



Date December 22, 2025

**ACCEPTING COMPLETED CONSTRUCTION AND APPROVING FINAL PAYMENT
FOR HARRIET STREET SOLAR FIELD, VAN MAANEN ELECTRIC, INC.**

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DES MOINES, IOWA: That the attached report of the Des Moines City Engineer, showing the cost of the construction of the Harriet Street Solar Field, Activity ID 102022019, in accordance with the contract approved on December 12, 2022, by Roll Call No. 22-1942, between Van Maanen Electric, Inc., Nathan Van Maanen, President, 500 Iowa Speedway Drive, Newton, IA, 50208, and the City of Des Moines, and recommending the acceptance thereof, be and the same is hereby approved, and accepted.

BE IT FURTHER RESOLVED: That \$3,263,847.53 is the total cost, of which \$3,165,932.10 has been paid the Contractor, and \$0.00 is now due and is hereby approved as final partial payment for the above project, the remaining balance of \$97,915.43 is to be paid at the end of thirty days, with funds retained for unresolved claims on file in accordance with Iowa Code Chapter 573.

BE IT FURTHER RESOLVED: That the City Manager be and is hereby authorized and directed to certify the Pollution Prevention Plan Inspection Summary and the NPDES Stormwater General Permit Notice of Discontinuation for the above referenced project on behalf of the City of Des Moines and submit said documents to the Iowa Department of Natural Resources.

BE IT FURTHER RESOLVED: That the Director of Finance be and is hereby authorized to release said retainage if suit is not filed as above provided.

Moved by _____ to adopt. Second by _____

FORM APPROVED:

FUNDS AVAILABLE:

/s/ Glenna K. Frank

/s/Nickolas J. Schaul

Glenna K. Frank
Deputy City Attorney

Nickolas J. Schaul
Director of Finance

Funding Source: 2025-26 CIP, Page 40, Greenhouse Relocation, BL134, American Rescue Plan Act (ARPA) Funds

SLN

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
BOESEN				
COLEMAN				
GATTO				
MANDELBAUM				
SIMONSON				
VOSS				
WESTERGAARD				
TOTAL				
MOTION CARRIED			APPROVED	
_____ Mayor				

CERTIFICATE

I, Laura Baumgartner, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

City Clerk

PROJECT SUMMARY

Harriet Street Solar Field

Activity ID 102022019

On December 12, 2022, under Roll Call No. 22-1942, the Council awarded the contract for the above improvements to Van Maanen Electric, Inc., in the amount of \$1,983,314.00. Tabulated below is a history of project change orders.

Change Order No.	Initiated By	Description	Amount
1	Consultant	2/20/2023 Increase Animal Control Facility solar array size from 382 kW DC to 875 kW DC per ASI-02.	\$1,015,484.00
2	City	5/25/2023 Add project changes found during construction.	\$35,789.60
3	City	7/19/2023 Add project changes found during construction related to uncapped landfill site conditions.	\$88,075.00
4	City	9/15/2023 Add project changes found during construction.	\$44,220.00
5	City	10/26/2023 Add project changes found during construction.	\$1,627.15
6	City	12/6/2023 Add project changes found during construction.	\$80,784.31
7	City	5/15/2024 Add project changes found during construction.	\$14,553.47
Original Contract Amount			\$1,983,314.00
Total Change Orders			\$1,280,533.53
Percent of Change Orders to Original Contract			64.57%
Total Contract Amount			\$3,263,847.53

Department of Engineering
City of Des Moines, Iowa



December 22, 2025

CERTIFICATION OF COMPLETION

AGENDA HEADING:

Accepting completed construction and approving final payment for the Harriet Street Solar Field, Van Maanen Electric, Inc.

SYNOPSIS:

Approve the Engineer's Certification of Completion, accept construction of said improvement, and authorize final payment to the contractor.

FISCAL IMPACT:

Amount: \$3,263,847.53 As-Built Contract Cost

Funding Source: 2025-26 CIP, Page 40, Greenhouse Relocation, BL134, American Rescue Plan Act (ARPA) Funds

CERTIFICATION OF COMPLETION:

On December 12, 2022, under Roll Call No. 22-1942, the City Council awarded a contract to Van Maanen Electric, Inc., Nathan Van Maanen, President, 500 Iowa Speedway Drive, Newton, IA 50208 for the construction of the following improvement:

Harriet Street Solar Field, 102022019

The improvement will construct solar arrays to provide renewable energy to two (2) new City of Des Moines facilities currently under construction - the Animal Control Facility at 1441 Harriet Street and the Greenhouse Facility at 1553 Maury Street. Solar arrays will be located on approximately six (6) acres of City-owned property in the area east of S.E. 15th Street, north of Harriet Street, and south of Maury Street. Work includes clearing and grubbing, ballast-mounted solar arrays, inverters, electrical infrastructure, and associated sitework, including security fencing, security cameras, and native seeding; all in accordance with the contract documents, including Plan File No. 646-140/161 located at 1643 Maury Street and 1085 SE 15th Street, Des Moines, IA

I hereby certify that the construction of said Harriet Street Solar Field, Activity ID 102022019, has been completed in substantial compliance with the terms of said contract, and I hereby recommend that the work be accepted. The work commenced on March 6, 2023, and was completed on October 3, 2025.

I further certify that \$3,263,847.53 is the total cost of said improvement, of which \$3,165,932.10 has been paid the Contractor and \$0.00 is now due and is hereby approved as final partial payment for the above project, the remaining balance of \$97,915.43 is to be paid at the end of thirty days, with funds retained for unresolved claims on file in accordance with Iowa Code Chapter 573. The amount of completed work is shown on the attached Estimate of Construction Completed.

Steven L. Naber, P.E.
Des Moines City Engineer

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ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA



ESTIMATE OF CONSTRUCTION COMPLETED

FINAL PAYMENT - PARTIAL PAYMENT NO. 16

PROJECT: HARRIET STREET SOLAR FIELD
CONTRACTOR: VAN MAANEN ELECTRIC, INC.

IDOT Proj No: N/A
Activity ID: 10-2022-019
Date: 10/3/2025

LINE NO.	DESCRIPTION		SCHEDULED VALUE	WORK COMPLETED		STORED MATERIALS	%	TOTAL COMPLETED AND STORED
				PREVIOUS APPLICATIONS	THIS PERIOD			
1	Bond		\$19,833.14	\$19,833.14	\$0.00	\$0.00	100.00%	\$19,833.14
2	General Conditions	M	\$38,400.00	\$38,400.00	\$0.00	\$0.00	100.00%	\$38,400.00
3	General Conditions	L	\$27,450.00	\$27,450.00	\$0.00	\$0.00	100.00%	\$27,450.00
4	Basic Electrical Requirements	M	\$18,600.00	\$18,600.00	\$0.00	\$0.00	100.00%	\$18,600.00
5	Basic Electrical Requirements	L	\$13,550.00	\$13,550.00	\$0.00	\$0.00	100.00%	\$13,550.00
6	Wire and Cable	M	\$116,000.00	\$116,000.00	\$0.00	\$0.00	100.00%	\$116,000.00
7	Wire and Cable	L	\$49,800.00	\$49,800.00	\$0.00	\$0.00	100.00%	\$49,800.00
8	Grounding and Bonding	M	\$17,000.00	\$17,000.00	\$0.00	\$0.00	100.00%	\$17,000.00
9	Grounding and Bonding	L	\$18,640.00	\$18,640.00	\$0.00	\$0.00	100.00%	\$18,640.00
10	Supporting Devices	M	\$17,100.00	\$17,100.00	\$0.00	\$0.00	100.00%	\$17,100.00
11	Supporting Devices	L	\$21,350.00	\$21,350.00	\$0.00	\$0.00	100.00%	\$21,350.00
12	Conduit and Boxes	M	\$41,700.00	\$41,700.00	\$0.00	\$0.00	100.00%	\$41,700.00
13	Conduit and Boxes	L	\$74,900.00	\$74,900.00	\$0.00	\$0.00	100.00%	\$74,900.00
14	Electrical Identification	M	\$6,000.00	\$6,000.00	\$0.00	\$0.00	100.00%	\$6,000.00
15	Electrical Identification	L	\$3,127.00	\$3,127.00	\$0.00	\$0.00	100.00%	\$3,127.00
16	Power System Study	M	\$4,000.00	\$4,000.00	\$0.00	\$0.00	100.00%	\$4,000.00
17	Power System Study	L	\$2,000.86	\$2,000.86	\$0.00	\$0.00	100.00%	\$2,000.86
18	Panelboards	M	\$28,000.00	\$28,000.00	\$0.00	\$0.00	100.00%	\$28,000.00
19	Panelboards	L	\$18,900.00	\$18,900.00	\$0.00	\$0.00	100.00%	\$18,900.00
20	Fuses	M	\$4,200.00	\$4,200.00	\$0.00	\$0.00	100.00%	\$4,200.00
21	Fuses	L	\$7,300.00	\$7,300.00	\$0.00	\$0.00	100.00%	\$7,300.00
22	Disconnect Switches	M	\$3,500.00	\$3,500.00	\$0.00	\$0.00	100.00%	\$3,500.00
23	Disconnect Switches	L	\$1,850.00	\$1,850.00	\$0.00	\$0.00	100.00%	\$1,850.00
24	Solar Photovoltaic Systems	M	\$704,500.00	\$704,500.00	\$0.00	\$0.00	100.00%	\$704,500.00
25	Solar Photovoltaic Systems	L	\$230,400.00	\$230,400.00	\$0.00	\$0.00	100.00%	\$230,400.00
26	LED Lighting	M	\$43,500.00	\$43,500.00	\$0.00	\$0.00	100.00%	\$43,500.00
27	LED Lighting	L	\$34,000.00	\$34,000.00	\$0.00	\$0.00	100.00%	\$34,000.00
28	Basic Communications Systems Requirements	M	\$2,900.00	\$2,900.00	\$0.00	\$0.00	100.00%	\$2,900.00
29	Basic Communications Systems Requirements	L	\$4,650.00	\$4,650.00	\$0.00	\$0.00	100.00%	\$4,650.00
30	Exterior Communications Pathways	M	\$14,800.00	\$14,800.00	\$0.00	\$0.00	100.00%	\$14,800.00
31	Exterior Communications Pathways	L	\$13,400.00	\$13,400.00	\$0.00	\$0.00	100.00%	\$13,400.00
32	Identification and Administration	M	\$1,850.00	\$1,850.00	\$0.00	\$0.00	100.00%	\$1,850.00

LINE NO.	DESCRIPTION		SCHEDULED VALUE	WORK COMPLETED		STORED MATERIALS	%	TOTAL COMPLETED AND STORED
				PREVIOUS APPLICATIONS	THIS PERIOD			
33	Identification and Administration	L	\$3,200.00	\$3,200.00	\$0.00	\$0.00	100.00%	\$3,200.00
34	Communication Equipment Rooms (CER)	M	\$19,000.00	\$19,000.00	\$0.00	\$0.00	100.00%	\$19,000.00
35	Communication Equipment Rooms (CER)	L	\$7,800.00	\$7,800.00	\$0.00	\$0.00	100.00%	\$7,800.00
36	Backbone Cabling Requirements	M	\$16,000.00	\$16,000.00	\$0.00	\$0.00	100.00%	\$16,000.00
37	Backbone Cabling Requirements	L	\$6,850.00	\$6,850.00	\$0.00	\$0.00	100.00%	\$6,850.00
38	Testing	M	\$1,250.00	\$1,250.00	\$0.00	\$0.00	100.00%	\$1,250.00
39	Testing	L	\$700.00	\$700.00	\$0.00	\$0.00	100.00%	\$700.00
40	Structured Cabling System Warranty	M	\$1,850.00	\$1,850.00	\$0.00	\$0.00	100.00%	\$1,850.00
41	Structured Cabling System Warranty	L	\$900.00	\$900.00	\$0.00	\$0.00	100.00%	\$900.00
42	Site Preparation	M	\$50,725.00	\$50,725.00	\$0.00	\$0.00	100.00%	\$50,725.00
43	Site Preparation	L	\$108,000.00	\$108,000.00	\$0.00	\$0.00	100.00%	\$108,000.00
44	Excavation	M	\$4,050.00	\$4,050.00	\$0.00	\$0.00	100.00%	\$4,050.00
45	Excavation	L	\$20,500.00	\$20,500.00	\$0.00	\$0.00	100.00%	\$20,500.00
46	Fill	M	\$9,350.00	\$9,350.00	\$0.00	\$0.00	100.00%	\$9,350.00
47	Fill	L	\$12,000.00	\$12,000.00	\$0.00	\$0.00	100.00%	\$12,000.00
48	Sediment and Erosion Control	M	\$3,716.00	\$3,716.00	\$0.00	\$0.00	100.00%	\$3,716.00
49	Sediment and Erosion Control	L	\$10,402.00	\$10,402.00	\$0.00	\$0.00	100.00%	\$10,402.00
50	Granular Subbase	M	\$3,000.00	\$3,000.00	\$0.00	\$0.00	100.00%	\$3,000.00
51	Granular Subbase	L	\$4,500.00	\$4,500.00	\$0.00	\$0.00	100.00%	\$4,500.00
52	Concrete Paving	M	\$7,080.00	\$7,080.00	\$0.00	\$0.00	100.00%	\$7,080.00
53	Concrete Paving	L	\$5,500.00	\$5,500.00	\$0.00	\$0.00	100.00%	\$5,500.00
54	Turf and Grasses	M	\$33,759.00	\$33,759.00	\$0.00	\$0.00	100.00%	\$33,759.00
55	Turf and Grasses	L	\$31,581.00	\$31,581.00	\$0.00	\$0.00	100.00%	\$31,581.00
56	Plants	M	\$8,000.00	\$8,000.00	\$0.00	\$0.00	100.00%	\$8,000.00
57	Plants	L	\$10,400.00	\$10,400.00	\$0.00	\$0.00	100.00%	\$10,400.00
1001	CR-01 - Increase Animal Control Facility Array Size							
	CR-01.1 - Electrical Scope	M	\$28,425.51	\$28,425.51	\$0.00	\$0.00	100.00%	\$28,425.51
	CR-01.1 - Electrical Scope	L	\$19,153.59	\$19,153.59	\$0.00	\$0.00	100.00%	\$19,153.59
	CR-01.2 - Solar Scope	M	\$836,139.85	\$836,139.85	\$0.00	\$0.00	100.00%	\$836,139.85
	CR-01.2 - Solar Scope	L	\$82,695.15	\$82,695.15	\$0.00	\$0.00	100.00%	\$82,695.15
	CR-01.3 - Fencing Scope	M	\$11,646.36	\$11,646.36	\$0.00	\$0.00	100.00%	\$11,646.36
	CR-01.3 - Fencing Scope	L	\$7,764.24	\$7,764.24	\$0.00	\$0.00	100.00%	\$7,764.24
	CR-01.4 - Grading Scope	M	\$11,880.00	\$11,880.00	\$0.00	\$0.00	100.00%	\$11,880.00
	CR-01.4 - Grading Scope	L	\$7,920.00	\$7,920.00	\$0.00	\$0.00	100.00%	\$7,920.00
	CR-01.5 - Landscaping Scope	M	\$393.36	\$393.36	\$0.00	\$0.00	100.00%	\$393.36
	CR-01.5 - Landscaping Scope	L	\$262.24	\$262.24	\$0.00	\$0.00	100.00%	\$262.24
	CR-01.6 - Camera Scope	M	\$5,982.41	\$5,982.41	\$0.00	\$0.00	100.00%	\$5,982.41
	CR-01.6 - Camera Scope	L	\$3,221.29	\$3,221.29	\$0.00	\$0.00	100.00%	\$3,221.29
2001	CR-02 - Off-site fill from adjacent City project		\$35,789.60	\$35,789.60	\$0.00	\$0.00	100.00%	\$35,789.60
3001	Haul and spread off-site topsoil from City stockpile		\$52,701.00	\$52,701.00	\$0.00	\$0.00	100.00%	\$52,701.00

LINE NO.	DESCRIPTION	SCHEDULED VALUE	WORK COMPLETED		STORED MATERIALS	%	TOTAL COMPLETED AND STORED
			PREVIOUS APPLICATIONS	THIS PERIOD			
3002	Additional grading and preparation of areas outside of array footprints	\$48,290.00	\$48,290.00	\$0.00	\$0.00	100.00%	\$48,290.00
3003	Modified grading at Animal Control Facility Array	\$8,910.00	\$8,910.00	\$0.00	\$0.00	100.00%	\$8,910.00
3004	Remove unforeseen trash and debris from areas of work	\$7,700.00	\$7,700.00	\$0.00	\$0.00	100.00%	\$7,700.00
3005	Added dumpsters for unforeseen trash and debris haul off	\$5,124.00	\$5,124.00	\$0.00	\$0.00	100.00%	\$5,124.00
4001	CR-03 - Load and Spread Existing On-Site Stockpile	\$16,775.00	\$16,775.00	\$0.00	\$0.00	100.00%	\$16,775.00
4002	Relocate Existing Tree by GH Array Gate	\$825.00	\$825.00	\$0.00	\$0.00	100.00%	\$825.00
4003	Remove Disking Scope in Alternate Area	-\$8,030.00	-\$8,030.00	\$0.00	\$0.00	100.00%	(\$8,030.00)
5001	Repair Damaged Buried Storm Manhole	\$3,124.00	\$3,124.00	\$0.00	\$0.00	100.00%	\$3,124.00
5002	Seeding Scope Revisions	\$38,503.15	\$38,503.15	\$0.00	\$0.00	100.00%	\$38,503.15
5003	Credit for Electrical Equipment at Animal Control Facility Array	-\$40,000.00	-\$40,000.00	\$0.00	\$0.00	100.00%	(\$40,000.00)
6001	Power and Data Revisions per ASI-007R	\$80,784.31	\$80,784.31	\$0.00	\$0.00	100.00%	\$80,784.31
7001	Data Cabinet Modifications	\$12,482.66	\$12,482.66	\$0.00	\$0.00	100.00%	\$12,482.66
7002	Credit for Lighting Modification	-\$25,401.69	-\$25,401.69	\$0.00	\$0.00	100.00%	(\$25,401.69)
7003	Added Tree Removal at ACF Array	\$27,472.50	\$27,472.50	\$0.00	\$0.00	100.00%	\$27,472.50
TOTAL CONTRACT AMOUNT PLUS CHANGE ORDERS		\$3,263,847.53					
PARTIAL PAYMENT #1		\$19,238.15					
PARTIAL PAYMENT #2		\$164,388.32					
PARTIAL PAYMENT #3		\$141,829.03					
PARTIAL PAYMENT #4		\$38,833.56					
PARTIAL PAYMENT #5		\$1,389,051.15					
PARTIAL PAYMENT #6		\$440,597.31					
PARTIAL PAYMENT #7		\$177,100.88					
PARTIAL PAYMENT #8		\$47,879.20					
PARTIAL PAYMENT #9		\$92,587.23					
PARTIAL PAYMENT #10		\$101,187.77					
PARTIAL PAYMENT #11		\$140,165.85					
PARTIAL PAYMENT #12		\$336,042.37					
PARTIAL PAYMENT #13		\$58,382.04					
PARTIAL PAYMENT #14		\$16,490.81					
PARTIAL PAYMENT #15		\$2,158.43					
THIS PARTIAL PAYMENT		\$0.00					
TOTAL PARTIAL PAYMENTS		\$3,165,932.10					
BALANCE		\$97,915.43					
		100.0%					

PREPARED BY: John Kuder

CHECKED BY: D. K.

TOTAL	\$3,263,847.53
RETAINAGE	\$97,915.43
TOTAL LESS RETAINAGE	\$3,165,932.10
LESS PREVIOUS PAYMENT	\$3,165,932.10
AMOUNT DUE	\$0.00

FINAL PAYMENT - PARTIAL PAYMENT NO. 16