELLER assumes the cost for maintenance and replacement of such items and shall have the right to discard and scrap any such item after it has been inactive for a minimum of one year, without credit to the BUYER.

14. **CHANGES AND ADDITIONAL CHARGES**: SELLER reserves the right to make design changes or improvements to any products of the same general class as Products being delivered hereunder without liability or obligation to incorporate such changes or improvements to Products ordered by BUYER unless agreed upon in writing before the Products' delivery date. SELLER shall not be obligated to implement any changes or variations in the scope of work described in SELLER's scope of supply unless BUYER and SELLER agree in writing to the details of the change and any resulting price, schedule or other contractual modifications. This includes any changes or variations necessitated by a change in applicable law occurring after the effective date of this Agreement including these Terms.

15. **SITE ACCESS / PREPARATION / WORKER SAFETY / ENVIRONMENTAL COMPLIANCE:** In connection with services provided by SELLER, BUYER agrees to permit prompt access to equipment. BUYER assumes full responsibility to back-up or otherwise protect its data against loss, damage or destruction before services are performed. BUYER is the operator and in full control of its premises, including those areas where SELLER employees or contractors are performing service, repair, and maintenance activities. BUYER will ensure that all necessary measures are taken for safety and security of working conditions, sites, and installations during the performance of any services. BUYER is the generator of any resulting wastes, including without limitation hazardous wastes. BUYER is solely responsible to arrange for the disposal of any wastes at its own expense. BUYER will, at its own expense, provide SELLER employees and contractors working on BUYER's premises with all information and training required under applicable safety compliance regulations and BUYER's policies. SELLER has no responsibility for the supervision or actions of BUYER's employees or contractors or for non-SELLER items (e.g., chemicals, equipment) and disclaims all liability and responsibility for any loss or damage that may be suffered as a result of such actions or items, or any other actions or items not under SELLER's control.

16. **LIMITATIONS ON USE:** BUYER will not use any Products for any purpose other than those identified in SELLER's catalogs and literature as intended uses. Unless SELLER has advised the BUYER in writing, in no event will BUYER use any Products in drugs, food additives, food, or cosmetics, or medical applications for humans or animals. In no event will BUYER use in any application any Product that requires FDA 510(k) clearance unless and only to the extent the Product has such clearance. BUYER will not sell, transfer, export, or re-export any SELLER Products or technology for use in activities which involve the design, development, production, use, or stockpiling of nuclear, chemical, or biological weapons or missiles, nor use SELLER Products or technology in any facility which engages in activities relating to such weapons. Unless the "ship-to" address is in California, U.S.A., the Products are not intended for sale in California and may lack markings required by California Proposition 65; accordingly, unless BUYER has ordered Products specifying a California ship-to address, BUYER will not sell or deliver any SELLER Products for use in California. Any warranty granted by SELLER is void if any goods covered by such warranty are used for any purpose not permitted hereunder.

17. **EXPORT AND IMPORT LICENSES AND COMPLIANCE WITH LAWS**: Unless otherwise expressly agreed, BUYER is responsible for obtaining any required export or import licenses necessary for Product delivery. BUYER will comply with all laws and regulations applicable to the installation or use of all Product, including applicable import and export control laws and regulations of the U.S., E.U., and any other country having proper jurisdiction, and will obtain all necessary export or import licenses in connection with any subsequent export, re-export, transfer, and use of all Product and technology delivered hereunder. BUYER will not sell, transfer, export, or re-export any SELLER Product or technology for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical, or biological weapons or missiles, nor use SELLER Product or technology in any facility which engages in activities relating to such weapons. BUYER will comply with all local, national, and other laws of all jurisdictions globally relating to anti-corruption, bribery, extortion, kickbacks, or similar matters which are applicable to BUYER's business activities in connection with this Contract, including but not limited to the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"). BUYER agrees that no payment of money or provision of anything of value will be offered, promised, paid, or transferred, directly or indirectly, by any person or entity, to any government official, government employee, or employee of any company owned in part by a government, political party, political party official, or candidate for any government office or political party office to induce such organizations or persons to use their authority or influence to obtain or retain an improper business advantage for BUYER or for SELLER, or which otherwise constitute or have the purpose or effect of public or commercial bribery, acceptance of or acquiescence in extortion, kickbacks, or other unlawful or improper means of obtaining business or any improper advantage, with respect to any of BUYER's activities related to this Contract. SELLER asks BUYER to "Speak Up!" if aware of any violation of law, regulation, or our Code of Conduct ("CoC") in relation to this Contract. See

https://www.veraltointegrity.com and https://www.veralto.com/integrity-compliance for a copy of the CoC and for access to our Helpline portal.

18. **RELATIONSHIP OF PARTIES**: BUYER is not an agent or representative of SELLER and will not present itself as such under any circumstances, unless and to the extent it has been formally screened by SELLER's compliance department and received a separate duly-authorized letter from SELLER setting forth the scope and limitations of such authorization.

19. **FORCE MAJEURE**: SELLER is excused from performance of its obligations under this Contract to the extent caused by acts or omissions that are beyond its control, including but not limited to Government embargoes, blockages, seizures or freezing of assets, delays, or refusals to grant an export or import license, or the suspension or revocation thereof, or any other acts of any Government; fires, floods, severe weather conditions, or any other acts of God; quarantines; epidemics and pandemics; labor strikes or lockouts; riots; strife; insurrections; civil disobedience or acts of criminals or terrorists; war; material shortages or delays in deliveries to SELLER by third parties. In the event of the existence of any force majeure circumstances, the period of time for delivery, payment terms, and payments under any letters of credit will be extended for a period of time equal to the period of delay. If the force majeure circumstances extend for six months, SELLER may, at its option, terminate this Contract without penalty and without being deemed in default or in breach thereof.

20. **ASSIGNMENT AND WAIVER**: BUYER will not transfer or assign this Contract or any rights or interests hereunder without SELLER's prior written consent. SELLER shall be permitted to assign and transfer this Contract and any ancillary agreement hereunder to an affiliate of SELLER so long as such affiliates are either Trojan Technologies Group ULC or Trojan Technologies Corp. Upon any assignment of this Contract the assignee shall have all rights, and be liable for all obligations and responsibilities, under this Contract. Failure of either party to insist upon strict performance of any provision of this Contract, or to exercise any right or privilege contained herein, or the waiver of any breach of the terms or conditions of this Contract, will not be construed as thereafter waiving any such terms, conditions, rights, or privileges, and the same will continue and remain in force and effect as if no waiver had occurred. This Agreement is for the sole benefit of the parties hereto and their respective successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of these Terms.

21. **FUNDS TRANSFERS**: BUYER and SELLER both recognize that there is a risk of banking fraud when individuals impersonating a business demand payment under new mailing or banking transfer instructions. To avoid this risk, BUYER must verbally confirm any new or changed mailing or banking transfer instructions by calling SELLER and speaking with SELLER's Accounts Receivable Manager before transferring any monies using the new instructions. Both parties agree that they will not institute mailing or banking transfer instruction changes and require immediate payment under the new instructions, but will instead provide a ten (10) day grace period to verify any mailing or banking transfer instruction changes before any new or outstanding payments are due using the new instructions.

22. **LIMITATION OF LIABILITY**: None of SELLER, its successors-in-interest, assignees, affiliates, directors, officers, and employees will be liable to any BUYER Indemnified Parties under any circumstances for any special, treble, incidental, or consequential damages, including without limitation, damage to or loss of property other than for the Products purchased hereunder; damages incurred in installation, repair, or replacement; lost profits, revenue, or opportunity; loss of use; losses resulting from or related to downtime of the Products or inaccurate measurements or reporting; the cost of substitute products; or claims of any of BUYER's Indemnified Parties' customers for such damages, howsoever caused, and whether based on warranty, contract, and/or tort (including negligence, strict liability or otherwise). The total liability of SELLER, its successors-in-interest, assignees, affiliates, directors, officers, and employees arising out of the performance or nonperformance hereunder, or SELLER's obligations in connection with the design, manufacture, sale, delivery, and/or use of Products, will in no circumstance exceed the amount actually paid to SELLER for Products delivered hereunder.

23. **APPLICABLE LAW AND DISPUTE RESOLUTION**: All issues relating to the construction, validity, interpretation, enforcement, and performance of this agreement and the rights and obligations of SELLER and the BUYER hereunder shall be governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein; provided that if SELLER is Trojan Technologies Corp., then the applicable governing laws shall be the State of New York and the applicable federal laws therein. Any provisions of the International Sale of Goods Act or any convention on contracts for the international sale of goods shall not be applicable to this agreement. The parties submit to and consent to the non-exclusive

jurisdiction of courts located in the Province of Ontario; provided that if SELLER is Trojan Technologies Corp., then the parties submit to and consent to the non-exclusive jurisdiction of courts located in the State of New York.

24. **ENTIRE AGREEMENT, MODIFICATION, & SURVIVAL**: These Terms & Conditions of Sale constitute the entire agreement between the parties and supersede any prior agreements or representations, whether oral or written. Upon thirty (30) days prior written notice, SELLER may, in its sole discretion, elect to terminate any order for the sale of Products and provide a pro-rated refund for any pre-payment of undelivered Products. No change to or modification of these Terms & Conditions shall be binding upon SELLER unless in a written instrument specifically referencing that it is amending these Terms & Conditions of Sale and signed by an authorized representative of SELLER. SELLER rejects any additional or inconsistent Terms & Conditions of Sale offered by BUYER at any time, whether or not such terms or conditions materially alter the Terms & Conditions herein and irrespective of SELLER's acceptance of BUYER's order for the described goods and services. All payment, confidentiality and indemnity obligations, warranties, limitations of liability, product return, and ownership of materials provisions together with those sections the survival of which is necessary for the interpretation or enforcement of these Terms, shall continue in full force and effect for the duration stated in such provisions or the applicable statute of limitations.

TERMS AND CONDITIONS COVERING SALES OF CONFIGURED-TO-ORDER PROJECTS AND SYSTEMS

In addition to all terms and conditions above, unless otherwise addressed as part of SELLER's offer, the following sections apply to sales of Configured-to-Order Projects, Systems, and the like, except for any Aria Filtra Products:

101. PAYMENT.

101.1 Payments will be made per the schedule of payment events set forth in SELLER's offer; provided that if the Start-Up Date (as defined below) is less than 30 days after the Delivery Date, 90% of the purchase price is due before the Start-Up Date.

101.2. In the event that achievement of a scheduled payment event is delayed or suspended due to the BUYER's convenience or other reasons for which the BUYER or its representatives is responsible, such payment event will be deemed to have occurred and SELLER shall be entitled to invoice BUYER as if achievement of such payment event had been achieved. In such circumstances, BUYER must notify SELLER in writing of the reasons for the delay and anticipated duration of the delay. SELLER will mark the Products (or parts thereof) as the BUYER's property and BUYER shall make arrangements for a third party to store the Products at BUYER's cost.

102. DELIVERY

102.1 SELLER will request the BUYER to provide a firm date for delivery of the Products to the project site (the "Delivery Date") which SELLER will then use to establish the production schedule for the Products. The Delivery Date will then be binding on the BUYER except for any changes made in accordance with the provisions below.

102.2 SELLER reserves the right to reschedule the Delivery Date to a date prior to or subsequent to the scheduled Delivery Date in order to accommodate its shipping, production or other requirements. This right to reschedule will be applicable unless otherwise agreed to in writing by an authorized officer of SELLER. SELLER will provide the BUYER or its representative with a minimum of 24 hours' notice of any such rescheduling.

102.3 Where any change to the Delivery Date is made at BUYER's request and upon SELLER's agreement, for all purposes with respect to the warranty and payment requirements provided by SELLER in connection with the Products, the initial Delivery Date will be deemed to be the Delivery Date regardless of any change later made to the Delivery Date.

103. ACCEPTANCE

103.1 During the period between the Delivery Date and the Start-up Date, the BUYER shall prepare the Products and the project site for installation and start-up and, unless otherwise agreed in writing by an authorized representative of SELLER, shall complete acceptance testing with respect to the Products. The Products shall be deemed to be accepted on the earliest to occur

of the following dates (the "Acceptance Date"): (a) that date on which the Products can function in either manual or automatic operation and provide treatment in accordance with criteria specified in the Quotation, or (b) 60 days after the Delivery Date.

103.2 All amounts which remain owing by the BUYER for the Products, including any amount which is specified to be payable on the Acceptance Date, will be paid by the BUYER to SELLER within 30 days after the Acceptance Date, unless otherwise agreed in writing by an authorized representative of SELLER.

103.3 Written notification must be given by the BUYER to SELLER within seven days after the Acceptance Date listing any outstanding deficiencies with respect to the Products and SELLER will use all reasonable efforts to correct such deficiencies promptly.

104. START-UP

104.1 SELLER will request a firm date for start-up of the Equipment (the "Start-Up Date"). Trojan will then schedule its technician to be on-site for the Start-up Date. The Start-up Date is binding except for any changes made in accordance with the provisions below.

104.2 On the Start-up Date, BUYER must have the Equipment and site ready as provided in the Installation Preparation Checklist contained in the Contractor Installation Package sent to BUYER and must have paid all amounts then due and payable to SELLER.

104.3 BUYER can request a rescheduling of the Start-up Date by notifying SELLER in writing not less than three weeks prior to the Start-up Date. BUYER may request that the Start-up Date be extended but may not request that the Start-up Date be moved forward. SELLER requires a minimum extension period of two weeks between the existing Start-up Date and the requested new Start-up Date in order to reschedule its technician.

104.4 SELLER may, in its sole discretion, agree to reschedule the Start-up Date where a BUYER requests less than a two-week extension but is under no obligation to do so. In the event that SELLER does agree to less than a two- week extension or that BUYER requests more than two changes to the Start-up Date, BUYER will be charged an administration fee in an amount determined by SELLER.

104.5 SELLER reserves the right to reschedule the Start-up Date to a date which is prior to or subsequent to the scheduled Start-up Date in order to accommodate its resource availability. This right to reschedule will be applicable unless otherwise agreed in writing by an authorized officer of SELLER. SELLER will provide BUYER or its representative with a minimum of 72 hours' notice of any such change to the Start-up Date.

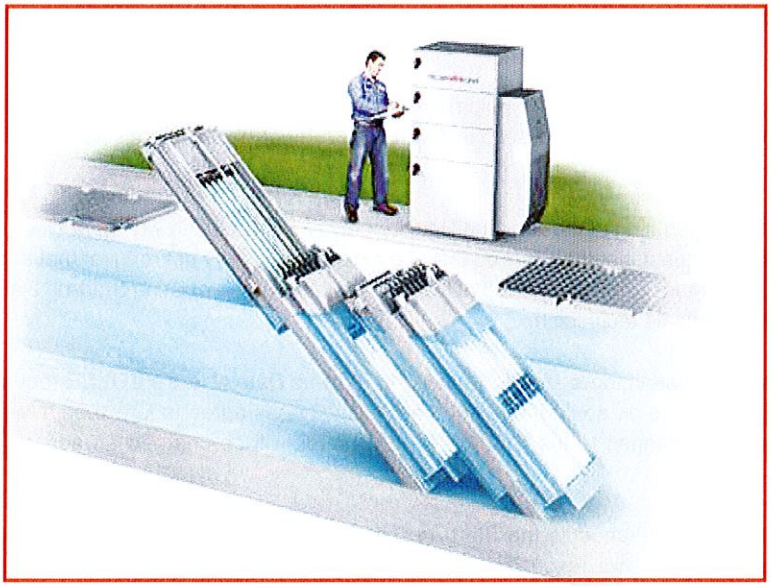
104.6 In the event that SELLER'S technician arrives at the project site and finds that the Equipment or the project site is not ready for start-up as defined in the Contractor Installation Package, or any amounts then due and payable to SELLER remain unpaid, BUYER may either:

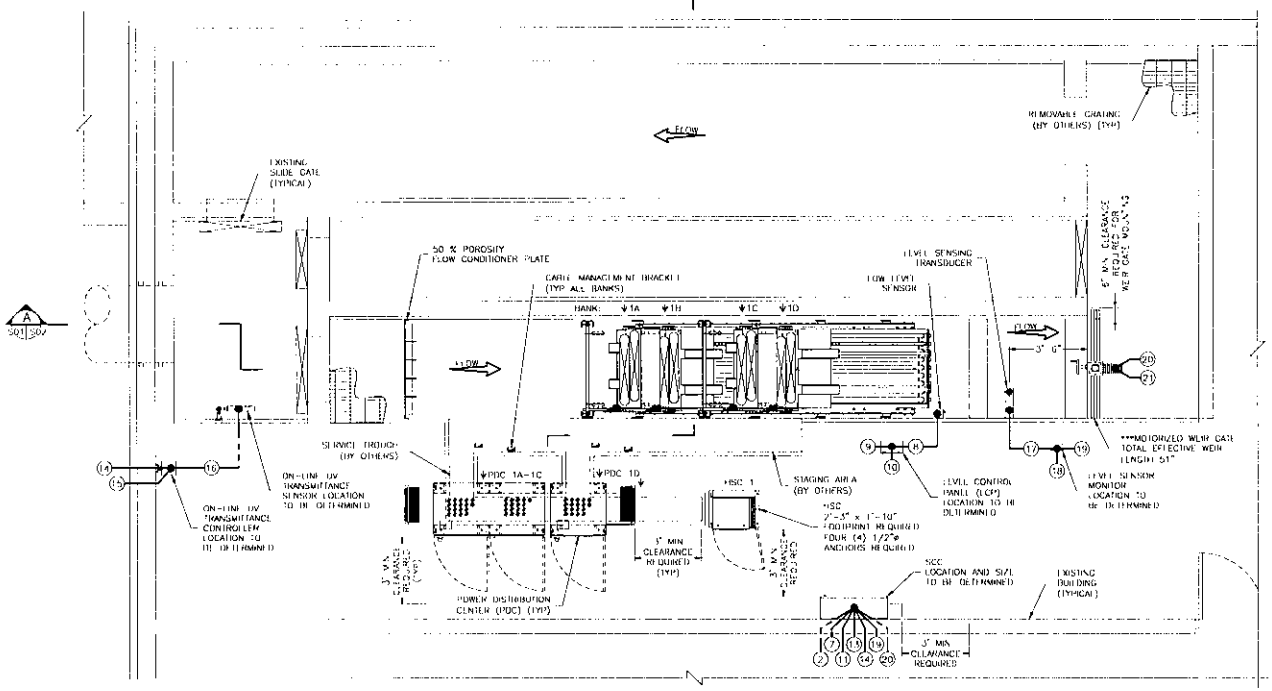
(a) provided all amounts then due and payable to SELLER have been paid, issue a purchase order for all costs involved in having SELLER correct the deficiencies, or

(b) have SELLER'S technician leave the site and then reschedule the Start-up Date to a date when all deficiencies will be corrected, and the Equipment will be ready for start-up as defined in the Contractor Installation Package. If BUYER selects this option, the cost of rescheduling will be not less than a minimum amount specified by SELLER, with the final cost being determined by SELLER based on its costs and expenses incurred in connection with the rescheduling.

Rev. February 12, 2025

DRAWINGS





PLAN VIEW

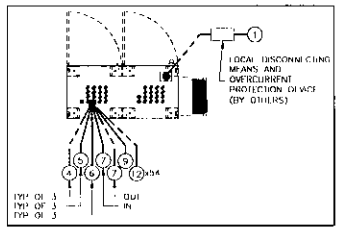
SCALE: AS SHOWN

NOTES:

1. DO NOT SCOPE CHANNEL FLOOR.
2. CHANNEL WIDTH & DEPTH MUST BE KEPT WITHIN A TOLERANCE OF ± OR ½" AGAINST A COMMON DATUM ELEVATION.
3. ANCHOR BOLTS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
4. SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS UNLESS OTHERWISE NOTED.
5. ELECTRICAL REQUIREMENTS SHOWN ARE TO SUPPLY TROJAN UV EQUIPMENT ONLY.
6. REMOVABLE GRATING SECTIONS SHALL BE EASILY REMOVED BY ONE PERSON. MAXIMUM WEIGHT OF THE SECTIONS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE APPLICABLE JURISDICTION.
7. CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
8. EFFLUENT LEVELS SHOWN REFLECT HYDRAULICS ASSOCIATED WITH TROJAN EQUIPMENT ONLY. EFFLUENT LEVELS MAY BE ALTERED DUE TO CHANNEL DEBRIS OR GEOMETRY.
9. ANY UPSTREAM AND DOWNSTREAM WL ELEVATIONS BEYOND THOSE SHOWN WITHIN THIS LAYOUT DRAWING ARE OUTSIDE OF THE SCOPE OF TROJAN TECHNOLOGIES AND ARE THE RESPONSIBILITY OF THE CONSULTING ENGINEER.
10. HYDRAULIC HOSE ELEVATIONS NOT TO EXCEED 12" ABOVE HSC MOUNTING ELEVATION.
11. INCLUDED CABLE LENGTH ALLOWS FOR 26.5" ROUTING (RISE + RUN) BETWEEN CABLE/HOSE MANAGEMENT BRACKET AND UNDERSIDE OF PDC. (10.5" ROUTING ASSUMED BASED ON THIS LAYOUT.)
12. INCLUDED HOSE LENGTH ALLOWS FOR 24.5" ROUTING (RISE + RUN) BETWEEN CABLE/HOSE MANAGEMENT BRACKET AND HOSE CONNECTION ON THE HSC. (18.5" ROUTING ASSUMED BASED ON THIS LAYOUT.)
13. SITE TO PROVIDE APPROVED (ENGINEERED) ANCHOR POINTS FOR PERSONNEL TO USE AS PART OF THEIR FALL RESTRAINT SYSTEM AROUND OPEN CHANNELS. THE ANCHOR POINTS MUST BE POSITIONED SO THAT THE PREFERRED RETRACTABLE LIFELINE OF 8 FEET IS OF SUFFICIENT LENGTH TO ACCESS THE WORK AT THE CHANNEL.

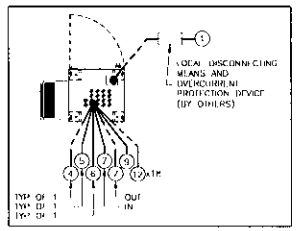
** SOLID GRATING REQUIRED TO BLOCK ULTRAVIOLET (UV) LIGHT.

*** MODULATING WEIR GATE REQUIRES 1 MINUTE TO TRAVEL 1'-0". SEE MWG SECTION VIEW FOR FULLY OPEN POSITION (FOP), FULLY CLOSED POSITION (FCP), AND GATE POSITION(S) (GP).



PDC 1A-1C INTERCONNECT DETAIL

SCALE: NOT TO SCALE



PDC 1D INTERCONNECT DETAIL

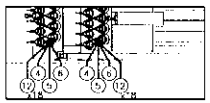
SCALE: NOT TO SCALE

TROJAN UVSIGNA™

EQUIPMENT INTERCONNECTIONS

NO.	DESCRIPTION	FROM	TO
1	POWER DISTRIBUTION CENTER (PDC 1A-1C)* POWER SUPPLY 480Y/277V, 3 PHASE, 4 WIRE + GROUND, 60 Hz 76 AMPS MAXIMUM CURRENT/PHASE 63.0 kVA/PDC POWER DRAW POWER DISTRIBUTION CENTER (PDC 1D)* 26 AMPS MAXIMUM CURRENT/PHASE 21.1 kVA/PDC POWER DRAW	DISTRIBUTION PANEL (DP) (BY OTHERS) (NOT SHOWN)	PDCs (TOP OF PANEL)
2	SYSTEM CONTROL CENTER (SCC)* POWER SUPPLY 120V, 1 PHASE, 2 WIRE + GROUND, 60 Hz 15 AMPS, 1.8 kVA	DP (BY OTHERS) (NOT SHOWN)	SCC
3	HYDRAULIC SYSTEM CENTER (HSC)* POWER SUPPLY 480V, 3 PHASE, 3 WIRE + GROUND, 60 Hz 3 AMPS, 2.5 kVA	DP (BY OTHERS) (NOT SHOWN)	HSC
4	BONDING CONDUCTOR 8 AWG THW THW STRANDED	PDCs (UNDERSIDE OF PANEL)	UV BANKS
5	UV INTENSITY 4-20MA ANALOG INPUT (SUPPLIED)	UV BANKS	PDCs (UNDERSIDE OF PANEL)
6	BANK IN PLACE PROXIMITY SENSOR 3 CONDUCTOR CABLES (SUPPOLID)	PROXIMITY SENSORS	PDCs (UNDERSIDE OF PANEL)
7	MODBUS BELDEN 3106A OR EQUIVALENT (ONE LINE PER CHANNEL)	SCC	HSCs & PDCs (UNDERSIDE OF PANEL) (DAISY CHAINED)
8	DISCRETE, LOW LEVEL SIGNAL 12 VDC - 2 CONDUCTORS	LOW LEVEL SENSOR	LEVEL CONTROL PANEL (LCP)
9	DISCRETE WATER LEVEL SIGNAL 2 CONDUCTORS	LEVEL CONTROL PANEL (LCP)	PDCs (UNDERSIDE OF PANEL)
10	LEVEL SENSOR CONTROL BOX (LCP)* POWER SUPPLY 120V, 1 PHASE, 2 WIRE + GROUND, 60 Hz 0.12 kVA	DP (BY OTHERS) (NOT SHOWN)	LEVEL CONTROL PANEL (LCP)
11	FLOW METER 4-20 mA, DC ANALOG INPUT	FLOW METER PANEL (BY OTHERS) (NOT SHOWN)	SCC
12	TRAY CABLES (SUPPLIED)	UV BANK	PDC (UNDERSIDE OF PANEL)
13	ETHERNET/IP COMMUNICATION	SCC	PLANT SCADA (NOT SHOWN)
14	ON-LINE UV TRANSMITTANCE CONTROLLER SIGNAL 4-20 mA	ON-LINE UV TRANSMITTANCE CONTROLLER	SCC
15	ON-LINE UV TRANSMITTANCE CONTROLLER* POWER SUPPLY 120V, 1 PHASE, 2 WIRE + GROUND, 60 Hz, 50 VA	DP (NOT SHOWN)	ON-LINE UV TRANSMITTANCE CONTROLLER
16	ON-LINE UV TRANSMITTANCE SENSOR COMMUNICATION (SUPPLIED)	ON-LINE UV TRANSMITTANCE SENSOR	ON-LINE UV TRANSMITTANCE CONTROLLER
17	COMMUNICATION LINK (30' CABLE SUPPLIED)	LEVEL SENSING TRANSDUCER	LEVEL SENSOR MONITOR
18	LEVEL SENSOR POWER SUPPLY* 120V, 1 PHASE, 2 WIRE + GROUND, 60 Hz, 16 VA	DP (NOT SHOWN)	LEVEL SENSOR MONITOR
19	WATER LEVEL SENSING 4-20 mA ANALOG SIGNAL	LEVEL SENSOR MONITOR	SCC
20	OPEN COMMAND DISCRETE OUTPUT (MIN 20 AWG) - 2 CONDUCTORS CLOSE COMMAND DISCRETE OUTPUT (MIN 20 AWG) - 2 CONDUCTORS GATE IN REMOTE MODE DISCRETE INPUT (MIN 20 AWG) - 2 CONDUCTORS GATE FAULT DISCRETE INPUT (MIN 20 AWG) - 2 CONDUCTORS GATE POSITION ANALOG INPUT 4-20mA 1 TWISTED, SHIELD PAIR (24 AWG)	SCC SCC WEIR GATE WEIR GATE WEIR GATE	WEIR GATE WEIR GATE SCC SCC SCC
21	WEIR GATE POWER SUPPLY* 480V, 3 PHASE, 3 WIRE + GROUND, 60 Hz	(DP) (BY OTHERS) (NOT SHOWN)	WEIR GATE

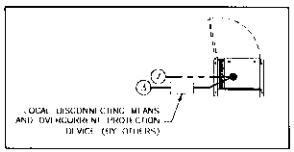
* GROUND CONNECTION REQUIRED TO PLANT GRID (BY OTHERS).



UV BANK INTERCONNECT DETAIL

SCALE: NOT TO SCALE

NOTE: TYPICAL FOR ALL UV BANKS THROUGH NOT SHOWN FOR CLARITY



HSC INTERCONNECT DETAIL

SCALE: NOT TO SCALE

PRELIMINARY, NOT FOR CONSTRUCTION

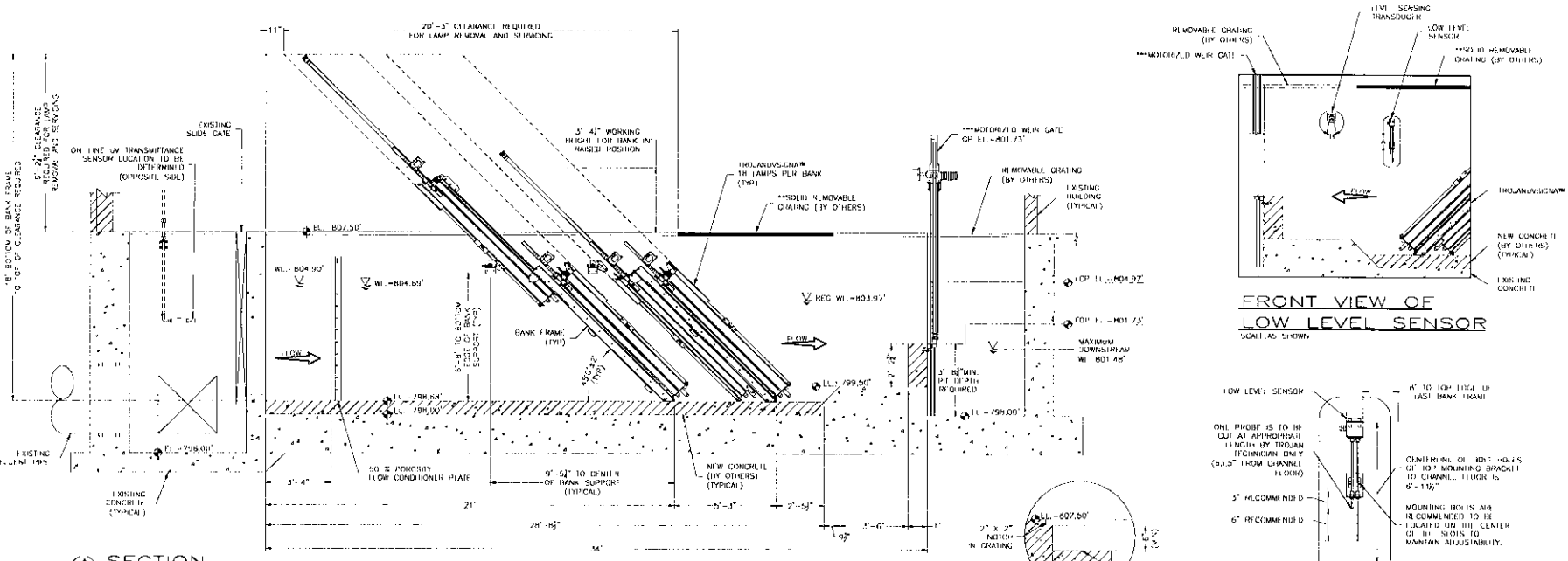
VERIFY DIMENSIONS BEFORE COMMENCING CIVIL OR DESIGN WORK

DESIGN CRITERIA		
PEAK FLOW	27 MGD	
U.V. TRANSMITTANCE AT 254.7 nm	65 %	
SUSPENDED SOLIDS	15 mg / L (30 DAY AVERAGE)	
DISINFECTION STANDARD	126 E.COLI / 100mL (30 DAY GEO MEAN)	400 E.COLI / 100ml (90 %ILE)

TROJANUV

CONFIDENTIALITY NOTICE

DESCRIPTION: LAYOUT, TROJANUVSIGNA WATERTOWN REPLACEMENT, WI		JOB NO: 248997
DRAWN BY : MAN	DATE : 25APR25	PROJECT
CHECKED BY : AP	DATE : 25APR25	
APPROVED BY : RC	DATE : 25APR25	DWG NO: S0
SCALE (11x17) : 3/16" = 1'-0"	TDG NUMBER : N/A	



NOTES:

1. DO NOT SLOPE CHANNEL FLOOR.
2. CHANNEL WIDTH & DEPTH MUST BE KEPT WITHIN A TOLERANCE OF ± OR - ¼" AGAINST A COMMON DATUM ELEVATION.
3. ANCHOR BOLTS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
4. SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS UNLESS OTHERWISE NOTED.
5. ELECTRICAL REQUIREMENTS SHOWN ARE TO SUPPLY TROJAN UV EQUIPMENT ONLY.
6. REMOVABLE GRATING SECTIONS SHALL BE EASILY REMOVED BY ONE PERSON MAXIMUM WEIGHT OF THE SECTIONS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE APPLICABLE JURISDICTION.
7. CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
8. EFFLUENT LEVELS SHOWN REFLECT HYDRAULICS ASSOCIATED WITH TROJAN EQUIPMENT ONLY. EFFLUENT LEVELS MAY BE ALTERED DUE TO CHANNEL DEBRIS OR GEOMETRY.
9. ANY UPSTREAM AND DOWNSTREAM WL ELEVATIONS BEYOND THOSE SHOWN WITHIN THIS LAYOUT DRAWING ARE OUTSIDE OF THE SCOPE OF TROJAN TECHNOLOGIES AND ARE THE RESPONSIBILITY OF THE CONSULTING ENGINEER.
10. HYDRAULIC HOSE ELEVATIONS NOT TO EXCEED 12" ABOVE HSC MOUNTING ELEVATION.
11. INCLUDED CABLE LENGTH ALLOWS FOR 26.5' ROUTING (RISE + RUN) BETWEEN CABLE/HOSE MANAGEMENT BRACKET AND UNDERSIDE OF PDC. (10.5' ROUTING ASSUMED BASED ON THIS LAYOUT.)
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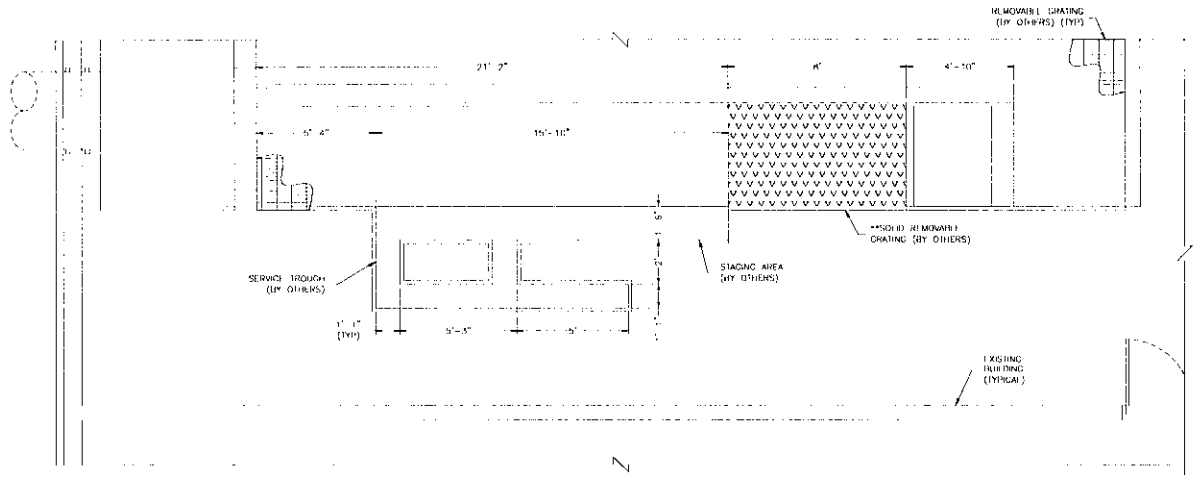
PRELIMINARY, NOT FOR CONSTRUCTION

VERIFY DIMENSIONS BEFORE COMMENCING CIVIL OR DESIGN WORK

TROJANUV™

DESCRIPTION	LAYOUT, TROJANUVSIGNA WATERTOWN REPLACEMENT, WI		JOB NO 248997
DRAWN BY : MAN		DATE : 25APR25	PROJECT
CHECKED BY : AP		DATE : 25APR25	
APPROVED BY : KG		DATE : 25APR25	DWG NO S02
SCALE (11x17) : 3/16" = 1'-0"		LOG NUMBER : N/A	



NOTES:
1. DO NOT SLOPE CHANNEL FLOOR.
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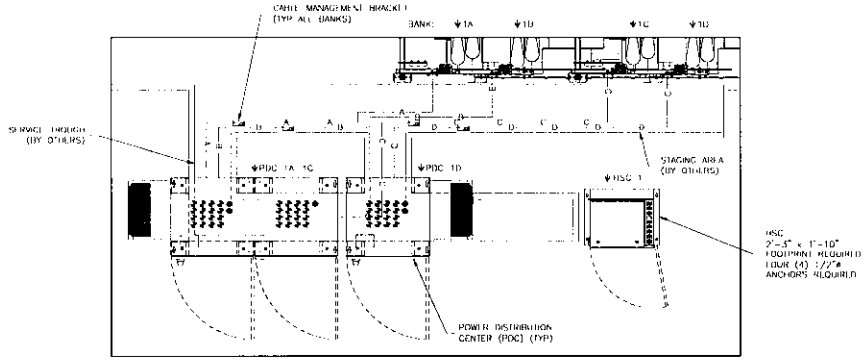
3. ANCHOR BOLTS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
4. SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS UNLESS OTHERWISE NOTED.
5. ELECTRICAL REQUIREMENTS SHOWN ARE TO SUPPLY TROJAN UV EQUIPMENT ONLY.
6. REMOVABLE GRATING SECTIONS SHALL BE EASILY REMOVED BY ONE PERSON. MAXIMUM WEIGHT OF THE SECTIONS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE APPLICABLE JURISDICTION.
7. CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
8. EFFLUENT LEVELS SHOWN REFLECT HYDRAULICS ASSOCIATED WITH TROJAN EQUIPMENT ONLY. EFFLUENT LEVELS MAY BE ALTERED DUE TO CHANNEL DEBRIS OR GEOMETRY.
9. ANY UPSTREAM AND DOWNSTREAM WL ELEVATIONS BEYOND THOSE SHOWN WITHIN THIS LAYOUT DRAWING ARE OUTSIDE OF THE SCOPE OF TROJAN TECHNOLOGIES AND ARE THE RESPONSIBILITY OF THE CONSULTING ENGINEER.
10. HYDRAULIC HOSE ELEVATIONS NOT TO EXCEED 12" ABOVE HSC MOUNTING ELEVATION.
11. INCLUDED CABLE LENGTH ALLOWS FOR 26.5' ROUTING (RISE + RUN) BETWEEN CABLE/HOSE MANAGEMENT BRACKET AND UNDERSIDE OF PDC. (10.5' ROUTING ASSUMED BASED ON THIS LAYOUT.)
12. INCLUDED HOSE LENGTH ALLOWS FOR 24.5' ROUTING (RISE + RUN) BETWEEN CABLE/HOSE MANAGEMENT BRACKET AND HOSE CONNECTION ON THE HSC. (18.5' ROUTING ASSUMED BASED ON THIS LAYOUT.)
13. SITE TO PROVIDE APPROVED (ENGINEERED) ANCHOR POINTS FOR PERSONNEL TO USE AS PART OF THEIR FALL RESTRAINT SYSTEM AROUND OPEN CHANNELS. THE ANCHOR POINTS MUST BE POSITIONED SO THAT THE PREFERRED RETRACTABLE LIFELINE OF 8 FEET IS OF SUFFICIENT LENGTH TO ACCESS THE WORK AT THE CHANNEL.

** SOLID GRATING REQUIRED TO BLOCK ULTRAVIOLET (UV) LIGHT.

*** MODULATING WEIR GATE REQUIRES 1 MINUTE TO TRAVEL 1'-0". SEE MWG SECTION VIEW FOR FULLY OPEN POSITION (FOP), FULLY CLOSED POSITION (FCP), AND GATE POSITION(S) (OP).

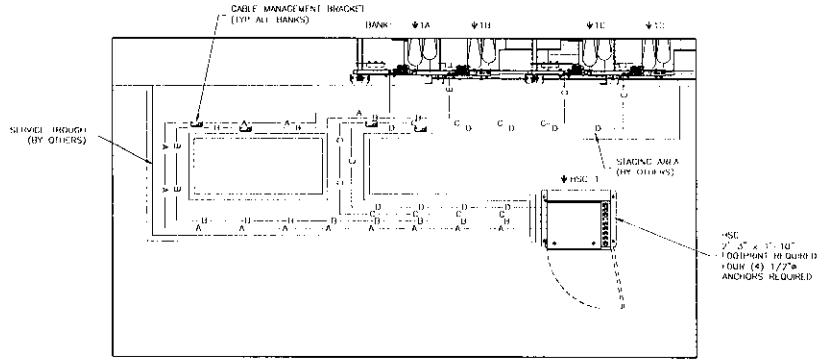
GRATING AND TROUGH PLAN VIEW

SCALE: AS SHOWN
NOTE: DESIGN OF GRATING SECTIONS SHOULD BE SIZED TO ALLOW FOR EASY REMOVAL BY SERVICE TECHNICIANS. SOLID GRATING MUST BE PROVIDED IN AREA INDICATED TO BLOCK UV LIGHT



LAMP CABLE ROUTING PLAN

SCALE: AS SHOWN
NOTE: GENERAL ROUTING SHOWN IS PROVIDED FOR CABLE TROUGHS ONLY. REFER TO "INSTRUCTION, TROJANUV SOLO LAMP™ CABLE ROUTING INSIDE PDC" AND PDC DRAWINGS FOR REQUIREMENTS FOR WIRING INSIDE THE PANEL. HSC NOT SHOWN FOR CLARITY.



HYDRAULIC HOSE ROUTING PLAN

SCALE: AS SHOWN
NOTE: PDCs NOT SHOWN FOR CLARITY.

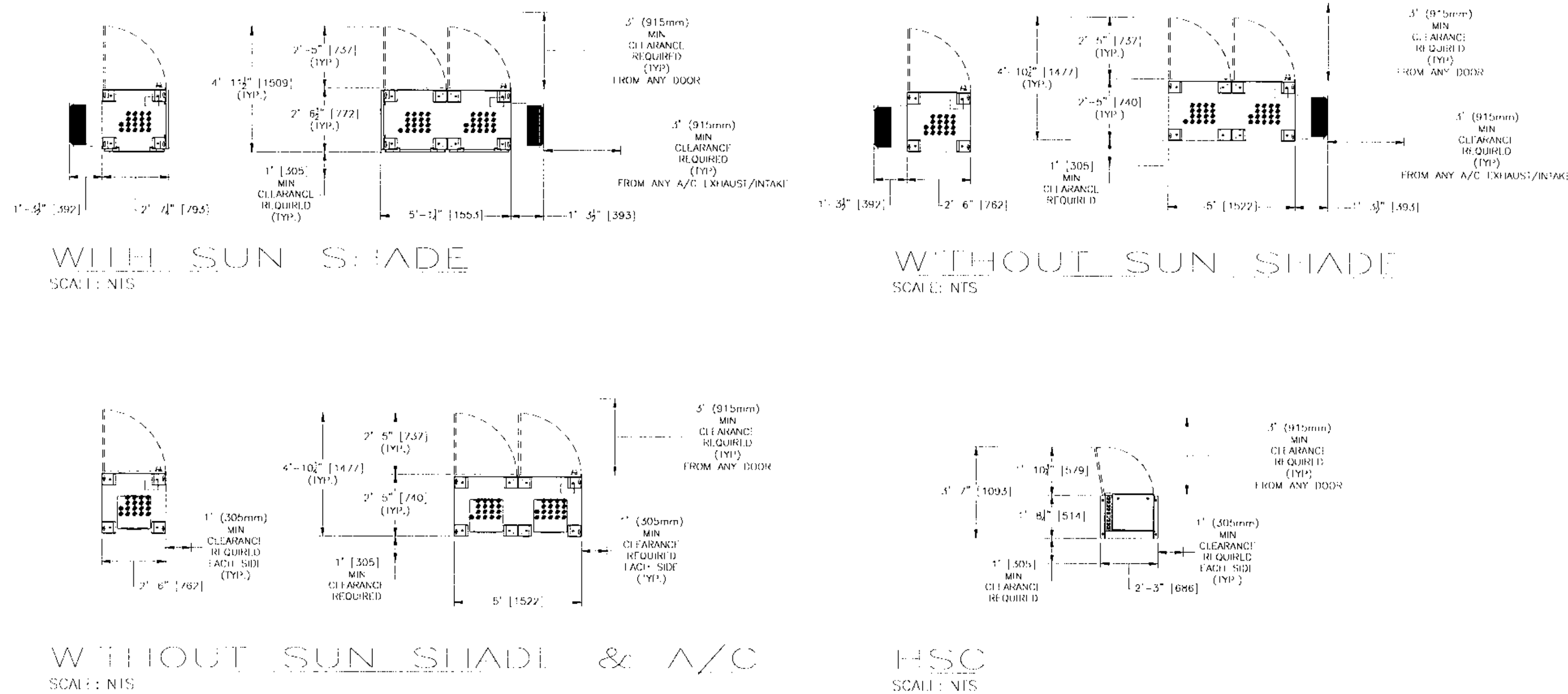
PRELIMINARY, NOT FOR CONSTRUCTION
VERIFY DIMENSIONS BEFORE COMMENCING CAD OR DESIGN WORK

TROJANUV

DESCRIPTION: LAYOUT, TROJANUVSIGNA WATERTOWN REPLACEMENT, WI

DRAWN BY :	MAA	DATE : 25APR25
CHECKED BY :	AP	DATE : 25APR25
APPROVED BY :	NG	DATE : 25APR25
SCALE (11x17) :	3/16" = 1'-0"	LOC NUMBER : N/A

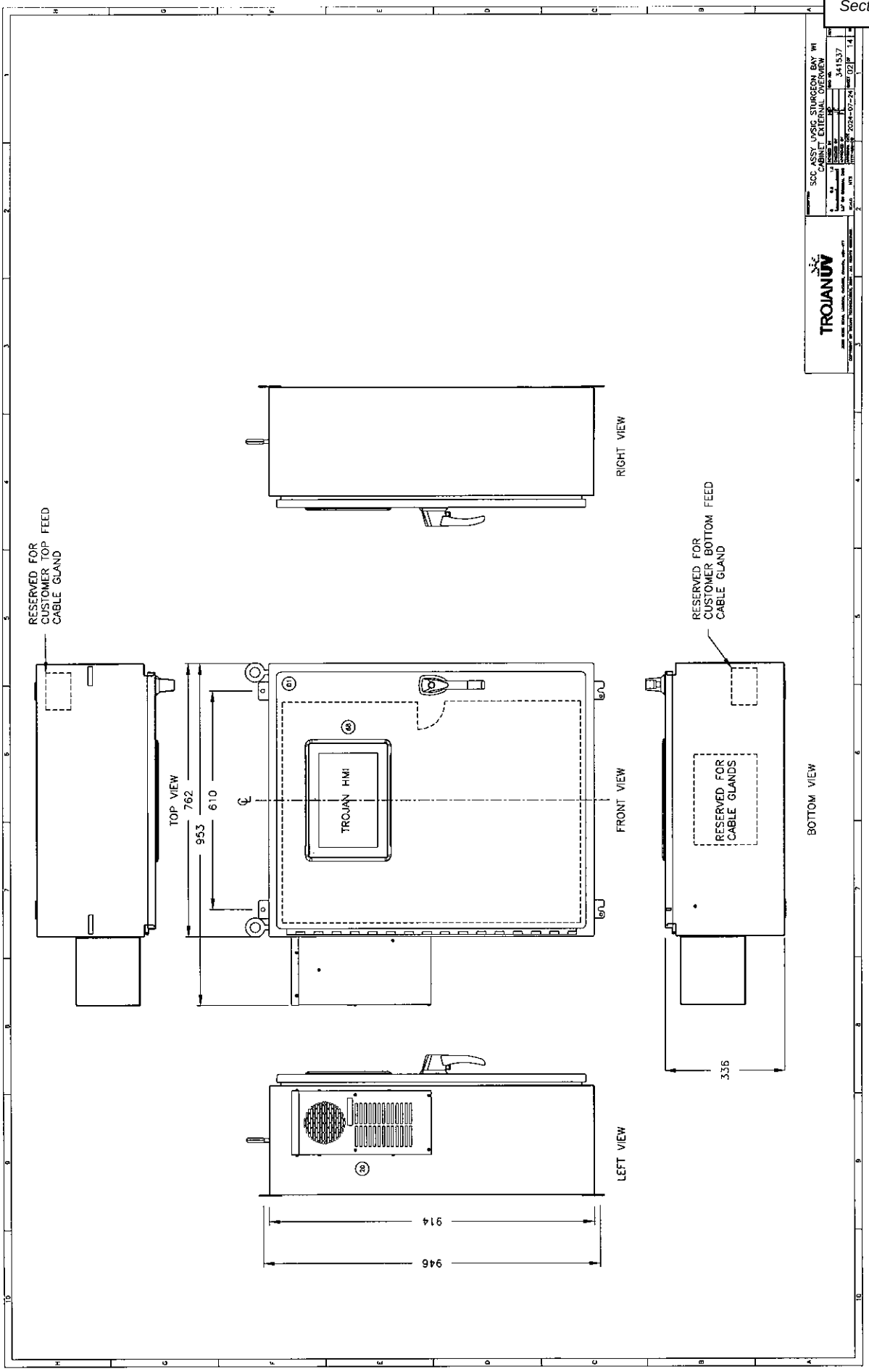
JOB NO: 248997
PROJECT:
DWG NO: SD

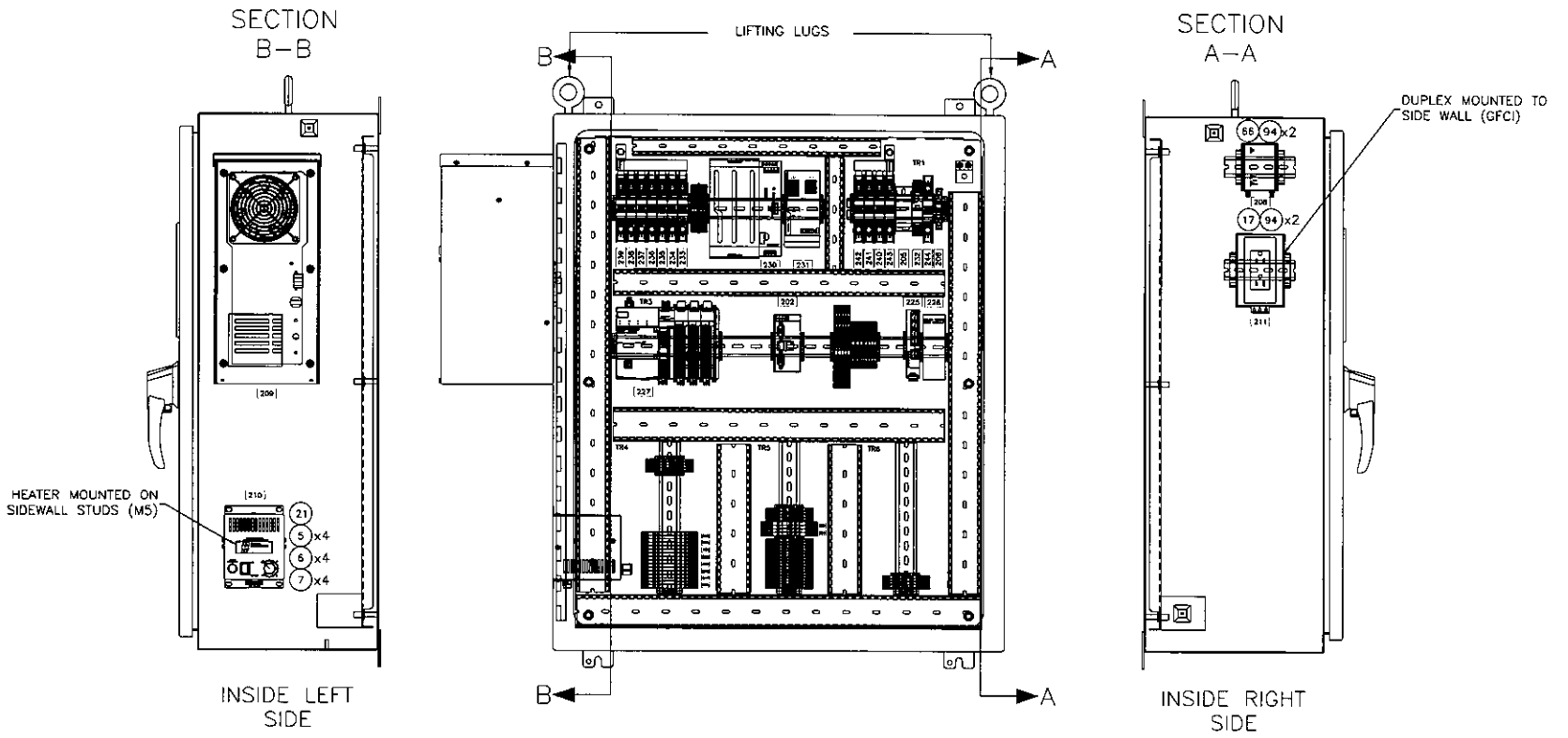


TROJANUV

CONFIDENTIALITY NOTED

DESCRIPTION: LAYOUT, TROJANUVSIGNA	
DRAWN BY : RP	DATE : 25JAN/29
CHECKED BY : ---	DATE : ---
APPROVED BY : ---	DATE : ---
SCALE (11x17) : 1/4" = 1'-0"	LOC NUMBER : N/A


SCC ASSY LYSIG STURGEON BAY WI
CABINET EXTERNAL OVERVIEW
341537
2024-07-24
TROJANUV
RIGHT VIEW
RESERVED FOR
CUSTOMER TOP FEED
CABLE GLAND
RESERVED FOR
CUSTOMER BOTTOM FEED
CABLE GLAND
TOP VIEW
762
610
953
TROJAN HMI
FRONT VIEW
RESERVED FOR
CABLE GLANDS
BOTTOM VIEW
336
LEFT VIEW
914
946



SHEET NOTES:

1. THE INTERNAL LAYOUT IS A GENERAL VIEW AND COULD BE SLIGHTLY DIFFERENT DEPENDING ON PROJECT REQUIREMENTS.
2. SEE SHEET#08 FOR EXACT TR3 COMPONENT LAYOUT.
3. SEE SHEET#09 FOR EXACT TR4 COMPONENT LAYOUT.
4. SEE SHEET#10 FOR EXACT TR5 COMPONENT LAYOUT.
5. SEE SHEET#11 FOR EXACT TR6 COMPONENT LAYOUT.

TROJANUV

SCC ASSY UVSIG STURGEON BAY WI
CABINET INTERNAL LAYOUT

341537

2024-07-24

THE CITY OF WATERTOWN
Opportunity runs through it.

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

To: Chairman Arnett and members of the Public Works Commission May 7, 2025
From: Peter Hartz – Water Systems Manager

Re: May 13, 2025, Public Works Commission agenda item

Water Systems:

1. Review and approve 2024 Compliance Maintenance Annual Report (CMAR) – Wastewater Utility permit to discharge summary.

   Background: A requirement for the wastewater utility under the Wisconsin Pollutant Discharge Elimination System permit issued by the Wisconsin Department of Natural Resources (WDNR) is to complete the Compliance Maintenance Annual Report (CMAR), referenced in Wisconsin Administrative Code NR 208.

   Included for review and discussion is a revised copy of the CMAR report for the calendar year 2024.

   Budget Goal: This report shows the continued investments and infrastructure planning is being accomplished and is ongoing.

   Fiscal Impact: The facilities planning document covers improvements needed for the wastewater facility, please note that we had 11 months of influent biological oxygen demand (BOD) concentrations over 90% of the plant design, and 9 months with influent BOD concentrations over 100% of the plant design. The plant effluent discharge to the Rock River was well below the permitted limits for all those months, however, we scored poorly on that section of the annual report due to the high loads at the treatment plant. Watertown began working on the wastewater treatment plant facility plan last June of 2023, and we continue to work with DNR on approvals and projects related to the plan.

   Recommendation: I recommend forwarding a resolution to the Watertown City Council which includes a specific mention of the action the wastewater utility is required to conduct.

   Statement in resolution:

   Whereas; The Public Works Commission has recommended the following action regarding the influent BOD design exceedance for loading. To continue working with our engineering consultant who is actively engaged with the facilities plan update regarding the plant design parameters for BOD, and to continue supporting the wastewater utility staff with equipment and infrastructure improvements when and where necessary, pending available funding.

   Sincerely,

   Peter Hartz
   Water Systems Manger

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Influent Flow and Loading

1. Monthly Average Flows and BOD Loadings

1.1 Verify the following monthly flows and BOD loadings to your facility.

Influent No. 701	Influent Monthly Average Flow, MGD	x	Influent Monthly Average BOD Concentration mg/L	x	8.34	=	Influent Monthly Average BOD Loading, lbs/day
January	2.8060	x	290	x	8.34	=	6,793
February	3.3609	x	242	x	8.34	=	6,785
March	4.0656	x	197	x	8.34	=	6,691
April	5.5957	x	164	x	8.34	=	7,662
May	4.0922	x	228	x	8.34	=	7,789
June	5.9302	x	161	x	8.34	=	7,967
July	4.6093	x	170	x	8.34	=	6,540
August	3.7123	x	248	x	8.34	=	7,669
September	2.7697	x	326	x	8.34	=	7,527
October	2.3222	x	391	x	8.34	=	7,563
November	2.6602	x	265	x	8.34	=	5,878
December	2.4909	x	298	x	8.34	=	6,186

2. Maximum Monthly Design Flow and Design BOD Loading

2.1 Verify the design flow and loading for your facility.

Design	Design Factor	x	%	=	% of Design
Max Month Design Flow, MGD	8.8	x	90	=	7.92
		x	100	=	8.8
Design BOD, lbs/day	6600	x	90	=	5940
		x	100	=	6600

2.2 Verify the number of times the flow and BOD exceeded 90% or 100% of design, points earned, and score:

	Months of Influent	Number of times flow was greater than 90% of	Number of times flow was greater than 100% of	Number of times BOD was greater than 90% of design	Number of times BOD was greater than 100% of design
January	1	0	0	1	1
February	1	0	0	1	1
March	1	0	0	1	1
April	1	0	0	1	1
May	1	0	0	1	1
June	1	0	0	1	1
July	1	0	0	1	0
August	1	0	0	1	1
September	1	0	0	1	1
October	1	0	0	1	1
November	1	0	0	0	0
December	1	0	0	1	0
Points per each		2	1	3	2
Exceedances		0	0	11	9
Points		0	0	33	18
Total Number of Points					**51**

51

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

● Yes — Enter last calibration date (MM/DD/YYYY): 2024-10-22

○ No

If No, please explain:

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

● Yes

○ No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

● Yes

○ No

If Yes, please explain:

The city of Watertown has four (4) active industrial pre-treatment permits issued to businesses with target limits in place. One (1) of those facilities has established Federal pre-treatment limits and a permit requirement to meet all of those limits in their discharge.

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

Septic Tanks	Holding Tanks	Grease Traps
● Yes	● Yes	● Yes
○ No	○ No	○ No

5.2 Did you receive septage at your facility? If yes, indicate volume in gallons.

Septic Tanks

○ Yes — gallons

● No

Holding Tanks

● Yes — 132,142 gallons

○ No

Grease Traps

○ Yes — gallons

● No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

Plant performance does not appear to be negatively impacted.

6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

○ Yes

● No

If yes, describe the situation and your community's response.

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?

○ Yes

● No

If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.

Total Points Generated	51
Score (100 - Total Points Generated)	49
Section Grade	**F**

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit > 10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	5	1	0	0
February	30	27	5	1	0	0
March	30	27	5	1	0	0
April	30	27	6	1	0	0
May	30	27	5	1	0	0
June	16	14.4	5	1	0	0
July	12	10.8	7	1	0	0
August	10	10	7	1	0	0
September	10	10	8	1	0	0
October	12	10.8	4	1	0	0
November	25	22.5	4	1	0	0
December	29	26.1	4	1	0	0
* Equals limit if limit is <= 10						
Months of discharge/yr				12		
Points per each exceedance with 12 months of discharge					7	3
Exceedances					0	0
Points					0	0
Total number of points						**0**

0

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

● Yes — Enter last calibration date (MM/DD/YYYY): 2024-10-22

○ No

If No, please explain:

3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

Daphnia magna aquatic insect infestations in clarifiers, however the minnow stocking does control this adequately and seems to have eliminated the outbreaks infestations.

4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

○ Yes

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

- ● No

If Yes, please explain:

4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?

- ○ Yes
- ● No

If Yes, please explain:

4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?

- ○ Yes
- ○ No
- ● N/A

Please explain unless not applicable:

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Effluent Quality and Plant Performance (Total Suspended Solids)

1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit >10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	30	27	4	1	0	0
February	30	27	3	1	0	0
March	30	27	3	1	0	0
April	30	27	4	1	0	0
May	30	27	4	1	0	0
June	16	14.4	4	1	0	0
July	12	10.8	4	1	0	0
August	10	10	4	1	0	0
September	10	10	5	1	0	0
October	12	10.8	3	1	0	0
November	25	22.5	3	1	0	0
December	29	26.1	3	1	0	0
* Equals limit if limit is <= 10						
Months of Discharge/yr				12		
Points per each exceedance with 12 months of discharge:					**7**	**3**
Exceedances					0	0
Points					0	0
Total Number of Points						**0**

0

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Effluent Quality and Plant Performance (Ammonia - NH3)

1. Effluent Ammonia Results

1.1 Verify the following monthly and weekly average effluent values, exceedances and points for ammonia

Outfall No. 001	Monthly Average NH3 Limit (mg/L)	Weekly Average NH3 Limit (mg/L)	Effluent Monthly Average NH3 (mg/L)	Monthly Permit Limit Exceedance	Effluent Weekly Average for Week 1	Effluent Weekly Average for Week 2	Effluent Weekly Average for Week 3	Effluent Weekly Average for Week 4	Weekly Permit Limit Exceedance
January	20	20	.067	0	.035	.055	.097	.057	0
February	20	20	.087	0	.205	.041	.057	.054	0
March	20	20	.118	0	.047	.096	.246	.104	0
April									0
May									0
June	17	17	.103	0	.079	.036	.105	.206	0
July	9	9	.024	0	.022	.029	.025	.028	0
August	6.4	6.4	.112	0	.254	.07	.056	.082	0
September	8.9	8.9	.06	0	.053	.071	.048	.048	0
October	9.3	13	.07	0	.071	.063	.064	.077	0
November	20	20	.049	0	.063	.04	.046	.047	0
December	20	20	.041	0	.045	.042	.042	.041	0

Points per each exceedance of Monthly average:	10
Exceedances, Monthly:	0
Points:	0
Points per each exceedance of weekly average (when there is no monthly average):	2.5
Exceedances, Weekly:	0
Points:	0
Total Number of Points	**0**

0

NOTE: Limit exceedances are considered for monthly OR weekly averages but not both. When a monthly average limit exists it will be used to determine exceedances and generate points. This will be true even if a weekly limit also exists. When a weekly average limit exists and a monthly limit does not exist, the weekly limit will be used to determine exceedances and generate points.

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Effluent Quality and Plant Performance (Phosphorus)

1. Effluent Phosphorus Results

1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

Outfall No. 001	Monthly Average phosphorus Limit (mg/L)	Effluent Monthly Average phosphorus (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance
January	1	0.296	1	0
February	1	0.353	1	0
March	1	0.460	1	0
April	.8	0.295	1	0
May	1	0.213	1	0
June	.8	0.213	1	0
July	1	0.240	1	0
August	1	0.240	1	0
September	1	0.182	1	0
October	1	0.212	1	0
November	1	0.366	1	0
December	1	0.281	1	0
Months of Discharge/yr			12	
Points per each exceedance with 12 months of discharge:				**10**
Exceedances				0
Total Number of Points				**0**

0

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Biosolids Quality and Management

1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- ☒ Land applied under your permit
- ☐ Publicly Distributed Exceptional Quality Biosolids
- ☐ Hauled to another permitted facility
- ☐ Landfilled
- ☐ Incinerated
- ☐ Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

2. Land Application Site

2.1 Last Year's Approved and Active Land Application Sites

2.1.1 How many acres did you have?

2033 acres

2.1.2 How many acres did you use?

108.1 acres

2.2 If you did not have enough acres for your land application needs, what action was taken?

2.3 Did you overapply nitrogen on any of your approved land application sites you used last year?

- ○ Yes (30 points)
- ● No

0

2.4 Have all the sites you used last year for land application been soil tested in the previous 4 years?

- ● Yes
- ○ No (10 points)
- ○ N/A

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

Outfall No. 004 - CAKE SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic		41	75	23			19			21			29				0	0
Cadmium		39	85	.59			.63			.67			.65				0	0
Copper		1500	4300	310			310			310			340				0	0
Lead		300	840	16			16			22			17				0	0
Mercury		17	57	<.36			.53			<.31			<.33				0	0
Molybdenum	60		75	9.8			7.6			7.2			8.7			0		0
Nickel	336		420	43			31			38			40			0		0
Selenium	80		100	<16			<11			<8.8			<10			0		0
Zinc		2800	7500	610			540			570			630				0	0

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Outfall No. 002 - LIQUID SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic		41	75														0	0
Cadmium		39	85														0	0
Copper		1500	4300														0	0
Lead		300	840														0	0
Mercury		17	57														0	0
Molybdenum	60		75													0		0
Nickel	336		420													0		0
Selenium	80		100													0		0
Zinc		2800	7500														0	0

3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

- ● 0 (0 Points)
- ○ 1-2 (10 Points)
- ○ > 2 (15 Points)

3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box)

- ○ Yes
- ○ No (10 points)
- ● N/A - Did not exceed limits or no HQ limit applies (0 points)
- ○ N/A - Did not land apply biosolids until limit was met (0 points)

3.1.3 Number of times any of the metals exceeded the ceiling limits = 0

Exceedence Points

- ● 0 (0 Points)
- ○ 1 (10 Points)
- ○ > 1 (15 Points)

3.1.4 Were biosolids land applied which exceeded the ceiling limit?

- ○ Yes (20 Points)
- ● No (0 Points)

3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified?

0

4. Pathogen Control (per outfall):

4.1 Verify the following information. If any information is incorrect, use the Report Issue button under the Options header in the left-side menu.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2024 - 03/31/2024
Density:	13,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees Fahrenheit.

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2024 - 12/31/2024
Density:	13,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2024 - 12/31/2024
Density:	31,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2024 - 12/31/2024
Density:	30,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

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Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	01/01/2024 - 12/31/2024
Density:	12,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2024 - 06/30/2024
Density:	12,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees Fahrenheit.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2024 - 12/31/2024
Density:	31,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

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Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2024 - 12/31/2024
Density:	30,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	04/01/2024 - 12/31/2024
Density:	12,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2024 - 09/30/2024
Density:	30,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	No
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees F.

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Outfall Number:	**004**
Biosolids Class:	B
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	10/01/2024 - 12/31/2024
Density:	31,000
Sample Concentration Amount:	CFU/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Anaerobic Digestion
Process Description:	Anaerobic digestion is utilized to meet list 3 requirements prior to land application. Operated mesophilic 95 to 98 degrees Fahrenheit.

0

4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.

4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?

○ Yes (40 Points)

● No

If yes, what action was taken?

5. Vector Attraction Reduction (per outfall):

5.1 Verify the following information. If any of the information is incorrect, use the Report Issue button under the Options header in the left-side menu.

Outfall Number:	**004**
Method Date:	01/03/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	>=38
Results (if applicable):	63.2

Outfall Number:	**004**
Method Date:	01/03/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	63.2

Outfall Number:	**004**
Method Date:	10/31/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	50.3

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Outfall Number:	**004**
Method Date:	07/23/2025
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	41.1

Outfall Number:	**004**
Method Date:	05/14/2025
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	55.4

Outfall Number:	**004**
Method Date:	05/14/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	>=38
Results (if applicable):	55.4

Outfall Number:	**004**
Method Date:	10/31/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	50.3

Outfall Number:	**004**
Method Date:	07/23/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	41.1

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Reporting For: **2024**

Outfall Number:	**004**
Method Date:	05/14/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	55.4

Outfall Number:	**004**
Method Date:	07/23/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	No
Limit (if applicable):	>=38
Results (if applicable):	41.1

Outfall Number:	**004**
Method Date:	10/31/2024
Option Used To Satisfy Requirement:	Volatile Solids Reduction
Requirement Met:	Yes
Land Applied:	Yes
Limit (if applicable):	>=38
Results (if applicable):	50.3

0

5.2 Was the limit exceeded or the process criteria not met at the time of land application?

- ○ Yes (40 Points)
- ● No

If yes, what action was taken?

6. Biosolids Storage

6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?

- ● >= 180 days (0 Points)
- ○ 150 - 179 days (10 Points)
- ○ 120 - 149 days (20 Points)
- ○ 90 - 119 days (30 Points)
- ○ < 90 days (40 Points)
- ○ N/A (0 Points)

0

6.2 If you checked N/A above, explain why.

7. Issues

7.1 Describe any outstanding biosolids issues with treatment, use or overall management:

We continue to have concerns with PFAS/PFOS and disposal options as looking into the future shows a moving target for regulations.

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Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

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Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing

1.1 Was your wastewater treatment plant adequately staffed last year?

- ○ Yes
- ● No

If No, please explain:

We had a vacancy in the wastewater operations team lasting from June 1 through the end of the year.

Could use more help/staff for:

Industrial pre-treatment program, citywide grease monitoring

1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?

- ● Yes
- ○ No

If No, please explain:

2. Preventative Maintenance

2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?

- ● Yes (Continue with question 2) ☐☐
- ○ No (40 points)☐☐

If No, please explain, then go to question 3:

2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?

- ● Yes
- ○ No (10 points)

0

2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?

- ● Yes
  - ○ Paper file system
  - ○ Computer system
  - ● Both paper and computer system
- ○ No (10 points)

3. O&M Manual

3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed?

- ● Yes
- ○ No

4. Overall Maintenance /Repairs

4.1 Rate the overall maintenance of your wastewater plant.

- ● Excellent
- ○ Very good
- ○ Good
- ○ Fair
- ○ Poor

Describe your rating:

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Wastewater staff in Watertown take great pride in their work and our facilities, unfortunately while pay is below our peers in our geographical area, the results are very good because we have real people who care employed.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

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Operator Certification and Education

1. Operator-In-Charge

1.1 Did you have a designated operator-in-charge during the report year?

- ● Yes (0 points)
- ○ No (20 points)

Name: PETER A HARTZ

Certification No: 32167

0

2. Certification Requirements

2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?

Sub Class	SubClass Description	WWTP	OIC		
		Advanced	OIT	Basic	Advanced
A1	Suspended Growth Processes	X			X
A2	Attached Growth Processes				X
A3	Recirculating Media Filters				
A4	Ponds, Lagoons and Natural				X
A5	Anaerobic Treatment Of Liquid				
B	Solids Separation	X			X
C	Biological Solids/Sludges	X			X
P	Total Phosphorus	X			X
N	Total Nitrogen				
D	Disinfection	X			X
L	Laboratory	X			X
U	Unique Treatment Systems				
SS	Sanitary Sewage Collection	X	X	NA	NA

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS is required 5 years after permit reissuance.)

- ● Yes (0 points)
- ○ No (20 points)

2.3 For wastewater treatment facilities with a registered or certified laboratory, is at least one operator that works in the laboratory certified at the basic level in the laboratory (L) subclass?

- ● Yes
- ○ No
- ○ N/A – Wastewater treatment facility does not have a registered or certified laboratory

2.4 For wastewater treatment facilities that own and operate a sanitary sewage collection system, has at least one operator been designated the OIC for sanitary sewage collection system and certified at the basic level in the sanitary sewage collection system (SS) subclass?

- ● Yes
- ○ No
- ○ N/A – Owner of the Wastewater treatment facility does not own and operate a sanitary sewage collection system

0

3. Succession Planning

3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?

- ☒ One or more additional certified operators on staff

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☐ An arrangement with another certified operator ☐ An arrangement with another community with a certified operator ☐ An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year ☐ A consultant to serve as your certified operator ☐ None of the above (20 points) If "None of the above" is selected, please explain:	**0**
4. Continuing Education Credits 4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates? OIT and Basic Certification: ○ Averaging 6 or more CECs per year. ○ Averaging less than 6 CECs per year. Advanced Certification: ● Averaging 8 or more CECs per year. ○ Averaging less than 8 CECs per year.	

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

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Financial Management

1. Provider of Financial Information

Name: Peter Hartz

Telephone: 920-262-4085 (XXX) XXX-XXXX

E-Mail Address (optional): phartz@watertownwi.gov

2. Treatment Works Operating Revenues

2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?

- ● Yes (0 points) ☐☐
- ○ No (40 points)

If No, please explain:

2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?

Year: 2024

- ● 0-2 years ago (0 points) ☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A (private facility)

2.3 Did you have a special account (e.g., CWFP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?

- ● Yes (0 points)
- ○ No (40 points)

0

REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]

3. Equipment Replacement Funds

3.1 When was the Equipment Replacement Fund last reviewed and/or revised?

Year: 2024

- ● 1-2 years ago (0 points)☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A

If N/A, please explain:

3.2 Equipment Replacement Fund Activity

3.2.1 Ending Balance Reported on Last Year's CMAR		$ 975,429.50
3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)	+	$ 0.00
3.2.3 Adjusted January 1st Beginning Balance		$ 975,429.50
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	+	$ 1,174,120.00

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*) - $ 1,174,120.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year $ 975,429.50

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

New computer server, new SCADA servers (x2), new wet well mixers, new list station pumps, engineering report for Allerman LS upgrade, new launder covers (x2), install new back entrance gravel driveway, 2 new lift station generators & electrical controls, new fleet vehicle, new spiral heat exchangers (x2), CIPP pipe lining, new sanitary sewer CIP work, engineering design work for utility projects in CIP, outside engineering for CIP planning, New WWTP Facilities Plan engineering work

0

3.3 What amount should be in your Replacement Fund? $ 975,249.50

Please note: If you had a CWFP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

- ● Yes
- ○ No

If No, please explain.

4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

- ● Yes - If Yes, please provide major project information, if not already listed below.☐☐
- ○ No

Project #	Project Description	Estimated Cost	Approximate Construction Year
1	Install new interceptor sewer for new drainage basin development, but only for part of the west side interceptor service area to include an extension to Highway A / River Rd. from Hoffmann Drive.	$8,000,000	2027
2	GIS enhancements	$30,000	2025
3	Continuance of hydraulic study for the sanitary sewer service area. Specific drainage basin model updates for areas anticipated to see development.	$15,000	2025
4	Biosolids dryer, design & bidding (installation planned for 2026).	$5,225,000	2025
5	Alerman lift station engineering & rehab - controls and pumps	$3,500,000	2028
6	WWTP facilities planning update project engineering, design, and process upgrades (yet to be determined)	$10,000,000	2025
7	New influent automatic screens	$2,000,000	2027

5. Financial Management General Comments

A sewer rate study was paused by the public works commission until 2027

ENERGY EFFICIENCY AND USE

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6. Collection System

6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

COLLECTION SYSTEM PUMPAGE: Total Power Consumed

Number of Municipally Owned Pump/Lift Stations: 18

	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	13,857	
February	14,699	
March	14,047	
April	19,257	
May	13,836	
June	16,654	
July	14,971	
August	12,917	
September	11,866	
October	9,618	
November	11,027	
December	14,130	
Total	**166,879**	**0**
Average	**13,907**	**0**

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- ☐ Comminution or Screening
- ☐ Extended Shaft Pumps
- ☒ Flow Metering and Recording
- ☐ Pneumatic Pumping
- ☒ SCADA System
- ☐ Self-Priming Pumps
- ☒ Submersible Pumps
- ☒ Variable Speed Drives
- ☐ Other:

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

- ● No
- ○ Yes

Year:

By Whom:

Describe and Comment:

6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

Mixer replacement with wet well wizards

7. Treatment Facility

7.1 Energy Usage

7.1.1 Enter the monthly energy usage from the different energy sources:

TREATMENT PLANT: Total Power Consumed/Month

	Electricity Consumed (kWh)	Total Influent Flow (MG)	Electricity Consumed/ Flow (kWh/MG)	Total Influent BOD (1000 lbs)	Electricity Consumed/ Total Influent BOD (kWh/1000lbs)	Natural Gas Consumed (therms)
January	217,080	86.99	2,495	210.58	1,031	9,561
February	195,552	97.47	2,006	196.77	994	6,011
March	202,510	126.03	1,607	207.42	976	0
April	245,923	167.87	1,465	229.86	1,070	6,212
May	239,415	126.86	1,887	241.46	992	2,533
June	330,971	177.91	1,860	239.01	1,385	1,188
July	325,875	142.89	2,281	202.74	1,607	1,906
August	272,882	115.08	2,371	237.74	1,148	451
September	274,862	83.09	3,308	225.81	1,217	1,658
October	250,485	71.99	3,479	234.45	1,068	2,214
November	175,238	79.81	2,196	176.34	994	1,010
December	227,795	77.22	2,950	191.77	1,188	4,463
Total	**2,958,588**	**1,353.21**		**2,593.95**		**37,207**
Average	**246,549**	**112.77**	**2,325**	**216.16**	**1,139**	**3,382**

7.1.2 Comments:

Unsure of March natural gas consumed, zero is shown on the WeEnergy Utility bill for that month.

7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- ☐ Aerobic Digestion
- ☒ Anaerobic Digestion
- ☐ Biological Phosphorus Removal
- ☐ Coarse Bubble Diffusers
- ☒ Dissolved O2 Monitoring and Aeration Control
- ☐ Effluent Pumping
- ☒ Fine Bubble Diffusers

☒ Influent Pumping
☒ Mechanical Sludge Processing
☒ Nitrification
☒ SCADA System
☒ UV Disinfection
☒ Variable Speed Drives
☐ Other:

7.2.2 Comments:

7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

Solar panels being installed in 2025

8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?
○ No
● Yes

If Yes, how is the biogas used (Check all that apply):
☒ Flared Off
☒ Building Heat
☒ Process Heat
☐ Generate Electricity
☐ Other:

9. Energy Efficiency Study

9.1 Has an Energy Study been performed for your treatment facility?
○ No
● Yes

☒ Entire facility

Year: 2024

By Whom: Partnership with UW-Milwaukee & University of Illinois Chicago / US Dept. Of Energy

Describe and Comment: Completed an initial technical assistance report for on-site energy production and efficiencies.

☐ Part of the facility

Year:

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By Whom:

Describe and Comment:

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

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Sanitary Sewer Collection Systems

1. Capacity, Management, Operation, and Maintenance (CMOM) Program

1.1 Do you have a CMOM program that is being implemented?

- ● Yes
- ○ No

If No, explain:

1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

- ● Yes
- ○ No (30 points)
- ○ N/A

If No or N/A, explain:

1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

☒ Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

We continue in our discussions and work to finalize the private sanitary lateral replacement program. We plan on having this completed prior to scheduled work on Dewey Ave which is tentatively planned for 2026.

Did you accomplish them?

- ● Yes
- ○ No

If No, explain:

☒ Organization [NR 210.23 (4) (b)]☐☐

Does this chapter of your CMOM include:

- ☒ Organizational structure and positions (eg. organizational chart and position descriptions)
- ☒ Internal and external lines of communication responsibilities
- ☒ Person(s) responsible for reporting overflow events to the department and the public

☒ Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

Watertown Municipal Code 508

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2015-06-05

Does your sewer use ordinance or other legally binding document address the following:

- ☒ Private property inflow and infiltration
- ☒ New sewer and building sewer design, construction, installation, testing and inspection
- ☒ Rehabilitated sewer and lift station installation, testing and inspection
- ☒ Sewage flows satellite system and large private users are monitored and controlled, as necessary
- ☒ Fat, oil and grease control
- ☒ Enforcement procedures for sewer use non-compliance

☒ Operation and Maintenance [NR 210.23 (4) (d)]

Does your operation and maintenance program and equipment include the following:

- ☒ Equipment and replacement part inventories
- ☒ Up-to-date sewer system map

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☒ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation
☒ A description of routine operation and maintenance activities (see question 2 below)
☐ Capacity assessment program
☒ Basement back assessment and correction
☒ Regular O&M training

☒ Design and Performance Provisions [NR 210.23 (4) (e)]☐☐

What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?

☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements
☒ Construction, Inspection, and Testing
☐ Others:

☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)]☐☐

Does your emergency response capability include:

☒ Responsible personnel communication procedures
☒ Response order, timing and clean-up
☒ Public notification protocols
☒ Training
☒ Emergency operation protocols and implementation procedures

☒ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]☐☐

☒ Special Studies Last Year (check only those that apply):

☒ Infiltration/Inflow (I/I) Analysis
☐ Sewer System Evaluation Survey (SSES)
☐ Sewer Evaluation and Capacity Managment Plan (SECAP)
☐ Lift Station Evaluation Report
☒ Others:

Updated WWTP Facilities Plan was completed and submitted to DNR

0

2. Operation and Maintenance

2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained.

Cleaning	29.6	% of system/year
Root removal	5	% of system/year
Flow monitoring	10	% of system/year
Smoke testing	0	% of system/year
Sewer line televising	7	% of system/year
Manhole inspections	29.6	% of system/year
Lift station O&M	18	# per L.S./year
Manhole rehabilitation	.5	% of manholes rehabbed
Mainline rehabilitation	1.43	% of sewer lines rehabbed
Private sewer inspections	1	% of system/year

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Private sewer I/I removal	0	% of private services
River or water crossings	100	% of pipe crossings evaluated or maintained

Please include additional comments about your sanitary sewer collection system below:

3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

41.82	Total actual amount of precipitation last year in inches
36.02	Annual average precipitation (for your location)
109	Miles of sanitary sewer
18	Number of lift stations
0	Number of lift station failures
0	Number of sewer pipe failures
1	Number of basement backup occurrences
15	Number of complaints
3.6929	Average daily flow in MGD (if available)
11.182	Peak monthly flow in MGD (if available)
	Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

0.00	Lift station failures (failures/year)
0.00	Sewer pipe failures (pipe failures/sewer mile/yr)
0.00	Sanitary sewer overflows (number/sewer mile/yr)
0.01	Basement backups (number/sewer mile)
0.14	Complaints (number/sewer mile)
3.0	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
0.0	Peaking factor ratio (Peak Hourly:Annual Daily Avg)

4. Overflows

LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OVERFLOWS REPORTED **			
Date	Location	Cause	Estimated Volume
None reported			

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

- ● Yes
- ○ No

If Yes, please describe:

During normal or dry times, we average approximately 1,000,000 per day of clear water infiltration into the sanitary sewer system. A quick comparison to the daily drinking water pumped vs treated wastewater flow is used to estimate. Rain events will spike the flows up to 4x higher in a matter of hours.

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

- ● Yes
- ○ No

If Yes, please describe:

Rain events exceeding 2 inches in a day cause a massive increase in influent flows, we know this is due to foundation drain tiles connected to the sanitary laterals in large older parts of the city. Look at the June 2 - 7 on the eDMR for a look at the flow increase and rain event. The end of May to middle of June was 2x normal peaking on June 3-4.

5.3 Explain any infiltration/inflow (I/I) changes this year from previous years:

No changes - same high flows when it rains.

5.4 What is being done to address infiltration/inflow in your collection system?

While the details continued to worked on, we are hoping to finalize a private lateral inspection and replacement program to address the foundation drain tile connections to the sanitary sewer. We are working with our internal team members to make sure this program is sustainable and also addresses the increase in surface water discharged to the home yards and storm sewer system. The cost to implement this program has yet to be determined as the sanitary laterals are privately owned from the building up to and including the connection to the sanitary main.

Total Points Generated	0
Score (100 - Total Points Generated)	100
Section Grade	**A**

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Grading Summary

WPDES No: 0028541

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	F	0	3	0
BOD/CBOD	A	4	10	40
TSS	A	4	5	20
Ammonia	A	4	5	20
Phosphorus	A	4	3	12
Biosolids	A	4	5	20
Staffing/PM	A	4	1	4
OpCert	A	4	1	4
Financial	A	4	1	4
Collection	A	4	3	12
TOTALS			**37**	**136**
GRADE POINT AVERAGE (GPA) = 3.68				

Notes:
A = Voluntary Range (Response Optional)
B = Voluntary Range (Response Optional)
C = Recommendation Range (Response Required)
D = Action Range (Response Required)
F = Action Range (Response Required)

Compliance Maintenance Annual Report

Watertown Wastewater Treatment Facility

Last Updated: 5/7/2025

Reporting For: **2024**

Resolution or Owner's Statement

Name of Governing Body or Owner:

Date of Resolution or Action Taken:

Resolution Number:

Date of Submittal:

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):

Influent Flow and Loadings: Grade = F

Whereas; The Public Works Commission has recommended the following action regarding the influent BOD design exceedance for loading. To continue working with our engineering consultant who is actively engaged with the facilities plan update regarding the plant design parameters for BOD, and to continue supporting the wastewater utility staff with equipment and infrastructure improvements when and where necessary, pending available funding.

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

Biosolids Quality and Management: Grade = A

Staffing: Grade = A

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A
(Regardless of grade, response required for Collection Systems if SSOs were reported)

ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS
(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)
G.P.A. = 3.68

RESOLUTION FOR
WASTEWATER UTILITY
2024 COMPLIANCE MAINTENANCE ANNUAL REPORT

SPONSOR: ALDERPERSON ARNETT
FROM: PUBLIC WORKS COMMISSION

WHEREAS, it is a requirement under the Wisconsin Pollutant Discharge Elimination System permit issued by the Wisconsin Department of Natural Resources (WDNR) to complete the Compliance Maintenance Annual Report (CMAR), referenced in Wisconsin Administrative Code NR 208; and,

WHEREAS, the CMAR is a yearly report which evaluates the physical condition, treatment performance, remaining capacity, financial stability, and the sanitary collection system of the City of Watertown's Wastewater Treatment Plant; and,

WHEREAS, by completing the CMAR for 2024, problems within the entire wastewater treatment system are identified and action can be taken to address these problems; and,

WHEREAS, the WDNR requires that the City of Watertown governing body has acknowledged and reviewed the CMAR by resolution prior to the final submission of the report; and,

WHEREAS, the Public Works Commission has recommended the following action regarding the influent BOD design exceedance for loading. To continue working with our engineering consultant who is actively engaged with the facilities plan update regarding the plant design parameters for BOD, and to continue supporting the wastewater utility staff with equipment and infrastructure improvements when and where necessary, pending available funding.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMON COUNCIL OF THE CITY OF WATERTOWN, WISCONSIN that the proper City Officials be and are hereby authorized to approve and adopt a resolution so staff can complete the submission of the CMAR to the Wisconsin Department of Natural Resources.

	YES	*NO*
DAVIS		
LAMPE		
BERG		
BARTZ		
BLANKE		
SMITH		
ARNETT		
WETZEL		
MOLDENHAUER		
MAYOR STOCKS		
TOTAL		

ADOPTED May 20, 2025

_____

CITY CLERK

APPROVED May 20, 2025

_____

MAYOR

(May 20, 2025) Exhibit #

THE CITY OF WATERTOWN

MEMO

Engineering Division of the Public Works Department

To: Chairperson Arnett and Commission Members

From: Andrew Beyer P.E., Director of Public Works/City Engineer

Date: May 8, 2025

Subject: Public Works Commission Meeting of May 13, 2025

Update, no action required: Lake Victoria Vegetation Management

Background

A request was received from property owners abutting Lake Victoria for assistance in managing aquatic vegetation. The City owns land adjacent to Lake Victoria between Franklin Street and Boomer Street as part of Clark Park. In January, the Public Works Commission reviewed the request and tasked staff with examining the ownership of Lake Victoria and drafting a comprehensive, city-wide aquatic vegetation management policy for City-owned waterfront property.

The packet presented to the Commission in January is attached for reference.

Ownership:

The City Attorney has determined that the City does not have any claim to Lake Victoria, and the Lake would belong to the State of Wisconsin as reserved by the WI constitution.

Policy:

City staff met to discuss next steps in development of a draft policy pertaining to aquatic vegetation management for City-owned waterfront. Staff continues to work through draft policy details which will be presented to the Commission at a later date. Policy details to include:

1. Aquatic vegetation management of Department of Natural Resources (DNR) regulated bodies of water like rivers, streams, and lakes
2. Vegetation management of City-owned stormwater management facilities
3. Vegetation management of City-owned ditches and swales

THE CITY OF WATERTOWN

MEMO

Budget Goal

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

Financial Impact

The Public Works Department does not have funds allocated for aquatic plant management of Lake Victoria in the 2025 budget.

Recommendation

Staff recommends no financial commitment at this time for aquatic vegetation management at Lake Victoria. A comprehensive draft policy for City-owned waterfront vegetation management is currently in development and will be presented to the Public Works Commission for review at a future meeting.

THE CITY OF WATERTOWN

MEMO

Public Works Department

To: Chairman Board and Commission Members

From: Andrew Beyer, P.E.

Date: January 9, 2025

Subject: Public Works Commission Meeting of January 14, 2025

Review and take possible action: Lake Vicotria vegetation control request

Background

The City has received a request for assistance with aquatic vegetation and algae treatment of Lake Victoria. The request letter is attached as a reference. Local residents have been hiring a licensed commercial aquatic herbicide applicator and obtaining a Wisconsin Department of Natural Resources (WDNR) Aquatic Plant Management Permit annually to manage aquatic plants and algae in riparian areas of Lake Victoria. The Parks, Recreation, and Forestry (PRF) Commission reviewed this item in late 2024 and moved to table the item. PRF meeting minutes on the item are as follows:

B. Review and recommend: Lake Victoria plant management

Kristine Butteris discussed letters from citizens requesting city assistance in the treatment of Lake Victoria for health and safety purposes. It is also stated in the letter that treatment of lake weeds and algae would be a benefit to both the 10 homeowners along Lake Victoria and community benefit as there is public access to the area. Treatment of the lake doesn't affect the city access path in a positive or negative manner. Majority of public use of Lake Victoria is for fishing which treatment would undermine. It was recommended that the city not assist in the treatment of Lake Victoria due to limited recreational use by the community and hinderance of use if treatment occurred. Treatment is also not currently within city budget. This request will be tabled.

Managing a pond or other waterbody for recreational purposes requires a balanced approach, as an improved waterbody for some activities may negatively impact other activities. For example, fish populations that utilize aquatic plants for cover and habitat may be negatively impacted when large areas of plants are removed for swimming and water sport activities.

The City does not currently chemically manage aquatic plants and algae each year in any other waterbodies. The City does not have a licensed commercial aquatic herbicide applicator for aquatic plant and organism management on staff. City staff do routinely cut terrestrial vegetation and

THE CITY OF WATERTOWN

MEMO

cattails above the water line near inlets and outlets and around the perimeter of city-owned stormwater ponds.

After review, the Public Works Department recommends denying the request for assistance with the aquatic plant treatment. Chemical control of vegetation could negatively impact the sporting and recreational opportunities of Lake Victoria. Additionally, vegetation control is not currently within City budget.

Budget Goal

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

Financial Impact

The Public Works Department does not have funds allocated for aquatic plant management of Lake Victoria in the 2025 budget.

Recommendation

The Public Works Department recommends to deny the request for assistance with the aquatic plant treatment. Chemical control of vegetation could negatively impact sporting and recreational opportunities of Lake Victoria. Additionally, vegetation control is not currently within City budget.

WATERTOWN PARK, RECREATION AND FORESTRY COMMISSION MINUTES

September 12, 2000

CALL TO ORDER: The Watertown Park, Recreation and Forestry Commission met on Monday, September 12, 2000 at 4:30 pm at 515 South First Street. The meeting was called to order by the President Richard Tietz. Present: Richard Tietz, Norman Bartel, Dan Milewsky, Tim Nordwig, Don Cayan, and James Braughler. Absent: Michael Knutson.

APPROVAL OF MINUTES:
A motion was made and seconded to accept the Park, Recreation and Forestry Commission minutes from the August 7, 2000 commission meetings. Motion carried.

A motion was made and seconded to accept the Senior Center Advisory Board minutes of August 9, 2000. Motion carried.

PRESIDENTS REPORT
Commission president, Richard Tietz reminded the commission members that the Brandt/Quirk Park dedication will be held on Saturday, September 30, 2000. He encouraged all commission members to attend the dedication.

DIRECTOR'S REPORT

1. **CONSIDER THE PARK DEDICATION REQUIREMENTS FOR A LAND DIVISION AT 1022 LISBON STREET:** The proposed land division would create a new lot on which the owner is proposing to build a duplex. A motion was made and seconded to accept money in lieu of land dedication. Motion passed.

2. **REVIEW PROPOSAL TO INSTALL NEW PLAYGROUND EQUIPMENT AT SCHALLER PARK:** Commission members reviewed letters received from individuals who wrote both in favor of placing playground equipment in Schaller Park and from individuals opposed to the playground equipment. A number of residents also attended the meeting.

   Speaking in favor of the playground equipment were; Andrea Fisher, Kay Rather, and Mark Stevens. Those in favor of the play equipment stated that there was a need for the play equipment because there are 33 children, ages 6 months to 12 years living in the neighborhood, the neighborhood is rather isolated because of Hwy 26 and the river, and that the park had been donated to the city for the purpose of a playground.

   Speaking in opposition to the playground equipment were Dave and Cathy Egan and John Higgins. Those in opposition stated concerns about safety because of the close proximity to the river, minimal use of the playground equipment that was in the park in past years, and health concerns with the large goose population frequenting the park, concerns of placing a fence along the river and concerns of placing a portable restroom at the site.

The director, John Steber, stated that he continues to have reservations about placing equipment at this park site because of the significant river current adjacent to the park, the limited size of the park and compatibility with the adjacent property owners.

After considerable discussion a motion was made and seconded to approve Schaller Park as a site for future playground equipment and request funds for the purchase and installation of said play equipment in the 2001 budget proposal. Motion passed on a 3 to 2 vote.

3. **CONSIDER REQUEST TO HAVE THE CITY CHEMICALLY TREAT LAKE VICTORIA WEED AND ALGIE PROBLEMS:** The director presented a letter from MaryAnne Wieland of 1612 Lakeside Terrace. The letter included the names and addresses of eleven (11) adjacent property owners. In her letter, Mrs. Wieland noted that the department was currently chemically treating Heiden Pond and requested that the department consider also treating Lake Victoria. She noted that Lake Victoria is located adjacent to Heiden Pond and that there is an exchange of water through a culvert between the two ponds which contributes to the weed and algae problems in Lake Victoria. She also noted that this year it costs the adjacent property owners $2,635.00 in 2000 to chemically treat the lake.

The director presented a map of the two ponds and the adjacent property owners. He noted that the city owns better than half of the frontage adjacent to Heiden Pond and owns less than a quarter of the frontage on Lake Victoria which is the narrow of land and the South Third Street right-of-way. Mr. Steber explained that the department accepted responsibility for spraying the weeds in Heiden Pond only after Aquatic Biologists of Fond du Lac, Wisconsin did an evaluation of the Heiden Pond weed problem in 1992. The report noted that a majority of the weed problems stemmed from nutrient loading which comes from a drainage ditch along Boomer Street which empties into the pond. Mr. Steber note that there is a small 14" culvert located in the 3rd Street right-of-way which does connect the two ponds. In his opinion, the culvert is not a major contributor to the weed problems in Lake Victoria. It is his opinion that much of the nutrient loading is likely coming from the yards of the homes which have been built adjacent to the lake in recent years.

A motion was made and seconded to deny the request to have the Park, Recreation and Forestry Department accept responsibility for weed and algae control of Lake Victoria. Motion passed.

4. **REVIEW OF THE 2001 BUDGET PROPOSAL:** Commission members reviewed the departments 2001 budget proposal. After considerable discussion and a number amendments a motion was made and seconded to accepted the 2001 Budget Proposal as amended. Motion carried.

Respectfully submitted,
John R. Steber
Director of Park, Recreation and Forest

8.30.24

Dear Neighbor,

Many of us have lived on Lake Victoria for over 25 years. We are thankful to call this place home. From friendly and thoughtful neighbors, a healthy community, and a beautiful environment, I have much to be thankful for as a resident. I believe that the residents of the 10 homes along the private shore have much to be thankful for as residents.

We have shared a concern and commitment to the health and safety of Lake Victoria for many years. Linda Hepp and I have been responsible for collecting fees from neighbors since 1993 to treat our watershed for weeds and algae so that we can all enjoy its benefits. With runoff from yards and streets feeding into Lake Victoria, the health and safety would be compromised if left untreated.

In a recent conversation between one of the homeowners along our shared shore and our Alderman, Myron Moledenhaver, the idea came up that the Lake Victoria is not just a benefit to residents of our shore but is also of community benefit as there is public access and public usage. As a natural feature with both private and public value, there should be a public and private partnership to treat Lake Victoria.

In 2001, this request was made to our City Council and denied. The City was unwilling to share financial responsibility. On average, the cost of maintenance is $3,500 per year or approximately $350-$400 per residence. When others have been unwilling or unable to contribute, this is a cost our family has covered because not only does a healthy Lake Victoria improve all of our property values, but it also improves our quality of life. Of course, increased property values also mean increased taxes. So, residence along our shore pay double for the direct expense along with the higher tax rate.

A public-private partnership would alleviate some of the financial burden of maintenance for the 10 residents on our shore and better reflect the City's interest and benefit from a well maintained Lake Victoria.

If you'd like the City to pay its fair share of the expenses for maintaining Lake Victoria, please sign below.

With respect,

Your neighbors,

Rod and Maryanne Wieland and Dale and Barb Winkelman

1) Dale & Barb Winkelman 9/30
1608 Lakeside Terrace

2) Linda Hepp 1616 Lakeside Terrace

3) Marie Wolbrath 1620 Lakeside Terrace

4) Georgene McCaig 1604 Lakeside Ter. 9/30/24

5) [illegible] 405 Franklin St 9/30/24

6) Mary R. Zwerg 309 Franklin 9/30/24

7) [illegible] 301 Franklin 9-30-24

8) Kelly Pochop Kelly Pochop 401 Franklin 10.2.24

9) Maryanne Wieland 1612 Lakeside Terr
Rod Wieland Wtfd. Wi 53094

10) Mary Krause 1600 LAKESIDE TERR WTFD 53094

THE CITY OF WATERTOWN

MEMO

Engineering Division of the Public Works Department

To: Chairman Arnett and Commission Members

From: Andrew Beyer, P.E.

Date: May 8, 2025

Subject: Public Works Commission Meeting of May 13, 2025

Background

The prospective developer of 1013 S. Fifth Street is requesting access to the property via an unimproved gravel portion of the public right-of-way located in the 1000 block of S. Fifth Street. Approximately 110 linear feet of right-of-way would require improvement to meet City standards for public street access, including grading, pavement, curb and gutter, sewer & water improvements, and stormwater infrastructure.

The proposed development at 1013 S. Fifth Street has been reviewed by the Site Plan Review Committee and the Plan Commission, both of which recommended approval of the project conditional upon a determination regarding the required right-of-way improvement. The matter of project administration and funding responsibility for those improvements was also communicated to the subdivider prior to the proposed lot development.

Per the City's subdivision code, subdividers are generally responsible for constructing and dedicating public infrastructure, such as roadways, sidewalks, sanitary sewer, water main, drainage improvements, & curb and gutter, associated with new land divisions. Improvements must be substantially completed and accepted prior to the issuance of building permits. While the code provides some flexibility regarding how improvement costs are funded, right-of-way improvement construction costs have historically been borne by the subdivider or developer.

This request involves infill development rather than a conventional new subdivision. To date, staff is not aware of a project where the City has used public funds to construct roadway improvements in similar infill development scenarios. Allowing public funding in this instance may establish a precedent and shift future expectations regarding the City's role in providing access to private development sites through unimproved public right-of-way.

Given these considerations, staff is requesting direction from the Public Works Commission in two key areas:

THE CITY OF WATERTOWN

MEMO

1. Project Administration

Should the right-of-way improvement be administered and constructed by the City, or should the developer be required to complete utility and roadway construction independently?

2. Funding Responsibility

The estimated cost associated with design and construction of the unimproved right-of-way area is roughly $110,000.

Enclosed:

- Site Map
- Chapter 545-4(C)(3)

Budget Goal

2. Proactively maintains and improves our parks and infrastructure to ensure safety, quality, and equity
4. Fosters community growth by assessing opportunities, stakeholder input, environmental needs, and modern code and policy priorities

Financial Impact

The estimated right-of-way improvement cost is roughly $110,000 for design and construction.

Recommendation

City staff acknowledges that the request for access to 1013 S. Fifth Street via the unimproved public right-of-way presents a unique situation, as the development involves infill construction with site access proposed from a previously platted unimproved public right-of-way.

Staff recommends that the Public Works Commission provide direction on the following items:

1. Whether the right-of-way improvements should be administered and constructed by the City or the developer.
2. Whether the cost of the improvements should be publicly funded or privately funded.

City Boundary
Parcel Boundary
Address Points
Sanitary Lift Stations
Sanitary Manholes
Flow Meter
Work Orders
Sanitary Main
MainLineType
Sanitary Sewer
Force Main
Siphon
Interceptor
Private Manholes
Private Main
Wells
Valves (by Type)
Valve Use
Air Release Valve
Hydrant Valve
Private Valve
Roadway Valve
Service Valve
Water Valve
<all other values>
Curb Stop Valves
Symbology
Lead | Lead
Lead | Galvanized Requiring Replacement
Lead | Non-Lead

THE CITY OF WATERTOWN
Opportunity runs through it

City of Watertown Geographic Information System

Scale: 1:600
SCALE BAR = 1"
Printed on: May 8,
Author:

N

136

Chapter 545. Subdivision of Land

Article I. General Provisions

§ 545-4. General requirements.

(3) Public facilities and public services for a proposed plat or certified survey map may be found to be adequate when the following conditions exist:

(a) Where the proposed land division is located in an urban service area or planned future urban service area where mainline interceptor sewer service is available, presently under construction, or designated by the Common Council for extension of sewer service, the Plan Commission and the Common Council also shall consider the recommendations of the City Engineer and the Public Works Commission on the capacity of trunk lines, sewage treatment facilities, and any other information presented. Where the proposed land division is not located in an urban service area or planned future urban service area where mainline interceptor sewer service is available, presently under construction, or designated by the Common Council for extension of sewer service, the Plan Commission and the Common Council shall consider the site-specific and overall impact of such development on the public health, safety, and welfare of the immediate area and the community as a whole.

(b) Where the proposed land division is located within an urban service area or planned urban service area where arterial transmission water main service and adequate capacity are available, presently under construction, or designated by the Common Council for extension of public water service, the Plan Commission and the Common Council shall consider the recommendations of the City Engineer and the Public Works Commission on line capacities, water sources, storage facilities, and any other information presented. Where the proposed land division is located within an urban service area or planned urban service area where arterial transmission water main service and capacity are not available, presently under construction, or designated by the Common Council for extension of public water service, the Plan Commission and the Common Council shall consider the site-specific and overall impact of such development on the public health, safety, and welfare of the immediate area and the community as a whole.

(c) The City Engineer and Public Works Commission shall recommend to the Plan Commission and the Common Council that adequate facilities are available to ensure the proper stormwater management.

(d) The Parks, Recreation and Forestry Commission shall recommend that future residents of the proposed land division can be assured park, recreation, and open space areas, facilities, and services which meet the standards of the Park and Open Space Plan.

(e) The appropriate Police Department and Fire District shall verify that timely and adequate service can be provided to the residents.

(f) The proposed land division shall be accessible by existing publicly maintained, all-weather roads adequate to accommodate existing traffic and that traffic to be generated by the proposed land division, necessary additional roads and road improvements shall be budgeted for construction with public or private financing, or public transportation service shall be deemed sufficient to serve the land division in combination with the foregoing available or programmed for the area. The Plan Commission and the Common Council shall consider the recommendations of other commenting agencies and jurisdictions and such factors as level of service, average and peak use, and any other information presented.

(g) Where the Plan Commission and the Common Council determine that one or more public facilities or services are not adequate for the proposed development but that a portion of the area could be served adequately or that careful phasing of the development could result in all public facilities and public services being adequate, conditional approval may include only such portions or may specify appropriate phasing of the development.

THE CITY OF WATERTOWN

MEMO

Engineering Division of the Public Works Department

To: Chairperson Arnett and Commission Members

From: Andrew Beyer P.E., Director of Public Works/City Engineer

Date: May 7, 2025

Subject: Public Works Commission Meeting of May 13, 2025

Review and take possible action: Sidewalk repair order for 207 Clark Street

Background

Agenda Item:

Review and take possible action: Sidewalk repair order for 207 Clark Street

BACKGROUND:

The Sidewalk Repair Notice for 207 Clark Street was prepared following inspection of the sidewalk prior to tree removal.

Site Address	Estimated cost not to exceed
207 Clark Street	$721.14

A repair inspection report for the property with detailed estimate of cost to repair sidewalk is attached. Property owners who receive sidewalk repair notices have three options on how to move forward with the repair:

1. City contractor to complete repair. Property owner is invoiced following completion.
2. Property owner can hire their own contractor to replace sidewalk to city specifications.
3. Property owner can replace sidewalk to city specifications.

The Engineering Division is seeking approval to send letters via certified mail per Wisconsin State Statute noticing the property owners to repair sidewalk.

THE CITY OF WATERTOWN

MEMO

Budget Goal

1. Proactively maintains and improves our parks and infrastructure to ensure safety, quality, and equity
4. Maintains a safe and healthy community, with an eye toward future needs and trends

Financial Impact

The total estimated cost of $721.14 will initially be charged to the Sidewalk Reserve Account (05-58-11-73). The Engineering Division will then invoice the property owner for the total repair cost.

Recommendation

The Public Works Department recommends issuing the sidewalk repair order for 207 Clark Street for the aforementioned estimated cost.

Motion: Motion to issue the sidewalk repair order for 207 Clark Street for the aforementioned estimated cost.

Attachments:

- Sidewalk Repair Order for 207 Clark Street

THE CITY OF WATERTOWN

ENGINEERING DIVISION

Andrew Beyer, P.E.
920.262.4050

Maureen McBroom, ENV SP
920.206-4264

Nathan Williams
920-262-4052

Ritchie Piltz
920.262.4034

Christopher Newberry
920-390-3164

Administrative Assistant
Wanda Fredrick 920.262.4060

May 14, 2025

Steven L. Voss Trust
N7231 County Road Y
Watertown, WI 53094

TAX PARCEL NUMBER: 291-0815-0924-006

Re: Sidewalk at 207 CLARK STREET, Watertown, WI

Dear PROPERTY OWNER:

Upon inspecting the sidewalk abutting your property at **207 CLARK STREET** at your request, our department has the marked sections of sidewalk **along Clark Street that** have been found to be a hazard and are in need of replacement.

According to City Code 457-3(A), the maintenance of the sidewalk is the responsibility of the abutting property owner.

By order of the Watertown Public Works Commission and affirmed by the Watertown Common Council, you are hereby notified to replace all marked sections of sidewalk according to City specifications.

You, as property owner, may:

1) Replace the sidewalk yourself, according to City specifications.

2) Hire your own sidewalk contractor to replace the sidewalk.

3) Have the City contractor complete the work for you at the prices listed on the enclosed estimate.

A permit is required for this sidewalk replacement. It can be taken out at the Engineering Department in the Municipal Building. There is no charge for this permit.

Being that current weather conditions are not favorable for concrete sidewalk replacement, you have until **July 14, 2025** to repair this sidewalk. If, after this date the sidewalk is not replaced, a contractor hired by the City, shall repair the sidewalk and you will be invoiced for the cost. Any costs less than $300.00 shall be paid in full sixty (60) days from billing date. Costs between $300.00 and $1,000.00 are due in full one (1) year after billing date. Costs greater than $1,000.00 are due in two (2) equal annual payments; the first of which is due one (1) year from billing date and the second is due two (2) years from billing date. Unless previously paid, the costs will be collected as a special tax against the property.

Your sidewalk repair may need a Tree Protection Permit during Construction if adjacent to a city tree. Those permits are also issued at the Engineering Department in the Municipal Building. There is no charge for this permit.

Please advise us before **July 7, 2025** of which method you plan to repair this sidewalk.

Thank you for your cooperation in this matter.

Sincerely,

Ritchie Piltz

Ritchie Piltz
Engineering Project Manager

Enclosure

Via Certified Mail

THE CITY OF WATERTOWN

ENGINEERING DIVISION

Andrew Beyer, P.E.
920.262.4050

Maureen McBroom, ENV SP
920.206-4264

Nathan Williams
920-262-4052

Ritchie
920.262.4034

Christopher Newberry
920-390-3164

Administrative Assistant
Wanda Fredrick 920.262.4060

CITY CONTRACT PRICES
(Estimated Costs Only)

Estimate for: 207 CLARK STREET

~~Remove existing concrete sidewalk: (4"):~~		~~Sq. ft. @~~	~~$3.50/ Sq. ft. =~~	
~~Remove existing concrete sidewalk (6"):~~		~~Sq. ft. @~~	~~$3.45/ Sq. ft. =~~	
Remove & Replace Concrete Sidewalk (4"):	40.4	Sq. ft. @	$17.85/ Sq. ft. =	$721.14
Remove & Replace Concrete Sidewalk (6"):		Sq. ft. @	$20.00/ Sq. ft. =	
REPLACEMENT ESTIMATED TOTAL AMOUNT				**$721.14**

NOTE: THIS IS ONLY A NOTICE. THIS IS NOT A BILL.

IMPORTANT: THIS NOTICE SHALL ACCOMPANY TRANSFER OF PROPERTY