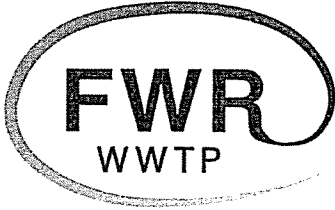


FOX WEST REGIONAL SEWERAGE COMMISSION

1965 W. Butte Des Morts Beach Rd.
Neenah, WI 54956

Phone (920) 739-7921
Fax (920) 739-1343
gcmwsc@new.rr.com



June 1, 2023

Town Clerk
Town of Grand Chute
1900 W Grand Chute Blvd
Grand Chute, WI 54913

Village Clerk
Village of Greenville
P O Box 60
Greenville, WI 54942

Village Clerk
Village of Fox Crossing
2000 Municipal Drive
Neenah, WI 54956

Town Clerk
Town of Clayton
8348 County Road T
Larsen, WI 54947

Ms. Ellen Skerke
Town of Neenah
1655 County Road A
Neenah, WI 54956

The Post Crescent
P O Box 59
Appleton, WI 54912

Mr. Andrew Rossmeissl
Herrling Clark Law Firm
800 North Lynndale Drive
Appleton, WI 54914

PUBLIC NOTICE

Public Notice is hereby given that there will be a **REGULAR MEETING** OF THE FOX WEST REGIONAL SEWERAGE COMMISSION on Wednesday, June 7, 2023 at 4:00 P.M. The Regular Meeting will be held at the McMahon Associates headquarters at 1445 McMahon Drive in Neenah. The meeting will also be held via teleconference.

Respectfully submitted,

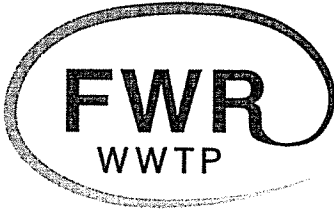
FOX WEST REGIONAL S.C.

Melissa Starr
Accounting Clerk

FOX WEST REGIONAL SEWERAGE COMMISSION

1965 W. Butte Des Morts Beach Rd.
Neenah, WI 54956

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AGENDA For REGULAR MEETING Wednesday June 7, 2023 4:00 P.M.

The meeting will also be held via teleconference.

CALL TO ORDER OF REGULAR MEETING

ROLL CALL

APPROVAL OF AGENDA

SECRETARY'S REPORT: • Approve Minutes of Regular Meeting (05/03/2023)
 • Discuss/Act on CD Renewal Quotes

TREASURER'S REPORT: • Approve Voucher List
 • Discussion / Review of Bank & Budget Statements

Discussion/Action

PRESIDENT'S REPORT: • Discuss/Act on Final Payment for Heating System Project

MANAGER'S REPORT: • Review/Approve Monthly Operational Summary
 • Review/Approve 2022 CMAR - Resolution 312-23

ENGINEER'S REPORT: • Fine Screen Engineering Update

OLD BUSINESS:

NEW BUSINESS: • Discuss/Act on Sewer Extension Request – Fox Highlands Phase IV (Greenville)

Design Criteria:

Acres – 7.576	Population Served – 114
Flow – 0.008 MGD Avg	Flow – 0.030 MGD Peak
BOD – 23.9 lbs./day	

• Discuss/Act on Sewer Extension Request – Scholar Ridge Estates Phase I (Clayton)

Design Criteria:

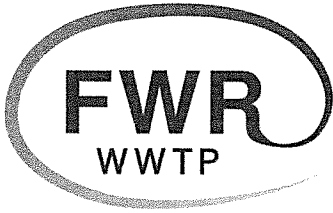
Acres – 599	Population Served – 5,050
Flow – 0.505 MGD Avg	Flow – 1.263 MGD Peak
BOD – 1,111 lbs./day	

ADJOURNMENT:

FOX WEST REGIONAL SEWERAGE COMMISSION

1965 W. Butte Des Morts Beach Rd.
Neenah, WI 54956

Phone (920) 739-7921
Fax (920) 739-1343
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REGULAR MEETING MINUTES

May 3, 2023

Notice of the Regular Meeting was distributed by Melissa Starr to all Commissioners; the Clerks of the Town of Grand Chute, Village of Fox Crossing, Village of Greenville, Town of Clayton, & Town of Neenah; the Post Crescent; and posted on the bulletin board at the Regional Office. The Regular Meeting was called to order by President Dale Youngquist at 4:00 pm.

PRESENT:

Mike Van Dyke	Jason Van Eperen	Ron Wolff Jr.
Dale Youngquist	Greg Ziegler	Brandon Kaufman (MCO)
Mark Strobel	Beth English	Melissa Starr (MCO)

Guests: Chad Olsen (McMahon)

APPROVAL OF AGENDA:

A motion was made by Mike Van Dyke to approve the Agenda, second by Greg Ziegler. *Motion Carried.*

SECRETARY'S REPORT:

Minutes

A motion was made by Mike Van Dyke to approve the Minutes of the Regular meeting held on April 5, 2023; second by Greg Ziegler. Beth English abstained from voting, *Motion Carried.*

Discuss/Act on CD Renewal Quotes

Accounting Clerk Starr presented the CD rate request information included in the packets and conversation regarding capital improvement projects, rates, and ease of access to funds followed. After discussion a motion was made by Mike Van Dyke to approve moving the funds to the Local Government Investment Pool (LGIP); second by Greg Ziegler. *Motion Carried.*

TREASURER'S REPORT:

Voucher List

President Youngquist asked if there were any questions or concerns with the Voucher List; hearing none, a motion was made by Mike Van Dyke to approve the Voucher List as presented; second by Greg Ziegler. *Motion Carried.*

Bank & Budget Statements

President Youngquist asked if there were any questions regarding the bank and budget statements; hearing none, a motion was made by Mike Van Dyke to approve the Bank & Budget Statements; second by Greg Ziegler. *Motion Carried.*

PRESIDENT'S REPORT:

Selection of Commission Officers

President Youngquist made a motion to keep Commission Officers in their current positions and assign Mark Strobel as Treasurer, second by Mike Van Dyke. *Motion Carried Unanimously.*

MANAGER'S REPORT:

Operational Summary

Manager Kaufman discussed his written report and provided additional information on: Hydrodyne Factory Tour; Crane Engineering scheduled a visit to Florida to tour the Hydrodyne factory in Clear Water as well as visit two municipalities that are currently using the Hydrodyne screens. He was able to speak with operators to learn more about the pros and cons of the screens. Crane will be putting together a proposal. Chad Olsen shared he will work with Manager Kaufman and go over all options and estimated costs. Influent flows; Flows reached 33.23 MGD on 4/1/23 after 1.75" of precipitation, however, as of 4/26/23 the flows are back to normal for this time of year. Service building air handling unit; The replacement coil was installed by AMA on 3/28/23. AMA had given specific requirements for testing the unit once it was fixed, so they will be returning to test it once the weather gets warmer. Manager Kaufman let AMA know payment will not be made until the testing is completed due to the leaking issue experienced the last time it was done. After discussion a motion was made by Mike Van Dyke to approve the Operational Summary; second by Greg Ziegler. *Motion Carried.*

ENGINEER'S REPORT:

Fine Screen Engineering

Chad Olsen shared he will work with Manager Kaufman and go over all options and estimated costs for the blower and screen project.

OLD BUSINESS

N/A

NEW BUSINESS

Sewer Extension Request – Church Pond Subdivision (Fox Crossing)

Manager Kaufman reported no concerns regarding the sewer extension request for the Church Pond Subdivision. A motion was made by Mike Van Dyke to approve the sewer extension request; second by Ron Wolff Jr. *Motion Carried.*

ADJOURNMENT

A motion was made by Mike Van Dyke, second by Greg Ziegler to Adjourn. *Motion Carried.*

Meeting adjourned at 4:34 pm.

ATTEST

Greg Ziegler, Secretary

Melissa Starr, Accounting Clerk

**** Invested Cash Deposits & Investments of Fox West Regional Sewerage Commission are restricted by Wisconsin Statutes to the following:**
Time Deposits; Repurchase Agreements; Securities issued by Federal, State, or Local Government entities; Statutorily Authorized Commercial Paper and Corporate Securities; and the Wisconsin Local Government Investment Pool.

C.D. RATE REQUEST (06/04/2023)

The maturing CD is currently with Community First Credit Union - Current rate: 1.06%

BOND REDEMPTION \$405,221 (approximately)

AMERICAN NATIONAL



Tiffany Binish
(tbinish@anbfc.bank)
P ~ 920.560.5950

CD Special:

Pick Your Term
9 - 14 Months
Rate

4.85%

COMMUNITY FIRST CREDIT UNION



Craig Gloudemans
(craig.gloudemans@communityfirstcu.org)
ph 920-968-6181 V-P Finance

CD Special:

Pick Your Term
7, 14, or 21 Months
Rate

4.85%

FOX COMMUNITY CREDIT UNION



Scott Yukel
(syukel@foxcu.org)
P ~ 920-993-3912

5 Month
Rate
4.40%

10 Month
Rate
4.50%

Local Government Investment Pool (LGIP)

April 2023 Rate
Rate

4.80%

**FOX WEST REGIONAL
SEWERAGE COMMISSION**

For Approval on: 06/07/2023

PREAUTHORIZED MAY PAYABLES

CHECK NO	DATE		Amount
37891-37893	05/02/23	Plant Payroll - Net (#23-09)	4,863.01
WDC050223	05/02/23	Wisconsin Def Comp (#23-09)	70.00
	05/02/23	FSA WITHHOLDING (#23-09)	149.99
37894-37896	05/16/23	Plant Payroll - Net (#23-10)	4,803.57
WDC051623	05/16/23	Wisconsin Def Comp (#23-10)	70.00
	05/16/23	FSA WITHHOLDING (#23-10)	149.99
37897	05/24/23	GFL Environmental (trash, grit, recycling hauling)	4,562.53
37898	05/24/23	McClone Agency (insurance installment-worker comp, liability, auto)	29.00
37899	05/24/23	Spectrum/Charter Communications (\$146.49 Internet/\$145.33 Telephone)	291.82
37900	05/24/23	Town of Grand Chute (Life & Dental Insurance, FSA fee)	360.09
37900	05/24/23	Town of Grand Chute (FSA Claims)	212.01
37901	05/24/23	WE Energies (\$2,401.72 Heat/\$59,361.32 Electric)	61,763.04
37902	05/24/23	VISA (\$15.63 - Lab Supplies/\$47.25 - software support/\$39.85- Postage/\$21.99-Maint. Supplies/\$20.98-Other Supplies/\$201.97-Vehicle Fuel/\$66.96-Maint. Yard)	414.63
37903-37905	05/30/23	Plant Payroll - Net (#23-11)	5,321.29
WDC053023	05/30/23	Wisconsin Def Comp (#23-11)	70.00
WGH052423	05/24/23	Dept of Employee Trust (JUNE HEALTH INVOICE)	6,359.70
EFTPS053123	05/31/23	Federal Payroll Taxes (MAY Federal Tax Withholding)	5,292.24
WDR053123	05/31/23	Wisconsin Dept Revenue (MAY State Tax Withholding)	879.21
WRS053123	05/31/23	Dept of Employee Trust (APRIL PENSION)	2,039.97
			<u>\$97,702.09</u>

CHECK NO	DATE		Amount
37906-37911	06/07/23	Commissioner's Wages (Net) Commission Wages (MAY Mtg)	\$1,059.17
37912	06/07/23	Aquachem Ferric Chloride	\$10,790.04
37913	06/07/23	Aquachem Ferric Chloride	\$22,029.21
37914	06/07/23	Atlas Copco Cooling Fan for HSI Blower#2	\$1,114.82
37915	06/07/23	Badger Laboratories Lab Testing; Fecal Coliform, Metals, Oils & Grease, Volatile Organic Compounds	\$1,409.00
37916	06/07/23	Brooks Tractor Actuator	\$137.22
37917	06/07/23	Crane Engineering Spool Piece for SNDR #1 Jet Pump	\$5,572.47
37918	06/07/23	Entrance Systems Service on South Gate and Programmed Remotes	\$366.27
37919	06/07/23	Ferguson Waterworks Repair Kit for ATAD Valve	\$190.00
37920	06/07/23	Grainger Ball Bearings, Washers, Caps, Cutting Oil, Cogged V-Belt, Elbows, Couplings, Flange Gasket	\$764.91
37921	06/07/23	Hach Company Sensor Guard LDO Model 2	\$619.95
37922	06/07/23	Heartland Business Systems Veeam Backup, Firewall, Server Hardware & Host for SCADA Server, DUO Install	\$2,162.75
37923	06/07/23	Kitz & Pfeil Blade and Circular Saw	\$163.99
37924	06/07/23	LAI Parts for Ferric Feed Pumps	\$2,823.48
37925	06/07/23	Midwest Contract Operations Contract Services	\$47,035.80
37926	06/07/23	MSA Sensor	\$1,532.89
37927	06/07/23	Mulcahy/Shaw Water UV Ballast	\$3,484.82
37928	06/07/23	NCL Petri Dish, Digital Thermometer, Safeskin Gloves	\$676.64
37929	06/07/23	Service Motor Co Replace Tire	\$177.84
37930	06/07/23	Splendid Cleaning Services Professional Bldg Maintenance	\$379.00
37931	06/07/23	Superior Chemical Degreaser, Enzyme Block, Aero Knock-Out	\$1,596.04
37932	06/07/23	Unifirst Mats, Bagged Wipers, Employee Uniforms	\$654.66
37933	06/07/23	WI DNR Environmental Fees	\$34,373.35
37934	06/07/23	Wisconsin Media Public Notice	\$30.50
			<hr/> \$139,144.82

CHECK NO	DATE		Amount
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EQUIPMENT REPLACEMENT

37935	06/07/23	Hach Company New D.O. Probes for IFAS Train# 3	\$6,079.70
37936	6/7/2023	Thermal Process Systems 396R ORP & pH Probes	\$2,186.80
Total Equipment Replacement			\$8,266.50

DEPRECIATION EXPENSE

XX	XX	XX	
		XX	XX

	Total Depreciation	\$0.00
--	---------------------------	---------------

Preauthorized JUNE Expenses	\$97,702.09
Monthly Payables	\$139,144.82
Equipment Replacement Expense	\$8,266.50
Depreciation Expense	\$0.00
	\$245,113.41

Disbursements Not Approved:

Approved by Commission:

Mark Strobel

Date

**FOX WEST REGIONAL SEWERAGE COMMISSION
BANK STATEMENT
CASH RECEIPTS & DISBURSEMENTS FOR THE MONTH OF APRIL 2023**

CHECKING ACCOUNT

Beginning Balance		<u><u>\$543,139.56</u></u>
Receipts:		
User Fees Received	\$365,139.80	
Vactor-Waste Fees Received	\$0.00	
Lab/MISC Fees Received	\$1,493.00	
Septic Haulers Fees	\$18,426.70	
Interest Earned @ 0.05% / ANB	\$22.03	
Transfers from:		
Equipment Replacement	-	
Bond Redemption	-	
Depreciation	-	
Misc Ledger Adjustment:	-	
Total Receipts:	<u>\$385,081.53</u>	
Total Available		\$928,221.09
Disbursements:		
Commissioners Wages (net)	\$1,239.63	
Plant Personnel Wages (net)	4,803.56	
Plant Personnel Wages (net)	4,759.55	
Plant Personnel Wages (net)	-	
Gen. Operating Expense	\$160,875.04	
Equipment Replacement	-	
Depreciation	-	
Transfers To:		
Misc ledger adjustment		
Equipment Replacement	34,337.74	
Bond Redemption	92,327.37	
Depreciation	-	
Total Disbursements:	<u>\$298,342.89</u>	
TOTAL CHECKING - Per General Ledger		<u><u>\$629,878.20</u></u>
	checks outstanding:	\$541.49
	actual checkbook balance at month-end- Per Bank Statement:	\$628,192.13

EQUIPMENT REPLACEMENT ACCOUNT

Beginning Balance - Money Market Account	\$493,582.77	
Interest Earned @ 2.97% / ANB	1,225.43	
Deposit (Transfer from Checking)	34,337.74	
Withdrawal (Transfer to Checking)	0.00	
Total Equip Replacement MM Acct Balance		<u><u>\$529,145.94</u></u>

FUTURE CAPITAL ACCOUNT

Beginning Balance - CD	\$1,281,820.36	
Interest Earned @ 2.65% / COM 1st - CD	2,760.30	
TOTAL FUTURE CAPITAL		<u><u>\$1,284,580.66</u></u>

**FOX WEST REGIONAL SEWERAGE COMMISSION
BANK STATEMENT
CASH RECEIPTS & DISBURSEMENTS FOR THE MONTH OF APRIL 2023**

BANK STATEMENT-04/30/23
PAGE 2

BOND REDEMPTION ACCOUNT

Beginning Balance - Money Market Account	\$1,043,667.76
Interest Earned @ 2.03% / ANB	1,092.00
Deposit (Transfer from Checking)	92,327.37
Deposit (Transfer from Matured CD)	507,619.74
Withdrawal (Wire Transfer to LGIP)	-1,100,000.00
Wire Transfer Fee	-25.00
Total Bond Redemption MM Acct Balance	\$544,681.87

Beginning Balance - LGIP Account	\$0.00
Interest Earned @ 4.80% / LGIP	\$1,879.95
Deposit (Wire from ANB Bond Redemption Account)	\$1,100,000.00
Withdrawal (STATE WIS - CWF loan payment)	
Total Bond Redemption MM Acct Balance	\$1,101,879.95

Invested:

CD - COMM 1st (6/4/23 - 1.06% - 16-month)	\$404,871.71
Interest Earned @ 1.06% / Comm 1st	349.41
COM 1st Total	\$405,221.12

CD - ANB (due 4/29/23 - 1.50%)	\$505,671.99
Interest Earned @ 1.50% / ANB	1,947.75
Withdrawal (Transfer to Money Market)	-507,619.74
ANB Total	\$0.00

TOTAL BOND REDEMPTION

\$2,051,782.94

DEPRECIATION ACCOUNT

Beginning Balance - Money Market Account	\$174,585.23
Interest Earned @ 2.62% / ANB	371.27
Deposit (Transfer from Checking)	0.00
Withdrawal (Transfer to Checking)	0.00
Total Depreciation Acct MM Balance	\$174,956.50

Invested:

CD - Com 1st (8/22/23 - 2.68% - 12-month)	\$1,595,506.73
Interest Earned @ 2.68% / Com 1st	3,475.14
	\$1,598,981.87

TOTAL DEPRECIATION ACCOUNT

\$1,773,938.37

SUMMARY

ANB CHECKING ACCOUNT	\$629,878.20
EQUIPMENT REPLACEMENT ACCOUNT	529,145.94
FUTURE CAPITAL CD ACCOUNT	\$1,284,580.66
BOND REDEMPTION ACCOUNT	2,051,782.94
DEPRECIATION ACCOUNT	1,773,938.37
PETTY CASH & WASTEHAULER DEPOSITS	\$1,208.87
TOTAL FUNDS AVAILABLE	<u>\$6,270,534.98</u>

Fox West Regional Sewerage Commission
Income Statement with Previous Year Comparison
April 30, 2023

		<u>Apr 23</u>	<u>Apr 22</u>	<u>Jan - Apr 23</u>	<u>Jan - Apr 22</u>	<u>Y-T-D \$ Change</u>
Operations & Maintenance Income						
	Grand Chute	93,863.10	93,388.79	348,244.48	294,833.18	53,411.30
	Clayton	4,241.53	4,288.83	15,634.43	13,326.24	2,308.19
	Fox Crossing	75,014.09	75,782.70	268,852.56	213,916.59	54,935.97
	Greenville	38,957.65	40,981.77	148,989.58	144,236.19	4,753.39
	Total Operation/Maint Income	\$212,076.37	\$214,442.09	\$781,721.05	\$666,312.20	\$115,408.85
Operations & Maintenance Expenses						
<i>Wages & Benefits</i>	Commissioner Pay	1,418.15	1,027.25	5,086.25	5,281.70	-195.45
	Employee Pay	14,999.80	14,039.61	62,103.45	57,901.37	4,202.08
	Employee Benefits	7,619.30	9,253.04	30,288.31	37,024.10	-6,735.79
<i>Utilities</i>	Electric	56,602.71	51,814.65	208,028.03	196,734.97	11,293.06
	Natural Gas & Water	5,828.88	3,980.81	32,943.05	28,626.83	4,316.22
<i>Chemicals</i>	Ferric Chloride	22,348.30	21,058.15	88,326.98	68,551.95	19,775.03
	Polymer	0.00	0.00	0.00	14,861.00	-14,861.00
	Other Chemicals	0.00	0.00	0.00	0.00	0.00
<i>General Operations</i>	Contract Operations	47,035.80	45,350.97	188,143.20	190,383.88	-2,240.68
	Rugs, Linens, Uniforms	467.57	351.60	1,935.34	1,639.66	295.68
	Grit & Refuse Hauling	1,751.17	1,741.59	6,213.40	6,186.72	26.68
	Other Operations	658.02	1,326.45	3,164.47	3,389.24	-224.77
<i>Sludge</i>	Sludge Disposal	0.00	0.00	0.00	0.00	0.00
	Other Sludge Exp.	0.00	0.00	0.00	0.00	0.00
<i>Plant Maint</i>	Maintenance of Operations	6,996.17	28,276.06	14,397.12	38,108.35	-23,711.23
	Other Plant Maintenance	6,074.09	20,481.81	33,865.12	48,618.21	-14,753.09
<i>Lab</i>	Lab Operations	2,546.21	2,395.90	10,394.79	7,795.00	2,599.79
	WPDES Compliance Monitor	0.00	0.00	0.00	0.00	0.00
<i>Administrative & General Expenses</i>	Insurance & Legal	0.00	0.00	56,557.00	52,734.00	3,823.00
	Annual Audit	0.00	0.00	9,425.00	0.00	9,425.00
	Office, Postage, Phone, etc	578.12	2,371.39	4,902.75	5,449.29	-546.54
	DNR Environment Fees	0.00	0.00	0.00	0.00	0.00
	Other General/Admin	25.00	120.00	2,405.75	2,819.80	-414.05
	Total Operating Expenses	\$174,949.29	\$203,589.28	\$758,180.01	\$766,106.07	(\$7,926.06)
	Gross Income (Loss)	\$37,127.08	\$10,852.81	\$23,541.04	(\$99,793.87)	\$123,334.91
Other Operations Income						
<i>Other Income</i>	Interest Income	13,123.29	3,200.10	40,139.66	12,499.96	27,639.70
	Waste Hauler Income	19,118.57	19,460.18	66,736.98	68,196.18	-1,459.20
	Lab Testing/Vac-Waste/Misc	1,549.00	1,337.00	13,463.41	10,688.00	2,775.41
	Other Operations Income	\$33,790.86	\$23,997.28	\$120,340.05	\$91,384.14	\$28,955.91
	Operating Fund Income (Loss)	\$70,917.94	\$34,850.09	\$143,881.09	(\$8,409.73)	\$152,290.82
Replacement, Debt, Depreciation						
<i>Repl.</i>	Repl. Income from Users	34,337.73	34,337.75	137,350.77	137,350.75	0.02
	Repl. Fund Expenses	7,269.95	925.83	14,101.95	125,440.56	-111,338.61
<i>Debt</i>	Debt Service from Users	92,327.43	92,354.49	369,308.91	369,417.20	-108.29
	Debt Service Interest	15,016.68	17,056.62	60,066.72	68,226.48	-8,159.76
<i>Depr.</i>	Depr. Income from Users	0.00	0.00	0.00	0.00	0.00
	Depr. Fund Expenses	0.00	0.00	0.00	210.00	-210.00
	Income (Loss) for Replacement, Debt, Depreciation	\$104,378.53	\$108,709.79	\$432,491.01	\$312,890.91	\$119,600.10
	Reconciliation Discrepancies / Audit GASB / Plant Depreciation	0.00	-0.10	0.00	0.01	-0.01
	Net Income (Loss)	\$175,296.47	\$143,559.98	\$576,372.10	\$304,481.17	\$271,890.92

Fox West Regional Sewerage Commission
Balance Sheet Summary with Previous Year Comparison
As of April 30, 2023

	<u>APR 30, 23</u>	<u>APR 30, 22</u>	<u>\$ Change</u>	<u>% Change</u>
ASSETS				
<u>Current Assets</u>				
<u>Cash & Investments</u>				
Checking-American Nat'l	627,650.64	403,713.36	223,937.28	55.47%
Cash-Wastehauler's Deposits	1,008.87	1,011.78	-2.91	-0.29%
Petty Cash	200.00	200.00	0.00	0.0%
Bond Redemption - Money Market & CD's	2,051,782.94	2,030,576.06	21,206.88	1.04%
Equipment Replacement - Money Market & CD's	529,145.94	298,481.53	230,664.41	77.28%
Depreciation Fund - Money Market & CD's	1,773,938.37	1,777,330.38	-3,392.01	-0.19%
Future Capital (CD)	1,284,580.66	1,258,986.35	25,594.31	2.03%
Total Cash & Investments	<u>6,268,307.42</u>	<u>5,770,299.46</u>	<u>498,007.96</u>	<u>8.63%</u>
<u>Other Current Assets</u>				
Accounts Receivable	359,542.10	362,870.51	-3,328.41	-0.01
Undeposited Funds	0.00	0.00	0.00	0.00
Inventory Mat'l & Supplies	12,521.00	12,521.00	0.00	0.00
WRS Pension - Assets & Deferred Outflows	348,954.00	308,946.00	40,008.00	0.22
Total Other Current Assets	<u>721,017.10</u>	<u>684,337.51</u>	<u>36,679.59</u>	<u>5.36%</u>
Total Current Assets	<u>6,989,324.52</u>	<u>6,454,636.97</u>	<u>534,687.55</u>	<u>8.28%</u>
<u>Fixed Assets</u>				
Land/Easements/Land Improvements	590,977.48	590,977.48	0.00	0.00
Interceptor Mains & Access	1,648,042.84	1,648,042.84	0.00	0.00
Structures, Equipment & Improvements	45,325,996.33	45,211,325.21	114,671.12	0.07
Accumulated Depreciation	-25,028,459.62	-23,256,661.57	-1,771,798.05	-0.08
Total Fixed Assets	<u>22,536,557.03</u>	<u>24,193,683.96</u>	<u>-1,657,126.93</u>	<u>-6.85%</u>
TOTAL ASSETS	<u><u>29,525,881.55</u></u>	<u><u>30,648,320.93</u></u>	<u><u>-1,122,439.38</u></u>	<u><u>-3.66%</u></u>
LIABILITIES & EQUITY				
<u>Liabilities</u>				
<u>Current Liabilities</u>				
Accounts Payable	119,528.24	165,737.40	-46,209.16	-0.28
Payroll Liabilities	43,436.52	35,088.04	8,348.48	0.24
Pension Liability	285,734.00	269,716.00	16,018.00	0.06
Customer Deposits	1,011.42	1,011.42	0.00	0.00
Accrued Interest Expense & Other Liab	89,933.35	102,151.10	-12,217.75	-0.12
Total Current Liabilities	<u>539,643.53</u>	<u>573,703.96</u>	<u>-34,060.43</u>	<u>-5.94%</u>
<u>Long Term Liabilities</u>				
CWF-INTERCEPTOR	57,790.80	114,034.89	-56,244.09	-0.49
CWF-2009 Upgrade	6,694,534.85	7,554,102.29	-859,567.44	-0.11
Total Long Term Liabilities	<u>6,752,325.65</u>	<u>7,668,137.18</u>	<u>-915,811.53</u>	<u>-11.94%</u>
Total Liabilities	<u>7,291,969.18</u>	<u>8,241,841.14</u>	<u>-949,871.96</u>	<u>-11.53%</u>
<u>Equity</u>				
Contributions in Aid-Grants/Agencies	4,951,269.00	4,951,269.00	0.00	0.00
Contributions in Aid-Communities	695,930.55	695,930.55	0.00	0.00
Contributions in Aid-Others	147,494.00	147,494.00	0.00	0.00
Accum Amort of Contributed Capital	-3,933,248.32	-3,933,248.32	0.00	0.00
Retained Earnings-Unappropriated	19,697,193.84	20,094,616.39	-397,422.55	-0.02
Restricted Net Position-Pension	145,937.00	145,937.00	0.00	0.00
Net Income	529,336.30	304,481.17	224,855.13	0.74
Total Equity	<u>22,233,912.37</u>	<u>22,406,479.79</u>	<u>-172,567.42</u>	<u>-0.77%</u>
TOTAL LIABILITIES & EQUITY	<u><u>29,525,881.55</u></u>	<u><u>30,648,320.93</u></u>	<u><u>-1,122,439.38</u></u>	<u><u>-3.66%</u></u>

2023 INTEREST EARNINGS
April 30, 2023

gl #'s	Operations			Future	Replacement	Bond Redemption					Depreciation		TOTAL
	Checking	WH Deposit Winn Waste	WH Deposits	C.D.	MONEY MARKET	MONEY MARKET	C.D.	C.D.	LGIP		MONEY MARKET	C.D.	
	0.05%	0.03%	0.00%	2.65% due 9/12/2023	2.97%	2.03%	1.06% - 16 mos due 6/04/2023	1.50% - 12 mos. Due 4/29/23	4.80%		2.62%	2.68% - 12 mos. due 8/22/2023	
	ANB	ANB	ANB	COMM 1st	ANB	ANB	COMM 1st	ANB			ANB	COMM 1st	
Jan	22.76	0.01	0.00	2,833.97	519.95	1,025.70	360.12	1,904.65			170.04	3,567.62	\$10,404.82
Feb	18.59	0.00	0.00	2,565.41	491.85	1,016.02	325.56	0.00			153.73	3,229.62	\$7,800.78
Mar	23.84	0.00	0.01	2,845.98	564.80	1,262.13	360.74	0.00	0.00		170.35	3,582.92	\$8,810.77
Apr	22.03	0.01	0.00	2,760.30	1,225.43	1,092.00	349.41	119.02	1,879.95		371.27	3,475.14	\$11,294.56
May													\$0.00
Jun													\$0.00
Jul													\$0.00
Aug													\$0.00
Sep													\$0.00
Oct													\$0.00
Nov													\$0.00
Dec													\$0.00
TOTALS:	\$87.22	\$0.02	\$0.01	\$11,005.66	\$2,802.03	\$4,395.85	\$1,395.83	\$2,023.67	\$1,879.95	\$0.00	\$865.39	\$13,855.30	\$38,310.93
	\$87.25			\$11,005.66	\$2,802.03			\$9,695.30			\$14,720.69		
acct #'s	-17	-129	-87	-7158	-92	-23	-0570	-76	-8191		-11	-7183	
acct \$'s	\$628,192.13	\$506.77	\$502.10	\$1,284,580.66	\$529,145.94	\$544,681.87	\$405,221.12	\$0.00	\$1,101,879.95	\$0.00	\$174,956.50	\$1,598,981.87	\$6,268,648.91

CD LISTING
4/30/2023

	<u>Date Issued</u>	<u>Account</u>	<u>Amount</u>	<u>Rate</u>	<u>Term</u>	<u>Matures</u>
American Nat'l Bank	3/17/2021	Bond Redemption	\$0.00	1.50%	12-month	04/29/23
Community First CU	2/4/2022	Bond Redemption	\$405,221.12	1.06%	16-month	06/04/23
		TOTAL	\$405,221.12			
Community First CU	2/11/2021	Depreciation	1,598,981.87	2.68%	12-month	08/22/23
		TOTAL	\$1,598,981.87			
Community First CU	8/8/2021	Future Capital	1,284,580.66	2.65%	12-month	09/12/23
		TOTAL	\$1,284,580.66			
TOTAL CD INVESTMENTS:			\$3,288,783.65			

MONEY MARKET & LGIP ACCOUNT LISTING
4/30/2023

	<u>Account</u>	<u>Amount</u>	<u>Rate</u>
American Nat'l Bank	Bond Redemption	\$544,681.87	2.03%
LGIP	Bond Redemption	\$1,101,879.95	4.80%
American Nat'l Bank	Depreciation	\$174,956.50	2.62%
American Nat'l Bank	Replacement	\$529,145.94	2.97%
TOTAL MONEY MARKET ACCOUNTS:		\$2,350,664.26	

CHECKING & SAVINGS ACCOUNT LISTING
4/30/2023

	<u>Account</u>	<u>Amount</u>	<u>Rate</u>
American Nat'l Bank	Operations - Checking	\$628,192.13	0.05%
American Nat'l Bank	Wastehauler Deposit -	\$502.10	0.01%
American Nat'l Bank	Wastehauler Deposit -	\$506.77	0.01%
TOTAL CHECKING & SAVINGS ACCOUNTS:		\$629,201.00	

**2022 BUDGET STATEMENT
FOX WEST REGIONAL
WASTEWATER TREATMENT PLANT**

Budget Through 04/30/2023

INCOME SOURCE	100.00% '23 BUDGET	MONTHLY 1/12 TOTAL	8.33% JAN	16.67% FEB	25.00% MAR	33.33% APR	41.67% MAY	50.00% JUNE	58.33% JULY	66.67% AUG	75.00% SEPT	83.33% OCT	91.67% NOV	100% DEC	YTD TOTAL	BDGT THRU APR (4/30/23)	(OVER)/UNDER BUDGET	% OF BUDGET
USER CHARGES:																		
OPERATION AND MAINT	\$2,031,919.00	\$169,326.58	\$175,166.66	\$156,003.33	\$238,474.69	\$212,076.37									\$781,721.05	\$677,306.33	(\$104,414.72)	38.47%
EQUIPMENT REPLACEMENT	412,052.00	34,337.67	34,337.64	\$34,337.66	\$34,337.74	\$34,337.73									137,350.77	\$137,350.67	(\$0.10)	33.33%
BOND REDEMPTION	1,107,925.00	92,327.08	92,327.05	92,327.06	92,327.06	92,327.37									369,308.91	\$369,308.33	(\$0.58)	33.33%
DEPRECIATION	0.00	0.00	0.00	0.00	0.00	0.00									0.00	\$0.00	\$0.00	0.00%
TOTAL BUDGETED INCOME	\$3,551,896.00	\$295,991.33	\$301,831.35	\$282,666.05	\$365,139.80	\$338,741.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,288,380.73	\$1,183,965.33	(\$104,415.40)	36.27%
CONTINGENCY FUNDING:																		
INTEREST INCOME	\$37,000.00	\$3,083.33	\$10,404.82	\$7,800.78	\$8,810.77	\$13,123.29									\$40,139.66	\$12,333.33	(\$27,806.33)	108.49%
WASTEHAULER INCOME	200,000.00	16,666.67	13,595.98	16,365.73	17,656.70	19,118.57									66,736.98	\$66,666.67	(\$70.31)	33.37%
LAB & MISC. INCOME	26,000.00	2,166.67	6,399.41	3,252.00	2,263.00	1,549.00									13,463.41	\$8,666.67	(\$4,796.74)	51.78%
TOTAL CONT FUNDING	\$263,000.00	\$21,916.67	\$30,400.21	\$27,418.51	\$28,730.47	\$33,790.86	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$120,340.05	\$87,666.67	(\$32,673.38)	45.76%
BUDGETED SURPLUS	\$0.00	\$0.00																
TOTAL BUDGET	\$3,814,896.00	\$317,908.00	\$332,231.56	\$310,086.56	\$393,870.27	\$372,532.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,408,720.78	\$1,271,632.00	(\$137,088.78)	36.93%
2023 BUDGETED O&M EXPENSE																		
WAGES & BENEFITS:																		
COMMISSIONERS	\$15,000.00	\$1,250.00	\$1,222.70	\$1,222.70	\$1,222.70	\$1,418.15									\$5,086.25	\$5,000.00	(\$86.25)	33.91%
PLANT PERSONNEL	211,100.00	17,591.67	16,879.05	15,149.80	15,074.80	14,999.80									62,103.45	\$70,366.67	\$8,263.22	29.42%
EMPLOYEE BENEFITS	119,837.00	9,986.42	7,468.60	7,642.91	7,557.50	7,619.30									30,288.31	\$39,945.67	\$9,657.36	25.27%
UTILITIES:																		
ELECTRIC POWER	585,000.00	48,750.00	49,045.30	53,563.96	48,816.06	56,602.71									208,028.03	\$195,000.00	(\$13,028.03)	35.56%
OTHER UTILITIES	65,000.00	5,416.67	7,463.62	7,229.59	7,014.69	5,828.88									27,536.78	\$21,666.67	(\$5,870.11)	42.36%
CHEMICALS:																		
FERRIC CHLORIDE	259,000.00	21,583.33	21,922.85	22,310.26	21,745.57	22,348.30									88,326.98	\$86,333.33	(\$1,993.65)	34.10%
OTHER CHEMICALS	35,000.00	2,916.67	0.00	0.00	0.00	0.00									0.00	\$11,666.67	\$11,666.67	0.00%
GENERAL OPERATIONS:																		
CONTRACT OPERATIONS	590,942.00	49,245.17	45,350.97	48,720.63	47,035.80	47,035.80									188,143.20	\$196,980.67	\$8,837.47	31.84%
OTHER OPERATING COSTS	40,600.00	3,383.33	2,865.84	3,096.75	2,473.86	2,876.76									11,313.21	\$13,533.33	\$2,220.12	27.87%
SLUDGE HANDLING:																		
SLUDGE DISPOSAL	27,000.00	2,250.00	0.00	0.00	0.00	0.00									0.00	\$9,000.00	\$9,000.00	0.00%
OTHER SLUDGE EXPENSES	500.00	41.67	0.00	0.00	0.00	0.00									0.00	\$166.67	\$166.67	0.00%
PLANT MAINTENANCE:																		
PLANT MAINTENANCE/REPAIR	194,200.00	16,183.33	15,836.69	9,514.91	9,840.38	13,070.26									48,262.24	\$64,733.33	\$16,471.09	24.85%
LABORATORY:																		
LAB OPERATIONS	8,000.00	666.67	1,945.53	3,806.19	2,096.86	2,546.21									10,394.79	\$2,666.67	(\$7,728.12)	129.93%
WPDES-COMPL. MONITORING	12,500.00	1,041.67	0.00	0.00	0.00	0.00									0.00	\$4,166.67	\$4,166.67	0.00%
ADMINISTRATIVE/GENERAL:																		
INSURANCE/LEGAL	69,740.00	5,811.67	51,298.00	0.00	5,259.00	0.00									56,557.00	\$23,246.67	(\$33,310.33)	81.10%
ANNUAL AUDITING SERVICES	9,000.00	750.00	0.00	0.00	9,425.00	0.00									9,425.00	\$3,000.00	(\$6,425.00)	104.72%
OFFICE,POSTAGE,PHONE, ETC	12,000.00	1,000.00	853.88	1,466.54	2,004.21	578.12									4,902.75	\$4,000.00	(\$902.75)	40.86%
DNR ENVIRONMENTAL FEES	35,000.00	2,916.67	0.00	0.00	0.00	0.00									0.00	\$11,666.67	\$11,666.67	0.00%
GENERAL ADMIN. EXPENSE	5,500.00	458.33	27.75	0.00	2,350.00	25.00									2,402.75	\$1,833.33	(\$569.42)	43.69%
TOTAL O&M EXPENSES	\$2,294,919.00	\$191,243.25	\$222,180.78	\$173,724.24	\$181,916.43	\$174,949.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$752,770.74	\$764,973.00	\$12,202.26	32.80%
CONTINGENCY APPLIED	\$235,400.00	\$19,616.67	\$30,937.53	(\$17,519.01)	(\$9,326.82)	(\$16,293.96)									(\$12,202.26)	\$78,466.67	\$90,668.93	-5.18%

McMAHON

ENGINEERS ARCHITECTS

May 31, 2023

Dale Youngquist
Fox West Regional Sewerage Commission
1965 W. Butte Des Morts Beach Road
Neenah, WI 54956

Re: Fox West Regional WWTF
Heating System Improvements
Certificate for Payment #8 - FINAL
McM. No. F0059-9-20-00171.06

Enclosed is Certificate for Payment #8 for the above referenced project. This Certificate is issued to B & P Mechanical, Inc. in the amount of \$23,871.00 for final payment for work performed through June 7, 2023.

Please process the enclosed and forward payment to B & P Mechanical, Inc. Should you have any questions, please contact our office at your convenience.

Respectfully,

McMahon Associates, Inc.

Chad T. Olsen, P.E., BCEES
Vice President / Senior Project Manager

CTO:jlh

Enclosure: Certificate for Payment #8 - FINAL

McMAHON

ENGINEERS ARCHITECTS

McMAHON ASSOCIATES, INC.

1445 McMAHON DRIVE P.O. BOX 1025
NEENAH, WI 54956 NEENAH, WI 54957-1025

TELEPHONE: 920.751.4200
FAX: 920.751.4284

CERTIFICATE FOR PAYMENT

Dale Youngquist
Fox West Regional Sewerage Commission
1965 W. Butte Des Morts Beach Road
Neenah, WI 54956

Contract No. F0059-9-20-00171
Project File No. F0059-9-20-00171.06
Certificate No. Eight (8) - Final
Issue Date: May 31, 2023
Project: FOX WEST REGIONAL SEWERAGE COMM.
Heating System Improvements

This Is To Certify That, In Accordance With The Contract Documents Dated: August 20, 2020

B & P Mechanical, Inc.
3200 W. Highview Drive
Appleton, WI 54912

Is Entitled To **Final** Payment For Work Performed Through: June 7, 2023

- Contractor's Application For Payment Attached.
- Itemized Cost Breakdown Attached.

Original Contract	<u>\$218,121.40</u>	Completed To Date	<u>\$227,148.00</u>
Net Change Orders	<u>\$9,026.60</u>	Retainage N/A	<u>\$0.00</u>
Current Contract Amount	<u>\$227,148.00</u>	Subtotal	<u>\$227,148.00</u>
		Previously Certified	<u>\$203,277.00</u>

Amount Due This Payment: \$23,871.00

Certified By:
McMAHON ASSOCIATES, INC.
Neenah, Wisconsin

Chad T. Olsen, P.E., BCEES
Vice President / Senior Project Manager

APPLICATION AND CERTIFICATE FOR PAYMENT

AIA DOCUMENT G702

(Instructions on reverse side) Page ONE of Pages

TO (OWNER):
Village of Fox Crossing
Fox West Regional
Sewerage Commission

PROJECT:
Wastewater Treatment Facility
Heating System Improvement

APPLICATION NO: 8

PERIOD TO: 12/3/2021

Distribution to:
 OWNER
 ARCHITECT

FROM: B & P Mechanical, Inc.
PO Box 2002, 3200 W. Highview Dr
Appleton, WI 54912-2002

ARCHITECT'S PROJECT NO: F0059-9-20-00171

CONTRACTOR
 GENERAL

CONTRACT FOR: HVAC

CONTRACT DATE:

Application is made for Payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY

Change Orders approved in previous months by Owner		ADDITIONS	DEDUCTIONS
TOTAL			
Approved this Month			
Number	Date Approved		
1	12/15/2020		-35,270.00
2	12/15/2020		-2,780.00
3	12/29/2020		23,871.00
4	5/13/2021		19,565.40
5	7/2/2021		9,026.60
TOTALS		0.00	14,413.00
Net Change by Change Orders			14,413.00

1 ORIGINAL CONTRACT SUM	\$ 212,735.00
2 Net change by Change Orders	\$ 14,413.00
3 CONTRACT SUM TO DATE (Line 1 ± 2)	\$ 227,148.00
4 TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$ 227,148.00

5 RETAINAGE:

- a. 2.5% (C) % of Completed Work \$ ~~5,678.70~~ 0 *CTU 5-31-23*
(Column D + e on G703)
- b. 0% of Stored Material \$ 0

Total Retainage (Line 5a & 5b or Total in Column 1 of G703)

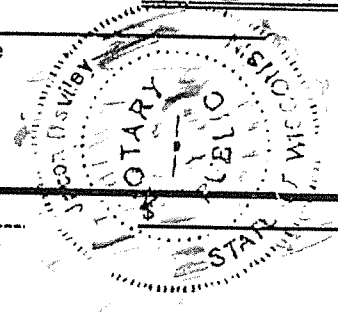
6 TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total)	\$ 227,148.00
7 LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)	\$ 23,077.00
8 CURRENT PAYMENT DUE	\$ 23,871.00
9 BALANCE TO FINISH, PLUS RETAINAGE (Line 3 less Line 6)	\$ 4,123.00
	\$ <u>0</u> -5,678.70

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: B & P Mechanical, Inc.

BY: *[Signature]* Date: 12/03/2021

State of: Wisconsin County of: Outagamie
Subscribed and sworn to before me this 3rd day of December, 2021
Notary Public: *[Signature]*
My Commission expires: 09/18/2023



ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED

(Attached explanation if amount certified differs from the amount applied for.)

ARCHITECT:

BY:

DATE:

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CONTINUATION SHEET

AIA DOCUMENT G703

(Instructions on reverse side)

PAGE 2 OF 3

PAGES

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing

APPLICATION NUMBER: 8

Contractor's signed Certification is attached.

APPLICATION DATE: 12/3/2021

In tabulations below, amounts are stated to the nearest dollar.

PERIOD TO: 12/3/2021

Use Column I on contracts where retainage for line items may apply.

ARCHITECT'S PROJECT NO: F0059-9-20-00171

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D + E + F)		H BALANCE TO FINISH (C - G)	I RETAINAGE
			FROM PREVIOUS APPLICATION (D + E)	THIS PERIOD		% (G / C)			
1	Engineering and plans	2,500.00	2,500.00	0.00	0.00	2,500.00	100%	0.00	125.00
2	Permit Fee	1,950.00	1,950.00	0.00	0.00	1,950.00	100%	0.00	97.50
3	Supervision	3,200.00	3,200.00	0.00	0.00	3,200.00	100%	0.00	110.00
4	Sheet metal materials	1,750.00	1,750.00	0.00	0.00	1,750.00	100%	0.00	65.00
5	Sheet metal labor	4,824.00	4,824.00	0.00	0.00	4,824.00	100%	0.00	160.00
6	Boiler	34,750.00	34,750.00	0.00	0.00	34,750.00	100%	0.00	1,737.50
7	Labor to install boiler	1,850.00	1,850.00	0.00	0.00	1,850.00	100%	0.00	92.50
8	Pumps and air control devices	19,825.00	19,825.00	0.00	0.00	19,825.00	100%	0.00	991.25
9	Labor to install pumps and air control devices	2,250.00	2,250.00	0.00	0.00	2,250.00	100%	0.00	112.50
10	Pipe, valves and fittings materials	19,336.00	19,336.00	0.00	0.00	19,336.00	100%	0.00	770.00
11	Labor to install PV&F's	45,537.00	45,537.00	0.00	0.00	45,537.00	100%	0.00	2,075.00
12	VFD's	2,340.00	2,340.00	0.00	0.00	2,340.00	100%	0.00	117.00
13	Unit heaters	11,925.00	11,925.00	0.00	0.00	11,925.00	100%	0.00	596.25
14	Labor to install unit heaters	1,850.00	1,850.00	0.00	0.00	1,850.00	100%	0.00	92.50
15	Electrical subcontractor	14,538.00	14,538.00	0.00	0.00	14,538.00	100%	0.00	626.90
16	Temperature controls subcontractor	26,950.00	26,950.00	0.00	0.00	26,950.00	100%	0.00	808.50
17	Insulation subcontractor	7,400.00	7,400.00	0.00	0.00	7,400.00	100%	0.00	0.00
18	Demolition	2,200.00	2,200.00	0.00	0.00	2,200.00	100%	0.00	110.00
19	Water balancing	2,035.00	0.00	2,035.00	0.00	2,035.00	100%	0.00	0.00
20	Chemical treatment	1,800.00	1,800.00	0.00	0.00	1,800.00	100%	0.00	0.00
21	Performance bond	3,925.00	3,925.00	0.00	0.00	3,925.00	100%	0.00	196.25
22	Change Order-1	-35,270.00	-35,270.00	0.00	0.00	-35,270.00	100%	0.00	-1,763.50
23	Change Order-2	-2,780.00	-2,780.00	0.00	0.00	-2,780.00	100%	0.00	-139.00
24	Retainage Adjustment								-1,302.45
25	Change Order-3	23,871.00	21,783.00	2,088.00	0.00	23,871.00	100%	0.00	0.00
26	Change Order- 4	19,565.40	19,565.40	0.00	0.00	19,565.40	100%	0.00	0.00
27	Change Order-5	9,026.60	9,026.60	0.00	0.00	9,026.60	100%	0.00	0.00
Total This Page		227,148.00	223,025.00	4,123.00	0.00	227,148.00	100%	0.00	5,678.70

WAIVER OF LIEN

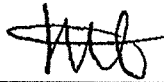
(GOOD ONLY UPON RECEIPT OF PAYMENT)

Know all men by thee presents: That B & P Mechanical, Inc. 3200 West Highview Drive, Appleton, WI 54914 for end in consideration of \$ 4,123.00 Dollars and other good and valuable considerations, lawful money of the United States of American, to me in hand paid, the receipt whereof is hereby acknowledged, does hereby waive, release, remise and relinquish any and all right to claim any lien or liens for work done or material furnished, or any kind of class of lien whatsoever on the following described property:

Village Of Fox Crossing - WWTF
Neenah, WI
Contract No: F0059-9-20-00171

Dated this 3rd Day of December, 2021 at B & P Mechanical, Inc.

By: _____



Shaishav Patel

Monthly Operational Summary

May, 2023

PLANT OPERATIONS

1. **PLANT PERFORMANCE** – The facility met all DNR permit limits in May.
2. **LOW LEVEL PHOSPHORUS LIMIT-** The new low level phosphorus limit took effect on 4/1/23. We had been operating with a limit of 0.7 mg/l total phosphorus as a monthly average. The new limits are 29 lbs. of phosphorus per day as a monthly average, and 9.6 lbs. per day as a six month average. This equates to a concentration of approximately 0.19 mg/l using the average daily flow.
3. **FINAL CLARIFIER DRAIN DOWNS-** On 5/12/23 a bolt broke on the rake mechanism for final clarifier #1. We drained the tank down using the new clarifier drain pump which was purchased last year. A new bolt was installed and the tank was cleaned and inspected while it was offline. We have subsequently drained the other five final clarifiers for cleaning and inspection. We will be draining the four primary clarifiers in June.
4. **ATAD DIGESTER FOAM EVENT-** ATAD reactor #2 foamed over on to the ground on 5/21/23. The DNR was notified and a treatment plant overflow (TFO) report was submitted to the DNR. The plant experienced a power bump which caused one of the blower units to fault. We also experienced issues with the radar gauge that is used to measure the foam level. This resulted in approximately 5000 gallons of foam to be spilled onto the blacktop road near the digester building. The spill was contained onsite, and Kuettel Septic Service was able to remove all of the foam from the road surface and return it to the treatment process.
5. **GREASE TRAP INSPECTION REPORTS-** I have requested a copy of the grease trap inspection reports for 2022 from each member community. Fox West passed resolution #260-00 in the year 2000 which requires each member community to submit an annual report detailing the maintenance records for each grease trap in their collection system. I met with Fox Crossing on 5/31/23 to discuss their grease trap program.
6. **YARDWORK-** Fox West staff performed landscaping work in the yard to repair some of the damaged grass which was torn up while removing snow during the winter. We also sprayed the property for weed control.
7. **WASTE HAULER STATION-** Kuettel Septic Service cleaned out the waste hauler dump station on 5/23/23. This is preventative maintenance that is performed twice per year. They also clean out the primary scum pits while they are onsite.

PRETREATMENT

1. **CANTEEN VENDING-** Canteen Vending had another pH violation on 4/28/23. Fox West issued them a notice of violation (NOV), which is the next step in our enforcement procedure. Canteen Vending is required to submit a corrective action plan which will contain a description of the immediate actions that will be taken to regain compliance. Canteen was also notified that failure to comply with the Fox West sewer use ordinance can result in a fine not to exceed \$10,000 per occurrence each day.

2. **OUTLOOK GROUP/KUETTEL SEPTIC SERVICE-** Fox West operators were unable to enter the head works building on 5/3/23 due to a strong chemical odor which originated from hauled waste. We found that Kuettel Septic Service had disposed of waste from the Outlook Group location in the Town of Clayton. Fox West staff performed an inspection of the Outlook group facility on 5/5/23 to determine the source of the odor. We found that Outlook Group has a collection sump which receives domestic bathroom waste along with process waste. We found that this process waste contained solvents used to clean plates which are used in their oil based ink printing process. I informed Outlook Group that we would not accept any waste from them until they segregated the process wastewater from the domestic wastewater. The process water is hazardous waste and it needs to be disposed of by a licensed waste disposal company. We performed a re-inspection of the facility to confirm that the process waste was now being properly collected. I also had a discussion with Kuettel informing them that they need to be more vigilant in monitoring the contents of the wastes that they bring to this facility.
3. **MASTER FLEET-**Fox West staff performed a routine inspection of the facility on 5/16/23. We discovered a manhole which had a large amount of waste oil material in it. We requested Master Fleet to have this manhole cleaned out, and the waste properly disposed.

EQUIP OPERATIONS

1. **SLUDGE MIXER #7-** This mixer is located in the primary sludge storage tank. The mixer failed to run on 2/16/23. The mixer had blown a fuse in the electrical panel. The mixer was removed from the tank, and we found that rag material had accumulated on the motor housing and impeller. The rags were removed and the mixer was picked up by Xylem on 2/27/23 for inspection at their shop. I have approved a quote for \$11,897.00 to repair. We are still waiting for this work to be completed.
2. **UV DISINFECTION-** Fox West staff replaced the ballast on 2A rack #1 bulbs 1&2, and ballast on 2A rack 15 bulb #5. We will need to order 3 more ballasts. They are \$1,150.50 each.
3. **SERVICE BUILDING AIR HANDLING UNIT-** The replacement coil for the air handling unit was installed by AMA on 3/28/23. Access was onsite on 5/10/23 to start the unit up. It appears to be running as it should.
4. **FERRIC FEED PUMPS-** Fox West staff replaced the hose on ferric feed pump #1.
5. **PRIMARY TUNNEL BOILER-** During the last cross connection inspection Johnson Controls found that there was a cross connection made between the potable water line and the boiler cooling water line which contains glycol. Fox West staff modified the piping to separate the two lines which eliminated the cross connection.
6. **DISSOLVED OXYGEN PROBES-** Fox West staff replaced the dissolved oxygen probes in aeration basins 3-2 and 3-3 (\$5,992.00). These probes were the originals from 2010 and they were not functioning properly. We also replaced the probe caps (\$1,336.00) on the other four aeration basins. These caps should be replaced every two years.
7. **HSI BLOWERS-** Atlas Copco was onsite on 5/31/23 to perform preventative maintenance on the HSI blowers as part of their five year service agreement. This agreement provides for two visits per year.
8. **INFLUENT PUMP SEAL WATER-** The seal water lines for all five influent pumps are severely corroded. I have obtained a quote from August Winter to replace the lines. I have also asked Crane Engineering to provide a quote. I have budgeted \$30,000 in this year's budget to complete this project.

Compliance Maintenance Annual Report

Fox West Regional Sewerage Commission

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5/31/2023 2022

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	3.8338	x	255	x	8.34	=	8,164
February	3.7897	x	285	x	8.34	=	9,016
March	6.7033	x	204	x	8.34	=	11,405
April	9.4415	x	135	x	8.34	=	10,630
May	6.3571	x	265	x	8.34	=	14,054
June	6.8671	x	188	x	8.34	=	10,744
July	5.3713	x	226	x	8.34	=	10,137
August	6.1372	x	218	x	8.34	=	11,143
September	6.4831	x	207	x	8.34	=	11,174
October	4.9395	x	258	x	8.34	=	10,630
November	6.3773	x	209	x	8.34	=	11,092
December	5.4469	x	228	x	8.34	=	10,347

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	13.1	x	90	=	11.79
		x	100	=	13.1
Design BOD, lbs/day	15070	x	90	=	13563
		x	100	=	15070

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	0	0
February	1	0	0	0	0
March	1	0	0	0	0
April	1	0	0	0	0
May	1	0	0	1	0
June	1	0	0	0	0
July	1	0	0	0	0
August	1	0	0	0	0
September	1	0	0	0	0
October	1	0	0	0	0
November	1	0	0	0	0
December	1	0	0	0	0
Points per each		2	1	3	2
Exceedances		0	0	1	0
Points		0	0	3	0
Total Number of Points					3

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3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?
 Yes Enter last calibration date (MM/DD/YYYY)

2023-02-13

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:

Fox West issued a notice of non-compliance to Canteen Vending for pH violations which occurred on 9/20/22, 9/21/22, and 9/23/22.

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

446,946 gallons

No

Holding Tanks

Yes

22,481,740 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 was not affected when receiving these wastes.

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.

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<p>6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.? <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>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.</p> <p>We believe that a waste hauler had been discharging a waste to us which contained a solvent that used to clean printing ink plates. We have requested that the hauler provide us with a list of all of the potential industrial sources they service</p>	
---	--

Total Points Generated	3
Score (100 - Total Points Generated)	97
Section Grade	A

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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	25	22.5	2	1	0	0
February	25	22.5	2	1	0	0
March	25	22.5	2	1	0	0
April	25	22.5	4	1	0	0
May	25	22.5	3	1	0	0
June	25	22.5	2	1	0	0
July	25	22.5	1	1	0	0
August	25	22.5	1	1	0	0
September	25	22.5	0	1	0	0
October	25	22.5	1	1	0	0
November	25	22.5	0	1	0	0
December	25	22.5	1	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

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)

No

If No, please explain:

The effluent area velocity flow meter is not functioning properly. We are using the primary effluent flow for regulatory reporting.

3. Treatment Problems

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

None

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

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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

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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	6	1	0	0
February	30	27	6	1	0	0
March	30	27	6	1	0	0
April	30	27	7	1	0	0
May	30	27	7	1	0	0
June	30	27	8	1	0	0
July	30	27	5	1	0	0
August	30	27	3	1	0	0
September	30	27	4	1	0	0
October	30	27	4	1	0	0
November	30	27	5	1	0	0
December	30	27	5	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

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

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2022

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	10		2.907	0					
February	10		4.997	0					
March	10		4.196	0					
April	11		5.095	0					
May	11		5.755	0					
June	4.4		1.126	0					
July	4.4		.333	0					
August	4.4		.669	0					
September	4.4		1.036	0					
October	18		5.236	0					
November	18		3.724	0					
December	18		6.613	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

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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	.7	0.195	1	0
February	.7	0.205	1	0
March	.7	0.166	1	0
April	.7	0.174	1	0
May	.7	0.208	1	0
June	.7	0.249	1	0
July	.7	0.096	1	0
August	.7	0.112	1	0
September	.7	0.103	1	0
October	.7	0.126	1	0
November	.7	0.145	1	0
December	.7	0.173	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

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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?

2223.7 acres

2.1.2 How many acres did you use?

125.7 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

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. 003 - 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	<9.71			11			<5.05			<25				0	0
Cadmium		39	85	2.07			1.59			1.64			<.595				0	0
Copper		1500	4300	538			505			541			683				0	0
Lead		300	840	30			19			23			26				0	0
Mercury		17	57	.691			.323			.367			.493				0	0
Molybdenum	60		75	9.56			12			8.44			<6.41			0		0
Nickel	336		420	55			39			43			39			0		0
Selenium	80		100	<8.58			<1.84			18			<22			0		0
Zinc		2800	7500	1531			1269			1196			1085				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)

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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:	003
Biosolids Class:	A
Bacteria Type and Limit:	Fecal Coliform
Sample Dates:	07/01/2022 - 09/30/2022
Density:	0
Sample Concentration Amount:	MPN/G TS
Requirement Met:	Yes
Land Applied:	Yes
Process:	Thermophilic Aerobic Digestion
Process Description:	Fecal coliform result is the geometric mean of seven discrete samples on a dry weight basis. Test results were: 8/24/22: <5.2 MPN/g TS 8/24/22 19 MPN/g TS 8/25/22 20 MPN/g TS 8/31/22 183 MPN/g TS 8/31/22 25 MPN/g TS 9/1/22 46 MPN/g TS 9/1/22 16 MPN/g TS

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?

0

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<p>5. Vector Attraction Reduction (per outfall):</p> <p>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.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Outfall Number:</td> <td style="text-align: center;">003</td> </tr> <tr> <td>Method Date:</td> <td style="text-align: center;">06/21/2022</td> </tr> <tr> <td>Option Used To Satisfy Requirement:</td> <td style="text-align: center;">Volatile Solids Reduction</td> </tr> <tr> <td>Requirement Met:</td> <td style="text-align: center;">Yes</td> </tr> <tr> <td>Land Applied:</td> <td style="text-align: center;">Yes</td> </tr> <tr> <td>Limit (if applicable):</td> <td style="text-align: center;">>=38</td> </tr> <tr> <td>Results (if applicable):</td> <td style="text-align: center;">71.9</td> </tr> </table> <p>5.2 Was the limit exceeded or the process criteria not met at the time of land application?</p> <p><input type="radio"/> Yes (40 Points)</p> <p><input checked="" type="radio"/> No</p> <p>If yes, what action was taken?</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	Outfall Number:	003	Method Date:	06/21/2022	Option Used To Satisfy Requirement:	Volatile Solids Reduction	Requirement Met:	Yes	Land Applied:	Yes	Limit (if applicable):	>=38	Results (if applicable):	71.9	0
Outfall Number:	003														
Method Date:	06/21/2022														
Option Used To Satisfy Requirement:	Volatile Solids Reduction														
Requirement Met:	Yes														
Land Applied:	Yes														
Limit (if applicable):	>=38														
Results (if applicable):	71.9														
<p>6. Biosolids Storage</p> <p>6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?</p> <p><input checked="" type="radio"/> >= 180 days (0 Points)</p> <p><input type="radio"/> 150 - 179 days (10 Points)</p> <p><input type="radio"/> 120 - 149 days (20 Points)</p> <p><input type="radio"/> 90 - 119 days (30 Points)</p> <p><input type="radio"/> < 90 days (40 Points)</p> <p><input type="radio"/> N/A (0 Points)</p> <p>6.2 If you checked N/A above, explain why.</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	0														
<p>7. Issues</p> <p>7.1 Describe any outstanding biosolids issues with treatment, use or overall management:</p> <div style="border: 1px solid black; padding: 2px;">None</div>															

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

Compliance Maintenance Annual Report

Fox West Regional Sewerage Commission

Last Updated: Reporting For:
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Staffing and Preventative Maintenance (All Treatment Plants)

<p>1. Plant Staffing</p> <p>1.1 Was your wastewater treatment plant adequately staffed last year?</p> <ul style="list-style-type: none">● Yes○ No <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Could use more help/staff for:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?</p> <ul style="list-style-type: none">● Yes○ No <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
<p>2. Preventative Maintenance</p> <p>2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?</p> <ul style="list-style-type: none">● Yes (Continue with question 2) <input type="checkbox"/><input type="checkbox"/>○ No (40 points) <input type="checkbox"/><input type="checkbox"/> <p>If No, please explain, then go to question 3:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?</p> <ul style="list-style-type: none">● Yes○ No (10 points) <p>2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?</p> <ul style="list-style-type: none">● Yes<ul style="list-style-type: none">○ Paper file system○ Computer system● Both paper and computer system○ No (10 points)	0
<p>3. O&M Manual</p> <p>3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed?</p> <ul style="list-style-type: none">● Yes○ No	
<p>4. Overall Maintenance /Repairs</p> <p>4.1 Rate the overall maintenance of your wastewater plant.</p> <ul style="list-style-type: none">○ Excellent● Very good○ Good○ Fair○ Poor <p>Describe your rating:</p> <div style="border: 1px solid black; padding: 5px;">We have purchased a new maintenance software package that has been installed.</div>	

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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:

BRANDON J KAUFMAN

Certification No:

32779

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				
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		X		
D	Disinfection	X			X
L	Laboratory	X			X
U	Unique Treatment Systems				
SS	Sanitary Sewage Collection	X	NA	X	NA

0

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)

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
- 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?

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Last Updated: Reporting For:
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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

Compliance Maintenance Annual Report

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Last Updated: Reporting For:
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Financial Management

<p>1. Provider of Financial Information</p> <p>Name: <input style="width: 150px;" type="text" value="Roger Viogt"/></p> <p>Telephone: <input style="width: 150px;" type="text" value="(920)793-3721"/> (XXX) XXX-XXXX</p> <p>E-Mail Address (optional): <input style="width: 300px;" type="text" value="gcmwsc@new.rr.com"/></p>													
<p>2. Treatment Works Operating Revenues</p> <p>2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?</p> <p>● Yes (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ No (40 points)</p> <p>If No, please explain: <input style="width: 750px; height: 25px;" type="text"/></p> <p>2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised? Year: <input style="width: 150px;" type="text" value="2021"/></p> <p>● 0-2 years ago (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ 3 or more years ago (20 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ N/A (private facility)</p> <p>2.3 Did you have a special account (e.g., CWF required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?</p> <p>● Yes (0 points)</p> <p>○ No (40 points)</p>	0												
<p>REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]</p>													
<p>3. Equipment Replacement Funds</p> <p>3.1 When was the Equipment Replacement Fund last reviewed and/or revised? Year: <input style="width: 150px;" type="text" value="2022"/></p> <p>● 1-2 years ago (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ 3 or more years ago (20 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ N/A</p> <p>If N/A, please explain: <input style="width: 750px; height: 25px;" type="text"/></p> <p>3.2 Equipment Replacement Fund Activity</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">3.2.1 Ending Balance Reported on Last Year's CMAR</td> <td style="width: 5%; text-align: center;">\$</td> <td style="width: 35%; text-align: right;"><input style="width: 150px;" type="text" value="316,816.87"/></td> </tr> <tr> <td>3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)</td> <td style="text-align: center;">\$</td> <td style="text-align: right;"><input style="width: 150px;" type="text" value="0.00"/></td> </tr> <tr> <td>3.2.3 Adjusted January 1st Beginning Balance</td> <td style="text-align: center;">\$</td> <td style="text-align: right;"><input style="width: 150px;" type="text" value="316,816.87"/></td> </tr> <tr> <td>3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)</td> <td style="text-align: center;">+</td> <td style="text-align: right;"><input style="width: 150px;" type="text" value="412,052.00"/></td> </tr> </table>	3.2.1 Ending Balance Reported on Last Year's CMAR	\$	<input style="width: 150px;" type="text" value="316,816.87"/>	3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)	\$	<input style="width: 150px;" type="text" value="0.00"/>	3.2.3 Adjusted January 1st Beginning Balance	\$	<input style="width: 150px;" type="text" value="316,816.87"/>	3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	+	<input style="width: 150px;" type="text" value="412,052.00"/>	
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3.2.3 Adjusted January 1st Beginning Balance	\$	<input style="width: 150px;" type="text" value="316,816.87"/>											
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	+	<input style="width: 150px;" type="text" value="412,052.00"/>											

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Last Updated: Reporting For:
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<p>3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*) -</p> <p style="text-align: right;">\$ 308,016.38</p> <p>3.2.6 Ending Balance as of December 31st for CMAR Reporting Year</p> <p style="text-align: right;">\$ 420,852.49</p> <p>All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.</p> <p>3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Replaced 50% of the UV bulbs and sleeves</td> <td style="text-align: right; padding: 2px;">\$95,342.50</td> </tr> <tr> <td style="padding: 2px;">Replaced Rotork valve actuator for #2 grit pump</td> <td style="text-align: right; padding: 2px;">\$4,510.00</td> </tr> <tr> <td style="padding: 2px;">Replaced clarifier drain pump</td> <td style="text-align: right; padding: 2px;">\$7,968.00</td> </tr> <tr> <td style="padding: 2px;">Replaced both re-use shower pumps for belt press</td> <td style="text-align: right; padding: 2px;">\$9,675.00</td> </tr> <tr> <td style="padding: 2px;">Replaced SNDR #2 radar gauge</td> <td style="text-align: right; padding: 2px;">\$5,535.02</td> </tr> <tr> <td style="padding: 2px;">Replaced check valve on RAS #1</td> <td style="text-align: right; padding: 2px;">\$7,498.00</td> </tr> </table> <p>3.3 What amount should be in your Replacement Fund? \$ 341,000.00</p> <p>Please note: If you had a CWFPP 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.</p> <p>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)?</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Yes <input type="radio"/> No <p>If No, please explain.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Multiple equipment failures in the past three years. Replacement funding increased in 2022 due to reduction in the account balance.</p> </div>	Replaced 50% of the UV bulbs and sleeves	\$95,342.50	Replaced Rotork valve actuator for #2 grit pump	\$4,510.00	Replaced clarifier drain pump	\$7,968.00	Replaced both re-use shower pumps for belt press	\$9,675.00	Replaced SNDR #2 radar gauge	\$5,535.02	Replaced check valve on RAS #1	\$7,498.00	0				
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<p>4. Future Planning</p> <p>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?</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Yes - If Yes, please provide major project information, if not already listed below. <input type="checkbox"/> <input type="checkbox"/> <input type="radio"/> No <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 5%;">Project #</th> <th style="width: 65%;">Project Description</th> <th style="width: 15%;">Estimated Cost</th> <th style="width: 15%;">Approximate Construction Year</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Master Planning & Needs Review (McMahon) March 26, 2019</td> <td style="text-align: center;">\$70,000</td> <td style="text-align: center;">2023</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Replacing fine screens</td> <td style="text-align: center;">\$4,000,000</td> <td style="text-align: center;">2023</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Replacing aeration blowers</td> <td style="text-align: center;">\$2,000,000</td> <td style="text-align: center;">2024</td> </tr> </tbody> </table>		Project #	Project Description	Estimated Cost	Approximate Construction Year	1	Master Planning & Needs Review (McMahon) March 26, 2019	\$70,000	2023	2	Replacing fine screens	\$4,000,000	2023	3	Replacing aeration blowers	\$2,000,000	2024
Project #	Project Description	Estimated Cost	Approximate Construction Year														
1	Master Planning & Needs Review (McMahon) March 26, 2019	\$70,000	2023														
2	Replacing fine screens	\$4,000,000	2023														
3	Replacing aeration blowers	\$2,000,000	2024														
<p>5. Financial Management General Comments</p> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>																	
<p>ENERGY EFFICIENCY AND USE</p>																	
<p>7. Treatment Facility</p> <p>7.1 Energy Usage</p> <p>7.1.1 Enter the monthly energy usage from the different energy sources:</p>																	

Compliance Maintenance Annual Report

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2022

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	488,063	118.85	4,107	253.08	1,928	9,156
February	518,461	106.11	4,886	252.45	2,054	9,343
March	524,253	207.80	2,523	353.56	1,483	6,530
April	508,651	283.25	1,796	318.90	1,595	5,071
May	557,586	197.07	2,829	435.67	1,280	1,527
June	558,160	206.01	2,709	322.32	1,732	211
July	470,358	166.51	2,825	314.25	1,497	145
August	538,642	190.25	2,831	345.43	1,559	124
September	506,888	194.49	2,606	335.22	1,512	606
October	457,843	153.12	2,990	329.53	1,389	4,411
November	561,459	191.32	2,935	332.76	1,687	6,782
December	494,231	168.85	2,927	320.76	1,541	7,316
Total	6,184,595	2,183.63		3,913.93		51,222
Average	515,383	181.97	2,997	326.16	1,605	4,269

7.1.2 Comments:

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:

IFAS aeration with medium-course bubble diffusers

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?

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<div data-bbox="147 268 1417 327" style="border: 1px solid black; height: 28px;"></div>	
<p>8. Biogas Generation</p> <p>8.1 Do you generate/produce biogas at your facility?</p> <p><input checked="" type="radio"/> No</p> <p><input type="radio"/> Yes</p> <p>If Yes, how is the biogas used (Check all that apply):</p> <p><input type="checkbox"/> Flared Off</p> <p><input type="checkbox"/> Building Heat</p> <p><input type="checkbox"/> Process Heat</p> <p><input type="checkbox"/> Generate Electricity</p> <p><input type="checkbox"/> Other:</p> <div data-bbox="183 762 1414 821" style="border: 1px solid black; height: 28px;"></div>	
<p>9. Energy Efficiency Study</p> <p>9.1 Has an Energy Study been performed for your treatment facility?</p> <p><input checked="" type="radio"/> No</p> <p><input type="radio"/> Yes</p> <p><input type="checkbox"/> Entire facility</p> <p>Year: <div data-bbox="261 1104 514 1148" style="border: 1px solid black; width: 156px; height: 21px;"></div></p> <p>By Whom: <div data-bbox="302 1178 555 1222" style="border: 1px solid black; width: 156px; height: 21px;"></div></p> <p>Describe and Comment:</p> <div data-bbox="168 1260 1411 1314" style="border: 1px solid black; height: 26px;"></div> <p><input type="checkbox"/> Part of the facility</p> <p>Year: <div data-bbox="261 1377 514 1421" style="border: 1px solid black; width: 156px; height: 21px;"></div></p> <p>By Whom: <div data-bbox="302 1451 555 1495" style="border: 1px solid black; width: 156px; height: 21px;"></div></p> <p>Describe and Comment:</p> <div data-bbox="168 1530 1411 1585" style="border: 1px solid black; height: 26px;"></div>	

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

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Grading Summary

WPDES No: 0024686

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	A	4	3	12
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
TOTALS			34	136
GRADE POINT AVERAGE (GPA) = 4.00				

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)

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Last Updated: Reporting For:
5/31/2023 2022

Resolution or Owner's Statement

Name of Governing
Body or Owner:

Fox West Regional Sewerage Commission

Date of Resolution or
Action Taken:

2023-06-07

Resolution Number:

#312-23

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 = A

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

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. = 4.00

Engineering Report

Wastewater Treatment Facility Fine Screen Replacement Project

Prepared for

FOX WEST REGIONAL SEWERAGE COMMISSION

WINNEBAGO COUNTY, WISCONSIN

MAY 31, 2023

McMAHON ASSOCIATES, INC.

1445 McMAHON DRIVE NEENAH, WI 54956 Mailing: PO BOX 1025 NEENAH, WI 54957-1025 PH 920.751.4200 MCMGRP.COM

McM. No. F0059-09-22-00279.02 / CTO:jlh

McMAHON
ENGINEERS ARCHITECTS

Wastewater Treatment Facility Fine Screen Replacement Project

Prepared for

FOX WEST REGIONAL SEWERAGE COMMISSION

WINNEBAGO COUNTY, WISCONSIN

MAY 31, 2023

McM. No. F0059-09-22-00279.02

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- II. EXISTING FINE SCREEN
- III. SCREEN DESIGN CRITERIA
- IV. FINE SCREEN TECHNOLOGIES CONSIDERED
 - A. Rotary Drum Screen
 - B. Perforated Spiral Sieve Screen
 - C. Perforated Plate Belt Screen
 - D. Ozzy Cup Screen
 - E. Center Flow Screen
- V. SCREEN TECHNOLOGY SUMMARY
- VI. CONCLUSIONS

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Table #3	Ozzy Cup Screen Option
Table #4	Ozzy Cup Screen Opinion of Probable Capital Costs
Table #5	Center Flow Options
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Figure #1	Wastewater Treatment Facility Schematic
Figure #2	Existing Fine Screen
Figure #3	Rotary Drum Screen
Figure #4	Perforated Spiral Sieve Screen
Figure #5	Perforated Plate Belt Screen
Figure #6	Ozzy Screen
Figure #7	Center Flow Band Screen

APPENDICES

Appendix A	Plant Design Criteria
Appendix B	Parshall Flume - Submerged Flow Information
Appendix C	Center Flow Band Screens

Wastewater Treatment Facility Fine Screen Replacement Project

Prepared for

FOX WEST REGIONAL SEWERAGE COMMISSION
WINNEBAGO COUNTY, WISCONSIN

MAY 31, 2023

McM. No. F0059-09-22-00279.02

I. INTRODUCTION

The Fox West Regional Sewerage Commission (FWRSC) owns and operates a Wastewater Treatment Facility (WWTF) that serves the Village of Fox Crossing Sanitary District, Town of Grand Chute Sanitary District #2, Town of Greenville and portions of the Town of Neenah. The FWRSC WWTF includes the following major unit processes:

- Fine Screening
- Raw Sewage Pumping
- Grit Removal
- Primary Clarification
- Integrated Fixed Film Activated Sludge (IFAS)
- Secondary Clarification
- Ultraviolet Disinfection
- Sludge Thickening with a Gravity Belt Thickener
- Auto-Thermal Thermophilic Aerobic Digestion (ATAD)
- Sludge Dewatering with Belt Filter Presses
- Hauled-In Waste Receiving Station

A Process Flow Schematic of the WWTF is included in Figure #1. Design criteria for the WWTF is included in Appendix A.

Raw wastewater at the FWRSC WWTF arrives to the Facility via a 48-inch interceptor from the Village of Fox Crossing and a 48-inch interceptor from the Town of Grand Chute. The two (2) flows

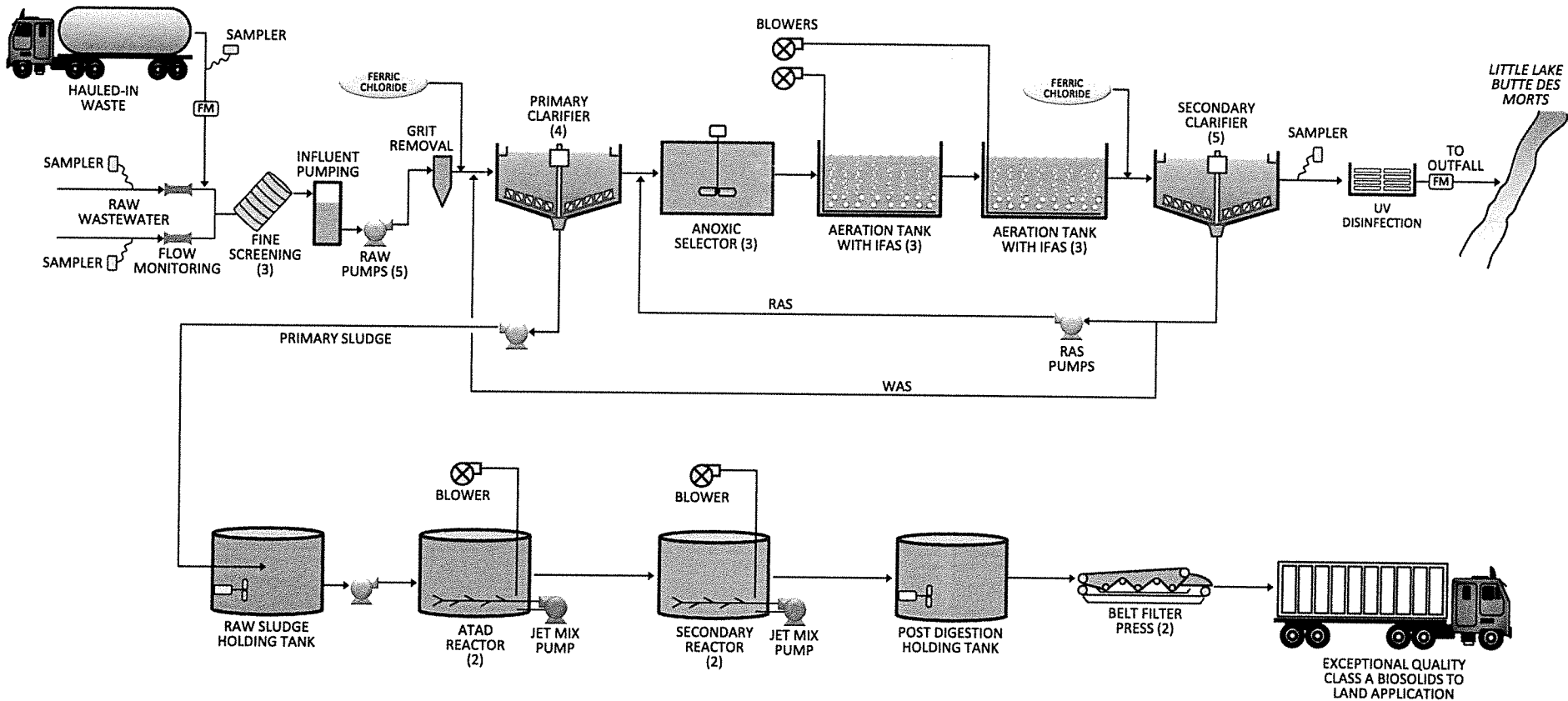


FIGURE #1
FINE SCREEN REPLACEMENT PROJECT
WASTEWATER TREATMENT FACILITY SCHEMATIC

FOX WEST REGIONAL WWTF
McM HFO059-9-22-00279.02 05/31/23

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are metered in separate 24-inch Parshall flumes. Hauled-in waste is discharged into the raw wastewater channel after the flumes.

The Headworks of the WWTF includes three (3) Lakeside Rotamat® Fine Screens. Two (2) screens and the accompanying screw conveyors were originally installed in 1994. A third Rotamat Fine Screen was added in 1999. Each screen has a hydraulic capacity of 9.0 MGD. The screens have been rebuilt several times and are no longer reliable.

In addition, rags and other debris are passing through the screens, creating ragging/clogging issues in the raw sludge storage tank, ATAD reactors and post-digestion biosolids storage tanks. This is either due to bypasses that occur when the screens fail or due to the slotted nature of the screenings basket.

FWRSC is interested in replacing the fine screens to increase reliability and capture efficiency.

II. EXISTING FINE SCREEN

The existing fine screens are Lakeside Rotamat® Fine Screens which includes a screening basket in the channel and a central screw conveyor. As wastewater flows through the basket, solids are trapped by the screen bars that form the circular basket. When liquid rises to a predetermined level the rake begins to rotate cleaning the screen bars. The rake's teeth pass between the bars of the screen to remove captured materials. When the rake reaches the top of the screen the captured material drops into the central screw conveyor. For complete cleaning, the rake reverses direction and passes through a comb. The central screw conveyor then transports the material as it is washed, compacted and dewatered on its way to the discharge chute.

The three (3) fine screens discharge into a common 14-inch diameter horizontal screw conveyor, which discharges into a 14-inch diameter 45-degree inclined screw conveyor. The inclined screw conveyor lifts the screenings approximately 20 feet and deposits them into a dumpster. The conveyors have a maximum screenings handling capacity of 140 cu.ft./hr.

Each screen had a design capacity of 9.0 MGD with a head loss of 9-inches. The screens have a basket diameter of 63-inches. They are each installed in 5'-4" wide by 9'-9" long channel. The channel has a depth of 5'-1". The original drawings show a maximum water level of 3.5 feet upstream of the screens. A depiction of the screens is included in Figure #2.

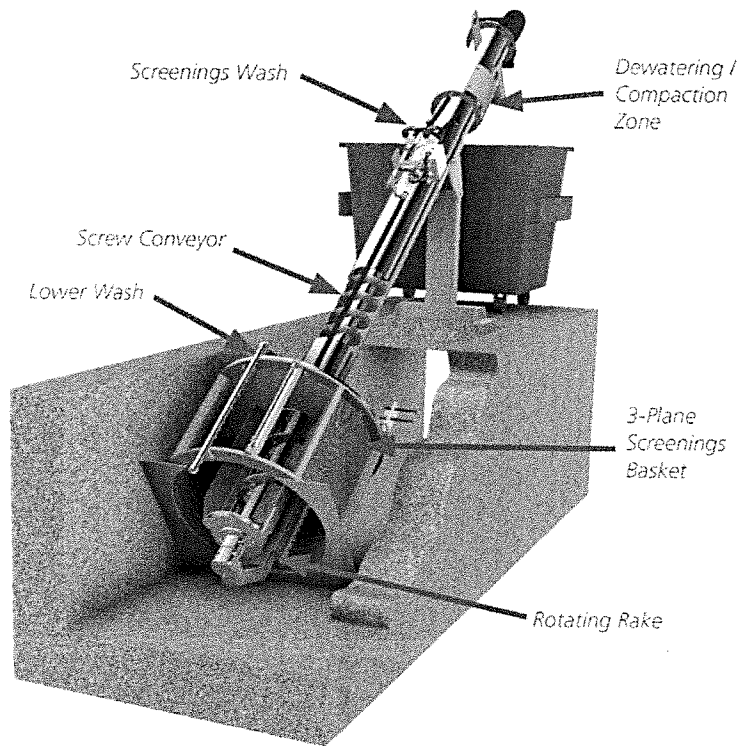


Figure #2
Existing Fine Screen

III. SCREEN DESIGN CRITERIA

As mentioned above, the existing screens are designed for a peak flow of 9.0 MGD (each) with a head loss of 9-inches. This provides a maximum capacity of 27 MGD. The screens are located downstream of the Parshall flumes used to monitor the incoming flow from the two (2) interceptors.

The WWTF was designed for the following year 2030 influent flows:

- Average.....8.2 MGD
- Maximum Month.....13.1 MGD
- Maximum Day25.4 MGD
- Peak Hour28.7 MGD

The new screens will be sized for following design criteria. The screens are sized to handle the average and maximum month flows with one unit out of service.

- Screen Size Opening¼" perforated
- Average Flow4.1 MGD
- Peak Flow.....10.0 MGD

- Channel Width.....5'-4"
- Channel Depth.....5'-1"
- Maximum Allowable Head4" (non submerged)
- Maximum Allowable Head22" (submerged)

The non submerged head loss is the maximum head loss allowed through the screen at peak flow that will not impact the upstream Parshall flume flow measurement. Head losses above 4-inches will require the use of new flow measuring devices to monitor both the upstream and downstream levels of the flume to obtain an accurate influent flow measurement. Refer to Appendix B for information on submerged flow measurement for a flume.

The screens considered will have perforated rather than slotted openings. The current screens have slotted openings, which have allowed rags and debris to pass through.

IV. FINE SCREEN TECHNOLOGIES CONSIDERED

The following fine screen alternatives will be evaluated for this application.

- Rotary Drum Screen
- Perforated Spiral Sieve Screen
- Perforated Plate Screen
- Ozzy Cup Screen
- Center Flow Band Screen

The fine screen alternatives will be evaluated based on hydraulic capacity, solids capture efficiency, compatibility with the existing channels, ease of installation, maintenance requirements, and conveyance of screenings. Opinions of Probable Capital Costs were developed for each option.

A. ROTARY DRUM SCREEN

1. General Operation

The first option evaluated is a rotary drum screen. Rotary drum screens consist of a filtering drum that utilizes openings in a perforated screen to remove solids as the drum rotates through the wastewater stream. The screens are installed parallel to the flow path. A schematic of the screen is shown in Figure #3.

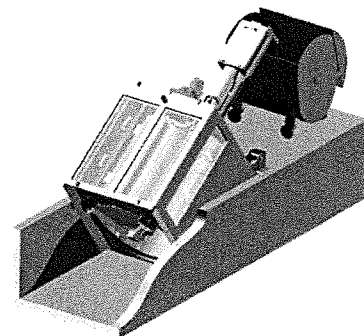


Figure #3
Rotary Drum Screen

The screenings are captured in the perforated drum. When cleaned, the drum rotates and captured solids fall into an integral screw conveyor which lifts the screenings up to a compaction area. Material is washed from screen surface using a pressure water spray system at the periphery of the drum and is deposited onto an internal trough that carries material away from the screen.

The rotary drum screen provides a compact design that can handle screening, washing, and compaction in one unit. The capture rate is highly effective because the screened material is trapped within the drum, allowing less material to carryover and continue downstream.

2. Screen Details

Saveco North America was contacted to evaluate the feasibility of installing a Rotary Drum Screen system in the Fox West Regional WWTF. To process up to a peak flow of 30 MGD (10 MGD per screen), Saveco recommends three (3) Flo-Drum VSA1600 inclined drum screens with integral conveyors and compactors.

To accommodate the screens, the widened part of the channel that houses the existing screens will need to be increased from a length of 6 feet to 12'-9." This is not practical with the existing layout. Therefore, this screen will not be considered further.

B. PERFORATED SPIRAL SIEVE SCREEN

1. General Operation

The perforated spiral sieve screen compactor consists of an integrated screen, shaftless spiral compactor and a press unit. During operation, solids within the incoming flow will progressively collect onto the screen mesh and cause it to gradually bind. The upstream water level will rise and at a predetermined level, or after a set time interval, the spiral will be activated.

Brushes fixed to the periphery at the lower section of the spiral clean the screen mesh and convey the solids up to the pressing zone. The solids or screenings are compacted and dewatered, prior to discharging the solids. The jet wash will break away organics and return them to the inlet flow. A schematic of the Spiral Sieve Screen is shown in Figure #4.

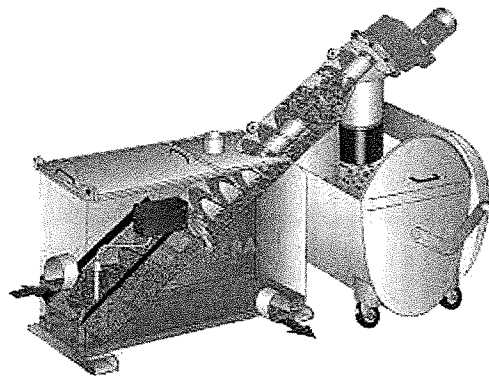


Figure #4
Perforated Spiral Sieve Screen

The main advantage of the spiral sieve is its compact design and the ability to be pivoted out of the channel for maintenance.

2. Screen Details

Aqseptence Group was contacted to evaluate the feasibility of installing the Spiral Sieve Screen system in the Fox West Regional WWTF. Due to the high peak flow of 10 MGD per screen, a perforated spiral sieve screen would not hydraulically work for this application.

C. PERFORATED PLATE BELT SCREEN

1. General Operation

Perforated plate belt/band screens are continuous screens that rotate through the influent stream. The screens remove debris from the stream and convey it out of the channel. The belt/band screens can be connected to perforated metal or UHMW plates sections or continuous plastic belts and the screen openings can be circular, rectangular, or square in shape. The accumulated debris is removed at the top of the unit by water spray and/or with a counter-rotating brush. A schematic of the perforated Plate Screen is shown in Figure #5.

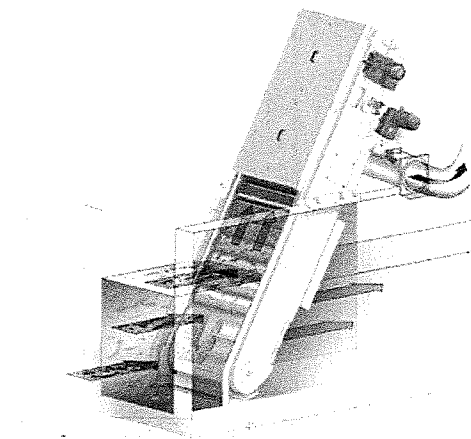


Figure #5
Perforated Plate Belt Screen

Perforated plate screens can handle higher flows than the basket style screens.

Disadvantages of belt/band screens include the following:

- The cleaning brush or cleaning spray water at times may be unable to remove stringy material from the screen openings.
- There is the chance for screening carryover as the screen returns down into the channel behind the front face of the screen.
- The screen cannot pivot out of the channel. Maintenance on the lower end of the screen will require draining its channel or removing the screen from the channel.

2. Screen Details

Headworks International was contacted to evaluate the feasibility of installing a perforated plate belt screen system in the Fox West WWTF to process up to a peak flow of 30 MGD (10 MGD per screen). Headworks recommended a screen with a width less than the existing 5.33 ft fine screen channel; therefore, they can be installed directly in the channel. Additional screen details are provided in Table #1, below.

**TABLE #1
PERFORATED PLATE BELT SCREEN OPTION**

PARAMETER	HEADWORKS INTERNATIONAL
Quantity / Model	(3) Perforator Screens
Channel Width	5.33 ft
Screen Width	5.17 ft
Channel Depth	5.10 ft
Perforation Size	6 mm (0.25 inch)
Head Loss	8-inches
Discharge Height (above top of channel)	5 ft
Screen Height(above top of channel)	8.2 ft
Screen Motor	3 HP (max)
Brush Motor	2 HP (max)
Incline	70%
Recessed Depth in Channel	Not Required

The screens will require new level sensing transmitters for calculating flows through the influent Parshall flumes due to the head loss through the screen.

3. Budgetary Equipment Costs

Headworks International provided a budgetary equipment cost for three (3) Perforator Screens and three (3) integral wash/compactors for \$944,405. This does not include the cost of the conveyors to convey the screenings to the dumpster on the first floor. The preliminary Opinion of Probable Cost for the installation is \$2,633,299 as shown in Table #2.

**TABLE #2
PERFORATED BELT SCREEN
OPINION OF PROBABLE CAPITAL COST**

DESCRIPTION	OPINION OF PROBABLE CAPITAL COST
Demolition of Existing Screens	\$45,000
Perforated Belt Screens (3)	\$688,100
Washer Compactors (3)	\$256,300
Conveyors (2)	\$150,000
Channel Grating Modifications	\$45,000
Mechanical & Equip Installation (35% equip cost)	\$383,040
Electrical & Controls (20% project cost)	\$313,488
Subtotal	\$1,880,928
Engineering & Contingency (30%)	\$564,278
General Conditions (10%)	\$188,093
TOTAL OPINION OF PROBABLE CAPITAL COST	\$2,633,299

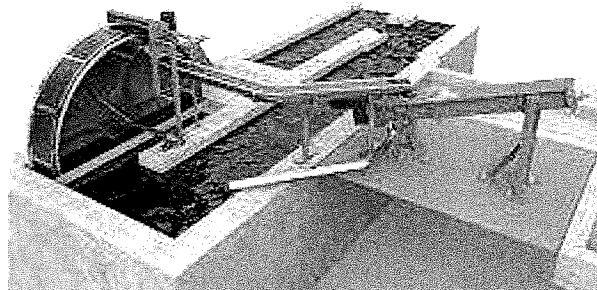
D. OZZY CUP SCREEN

1. General Operation

The Ovivo Ozzy Cup screen consists of a drum structure with a solid horizontal main shaft, which revolves slowly in self-aligning roller bearings. Water flows from the inside to the outside of the drum through mesh panels arranged around its periphery. Mesh panels are cleaned by spray wash nozzles mounted on the outer side of the drum screen.

The screenings are then caught by a screening hopper and conveyed to the screw compactor through a sluice trough. The screen is driven by a single drive unit positioned at deck level. The final drive is a nylon pinion, which engages with a gear ring on the outside of the drum.

Unlike the other options where the screenings are dewatered prior to discharge, the screenings in this system are discharged with carrier water in a trough. The system relies on the screw conveyors to dewater and clean the screenings. A schematic of an Ozzy Cup Screen is shown in Figure #6, below.



*Figure #6
Ozzy Cup Screen*

2. Screen Details

For this installation, Ovivo recommended three (3) 9 foot diameter Ozzy Cup screens. Each screen is 3 feet wide, therefore they should fit in the existing channels. The screens will require a new dividing wall to direct flow into the center of the screen and provide a bypass. Ovivo has included this as a stainless steel wall in their equipment quote.

The proposed package includes six (6) 9-inch wide by 9-inch tall troughs, a horizontal shaftless screw conveyor and an angled shaftless screw conveyor. Each screen includes two (2) u-shaped troughs to carry the screenings in carrier water to the horizontal conveyor. The horizontal and angled conveyors include perforated bottoms and 8-inch drain to dewater the screenings. The horizontal conveyor receives the screenings from the three (3) fine screens. The angled conveyor transports the screenings to the dumpster on the first floor.

Each screen requires 25 gpm of wash water. In addition, each conveyor requires 6 to 16 gpm of wash water, providing a peak water demand of approximately 100 gpm.

New platforms would be required to access the top of the screen, discharge troughs and horizontal conveyor. Details of the proposed system are provided in the Table #3, below.

**TABLE #3
OZZY CUP FINE SCREEN OPTION**

PARAMETER	OVIVO USA. LLC.
Quantity / Model	(3) Ozzy Cup Screens
Screen Width	3 ft
Screen Diameter	9 ft
Perforation Size	6 mm (0.25 inch)
Head Loss	2.7 inches at 25% blinding
Discharge Height (above top of channel)	4 ft (approx.)
Screen Height (above top of channel)	5.2 ft
Screen Motor	1 HP (max)
Incline	N/A
Recessed Depth in Channel	Not Required
Integral Components	Discharge Trough & Dewatering Conveyors

It appears that the existing that the existing level transmitters for measuring the flow though the influent flumes will work with this screening system.

Advantages of the Ozzy Cup fine screens are their low head loss and there are no components that need to be maintained below the water line. A disadvantage of the system is that it relies on troughs to carry fluidized solids to perforated

conveyors for dewatering. If the screw conveyor fails or if debris gets caught in the trough, it could cause the troughs to overflow and create a mess.

3. Preliminary Opinion of Probable Costs

Ovivo, USA provided a budgetary equipment cost of \$1,085,000 for three (3) screens with the necessary troughs and conveyors to convey the screenings to the dumpster on the first floor. The preliminary Opinion of Probable Cost for the installation is \$3,219,258 as shown in Table #4.

**TABLE #4
OZZY CUP FINE SCREEN
OPINION OF PROBABLE CAPITAL COST**

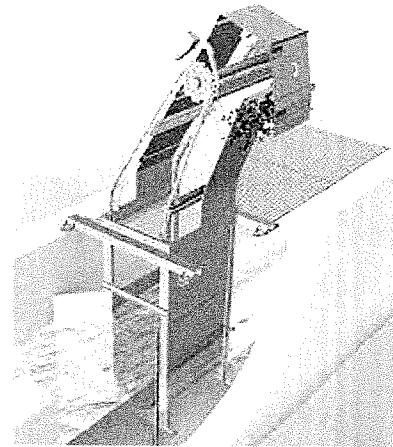
DESCRIPTION	OPINION OF PROBABLE CAPITAL COST
Demolition of Existing Screens	\$45,000
Ozzy Cup Screen with Conveyors	\$1,193,500
Channel Grating Modifications	\$60,000
Elevated Access Platforms	\$200,000
Mechanical & Equip Installation (35% equip cost)	\$417,725
Electrical & Controls (20% project cost)	\$383,245
Subtotal	\$2,299,470
Engineering & Contingency (30%)	\$689,841
General Conditions (10%)	\$229,947
TOTAL OPINION OF PROBABLE CAPITAL COST	\$3,219,258

E. CENTER FLOW BAND SCREEN

1. General Operation

Center flow band screens are designed as an elongated drum screen with an inside-out flow through the screen, utilizing openings in perforated plates. The screens are installed parallel to the flow path. A schematic of the screen is shown in Figure #7.

A steel plate covers the back of the inside of the drum, perpendicular to the path of flow, and forces the flow out through both sides of the screen. The screenings are captured in the perforated drum with plates/“shelves” serving to aid in lifting material within screen drum. Material is washed from screen surface using a pressure water spray system at the high point of the drum and is deposited onto an internal trough that carries material away from the screen.



*Figure #7
Center Flow Band Screen*

The design of the center flow screen provides twice as much screening area in the same footprint as other designs as the screens are installed parallel to the flow. Therefore, the head losses are less when compared to similar size screen openings. The capture rate is highly effective because the screened material is trapped within the screen, preventing contact with the clean stream, and allowing less material to carryover and continue downstream.

A disadvantage of the screen is that it cannot pivot out of the channel. Maintenance on the lower end of the screen will require draining its channel or removing the screen from the channel. The channels will need to be emptied on a regular basis to allow for cleaning of grit upstream of the band screen.

2. Screen Details

Hydro Dyne Engineering recommended three (3) Great White Center Flow Screens for this application. The screens have a width of 38-inches and therefore can be installed directly in the channel. The screens are provided with integral washer/compactors in the headspace of the unit. Each screen with integral washer/compactor requires 58 gpm of wash water, providing a peak water demand of approximately 174 gpm.

Aqseptence Group recommended three (3) Centre Flow Band Screens for this application. The screens have a width of 36-inches and therefore can be installed directly in the channel. The screens are provided with integral washer/compactors in the headspace of the unit. Each screen with integral washer/compactor has a maximum wash water demand of 50 gpm of wash water, providing a peak water demand of approximately 150 gpm.

Additional screen details provided by each manufacturer are presented in Table #5.

**TABLE #5
CENTER FLOW SCREEN OPTIONS**

PARAMETER	AQSEPTENCE GROUP	HYDRO DYNE ENGINEERING
Quantity / Model	(3) Centre-Flo® (600-900) Band screens	(3) Great White Center Flow Screens (Model 44-49-132-6-P)
Channel Width	5.33 ft	5.33 ft
Screen Width	3 ft	3'-2"
Channel Depth	5.10 ft	5.10 ft
Perforation Size	5 mm (0.20 inch)	6 mm (0.25 inch)
Head Loss	9.78 inches	5.57 inches @ 50% blinding
Discharge Height (above top of channel)	35.4 inches	5 ft
Screen Height (above top of channel)	5.33 ft	5 ft
Screen Motor	1.5 kW	0.75 hp
Compactor/Wash Motors		5 hp
Incline	0%	0%
Recessed Depth in Channel	Not Required	Not Required
Integral Components	Screenings Washer/Compactor	Screenings Washer/Compactor

Both units will require additional level transmitters to monitor the influent flows through the Parshall flumes during peak flows due to submerged flume conditions.

3. Preliminary Opinion of Probable Costs

Hydro Dyne Engineering provided a budgetary equipment cost for three (3) Great White Center Flow Screens with integral wash/compactor for \$1,000,000. This includes the horizontal and inclined screw conveyors to carry the screenings to the dumpster on the first floor. The preliminary Opinion of Probable Cost for the installation is \$2,419,200 as shown in Table #6.

**TABLE #6
HYDRO DYNE CENTER FLOW BAND SCREEN
OPINION OF PROBABLE CAPITAL COST**

DESCRIPTION	OPINION OF PROBABLE CAPITAL COST
Demolition of Existing Screens	\$45,000
Band Screens (3) with Conveyors	\$1,000,000
Channel Grating Modifications	\$45,000
Mechanical & Equip Installation (35% equip cost)	\$350,000
Electrical & Controls (20% project cost)	\$288,000
Subtotal	\$1,728,000
Engineering & Contingency (30%)	\$518,400
General Conditions (10%)	\$172,800
TOTAL OPINION OF PROBABLE CAPITAL COST	\$2,419,200

Aqseptence Group provided a budgetary equipment cost for three (3) Centre-Flo® (600-900) Band screens with integral wash/compactor for \$574,000. This does not include the horizontal or inclined screw conveyors. The preliminary Opinion of Probable Cost for the installation is \$2,032,800 as shown in Table #7.

**TABLE #7
AQSEPTENCE GROUP CENTER FLOW BAND SCREEN
OPINION OF PROBABLE CAPITAL COST**

DESCRIPTION	OPINION OF PROBABLE CAPITAL COST
Demolition of Existing Screens	\$45,000
Band Screens (3)	\$574,000
Conveyors (2)	\$150,000
Channel Grating Modifications	\$45,000
Mechanical & Equip Installation	\$350,000
Electrical & Controls	\$288,000
Subtotal	\$1,452,000
Engineering & Contingency (30%)	\$435,600
General Conditions (10%)	\$145,200
TOTAL OPINION OF PROBABLE CAPITAL COST	\$2,032,800

V. SCREEN TECHNOLOGY SUMMARY

Of the five (5) screening technologies evaluated, it appears that the Perforated Plate Belt Screens, Ozzy Cup Screens and Center Flow Band Screens are the only perforated screening options that will fit within the confines of the existing channels and handle a peak flow of 10 MGD with minimal head losses (8-inches or less). Opinions of Probable Cost for the three (3) types of screens are as follows:

- Perforated Plate Belt Screen\$2,633,299
- Ozzy Cup Screen\$3,219,258
- Center Flow Band Screen\$2,032,800 to \$2,419,200

The Ozzy Cup screen has the lowest head loss. A disadvantage of the system is that it relies on troughs to carry fluidized solids to perforated conveyors for dewatering. If the screw conveyor fails or if debris gets caught in the trough, it could cause the troughs to overflow and create a mess.

The perforated plate belt screen can allow material to “pass through” the screen. Material not removed by the spray bar and/or brush at the top of the screen can be carried into the flow stream downstream of the screen.

The center flow band screen has the lowest opinion of cost and unlike the perforated belt screen, it does not allow for solids carryover. It should be noted that the screens will need to be removed from service on a regular basis to remove grit that may have accumulated in front of the screen.

VI. CONCLUSIONS

The Fox West Regional Sewerage Commission (FWRSC) is interested in replacing the fine screening system. The current fine screens have been unreliable, requiring significant repairs and rework. During failures, the screens can allow rags and other debris to pass through the Headworks facility, where they end up in clarifiers, sludge storage tanks, and ATAD reactors. In addition, the slotted nature of the screens allows rags and debris to pass through the screen.

FWRSC is also interested in increasing the capture efficiency of their screens. New screens considered have perforated rather than slotted openings.

McMahon Associates, Inc. (McMAHON) has investigated the feasibility of installing the following ¼-inch fine screen technologies:

- Rotary Drum Screen
- Perforated Spiral Sieve Screen
- Perforated Plate Screen
- Ozzy Cup Screen
- Center Flow Band Screen

The rotary drum screen and perforated spiral sieve screens are not able to accommodate the design flows in the existing channels. Of the three (3) remaining options, the center flow band screen has the lowest Opinion of Probable Capital Cost at a range of \$2,032,800 to \$2,419,200.

Based on the Opinion of Probable Cost and the advantages of the screens, it is recommended that the existing Lakeside Rotamat® Fine Screens be replaced with center flow band screens. Information on center flow band screens is included in Appendix C.

Disclaimer: The attached Opinion Of Probable Cost was prepared for use by the Owner in planning for future costs of the project. In providing Opinions Of Probable Cost, the Owner understands that the Design Professional has no control over costs or the price of labor, equipment or materials, or over Construction Professionals' method of pricing, and that the Opinions Of Probable Cost provided herewith are made on the basis of the Design Professional's qualifications and experience. It is not intended to reflect actual costs and is subject to change with the normal rise and fall of the local area's economy. This Opinion must be revised after every change made to the project or after every 30-day lapse in time from the original submittal by the Design Professional.

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APPENDIX A
Plant Design Criteria

PROCESS FLOW DIAGRAM FLOWS, LOADS, AND CONCENTRATIONS FOR 2020

ID	DESCRIPTION	FLOWSTREAM ID	INITIAL STARTUP										2020 DESIGN AVERAGE										2020 MAXIMUM MONTH										2020 DESIGN PEAK HOUR
			BOD		TSS		NH3		NO3		BOD		TSS		NH3		NO3		BOD		TSS		NH3		NO3								
			FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)						
1A+1B	RAW WASTEWATER	RAW	6.3	8,783	186	9,233	175	785	15	7.2	12,100	202	13,265	209	1,361	23	11.9	13,310	139	15,078	157	1,857	17										
2	PRIMARY INFLUENT	PI	8.5	10,184	188	12,909	240	973	18	7.4	14,877	240	19,555	318	1,721	28	11.8	10,818	171	23,980	244	2,070	21										
3A+3B	PRIMARY EFFLUENT	PE	8.5	5,031	93	5,200	96	868	18	7.4	7,864	128	8,404	143	1,710	28	11.7	8,847	92	11,750	125	2,060	21										
4	MIXED LIQUOR	ML	8.0	-	-	19,818	2,120	-	-	10.3	-	-	239,953	2,783	-	-	16.4	-	-	404,827	2,980	-	-										
5	PLANT EFFLUENT	PLE	8.3	423	8	852	18	9	0.1	7.2	480	8	1,281	18	12	0.2	11.5	767	8	1,725	18	307	3										
6A+6B	PRIMARY SCUM	PSM	0.004	-	-	-	-	-	-	0.004	-	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-						
7	PRIMARY SLUDGE (INCLUDES WAS)	PSD	0.0235	-	-	10,348	37,000	-	-	0.05	-	-	14,058	37,000	-	-	0.05	-	-	-	-	-	-	-	-	-	-						
8	SECONDARY SCUM	SSM	0.007	-	-	-	-	-	-	0.007	-	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-						
9	WASTE ACTIVATED SLUDGE	WAS	0.09	-	-	3,721	8,204	-	-	0.07	-	-	22,039	37,000	-	-	0.07	-	-	-	-	-	-	-	-	-	-						
10A+10B	RETURN ACTIVATED SLUDGE	RAS	2.8	-	-	5,711	6,204	-	-	0.13	-	-	6,321	6,030	-	-	0.15	-	-	8,101	6,448	-	-	-	-	-	-						
11A+11B+11C	MIXED LIQUOR RECYCLE	M/R	13.1	-	-	2,120	-	-	-	13.1	-	-	2,783	-	-	-	13.1	-	-	2,980	-	-	-	-	-	-	-						

PROCESS FLOW DIAGRAM FLOWS, LOADS, AND CONCENTRATIONS FOR 2030

ID	DESCRIPTION	FLOWSTREAM ID	2030 DESIGN AVERAGE										2030 MAXIMUM MONTH										2030 DESIGN PEAK HOUR				
			BOD		TSS		NH3		NO3		BOD		TSS		NH3		NO3										
			FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)	FLOW (MGD)	BOD (LBS/DAY)	TSS (MG/D)	NH3 (MG/D)	NO3 (MG/D)
1A+1B	RAW WASTEWATER	RAW	8.2	13,700	200	14,294	209	1,573	23	13.1	19,070	336	17,183	197	1,869	17	22.3	24,200	130	31,418	168	2,762	18				
2	PRIMARY INFLUENT	PI	8.5	16,997	241	22,478	318	1,879	28	13.4	19,319	173	27,832	248	2,370	21	22.6	28,943	154	43,723	233	3,507	19				
3A+3B	PRIMARY EFFLUENT	PE	8.4	8,787	124	10,115	144	1,867	28	13.3	10,243	92	13,539	122	2,358	21	22.5	12,827	87	17,489	93	3,491	19				
4	MIXED LIQUOR	ML	11.8	-	-	264,720	2,694	-	-	18.8	-	-	455,218	2,927	-	-	32.5	-	-	812,895	3,000	-	-				
5	PLANT EFFLUENT	PLE	8.2	547	8	1,231	18	27	0.4	13.1	874	8	1,297	18	339	3	22.3	1,874	9	3,348	18	2,232	12				
6A+6B	PRIMARY SCUM	PSM	0.004	-	-	-	-	-	-	0.004	-	-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-
7	PRIMARY SLUDGE (INCLUDES WAS)	PSD	0.05	-	-	18,734	37,000	-	-	0.07	-	-	22,039	37,000	-	-	0.11	-	-	32,785	37,000	-	-	-	-	-	-
8	SECONDARY SCUM	SSM	0.007	-	-	-	-	-	-	0.007	-	-	-	-	-	-	0.007	-	-	-	-	-	-	-	-	-	-
9	WASTE ACTIVATED SLUDGE	WAS	0.18	-	-	7,368	5,532	-	-	0.15	-	-	9,568	8,900	-	-	0.14	-	-	10,744	9,078	-	-	-	-	-	-
10A+10B	RETURN ACTIVATED SLUDGE	RAS	3.4	-	-	5,552	-	-	-	5.3	-	-	6,813	-	-	-	10.0	-	-	9,078	-	-	-	-	-	-	-
11A+11B+11C	MIXED LIQUOR RECYCLE	M/R	13.1	-	-	2,694	-	-	-	13.1	-	-	2,927	-	-	-	13.1	-	-	3,000	-	-	-	-	-	-	-

- NOTES
- A AVERAGE VALUES ARE BASED ON A WASTEWATER TEMPERATURE OF 14 TO 15 °C. PEAK MONTH AND PEAK WEEK ESTIMATES ARE BASED ON A HISTORICAL MINIMUM MONTH WASTEWATER TEMPERATURE OF 9.8 °C.
 - B 2020 DESIGN PLANT INFLUENT PHOSPHORUS LOADS WERE 284 LBS/DAY AVERAGE, 314 LBS/DAY PEAK MONTH, 353 LBS/DAY PEAK WEEK, AND 570 LBS/DAY PEAK DAY. PLANT EFFLUENT PHOSPHORUS WAS PREDICTED TO BE LESS THAN 1 mg/L FOR ALL LOAD CONDITIONS.
 - C 2020 DESIGN PLANT INFLUENT PHOSPHORUS LOADS WERE 324 LBS/DAY AVERAGE, 351 LBS/DAY PEAK MONTH, 402 LBS/DAY PEAK WEEK, AND 846 LBS/DAY PEAK DAY. PLANT EFFLUENT PHOSPHORUS WAS PREDICTED TO BE LESS THAN 1 mg/L FOR ALL LOAD CONDITIONS.
 - D 2020 VALUES ARE BASED ON A 35% FAS FILL FRACTION IN THE TWO AERATED CELLS OF EACH AERATION TANK. 2020 VALUES ARE BASED ON A 49% FAS FILL FRACTION IN THE TWO AERATED CELLS OF EACH AERATION TANK.

McMAHON
ENGINEERS ARCHITECTS

WASTEWATER TREATMENT FACILITY
EXPANSION AND REMEDIATION
GRAND CHUTE-ARNSHA
WEST BENTONVILLE COMMISSION
RESIDENT, MISSOURI

CH2MHILL

GENERAL
FLOWS, LOADS AND
CONCENTRATIONS - LIQUIDS

NTS

VERIFY SCALE

MAXIMUM INCH ON ORIGINAL DRAWING: 1"

DATE: AUGUST 2009

PROJECT: 386448

CHG: 001-D-0003

SHEET: 27

NO. DATE DESG. REVISION

1. 08/22/09 JH/ESH/BJE

2. 08/22/09 JH/ESH/BJE

3. 08/22/09 JH/ESH/BJE

4. 08/22/09 JH/ESH/BJE

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50. 08/22/09 JH/ESH/BJE

BY

APPROVED

08/22/09 11:28:00 AM ALL RIGHTS RESERVED.
 THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CH2MHILL. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN AUTHORIZATION OF CH2MHILL.

APPENDIX B

Parshall Flume Submerged Flow Information

Parshall flumes

The Parshall flume (see Figure 4-6) was developed in the 1920s primarily to measure irrigation water flow, but it is now frequently used in industrial and municipal sewers, and in sewage treatment plants. In 1922, Dr. Ralph L. Parshall of the U.S. Soil Conservation Service made some radical changes to the existing venturi (subcritical) flume design. The essential change introduced by Parshall was a drop in the floor which produced supercritical flow through the throat of the flume (Type V). This perfected device was named the Parshall Measuring Flume by the Irrigation Committee of the American Society of Civil Engineers. The flumes are not patented and the discharge tables are not copyrighted.

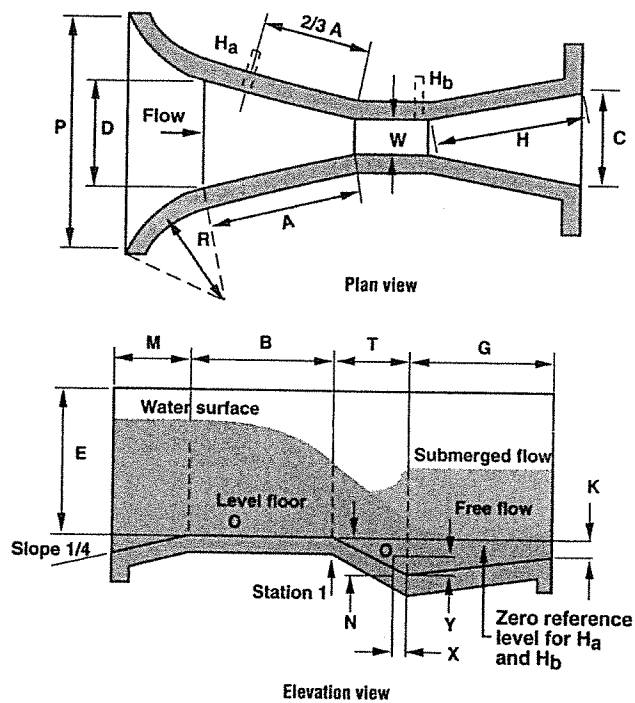


Figure 4-6: Parshall Flume

The constricted throat of the flume produces a head that is related to discharge. The level converging section followed by the downward sloping floor in the throat gives the Parshall flume its ability to withstand relatively high degrees of submergence without affecting the rate of flow. The converging upstream portion of the flume accelerates the entering flow, helping to eliminate deposits of sediment which would otherwise reduce measurement accuracy. The approaching flow should be relatively free of turbulence, eddies, and waves if accurate measurements are expected.

Submergence Transition

As Parshall Flumes increase in size, their resistance to the effects of downstream submergence increases.

1-3 inch Parshall	50%
6 inch Parshall	60%
1-8 foot Parshall	70%
10-50 foot Parshall	80%

Flow Equations

With the above known, the flow rate in the flume can now be calculated.

For free flow, the flow equation is:

$Q = KH_a^n$
$Q = \text{free flow rate (cfs / l/s)}$
$K = \text{flume discharge constant (varies by flume size / units)}$
$H_a = \text{depth at point of measurement (feet / centimeters)}$
$n = \text{discharge exponent (depends upon flume size)}$

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Per ASTM D1941 (<https://www.astm.org/Standards/D1941.htm>):

THROAT WIDTH	K (IMPERIAL)	K (SI)	N
1"	0.338	0.0479	1.55
2"	0.676	0.0959	1.55
3"	0.992	0.141	1.55
6"	2.06	0.264	1.58
9"	3.07	0.393	1.53
1'	4	0.624	1.522

$$Q = \frac{C_s W (H_a - H_b)^{n_f}}{[-(\log_{10} S + 0.0044)]^{n_s}}$$

Q = discharge

H_a = depth at the primary point of measurement

H_b = depth at the secondary point of measurement

W = throat width

n_f = free-flow exponent

n_s = submerged flow exponent

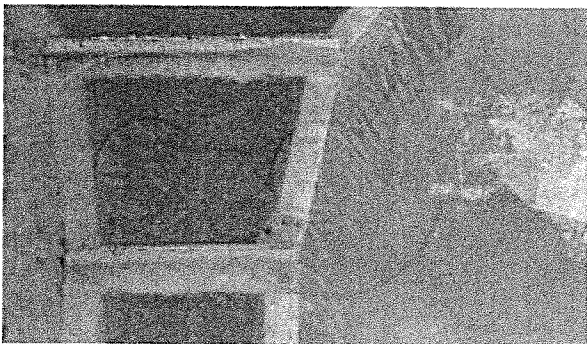
C_s = submergence constant

S = submergence ratio (H_b/H_a)

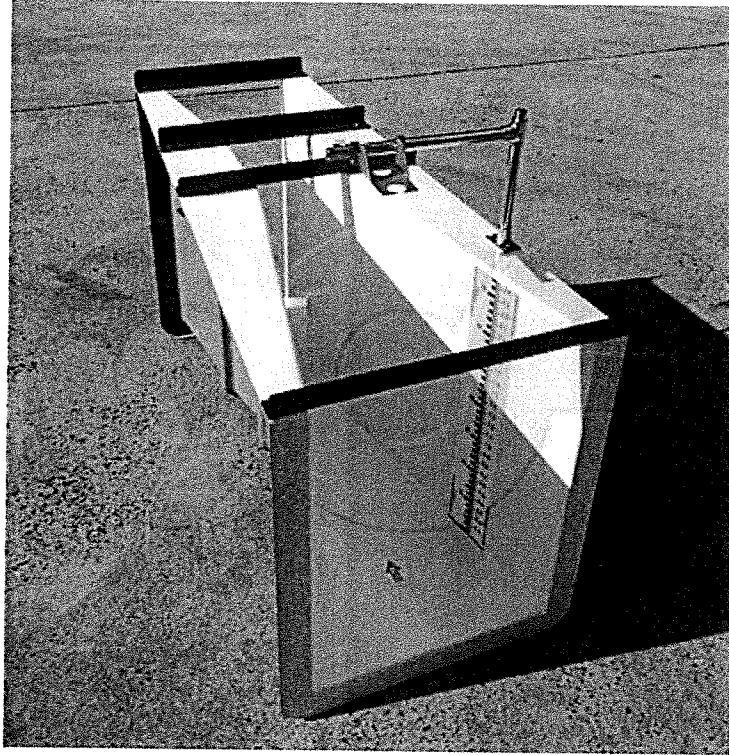
For more information (<https://www.openchannelflow.com/blog/universal-equation-parshall-flume-submergence>) on the submergence equation.

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RELATED ARTICLES



(<https://www.openchannelflow.com/blog/universal-equation-parshall-flume-submergence>)

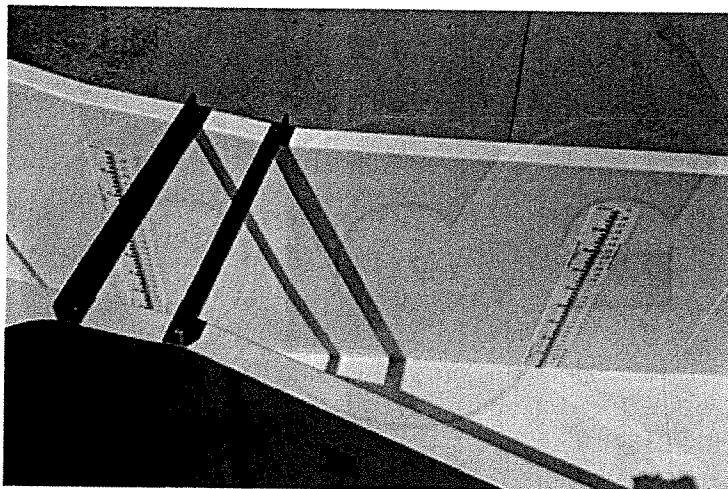


The single, primary point of measurement, denoted as H_a , allows an operator to take a SINGLE depth reading to determine the flow rate through the flume. As with any short throated flume, the H_a location is upstream of the throat at a specific location - $2/3$ of the sidewall length as measurement back from where the converging section meets the throat (for large Parshall Flumes the point of measurement is closer to the throat).

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Submerged Flow

Should the flow from a Parshall Flume be restricted by downstream conditions, a secondary point of measurement, H_b , can be used in conjunction with the primary point of measurement, H_a , to correct the flow rates.



Submerged (or drowned) flow (<https://www.openchannelflow.com/flumes/parshall-flumes/submergence>) occurs when the water surface downstream from the flume is high enough to reduce flow through a flume. When the resistance to the flow in the downstream channel is sufficient to reduce the velocity out of the flume, flow depths increase and cause a backwater effect, as water cannot exit the flume quickly enough.



Unlike free-flow, submerged flow requires the measurement of the head at the primary (H_a) and secondary (H_b) points of measurement - H_b occurring in the throat of the flume. The ratio of downstream head to the upstream head, H_b/H_a , expressed as a percentage, is the submergence ratio. Research has shown that the discharge from a Parshall Flume is not reduced until the submergence ratio exceeds a critical value (submergence transition, S_T).

PARSHALL FLUME SUBMERGENCE TRANSITION (S_T)	
Flume Size	S_T
1" - 3"	50%
6"-9"	60%
1'-8'	70%
10'-50'	80%

Below these ratios, free-flow conditions exist. At or above the ratios, submerged flow conditions exist.

Visually, determining the submergence of a Parshall Flume can be difficult. With the secondary point of measurement (H_b) located in the throat - the narrowest part of the flume - it can be hard to accurately read the gauge as the flow is turbulent and can fluctuate quickly. Stilling wells can be useful, but should be used with care on solids laden flows.

What Can Be Done

If submerged flow is suspected there are several options that are available, depending upon the installation and site conditions, including: adjusting the downstream hydraulics, raise the flume, install a false floor (aka magic bottom), upgrade to instrumentation capable of calculating submerged flow.

Submergence in a Parshall Flume occurs due to downstream conditions. Before modifications are made to the flume installation or instrumentation, the downstream conditions should be evaluated and adjusted as necessary. In earthen channels, irrigation ditches, and surface water flows, the downstream channel may be restricted by vegetative growth, sediment, or debris. Clearing out these obstructions may be a relatively solution. Treatment plant installations may downstream vales or gates closed, an unusual amount of flow diverted from another part of the plant, or any number of other conditions present.

The ratio of downstream to upstream levels, H_b/H_a , is known as the submergence ratio and the point at which the downstream conditions begin to retard flow out of the flume is known as the submergence transition (<https://www.openchannelflow.com/blog/parshall-flumes-free-and-submerged-flow>), S_t . For Parshall Flumes, S_t ranges from 50% - 70% - with the larger Parshall Flumes more resistant to the effects of submergence (and thus having higher submergence transitions).

Determining the Flow Rate

Under free-flow conditions, all that is required to determine the flow rate in a Parshall Flume is to measure from the surface of the water to the floor of the flume at the point of measurement. Unlike most long throated flumes (i.e. Palmer-Bowlus (<https://www.openchannelflow.com/flumes/palmer-bowlus-flumes>)) and RBC (<https://www.openchannelflow.com/flumes/rbc-flumes>)) there is no rise in the throat of a Parshall Flume - meaning that there is no need to deduct the height of any standing water. As a result, with the H_a depth of flow in hand, the operator can look up from the discharge table (or calculate it using the standardized discharge equation).



Submerged flow conditions require not only that the H_a level be measured, but also the H_b level be measured. In a Parshall Flume, the H_b location is towards the end of the throat. This location is, however, quite turbulent - making accurate level measurement difficult. H_b readings are, therefore, usually taken in stilling wells, where the level is more easily determined than in the main flow stream. Practically speaking, the upper limit for correctable submerged flows (<https://www.openchannelflow.com/flumes/parshall-flumes/submergence>) is 90%. Above this point and wave action in the throat makes accurate level measurement exceedingly difficult.

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APPENDIX C

Center Flow Band Screens



Great White Center/Dual Flow Screen

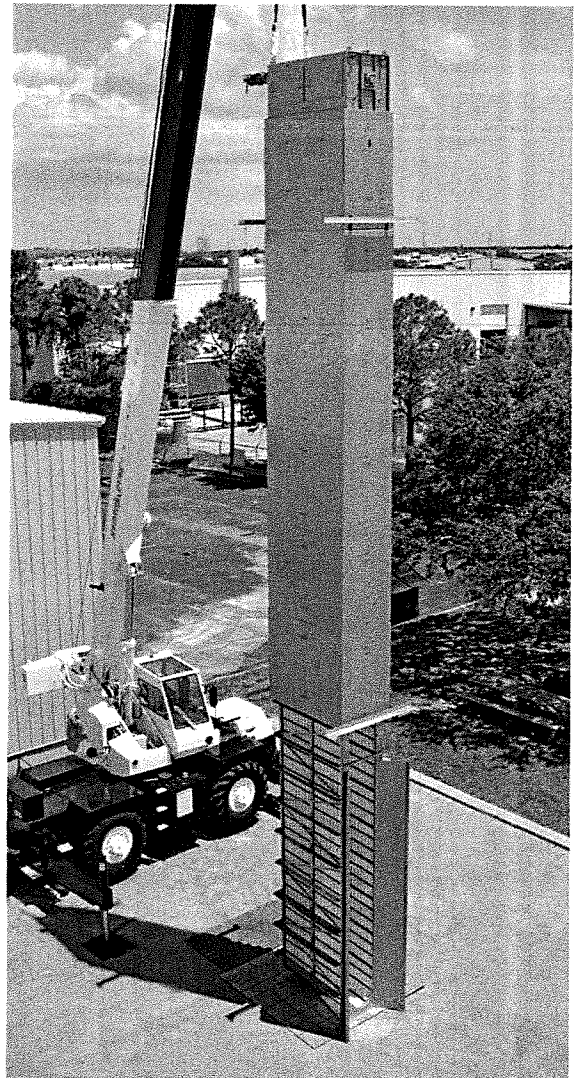
Highest Screenings Capture Ratio Available

- Independently certified¹ highest SCR water/wastewater screen
93.25% with 2mm opening
84% with 6mm opening
- Continuous band screen design eliminates bypass and carryover
- Excellent sensitive process and membrane protection
- Proprietary design features easily capture and offload screenings including rags and stringy material
- All T304 or T316 stainless steel fabrication

About the Great White Center/Dual Flow Screen

The Great White Shark is an apex predator that rules almost every body of water around the world. Like the Great White, our Center/Dual Flow Screen is designed and manufactured at the pinnacle of quality and dominates application environments.


The Great White Center/Dual Flow continuous band screen is designed to handle low-to-high flows and has been independently¹ certified to have the highest screenings capture ratio of all band screens on the market. Dual spray wash, patented grid design, proprietary sealing system and UHMWPE guide links make this an exceptional product for the filtering and offloading of water and wastewater screenings.



¹ UK Water Industry Research in National Screen Evaluation Facility Inlet Screen Evaluation Comparative Report (1999-2011)

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Coarse Screens | Fine Screens | Screenings Handling | Grit Removal Equipment

Designed and manufactured in U.S.A. 
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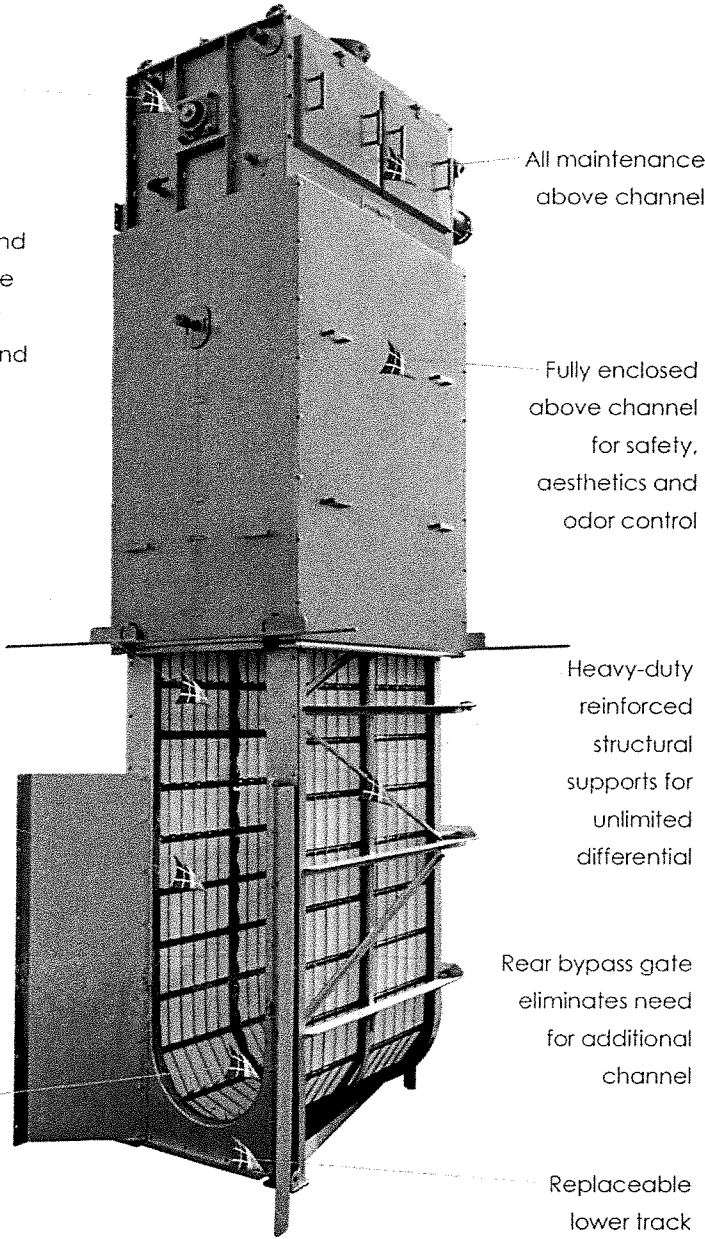
Dual spray wash unloading

Stainless steel links and supported panels are significantly stronger than plastic hooks and unsupported panels

Proprietary low friction UHMWPE guide links reduce maintenance and operations costs

Proprietary grid-to-frame and panel-to-panel sealing system held to <0.5mm tolerance for life

No submerged sprockets, bushings or bearings



At-a-glance

models

Center Flow (center entrance/side exit)
Dual Flow (side entrance/rear exit)

grid opening range

0.5-25mm

flow capacity

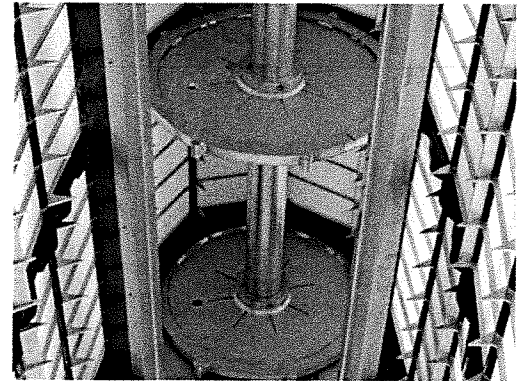
0.1mgd (5 L/s) to 125+mgd (5,500+ L/s)

grid types

Stainless steel laced link
Stainless steel wire mesh
Stainless steel perforated panel
UHMWPE perforated panel

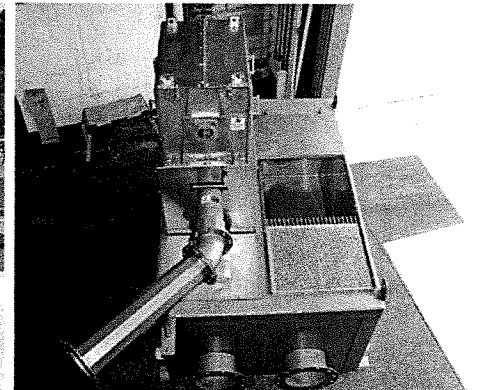
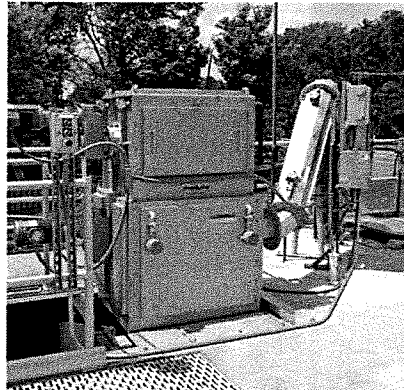
Patented Drive Features

- Grid does not contact drive or unloading mechanism
- Direct drive uses no chains or sprockets
- Fully supports grid for negligible wear
- Fractional hp requirements




Optional Equipment

- Specialty stainless steel construction
- Cold weather/freeze protection
- Basic to sophisticated automation controls
- Sectional construction for restricted area assembly
- Integrated screenings handling equipment
- Electric, hydraulic or explosion-proof drives

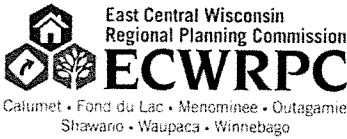


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May 26, 2023

Steve Brueggeman, P.E.
JSD Professional Services, Inc.
Appleton Regional Office
3215 W. Lawrence Street, Suite 6
Appleton, WI 54914

**Subject: Water Quality Management Conformance Review – Fox Highlands
Subdivision – Phase IV (JSD Project No. 16-7171)**

East Central Review No. 2023-025

Dear Steve Brueggeman:

This is to acknowledge receipt of your request on May 19, 2023 that East Central Wisconsin Regional Planning Commission (ECWRPC) review the sanitary sewer extension for the proposed Fox Highlands Subdivision – Phase IV in the Village of Greenville, Outagamie County. Your request seeks a determination that the submitted plans are in conformance with the approved Wisconsin Areawide Water Quality Management Plan (AWQMP) in accordance with Section 208 of the Clean Water Act and sections NR 110.08 and SPS 382.20(4)(b)2.a. of the Wisconsin Administrative Code. As a contracted agency of the Wisconsin Department of Natural Resources, ECWRPC is the Areawide Coordinating Agency under Wisconsin's AWQMP Program.

Commission Staff has determined that the proposed Fox Highlands Subdivision is within the Fox West Sewer Service Area (SSA). The extension of 882 linear feet of 8" sanitary sewer on Meadow Park Drive does not appear to impact any mapped environmentally sensitive areas such as wetlands, floodways, or adjacent shoreland buffer areas. The proposed project is therefore consistent with the Fox Cities - Fox West SSA Plan and AWQMP elements.

A copy of this letter should be enclosed with the project plans sent to the Wisconsin Department of Natural Resources and other appropriate agencies for their review. If you have any questions, please contact me at wpaustian@ecwrpc.org or at 920-886-6832.

Sincerely,

Wilhelmina Paustian
Senior Planner

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final plans and/or specifications for any reviewable project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code.

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

Owner Information			
Owner Name (Municipality, Company or other) Greenville Sanitary District #1		WPDES Permit No.*	County (of project location) Outagamie
Owner Representative Last Name Simonis	First Name Cody	MI	Title Superintendent
Address W6860 Parkview Drive		City Greenville	State ZIP Code WI 54942
Phone Number (include area code) (920) 757-7276		Email Address csimonis@greenvillewi.gov	

Design Engineer Information			
Last Name Brueggeman		First Name Steven	MI J
Title Senior Project Manager		Company Name JSD Professional Services, Inc.	
Address 3215 W. Lawrence Street, Unit 6		City Appleton	State ZIP Code WI 54914
Phone Number (include area code) (920) 733-2800		Email Address steve.brueggeman@jsdinc.com	

Project Information	
Project Title Fox Highlands - Phase 4	
Project Description Fourth phase of residential subdivision development of 19 single family residential lots, associated roadways and utilities in Fox Highlands Subdivision. Roadway extensions include Highpoint Lane and Meadow Park Drive.	

Certification	
I certify that this document and the plans and specifications, to the best of my knowledge and belief, are true, accurate, and complete; and conform to all applicable design requirements contained in the Wisconsin Administrative Code with the exception of any requested variances or alternative requirements as detailed below:	
Requested Design Variances or Alternative Requirements	

Design Engineer Name (print) Steven Brueggeman	Wisconsin P.E. Number* E-31177
Signature of Design Engineer	Date Signed 5/19/23

Type of Project	
Select all that apply:	
<input checked="" type="checkbox"/> Sanitary Sewer Extension	<input type="checkbox"/> Municipal Treatment Plant
<input type="checkbox"/> Sewer Replacement/Rehabilitation	<input type="checkbox"/> Industrial Treatment Plant
<input type="checkbox"/> Lift Station	<input type="checkbox"/> Industrial Pretreatment Facility
<input type="checkbox"/> Force Main	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Clean Water Fund? Provide CWF Project Number if known: _____	<input type="checkbox"/> Non-Domestic POWTS
<input type="checkbox"/> Requesting Expedited Review (ONLY AVAILABLE FOR CERTAIN TYPES OF PROJECTS. See Instructions at our webpage here: Expedited Review)	<input type="checkbox"/> Septage Storage Facility
	<input type="checkbox"/> Large POWTS

PROJECTS FINANCED BY THE CLEAN WATER FUND REQUIRE A FACILITIES PLAN

Website for plan submittal guidance: <http://dnr.wi.gov/topic/wastewater/AdequateSubmittal.html>

*May not be required for industrial pretreatment facilities.

Sanitary Sewer or Lift Station Project Approval Request

Form 3400-160 (R 11/17)

Date: 05/19/2021

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final plans and/or specifications for any reviewable sanitary sewer and/or lift station project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code. Completion of this form is required by the Department for any sanitary sewer or lift station plan submittal to evaluate conformance with requirements in chs. NR 108 and 110, Wis. Adm. Code.

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

General Information

I am submitting one paper copy and one CD containing PDF files of plans and/or specifications for (select all that apply).

- Sanitary Sewer Extension Sewer Replacement/Rehabilitation Lift Station Force Main

Project Title:

Fox Highlands - Phase 4

Project construction will occur at the following locations:

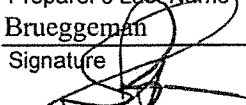
Street	Pipe Size (in.)	Pipe Length (ft.)
Meadow Park Drive	8	882

The sewer and/or lift station plan submittal conforms with the following:

True False N/A

- Attached are completed Department Forms 3400-205, 3400-059, 3400-095 and 3400-168 (Form 3400-168 is only required for lift station projects).
- Attached is a general map of the proposed sanitary sewer extension showing the proposed sewer service area.
- Attached is the sewerage system owner approval letter in accordance with s. NR 110.12, Wis. Adm. Code (Only required if the engineer is not an employee of or has not been retained by the municipality).
- Attached is a copy of the wastewater treatment facility (WWTF) approval letter (Only required if sewer system is connected to a regional WWTF).
- Attached is a copy of the Sewer Service Area /Water Quality Management (208) conformance letter (See communities which require this letter available at the WDNR website: <http://dnr.wi.gov/topic/wastewater/RPClist.html>)
- Sewers do not come within 50 feet of a private water supply well OR 200 feet of a public water supply well in conformance with ss. NR 811.12 (5)(d) and 812.08(4)(c), Wis. Adm. Code.
- Lift Stations do not come within 8 feet of water main, 100 feet of a private water supply well OR 200 feet of a public water supply well in conformance with ss. NR 811.12 (5)(d), 811.75(1)(a) and 812.08(4)(d), Wis. Adm. Code.
- Sewers meet the minimum required horizontal and vertical separation distances from water mains in conformance with s. NR 811.74, Wis. Adm. Code.
- Erosion and sediment control practices are consistent with the WDNR construction site erosion and sediment control technical standards and are on the plan sheets. (The WDNR construction site erosion and sediment control technical standards are available on the WDNR website at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html). If the project is part of a construction site that will disturb one or more acres of land, a Notice of Intent and associated attachments (Forms 3500-053 and 3500-053C) for coverage under the Construction Site Stormwater Runoff General Permit has been submitted to the Department in accordance with ch. NR 216, Wis. Adm. Code.
- Sewer and/or lift station construction does not impact any wetlands.
- Sewer and/or lift station construction does not impact any navigable waterways.
- Sewer and/or lift station plans and specifications are in conformance with chs. NR 108 and 110, Wis. Adm. Code.

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.

Preparer's Last Name Brueggeman	First Name Steven	Email steve.brueggeman@jsdinc.com	P.E. Number 31177
Signature 		Name of Firm JSD Professional Services, Inc.	

If you have any questions on sewer and/or lift station approval requests or the plan review process, please visit the WDNR website at: <http://dnr.wi.gov/topic/wastewater/AdequateSubmittal.html>

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final specifications for any reviewable sanitary sewer project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code. Completion of this form is required by the Department for any sanitary sewer plan submittal to evaluate conformance with requirements in chs. NR 108 and 110, Wis. Adm. Code

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

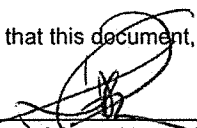
Please type or clearly print your answers to all questions.

Sanitary sewers will be constructed in accordance with (select one of the following):

- 1. Standard specifications for Sewer and Water Construction in Wisconsin (6th edition).
Note: Standard specifications do not amply cover erosion control measures. Special provisions must be submitted.
- 2. Standard specifications for municipality on file with the Department:
Municipality Name: _____
Approval Number: _____ Date of Approval _____
Are the specifications on the file with the Department less than 4 years old? Yes No
- 3. Specifications submitted with plans (please fill out Sections A through G below):
Note: Specifications must be signed and sealed by a professional engineer.

A. Pipe Material	Application Standard	Joint Type and Standard
Asbestos Cement	_____	_____
Cast Iron	_____	_____
Concrete	_____	_____
Vitrified Clay	_____	_____
Steel	_____	_____
Ductile Iron	_____	_____
PVC	_____	_____
ABS Composite	_____	_____
Is any pressure sewer pipe being used?		<input type="radio"/> Yes <input type="radio"/> No
If yes, indicate type, standard and joints:	_____	
B. Is trench width adequate for pipe laying, jointing and placement of proper backfill?		<input type="radio"/> Yes <input type="radio"/> No
C. Bedding type for pipe meets requirements of ASTM C12-81 or MOP 9?		<input type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Class A <input type="radio"/> Class B <input type="radio"/> Class C		
Bedding material for PVC and ABS composite pipe meets requirements of ASTM D2321-80?		<input type="radio"/> Yes <input type="radio"/> No
<input type="radio"/> Class I <input type="radio"/> Class II <input type="radio"/> Class III		
D. Suitable backfill material within 2 feet of pipe (no frozen or organic material or large stones)?		<input type="radio"/> Yes <input type="radio"/> No
E. Infiltration - less than 200 gal/in/mi/day?		<input type="radio"/> Yes <input type="radio"/> No
Test Procedure:	_____	
F. PVC pipe deflection testing?		<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
Method:	_____	
G. Manholes:		
Diameter	_____	
Material	_____	
Outside Drops	_____	
Water Tight Inlets and Outlets	_____	
Sketch Included	_____	

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.



Signature of Consulting or Municipal Engineer Responsible for Preparing this Form

31177

Wisconsin P.E. Number

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final plans and specifications for any reviewable sanitary sewer project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code. Completion of this form is required by the Department for any sanitary sewer plan submittal to evaluate conformance with requirements in chs. NR 108 and NR 110, Wis. Adm. Code. This form is not intended to be used for interceptor projects. Please submit a facility plan report for interceptor projects. If you question if a sewer should be submitted using this form, please contact DNR wastewater plan review staff.

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

1. General Information

A. Municipality Name City Town Village Sanitary District Utility District

Greenville

B. Project Name (as indicated on the plans):

Fox Highlands - Phase 4

C. Wastewater Treatment Facility Name:

Fox West Regional Treatment Facility

D. Sewage Collection System Owner Name (after installation):

Greenville Sanitary District #1

E. Responsible Project Inspector (List name and/or title, if known):

Village of Greenville

2. Submittal Requirements:

- A. Is a CD, flash drive, or other storage device containing PDF files of the final plans and/or specifications included with this plan submittal? Yes No
- B. Are the submitted paper and electronic plans and/or specifications signed and sealed by a registered Wisconsin professional engineer? Yes No
- C. Is the submitted paper set of plans in half size format (11" x 17")? Yes No
- D. Are the construction plans and/or specifications submitted in conformance with ch. NR 108 and ss. NR 110.06, 110.07, and 110.10(3), Wis. Adm. Code? Yes No
- E. If this project is intended to be funded through the Clean Water Fund Program, is an abbreviated engineering report included with this submittal, or was one previously submitted? Yes No N/A

3. Sewer Service Area

A. Is a map of the sewer service area that shows the location of the proposed sewer attached to this plan submittal? Yes No

B. Does the project only involve replacement/rehabilitation construction of existing sanitary sewer where the sewer service area has not changed? Yes No

i. If no, please provide the basis of the design for the area and population to be served by the proposed sewer:

Ultimate design year: <u>2024</u>	Population Density per acre: <u>17.5</u>
Total Population Served: <u>258</u>	Immediate Area Served: <u>7.58</u> acres
	Ultimate Area Served: <u>59.17</u> acres

4. Erosion Control

A. Does the municipality have an erosion control ordinance? Yes No

i. If yes, will compliance with the ordinance be required for this project? Yes No

B. Do the plan sheets show the erosion control provisions? Yes No

C. Do the specifications require that the erosion control measures be in place before construction begins and maintained during construction? Yes No

D. Will the project disturb one or more acres of land? Yes No

i. If yes, has an electronic Notice of Intent been submitted to the DNR for the land disturbing construction activities for coverage under the construction site storm water runoff general permit in accordance with Chapter NR 216, Wis. Adm. Code (<https://dnr.wi.gov/topic/stormwater/construction/forms.html>)?

ii. Construction Site ID#, if known: _____

5. Water Diversion

- A. Will the proposed sewer project result in a diversion of water from a water supply system that uses surface water from the Great Lakes System to the Mississippi River Basin? Yes No

6. Sanitary Sewer Overflow Structures or Bypasses

- A. Are there any existing sanitary sewer overflow structures or bypasses or known bypass locations that function in the sewerage system? If you answered "Yes" to this question, please answer the sub-questions under A. Yes No

i. Number of sanitary sewer overflow structures or bypasses: _____

ii. Location of sanitary sewer overflow structures or bypasses:

7. Wetlands and Waterways

- A. Will the proposed project involve construction in, on, over, or under a water of the state (i.e. any dredging of the waterway; placement of footings or pilings in the waterway; placement of piping under or on the bed of the waterway; installation of any piping on the shoreline or in the waterway; or placement of any material that could be a barrier for boating or other recreational navigation)? If you answered "Yes" to this question, please visit the DNR Waterways and Wetland Permit website (<http://dnr.wi.gov/topic/Waterways/>) to determine what waterway permits may be needed for your project and answer the sub-questions under A. Yes No

i. Does the project require a waterway permit? Yes No

ii. Is a copy of the DNR permit(s) coverage letter(s) attached to this plan submittal? Yes No N/A

Note: The DNR wastewater program cannot issue a sanitary sewer plan approval until the DNR waterway permit(s) has been issued

- B. Have you reviewed the DNR Surface Water Data Viewer (SWDV) web site (<https://dnr.wi.gov/topic/surfacewater/swdv/>) and conducted an on-site field inspection to verify whether the proposed sanitary sewer construction will impact any wetland areas (attach map from the SWDV)? Applicants for sanitary sewer projects must review the DNR SWDV website and conduct an on-site field inspection to determine whether the proposed project will impact any wetland areas prior to completing and submitting this form. Yes No

(Note: "Impact" means any construction-related disturbance resulting in any temporary or permanent change in the characteristics of the wetland including direct excavation within the wetland area, temporary or permanent soil placement / removal within the wetland area, drainage modifications within or adjacent to the wetland area that may cause hydrological changes to the wetland, etc.)

- C. Based on the review in part B, will the proposed project impact any wetland areas? If you answered "Yes" to this question, please visit the DNR Waterways and Wetland Permit website (<http://dnr.wi.gov/topic/Waterways/>) to determine what wetland disturbance permits may be needed for your project and answer the sub-questions under C. Yes No

i. Are you eligible for a municipal wetland disturbance permit or does the project require a wetland individual permit? Yes No

ii. Is a copy of the DNR and/or USACE wetland disturbance permit(s) coverage letter(s) attached to this plan submittal? Yes No N/A

Note: The DNR wastewater program cannot issue a sanitary sewer plan approval until the DNR and/or USACE wetland disturbance permit(s) have been issued.

- D. Do the plans show the location/boundaries of any impacted or nearby waterways and/or wetlands? Yes No

8. Floodplain

- A. Will any manhole tops and sewers be installed within any floodplains or areas that have the potential to be flooded by street runoff? **If you answered "Yes" this question, please answer the sub-questions under A.** Applicants should determine if construction of any manholes or sewers will be within the floodplain or areas that have the potential to be flooded by street runoff. (**Note:** "Floodplain" means that land which has been or may be covered by flood water during the regional flood. The floodplain includes the floodway, flood fringe, shallow depth flooding, flood storage and coastal floodplain areas. "Regional flood" means a flood determined to be representative of large floods known to have occurred in Wisconsin or which may be expected to occur on a particular lake, river or stream once in every 100 years.)
- Yes No
- i. Are the regional (100-year) flood elevation and floodplain contours indicated on the plans? Yes No
- ii. Will solid watertight manhole covers be installed to prevent flooding? Yes No
- iii. Does the project conform to the requirements in ch. NR 116, Wis. Adm. Code? Yes No

9. Pumping and Dewatering

- A. Is there potential for construction trenches or pits to be dewatered or pumped for this project? **If you answered "Yes" to this question, please answer the sub-questions under A.** Yes No
- i. Will the specifications include construction site dewatering methods consistent with the Wisconsin DNR Conservation Practice Standard 1061 or equivalent methodology? Yes No
- ii. If contaminated groundwater or soils are expected on the site, will section(s) of the specifications address handling and discharge requirements for the contaminated media? Yes No
- iii. Will the specifications include requirements for the contractor to submit and obtain the necessary Wisconsin Discharge Elimination System (WPDES) permits and/or high capacity well approvals for the dewatering for the project? Yes No

Note: Dewatering or pumping of groundwater or contaminated groundwater if encountered from construction trenches or pits that is discharged to a water of the state (excludes discharge to sanitary sewer systems) requires coverage under a WPDES permit. These discharges may be eligible under either the Dewatering Operations WPDES General Permit or the Contaminated Groundwater from Remedial Action Operation WPDES General Permit (<https://dnr.wi.gov/topic/wastewater/GeneralPermits.html>). Also dewatering systems that will have a total combined pumping capacity of 70 gallons per minute (100,000 gallons per day) or more may require a high capacity well approval (<https://dnr.wi.gov/topic/Wells/HighCap/Apply.html>).

10. Separation Between Water Supplies

- A. Are all proposed sewers and manholes at least 200 feet from public water system wells (s. NR 811.12(5)(d)3., Wis. Adm. Code) **OR** are all proposed sewers that meet the material, joint, and testing requirements of s. NR 811.12(5)(d)2., Wis. Adm. Code at least 50 feet from public water system wells and all manholes at least 200 feet from public water system wells? Yes No
- B. Is the minimum horizontal separation distance of 8 feet between the sewer and existing or future water mains being met? (s. NR 811.74(2), Wis. Adm. Code)? Yes No
- C. Where water mains cross over sewers, is the minimum vertical separation distance of 6 inches being met (s. NR 811.74(3), Wis. Adm. Code)? Yes No N/A
- D. Where water mains cross under sewers, is the minimum vertical separation distance of 18 inches being met (s. NR 811.74(3), Wis. Adm. Code)? Yes No N/A
- E. **If you answered "No" to any of the above questions (A-D), please answer the sub-questions under E.** The below are required for sewers that do not meet the separation requirements from new or existing public water system infrastructure.
- i. Has the public water system given written approval or no-objection to the sanitary sewer plans? Yes No
- ii. Has a plan submittal with a request for review been sent to the DNR Public Drinking Water Engineering Section? Yes No
- iii. Is a copy of the written no-objection/approval from the public water system and DNR Public Water Engineering Section attached to this plan submittal? Yes No

Sanitary Sewer Submittal

Form 3400-059 (R 08/20) Page 4 of 6

Fox Highlands - Phase 4

- F. Are all sewers at least 25 feet from all existing private or non-community wells (s. NR 812.08(4) Table A, Wis. Adm. Code)? **If answered "No" to this question, please answer the sub-questions under F.** Yes No
- i. Has Form 3300-208 (Application for Sewer/Existing Private Well Separation) been submitted to the DNR Drinking Water and Groundwater Program to request a variance to the 25-foot separation distance requirement? Yes No
- ii. Is a copy of the approved variance to the 25-foot separation distance attached to this plan submittal? Yes No

11. List below all sewers to be constructed as part of this project:

Diameter (in.)	Length (feet)	Street Name or Easement Description	Material
8	882	Meadow Park Drive	PVC

12. Sewer Design Requirements (s. NR 110.13(2), Wis. Adm. Code)

- A. Will the all sewers be installed deep enough to prevent freezing? **If you answered "No" to this question, please answer the sub-questions under A.** The below are required for sewers that do not meet the minimum depth of cover to prevent freezing. Yes No
- i. Please specify the type and thickness of insulation that will be provided, and the basis for the thickness of the proposed insulation:
- ii. Are all the proposed locations of insulated pipe(s) along with a standard construction detail indicated on the plans? Yes No
- B. Will all gravity sewers be installed deep enough to provide gravity basement drainage for sanitary wastes? Yes No N/A
- i. If no, has the owner(s) of the existing buildings been advised, in writing, prior to construction of the sewers? Yes No
- C. Do all proposed gravity sewers meet the minimum slope requirements as specified in s. NR 110.13(2) (c), Wis. Adm. Code? **If you answered "No" to this question, please answer the sub-questions under C, and provide design calculations for the estimated peak diurnal flow velocity in the non-conforming pipe segment(s).** The below are required for sewers that do not meet the minimum slope requirements. Yes No N/A
- i. Has the sewer system owner provided justification that demonstrates that the physical circumstances warrant the lesser slopes? Yes No
- ii. Has written assurance been submitted from the sewer system owner that the sewer system owner will provide the additional maintenance which may result from sedimentation due to the decreased velocities? Yes No
- D. Will all proposed gravity sewers be designed with an average velocity of 2.0 feet per second or greater when flowing full? Yes No N/A
- E. Will all gravity sewers be laid with straight alignment between manholes? Yes No N/A
- F. Will all gravity sewers that have slopes greater than 20% be anchored consistent with s. NR 110.13(2)(g), Wis. Adm. Code Yes No N/A
- G. Where velocities of greater than 15 feet per second are attained, will special provisions be made to protect against displacement or erosion? Yes No N/A
- H. Are design calculations for all proposed sewers attached to this plan submittal? Yes No

13. Manhole Installation (s. NR 110.13(3), Wis. Adm. Code)

- A. Is there a manhole present at all changes in grade and size or alignment, and at all pipe intersections? Yes No
- B. Is a manhole being constructed at the end of each sewer line (including stubbed sewer)? **If you answered "No" to this question, please answer the sub-questions under B.** The below are required for each of sewer line where a manhole is not installed at the end. Yes No N/A
- i. Will all stubbed sewers be capped or plugged and will no service be provided until a manhole is installed under a Department approved project? Yes No N/A
- ii. Is the cap or plug labeled on the plans for each stubbed sewer? Yes No N/A
- C. Will all manholes be spaced less than or equal to the required maximum intervals as specified in s. NR 110.13(3)(b), Wis. Adm. Code? **If you answered "No" to this question, please answer the sub-question under C.** The below are required for manholes that do not meet the manhole spacing requirements. Yes No N/A
- i. Does the sewer system owner have access to cleaning equipment with the capability to reach the extended sewer lengths? Yes No
- D. Is an outside drop provided at each manhole where the invert elevation of the entering sewer is 2 feet or more above the spring line of the outgoing sewer? **If you answered "Yes" or "No" to this question, please answer the sub-questions under D.** Yes No N/A
- i. List the location of all manholes where an entering sewer is 2 feet or more above the spring line of the outgoing sewer:
- ii. Are all outside and/or inside drop manholes labeled on the plans? Yes No
- iii. Is a standard construction detail of the outside and/or inside drop manhole provided in the plans? Yes No
- iv. Will the entire outside drop connection be encased in the concrete? Yes No N/A
- v. For installation of inside drop connections in new manholes, will an oversized manhole be installed? Yes No N/A
- vi. For installation of inside drop connections in existing manholes that are not oversized, is justification provided that explains why an outside drop cannot practicably be constructed and how the encroachment upon the maintenance and access of the manhole will be addressed? Yes No N/A
- E. Will the diameter of all manholes be greater than or equal to 42 inches? Yes No
- F. Will the flow channel through the manholes be made to conform to the shape and slope of the sewers? Yes No
- G. Are the tops of all manholes at or above finished grade? Yes No

14. Force Mains (s. NR 110.14(3)(j), Wis. Adm. Code):

- Yes No
- A. Is a cleansing velocity of at least 2 feet per second maintained in the force main at the design pumping rate of the lift station? Yes No
- B. Please specify what type of air relief will be provided at each high point in the force main (select one):
- Combination Automatic Air Relief and Vacuum Valve
- Automatic Air Relief Valve
- Manual Air Relief Valve
- Other specify _____
- C. When a force main enters the gravity sewer manhole, will the discharge be at a point not more than 2 feet above the spring line of the receiving sewer? Yes No

Sanitary Sewer Submittal

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Fox Highlands - Phase 4

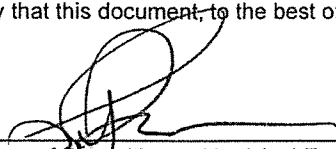
15. Clearwater

- A. If this is a sewer extension, will all storm and other clearwater including that from sump pumps, roof drains, cistern overflows, and building foundation drains be excluded for these proposed sanitary sewers, to the best of your knowledge? Yes No N/A

- B. To the best of your knowledge, will street and tributary building sewers be laid in such a manner as to minimize entrance of groundwater and will building sewers and drains be installed to conform with clearwater prohibitions in state plumbing regulations (s. SPS 382.36(4)(6), Wis. Adm. Code)? Yes No

Certification

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.



Date Signed 5/19/23

Signature of Consulting or Municipal Engineer Responsible for Preparing this Form

Wisconsin P.E. Number E-31177

Sanitary Flow Calculations

Project: Fox Highlands - Phase 4
 Location: Greenville, WI
 JSD Project #: 16-7171
 Performed By: SJB
 Date: 5/19/2023

MADISON REGIONAL OFFICE
 161 Horizon Drive, Suite 101
 Verona, Wisconsin 53593
 Ph: (608) 848-5060 Fax: (608) 848-2255

FOX VALLEY REGIONAL OFFICE
 3215 W. Lawrence Street, Suite 6
 Appleton, Wisconsin 54914
 Ph: (920) 733-2800

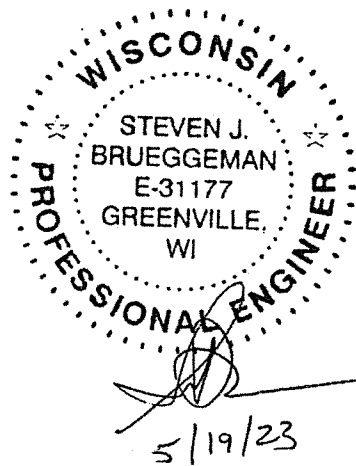
JSD Professional Services, Inc.
 • Engineers • Surveyors • Planners

Sanitary Sewer Size Calculation

$$\begin{aligned} \text{Inside Diameter} &= \frac{7.920}{12} \text{ inches} && (8" \text{ SDR-35 PVC Pipe}) \\ \text{Slope} &= \frac{0.004}{1} \text{ ft/ft} && (\text{Minimum Allowed Slope per NR 110.13 Wisconsin Admin. Code}) \\ n &= \frac{0.013}{1} && (\text{PVC}) \end{aligned}$$

$$\begin{aligned} \text{Sewer Capacity} = Q &= \frac{0.4632}{n} * (\text{Dia.}/12)^{8/3} * (\text{slope})^{1/2} \\ \text{Sewer Capacity} = Q &= \frac{0.74}{1} \text{ cfs} \end{aligned}$$

Capacity @ Minimum Slope			PVC SDR-35 Dimensional Data		
Diameter (inches)	Min. Slope (%)	Capacity (cfs)	Average O.D. (inches)	Wall Thickness (inches)	Average I.D. (inches)
8	0.40	0.74	8.400	0.240	7.920
10	0.28	1.13	10.500	0.300	9.900
12	0.22	1.59	12.500	0.360	11.780
15	0.15	2.25	15.300	0.437	14.426
18	0.12	3.44	18.701	0.536	17.629
21	0.10	4.87	22.047	0.632	20.783
24	0.08	5.97	24.803	0.711	23.381



 STEVEN J. BRUEGGEMAN
 E-31177
 GREENVILLE, WI
 5/19/23

Sanitary Flow Calculations

Project: Fox Highlands, Phase 4
 Location: Greenville, WI
 JSD Project #: 16-7171
 Performed By: SJB
 Date: 05-19-2023

MADISON REGIONAL OFFICE
 161 Horizon Drive, Suite 101
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 Ph: (608) 848-5060 Fax: (608) 848-2255

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 Appleton, Wisconsin 54914
 Ph: (920) 733-2800 Fax: (920) 733-2801



Wastewater Generation Estimate

TOTAL ESTIMATED WATER DEMAND/WASTEWATER FLOW RATE

Land Use	Area (acres)	Avg. Daily Flow Rate (gpd)	Avg. Daily Flow Rate (gpm)	Peak Flow Rate (gpd)	Peak Flow Rate (gpm)	Peak Flow Rate (cfs)
Single Family Residential	7.576	7,576	5.26	30,304	21.04	0.047
Medium Density Residential	0.000	0	0.00	0	0.00	0.000
High Density Residential	0.000	0	0.00	0	0.00	0.000
Offices/Retail	0.000	0	0.00	0	0.00	0.000
Totals	7.58	7,576	5.26	30,304	21.04	0.047

(Using assumed sewage flows based on proposed land use)

Assumptions:

Single Family Residential Sewage Generation Rate =	1000	gal/acre/day**
Medium Density Residential Sewage Generation Rate =	1500	gal/acre/day**
High Density Residential Sewage Generation Rate =	2000	gal/acre/day**
Retail / Office Generation Rate	1500	gal/acre**
Residential Peaking Factor = 4		
Commerical Peaking Factor = 2.5		

** Values based on Madison Metropolitan Sewerage District Standard Estimates



[Signature]
 5/19/23

RE: Sanitary Sewer Extension - Fox Highlands Phase IV, Village of Greenville, WI

Steve Brueggeman <steve.brueggeman@JSDinc.com>

Mon 5/22/2023 2:49 PM

To: Brandon Kaufman <bkaufman@mco-us.com>

Cc: Connor Nett <cpn@forwarddevgroup.com>; Ron Henshue <rjh@forwarddevgroup.com>; Konner Kearney <ktk@forwarddevgroup.com>; Dave M. Jenkins <dave.jenkins@jsdinc.com>; Hans P. Justeson <hans.justeson@jsdinc.com>; Donna Edge <donna.edge@JSDinc.com>

Brandon,

Per your request, estimated BOD is 0.21lbs/person/day. Therefore, for the immediate served area, the population equals 7.576 acres X 15 persons/ac = 114 people.

114 persons x 0.21 lbs/day = **23.9 lbs per day BOD**

Please let me know if you have any other questions.

Steve



Planners · Engineers · Landscape Architects · Surveyors

Steve Brueggeman, P.E. | Senior Project Engineer | steve.brueggeman@jsdinc.com
Fox Valley Regional Office - [3215 W. Lawrence Street, Suite 6, Appleton, WI 54914](#)
o: 920-733-2800 ext 224 | c: 920-450-3815 | www.jsdinc.com

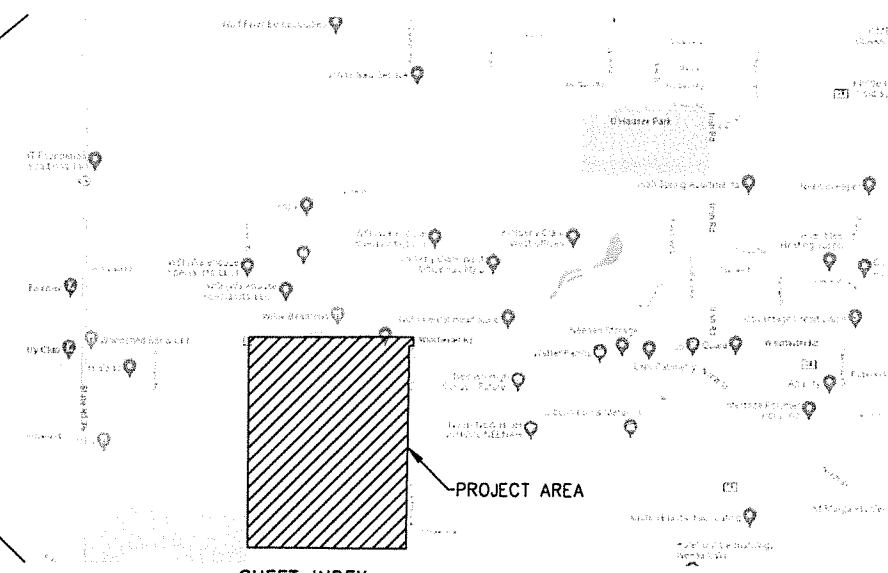
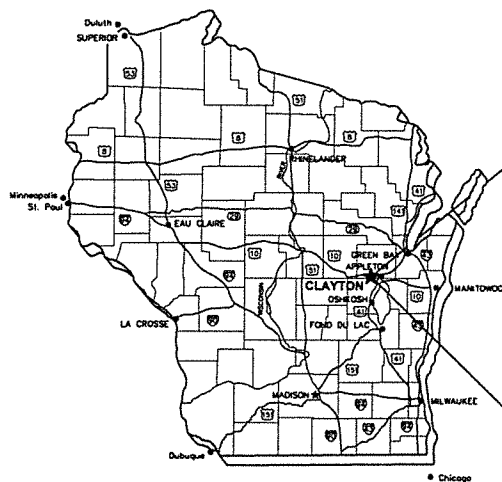
Planners · Engineers · Landscape Architects · Surveyors



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SCHOLAR RIDGE ESTATES - PHASE 1 UTILITY & ROAD CONSTRUCTION TOWN OF CLAYTON

WINNEBAGO COUNTY, WISCONSIN
MCM # C1069-09-23-00271



SHEET INDEX

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- 12 ST. THOMAS LANE
- 13-14 PRINCETON DRIVE
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- 20-22 DETAILS

DESIGN CONTACT
 McMAHON ASSOCIATES, INC.
 ZACH LAABS
 1445 McMAHON DRIVE
 NEENAH, WI 54956
 (920) 751-4200
 zlaabs@mcgrp.com

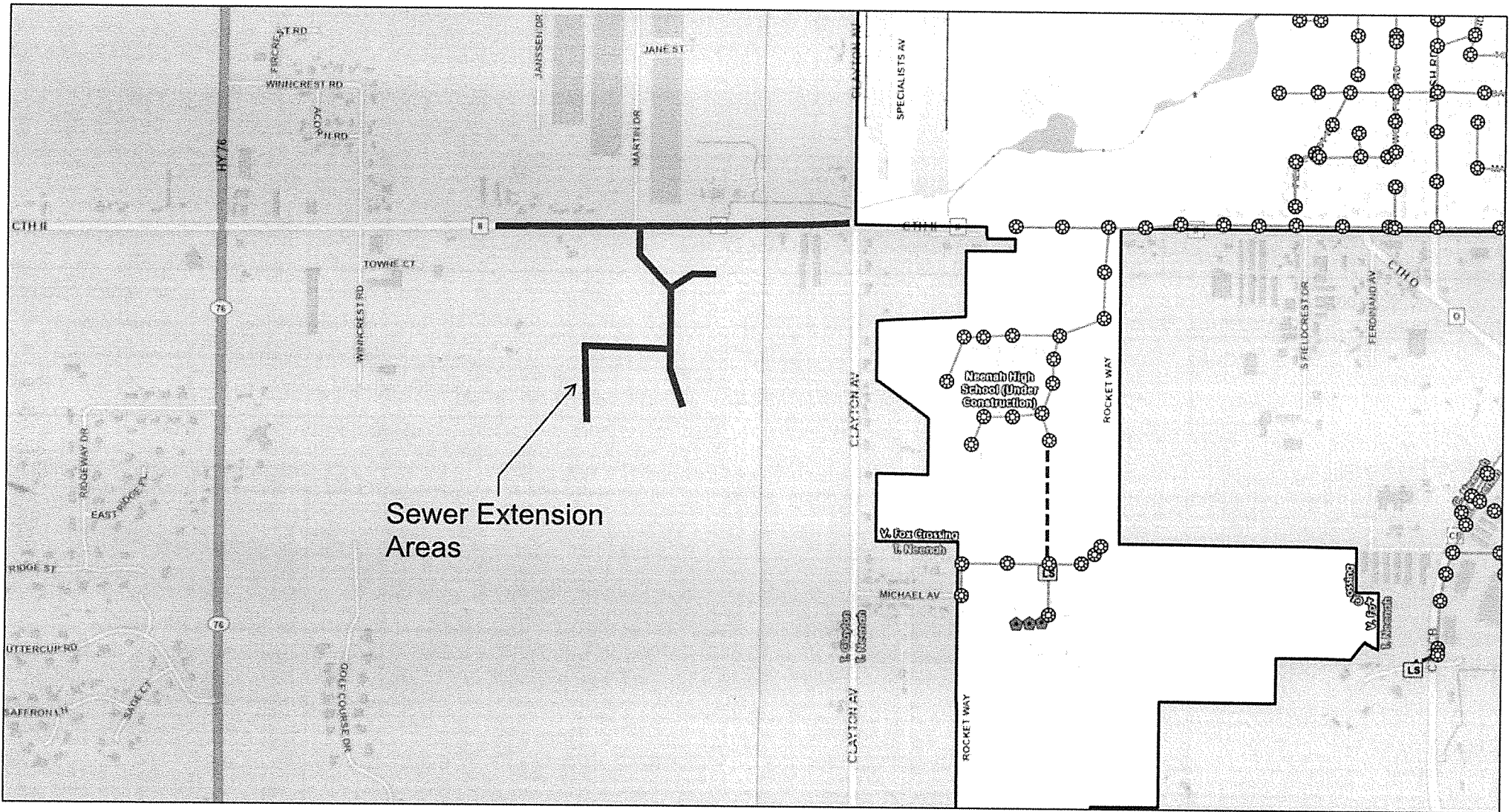
DIGGERSHOTLINE
 Dial 811 or (800) 242-8511
 www.DiggersHotline.com

McMAHON
 ENGINEERS ARCHITECTS
 McMAHON ASSOCIATES, INC.
 1445 McMAHON DRIVE NEENAH, WI 54956
 Mailing: P.O. BOX 1025 NEENAH, WI 54957-1025
 PH 920.751.4200 FX 920.751.4284 MCMGRP.COM

DATE
 JUNE, 2023
 PROJECT NO.
 C1069-09-23-0027

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Sanitary Sewer Extension



Sewer Extension Areas

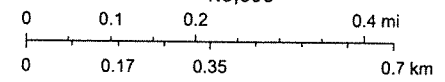
Nesanch High School (Under Construction)

V. Fox Crossing

MICHAEL AV

ROCKET WAY

1:9,600



Village of Fox Crossing

5/24/2023, 4:07:33 PM

- ⊗ Sanitary Manhole
- ⊕ Sanitary Cleanout
- Sanitary Structure
- LS Lift Station
- Sanitary Force Main
- Sanitary Gravity Main
- Fox Crossing Municipal Boundary

Sanitary Sewer Design Calculations

Sanitary Sewer Extension – Scholar Ridge Estates – Clayton, WI

- Immediate Service Area = 50-acres
 - 50 Acres of Residential

- Ultimate Service Area = 599-acres
 - 280 Acres of Residential
 - 165 Acres of Commercial
 - 154 Acres of Industrial

- Average Daily Flow=
 - Residential = Acres * (7.5 people / acre) * (100 gpd/capita) = **227,250 gpd**
 - Commercial = 165 Acres * (750 gpd / acre) = **123,750 gpd**
 - Light Industrial = 154 Acres * (1,000 gpd / acre) = **154,000 gpd**
 - **TOTAL DAILY FLOW= 505,000 gpd**

- Peak Daily Flow = (505,000 gpd)*2.5 = 1,262,500 gpd

- 12-inch capacity @ 0.22% (n=0.011) = 2.00 cfs = 1,292,544 gpd >1,262,500 gpd

- Population equivalent = 505,000 gpd / (100 gpd / capita) = 5,050 people

- Estimated BOD Loading = (5,050 people)*(0.22 lb./capita/day) = 1,111.00 lb./day

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final plans and specifications for any reviewable sanitary sewer project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code. Completion of this form is required by the Department for any sanitary sewer plan submittal to evaluate conformance with requirements in chs. NR 108 and NR 110, Wis. Adm. Code. This form is not intended to be used for interceptor projects. Please submit a facility plan report for interceptor projects. If you question if a sewer should be submitted using this form, please contact DNR wastewater plan review staff.

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

1. General Information

A. Municipality Name City Town Village Sanitary District Utility District

Town of Clayton

B. Project Name (as indicated on the plans):

Scholar Ridge Estates - Phase 1

C. Wastewater Treatment Facility Name:

Fox West Regional Sewerage Treatment Plant

D. Sewage Collection System Owner Name (after installation):

Town of Clayton

E. Responsible Project Inspector (List name and/or title, if known):

Consulting Engineer - McMahon Associates

2. Submittal Requirements:

- A. Is a CD, flash drive, or other storage device containing PDF files of the final plans and/or specifications included with this plan submittal? Yes No
- B. Are the submitted paper and electronic plans and/or specifications signed and sealed by a registered Wisconsin professional engineer? Yes No
- C. Is the submitted paper set of plans in half size format (11" x 17")? Yes No
- D. Are the construction plans and/or specifications submitted in conformance with ch. NR 108 and ss. NR 110.06, 110.07, and 110.10(3), Wis. Adm. Code? Yes No
- E. If this project is intended to be funded through the Clean Water Fund Program, is an abbreviated engineering report included with this submittal, or was one previously submitted? Yes No N/A

3. Sewer Service Area

- A. Is a map of the sewer service area that shows the location of the proposed sewer attached to this plan submittal? Yes No
- B. Does the project only involve replacement/rehabilitation construction of existing sanitary sewer where the sewer service area has not changed? Yes No
- i. If no, please provide the basis of the design for the area and population to be served by the proposed sewer:
- | | | | |
|--------------------------|--------------|------------------------------|------------------|
| Ultimate design year: | <u>2035</u> | Population Density per acre: | <u>7.5</u> |
| Total Population Served: | <u>5,050</u> | Immediate Area Served: | <u>50</u> acres |
| | | Ultimate Area Served: | <u>599</u> acres |

4. Erosion Control

- A. Does the municipality have an erosion control ordinance? Yes No
- i. If yes, will compliance with the ordinance be required for this project? Yes No
- B. Do the plan sheets show the erosion control provisions? Yes No
- C. Do the specifications require that the erosion control measures be in place before construction begins and maintained during construction? Yes No
- D. Will the project disturb one or more acres of land? Yes No
- i. If yes, has an electronic Notice of Intent been submitted to the DNR for the land disturbing construction activities for coverage under the construction site storm water runoff general permit in accordance with Chapter NR 216, Wis. Adm. Code (<https://dnr.wi.gov/topic/stormwater/construction/forms.html>)? Yes No
- ii. Construction Site ID#, if known: TO BE SUBMITTED

5. Water Diversion

A. Will the proposed sewer project result in a diversion of water from a water supply system that uses surface water from the Great Lakes System to the Mississippi River Basin? Yes No

6. Sanitary Sewer Overflow Structures or Bypasses

A. Are there any existing sanitary sewer overflow structures or bypasses or known bypass locations that function in the sewerage system? If you answered "Yes" to this question, please answer the sub-questions under A. Yes No

i. Number of sanitary sewer overflow structures or bypasses: _____

ii. Location of sanitary sewer overflow structures or bypasses:

7. Wetlands and Waterways

A. Will the proposed project involve construction in, on, over, or under a water of the state (i.e. any dredging of the waterway; placement of footings or pilings in the waterway; placement of piping under or on the bed of the waterway; installation of any piping on the shoreline or in the waterway; or placement of any material that could be a barrier for boating or other recreational navigation)? If you answered "Yes" to this question, please visit the DNR Waterways and Wetland Permit website (<http://dnr.wi.gov/topic/Waterways/>) to determine what waterway permits may be needed for your project and answer the sub-questions under A. Yes No

i. Does the project require a waterway permit? Yes No

ii. Is a copy of the DNR permit(s) coverage letter(s) attached to this plan submittal? Yes No N/A

Note: The DNR wastewater program cannot issue a sanitary sewer plan approval until the DNR waterway permit(s) has been issued

B. Have you reviewed the DNR Surface Water Data Viewer (SWDV) web site (<https://dnr.wi.gov/topic/surfacewater/swdv/>) and conducted an on-site field inspection to verify whether the proposed sanitary sewer construction will impact any wetland areas (attach map from the SWDV)? Applicants for sanitary sewer projects must review the DNR SWDV website and conduct an on-site field inspection to determine whether the proposed project will impact any wetland areas prior to completing and submitting this form. Yes No

(Note: "Impact" means any construction-related disturbance resulting in any temporary or permanent change in the characteristics of the wetland including direct excavation within the wetland area, temporary or permanent soil placement / removal within the wetland area, drainage modifications within or adjacent to the wetland area that may cause hydrological changes to the wetland, etc.)

C. Based on the review in part B, will the proposed project impact any wetland areas? If you answered "Yes" to this question, please visit the DNR Waterways and Wetland Permit website (<http://dnr.wi.gov/topic/Waterways/>) to determine what wetland disturbance permits may be needed for your project and answer the sub-questions under C. Yes No

i. Are you eligible for a municipal wetland disturbance permit or does the project require a wetland individual permit? Yes No

ii. Is a copy of the DNR and/or USACE wetland disturbance permit(s) coverage letter(s) attached to this plan submittal? Yes No N/A

Note: The DNR wastewater program cannot issue a sanitary sewer plan approval until the DNR and/or USACE wetland disturbance permit(s) have been issued.

D. Do the plans show the location/boundaries of any impacted or nearby waterways and/or wetlands? Yes No

8. Floodplain

- A. Will any manhole tops and sewers be installed within any floodplains or areas that have the potential to be flooded by street runoff? **If you answered "Yes" this question, please answer the sub-questions under A.** Applicants should determine if construction of any manholes or sewers will be within the floodplain or areas that have the potential to be flooded by street runoff. (**Note:** "Floodplain" means that land which has been or may be covered by flood water during the regional flood. The floodplain includes the floodway, flood fringe, shallow depth flooding, flood storage and coastal floodplain areas. "Regional flood" means a flood determined to be representative of large floods known to have occurred in Wisconsin or which may be expected to occur on a particular lake, river or stream once in every 100 years.) Yes No
- i. Are the regional (100-year) flood elevation and floodplain contours indicated on the plans? Yes No
- ii. Will solid watertight manhole covers be installed to prevent flooding? Yes No
- iii. Does the project conform to the requirements in ch. NR 116, Wis. Adm. Code? Yes No

9. Pumping and Dewatering

- A. Is there potential for construction trenches or pits to be dewatered or pumped for this project? **If you answered "Yes" to this question, please answer the sub-questions under A.** Yes No
- i. Will the specifications include construction site dewatering methods consistent with the Wisconsin DNR Conservation Practice Standard 1061 or equivalent methodology? Yes No
- ii. If contaminated groundwater or soils are expected on the site, will section(s) of the specifications address handling and discharge requirements for the contaminated media? Yes No
- iii. Will the specifications include requirements for the contractor to submit and obtain the necessary Wisconsin Discharge Elimination System (WPDES) permits and/or high capacity well approvals for the dewatering for the project? Yes No

Note: Dewatering or pumping of groundwater or contaminated groundwater if encountered from construction trenches or pits that is discharged to a water of the state (excludes discharge to sanitary sewer systems) requires coverage under a WPDES permit. These discharges may be eligible under either the Dewatering Operations WPDES General Permit or the Contaminated Groundwater from Remedial Action Operation WPDES General Permit (<https://dnr.wi.gov/topic/wastewater/GeneralPermits.html>). Also dewatering systems that will have a total combined pumping capacity of 70 gallons per minute (100,000 gallons per day) or more may require a high capacity well approval (<https://dnr.wi.gov/topic/Wells/HighCap/Apply.html>).

10. Separation Between Water Supplies

- A. Are all proposed sewers and manholes at least 200 feet from public water system wells (s. NR 811.12(5)(d)3., Wis. Adm. Code) **OR** are all proposed sewers that meet the material, joint, and testing requirements of s. NR 811.12(5)(d)2., Wis. Adm. Code at least 50 feet from public water system wells and all manholes at least 200 feet from public water system wells? Yes No
- B. Is the minimum horizontal separation distance of 8 feet between the sewer and existing or future water mains being met? (s. NR 811.74(2), Wis. Adm. Code)? Yes No
- C. Where water mains cross over sewers, is the minimum vertical separation distance of 6 inches being met (s. NR 811.74(3), Wis. Adm. Code)? Yes No N/A
- D. Where water mains cross under sewers, is the minimum vertical separation distance of 18 inches being met (s. NR 811.74(3), Wis. Adm. Code)? Yes No N/A
- E. **If you answered "No" to any of the above questions (A-D), please answer the sub-questions under E.** The below are required for sewers that do not meet the separation requirements from new or existing public water system infrastructure.
- i. Has the public water system given written approval or no-objection to the sanitary sewer plans? Yes No
- ii. Has a plan submittal with a request for review been sent to the DNR Public Drinking Water Engineering Section? Yes No
- iii. Is a copy of the written no-objection/approval from the public water system and DNR Public Water Engineering Section attached to this plan submittal? Yes No

- F. Are all sewers at least 25 feet from all existing private or non-community wells (s. NR 812.08(4) Table A, Wis. Adm. Code)? **If answered "No" to this question, please answer the sub-questions under F.** Yes No
- i. Has Form 3300-208 (Application for Sewer/Existing Private Well Separation) been submitted to the DNR Drinking Water and Groundwater Program to request a variance to the 25-foot separation distance requirement? Yes No
- ii. Is a copy of the approved variance to the 25-foot separation distance attached to this plan submittal? Yes No

11. List below all sewers to be constructed as part of this project:

Diameter (in.)	Length (feet)	Street Name or Easement Description	Material
12	2595	County Road II	PVC
8	1575	Marlo Ave	PVC
8	296	St Thomas Lane	PVC
8	848	Princeton Drive	PVC
8	1023	St Norbert Drive	PVC
8	1226	Lawrence Lane	PVC

12. Sewer Design Requirements (s. NR 110.13(2), Wis. Adm. Code)

- A. Will the all sewers be installed deep enough to prevent freezing? **If you answered "No" to this question, please answer the sub-questions under A.** The below are required for sewers that do not meet the minimum depth of cover to prevent freezing. Yes No
- i. Please specify the type and thickness of insulation that will be provided, and the basis for the thickness of the proposed insulation:
- ii. Are all the proposed locations of insulated pipe(s) along with a standard construction detail indicated on the plans? Yes No
- B. Will all gravity sewers be installed deep enough to provide gravity basement drainage for sanitary wastes? Yes No N/A
- i. If no, has the owner(s) of the existing buildings been advised, in writing, prior to construction of the sewers? Yes No
- C. Do all proposed gravity sewers meet the minimum slope requirements as specified in s. NR 110.13(2) (c), Wis. Adm. Code? **If you answered "No" to this question, please answer the sub-questions under C, and provide design calculations for the estimated peak diurnal flow velocity in the non-conforming pipe segment(s).** The below are required for sewers that do not meet the minimum slope requirements. Yes No N/A
- i. Has the sewer system owner provided justification that demonstrates that the physical circumstances warrant the lesser slopes? Yes No
- ii. Has written assurance been submitted from the sewer system owner that the sewer system owner will provide the additional maintenance which may result from sedimentation due to the decreased velocities? Yes No
- D. Will all proposed gravity sewers be designed with an average velocity of 2.0 feet per second or greater when flowing full? Yes No N/A
- E. Will all gravity sewers be laid with straight alignment between manholes? Yes No N/A
- F. Will all gravity sewers that have slopes greater than 20% be anchored consistent with s. NR 110.13(2)(g), Wis. Adm. Code Yes No N/A
- G. Where velocities of greater than 15 feet per second are attained, will special provisions be made to protect against displacement or erosion? Yes No N/A

H. Are design calculations for all proposed sewers attached to this plan submittal? Yes No

13. Manhole Installation (s. NR 110.13(3), Wis. Adm. Code)

A. Is there a manhole present at all changes in grade and size or alignment, and at all pipe intersections? Yes No

B. Is a manhole being constructed at the end of each sewer line (including stubbed sewer)? **If you answered "No" to this question, please answer the sub-questions under B.** The below are required for each of sewer line where a manhole is not installed at the end. Yes No N/A

i. Will all stubbed sewers be capped or plugged and will no service be provided until a manhole is installed under a Department approved project? Yes No N/A

ii. Is the cap or plug labeled on the plans for each stubbed sewer? Yes No N/A

C. Will all manholes be spaced less than or equal to the required maximum intervals as specified in s. NR 110.13(3)(b), Wis. Adm. Code? **If you answered "No" to this question, please answer the sub-question under C.** The below are required for manholes that do not meet the manhole spacing requirements. Yes No N/A

i. Does the sewer system owner have access to cleaning equipment with the capability to reach the extended sewer lengths? Yes No

D. Is an outside drop provided at each manhole where the invert elevation of the entering sewer is 2 feet or more above the spring line of the outgoing sewer? **If you answered "Yes" or "No" to this question, please answer the sub-questions under D.** Yes No N/A

i. List the location of all manholes where an entering sewer is 2 feet or more above the spring line of the outgoing sewer:

County Road II & Marlo Ave Marlo Ave & Princeton Drive,
Marlo Ave & St Thomas Lane

ii. Are all outside and/or inside drop manholes labeled on the plans? Yes No

iii. Is a standard construction detail of the outside and/or inside drop manhole provided in the plans? Yes No

iv. Will the entire outside drop connection be encased in the concrete? Yes No N/A

v. For installation of inside drop connections in new manholes, will an oversized manhole be installed? Yes No N/A

vi. For installation of inside drop connections in existing manholes that are not oversized, is justification provided that explains why an outside drop cannot practicably be constructed and how the encroachment upon the maintenance and access of the manhole will be addressed? Yes No N/A

E. Will the diameter of all manholes be greater than or equal to 42 inches? Yes No

F. Will the flow channel through the manholes be made to conform to the shape and slope of the sewers? Yes No

G. Are the tops of all manholes at or above finished grade? Yes No

14. Force Mains (s. NR 110.14(3)(j), Wis. Adm. Code): Yes No

A. Is a cleansing velocity of at least 2 feet per second maintained in the force main at the design pumping rate of the lift station? Yes No

B. Please specify what type of air relief will be provided at each high point in the force main (select one):

- Combination Automatic Air Relief and Vacuum Valve
- Automatic Air Relief Valve
- Manual Air Relief Valve
- Other specify _____

C. When a force main enters the gravity sewer manhole, will the discharge be at a point not more than 2 feet above the spring line of the receiving sewer? Yes No

15. Clearwater

A. If this is a sewer extension, will all storm and other clearwater including that from sump pumps, roof drains, cistern overflows, and building foundation drains be excluded for these proposed sanitary sewers, to the best of your knowledge? Yes No N/A

B. To the best of your knowledge, will street and tributary building sewers be laid in such a manner as to minimize entrance of groundwater and will building sewers and drains be installed to conform with clearwater prohibitions in state plumbing regulations (s. SPS 382.36(4)(6), Wis. Adm. Code)? Yes No

Certification

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.



Date Signed 6/1/2023

Signature of Consulting or Municipal Engineer Responsible for Preparing this Form

Wisconsin P.E. Number E-27972

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final specifications for any reviewable sanitary sewer project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code. Completion of this form is required by the Department for any sanitary sewer plan submittal to evaluate conformance with requirements in chs. NR 108 and 110, Wis. Adm. Code

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

Sanitary sewers will be constructed in accordance with (select one of the following):

- 1. Standard specifications for Sewer and Water Construction in Wisconsin (Latest _____ edition).
 Note: Standard specifications do not amply cover erosion control measures. Special provisions must be submitted.

- 2. Standard specifications for municipality on file with the Department:

Municipality Name: _____

Approval Number: _____ Date of Approval _____

Are the specifications on the file with the Department less than 4 years old? Yes No

- 3. Specifications submitted with plans (please fill out Sections A through G below):

Note: Specifications must be signed and sealed by a professional engineer.

A. Pipe Material	Application Standard	Joint Type and Standard
Asbestos Cement	_____	_____
Cast Iron	_____	_____
Concrete	_____	_____
Vitrified Clay	_____	_____
Steel	_____	_____
Ductile Iron	_____	_____
PVC	_____	_____
ABS Composite	_____	_____

Is any pressure sewer pipe being used? Yes No

If yes, indicate type, standard and joints: _____

B. Is trench width adequate for pipe laying, jointing and placement of proper backfill? Yes No

C. Bedding type for pipe meets requirements of ASTM C12-81 or MOP 9? Yes No
 Class A Class B Class C

Bedding material for PVC and ABS composite pipe meets requirements of ASTM D2321-80? Yes No
 Class I Class II Class III

D. Suitable backfill material within 2 feet of pipe (no frozen or organic material or large stones)? Yes No

E. Infiltration - less than 200 gal/in/mi/day? Yes No

Test Procedure: _____

F. PVC pipe deflection testing? Yes No N/A

Method: _____

G. Manholes:

Diameter _____

Material _____

Outside Drops _____

Water Tight Inlets and Outlets _____

Sketch Included _____

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.



Signature of Consulting or Municipal Engineer Responsible for Preparing this Form

E-27972

Wisconsin P.E. Number

Sanitary Sewer or Lift Station Project Approval Request

Form 3400-160 (R 11/17)

Page 1 of 2

Date: 05/25/2023

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final plans and/or specifications for any reviewable sanitary sewer and/or lift station project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code. Completion of this form is required by the Department for any sanitary sewer or lift station plan submittal to evaluate conformance with requirements in chs. NR 108 and 110, Wis. Adm. Code.

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

General Information

I am submitting one paper copy and one CD containing PDF files of plans and/or specifications for (select all that apply).

- Sanitary Sewer Extension Sewer Replacement/Rehabilitation Lift Station Force Main

Project Title:

Scholar Ridge Estates - Phase 1 - Utility & Street Construction

Project construction will occur at the following locations:

Street	Pipe Size (in.)	Pipe Length (ft.)
County Road II	12	2,595
Marlo Avenue	8	1,575
St Thomas Lane	8	296
Princeton Drive	8	848
St Norbert Drive	8	1,023
Lawrence Lane	8	1,226

The sewer and/or lift station plan submittal conforms with the following:

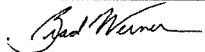
True False N/A

- Attached are completed Department Forms 3400-205, 3400-059, 3400-095 and 3400-168 (Form 3400-168 is only required for lift station projects).
- Attached is a general map of the proposed sanitary sewer extension showing the proposed sewer service area.
- Attached is the sewerage system owner approval letter in accordance with s. NR 110.12, Wis. Adm. Code (Only required if the engineer is not an employee of or has not been retained by the municipality).
- Attached is a copy of the wastewater treatment facility (WWTF) approval letter (Only required if sewer system is connected to a regional WWTF).
- Attached is a copy of the Sewer Service Area /Water Quality Management (208) conformance letter (See communities which require this letter available at the WDNR website: <http://dnr.wi.gov/topic/wastewater/RPCList.html>)
- Sewers do not come within 50 feet of a private water supply well OR 200 feet of a public water supply well in conformance with ss. NR 811.12 (5)(d) and 812.08(4)(c), Wis. Adm. Code.
- Lift Stations do not come within 8 feet of water main, 100 feet of a private water supply well OR 200 feet of a public water supply well in conformance with ss. NR 811.12 (5)(d), 811.75(1)(a) and 812.08(4)(d), Wis. Adm. Code.
- Sewers meet the minimum required horizontal and vertical separation distances from water mains in conformance with s. NR 811.74, Wis. Adm. Code.
- Erosion and sediment control practices are consistent with the WDNR construction site erosion and sediment control technical standards and are on the plan sheets. (The WDNR construction site erosion and sediment control technical standards are available on the WDNR website at: http://dnr.wi.gov/topic/stormwater/standards/const_standards.html). If the project is part of a construction site that will disturb one or more acres of land, a Notice of Intent and associated attachments (Forms 3500-053 and 3500-053C) for coverage under the Construction Site Stormwater Runoff General Permit has been submitted to the Department in accordance with ch. NR 216, Wis. Adm. Code.
- Sewer and/or lift station construction does not impact any wetlands.
- Sewer and/or lift station construction does not impact any navigable waterways.
- Sewer and /or lift station plans and specifications are in conformance with chs. NR 108 and 110, Wis. Adm. Code.

Sanitary Sewer or Lift Station Project Approval Request

Form 3400-160 (R 11/17)

I certify that this document, to the best of my knowledge and belief, is true, accurate, and complete.

Preparer's Last Name Werner	First Name Brad	Email bwerner@mcmgrp.com	P.E. Number E-27972
Signature 		Name of Firm McMahon Associates	

If you have any questions on sewer and/or lift station approval requests or the plan review process, please visit the WDNR website at:
<http://dnr.wi.gov/topic/wastewater/AdequateSubmittal.html>

Wastewater System Approval Request

Form 3400-205 (R 4/17)

Notice: In accordance with s. NR. 108.04(2)(a), Wis. Adm. Code, this form is authorized to accompany final plans and/or specifications for any reviewable project that is submitted to the Department of Natural Resources (Department) pursuant to s. 281.41, Wis. Stats and s. NR 108.03, Wis. Adm. Code.

All necessary information must be provided on this form. Failure to complete this form correctly may result in rejection of this form by the Department. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

Please type or clearly print your answers to all questions.

Owner Information

Owner Name (Municipality, Company or other) Town of Clayton		WPDES Permit No.*	County (of project location) Winnebago	
Owner Representative Last Name Wisnepske	First Name Kelly	MI	Title Administrator	
Address 8348 County Road T		City Larsen	State WI	ZIP Code 54947
Phone Number (include area code) (920) 836-2007		Email Address administrator@townofclayton.net		

Design Engineer Information

Last Name Werner	First Name Brad	MI
Title Project Engineer, PE	Company Name McMahon Associates	
Address 1445 McMahon Drive	City Neenah	State WI
Phone Number (include area code) (920) 751-4200	Email Address bwerner@mcmgrp.com	

Project Information

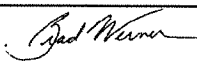
Project Title
Scholar Ridge Estates - Phase I - Utility and Street Construction

Project Description
Sanitary sewer extension along County Road II from Clayton Avenue past Martin Drive. Also extension along Marlo Ave, St. Thomas Lane, Princeton Drive, St. Norbert Drive, and Lawrence Lane.

Certification

I certify that this document and the plans and specifications, to the best of my knowledge and belief, are true, accurate, and complete; and conform to all applicable design requirements contained in the Wisconsin Administrative Code with the exception of any requested variances or alternative requirements as detailed below:

Requested Design Variances or Alternative Requirements

Design Engineer Name (print) Brad Werner	Wisconsin P.E. Number* E-27972
Signature of Design Engineer 	Date Signed 6/1/2023

Type of Project

Select all that apply:

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Sanitary Sewer Extension | <input type="checkbox"/> Municipal Treatment Plant | <input type="checkbox"/> Non-Domestic POWTS |
| <input type="checkbox"/> Sewer Replacement/Rehabilitation | <input type="checkbox"/> Industrial Treatment Plant | <input type="checkbox"/> Septage Storage Facility |
| <input type="checkbox"/> Lift Station | <input type="checkbox"/> Industrial Pretreatment Facility | <input type="checkbox"/> Large POWTS |
| <input type="checkbox"/> Force Main | <input type="checkbox"/> Other: _____ | |

Clean Water Fund? Provide CWF Project Number if known: _____

Requesting Expedited Review (ONLY AVAILABLE FOR CERTAIN TYPES OF PROJECTS. See Instructions at our webpage here: [Expedited Review](#))

PROJECTS FINANCED BY THE CLEAN WATER FUND REQUIRE A FACILITIES PLAN

Website for plan submittal guidance: <http://dnr.wi.gov/topic/wastewater/AdequateSubmittal.html>

*May not be required for industrial pretreatment facilities.