

**CITY OF FAIRMONT
PUBLIC UTILITIES COMMISSION
AGENDA**

Tuesday, September 17, 2024

- 1 Call to Order
 - 7:30 AM City Hall Conference Room (Second Floor)

- 2 Roll Call
 - Chair Werre _____
 - Commissioner Struss _____
 - Commissioner Christ _____
 - Commissioner Sharp _____
 - Commissioner Zoch _____

- 3 Public Discussion/Comments (Individual comments are limited to 3 minutes)

- 4 Approval of Minutes (2 - 3)
 - Regular Meeting, August 20 , 2024

- 5 Financials & Productions Stats for August 2024 (4 - 12)

- 6 Approval of Disbursements for August 2024 (13 - 38)

- 7 Old Business (39)
 - 7.1 - Update on UV and Bio-Solids Project

- 8 New Business (40 - 62)
 - 8.1 - Approve DER 2024-0002 Tyler Hartwig

- 9 Staff Updates
 - 9.1 - Water/Wastewater Departments
 - 9.2 - Line Departments

- 10 Date and Time of Next Meetings:
 - Work Session - Tuesday, October 1, 2024
 - Regular Meeting - Tuesday, October 15, 2024

- 11 Adjournment



Fairmont Public Utilities Commission
September 17, 2024

Agenda Item: 4

From: Julie Zarling, Assistant Finance Director
To: Public Utilities Commission

Subject: PUC Minutes from Regular meeting on August 20, 2024

Policy/Action Requested:

Vote Required: Simple Majority Roll Call

Recommendation: Approval

Overview:

Budget Impact: N/A

Attachments: PUC Minutes Regular Meeting, August 20, 2024

PUC Action: _____ Date: _____

PUBLIC UTILITIES COMMISSION
REGULAR MEETING

Tuesday, August 20, 2024
7:30 AM
City Hall Conference Room
Meeting held in person

IN ATTENDANCE: Commissioners Struss, Christ, and Zoch

ALSO IN ATTENDANCE: Public Works/Utilities Director York, Water/Wastewater Superintendent Powers, Assistant Finance Director Zarling

ABSENT: Commissioner Werre, Sharp

Commissioner Christ called the meeting to order at 7:30 AM.

Commissioner Christ called for Public Discussion and Comments. No individuals were present for public comment at the meeting.

A motion was made by Mr. Struss, seconded by Mr. Zoch, and carried to approve the August 8, 2024, regular meeting minutes.

Assistant Finance Director Zarling presented the financial and capital expense report and production stats for July 2024. Discussion with no action taken.

Assistant Finance Director Zarling presented the disbursements for July 2024. Discussion was held. A motion was made by Mr. Christ, seconded by Mr. Struss, and carried to approve the July 2024 disbursements.

In old business, Public Works/Utility Director York discussed the agenda items that were taken to City Council for PUC projects. First was a motion to approve bid from DN Tanks for the Ground Storage Reservoir Reconstruction. Secondly, they passed a motion to approve Bolton & Menk for the construction management services for the Ground Storage Reservoir Reconstruction Project. Third motion was to approve the bid with The Joseph Company of Austin, MN for the Biosolids and UV Project at the Wastewater Treatment Plant. Lastly, a motion was passed to approve Bolton and Menk for Construction Management Services for the Biosolids and UV Project at the Wastewater Plant.

Water/Wastewater Superintendent Powers updated the commission on the water and wastewater departments. The water department continues to put in the larger new meters for the AMI project. There were two 12-inch water main breaks that have just recently happened. They needed to wait for parts to fix these breaks. The Digester lid is on at the Wastewater Plant. There have been issues with getting certain fittings that they need. Inspectors are set to come September 16th to check the digester. Collections is going very well with the new jetter.

There was no other business; it was moved by Mr. Zoch, seconded by Mr. Struss, and approved to adjourn the meeting at 8:43 AM.

Perry Struss, Secretary



Fairmont Public Utilities Commission
September 17, 2024

Agenda Item: 5

From: Julie Zarling, Assistant Finance Director
To: Public Utilities Commission

Subject: Financial Report & Production Stats: August 2024

Policy/Action Requested:

Vote Required: ___ Simple Majority ___ Roll Call

Recommendation: Informational

Overview:

Financial Reports, Stats, and the Capital Expenditure Summary for August 2024 are included for review.

Budget Impact: N/A

Attachments: August Financial Report, Capital Expenditures Summary, & Production Statistics

PUC Action: _____ Date: _____

FAIRMONT PUBLIC UTILITIES COMMISSION

INCOME STATEMENT SUMMARY: 2024 & 2023

WATER DEPARTMENT	2024				2023			
	AUG	YTD	BUDGET	% BUDGET	AUG	YTD	BUDGET	% BUDGET
WATER DEPT REVENUE	\$572,385.00	\$4,443,462.27	\$5,978,199.00	74.33%	\$531,868.19	\$3,918,423.70	\$5,609,556.00	69.85%
WATER FILTRATION PLANT EXP.	\$119,682.87	\$1,054,122.71	\$1,757,948.00	59.96%	\$185,305.42	\$1,236,920.19	\$1,986,653.00	62.26%
WATER DISTRIB EXP.	\$50,904.38	\$425,812.51	\$865,675.00	49.19%	\$77,617.83	\$436,438.01	\$802,707.00	54.37%
WATER ADMIN EXP.	\$11,337.68	\$139,123.48	\$219,368.00	63.42%	\$13,732.85	\$128,892.71	\$211,875.00	60.83%
WATER MISC EXP.	\$316,025.12	\$1,166,850.39	\$1,539,620.00	75.79%	\$324,519.61	\$1,183,918.84	\$1,477,042.00	80.15%
TRANSFER OUT TO OTHER FUNDS	\$15,784.72	\$126,277.76	\$189,417.00	66.67%	\$14,277.50	\$114,220.00	\$171,330.00	66.67%
TOTAL WATER DEPT EXP.	\$513,734.77	\$2,912,186.85	\$4,572,028.00	63.70%	\$615,453.21	\$3,100,389.75	\$4,649,607.00	66.68%
WATER DEPT NET INCOME (LOSS)	\$58,650.23	\$1,531,275.42	\$1,406,171.00	108.90%	(\$83,585.02)	\$818,033.95	\$959,949.00	85.22%

WASTEWATER DEPARTMENT	2024				2023			
	AUG	YTD	BUDGET	% BUDGET	AUG	YTD	BUDGET	% BUDGET
WASTEWATER DEPT REVENUE	\$254,833.25	\$2,281,508.46	\$4,919,780.00	46.37%	\$271,617.30	\$2,341,309.72	\$3,434,521.00	68.17%
WASTEWATER TREATMENT PLANT EXP.	\$89,311.84	\$811,673.19	\$1,279,511.00	63.44%	\$124,791.39	\$745,110.13	\$1,194,880.00	62.36%
WASTEWATER COLLECTION EXP.	\$19,026.60	\$200,711.06	\$514,223.00	39.03%	\$48,678.21	\$256,878.68	\$476,573.00	53.90%
WASTEWATER ADMIN EXP.	\$7,130.26	\$83,554.05	\$141,611.00	59.00%	\$10,243.26	\$85,616.64	\$136,187.00	62.87%
WASTEWATER MISC EXP.	\$71,312.95	\$526,640.47	\$766,728.00	68.69%	\$75,186.18	\$518,894.71	\$690,482.00	75.15%
TRANSFER OUT TO OTHER FUNDS	\$9,633.51	\$77,068.08	\$115,602.00	66.67%	\$8,691.01	\$69,528.08	\$104,292.00	66.67%
TOTAL WASTEWATER DEPT EXP.	\$196,415.16	\$1,699,646.85	\$2,817,675.00	60.32%	\$267,590.05	\$1,676,028.24	\$2,602,414.00	64.40%
WASTEWATER DEPT NET INCOME (LOSS)	\$58,418.09	\$581,861.61	\$2,102,105.00	27.68%	\$4,027.25	\$665,281.48	\$832,107.00	79.95%

ELECTRIC DEPARTMENT	2024				2023			
	AUG	YTD	BUDGET	% BUDGET	AUG	YTD	BUDGET	% BUDGET
ELECTRIC DEPT REVENUE	\$1,587,712.83	\$11,395,890.89	\$17,920,234.00	63.59%	\$1,637,147.40	\$10,891,455.77	\$17,082,910.00	63.76%
PURCHASE POWER EXP.	\$1,255,199.65	\$8,717,975.21	\$13,165,500.00	66.22%	\$1,293,220.36	\$8,677,396.32	\$12,869,582.00	67.43%
ELECTRIC DISTRIB EXP.	\$124,596.89	\$1,073,155.59	\$1,784,683.00	60.13%	\$159,533.09	\$1,022,635.88	\$1,752,138.00	58.37%
ELECTRIC ADMIN EXP.	\$47,822.67	\$489,763.37	\$735,510.00	66.59%	\$59,291.70	\$460,511.70	\$719,070.00	64.04%
ELECTRIC DEPT MISC EXP.	\$53,188.52	\$390,219.51	\$699,236.00	55.81%	\$49,877.22	\$370,722.93	\$687,039.00	53.96%
TRANSFER OUT TO OTHER FUNDS	\$52,915.10	\$423,320.80	\$634,981.00	66.67%	\$55,364.82	\$442,918.57	\$664,378.00	66.67%
TOTAL ELECTRIC DEPT EXP.	\$1,533,722.83	\$11,094,434.48	\$17,019,910.00	65.19%	\$1,617,287.19	\$10,974,185.40	\$16,692,207.00	65.74%
ELECTRIC DEPT NET INCOME (LOSS)	\$53,990.00	\$301,456.41	\$900,324.00	33.48%	\$19,860.21	(\$82,729.63)	\$390,703.00	-21.17%

**FAIRMONT PUBLIC UTILITIES COMMISSION
CAPITAL EXPENDITURE SUMMARY**

Acct #	ELECTRIC DISTRIBUTION	2021 Budget			2022 Budget			2023 Budget			2024 Budget			Total Projects		
		Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal
604-00000-16500	AMI - 2023	\$1,100,000	\$1,375,009	(\$275,009)	\$300,000	\$682,313	(\$382,313)	\$0	\$42,936	(\$42,936)	\$0	\$14,331	(\$14,331)	\$1,400,000	\$2,114,589	(\$714,589)
604-00000-16300	New Transformers			\$0	\$85,000	\$68,871	\$16,129	\$125,000	\$97,823	\$27,177	\$210,000	\$46,520	\$163,480	\$420,000	\$213,214	\$206,786
604-00000-16300	Underground Conductors			\$0			\$0			\$0	\$130,000	\$18,107	\$111,893	\$130,000	\$18,107	\$111,893
604-00000-16300	Replace High Voltage Switches			\$0			\$0	\$120,000	\$15,350	\$104,650	\$280,000	\$61,867	\$218,133	\$400,000	\$77,217	\$322,783
604-00000-16300	Downtown Lighting/Bollard/sign Replac			\$0			\$0			\$0	\$230,000		\$230,000	\$230,000	\$0	\$230,000
604-00000-16300	Workorder Software/Outage Mangement			\$0			\$0			\$0	\$80,000		\$80,000	\$80,000	\$0	\$80,000
604-00000-16500	10th Street SUB Modifications/Breakers*			\$0			\$0	\$975,000	\$112,188	\$862,812	\$100,000	\$34,507	\$65,493	\$1,075,000	\$146,694	\$928,306
604-00000-16500	FES Substation Transformer Replace.			\$0			\$0	\$352,500	\$19,375	\$333,125	\$600,000	\$27,728	\$572,272	\$952,500	\$47,103	\$905,397
604-00000-16500	West Industrial Park Substation			\$0			\$0	\$632,850	\$18,628	\$614,223	\$100,000	\$648	\$99,352	\$732,850	\$19,276	\$713,575
604-00000-16420	GIS Software			\$0			\$0			\$0	\$30,000		\$30,000	\$30,000	\$0	\$30,000
604-00000-16400	Replace Boring Machine			\$0			\$0			\$0	\$260,000	\$218,821	\$41,179	\$260,000	\$218,821	\$41,179
604-00000-16440	Flat Bed/Dump Box Truck #228			\$0			\$0			\$0	\$10,000	\$14,805	(\$4,805)	\$10,000	\$14,805	(\$4,805)
604-00000-16200	Repair Damaged Buildings			\$0			\$0			\$0	\$43,000		\$43,000	\$43,000	\$0	\$43,000
604-00000-16500	Street Improvement Projects			\$0			\$0			\$0	\$20,000		\$20,000	\$20,000	\$0	\$20,000
604-00000-16400	Skid Loader Attach/Trencher/Snow Pusher			\$0			\$0			\$0	\$50,000	\$11,627	\$38,374	\$50,000	\$11,627	\$38,374
604-00000-16420	GIS/RAM/I-PADS (for locating, mapping)			\$0			\$0			\$0	\$10,000	\$327	\$9,673	\$10,000	\$327	\$9,673
	Contingency			\$0			\$0			\$0	\$20,000		\$20,000	\$20,000	\$0	\$20,000
	TOTAL CAPITAL EXPENDITURES	\$1,100,000	\$1,375,009	(\$275,009)	\$385,000	\$751,183	(\$366,183)	\$2,205,350	\$306,300	\$1,899,050	\$2,173,000	\$449,288	\$1,723,712	\$5,863,350	\$2,881,780	\$2,981,570

* Total of 10th St. Sub Design, Relay, and breaker lines from 2023 budget

**FAIRMONT PUBLIC UTILITIES COMMISSION
CAPITAL EXPENDITURE SUMMARY**

Acct #	WATER DEPARTMENT	2021 Budget			2022 Budget			2023 Budget			2024 Budget			Total Projects		
		Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal
601-00000-16440	Purchase used Dump truck - Double Axel			\$0		\$0	\$75,000		\$75,000		\$80,188	(\$80,188)	\$75,000	\$80,188	(\$5,188)	
601-00000-16500	Ground storage tank (Industrial Tank)			\$0		\$0	\$40,000	\$1,914	\$38,086	\$4,500,000	\$248,575	\$4,251,425	\$4,540,000	\$250,489	\$4,289,511	
601-00000-16500	AMI - Water meter upgrades	\$1,000,000	\$4,117	\$995,883	\$600,000	\$699,633	(\$99,633)	\$0	\$430,406	(\$430,406)	\$150,000	\$95,302	\$54,698	\$1,750,000	\$1,229,458	\$520,542
601-00000-16400	Water Plant PLC upgrades			\$0		\$0			\$0	\$80,000	\$64,423	\$15,577	\$80,000	\$64,423	\$15,577	
601-00000-16400	Safety shoring			\$0		\$0			\$0	\$15,000		\$15,000	\$15,000	\$0	\$15,000	
601-00000-16400	Skid Loader update			\$0		\$0			\$0	\$65,000	\$56,299	\$8,701	\$65,000	\$56,299	\$8,701	
601-00000-16400	Replace backhoe			\$0		\$0			\$0	\$175,000	\$170,836	\$4,164	\$175,000	\$170,836	\$4,164	
601-00000-16200	Relocate AC units at Water Plant (3)			\$0		\$0			\$0	\$25,000	\$96	\$24,904	\$25,000	\$96	\$24,904	
	Contingency			\$0		\$0			\$0	\$20,000		\$20,000	\$20,000	\$0	\$20,000	
	Miscellaneous capital items (<\$5,000 ea.)			\$0		\$0			\$0	\$5,000		\$5,000	\$5,000	\$0	\$5,000	
601-00000-16500	2024 Improvement Project			\$0		\$0			\$0	\$225,000		\$225,000	\$225,000	\$0	\$225,000	
	TOTAL CAPITAL EXPENDITURES	\$1,000,000	\$4,117	\$995,883	\$600,000	\$699,633	(\$99,633)	\$115,000	\$432,320	(\$317,320)	\$5,260,000	\$715,719	\$4,544,281	\$6,975,000	\$1,851,789	\$5,123,211

Acct #	WASTEWATER DEPARTMENT	2021 Budget			2022 Budget			2023 Budget			2024 Budget			Total Projects		
		Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal	Bud Amt	YTD Exp	Budget Bal
602-00000-16440	Vactor replacment(using this for Dump Truck)			\$0		\$0	\$550,000	\$509,653	\$40,347	\$0	\$42,794	(\$42,794)	\$550,000	\$552,446	(\$2,446)	
602-00000-16500	Bar Screen Replacement Project (2022)			\$0	\$750,000	\$46,225	\$703,775	\$0	\$666,889	(\$666,889)	\$0	\$4,618	(\$4,618)	\$750,000	\$717,731	\$32,269
602-00000-16500	Lift Station rehab/repair/monitoring			\$0		\$0			\$0	\$150,000	\$87,275	\$62,725	\$150,000	\$87,275	\$62,725	
	Lift Station Panel Updates			\$0		\$0			\$0	\$0		\$0	\$0	\$0	\$0	
602-00000-16500	Eastside lift station pump improvements			\$0		\$0			\$0	\$185,000		\$185,000	\$185,000	\$0	\$185,000	
602-00000-16200	Lab/Office Updates			\$0		\$0			\$0	\$25,000	\$12,516	\$12,484	\$25,000	\$12,516	\$12,484	
602-00000-16440	Service Truck - Collections			\$0		\$0			\$0	\$95,000	\$101,682	(\$6,682)	\$95,000	\$101,682	(\$6,682)	
	Diffuser Replace / Aeration Basin Cleaning			\$0		\$0			\$0	\$0		\$0	\$0	\$0	\$0	
602-00000-16500	Digester Improvements			\$0		\$0	\$500,000	\$169,253	\$330,747	\$825,000	\$758,232	\$66,768	\$1,325,000	\$927,485	\$397,515	
602-00000-16500	UV/Solids handling upgrade project			\$0		\$0	\$4,000,000	\$8,454	\$3,991,546	\$14,000,000	\$57,500	\$13,942,500	\$18,000,000	\$65,954	\$17,934,046	
602-00000-16400	Grit Pump/RAS/WAS Replacement Pumps			\$0		\$0			\$0	\$50,000		\$50,000	\$50,000	\$0	\$50,000	
	Secondary Clarifier Updates			\$0		\$0			\$0	\$0		\$0	\$0	\$0	\$0	
	Contingency (2024 60x10 Dump Trailer)			\$0		\$0			\$0	\$20,000	\$7,952	\$12,048	\$20,000	\$7,952	\$12,048	
	Misc Capital items			\$0		\$0			\$0	\$5,000		\$5,000	\$5,000	\$0	\$5,000	
602-00000-16500	2024 Improvement Project			\$0		\$0			\$0	\$200,000		\$200,000	\$200,000	\$0	\$200,000	
	TOTAL CAPITAL EXPENDITURES	\$0	\$0	\$0	\$750,000	\$46,225	\$703,775	\$5,050,000	\$1,354,248	\$3,695,752	\$15,555,000	\$1,072,568	\$14,482,432	\$21,355,000	\$2,473,041	\$18,881,959

FAIRMONT PUBLIC UTILITIES

ELECTRIC DEPT STATISTICAL COMPARISON - AUGUST

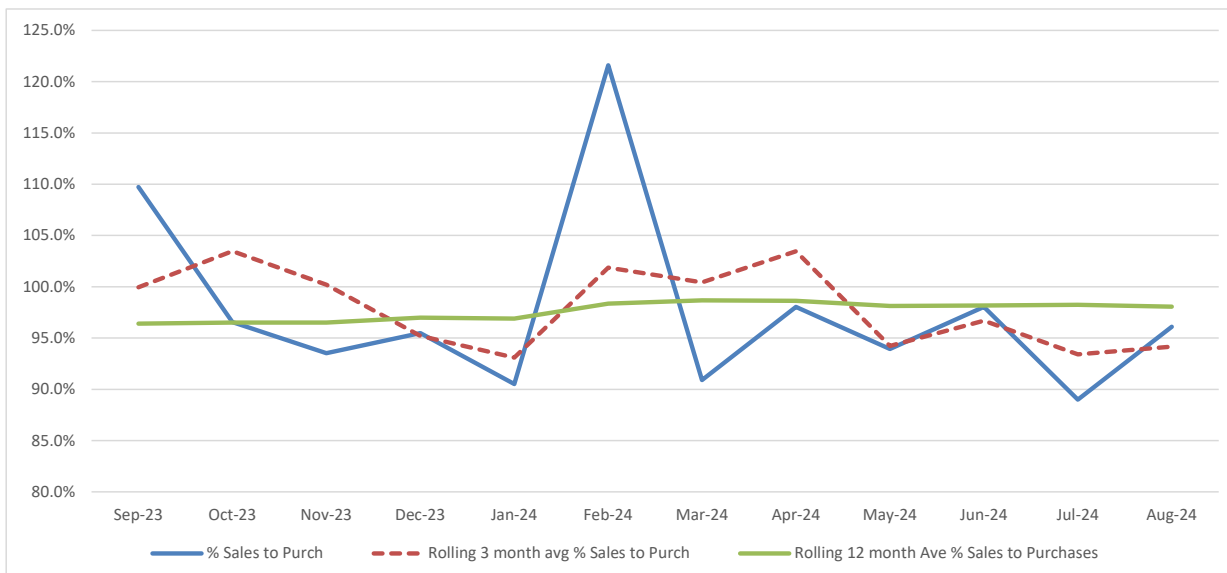
ACCOUNT #	DESCRIPTION	AUG KWH 2024	AUG KWH 2023	AUG REVENUE 2024	AUG REVENUE 2023
604-37400-37411	Residential Light Sales	3,012,207	3,199,641	\$387,623.49	\$355,286.22
604-37400-37412	Residential Heat Sales	790,913	846,902	\$96,117.54	\$88,034.52
604-37400-37413	Commercial Service Sales	1,802,983	1,991,270	\$224,284.01	\$213,406.15
604-37400-37414	Seasonal Commercial Heat Sales	32,697	34,112	\$3,982.97	\$3,543.51
604-37400-37415	General Service Sales	1,431,752	1,526,953	\$139,304.81	\$139,391.47
604-37400-37416	Industrial Sales	4,829,528	5,271,497	\$518,850.24	\$466,750.72
604-37400-37417	All Electric Sales	705,836	721,614	\$71,794.66	\$62,093.36
604-37400-37418	Rural Electric Sales	293,341	316,992	\$37,410.14	\$34,634.19
604-37400-37420	Filter Plant Power	106,140	127,196	\$8,767.16	\$8,458.53
604-37400-37421	WW Treatment Plant Power	107,010	125,120	\$8,839.03	\$8,320.48
604-37400-37423	Municipal Street Lighting	34,709	35,504	\$3,172.41	\$2,662.82
604-37400-37422	EV Charging Stations	963	612	\$507.28	\$348.03
604-37400-37426	Security & Street Lighting	3,233	3,309	\$905.44	\$879.98
604-37400-37419	Energy Cost Adjustment			\$63,401.13	\$192,745.65

TOTAL SALES	13,151,312	14,200,722	\$1,564,960.31	\$ 1,576,555.63
--------------------	-------------------	-------------------	-----------------------	------------------------

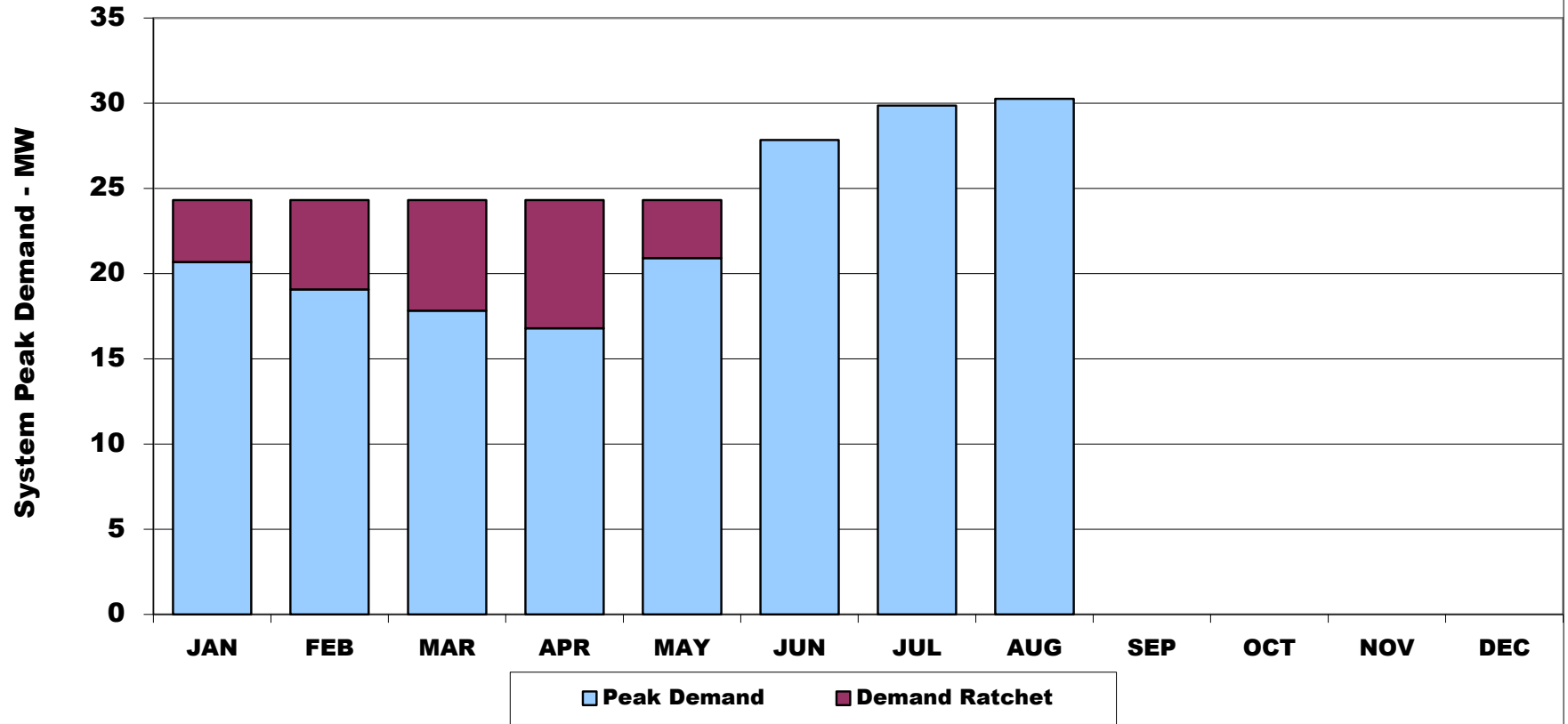
ELECTRIC PURCHASES	2024	2023
--------------------	------	------

TIE LINE - SMMPA 69 KV (BILLED)	13,425,916	14,553,912
TIE LINE - WAPA 69 KV (BILLED)	261,000	261,000
TOTAL PURCHASES (69 KV)	13,686,916	14,814,912

SALES TO PURCHASES DIFFERENTIAL	535,604	614,190	96.09%	95.85%
--	----------------	----------------	---------------	---------------



City of Fairmont Demand Ratchet Costs - 2024



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PEAK DEMAND	20,689	19,074	17,829	16,787	20,918	27,849	29,862	30,262				
RATCHET DEMAND	24,313	24,313	24,313	24,313	24,313							
DIFFERENCE	3,624	5,239	6,484	7,526	3,395					0	0	0
RATCHET COST	\$39,683	\$57,367	\$71,000	\$82,410	\$37,175					\$0	\$0	\$0

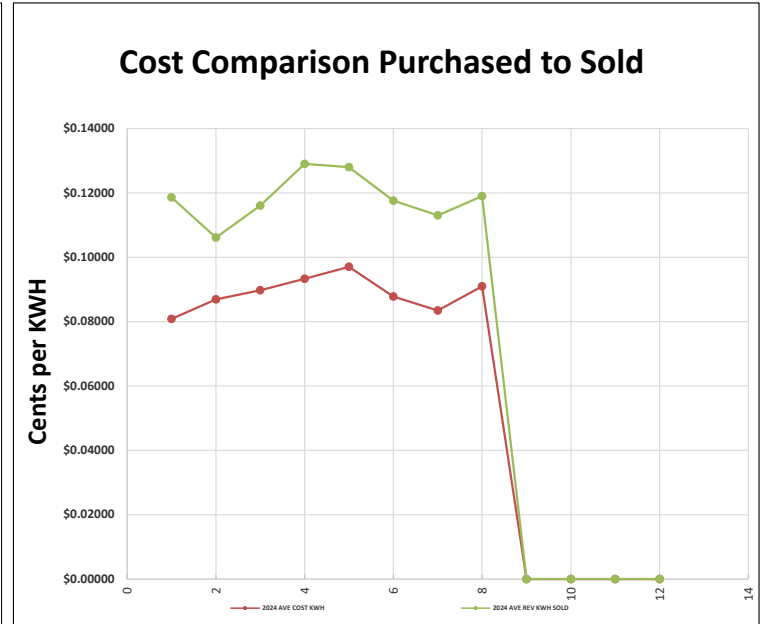
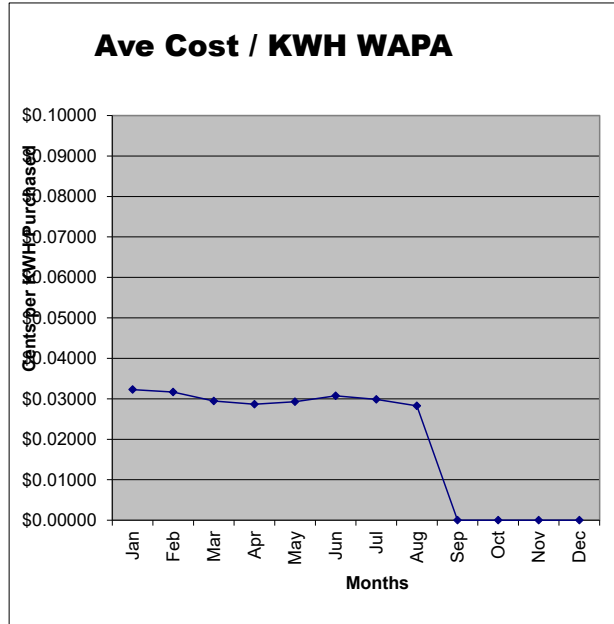
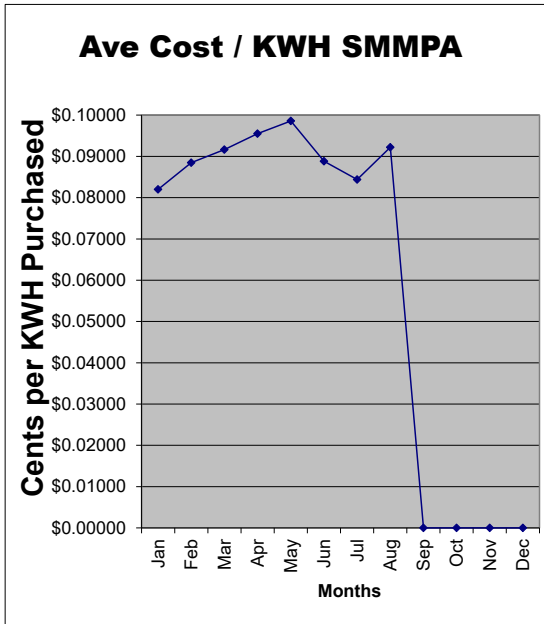
TOTAL RATCHET COSTS

\$287,635

JAN - MAY: RATCHET BASED ON SYSTEM PEAK OF 32,856 SET ON AUGUST 23, 2023
 JUN - SEP: ANNUAL PEAK MEASUREMENT PERIOD.
 OCT-DEC: RATCHET BASED ON SYSTEM PEAK SET SUMMER OF 2024 - TBD
 Ratchet is 74% of peak demand.

FAIRMONT PUBLIC UTILITIES - COMPARISON OF PURCHASE POWER TO SALES FOR YEAR 2024

	SMMPA									WAPA				TOTAL KWH PURCHASED	TOTAL PURCHASED POWER COST	2024 AVE COST KWH	TOTAL KWH SOLD TO CUSTOMERS	TOTAL REVENUE	2024 AVE REV KWH SOLD
	ACTUAL DEMAND	BILLED DEMAND	KWH	DEMAND \$\$	ENERGY \$\$	ECA \$\$	WHEELING	TOTAL BILL	AVERAGE COST/KWH	BILLED DEMAND	KWH	TOTAL BILL	AVERAGE COST/KWH						
JAN	20,689	24,313	12,327,128	\$356,252.79	\$683,522.17	(\$29,091.95)	\$0.00	\$1,010,683.01	\$0.08199	784	286,000	\$9,228.02	\$0.03227	12,613,128	\$1,019,911.03	\$0.08086	11,416,223	\$1,353,596.98	\$0.11857
FEB	19,074	24,313	10,696,985	\$354,091.54	\$595,059.41	(\$2,810.59)	\$0.00	\$946,340.36	\$0.08847	785	297,000	\$9,402.19	\$0.03166	10,993,985	\$955,742.55	\$0.08693	13,368,462	\$1,418,668.11	\$0.10612
MAR	17,829	24,313	10,917,771	\$354,091.54	\$603,366.84	\$42,991.18	\$0.00	\$1,000,449.56	\$0.09163	782	342,000	\$10,070.74	\$0.02945	11,259,771	\$1,010,520.30	\$0.08975	10,235,151	\$1,187,663.58	\$0.11604
APR	16,787	24,313	10,377,232	\$354,091.54	\$579,856.45	\$57,307.38	\$0.00	\$991,255.37	\$0.09552	774	358,000	\$10,265.46	\$0.02867	10,735,232	\$1,001,520.83	\$0.09329	10,523,710	\$1,357,857.65	\$0.12903
MAY	20,918	24,313	11,064,859	\$354,091.54	\$617,769.04	\$118,788.17	\$0.00	\$1,090,648.75	\$0.09857	569	252,000	\$7,375.84	\$0.02927	11,316,859	\$1,098,024.59	\$0.09703	10,631,164	\$1,360,967.41	\$0.12802
JUN	27,849	27,849	12,425,988	\$396,346.74	\$690,848.44	\$16,663.68	\$0.00	\$1,103,858.86	\$0.08883	578	232,000	\$7,126.24	\$0.03072	12,657,988	\$1,110,985.10	\$0.08777	12,407,911	\$1,459,092.11	\$0.11759
JUL	29,862	29,862	14,310,985	\$420,402.09	\$800,046.37	(\$12,500.54)	\$0.00	\$1,207,947.92	\$0.08441	578	246,000	\$7,340.02	\$0.02984	14,556,985	\$1,215,287.94	\$0.08348	12,954,687	\$1,464,095.75	\$0.11302
AUG	30,262	30,262	13,425,916	\$425,182.09	\$750,373.44	\$62,467.45	\$0.00	\$1,238,022.98	\$0.09221	546	261,000	\$7,370.67	\$0.02824	13,686,916	\$1,245,393.65	\$0.09099	13,151,312	\$1,564,960.31	\$0.11900
SEP							\$0.00	\$0.00	#DIV/0!				#DIV/0!	0	\$0.00	#DIV/0!			#DIV/0!
OCT							\$0.00	\$0.00	#DIV/0!				#DIV/0!	0	\$0.00	#DIV/0!			#DIV/0!
NOV							\$0.00	\$0.00	#DIV/0!				#DIV/0!	0	\$0.00	#DIV/0!			#DIV/0!
DEC							\$0.00	\$0.00	#DIV/0!				#DIV/0!	0	\$0.00	#DIV/0!			#DIV/0!
TOT			95,546,864	\$3,014,549.87	\$5,320,842.16	\$253,814.78	\$0.00	\$8,589,206.81	\$0.08990	5,396	2,274,000	\$68,179.18	\$0.02998	97,820,864	\$8,657,385.99	\$0.08850	94,688,620	\$11,166,901.90	\$0.1179
																		AVE KWH COST	\$0.0885
																		KWH SOLD	\$0.0914
																		KWH MARGIN	\$0.0265



PUBLIC UTILITIES COMMISSION WATER DEPARTMENT STATISTICS FOR 2024

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
RAW WATER	41,555,280	39,324,370	42,705,320	40,986,120	47,994,420	46,012,300	48,863,310	44,855,280				
FINISHED WATER	40,642,050	38,442,680	41,367,380	39,883,860	46,543,520	44,851,960	47,499,640	43,288,260				
TOTAL PLANT LOSS	913,230	881,690	1,337,940	1,102,260	1,450,900	1,160,340	1,363,670	1,567,020	0	0	0	0
RESIDENTIAL SALES	14,064,337	13,578,137	10,984,741	12,169,206	12,578,000	16,447,528	12,011,109	13,463,945				
COMMERCIAL SALES	7,270,057	8,332,125	7,516,391	8,503,944	9,343,595	12,049,342	10,424,449	11,841,938				
INDUSTRIAL SALES	14,452,326	14,429,885	13,816,484	14,811,390	14,773,988	16,876,008	14,078,301	15,320,064				
TOTAL WATER SALES	35,786,720	36,340,147	32,317,616	35,484,540	36,695,583	45,372,878	36,513,859	40,625,947	0	0	0	0
ACCOUNTED LOSS	1,064,326	1,496,660	1,481,770	1,375,820	1,355,890	1,051,020	1,008,920	295,700				
UNACCOUNTED LOSS	3,791,004	605,873	7,567,994	3,023,500	8,492,047	(1,571,938)	9,976,861	2,366,613	0	0	0	0
% OF NET FINISHED WATER	9.33%	1.58%	18.29%	7.58%	18.25%	-3.50%	21.00%	5.47%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
PEAK DAY VOL	1,451,900	1,560,400	1,546,700	1,523,300	1,845,600	1,645,700	1,847,600	1,705,800				
PEAK DATE	01/20/24	01/22/24	03/15/24	04/15/24	05/18/24	06/08/24	07/31/24	08/31/24				
AVERAGE DAY VOL	1,311,000	1,325,600	1,334,400	1,329,500	1,501,400	1,495,100	1,532,200	1,396,400				
RESIDENTIAL SALES \$\$	\$291,043.80	\$287,474.80	\$267,441.43	\$275,761.72	\$275,810.88	\$309,949.91	\$273,446.43	\$285,728.55				
COMMERCIAL SALES \$\$	\$97,694.60	\$106,550.06	\$99,353.24	\$108,341.42	\$115,454.11	\$138,206.12	\$124,577.63	\$136,516.69				
INDUSTRIAL SALES \$\$	\$101,670.40	\$101,498.80	\$96,808.40	\$104,416.00	\$104,130.00	\$120,203.20	\$98,810.40	\$108,305.60				
TOTAL SALES \$\$\$	\$490,408.80	\$495,523.66	\$463,603.07	\$488,519.14	\$495,394.99	\$568,359.23	\$496,834.46	\$530,550.84	\$0.00	\$0.00	\$0.00	\$0.00

WATER DEPARTMENT TOTALS YEAR TO DATE

	2024	2023	
RAW WATER	352,296,400	363,556,220	GAL
FINISHED WATER	342,519,350	350,650,560	GAL
TOTAL PLANT LOSS	9,777,050	12,905,660	
RESIDENTIAL SALES	105,297,003	113,728,761	GAL
COMMERCIAL SALES	75,281,841	65,607,581	GAL
INDUSTRIAL SALES	118,558,446	104,839,209	GAL
TOTAL WATER SALES	299,137,290	284,175,551	GAL
ACCOUNTED LOSSES	9,130,106	11,989,500	GAL
UNACCOUNTED LOSSES	34,251,954	54,485,509	GAL
% OF NET FINISHED WATER	10.00%	15.54%	
YTD RESIDENTIAL SALES \$\$	\$2,266,657.52	\$2,129,291.40	
YTD COMMERCIAL SALES \$\$	\$926,693.87	\$744,922.94	
YTD INDUSTRIAL SALES \$\$	\$835,842.80	\$677,275.00	
YTD WATER SALES TOTAL \$	\$4,029,194.19	\$3,551,489.34	
REVENUE PER GALLON SOLI	\$0.013469	\$0.012498	
	1.07776	1.10394	

PUBLIC UTILITIES COMMISSION WASTEWATER DEPARTMENT STATISTICS FOR THE YEAR 2024

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TOTAL FLOW	40,440,000	36,800,000	42,950,000	59,100,000	94,090,000	134,000,000	72,260,000	45,930,000				
DAILY FLOW	1,300,000	1,270,000	1,390,000	1,970,000	3,040,000	4,470,000	2,330,000	1,480,000				
MAXIMUM FLOW	1,430,000	1,390,000	2,280,000	3,020,000	6,520,000	11,400,000	3,470,000	1,960,000				
MINIMUM FLOW	1,220,000	1,230,000	1,170,000	1,590,000	1,910,000	1,940,000	1,560,000	1,220,000				
I & I % OF TOTAL FLOW	29.06%	19.21%	38.82%	50.74%	66.90%	72.40%	57.87%	30.14%				
<u>INFLUENT AVERAGE:</u>												
LBS / DAY BOD	2,696	2,852	2,355	3,293	4,288	5,332	3,521	3,625				
LBS / DAY TSS	4,615	5,000	3,869	2,176	3,523	4,685	2,908	5,007				
<u>EFFLUENT BOD:</u>												
AVERAGE BOD	2.8	3.4	2.8	2.5	2.6	2.7	1.7	2.1				
MAXIMUM BOD	4.0	4.5	5.3	3.1	6.1	7.4	3.1	4.2				
MINIMUM BOD	1.0	1.9	1.6	1.8	0.5	0.5	0.5	0.9				
<u>EFFLUENT TSS:</u>												
AVERAGE TSS	17	17	12	7	9	9	4	3				
MAXIMUM TSS	19	23	25	13	20	23	7	8				
MINIMUM TSS	5	13	7	4	4	1	2	1				
# OF DAYS OVER PERMIT LIMITS	0	0	0	0	1	2	0	0				
ELECTRIC USE - KWH	110,728	108,592	89,600	114,518	119,968	137,966	119,646	107,010				
ELECTRIC USE - COST	\$8,830.20	\$8,942.66	\$7,085.03	\$11,007.36	\$11,275.92	\$11,613.98	\$9,760.96	\$9,359.31				
<u>REVENUE:</u>												
RESIDENTIAL	\$117,874.58	\$116,425.79	\$109,287.30	\$112,674.71	\$112,870.91	\$110,008.77	\$104,203.29	\$105,050.26				
COMMERCIAL	\$31,486.23	\$37,367.94	\$34,848.09	\$35,076.41	\$37,341.02	\$44,223.77	\$50,872.11	\$43,156.84				
INDUSTRIAL	\$38,326.82	\$42,628.76	\$67,813.95	\$59,719.19	\$50,658.56	\$68,357.33	\$38,304.83	\$23,841.70				
TOTAL REVENUE	\$187,687.63	\$196,422.49	\$211,949.34	\$207,470.31	\$200,870.49	\$222,589.87	\$193,380.23	\$172,048.80	\$0.00	\$0.00	\$0.00	\$0.00

WASTEWATER DEPARTMENT TOTALS YEAR TO DATE

	YEAR	
	2024	2023
BOD = Biodegradable Oxygen Demand		
TSS= Total Suspended Solids		
TOTAL FLOW TO PLANT, GALLONS	525,570,000	397,680,000
I & I % OF TOTAL FLOW	45.64%	25.06%
DAYS EXCEEDING PERMIT LIMITS	3	2
TOTAL ELECTRIC - KWH	908,028	887,704
TOTAL ELECTRIC - COST	\$77,875.42	\$ 60,431.68
TOTAL RESIDENTIAL REVENUE	\$888,395.61	\$860,173.56
TOTAL COMMERCIAL REVENUE	\$314,372.41	\$295,348.32
TOTAL INDUSTRIAL REVENUE	\$389,651.14	\$308,552.63
TOTAL REVENUE	\$1,592,419.16	\$1,464,074.51



Fairmont Public Utilities Commission
September 17, 2024

Agenda Item: 6

From: Julie Zarling, Assistant Finance Director
To: Public Utilities Commission

Subject: Record of Disbursements- August 2024

Policy/Action Requested:

Vote Required: X Simple Majority _____ Roll Call

Recommendation: Approval

Overview:

Approval is requested for the Commissioners' Record of Disbursements for August 2024

Budget Impact:

Attachments: PUC Check Listing for August 2024

PUC Action: _____ Date: _____

AP
PUC CHECKS



User: juliezar
Printed: 9/11/2024 2:30:21 PM

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Advanced Engineering & Environmental Services, LLC	602-49450-31200	218.00	8/30/2024	165860	services from 6/29-08/02/24 Win911 Alarms Troubleshooting
Advanced Engineering & Environmental Services, LLC		218.00			
Altec Industries Inc	604-49570-40500	1,040.37	9/10/2024	165969	#226 inspection
Altec Industries Inc	604-49570-40500	1,377.05	9/10/2024	165969	#224 inspection
Altec Industries Inc	604-49570-40500	1,671.04	9/10/2024	165969	#229 inspection
Altec Industries Inc		4,088.46			
Amazon Capital Services	604-49570-22300	235.34	8/21/2024	165717	Replacement for ELKO 24E3 10 Pack
Amazon Capital Services	601-49430-40200	31.98	8/30/2024	165861	stainless steel mesh screen
Amazon Capital Services	602-49470-40200	39.99	8/16/2024	165674	fishing magnets
Amazon Capital Services	601-49400-43900	24.98	8/30/2024	165861	fast iphone charger
Amazon Capital Services	604-49570-40400	45.00	8/21/2024	165717	220mm Bellows Boot Jumping Jack Compactor
Amazon Capital Services	602-49450-40400	132.45	8/30/2024	165861	replacement batteries
Amazon Capital Services		509.74			
Aqua-Pure Inc.	601-49400-31400	51.25	8/16/2024	165675	gal of ph 10 buffer
Aqua-Pure Inc.		51.25			
Arnold Motor Supply	602-49450-40400	8.75	9/10/2024	165970	fuel filter east side lift
Arnold Motor Supply		8.75			
Asmus/Leah Fortune Dayton	604-00000-20200	2.28	8/30/2024	165801	Refund Check
Asmus/Leah Fortune Dayton	604-00000-20200	1.31	8/30/2024	165801	Refund Check
Asmus/Leah Fortune Dayton		3.59			
Aust Greg/Megan	601-00000-20200	8.02	8/30/2024	165802	Refund Check 016864-000, 1309 N Prairie Ave

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Aust Greg/Megan	604-00000-20200	1.46	8/30/2024	165802	Refund Check 016864-000, 1309 N Prairie Ave
Aust Greg/Megan	601-00000-20200	6.43	8/30/2024	165802	Refund Check 016864-000, 1309 N Prairie Ave
Aust Greg/Megan	602-00000-20200	6.74	8/30/2024	165802	Refund Check 016864-000, 1309 N Prairie Ave
Aust Greg/Megan	604-00000-20200	24.70	8/30/2024	165802	Refund Check 016864-000, 1309 N Prairie Ave
Aust Greg/Megan	604-00000-20200	1.93	8/30/2024	165802	Refund Check 016864-000, 1309 N Prairie Ave
Aust Greg/Megan		49.28			
Ausua Clotilde	604-00000-20200	2.63	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde	601-00000-20200	8.12	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde	602-00000-20200	7.67	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde	602-00000-20200	14.39	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde	604-00000-20200	4.62	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde	604-00000-20200	3.50	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde	604-00000-20200	59.95	8/30/2024	165803	Refund Check 015864-001, 103 Scotts Ct #1
Ausua Clotilde		100.88			
Baarts James/Dolores	604-00000-20200	3.00	8/30/2024	165890	Refund Check 008838-004, 620 Summit Dr #313
Baarts James/Dolores	601-00000-20200	16.47	8/30/2024	165890	Refund Check 008838-004, 620 Summit Dr #313
Baarts James/Dolores	602-00000-20200	14.88	8/30/2024	165890	Refund Check 008838-004, 620 Summit Dr #313
Baarts James/Dolores	604-00000-20200	39.86	8/30/2024	165890	Refund Check 008838-004, 620 Summit Dr #313
Baarts James/Dolores	602-00000-20200	27.89	8/30/2024	165890	Refund Check 008838-004, 620 Summit Dr #313
Baarts James/Dolores	604-00000-20200	0.78	8/30/2024	165890	Refund Check 008838-004, 620 Summit Dr #313
Baarts James/Dolores		102.88			
Becker Brandon	601-00000-20200	0.12	8/30/2024	165891	Refund Check 015577-000, 829 Edison Dr - ELEC
Becker Brandon	602-00000-20200	0.21	8/30/2024	165891	Refund Check 015577-000, 829 Edison Dr - ELEC
Becker Brandon	604-00000-20200	3.18	8/30/2024	165891	Refund Check 015577-000, 829 Edison Dr - ELEC
Becker Brandon	602-00000-20200	0.11	8/30/2024	165891	Refund Check 015577-000, 829 Edison Dr - ELEC
Becker Brandon	604-00000-20200	2.31	8/30/2024	165891	Refund Check 015577-000, 829 Edison Dr - ELEC
Becker Brandon	604-00000-20200	40.85	8/30/2024	165891	Refund Check 015577-000, 829 Edison Dr - ELEC
Becker Brandon		46.78			
Beemer Companies	601-49430-40200	1,417.06	8/16/2024	165676	class 5 recycle rock for indus st watermain break
Beemer Companies	601-49430-40200	385.00	8/16/2024	165676	welding mill ends of meter
Beemer Companies		1,802.06			
Benschoter Troy	601-00000-20200	0.17	8/30/2024	165805	Refund Check 017283-001, 318 S DEWEY ST
Benschoter Troy	602-00000-20200	0.22	8/30/2024	165805	Refund Check 017283-001, 318 S DEWEY ST

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Benschoter Troy	601-00000-20200	0.35	8/30/2024	165805	Refund Check 017283-001, 318 S DEWEY ST
Benschoter Troy	602-00000-20200	2.74	8/30/2024	165805	Refund Check 017283-001, 318 S DEWEY ST
Benschoter Troy	602-00000-20200	1.04	8/30/2024	165805	Refund Check 017283-001, 318 S DEWEY ST
		<hr/>			
Benschoter Troy		4.52			
Benton Matthew	601-00000-20200	4.97	8/30/2024	165806	Refund Check
Benton Matthew	602-00000-20200	8.83	8/30/2024	165806	Refund Check
Benton Matthew	604-00000-20200	1.54	8/30/2024	165806	Refund Check
Benton Matthew	602-00000-20200	4.70	8/30/2024	165806	Refund Check
Benton Matthew	604-00000-20200	20.35	8/30/2024	165806	Refund Check
Benton Matthew	604-00000-20200	0.23	8/30/2024	165806	Refund Check
		<hr/>			
Benton Matthew		40.62			
Bock Randall	601-49440-32100	46.44	8/16/2024	0	Aug 2024 Cell Phone Reimbursement
		<hr/>			
Bock Randall		46.44			
Bodin Megan	604-00000-20200	1.12	8/30/2024	165892	Refund Check 018445-000, 218 1/2 S Grant St #5
Bodin Megan	604-00000-20200	8.45	8/30/2024	165892	Refund Check 018445-000, 218 1/2 S Grant St #5
Bodin Megan	604-00000-20200	113.34	8/30/2024	165892	Refund Check 018445-000, 218 1/2 S Grant St #5
Bodin Megan	602-00000-20200	4.71	8/30/2024	165892	Refund Check 018445-000, 218 1/2 S Grant St #5
Bodin Megan	601-00000-20200	5.27	8/30/2024	165892	Refund Check 018445-000, 218 1/2 S Grant St #5
Bodin Megan	602-00000-20200	8.86	8/30/2024	165892	Refund Check 018445-000, 218 1/2 S Grant St #5
		<hr/>			
Bodin Megan		141.75			
Boekett Building Supply	601-49430-40200	148.82	8/30/2024	165862	concrete bags, trowl, ready mix, tape
		<hr/>			
Boekett Building Supply		148.82			
Bomgaars Supply	601-49400-43900	61.98	8/30/2024	165863	hose and sprayer
Bomgaars Supply	602-49450-43900	9.47	8/30/2024	165863	sand paper
Bomgaars Supply	601-49430-40200	13.48	8/30/2024	165863	zip ties
Bomgaars Supply	602-49450-43900	2.39	8/30/2024	165863	adapter pvc
Bomgaars Supply	601-49430-40200	174.99	8/30/2024	165863	rubber boots
Bomgaars Supply	602-49470-40200	62.55	8/30/2024	165863	adapters and couplers
Bomgaars Supply	602-49450-43900	31.97	8/30/2024	165863	spray paint
Bomgaars Supply	602-49470-40200	40.98	8/30/2024	165863	wrenches
Bomgaars Supply	602-49450-43900	16.39	8/30/2024	165863	buckets and funnel
Bomgaars Supply	602-49470-40200	54.96	8/30/2024	165863	rags and weed killer

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Bomgaars Supply		469.16			
Brusky Megan	604-49595-43990	50.00	8/16/2024	165677	residential furnace rebate
Brusky Megan		50.00			
Bulfer Paula	604-49595-43990	50.00	8/16/2024	165678	residential furnace rebate
Bulfer Paula	604-49595-43981	100.00	8/16/2024	165678	residential AC rebate
Bulfer Paula		150.00			
Burmeister Jace	604-00000-20200	1.60	8/30/2024	165893	Refund Check 019147-000, 1511 Falcon Dr #102
Burmeister Jace	602-00000-20200	11.82	8/30/2024	165893	Refund Check 019147-000, 1511 Falcon Dr #102
Burmeister Jace	604-00000-20200	47.42	8/30/2024	165893	Refund Check 019147-000, 1511 Falcon Dr #102
Burmeister Jace	601-00000-20200	6.97	8/30/2024	165893	Refund Check 019147-000, 1511 Falcon Dr #102
Burmeister Jace	604-00000-20200	3.62	8/30/2024	165893	Refund Check 019147-000, 1511 Falcon Dr #102
Burmeister Jace	602-00000-20200	6.31	8/30/2024	165893	Refund Check 019147-000, 1511 Falcon Dr #102
Burmeister Jace		77.74			
Carquest Auto Parts Stores	604-49570-40500	18.56	8/16/2024	165679	air filter
Carquest Auto Parts Stores	601-49400-40500	47.83	9/10/2024	165971	#648 starter solenoid
Carquest Auto Parts Stores	604-49570-40500	3.56	9/10/2024	165971	#228 case fuse
Carquest Auto Parts Stores	601-49400-40500	83.77	9/10/2024	165971	#648 circuit breaker
Carquest Auto Parts Stores		153.72			
Celander Cynthia	604-49595-43986	25.00	8/16/2024	165680	residential freezer rebate
Celander Cynthia		25.00			
Chavez Martin Marina Estela	602-00000-20200	0.95	8/30/2024	165811	Refund Check 017497-000, 215 Webster St
Chavez Martin Marina Estela	604-00000-20200	2.84	8/30/2024	165811	Refund Check 017497-000, 215 Webster St
Chavez Martin Marina Estela	601-00000-20200	0.53	8/30/2024	165811	Refund Check 017497-000, 215 Webster St
Chavez Martin Marina Estela	602-00000-20200	0.51	8/30/2024	165811	Refund Check 017497-000, 215 Webster St
Chavez Martin Marina Estela	604-00000-20200	0.42	8/30/2024	165811	Refund Check 017497-000, 215 Webster St
Chavez Martin Marina Estela	601-00000-20200	17.54	8/30/2024	165811	Refund Check 017497-000, 215 Webster St
Chavez Martin Marina Estela		22.79			
Chavez Martin Maritza Marisol	604-00000-20200	0.42	8/30/2024	165812	Refund Check 017816-000, 89 Downtown Plaza #2
Chavez Martin Maritza Marisol	604-00000-20200	2.27	8/30/2024	165812	Refund Check 017816-000, 89 Downtown Plaza #2

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Chavez Martin Maritza Marisol	601-00000-20200	4.36	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	601-00000-20200	0.43	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	601-00000-20200	3.06	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	604-00000-20200	0.42	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	602-00000-20200	0.71	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	604-00000-20200	5.69	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	602-00000-20200	2.89	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	602-00000-20200	0.38	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
Chavez Martin Maritza Marisol	604-00000-20200	1.15	8/30/2024	165813	Refund Check 017816-001, 712 Webster St
		21.78			
Chavez Martin Maritza Marisol		21.78			
Cintas Corporation	601-49400-31200	43.56	8/7/2024	165530	Water Dept First Aid Supplies
Cintas Corporation	604-49570-43760	1,821.84	9/10/2024	165972	laundrying services-august
		1,865.40			
Cintas Corporation		1,865.40			
City Of Fairmont Petty Cash	604-49595-40400	23.00	9/10/2024	165973	replace lost license plate from crysteel trucking
		23.00			
City Of Fairmont Petty Cash		23.00			
Clemmensen Lloyd	604-49595-43990	50.00	8/16/2024	165681	residential furnace rebate
Clemmensen Lloyd	604-49595-43981	200.00	8/16/2024	165681	residential AC rebate
		250.00			
Clemmensen Lloyd		250.00			
Cole Kevin	604-49595-43990	50.00	8/16/2024	165682	residential furnace rebate
Cole Kevin	604-49595-43981	236.00	8/16/2024	165682	residential AC rebate
		286.00			
Cole Kevin		286.00			
Colonial Life	602-00000-21812	14.41	8/14/2024	165630	PR Batch 00001.08.2024 Colonial GroupSpecifiedDisease
Colonial Life	602-00000-21812	18.43	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Cancer
Colonial Life	601-00000-21812	91.98	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Life Insurance
Colonial Life	602-00000-21812	18.44	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Cancer
Colonial Life	602-00000-21812	134.50	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Disability
Colonial Life	604-00000-21812	282.83	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Disability
Colonial Life	601-00000-21812	30.06	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Group Accident
Colonial Life	601-00000-21812	92.00	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Life Insurance
Colonial Life	604-00000-21812	282.82	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Disability
Colonial Life	602-00000-21812	98.08	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Life Insurance
Colonial Life	602-00000-21812	52.28	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Group Accident
Colonial Life	604-00000-21812	225.46	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Life Insurance

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Colonial Life	604-00000-21812	60.40	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Cancer
Colonial Life	602-00000-21812	134.49	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Disability
Colonial Life	602-00000-21812	14.41	8/28/2024	165790	PR Batch 00002.08.2024 Colonial GroupSpecifiedDisease
Colonial Life	601-00000-21812	19.52	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Cancer
Colonial Life	604-00000-21812	16.87	8/14/2024	165630	PR Batch 00001.08.2024 Colonial GroupSpecifiedDisease
Colonial Life	601-00000-21812	116.24	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Disability
Colonial Life	604-00000-21812	225.46	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Life Insurance
Colonial Life	604-00000-21812	66.00	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Group Accident
Colonial Life	602-00000-21812	52.27	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Group Accident
Colonial Life	604-00000-21812	66.01	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Group Accident
Colonial Life	601-00000-21812	116.22	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Disability
Colonial Life	604-00000-21812	60.39	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Cancer
Colonial Life	604-00000-21812	14.89	8/28/2024	165790	PR Batch 00002.08.2024 Colonial GroupSpecifiedDisease
Colonial Life	601-00000-21812	19.53	8/14/2024	165630	PR Batch 00001.08.2024 Colonial Cancer
Colonial Life	602-00000-21812	98.09	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Life Insurance
Colonial Life	601-00000-21812	30.06	8/28/2024	165790	PR Batch 00002.08.2024 Colonial Group Accident
		2,452.14			
Colonial Life					
Cornerstone Clinic	601-49445-30500	175.00	8/30/2024	165864	new employment exam-gracie
		175.00			
Cornerstone Clinic					
Cress Refrigeration	602-49450-40400	1,090.57	8/16/2024	165683	fix condensor fan on WTP a/c unit
Cress Refrigeration	602-49450-40400	2,337.78	9/10/2024	165974	fixed AC blower motor at WWTP
Cress Refrigeration	601-49400-40400	540.00	9/10/2024	165974	checked VFD for entry AHU
		3,968.35			
Cress Refrigeration					
Crysteel Truck Equipment Inc	604-00000-16440	14,805.00	8/7/2024	165532	Install Tipper Body Onto 2005 F450 Chassis
		14,805.00			
Crysteel Truck Equipment Inc					
Culligan Water of Fairmont	602-49450-31200	155.35	8/16/2024	165684	RO filters and maintenance
		155.35			
Culligan Water of Fairmont					
Czuczor Eric	601-00000-20200	1.69	8/30/2024	165817	Refund Check
Czuczor Eric	604-00000-20200	5.16	8/30/2024	165817	Refund Check
Czuczor Eric	601-00000-20200	9.00	8/30/2024	165817	Refund Check
Czuczor Eric	602-00000-20200	11.99	8/30/2024	165817	Refund Check
Czuczor Eric	601-00000-20200	14.37	8/30/2024	165817	Refund Check
Czuczor Eric	604-00000-20200	2.62	8/30/2024	165817	Refund Check

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Czuczor Eric	602-00000-20200	1.61	8/30/2024	165817	Refund Check
Czuczor Eric	602-00000-20200	3.01	8/30/2024	165817	Refund Check
Czuczor Eric	604-00000-20200	33.26	8/30/2024	165817	Refund Check
Czuczor Eric	604-00000-20200	1.92	8/30/2024	165817	Refund Check
		84.63			
Czuczor Eric					
Dakota Supply Group	601-49430-40200	64.89	8/16/2024	165685	rubber meter gaskets
Dakota Supply Group	601-49400-40200	374.88	8/16/2024	165685	pipe nipples
Dakota Supply Group	601-00000-16500	190.20	8/30/2024	165865	meter gaskets - CIP - AMI
Dakota Supply Group	601-49430-40200	2,582.17	8/30/2024	165865	couplings and long sleeve fbe
Dakota Supply Group	601-49430-40200	1,687.37	8/16/2024	165685	threaded flanges, neoprene gaskets
Dakota Supply Group	601-49430-40200	74.94	8/16/2024	165685	rubber gaskets
		4,974.45			
Dakota Supply Group					
Day Plumbing Heating & Cooling, Inc.	601-49430-40200	68.82	8/16/2024	165686	brass nipples
Day Plumbing Heating & Cooling, Inc.	602-49450-40400	140.40	8/30/2024	165866	20x24 pleated filters
Day Plumbing Heating & Cooling, Inc.	601-49400-40400	12.53	8/30/2024	165866	ball valve
		221.75			
Day Plumbing Heating & Cooling, Inc.					
DGR Engineering	604-00000-16500	1,323.50	8/16/2024	165687	services through 7/31/24 - CIP - FES substation
DGR Engineering	604-00000-16500	540.00	8/16/2024	165687	services through 7/31/24 - CIP - 10th st substation
		1,863.50			
DGR Engineering					
Ditch Witch Of Minnesota, Inc.	604-49570-40500	5.92	9/10/2024	165975	screw
		5.92			
Ditch Witch Of Minnesota, Inc.					
EFTPS	604-00000-21801	4,959.26	8/28/2024	0	PR Batch 00002.08.2024 Federal Income Tax
EFTPS	602-00000-21809	349.11	8/14/2024	0	PR Batch 00001.08.2024 Medicare Employer Portion
EFTPS	602-00000-21803	1,492.75	8/14/2024	0	PR Batch 00001.08.2024 FICA Employee Portion
EFTPS	604-00000-21803	3,000.85	8/28/2024	0	PR Batch 00002.08.2024 FICA Employee Portion
EFTPS	602-00000-21801	2,270.38	8/28/2024	0	PR Batch 00002.08.2024 Federal Income Tax
EFTPS	602-00000-21803	1,434.34	8/28/2024	0	PR Batch 00002.08.2024 FICA Employer Portion
EFTPS	601-00000-21803	2,090.67	8/14/2024	0	PR Batch 00001.08.2024 FICA Employee Portion
EFTPS	601-00000-21809	503.32	8/28/2024	0	PR Batch 00002.08.2024 Medicare Employer Portion
EFTPS	604-00000-21809	701.83	8/28/2024	0	PR Batch 00002.08.2024 Medicare Employee Portion
EFTPS	602-00000-21803	1,434.34	8/28/2024	0	PR Batch 00002.08.2024 FICA Employee Portion
EFTPS	604-00000-21801	5,079.52	8/14/2024	0	PR Batch 00001.08.2024 Federal Income Tax
EFTPS	604-00000-21809	703.03	8/14/2024	0	PR Batch 00001.08.2024 Medicare Employer Portion

Last Name	Acct 1	Amount	Check Date	Check Num	Description
EFTPS	604-00000-21809	701.83	8/28/2024	0	PR Batch 00002.08.2024 Medicare Employer Portion
EFTPS	601-00000-21809	503.32	8/28/2024	0	PR Batch 00002.08.2024 Medicare Employer Portion
EFTPS	601-00000-21803	2,152.10	8/28/2024	0	PR Batch 00002.08.2024 FICA Employee Portion
EFTPS	604-00000-21803	3,005.99	8/14/2024	0	PR Batch 00001.08.2024 FICA Employer Portion
EFTPS	602-00000-21809	349.11	8/14/2024	0	PR Batch 00001.08.2024 Medicare Employee Portion
EFTPS	602-00000-21801	2,411.68	8/14/2024	0	PR Batch 00001.08.2024 Federal Income Tax
EFTPS	601-00000-21801	3,312.60	8/14/2024	0	PR Batch 00001.08.2024 Federal Income Tax
EFTPS	602-00000-21809	335.45	8/28/2024	0	PR Batch 00002.08.2024 Medicare Employee Portion
EFTPS	601-00000-21809	488.94	8/14/2024	0	PR Batch 00001.08.2024 Medicare Employer Portion
EFTPS	602-00000-21803	1,492.75	8/14/2024	0	PR Batch 00001.08.2024 FICA Employer Portion
EFTPS	601-00000-21803	2,152.10	8/28/2024	0	PR Batch 00002.08.2024 FICA Employer Portion
EFTPS	602-00000-21809	335.45	8/28/2024	0	PR Batch 00002.08.2024 Medicare Employer Portion
EFTPS	604-00000-21803	3,000.85	8/28/2024	0	PR Batch 00002.08.2024 FICA Employer Portion
EFTPS	604-00000-21809	703.03	8/14/2024	0	PR Batch 00001.08.2024 Medicare Employee Portion
EFTPS	604-00000-21803	3,005.99	8/14/2024	0	PR Batch 00001.08.2024 FICA Employee Portion
EFTPS	601-00000-21803	2,090.67	8/14/2024	0	PR Batch 00001.08.2024 FICA Employer Portion
EFTPS	601-00000-21809	488.94	8/14/2024	0	PR Batch 00001.08.2024 Medicare Employee Portion
EFTPS	601-00000-21801	3,516.13	8/28/2024	0	PR Batch 00002.08.2024 Federal Income Tax
		<hr/>			
EFTPS		54,066.33			
Elan Financial Services	604-49570-33100	640.00	8/7/2024	165538	MMUA Summer Conference 08/19 to 08/21/24
Elan Financial Services	601-49400-31500	20.00	8/7/2024	165538	Special Engineer License Renewal Fee
Elan Financial Services	601-49400-43900	26.95	8/7/2024	165538	DNR/EPA Meetings Inspections
Elan Financial Services	604-49570-33100	277.13	8/7/2024	165538	07/12 to 07/13/24 Fargo, ND Training
Elan Financial Services	602-49470-40200	17.00	8/7/2024	165538	WW Pump-Fuel
Elan Financial Services	602-49495-33100	361.53	8/7/2024	165538	WW Training Hugget 07/08 to 07/11/2024 St Cloud
Elan Financial Services	602-49470-40200	26.24	8/7/2024	165538	WW Pump-Fuel
		<hr/>			
Elan Financial Services		1,368.85			
Erickson Peter	602-00000-20200	0.20	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	602-00000-20200	0.10	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	604-00000-20200	1.16	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	601-00000-20200	19.46	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	604-00000-20200	2.50	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	601-00000-20200	9.79	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	604-00000-20200	32.65	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	602-00000-20200	10.92	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
Erickson Peter	601-00000-20200	0.12	8/30/2024	165894	Refund Check 018767-000, 123 Linden Ave
		<hr/>			
Erickson Peter		76.90			

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Fairmont Sentinel	602-49450-43900	210.38	8/27/2024	165781	Biosolids UV
Fairmont Sentinel	601-00000-16500	217.80	8/27/2024	165781	Reservoir Imp
Fairmont Sentinel	602-49450-43900	133.88	8/27/2024	165781	Biosolids UV
Fairmont Sentinel	601-00000-16500	138.60	8/27/2024	165781	Reservoir Imp
Fairmont Sentinel	601-00000-16500	156.75	8/27/2024	165781	Furnish Control
Fairmont Sentinel	601-49400-43900	234.30	8/27/2024	165781	Drinking Water Pro
		<hr/>			
Fairmont Sentinel		1,091.71			
Fastenal Company	601-49430-40200	39.98	9/10/2024	165976	safety glasses
Fastenal Company	601-49400-40400	25.39	8/30/2024	165867	bolts
		<hr/>			
Fastenal Company		65.37			
Federated Rural Electric Association	602-49470-38100	68.50	9/10/2024	165977	utilitie usage-august
		<hr/>			
Federated Rural Electric Association		68.50			
Fleet & Farm Supply	602-49450-43900	3.90	9/10/2024	165978	10' hose
Fleet & Farm Supply	602-49450-43900	6.59	9/10/2024	165978	garbage bags
Fleet & Farm Supply	601-49430-40200	35.75	9/10/2024	165978	paint brushes
Fleet & Farm Supply	601-49430-40200	32.98	9/10/2024	165978	bearings
Fleet & Farm Supply	602-49450-43900	7.90	9/10/2024	165978	pvc hose
Fleet & Farm Supply	601-49430-43900	11.18	9/10/2024	165978	wasp spray
Fleet & Farm Supply	604-49570-43900	37.98	9/10/2024	165978	mlw recip 9"
Fleet & Farm Supply	602-49470-40200	325.00	9/10/2024	165978	plumming hose
Fleet & Farm Supply	601-49400-43900	15.96	9/10/2024	165978	roller frame 7"
Fleet & Farm Supply	601-49430-40200	38.97	9/10/2024	165978	ball valves
Fleet & Farm Supply	602-49450-40400	27.97	9/10/2024	165978	rags, brushes, grease
Fleet & Farm Supply	602-49450-43900	23.98	9/10/2024	165978	drain bladder
Fleet & Farm Supply	604-49570-40400	39.00	9/10/2024	165978	chain
Fleet & Farm Supply	604-49570-40400	45.00	9/10/2024	165978	spray paint
Fleet & Farm Supply	601-49430-40200	36.75	9/10/2024	165978	duct tape, screw driver, towels
Fleet & Farm Supply	602-49450-43900	43.98	9/10/2024	165978	drain bladder
		<hr/>			
Fleet & Farm Supply		732.89			
Frontier Communications	604-49570-32100	42.70	8/16/2024	165688	507-235-6081-august
Frontier Communications	604-49570-32100	59.35	8/16/2024	165688	507-238-1928-august
		<hr/>			
Frontier Communications		102.05			
Further	604-00000-21811	493.30	8/28/2024	0	PR Batch 00002.08.2024 Health Savings Account

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Further	601-00000-21811	699.33	8/14/2024	0	PR Batch 00001.08.2024 Health Savings Account
Further	602-00000-21811	449.96	8/14/2024	0	PR Batch 00001.08.2024 Health Savings Account
Further	602-00000-21811	449.96	8/28/2024	0	PR Batch 00002.08.2024 Health Savings Account
Further	601-00000-21811	699.32	8/28/2024	0	PR Batch 00002.08.2024 Health Savings Account
Further	604-00000-21811	493.32	8/14/2024	0	PR Batch 00001.08.2024 Health Savings Account
		<hr/>			
Further		3,285.19			
Gopher State One Call, Inc.	602-49470-31200	51.68	9/10/2024	165979	Locating Expense-august
Gopher State One Call, Inc.	604-49570-31200	53.24	9/10/2024	165979	Locating Expense-august
Gopher State One Call, Inc.	601-49430-31200	51.68	9/10/2024	165979	Locating Expense-august
		<hr/>			
Gopher State One Call, Inc.		156.60			
Grabouski Beverly	604-49595-43982	1,173.00	8/16/2024	165689	residential mini-split ASHP rebate
		<hr/>			
Grabouski Beverly		1,173.00			
Grainger	601-49400-43900	129.00	9/10/2024	165980	red pass plus membership
		<hr/>			
Grainger		129.00			
Graymont (WI) LLC	601-49400-21620	7,594.75	8/16/2024	165690	high calcium quicklime
		<hr/>			
Graymont (WI) LLC		7,594.75			
Great Northern Environmental, LLC	601-00000-16500	13,758.50	9/10/2024	165981	4" SSV safety selector valve - CIP - digester improvements - ins
		<hr/>			
Great Northern Environmental, LLC		13,758.50			
Greimann Andrew	601-00000-20200	8.25	8/30/2024	165823	Refund Check
Greimann Andrew	604-00000-20200	42.93	8/30/2024	165823	Refund Check
Greimann Andrew	604-00000-20200	1.68	8/30/2024	165823	Refund Check
Greimann Andrew	604-00000-20200	3.29	8/30/2024	165823	Refund Check
Greimann Andrew	602-00000-20200	7.79	8/30/2024	165823	Refund Check
Greimann Andrew	602-00000-20200	14.63	8/30/2024	165823	Refund Check
		<hr/>			
Greimann Andrew		78.57			
GS Systems, Inc.	601-49400-31200	17,221.60	8/16/2024	165691	AVEVA first support renewal
GS Systems, Inc.	601-49400-31200	355.30	8/30/2024	165868	customer care plan for WIN-911

Last Name	Acct 1	Amount	Check Date	Check Num	Description
GS Systems, Inc.		17,576.90			
Hach Company	601-49400-31200	529.32	8/16/2024	165692	FSPTL23XX
Hach Company		529.32			
Hauglid AI	604-49595-43987	25.00	8/16/2024	165693	residential clothes washer rebate
Hauglid AI		25.00			
Hawkins, Inc.	601-00000-14206	883.05	9/10/2024	165982	hydrofluosilicic acid
Hawkins, Inc.		883.05			
Heide Miles	604-49570-33100	515.36	8/30/2024	165869	meal per diem and mileage for own car
Heide Miles		515.36			
Hoch Erin	601-00000-20200	9.21	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	604-00000-20200	26.60	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	602-00000-20200	2.42	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	602-00000-20200	1.28	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	601-00000-20200	1.43	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	604-00000-20200	2.04	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	602-00000-20200	10.77	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	604-00000-20200	0.93	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin	601-00000-20200	18.30	8/30/2024	165895	Refund Check 018635-000, 205 Fairview Ave S Apt
Hoch Erin		72.98			
Hometown Sanitation Services, LLC	602-49450-38420	77.97	8/16/2024	165694	recycling 8/1-10/31/24
Hometown Sanitation Services, LLC		77.97			
IBEW, Local Union 949	602-00000-21807	263.21	8/14/2024	165632	PR Batch 00001.08.2024 Union Dues
IBEW, Local Union 949	604-00000-21807	900.79	8/14/2024	165632	PR Batch 00001.08.2024 Union Dues
IBEW, Local Union 949	601-00000-21807	524.77	8/14/2024	165632	PR Batch 00001.08.2024 Union Dues
IBEW, Local Union 949		1,688.77			
Impact Proven Solutions	601-49440-31200	734.59	8/16/2024	165695	Monthly Utility Billing-august
Impact Proven Solutions	604-49590-31200	2,462.59	8/16/2024	165695	Monthly Utility Billing-august

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Impact Proven Solutions	602-49490-31200	448.33	8/16/2024	165695	Monthly Utility Billing-august
Impact Proven Solutions		3,645.51			
Interstate Power Systems, Inc.	602-49470-31200	1,210.00	8/30/2024	165870	service contract for east side lift station
Interstate Power Systems, Inc.	602-49470-31200	741.00	8/30/2024	165870	service contract for grace lutheran lift station
Interstate Power Systems, Inc.	601-49430-31200	1,401.00	8/30/2024	165870	service contract for water tank farm
Interstate Power Systems, Inc.		3,352.00			
J. H. Larson	601-49400-40400	267.75	8/30/2024	165871	linear led tube lamps
J. H. Larson	601-49400-40400	371.92	8/30/2024	165871	25W T5's
J. H. Larson		639.67			
Jarvis Kirk	602-00000-20200	1.74	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	602-00000-20200	3.25	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	602-00000-20200	6.92	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	604-00000-20200	0.77	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	604-00000-20200	21.64	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	601-00000-20200	1.92	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	604-00000-20200	1.66	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	601-00000-20200	12.32	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk	601-00000-20200	6.19	8/30/2024	165896	Refund Check 017526-000, 1207 Albion Avenue
Jarvis Kirk		56.41			
Johnson James	604-49595-43990	50.00	8/16/2024	165696	residential furnace rebate
Johnson James	604-49595-43981	200.00	8/16/2024	165696	residential AC rebate
Johnson James		250.00			
Johnson Matthew C	602-00000-20200	1.14	8/30/2024	165825	Refund Check
Johnson Matthew C	604-00000-20200	1.78	8/30/2024	165825	Refund Check
Johnson Matthew C	601-00000-20200	2.24	8/30/2024	165825	Refund Check
Johnson Matthew C	601-00000-20200	4.46	8/30/2024	165825	Refund Check
Johnson Matthew C	604-00000-20200	22.89	8/30/2024	165825	Refund Check
Johnson Matthew C	601-00000-20200	1.21	8/30/2024	165825	Refund Check
Johnson Matthew C	602-00000-20200	3.53	8/30/2024	165825	Refund Check
Johnson Matthew C	602-00000-20200	2.14	8/30/2024	165825	Refund Check
Johnson Matthew C	604-00000-20200	1.36	8/30/2024	165825	Refund Check

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Johnson Matthew C		40.75			
Kelly Logan	604-00000-20200	13.57	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	601-00000-20200	5.93	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	601-00000-20200	2.99	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	602-00000-20200	0.97	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	604-00000-20200	0.50	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	604-00000-20200	1.03	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	601-00000-20200	1.07	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	602-00000-20200	1.81	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan	602-00000-20200	3.74	8/30/2024	165897	Refund Check 018434-000, 1010 S Prairie Ave
Kelly Logan		31.61			
Kenney Matthew	602-00000-20200	3.98	8/30/2024	165827	Refund Check
Kenney Matthew	602-00000-20200	2.12	8/30/2024	165827	Refund Check
Kenney Matthew	604-00000-20200	2.80	8/30/2024	165827	Refund Check
Kenney Matthew	601-00000-20200	2.25	8/30/2024	165827	Refund Check
Kenney Matthew	604-00000-20200	48.22	8/30/2024	165827	Refund Check
Kenney Matthew	604-00000-20200	3.76	8/30/2024	165827	Refund Check
Kenney Matthew		63.13			
Kopeschka Virgil	604-49595-43981	200.00	8/16/2024	165697	residential AC rebate
Kopeschka Virgil		200.00			
Kotewa Jon	604-49595-43990	50.00	8/16/2024	165698	residential furnace rebate
Kotewa Jon		50.00			
Kotewa Steve/Marcia	604-49595-43985	55.00	8/16/2024	165699	residential refrigerator rebate
Kotewa Steve/Marcia		55.00			
Lawn Solutions, Inc	602-00000-16500	2,290.00	8/16/2024	165700	east of lab landscaping - CIP - digester improvements
Lawn Solutions, Inc	602-49470-40200	1,190.00	8/16/2024	165700	rona court station dirt, fabric, rock
Lawn Solutions, Inc	602-00000-16500	2,720.00	8/16/2024	165700	rock, fabric, bullet bricks - CIP - digester improvements
Lawn Solutions, Inc		6,200.00			
Lefebber Ryan	604-00000-20200	46.03	8/30/2024	165898	Refund Check 018848-000, 1511 Falcon Dr #209

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Lefebber Ryan	604-00000-20200	3.51	8/30/2024	165898	Refund Check 018848-000, 1511 Falcon Dr #209
Lefebber Ryan	602-00000-20200	5.75	8/30/2024	165898	Refund Check 018848-000, 1511 Falcon Dr #209
Lefebber Ryan	604-00000-20200	1.66	8/30/2024	165898	Refund Check 018848-000, 1511 Falcon Dr #209
Lefebber Ryan	602-00000-20200	3.07	8/30/2024	165898	Refund Check 018848-000, 1511 Falcon Dr #209
Lefebber Ryan	601-00000-20200	3.40	8/30/2024	165898	Refund Check 018848-000, 1511 Falcon Dr #209
Lefebber Ryan		63.42			
Libra James	604-49595-43982	1,130.00	8/16/2024	165701	residential mini-split ASHP rebate
Libra James		1,130.00			
Loken/Mical Walker Berti	602-00000-20200	1.54	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	601-00000-20200	3.88	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	602-00000-20200	2.86	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	601-00000-20200	1.61	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	604-00000-20200	1.61	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	601-00000-20200	5.98	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	604-00000-20200	27.32	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti	602-00000-20200	4.74	8/30/2024	165832	Refund Check
Loken/Mical Walker Berti		49.54			
Maday Mike	604-49595-43982	1,177.00	8/16/2024	165702	residential mini-split ASHP rebate
Maday Mike		1,177.00			
Marco Technologies, LLC	604-49590-20220	53.21	8/30/2024	165834	Contract Base Rate 08/14 to 09/13/24, Usage 05/14 to 08/13/24
Marco Technologies, LLC	604-49590-20120	29.13	8/30/2024	165834	Contract Base Rate 08/22 to 09/21/24 City Hall
Marco Technologies, LLC	602-49490-20120	3.64	8/21/2024	165744	Contract Base Rate 08/02 to 09/01/24. Usage 07/02 to 08/01/24
Marco Technologies, LLC	602-49490-20120	5.30	8/30/2024	165834	Contract Base Rate 08/22 to 09/21/24 City Hall
Marco Technologies, LLC	601-49440-20220	46.78	8/30/2024	165834	Contract Base Rate 08/14 to 09/13/24, Usage 05/14 to 08/13/24
Marco Technologies, LLC	604-49590-20120	20.00	8/21/2024	165744	Contract Base Rate 08/02 to 09/01/24. Usage 07/02 to 08/01/24
Marco Technologies, LLC	602-49490-20220	54.33	8/30/2024	165834	Contract Base Rate 08/14 to 09/13/24, Usage 05/14 to 08/13/24
Marco Technologies, LLC	601-49440-20120	5.97	8/21/2024	165744	Contract Base Rate 08/02 to 09/01/24. Usage 07/02 to 08/01/24
Marco Technologies, LLC	601-49440-20120	8.69	8/30/2024	165834	Contract Base Rate 08/22 to 09/21/24 City Hall
Marco Technologies, LLC		227.05			
Martin County Highway Dept	601-49430-21200	857.05	9/10/2024	165983	fuel usage-august
Martin County Highway Dept	602-49450-21200	391.16	9/10/2024	165983	fuel usage-august
Martin County Highway Dept	602-49470-21200	482.81	9/10/2024	165983	fuel usage-august
Martin County Highway Dept	604-49570-21200	1,735.09	9/10/2024	165983	fuel usage-august

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Martin County Highway Dept		3,466.11			
McCloy Ciara	604-00000-20200	1.00	8/30/2024	165835	Refund Check
McCloy Ciara	602-00000-20200	1.69	8/30/2024	165835	Refund Check
McCloy Ciara	604-00000-20200	1.82	8/30/2024	165835	Refund Check
McCloy Ciara	602-00000-20200	0.90	8/30/2024	165835	Refund Check
McCloy Ciara	604-00000-20200	23.45	8/30/2024	165835	Refund Check
McCloy Ciara	601-00000-20200	0.95	8/30/2024	165835	Refund Check
McCloy Ciara		29.81			
Metering & Technology Solutions	601-00000-16500	1,533.39	8/30/2024	165872	twist tight, gel caps - CIP - AMI
Metering & Technology Solutions	601-00000-16500	1,671.30	8/16/2024	165703	flange set 2" - CIP - AMI
Metering & Technology Solutions		3,204.69			
Midco	604-49590-32100	203.85	8/16/2024	165661	Aug 2024 Telephone City Hall
Midco	604-49570-32100	300.39	8/16/2024	165661	Aug 2024 Telephone Electric Dept
Midco	602-49490-32100	37.11	8/16/2024	165661	Aug 2024 Telephone City Hall
Midco	601-49400-32100	367.38	8/16/2024	165661	Aug 2024 Telephone Water Dept
Midco	602-49450-32100	367.62	8/16/2024	165661	Aug 2024 Telephone Waste Water Dept
Midco	601-49440-32100	60.81	8/16/2024	165661	Aug 2024 Telephone City Hall
Midco		1,337.16			
Midwest Garage Doors of Fairmont, Inc.	602-49450-40400	156.00	8/30/2024	165873	3 remotes for wwtp
Midwest Garage Doors of Fairmont, Inc.		156.00			
Miedtke(A Broome,S Busse) Trevor	601-00000-20200	1.77	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	601-00000-20200	2.36	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	602-00000-20200	0.19	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	604-00000-20200	0.48	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	602-00000-20200	1.81	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	604-00000-20200	0.37	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	604-00000-20200	6.11	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	601-00000-20200	0.10	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor	602-00000-20200	0.11	8/30/2024	165836	Refund Check 018067-000, 222 FOREST ST
Miedtke(A Broome,S Busse) Trevor		13.30			
Minn Municipal Utilities Association	604-49570-33100	535.00	9/10/2024	165984	overhead school 9/10/24-leach

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Minn Municipal Utilities Association		535.00			
Minnesota State Retirement System	604-00000-21811	3.24	8/14/2024	0	PR Batch 00001.08.2024 Health Savings Plan AFSCME
Minnesota State Retirement System	601-00000-21811	2.18	8/14/2024	0	PR Batch 00001.08.2024 Health Savings Plan AFSCME
Minnesota State Retirement System	604-00000-21811	3.23	8/28/2024	0	PR Batch 00002.08.2024 Health Savings Plan AFSCME
Minnesota State Retirement System	601-00000-21811	2.18	8/28/2024	0	PR Batch 00002.08.2024 Health Savings Plan AFSCME
Minnesota State Retirement System	602-00000-21811	2.08	8/28/2024	0	PR Batch 00002.08.2024 Health Savings Plan AFSCME
Minnesota State Retirement System	602-00000-21811	2.07	8/14/2024	0	PR Batch 00001.08.2024 Health Savings Plan AFSCME
Minnesota State Retirement System		14.98			
Mn Child Support Payment	604-00000-21720	352.09	8/28/2024	165792	PR Batch 00002.08.2024 HR
Mn Child Support Payment	604-00000-21720	352.09	8/14/2024	165634	PR Batch 00001.08.2024 HR
Mn Child Support Payment		704.18			
MN Council 65 AFSCME	601-00000-21807	10.54	8/14/2024	165635	PR Batch 00001.08.2024 Union Dues
MN Council 65 AFSCME	604-00000-21807	15.58	8/14/2024	165635	PR Batch 00001.08.2024 Union Dues
MN Council 65 AFSCME	602-00000-21807	10.00	8/14/2024	165635	PR Batch 00001.08.2024 Union Dues
MN Council 65 AFSCME		36.12			
MN Dept Of Health	601-49400-31500	10,752.00	8/30/2024	165874	quarterly 7/1-9/30/24 community water supply service connection
MN Dept Of Health		10,752.00			
MN Dept Of Revenue	604-00000-21802	2,162.73	8/14/2024	0	PR Batch 00001.08.2024 State Income Tax
MN Dept Of Revenue	601-00000-21802	1,437.74	8/14/2024	0	PR Batch 00001.08.2024 State Income Tax
MN Dept Of Revenue	604-00000-21802	2,126.45	8/28/2024	0	PR Batch 00002.08.2024 State Income Tax
MN Dept Of Revenue	602-00000-21802	1,045.81	8/14/2024	0	PR Batch 00001.08.2024 State Income Tax
MN Dept Of Revenue	601-00000-21802	1,505.11	8/28/2024	0	PR Batch 00002.08.2024 State Income Tax
MN Dept Of Revenue	602-00000-21802	981.15	8/28/2024	0	PR Batch 00002.08.2024 State Income Tax
MN Dept Of Revenue		9,258.99			
MN Energy Resources Corp.	602-49450-38300	268.82	8/30/2024	165875	gas utilities-burner
MN Energy Resources Corp.	602-49470-38300	3.47	8/30/2024	165875	gas utilities-indus
MN Energy Resources Corp.	601-49400-38300	201.19	8/30/2024	165875	gas utilities-filtration
MN Energy Resources Corp.	602-49450-38300	2,605.69	8/30/2024	165875	gas utilities-solids
MN Energy Resources Corp.	602-49450-38300	28.23	8/30/2024	165875	gas utilities-disposal
MN Energy Resources Corp.	602-49450-38300	47.50	8/30/2024	165875	gas utilities-maintenance

Last Name	Acct 1	Amount	Check Date	Check Num	Description
MN Energy Resources Corp.		3,154.90			
Mn NCPERS Life Insurance	601-00000-21810	16.00	8/28/2024	165793	PR Batch 00002.08.2024 PERA Term Life
Mn NCPERS Life Insurance	604-00000-21810	48.00	8/28/2024	165793	PR Batch 00002.08.2024 PERA Term Life
Mn NCPERS Life Insurance	602-00000-21810	16.00	8/28/2024	165793	PR Batch 00002.08.2024 PERA Term Life
Mn NCPERS Life Insurance		80.00			
MN Public Facilities Authority	601-49445-61100	12,338.72	8/7/2024	165559	MPFA-CWRF-L-028-FY22 Interest Payment Aug 2024 Clean Water
MN Public Facilities Authority	601-00000-22511	119,572.87	8/7/2024	165559	MPFA-CWRF-L-028-FY22 Principal Payment Aug 2024 Clean Water
MN Public Facilities Authority	601-00000-22510	893,000.00	8/7/2024	165559	MPFA-11-0067-R-FY12 Principal Payment Aug 2024 Drinking Water
MN Public Facilities Authority	602-49495-61100	6,989.20	8/7/2024	165559	MPFA-04-0006-R-FY04 Interest Payment Aug 2024 Clean Water
MN Public Facilities Authority	601-49445-61100	214,318.79	8/7/2024	165559	MPFA-11-0067-R-FY12 Interest Payment Aug 2024 Drinking Water
MN Public Facilities Authority	602-00000-22510	808,000.00	8/7/2024	165559	MPFA-04-0006-R-FY04 Principal Payment Aug 2024 Clean Water
MN Public Facilities Authority		2,054,219.58			
MN Valley Action Council	604-49595-43992	75.00	8/30/2024	165876	residential low income client education
MN Valley Action Council		75.00			
MN Valley Testing Lab	602-49450-31400	73.38	8/16/2024	165704	bod carbonaceuos tests
MN Valley Testing Lab	602-49450-31400	73.38	8/30/2024	165877	watwwater bod carbonaceous tests
MN Valley Testing Lab	602-49450-31400	48.38	8/16/2024	165704	bod cabonaceous wastewater tests
MN Valley Testing Lab	602-49450-31400	82.50	8/16/2024	165704	nitrogen tests
MN Valley Testing Lab		277.64			
Montiel and Juan Mejia Dina O	601-00000-20200	0.56	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	601-00000-20200	0.02	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	601-00000-20200	0.35	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	604-00000-20200	0.14	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	602-00000-20200	0.47	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	604-00000-20200	0.11	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	602-00000-20200	0.01	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	604-00000-20200	1.82	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O	602-00000-20200	0.05	8/30/2024	165838	Refund Check
Montiel and Juan Mejia Dina O		3.53			
MPower Technologies, Inc	601-00000-16500	330.00	9/10/2024	165985	troubleshoot meter reading issues - CIP - AMI

Last Name	Acct 1	Amount	Check Date	Check Num	Description
MPower Technologies, Inc		330.00			
Munasinghe Menuka	604-00000-20200	27.30	8/30/2024	165839	Refund Check
Munasinghe Menuka	604-00000-20200	2.14	8/30/2024	165839	Refund Check
Munasinghe Menuka	601-00000-20200	11.07	8/30/2024	165839	Refund Check
Munasinghe Menuka	602-00000-20200	2.30	8/30/2024	165839	Refund Check
Munasinghe Menuka	602-00000-20200	4.30	8/30/2024	165839	Refund Check
Munasinghe Menuka	602-00000-20200	11.12	8/30/2024	165839	Refund Check
Munasinghe Menuka	604-00000-20200	1.57	8/30/2024	165839	Refund Check
Munasinghe Menuka	601-00000-20200	2.43	8/30/2024	165839	Refund Check
Munasinghe Menuka	601-00000-20200	11.81	8/30/2024	165839	Refund Check
Munasinghe Menuka		74.04			
Napa Auto Fairmont Star Group LLC	604-49570-40500	9.98	9/10/2024	165986	#224 cabin filter
Napa Auto Fairmont Star Group LLC	601-49400-40500	3.37	9/10/2024	165986	#699 oil filter
Napa Auto Fairmont Star Group LLC	602-49470-40400	3.37	9/10/2024	165986	fuel filter
Napa Auto Fairmont Star Group LLC	604-49570-40500	7.57	9/10/2024	165986	#224 oil filter
Napa Auto Fairmont Star Group LLC		24.29			
NeonLink LLC	604-49570-31200	649.84	9/10/2024	165987	Enerlyte Payment Services-August
NeonLink LLC	602-49450-31200	118.31	9/10/2024	165987	Enerlyte Payment Services-August
NeonLink LLC	601-49400-31200	193.85	9/10/2024	165987	Enerlyte Payment Services-August
NeonLink LLC		962.00			
Norlab, Inc.	601-49400-43900	93.00	8/30/2024	165878	toilet dye packets
Norlab, Inc.		93.00			
North Central Laboratories	602-49450-31400	697.40	8/30/2024	165879	phosphorus test'n'tubes
North Central Laboratories		697.40			
Olson Kenneth G.	601-00000-20200	2.48	8/30/2024	165841	Refund Check 017588-000, 1001 Pheasant Av 307
Olson Kenneth G.	602-00000-20200	4.43	8/30/2024	165841	Refund Check 017588-000, 1001 Pheasant Av 307
Olson Kenneth G.	602-00000-20200	2.37	8/30/2024	165841	Refund Check 017588-000, 1001 Pheasant Av 307
Olson Kenneth G.	604-00000-20200	1.99	8/30/2024	165841	Refund Check 017588-000, 1001 Pheasant Av 307
Olson Kenneth G.	604-00000-20200	50.66	8/30/2024	165841	Refund Check 017588-000, 1001 Pheasant Av 307
Olson Kenneth G.	604-00000-20200	3.90	8/30/2024	165841	Refund Check 017588-000, 1001 Pheasant Av 307

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Olson Kenneth G.		65.83			
Olson Rod/Nancy	604-49595-43988	25.00	8/16/2024	165705	residential dishwasher rebate
Olson Rod/Nancy		25.00			
O'Reilly Auto Parts	601-49400-40500	7.99	9/10/2024	165988	#678 circuit breaker
O'Reilly Auto Parts	601-49400-40500	-3.07	9/10/2024	165988	statement credit
O'Reilly Auto Parts		4.92			
Osborn Ardis	604-49595-43982	1,177.00	8/16/2024	165706	residential mini-split ASHP rebate
Osborn Ardis		1,177.00			
PC Janitorial Supply	602-49450-40400	405.94	8/30/2024	165880	nitrile gloves, bath tissue, towels
PC Janitorial Supply		405.94			
Peterson Darwin	604-49595-43982	1,177.00	8/16/2024	165707	residential mini-split ASHP rebate
Peterson Darwin		1,177.00			
Pfannes Bridget	604-00000-20200	0.29	8/30/2024	165899	Refund Check 018809-000, 646 Summit Dr #4
Pfannes Bridget	604-00000-20200	0.31	8/30/2024	165899	Refund Check 018809-000, 646 Summit Dr #4
Pfannes Bridget	602-00000-20200	2.27	8/30/2024	165899	Refund Check 018809-000, 646 Summit Dr #4
Pfannes Bridget	604-00000-20200	49.97	8/30/2024	165899	Refund Check 018809-000, 646 Summit Dr #4
Pfannes Bridget	601-00000-20200	1.33	8/30/2024	165899	Refund Check 018809-000, 646 Summit Dr #4
Pfannes Bridget	602-00000-20200	1.21	8/30/2024	165899	Refund Check 018809-000, 646 Summit Dr #4
Pfannes Bridget		55.38			
Pitney Bowes	602-49490-32200	4.41	8/21/2024	165757	Red Ink Cartridges Postage Meter
Pitney Bowes	604-49590-32200	24.23	8/21/2024	165757	Red Ink Cartridges Postage Meter
Pitney Bowes	601-49440-32200	7.22	8/21/2024	165757	Red Ink Cartridges Postage Meter
Pitney Bowes		35.86			
Plunkett's Pest Control, Inc.	602-49450-31200	91.84	9/10/2024	165989	general pest control
Plunkett's Pest Control, Inc.		91.84			

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Polydyne Inc.	602-49450-21620	4,853.00	8/30/2024	165881	clarifloc c-6266x
		4,853.00			
Polydyne Inc.					
Powers Brady	601-49440-32100	46.44	8/16/2024	165664	Cell Phone Reimbursement Aug 2024
		46.44			
Powers Brady					
Prairieland Solid Waste Mgmnt	602-49450-38420	221.80	9/10/2024	165990	refuse disposal tickets: 90906,91058,91216,91320,91474
		221.80			
Prairieland Solid Waste Mgmnt					
Public Utilities Comm	604-49595-43994	300.00	9/10/2024	165991	lamp and ballast recycling money for October Tractor Supply
Public Utilities Comm	604-49595-43994	78.40	9/10/2024	165991	lamp and ballast recycling rebates
		378.40			
Public Utilities Comm					
Public Utilities Commission	604-49570-40300	151.75	8/21/2024	165759	Aug 2024 EV Charging Station Wbgo Softball Complex
		151.75			
Public Utilities Commission					
Quality Flow Systems, Inc	601-49400-40400	12,240.00	8/16/2024	165708	repair and instal 2 hydromatic impellers
Quality Flow Systems, Inc	602-00000-16500	14,805.00	8/16/2024	165708	new valves at kramer LS - CIP - LS rehab/repair
		27,045.00			
Quality Flow Systems, Inc					
Ramos Jose	601-00000-20200	2.04	8/30/2024	165846	Refund Check
Ramos Jose	601-00000-20200	3.15	8/30/2024	165846	Refund Check
Ramos Jose	604-00000-20200	1.23	8/30/2024	165846	Refund Check
Ramos Jose	602-00000-20200	2.89	8/30/2024	165846	Refund Check
Ramos Jose	602-00000-20200	0.05	8/30/2024	165846	Refund Check
Ramos Jose	601-00000-20200	0.06	8/30/2024	165846	Refund Check
Ramos Jose	604-00000-20200	20.30	8/30/2024	165846	Refund Check
Ramos Jose	602-00000-20200	0.10	8/30/2024	165846	Refund Check
Ramos Jose	604-00000-20200	1.58	8/30/2024	165846	Refund Check
		31.40			
Ramos Jose					
Reserve Account	602-49490-32200	99.62	8/16/2024	165666	Postage for Postage Meter
Reserve Account	601-49440-32200	163.22	8/16/2024	165666	Postage for Postage Meter
Reserve Account	604-49590-32200	547.16	8/16/2024	165666	Postage for Postage Meter

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Reserve Account		810.00			
Retirement Association Public Employees	601-00000-21804	2,759.53	8/28/2024	0	PR Batch 00002.08.2024 PERA Employer
Retirement Association Public Employees	601-00000-21804	2,624.34	8/14/2024	0	PR Batch 00001.08.2024 PERA Employer
Retirement Association Public Employees	602-00000-21804	1,734.01	8/28/2024	0	PR Batch 00002.08.2024 PERA Employer
Retirement Association Public Employees	602-00000-21804	1,502.82	8/28/2024	0	PR Batch 00002.08.2024 PERA
Retirement Association Public Employees	604-00000-21804	3,854.96	8/14/2024	0	PR Batch 00001.08.2024 PERA Employer
Retirement Association Public Employees	604-00000-21804	3,308.25	8/28/2024	0	PR Batch 00002.08.2024 PERA
Retirement Association Public Employees	602-00000-21804	1,809.57	8/14/2024	0	PR Batch 00001.08.2024 PERA Employer
Retirement Association Public Employees	602-00000-21804	1,568.31	8/14/2024	0	PR Batch 00001.08.2024 PERA
Retirement Association Public Employees	604-00000-21804	3,340.91	8/14/2024	0	PR Batch 00001.08.2024 PERA
Retirement Association Public Employees	601-00000-21804	2,274.42	8/14/2024	0	PR Batch 00001.08.2024 PERA
Retirement Association Public Employees	601-00000-21804	2,391.59	8/28/2024	0	PR Batch 00002.08.2024 PERA
Retirement Association Public Employees	604-00000-21804	3,817.21	8/28/2024	0	PR Batch 00002.08.2024 PERA Employer
Retirement Association Public Employees		30,985.92			
Rice Lake Construction Group	602-00000-16500	210,000.00	8/16/2024	165709	digester cover - CIP - digester improvements - Insurance
Rice Lake Construction Group		210,000.00			
River Bend Business Products	604-49590-20120	37.04	8/30/2024	165848	Office Supplies City Hall
River Bend Business Products	602-49490-20120	6.75	8/30/2024	165848	Office Supplies City Hall
River Bend Business Products	601-49440-20120	11.06	8/30/2024	165848	Office Supplies City Hall
River Bend Business Products		54.85			
S & J Excavating, Inc.	601-49430-40200	215.00	8/30/2024	165882	7/11/24 drainage rock
S & J Excavating, Inc.		215.00			
Sauceda Heather	601-00000-20200	0.31	8/30/2024	165849	Refund Check
Sauceda Heather	604-00000-20200	3.50	8/30/2024	165849	Refund Check
Sauceda Heather	604-00000-20200	0.17	8/30/2024	165849	Refund Check
Sauceda Heather	604-00000-20200	0.10	8/30/2024	165849	Refund Check
Sauceda Heather	602-00000-20200	0.29	8/30/2024	165849	Refund Check
Sauceda Heather	604-00000-20200	2.24	8/30/2024	165849	Refund Check
Sauceda Heather	602-00000-20200	0.55	8/30/2024	165849	Refund Check
Sauceda Heather		7.16			
Schiltz David	602-49450-32100	46.44	8/16/2024	165667	Aug 2024 Cell Phone Reimbursement

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Schiltz David		46.44			
Sell Shateja	602-00000-20200	0.21	8/30/2024	165851	Refund Check 017970-001, 900 Hengen St #203
Sell Shateja	601-00000-20200	0.12	8/30/2024	165851	Refund Check 017970-001, 900 Hengen St #203
Sell Shateja	604-00000-20200	0.21	8/30/2024	165851	Refund Check 017970-001, 900 Hengen St #203
Sell Shateja	604-00000-20200	0.52	8/30/2024	165851	Refund Check 017970-001, 900 Hengen St #203
Sell Shateja	604-00000-20200	6.89	8/30/2024	165851	Refund Check 017970-001, 900 Hengen St #203
Sell Shateja	602-00000-20200	0.10	8/30/2024	165851	Refund Check 017970-001, 900 Hengen St #203
Sell Shateja		8.05			
Subsurface Solutions	604-49570-22300	268.50	8/30/2024	165883	direct connect leads for locates
Subsurface Solutions		268.50			
Sweet Financial	604-49595-43903	50.00	8/16/2024	165710	commercial furnace rebate
Sweet Financial	604-49595-43902	600.00	8/16/2024	165710	commercial AC rebate
Sweet Financial		650.00			
Tami's On The Ave & Gerhardt's	604-49595-43906	6,849.00	8/16/2024	165711	commercial mini-split ASHP rebate (qty:3)
Tami's On The Ave & Gerhardt's		6,849.00			
Truck Center Companies East LLC	601-49400-40500	281.43	8/30/2024	165884	#678 12v starting battery
Truck Center Companies East LLC		281.43			
UPS	601-49400-31400	50.31	8/30/2024	165885	samples to mn dept of health
UPS	601-49400-31400	68.79	8/30/2024	165885	samples to mn dept of health
UPS	601-49400-31400	23.83	8/16/2024	165712	tests sent to mn dept of health
UPS	601-49400-31400	75.32	9/10/2024	165992	samples sent to Hac Co. Service Center
UPS	601-49400-31400	93.30	9/10/2024	165992	samples sent to mn dept of health
UPS		311.55			
USA Blue Book	601-49400-31400	53.25	8/16/2024	165713	orthophosphate chemkey low range
USA Blue Book	602-49470-40200	195.03	8/30/2024	165886	v-gard protective yellow cap
USA Blue Book	601-49400-31400	-53.25	8/30/2024	165886	orthophosphate chemkey low
USA Blue Book	601-49400-31400	-53.25	8/16/2024	165713	orthophosphate chemkey low range
USA Blue Book	601-49400-31400	343.75	8/16/2024	165713	procal primary standards kit
USA Blue Book	601-49400-31400	53.25	8/16/2024	165713	orthosphosphate chemkey

Last Name	Acct 1	Amount	Check Date	Check Num	Description
USA Blue Book	601-49400-31400	276.85	8/16/2024	165713	total chlorine swiftest and flouride reagent
USA Blue Book		815.63			
Vantage Transfer - 301177	601-00000-21808	60.26	8/14/2024	0	PR Batch 00001.08.2024 ICMA- Percent
Vantage Transfer - 301177	602-00000-21808	429.99	8/28/2024	0	PR Batch 00002.08.2024 ICMA- Percent
Vantage Transfer - 301177	602-00000-21808	61.64	8/14/2024	0	PR Batch 00001.08.2024 ICMA Payroll Roth IRA
Vantage Transfer - 301177	604-00000-21808	248.03	8/28/2024	0	PR Batch 00002.08.2024 ICMA Loan Repayment
Vantage Transfer - 301177	604-00000-21808	158.88	8/14/2024	0	PR Batch 00001.08.2024 ICMA- Percent
Vantage Transfer - 301177	602-00000-21808	429.99	8/14/2024	0	PR Batch 00001.08.2024 ICMA- Percent
Vantage Transfer - 301177	604-00000-21808	453.47	8/14/2024	0	PR Batch 00001.08.2024 ICMA Payroll Roth IRA
Vantage Transfer - 301177	601-00000-21808	371.56	8/28/2024	0	PR Batch 00002.08.2024 ICMA
Vantage Transfer - 301177	601-00000-21808	165.10	8/14/2024	0	PR Batch 00001.08.2024 ICMA Payroll Roth IRA
Vantage Transfer - 301177	604-00000-21808	453.47	8/28/2024	0	PR Batch 00002.08.2024 ICMA Payroll Roth IRA
Vantage Transfer - 301177	604-00000-21808	1,903.27	8/28/2024	0	PR Batch 00002.08.2024 ICMA
Vantage Transfer - 301177	602-00000-21808	61.61	8/28/2024	0	PR Batch 00002.08.2024 ICMA Payroll Roth IRA
Vantage Transfer - 301177	601-00000-21808	371.59	8/14/2024	0	PR Batch 00001.08.2024 ICMA
Vantage Transfer - 301177	604-00000-21808	158.88	8/28/2024	0	PR Batch 00002.08.2024 ICMA- Percent
Vantage Transfer - 301177	601-00000-21808	107.21	8/28/2024	0	PR Batch 00002.08.2024 ICMA Loan Repayment
Vantage Transfer - 301177	601-00000-21808	60.26	8/28/2024	0	PR Batch 00002.08.2024 ICMA- Percent
Vantage Transfer - 301177	601-00000-21808	165.12	8/28/2024	0	PR Batch 00002.08.2024 ICMA Payroll Roth IRA
Vantage Transfer - 301177	601-00000-21808	107.21	8/14/2024	0	PR Batch 00001.08.2024 ICMA Loan Repayment
Vantage Transfer - 301177	602-00000-21808	128.16	8/28/2024	0	PR Batch 00002.08.2024 ICMA
Vantage Transfer - 301177	604-00000-21808	1,903.26	8/14/2024	0	PR Batch 00001.08.2024 ICMA
Vantage Transfer - 301177	602-00000-21808	128.16	8/14/2024	0	PR Batch 00001.08.2024 ICMA
Vantage Transfer - 301177	604-00000-21808	248.03	8/14/2024	0	PR Batch 00001.08.2024 ICMA Loan Repayment
Vantage Transfer - 301177		8,175.15			
Verizon Wireless	601-49400-32100	222.34	8/7/2024	165572	06/21 to 07/20/2024 Cell Phones Water Dept
Verizon Wireless	604-49570-32100	277.37	8/7/2024	165572	06/21 to 07/20/2024 Cell Phones Electric Dept
Verizon Wireless	602-49450-32100	46.23	8/7/2024	165572	06/21 to 07/20/2024 Cell Phone Waste Water Dept
Verizon Wireless		545.94			
Vessco, Inc.	601-00000-16500	5,641.45	8/30/2024	165887	dezurik 4" pec - CIP - digester improvements - insurance
Vessco, Inc.	601-49400-40400	1,393.00	8/16/2024	165714	asco, solenoid valve
Vessco, Inc.		7,034.45			
Vestis	601-49400-31200	183.95	8/30/2024	165888	laundrying services-august

Last Name	Acct 1	Amount	Check Date	Check Num	Description
Vestis		183.95			
Voss Cleaning Services, Inc.	601-49440-31200	164.03	8/21/2024	165769	Janitorial & Rug Service Aug 2024 City Hall
Voss Cleaning Services, Inc.	602-49450-31200	100.11	8/21/2024	165769	Janitorial & Rug Service Aug 2024 City Hall
Voss Cleaning Services, Inc.	602-49450-31200	108.00	9/10/2024	165993	rug service-august
Voss Cleaning Services, Inc.	604-49570-31200	549.86	8/21/2024	165769	Janitorial & Rug Service Aug 2024 City Hall
Voss Cleaning Services, Inc.		922.00			
Wesco Receivables Corp.	604-49570-22300	1,732.60	9/10/2024	165994	harnesses
Wesco Receivables Corp.	604-49570-22300	329.48	9/10/2024	165994	harness
Wesco Receivables Corp.	604-00000-14207	625.00	8/30/2024	165889	utility line covers for vertical pole instalation
Wesco Receivables Corp.	604-00000-16300	4,360.00	8/30/2024	165889	transformer box pad - CIP - replace high voltage switches
Wesco Receivables Corp.	604-49570-22300	211.53	9/10/2024	165994	hook gated handline
Wesco Receivables Corp.	604-49570-22300	433.15	9/10/2024	165994	harness
Wesco Receivables Corp.	604-00000-14207	1,273.40	8/30/2024	165889	power hub anchors
Wesco Receivables Corp.		8,965.16			
Western Area Power Admin. US Dept of Energy	604-00000-20100	7,340.02	8/21/2024	165770	July 2024 Electric Service
Western Area Power Admin. US Dept of Energy		7,340.02			
Williams Kevin	604-49595-43990	50.00	8/16/2024	165715	residential furnace rebate
Williams Kevin	604-49595-43981	200.00	8/16/2024	165715	residential AC rebate
Williams Kevin		250.00			
WSB & Associates, Inc.	604-00000-16420	177.00	9/10/2024	165995	July services - CIP - GIS
WSB & Associates, Inc.		177.00			
Yeager Chelsea	602-00000-20200	0.93	8/30/2024	165858	Refund Check
Yeager Chelsea	604-00000-20200	4.45	8/30/2024	165858	Refund Check
Yeager Chelsea	604-00000-20200	45.07	8/30/2024	165858	Refund Check
Yeager Chelsea	602-00000-20200	1.74	8/30/2024	165858	Refund Check
Yeager Chelsea	604-00000-20200	3.79	8/30/2024	165858	Refund Check
Yeager Chelsea	601-00000-20200	0.99	8/30/2024	165858	Refund Check
Yeager Chelsea	604-00000-20200	2.85	8/30/2024	165858	Refund Check
Yeager Chelsea		59.82			

Last Name	Acct 1	Amount	Check Date	Check Num	Description
-----------	--------	--------	------------	-----------	-------------

		2,572,036.45			



Fairmont Public Utilities Commission
September 17, 2024

Agenda Item: 7.1

From: Matthew York, Public Works and Utilities Director/Brady Powers Water/Wastewater Superintendent
To: Public Utilities Commission

Subject: Update on the UV Bio-Solids Projects

Policy/Action Requested:

Vote Required: __ Simple Majority _____ Roll Call

Recommendation: Information

Overview:

Matt York and Brady Powers will be giving you an update on the UV and Bio Solids project.

Budget Impact: N/A

Attachments:

PUC Action: _____ Date: _____



Fairmont Public Utilities Commission
September 17, 2024

Agenda Item: 8.1

From: Julie Zarling
To: Public Utilities Commission

Subject: DER 2024-0002 Tyler Hartwig Contract & Interconnection Agreement

Policy/Action Requested:

Vote Required: Simple Majority Roll Call

Recommendation: Approval

Overview:

Tyler Hartwig is installing a solar Photovoltaic System at 923 N North Ave. The system proposal has been reviewed and approved by the Line Department.

Approval is recommended for the DER contract and agreement.

Budget Impact: N/A

Attachments: DER 2024-0002 application and spec sheets, and site layout

PUC Action: _____ Date: _____

Simplified Interconnection Application

Persons interested in applying for the interconnection of a distributed energy resource (DER) to the Utility’s distribution system through the Simplified Process are to fill out this Simplified Interconnection Application. The Simplified Interconnection Application is to be used for inverter-based DER technologies with the capacity of 20 kW AC or less and is to be filled out completely by the Applicant. The Simplified Application shall be returned to the Utility with the requested material information and a non-refundable \$100 application fee.

Proposed DER interconnections to the Utility’s distribution submitted under the Simplified Process may be moved into the Fast Track Process if engineering screens are failed during the Simplified Interconnection Application review. Timeline for review of the Simplified Application is as follows:

- Upon receipt of a Simplified Interconnection Application the Utility has 10 business days to review the application for completeness.
- If the application is deemed incomplete, the Utility shall notify the Applicant of what additional information material is required.
- The Applicant has 5 business days to return the missing information material or their application may lose its queue position and be deemed withdrawn.
- The Utility shall have a total of 20 business days to review the Simplified Interconnection Application, not including time waiting for additional information material to deem the application completed.
- The Utility will notify the Application if the proposed DER system is preliminary approved for interconnection or if the proposed DER system will need to be moved in the Fast Track Process.

Checklist for Submission to Utility	
<i>The items below shall be included with submittal of the Simplified Application to the Utility. Failure to include all items will deem the Simplified Application incomplete.</i>	
	Included
\$100 Non-Refundable Simplified Application Fee	<input checked="" type="checkbox"/> Yes
One-line diagram – Details required on one-line diagram specified at the end of the interconnection application.	<input checked="" type="checkbox"/> Yes
All Certified Equipment Manufacturer Specification Sheets	<input checked="" type="checkbox"/> Yes
Site Layout Drawing	<input checked="" type="checkbox"/> Yes
Copy of Insurance Declaration page or other acceptable proof of insurance	<input checked="" type="checkbox"/> Yes
<u>Possible Additional Documentation</u>	
<ul style="list-style-type: none"> • If an Application Agent is being used for this project, the Site Layout Drawing must be signed by the Interconnection Customer indicating Site Control of the DER interconnection location. • If the DER export capacity is limited, include information material explaining the limiting capabilities. • If Energy Storage is included with the proposed DER system include the Energy Storage 	

Application.

Simplified Interconnection Application

Interconnection Customer		
Full Name (must match the name of the existing service account): Tyler Hartwig		
Account Number: 017429-000	Meter Number: 94176836	
Mailing Address: 923 N North Ave		
City: Fairmont	State: MN	Zip Code: 56031
Email: mamashark247@gmail.com	Phone: (507) 236-6980	

Application Agent	
Is the Customer using an Application Agent for this application?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>If Interconnection Customer is not using an Application Agent, please skip to the next section.</i>	
Application Agent: Chloe Kirks	
Company Name: Wolf River Electric	
Email: Chloe@wolfriverelectric.com	Phone: 612-412-4127

For Office Use Only	
Application ID:	Queue Number:
Date Received:	Application Fee Received: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Preliminary Approval Provided to Applicant:	

Distributed Energy Resource Information		
Location (if different from mailing address of Interconnection Customer):		
Will the Proposed DER system be interconnected to an existing electric service?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Is the Distributed Energy Resource a single generating unit or multiple?	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple	
DER Type (Check all that apply):		
<input checked="" type="checkbox"/> Solar Photovoltaic	<input type="checkbox"/> Wind	<input type="checkbox"/> Energy Storage
<input type="checkbox"/> Combined Heat and Power	<input type="checkbox"/> Solar Thermal	<input type="checkbox"/> Other (please specify)
<i>DER systems with Energy Storage must also submit the Energy Storage Application to the Utility.</i>		
Inverter Manufacturer: Sun Power	Model: Sun Power A5	
Phase Configuration of Proposed DER System:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Three	
Aggregate Inverter(s) Nameplate Rating:	9.984	9.984
Is the export capability of the DER limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<i>If the DER export capacity is limited, include information material explaining the limiting capabilities.</i>		
Aggregate DER Capacity (the sum of nameplate capacity of all generation and storage devices at the PCC):		
Installed DER System Cost (before incentives):	\$ 47000	
Estimated Installation Date:	9/14/24	

Equipment Certification	
Is the DER equipment certified ¹ ?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Please list all certified IEEE 1547 equipment below. Include all certified equipment manufacturer specification sheets with the Simplified Application submission.</i>	
Equipment Type	Certifying Entity
1	
2	
3	

¹ Information regarding certified equipment can be found in Section 14 and Section 15 of the Overview Process document.

Interconnection Agreement

Proposed DER interconnections that are also deemed Qualifying Facilities under Minnesota Statutes §216B.164 are eligible to sign the Utility’s Uniform Contract for Cogeneration and Small Power Production Facilities. Included in this agreement are payment terms for excess power generated by the proposed DER system the Utility may purchase. In lieu of the Utility’s Uniform Contract for Cogeneration and Small Power Production Facilities, the Interconnection Customer may choose to instead sign the Municipal Minnesota Interconnection Agreement (MMIA).

The Interconnection Customer requests an MMIA to be executed in lieu of the Utility’s Uniform Contract for Cogeneration and Small Power Production Facilities.

Yes No

Disclaimers – Must be completed by Interconnection Customer

	Initials
The Interconnection Customer has opportunities to request a timeline extension during the interconnection process. Failure by the Interconnection Customer to meet or request an extension for a timeline outlined in the Interconnection Process could result in a withdrawn queue position and the need to re-apply.	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <small>Initial</small> T H </div>
Propose DER interconnection to the Utility’s distribution submitted under the Simplified Process may be moved into the Fast Track Process if engineering screens are failed during the Simplified Application review.	<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <small>Initial</small> T H </div>

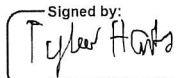
Application Signature – Must be completed by Interconnection Customer

I designate the individual or company listed as my Application Agent to serve as my agent for the purpose of coordinating with the Area EPS Operators on my behalf throughout the interconnection process.

Initial
 T H

 Initials

I hereby certify that, to the best of my knowledge, the information provided in this Application is true, and that I have appropriate Site Control in conformance with the Interconnection Process. I agree to abide by the Municipal Minnesota Distributed Energy Resource Interconnection Process (M-MIP) and return the Certificate of Completion when the DER has been installed.

Signed by:


 Applicant Signature:

8/13/2024 | 2:13 PM PDT

 Date:

*****Please print clearly or type and return completed along with any additional documentation*****

PHOTOVOLTAIC ROOF MOUNT SYSTEM

26 MODULES-ROOF MOUNTED - 9.620 kW DC, 9.984 kW AC
923 N NORTH AVE, FAIRMONT, MN 56031, USA



WOLF RIVER ELECTRIC
101 SOUTH PARKWAY N.E. SUITE G
FAIRMONT, MN 56031
ELECTRICAL LICENSE # 677769
BUILDING LICENSE # 677271
CONTACT (763) 726-6662
www.wolfriverelectric.com

PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE: 9.620 kW DC
9.984 kW AC
MODULE TYPE & AMOUNT: (26) SUNPOWER APTOS DNA-120-BF2(370W)
MODULE DIMENSIONS: (LxWxH) 69.37" x 41.26" x 1.38"
INVERTER: (26) SUNPOWER SPWR-A5 (240V, 1 PHASE)
INTERCONNECTION METHOD: SUPPLY SIDE TAP

GENERAL STRUCTURAL NOTES:

- THE SOLAR PANELS ARE TO BE MOUNTED TO THE ROOF FRAMING USING THE PEGASUS & INVISIMOUNT RAIL SYSTEM. THE MOUNTING FEET ARE TO BE SPACED AS SHOWN IN THE DETAILS, AND MUST BE STAGGERED TO ADJACENT FRAMING MEMBERS TO SPREAD OUT THE ADDITIONAL LOAD.
- UNLESS NOTED OTHERWISE, MOUNTING ANCHORS SHALL BE 5/8" LAG SCREWS WITH A MINIMUM OF 2 1/2" PENETRATION INTO ROOF FRAMING.
- THE PROPOSED PV SYSTEM ADDS 3.0 psf TO THE ROOF FRAMING SYSTEM.
 - ROOF LIVE LOAD = 20 psf TYPICAL, 0 psf UNDER NEW PV SYSTEM.
 - GROUND SNOW LOAD = 50 psf
 - WIND SPEED = 110 mph
 - EXPOSURE CATEGORY = D

AUTHORITIES HAVING JURISDICTION:

BUILDING: CITY OF FAIRMONT
ZONING: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY
UTILITY METER NO: 94-178-836

SHEET INDEX:

- PV 0.0: COVER SHEET
- PV 0.1: PLOT PLAN
- PV 1.0: SITE PLAN
- PV 1.1: ATTACHMENT & STRING LAYOUT
- PV 1.2: EQUIPMENT ELEVATION
- S 1.0: MOUNT DETAILS
- S 1.1: 3-LINE DIAGRAM
- E 1.1: WIRE CALCULATION
- E 1.2: WARNING LABELS
- E 1.3: PLACARD
- E 1.4: EQUIPMENT SPEC SHEET
- D 1.1-4:

GOVERNING CODES

- ALL WORK SHALL CONFORM TO THE FOLLOWING CODES
- 2023 NATIONAL ELECTRICAL CODE
 - 2020 MINNESOTA RESIDENTIAL CODE
 - 2020 MINNESOTA BUILDING CODE
 - 2024 MINNESOTA ENERGY CODE
 - 2020 MINNESOTA ACCESSIBILITY CODE
 - 2020 MINNESOTA MECHANICAL AND FUEL GAS CODE
 - 2020 MINNESOTA PLUMBING CODE
 - 2020 MINNESOTA STATE FIRE CODE
 - ANY OTHER LOCAL AMENDMENTS

GENERAL ELECTRIC NOTES:

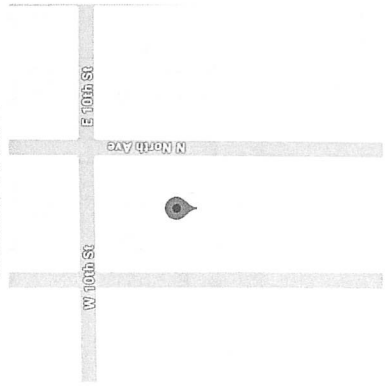
- ALL COMPONENTS ARE UL LISTED AND CEC CERTIFIED, WHERE WARRANTED.
- THE SOLAR PV SYSTEM WILL BE INSTALLED IN ACCORDANCE WITH ARTICLE 690 OF THE NEC 2023.
- THE UTILITY INTERCONNECTION APPLICATION MUST BE APPROVED AND PV SYSTEM INSPECTED PRIOR TO PARALLEL OPERATION.
- ALL CONDUCTORS OF A CIRCUIT, INCLUDING THE EGC, MUST BE INSTALLED IN THE SAME RACEWAY, OR CABLE, OR OTHERWISE RUN WITH THE PV ARRAY CIRCUIT CONDUCTORS WHEN THEY LEAVE THE VICINITY OF THE PV ARRAY.
- WHERE METALLIC CONDUIT CONTAINING DC CONDUCTORS IS USED INSIDE THE BUILDING, IT SHALL BE IDENTIFIED AS "CAUTION: SOLAR CIRCUIT" EVERY 10FT.
- HEIGHT OF THE AC DISCONNECT SHALL NOT EXCEED 6'-7" PER NEC CODE 240.24.
- A GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH CEC 690.47 AND 250.50 THROUGH 60 AND 250-166 SHALL BE PROVIDED. PER NEC GROUNDING ELECTRODE SYSTEM OF EXISTING BUILDING MAY BE USED AND BONDED TO THE SERVICE ENTRANCE. IF EXISTING SYSTEM IS INACCESSIBLE OR INADEQUATE A SUPPLEMENTAL GROUNDING ELECTRODE WILL BE USED AT THE INVERTER LOCATION CONSISTING OF A UL LISTED 8 FT. GROUND ROD WITH ACORN CLAMP. GROUNDING ELECTRODE CONDUCTORS SHALL BE NO LESS THAN #6 AWG AND NO LARGER THAN #6 AWG COPPER AND BONDED TO THE EXISTING GROUNDING ELECTRODE TO PROVIDE FOR A COMPLETE SYSTEM.
- PHOTOVOLTAIC MODULES ARE TO BE CONSIDERED NON-COMBUSTIBLE.
- PHOTOVOLTAIC INSTALLATION WILL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
- ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS DESIGNED AND LISTED FOR SUCH USE. WIRING MUST BE PERMANENTLY AND COMPLETELY HELD OFF THE ROOF SURFACE.
- ALL SINAGE TO BE PLACED IN ACCORDANCE WITH THE LOCAL BUILDING CODE. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT. ALL PLAQUES AND SINAGE WILL BE INSTALLED AS REQUIRED BY THE NEC AND AHJ.
- AS SPECIFIED BY THE AHJ, EQUIPMENT USED IN UNGROUNDED SYSTEMS LABELED ACCORDING TO NEC 690.35(F).
- INVERTER(S) USED IN UNGROUNDED SYSTEM SHALL BE LISTED FOR THIS USE [NEC 690.35(G)]. THE INSTALLATION OF EQUIPMENT AND ALL ASSOCIATED WIRING AND INTERCONNECTION SHALL BE PERFORMED ONLY BY QUALIFIED PERSONS [NEC 690.4(C)].
- ALL OUTDOOR EQUIPMENT SHALL BE NEMA 3R RATED (OR BETTER), INCLUDING ALL ROOF MOUNTED TRANSITION BOXES AND SWITCHES.
- ALL EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED IN ACCORDANCE WITH NEC ARTICLE 250.
- SYSTEM GROUNDING SHALL BE IN ACCORDANCE WITH NEC 690.41.
- PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION IN ACCORDANCE WITH NEC 690.12
- DISCONNECTING MEANS SHALL BE LOCATED IN A VISIBLE, READILY ACCESSIBLE LOCATION WITHIN THE PV SYSTEM EQUIPMENT OR A MAXIMUM OF 10 FEET AWAY FROM THE SYSTEM [NEC 690.13(A)].
- WORK CLEARANCES AROUND ELECTRICAL EQUIPMENT WILL BE MAINTAINED PER NEC 110.26(A)(1), 110.26(A)(2) AND 110.26(A)(3).
- ROOFTOP MOUNTED PHOTOVOLTAIC PANELS AND MODULES SHALL BE TESTED, LISTED & IDENTIFIED IN ACCORDANCE WITH UL1703
- ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT EXPANSION JOINTS AND ANCHOR CONDUIT RUNS AS REQUIRED PER NEC.

43.661364, -94.462796



1 SATELLITE VIEW
SCALE: NTS
PV 0.0

43.661364, -94.462796



2 VICINITY MAP
SCALE: NTS
PV 0.0

TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
AHJ: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENT CAD
TRIVENT CAD SOLUTION
Sheet Name:
COVER SHEET

Sheet Size:
ANSI B
11" X 17"

Sheet Number:
PV 0.0

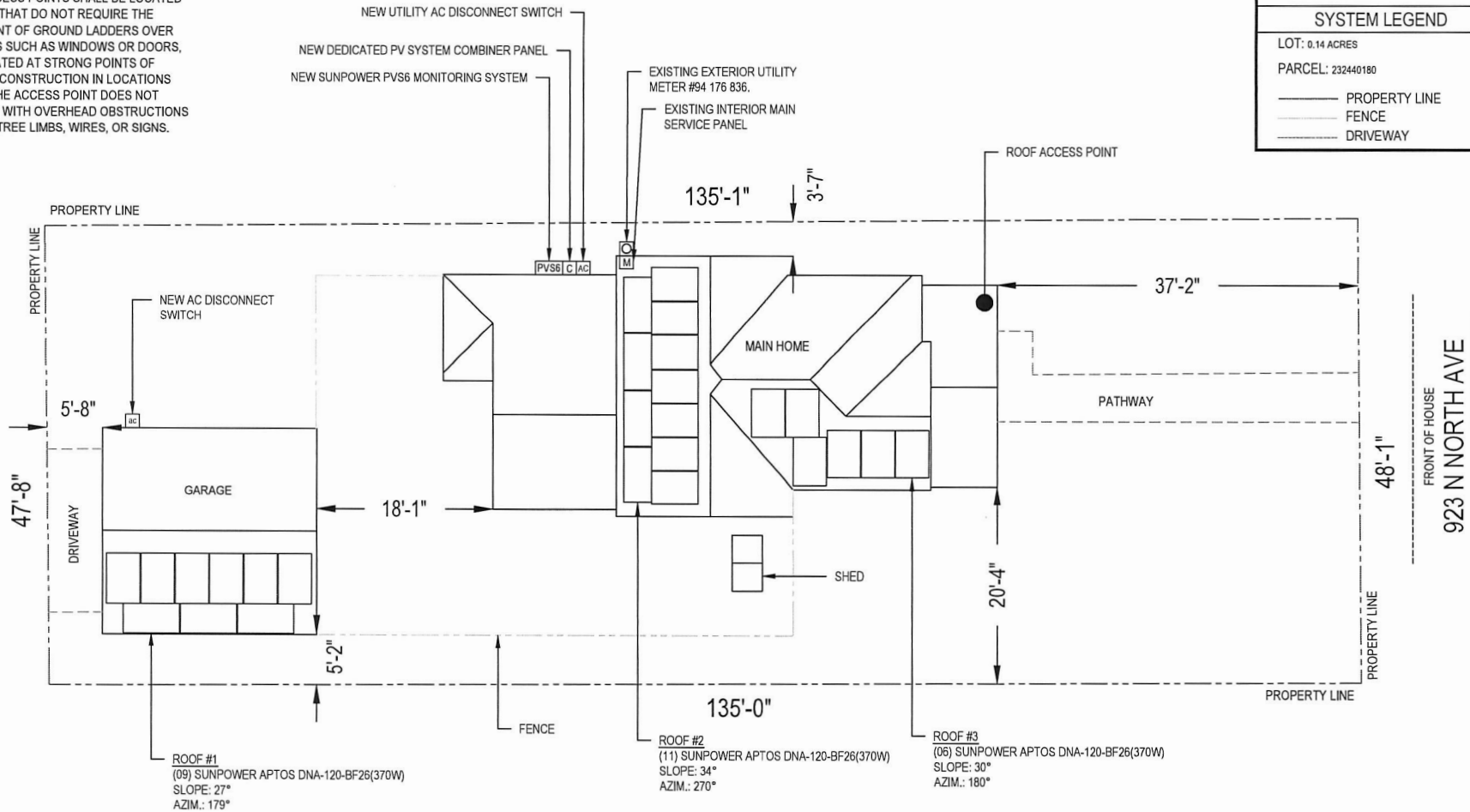
Revisions	Date	Rev
DESCRIPTION	27-JUL-2024	00
CA01	20-Aug-2024	01
CA02	10-Aug-2024	02
CA03		

Signature with Seal

- NOTE:**
- 24/7 UNESCORTED KEYLESS ACCESS IS TO BE PROVIDED FOR ALL UTILITY EQUIPMENT.
 - AC DISCONNECT SHOULD BE LOCATED TOGETHER IN A READILY ACCESSIBLE LOCATION WITH THE MAIN SERVICE METER.

● ROOF ACCESS POINT

ROOF ACCESS POINTS SHALL BE LOCATED IN AREAS THAT DO NOT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION IN LOCATIONS WHERE THE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREE LIMBS, WIRES, OR SIGNS.



SYSTEM LEGEND

LOT: 0.14 ACRES
PARCEL: 232440180

—	PROPERTY LINE
---	FENCE
---	DRIVEWAY

WOLF RIVER ELECTRIC
 WOLF RIVER ELECTRIC
 101 ISANTI PARKWAY RE, SUITE G
 ISANTI, MN 55050
 ELECTRICAL LICENSE EA777669
 BUILDING LICENSE BC773271
 CONTACT: (763) 229-6662
 contact@wolfriverelectric.com

REVISIONS

Description	Date	Rev
CAD 1	27-July-2024	03
CAD 2	07-Aug-2024	01
CAD 3	16-Aug-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 A/H: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:

 TRIVENT CAD SOLUTION

Sheet Name
PLOT PLAN

Sheet Size
**ANSI B
 11" X 17"**

Sheet Number
PV 0.1



Revisions	Date	Rev
DESCRIPTION	27-July-2024	01
CAD 1	27-Aug-2024	01
CAD 2	10-Sep-2024	02
CAD 3		

Signature with Seal

Project Name & Address
 TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 A/E: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
 TRIVENTCAD
 TRIVENT CAD SOLUTION

Sheet Name
 SITE PLAN

Sheet Size
 ANSI B
 11" X 17"
 Sheet Number
 PV 1.0

SYSTEM LEGEND

EXISTING EXTERIOR UTILITY METER #64
 176 636.

EXISTING INTERIOR MAIN SERVICE PANEL

NEW UTILITY AC DISCONNECT SWITCH.

NEW AC DISCONNECT SWITCH.

NEW DEDICATED PV SYSTEM COMBINER PANEL.

NEW SUNPOWER PVSS MONITORING SYSTEM

26 NEW SUNPOWER APTOS DVA-120-5F-263070V MODULES NEW 76-SUNPOWER SPWR-45 (240V, 1 PHASE) INVERTERS, MOUNTED ON THE BACK OF EACH MODULE.

FIRE PATHWAY

ROOF OBSTRUCTIONS

ATTIC RUN CONDUIT

ATTIC RUN CONDUIT JUNCTION BOX

TRENCHED CONDUIT RUN

ROOF SECTIONS

ROOF #01 MODULE -06
 SLOPE - 27°
 1/2" WITH - 1" COMP. SHINGLE
 RAFTER SIZE & SPACING - 2"x4" @ 24" O.C.

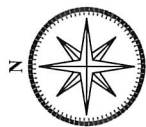
ROOF #02 MODULE - 11
 SLOPE - 34°
 1/2" WITH - 1" COMP. SHINGLE
 RAFTER SIZE & SPACING - 2"x4" @ 24" O.C.

ROOF #03 MODULE -06
 SLOPE - 18°
 1/2" WITH - 1" COMP. SHINGLE
 RAFTER SIZE & SPACING - 2"x4" @ 24" O.C.

NOTE:
 ATTIC RUN CONDUIT SHALL BE MINIMUM 18 INCHES FROM ROOF SHEATING.

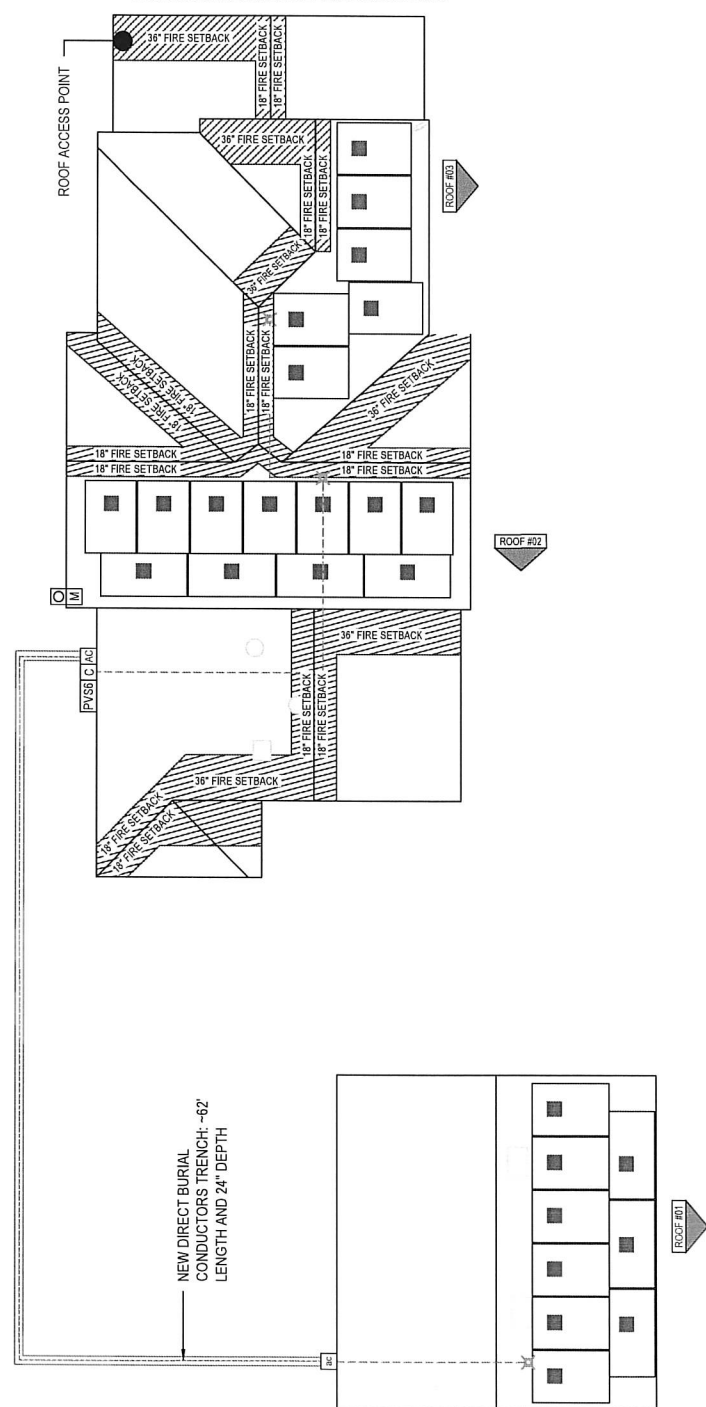
ROOF FIRE SUPPRESSION SPRINKLER SYSTEM:
 NO

TOTAL ROOF AREA: 1784ft²
 TOTAL MODULE AREA: 517ft²
 TOTAL AREA COVERED: 28.97%



923 N NORTH AVE

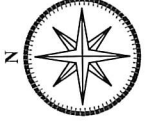
FRONT OF HOUSE



ROOF ACCESS POINT
 ROOF ACCESS POINTS SHALL BE LOCATED IN AREAS WHERE THERE ARE NO TREE LIMBS, WIRES, OR SIGNS. OVERHEAD WIRE OPENINGS SUCH AS WINDOW EAVES DOORS, AND LOCATED AT STROG POINTS OF BUILDING CONSTRUCTION IN LOCATIONS WHERE THE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREE LIMBS, WIRES, OR SIGNS.

- NOTE:**
- UNESCORTED KEYLESS ACCESS IS TO BE PROVIDED FOR ALL UTILITY EQUIPMENT.
 - AC DISCONNECT SHOULD BE LOCATED TOGETHER IN A READILY ACCESSIBLE LOCATION WITHIN 10' OF THE MAIN SERVICE METER.

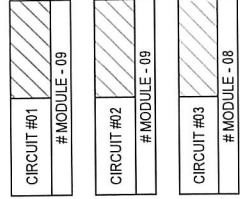
1 SITE PLAN
 SCALE: 1/8" = 1'-0"
 PV 1.0



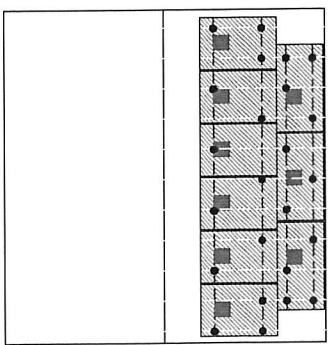
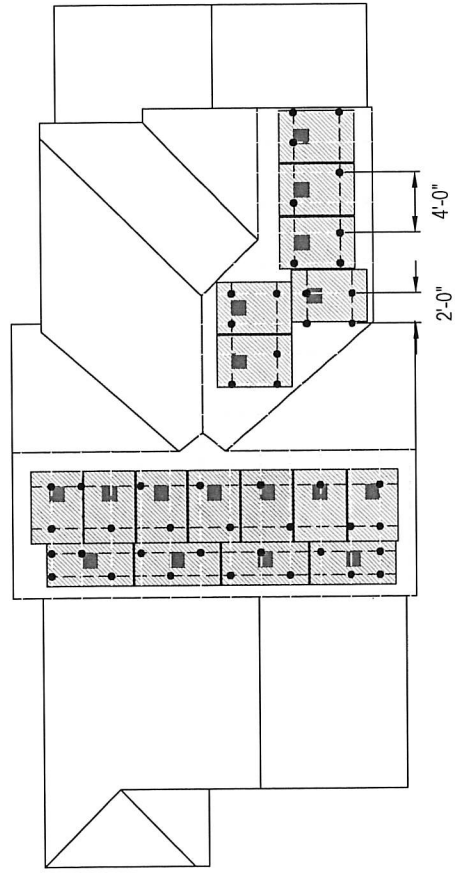
SYSTEM LEGEND

- = ATTACHMENT POINT(S) (3 Nos)
- = RAFTER
- - - - - = RAIL SYSTEM

CIRCUIT(S)



NOTE: THE MAXIMUM CANTILEVER OF THE RAIL SHALL BE 1/3 OF THE ATTACHMENT SPACING.



WOLF RIVER ELECTRIC
 101 EAST PARKWAY, SUITE C
 FAIRMONT, MN 56031
 PHONE: (507) 235-6662
 FAX: (507) 235-6662
 WWW.WOLFRIVERELECTRIC.COM

REVISIONS	Description	Date	Rev
CAD 1		25-Jul-2024	00
CAD 2		27-Aug-2024	01
CAD 3		10-Aug-2024	02

Signature with Seal

Project Name & Address
 TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 AHJ: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENTCAD
 TRIVENT CAD SOLUTION
 Sheet Name
ATTACHMENT & STRING LAYOUT

Sheet Size
ANSI B
11" X 17"

Sheet Number
PV 1.1

MODULE, ARRAY & ATTACHMENT POINT WEIGHT

	Quantity	Lbs./Unit	Lbs./Qty.
Module	26	45.2	1175.20
Mount Bk	73	4.50	328.50
Coupling Bk	46	4.00	184.00
Microinverters	26	23.8	618.8
Flashing	73	1.00	73.00
Slidecomp	73	1.00	73.00
Clip SS	26	1.00	26.00
Total Point Attachment Load per Standoff			2632
Total System Weight (LBS.)			1921.58
Attachment Point Weight (LBS.) Per Sq.Ft.			3.72

ARRAY AREA

	Module Dim (69.37" x 41.26")	19.88 SQ. FT.
Module Area		
Area of Array		517.76 SQ. FT.
Roof Area		1784 SQ. FT.
Roof Coverage (in percentage)		28.97%

WOLF RIVER
 WOLF RIVER ELECTRIC
 1011 SANITARY PARKWAY, THE SUITE G
 FAIRMONT, MN 56031
 ELECTRICAL LICENSE # 677689
 CONTACT: (507) 254-6662
 www.wolfriverelectric.com

REVISIONS

Description	Date	Rev
CAD 1	12-14-2024	00
CAD 2	12-14-2024	01
CAD 3	10-14-2024	02

Signature with Seal

Project Name & Address
 TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 AHJ: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
 TRUENTCAD
 TRUENT CAD SOLUTION

Sheet Name
 EQUIPMENT
 ELEVATION

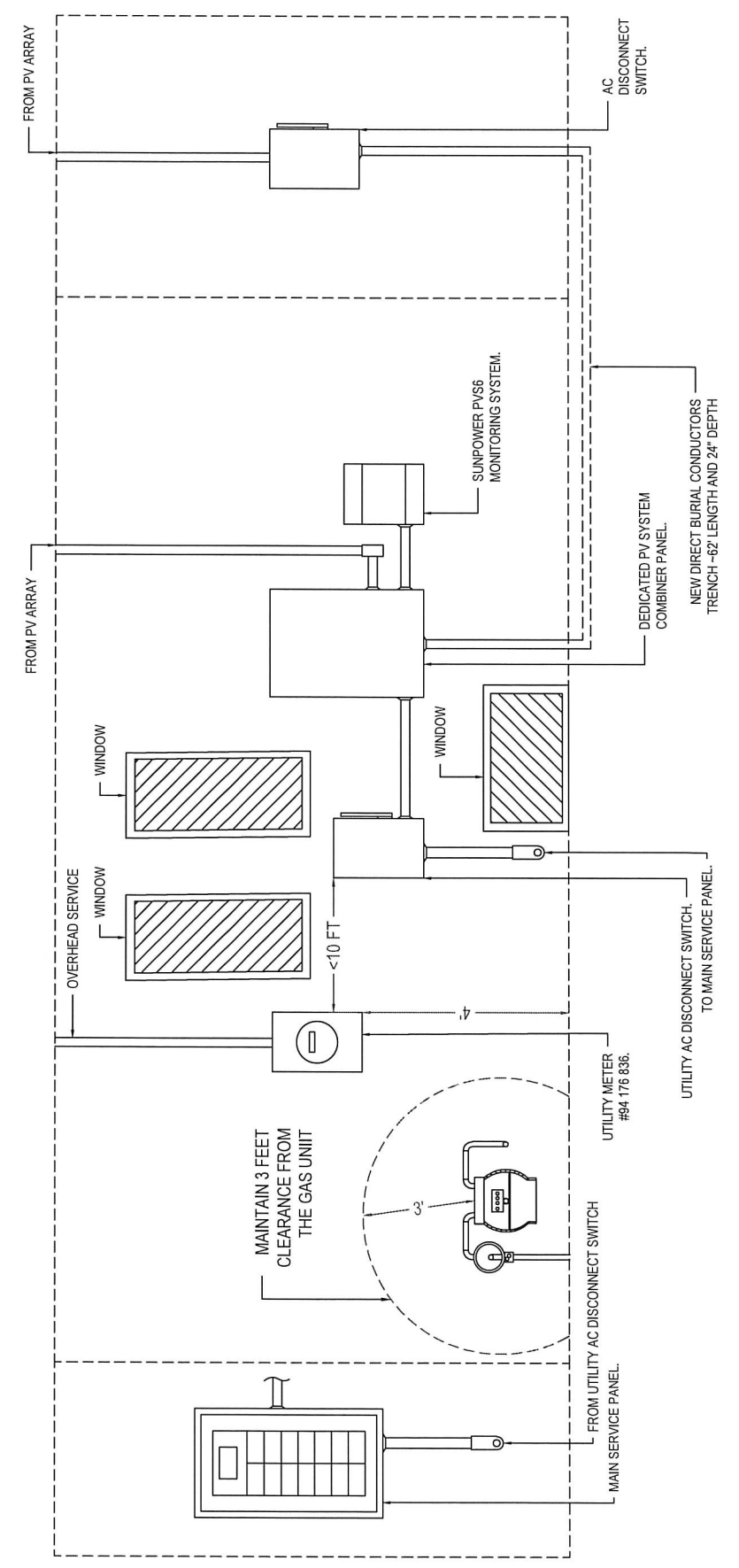
Sheet Size
 ANSI B
 11" X 17"

Sheet Number
 PV 1.2

EXTERIOR WALL AT
 GARAGE

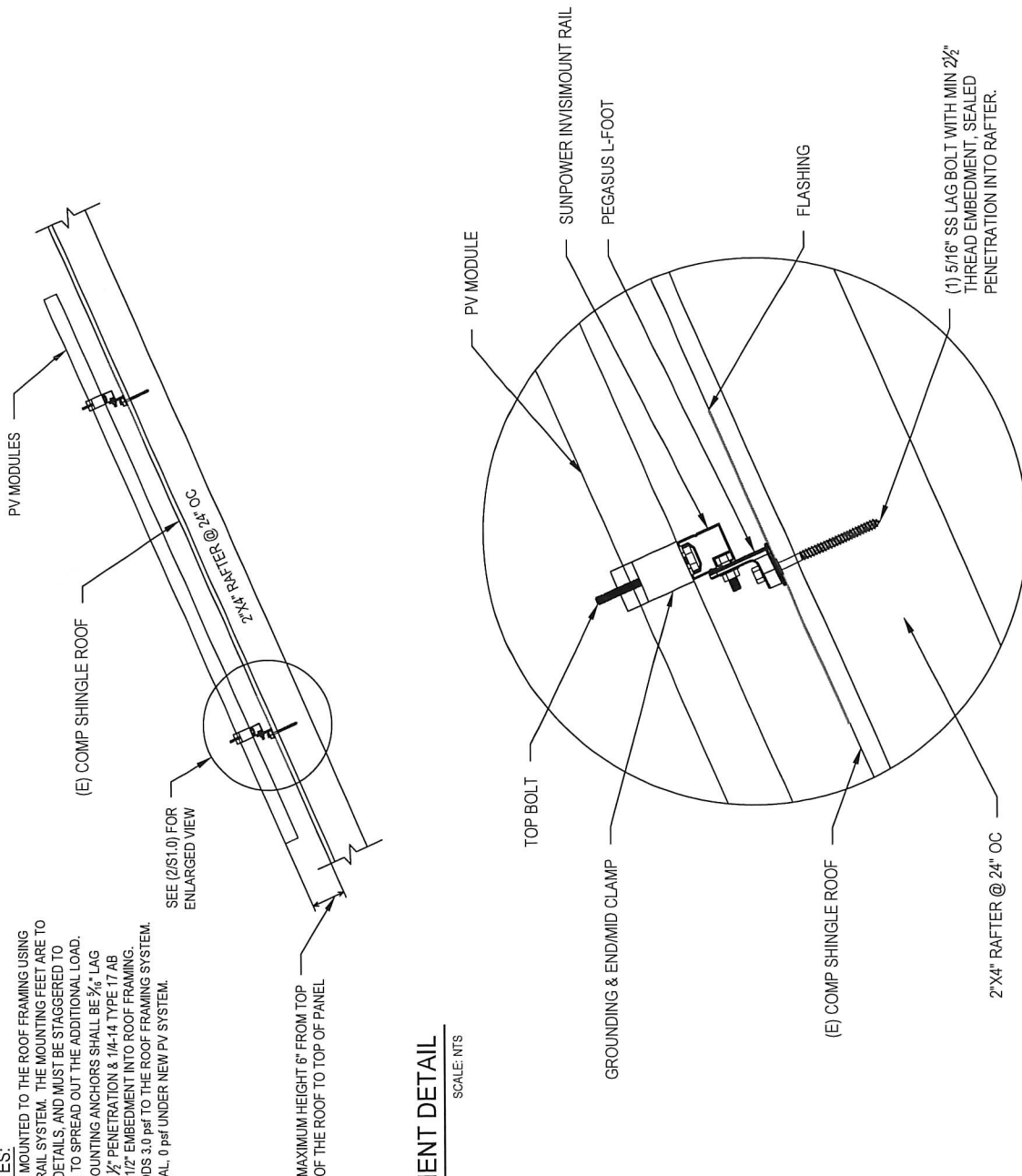
EXTERIOR WALL AT
 MAIN HOME

INTERIOR WALL
 AT MAIN HOME



GENERAL STRUCTURAL NOTES:

- a. THE SOLAR PANELS ARE TO BE MOUNTED TO THE ROOF FRAMING USING THE PEGASUS & INVISIMOUNT RAIL SYSTEM. THE MOUNTING FEET ARE TO BE SPACED AS SHOWN IN THE DETAILS, AND MUST BE STAGGERED TO ADJACENT FRAMING MEMBERS TO SPREAD OUT THE ADDITIONAL LOAD, UNLESS NOTED OTHERWISE. MOUNTING ANCHORS SHALL BE 5/8" LAG SCREWS WITH A MINIMUM OF 2 1/2" PENETRATION & 1/4"-14 TYPE 17 AB MILLED POINT WITH 1-1/2" TO 2-1/2" EMBEDMENT INTO ROOF FRAMING.
- b. THE PROPOSED PV SYSTEM ADDS 3.0 psf TO THE ROOF FRAMING SYSTEM.
- c. ROOF LIVE LOAD = 20 psf TYPICAL, 0 psf UNDER NEW PV SYSTEM.
- 1. GROUND SNOW LOAD = 50 psf
- 2. WIND SPEED = 110 mph
- 3. EXPOSURE CATEGORY = D



1 ATTACHMENT DETAIL

S 1.0 SCALE: NTS

2 ATTACHMENT DETAIL (enlarged view)

S 1.0 SCALE: NTS

WOLF RIVER ELECTRIC
 101 ASHOTT PARKWAY THE VILLAGE @ ISANTI, MN 55040
 ELECTRICAL LICENSE # 6777925
 612-835-2222
 CONTACT: (612) 229-6652
 contact@wolfriverelectric.com

REVISIONS	Description	Date	Rev
CAD 1		25-Jul-2024	00
CAD 2		27-Aug-2024	01
CAD 3		16-Aug-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY
 A/E: CITY OF FAIRMONT

DESIGNED BY:



TRIVENT CAD SOLUTION

Sheet Name

MOUNT DETAILS

Sheet Size

ANSI B
 11" X 17"

Sheet Number

S 1.0

NOTE:

1. 24/7 UNESCORTED KEYLESS ACCESS IS TO BE PROVIDED FOR ALL UTILITY EQUIPMENT.
2. AC DISCONNECT SHOULD BE LOCATED TOGETHER IN A READILY ACCESSIBLE LOCATION WITH THE MAIN SERVICE METER.

Photovoltaic System	
DC System Size (Watts)	8920
AC System Size (Watts)	8984
Total Module Count	26

AC DISCONNECT TO BE INSTALLED WITH THE UTILITY METER.

AHJ: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

Conduit Conductor Schedule (Unless Otherwise Specified Conductors Shall be Copper)

Tag #	Description	Wire Gauge	# of Conductors/Color	Conduit Type	Conduit Size
1A & 2A	Inverter Output (EPhase O Cable)	12 AWG	2(1L, 1L2), & 4(2L1, 2L2)	Free Air	N/A
1A & 2A	EGC (Base Copper Ground)	6 AWG	1 BARE	Free Air	N/A
1B & 2B	Inverter Output (THWN-2)	12 AWG	2(1L, 1L2), & 4(2L1, 2L2)	FMC	3/4"
1B & 2B	EGC (THWN-2)	12 AWG	1 (GRN)	FMC	3/4"
2T	Inverter Output (URD)	4 AWG AL	3(1L, 1L2, N) BRWN	N/A	N/A
2T	EGC (URD)	4 AWG AL	1 (GRN)	N/A	N/A
3	Inverter Output (THWN)	6 AWG CU	3(1L, 1L2, N) BRWN	SCH 80 PVC	1"
3	EGC (THWN)	10 AWG CU	1 (GRN)	SCH 80 PVC	1"
4	Inverter Output (THWN)	6 AWG CU	3(1L, 1L2, N) BRWN	SCH 80 PVC	1"

PV MODULE RATING @ STC

MANUFACTURER	SUNPOWER APTOS DWA-120-BF26(370W)
MAX. POWER-POINT CURRENT (MPP)	10.72 AMPS
MAX. POWER-POINT VOLTAGE (VMP)	34.5 VOLTS
OPEN-CIRCUIT VOLTAGE (VOC)	41.4 VOLTS
SHORT-CIRCUIT CURRENT (ISC)	11.28 AMPS
NOM. MAX. POWER AT STC (P _{MAX})	370 WATTS
MAX. SYSTEM VOLTAGE	1500V (IEC) / 1500V (UL)
VOC TEMPERATURE COEFFICIENT	-0.28%/°C

INVERTER SPECIFICATIONS

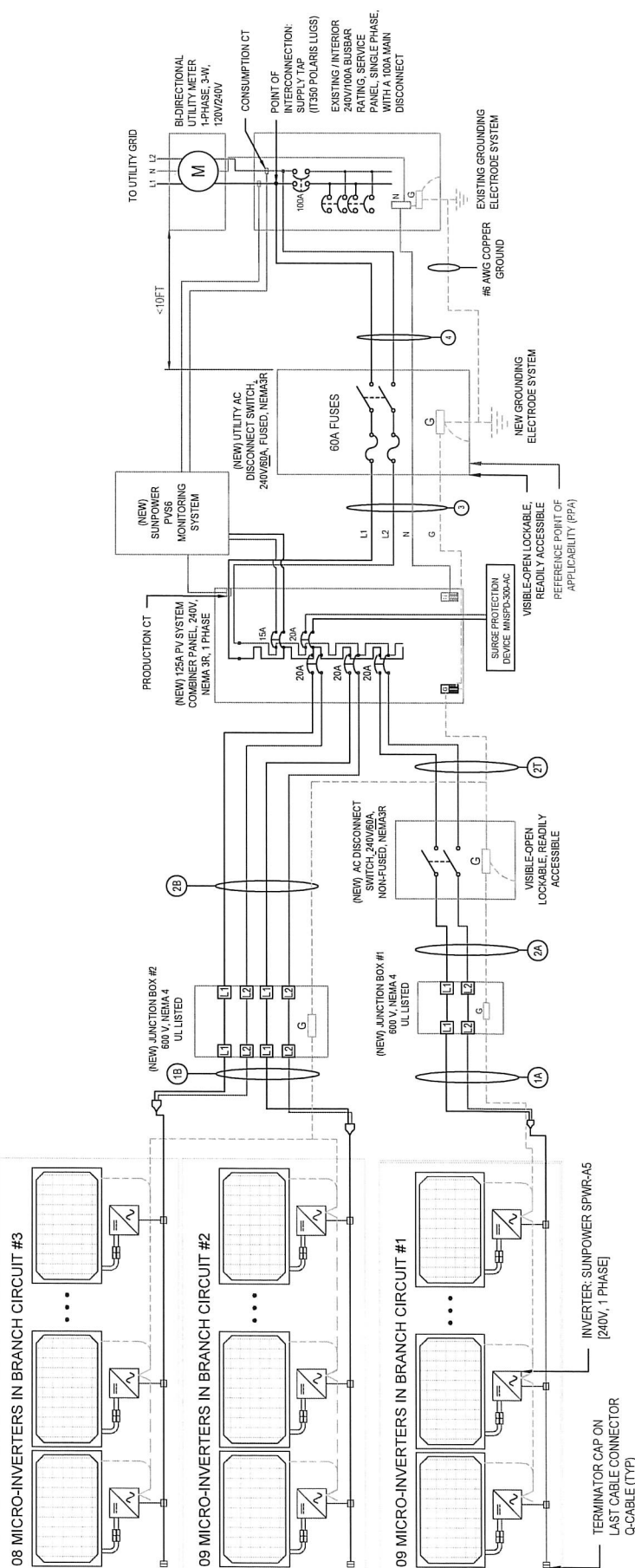
MANUFACTURER	SUNPOWER SPWR-A5
MAX. DC VOLT RATING	59 VOLTS
MAX. POWER AT 40 C	384 WATTS
NOMINAL AC VOLTAGE	240 VOLTS
MAX. AC CURRENT	1.60 AMPS
MAX. DC/DC RATING	20 AMPS
MAX. PANELS/CIRCUIT	10
SHORT CIRCUIT CURRENT	15 AMPS

26 NEW SUNPOWER APTOS DWA-120-BF26(370W) MODULES
NEW 26 - SUNPOWER SPWR-A5 [240V, 1 PHASE]
INVERTERS, MOUNTED ON THE BACK OF EACH MODULE.

08 MICRO-INVERTERS IN BRANCH CIRCUIT #3

09 MICRO-INVERTERS IN BRANCH CIRCUIT #2

09 MICRO-INVERTERS IN BRANCH CIRCUIT #1



REVISIONS

Description	Date	Rev
CAD 2	27-Aug-2024	01
CAD 3	10-Aug-2024	02

Signature with Seal

Project Name & Address
TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
AHJ: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENTCAD

Sheet Name
3-LINE DIAGRAM

Sheet Size
ANSI B
11" X 17"

Sheet Number
E 1.1



WOLF RIVER Electric
 101 SOUTH HARTWIG AVE. SUITE C
 FAIRMONT, MN 56031
 (763) 274-6662
 CONTACT (763) 274-6662
 contact@wolfriverelectric.com

Revision	Date	By
REV 01	07-Aug-2024	00
REV 02	07-Aug-2024	01
REV 03	10-Aug-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 A/H: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY



TRIVENT CAD SOLUTION

Sheet Name

WIPE
CALCS

Sheet Size

ANSI B
11" X 17"

Sheet Number

E 1.2

OCPD Calculations

Breakers sized according to continuous duty output current, PV circuit nominal current based off # of modules per Circuit X (1.25art. 690.8(A)) X (1.60 Max AC current per micro-inverter)
 Circuit #1 = 09 modules. Output Current w/ continuous duty = 18.00 <= 20A Breaker
 Circuit #2 = 09 modules. Output Current w/ continuous duty = 18.00 <= 20A Breaker
 Circuit #3 = 08 modules. Output Current w/ continuous duty = 16.00 <= 20A Breaker

system output current w/ continuous duty = 52.00 <= 60A (System OCPD)

Conductor Calculations

Wire gauge calculated from code art. 310.16 with ambient temperature calculations from art. 310.15(B)(1). For "In Attic" conductors we use the 90°C column ampacity, the relevant ambient temperature adjustment, and raceway fill adjustments from 310.16. Conduit shall be installed at least 1" above the roof deck.

For "Off Roof" conductors we use the 75°C column ampacity, or the 90°C column ampacity with the relevant ambient temperature and raceway fill adjustments, whichever is less. The rating of the conductor after adjustments MUST be greater than, or equal to, the continuous duty updated output current.

Calculation Example - Wire Rating (90°C) x Ambient Temperature Adjustment x Conduit Fill Adjustment >= Continuous Duty Output Current

(Tag 2A In Attic):
 12 gauge wire rated for 30A, 30A x 0.96 x 0.8 (2 Conductors) = 23.04A > 16.00A

(Tag 2B In Attic):
 12 gauge wire rated for 30A, 30A x 0.96 x 0.8 (4 Conductors) = 23.04A > 18.00A

(Tag 2T Trenched):
 4 gauge AL wire rated for 65A, 65A x 0.96 = 72.0A > 60A (System Output Current)

(Tag 3 & 4 Off Roof):
 6 gauge CU wire rated for 75A, 75A x 0.96 = 72.0A > 60A (System Output Current)

ELECTRICAL NOTES

- Designed according to and all code citations are relevant to the 2023 National Electrical Code.
- Tag 2- Use 96% temperature derate for conditions of use (In Attic)
- Tag 3 - Use 96% temperature derate for conditions of use (adjusted ambient)
- Bottom of conduit to be installed min. 7/8" above roof surface.
- System grounding & bonding designed in compliance with 690.47(C)3 and 250.84(E)
- Equipment shall be listed, tested, and marked to withstand the available short circuit current

PV MODULE RATINGS @ STC

MANUFACTURER	SUNPOWER APTOS DWA-720-BF26(70W)
MAX. POWER-POINT CURRENT (IMP)	10.72 AMPS
MAX. POWER-POINT VOLTAGE (VMP)	34.5 VOLTS
OPEN-CIRCUIT VOLTAGE (VOC)	41.4 VOLTS
SHORT-CIRCUIT CURRENT (ISC)	11.26 AMPS
NOM. MAX. POWER AT STC (P _{MAX})	370 WATTS
MAX. SYSTEM VOLTAGE	1500V (REC)/1500V (UL)
VOC TEMPERATURE COEFFICIENT	-0.26%/°C

INVERTER SPECIFICATIONS

MANUFACTURER	SUNPOWER SPWR-A5
MAX. DC VOLT RATING	59 VOLTS
MAX. POWER AT 40 C	384 WATTS
NOMINAL AC VOLTAGE	240 VOLTS
MAX. AC CURRENT	1.60 AMPS
MAX. OCPD RATING	20 AMPS
MAX. PANELS/CIRCUIT	10
SHORT CIRCUIT CURRENT	15 AMPS

Roof top conductor ampacities designed in compliance with art. 690.8, Tables 310.15(B)(2)(a), 310.15(B)(3)(a), 310.15(B)(3)(c), 310.15(B)(16), Chapter 9 Table 4, 5, & 8. Location specific temperature obtained from ASHRAE 2017 data tables

RECORD LOW TEMP	-28°
AMBIENT TEMP (HIGH TEMP 2%)	31°
CONDUIT HEIGHT	7/8"
CONDUCTOR TEMPERATURE RATE ON ROOF	90°
CONDUCTOR TEMPERATURE RATE OFF ROOF	90°

THIS PANEL IS FED BY MULTIPLE SOURCES (UTILITY AND SOLAR)

AC OUTPUT CURRENT ACCORDING TO ART. 694.8(B)(1)	41.60A
NOMINAL AC VOLTAGE	240V

PERCENT OF VALUES	NUMBER OF CURRENT CARRYING CONDUCTORS IN CONDUIT
.80	4-6
.70	7-9
.50	10-20



WARNING

ELECTRICAL SHOCK HAZARD
TERMINALS ON THE LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION

LABEL LOCATION: COMBINER PANEL, AC
DISCONNECT, POINT OF INTERCONNECTION
PER CODE: NEC 706.15(C)(4), NEC 690.13(B)



WARNING

TURN OFF PHOTOVOLTAIC AC
DISCONNECT PRIOR TO
WORKING INSIDE PANEL

LABEL LOCATION: COMBINER PANEL(S), MAIN SERVICE DISCONNECT
PER CODE: NEC 110.27(C), OSHA 1910.145(I)(7)

PHOTOVOLTAIC POWER SOURCE

LABEL LOCATION: DC CONDUIT/RACEWAYS
PER CODE: NEC 690.31(D)(2)

PHOTOVOLTAIC SYSTEM AC DISCONNECT
RATED AC OUTPUT CURRENT: **41.60 A**
NOMINAL OPERATING AC VOLTAGE: **240 V**

LABEL LOCATION: AC DISCONNECT/POINT OF INTERCONNECTION
PER CODE: NEC 690.34

PHOTOVOLTAIC

AC DISCONNECT

LABEL LOCATION: AC DISCONNECT
PER CODE: NEC 690.13(B)



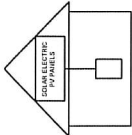
WARNING DUAL POWER SOURCE

SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

LABEL LOCATION: MAIN SERVICE DISCONNECT, PRODUCTION/METER
PER CODE: NEC 690.35, 706.12(C)

**SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN**

TURN RAPID SHUTDOWN
SWITCH TO THE
"OFF" POSITION TO
SHUT DOWN PV SYSTEM
AND REDUCE
SHOCK HAZARD
IN THE ARRAY



LABEL LOCATION: MAIN SERVICE DISCONNECT
PER CODE: NEC 690.56(C)

**MAIN PHOTOVOLTAIC
SYSTEM DISCONNECT**

LABEL LOCATION: MAIN SERVICE DISCONNECT, UTILITY METER
PER CODE: NEC 690.13(B)

**RAPID SHUTDOWN FOR
SOLAR PV SYSTEM**

LABEL LOCATION: RSD INITIATION DEVICE, AC DISCONNECT
PER CODE: NEC 690.56(C)(2)

**DO NOT DISCONNECT
UNDER LOAD**

LABEL LOCATION: MAIN SERVICE DISCONNECT
PER CODE: NEC 690.15(B) & NEC 690.33(D)(2)

WOLF RIVER
WOLF RIVER ELECTRIC
1811 SOUTH PARKWAY N.E., SUITE G
FAIRMONT, MN 56031
ELECTRICAL LICENSE #A172769
BUILDING LICENSE #A172771
CONTACT: (763) 256-6662
CONTACT@WOLFRIVERELECTRIC.COM

REVISIONS	Description	Date	Rev
CAD-1		27-May-2024	01
CAD-2		27-Aug-2024	01
CAD-3		10-Aug-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
A/H: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENTCAD
TRIVENT CAD SOLUTION

Sheet Name
WARNING LABELS

Sheet Size
**ANSI B
11" X 17"**

Sheet Number
E 1.3



WOLF RIVER ELECTRIC
 101 SOUTH PARKWAY NE, SUITE C
 FAIRBANKS, ALASKA 99701
 (907) 479-6662
 www.wolfriverelectric.com

REVISIONS	Description	Date	Rev
CAD 1		12-May-2024	01
CAD 2		10-Aug-2024	01
CAD 3		10-Aug-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 A/E: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY

TRIVENTCAD
 FAIRMONT CAD SOLUTION

Sheet Name

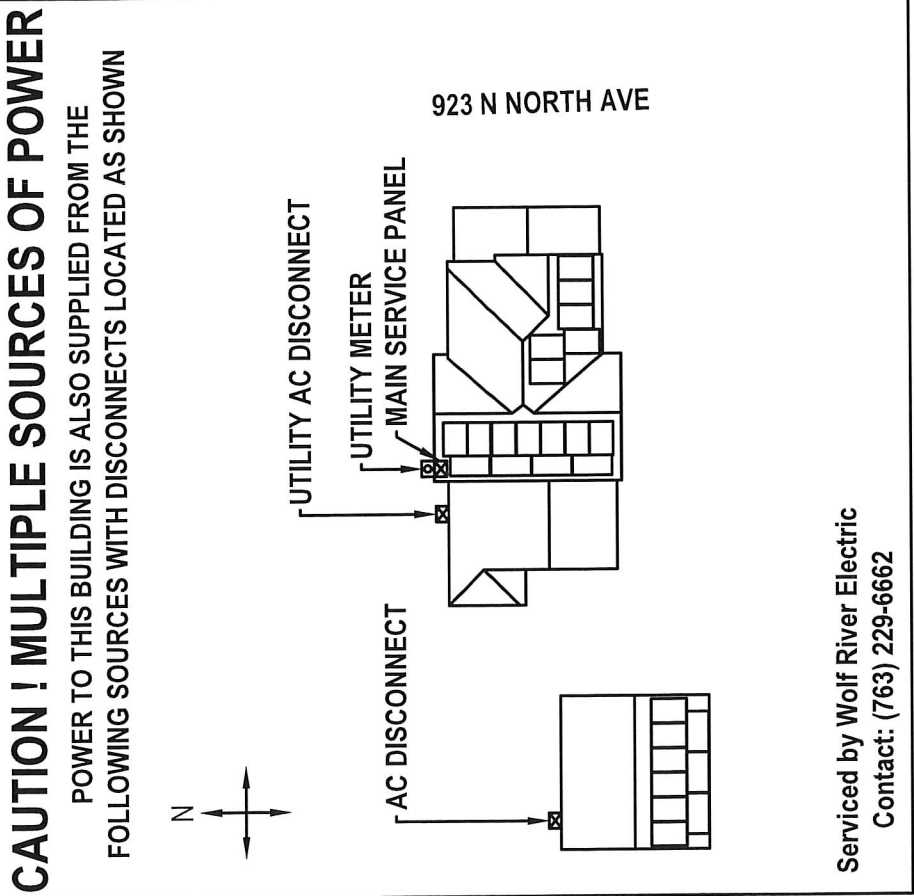
PLACARD

Sheet Size

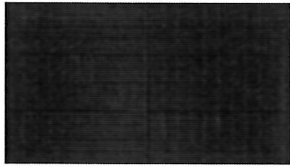
ANSI B
 11" X 17"

Sheet Number

E 1.4



SunPower-certified U-Series panel option



U-Series	APTOS DNA 120 BIFACIAL 370W
Wattage	370 W
Module Efficiency	20.4%
Weather Resiliency	Up to 5400 PA Snow and 5400 PA Wind Loads
Weight	45.2 lbs
Dimensions (in) W/H/D	41.26 x 69.37 x 1.36
Cell Type	Monocrystalline
Color	All Black (Black cells on black backsheet)
Frame	Black Anodized Aluminum
UL Certification	UL 61730 – Type 1
Manufacturing Location	Designed & Engineered in USA. Manufactured in Vietnam

U-Series



High Quality Residential Solar Panels

U-Series panels range from 19.2 to 20.9% efficient, putting them among the industry's highest front-contact cell panels available.



Superior Aesthetics

Sleek all-black design combined with SunPower's InvisiMount® low-profile mounting system makes for an elegant, streamlined appearance.



Rigorous Quality Assurance

From the warehouse to installation on your roof, SunPower® products and system components meet our comprehensive quality standards. These quality and reliability standards include vendor verification, supplier guideline enforcement, on-site manufacturing and shipment inspections, and ongoing performance and reliability testing.

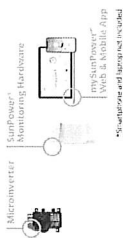
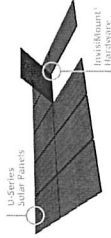


Industry-Leading Warranty

Every part of the SunPower Equinox® system is designed and backed by one company. SunPower's Complete Confidence Warranty includes limited warranties of 25 years for panels, microinverters and racking, and 10 years for monitoring hardware.

Your complete home solar solution

Every U-Series solar panel is designed as part of the SunPower Equinox® system, complete with mySunPower® monitoring app capability. Based on availability and installation locations, we will recommend the U-Series panel for your home.



SUNPOWER®

© 2023 SunPower Corporation. All Rights Reserved. SUNPOWER, the SUNPOWER logo, SUNPOWER EQUINOX, INVISIMOUNT and mySUNPOWER are registered trademarks of SunPower Corporation in the U.S. All other logos and trademarks are properties of their respective owners.

SUNPOWER®

WOLF RIVER ELECTRIC
 WOLF RIVER ELECTRIC
 101 ISANTI PARWAY NE, SUITE D
 WOLF RIVER, MN 56301
 ELECTRICAL LICENSE # 771969
 BUILDING LICENSE # RD77321
 CONTACT (763) 226-6662
 www.wolfriverelectric.com

REVISIONS			
Description	Date	Rev	By
CAD 1	27-Jul-2024	00	
CAD 2	03-Aug-2024	01	
CAD 3	16-Aug-2024	02	

Signature with Seal

Project Name & Address
TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 A/H: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENTCAD

Sheet Name
MODULE SPEC SHEET

Sheet Size
ANSI B 11" X 17"

Sheet Number
D 1.1

SUNPOWER®

SPR-A5 Microinverter

The high-powered smart grid ready SPR-A5 Microinverter with integrated MCH connectors dramatically simplifies the installation process while achieving the highest system efficiency.

The SPR-A5 Microinverter extends the reliability standards set forth by previous generations with over a million hours of power-on testing, enabling an industry-leading warranty of up to 25 years.



Easy to Install

- Lightweight and simple.
- Faster installation with improved built-in connectors and two-wire cabling.
- Built-in rapid shutdown compliance (NEC 2014, 2017, and 2020).



Efficient and Reliable

- Optimized for high-powered residential modules.
- Highest CEC efficiency of 97.0%.
- More than a million hours of testing.
- Class II double insulated NEMA 6 enclosure.
- Natural convection cooling without fans.



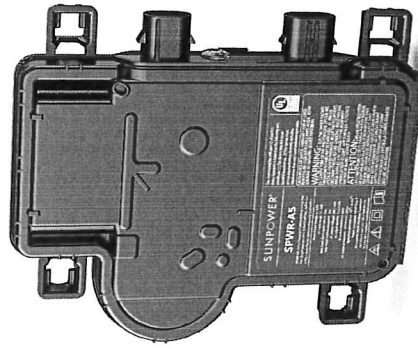
Smart Grid Ready

- Complies with advanced grid support, voltage, and frequency ride-through requirements.
- Remotely updates to respond to changing grid requirements.
- Configurable for varying grid profiles.
- Meets CA Rule 21 (UL 1741-SA and IEEE 1547.2018 (UL 1741-SB)).



Complete Confidence Warranty

- SunPower Complete Confidence Warranty guarantees performance of up to 25 years.
- Labor, shipping, and parts all included.
- One company stands behind the entire SunPower Equinox® System, one company to call.



SPR-A5 Microinverter

DC Electrical Data		A-Series, M-Series, U-Series	
Switching Module Compatibility		50 V	
Maximum Input DC Voltage		30 V-23 V	
Peak Power Handling Voltage		20 V-23 V	
Operating Range		20 V-55 V	
MPPT Start Voltage		15 A	
Maximum DC Short Circuit Current (max. ISC)			
Overvoltage Class DC Port			
DC Port Backfeed Current			
Array Configuration			

AC Electrical Data		@208 VAC	
Peak Output Power		354 VA	
Maximum Continuous Output Power		364 VA	
Normal (L-L) Voltage Range ¹		240 V / 211-264 V	
Maximum Continuous Output Current		1.60 A (250 V)	
Normal Frequency		60 Hz	
Extended Frequency Range ²		47-66 Hz	
AC Short Circuit Fault Current Cap ³ Cycles		4.82 A	
Maximum Line per 20 A (L-L) Branch Circuit ⁴		10	
Overvoltage Class AC Port		III	
AC Port Backfeed Current		18 mA	
Power Factor Setting		1.0	
Power Factor (adjustable)		0.85 leading / 0.85 lagging	
CEC Weighted Efficiency		97.0%	

Mechanical Data		Features	
Ambient Temperature Range	-40°C to 60°C	Communication	Power Line Communication (PLC)
Relative Humidity Range	4% - 100% (noncondensing)	Disconnecting Means	The AC and DC connectors have been evaluated and approved by UL for use as the disconnecting means required by NEC 690 and C22.1, 2015 Rule 6-219.
Case for Type	Standard NEMA 6	Compliance	<ul style="list-style-type: none"> • CA Rule 21 (UL 1741-SA) • IEEE 1547-2018 (UL 1741-SB) • IEEE C92.1 • UL 728 / IEEE 1547 • UL 726 / IEEE 1547 • IEC 60335-1 Class B • IEC 60335-2-22 Class B • IEC 60335-2-22 Class B
Dimensions (W x H x D)	8.4" x 6.6" x 1.2" (without bracket) (212 mm x 175 mm x 30.2mm)		This product is UL listed as PV rapid shutdown equipment and conforms with NEC 2014, 2017, and 2020 Article 690.12 and C22.1, 2015 Rule 6-219 (rapid shutdown) and 6-219.2 (UL 1741-SB).
Weight	2.88 lb (1.30 kg)		When installed according to manufacturer's instructions.
Coating	Natural convection - no fans		
Approved for Wet Locations	Yes		
Pollution Degree	PO3		
Finish/Note	Class II corrosion resistant polymeric enclosure		
Environmental Category / UV Exposure Rating	IEC64, type 6 / outdoor		
Altitude	6561 ft (2000 m)		

¹ For additional DC parameters require AC connection (standard) or AC disconnect (UL listed) for additional DC parameters. For more information, see the datasheet for the applicable model. ² Normal frequency range can be extended beyond normal frequency by the user. ³ Normal frequency range can be extended beyond normal frequency by the user. ⁴ Normal frequency range can be extended beyond normal frequency by the user.

See www.sunpower.com for more information. All dimensions are in inches unless otherwise specified. All dimensions are in inches unless otherwise specified. All dimensions are in inches unless otherwise specified. All dimensions are in inches unless otherwise specified.

See www.sunpower.com for more information. All dimensions are in inches unless otherwise specified. All dimensions are in inches unless otherwise specified. All dimensions are in inches unless otherwise specified.



650957 Rev A
April 2023



WOLF RIVER ELECTRIC
101 LAKEVIEW PARKWAY, SUITE C
ISAHAI, MN 55090
TEL: (763) 255-6622
CONTACT: (763) 255-6622
www.wolfriverelectric.com

REVISONS	
Description	Date
CAD 1	12-04-2020
CAD 2	01-09-2021
CAD 3	10-09-2024

Signature with Seal

Project Name & Address
TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
A/E: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENT CAD
TRIVENT CAD SOLUTION

Sheet Name
INVERTER SPEC SHEET

Sheet Size
ANSI B
11" X 17"

Sheet Number
D.1.2

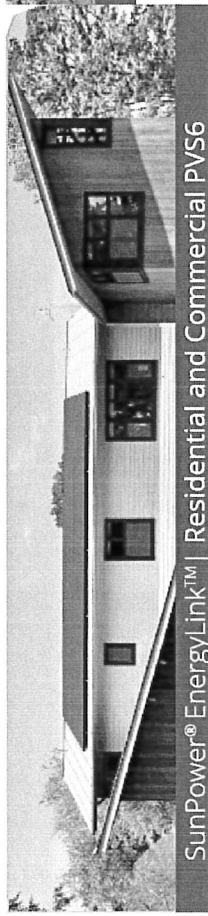
Revision	Date	Rev
001	12/04/2024	00
002	02/08/2024	01
003	10/08/2024	02

Signature with Seal

Project Name & Address
 TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 AHJ: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
 TRIVENTCAD
 TRIVENT CAD SOLUTION
 Sheet Name:
 MONITORING SPEC SHEET

Sheet Size
 ANSIB
 11" X 17"
 Sheet Number
 D 1.3



SunPower® EnergyLink™ Residential and Commercial PVS6

- Improve Support, Reduce Maintenance Costs**
 An intuitive monitoring website enables you to:
- See a visual map of customer sites
 - Remotely manage hundreds of sites
 - Receive electric system reports
 - Locate system issues and remotely diagnose
 - Diagnose issues online
 - Drill down for the status of individual devices
- Robust Cloud Connectivity**
 Multiple options to maintain optimal connectivity.
- Hardware Ethernet
 - Wi-Fi
 - Cellular backup

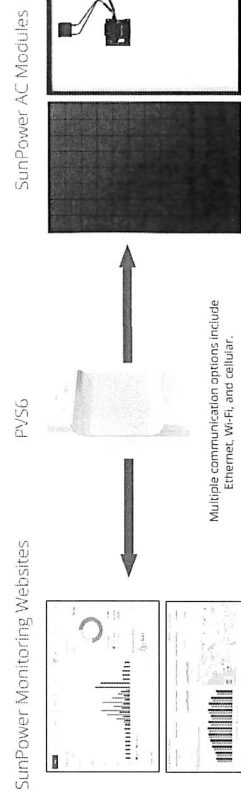


Add Value for Customers

- With the SunPower Monitoring System customers can:
- See what their solar system produces each day, month, or year
 - Optimize their solar investment and save on energy expenses
 - See their energy use and estimated bill savings
 - See their solar system's performance using the SunPower monitoring website or mobile app



SunPower® EnergyLink™ Residential and Commercial PVS6



Multiple communication options include Ethernet, Wi-Fi, and cellular.

Site Requirements	Value
Number of SunPower AC modules supported per PVS6	85
Internet access	High-speed internet access via available router or switch
Power	<ul style="list-style-type: none"> • 150-240 VAC (1-14, 50 or 60 Hz) • 208 VAC (1-4, 3-phase, 60 Hz)

Operating Conditions	
Temperature	-25°F to +149°F (-30°C to +60°C)
Humidity (maximum)	95%, non-condensing

Mechanical	
Weight	3.5 lbs (1.6 kg)
Dimensions	11.8 x 8.0 x 4.2 in. (303 x 203 x 108 mm)
Enclosure rating	NEMA Type 3F

Web and Mobile Device Support	
Customer site	monitor.us.sunpower.com
Partner site	partner.us.sunpower.com
Browsers	Firefox, Safari, and Chrome
Mobile devices	iPhone®, iPad®, and Android®
Customer app	<ol style="list-style-type: none"> 1. Create account online at monitor.us.sunpower.com. 2. On a mobile device, download the SunPower Monitoring app from the App Store or Google Play Store. 3. Sign in using account email and password.

Communication	
RS-485	Inverters and meters
Integrator Modbus	<ul style="list-style-type: none"> • One channel of inverter/DC ac production monitoring • Two channels of local production monitoring
Ethernet	1 channel optional (NEMA) port
PLC	PLC for SunPower AC modules
Wi-Fi	802.11b/g/n 2.4 GHz and 5 GHz
Cellular	LTE Cat 4/12G LTE-M
ZigBee	ZigBee 400 15.4 MAC 7-Watt 150mWatt
Data Storage	60 days
Updates	Automatic firmware updates

Warranty and Certifications	
Warranty	Three limited warranty
Certifications	UL, CE, FCC, IEC, ENEC, and 2, FCC Part 15 (Class B)



FCC ID: YAW529027
 E503346

© 2019 SunPower Corporation. All rights reserved. SUNPOWER, SUNPOWER logo, and ENERGYLINK are trademarks or registered trademarks of SunPower Corporation. iPhone and iPad are registered trademarks of Apple Inc. Android and Google Play are trademarks of Google Inc. All other trademarks are the property of their respective owners. Specifications included in the datasheet are subject to change without notice.

530536 Rev/C
SUNPOWER®

SUNPOWER®



**WOLF RIVER
SCIENTIFIC**
101 HART PARWAY, SUITE G
FAIRMONT, MN 56031
PHONE: (763) 254-6652
CONTACT: (763) 254-6652
www.wolfriver.com

Revision	Date	Rev
CAD 1	12-04-2024	01
CAD 2	01-09-2024	01
CAD 3	10-09-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
A/E: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:



Sheet Name

RAIL SPEC SHEET

Sheet Size

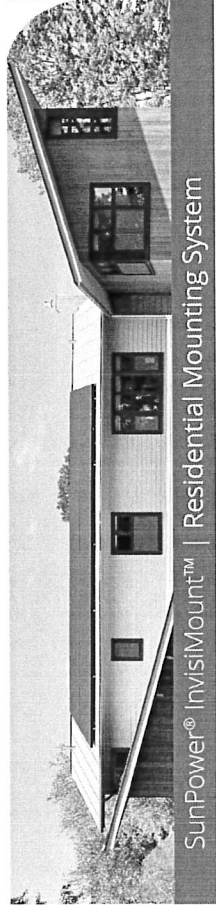
ANSI B 11" X 17"

Sheet Number

D 1.4

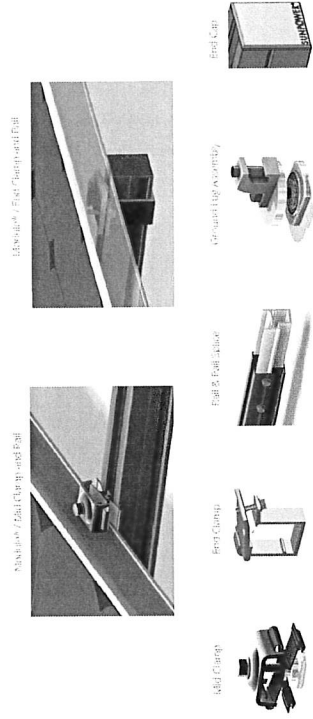


SunPower® InvisiMount™ Residential Mounting System



SunPower® InvisiMount™ Residential Mounting System

InvisiMount Component Images



InvisiMount® End Cap (not sold)

InvisiMount® Rail (not sold)

InvisiMount® End Clamp

InvisiMount® Rail Clamp

InvisiMount® Rail Adapter

InvisiMount® End Cap

Component	Material	Weight
Mid Clamp	Black Anodized Aluminum	11.8 lbs (5.4 kg)
End Clamp	Black Anodized Aluminum	11.8 lbs (5.4 kg)
Rail	Black Anodized Aluminum	11.8 lbs (5.4 kg)
Rail Splice	Black Anodized Aluminum	11.8 lbs (5.4 kg)
Ground Lug Assembly	Black Anodized Aluminum	11.8 lbs (5.4 kg)
End Cap	Black Anodized Aluminum	11.8 lbs (5.4 kg)

InvisiMount Operating Conditions	
Temperature	-40° F to 140° F (-40° C to 60° C)
Wind Speed	70 mph (112 km/h)
Seismic	ASCE 7-16, Category I

InvisiMount Warranties And Certifications	
Warranty	10-year product warranty 5-year linear warranty
Certifications	UL 2703 Listed Class 2 fire rating when distance between roof and backboard is maintained IP65 for backboard and backboard assembly

Roof Attachment Hardware Supported by InvisiMount System Design Tool	
Applies to:	<ul style="list-style-type: none"> Commercial, Agricultural, Residential Concrete, Metal, Single-Pipe, Exchange, Wood, Asphalt Flat, Gable, Hip, Shed, Vertical, and Inverted 100-500 sq ft interface for Other Roof Attachments

*Maximum weight is based on the manufacturer's specifications. Always consult the manufacturer's specifications for the correct installation and use of the product. Always consult the manufacturer's specifications for the correct installation and use of the product. Always consult the manufacturer's specifications for the correct installation and use of the product.

Elegant Simplicity

SunPower® InvisiMount™ is a SunPower designed rail-based mounting system. The InvisiMount System addresses residential sloped roofs and combines faster installation time, design flexibility, and superior acoustics. The InvisiMount product was specifically envisioned and engineered to pair with SunPower modules. The resulting system-level approach will amplify the aesthetic and installation benefits for both homeowners and installers.

- Simple and Fast Installation**
- Integrated mosaic-to-rail grounding
 - Pre-assembled mid and end clamps
 - Levitating mid clamp for easy placement
 - Mid clamp with facilitates even module spacing
 - Simple pre-drilled rail splice
 - UL 2703 listed integrated grounding

- Flexible Design**
- Addresses nearly all sloped residential roofs
 - Design in landscape and portrait
 - Rails enable easy obstacle management

- Customer-Preferred Acoustics**
- #1 module and #1 mounting aesthetics
 - Best-in-class system aesthetics
 - Premium, low profile design
 - Back-mounted components
 - Hidden mid clamps and end clamps hardware, and clipped, flush rails

- Part of Superior System**
- Built for use with SunPower DC and AC modules
 - Best-in-class system reliability and aesthetics
 - Combine with SunPower modules and monitoring app



sunpower.com



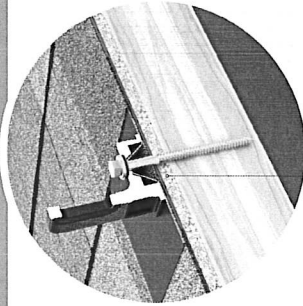
SUNPOWER®

SUNPOWER®



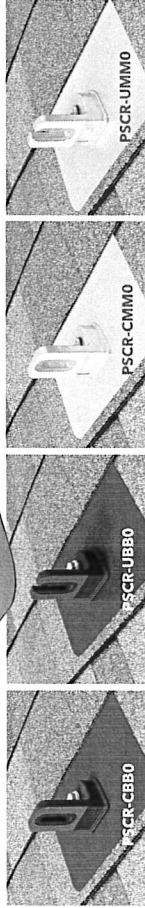
A Better Day on the Job

COMP MOUNT



One-Piece Flashing with Elevated Cone
No press-fits or deck-level EPDM washers to fail

Encapsulating Design
Raises the water seal 0.9" Above roof deck



Simple 3-Piece Design Watertight For Life

Pegasus solar's comp mounts are a cost effective, high-quality option for rail installations on composition shingle roofs. Designed to last decades, the one-piece flashing with elevated cone means there is simply nothing to fail.



25-Year Warranty
Manufactured with advanced materials and coatings to outlast the roof itself



Code Compliant
Fully/IBC/CBC Code Compliant
Exceeds ASCE 7-16 Standards



Superior Waterproofing
Tested to AC208 without sealant
Water seal elevated 0.9" above

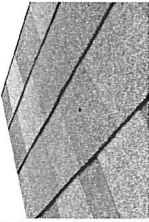


All-in-One Kit Packaging
Flashings, L-Feet and SS lags with bonded EPDM washers are included in each 24-pack

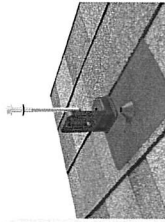
Pegasus Solar Inc | 506 West Ohio Avenue, Richmond, CA 94804 | T: 510.210.3797 | www.pegasussolar.com



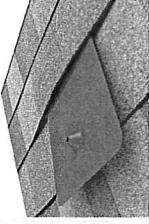
COMP MOUNT



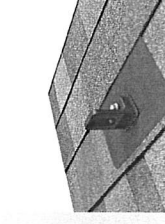
1 Drill pilot hole in the center of the rafter.



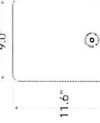
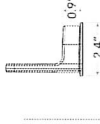
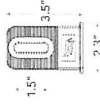
3 Place L-Foot over cone and install lag with washer through L-Foot.



2 Optional. Apply a strip of sealant to the flashing and position under 2nd shingle course, cone over pilot hole.



4 Drive lag to required depth. Attach rail per rail manufacturer's instructions.



SPECIFICATIONS

SKU	Finish	L-Foot Type	Kit Contents	Rail Type	Certifications	Install Application	Compatible Rail	Kit Quantity	Boxes per Pallet
PSCR-CBBO	Black	Closed Slot	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	IBC, ASCE/SEI 7-16, AC208	Relief Systems	Moist	24	72	
PSCR-UBBO	Black	Open Slot	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer and M10 Hex Bolt	IBC, ASCE/SEI 7-16, AC208	Relief Systems	Moist	24	72	
PSCR-CBBH	Mill	Closed Slot	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	IBC, ASCE/SEI 7-16, AC208	Relief Systems	Moist	24	72	
PSCR-CMMO	Mill	Closed Slot	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	IBC, ASCE/SEI 7-16, AC208	Relief Systems	Moist	24	72	
PSCR-UMMO	Mill	Open Slot	L-Foot, Flashing, 5/16" x 4 1/2" SS Lag with metalized EPDM washer	IBC, ASCE/SEI 7-16, AC208	Relief Systems	Moist	24	72	

Printed under US Patent 10,443,847. Additional patents pending. All rights reserved. ©2021 Pegasus



REVISIONS

Revision	Date	By
001	27-Jul-2024	00
002	10-Aug-2024	01
003	10-Aug-2024	02

Signature with Seal

Project Name & Address
 TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FARMONT, MN 56031
 AH: CITY OF FARMONT
 UTILITY: FARMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
 TRIVENTCAD
 TRIVENT CAD SOLUTION

Sheet Name
 MOUNTING
 SPEC SHEET

Sheet Size
 ANSIB
 11" X 17"

Sheet Number
 D 1.5

MIDNITE SOLAR INC.

Surge Protection

Surge Protection You Can Count On!

MidNite Solar Surge Protection Devices are type 1 devices, designed for indoor and outdoor applications. Engineered for both AC and PV DC electrical systems, they provide protection to service panels, load centers or electronic devices that are directly connected to a MidNite Surge Protection Device (SPD).

MidNite's SPD's are offered in four models to protect a variety of different voltage ranges. They achieve this protection by clamping surge voltage to a level that your system can sustain without damaging the components of the system.

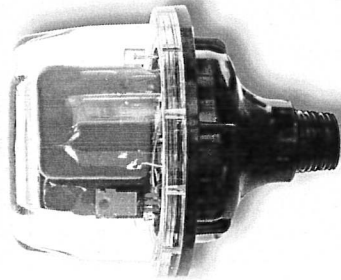
Compare our SPD's against other surge protection devices. You will see there is no comparison in both our price and features. All our SPD's have a 5 year warranty.

With lightning you only get one chance, so get the best!

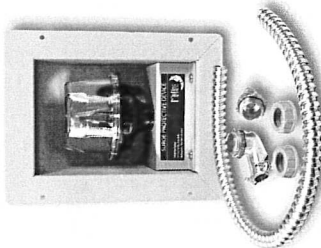


www.midnitesolar.com/spd

19115 - 62nd Ave. NE, Arlington, WA. 360-403-7207 FAX: 360-691-6862



MNSPD300ACFM (Cut-in box)
(MNSPD-300-AC included)



- Four Models:
MNSPD-115
MNSPD-300-AC
MNSPD-300-DC
MNSPD-600



MidNite Surge Protection Devices

PART NUMBER	MNSPD-115	MNSPD-300-AC	MNSPD-300-DC	MNSPD-600
Nominal Voltage	0 to 90 VAC 0 to 115 VDC	0 to 250 VAC	0 to 300 VDC	0 to 480 VAC 0 to 600 VDC
MCOV	180V	470V	470V	780V
VPR Line to Ground	600V	1200V	1200V	1800V
Suggested Placement	Up to 90VAC circuits. 12V, 24V, 48VDC battery circuits	120/240VAC circuits	Off-grid PV combiners Charge controller inputs up to 300VDC	316V/480VAC circuits Grid-tie PV combiners Grid-tie inverter input Non-Isolated Inverters
Type	UL1449 4th Ed. Type 1	UL1449 4th Ed. Type 1	UL1449 4th Ed. Type 1	UL1449 4th Ed. Type 1
Diagnostic Blue LED	MNSPD-300-AC LED indicates when voltage is present between L1 + ground and L2 + ground	MNSPD-115, MNSPD-300-DC and MNSPD-600: LED indicates when voltage is present between L1 + L2 (PV+ PV-)		
Thermal Disconnect	Internal Fuse			
Response Time	<1 micro sec.			



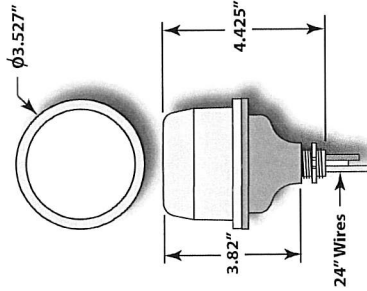
Performance
 Surge Current Rating per Phase 80kA
 Short-Circuit Current Rating 10kA

Fusing
 Thermal Fusing Individually fused MOVs
 Over Current Fusing Yes
 Operating Frequency 0 to 500 Hz

Mechanical Description
 Enclosure Polycarbonate UL94V-0
 Environmental Rating Type 4X
 Connection Method #12 AWG
 Weight 1 lb.
 Mounting Method 1/2" Conduit Knockout
 Operating Altitude Sea Level - 12,000' (3,658 Meters)
 Storage temp -40° F to +185° F (-40° C to +85° C)
 Operating temp -40° F to +185° F (-40° C to +85° C)

Diagnostics
 Blue status LED, one per leg

Listings and Performance
 UL Standard for Safety, UL-1449 Surge Protective Devices-Fourth Edition
 CSA C22.2 No. 8-MT1986 Electromagnetic Interference (EMI) Filters, Fourth Edition



Model No.	Max Operating Voltage	Surge Current per Phase	Configuration	MCOV	SCCR	VPR 600V/3kA L G
MNSPD-115	100 VAC/150VDC	80kA	1 Ø 3-wire (2 Legs)	180V/L-N	10kA	600V
MNSPD-300-AC	300VAC	80kA	1 Ø 3-wire (2 Legs)	470V/L-N	10kA	1200V
MNSPD-300-DC	385VDC	80kA	1 Ø 3-wire (2 Legs)	470V/L-N	10kA	1200V
MNSPD-600	480VAC/600VDC	80kA	1 Ø 3-wire (2 Legs)	780V/L-N	10kA	1800V

www.midnitesolar.com/spd

19115 - 62nd Ave NE, Arlington, WA 98223 PH. 360-403-7207 FAX 360-691-6862

WOLF RIVER Electric
 101 LAUREL PARKWAY, E. SUITE C
 ISANTI, MN 55040
 TEL: 763-429-1622
 CONTACT: (763) 225-8662
www.wolfriver.com

Revis	Date	Rev
CAD 1	12-04-2024	01
CAD 2	07-09-2024	01
CAD 3	10-09-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
 923 N NORTH AVE, FAIRMONT, MN 56031
 A.H.: CITY OF FAIRMONT
 UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY

TRAVENTCAD
 TRAVENT CAD SOLUTIONS

Sheet Name

SPD SPEC SHEET

Sheet Size

ANSI B
 11" X 17"

Sheet Number

D.16

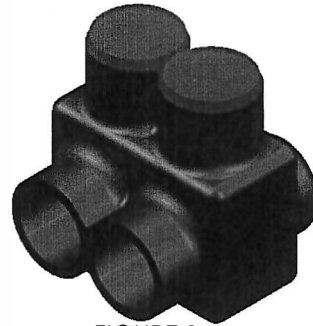


FIGURE 1
IT

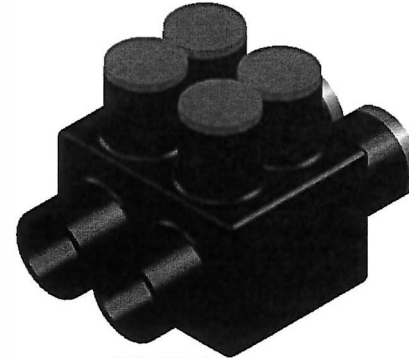


FIGURE 3
ITH



FIGURE 2
DUAL ENTRY



FIGURE 4
ITO

PART #	FIG. #	WIRE RANGE	HEX SIZE	L	W	H
IT4	1	4 - 14	SLOTTED	1.12	1.18	1.38
ITO4	4	4 - 14	SLOTTED	1.12	1.25	1.38
IT1/0	1	1/0 - 14	3/16	1.62	1.62	1.75
ITO1/0	4	1/0 - 14	3/16	1.62	1.75	1.75
IT3/0	1	3/0 - 6	1/4	1.84	1.75	1.87
ITO3/0	4	3/0 - 6	1/4	1.84	1.87	1.87
IT250	2	250 - 6	5/16	2.12	2.25	2.25
IT350	2	350 - 6	5/16	2.47	2.50	2.44
IT500	2	500 - 4	5/16	2.81	2.87	2.94
IT750*	2	750 - 250	3/8	3.48	3.50	3.50
IT600††	2	600 - 6	5/16	2.34	2.94	3.05
ITH750	3	750 - 250	5/16	3.48	4.50	3.50

†† 600 SERIES ARE AL7CU AND 75 °C

*NOT UL LISTED

NOTES:

1. CONNECTOR MANUFACTURED FROM 6061-T6 ALUMINUM ALLOY.
2. UL LISTED PER UL486A/B SPECIFICATIONS FOR 600V.
3. DUAL RATED FOR 90°C COPPER AND/OR ALUMINUM CONDUCTOR
4. COLD TEMPERATURE RATED TO -45°C.
5. HIGH DIELECTRIC STRENGTH INSULATION IS ABRASION, CHEMICAL AND UV RESISTANT.

CONTACT NSI FOR SALES @ 800.321.5847

		POLARIS SALES CO. INC					
PROPRIETARY AND CONFIDENTIAL		11625 PROSPEROUS DRIVE ODESSA, FL 33556					
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF POLARIS SALES CO. INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF POLARIS SALES CO. INC. IS PROHIBITED.		TITLE: IT SERIES INSULATED CONNECTORS					
<table border="1"> <thead> <tr> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>S.PARRY</td> <td>6/13/2012</td> </tr> </tbody> </table>		NAME	DATE	S.PARRY	6/13/2012	DWG. NO. IT SERIES	
NAME	DATE						
S.PARRY	6/13/2012						
MATERIAL: N/A		NOT TO SCALE					
		SHEET: 1 OF 1					



REVISIONS		
Description	Date	Rev
CAD 1	27-July-2024	00
CAD 2	07-Aug-2024	01
CAD 3	10-Aug-2024	02

Signature with Seal

Project Name & Address

TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
AHLU CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:



TRIVENT CAD SOLUTION

Sheet Name
TAP KIT
SPEC SHEET

Sheet Size

ANSI B
11" X 17"

Sheet Number

D 1.7

Solar PV Inspection Checklist for REI #ELE- _____ Installer _____
Job Address _____ City/Township _____

Required Documentation

- Manufacturer's specifications for the inverter(s)
- Manufacturer's specifications for the module(s)
- Manufacturer's specifications for the optimizer(s) (if used)
- Verification that the racking system grounding and bonding is listed

PV Inverter

- Is the PV system utility-interactive, stand alone or multimode?
- Is all the equipment listed for PV application or be evaluated for the application and have a field label applied? 690.4
- Is the system solidly grounded, ungrounded, or functionally grounded? 690.2 and 690.41
- Has DC Ground-Fault Protection been provided and properly labeled? 690.41(B)?
- What is the maximum PV system voltage and is the maximum 600 volts or less for a dwelling or 1000 volts or less for non-dwelling or 1500 volts or less when not located on a building? 690.7
- Is all listed equipment and conductors rated for the maximum voltage? 690.7
- Determine the maximum circuit current for the PV Source and Output Circuit; Inverter Output Circuit; Inverter Input Circuit; and DC to DC Converter Output (refer to inverter documentation). 690.8

System Grounding

- Is all exposed non-current carrying metal parts of the PV system grounded? 690.43 and 690.47
- Are the mounting structures or systems used for equipment grounding? 690.43
- Are the interconnecting devices used for equipment grounding listed and identified and are all connections properly torqued? 690.43 and 110.14
- Are the EGC properly sized and protected, if exposed not smaller than #6? 690.45, 250.122, and 250.120(C)
- Has the grounding electrode system been installed? 690.47
- If both are present, has the DC grounding electrode system been bonded to the AC GES? 690.47

Wiring Methods and Disconnecting Means

- Are the conductor and cable ampacities determined at 125% before adjustment factors? 690.8(B)
- How are the PV Source and Output Circuit protected from overcurrent? 690.9
- Do AC or DC OCPD's have the appropriate voltage, current and interrupt ratings? 690.9
- Has arc-fault circuit protection been provided for DC source and/or output circuits? 690.11
- Is a rapid shutdown required and if so, how is it accomplished and identified? 690.12 & 690.56(C)
- Are the PV disconnect permanently marked and installed in a readily accessible location? 690.13
- Are the Isolating devices or equipment disconnecting means installed in circuits connected to equipment at a location within the equipment, or within sight and 10 feet of the equipment? (Where the maximum circuit current is greater than 30 amperes an equipment disconnecting means shall be provided for isolation.) 690.15
- Has the fuse disconnecting means, if required, been installed? 690.15 and 240.40
- Are PV source or output circuits > 30 volts in a raceway or guarded if readily accessible? 690.31
- Is single conductor cable used outdoors sunlight resistant Type USE-2, Type RHW-2, or listed & labeled PV wire, and properly support and secured? 690.31(C)
- Are PV source or output circuits inside a building in a metal raceway and marked? 690.31(D)

Interconnection

- Has a plaque or directory been installed at each disconnecting means (capable of interconnection) denoting all electric power sources & power production sources? 705.10
- Has the point of connection to other sources been installed per 705.11 or 705.12?
- Are the utility interactive inverters connected to the system through a dedicated circuit breaker or fusible disconnecting means? 705.12
- Does the bus or conductor ampacity comply with 705.12?
- Have all the required labels been applied? (See label list.)



REVISIONS		
Description	Date	Rev
CAD 1	27-July-2024	00
CAD 2	07-Aug-2024	01
CAD 3	16-Aug-2024	02

Signature with Seal

Project Name & Address
TYLER HARTWIG RESIDENCE
923 N NORTH AVE, FAIRMONT, MN 56031
AHL: CITY OF FAIRMONT
UTILITY: FAIRMONT PUBLIC UTILITIES COMPANY

DESIGNED BY:
TRIVENTCAD
TRIVENT CAD SOLUTION

Sheet Name
MN CHECKLIST

Sheet Size
ANSI B 11" X 17"

Sheet Number
D 1.8