### CITY OF FALCON HEIGHTS

Regular Meeting of the City Council City Hall 2077 West Larpenteur Avenue

> AGENDA - AMENDED April 9, 2025 at 7:00 P.M.

A. B.	CALL TO ORDER: // D
	STAFF PRESENT: LINEHAN
C	APPROVAL OF AGENDA Meyer 5-0

- APPROVAL OF AGENDA C.
  - 1. Presentation from paleBLUEdot on Climate Action Plan Draft
  - 2. Presentation from Tubman
- $\mathbf{E}$ .
- APPROVAL OF MINUTES:

  1. March 4, 2025 City Council Goal Setting Session Minutes Mille 5-0
- PUBLIC HEARINGS: F.

D.

Wasserbis 5

- CONSENT AGENDA: 1. General Disbursements through 4/2/25: \$327,195.00 Payroll through 3/23/25: \$25,004.18 Wire Payments through 3/23/25: \$16,164.98
- 3. Approval of Resolution 25-30 Request for Proposal (RFP) for City Website Redesign
- 4. Approval of Resolution 25-31 Accepting Alice Hausman's Resignation from the State
- 5. Approval of Resolution 25-32 Authorizing Acceptance of a Proposal with DDA Human Resources, Inc. for Completion of a Compensation & Classification Study
- 6. Authorization to Close Fund 429 2023 Street Project Fund and Transfer Remaining Funds to Remaining Debt Service Funds
- 7. Authorization to Enter into a Memorandum of Understanding with Goff Public for Communication Support and Media Relations Services
- 8. Approval of Proposal for Construction Materials Testing for the 2025 Pavement
- 9. Approval of a Resolution 25-33 Supporting a Capitol Region Watershed District Stewardship Grant for Falcon Woods Outlet Control Structure

Miulke 1. Approval of Resolution 25-34 Awarding the Contract for the 2025 Pavement Management Project to Bituminous Roadways, Inc. for \$1,236,579.00

- 2. Approval of Resolution 25-35 Accepting a Proposal from All Energy Solar for City Hall Solar Panels to be Contingent Upon Receipt of the Solar on Public Buildings
- I. INFORMATION/ANNOUNCEMENTS:
- COMMUNITY FORUM:

Please limit comments to 3 minutes per person. Items brought before the Council will be referred for consideration. Council may ask questions for clarification, but no council action or discussion will be held on these items.

K. ADJOURNMENT: Leeby 8:17/2

BLANK PAGE

3



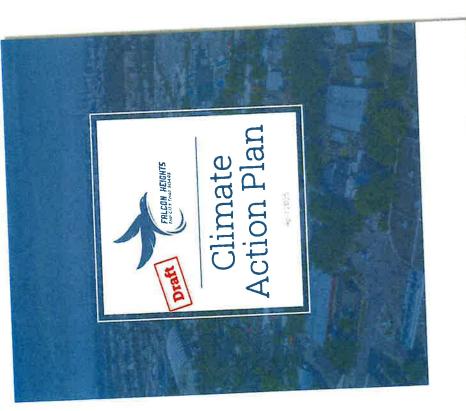


### REQUEST FOR COUNCIL ACTION

Meeting Date	
Agenda Item	April 9, 2025
	Presentation D1
Attachment	Draft Climate Action Plan
Submitted By	Hannah Lynch, Community
	Development Coordinator

Item	Presentation from paleBLUEdot LLC on Climate Action Plan Draft		
Description	The City of Falcon Heights is developing a Climate Action Plan to reduce greenhouse gas emissions, address the climate crisis, and build resilience. The city has already seen the effects of climate change in variable weather conditions, air quality health risks from wildfires, and extreme heat. To address it, the city has goals to reduce greenhouse gas emissions and switch to renewable energy sources. As a GreenStep city and part of the Partners in Energy program through Xcel Energy, we are already taking action to address climate change. A Climate Action Plan is one of the most important next steps for achieving these goals.		
	The plan is being funded by a Minnesota Pollution Control Agency grant via the Local Climate Action Grant Program and is being supported by paleBLUEdot LLC, the City's consultant. The Climate Action Plan stems from the Climate Crisis resolution adopted by the City Council in January 2023, which included a commitment to consider a Climate Action Plan with inputs from the Falcon Heights community and local partners.		
	The Climate Action Plan team has met four times, including one meeting with important advisory stakeholders, to identify goals and actions which serve as the basis for the drafted Climate Action Plan. Ted Redmond, principal from paleBLUEdot LLC, is here tonight to present the draft.		
udget Impact	There will be one more opportunity for residents to provide feedback on the Climate Action Plan at the Sustainability Fair on Saturday, April 26, with the goal of adoption		
	N/A		
ttachment(s)	Draft Falcon Heights Climate Action Plan		
ction(s) equested	No action is requested from the Council for this informational item.		

on Heights Climate Action Plan	
ested from the Council for this informational item.	
City of Falcon Heights, Minnesota	
	4









City of Falcon Heights Climate Action Plan

Draft Plan Review

April 2025

# Introduction



### Our mission:

To hasten the transition to an authentically sustainable, no carbon economy and to elevate the public discourse.



climate planning

sustainability + resilience consulting

renewable energy + net zero planning



Colleen

Educator Community Engagement Consultant Climate Planner

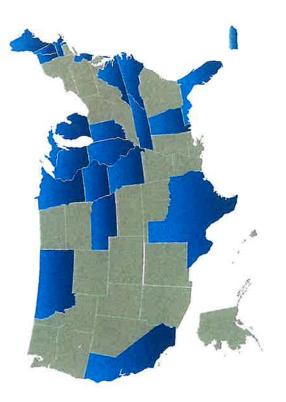


Architect Urban Planner Renewable Energy Consultant



### Introduction

70+ Projects in 22 states Midwest: 50+ Communities



# Climate, Sustainability, and Energy Planning Experience (partial):

### LA CROSSE WISCONSIN











E Fitchourg





CITY OF BLOOMINGTON



Northbrook



Faripault



HENNEPIN COUNTY





14 months

Planning timeframe 100+

Community members engaged 2

Community meetings and events 2

Online community input surveys 31

Planning team members 5

Foundational research documents

### Research Based Climate Action Plan



Climate Action Baseline Study



Climate Vulnerability
Assessment



Community-Wide GHG Inventory



Ground Cover, Tree Canopy & Carbon Sequestration Study



Community-Wide Renewable Energy Potential Study

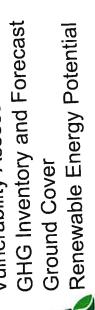


This was a process document to help the planning team and have a place to start the conversation!



Community Survey/Input **Baseline Studies** 

Vulnerability Assessment





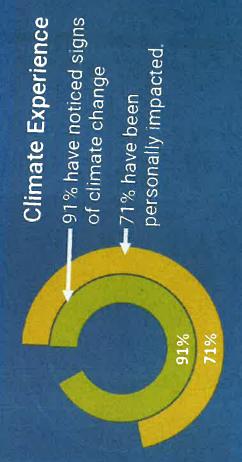
### What We Heard

How concerned are you about climate change?



 Moderately concerned Slightly concerned

84% Moderately, Very, or Extremely Concerned about climate change



### What We Heard

# The City's Role in Climate Action

Respondents reported that they agree or strongly agree...

It is important for Falcon Heights to take action to prepare for the projected impacts of climate It is important for Falcon Heights to take action to reduce greenhouse gas emissions. It is important for Falcon Heights to be a leader in proactively addressing climate change.

74%

830/0

### What We Heard

### Key Themes

Key themes that emerged from the community included:



Action and Leadership Support for Municipal

84% of respondents are concerned about climate change. Additionally, 83% support the City preparing for impacts, 82% back reducing emissions, and 74% want Falcon Heights to lead on climate.



rental properties to meet energy efficiency standards to reduce costs while 67% support incentives for efficiency and solar readiness, and 61% 79% support requiring installation incentives. support solar



**Populations** Vulnerable climate change risks to vulnerable groups. respondents are concerned about Over 80% of







### The Hottest

25 Hottest Global Years on Record<sup>27</sup>

years on record have 24 of the 25 hottest occurred since the year 2000 The hottest years of all have been the last 11 years

# Climate Projections for Falcon Heights7

Over their lifetime, a child in Falcon Heights can expect:<sup>20,21</sup>









End of Century (2100 average)

J	



	_
}]	-Century
	77

2
ŧ
èn
7

Ĭ		•
	t	5
		7

Cantury

	>
]]	Sentur average
J	<b>id-Ce</b> )50 av
	20

Ţ	<b>Sentury</b> average)
	<b>Vid-C</b> 2050 a

ntury
lid-Cer

0	4	
		(
		-

		1
	+	j
_	10	
		7

Century
<b>Mid-C</b> 2050 a

	_
	tury
+	Seni
	Ġ

. ≥
=
Ē
a
Ċ
ö

	>
	ntur
J	d-Cen
	<b>≔</b> 8

1	Sent
	lid-C

<b>Sentury</b> average)
<b>/id-Ce</b> 2050 av

_
Tid-Century

}]	l-Century
	id

<b>entury</b> Iverage)
<b>Mid-Ce</b> 2050 av

|--|

Mid-Centur (2050 average	

Baseline

}	Mid-Century (2050 average)
---	-------------------------------

	<u>&gt;</u>
	Sentu averac
Ţ	
	i <b>d-</b> 050
	ΣΩ

M		
C	4	
		C
		3

Mid-Century (2050 average	) Br

Mid-Century (2050 average)

>
age,
Sentu averag
$\sim$
50 50
[2 <b>⊠</b>

]	entury
	Aid-Ce

$\frac{1}{2}$	<b>d-Century</b> 150 average)
	<b>/lid</b> 205

l-Century 0 average)	
Mid-(2050	

Mid-Century (2050 average)
1

	<b>tury</b> age)
Y .	id-Centu 150 averag
	<b>Z</b> 2

$\frac{1}{2}$	-Century
)	<b>/id-C</b> 2050 a
	20







_	
e 🗲	
<b>Sentur</b> y average	
<b>E</b> %	
en  Yei	
1 <b>id</b> -(	
<b>20</b>	
>01	



62°F	51	
62°		
9	.	0

<u>©</u> _5
-Centur 0 average
<b>/lid</b>

	<u>~</u> @∫	
	Sentu averag	
33	ᆖ놂ᅵ	
Y.	en e	
	00	
0	9	
	Ω <b>σ</b>	
	.≌ ∺	



_ //
<u>~</u> @
3 8
<b>₹</b> ७
Sentu averag
9 S
٦٣
25 <b>d</b>
.≅ö∣
201

ge)	
Sentu averag	
Gen aver	
50 G	
·= 0	

حاجا
%
CO

55° F

Average Daily Maximum

Temperature

62°F - 67°F



8

Number of Days Per Year with Maximum > 95° F

23 - 52



154

Number of Days Per Year With Minimum < 32° F

130 - 107



9 days

Change in Growing, Allergy, & Tick/Mosquito Season<sup>22,23</sup>









26"

Average Annual Precipitation <sup>24</sup>



270%

N/A

Increase in Heavy Precipitation Events (Days with > 1" Rainfall)



# 2022 GHG EMISSIONS IN Falcon Heights<sup>6</sup>

38.50/0

**12,894** MT CO<sub>2</sub>e from transportation

37 40/0

**12,514**MT CO<sub>2</sub>e from natural gas

21.4%

7,168
MT CO<sub>2</sub>e from electricity

2.6%

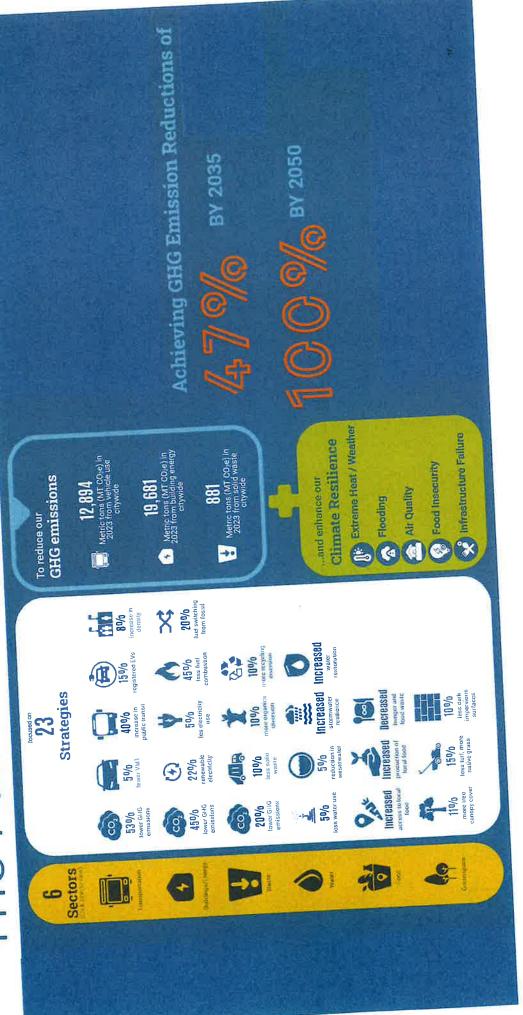
**881**MT CO<sub>2</sub>e from solid waste

5





## The Plan.



### The Plan:

Strategies Focused or

### STRATEGY 114:

Increase battery electric vehicle (BEV) use to 15% of vehicles on the road by 2035.

### Potential Actions 5

- ACTIONS

  TL 4-1 Collaborate with Xcel Energy and partners to expand incentives for electric vehicles (EVs), residential chargers, and eBike adoption, including low-cost loan or bulk-purchase programs to reduce costs.
- Provide information to the community through workshops, an EV guide, and enhanced website content highlighting EV technology, incentives, and available programs. TL 4-2
- Partner with Ramsey County Environmental Health to host and promote a Falcon Heights EV Fair, providing education, test drives, and vendor interaction. TL 4-3
  - Through trash hauler permitting, promote or require fleet efficiency improvements such as fuel-efficient practices, optimized routing, renewable or low-emission fuels, and advanced technologies. Require annual reporting on progress. TL 4-4



## The Plan.



Transportation and Land Use
Strengthening Falcon Heights's mobility
resilience while reducing emissions and
environmental impacts.

### Sector Strategies.

- Increasing public transit use Increasing population density (within already developed land)
- Increasing zero emission vehicle registration















# The Plan:



Buildings and Energy
Increasing building resilience through
energy efficiency, renewable energy
adoption, and decreased on-site fuel use.

### Sector Strategies:

- Reducing energy use Switching from fossil fuel combustion Increasing renewable energy use



















200/o fuel switching from fossil

20

## The Plan.



# Waste Management Reducing GHG emissions by increasing recycling and organic diversion, and decreasing overall waste.

### Sector Strategies:

- Reducing amount of solid waste produced Recycling more of our waste Sending less organic waste to landfills
  - . . .















# The Plan:



Water and Wastewater
Decreasing water consumption and
wastewater effects while improving
resilience to flooding and stormwater.

### Sector Strategies:

- Using less water Preparing for more and heavier rainfall Keeping water clean and protecting it















32

# The Plan.



# Local Food and Agriculture

Strengthening the resilience, accessibility, and security of the community's local food system.

### Sector Strategies:

- Making it easier to get locally grown food Growing more food in the community Cutting down on food waste and reducing hunger











23

# The Plan:



**Greenspace and Ecosystems**Encouraging community adaptation by increasing green infrastructure and strengthening ecosystem resilience.

### Sector Strategies:

- Planting more trees to increase shade and tree coverage
  - Planting more pollinator-friendly native plants instead of lawns Reducing the amount of pavement











# Plan Impacts



Business-as-usual Reductions

29.5%

5.2% (三) Mobile Combustion Reductions

3.6% 🕜 Electricity Reductions

8.2% 🕥 Stationary Combustion Reductions

0.4% 🛂 Solid Waste Reductions

53.1%

Remaining Annual Emissions

Goal Goal

GHG emissions by 47% below 2019 levels by 2035."\* City of Falcon Heights GHG interim reduction goal:

"To reduce citywide



emissions by 2050."\*\* City of Falcon Heights's long-term GHG goal: "To achieve net zero



Potential Economic Savings
Below is an estimate of the cumulative
community-wide economic savings
potential of implementing the plan
through 2035.

Transportation Economic Potential\*:

Sector Savings:
Sector Cost Increases:
Potential Sector Net Cost Savings:
\$8,005,769

Buildings + Energy Economic
Potential\*: \$3,526,485
Sector Savings: -\$2,543,594
Sector Cost Increases: -\$2,543,594
Potential Sector Net Cost Savings: + \$982,892

Waste Reduction Economic Potential\*:

\$463,869
Residential Savings:
\$1,531,208
Potential Sector Net Cost Savings:

+ \$1,995,078

Social Cost of Avoided Carbon:
+ \$6,002,051
Estimated Localized Social \$141
Cost of Carbon.

Cumulative Community Savings Potential:

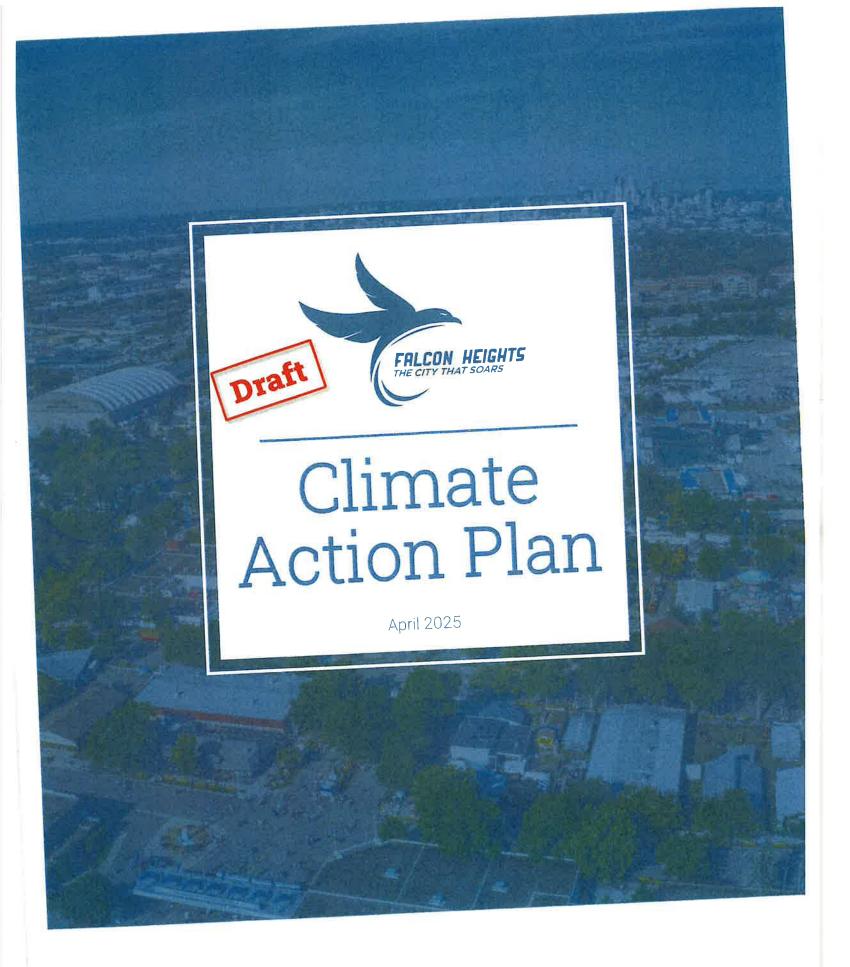
= \$16,985,739



- Next Steps

   Draft plan made available for community review and
  - Will process input received and coordinate with City staff on appropriate plan refinements accordingly. We'll bring the final draft back to the Environmental Commission and City Council.





### Table of Contents

Plan At A	Glance (summary)	77
Introducti		11
Greenhoi Plan Fran	Process Change Impacts Use Gas (GHG) Emissions Nework Uction Goal	1-1
The Plan		2-1
Buildings Waste Ma Water and Local Food	ation and Land Use and Energy nagement Wastewater d and Agriculture e and Ecosystems	2-1
Implementa		0.1
What You C	an Do	3-1
Appendix A	References	4-1
Appendix B	Potential Cumulative Community Cost and Savings from Plan Implementation	A-1
Appendix C	Abbreviations and Glossary of Terms	B-1
Appendix D	Acknowledgements	C-1
	Jagements	E-1



### FRICON HEIGHTS Plan At A Glance





Buildings/Energy

Water

Q Q

Food

60

Greenspace







400/0 increase in

public transit

les electricity

10%

focused on

23

**Strategies** 

registered EVs

80/0 increase in



以

200/0

fuel switching from fossil



lower GHG





CO 200/0

lower GHG emissions

5%





less solid

reduction in

Increased

production of

local food





Increased stormwater

**a** 

Decreased

food waste

Increased

less fuel

combustion

100/0

more recycling





Increased

access to local

more tree

less turf, more

10º/o

less dark impervious surfaces

To reduce our **GHG** emissions















881 Metric tons (MT CO<sub>2</sub>e) in 2023 from solid waste citywide



.. and enhance our Climate Resilience



Extreme Heat / Weather



Flooding



Air Quality



Food Insecurity



Infrastructure Failure

Achieving GHG Emission Reductions of

BY 2035 1 0 0 0 BY 2050



### **QUICK FACTS**

19,681

Metric tons (MT CO<sub>2</sub>e) in 2023 from building energy citywide

12,894

Metric tons (MT CO<sub>2</sub>e) in 2023 from vehicle use citywide

881

Metric tons (MT CO<sub>2</sub>e) in 2023 from solid waste citywide

### Introduction

Falcon Heights has long been a leader in environmental stewardship, embracing sustainability as a core value of our community. Over the years, the City has adopted forward-thinking "green" practices—becoming one of Minnesota's first GreenStep Cities in 2009 and pioneering projects like a 40 kW solar installation on City Hall in 2012, community gardens, a native plant ordinance, and LED streetlight upgrades. This strong foundation reflects a commitment to a high quality of life through sustainable infrastructure and conservation.

### Climate Emergency Resolution

Climate change is already impacting Falcon Heights, bringing warmer winters, hotter summers, and extreme weather. The City Council responded by unanimously declaring a Climate Emergency in January 2023, committing Falcon Heights to urgent action and a just transition. This Climate Action Plan, supported by a Minnesota Pollution Control Agency grant, is a key step in meeting that commitment.

### **Current Initiatives and Partnerships**

Building on our strong foundation, Falcon Heights now holds Step 5 recognition in the GreenStep Cities program, reflecting ongoing leadership in energy savings, waste reduction, and sustainability. The City is also a Charging Smart community, recognized for electric vehicle readiness. With Xcel Energy, we've launched an Energy Action Plan to cut emissions—progress driven by residents and businesses. Falcon Heights collaborates with Ramsey County and nearby cities on recycling, composting, and resilience projects, and engages residents through events like the annual Sustainability Fair. These efforts show what's possible when our community works together for a sustainable future.

### A Vision for the Future

This Climate Action Plan outlines a clear path to a low-carbon, resilient future. It sets ambitious goals aligned with Minnesota's climate targets—cutting emissions 47% by 2035 and reaching net zero emissions by 2050. Shaped by public input, the plan calls on everyone—residents, businesses, and partners—to play a role. Together, we can protect what we value today and create a thriving, resilient Falcon Heights for generations to come.





### Planning

### Common Co-Benefits of Climate Planning

Reduced Costs

Reduced Pollution





Improved Energy Resilience



Safer Streets



Protected / Enhanced Ecosystems





Improved Community Resilience



Improved Mobility



Improved Quality of Life



The World Health Organization reports growing evidence that climate policies can deliver both cost savings and significant health improvements. Community actions to cut greenhouse gas emissions in sectors like housing, transportation, and energy create multiple cobenefits beyond mitigating climate change. These include cleaner air, better public health, reduced health risks, greater resource efficiency, stronger local economies, and increased resilience of ecosystems and infrastructure. 1,2,3,4 These outcomes not only improve quality of life and natural resources but also generate financial gains.

Many climate actions offer direct financial benefits, such as lower fuel costs, and indirect savings, particularly from improved air quality. Research shows that health and air pollution benefits can offset much of the cost of these initiatives.<sup>5</sup> Additional savings come from increased resilience, such as reduced reliance on fossil fuels-valued locally at \$141 per metric ton (MT) of greenhouse gas reductions. 678 Health benefits may be even greater, with estimates ranging from \$50 to \$380 per MT of GHG reduced globally.9

Implementing climate action plans like this one can enhance quality of life by expanding mobility options, creating jobs, and reducing poverty and inequality. 10 These co-benefits strengthen community well-being as we address climate challenges.

Taking action on climate change also helps protect ecosystems that provide essential services. 11 For example, expanding Falcon Heights' tree canopy to meet this plan's goals could increase the annual economic value of community trees by up to \$22,500. Other strategies will improve residents' access to green spaces, supporting both environmental health and quality of life. 12

31

FALCON HEIGHTS CLIMATE ACTION PLAN | 1-2



14 months

Planning timeframe 100+

Community members engaged 2

Community meetings and events 2 Online

community input

surveys

Planning team members 5

Foundational research documents

The Falcon Heights Climate Action Plan was developed collaboratively with a 31-member planning team, including community members, businesses, institutions, City commissions, and Falcon Heights staff. The planning team considered, created, and reviewed strategies and actions for each of the sectors included in this plan (see Plan Framework). The team participated in planning workshops from January to April 2025. The process included community engagement including community-wide surveys and input meetings and events. Goals and actions were shaped by community feedback, expert analysis, and best practices from other Minnesota and U.S. cities. Through workshops, the team refined and prioritized strategies, resulting in a co-authored plan that reflects the voices of Falcon Heights.

### Research Based Climate Action Plan

To establish the plan's goals, strategies, and actions, the planning team conducted extensive research and produced several key assessments. These included studies on climate vulnerability, ground cover and tree canopy, greenhouse gas emissions, and renewable energy potential, providing critical data on climate risks, carbon sequestration, emissions trends, and solar opportunities. A final Climate Action Baseline Study synthesized these findings, reviewed key community metrics, and outlined preliminary sector-specific goals to guide planning discussions. Click on the icons below to view these documents:



Climate Action Baseline Study



Climate Vulnerability
Assessment



Community-Wide GHG Inventory



Ground Cover, Tree Canopy & Carbon Sequestration Study



Community-Wide Renewable Energy Potential Study

### What We Heard

Community input was gathered through two surveys with over 75 responses from residents and businesses. 13 The first gathered climate concerns and action ideas; the second collected feedback on draft strategies. This input shaped the plan to reflect local priorities.

### The City's Role in Climate Action

Respondents reported that they agree or strongly agree... 830/0

It is important for Falcon Heights to take action to prepare for the projected impacts of climate

It is important for Falcon Heights to take action to reduce greenhouse gas emissions.

82%

It is important for Falcon Heights to be a leader in proactively addressing climate change.

### How concerned are you about climate change?



- Not at all concerned
- Slightly concerned
- Moderately concerned
- Very concerned
- Extremely concerned

### Climate Experience

- 91% have noticed signs of climate change

←71% have been personally impacted.

Key themes that emerged from the community included: Renewable



### Support for Municipal Action and Leadership

84% of respondents are concerned about climate change. Additionally, 83% support the City preparing for impacts, 82% back reducing emissions, and 74% want Falcon Heights to lead on climate.



79% support requiring rental properties to meet energy efficiency standards to reduce costs while 67% support incentives for efficiency and solar readiness, and 61% support solar installation incentives.



### Impacts on Vulnerable Populations

Over 80% of respondents are concerned about climate change risks to vulnerable groups.



### Protect Resources

84% are

concerned about air quality, 82% about impacts on ecosystems, and 77% about risks to clean water.



For Additional Information See

### The Hottest

25 Hottest Global Years on Record<sup>27</sup>



### Climate Change Impacts

Climate change is a global issue with serious local impacts. Scientists agree that rising greenhouse gas emissions are destabilizing Earth's climate. Twenty-four of the 25 hottest years on record have occurred since 2000. In Minnesota, much of the state has warmed nearly 3°F over the past century, causing drier soils and a 20% increase in heavy

### Climate Change in Falcon Heights

Falcon Heights is already experiencing these changes. Between 1980 and 2018, the city saw rising average temperatures, more days above 95°F, more heavy rain events, and fewer days below 32°F. 17,18 One of the most notable shifts is in precipitation patterns. While overall annual precipitation has increased, the change is uneven. Fall and winter precipitation rose up to 15.5%, while spring and summer levels

### Climate Projections for Falcon Heights<sup>7</sup>

Over their lifetime, a child in Falcon Heights can







expect: <sup>20,21</sup>			
Climate Conditions	Baseline	Mid-Century (2050 average)	End of Century (2100 average)
Average Daily Maximum Temperature	55° F	62°F	62°F - 67°F
Number of Days Per Year with Maximum > 95° F	2	23	23 - 52
Number of Days Per Year With Minimum < 32° F	154	131	130 - 107
Change in Growing, Allergy, & Tick/Mosquito Season <sup>22,23</sup>	9 days	23 days	24-37 days
Average Annual Precipitation <sup>24</sup>	26"	24%	7-36%
Increase in Heavy Precipitation Events (Days with > 1" Rainfall)	N/A	27%	27-55%
Air Conditioning Demand (Cooling Degree Days)	700	1140/0	114-214%
Heat Related Increase In Per Capita Electricity <sup>25</sup>	N/A	000	36-53%
			00 00 70

### Falcon Heights's Climate Risks

The anticipated climate changes in Falcon Heights over the next few decades pose potential risks to residents, with certain populationssuch as children, seniors, and individuals with disabilities—being more vulnerable to these impacts. Below are some of the most notable risks to the community.7



### Extreme Heat and Weather

Certain individuals face higher risks of stress, health issues, or even death from extreme weather events like severe storms, hail, heavy rain events, and heat waves. 38,39 Susceptibility to heat stress increases with pre-existing conditions such as diabetes and heart disease, as well as demographic, socioeconomic, and environmental factors like land cover.



### Flooding

The latest National Climate Assessment shows that heavy precipitation events are already on the rise across the U.S. and in Minnesota. These intense rainfall events are expected to continue increasing throughout the state. The growing frequency of both extreme and total precipitation is likely to contribute to more frequent over-bank flooding (river and lake flooding) and flash floods.



Climate change is anticipated to impact air quality through various channels, including higher levels of allergens and pollen, increased regional ozone concentrations, greater risks of smoke from wildfires, and elevated particulate pollution and dust.



### Food Insecurity

Climate change is likely to destabilize cropping systems, interrupt transportation networks, and trigger food shortages and spikes in food cost.



### Infrastructure / Power Failure

Extreme weather events, flooding, flash flooding, and the growing daily challenges from climate variability all pose risks to the stability of our aging infrastructure. Power outages, road damage, bridge collapses, and water system failures are significant physical climate risks to the community, particularly for those most vulnerable to climate impacts.



### Greenhouse Gas Emissions

Measuring, tracking, and reducing greenhouse gas (GHG) emissions is essential for effective climate action. Understanding our emissions helps us focus efforts on minimizing our community's climate impact.

In Falcon Heights, community-wide emissions decreased from 37,466 MT  $\rm CO_2e$  in 2019 to 33,457 MT  $\rm CO_2e$ in 2023, a reduction of nearly 11%.6

### 2022 GHG EMISSIONS IN Falcon Heights<sup>6</sup>

38.5%



12,894

MT CO<sub>2</sub>e from transportation

37.40/0



12,514

MT CO2e from natural



7,168 MT CO2e from electricity

2.60/0



881

MT CO<sub>2</sub>e from solid waste

### Inside The Numbers:

Total Vehicle Miles Traveled (VMT): 27,333,000

Gasoline consumed (est): 1,035,911 gallons

Diesel fuel consumed (est): 398,464

Electric Vehicle (EV) share of total: 2.7%

Non-residential therms used: 1,186,300

Residential therms used: 1,175,347

Non-residential kWh used: 17,215,000

Residential kWh used: 12,964,000

Customer-owned renewable share: 0.58%

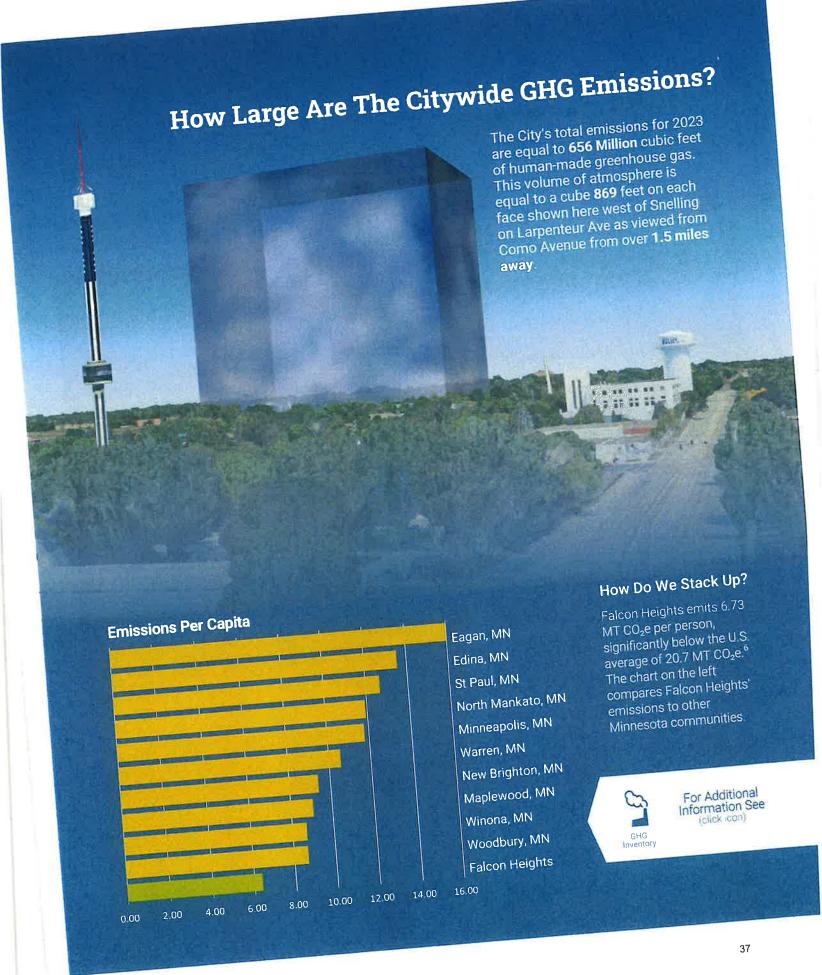
Total solid waste generated: 6.160 tons

> Solid waste landfilled: 669 tons

Solid waste used for waste-to-energy: 2,330 tons

Solid waste recycled: 1,936 tons

Organic solid waste recycled/composted: 1,224 tons



FALCON HEIGHTS CLIMATE ACTION PLAN | 1-8



# Plan Framework

The plan guides Falcon Heights's municipal operations and citywide climate action, covering GHG reductions and climate resilience. It includes an implementation section and eight sectors, each with goals and detailed actions for implementation.



## Transportation and Land Use

Strengthening Falcon Heights's mobility resilience while reducing emissions and Click here for section environmental impacts



## **Buildings and Energy**

Increasing building resilience through energy efficiency, renewable energy adoption, and decreased on-site fuel use.

#### Sector Strategies:

- Reducing vehicle use
- Increasing public transit use
- Increasing population density (within already developed land)
- Increasing zero emission vehicle registration
- Increasing community "EV Readiness"

## Sector Strategies:

- Reducing energy use
- Switching from fossil fuel combustion
- Increasing renewable energy use



## Waste Management

Reducing GHG emissions by increasing recycling and organic diversion, and Click here for section decreasing overall waste



**Water and Wastewater** 

Decreasing water consumption and wastewater effects while improving resilience to flooding and stormwater

#### Sector Strategies:

- Reducing amount of solid waste produced
- · Recycling more of our waste
- Sending less organic waste to landfills

### Sector Strategies:

- Using less water
- Preparing for more and heavier rainfall
- · Keeping water clean and protecting it



## Local Food and Agriculture

Strengthening the resilience, accessibility, and security of the community's local food Click here for section system.



#### **Greenspace and Ecosystems**

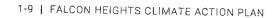
Encouraging community adaptation by increasing green infrastructure and click here to section section strengthening ecosystem resilience.

#### Sector Strategies:

- Making it easier to get locally grown food
- Growing more food in the community
- Cutting down on food waste and reducing hunger

### Sector Strategies:

- Planting more trees to increase shade and tree
- Planting more pollinator-friendly native plants instead of lawns
- · Reducing the amount of pavement



# GHG Reduction Goal

This plan aligns with science-based greenhouse gas reduction targets to limit global warming to 1.5°C above pre-industrial levels. Meeting this target would greatly reduce climate risks and impacts. The CAP sets both interim and long-term goals.:



City of Falcon Heights GHG interim reduction goal:

"To reduce citywide GHG emissions by 47% below 2019 levels by 2035."\*

City of Falcon Heights's long-term GHG goal:



"To achieve net zero emissions by 2050."\*\*

This citywide goal guides sector-specific strategies. Sector goals aim to evenly distribute greenhouse gas reductions and meet the community's overall emissions targets. They are designed to be achievable yet ambitious, surpassing business-as-usual outcomes.

## Survey of Peer Community Carbon Reduction Goals

Reduce community-wide
GHG emissions 40% below
2005 levels by 2030 and 80%
below 2005 levels by 2050.

To reduce community-wide
GHG emissions 55% below
2014 levels by 2035, and net
zero emissions by 2050.

To reduce community-wide GHG emissions 45% below 2019 levels by 2030, and net zero emissions by 2050.

Reducing greenhouse gas emissions to 20 percent of the City's 2015 baseline levels by 2050 (an 80 percent reduction).

Minneapolis 100% renewable energy for city operations by 2022 and citywide electricity by 2030.

To reduce community-wide GHG emissions 42% below 2013 levels by 2030, and achieve carbon neutrality by 2050 .

100% renewable electricity
St Louis Park citywide by 2030, carbon neutrality by 2040.

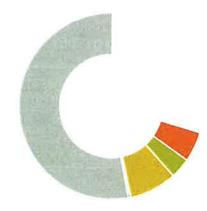
Carbon neutral municipal
St Paul operations by 2030, carbon neutral citywide by 2050.

<sup>\*</sup> Goal aligns with IPCC recommended reduction targets which use 2019 as the baseline year.

A community, business, institution, or building that produces the same amount of energy it consumes through renewable and GHG same sources, resulting in zero net emissions over a year See Glossary of Terms for more information.

# Plan Impacts

Long-term emission reduction potentials of the strategies and actions included in this plan have been modeled based on projected energy and fuel reductions and adoption rates of renewable energy and low/no emission transportation modes outlined in the strategies and actions. From this modeling, we know that with the successful implementation of the strategies outlined in this climate action plan, citywide annual GHG emissions are projected to drop to 19,892 MT CO<sub>2</sub>e by 2035, a 46.9% decrease below 2019 levels. The potential cumulative GHG emissions reductions over the 10 year implementation period are estimated at over 42,498 MT CO<sub>2</sub>e - equal to the elimination of over 834 million cubic feet of greenhouse gases by 2035.

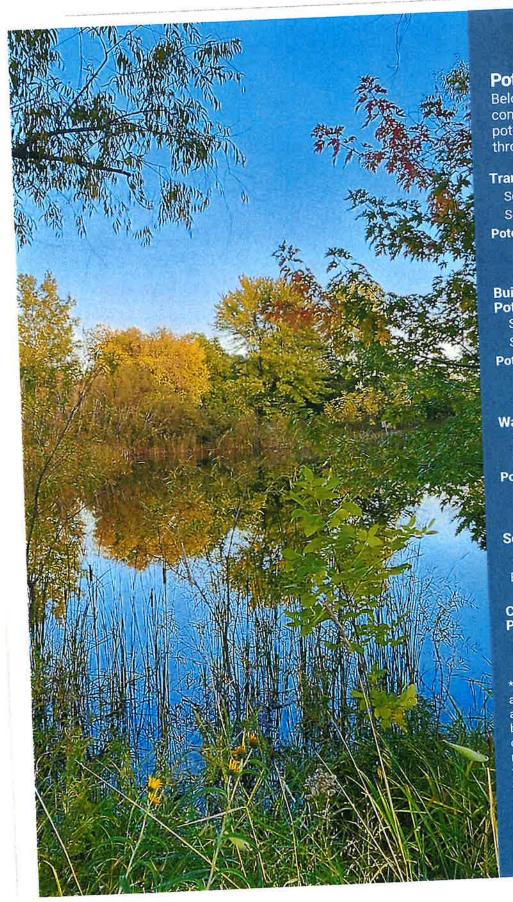


29.5%	Business-as-usual Reductions
5.2%	Mobile Combustion Reductions
3.6%	Electricity Reductions
8.2%	Stationary Combustion Reductions
0.4%	Solid Waste Reductions

Note Reductions Achieved refer to emissions reductions that have occurred since 2014 based on the City of Falcon Heights Community GHG Inventory. Business-as-usual (BAU) Reductions are anticipated reductions resulting from existing requirements or commitments, such as federal vehicle fuel efficiency standards and electric utility carbon-reduction commitments, which are outside the scope of this plan.

**53.1%** Remaining Annual Emissions





## Potential Economic Savings

Below is an estimate of the cumulative community-wide economic savings potential of implementing the plan through 2035.

## Transportation Economic Potential\*:

Sector Savings: \$9,517,233 Sector Cost Increases: -\$1,511,464

Potential Sector Net Cost Savings:

\$8,005,769

# Buildings + Energy Economic Potential\*:

Sector Savings: \$3,526,485 Sector Cost Increases: -\$2,543,594

**Potential Sector Net Cost Savings:** 

+ \$982,892

## Waste Reduction Economic Potential\*:

Residential Savings: \$463,869 Commercial Savings: \$1,531,208

Potential Sector Net Cost Savings:

+ \$1,995,078

## Social Cost of Avoided Carbon:

+ \$6,002,051

Estimated Localized Social Cost of Carbon:

# Cumulative Community Savings Potential:

= \$16,985,789

41

\* Estimated community-wide costs and savings are calculated based achieving goal statements and are not calculated on an individual action basis. Values do not include economic potential of job creation and new business potential represented in the plan actions. See Appendix for a detailed illustration of how cumulative costs and savings are arrived at.



# QUICK FACTS

38.5%

of community-wide GHG emissions in 2023 from transportation

27,333,000

Vehicle Miles Traveled in

45.9%

Commuters drove alone in 2023

10.3%

Commuters use public transit

87

Battery Electric Vehicles (BEV) registered in 2023

For More Information (click icon):





## Click here to return to TOC

# The Plan:

# **Transportation and Land Use**

Transportation is energy- and resource-intensive. Beyond road vehicles, off-road equipment (such as construction machinery and gas-powered lawn mowers) also burns significant fossil fuel. Globally, transportation accounts for nearly one-third of all energy use and roughly one-quarter of energy-related carbon emissions. 1 In Falcon Heights, transportation contributes about 38% of the city's greenhouse gas emissions.<sup>2</sup> As electricity gets cleaner, transportation's share of emissions could growmaking it a key focus for climate action.

There are many ways to make transportation more sustainable while improving quality of life and equity, including:

- Shared and Public Transportation: Riding together on buses, trains, or carpools means fewer single-occupancy cars on the road. This cuts traffic and pollution while improving access to transportation for
- Bicycle-sharing stations like Nice Ride Minnesota offer a clean and active way to get around. Encouraging walking, biking, or e-scooter use reduces air pollution and improves public health.
- Electric Vehicles and Clean Fuels: Transitioning to electric vehicles (EVs) and renewable fuels can dramatically reduce transportation emissions. EVs produce no tailpipe pollution, improving air quality for everyone especially in lower-income neighborhoods with more traffic pollution

## The Link Between Land Use and Transportation Emissions

Transportation emission strategies often focus on technology and lowcarbon fuels, but studies show smart growth and compact development are also key. Denser, well-planned communities reduce driving and support more energy-efficient housing. In the 125 largest U.S. urban areas, a 10% increase in population density could cut CO<sub>2</sub> emissions by 4.8% from travel and 3.5% from residential energy use. 3

## ACTIONS

- TL 1-1 Adopt and implement a Living Streets policy. (Note: Living Streets are green, multimodal streets that enhance walking and biking conditions, safety, and neighborhood livability while reducing environmental impacts and maintenance costs.
- TL 1-2 Create an Active Mobility Plan emphasizing multimodal transportation, transit access, bike/pedestrian safety, and infrastructure improvements. Prioritize protected bike lanes. Review Ramsey County's bike/pedestrian plan and partner with adjacent communities, the University of Minnesota and State Fair on connected routes.
- TL 1-3 Establish a policy requiring a Transportation Demand Management (TDM) plan, including a transit component, for all new developments and redevelopment projects.
- TL 1-4 Collaborate with partners on a branded campaign and incentives to promote alternative transportation, focusing on short trips and equity-driven support for bike and eBike adoption.
- TL 1-6 Develop and distribute a resident-focused brochure through landlords highlighting local parks, transit options, bike/walk routes, sustainability resources, waste and recycling programs, renewable energy opportunities, and related incentives, with links to current City information.

## **ACTIONS**

- TL 2-1 Collaborate with Metro Transit and partners to secure funding for free or reduced fares for Falcon Heights residents and expand transit access through fare reductions, Bus Rapid Transit, and other strategies.
- TL 2-2 Collaborate with Metro Transit and partners to enhance bus stop infrastructure according to industry best practices, including pullouts, shelters, and safe pedestrian crossings.
- TL 2-3 Partner with Metro Transit and others to develop and distribute educational materials about public transit options and resources.
- TL 2-4 Work with local businesses to promote and expand Metro Transit's Guaranteed Ride Home and Employer Sponsored Pass programs for employees and students.

# STRATEGY TL1:

Decrease communitywide Vehicle Miles Traveled (VMT) by 5% by 2035.

## Strategy Co-Benefits





In 2023, Falcon Heights' total vehicle miles traveled (VMT) was 27.3 million miles. VMT rose 1% from 2014 to 2019 but then fell, ending 2023 20% below 2014 levels.<sup>2</sup>

Reducing VMT by 5% would eliminate 1.7 million miles and cut annual greenhouse gas emissions by over 640 MT CO<sub>2</sub>e<sup>4,5</sup> Expanding safe, accessible bike and walking routes to schools, shops, and recreation areas can help reduce vehicle use for daily trips.

# STRATEGY IL2:

Increase public transit commuter ridership 4% by 2035.

## Strategy Co-Benefits







Since 2013, Falcon Heights' 6,100 workers have averaged a 19.9-minute commute. About 97% commute in from outside the city, while 87% of employed residents work elsewhere. With vehicle operating costs at \$0.81 per mile, each 1% shift to public transit could reduce driving by 273,000 miles and save commuters over \$200,000 annually.

## TRANSPORTATION AND LAND USE

## STRATEGY TL3:

Increase average population per developed acre by 8% by 2035.

## Strategy Co-Benefits







The city has 875 acres of developed land, covering 61% of its total area and supporting 5,232 residents—an

average of 6 residents per developed acre. 9,10 Falcon Heights' population could grow by up to 12.8% by 2035. 15 Research shows that every 1% increase in population-weighted urban density reduces household travel CO2 emissions by 0.12% to 0.48%.3<sup>3,11</sup> Zoning policies and incentives that promote higher density in developed areas, while ensuring affordable housing and preventing gentrification, can help reduce citywide emissions.

## ACTIONS

- TL 3-1 Amend zoning ordinances to support higher-density, walkable neighborhoods by increasing building heights, allowing approved densities, encouraging Accessory Dwelling Units (ADUs), promoting Transit-Oriented Development (TOD) near transit stations, and supporting mixed-use developments.
- TL 3-2 Use the Comprehensive Plan process to identify vacant or underutilized land suitable for higher-density development, walkability improvements, transit access, or greenspace.
- TL 3-3 Attract and support mixed-use, multimodal redevelopment projects on priority sites identified through the Comprehensive Plan.

# STRATEGY TL4:

Increase battery electric vehicle (BEV) use to 15% of vehicles on the road by 2035.

## Strategy Co-Benefits







Shifting vehicles communitywide from fossil fuels to low- and zero-emission alternatives is key to cutting long-term emissions. Électric vehicles (EVs) reduce vehicle emissions by 50-70%, with battery production impacts offset within two years. 12

Falcon Heights has about 3,200 vehicles but only 87 battery electric vehicles (BEVs) as of January 2024. 4,13 Nationally, EV sales have grown fivefold in three years, showing strong potential for local adoption. 14 Each 1% shift to EVs in the city could reduce annual emissions by up to 112 MT CO2e, even with added electricity use. 2,5

- TL 4-1 Collaborate with Xcel Energy and partners to expand incentives for electric vehicles (EVs), residential chargers, and eBike adoption, including low-cost loan or bulkpurchase programs to reduce costs.
- TL 4-2 Provide information to the community through workshops, an EV guide, and enhanced website content highlighting EV technology, incentives, and available programs.
- TL 4-3 Partner with Ramsey County Environmental Health to host and promote a Falcon Heights EV Fair, providing education, test drives, and vendor interaction.
- TL 4-4 Through trash hauler permitting, promote or require fleet efficiency improvements such as fuel-efficient practices, optimized routing, renewable or low-emission fuels, and advanced technologies. Require annual reporting on progress.

- TL 5-1 Implement an "EV Ready" ordinance requiring new developments to include EV charging infrastructure and dedicated parking.
- TL 5-2 Create an Electric Vehicle Infrastructure Readiness Plan that assesses current and future charging needs, maps existing stations, identifies expansion opportunities in public, commercial, and multi-family residential areas, and prioritizes equitable access in low/moderate-income neighborhoods.
- TL 5-3 Promote funding opportunities and resources for local businesses to provide electric vehicle charging stations.
- TL 5-4 Identify an existing or develop and distribute an "EV Ready Guide" with building readiness standards and fleet conversion resources.

# **ACTIONS**

- TL 6-1 Conduct phased fleet analyses to transition to electric and alternative fuel vehicles and equipment, including emergency, non-emergency, and heavy-duty segments. Identify replacements, infrastructure requirements, and facility upgrades.
- TL 6-2 Adopt a policy requiring new City fleet vehicles to be electric or use low/no-carbon fuels by 2030 for light-duty and by 2040 for medium/heavy-duty vehicles.
- TL 6-3 Implement and enforce a city operations anti-idling policy of combustion vehicles.
- TL 6-4 Create an "Eco Driving Guide" to promote fuel efficiency, distribute it to City employees, include it in new employee training, and make it available to Falcon Heights residents and businesses.

# STRATEGY TL5:

Make the community "EVready" with electric vehicle charging stations in every public and private parking lot or ramp by 2030.

## Strategy Co-Benefits







As a core climate action strategy, communities are prioritizing EV readiness as by expanding Level 2 and DC fast charging infrastructure across public and private parking areas. This widespread access reduces range anxiety, increases EV adoption, and cuts transportation emissions. 15 Benefits include cleaner air, improved public health, and economic growth through job creation and cost savings. 16 Making all parking EV-ready also supports equitable access, strengthens transportation systems, and supports community resilience.

# STRATEGY TL6:

Convert 100% of the municipal non-emergency fleet and equipment to EVs and improve remaining combustion vehicle fuel efficiency by 10% by 2035.

## Strategy Co-Benefits







Falcon Heights can lead in sustainable transportation by transitioning its fleet to EVs, reducing emissions, costs, and supporting EV adoption. In 2023, gasoline made up 43% of fleet fuel use (1,141 gallons). Converting to EVs by 2035 could cut emissions by 10 MT CO₂e annually, with a 10% increase in efficiency of remaining vehicles saving another 2 MT CO<sub>2</sub>e.2,17



# QUICK FACTS

58.80/0

of community-wide GHG emissions in 2023 from buildings and energy

30,240,951

kWh or electricity used in 2023

2,361,647

Therms of natural gas used in 2023

78.9%

of all homes were built before 1980

52

solar arrays communitywide in 2023

For More Information (click icon):









# The Plan:

# **Buildings and Energy**

Energy use in buildings is a major contributor to greenhouse gas (GHG) emissions from both residential and commercial properties. Emissions come from direct on-site fossil fuel use, like heating and cooking, and from off-site power generation. Prioritizing efficient building design improves long-term energy performance and comfort. Increasing efficiency reduces emissions, lowers energy costs for households and businesses, and strengthens climate resilience. Improving Falcon Heights' built environment also creates environmental, economic, and social benefits for the community.

## Residential Energy

In 2023, Falcon Heights's residential sector consumed over 12.9 million kWh of electricity (6,324 kWh per household) and 1.175 million therms of natural gas (573 therms per household). This resulted in 9,059 MT  $\rm CO_2e$  of GHG emissions, about 46% of citywide building energy emissions. <sup>1</sup>

## Non-Residential Energy

The non-residential sector consumed over 17.2 million kWh of electricity (2,816 kWh per job) and 1.186 million therms of natural gas (194 therms per job) in 2023. This resulted in 10,607 MT  $\rm CO_2e$  emissions, about 54% of citywide building energy

## ACTIONS

- BE 1-1 Collaborate with partners to establish a program achieving deep energy retrofits for 80% of low/moderate-income households by 2030. Goal: 100 households annually, each achieving 15% energy reductions. (Comprehensive Plan)
- BE 1-2 Offer and promote fully subsidized Home Energy Squad visits for income-qualified residents.
- BE 1-3 Adopt an energy benchmarking ordinance (Comprehensive Plan)
- BE 1-4 Require city-funded projects—and encourage other developments needing PUD, CUP, and zoning approval—to meet energy efficiency standards (e.g., SB2030, LEED Gold, Enterprise Green Communities, ICC/ASHRAE 700). (Comprehensive Plan)
- BE 1-5 Consider establishing a Mayor's Home Energy Challenge to encourage and incentivize residential energy-efficiency upgrades.
- BE 1-6 Adopt and promote a voluntary net-zero energy code through the building permit process (Comprehensive Plan)

# ACTIONS

- BE 2-1 Coordinate an annual group purchase campaign for residents and small businesses to reduce costs of electrification, energy efficiency, and weatherization upgrades (e.g., air and ground source heat pumps). Prioritize equity in program design, support local contractors, and consider integration with renewable energy purchase programs. Goal: 30 households and 10 businesses annually. NOTE: Action may be implemented in combination with a renewable energy group purchase program action.
- BE 2-2 Collaborate with partners to expand and promote incentives for low-income residents to electrify their homes. Goal: 15 households annually.
- BE 2-3 Address misconceptions and promote new technologies through educational materials and City communications.

# STRATEGY BE1:

Improve total Citywide building energy efficiency 5% for electricity and 15% for natural gas by 2035.

## Strategy Co-Benefits







Homes built between 2000 and 2009 use 15% less energy per square foot than 1980s homes. Retrofitting older homes offers significant potential to reduce citywide energy use, especially natural gas. In Falcon Heights, 85% of owner-occupied and 69% of renter-occupied homes were built before 1980, making energy upgrades a key opportunity. Building permits suggest up to 20% of residential units could be added, renovated, or replaced over 10 years. 3

# STRATEGY BE2:

Achieve 30% building "fuel switching" from on-site fossil fuel combustion to electrification or renewable fuels by 2035.

Strategy Co-Benefits







64.7% of the city's residential heating is provided by natural gas and 28.5%. As Falcon Heights's electric grid nears carbon neutrality, building heating fuel will become an increasingly important target for emission reductions. Reduction, and ultimately the elimination of all fossil fuel heating (oil, propane, natural gas) in the buildings sector will be required in order to achieve community wide carbon reductions. 1,7

#### BUILDINGS AND ENERGY

## STRATEGY BE3:

Increase customer-owned or purchased renewable electricity to 22% of total building electricity use citywide by 2035.

### Strategy Co-Benefits









Grid electricity emissions are expected to decline, but increasing consumer renewable energy purchases remains essential to meet GHG reduction goals as well as offering cost savings and increased resilience. 1,6,8,9 As of 2023, Falcon Heights had 52 customer-owned solar systems generating 1 MW. 10 Those unable to install solar can buy renewable energy from their utility to reduce their emissions and support grid decarbonization. 11,12,13

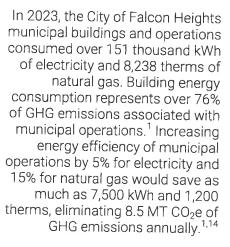
## STRATEGY BE4:

Improve total municipal building energy efficiency by 5% for electricity and 15% for natural gas by 2035.

### Strategy Co-Benefits







## **ACTIONS**

- BE 3-1 Collaborate with partners to implement and promote an annual Residential Solar Group Purchase program. supported by a program administrator such as MREA or others experienced in solar group purchase programs. Goal: 15 participants and 100 KW installed Annually.
- BE 3-2 Establish a policy to require renewable energy within PUD ordinance (Comprehensive Plan)
- BE 3-3 Identify top privately-owned sites for Solar PV installations (rooftop, ground, carport) and develop site assessments detailing estimated costs, energy generation, and 20-year economic payback. Provide assessments to additional property owners biennially through 2032 to maximize solar incentives. Coordinate with the Commercial property and Industrial property Solarize program.
- BE 3-4 Organize an annual group solar purchase program for commercial and industrial properties, coordinating with the City's "Top Solar Potentials" initiative. Goal: 5 participants installing 150 kW annually.
- BE 3-5 Organize education and outreach promoting net-zero energy development, renewable energy rebates, and tax credits; provide resources on the City's Energy Hub website. (Comprehensive Plan)

## **ACTIONS**

- BE 4-1 Require municipal buildings to achieve and maintain ENERGY STAR ratings of 75 or higher, meet or exceed IGCC standards, and report energy use publicly. Require all facility design and construction RFPs for new or major renovation projects to evaluate opportunities for achieving Net Zero
- BE 4-2 Conduct energy audits of all City facilities, including Dark Sky LED outdoor lighting guidance. Use audit results to prioritize facility improvements in the Capital Improvement Plan, with implementation within 5 years.

# **ACTIONS**

- BE 5-1 Identify and assess City facilities to prioritize for electrification and schedule improvements.
- BE 5-2 Require all new municipal buildings to be 100% electric (or zero onsite fossil fuel combustion.
- BE 5-3 Conduct a City Facility Solar and Renewable Energy Master Plan study assessing on-site solar feasibility, options for achieving 100% renewable electricity including ownership options, community solar, RECs, and solar+storage microgrids. Establish an implementation timeline. (Comprehensive Plan)

# S STRATEGY BE5:

Achieve 100% municipal building renewable electricity use and "fuel switching" from on-site fossil fuel combustion to electrification by 2035.

## Strategy Co-Benefits





By expanding renewable energy and reducing fossil fuel use, the city can model sustainable, resilient energy systems.

Reaching 100% municipal electric use through on-site generation and green energy purchases could cut emissions by up to 36 MT CO<sub>2</sub>e annually. Switching City facilities to electric heating as the grid decarbonizes could reduce emissions by another 44 MT CO<sub>2</sub>e each year.



## **QUICK FACTS**

2.6%

of community-wide GHG emissions in 2023 from solid waste

669

tons of landfilled waste in 2023 - 10.9% of all solid waste

2,330

tons of waste used for waste-to-energy in 2023 -37.8% of all solid waste

1.224

tons of organics diversion in 2023 - 19.9% of all solid waste

52

tons of recycling diversion in 2023 - 37.8% of all solid waste

For More Information (click icon)







Click here to return to TOC

# The Plan:

## **Waste Management**

Waste management-including solid waste, recycling, and organics—plays a key role in reducing climate impacts. Landfills emit methane, a greenhouse gas over 25 times more potent than carbon dioxide, as organic waste like food, paper, and yard trimmings decomposes without oxygen. Reducing landfill waste, especially organics, is critical to lowering these emissions.

Waste collection also produces carbon emissions from dieselpowered trucks. Cutting waste through recycling and composting reduces collection trips and transportation emissions. 2 Recycling conserves natural resources and lowers emissions from raw material extraction and manufacturing. 3 Composting prevents methane emissions, enriches soil, and helps sequester carbon.4

Waste reduction is the most effective strategy, cutting emissions throughout a product's life cycle. 5 In Minnesota, waste reduction and recycling already prevent nearly 4.9 million metric tons of CO. annually-the equivalent of removing one million cars from the road.6 Expanding recycling, composting, and waste reduction can help Falcon Heights cut climate pollution, conserve resources, and build healthier, more sustainable systems.

## Solid Waste in Falcon Heights<sup>7</sup>

Total solid waste handled in 2019 was 6,598 tons. By 2023 the total was 6,160 for a 6.6% decrease. On a per-capita basis, however, the decrease in total solid waste handled is lower at 2.1%. The share of solid waste being diverted for recycling has decreased from 33% in 2019 to 31.4% in 2023. Organics diversion, however, has increased from 17.2% in 2019 to 19.9% in 2023. These numbers highlight a significant opportunity to divert more waste from landfills. especially organic materials, which generate the most greenhouse gas emissions.

## **ACTIONS**

- WM 1-1 Establish a Zero Waste policy for City operations with clear annual waste reduction targets toward achieving Zero Waste. Require external users of City facilities to comply with the Zero Waste policy, and update event permit applications to mandate recycling and composting at events.
- WM 1-2 Explore waste hauling improvements to support CAP goals, including updates to the City's licensing process and the implementation of organized waste hauling strategies.
- WM 1-3 Require all construction and demolition projects to submit waste management plans demonstrating their ability to meet specific waste diversion targets aligned with the City's CAP goals.
- WM 1-4 Collaborate with partners such as Reuse MN to promote material reuse and waste reduction, including community events like swaps and garage sales.
- WM 1-5 Collaborate with partners to create a comprehensive communication campaign to provide standardized information and communications on waste reduction, recycling, and organics collection options to reach the residential sector.

## STRATEGY WM1:

Decrease total annual municipal solid waste generated by 10% by 2035.

## Strategy Co-Benefits





The Minnesota Pollution Control Agency (MPCA) ranks waste management strategies by environmental impact, prioritizing reduction, reuse, recycling, and organics recovery. Reducing waste conserves resources, cuts emissions, and can save homes and businesses hundreds of dollars annually. Strengthening waste reduction policies offers a major environmental opportunity for Falcon Heights.

## ACTIONS

- WM 2-1 Promote participation in the Ramsey/Washington Recycling and Energy center's food scraps pickup program. Goal 75% household participation by 2035.
- WM 2-2 Incorporate requirements into zoning standards for commercial and multi-family buildings to provide convenient organics and recycling collection, ensuring diversion is as easy as garbage disposal.
- WM 2-3 Collaborate with partners to promote backyard composting by providing residents with low-cost or free compost bins and educational materials.
- WM 2-4 Collaborate with partners such as Ramsey County Urban Agriculture Coordinator to establish a community compost site for residents unable or unwilling to compost at home.

# STRATEGY WM2:

Increase organics and compostable diversion from 19.9% to 22% of total MSW handled by 2035.

## Strategy Co-Benefits





Most landfill gas arises from bacterial decomposition when organic waste breaks down by bacteria. Organic wastes include food, garden waste, street sweepings, textiles, wood, and paper products. <sup>12</sup> The State's 2013 Waste Characterization study shows that over 50% of Falcon Heights' landfill and waste-to-energy stream is organic material, including paper—presenting a major emissions reduction opportunity. <sup>13,14</sup>

WASTE MANAGEMENT

# STRATEGY WM3:

Increase recycling diversion from 31.4% to 35% of total MSW handled by 2035.

## Strategy Co-Benefits





The 2013 State Waste Characterization study identifies significant potential to boost recycling, estimating that up to 48% of landfilled waste could be recycled. 14 The largest opportunities lie in paper and plastics, with additional potential in metals and glass.

## **ACTIONS**

- WM 3-1 Collaborate with partners on a comprehensive communication campaign providing standardized education and guidance on waste reduction, recycling, organics collection, hazardous waste management, and available waste diversion programs for residential and commercial sectors
- WM 3-2 Partner with Ramsey County and the Recycling Ambassador program to reduce barriers to recycling participation at multifamily and commercial properties.
- WM 3-3 Through waste hauler permitting or organized waste collection processes, require or incentivize haulers to educate customers on recycling, waste reduction, and diversion.
- WM 3-4 Adopt an ordinance requiring all "to-go" packaging to be recyclable, compostable, or reusable.

2-11 | FALCON HEIGHTS CLIMATE ACTION PLAN

# The Plan:

# Water and Wastewater

Climate change directly impacts water and wastewater systems, affecting availability, quality, and infrastructure capacity in Falcon Heights. Rising temperatures and shifting rainfall patterns increase water risks, requiring strategies like conservation, efficient irrigation, and drought-resistant landscaping to protect limited resources. 23

Heavier rainfall can overload wastewater systems, causing overflows.4 Adaptive strategies include increasing wastewater facility capacity, using green infrastructure like rain gardens and bioswales to manage stormwater, and preventing contamination. Integrating climate projections into planning supports proactive adaptation and strengthens the long-term sustainability of water and wastewater systems. By prioritizing resilience, Falcon Heights can protect public health, the environment, and the local economy while ensuring safe water and reliable wastewater treatment.5

By 2025, an estimated 1.8 billion people will live in areas plagued by water scarcity, with two-thirds of the world's population living in water-stressed regions. Since 1985 the Falcon Heights area has had a reduction in water yield of approximately 10%. Through 2050, the City can anticipate an increase in water demand of 20%.



# QUICK FACTS

360/0

annual precipitation increase projected by 2100

27-55%

heavy precipitation event increase projected by 2100

flood and severe storm events in Ramsey County reported since 2000

\$30,869,000

in flood and storm damage reported by NOAA since 2000

For More Information (click icon):











Click here to return to TOC

# STRATEGY W1:

Promote a 5% reduction in water use and wastewater generation Citywide by 2035.

## Strategy Co-Benefits





Reducing water use and wastewater is key to cutting emissions and building climate resilience. Using less water eases pressure on freshwater resources, supports ecosystems, and lowers energy demand for treatment and transport, reducing greenhouse gases. Minimizing wastewater further conserves energy and cuts emissions. Together, these actions strengthen sustainability and water security.

## STRATEGY W2:

Identify flood-prone areas and develop plans to address future stormwater and climaterelated impacts.

## Strategy Co-Benefits







Falcon Heights can expect as much as a 36% increase in annual precipitation and 55% more heavy downpours by 2100. 1,7,8 These trends are likely to lead to more runoff and flash flooding on less absorbent ground.9 Infrastructure is often based on past rainfall, but climateready designs must use projections from NOAA and others to account for increased precipitation and heavier storms

WATER AND WASTEWATER \_\_\_

## ACTIONS

- W 1-1 Collaborate with regional partners, including Saint Paul Regional Water Services, Capitol Region, Rice Creek Watershed Districts, and Met Council, to help Falcon Heights' largest water users reduce consumption through an opt-in program. Offer technical resources or grants for water-efficient equipment to assist large institutions and businesses in conserving water internally.
- W 1-2 Promote community-wide adoption of WaterSense fixtures by accelerating installation in homes and expanding to commercial properties. Goal: achieve 30 households and 10 businesses upgraded annually.
- W 1-3 Evaluate adopting a Lawn and Landscaping watering policy that provides clear irrigation guidelines and promotes water conservation
- W 1-4 Implement a policy requiring rainwater collection systems and WaterSense fixtures and appliances in all City facility projects, including modeling best practices in the anticipated new park building. Encourage projects receiving City financing or public funds to adopt similar practices and provide technical support as needed.
- W 1-5 Partner with Ramsey County, Saint Paul Regional Water Services, and local watershed districts to establish a reduced-cost or giveaway program for rain barrels.

- W 2-1 Incorporate anticipated increases in precipitation and extreme weather into the City's stormwater management plans, including addressing redevelopment of currently exempt properties. Collaborate with Capital Region and Rice Creek watershed districts.
- W 2-2 Conduct a pavement analysis and permeable pavement conversion study, prioritizing flood-vulnerable areas identified in the City's 2024 Ground Cover Study. Develop an implementation master plan and replacement schedule.
- W 2-3 Explore zoning adjustments to reduce impervious surfaces citywide, emphasizing pavement removal, permeable pavement installation, floodplain preservation, and green stormwater infrastructure. Collaborate with Capital Region and Rice Creek watershed districts.
- W 2-4 Partner with Capital Region and Rice Creek watershed districts to create or expand incentive programs encouraging rain garden installations, prioritizing areas vulnerable to stormwater impacts.

## ACTIONS

- W 3-1 Partner with Capital Region and Rice Creek watershed districts to assess the percentage of impervious surface runoff treated by Best Management Practices (BMPs) and set a 2035 improvement goal.
- W 3-2 Strengthen ordinances and enforcement to protect riparian areas, streams, and wetlands that store and filter
- W 3-3 Adopt a no-fertilizer, no-pesticide policy for all City-owned or managed properties and encourage reduced fertilizer and pesticide use by residents and businesses.
- W 3-4 Collaborate with partners to educate residents on environmentally safer alternatives to road and sidewalk salt for ice control.

# S STRATEGY W3:

Increase groundwater, stream, river and wetland water quality protection and restoration.

# Strategy Co-Benefits







Protecting aquifers, lakes, and natural water bodies is vital for climate adaptation, as they store freshwater, support ecosystems, and meet human needs. Climate change harms water quality through evaporation, flooding, and contamination. Groundwater management, land use planning, and riparian restoration are key. Green infrastructure like permeable pavements and rain gardens reduces runoff and improves water quality. 11

FALCON HEIGHTS CLIMATE ACTION PLAN | 2-14



# QUICK FACTS

community gardens within the city

farmers markets within the city

10.5%

average food insecurity rate in Ramsey County

19.0%

child food insecurity rate in Ramsey County

For More Information (click icon)









Click here to return to TOC

# The Plan:

## **Local Food and Agriculture**

Transporting food across long distances relies heavily on fossil fuels, contributing significantly to greenhouse gas emissions. The extended travel time also increases the need for energy-intensive refrigeration, further adding to the environmental impact. By minimizing transportation and refrigeration, we can make our food systems more sustainable.1

Choosing locally grown food helps reduce the carbon footprint associated with our meals while also strengthening the local economy. Studies indicate that local produce markets support approximately 32 jobs per \$1 million in sales, compared to just 10.5 jobs generated by wholesale distribution channels. Additionally, community gardens and neighborhood gardening provide social and environmental benefits. <sup>2</sup> These spaces can foster a sense of community, create opportunities for people of all ages to engage in shared activities, encourage low-impact outdoor exercise, and support biodiversity by creating habitats for plants, animals, and pollinators.3

At the same time, our food systems face increasing threats from climate change. 4 Extreme weather events, rising temperatures, and changing precipitation patterns put crops and livestock at risk. Challenges range from animal heat stress to increased pest infestations and disruptions to natural cycles. These physical impacts are compounded by social and economic consequences. Food insecurity—when access to adequate nutrition is limited by factors like income or availability—disproportionately affects lowincome households, who are nearly three times more likely to experience it. 5 As climate change intensifies, it is likely to deepen these existing inequities and further strain food security in many communities.6

- \1 Collaborate with the Saint Paul-Ramsey County Food and Nutrition Commission to complete a Food Security Assessment, identify underserved areas, and develop strategies to improve food access-especially for vulnerable
- FA 1-2 Partner with organizations like Good Acre, the University of Minnesota, Gibbs Farm, and St. Paul Farmer's Market to create or expand farmers market access in Falcon Heights. Pursue grant opportunities to support these efforts.
- FA 1-3 Work with partners to promote subsidy programs that provide local produce at reduced prices for qualifying
- FA 1-4 Offer City facilities or parking lots as pickup sites for Community Supported Agriculture (CSA) programs that accept SNAP and EBT payments.

# STRATEGY LF1:

Enhance access to local food, especially for lowincome and food-insecure individuals.

## Strategy Co-Benefits







U.S. agriculture faces regional climate risks.7 Pacific states face less water, warmer winters, and variable springs. Extreme weather, heat, and flooding threaten Plains and Midwest grain. Livestock in the Plains and Southeast faces weather and supply risks.

Low-income and food-insecure groups will be hit hardest by the effects of these impacts. Strong local food systems boost resilience, food security, jobs, and community wealth. 8,9

- FA 2-1 Identify and map potential sites for community gardens or farms, prioritizing underserved populations and foodinsecure areas. Include parks and public lands, and collaborate with partners to implement garden locations.
- FA 2-2 Plant fruit and nut trees on City-owned land, boulevards, and rights-of-way. Partner with groups like Every Meal to collect and distribute the harvest.
- FA 2-3 Establish a "Grow Falcon Heights" program to expand community garden plots and create a market garden that offers youth training and internships. Collaborate with local restaurants, food shelves, and organizations to distribute produce to food-insecure residents.
- FA 2-4 Review policies and ordinances to support urban agriculture, including front yard and rooftop gardens, community gardens, urban farms, beekeeping, and poultry keeping

Increase production of local food, particularly serving low-income and food-insecure individuals.

## Strategy Co-Benefits







Some Falcon Heights residents face economic stress, limited transportation, and live over 1/2 mile from a grocery store (see the Falcon Heights Climate Baseline Assessment). 10 Others face food insecurity from lack of money, culturally appropriate foods, or resources. Improving food access reduces insecurity and strengthens climate resilience.

FALCON HEIGHTS CLIMATE ACTION PLAN | 2-16

## LOCAL FOOD AND AGRICULTURE

# STRATEGY LF3:

Reduce food waste and hunger, achieve a 50% decrease in food insecurity Citywide by 2035.

## Strategy Co-Benefits







Nationally, 30-40% of food is wasted. 11 Falcon Heights generates about 480 tons of food waste yearly, based on the State's 2013 Waste Study. 12.13 This waste emits greenhouse gases and costs \$1 million annually. 14 It also wastes resources like land, water, and energy, and could have helped families in need. Reducing food waste supports sustainability and may reduce food insecurity.

## **ACTIONS**

- FA 3-1 Collaborate with the Saint Paul—Ramsey County Food and Nutrition Commission to complete a Food Security Assessment. Identify food-insecure areas, especially vulnerable populations, and develop strategies to improve food access in the city.
- FA 3-2 Work with Ramsey County, the University of Minnesota, and the State Fair to explore creating a Food Recovery Network that improves surplus food collection and distribution from large events and facilities to food-insecure and elderly populations.
- FA 3-3 Coordinate with local food banks to support edible food donations from City and community events. Expand partnerships with food retailers and restaurants, and share food bank resources on the City's website.

2-17 | FALCON HEIGHTS CLIMATE ACTION PLAN

# The Plan:

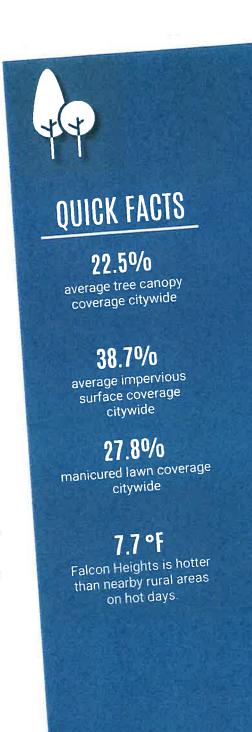
# **Greenspace and Ecosystems**

Trees and natural vegetation are vital to community well-being, helping improve air and water quality, lower building energy use, and support climate action efforts. Research also links exposure to nature, like time spent in parks, with better physical and mental health and reduced stress.<sup>2</sup> Additionally, trees help clean the air by removing pollutants such as carbon monoxide, particulate matter, and ground-level ozone—substances that can worsen asthma and other respiratory conditions when present at high levels.3

## Prairie Grass and Climate Action

Switching from traditional lawns to native grasses and wildflowers strengthens climate resilience. Native plants require less water and upkeep, cutting down on irrigation, chemical fertilizers, pesticides, and emissions from lawn maintenance. Their deep roots enhance soil stability, improve water absorption, reduce flooding risks, and sequester carbon. Native grasses also promote biodiversity by providing essential habitats for wildlife.5

More pavement and buildings increase the urban heat island effect, Impervious Surfaces and Heat where cities become hotter than surrounding rural areas due to heat absorption by man-made surfaces. This effect worsens extreme heat events, raising health risks and discomfort. Research shows that areas with more impervious surfaces and fewer trees experience significantly higher temperatures. 6



For More Information (click icon):





Click here to return to TOC

## GREENSPACE AND ECOSYSTEMS

# STRATEGY GE1:

Increase tree cover, particularly in the priority neighborhoods, from 22.5% to 25% by 2035.

## Strategy Co-Benefits







Our tree canopy reduces runoff, cleans water, cools urban heat islands, lowers building energy use, stores carbon, and supports economic growth. 7,8,9 Expanding canopy coverage boosts climate adaptation. 10,11

Prioritizing tree canopy expansion enhances equity, benefits more households, and reduces heat island effects. Suggested neighborhood increases and criteria are outlined in the City's 2024 Ground Cover Study.

# STRATEGY GE2:

Enhance pollinator habitats and replace 15% of turf with native grasses and wildflowers citywide by 2035.

## Strategy Co-Benefits







Replacing lawns with native grasses and wildflowers creates a natural landscape and helps address climate change. Native plants support wildlife, improve water quality, reduce air pollution, protect biodiversity, and increase carbon sequestration. 12,13,14

In Falcon Heights, 99% of grasslands are lawns, presenting turf reduction opportunities. Replacing turf boosts stormwater uptake, reduces water use, and increases soil carbon. Areas with more grass have the greatest potential for native plant restoration.

# ACTIONS

- GE 1-1 Adopt a No Net Loss policy requiring every removed public street or space tree to be replaced with a seedling or sapling. If replanting on-site isn't feasible, plant in a nearby space or the City's designated tree bank.
- GE 1-2 Partner to create or expand an annual tree giveaway or discount program for residents. Example: grow and distribute 400 seedlings or saplings each year.
- GE 1-3 Update the City's Landscape Ordinance to require minimum tree and native/pollinator planting coverage based on lawn or impervious surface area. Require planting islands in parking lots for new or expanded developments. Promote native tree, shrub, and pollinator-friendly groundcover
- GE 1-4 Collaborate with partners to share educational resources on climate-adaptive trees, promotion of tree and plant diversity, carbon gardening, tree care, and other sustainable greenspace practices such as reducing fertilizer use, biochar amendments, and polyculture lawns. Post resources on the City website.

## ACTIONS

- GE 2-1 Complete a Land Conversion Opportunity Study to identify turf and impervious areas suitable for conversion to native grasslands, wetlands, shrubs, or forests. Develop an implementation plan by census tract, explore incentives, and launch outreach to promote turf conversion.
- GE 2-2 Establish a policy for City properties to reduce impervious surfaces and enhance natural diversity by incorporating pavement reduction, permeable pavement, green roofs, and replacing turf with native wildflowers and prairie grasses to
- GE 2-3 Collaborate with partners like the University of Minnesota Bee Lab and Capital Region Watershed District to develop and share resources on selecting appropriate native and pollinator-friendly plants.
- GE 2-4 Partner with the University of Minnesota Master Gardeners to create a greenspace ambassador and education

# GREENSPACE AND ECOSYSTEMS

## ACTIONS

- GE 3-1 Collaborate with partners to create an incentive program supporting the conversion of underutilized paved and turf areas into sustainable green spaces, following the City's Land Conversion Opportunity Study.
- GE 3-2 Require commercial developments receiving City funding, PUD approval, or Conditional Use Permits to implement heat island reduction strategies, including cool surfaces, solar-friendly shading, impervious surface reduction, and breeze capture
- GE 3-3 Collaborate with partners to develop and promote best practices for reducing heat island effects on commercial properties.
- GE 3-4 Collaborate with partners to create a cool roofs and pavements incentive program and develop a Falcon Heights demonstration project featuring a cool roof, green roof, green/live wall, or vertical garden.

# STRATEGY GE3:

Reduce heat island effect by decreasing dark impervious surfaces 10% citywide by 2035, prioritizing high-impact neighborhoods.

# Strategy Co-Benefits







The heat island effect causes urban areas to be warmer than nearby rural regions due to human activities and infrastructure. This increases discomfort and health risks, especially during heat waves, which are expected to grow more frequent and intense in Falcon Heights. <sup>19,20</sup> Dark-colored impervious surfaces contribute significantly to this effect. <sup>21</sup> Reducing these surfaces can help lessen heat island impacts.



## **QUICK FACTS**

6

Climate Action Plan Sectors

23

strategies to achieve GHG reduction and climate resilience goals

92

detailed actions outlining a menu of steps that can be taken to support strategies

10 Year implementation

timeframe

Plan (CAP) are crucial for setting a successful trajectory. Clarifying roles and securing funding early will be essential to achieving ambitious greenhouse gas reduction and climate resilience goals.

### Everyone Has a Role

Climate change affects many aspects of community life, requiring a comprehensive response. Some actions will be led directly by Falcon Heights's elected officials, city leadership, or municipal departments. Other 'efforts will depend on local government support and active participation from residents, families, and businesses. Building a resilient future demands commitment from both city officials and the entire community.

The initial years following the adoption of the Falcon Heights Climate Action

Implementation

## Climate Action is a Continuous Process

Implementing a multi-year plan comes with uncertainties, especially regarding future technologies and opportunities. To accommodate this, the CAP will follow annual or biennial implementation cycles. Each cycle will identify and prioritize actions across sectors for the upcoming period, ensuring alignment with city initiatives, current projects, and budget planning. Actions will be flexible and adaptable, with refinements made as implementation progresses. Policy changes, new ordinances, or city-funded initiatives will require City Council approval.

The City will prioritize CAP implementation through collaboration among city departments, the Environment Commission, and community stakeholders. This approach ensures integration of climate actions into annual planning and budgeting processes, promoting consistency with broader city efforts.





# **Organizational Actions**

The following actions outline steps the City can take to organize the implementation of the climate action plan:

- CP 1-1 Create a City "CAP Implementation Team" with staff from key departments to meet quarterly, prioritize and track progress, and develop two-year work plans outlining tasks, timelines, resources, and staffing needs. The team will provide annual progress updates to the Environment Commission and City Council.
- CP 1-2 Form a Falcon Heights Climate Action Collaboration Team with members from local government, nonprofits, community groups, and residents. The team will meet regularly to coordinate CAP implementation, pursue joint initiatives, share lessons, support cross-jurisdictional projects, and identify funding opportunities.
- CP 1-3 Create a process to review city policies and plans for consistency with the Climate Action Plan.
- CP 1-4 Implement a cohesive annual communication and education campaign that addresses the communication and educational needs of each CAP section. Enhance the City's Energy Action Hub to disseminate CAP resources and foster community action.
- CP 1-5 Regularly evaluate CAP progress and impacts (every 1-2 years), including updated community-wide and municipal GHG inventories. Review strategies for effectiveness and relevance, adjusting actions as necessary.

# Tools

To aid the City's initial implementation, the paleBLUEdot team has developed supportive tools:

## Implementation Matrix:

Excel tool for action implementation and monitoring.

## **Example Programs, Policies** and Ordinances

Example programs, policies, and ordinances supporting the City's Climate Action Plan strategies: https://palebluedot.llc/falconheights-cap-policies

## **Example Policy Alignment Memo**

For use in reviewing policy items against Climate Action Plan goals: Plan Alignment Statement Memo Falcon Heights.pdf



# What You Can Do

Our success in building a sustainable and resilient future depends on all of us. The City has initiated this planning effort, but now we need everyone's involvement to keep the momentum going. Here are some simple steps you can start taking today!



## **Transportation and Land Use**

- Keep vehicles tuned and tires properly inflated.
- Limit idling to 30 seconds, even in winter.
- Walk or bike instead of driving short distances.
- Use public transit regularly for commuting or errands. Plan your trip <u>here</u>.
- Telecommute or carpool to reduce driving.
- Fly less; vacation locally or use remote meetings.
- Consider becoming a one-car household. Explore how to make the change <u>here</u>
- Choose an electric or hybrid vehicle for your next car.
   Search models available here.



## **Buildings and Energy**

- Switch all home lighting to energy-efficient LED bulbs.
- Adjust your thermostat slightly higher in summer, lower in winter.
- Check out State of Minnesota's energy savings tips for summer and winter
- Get a <u>home energy audit</u> to identify efficiency improvements.
- Weatherize your home by sealing drafts and adding insulation.
- Replace older appliances with <u>ENERGY STAR</u>® efficient models.
- Take advantage of incentives from <u>Xcel</u>, the <u>State of Minnesota</u>, and the <u>US Government</u>.
- Replace gas appliances with efficient electric alternatives.
- Install rooftop solar or subscribe to renewable electricity through <u>Xcel</u> or a <u>community solar garden</u>.



## **Waste Management**

- Follow Ramsey County recycling guidelines.
- Purchase durable, reusable products to reduce waste.
- Choose reusable bags, bottles, and containers to avoid single-use plastics.
- Repair items instead of discarding; donate or sell usable goods.
- Buy second-hand or borrow items rather than purchasing new.
- Plan meals carefully and shop to reduce food waste.
- Dispose of hazardous waste like batteries and electronics at proper facilities.
- Participate in Ramsey County food scraps program to easily divert scraps from the landfill.
  - Participate in Ramsey County's <u>yard waste drop off</u> <u>program</u>.







## Water and Wastewater

- Reduce indoor water use by shortening showers and turning off faucets promptly.
   See other tips here.
- Repair leaks immediately to avoid unnecessary water loss.
- Keep gutters and storm drains clear to keep your home storm ready. Check out other rain-ready tips here.
- Use <u>rain barrels</u> to collect rainwater for gardening or lawn care.
- Water lawns and gardens infrequently and only during cool parts of the day.
- Install <u>WaterSense</u> water efficient fixtures like low-flow toilets, faucets, and showerheads.
- Install a <u>rain garden</u> to absorb stormwater runoff and reduce flooding.
- Understand your home's flood risk and have a <u>preparedness</u> <u>plan</u>.



## **Local Food and Agriculture**

- Plan meals to use groceries fully and minimize waste.
- Incorporate more <u>plant-</u> <u>based meals</u> into your diet.
- Choose seasonal foods grown locally to reduce transport emissions.
- Select ethically-produced <u>climate-friendly</u> items, such as <u>fair-trade</u> coffee or chocolate.
- Support restaurants and stores selling locally-grown food products.
- Purchase food directly from local farmers through markets or <u>CSA programs</u>.
- Start a small garden at home to grow fruits, vegetables, or herbs.
- Join or start a <u>community</u> garden if space at home is limited.
- Plant fruit or nut trees and shrubs suitable for Minnesota's climate.



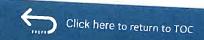
## **Greenspace and Ecosystems**

- Avoid chemical pesticides and herbicides; use natural yard-care methods.
- Volunteer locally to assist with <u>tree plantings</u> or <u>gardens</u>.
- Create a pollinator-friendly garden with native plants and wildflowers.
- Reduce lawn size by planting drought-tolerant grasses and native species. Apply for <u>funding to help</u>.
- Plant and care for trees to provide shade and absorb carbon emissions.
- Design your yard to support local wildlife habitats.
  - Replace unnecessary pavement with permeable surfaces or greenery.
- Consider installing a green <u>roof</u> to manage stormwater and reduce heat.

FALCON HEIGHTS CLIMATE ACTION PLAN   4-2
--



# Appendix A References



The following are sources and additional references used in the Climate Action Plan.

A-1 | FALCON HEIGHTS CLIMATE ACTION PLAN

#### Introduction

- 1 Estimating the Health-Related Costs of 10 Climate-Sensitive US Events During 2012: <a href="https://www.nrdc.org/resources/bitter-pill-high-health-costs-climate-change">https://www.nrdc.org/resources/bitter-pill-high-health-costs-climate-change</a>
- 2 Stop Climate Change, Save Lives: https://www.nrdc.org/stop-climate-changesave-lives
- 3 World Health Organization Building Capacity on Climate Change for Human Health Toolkit:

https://www.who.int/activities/buildingcapacity-on-climate-change-humanhealth/toolkit/cobenefits

4 United Nations Economic Commission for Europe:

https://unece.org/DAM/Sustainable\_Develop ment\_No\_2\_Final\_Draft\_OK\_2.pdf

5 Bollen, J. et al. (2009), Co-benefits of Climate Change Mitigation Policies: Literature Review and New Results.

https://www.oecd-ilibrary.org/economics/cobenefits-of-climate-change-mitigationpolicies\_224388684356

6 City of Falcon Heights Community GHG Inventory, 2024; <a href="https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/">https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/</a>

7 City of Falcon Heights Climate Vulnerability Assessment:

https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/

8 i Parry, I, Veungh, C. and Heine, D. (2014), How Much Carbon Pricing is Countries' Own Interests? The Critical Role of Co-Benefits; <a href="https://www.imf.org/external/pubs/ft/wp/20">https://www.imf.org/external/pubs/ft/wp/20</a> 14/wp14174.pdf

- 9 UNC Gillings School of Global Public Health, "Reducing greenhouse gases benefits air quality, saves lives"; <a href="https://sph.unc.edu/sph-news/reducing-greenhouse-gases-benefits-air-quality-saves-lives/">https://sph.unc.edu/sph-news/reducing-greenhouse-gases-benefits-air-quality-saves-lives/</a>
- 10 Mapping the co-benefits of climate change action to issues of public concern in the UK: a narrative review:

https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30167-4/fulltext

11 Union of Concerned Scientists, Top 10 Benefits of Climate Action:

https://www.ucsusa.org/resources/top-10benefits-climate-action

12 Based on existing average economic value per acre of tree canopy cover. City of Falcon Heights Ground Cover, Heat Island, and Carbon Sequestration Study:

https://view.publitas.com/palebluedot/falcon

https://view.publitas.com/palebluedot/falconheights-ground-cover-heat-island-andcarbon-sequestration-study/

13 City of Falcon Heights, Climate Action Plan Community Survey;

https://view.publitas.com/palebluedot/falcon-heights-community-survey-report/

14 US EPA, "What Climate Change Means for Minnesota";

https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-mn.pdf

15 State of Minnesota, Interagency Climate Adaptation *Team*, Building Resiliency to Extreme Precipitation in Minnesota; <a href="https://bwsr.state.mn.us/sites/default/files/2018-">https://bwsr.state.mn.us/sites/default/files/2018-</a>

12/Building Resiliency to Extreme Precipitati on in Minnesota-

ICAT\_White\_Paper%20%282%29.pdf

16 NASA, Global Temperature (Global Avg Temperature); <a href="https://climate.nasa.gov/vital-signs/global-temperature/?intent=121">https://climate.nasa.gov/vital-signs/global-temperature/?intent=121</a>

17 US Climate Resilience Toolkit Climate Explorer:

https://toolkit.climate.gov/tool/climate-explorer-0

18 U.S. Global Change Research Program, Climate Science Special Report: https://science2017.globalchange.gov/

19 US National Oceanic and Atmospheric Administration, National Centers For Environmental Information, Climate Data Online: https://www.ncdc.noaa.gov/cdo-web/

20 Projections assume global greenhouse gas emissions are not reduced in line with the recommendations of the International Panel on Climate Change. Reductions in greenhouse gas emissions can positively effect the projected climate impacts, particularly in the second half of the century. Projections use climate model RCP 8.5 which is recommended by Woodshole Research Center and others as the best match through mid-century under current and stated policies with still highly plausible through 2100. "RCP8.5 tracks cumulative CO<sub>2</sub> emissions" Christopher R. Schwalm University of California, Los Angeles:

https://www.pnas.org/doi/full/10.1073/pnas. 2007117117#data-availability

21 Unless noted otherwise, projections are based on U.S. Climate Resilience Toolkit CLIMATE EXPLORER, NOAA: <a href="https://crt-climate-explorer.nemac.org/">https://crt-climate-explorer.nemac.org/</a>

22 Assumes 60% of decrease of days <32° F occur during frost-free season with balance occurring during winter months. All numbers are shown as change over baseline column.

23 University of Minnesota, Changing Seasons: <a href="https://climate.umn.edu/our-changing-climate/changing-seasons">https://climate.umn.edu/our-changing-climate/changing-seasons</a>

24 Argonne National Laboratory, Center for Climate Resilience and Decision Science: <a href="https://disgeoportal.egs.anl.gov/ClimRR/">https://disgeoportal.egs.anl.gov/ClimRR/</a>

25 Increases are due to increased air

conditioning needs. Calculations are based on US Environmental Protection Agency's "Climate Change Indicators: Residential Energy Use": <a href="https://www.epa.gov/climate-indicators/climate-change-indicators-residential-energy-use">https://www.epa.gov/climate-indicators/climate-change-indicators-residential-energy-use</a> and an estimated average of 16,9% of total residential electric use for air conditioning based on US Energy Information Administration "Use of energy explained":

https://www.eia.gov/energyexplained/use-of-energy/electricity-use-in-homes.php

26 University of Minnesota Climate Adaptation Partnership; https://climate.umn.edu/our-changingclimate/extreme-events

27 State of Minnesota MPCA, Climate Change Impacts; <a href="https://www.pca.state.mn.us/air-water-land-climate/climate-change-impacts">https://www.pca.state.mn.us/air-water-land-climate/climate-change-impacts</a>

## The Plan - Transportation

1 US Energy Information Administration, International Energy Outlook 2016 https://www.eia.gov/outlooks/ieo/pdf/transportation.pdf

2 City of Falcon Heights Community GHG Inventory, 2024; <a href="https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/">https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/</a>

3 The Influence of Urban Form on GHG Emissions in the U.S. Household Sector (Lee, S., and Lee, B. 2014)

<a href="https://www.researchgate.net/publication/27">https://www.researchgate.net/publication/27</a>

0952371 The influence of urban form on GHG emissions in the US household sector

4 National Academies, "Transportation's Role in Equity and Justice: Restoring and Revitalizing Neighborhoods and Communities":

https://www.nationalacademies.org/news/20 21/07/transportations-role-in-equity-and-

## justice-restoring-and-revitalizingneighborhoods-and-communities

5 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal Recommendations, 2024:

https://view.publitas.com/palebluedot/cityof-falcon-heights-climate-action-baselineassessment/

6 US Census accessed via Deloitte Data USA: https://datausa.io/profile/geo/Falcon Heights-mn

7 US Census, On The Map: https://onthemap.ces.census.gov/

8 AAA "Your Driving Costs, 2023": https://newsroom.aaa.com/wpcontent/uploads/2023/08/YDC-Fact-Sheet-FINAL-8.30.23-1.pdf

9 Social Explorer Tables (SE), Environmental Summaries 2011, Social Explorer, National Historical Geographic Information System (NHGIS)

10 US Census https://data.census.gov/

11 TRB Special Report 298: Driving and the Built Environment: Effects of Compact Development on Motorized Travel, Energy Use, and CO2 Emissions Impacts of Land Use Patterns on Vehicle Miles Traveled Evidence from the Literature https://www.nap.edu/read/12747/chapter/5#

12 New York Times, "E.V.s Start With a Bigger Carbon Footprint. But That Doesn't Last"; https://www.nytimes.com/2022/10/19/busin ess/electric-vehicles-carbon-footprintbatteries.html

13 EV HUB:

https://www.atlasevhub.com/materials/state -ev-registration-data/

14 US EPA, Automotive Trends Report, 2023; https://www.epa.gov/system/files/document s/2023-12/420r23033.pdf

15 US Department of Transportation, Electric Vehicle Charging Infrastructure; https://www.transportation.gov/sites/dot.gov /files/2024-12/EV%20Charging%20Infrastructure%20-%20Climate%20Strategies%20that%20Work.p

16 US Department of Energy, Alternative Fuel Data Center, Electric Vehicle Benefits and Considerations:

https://afdc.energy.gov/fuels/electricitybenefits

17 US Energy Information Administration, Carbon Dioxide Emissions Coefficients: https://www.eia.gov/environment/emissions /co2\_vol\_mass.php

## The Plan - Buildings and Energy

1 City of Falcon Heights Community GHG Inventory, 2024; https://view.publitas.com/palebluedot/falcon

-heights-ghg-inventory/

2 US Department of Energy, Residential Program Solution Center: https://rpsc.energy.gov/energy-data-facts

3 City of Falcon Heights, residential and nonresidential construction permit history, 2021, 2022, and 2023.

4 Social Explorer, Market Profile Data 2022 based on US Census American Census Survey:

https://www.socialexplorer.com/data/EASI20 25/documentation/7933fdf1-4c9b-4cb2ad82-5a8e949ac78f

5 US Census Bureau ACS 5 year estimates; https://data.census.gov/table/

6 State of Minnesota House of Representatives, "State establishes standard of 100% carbon-free electricity by 2040" https://www.house.mn.gov/NewLaws/story/ 2023/5473

7 City of Falcon Heights Climate Action

Baseline Assessment and Strategic Goal Recommendations, 2024:

https://view.publitas.com/palebluedot/cityof-falcon-heights-climate-action-baselineassessment/

- 8 US Department of Energy, Benefits of Residential Solar Electricity: <a href="https://www.energy.gov/energysaver/benefit">https://www.energy.gov/energysaver/benefit</a> s-residential-solar-electricity
- 9 ACEEE Understanding Energy Affordability: https://www.aceee.org/sites/default/files/energy-affordability.pdf
- 10 City of Falcon Heights Renewable Energy Potentials Study, 2024: https://view.publitas.com/palebluedot/falcon
- 11 Xcel Energy, Renewable Energy Opportunities:

-heights-renewable-potentials-study/

https://mn.my.xcelenergy.com/s/renewable

12 Dakota Electric Association, Renewable Energy:

https://www.dakotaelectric.com/renewableenergy/

13 US Department of Energy, Renewable Energy Certificates:

https://www.epa.gov/green-powermarkets/renewable-energy-certificates-recs

14 Savings calculated on Falcon Heights average commercial electricity rate as reported by Electricity Local (https://www.electricitylocal.com/) and Natural Gas Local (https://naturalgaslocal.com/)

## The Plan - Waste Management

1 US EPA, Understanding Global Warming Potentials;

https://www.epa.gov/ghgemissions/understanding-global-warming-potentials

2 Northwestern Global News, How cities can cut transportation emissions. New Northeastern research reveals key strategies;

- https://news.northeastern.edu/2025/03/19/c limate-plan-city-research/
- 3 Lawrence University, The Impact of Recycling on Environmental Sustainability; https://blogs.lawrence.edu/careercenter/202 4/10/the-impact-of-recycling-onenvironmental-sustainability.html
- 4 US EPA National Recycling Strategy: https://www.epa.gov/circulareconomy/national-recycling-strategy
- 5 MPCA, Waste planning and recycling: https://www.pca.state.mn.us/air-water-landclimate/waste-planning-and-recycling
- 6 MPCA, Understanding Solid Waste; https://www.pca.state.mn.us/air-water-landclimate/understanding-solid-waste
- 7 City of Falcon Heights Community GHG Inventory, 2024; <a href="https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/">https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/</a>
- 8 MPCA Waste Planning and Recycling; https://www.pca.state.mn.us/air-water-landclimate/waste-planning-and-recycling
- 9 Minnesota Chamber of Commerce, WasteWise program: https://www.mnchamber.com/sites/default/files/Waste%20Wise%20Annual%20Report.pdf
- 10 North Carolina State University Extension, How Your Business Can Cut Costs by Reducing Waste: https://content.ces.ncsu.edu/how-your-

https://content.ces.ncsu.edu/how-yourbusiness-can-cut-costs-by-reducing-wastes

- 11 ReFed, A Roadmap To Reduce US Food Waste by 20 Percent: https://www.refed.com/downloads/ReFED\_R eport\_2016.pdf
- 12 Agency for Toxic Substances and Disease Registry:

https://www.atsdr.cdc.gov/hac/landfill/html/ch2.html

13 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal

Recommendations, 2024: https://view.publitas.com/palebluedot/cityof-falcon-heights-climate-action-baselineassessment/

14 State of Minnesota, 2013 Statewide Waste Characterization;

https://www.pca.state.mn.us/sites/default/files/w-sw1-60.pdf

#### The Plan - Water and Wastewater

1 City of Falcon Heights Climate Vulnerability Assessment:

https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/

- 2 Center for Climate and Energy Solutions, "Resilience Strategies for Drought"; https://www.c2es.org/wpcontent/uploads/2018/10/resiliencestrategies-for-drought.pdf
- 3 Aspen Public Radio, "How Landscaping Plays a Key Role in The Fight Against Climate Change";

https://www.aspenpublicradio.org/2023-10-17/how-landscaping-plays-a-key-role-in-thefight-against-climate-change

4 Climate Central, "Overflow: Climate Change, Heavy Rain, And Sewage"; https://assets.climatecentral.org/pdfs/Overflow\_sewagereport\_update.pdf

5 Johnson T, Butcher J, Santell S, Schwartz S, Julius S, LeDuc S. A review of climate change effects on practices for mitigating water quality impacts. J Water Clim Chang. 2022 Mar 22:

https://doi.org/10.2166%2Fwcc.2022.363

6 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal Recommendations, 2024: <a href="https://view.publitas.com/palebluedot/city-of-falcon-heights-climate-action-baseline-">https://view.publitas.com/palebluedot/city-of-falcon-heights-climate-action-baseline-</a>

assessment/

7 Argonne National Laboratory, Center for Climate Resilience and Decision Science, https://disgeoportal.egs.anl.gov/ClimRR/

8 Defined as Days Per Year with > 1" Rainfall, U.S. Climate Resilience Toolkit CLIMATE EXPLORER, NOAA; <a href="https://crt-climate-explorer.nemac.org/">https://crt-climate-explorer.nemac.org/</a>

9 WUFT, "Why the risk for flash flooding increases after a drought"; https://www.wuft.org/weather/2022-08-12/why-the-risk-for-flash-flooding-increases-after-a-drought

10 American Public Health Association, "Climate Changes Health: Water Quality and Accessibility"; https://www.apha.org/topics-and-issues/climate-health-and-equity/water-quality

11 US EPA, National Menu Best Management Practices:

https://www.epa.gov/npdes/national-menubest-management-practices-bmpsstormwater

# The Plan – Local Food and Agriculture

1 H. Nabipour Afrouzi, J. Ahmed, B. Mobin Siddique, N. Khairuddin, Ateeb Hassan, A comprehensive review on carbon footprint of regular diet and ways to improving lowered emissions, Results in Engineering, Volume 18, 2023;

https://doi.org/10.1016/j.rineng.2023.101054

2 Conner, David & Knudson, William & Hamm, Michael & Peterson, H.. (2008). The Food System as an Economic Driver: Strategies and Applications for Michigan. https://www.researchgate.net/publication/247521128 The Food System as an Economic Driver Strategies and Applications for Michigan

3 North Carolina State Extension, Research & Benefits of Community Gardens:

- https://nccommunitygardens.ces.ncsu.edu/resources-3/nccommunitygardens-research/
- 4 USDA Climate Indicators for Agriculture: https://www.usda.gov/sites/default/files/doc uments/climate\_indicators\_for\_agriculture.pd f
- 5 US Department of Health, Office of Disease Prevention and Health Promotion: https://www.healthypeople.gov/2020/topicsobjectives/topic/social-determinantshealth/interventions-resources/foodinsecurity
- 6 US Global Change Research Program, Fifth National Climate Assessment, Agriculture, Food Systems, and Rural Communities Chapter;
- https://nca2023.globalchange.gov/chapter/1
- 7 Lengnick, Laura. (2015). The vulnerability of the US food system to climate change. Journal of Environmental Studies and Sciences.
- https://www.researchgate.net/publication/28 2499666 The vulnerability of the US food s vstem\_to\_climate\_change
- 8 Cleveland Foundation, ParkWorks, Kent State University Cleveland Urban Design Collaborative, Neighborhood Progress Inc., Cleveland-Cuyahoga County Food Policy Coalition:
- https://docs.google.com/viewerng/viewer?url =https://communitywealth.org/sites/clone.communitywealth.org/files/downloads/report-masi-etal.pdf
- 9 American Planning Association, Local Food Systems Key to Healthy, Resilient, Equitable Communities:
- https://www.planning.org/planning/2021/win ter/local-food-systems-key-to-healthyresilient-equitable-communities/

- 10 USDA Food Access Research Atlas; https://www.ers.usda.gov/data-products/food-access-research-atlas/
- 11 USDA, Why Should You Care About Food Waste:
- https://www.usda.gov/foodlossandwaste/wh
- 12 State of Minnesota, 2013 Statewide Waste Characterization;
- https://www.pca.state.mn.us/sites/default/files/w-sw1-60.pdf
- 13 City of Falcon Heights Community GHG Inventory, 2024;
- https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/
- 14 ReFed, A Roadmap To Reduce US Food Waste by 20 Percent:
- https://www.refed.com/downloads/ReFED\_Report\_2016.pdf

### The Plan – Greenspace and Trees

- 1 US EPA, Using Trees and Vegetation to Reduce Heat Islands;
- https://www.epa.gov/heatislands/using-trees-and-vegetation-reduce-heat-islands
- 2 Dahlia Stott, et al, Interactions with Nature, Good for the Mind and Body: A Narrative Review, Int J Environ Res Public Health. 2024 Mar; 21(3): 329. Published online 2024 Mar 12; https://www.mdpi.com/1660-4601/21/3/329
- 3 US EPA, Throwing Shade Exploring Benefits of Trees:
- https://www.epa.gov/sciencematters/throwing-shade-exploring-benefits-trees
- 4 US EPA, Landscaping with Native Plants; https://archive.epa.gov/greenacres/web/html/conf\_knwldge.html
- 5 Audubon, Why Native Plants Matter;

### City of Falcon Heights Climate Action Plan References

### https://www.audubon.org/content/whynative-plants-matter

6 Comparison of impervious surface area and normalized difference vegetation index as indicators of surface urban heat island effects in Landsat imagery. Fi Yuan and Marvin Bauer, February 2007:

https://rs.umn.edu/sites/rs.umn.edu/files/Ur ban\_heat\_island--Impervious\_RSE\_paper.pdf

7 Francisco J. Escobedo, Timm Kroeger, John E. Wagner, Urban forests and pollution mitigation: Analyzing ecosystem services and disservices, Environmental Pollution, Volume 159, Issues 8–9, 2011:

https://www.sciencedirect.com/science/artic le/abs/pii/S0269749111000327

8 T Elmqvist, H Setälä, SN Handel, S van der Ploeg, J Aronson, JN Blignaut, E Gómez-Baggethun, DJ Nowak, J Kronenberg, R de Groot, Benefits of restoring ecosystem services in urban areas, Current Opinion in Environmental Sustainability, Volume 14, 2015:

https://www.sciencedirect.com/science/artic le/pii/S1877343515000433

9 USDA Forest Service, Carbon Storage and Sequestration by Urban Trees in the USA: <a href="https://www.nrs.fs.fed.us/pubs/5521">https://www.nrs.fs.fed.us/pubs/5521</a>

10 US EPA, Using Trees and Vegetation to Reduce Heat Islands:

https://www.epa.gov/heatislands/usingtrees-and-vegetation-reduce-heat-islands

11 USDA Forest Service, Trees Reduce
Building Energy Use in US Cities:
<a href="https://www.nrs.fs.fed.us/news/release/trees-reduces-building-energy-use">https://www.nrs.fs.fed.us/news/release/trees-reduces-building-energy-use</a>

12 US EPA, Green Landscaping: Greenacres, a Source Book on Natural Landscaping for Public Officials: <a href="https://archive.epa.gov/greenacres/web/html/chap2.html">https://archive.epa.gov/greenacres/web/html/chap2.html</a>

13 Fight Climate Change at Home: Landscaping with Native Grasses, Lindsay Ifill: https://www.wildrootsnj.com/ecologicallandscaping-with-native-grasses-climatechange/

14 Tallgrass Ontario: Tallgrass Prairie and Carbon Sequestration:
<a href="https://tallgrassontario.org/wp-site/carbon-sequestration/">https://tallgrassontario.org/wp-site/carbon-sequestration/</a>

15 University of Minnesota, "The Potential of Turfgrass to Sequester Carbon and Offset Greenhouse Gas Emissions"; https://turf.umn.edu/news/potential-turfgrass-sequester-carbon-and-offset-greenhouse-gas-emissions

16 Resource Central, Unearth the Turf:
Outdoor Water Savings;
<a href="https://resourcecentral.org/unearth-the-turf-outdoor-water-savings/">https://resourcecentral.org/unearth-the-turf-outdoor-water-savings/</a>

17 US EPA, Know Your Roots; https://cfpub.epa.gov/npstbx/files/KSMO\_KnowYourRoots.pdf

18 City of Falcon Heights Ground Cover, Heat Island, and Carbon Sequestration Study:

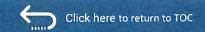
<a href="https://view.publitas.com/palebluedot/falcon-heights-ground-cover-heat-island-and-carbon-sequestration-study/">https://view.publitas.com/palebluedot/falcon-heights-ground-cover-heat-island-and-carbon-sequestration-study/</a>

19 US EPA, Climate Change and Heat Islands: https://www.epa.gov/heatislands/climatechange-and-heat-islands

20 City of Falcon Heights Climate
Vulnerability Assessment:
<a href="https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/">https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/</a>

21 Comparison of impervious surface area and normalized difference vegetation index as indicators of surface urban heat island effects in Landsat imagery. Fi Yuan and Marvin Bauer, February 2007: https://rs.umn.edu/sites/rs.umn.edu/files/Urban\_heat\_island-Impervious\_RSE\_paper.pdf

### Appendix B



### Potential Cumulative Community Cost Savings From Plan Implementation

The following documents the calculations and source references used for estimating the potential cumulative communitywide cost savings of the actions included in the Climate Action Plan.

### Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights

### **Notes Transportation**

VMT Reductions (public transit, bike, walk, etc)

Formula:

Cumulative vehicle miles saved x Average vehicle operation cost per mile = Gross VMT savings

VMT saved (goal year) 1,366,663
Cumulative vehicle miles saved (through goal year): 8,199,979

1 Average vehicle operating cost per mile: \$0.820

Gross VMT savings \$8,199,979

1 Savings per VMT based on AAA estimates https://newsroom.aaa.com/wp-content/uploads/2023/08/YDC-Fact-Sheet-FINAL-8.30.23-1.pdf, https://www.slashgear.com/aaa-says-it-costs-about-74-cents-per-mile-to-drive-23496316/https://www.thesimpledollar.com/save-money/is-it-really-cheaper-to-ride-the-bus/

### Increased Public Transit Use

Formula:

Cumulative increased public transit mileage x Average public transit cost per mile = Increased spending on public transit

Increased spending on public transit	-\$1.381.248
Cumulative increased public transit pass costs (through goal year):	-\$1,381,248
2 Annual increased public transit pass costs (goal year):	-\$230,208
Cumulative increased public transit miles (through goal year):	6,559,983
Increased public transit miles (goal year)	1,093,331

2 Annual increased public transit pass costs calculated based on increased percentage of population using public transit (target increased public transit percentage) multiplied by cost of monthly transit pass. Negative numbers indicate increased consumer spending. https://www.census.gov/programs-surveys/sis/resources/data-tools/quickfacts.html https://www.metrotransit.org/fares-passes#:~:text=You%20can%20buy%20Go%2DTo,to%20a%20Go%2DTo%20Card

### **EV and Alt Fuel Conversions**

Formula:

Cumulative VMT converted to EV/alt fuel x Average vehicle operation cost savings per mile = Gross EV VMT savings - Gross EV purchase spending difference = Net EV VMT Savings

VMT converted to EV/Alt fuel (goal year)	1,366,663
Cumulative VMT converted to EV/alt fuel (through goal year)	8,199,979
3 Average fuel savings per mile:	\$0.121
4 Average vehicle maintenance savings per mile:	\$0.040
Cumulative Gross EV VMT savings (through goal year)	\$1,317,255
5 Spending difference per vehicle on EV purchase vs ICE purchase	-\$277
New electric vehicle purchases	470
Gross EV purchase spending difference (through goal year)	-\$130,216
Net EV VMT savings	\$1,187,038

3 Fuel Savings per VMT based on average reported gasoline costs (https://gasprices.aaa.com/state-gas-price-averages/) divided by current average MPG (Federal Highway Administration:

https://www.fhwa.dot.gov/policyinformation/quickfinddata/qftravel.cfm) compared against average fuel cost per mile using current kWh rate (https://www.electricitylocal.com/) and average kWh/100 mile data

(https://www.fueleconomy.gov/feg/byfuel/EV2024.shtml; https://ev-database.org/cheatsheet/energy-consumption-electric-car')

4 Maintenance savings per mile based on US Department of Energy FOTW #1190, June 14, 2021: Battery-Electric Vehicles Have Lower Scheduled Maintenance Costs than Other Light-Duty Vehicles:

https://www.energy.gov/eere/vehicles/articles/fotw-1190-june-14-2021-battery-electric-vehicles-have-lower-scheduled

5 Average EV purchase price increse per vehicle on Kelly Blue Book average EV purchase price compared to average gasoline vehicle purchase price (https://www.kbb.com/car-advice/electric-car-faqs/) with an average of \$3,750 in tax credits appied (tax credits are available up to \$7,500 for qualifying vehicles) Total cost difference is then divided by an assumed 5 year financing term to arrive at an estimated annualized cost difference. Negative numbers indicate increased consumer spending https://www.nerdwallet.com/article/taxes/ev-tax-credit-electric-vehicle-tax-credit

### **Potential Total Cumulative Transportation Cost Savings**

### Formula:

Transportation sector savings - Transportation sector cost increases = Potentail Total Cumulative Transportation Cost Savigns Transportation Sector Savings

\$8,005,769

Gross VMT savings		\$8,199,979
Gross EV VMT savings		\$1,317,255
	Total Gross Transportation Savings	\$9,517,233
Transportation Sector Cost Increase	s	
Increased spending on public transit		-\$1,381,248
Gross EV purchase spending differen		-\$130,216
Total	Gross Transportation Cost Increases	-\$1,511,464

Potentail Total Cumulative Transportation Cost Savings

### Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights

### Notes Energy - Residential

Residential Savings - grid electricity to customer owned solar

Cumulative kWh converted to solar x Average cost savings per kWh = Residential solar savings

Residenti	al kWh converted (goal year)	tial solar savings
Cumulati Average r	ve residential kWh converted (through goal year) net solar cost savings per solar kWh	1,166,795 7,000,768 \$0.058
6a	Average sciar installation cost per KW	\$3,116,50
7	Average kWh produced annually per solar by KW installed	1,287
	Estimated installed solar PV KW installed (goal year)	907
8	Estimated total solar installation costs	\$2,825,420
8	Est average lifespan kWh produced per solar ov KW installed	38,429
9	Estimated cumulative lifespan kWh produced	34,839,759
	Estimated value of cumulative lifespan kWh produced	\$4,840,145
	Average solar cost savings per kWh produced	\$0.058
6a Recent	Residential solar savings	\$404,843

6a Recent average cost per KW is 1000x the per watt cost reported by Solar Reviews https://www.solarreviews.com Value includes assumed financing costs based on 20% initial payment and 80% financed through 10 year loan with 3.5% annual interest rate. Potential savings from tax credits, depreciation, or grants are not included and would reduce these costs.

- 7 Calculations are based on the geographic energy production factor (https://www.nrel.gov/docs/fy04osti/35297.pdf) multiplied by an average performance ratio of 78% ( https://www.nrel.gov/docs/fy13osti/57991.pdf )
- 8 Based on an assumed average useful life of 32.5 years according to NREL research (https://www.nrel.gov/analysis/techfootprint.html) with an average degradation rate of 0.5% (https://www.nrel.gov/state-local-tribal/blog/posts/stat-faqs-part2-
- 9 Svings per kWh based on average electricity cost per kWh (https://www.electricitylocal.com/) calculated to the solar array's midlife (year 16) using an estimated average electrical cost inflation of 2% annually

### Residential Savings - community solar

Cumulative kWh converted to community solar x Average cost savings per kWh = Residential community solar savings

Residential kWh converted (goal year)	-	"B" PET KITH - RESIDENTIAL COMP
Cumulative residential kWh converted (t	brough (	0
10 Average community solar cost savings pe	rirough goal year)	0
ge service and cost savings be		\$0.010
10 The average cost soules a live of	Residential solar savi	ngs \$0

10 The average cost savings per kWh of community solar subscription is estimated at 10%.

### Residential Savings - utility purchased renewable

Cumulative kWh converted to utility purchased renewable x Average cost/savings per kWh = Residential utility purchased

Residential kWh converted (goal year)	
Cumulation (goal year)	1,166,795
Cumulative residential kWh converted (through goal year)	
11 Average utility purchased cost/savings per kWh	7,000,768
	-\$0.013
Residential utility purchased cost/savings	-\$88.840

11 The average cost/savings per kWh of utility purchased renewable energy subscription is based on utility fee information. Negative numbers indicate increased consumer spending

### Residential Savings - electrical energy efficiency

Formula:

Cumulative kWh saved from energy efficiency x Average cost per kWh = Gross Residential electrical energy efficiency savings -Residential Efficiency Upgrade Costs = Net Residential Electrical Energy Efficiency Savings

	648,219
Residential kWh saved (goal year)	3,889,316
Cumulative residential kWh saved (through goal year)	\$0.101
12a Average cost per kWh	\$393,599
Gross Residential electrical energy efficiency savings Residential Electrical Efficiency Upgrade Costs	-\$346,367
13 Residential Electrical Entirelity Oppliate  Net Residential Electrical Energy Efficiency Savings	\$47,232
Net Residential Electrical Energy Efficiency 555 Mg	st per kWh: https://wwv

12a Energy efficiency savings per kWh saved based on average electricity cost per kWh: https://www.electricitylocal.com/

13 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12%

(https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency) Negative numbers indicate increased consumer

### Residential Savings - natural gas energy efficiency

Cumulative therms saved from energy efficiency x Average cost per therm = Gross Residential natural gas energy efficiency savings - Residential Natural Gas Efficiency Upgrade Costs = Net Residential Electrical Natural Gas Efficiency Savings

13	savings - Residential Natural Gas Efficiency Opgrade Costs - Net Residential	58,767
14	14 Residential therms saved (goal year)	
	14 Cumulative residential therms saved (through goal year)	
15	Average cost per therm	\$651,612
	Gross Residential natural gas energy efficiency savings	-\$573,419
14, 16	Residential Natural Gas Efficiency Upgrade Costs  Net Residential Electrical Natrual Gas Efficiency Savings	\$78,193
	and the state of t	

14 Includes fuel switching from fossil fuel heat to electric

15 Energy efficiency savings for natural gas is based on average natural gas cost per therm https://naturalgaslocal.com/

16 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12%

(https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency) Negative numbers indicate increased consumer

### **Potential Total Cumulative Residential Energy Cost Savings**

Residential solar savings + Residential community solar savings + Residential utility purchased renewable + Residential electrical efficiency savings + Residential natural gas energy efficiency savings - Residential increased electrical costs = Potential Total Cumulative Residential Energy Savings

	\$404,843
	\$0
	-\$88,840
	\$47,232
	\$78,193
24	\$441,428
	N

### Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights

### Notes Energy - Non Residential

Non-Residential Savings - grid electricity to solar

Formula:

Cumula	sidential kWh converted (goal year) tive Non-Residential kWh converted (through goal year)	1,554,891
Average	e solar cost savings per kWh	9,329,346
b		\$0.050
,	Average solar installation cost per KW	\$1,978.00
	Average kWh produced annually per solar pv KW installed	1.287
	Estimated installed solar PV KW installed (goal year)	1.208
	Estimated total solar installation costs	\$2,389,724
	Estimated average lifespan kWh produced per solar pv KW installed	38,429
	Estimated cumulative lifespan kWh produced	46,428,071
	Estimated value of cumulative lifespan kWh produced	\$4,712,200
	Average solar cost savings per kWh produced	
	Non-Residential solar savings	\$0.050
CL D	The state in the state is a state of the sta	\$466 683

6b Recent average cost per KW is 1000x the per watt cost reported for commercial solar arrays by NREL https://www.nrel.gov/docs/fy21osti/77324.pdf https://www.nrel.gov/solar/market-research-analysis/solar-installed-system-cost.html Value includes assumed financing costs based on 20% initial payment and 80% financed through 10 year loan with 3.5% annual interest rate. Potential savings from tax credits, depreciation, or grants are not included and would reduce these costs.

- 7 Calculations are based on the geographic energy production factor (https://www.nrel.gov/docs/fy04osti/35297.pdf) multiplied by an average performance ratio of 78% (https://www.nrel.gov/docs/fy13osti/57991.pdf)
- 8 Based on an assumed average useful life of 32.5 years according to NREL research (https://www.nrel.gov/analysis/tech-footprint.html) with an average degradation rate of 0.5% (https://www.nrel.gov/state-local-tribal/blog/posts/stat-faqs-part2 lifetime-of-pv-panels.html)
- 9 Svings per kWh based on average electricity cost per kWh (https://www.electricitylocal.com/) calculated to the solar array's midlife (year 16) using an estimated average electrical cost inflation of 2% annually

### Non-Residential Savings - community solar

**Formula** 

Cumulative kWh converted to community solar x Average cost savings per kWh = Non-Residential community solar saving

	Non-Residential kWh converted (goal year)	kWh = Non-Residential
	Cumulative Non-Residential kWh converted (through goal year)	0
10	Average solar cost savings per solar kWh	0
		\$0.01
	10. The average seet services a large	\$0

10 The average cost savings per kWh of community solar subscription is estimated at 10%.

### Non-Residential Savings - utility purchased renewable

Formula:

Cumulative kWh converted to utility purchased renewable  $\,x\,$  Average cost/savings per kWh = Non-Residential utility purchased cost/savings

Non-Residential kWh converted (goal year)	
Cumulative Non-Residential kWh converted (through goal year)	1,554,891
11 Average utility purchased cost/savings per kWh	9,329,346
	-\$0.013
Non-Residential utility purchased cost/savings	-\$118,389

11 The average cost/savings per kWh of utility purchased renewable energy subscription is based on utility fee information. Negative numbers indicate increased consumer spending

Non-Residential Savings - electrical energy efficiency

	1	
	-	
-system- n with		
e these		
:h-		
part2-		
1		
array's		
nvings		
n.		
79		
, <del>g</del>		

Cumulative kWh saved from energy efficiency x Average cost per kWh = Gross Non-Residential electrical energy efficiency

savings - Non-Residential Efficiency Upgrade Costs = Net Non-Residential Electrical Energy Efficiency Savings

Commercial kWh saved (goal year) 15,548,909

Cumulative commercial kWh saved (through goal year) \$0.074 12b Average cost per kWh

\$1,149,583 Gross Commercial electrical energy efficiency savings -\$1,011,633 Commercial Electrical Efficiency Upgrade Costs \$137,950

**Net Commercial Electrical Energy Efficiency Savings** 

12b Energy efficiency savings per kWh saved based on average electricity cost per kWh reported for commercial and industrial with a weighted average (2/3rds commercial rate, 1/3rd industrial rate) reflecting typical non-residential electric consumption paterns: https://www.electricitylocal.com/

13 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12% (https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency) Negative numbers indicate increased consumer spending

Non-Residential Savings - natural gas energy efficiency Formula:

Cumulative therms saved from energy efficiency x Average cost per therm = Gross Non-Residential natural gas energy efficiency savings - Non-Residential Natural Gas Efficiency Upgrade Costs = Net Non-Residential Electrical Natural Gas Efficiency Savings 177,945

14 Non-Residential therms saved (year 10) 1,067,670 14 Cumulative Non-Residential therms saved \$0.431 15 Average cost per therm \$460,166 Gross Non-Residential natrual gas energy efficiency savings -\$404,946 Non-Residential Natural Gas Efficiency Upgrade Costs 14, 16 Net Non-Residential Natural Gas Energy Efficiency Savings \$55,220

14 includes fuel switching from fossil fuel heat to electric

15 Energy efficiency savings for natural gas is based on average natural gas cost per therm https://naturalgaslocal.com/

16 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12% (https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency) Negative numbers indicate increased consumer spending

### **Potential Total Cumulative Non-Residential Energy Cost Savings**

13

Non-Residential solar savings + Non-Residential community solar savings + Non-Residential utility purchased renewable + Non-Residential electrical efficiency savings + Non-Residential natural gas energy efficiency savings - Non-Residential increased electrical costs = Potential Total Cumulative Non-Residential Energy Savings

electrical costs = Potential Total Cultioners	\$466,683
Non-Residential solar savings	\$0
Non-Residential community solar savings	-\$118,389
Non-Residential utility purchased renewable cost/savings	\$137,950
Non-Residential electrical efficiency savings	\$55,220
Non-Residential natural gas energy efficiency savings	\$541,463
Potentail Total Cumulative Non-Residential Energy Savings	

### Potential Total Cumulative Energy Cost Savings (Residential + Non-Residential)

Energy sector savings - Energy sector cost increases = Potentail Total Cumulative Energy Cost Savigns

**Energy Sector Savings** \$871,526 Total solar energy savings \$0 Total community solar energy savings \$1,543,181 Total energy efficiency savings - electricity \$1,111,778 Total energy efficiency savings - natrual gas \$3,526,485

Total Gross Energy Savings

**Energy Sector Cost Increases** 

(included in estimated Total Solar Energy Savings)

Total solar PV installation costs -\$207,229 Total utility purchased renewable cost/savings -\$1,358,000 Total energy efficiency upgrade costs - electricity -\$978,365 Total energy efficiency upgrade costs - natrual gas Total Gross Energy Cost Increases -\$2,543,594

Potentail Total Cumulative Energy Cost Savings

\$982,892

### **Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights**

### Notes Solid Waste - Residential

Residential savings - Food Waste Reduction

Formula:

Cumulative tons of food waste reduced and diverted x Average cost savings per ton = Residential food waste savings

Residential food waste reduced (goal year)

31

Cumulative residential food waste reduced (through goal year)

188

17 Average cost savings per ton reduced

\$2,469

Residential food waste savings

\$463,869

17 Value per ton of residential food waste avoided is based on average for Prevent and Recover strategies by ReFED "A Roadmap To Reduce U.S. Food Waste" https://refed.com/downloads/the-roadmap-to-reduce-u-s--food-waste/ . Food waste share of total organics diverted is calculated based on available waste sort data (see Baseline Assessment document)

### **Potential Total Cumulative Residential Solid Waste Reduction Cost Savings**

Residential food waste savings

\$463,869

### Notes Solid Waste - Non-Residential

Non-Residential savings - Solid Waste Reduction

Formula:

Cumulative participant/years x Average reported cost savings per participant/year = Non-Residential solid waste savings

Participating businesses (goal year)

Cumulative participant/years (through goal year)

550

18 Average cost savings per participant/year

\$431

Commercial solid waste savings

\$1,422,300 18 Savings per business engaged in waste reduction programs are based on MN WasteWise reported average business savings (\$431) escallated to 5 year (mid point) Cumulative savings assume businesss reduction strategies remain in force. See https://www.mnchamber.com/your-opportunity/waste-wise

### **Commercial savings - Food Waste Reduction**

Formula:

Cumulative tons of food waste reduced and diverted x Average cost savings per ton = Non-Residential food waste savings

Commercial food waste reduced (goal year)

82

Cumulative non-residential food waste reduced (through goal year)

221 \$494

19 Average cost savings per ton reduced Commercial food waste savings

\$108,908

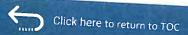
19: Average cost savings per ton of food waste avoided is based on an assumed 20% wholesale share of value per ton of residential food waste average for Prevent and Recover strategies by ReFED "A Roadmap To Reduce U.S. Food Waste" https://refed.com/downloads/the-roadmap-to-reduce-u-s--food-waste/ Additionally, the World Resources Institute conducted a study which found that for every \$1 invested in food waste reduction, businesses saved \$14 in operational costs. See https://www.wri.org/news/release-new-research-finds-companies-saved-14-every-1-invested-reducing-food-waste

### **Potential Total Cumulative Solid Waste Savings**

Residential Food Waste Savings + Commercial Solid Waste Savings + Commercial Food Waste Savings = Potentail Total Cumulative

	\$463,869
Residential Food Waste Savings	\$1,422,300
Non-Residential Solid Waste Savings	\$108,908
Non-Residential Food Waste Savings	\$1,995,078
Potentail Total Cumulative Solid Waste Savings	

### Appendix C



### Abbreviations and Glossary of Terms

The following are abbreviations and terms used in the Climate Action Plan as well as others common to sustainability and climate action concepts.

C-1 | FALCON HEIGHTS CLIMATE ACTION PLAN

8/

### **Abbreviations** Accessory Dwelling Unit ADU BAU Business as usual forecast BEV Battery electric vehicle BIPOC Black, Indigenous, people of color C&D Construction and demolition CAP Climate Action Plan CE Carbon Equivalent CDP Carbon Disclosure Project CFC Chlorofluorocarbons $CH_4$ Methane CHP Combined Heat and Power $CO_2$ Carbon dioxide Carbon dioxide equivalent CO₂ e CSG Community Solar Garden DCFC Direct Current Fast Charger DOE U.S. Department of Energy **EMS** Emergency medical services EPA U.S. Environmental Protection Agency ΕV Electric vehicle **EVSE** Electric vehicle supply equipment FEMA Federal Emergency Management Agency FTE Full-time equivalent GCoM Global Covenant of Mayors GDP **Gross Domestic Product** GHG Greenhouse gas **GWP** Global warming potential HFC Hydrofluorocarbons HVAC Heating, Ventilation, and Air Conditioning ICE Internal Combustion Engine vehicle IPCC Intergovernmental Panel on Climate Change kWh Kilowatt-hour LEED Leadership in Energy and Environmental LEV Low emission vehicle LIDAC Lower Income and Disadvantaged Community MWH Megawatt hour – 1,000 Kilowatt-hours

Municipal Solid Waste

known as Metric Tonne)

MT CO<sub>2</sub> e Metric tons of carbon dioxide equivalent

Non-Governmental Organization

National Oceanic and Atmospheric

Million Metric tons MMBTU Million British Thermal Units

Nitrous Oxide

Nitrogen Oxides

Metric ton equivalent to 1,000 kg (also

MSW

MMT

NGO

 $N_2O$ 

 $NO_x$ 

NOAA

ΜT

NZE O₃ ODS PACE PFC PHEV PM2.5  POC PPA PUB PV REC RCP SO₂ SF₀ SULEV t  TOG USGS VMT VHT ZEV ZNEB	Administration Net-Zero Emissions Ozone Ozone Depleting Substances Property Assessed Clean Energy Perfluorocarbons Plug-in hybrid electric vehicle Particulate matter of 2.5 micrometer diameter or less People of color Power Purchase Agreement Public Utilities Board Photovoltaic (solar photovoltaic) Renewable Energy Credit Representative Concentration Pathway Sulfur Dioxide Sulfur Hexafluoride Super ultra-low emission vehicle Ton equivalent to 2,000 lbs (United States) Total Organic Gasses U.S. Geological Survey Vehicle miles traveled Vehicle hours traveled Zero emission vehicle Zero Net Energy Building

### Α

### Accessory Dwelling Unit (ADU)

A secondary dwelling unit associated with a primary single-family home, which can be located within or attached to the main residence, or in a separate accessory building on the same property.

### Action

Specific tasks set out to realize the objectives and methods highlighted in a given plan.

### **Activity Data**

Information regarding the scale of human actions that lead to emissions or removals within a specified timeframe. This includes data like energy consumption, metal production, land coverage, management procedures, and usage of lime, fertilizers, and waste generation.

### Adaptation

Refer to "Climate Readiness or Resilience"

### **Adaptive Capacity**

The combination of societal, technological, and monetary abilities that individuals or groups possess to initiate and sustain actions against climate change.

### Aerosols

Airborne particles, either solid or liquid, typically ranging between 0.01 and 10 micrometers. These particles, which can be of natural or human-made origin, can persist in the atmosphere for extended periods. They can affect climate by directly interfering with radiation or indirectly by influencing cloud properties.

### Afforestation

The process of establishing forests on lands that weren't previously forested.

### **Air Pollutant**

Any substance, either originating from human activities or naturally, present in the atmosphere that might have detrimental impacts on humans, fauna, flora, or materials.

### Anthropogenic

In relation to greenhouse gas records, "anthropogenic" denotes emissions and removals

directly stemming from human actions or from natural processes influenced by human activities.

### Atmosphere

The layer of gases encasing the Earth. It mainly consists of nitrogen and oxygen, along with trace gases like argon, helium, and certain greenhouse gases like carbon dioxide and ozone. The atmosphere also encompasses varying amounts of water vapor and contains other components like clouds and aerosol particles.

### В

### **Baseline Emissions**

A reference point, either through measurement, calculation, or a specific timeframe, for making comparisons. It represents emission levels in scenarios devoid of policy changes or project implementations. Such evaluations are crucial to gauge the impact of emissions-reducing measures.

### **Base Year**

The initial year used for data gathering. Emission-reducing goals are often set with this year as a reference.

### **Beneficial Electrification**

Beneficial electrification is the process of replacing fossil fuels with electricity to reduce energy costs and greenhouse gas emissions. It can be applied to many sectors, including transportation, residential buildings, and commercial buildings.

### Biogenic

Derived from the biological activities of living entities. The term "biogenic" exclusively pertains to recently formed biological materials. The IPCC suggests categorizing peat as fossil carbon due to its lengthy replacement cycle.

### **Biogeochemical Cycle**

The continuous transfer of essential chemicals, crucial for life, within Earth's systems, including carbon, nitrogen, oxygen, and phosphorus.

### Biomas

Refers either to (1) the combined weight of all living organisms within a designated area or species, usually represented as dry weight or (2) Organic substances originating from or recently derived from

living beings, excluding peat, and encompasses derived products and waste.

### **Biomass Waste**

Biological, non-fossil substances of biological origin that are either residual or discarded. This definition includes biogenic municipal waste, landfill gas, and other forms of biomass but excludes certain fuels and biofuels. EIA's data on "biomass waste" also count energy crops produced specifically for power generation.

### BIPOC

Defined as "Black, Indigenous, and people of color", this U.S.-specific term emphasizes the experiences of Black and Indigenous communities, showcasing or influencing the broader socioeconomic dynamics encountered by all non-white individuals.

### **Black Carbon**

A type of aerosol characterized based on its capacity to absorb light, its chemical reactivity, and/or thermal resistance; comprises elements like soot and charcoal.

### Blue Carbon

Carbon that's absorbed and retained by coastal ecosystems and wetlands, aiding in countering climate change impacts.

### British Thermal Unit (BTU)

A conventional measure of thermal energy, representing the energy needed to elevate the temperature of a pound of water by a single degree Fahrenheit.

### Business As Usual Forecast (BAU)

The Intergovernmental Panel on Climate Change (IPCC) describes this as the predicted emission levels if upcoming trends emulate historical ones and no additional policy amendments are enacted. This projection presumes no further emission-curbing actions will be adopted beyond existing or committed measures. BAU forecasts do include anticipated reductions resulting from existing requirements or commitments, such as federal vehicle fuel efficiency standards and electric utility carbon-reduction commitments, which are outside the scope of this plan.

### C Carbon Cycle

The systematic flow and storage of carbon across different reservoirs. This involves four primary carbon storage areas: the atmosphere, the terrestrial environment (including freshwater systems), oceans, and sediments (which encompass fossil fuels). The carbon exchanges between these reservoirs are driven by a mix of chemical, physical, geological, and biological factors. Though the ocean holds a significant amount of near-surface carbon, its exchange with the atmosphere is relatively slow.

### Carbon Dioxide (CO<sub>2</sub>)

A gas found naturally in the environment, but also produced from burning fossil fuels, biomass, through land-use alterations, and various industrial activities. As the main human-induced greenhouse gas, it impacts the Earth's ability to reflect heat. Other greenhouse gases are often measured relative to CO<sub>2</sub>, which has a Global Warming Potential set at 1.

### Carbon Dioxide Equivalent (CO<sub>2</sub> e)

A standard for comparing the emissions from different greenhouse gases based on their potential to warm the planet. It's determined by equating the amount of a gas emitted to the amount of CO<sub>2</sub> that would have the same global warming impact.

### Carbon Disclosure Project (CDP)

A global initiative allowing organizations and cities to publicly share their environmental impacts, notably related to climate risks. CDP stands as one of the recognized disclosure platforms endorsed by GCoM.

### Carbon Emissions

The process of releasing carbon dioxide into the atmosphere, primarily through human activities like burning fossil fuels for energy.

### Carbon Equivalent (CE)

A metric for comparing emissions from various greenhouse gases based on their capacity to influence global warming. Carbon equivalents are derived from carbon dioxide equivalents using a specific conversion factor related to molecular weights.

### Carbon Free

Activities, systems, or products that don't emit carbon dioxide or other greenhouse gases. Often associated with sustainable or renewable energy discussions, not every "carbon free" source is renewable. For instance, while both wind and nuclear energy are carbon-free, only wind is renewable.

### **Carbon Intensity**

The ratio of carbon emitted for every unit of energy used. A typical measure of this is the carbon weight per British thermal unit (Btu) of energy. When considering a single fuel type, carbon intensity and the emission coefficient are the same. With multiple fuels, it's an aggregate value.

### Carbon Neutral / Carbon Neutrality

Achieving a balance where the amount of CO<sub>2</sub> produced annually is equal to the amount removed or offset, leading to net-zero CO<sub>2</sub> emissions by a specific date. Carbon Neutrality is also sometimes applied to all greenhouse gas emissions. In those instances the term is sometimes used interchangeably with "Net Zero" or "Climate Neutral"

### Carbon Offsets

Mechanisms to counterbalance carbon dioxide or other greenhouse gas emissions by funding equivalent reductions elsewhere. They are quantified in metric tonnes of CO<sub>2</sub> -equivalent and can be traded to neutralize emissions from an entity's operations.

### Carbon Sinks

Natural environments, such as forests or oceans, recognized for their ability to absorb and store carbon dioxide from the atmosphere.

### **Carbon Sequestration**

The process of capturing and storing CO<sub>2</sub>, either in oceans, terrestrial environments like forests and soils, or in geological formations underground.

### Chlorofluorocarbons (CFCs)

Gases, regulated under the 1987 Montreal Protocol, used in several applications like refrigeration and air conditioning. Since they don't break down in the lower atmosphere, they reach the upper atmosphere and can deplete ozone. Their usage is being phased out in favor of alternative compounds,

some of which are greenhouse gases under the Kyoto Protocol.

### **Circular Economy**

A sustainable economic model that deviates from the traditional linear approach (produce, use, discard) by focusing on reducing resource inputs and waste. It emphasizes durable product design, repair, reuse, and recycling to minimize waste.

### Climate

Often described as the "typical weather" of an area, climate is a statistical representation of weather patterns over extended periods, typically 30 years as per World Meteorological Organization (WMO) standards. It encompasses averages and variability of factors like temperature and precipitation. On a broader scale, climate is the comprehensive state of the climate system, including statistics.

### **Climate Adaptation or Resilience**

The ability of ecosystems or communities to anticipate, stand against, respond, and recover from disruptive events. It involves adjusting to changing climate conditions to lessen risks and vulnerabilities.

### Climate Action Plan

A comprehensive strategy detailing steps that a municipality, business, or government will take to decrease greenhouse gas emissions and prepare for climate change, fostering sustainable and resilient growth.

### **Climate Change**

Any significant, lasting change in the average or variability of climate conditions over extensive periods. It can stem from natural processes, persistent changes in atmospheric composition due to human activities, or alterations in land use.

### **Climate Hazard**

A climate event or situation that can negatively affect human health, resources, or livelihoods, encompassing sudden shifts in climate systems like heavy rainfall or prolonged droughts.

### **Climate Migration**

The relocation of individuals due to the effects of climate change impacting their way of life or degrading their living conditions. This can result from changing water supplies, altered agricultural yields,

or factors like rising sea levels and increased storm intensity.

### Climate Model

A mathematical representation used to simulate the key components of climate, including the atmosphere, oceans, land, and ice. These models are used to forecast potential future climate changes.

### Climate Neutral / Climate Neutrality

Achieving a balance where the amount of all GHG emissions produced annually is equal to the amount removed or offset, leading to net-zero GHG emissions by a specific date. "Climate Neutral" is sometimes used interchangeably with "Carbon Neutral", however, "Carbon Neutral" often interpreted as addressing CO<sub>2</sub> emissions only, whereas "Climate Neutral" is intended to address all GHG gases.

### Climate Scenario

A structured and logical narrative of potential future climatic conditions, built on a set of assumptions about potential future events.

### Climate Risk

The potential negative outcomes due to climatic changes, where valuable assets are at risk. The risk is calculated based on the likelihood of certain climate events or changes happening and the potential impact of those changes. It is a product of the system's vulnerability and the climate hazards faced.

### Climate Vulnerability

The extent to which a system is at risk from adverse climate changes, including climate variability and extremes. It depends on how exposed the system is to these changes, its inherent sensitivity, and its ability to adapt. Vulnerability can be described as the potential negative impact minus the system's adaptive capacity.

### Climate Vulnerability Assessment

An analysis aiming to pinpoint and categorize the threats posed by climate change. It guides the creation of strategies to address these threats and can cover diverse areas like food security, socioeconomic factors, and extreme weather patterns.

### Co-Benefit

Additional advantages or benefits (e.g., health, economic, societal) that arise indirectly from climate adaptation and mitigation measures.

### Co-generation

A facility or system that simultaneously and efficiently produces multiple forms of energy, usually heat and power, in an integrated manner.

### Community Choice Aggregation (CCA)

CCA programs, or sometimes known as "Community Power Aggregation", empower local governments to source power for their citizens, businesses, and municipal facilities from alternative providers, while still utilizing the distribution services of their existing utilities. Setting up a CCA generally needs state-level legislation. For more details, one can visit EPA's dedicated CCA website: [EPA's CCA webpage](https://www.epa.gov/green-power-markets/community-choice-aggregation)

### Combined Heat and Power (CHP)

A system designed to concurrently generate electricity and useful heat, aiming for optimal energy use. Some utilities might sell the heat produced for public use, while certain industries might sell surplus electricity to other businesses or utility companies.

### **Community Power Aggregation**

Refer to "Community Choice Aggregation"

### Community Solar / Community Solar Garden (CSG)

Shared solar installations that allow community members to benefit from solar energy without installing panels on individual properties.

Participants receive bill credits based on their share of the generated power. Generally, the electricity from community solar farms is priced lower than traditional utility rates.

### **Complete Streets**

A street design concept that ensures streets are made to accommodate all users safely and efficiently, regardless of their mode of transportation or age.

### Consistency

Ensuring that an inventory remains uniform in its methodologies and data over time. If the same methods and datasets are consistently applied over years, then the inventory is considered consistent.

### **Continuous Emission Monitor (CEM)**

A monitoring system placed within smokestacks or other emission sources that continuously measures and reports air emissions.

### **Cool Roof**

Roofing materials engineered to reflect more sunlight and absorb less heat, thereby reducing the heat transferred to the building or its surroundings.

### **Cool Pavement**

Pavement materials designed to reflect sunlight and decrease heat absorption, minimizing heat transfer to the nearby environment.

### **Criteria Air Pollutant**

Specific air pollutants for which permissible exposure levels are determined, and corresponding air quality standards are established. Examples include carbon monoxide, ozone, and various particulates. The term arises from the U.S. EPA's obligation to define these pollutants and their impacts on health and the environment. Standards can be reviewed and updated based on new scientific information.

### D

### Decarbonization

The transition towards reducing carbon emissions by adopting cleaner energy sources, enhancing energy efficiency, or capturing and storing released carbon. The ultimate aim is to minimize the climate impact and move towards a carbon-neutral society.

### Deforestation

The conversion of forested areas into non-forest uses. Deforestation is often linked to the amplified greenhouse effect for two main reasons: the combustion or decay of wood releases carbon dioxide, and the removed trees no longer absorb atmospheric carbon dioxide through photosynthesis.

### Demand Side Management (DSM)

Initiatives designed to modify consumer energy consumption patterns using methods like education and financial incentives. DSM seeks to reduce energy consumption, particularly during peak demand periods, and shift usage to times when demand is typically lower.

### Direct Current Fast Charger (DCFC)

DCFC charging is designed to deliver more power at faster speeds than Level 2 chargers with outputs ranging from 50 kW to 350 kW. They can recharge an EV battery to 80% in anywhere from 15 minutes to 45 minutes, depending on the vehicle's voltage capacity. DCFC is also sometimes known as "Level 3 charging", or "Rapid Charging".

### Distillate Fuel Oil

A category of petroleum products obtained through standard distillation processes. This encompasses diesel fuels and fuel oils, including types like No. 1, No. 2, and No. 4 diesel fuel. These products are used in various engines, from road vehicles to trains and agricultural equipment. Additionally, No. 1, No. 2, and No. 4 fuel oils are typically employed for heating spaces and generating electricity.

### District Heating

A system that distributes heat, generated at a centralized point, via a network of pipes to provide heating for homes and businesses in a specified area or community.

### Ε

### **Ecosystem Services**

The benefits ecosystems offer to human welfare. These benefits range from tangible resources like water and food to services like air purification, flood control, and climate stabilization.

### Electric Vehicle (EV)

A vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source. An EV includes both a vehicle that can only be powered by an electric motor that draws electricity from a battery (all-electric vehicle) and a vehicle that can be powered by an electric motor that draws electricity from a battery and by an internal combustion engine (plug-in hybrid electric vehicle).

### Electric vehicle supply equipment (EVSE)

The infrastructure that allows electric vehicles to charge from an electricity source. It's also known as an EV charging station, EV charger, or charging dock. EVSE takes electrical power from the grid and transfers it to the vehicle's battery.

### **Emissions**

The act of discharging certain substances, often gases in the context of climate change, into the environment.

### **Emission Factor**

A value that signifies the amount of a gas emitted or removed per unit of activity. This coefficient is usually derived from a collection of measurement data and provides a representative emission rate for a set of specific conditions.

### **Emission Inventory**

A calculation of the total pollutants released into the atmosphere from various significant sources, measured over a defined period, such as daily or annually.

### **Emission Rate**

The quantity of a specific pollutant released over a set duration, commonly expressed in units like tons per year.

### **Energy Burden**

The fraction of a household's total income spent on energy costs. An "high" energy burden is identified when energy costs comprise 6% or more of the household income, while it's deemed "severe" if above 10%.

### **Energy Savings / Energy Efficiency**

Refers to the sustainable reduction in the amount of energy consumed for the same level of output or performance. For instance, a modern heater that requires less energy to provide the same warmth results in energy efficiency improvements.

### **Energy Tariff**

A pricing structure, or utility tariff, that dictates how consumers are charged by energy providers for their electric or gas consumption. Energy tariffs are subject to government approval and review.

### **Environmental Justice**

The equitable treatment and active participation of all individuals, regardless of their race, ethnicity, income, or origin, in the processes related to environmental laws, policies, and regulations.

### Equity

Being just and fair in treatment, acknowledging that people have diverse circumstances and providing

them with the necessary resources and opportunities to achieve equal outcomes. In terms of climate change, equity encompasses both shielding from environmental hazards and ensuring access to environmental benefits, irrespective of socioeconomic factors.

### F

### Federal Emergency Management Agency (FEMA)

A federal agency that leads the country's response to disasters, including natural disasters, man-made incidents, and terrorist events.

### Fluorocarbons

Molecules made up of carbon and fluorine, which can also include elements like hydrogen, chlorine, or bromine. Some well-known types are chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

### Flux

(1) Materials, like limestone and dolomite, used to moderate the heat or energy demands of mineral processing, like metal smelting. They can also function as agents to produce slag. (2) The rate or volume of a liquid or gas moving across a specific area over time, such as the "CO₂ absorption rate by forests".

### **Fossil Fuel**

Deposits of hydrocarbons formed from ancient organic matter, including coal, oil, and natural gas.

### **Fuel Combustion**

The intentional burning of materials in a device designed to provide heat or mechanical energy. This process can be for direct application or use elsewhere.

### Fuel Switch (see also "Beneficial Electrification")

The process of transitioning from one energy source to another, commonly from non-renewable sources like fossil fuels to renewable ones like wind or solar, to reduce both costs and emissions.

### **Fugitive Emissions**

Unintentional leaks of gases from surfaces such as seals or underground pipelines due to deterioration or faults.

### G

### **Geologic Carbon Sequestration**

The practice of capturing  $CO_2$ , often from sources like coal-powered plants, and injecting it deep underground for storage. With careful site selection and management, this approach has potential in reducing atmospheric  $CO_2$  levels.

### GHG

Refer to "Greenhouse Gas"

### Global Environmental Change

Significant, accelerated alterations to Earth's natural systems, encompassing climate shifts, biodiversity loss, resource depletion, pollution, and other large-scale environmental disruptions.

### **Global Warming**

The average rise in atmospheric temperature near the Earth's surface and within the troposphere, which can lead to shifts in global climate. This warming can arise from both natural phenomena and human activities. Typically, "global warming" is used to refer to the temperature increase resulting from the enhanced emissions of greenhouse gases due to human actions. See also Climate Change.

### Global Warming Potential (GWP)

An index that calculates the radiative effects of greenhouse gases, considering their ability to trap heat compared to carbon dioxide over a specified timeframe. The GWP evaluates the cumulative effect of these gases in the atmosphere based on their longevity and their potential to absorb infrared radiation. The Kyoto Protocol uses GWPs derived from 100-year timespan emissions.

### GCoM Global Covenant of Mayors

GCoM represents the world's largest alliance dedicated to urban climate leadership. Comprising over 10,000 city and local governments, GCoM's goal is to encourage and support action on climate and energy at the grassroots level globally.

### **Green Streets**

An urban design approach that incorporates plant life, soil, and engineered structures to manage, slow,

and purify stormwater runoff from surfaces that don't absorb water.

### **Greenhouse Effect**

A natural process where specific gases in the atmosphere trap heat near the Earth's surface, leading to a warming effect. If concentrations of these greenhouse gases increase, this effect intensifies, leading to a gradual increase in the Earth's temperature.

### Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories

A comprehensive and transparent framework adopted globally for cities and local governments to consistently measure, calculate, and report their greenhouse gas emissions.

### **Greenhouse Gas**

A gas that can absorb and emit infrared radiation, contributing to the greenhouse effect. Some common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, and certain industrial gases like hydrofluorocarbons.

### **Greenhouse Gas Reduction**

Efforts aimed at diminishing the amount of greenhouse gases released into the atmosphere, thereby mitigating potential adverse climate impacts.

### Green Infrastructure

Green infrastructure encompasses a diverse array of green spaces and features, both in urban and rural areas, that serve to enhance the well-being of communities and provide environmental advantages. It extends beyond traditional open spaces like parks and playing fields to include a range of measures that use plant or soil systems, permeable pavement and surfaces, stormwater harvest and reuse, or landscaping to manage stormwater and reduce flows to sewer systems or to surface waters. This approach helps counter water pollution in urbanized areas caused by stormwater carrying contaminants

### **Green Roof**

A roof that incorporates vegetation over a waterproof layer. Green roofs can be categorized as extensive, intensive, or semi-intensive based on the depth of planting medium and amount of

maintenance they require. They offer benefits like mitigating the heat island effect, managing stormwater, and enhancing green space in urban areas.

### Green Wall

This is a vertical extension of the green roof concept, where vegetation is grown on building exteriors.

### **Gross Domestic Product (GDP)**

The total value of goods and services produced within a country's borders in a specific timeframe, typically a year. It doesn't account for the depreciation of assets or depletion of natural resources.

### Groundwater

Water located beneath the Earth's surface, filling the spaces between soils and rocks.

### Halocarbons

A group of organic compounds composed partially of halogens. They encompass chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), halons, and more. Many halocarbons have significant Global Warming Potentials and some also contribute to ozone layer depletion.

### Hazard

The potential for an event, whether natural or human-induced, to cause harm to people, property, infrastructure, or the environment.

### Heat Island

An urban area that exhibits higher temperatures than its surrounding rural areas due to human activities. This phenomenon is attributed to factors like heat-absorbing surfaces and structures. See also "Micro Heat Island".

### Heating, Ventilation, and Air Conditioning (HVAC)

a term that refers to systems that regulate and move heated and cooled air throughout buildings. HVAC systems are used to improve air quality and maintain a comfortable indoor climate.

### Hydrocarbons

Compounds made up of only hydrogen and carbon atoms. The term can also refer to petroleum

compounds which might contain elements like sulfur, nitrogen, or oxygen. Unsaturated hydrocarbons contain either double or triple carboncarbon bonds.

### Hydrofluorocarbons (HFCs)

Molecules made up of hydrogen, fluorine, and carbon. These were developed as replacements for ozone-depleting substances and are used in a variety of industrial processes. While HFCs don't deplete the ozone layer, they are potent greenhouse gases with varying Global Warming Potentials.

### ICLEI Local Governments for Sustainability:

An association of local governmental entities focused on reducing carbon emissions and fostering sustainable urban growth. ICLEI members, along with a team of specialists, collaborate through capacity building, partnerships, and peer interaction to effect change towards urban sustainability.

### Impact

A consequence or effect that arises due to climate change on any system's structure or functioning. Examples include severe heatwaves, sea-level rise, or alterations in rainfall causing floods or droughts.

### Indicator

A numerical representation highlighting a specific facet of vulnerability to climate change. For instance, a forecasted alteration in annual average temperature or the count of species at risk.

### Internal Combustion Engine Vehicle (ICE)

Vehicles which ignite and combust fuel within an internal combustion engine. Fuels used in ICE vehicles are typically gasoline and diesel.

### Intergovernmental Panel on Climate Change (IPCC)

Founded in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the IPCC is tasked with evaluating scientific and technical information related to all aspects of climate change. The IPCC informs governments about the state of knowledge of climate change by examining all the relevant scientific literature on the subject. The IPCC is scientific entity and is not a legislative body.

### Kilowatt Hour (kWh):

A unit representing electrical energy consumption, equivalent to using 1,000 watts continuously for an hour.

### **Kyoto Protocol**

A supplement to the United Nations Framework Convention on Climate Change (UNFCCC) ratified in Kyoto, Japan, in 1997. This protocol incorporates legally binding obligations to reduce greenhouse gas emissions. Countries listed in the Protocol's Annex B pledged to reduce their emissions of six major greenhouse gases by at least 5% from 1990 levels between 2008 and 2012. The Protocol became effective on February 16, 2005.

### ı

### Land Use and Land Use Change

Land use pertains to the human activities performed on a certain type of land cover. Meanwhile, land use change denotes alterations in how land is managed or utilized by humans, which can influence land cover. Changes in land cover and land use can affect climate properties such as surface albedo and greenhouse gas sources/sinks, potentially influencing climate on various scales.

### Leadership in Energy and Environmental Design (LEED)

LEED is a certification system for evaluating and promoting sustainable building and design practices. Developed by the U.S. Green Building Council (USGBC), LEED provides a framework for environmentally responsible construction, aiming to improve energy efficiency, reduce water usage, and decrease greenhouse gas emissions. Buildings can earn LEED certification at different levels (Certified, Silver, Gold, or Platinum) based on their performance across several criteria, including energy use, indoor environmental quality, and sustainable site development.

### Level 1 Charger

An electric vehicle charging device that provides charging through a common residential 120-volt (120V) AC outlet. Level 1 chargers can take 40-50+hours to charge a BEV to 80 percent from empty and 5-6 hours for a PHEV.

### Level 2 Charger

An electric vehicle charging device with a higher AC charging capacity than Level 1 chargers. They typically operate at 240V for residential use or 208V for commercial use. Level 2 chargers can charge a BEV to 80 percent from empty in 4-10 hours and a PHEV in 1-2 hours.

### **LIDAC Communities**

Low Income / Disadvantaged Communities (LIDACs): communities where residents have low incomes, limited access to resources, and face disproportionate environmental or climate burdens.

### Living Streets

"Living streets" amalgamate the principles of green streets and complete streets while emphasizing the enhancement of residents' life quality in urban areas.

### LULUCF

An abbreviation for "Land Use, Land Use Change, and Forestry," a category in greenhouse gas inventory documentation.

### М

### Megawatt Hour (MWH):

An electrical energy unit denoting the consumption of a million watts over an hour.

### Methane (CH<sub>4</sub>)

A hydrocarbon that acts as a greenhouse gas with a global warming potential estimated to be 28 times stronger than carbon dioxide. Methane arises from several sources, including decomposition in landfills, flooded rice fields, digestion in animals, and fossil fuel production. The GWP value is sourced from the IPCC's Fifth Assessment Report (AR5).

### Metric Ton

Equivalent to a Megagram or 1,000 kilograms, a metric ton, sometimes referred to as a metric tonne, is a standard international unit for mass.

### Micro Heat Island

Smaller localized zones within urban environments experiencing elevated temperatures in comparison to surrounding areas. Such hotspots might include asphalt roads, non-green roofs, or barren parking lots. The microclimate and unique built environment conditions heavily influence these micro heat islands. Refer also to "Heat Island".

### Million Metric Tons (MMT)

A standard measurement often utilized in greenhouse gas documentations, equivalent to a Teragram (Tg).

### Mitigation:

Efforts to reduce or curb the extent or speed of longterm climatic warming and its associated effects. Mitigation typically encompasses the reduction of human-induced greenhouse gas emissions.

### **Mobile Sources**

Transportation means that emit pollutants, including cars, motorbikes, trucks, off-road vehicles, boats, and planes.

### Mode Share

The proportion of travelers opting for a specific mode of transportation. Mode share serves as a vital metric when shaping sustainable transportation strategies in a city or region, as it highlights the prevalent use of different transport options. This metric showcases the effectiveness of infrastructures, policies, investments, and urban designs in facilitating various transport modes.

### Model

A model serves as a numerically-based representation of real-world scenarios, often omitting or simplifying certain details to emphasize core elements.

### Municipal Power Aggregation

Refer to "Community Choice Aggregation."

### Municipal Solid Waste (MSW)

Waste originating from homes and certain nonhazardous industrial, institutional, and commercial sources. Typically, this waste is directed to municipal disposal sites.

### N

### National Oceanic and Atmospheric Administration (NOAA)

A US agency responsible for weather forecasting, monitoring oceanic and atmospheric conditions, charting the seas, conducting deep-sea exploration, and managing fishing and protection of marine mammals and endangered species in the US exclusive economic zone.

### **Natural Sources**

Emission sources that aren't human-induced, including biological, geological sources, wildfires, and dust carried by the wind.

### Net Energy Metering (NEM)

Net Energy Metering, commonly referred to as Net Metering, enables residential and business consumers generating their own solar energy to sell their surplus electricity back to the grid. The rate schedule for NEM determines compensation for this electricity. While net metering laws exist in many states, in others, utilities may offer these programs either voluntarily or due to regulatory decisions.

### Net Zero Emissions (NZE)

Pertains to a community, business, institution, or building that produces the same amount of energy it consumes through renewable and GHG emission-free sources, resulting in zero net emissions over a year. With a net zero target, only a small portion of residual emissions, no more than 5-10%, should be offset using high-quality carbon removal methods.

### Nitrogen Fixation

The process where atmospheric nitrogen gas transforms into forms beneficial for plants and other organisms, achieved through lightning, bacteria, and blue-green algae. This process is integral to the nitrogen cycle.

### Nitrogen Oxides (NOx)

Gaseous compounds comprising nitrogen and oxygen. These gases emerge from vehicle exhaust and power generation. As they can form photochemical ozone, impact visibility, and harm health, they're deemed pollutants.

### Nitrous Oxide (N2O)

A potent greenhouse gas with a warming potential 265 times greater than carbon dioxide. Key sources encompass soil management practices, fossil fuel burning, and biomass combustion. Its global warming potential is derived from the IPCC's Fifth Assessment Report (AR5).

### Non-Governmental Organization (NGO)

a group that works independently of governments to improve social conditions. NGOs are often non-profit

institutions that are established at the community, national, or international level.

### 0

### Ozone (O<sub>3</sub>)

A gaseous compound composed of three oxygen atoms. In the troposphere, ozone forms naturally and through photochemical reactions involving human-produced gases. In the stratosphere, it forms when solar UV radiation interacts with diatomic oxygen. While tropospheric ozone is a greenhouse gas, stratospheric ozone is vital for blocking harmful UV radiation.

### **Ozone Depleting Substances (ODS)**

Compounds causing the depletion of the stratospheric ozone layer. This category includes substances like CFCs, HCFCs, halons, and more. These substances, predominantly stable in the troposphere, degrade in the stratosphere under UV radiation, releasing ozone-depleting chlorine or bromine.

### Р

### Perfluorocarbons (PFCs)

Man-made compounds solely composed of carbon and fluorine. Used as substitutes to ozone-depleting substances and emitted during certain industrial processes. Despite not depleting the ozone, they are formidable greenhouse gases. (IPCC's Fourth Assessment Report (AR4))

### Phantom Load

Refers to the power consumed by electronic devices and appliances even when switched off. Devices drawing "phantom loads" constantly utilize electricity.

### Photosynthesis

A biological process where plants absorb carbon dioxide to produce carbohydrates, releasing oxygen in the process. The mechanism varies based on different atmospheric carbon dioxide concentrations.

### Plug-in hybrid electric vehicle (PHEV)

A type of vehicle that combines features of both gasoline-powered and electric vehicles. PHEVs use batteries to power an electric motor, and another fuel, such as gasoline or diesel, to power an internal combustion engine or other propulsion source.

PHEVs can charge their batteries through charging equipment and regenerative braking

### Plug Load

Refers to the energy consumption of devices plugged into electrical outlets. In offices, major plug loads include computers, printers, and copiers. As buildings become more energy efficient, the relative importance of plug loads increases.

### POC

An acronym for "people of color" or "person of color", encompassing all non-white demographic groups. See also "BIPOC"

### **Point Sources**

Specific locations emitting pollutants into the atmosphere, like industrial smokestacks.

### Power Purchase Agreement (PPA)

A contract where one party, the generator, produces electricity, and the other, the buyer, agrees to purchase it. Individual or grouped customers can forge PPAs with energy developers. PPAs enable long-term renewable energy commitments and can serve as direct renewable energy investments.

### Property-Assessed Clean Energy (PACE)

A financial structure allowing property owners to fund renewable energy and energy efficiency improvements. Eligible properties include residential, commercial, and industrial sites. Upgrades can be geared toward energy efficiency, renewable energy, and water conservation.

### **Process Emissions**

These are emissions resulting from chemical transformations in industrial processes that are distinct from burning

### R

### RCP 8.5

A Representative Concentration Pathway climate model frequently considered the climate model representing "business as usual" forecasts if global GHG emissions are not reduced and fossil fuels are continued to be used.

### Radiative Forcing

A shift in equilibrium between incoming sunlight and outgoing infrared radiation. Ordinarily, the Earth's

incoming and outgoing radiations are almost balanced. However, the introduction of greenhouse gases captures more infrared radiation, reflecting it back to Earth's surface, leading to a warming effect.

### Reforestation

The act of reintroducing forests on lands that once held forests but were later repurposed.

### Regeneration

The process of reestablishing young trees, either naturally or through human intervention, typically preserving the existing forest type after the previous forest has been removed.

### Renewable Energy

Energy sourced from naturally renewable elements such as the sun, wind, water, and geothermal heat.

### Renewable Energy Credits (RECs)

Certificates representing the benefits and attributes of electricity generated from renewable sources. Each REC represents one megawatt-hour (MWh) of renewable electricity dispatched to the grid. The largest reduction in Evanston's emissions is attributed to REC purchases.

### Representative Concentration Pathway (RCP)

climate change scenarios to project future greenhouse gas concentrations. These pathways describe future greenhouse gas concentrations and have been formally adopted by the IPCC. There are a range of RCP climate models from RCP 2.6 to RCP 8.5 reflecting a range of potential human-made GHG emission scenarios. The numbers represent the expected change in radiative forcing through the end of the 21st century.

### **Residence Time**

The typical duration a single atom or molecule remains in a particular storage area. In the context of greenhouse gases, it generally refers to the duration a molecule lingers in the atmosphere.

### Resilience / Resiliency

The capacity to foresee, ready for, counteract, and promptly bounce back from climate-induced threats, ensuring minimal damage to society, economy, and natural settings.

### Resilience Hub

A resilience hub is a community-serving facility that supports residents and communities before, during, and after emergencies. Resilience hubs can also provide resources to support communities in reducing greenhouse gas emissions.

### Reservoir

Either (1) a part of the climate system where a greenhouse gas or its precursor is housed; or (2) human-manipulated water bodies where significant variations in water area might occur due to water regulation.

### Respiration

A biological process where living entities transform organic substances into carbon dioxide, using up oxygen and releasing energy in the process.

### Retro-commissioning

A comprehensive approach to enhance a building's operational efficiency by ensuring its control systems operate optimally and align with the building's intended and actual usage.

### Ride-share

A system where individuals share transport means, usually through carpooling or joining a vanpool. Typically facilitated by a platform connecting drivers with potential riders.

### S

### Scope 1:

Refers to emissions discharged directly within the city's boundaries due to fossil fuel combustion and the decomposition of waste in landfills and wastewater facilities.

### Scope 2:

Refers to emissions generated outside the city resulting from the city's consumption of electricity.

### Scope 3:

Pertains to emissions linked to local government functions that can be quantified and disclosed but don't fall under Scope 1 or 2. Examples include outsourced activities and commuting of employees.

### Short Ton

A standard ton measurement in the U.S., equivalent to 2,000 lbs or about 0.907 metric tons.

### Sink

Any activity, process, or mechanism responsible for removing a greenhouse gas, aerosol, or their precursor from the atmosphere.

### Social Cost of Carbon

An estimation of the economic damage due to climate change effects, calculated as the monetary value of total damages arising from emitting a single ton of carbon dioxide.

### **Solar Radiation**

The sun's emitted electromagnetic waves. This radiation, also known as shortwave radiation, has wavelengths mainly in the visible spectrum due to the Sun's temperature.

### Solar Photovoltaic (PV)

A system that directly transforms sunlight into electricity using semiconductors, primarily silicon. Suitable for homes, businesses, and large-scale operations, solar PV systems can be roof-mounted, ground-based, or integrated into building structures to produce renewable energy.

### Source

Any process or activity that introduces greenhouse gases, aerosols, or their precursors into the atmosphere.

### **Stationary Sources**

Fixed locations like power stations, manufacturing plants, and refineries that emit pollutants into the

### Strategy / Strategic Goal

Detailed directions built upon the foundation of the sustainability vision and GHG reduction objectives that guide future policy decisions, community investments, and initiatives.

### Sulfur Dioxide (SO<sub>2</sub>)

A molecule made of one sulfur atom and two oxygen atoms. Released both naturally and by human activity, it can transform into sulfate aerosols in the atmosphere. These aerosols can cool the Earth's surface, contribute to acid rain, and decrease visibility.

### Sulfur Hexafluoride (SF<sub>6</sub>)

A colorless gas that mixes well with alcohol and ether but less so with water. It's an extremely potent greenhouse gas, with a global warming potential much higher than carbon dioxide (CO<sub>2</sub>). SF6 is predominantly used in electricity transmission and as an insulator in electronics. Its global warming potential is derived from the IPCC's Fourth Assessment Report (AR4). It is a potent greenhouse gas with a warming potential 23,500 times greater than carbon dioxide.

### T

### **Terrestrial Carbon Sequestration**

The process where trees, plants, and crops absorb carbon dioxide (CO<sub>2</sub>) from the atmosphere through photosynthesis and store it as carbon in biomass (like tree stems, branches, and roots) and soil. This stored carbon creates "sinks" which counteract emissions when the absorbed carbon is greater than the released carbon over time.

### Therm

A unit of energy equivalent to 100,000 British Thermal Units, roughly akin to the energy in 100 cubic feet of natural gas. Commonly used to gauge natural gas consumption for billing.

### **Total Organic Gases (TOG)**

Organic gases that encompass both reactive and relatively non-reactive compounds, such as methane.

### Transparency

Clear presentation of methodologies and assumptions used in an inventory so users can easily replicate and evaluate the inventory. Transparency is crucial for effective communication and consideration of information.

### Trend

A measure of a quantity's change over time. A positive trend signifies growth, while a negative one indicates a decline. It's expressed in percentage or fractional terms concerning the quantity's initial value.

### U

### **Urban Tree Canopy**

The composition and traits of trees in urban settings.

### U.S. Department of Energy (DOE)

A federal agency that oversees the nation's nuclear infrastructure, energy policy, and funds scientific research in the field.

### U.S. Environmental Protection Agency (EPA)

A federal agency tasked with safeguarding human health and the environment. It offers technical support for recovery planning, long-term cleanup, and environmental surveillance. This includes assistance with public health infrastructure, such as wastewater treatment plants, and addressing threats through monitoring, assessment, and decontamination efforts

### V

### Vehicle Miles Traveled (VMT):

Represents the distance traveled by vehicles, be it cars, trucks, or motorcycles. Each mile is counted as one vehicle mile, irrespective of the number of passengers.

### **Vision Zero:**

A strategy focused on eliminating severe injuries and fatalities from traffic accidents, aiming to provide safe and equal mobility for all individuals.

### Vulnerability

The extent to which a system is exposed to, sensitive to, or unable to handle the adverse impacts of climate change. This encompasses:

- Exposure: The presence of assets or organisms in areas potentially adversely impacted by climate change.
- Sensitivity: The level at which assets or organisms are impacted by climate change.
- Adaptive capacity: The capability of systems, assets, or organisms to adjust to detrimental impacts.

### W

### Water Vapor

The predominant greenhouse gas present in the form of water in its gaseous state in the atmosphere. Water vapor is a natural part of the greenhouse effect. Its concentration is not significantly altered by human activities, but it amplifies the greenhouse effect due to positive feedback mechanisms. Water vapor also plays a vital role in climate regulation by forming clouds and precipitation.

### Weather

Weather represents the immediate atmospheric conditions at a specific time and place, while climate refers to the long-term average of these conditions in a particular region over an extended period. In simpler terms, weather is what you experience outdoors on any given day, while climate describes the typical weather patterns you'd anticipate for a particular season and location.

### Z

### Zero Emission Vehicles (ZEV)

A vehicle that doesn't release harmful pollutants during its operation. Examples include electric cars, hydrogen-fueled vehicles, and bicycles. These emissions, when released, can have detrimental effects on both the environment and human health.

### Zero Net Energy Building (ZNEB)

Also known as a Net-Zero Energy Building is one that is optimally efficient, and over the course of a year, generates renewable energy onsite equal to or greater than the total amount of energy consumed onsite.

### Zero Waste

An approach focusing on the efficient utilization of resources through responsible production, consumption, and recovery. This means products, packaging, and materials are reused and recycled without causing harm to the environment or health, and without resorting to incineration or releases to land, water. or air.



### Appendix D **Acknowledgements**

We are deeply grateful for the community collaboration and input that went into this plan. Below are some of the main contributors that made the City of Falcon Heights's Climate Action Plan possible:

### City of Falcon Heights Project Lead

City of Falcon Heights, Hannah B. Lynch Community Development Coordinator / Planner

100

### **Climate Action Planning Team**

Adam Keester	Resident, Environment Commissioner	Mark Miazga	Resident
Colin Callahan	City of Falcon Heights, Public Works Director	Megan Cunningham	UMN Institute on the Environment Undergraduate Leaders Program
Daryl Richard Lawrence	Facilities Manager at the Bell Museum	Mike Dockry	Resident
Erin McCabe	Local business representative - Crocus Hill Acupuncture	Olivia Siebert	City of Falcon Heights, Minnesota GreenCorps Member
Georgiana May	Resident, California Ave. and Northome Block Group	Paula Mielke	City of Falcon Heights, Council Member
Gregory Goodwine	Ramsey County	Pedro De Filippo Vannucci	Resident, Environment Commissioner
Hannah B. Lynch	City of Falcon Heights, Community Development Coordinator / Planner	Ron Eggert	Resident, Former Mayor
Janelle Barlan	UMN Student, Institute on the Environment	Sammy Nelson	Gibbs Farm/Ramsey County Historical Society
Jen Schnabel Smith	Resident	Shirley A. Reider	Resident
Jennie Betchwars	Resident	Susan	Resident
Kristen Swanson	Resident	1 Sec	

D-1 | FALCON HEIGHTS CLIMATE ACTION PLAN

### **Climate Action Plan Advisory Group**

Carla Inderrieden MPCA

Rachel Funke Watershed district

Nate Zwonitzer Watershed district

Kate Nelson

University of Minnesota, Twin Cities Director of Campus Sustainability

Christine Noonan State fair

Elisa Rasmussen Xcel

Peter Lindstrom CERTS

Deirdre Coleman Center for Energy and Environment

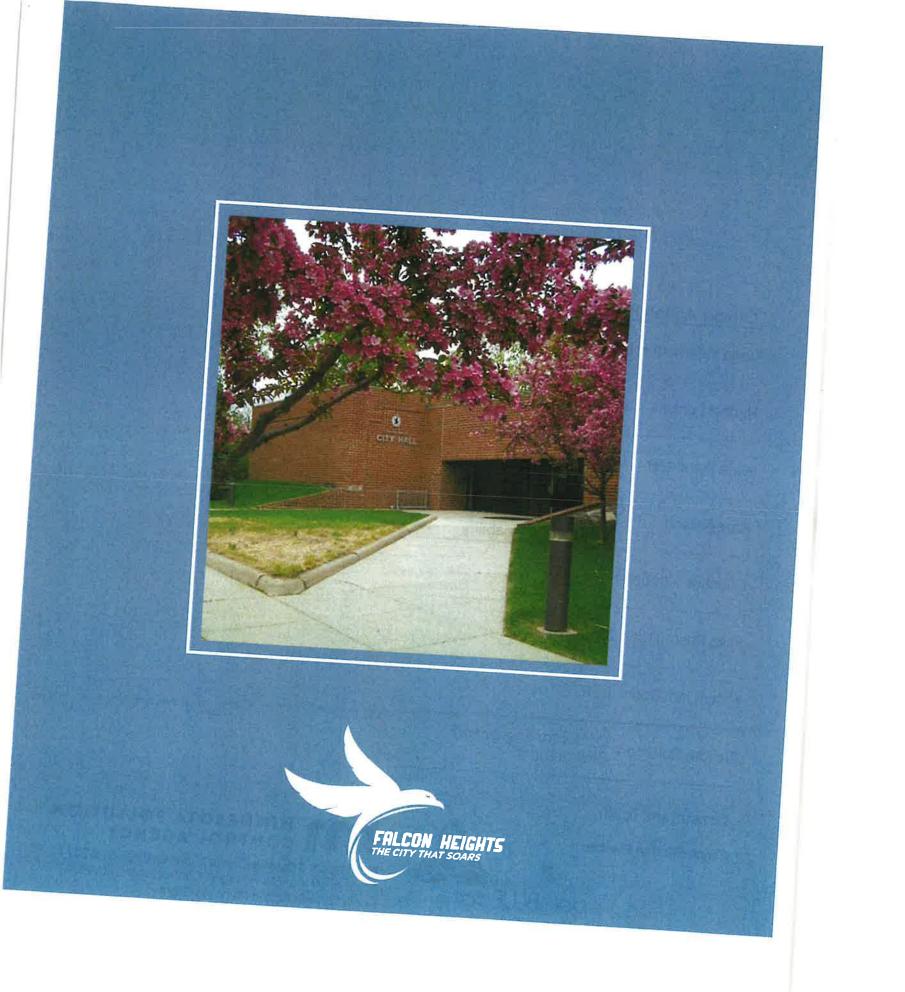
### **Consultant Team**

Climate Action Planner:





Funding for this project was provided through a 2024 State of Minnesota Pollution Control Agency (MPCA) Local Climate Action Planning Grant



BLANK PAGE



### REQUEST FOR COUNCIL ACTION

Meeting Date	
	March 12, 2025
Agenda Item	Presentation D2
Attachment	
Submitted By	Presentation
Submitted By	Jack Linehan, City Administrator

Item	Tubman Legal Services Presentation
Description	Tubman Legal Services is a not-for-profit organization that serves Hennepin, Ramsey and Washington counties, offering pro-bono legal services for those experiencing trauma – particularly victims of relationship violence, sexual assault and more.
	Tubman Legal Services actively supports the Falcon Heights community and with the assistance of the City Prosecutor, helps victims of domestic violence navigate their way through the court system. They also help victims with the steps to filing orders of protection.
	Jennifer Dickinson, Director of Legal Services, will present an update on the organization's recent activity.
Budget Impact	N/A
Attachment(s)	• Presentation
Action(s) Requested	No action is requested from the Council for this informational item.

City of Falcon Heights, Minnesota	
	104



# Tubman 2024 Falcon Heights Services "Year in Review" Jennifer Dickinson Director of Legal Services April 9, 2025

# \* Tubman Tubman Services: How can we help?

### Legal Services:

- Legal Advocacy (criminal/civil)
  - Attorney Services

# Shelter/Housing Services:

- Harriet Tubman Center East
  - Safe Journeys
- Community Based Supportive Housing

# Youth and Young Adult Programs:

- Voices in Prevention (VIP)
  - Inspiring Youth
- Northstar Youth Outreach Center

## Clinical Services:

- Several available groups
  - · Individual therapy
- Pieces of Peace Support Group (virtual)

\*\*The current Tubman Program Guide can be found at www.tubman.org\*\*



# victim/survivors of relationship violence in Falcon Heights? How does Tubman support

- incident of domestic abuse and connect the victim/survivor with an advocate right away • Provides a 24/7 designated intervention line number for law enforcement to report an
- Offers 24/7 services to victim/survivors, including immediate safety planning and shelter if
- Provides legal advocacy on the criminal court case from start to finish- including explaining the court process, making sure their voice is heard, and offering additional resources and
- Ongoing client-centered and trauma-informed services- What is most important to the victim/survivor?
- Assigned legal advocate for FH criminal cases works closely with the Kelly and Lemmons prosecution team on behalf of and with victim/survivor
- Follow up with law enforcement as needed to address victim/survivor safety concerns



# Falcon Heights 2024 Services

### Criminal/Civil

### Advocacy

- 8 new criminal cases followed
- 2 cases not followed (non-IPV)
- 1 protective order
- 10 law enforcement calls to our intervention line

### Safety Plans

- 12 safety plans developed with an advocate
- Services included attorney services, shelter, SAH, lease breaking help, Freedom Fund, and support groups

### **Total Numbers**

- 17 unique advocacy clients
- 127 total legal advocacy services provided
- An average of 8 services per client



## \* Tubman

### "Lori's" Story

- Referred by law enforcement after being assaulted by her ex-boyfriend
- Worked closely with her Tubman advocate to draft and file an Order for Protection quickly when the DANCO did not issue in criminal court
- Her advocate worked with law enforcement to get the abusive party served with the order at the courthouse
- Represented by a Tubman Safety Project volunteer attorney in the OFP process
- Worked closely with her Tubman advocate to do ongoing safety planning and access resources to achieve short-term and long-term goals





# Ongoing Challenges



- Lengthy court processes
   (often several continuances)
- Multiple, complex needs of the client/family
- Need additional resources
- Uncertainty of government funding moving forward



# \*\*Tubman News\*\*



- intake programs, provides a shared supervision model and expanded services. The CAT Team combines our resource advocacy and clinical · Our new Central Access Team streamlines access for those seeking resource line hours effective June 2,2025.
- · Harriet's Haven for Pets—exciting new program coming soon to Tubman...

### Harriet's Haven for Pets

\*Pet sanctuary to be added to our Tubman East Shelter

\*Estimated completion in 2025

\*Will provide for shelter and care for 8 dogs and 8 cats

\*Shelter residents will be able to care for and visit their pets on-site

\*Reduces a huge barrier- nearly 50% of victim/survivors delay leaving due to fear for their pet's safety





## Sobering Domestic Violence Statistics:

- 23 people in the state of MN lost their lives due to domestic violence in 2024 (Violence Free Minnesota)
- 2 additional deaths involved suspected DV
- 13 were killed by a current or former intimate partner
- 10 were bystanders or intervenors of the violence
- Due to those homicides, 10 minor children are now left without a parent due to relationship violence

If you or someone you know is experiencing DV, please encourage them to reach out for help:

Tubman

www.tubman.org

612-825-0000



### **BLANK PAGE**

### City of Falcon Heights 2025 Goal Setting Session Tuesday, March 4, 2025 12:30 PM – 6:30 PM

### Falcon Heights City Hall – Council Chambers

### **MINUTES**

Welcome, Introductions, How & Why We Are Here (12:30 – 12:40) – Mayor, Jack, Bart, Liza Council, staff and consultant provide brief introductions, and the consultants provide a brief overview of today's session and goals.

Let's start with a little fun! (12:40 – 1:00) – Bart

Council and staff participate in an icebreaker-style activity.

City Council Presentations (1:00-1:45) on their Top 3 Visions/Strategic Initiatives for the future of Falcon Heights

### Mielke:

- o Improving the lives of Falcon Heights residents.
  - Age in place
  - Lower street assessments
  - Improve renters' experience, strengthen rental codes
  - Improving pedestrian safety
- Improve parks and tree canopy and implement goals from the Climate Action Plan once completed.
- Purchase 1407 Largenteur property to control narrative
- o Improve the State Fair experience for Falcon Heights residents

### Meyer:

- Offer park programming again once the parks are completed, because of the lack of programming available for the community in general.
- o Strengthening connections with the community. There's an opportunity to create a shared community identity.
- Create a connection again with the elementary school. Mielke notes that a lot of Falcon Heights children also go to Brimhall and other surrounding schools. Linehan notes that staff turnover may have also contributed to the lack of a relationship with the school.
   Various staff have attempted to connect.

### • Gustafson:

- o Continue developing community meeting places, such as community parks and city hall.
- Continue cultivating caring community efforts through community engagement.
  - He mentions that some steps, like community training, were taken, but it feels more like a series of individual actions rather than a cohesive program. There needs to be more integration. The focus should be on reducing hate and polarization, ensuring that neighbors can get along with one another.
  - Falcon Heights has 11 different neighborhoods, divided by major roadways, which makes cohesion difficult. Creates an interesting dynamic. Leehy agrees.

Finding community consensus around garbage.

### Wassenberg:

- o Finish improvements to all city parks and create a third living space accessible for all residents.
- Long-term goal: Organized garbage collection. Saw first-hand what is possible with garbage collection through a tour of the center. He wants to ensure residents see the benefit of it as well. Currently, have organized recycling collection, which is a benefit to the city.

### Leehy:

- Strengthening the sense of community and cultivating a caring community and continue working on infusing those values in the fabric of the city, council, commissions, and staff.
- o Take care of city staff, and ensure staff feels supported; this helps the city be strong.
- Create value for teens and pre-teens and continue to ensure seniors can age in place. People
  of all ages should be represented and feel valued. Pre-teens and teenagers get overlooked.
- o Continue to ensure residents and police officers feel valued and comfortable.
- O Signage is important for branding, such as electronic signs at City Hall to promote events.
- o Connecting with schools: a broad spectrum of school representation in Falcon Heights because of various schools in the area; kids don't know each other on the block.
- Neutral regarding garbage hauling. She realizes 6 haulers are getting out of control. Leehy
  initially wanted residents to be able to make their own decisions. She feels 1-3 options are
  good, over 3 is getting out of hand, because of the wear and tear and impact on the
  community.
- o More inclusion from the city with Unity and Restoration Day.

Fischer: While garbage collection might be a longer-term goal for some, those require a start too. He polls the other members if they have a favorable view of this goal. Mielke agrees it's a long-term goal. Gustafson notes he has changed his mind on this idea. But over time learned the differences between a free economic system and an organized collection. Meyer agrees with an organized collection. He believes it is not helpful to have 6 haulers drive down streets to pick up a couple of carts each.

**City Administrator Presentation** (1:45 – 2:00 PM) on his Top 3 Visions/Strategic Initiatives for the future of Falcon Heights as well as an update on 2024 accomplishments and a "state of the city" update.

### Linehan:

- 2024 accomplishments:
  - Community engagement and reconciliation process with St. Anthony Village to find alignment on policing. Found a policing solution.
  - Community Park re-evaluation and re-energizing. Determined the park building was
     2 million over budget. Pick up on a new plan that's better than before
  - New streetlights and banners on Larpenteur
  - Updated monument signs
  - Staff continuity
  - No full-time employee turnover, a first in nearly a decade
  - Cannabis readiness. A lot of legwork went into it from planning and staff
  - "Missing middle housing" code changes. The state wants to get cities on board with helping the housing crisis.
  - State Fair improvements with the help of the State Fair Task Force

Continued success with grant funds.

### Future Priorities:

- Development of a service model so that we can provide value-added services to our residents that exceed the taxes they pay to the city
- Falcon Heights was known for its lower taxes, but also for its low number of services offered. As public safety costs are driving up the tax base, not only in Falcon Heights but everywhere, Falcon Heights is no longer the lowest tax base in Ramsey County. Linehan sees a need to reevaluate the city's service model.
  - For example, Public Works plows an extra time through the city
- A refinement of human resources practices to modernize the services provided to employees
  - Benefits
  - Onboarding improvements
- Development of a multi-year capital plan that includes a master space analysis to look at future uses for all city-owned property, including city hall, city parks, and potential property the city wants to invest in.
  - Currently, the capital improvement plan is managed through the budget process. However, it's not a readable document for residents to see.

Gustafson notes those are great priorities for city operations. Staff turnover was a challenge. Falcon Heights has been known as a training ground but investing in staff and then being able to retain trained staff is important as well.

Fisher agrees that Falcon Heights has been a training ground, but that was the mentality of the council at the time. Leehy believes Falcon Heights should not be a revolving door. If the City is investing in staff, retaining them is important too. The city should take other retention tools into account as well. Gustafson notes that having great staff with some experience is invaluable. Bart and Liza agree from a consultant standpoint.

**Overview and Summary of Findings, Themes, and Goals** – from individual calls/meetings and presentations. (2:15 – 2:30) – Bart & Liza

Donabauer goes over the goals for today as well as themes that were determined after the consultants had individual calls with council members previously.

Themes from previous individual phone calls:

- What are we proud of/ energizes us
  - Restoration of service contract with SAPD
  - o Excellent, competent staff
  - Ability to pivot on the community park building project
  - o Anticipation of providing improved services to residents in response to SAPD
  - o Peace garden, restoration, and Unity Day
  - Culture of caring and connectedness
  - Working on Commission members getting paid per diem in response to DEI
  - o Ideas and service from commission/board members. Can create a domino effect and get other residents to serve
  - o Community feedback

- Connecting with residents
- o Council interactions are professional and respectful
- o Work with the SFTF

### Frustrations

- o Community Park building process and the budget
- o Mandated parking: impacts future development and business. Discussions on what is the right amount of parking for developments.
- Long city council meetings/ off-focus
- Pace of city government in moving projects/initiatives forward.
- o Divided neighborhoods can be an obstacle

### What keeps us up at night

- Future funding
- High staff turnover
- Normal day-to-day problem solving
- o Future of U of M golf course. Currently, the U can develop it themselves.
- Health & safety of rental property residents
- Leehy adds that it is similar to the State Fair. Another large institution. Can be part of larger conversations of how to deal with them.
- Linehan adds cyber security. Financial issues.

Donabauer shifts the conversation to opportunities that were identified as immediate and longer-term.

### Opportunities

### o Immediate

- Defining council roles and responsibilities, providing training
- Support rental property residents, creating ordinances
- Explore funding opportunities for SF and street improvements and look at funding mechanisms.
- Climate Action Plan
- Smooth transition of SAPD service
- Improved communications/public engagement and community involvement
- Improve community events
- Develop a multi-year CIP
- Explore the impact of the future of the U of M golf course
- Completion of improvements at the community park and look at other parks
- Update technology and processes
- Ensuring staff is taken care of
- Explore opportunities to provide value-added services to residents.

### Long term

- Organized trash collection (move to immediate to start discussions)
- Enhance partnerships with SF and U of M (potential to move to immediate)
  - Leehy: Residents work at the University, so we can engage them more.
  - Student engagement
  - Build a relationship intergovernmental team
  - Linehan: The relationships ebb and flow.

- Increase collaboration and communication with all schools that kids attend.
  - Mielke: The district holds regular meetings
- Embrace & acknowledge differences by building upon a caring community
- Space study for city hall and future investments
  - Explore other redevelopment opportunities.
- Continue to improve relations with SAV and Lauderdale
- Increase opportunities for Falcon Heights teens, summer programming

### Group Discussion on and Prioritization of Findings, Themes, Goals and Strategies (2:30 - 3:45)

- Smooth Transition to the St. Anthony Police Department (SAPD):
  - o Meyer wonders if there are still question marks.
  - o Linehan notes it was well planned out. An item of note could be community outreach.
  - Mielke would like a regular update from Chief Spiess to the council.
  - Linehan notes organizing a community coffee with a cop in April and May. There will also be an annual report and weekly reports. An option is to conduct a community-wide survey on the satisfaction of municipal services and include police services.
  - o Leehy: ask for community feedback now that the transition has taken place.
    - Such as a public listening session.
  - o Gustafson notes a community survey can also tie in with improving communications.
  - Wassenberg: Ensure SAPD will attend city events
  - o Linehan: have a police representative attend city commission meetings. Hire a community service officer and a licensed officer.
- Communications / Community Engagement
  - Enhancing events
    - Leehy explains the Community Engagement Commission is working on a block party style/mini-ice cream social for reaching out to apartments and having small events with council members and staff present at their buildings.
    - Meyer suggests enhancing Ice Cream Social with a talent show, and prizes. Inclusion of food from different cultures, like a multi-cultural event.
    - Fall Fest to create more around the history of Falcon Heights
    - Council discusses the idea of better defining who plans what event.
      - Gustafson suggests defining commission roles and assigning event planning
  - Creating community identity and how to get residents more involved.
  - o Restoration and Unity Day
  - o Improving communications
    - Wassenberg: Creating an effective way to communicate that people are accustomed to, can drive engagement. For example, alerts through text messaging
  - Gustafson suggests promoting ourselves more and communicating our story to help showcase
     City pride. For example, you can call the City Administrator and be heard.
  - Meyer mentions the Local Attractions section of the City's website and suggests building that out more. Instead of listing the Raptor Center, for example, it generically lists the University of Minnesota. And the golf course could be added.

### Park Programming

- Leehy: Ensuring Falcon Heights is unique in their offering of programming
- O Wassenberg: people are interested in summer day camps.
- Mielke: Falcon Heights is competing in their park programming with surrounding organizations and staffing

Break (3:45 - 4:00)

### Group Discussion on and Prioritization of Findings, Themes, Goals and Strategies (4:00 – 5:15)

- Fischer introduces the topic of tax burden for discussion and asks Linehan to elaborate.
  - Linehan: Trying to determine their purpose as the City of Falcon Heights. What are our core services? Our tax burden has increased so is the expectation of service higher? How do we look at what we offer our residents? What's our goal and our role?
  - Wassenberg says transportation, utilities, police, fire, etc. are our cores to focus on. Beyond
    this, our parks are a core in the sense that people tend to enjoy parks where they are and
    don't necessarily drive to them. He adds that he would prefer to remove assessments.
    - Meyer adds that it would do away with the need for public hearings and simplify things without assessments.
    - Fischer asks if this fits under Enhanced Services.
    - Linehan thinks it does and adds that the council has talked about rental licenses and the process. Renter's rights would fall under Enhanced Services.
    - Meyer asks if the City is mostly caught up on inspections and Linehan confirms this.

### Enhance partnerships with community organizations

- Wassenberg asks if there's an opportunity to partner with the University of Minnesota to make a groomed path within the fields.
- Leehy states that the field off of Fairview is fairly accessible to residents. She does not feel that the University of Minnesota will probably want to add a path.
- Wassenberg adds that he's trying to take things that the City already has within it to then
  expand offerings without a cost or at a minimal cost. He then suggests inviting someone
  from the University of Minnesota to whatever grand reveal the City has at Community
  Park after the renovation to show what has been done since the City purchased it.
- Fischer mentions that the school district was previously identified under the Partnership list.
- Linehan says that agencies from the State Fair to Gibbs Farm are all partnerships to strengthen.
- O Wassenberg uses snowplowing for Lauderdale as an example of a successful partnership.
- Linehan adds that there may be an opportunity to present street sweeping to Lauderdale as well. He then asks what other opportunities there are to insource. In a lot of areas, we outsource.
- Leehy asks if our parks receive any sponsorships from local businesses and suggests improving relationships with them.

### Organized Trash Collection

- o Fischer asks for clarification regarding the timeline for the organized trash collection goal.
- Linehan says that it's a worthwhile topic to discuss further at a future workshop meeting.
   He adds that the City can request data from the haulers to see how many accounts they

have in each neighborhood and that it could be a phased approach where you go from seven haulers to five, then to three, then to one, as an example.

- The Council discusses Internal Services / Operational Items and identifies updating technologies and staff retention as goals.
  - Linehan reminds the Council that they will be talking about a classification and compensation study at their workshop meeting but also thinking about processes. In the past, staff turnover likely caused a loss of knowledge, or a more limited transfer of knowledge being passed on. He shares that salary and benefits are primary factors for staff turnover. Linehan notes that cleaning up processes and making the small government environment more enjoyable would help.
  - Gustafson says updating technology makes the council more productive.
  - Wassenberg identifies two priorities which are to retain staff and to have processes identified so that when someone does leave, disruption is minimal.
  - Linehan says there are sometimes costs associated with updating processes such as shifting to electronic timesheets from paper.
  - Meyer then asks if the Council would like to explore paperless agenda packets. He asks if personal devices could be used.
  - o Linehan says that it may be possible to read agendas posted online from personal devices.

### Additional Discussion as Needed and Wrap Up (5:30-6:30) - Bart, Liza, Jack

- Fischer asks if anything was missed.
  - o Mielke suggests adding non-profits under Partnerships.
  - The Council discusses having social services available or promoting hours of existing services at Ramsey County Library, for example.
  - o Leehy says that Minneapolis has BCR (Behavioral Crisis Response) Teams.
  - The Council adds this to Enhanced Services.
  - Mielke then mentions improving cooperation amongst commissions. This is added under Definitions of Roles.
- Development/Redevelopment
  - o Completion and improvement of Community Park → part of multi-year CIP.
    - Linehan: looking at physical infrastructure that is not essential/city amenities, what is offered, and what can be improved. CIP can be utilized as a tool to tie the funding to implementation.
    - Determining the community's needs and demands.
    - Long-term land use.
      - Utilize consultants.
      - Use a long-term road plan as a driver
      - Create more pocket amenities for each neighborhood.
      - Create mini community meeting places.
  - Leehy wonders what we are doing to draw businesses in at 1550 Larpenteur, for example.
     When we have vacancies, what are we doing to help fill them?
    - Mielke says that some locations may choose to have vacancies for the tax benefits.
    - Leehy says the City could speak up about what they'd like to see when there are vacancies.

- Gustafson says that we don't have an economic development committee, but we could maybe add vacancies to our newsletter.
- Areas within the City are identified as possibilities for future redevelopment. While there are
  no current plans to develop these noted areas, Leehy suggests adding them to a workshop to
  discuss, and to take a proactive approach rather than reactive.
- Linehan says a timeline will be identified once Fischer and Donabauer have sifted through and filtered the list.
- To conclude the goal-setting session, Fischer asks each attendee for their takeaway.
  - o Linehan: There was good cooperation, and we all have more in common than we have differences.
  - o Wassenberg: A better understanding of operational improvements.
  - o Leehy: Echoing Linehan's statements, Leehy says the commonality of our goals.
  - Gustafson: He is encouraged by everyone's commitment to our City and in wanting to improve what they are doing.
  - Meyer: He notes that everyone is on board with the pragmatic path, wanting to improve things for our residents while we stretch the dollar while doing it.
  - Mielke: It was good to spend this time together.

Randall C. Gustafson, Mayo

Dated this 9<sup>th</sup> day of April, 2025

Jack Linehan, City Administrator

### BLANK PAGE

4/02/2025 1:39 PM

PACKET: 03355 APRIL 2 PAYABLES

VENDOR SET: 01 City of Falcon Heights

SEOUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED

GROSS P.O. #
OST DATE BANK CODE ------DESCRIPTION DISCOUNT G/L ACCOUNT ----- ACCOUNT NAME----- DISTRIBUTION THE RELIEVE THE RESULT OF THE RESULT OF THE PROPERTY OF THE PR 01 225 CITY OF ST ANTHONY I-4559 MARCH 2025 POLICE SVCS 100,150.25 4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025 1099: N 101 4122-81000-000 POLICE SERVICES 100,150.25 MARCH 2025 POLICE SVCS === VENDOR TOTALS === 100,150,25 01-03122 CITY OF ST PAUL ### ADDIO SHOP MAINTENANCE 90.00
4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025 I-IN 62038 1099: N 90.00 101 4132-70120-000 SUPPLIES === VENDOR TOTALS === 90.00 01-05585 METROPOLITAN AREA MANAGEMENT A 4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025 I-2274 1099: N 101 4112-86100-000 CONFERENCES/EDUCATION/AS 35.00 === VENDOR TOTALS === 35.00 01-05753 MWP RECREATION T-202504029158 DEPOSIT COMM PARK BLDG&SHELTE 156,781.00 -202509029158 DEPOSIT COMM PARK BLDG&SHEDTE 156, 4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025 1099: N 403 4403-91500-000 COMMUNITY PARK LAND/BUIL 156,781.00 DEPOSIT COMM PARK BLDG&SHELTER 156 781 00 === VENDOR TOTALS === ): 1953 OREILLY AUTO PARTS 77.91 OIL AND FILTER F450 TRK 1243-471336 4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025 1099: N 77,91 OIL AND FILTER F450 TRK 101 4132-70120-000 SUPPLIES

77,91

01-06009 PALE BLUE DOT LLC

CLIMATE ACTION PLAN 16.607.14 T-1443 4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025

=== VENDOR TOTALS ===

1099: N 101 4137-80450-000 CLIMATE ACTION PLAN 16,607.14 CLIMATE ACTION PLAN

16,607.14 === VENDOR TOTALS ===

4/02/2025 1:39 PM

PACKET: 03355 APRIL 2 PAYABLES

VENDOR SET: 01 City of Falcon Heights

SEQUENCE : ALPHABETIC

DUE TO/PROM ACCOUNTS SUPPRESSED

01-05870 XCEL ENERGY

ELECT 46.98 I-202504029159

4/02/2025 APBNK DUE: 4/02/2025 DISC: 4/02/2025 1099: N

209 4209-85020-000 STREET LIGHTING POWER ELECT

> === VENDOR TOTALS === 46.98

> 273,788,28 === PACKET TOTALS ===

PAGE: 2

46.90

3/31/2025 1:50 PM

PACKET: 03352 MAR 31 PAYABLES
VENDOR SET: 01 City of Falcon Heights

SEQUENCE : ALPHABETIC
DUE TO/FROM ACCOUNTS SUPPRESSED -----ID-----GROSS P.O. #

T DATE BANK COD	EDESCRIPTION	DISCOUNT	G/L ACCOUNT	ACCOUNT NAME	DISTRIBUTION
01-00028 ALLSTREAM			>==== <del>==============</del> ==================	G	
01-00028 ALLSIREAN					
I-21380522	4	134.34	1000 N		
3/31/2025 APBNK	DUE: 3/31/2025 DISC: 3/31/2025 EMERG LANDLINE 3/23 TO 4/22		1099: N 101 4116-85010-000	TELEPHONE	134 34
	EMERG DANDDINE 3/23 TO 4/22		101 4110 02010 000		
	=== VENDOR TOTALS ===	134.34			
01-05422				- <b>-</b>	
I-202503319146	FUEL	1,078.85			
3/31/2025 APBNK	DUE: 3/31/2025 DISC: 3/31/2025		1099: N		
	FUEL		101 4132-74000-000	MOTOR FUEL & LUBRICANTS	1,078.85
	=== VENDOR TOTALS ===	1,078,85			
=======================================			=======================================		
01-01012 COREMARK META	ALS				
I-5583175	STEEL AND SPIRAL TAB PLUG	21.27			
3/31/2025 APBNK	DUE: 3/31/2025 DISC: 3/31/2025		1099: N		
	STEEL AND SPIRAL TAB PLUG		101 4132-70120-000	SUPPLIES	21.27
I-5583954	WHEELS FOR MAP CABINENT	39,36			
3/31/2025 APBNK	DUE: 3/31/2025 DISC: 3/31/2025		1099: N		
	WHEELS FOR MAP CABINENT		101 4131-70110-000	SUPPLIES	39.36
	=== VENDOR TOTALS ===	60.63			
01-03421 GENERAL REPAI	IR SERVICE				
	IR SERVICE	357.50			
I-84910	IR SERVICE  LIFT STATION MAINTENANCE	357.50	1099: N		
I-84910	IR SERVICE	357.50			357.50
I-84910	IR SERVICE  LIFT STATION MAINTENANCE  DUE: 3/31/2025 DISC: 3/31/2025	357.50	1099: N		
I-84910 3/31/2025 APBNK	LIFT STATION MAINTENANCE DUE: 3/31/2025 DISC: 3/31/2025 LIFT STATION MAINTENANCE  *** VENDOR TOTALS ===	357.50 357.50	1099: N 601 4601-87000-000	REPAIR EQUIPMENT	357.50
I-84910 3/31/2025 APBNK	IR SERVICE  LIFT STATION MAINTENANCE  DUE: 3/31/2025 DISC: 3/31/2025  LIFT STATION MAINTENANCE  VENDOR TOTALS ===	357.50 357.50	1099: N 601 4601-87000-000	REPAIR EQUIPMENT	357.50
3/31/2025 APBNK	IR SERVICE  LIFT STATION MAINTENANCE  DUE: 3/31/2025 DISC: 3/31/2025  LIFT STATION MAINTENANCE  VENDOR TOTALS ===	357.50 357.50	1099: N 601 4601-87000-000	REPAIR EQUIPMENT	357.50
I-84910 3/31/2025 APBNK	IR SERVICE  LIFT STATION MAINTENANCE  DUE: 3/31/2025 DISC: 3/31/2025  LIFT STATION MAINTENANCE  VENDOR TOTALS ===	357.50 357.50	1099: N 601 4601-87000-000	REPAIR EQUIPMENT	357.50
I-84910 3/31/2025 APBNK 01-05153 HOME DEPOT CF	LIFT STATION MAINTENANCE  DUE: 3/31/2025 DISC: 3/31/2025  LIFT STATION MAINTENANCE  VENDOR TOTALS ===	357.50	1099: N 601 4601-87000-000	REPAIR EQUIPMENT	357.50
I-84910 3/31/2025 APBNK 01-05153 HOME DEPOT CF	LIFT STATION MAINTENANCE DUE: 3/31/2025 DISC: 3/31/2025 LIFT STATION MAINTENANCE  VENDOR TOTALS ===  RC/GECF  POLICE OFFICE REMODELING	357.50	1099: N 601 4601-87000-000	REPAIR EQUIPMENT	357.50

PAGE: 2

3/31/2025 1:50 PM

PACKET: 03352 MAR 31 PAYABLES

VENDOR SET: 01 City of Falcon Heights

=== VENDOR TOTALS ===

SEQUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED

GROSS P.O. # -----ACCOUNT NAME----- DISTRIBUTION 01 \_\_008 HUMANA INSURANCE CO VISION APR 78.21 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 1099: N VISION APR 101 4112-89000-000 MISCELLANEOUS 78 21 === VENDOR TOTALS === 78.21 01-05953 LANDBERG, ALYSSA 10 92 I-202503319153 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 MILEAGE REEIMB 1099: N 101 4113-86010-000 MILEAGE 10 92 MILEAGE REEIMB === VENDOR TOTALS === 10.92 01-05856 LINEHAN, JACK I-202503319150 FLEX MEDICAL REIMB 151.38 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 1099: N MEDICAL FLEX SAVINGS PAY FLEX MEDICAL REIMB 101 21712-000 133.21 7.57 206 21712-000 MEDICAL FLEX SAVINGS PAY FLEX MEDICAL REIMB 601 21712-000 MEDICAL FLEX SAVINGS PAY FLEX MEDICAL REIMB 602 21712-000 MEDICAL FLEX SAVINGS PAY 4.54 FLEX MEDICAL REIMB === VENDOR TOTALS === 151.38 01-05451 MADISON NATIONAL LIFE INS CO I I-1686614 LTD AND STD INSURANCE APR 170.53 APBNK DUE: 3/31/2025 DISC: 3/31/2025 1099: N 3/31/2025 170-53 101 4112-89000-000 MISCELLANEOUS LTD AND STD INSURANCE APR === VENDOR TOTALS === 170.53 01-05582 MENARDS POLICE OFFICE & SHOP SUPPLIES 381.98 I-202503319156 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 402 4402-91100-000 POLICE OFFICE RENOVATION 246.66 POLICE OFFICE REMODELING 101 4131-70110-000 SUPPLIES 135.32 SHOP SUPPLIES

381.98

PAGE: 3

3/31/2025 1:50 PM

PACKET: 03352 MAR 31 PAYABLES

VENDOR SET: 01 City of Falcon Heights

SEQUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED

DISCOUNT G/L ACCOUNT ....-ACCOUNT NAME----- DISTRIBUTION -----ID-----TT DATE BANK CODE ------DESCRIPTION----01 -3030 OLSON, ROLAND 100.80 REIMB MILEAGE MARCH I-202503319151 REIMB MILEAGE MARCH 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 1099: N 100.80 I-202503319151 101 4113-86010-000 MILEAGE REIMB MILEAGE MARCH 01-05927 POPE, DEAN 334.98 WORK BOOTS REIMB 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 I-202503319149 1099: N 334.98 101 4132-77000-000 CLOTHING WORK BOOTS REIMB 01-06185 RAMSEY COUNTY 5,994.00 2ND QTR ELECTIONS 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 1099: N 5,994.00 101 4115-80300-000 ELECTION CONTRACT I-PRRRV-003449 2ND QTR ELECTIONS 01-06483 SENTRY SYSTEMS, INC 94.50 COMM MONITORING 4/1 TO 6/30 1-801140 COMM MONITORING 4/1 10 6/30 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 101 4131-87100-000 PANIC BUTTON SECURITY I-801140 COMM MONITORING 4/1 TO 6/30 0° 135 ST PAUL REGIONAL WATER SERVICE 224.51 WATER AND SS 1099: N 44.52 3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025 \_-202503319152 101 4131-85040-000 WATER 12.83 601 4601-85075-000 CITY BUILDINGS SANITARY H20 98.61 101 4141-85040-000 WATER H20 12.83 601 4601-35075-000 CITY BUILDINGS SANITARY H20 42.89 101 4141-85040-000 WATER H20 601 4601-85075-000 CITY BUILDINGS SANITARY 12.83 H20 H20 224 51 === VENDOR TOTALS ===

PAGE: 4

3/31/2025 1:50 PM

PACKET: 03352 MAR 31 PAYABLES

VENDOR SET: 01 City of Falcon Heights

SEQUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED

GROSS P.O. #

C DATE BANK CODE ------DESCRIPTION------- DISCOUNT G/L ACCOUNT NAME------ DISTRIBUTION

Ol-v-851 TRICON AMERICAN HOMES

01-v0851 TRICON AMERICAN HOMES

I 202503319148 REFUND RENTAL LIC 51.43

3/31/2025 APBNK DUE: 3/31/2025 DISC: 3/31/2025

REFUND RENTAL LIC 101 32150-000 RENTAL HOUSING LICENSE 51.43

=== VENDOR TOTALS === 51.43

=== PACKET TOTALS === 9,473.72

129

3/24/2025 2:23 PM

PACKET: 03349 MARCH 24TH PAYABLES VENDOR SET: 01 City of Falcon Heights

SEQUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED

GROSS P.O. # DISCOUNT G/L ACCOUNT -----ACCOUNT NAME----- DISTRIBUTION ST DATE BANK CODE ------DESCRIPTION-----01 2103 CANON FINANCIAL SERVICES COPIER SVC MARCH 101 4131-87010-000 CITY HALL MAINTENANCE 163.59 I-39087878 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 COPIER SVC MARCH 01-03110 CENTURY LINK 71.38 1-202503249141 LANDLINE SVC MAR 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 71.38 101 4141-85011-000 TELEPHONE - LANDLINE LANDLINE SVC MAR 01-05166 GRAINGER, W. W., INC. 267.82 BENCH SCALE FOR RECYCLING 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N I-9434742079 206 4206-70100-000 SUPPLIES/COPY COSTS 267.82 BENCH SCALE FOR RECYCLING 23503-328465878488537736779758879-888762868577757625 25328760 860 8638 2575-2588 258 258 258 258 258 258 258 2 01-05450 LEAGUE MN CITIES INS TRST 2,500.00 DEDUCTIBLE CAR DAMAGE PLOW 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 2,500.00 101 4192-89000-000 MISCELLANEOUS DEDUCTIBLE CAR DAMAGE PLOW T 01 1357 MINNESOTA POLLUTION CONTROL AG 400.00 WASTE WATER APPLICATION FEE 202503249143 1099; N 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 400.00 601 4601-86110-000 MEMBERSHIPS WASTE WATER APPLICATION FEE 01-06024 ON SITE SANITATION 260.00 CURTIS PORTABLE TOILET I-1861624 1099: N 3/24/2025 AFBNK DUE: 3/24/2025 DISC: 3/24/2025 260.00 601 4601-85080-000 PORTABLE TOILET PARKS CURTIS PORTABLE TOILET 260.00 COMM PARK PORTABLE TOILET 1-1861825 COMM PARK POKTABLE TOILET
3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 601 4501-85080-000 PORTABLE TOILET PARKS I-1861625 260.00 COMM FARK PORTABLE TOILET 520.00 === VENDOR TOTALS ===

3/24/2025 2:23 PM PACKET: 03349 MARCH 24TH PAYABLES VENDOR SET: 01 City of Falcon Heights

SEQUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED -----ACCOUNT NAME----- DISTRIBUTION GROSS P.O. # .\_\_\_\_TD-----ST DATE BANK CODE ------DESCRIPTION-----01 ...053 OREILLY AUTO PARTS I-3243-470285 hose barb 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1.92 1.92 1099: N I-3243-470285 101 4132-70120-000 SUPPLIES hose barb 1.92 1.92 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 hose barb 1099: N I-3243-470310 101 4132-70120-000 SUPPLIES hose barb のようしてもまたのは、100mので 01-06190 RAMSEY COUNTY - HAZARDOUS WAST AAZARD WASTE LICENSE RENEWAL

3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 HAZARD WASTE LICENSE RENEWAL 100.00 100.00 1099: N 101 4131-89000-000 MISCELLANEOUS I-620674 01-05914 SIMONS, DAVID 26.98 REIMB WORK PANTS I-202503249144 26.98 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 101 4132-77000-000 CLOTHING REIMB WORK PANTS 01-07282 SURPLUS SERVICES 175.00 FILE CABINENT 175.00 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 401 4401-90100-000 FURNITURE & EQUIPMENT 1-202503249142 FILE CABINENT 01-05752 UNIVERSAL TRUCK SERVICE LLC 29.67 FUSES FOR DUMP TRUCK 1099: N 29.67 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 101 4132-87000-000 REPAIR EQUIPMENT I-108008

29.67

FUSES FOR DUMP TRUCK

=== VENDOR TOTALS ===

3/24/2025 2:23 PM

PACKET: 03349 MARCH 24TH PAYABLES VENDOR SET: 01 City of Falcon Heights

=== VENDOR TOTALS ===

=== PACKET TOTALS ===

SEQUENCE : ALPHABETIC

DUE TO/FROM ACCOUNTS SUPPRESSED

P,O. # GROSS ----- TD-----ST DATE BANK CODE ------DESCRIPTION----- DISCOUNT G/L ACCOUNT ----- ACCOUNT NAME----- DISTRIBUTION 01 -784 UPPER CUT TREE SERVICES I-6297 22,500.00 TREE TRIMMING 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 101 4134-84040-000 STORM DAMAGE 22.500.00 TREE TRIMMING === VENDOR TOTALS === 22.500.00 01-07898 WSB I-R-023655-000-17 PLANNING COMM PARK BLDG 15.684.00 3/24/2025 APENK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 403 4403-91500-000 COMMUNITY PARK LAND/BUIL 15,684.00 PLANNING COMM PARK BLDG 15,684.00 === VENDOR TOTALS === 01-05870 XCEL ENERGY I-202503249140 ELECT AND GAS 1,490.72 3/24/2025 APBNK DUE: 3/24/2025 DISC: 3/24/2025 1099: N 209 4209-85020-000 STREET LIGHTING POWER 64.82 ELECT 19.62 209 4209-85020-000 STREET LIGHTING POWER ELECT 209 4209-85020-000 STREET LIGHTING POWER 72.67 RLECT 101 4131-85030-000 NATURAL GAS 1,216.10 GAS 34.36 101 4121-85020-000 ELECTRIC ELECT 58.77 101 4142-85020-000 ELECTRIC ELECT 101 4141-85020-000 ELECTRIC/GAS 24.38 ELECT

1,490.72

43,933.00

\*\*\*\*\* DIRECT DEPOSIT LIST \*\*\*\*\*

EMP # ----- NAME -----TNUOMA . )022 RANDALL C GUSTAFSON 293.07 )1-0023 MELANIE M LEEHY 262.05 262.05 )1-0027 ERIC G MEYER )1-0028 JAMES J WASSENBERG 262.05 )1-0029 PAULA MIELKE 262.05 )1-1006 JACK LINEHAN 2,842,02 )1-1027 KELLY A NELSON 2,323.11 )1-1029 ELKE JOHNSON 1,771.60 )1-1136 ROLAND O OLSON 3,143.63 2,480.14 )1-1162 ALYSSA LANDBERG )1-1028 HANNAH B LYNCH 2,836.21 )1-1168 DEAN T POPE 1,649.60 )1-1033 DAVE TRETSVEN 1,970.93 )1-1143 COLIN B CALLAHAN 2,895.02 23,253.53 'OTAL PRINTED: 14

3-25-2025 5:13 AM PAYROLL CHECK REGISTER PAYROLL NO: 01 City of Falcon Heights

PAGE: 1 PAYROLL DATE: 3/25/2025

CHECK CHECK CHECK EMP NO EMPLOYEE NAME TYPE DATE AMOUNT NO. 1 SIMONS, DAVID S 3/25/2025 1,750.65 094034

PAYROLL CHECK REGISTER 3-25-2025 5:13 AM 'AYROLL NO: 01 City of Falcon Heights \*\*\* REGISTER TOTALS \*\*\*

PAGE: 2 PAYROLL DATE: 3/25/2025

1,750.65 14 23,253.53 REGULAR CHECKS: DIRECT DEPOSIT REGULAR CHECKS:

MANUAL CHECKS: PRINTED MANUAL CHECKS:

DIRECT DEPOSIT MANUAL CHECKS: VOIDED CHECKS:

NON CHECKS:

..... 25,004.18 TOTAL CHECKS: 15

\*\*\* NO ERRORS FOUND \*\*\*

\* END OF REPORT \*\*

### March 25 payroll

Fed With	9,115.19
St With	1,776.84
Pera	5,072.95
ICMA	200.00
	16 164 98

### BLANK PAGE



### REQUEST FOR COUNCIL ACTION

Meeting Date	April 9, 2025
Agenda Item	Consent G2
Attachment	N/A
Submitted By	Kelly Nelson
	Administrative Services Director /
	Deputy Clerk

Item	Approval of City License(s)
Description	The following individuals/entities have applied for a Home Occupation License for 2025. Staff have received the necessary documents for licensure.  1. Bouquets in Bloom
	N/A
Attachment(s)	N/A
Action(s) Requested	Staff recommends approval of the City license applications contingent on background checks and fire inspections as required.

### **BLANK PAGE**

137



### REQUEST FOR COUNCIL ACTION (RCA)

Meeting Date	April 9, 2025
Agenda Item	G3
Attachment(s)	Request for Proposals for City Website
	Redesign, Resolution 25-30
Submitted By	Elke Johnson, Administrative and
	Communications Coordinator

Description  The attached Request for Proposal (RFP) will notify qualified vendors and individuals that the City is accepting proposals for redesign of the city's website.  The last major redesign of the City's website took place in 2021. Since then, much has changed in the architecture of CMS, as well as the level of expectations of services provided by local government websites.  The goal of the website redesign is to create an engaging, user-friendly site with a flexible CMS that enables city staff to provide timely, accurate, and accessible information.  This website redesign will also help with the new accessibility requirements for web content provided by state and local governments. On April 24, 2024, the Federal Register published the Department of Justice's (Department) final rule updating its regulations for Title II of the Americans with Disabilities Act (ADA). The final rule has specific requirements about how to ensure that web content and mobile applications (apps) are accessible to people with disabilities. The technical standard to comply with is The Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA. The compliance deadline is determined based on size. Because Falcon Heights is smaller than 49,999 residents, they need to comply by April 26, 2027.  Budget Impact  • Request for Proposal for City Website Redesign • Resolution 25-30  Action(s) Staff recommends that City Council authorize City Staff to give notice that the City		
individuals that the City is accepting proposals for redesign of the city's website.  The last major redesign of the City's website took place in 2021. Since then, much has changed in the architecture of CMS, as well as the level of expectations of services provided by local government websites.  The goal of the website redesign is to create an engaging, user-friendly site with a flexible CMS that enables city staff to provide timely, accurate, and accessible information.  This website redesign will also help with the new accessibility requirements for web content provided by state and local governments. On April 24, 2024, the Federal Register published the Department of Justice's (Department) final rule updating its regulations for Title II of the Americans with Disabilities Act (ADA). The final rule has specific requirements about how to ensure that web content and mobile applications (apps) are accessible to people with disabilities. The technical standard to comply with is The Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA. The compliance deadline is determined based on size.  Because Falcon Heights is smaller than 49,999 residents, they need to comply by April 26, 2027.  Budget  Impact  Request for Proposal for City Website Redesign  Resolution 25-30  Action(s)  Staff recommends that City Council authorize City Staff to give notice that the City	Item	Release of Request for Proposal (RFP) for City Website Redesign
Impact Attachment(s) Request for Proposal for City Website Redesign Resolution 25-30 Action(s) Staff recommends that City Council authorize City Staff to give notice that the City	Description	individuals that the City is accepting proposals for redesign of the city's website.  The last major redesign of the City's website took place in 2021. Since then, much has changed in the architecture of CMS, as well as the level of expectations of services provided by local government websites.  The goal of the website redesign is to create an engaging, user-friendly site with a flexible CMS that enables city staff to provide timely, accurate, and accessible information.  This website redesign will also help with the new accessibility requirements for web content provided by state and local governments. On April 24, 2024, the Federal Register published the Department of Justice's (Department) final rule updating its regulations for Title II of the Americans with Disabilities Act (ADA). The final rule has specific requirements about how to ensure that web content and mobile applications (apps) are accessible to people with disabilities. The technical standard to comply with is The Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA. The compliance deadline is determined based on size. Because Falcon Heights is smaller than 49,999 residents, they need to comply by April 26, 2027.
Attachment(s)  Request for Proposal for City Website Redesign  Resolution 25-30  Action(s)  Staff recommends that City Council authorize City Staff to give notice that the City	Budget	Budgeted \$25,000 to upgrade and maintain the website
• Resolution 25-30  Action(s) Staff recommends that City Council authorize City Staff to give notice that the City	Impact	
	Attachment(s)	1 , ,
	Action(s)	Staff recommends that City Council authorize City Staff to give notice that the City
	Requested	



P: 651-792-7600 F: 651-792-7610

April 4, 2025

### **REQUEST FOR PROPOSALS**

The City of Falcon Heights

City Website Redesign

Bid Submittal Deadline: Friday, May 9, 2025 at 4:30 PM

Prepared By:

Elke Johnson, Administrative & Communications Coordinator

City of Falcon Heights

2077 Larpenteur Ave West

Falcon Heights, MN 55113

elke.johnson@falconheights.org

651-792-7621

### Request for Proposal

### TABLE OF CONTENTS

SECTION 1: INTRODUCTION

SECTION 2: PROCESS

SECTION 3: SCOPE OF SERVICES

SECTION 4: PROPOSAL FORM AND CONTENT

SECTION 5: EVALUATION CRITERIA

SECTION 6: CONTRACT ETHICS

### **SECTION 1**

### INTRODUCTION

The City of Falcon Heights (City) is seeking proposals from vendors who are interested in providing web redesign and hosting services for the City's website, www.falconheights.org. All proposals must be submitted to the City's Administrative & Communications Coordinator, Elke Johnson, at elke.johnson@falconheights.org no later than 4:30 PM on Friday, May 9, 2025.

### 1-1 City Background

The City of Falcon Heights, located in Ramsey County, Minnesota, has a population of 5,369, as reported by the 2020 U.S. Census. The median age is 34, with 2,203 households. Approximately 20.9% of the population is 62 years or older, while 82.9% are 18 years or older. Key transportation routes in Falcon Heights include Minnesota Highway 51 (Snelling Avenue) and Ramsey County Road 30. The city is bordered by Lauderdale to the west, St. Paul to the south, and Roseville to the north and east. According to the U.S. Census Bureau, Falcon Heights covers a total area of 2.2 square miles (5.8 km²), all of which is land.

In addition to providing general government services, the City offers other services such as building permits, rental licenses, street cleaning, and snow removal. For fire services, the City contracts with the St. Paul Fire Department; for police services, the City contracts with the St. Anthony Village Police Department. The City of Falcon Heights employs ten full-time employees.

Currently, the City employs a full-time Communications Coordinator whose duties include maintenance of the website and making the majority of its updates, while a few other staff members also have access to create webpages, make edits, and upload documents such as meeting agendas and minutes.

This website redesign project aims to create an engaging, user-friendly site with a flexible CMS that enables city staff to provide timely, accurate, and accessible information. The site should help residents, businesses, visitors, and others easily find information, services, and solutions. It should reflect Falcon Heights' unique personality, be clean, welcoming, well-organized, and fully accessible to all users as per the latest Web Content Accessibility Guidelines. The project will also involve updating, migrating webpages to a new structure, and training City staff to maintain it.

The last major redesign of the City's website took place in 2021. Since then, much has changed in the architecture of CMS, as well as the level of expectations of services provided by local government websites. The current website consists of 210 published pages. The website experiences a total of 30,000 pageviews per year.

### **SECTION 2**

### **PROCESS**

Notice is hereby given that proposals will be received by the City of Falcon Heights, Ramsey County, Minnesota, for website redesign services. The City of Falcon Heights invites qualified individuals or firms to submit proposals to provide website redesign and hosting services based on the scope of work contained herein. To ensure a fair review and selection process, firms submitting proposals are expressly requested not to make other contacts with the City staff or council members regarding these proposals. Failure to comply with this request may result in disqualification of the proposal.

If not found within this document, information regarding the RFP process should be directed to Elke Johnson, Administrative & Communications Coordinator, by email at <a href="mailto:elke.johnson@falconheights.org">elke.johnson@falconheights.org</a> or by phone at 651-792-7621. Find additional information about the City of Falcon Heights at <a href="mailto:www.falconheights.org">www.falconheights.org</a>

### 2-1 Requests for Proposal

The City of Falcon Heights invites qualified individuals or firms to submit proposals for website redesign services, as described in the scope of work set forth in Section 3 of this Request for Proposals (RFP).

### 2-2 Schedule (tentative)

Issue Date: April 9, 2025

Closing Date: May 9, 2025

Anticipated Award Notice: May 28, 2025
Anticipated Contract Approval: May 30, 2025

### 2-3 Official Contact

Questions regarding the scope of services shall be directed to:

- Elke Johnson, Administrative & Communications Coordinator
- City of Falcon Heights
- 2077 Larpenteur Ave West
- Falcon Heights, MN 55113
- elke.johnson@falconheights.org
- 651-792-7621

### 2-4 Proposal Due Date:

One (1) copy of the proposal must be emailed to Elke Johnson at <a href="mailto:elke.johnson@falconheights.org">elke.johnson@falconheights.org</a> no later than 4:30 PM on Friday, May 9, 2025. Proposals should be marked "RFP Website Redesign." Late proposals will be kept by the City but not considered for award.

### 2-5 Cancellation, Delay or Suspension of Solicitation: Rejection of Proposals

Falcon Heights may cancel, delay, or suspend this solicitation if in the best interest of the City as determined by the City. Falcon Heights may reject any or all proposals, in whole or in part, if in

the best interest of the City as determined by the City. The City reserves the right to reject any or all proposals not in compliance with public bidding procedures.

The City is not liable for any costs incurred by a proposer in the preparation and/or presentation of a proposal. The City is not liable for any cost incurred by a proposer in protesting the City's selection decision.

2-7 Confidentiality of Information All information and data furnished to the proposer by the City and all other documents to which the proposer's employees have access during the preparation and submittal of the proposal shall be treated as confidential to the City. Any oral or written disclosure to unauthorized individuals is prohibited.

Once a proposal has been accepted and is presented to the City Council for approval, it will be determined a public document and non-private information will be shared and published online, including the response to this proposal.

### SECTION 3

### SCOPE OF SERVICES

The City of Falcon Heights seeks to reorganize and enhance its website to ensure users can easily find relevant information and access services. The redesigned website will also serve as an essential tool for community engagement, providing residents with up-to-date information on City decisions, programs, projects, and events.

Our goal is to create a website that engages, connects, and informs our community with a flexible CMS that empowers city staff to provide timely, accurate, and accessible information. Residents, businesses, visitors, and others need to be able to easily locate information and services and find answers to their inquiries and solutions to their issues online. The final website should reflect the unique personality of Falcon Heights, feel clean and welcoming, and be intuitively organized, searchable, and robust. The site must also be fully accessible to people of all abilities as required by the new Web Content Accessibility Guidelines.

The key project elements include:

- Redesigning the website at <u>falconheights.org</u>
- Providing hosting for the redesigned site
- Offering CMS training and ongoing support for the new website structure

As part of this redesign, the City plans to:

- Reorganize the website structure for ease of navigation
- Remove obsolete pages
- Add new pages as needed
- Update existing content for relevancy and accuracy

### 3-2 Project approach

After a review of the City's existing website at falconheights.org, describe the following:

- Steps you would take to accomplish the redesign and update (may be a broad outline)
  - o Include milestones and status reports in your outline
- How would your content management system/platform help the City achieve its goals stated above
- Additional information about your company and/or services that would help the City in choosing a Vendor

### 3-3 Platforms and Processes

Provide answers to the following questions:

- What content management system do you use for designing and maintaining websites, and is it proprietary?
- Is there an ongoing fee/subscription for this CMS? If so, please list the annual fee/cost and what that fee/cost includes, i.e. ongoing support, version updates, training, fixes, etc.
- What hosting service do you use/recommend, and what are the fees for using it?
- What processes do you use to test and review a website?
- What additional services do you offer? For example, do you offer "add-ons" for public engagement, online registration and reservation platforms, etc.?

### 3-4 Training and support

- What after-service support do you provide, and for how long?
- What services do you provide should the City website be hacked or otherwise experience problems? Does your system offer the ability to revert to a previous version?

### 3-5 Accessibility

The selected vendor must ensure that all digital products, including but not limited to websites, web applications, video content, software, and digital documents, comply with the Web Content Accessibility Guidelines (WCAG) 2.1 AA (or WCAG 2.2 AA, if applicable). Compliance must be maintained throughout the duration of the contract, including updates and new feature rollouts.

### Testing & Validation

- Deliverables must undergo both automated and manual testing, including testing with screen readers (e.g., NVDA, JAWS, or Voiceover), keyboard navigation, and other assistive technologies.
- Vendors must provide a detailed accessibility testing report for each deliverable, listing any identified issues and their resolutions.
- Vendors must submit a Voluntary Product Accessibility Template (VPAT) or equivalent documentation demonstrating compliance.

### Ongoing Compliance & Remediation

- If accessibility barriers are identified during testing, independent audits, or user feedback, the vendor is responsible for implementing all necessary remediations at no additional cost within 60 days from the date of issue identification.
- Vendors must provide an accessibility roadmap outlining plans to maintain compliance and address future WCAG updates.

 Any content, updates, or feature additions must meet WCAG 2.1 AA standards before deployment.

### Training & Support

 The vendor must provide training for city staff on accessibility best practices and ensure proper content management to maintain compliance.

#### Enforcement & Penalties

- Failure to meet accessibility requirements at any stage of the project may result in contract termination, financial penalties, and/or withholding of payment until compliance is achieved.
- If the vendor fails to remediate identified accessibility issues within the agreed timeframe, the city reserves the right to engage a third party to correct the issues, with costs deducted from the vendor's payment.

By responding to this RFP, the vendor acknowledges and agrees to comply with all accessibility requirements stated in this section and in applicable legal and regulatory frameworks (e.g., Americans with Disabilities Act, Section 508 of the Rehabilitation Act).

#### 3-6 Other Requirements

- **Responsive Design:** The new website should be usable on all devices, including phones, tablets, and personal computers.
- Interactive Calendar: The website should support a calendar system that provides
  information on local events, meetings, and activities and is easy to update. A calendar
  that can assign categories to events and host recurring meetings is ideal.
- Document Hosting: As a government entity, we have many existing PDFs and other
  documents that must be migrated from the existing database and hosted on a platform
  that allows links to individual documents, is searchable, and allows for the addition of
  more documents and maintenance by city content creators.
- Integration of Other Sites and Services: The City of Falcon Heights contracts with other service providers, including (but not limited to): iWorQ for building permits; ArcGIS for mapping; AllPaid for payments
- Social Media Integration: Ability to integrate in some way with social media tools
   (Facebook, Nextdoor), allowing feed-sharing and following of city social media accounts.
- News Updates: The new website must include the capability for online publishing of blog-style news updates with email subscription capability.
- Multi-Language Translation: The website should support translation into multiple languages to serve diverse community needs.
- Site Statistics: Regular or easily accessible data analytics reports

#### 3-7 Budget

Please break out your fees/charges by:

- Redesign of web structure, development of style guidelines and templates, and migration of webpages to the new structure
- Training of City staff in maintaining the website
- Ongoing maintenance and support

### **SECTION 4**

### PROPOSAL FORM AND CONTENT

Proposals shall be prepared simply and economically, providing a straightforward, concise description of the proposer's capabilities to satisfy the requirements of the RFP.

### 4-2 Proposal Form and Content

Proposals should include the following items in their proposals, addressing the scope of work in Section 3. The proposal and cost schedule shall be valid and binding for ninety (90) days following the proposal's due date and will become part of the contract that is negotiated with the City.

The following will be considered the minimum contents of the proposal and must be submitted in the order listed:

- Proposed Vendor Qualifications: Summarize your or the firm's background and history; include the depth and breadth of your firm's experience in redesigning or creating websites for smaller municipalities and any experience you may have working on related
- Scope of Services Offered: Provide a detailed breakdown of how you would approach the Scope of Work proposed in Section 3. Include specific information on the steps that would be taken to address each of the primary areas of need.
- Samples: Proposals shall include a minimum of two (2) samples demonstrating redesign of a small municipal website that uses the same or similar specifications to the bid.
- Fee Schedule: The vendor must submit a compensation schedule for the services outlined in the preliminary scope of work. References from municipal clients are optional but not required.
- Timeline: Identify a concrete, but reasonable timeline for the completion of each component in the process, as well as implementation guidelines.
- Additional Information: Any information that the proposer feels is applicable to the evaluation of the Proposal or of their qualifications for accomplishing this request for services should be included in this section. You may use this section to address the aspects of your services that distinguish you or your firm from other firms.

#### **SECTION 5**

### **EVALUATION CRITERIA**

The City shall evaluate the proposal on criteria including, but not limited to, the following list (in no order of priority).

- 1. The vendor adheres to the instructions in this Request for Proposals on preparing and submitting the proposal;
- 2. Compensation schedule;
- 3. Samples of your experience in designing and maintaining local government unit websites;
- 4. The vendor can provide a content management system and hosting;
- 5. The vendor can provide training and post-launch support;
- 6. The vendor can ensure compliance with the Web Content Accessibility Guidelines

#### **SECTION 6**

#### **CONTRACT ETHICS**

- 1. No elected official or employee of the City who exercises any responsibilities in the review, approval, or implementation of the proposal or contract shall participate in any decisions which affect his or her direct or indirect personal or financial interest.
- 2. It is a breach of ethical standards for any person to offer, give or agree to give any City employee or council member, or for any City employee or council member to solicit, demand, accept, or agree to accept from another person or firm, a gratuity or an offer of employment whenever a reasonably prudent person would conclude that such consideration was motivated by an individual, group or corporate desire to obtain special, preferential, or more favorable treatment than is normally accorded to the general public.
- 3. The firm shall not accept any client or project that places it in a conflict of interest with its services rendered to the City of Falcon Heights. If such a conflict of interest is subsequently discovered, the City shall be promptly notified.

### CITY OF FALCON HEIGHTS COUNCIL RESOLUTION

April 9, 2025

No. 25-30

### RESOLUTION AUTHORIZING THE REQUEST FOR PROPOSALS FOR CITY WEBSITE REDESIGN

WHEREAS, the last major redesign of the City's website took place in 2021; and

WHEREAS, the City's website redesign will also meet the new accessibility requirements for web content provided by state and local government as part of updated regulations of Title II of the Americans with Disabilities Act; and

WHEREAS, the proposed scope of work of a redesign of the city's website is outlined in the Notice of Request for Proposals; and

**NOW THEREFORE BE IT RESOLVED** by the Council of the City of Falcon Heights, Minnesota:

1. That the Mayor and the City Administrator are hereby authorized and directed to request bids from vendors for a redesign of the City's website for not to exceed the City's budget.

**ADOPTED** this 9th day of April, 2025 by the City Council of Falcon Heights, Minnesota.

Moved by:	lassenbe	279	Approved by	Randall C. Gustafson
GUSTAFSON LEEHY MEYER MIELKE	5	In Favor Against	Attested by:	Jack Linehan City Administrator
WASSENBERG	.0			

### **BLANK PAGE**



## REQUEST FOR COUNCIL ACTION

D.I.	April 9, 2025
Meeting Date	Consent G4
Agenda Item	See below
Attachment	
Submitted By	Jack Linehan, City Administrator

Item	Resignation of Alice Hausman from the State Fair Task Force		
Description	Alice Hausman was appointed to the State Fair Task Force 2.0 in 2024. Alice has provided valuable insight and contributions, which Staff appreciates and sincerely thanks her for. Alice has expressed her wishes to resign from the State Fair Task Force and Staff would like to wish her well.		
<b>Budget Impact</b>	N/A		
Attachment(s)	<ul> <li>Resignation of Alice Hausman</li> <li>Resolution 25-31 Accepting Resignation of Alice Hausman from the State Fair Task Force</li> </ul>		
Action(s) Requested	State Fair Task Force  Staff recommends approval of attached resolution, accepting the resignation of Alice Hausman from the State Fair Task Force.		

From: Alice

Sent:

To: Jack Linehan

Subject: Fw: Re: City Council Public Hearing on E-Meters [In-person]

I am thinking it will be better if I ask to be removed from the task force so that someone who can attend more regularly takes my place. Between my health issues and my schedule I have not been responsible as a member.

### CITY OF FALCON HEIGHTS COUNCIL RESOLUTION

April 9, 2025

No. 25-31

### RESOLUTION ACCEPTING THE RESIGNATION OF ALICE HAUSMAN FROM THE STATE FAIR TASK FORCE

**WHEREAS**, the City appointed Alice Hausman as a member of the City of Falcon Heights State Fair Task Force in 2024; and

**WHEREAS**, Alice Hausman communicated her intent to resign her duties from the State Fair Task Force effective immediately.

**NOW THEREFORE BE IT RESOLVED** by the City Council of the City of Falcon Heights, Minnesota:

1. That the resignation is accepted by the City Council of the City of Falcon Heights.

Moved by: Wassenberg Approved by:

Randall C. Gustatson
Mayor

GUSTAFSON

MEYER

LEEHY

Against

Against

City Administrator

**MIELKE** 

### BLANK PAGE



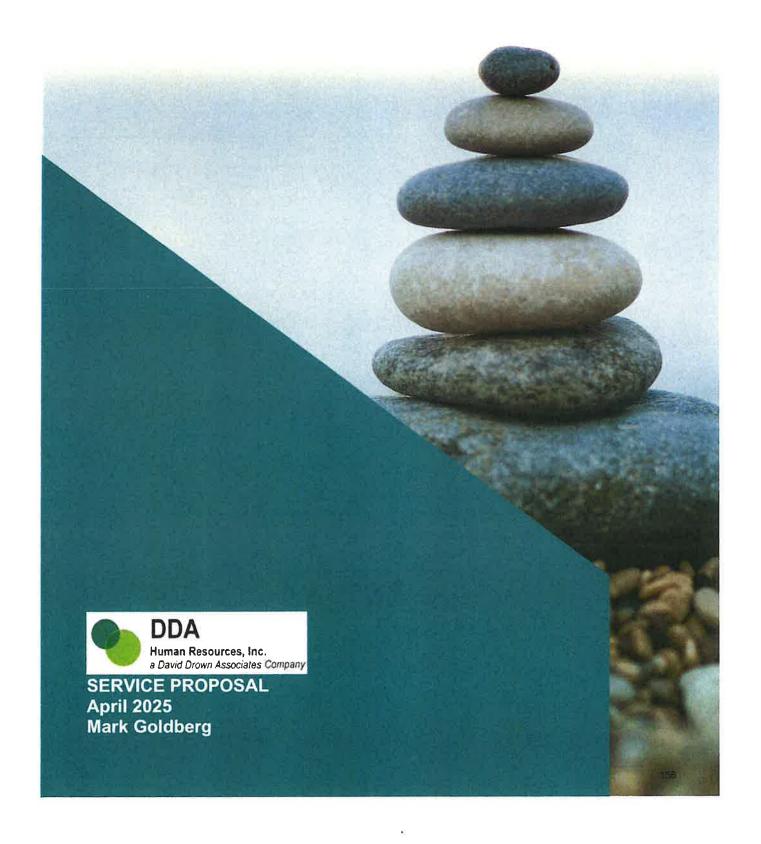
### **REQUEST FOR COUNCIL ACTION (RCA)**

Meeting Date	April 9, 2025
Agenda Item	G5
Attachment(s)	Resolution 25-32
Submitted By	Jack Linehan, City Administrator

Item	Resolution 25-32 Authorizing Acceptance of a Proposal with DDA Human
	Resources, Inc. for Completion of a Compensation & Classification Study Not to
	Exceed \$11,000
Description	The City released a Request for Proposal (RFP) to notify qualified consulting firms that the City was accepting proposals for a classification and compensation study to be conducted on all full-time positions employed by the City.
	The City currently does not have pay ranges, and in some cases, position descriptions. The classification and compensation study will help the City establish these and include a market analysis of similarly-sized cities within the metro area.
	The City accepted proposals from consultants/consulting firms, evaluating and scoring proposals on criteria including, but not limited to, the implementation strategy with the lowest financial impact on the City's operating process and greatest gains to positions that fall outside of a designated range.
	In total, the city received 10 proposals from qualified firms. After reviewing all proposals received, Staff identified the three proposals that scored the highest, matching most closely with the City's identified criteria. Staff completed virtual meetings with the top three firms for the purpose of asking clarifying questions and to better determine which firm would be the best fit to conduct the City's classification and compensation study. After the last virtual meeting on 4/7/25, staff identified the highest-scoring firm as DDA Human Resources. Staff seeks Council approval of the attached resolution to accept DDA Human Resources'
B 1 .	proposal to conduct a Compensation & Classification Study.
Budget	Funds are budgeted in the 2025 Administration – Consulting Line
Impact	
Attachment(s)	• Resolution 25-32

Action(s) Staff recommends that City Council approve the attached resolution, accepting	
Requested proposal submitted by DDA Human Resources and authorize the Mayor and	
	Administrator to authorize a contract with DDA Human Resources as
	Classification and Compensation Study Consultant not to exceed \$11,000.

### **CITY OF FALCON HEIGHTS**



### **EXECUTIVE SUMMARY**

April 2025

Jack Linehan, City Administrator City of Falcon Heights

### RE: Proposal for Job Classification and Compensation Services

Dear Mr. Linehan:

Thank you for the opportunity to submit this proposal to the City of Falcon Heights. Based on our experience with the type of work outlined in the proposal, we are confident our experience and expertise will allow us to address your needs, goals and exceed your expectations.

Three major factors distinguish DDA Human Resources from other providers:

- All our employees come with years of public sector experience. We specialize in government, and we know first-hand the challenges of managing public sector compensation. This helps us deliver practical, workable solutions.
- We believe that classification and compensation can and should be managed as a practical, common-sense process not as some theoretical or statistical exercise in regression analysis.
   We will help you design a compensation system that is technically solid and one you understand.
   We measure our effectiveness as a consulting firm not by studies completed, but by studies that are actually implemented.
- We think a compensation should be actively managed as an ongoing program not neglected
  and then fixed with a major compensation study like this. With proper on-going maintenance
  support, major disruptive and expensive compensation studies are unnecessary. We are pioneers
  in providing ongoing maintenance solutions.

Our firm's goal is to be known as the best human resources consultant in Minnesota. There is only one way to get there – by delivering exceptional service. We will do our very best to earn your trust, your respect, and your future business.

Our success has been driven by utilizing staff that is experienced and well-trained in government planning, human resources, payroll, compensation systems and market analysis. We understand that each client has a specific project scope. We will customize our approach with our attention to detail, collaboration with your staff, transparent and customized communications. Our overall project approach provides efficient and effective outcomes and sets ourselves apart in our ability to value your organization.

#### Involvement with Personnel

Our approach to this project is to engage staff to ensure that we have an understanding of the project, each individual's role in the project, overall expectations and needs and deadlines. Throughout the project, there will be periodic meetings with staff, Project Team, Working Committee and other groups as needed to share information, solicit input and provide updates. We believe communications is important and will customize a plan that suits the organization. Your internal staff and leadership are key to truly understanding your organization and developing solutions that can be implemented.

## **Commitment to Meet Your Needs**

We assist all our clients in implementing a solution that works. In order to do that, we will do the following for you:

- Present a clear project plan.
- Use portal technology to share and collaborate documents.
- Provide an environment that solicits and welcomes ideas and strategies from the employees and
- Present recommendations in a clear, concise manner. We use non-technical terms and examples to gain employee buy-in.
- Respond to project team needs in a timely manner.

We have included cost for each option for up to 10 full time positions as follows:

	uded cost for each option for up to	Total Cost Not to Exceed
Option	Services	\$4,000
1	Compensation Study/ Market Analysis	\$6,000
2	Compensation Study/ Market Analysis Amend or Establish Compensation System	<b>\$0,000</b>
3	Compensation Study/ Market Analysis Amend or Establish Compensation System Implementation Analysis and Strategy for Compensation	\$9,275

### Contents of Proposal

- Approach to the Development of a Compensation System for the City of Falcon Heights
- Proposed Consultant's Qualifications
- Scope of Services Offered
- Timeline
- Project Investment
- Additional Information
- Fees

# APPROACH TO THE DEVELOPMENT OF A COMPENSATION SYSTEM FOR THE CITY OF FALCON HEIGHTS

We approach compensation study work as a practical, common-sense process

— not as some theoretical or statistical exercise in regression analysis.

We collect information, analyze it,

and communicate our findings in simple understandable ways.

Our honest goal is to help you design a compensation system

that is technically solid, is one you actually understand,
and one that works better than what you have now.

We measure our effectiveness as a consulting firm not by studies completed,
but by studies that are actually implemented.

We do this through customizing your competitive pay philosophy.

DDA's proprietary compensation model incorporates the latest data on competitive market conditions with data on your organization. Using this model, we can calibrate and compare your current wage ranges with the market and provide trend lines clearly showing how your wage scales stack up. You will have the information you need to make informed decisions.



#### Internal Indicators

- Benefits
- Incentives
- Healthcare
- Retirement
- Vacation/ Sick time
- Work Balance
- Flexibility

#### **External Indicators**

- Benchmarks (size, tax capacity, services, etc.)
- Level of Responsibility
- Reporting Relationships
- Experience Required
- Size of Organizations
- Organizational Structure
- # of Employees Supervised

We have included examples of job descriptions and questionnaires in the Appendix, but DDA prides itself on customizing all of our materials for each client. So, the forms and structure we crate for you would be different from the one we design for the City of Columbus or Mounds View. As we describe in the Scope section, we partner with you to understand the needs of your City and design your system accordingly.

### PROPOSED CONSULTANT QUALIFICATIONS

Our parent company, David Drown Associates, Inc. has provided consulting services to over 450 units of government across Minnesota since 1997. Over these years, DDA Human Resources staff has gotten to know government well and we continually strive to keep our services practical, useful, and up to date. Our history and corporate culture have grown from an honest desire to serve public sector clients in a practical and common-sense manner. We are not your ordinary consultant. The DDA Human Resource difference is:



In addition to our work with various cities, counties and government entities, we partner with organizations that include League of Minnesota Cities, Association of Minnesota Counties (AMC) and Pay Equity. As part of our work with AMC, we provide the Technical Human Resource Program. And we have teamed up with Pay Equity to help educate entities on reporting, classifications, and compliance.

Government is in the service delivery business, and quality service requires quality employees. An effective compensation system will help you attract and keep talented employees. Likewise, an out-of-date or ill-conceived compensation system will produce turnover and hamper efforts to recruit quality replacements.

In the real world of limited resources, government is increasingly expected to do more with less. Accordingly, a community's pay philosophy must strike a reasonable balance between a desire to pay your good employees well to retain their good services, while at the same time controlling costs to keep faith with the taxpayers. Designing a pay system is not easy, every community is different, and a "one size fits all" approach seldom produces a good result.

We approach compensation study work as a practical, common-sense process – not as some theoretical or statistical exercise in regression analysis. We collect information, analyze it, and communicate our findings in simple understandable ways. Our honest goal is to help you design a compensation system that is technically solid, is one you actually understand, and one that works better than what you have now.

As we work with you to build the best compensation system for your community, we keep four very practical objectives in mind:

### Compensation and Benefits

· Competitive to hire, retain, and motivate qualified employees

### Internal Equity

 Satisfy MN Pay Equity Requirements

### Positive and Transparent

· Be open and fair to employees, managers and unions

### Customized

· Establish a pay philosophy based on your organization

DDA Human Resources believes your compensation and classifications systems should be based on:

- 1. Updated job descriptions
- 2. Market Competitiveness set by a decided pay philosophy
- Pay Equity

### A compensation program is a structured pay plan that is used to:

- Assist in the attraction of the most qualified professionals available.
- Retain talented employees.

### A pay plan is developed through:

- Job descriptions
- Pay equity of job descriptions (hierarchy of jobs)
- · Market definition influenced by industry, size, geographic location, and tax capacity
- Pay philosophy

### Compensation/pay philosophy is set by the Board:

- Influenced by industry, size, geographic location and tax capacity
- Includes objectives and statement of where organization wants to be in relation to market

DDAHR maintains a staff of 10 individuals. We also maintain relationships with several independent consults in key specialty areas. Here is the Team we have assembled for your project:

### Dr. Tessia Melvin - Department Head

Tessia heads the compensation and classification (C&C) services area of DDAHR. Over the past six years, Tessia has served as lead analyst on over 65 separate C&C engagements with Minnesota communities. She brings to the position nearly 13 years of diverse service to city and county government. As a City Administrator in Maple Plain, Minnesota, Tessia drafted five-year budgets, capital improvement plans, infrastructure improvement plans, and led strategic planning program. Working in Dakota County, Minnesota, Tessia provided leadership training, managed their performance management system, and worked with compensation and benefits. Dedicated to local governments and continued learning, Tessia earned her doctorate in Public Administration.



## Mark Goldberg, MA-HRR – Principal Consultant

Mark Goldberg is a Principal Consultant with the firm. Mark's experience is broad and deep. He has held a variety of compensation leadership positions in media, high tech, manufacturing, local government organizations and the University of Minnesota. In addition, Mr. Goldberg has over 6 years of experience consulting with major public sector organizations around the country with a focus on project in Minnesota such as Koochiching County, the city of Red Wing and the City of Aitkin. He has a master's degree in industrial and labor Relations from Cornell University and a bachelor's degree in human resource



administration from Muhlenberg College.

### **David Drown - Technical Support**

David is the founder and owner of DDA. David will lend his technical and statistical expertise to the team to manage the collection and analysis of market data, help calibrate your compensation plan, and calculate budget impacts. David received his undergraduate degree in civil engineering and served in local government as a registered civil engineer early in his career. He also holds an MBA in finance from the Carlson School of Management and has served as a finance and economic development consultant to numerous cities and counties across the State.

### Kelly Jones - Technical Support

Kelly received his Bachelor of Arts degree in Psychology and his Master of Science degree in Industrial and Organizational Psychology from Saint Cloud State University in Saint Cloud, Minnesota. Prior to entering the field of compensation, he served as a project coordinator and talent management specialist for Sleep Number and Robert Half. Kelly has spent the last 3 years as a technical analyst and compensation consultant, while assisting dozens of Cities and Counties across the United States with their compensation and classification needs. His work will be primarily focused on data collection and analysis, while also assisting the DDA team with any ongoing project needs.

### Tom Blakesley - Technical Support

Tom is the newest member of the DDA team. Prior to joining DDA, Tom worked extensively in client/customer relations. He also brings experience in working with and analyzing business data in the private sector. He will be primarily working on data collection and analysis and providing a great deal of the initial groundwork and research for classification and compensation studies.

### Supporting Team Members (Our Bench)

#### **Melanie Ault**

Melanie Ault brings to DDAHR over 20 years of experience leading Minnesota county human resources and labor relations operations with additional experience at the city, regional, and state levels. Melanie joined DDAHR in 2017, after serving as Washington County's HR Director. You might recognize her by her passion for examining pending legislation and its ramifications for the public sector. Melanie holds BA, MAPA, and JD degrees, with further education in public administration. She is an avid supporter of professional organizations, serving on the state and national levels. She loves making new connections and looks forward to helping you find answers and ideas. Melanie is one of our AMC Human Resources Technical Assistance Program staff.

#### George Gmach

George has been doing classification and compensation study work in Minnesota for 30 years. He worked with the Stanton Group for 12+ years with management responsibility for salary and benefit surveys and compensation consulting. His experience has crossed multiple industries and included private, non-private and public sectors. George also worked at Employers Association and its successor for 16 years. During his career, he has designed and conducted several hundred compensation and benefit surveys and has implemented multiple compensation programs in large and small organizations across all sectors. He designed and modified job evaluation systems and implemented them in the public sector. He has worked with the Minnesota Pay Equity Statutes since their inception. In addition, he is a military veteran who served as a combat medic in Vietnam.

### **Our Offices**

5029 Upton Avenue S, Minneapolis, MN 55410 Minneapolis

6954 Martin Farms Ave NE, Otsego, MN 55330 Otsego

1887 Montreal Avenue, Saint Paul, MN 55116 St. Paul

6363 Jamaca Avenue North, Stillwater, MN 55082 Stillwater

3620 Northome Avenue, Wayzata, MN 55391 Wayzata

### REFERENCES

City of Fridley, MN Reference #1:

Becca Hellegers, Employee Resources Manager, 763-572-3507, Contact:

Becca.Hellegers@FridleyMN.gov

February 2020 - December 2020, they have entered an ongoing Contract Dated:

maintenance contract with us

DDA was originally engaged to complete a market study only of wages Scope of Services:

paid to 97 position descriptions. The work plan was expanded to have us perform a full classification and compensation study for all positions,

classifying all jobs and designing a new pay plan for the City.

Reference #2: City of Golden Valley, MN

Kirsten Santelices, HR Director Contact:

763-593-3989

ksantelices@goldenvalleymn.gov

January 2020 - completed December 2020, we continue to provide ongoing Contract Dated:

maintenance

All job titles were reclassified using the JET evaluation system, and several Scope of Services:

employee challenges were reviewed and resolved. Market wage study revealed that the current pay plan wages averaged about 5% below the benchmark average. We developed a new pay plan with expanded steps, reviewed several approaches for implementation, and ultimately arrived at

a plan that worked within the City's limited budget.

Reference #3: Rochester, MN

Leena Murphy, Senior HR Contact:

507-328-2561

Imurphy@rochestermn.gov

October 2021 for ongoing maintenance Contract Dated:

This is an example of a client engagement with a scope of services looking to maintain their current classification system. We learned a new Scope of Services:

classification system, their job positions and are able to maintain their pay philosophy, job descriptions and maintain competitive pay without

having to complete an entire study.

### SCOPE OF SERVICES OFFERED

### **Project Orientation**

The first step of the project is to review and analyze data provided by the client. This includes any existing job description, job evaluation system, policies, pay philosophies and pay strategies, current compensation model, pay equity and any other data the client has available. We will discuss strengths and weaknesses of the current compensation and classification systems and identify possible barriers to implementing and maintain change.

- Project Administration: Meeting with Project Team to develop and confirm detailed project schedule and review system history/materials.
- Define Communication Strategy: Partner with the client to design a communication strategy that combines best practices in the industry with practical applications and tools. Create necessary stakeholder teams to assist with communication (Project Team, Working Committee, etc.)
- Employee Orientation Sessions (optional): Conducted virtually, with one session recorded so any employee who is unable to attend can see the information presented.

After this review, we will meet with the client to discuss project expectations, define strategic goals and objectives, identify current challenges and discuss timeline.

#### Position Review

Using the client's existing job descriptions and Job Evaluation system, our team will conduct a review and analysis of the overall compensation structure with a focus on:

- Opportunities for improvement or areas of risk
- Alignment of compensation and performance with management philosophies
- Identification of current or potential pay compression, pay equity, or bargaining issues
- Identification of any ADA, FLSA and other State and Federal Requirement concerns
- Identification of job classification and industry mismatch.

We have worked with a variety of job evaluation systems and is experienced in many compensation models. This phase of the project will include meeting with leadership to understand and discuss any noted recommendations and identified challenges moving to the next phase of the project.

### **Labor and Market Analysis**

We will work with Project Team to confirm the labor market and identify comparable organizations and gather data from various sources.

We will utilize the data that we have collected from around the state, supplemented by additional survey sources to provide updated and accurate wage information.

- If we do not have data from a particular entity selected by the City/County, we will reach out to that organization and ask them to provide us with a current roster.
- We will collect detailed wage information on all jobs that you have in common with these communities – not just a selected list.
- We will organize the results of this analysis using a series of graphs and charts that are designed to clearly show how your current pay ranges and wages compare to those of benchmark entities. This is the information needed to develop of a pay.

structure that balances both internal and external equity and assures compliance with State Pay Equity Compensation Standards.

### Pay Grid Calibration

All compensation and market adjustment recommendations will be evaluated to calculate reliable implementation costs. We will provide 2 recommendations.

- We will provide recommendations and options for either an adjustment of your existing compensation plan, or a replacement plan that produces a better match with your compensation philosophy.
- We will fine tune the plan to establish fair and equitable compensation relationships within and outside the organization that are workable within a union and non-union environment.
- We will provide system testing to assure that any option proposed will comply with the State's pay equity standards and Federal requirements.

### Implementation Cost Analysis

All compensation and market adjustment recommendations will be evaluated to calculate reliable implementation costs.

- We will outline transition options and next steps/costs.
- We will evaluate the cost/budget implications of up to two (2) alternative implementation strategies that consider your current budget constraints.

### Final Documents and Systems Presentation

All documents will be reviewed with the Project Team in draft format before finalization and distribution. Final reporting will include comprehensive findings, recommendations, description of methodology, data analysis and resources to maintain classification and compensation changes.

- Quality Assurance: DDA HR conducts quality assurance reviews and provides the draft report to the County for review and feedback.
- Final Report: DDA HR discusses consolidated feedback from the County and finalizes the report and communications plan.
- Guidelines and Policies: DDA HR provides the Project Team with compensation administrative guidelines and policies aligned with the updated/new system for review.
- Two draft revisions with Project Team and in person presentation to Council and related travel time and mileage.

### **TIMELINE**

Key Milestones	Completion Week of
Introduction and Project Orientation; collect organizational information (roster, org charts, policies, etc.)	4/12/2025
Discuss compensation philosophy	4/12/2025
Creation of communication strategy	4/12/2025
Develop list of comparable organizations	4/12/2025
Finalize list of comparable organizations	4/19/2025
Kickoff Presentation to Staff	4/26/2025
Collection and verification of market data	5/3/2025
Competitive analysis performed	5/10/2025
Finalization of market data	5/17/2025
Begin discussion of existing job evaluation method and alternative options	4/12/2025
In depth review of options for job evaluation methods	4/26/2025
Selection of appropriate job evaluation method for the City	5/10/2025
DDA evaluates jobs using structured job evaluation tool	5/24/2025
Finalization of job evaluation with review from organization	6/7/2025
Development of new structure of grades and ranges	6/21/2025
Transition options and next steps/costs outlined	6/28/2025
Finalization of new structure	7/19/2025
System testing for equity and fairness	7/26/2025
Presentation to staff and leadership	8/9/2025
System Adoption/Presentation to City	8/16/2025

### **FEES**

Option	Services	Total Cost Not to Exceed
1	Compensation Study/ Market Analysis	\$4,000
2	Compensation Study/ Market Analysis Amend or Establish Compensation System	\$6,000
3	Compensation Study/ Market Analysis Amend or Establish Compensation System Implementation Analysis and Strategy for Compensation	\$9,275

For clients who prefer to receive maintenance support in a less rigorous manner, we offer a full range of support services with standard pricing:

=	Write or revised job description	\$250 per position
	Classify a job description provided by client	\$200 per position
	Market Wage Analysis	\$150 base fee plus \$200 per position

#### Hourly rates:

	Professional	\$275 per hour
	Technical Support	\$175 per hour
Ħ	Clerical	\$125 per hour

### ADDITIONAL INFORMATION

### Job Description Re-Write

- Position Analysis Questionnaire (PAQ) DDA will work with you to design a PAQ that reflects your needs. We have several versions to customize your needs.
- We will distribute a position analysis questionnaire (PAQ) to all employees and their supervisors, asking them to outline all the important requirements for and duties of the job.
- DDA write job descriptions in newly designed and approved job description template.
- Employees and supervisors will be asked to review the new job descriptions, and we will guide a controlled process for employees to appeal the content of descriptions before they are finalized.
- Addition job descriptions may be added to provide for internal promotional opportunities, or jobs may be consolidated to make administration easier.
- Job Description Appeal Process: Once jobs descriptions are completed, employees and supervisors will review. If changes are needed, they will complete a Job Description Appeal form.
- DDA will review appeals and work with Project Team and employees to create consistent results.

### **Ongoing Maintenance**

This exclusive DDA Human Resources, Inc. program is designed to eliminate the need for large classification and compensation study every 4 to 6 years. Services include everything needed to keep a freshly updated compensation plan perpetually current. We find that over half of larger communities who have completed a compensation study with DDAHR have

opted to convert to this management approach. Our ongoing maintenance scope generally includes a three-year commitment and includes the following services:

- We review, update and reclassify as necessary 1/3 of job descriptions annually.
- We annually update a market analysis of wages with benchmark communities and suggestion changes to pay plan as necessary to remain in tune with the market.
- For any new jobs or changed jobs, we will write and classify the position for placement in the compensation system.
- We will complete and submit a pay equity report every three years or when otherwise required.
- If desired, we will handle data input of wage data into the LMC/AMC salary system

We will provide budget support by:

- Recommending an adjustment to your Pay Plan for the coming year based upon COLA and market factors.
- Preparing up to two (2) analysis of budget impacts of alternatives for wage adjustments.
- Making an annual presentation to the staff and/or selected group on the status of your compensation system.

#### **Executive Searches**

Our approach to conducting executive searches is a simple one. We want to find the best fit for your organization. This is accomplished by listening to what you are saying and building the entire search process off that foundation. We strive to gather a significant amount of background information so, when the elected body ultimately approves moving forward with the search, we will have fully encapsulated your expectations.

#### Organizational Analysis

Creating an organizational structure that maximizes service effectiveness is challenging. In order for the City or County to function in a lean, efficient manner, there must a structure in place to capitalize on the organization's most valuable resource – the people.

### **Multi-Agency Services**

Cities and Counties continue to face financial challenges created by a growing list of mandates and service expectations and a contraction of available financial resources. This dilemma can sometimes be solved by creating service partnerships with other units of government. We have experience evaluating options and providing a path forward for specific services or large parts of the organization.

### **APPENDIX**

Copies of both a Position Analysis Questionnaire and a sample job description are attached.



Wayzata Office 3620 Northome Avenue Wayzata, MN 55361

Phone: (612)920-3320 x103 | Fax: (612)605-2375 www.ddahumanresources.com

### **Position Analysis Questionnaire**

This form is designed to assist you in describing your position. You are asked to fill out this form because you know the duties and responsibilities of your position better than anyone. If you share a job position with another colleague, please complete one form, if possible.

### Instructions

The purpose of this questionnaire is to gather information about the work of the position(s) being reviewed. Please give each question thoughtful consideration. Complete this questionnaire as completely, honestly and accurately as possible. Base your answers on what is normal for the job. Please exclude special projects or duties unless they are a regular part of your job. If a question does not apply to your position, write NOT APPLICABLE or N/A for that item. Please print or type out your answers legibly. If you need help completing this questionnaire, contact your supervisor to arrange assistance. Thank you for your cooperation.

Feel free to provide edits on your current job description enclosed, if necessary.

EMPLOYEE NAME:		
JOB TITLE:	<del></del>	
DEPARTMENT:	**	
REPORTS TO:	¥=====================================	
SUPERVISES:		

### **Job Summary**

State briefly in 3-5 sentences the main purpose or function of your position. What do you believe is the major purpose of your job?

(Example: Performs administrative duties for XXX; Manages and maintains ...; Coordinates vendors and projects...; Provides high-quality customer service...; Operates...; Provides accurate and timely reports; Maintains strict confidentiality; etc.)

This is very important to help us understand your job. Please describe in detail the elements of what you do in your job. List the major functions and list the % of time that you do this. Remember, this is not about your department. This is about your job only.

Make revisions on your job description and use the spaces below for listing any additional functions/duties/tasks.

Please use action words such as PREPARES, MAINTAINS, OPERATES, CALCULATES, MANAGES, to start each statement. Your % should total 100.

	tatement. Your % should total 100.  Function/Duty/Task	% of Time
	PulicuoinDuty	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10	ii	

**Additional Work Activities:** 

### **Equipment, Tools, and Machinery**

What machinery, vehicles or motorized equipment do you use in your work?	How often to you use it? *
s.	

<sup>\*</sup> Intermittent - Less than 15% of the time in a typical week (one per week or less)

Occasional - 15%-45% of the time in a typical week

Frequent - 45%-70% of the time in a typical week

Continuous - Over 70% of the time in a typical week (averages daily)

### Additional Comments on Equipment, Tools and Machinery:

### **Education & Experience**

Please mark the general work experience that contributes to the job-related skills and directly related experience.

Employee Check One	Minimum Requirement for the Job	Supervisor Check One
	No formal education needed.	
	Must be able to read and follow written instructions and diagrams.	
	Requires High School Diploma or GED.	
	Requires specialized training beyond High School, but less than an associate degree.	
	Requires two years of formal training in tech or associate's degree.	
	Requires a four-year degree in business, liberal arts, history, social science, education, or general science area.	
	Requires a four-year degree in a highly technical area, such as engineering, computer science, nursing or specialized qualification such as CPA, or a non-technical master's degree is required.	
	Requires advanced education equivalent to a technical/administrative master's degree or specialist certification in a technical field.	
	Requires advanced education equivalent to a doctorate degree, law, administration or medicine.	

Education & Experience (continued)

How much work experience should be required when hiring for this job? Preferred experience and education?

Employee - Check One	Years of Experience required for this position, when hiring	Supervisor - Check One
	No experience needed	
	Less than one year (minimal)	
	One to three years (some)	
	Three to five years (moderate)	
	Five years (considerable)	
	More than five years (extensive)	
	Must have previous supervisory or serve in a leadership capacity (list number of years)	

Does this job require ongoing certification and testing? If requirement is specific to training, please indicate timeframe by each one individually.

Type of Certification/Testing	Needed Upon Hire	Within 6 months	Within 1 year	Within 2 years	Does this require re-certification, if so, when?
	e e				

Additional Comments on Education & Experience:

<u>Decision Making</u>
Describe specific key actions and decisions that the position takes/makes and indicate if clearance from a supervisor/manager is needed. Include decision/actions and how frequent they occur.

Decision or Action	Frequency	Does your Supervisor/Manager Provide Clearance (yes/no)
Ex: preparing weekly reports	WEEKLY	No
		1 71

**Decision Making** (continued)
Only mark one (1) box that best describes how you make decisions:

Employee Check One	Scope of Organizations Directly or Indirectly Affected	Supervisor Check One
	My decisions have positive and negative impact affecting my own work.	
	I provide training and work direction to others.	
	I serve as a group leader or working supervisor.	
	l lead a larger working unit.	
	I lead a department.	
	I lead overall operation of the entire organization.	

Describe how much freedom or independence is required or allowed in the performance of your normal duties:

Employee Check One	Level of Responsibility	Supervisor Check One
	Handles every day, reoccurring basic assignments and problems under close supervision; or, tasks are so routine and standard that they do not require supervision.	
	Handles a variety of typical assignments and problems under moderate supervision within standard operating procedures; supervisor or senior workers are generally nearby to answer questions, make "judgment calls" and/or prioritize work.	
	Limited supervision with general autonomy in determining how objectives are achieved; supervisors generally set operating benchmarks, goals and objectives.	
	Administers operating rules and procedures under management guidance.	
	Applies professional/managerial principles and judgement within overall goals/direction established by senior management.	
	Involves setting policies and goals for the department or organization operation, with top management guidance.	
	Formulates strategic direction in keeping with the overall organizational mission, with broad guidance/governance; provides overall guidance to management.	

### **Additional Comments on Decision Making:**

<u>Supervisory Responsibilities</u>

Does your position have the authority to take any of the following actions? If not, does your supervisor rely mainly on your recommendations to make the decision?

Responsibility	Yes	No	Recommend Only	N/A
Hire employees				
Promote employees				
Transfer employees				
Prepare work schedules	b3			
Assign/review work				
Train employees				
Assign/approve time, overtime				
Approve sick leave and vacation				
Recall employees during emergencies				
Merit increase				
Discipline employees				
Suspend employees				
Terminate employees				

Responsibility for Others
---------------------------

A. L	ist the titles of	jobs that directl	y report to	you in this	job or write "none."
------	-------------------	-------------------	-------------	-------------	----------------------

Job Title	Number of Direct Reports

B.	List the titles of jobs to which you give work direction, but do not formally supervise; or write
752	"none."

Job Title	Number Giving Work Direction To		

Additional Comments on Supervisory Responsibility:

### **Problem Solving**

Describe how your problem solving impacts the organization.

How do you receive your instructions? (check all that apply)

Orally

In Writing

How are priorities and/or deadlines decided for your position?

How often do you meet with your supervisor, and for what purposes?

Employee Check One	WORK COMPLEXITY: Complexity and difficulty level associated with tasks necessary to complete your work. Consider the level of judgement, analytical ability and creativity required and whether there are standards, policies and procedures that guide your action.			
	Regular and repetitive tasks, processes or operations requiring the selection and execution of actions based on defined procedures or straight-forward directions.			
	Fairly standard procedures and tasks where basic analytical ability is required, such as comparison of numbers and facts to select the correct actions. Detailed guidelines and procedures are generally used to make decisions or determine actions.			
	Requires application of a variety of procedures, policies and/or precedents and moderate analytical ability in adapting standard methods to fit facts and conditions, using generally prescribed procedures.			
	Considerable analytical ability is needed to select, evaluate and interpret data from several sources; interpretation of guidelines, policies and procedures is required.			
	Widely varied involving many complex and significant variables, requiring analytical ability and inductive thinking in adapting policies, procedures and methods to fit unusual and complex situations.			
	Creates previously unknown technology or original business approaches or significantly differentiates existing products or services.			

### Problem Solving (continued)

Employee Check One	ORGANIZATIONAL IMPACT AND CONSEQUENCES: Describe how your daily duties impact the organization and the consequences of those duties.	Supervisor Check One	
	Problem solving impacts immediate work area. Failures and successes are readily isolated and have limited financial impact.		
	Problem solving impacts department operations. Failures and successes have moderate financial impact on the overall organization.		
	Problem solving impacts division or major department operations. Failures and successes have significant financial impact on the overall organization.		
	Problem solving impacts overall organization. Failures and successes impact the short-term financial impact on the overall organization.		
	Problem solving impacts the overall organization and have a significant impact on organization and future years. Failures and successes significantly impact the organization's balance sheet and long-term performance.		

Specify if this position is responsible for any projects, programs or activities. (Such as overseeing contract employees, vendors, interns and/or managing budget, etc.) *If this does not apply to your position, write N/A.* 

Specify any resources that this position refers to in making decisions and resolving problems. (Examples: Policies, Procedures, Consultants, Ordinances, etc.)

## Additional Comments on Problem Solving:

### **Relationships**

elationsh	and Communication Skills: Skills required during	Supervisor Check One
Employee		
Check One	Little or no contact required with immediate associates and direct	
	Regular contact with department and periodic contacts with other departments, outside agencies and public to relay basic information or relay facts.	
	Frequent contact with the department and other departments, outside agencies and public (supplying or seeking information) on specialized agencies and public (supplying or technical responses/explanations.	
	Frequent outside and inside contacts to carry out organization.  programs; or occasional contacts with officials at higher levels on matters requiring cooperation, explanation and persuasion; or work matters required to the cooperation of laws ordinances, policies and procedures.	
	Regular interaction with persons of influence involving street tact, discretion and persuasion to negotiate important agreements or alicit desired behaviors.	
	Frequent interaction to negotiate critical agreements or motivate behavior and requires a well-developed sense of strategy and time, the ability to engender trust of diverse audiences.	e

# Please list people or groups with whom you interact and/or communicate while completing your job.

Contact Frequency	Nature and Impact of Contact Tax/Billing Questions and Concerns	Method In person, phone, et
Ex. Resident Daily	Tax/Billing Questions and Concerns	
LA, NOOLO III		

### **Physical Job Requirements and Working Conditions**

Pick one box that describes the requirements needed for your job and the conditions you encounter on the job.

Intermittent - Less than 15% of the time in a typical week (one per week or less)

Occasional - 15%-45% of the time in a typical week

Frequent - 45%-70% of the time in a typical week

Continuous - Over70% of the time in a typical week (averages daily)

PROPERTY OF THE PROPERTY OF THE	N/A	Intermittent	Occasional	Frequent	Continuous
Walk					
Stand					
Sit					
Bend or Stoop					
Kneel or Squat					
Work with arms above shoulder					
Climbing					
Lift or carry less than 10 lbs.					
Lift or Carry 11-25 lbs.					
Lift, carry, push, pull 26-60 lbs					
Lift, carry, push, pull over 60 lbs.					
Keyboarding					
Repetitive movement					
Working in cold weather below freezing					
Working in hot weather above 90					
Exposed to toxic/caustic materials					
Exposed to bloodborne pathogens					
Exposed to fumes or airborne particles					
Exposed to annoying odor					
Exposed to sickening odor					
Exposed to grease/grime					
Exposed to driving on street					
Exposed to wet conditions					
Exposed to machine tools					
Exposed to moving mechanical parts					
Exposed to high, precarious spaces					
Exposed to risk of electrical shock					
Exposed to slippery conditions					
Inability to leave work station					
Exposure to angry public					
Exposure to deadly assault					
Exposure to offense language					
Exposure to threats					
Exposure to trauma					
Limited mental effort and/or stress					
Some mental effort and stress involved					
resulting in frustration					
Considerable mental effort and stress					
Work alone					
Work with moderate detail					
Work with high detail					
Work with moderate deadlines					
Work with high deadlines					

## PLEASE INCLUDE OTHER CONDITIONS OF YOUR JOB NOT MENTIONED PREVIOUSLY, IF APPLICABLE.

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. AFTER YOU OR YOUR GROUP HAS COMPLETED YOUR PORTION OF THE QUESTIONNAIRE, PLEASE SUBMIT THE QUESTIONNAIRE TO YOUR SUPERVISOR FOR REVIEW, COMMENT, DISCUSSION, AND APPROVAL.

## TO BE COMPLETED BY THE IMMEDIATE SUPERVISOR

Use this section to note any additional comments, additional duties or disagreements with any section of the questionnaire. Do not change anything written by the individual filling out the questionnaire and do not address any performance issues. If you disagree with any information provided or believe some information is missing, indicate below the question number and your comments.

comments	
Question No.	Comments
	mments must be discussed with the employee.
SUPERVISOR SIGN	
Supervisor Signa	ture: Date:
☐ No comment☐ The above	e appropriate statement: s were added by my supervisor. comments have been discussed with my supervisor and I agree with these comments have been discussed with my supervisor and I disagree with these
Employee Signa	Date:

# CITY OF FALCON HEIGHTS COUNCIL RESOLUTION

March 12, 2025

No. 25-32

# RESOLUTION AUTHORIZING ACCEPTANCE OF A PROPOSAL WITH DDA HUMAN RESOURCES, INC. FOR COMPLETION OF A CLASSIFICATION AND COMPENSATION STUDY NOT TO EXCEED \$11,000

WHEREAS, the City of Falcon Heights has not had a classification and compensation done previously and currently follows the State of Minnesota Job Classification System; and

WHEREAS, the City released a Request for Proposal (RFP) to qualified firms and outlined the proposed scope of work requested; and

WHEREAS, the City of Falcon Heights received proposals from ten (10) firms as a result of the RFP, which Staff then scored on criteria which included, but was not limited to, cost of services, approach to develop and implement a compensation system, and depth and breadth of experience specifically in municipal government operations; and

**WHEREAS**, the proposal receiving the highest score was received from DDA Human Resources with a total project price not to exceed \$11,000.

**NOW THEREFORE BE IT RESOLVED** by the Council of the City of Falcon Heights, Minnesota:

1. That the Mayor and the City Administrator are hereby authorized and directed to enter into a contract with DDA Human Resources not to exceed \$11,000 to act as consultant to complete the City's classification and compensation study not to exceed the City's budget.

ADOPTED this 9th day of April, 2025 by the City Council of Falcon Heights, Minnesota.

			2/
Moved by:	Wassenb	erg	Approved by:  Randall C. Gustafson
GUSTAFSON LEEHY MEYER MIELKE	5 0	In Favor Against	Attested by:  Jack Linehan  City Administrator

WASSENBERG

## **BLANK PAGE**



# ITEM FOR DISCUSSION

Meeting Date	April 9,2025
Agenda Item	Consent G6
Attachment	
Submitted By	Roland Olson, Finance Director

Item  Description	Close the 2023 Street Project/Garden Avenue Fund 429 to the 2023 G.O. Improvement Bond Series 2023A Debt Service Fund 306 and transfer remaining funds to this debt service fund.  The 2023 Street Project/Garden Avenue project is complete and can be closed. There is a balance in this project fund of approximately \$290,000 and needs to be transferred to the debt service fund associated with this street project. Staff recommends closing Fund 429 2023 Street Project/Garden Avenue and transferring remaining funds to the 2023 G.O. Improvement Bond Series 2023A
	fund 306 along with the remaining funds in fund 429. Staff also recommends amending the associated budgets for these funds with a little extra to account for the posting of first quarterly interest.
£1	<u>Fund 429</u> : dr. cr.
	429-4429-97000 295,000
	<u>Fund 403</u> :
	306-000-39200 295,000
Budget Impact	Closeout Fund 429 and transfer the ending funds within the fund to the 2023 G.O. Improvement Bond Series Debt service fund 306. The ending funds in fund 429 are estimated at \$290,000.
Attachment(s)	
Action(s) Requested	Staff recommends closing Fund 429 2023 Street Project/Garden Avenue and transferring and remaining funds to the 2023 G.O. Improvement Bond Series 2023A.

## BLANK PAGE



# REQUEST FOR COUNCIL ACTION (RCA)

	April 9, 2025
Meeting Date	Consent Agenda G7
Agenda Item	Memorandum
Attachment(s)	Jack Linehan, City Administrator
Submitted By	Jack Linenan, City Administra

Item	Goff Public Contract
	lists an agreement with Goff Public in 2024 to help us with our cases
Description	The City entered in to an agreement with Goff Public in 2024 to help us with outreach and messaging surrounding our discussion with the City of St. Anthony Village and messaging a potential police partnership. That agreement expired when funds were regarding a potential police partnership. That agreement expired when funds were utilized or on 12/31/24, whichever came first.
	The City Council is requested to authorize the City to partner with Goff Public Not to exceed \$5,000 total in 2025 to assist us with messaging and media relations.
	the budget for consulting services and communications
Budget	There are available funds in the budget for consulting services and communications
Impact	support
Attachment(s	• Goff Memorandum of Understanding  • Goff Memorandum of Understanding  • Goff Memorandum of Understanding
Action(s) Requested	• Goff Memorandum of Understanding  The City Council is requested to approve a contract with Goff Public and authorize the City Administrator to execute necessary documents.



TO:

JACK LINEHAM

FROM:

JENNIFER HELLMAN

DATE:

**APRIL 2, 2025** 

RE:

MEMORANDUM OF UNDERSTANDING FOR PUBLIC RELATIONS SERVICES

Thank you for the opportunity to assist the City of Falcon Heights with public relations services.

At your direction, Goff Public will provide the following public relations services:

- · Communications strategy and messaging
- Media relations
- Crisis communications

For the services described above, Goff Public will bill the City of Falcon Heights:

Our non-profit rate of \$225 per hour, not to exceed \$5,000 in 2025.

These costs are based on billing rates consistent with our 2025 schedule. Any work performed outside of this agreement or after the stated schedule may be adjusted to reflect new billing rates. Notice of billing rate adjustments will be provided in writing.

Either party may cancel this agreement with or without cause, upon thirty days prior written notice, with no further obligation except for payment of amounts due for work performed and expenses incurred to the date of termination.

Reimbursable expenses such as printing, Constant Contact, stock photography, broadcast news clips, newswire services, Zoom webinar fees, and event supplies/equipment will be billed with a 15% markup. Travel, parking and postage will be billed at cost. Mileage will be billed at the current federal mileage reimbursement rate.

Invoice payments are due net 30 days.

Goff Public reserves the right to seek an addendum to this contract if there is a desire from the City of Falcon Heights to use Goff Public services in excess of the \$5,000 amount.

Goff Public maintains a document retention policy. Under the policy, we will retain client records (items that you send to us, as well as other documents and materials we create or receive in connection with our representation of you) for the duration of all active matters. A matter is considered "active" while we are providing service on a project. When the matter becomes inactive, or our representation of you comes to an end, we will retain client records for a period of three years. A matter is deemed "inactive" once the project is completed or discontinued. Our representation of you



is considered ended if one year or more has passed without any active matters. The policy applies to all electronic and physical materials, including work product, emails, and other electronic files and data.

Signed approval of this agreement grants Goff Public permission to identify the City of Falcon Heights as a client in corporate print, web and other related marketing communications. If you prefer not to grant us permission to identify the City of Falcon Heights as a client, please let us know.

grant us permission to identify the
Signature:
Name: Jack Whichar
Title: City Administrator
Email address: Jack. Lineharco Follon hazzas.
City: Follon Hughy State, Zip: MN 5-5113
City: Kalcon Huggy State, Zip: WW 7 3 317)
Date.
Please note whether the billing contact is the same as the signatory or if the billing contact is different from the signatory. Invoices should be sent to:
Name:
Email address:

## **BLANK PAGE**



# REQUEST FOR COUNCIL ACTION

Meeting Date	April 9, 2025
Agenda Item	G8
Attachment	AET Construction Material Testing
	Proposal
Submitted By	Erik Henricksen, City Engineer

T.	A D 16 C + C M + 11 T + C + 1 2025 D
Item	Approve Proposal for Construction Materials Testing for the 2025 Pavement
	Management Project
Description	On April 9, 2025, Council will consider award of the contract for construction of the 2025 Pavement Management Project. If awarded, the following neighborhoods and streets are included in the 2025 PMP for pavement rehabilitation and minor utility work:  Falcon Woods Neighborhood: Autumn St, Prior Ave N, Summer St, Moore St, Howell St N and Garden Ave  Northome Neighborhood: California Ave W, Idaho Ave W, and Iowa Ave W.  Materials testing services are required to help ensure quality materials and workmanship for the project and compliance with the schedule of material controls and Minnesota State Aid standards. As such, the City requested quotes from geotechnical firms with experience in construction material testing. Two quotes were received and are summarized below:
	Contractor American Engineering Testing (AET) \$22,713.50 Braun Intertec \$35,165.00  AET's proposal is included as an attachment. AET has done the testing on previous City projects, and their work has been acceptable.
Budget Impact	Materials testing is budgeted within the anticipated engineering cost in the approved 2025 Pavement Management Project.
Attachment(s)	AET Testing Proposal

Action(s) Requested	Approve proposal for professional services with American Engineering Testing (AET) for construction materials testing for the 2025 Pavement of \$22,713.50.
•	Testing (AET) for construction and the AET (AET) fo

March 26, 2025

City of Falcon Heights 2077 Larpenteur Avenue West Falcon Heights, MN 55113



Attn: Erik Henricksen, PE – City Engineer

Erik.Henricksen@cityofroseville.com

RE: Quality Assurance Testing Proposal

2025 Pavement Management Project

S.A.P. 124-050-018 City Project No. 25-01

Falcon Heights, Minnesota AET Proposal No. P-0041538

Dear Mr. Henrickson:

Thank you for the opportunity to provide a proposal to perform testing services on the referenced project. This proposal has been prepared in response to your email request on March 7, 2025, and describes our understanding of the project, our anticipated scope of services, our unit rates, and an estimated total fee to perform these services.

# PROJECT INFORMATION

The City of Falcon Heights (the City) will be performing a street improvements project during the 2025 construction season. Construction is anticipated to begin in the spring and be completed October 1, 2025. The project area will include Prior Avenue North, Garden Avenue, Howell Street, Moore Street, Summer Street, Autumn Street, California Avenue, Idaho Avenue, and lowa Avenue. The project will be funded with a mix of state aid and municipal funds.

Plans were prepared by the City of Roseville Engineering Department, and the Specifications were prepared by the City of Falcon Heights. We understand Construction Inspection and Contract Management of the project will be performed by the City.

# GEOTECHNICAL INFORMATION

2 geotechnical exploration and analysis were performed for this project by Braun Intertec. The results were presented in their Geotechnical Evaluation Report, dated July 19, 2022 (Braun Project No. B2203417) and their Pavement Evaluation Report, dated December 3, 2024 (Braun



Project No. B2410775). Reference should be made to those reports for more details regarding site conditions and recommendations.

# PROJECT APPROACH

During the construction improvements, AET will provide experienced MnDOT certified Engineering Technicians to perform sampling and material testing services in accordance with the 2023 Minnesota Department of Transportation Schedule of Materials Control (2023 MnDOT SMC) and project specific testing requirements referenced in the project documents. For this project, Ryan Schaefer will be AET's contact. He can be reached at 651-603-6639 (office). AET requires a minimum of 24 hours' notice of the need for Services.

We understand that the City will contract with MnDOT Metro Inspections for bituminous and concrete plant monitoring.

# SCOPE OF SERVICES

Based on our review of the available plans and our experience on similar projects, our anticipated scope of services is outlined below. These services will be provided on an on-call basis coordinated through authorized City field personnel. Any services not expressly identified in our scope of services is excluded from our contract responsibility.

# Soils Sampling and Testing

Our estimate of the sampling and testing to be performed on the grading and base items is based on the requirements of MnDOT's "Specified Density Method" and in accordance with the 2023 MnDOT SMC. AET will perform MnDOT Relative Density testing (Proctor) as well as in-place density and moisture testing on the utility trench backfill.

The MnDOT Dynamic Cone Penetrometer will be used to test compaction on the Class 5 Aggregate Base sections of the project following the MnDOT Penetration Index procedures in accordance with the 2023 MnDOT SMC.

AET will perform the sampling of the soils and Class 5 Aggregate Base materials and transport the samples to our St. Paul, Minnesota laboratory. City personnel will update AET on the schedule of material placement, material sources (including changes in source), and changes in quantities.



# Full Depth Reclamation (FDR)

AET will perform dynamic cone penetrometer (DCP) testing and moisture content testing of the full depth reclamation material along with up to 6 gradations in accordance with the 2023 MnDOT SMC. The frequency of these gradations for an FDR project are at the discretion of the Engineer. We assume the City's Inspector will perform depth checks of the FDR material.

# **Bituminous Pavement Sampling and Testing**

As bituminous paving is being completed, AET personnel will pick up companion samples provided by the contractor, during each day of paving, and transport the samples to our St. Paul, Minnesota laboratory. Samples will be tested in our laboratory for MnDOT Gyratory Mix Properties as follows:

- Gyratory Density (AASHTO T 312) MnDOT Modified
- Rice Specific Gravity (ASTM D2041)
- Asphalt Extraction and Aggregate Gradation (ASTM D2172 Method E-11) MnDOT Modified C137 and C117
- Fine Aggregate Angularity (AASHTO T 304, Method A, MnDOT 1206.5)
- Coarse Aggregate Angularity, One Face (ASTM D5821)

AET will use the MnDOT program to determine random core locations of bituminous based on information provided by City personnel regarding tonnage (lot sizes) and pavement placement patterns. AET personnel will mark the sample locations in the field and the City will coordinate the removal of both the contractor and companion cores with the contractor.

After the completion of the coring, AET will retrieve companion core samples from the project contractor for laboratory testing. This testing will include the following:

- The thickness of each layer of the core sample
- The density of each layer of the core sample

# Concrete Sampling and Testing

During the placement of concrete, AET will perform field testing consisting of slump, air content, temperature of the plastic concrete, and casting of cylinders for compression testing. The 2023 MnDOT SMC requires field testing for slump, air content, and temperature per every 100 cubic yards of each type of concrete placed each day. Compressive strength cylinders (1 set of 3 cylinders) are required once per every 300 cubic yards of each type of concrete placed each day; the cylinders will be retrieved the following day for curing and testing in our laboratory. The



3 cylinders are to be tested at 28-days. We are proposing to cast sets of 5 cylinders, with compressive strength testing as follows: 1 at 7 days, 3 at 28 days, and the 5th cylinder will be held in reserve for future testing if the 28-day strength requirement is not met.

We have assumed City personnel will be compiling the concrete batch tickets, certificates of compliance, and AET's field test results of the plastic concrete, which we will provide each day we are on-site performing testing services.

# REPORTING

AET staff will prepare reports for the City to review. These reports will include the results of our field and laboratory testing as performed per the 2023 MnDOT SMC and testing frequencies referenced in the project documents. AET will complete the Preliminary Grading and Base Report and the Final Grading and Base Report, once provided with final project quantities. Daily field reports will also be prepared and made available upon request.

# **ESTIMATED FEES**

Our services will be provided on a unit cost basis according to the unit rates provided in the attached Materials Testing Estimate. Our invoices will be determined by multiplying the number of personnel hours or tests by their respective unit rates. The rates are from the annual fee schedule for 2025 projects.

We have estimated a "minimum required estimate" for the project which estimates the tests needed to satisfy the requirements as defined in the 2023 MnDOT SMC and the project documents. The "likely needed estimate" is the cost that we anticipate will be required to complete the previously described testing services, based on our experience, and assumed scheduling of the project. Therefore, we propose a budget cost estimate using the "likely needed" estimate for the scope of services for the project as outlined in this proposal. Our "likely needed" estimated fee is \$22,713.50. We refer you to the attached Materials Testing Estimate as reference to how we arrived at this estimated cost.

We caution that this is only an estimated cost. Often, variations in the overall cost of the services occur due to reasons beyond our control, such as weather delays, changes in the contractor's schedule, unforeseen conditions, or retesting. These variations will affect the actual invoice totals, either increasing or decreasing our total costs for the project from those estimated in this proposal. If more time or tests are required, additional fees may be needed to complete the project testing services. If less time or tests are needed, a cost savings will be realized. We will



not, however, exceed the estimated total cost for the project without first obtaining your authorization.

# TERMS AND CONDITIONS

All AET Services are provided subject to the Terms and Conditions set forth in the enclosed Construction Service Agreement—Terms and Conditions, which, upon acceptance of this proposal, are binding upon you as the Client requesting Services, and your successors, assignees, joint venturers, and third-party beneficiaries. Please be advised that additional insured status is granted only upon written acceptance of the proposal.

# **ACCEPTANCE**

AET requests written acceptance of this proposal in the Proposal Acceptance box below, but the following actions shall constitute your acceptance of this proposal together with the Terms and Conditions: 1) issuing an authorizing purchase order for any of the Services described in this proposal, 2) authorizing AET's presence on site, or 3) written or electronic notification for AET to proceed with any of the Services described in this proposal. Please indicate your acceptance of this proposal by signing below and returning a copy to us. When you accept this proposal, you represent that you are authorized to accept on behalf of the Client.

# **GENERAL REMARKS**

AET appreciates the opportunity to provide this service for you and looks forward to working with you on this project. If you have any questions or need additional information, please contact me.

Sincerely,

**American Engineering Testing** 

Ryan S. Schaefer

Geologist II/Project Manager rschaefer@teamAET.com

651-603-6639

Robert D. Anderson

**CMT Transportation Sector Lead** 

randerson@teamAET.com

612-685-3079



ACCEPTANCE AND AUTHORIZATION: AET Proposal No. P-0041536	
SIGNATURE:	
PRINTED NAME: / Jak Circhan	
COMPANY: City OF Falcon Haights	
ADDRESS: 2077 Lasjontens Ave w, Falco, Huy	1/15,2
PHONE NUMBER AND EMAIL: 65/- 742- 7611	
DATE:	
INVOICING INFORMATION (Provide Company AP Department Information, if present.)	
AP CONTACT NAME: Alyssa Lanlburg	
BILLING/MAILING ADDRESS:	
AP PHONE NUMBER AND INVOICE EMAIL: Alyssa. Landbulg @ falcon Keijths.	0/5
P.O. NO./ PROJECT NO.:	
Attachments: Materials Testing Estimate	
Construction Service Agreement – Terms and Conditions	
Certificate of Insurance	
W9	



# Materials Testing Estimate for 2025 Pavement Management Project ~ 2023 MnDOT SMC SAP 124-050-018, City Project No. 25-01; Falcon Heights Heights, Minnesota

Material	Units	Quantity	Trips	Hours	Agency Testing & Frantishov	# of Tests	ests	Cost per	Cost (\$)	(S)
					formation in British Company	Minimum	Likely	Test (\$)	Minimum	Likely
Storm Sewer	i.	Ġ	(		Proctor (1/soil type)	0	-	195.00	0.00	195.00
(non-participating)	5	32	7	4	Trenches, Specified Density Nuclear Gauge (1/500')	0	60	44.00	0.00	132.00
					Relative Moisture (1/10,000 CY, 10 max)	0	0	56.00	00.00	0.00
Select Granular Embankment					Gradation (1/40,000 CY)	1	-	142.00	142.00	142 00
Note 1	<u></u> 5	100	-	2	Penetration Index DCP (1/5,000 CY)	0	0	98.00	0.00	00.00
					Relative Moisture (1/10,000 CY, 10 max)	0	0	56.00	00.00	0.00
					Gradation (2 per lot, 1 lot ≤ 2,000 CY)	2	2	142.00	284.00	284.00
					Road, Penetration Index DCP (1/2,000 CY)	0	0	98.00	00.0	0.00
					Walks and Trails, DCP (1/500 feet)	0	3	99.00	00.00	198.00
Aggregate Base Class 5	- ?	Č	(		Relative Moisture (1/1,000 CY, 10 max)	0	1	56.00	00.00	56.00
Note 1	5	?	7	4	Percent Crushed (1/source, if required)			225.00	00.00	00.00
					LAR (1/source, if required)			195.00	00:00	00.00
					Insoluble Residue (1/source, if required)			640.00	00.00	00:00
				18	Litho Exam & Shale Float Test (1/source, if required)			492.00	0.00	00.0
					Bitumen Content (Engineer's discretion)			303.00	00.00	0.00
	à	1	,		Gradation (Engineer's discretion)	0	9	142.00	0.00	852.00
Full Deptin Reclamation (FDR)	, S	33,700	က	9	Penetration Index DCP (1/10,000 SY, test rolled)	4	6	00.99	264.00	594.00
					Relative Moisture (1/20,000 CY)	2	2	56,00	112.00	112.00
Bituminous - SP WE/NW	NOT	7,460	80	20	MnDOT Gyratory Mix Properties (1/day/mix type)	4	8	656.00	2,624.00	5.248.00
					Companion Core Density & Thickness	32	32	29.00	1,888.00	1,888.00
Bituminous - 3" Trail	NOT	40	0	0	MnDOT Gyratory Mix Properties (1/day/mix type)	0	0	656.00	00.00	0.00
Topsoil Borrow	ζ				Topsoil Borrow Testing (Engineer's discretion)			358.00	0.00	00.00
Concrete - Sidewalk, Pedestrian Ramns, Curh &					Plastic Concrete Testing (1 set of tests/100 CY) - Included in hourly rate see below					
Gutter, Driveway	δ	+344	6	23	Concrete Compressive Strength, Curing, & Handling 4x8 Cylinders (includes mold) (5 cyls/300 CY)	25	45	44.00	1,100.00	1,980.00
					Concrete sample pick up from job site	S	6	105.00	525.00	945.00
Notes:			52	59				Subtotal =	6,939.00	12,626.00

1. For grading and base materials, per the 2023 MnDOT SMC, less than 500 tons (250 CY) Quality Compaction may be used as the only test method, except when backfilling for structures.

2. Material quantities are estimated based upon Statement of Estimated Quantities, conversions, and plans.
3. Number of "Likely" bituminous samples, cores, and trips assumes 8 days of paving (800 to 1000 tons of bituminous per day). Assumes testing of all companion cores and no longitudinal density cores.

lime and Mileage	Onit	Rate (\$)	Rate (\$) Minimum Quantity	Likely Quantity	Minimum Cost	likely Cost
ANTICONO. Description of the Property of the P				l	1000	FINCIS COST
iwilleage, Personal Automobile/ Lruck	Mile	1.35	250	250	337.50	337 50
Tochalolon					20:100	001100
lect mician	HOL	120.00	230	50	7 080 7	7 090 7
					00.000	00.000,
Engineer II, Project Management/Pinal Reporting	Hour	200,00	œ	12	1 600 00	00 007 6
4 17 11 11 11 11 11 11 11 11 11 11 11 11				1	00.000,1	2,400.00
Project Administrator	Hour	90.00		~	00 026	00 026
				)	00.072	2/0.00
				Subtotal =	Q 287 50	10 087 50
					00:00	00.00

00000

Estimate prepared by: Ryan Schaefer

22,713.50 16,226.50 Total Cost Estimate =

Likely

Minimum

#### **SECTION 1 - RESPONSIBILITIES**

- 1.1 This Service Agreement Terms and Conditions ("terms and conditions") is applicable to all services ("Services") provided by American Engineering Testing, Inc. (AET). As used herein "Services" refer to the scope of Services described in the proposal submitted by AET to Client. The proposal, these terms and conditions and any appendices attached hereto shall comprise the agreement ("Agreement") between AET and Client for Services described in the proposal and are binding upon the Client, its successors, assignees, joint ventures and third-party beneficiaries. AET requests written acceptance of the Agreement, but the following actions shall also constitute Client's acceptance of the Agreement: 1) issuing an authorizing purchase order, task order, service order, or any other documentation for any of the Services, 2) authorizing AET's presence on site, or 3) written or electronic notification for AET to proceed with any of the Services. Issuance of a purchase order, task order or service order by Client which contains separate terms and conditions will not take precedence or modify the terms and conditions contained in this Service Agreement AND THE TERMS AND CONDITIONS OF THIS SERVICE AGREEMENT AND ANY CORRESPONDING PROPOSAL ISSUED BY AET SHALL GOVERN UNLESS AUTHORIZED IN WRITING IN ADVANCE BY AET.
- 1.2 Prior to AET performing Services, Client will provide AET with all information that may affect the cost, progress, safety and performance of the Services. This includes, but is not limited to, information on proposed and existing construction, all pertinent sections of contracts between Client and their client and/or Owner which contain flow-down provisions to AET, if they are included, site safety plans or other documents which may control or affect AET's Services. If new information becomes available or changes are made during AET's Services, Client will provide such information to AET in a timely manner. Failure of Client to timely notify AET of changes to the project including, but not limited to, location, elevation, loading, or configuration of the structure or improvement will constitute a release of any liability of AET. Client will provide a representative for timely answers to project-related questions by AET.
- 1.3 AET observes and tests earthwork and other construction operations and materials, and may provide opinions, conclusions and recommendations regarding the same. However, AET's Services do not relieve the contractors of their contractual responsibility to perform their work in accordance with approved plans, specifications and building code requirements.
- 1.4 AET personnel do not have authority to accept, reject, direct or otherwise approve the work of the contractor. AET cannot stop work or waive or alter the requirements of the project documents. Any authority given to AET by Client must be in writing prior to the start of Services.
- 1.5 AET does not perform construction management, general contracting or surveying services and our involvement with the project does not constitute any assumption of those responsibilities.
- 1.6 Services performed by AET often include sampling at specific locations. Client acknowledges the limitations inherent in sampling. Variations in conditions occur between and beyond sampled/tested locations. The passage of time, natural occurrences and direct or indirect human activities at the site or distant from it may alter the actual conditions. Client assumes all risks associated with such variations.
- 1.7 AET is not responsible for interpretations or modifications of AET's recommendations by other persons.
- 1.8 Should change in conditions be alleged, Client agrees to notify AET before evidence of alleged change is no longer accessible for evaluation.
- 1.9 Test borings and/or cone penetration test soundings to a proper depth below foundation grade and the base of suitable bearing soils are recommended to explore the deeper unseen soil and ground water conditions. Judgments made by AET personnel regarding the suitability of materials and ground water conditions below the bottom of an excavation are limited if sufficiently deep test borings/soundings are not provided by the Client prior to our observations and judgments. AET's opinions, conclusions and recommendations are qualified to that extent.
- 1.10 Pricing in the proposal assumes use of these terms and conditions. AET reserves the right to amend pricing if Client requests modifications to the Agreement or use of Client's alternate contract format. Any contract amendments made after Client has authorized the Services shall be applicable only to Services performed after the effective date of such amendment. The proposal and these terms and conditions, including terms of payment, shall apply to all Services performed prior to the effective date of such amendment.
- 1.11 The AET proposal accompanying these terms and conditions is valid for thirty (30) days after the proposal issuance date to the Client. Any attempt to authorize Services after the expiration date is subject to AET's right to revise the proposal as necessary.

## SECTION 2 - ON CALL SERVICES

- 2.1 If AET's Services are performed on an on-call basis at the direction of the Client or its authorized representatives, Client acknowledges the inherent limitations associated with performing engineering judgments and testing Services on an on-call basis, including without limitation, the inability to completely evaluate, document or judge work and conditions not directly observed or tested by AET. AET's opinions, conclusions, and recommendations are qualified to the extent of those limitations.
- 2.2 Density tests of fill soils represent conditions only at the locations and elevations tested and do not necessarily represent conditions laterally, above or below. AET can only provide judgments regarding the engineered fill system to adequately support the design construction loadings by monitoring the filling process on a continuous basis for consistency of soil type, moisture content, lift thickness, and compaction effort.
- 2.3 AET requires a minimum of 24 hours' notice of the need for Services. AET will not be liable for claims, damages, or delays related to failure of Client to provide adequate advance notice to AET.

#### SECTION 3 - SITE ACCESS, UNDERGROUND FACILITIES AND CONSTRUCTION STAKING

- 3.1 Client will furnish AET safe and legal site access.
- 3.2 With the exception of public utilities which AET will contact state "call before you dig" notification centers (e.g., Gopher State One call in Minnesota), Client will mark or cause to be marked the location of all other underground utilities and structures (Facilities) that service or are located on the site. AET shall be entitled to rely upon the accuracy of all location information supplied by any source.
- 3.3 Client shall hold harmless, indemnify and defend AET from all claims, damages, losses, fines, penalties and expenses (including attorney's fees) arising out of or related to the following: a) Facilities that are not shown or vary from the locations shown on any plans or drawings, b) Facilities that are not located by or vary from the locations marked by Client, governmental or quasi-governmental locator programs, or private utility locating services, or c) any other Facilities that are not disclosed or vary from locations provided by the Client. The obligation to defend AET shall be independent of the obligation to indemnify and hold harmless AET and shall be with independent counsel acceptable to AET.
- 3.4 The location and elevation of a proposed structure or facility shall be staked (with offsets) and controlled by surveying or GPS equipment by others. AET's measurements are made in relation to that information. The reliability of any opinions, conclusions, and recommendations based on those measurements is strictly dependent on the accuracy of the staking or GPS information provided by others.

3.5 - During construction, observations and testing Services are based on the positioning of the formwork by the contractor or its subcontractor. AET will not be responsible for any errors or damages resulting from improper location or positioning of the formwork.

#### **SECTION 4 - SAFETY**

- 4.1 Client shall inform AET of any known or suspected hazardous materials or unsafe conditions at the site. Client or its authorized representative(s) is responsible for the safety of the jobsite. If, during the course of AET's Services, such materials or conditions are discovered, AET reserves the right to take measures to protect AET personnel and equipment or to immediately terminate Services. Client shall be responsible for payment of such additional protection costs.
- 4.2 AET shall only be responsible for safety of AET employees at the site; the safety of all others shall be Client's or other persons' responsibility.

#### **SECTION 5 - SAMPLES**

- 5.1 Client shall inform AET of any known or suspected hazardous materials prior to submittal to AET. All samples obtained by or submitted to AET remain the property of the Client during and after the Services. Any known or suspected hazardous material samples will be returned to the Client at AET's discretion.
- 5.2 Non-hazardous samples will be held for thirty (30) days and then discarded unless, within thirty (30) days of the report date, the Client requests in writing that AET store or ship the samples. Storage and shipping costs shall be borne solely by Client.

#### **SECTION 6 - PROJECT RECORDS**

The original project records prepared by AET will remain the property of AET. AET shall retain these original records for a minimum of three years following submission of the report, during which period the project records can be made available to Client at AET's office at reasonable times.

#### **SECTION 7 - STANDARD OF CARE**

AET performs its Services consistent with the level of care and skill normally performed by other firms in the profession at the time of this service and in this geographic area, under similar budgetary constraints.

#### **SECTION 8 - INSURANCE**

AET maintains insurance with coverage and minimum limits shown below. AET will furnish certificates of insurance to Client upon request. 8.1 –

Workers' Compensation

Statutory Limits

Employer's Liability

\$100,000 each accident \$500,000 disease policy limit

\$100,000 disease each employee

Commercial General Liability

\$1,000,000 each occurrence

\$1,000,000 aggregate

Automobile Liability

\$1,000,000 each accident

Professional/Pollution Liability Insurance

\$1,000,000 per claim \$1,000,000 aggregate

- **8.2** Commercial General Liability insurance will include coverage for Products/Completed Operations extending one (1) year after completion of AET's Services as outlined in our proposal, Property Damage, Personal Injury, and Contractual Liability coverage applicable to AET's indemnity obligations under this Agreement.
- 8.3 Automobile Liability insurance shall include coverage for all owned, hired and non-owned automobiles.
- 8.4 Professional/Pollution Liability Insurance is written on a claims-made basis and coverage will be maintained for one (1) year after completion of AET's Services as outlined in our proposal. Renewal policies during this period shall maintain the same retroactive date.
- 8.5 To the extent permitted by applicable state law, and upon Client's signing of the proposal, which includes these Terms and Conditions, and return of the same to AET, or Client provided forms of acceptance as defined in Section 1.1; Client and Owner shall be named an "additional insured" on AET's Commercial General Liability Policy (Form CG D4 14, which includes blanket coverage for the Additional Insured on a Primary and Non-Contributory basis). Client and Owner shall also be named an "additional insured" on a Primary and Non-contributory basis on AET's Automobile Liability Policy (Form CA T4 74). Any other endorsement, coverage or policy requirement may result in additional charges.
- 8.6 AET will maintain insurance coverage required by this Agreement at its sole expense, provided such insurance is reasonably available, with insurance carriers licensed to do business in the state in which the project is located and having a current A.M. Best rating of no less than A minus (A-). Such insurance shall provide for thirty (30) days prior written notice to Client for notice of cancellation or material limitations for the policy or ten (10) days' notice for non-payment of premium.
- 8.7 AET reserves the right to charge Client for AET's costs for additional coverage requirements unknown on the date of the proposal, e.g., coverage limits or policy modification including waiver of subrogation, additional insured endorsements and other project specific requirements.

#### SECTION 9 - DELAYS

If delays to AET's Services are caused by Client or Owner, other parties, strikes, natural causes, pandemic, weather, or other items beyond AET's control, a reasonable time extension for performance of the Services shall be granted, and AET shall receive an equitable fee adjustment.

#### SECTION 10 - PAYMENT, INTEREST AND BREACH

- 10.1 Invoices are due net thirty (30) days from the date of receipt of an undisputed invoice. Invoices will be paid without reductions for bond or retention. Client will inform AET of invoice questions or disagreements within fifteen (15) days of invoice date; unless so informed, invoices are deemed correct.
- 10.2 Invoices remaining unpaid for sixty (60) days shall constitute a material breach of this Agreement, permitting AET, in its sole discretion and without limiting any other legal or equitable remedies for such breach, to terminate performance of this Agreement and be relieved of any associated duties to the Client or other persons. Further, AET may withhold from Client data and reports in AET's possession. If Client fails to cure such breach, all reports associated with the unpaid invoices shall immediately upon demand be returned to AET and Client may neither use nor rely upon such reports or the Services.
- 10.3 AET reserves the right to pursue any unpaid invoice utilizing available remedies at law. AET explicitly reserves its Mechanic Lien or Bond Claim rights for nonpayment of an undisputed invoice. Client is responsible for paying AET expenses and attorney fees related to collection of past due invoices.
- 10.4 AET reserves the right to charge a 2.5% fee on any payment made using a credit card or debit card.

#### **SECTION 11 - CHANGE ORDERS**

AET's proposal associated with this project may provide an estimated cost for the work. If the proposal amount is a time and material estimate, or if changes occur affecting the project scope, estimated quantities, project schedule or other unforeseen conditions, AET will communicate with Client and request a change order. However, nothing in this agreement shall be construed in any way as a waiver of payment by Client to AET for Services authorized under this agreement. Approval of a change order may be in writing, by electronic communication, or any directive for additional Services.

#### **SECTION 12 - MEDIATION**

- 12.1 Except for enforcement of AET's rights to payment for Services rendered or to assert and/or enforce its lien rights, including without limitation assertion and enforcement of mechanic's lien rights and foreclosure of the same, Client and AET agree that any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to arbitration or the institution of legal or equitable proceedings by either party; provided however that if either party fails to respond to a request for mediation within sixty (60) days, the party requesting mediation may without further notice, proceed to arbitration or the institution of legal or equitable proceedings.
- 12.2 Mediation shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association. Request for mediation shall be in writing and the parties shall share the mediator's fee and any filing fees equally and each party shall pay their own legal fees. The mediator shall be acceptable to both parties and shall have experience in commercial construction matters.

#### **SECTION 13 - LITIGATION REIMBURSEMENT**

Except for matters relating to non-payment of fees, which is governed by Section 10 hereof, payment of attorney's fees and costs associated with lawsuits or arbitration of disputes between AET and Client, which are dismissed or are judged substantially in either party's favor, shall be paid by the non-prevailing party. Applicable costs include, but are not limited to, attorney and expert witness fees, court costs, and other direct costs.

#### **SECTION 14 - MUTUAL INDEMNIFICATION**

- 14.1 Subject to the limitations contained in Sections 14 and 17, AET agrees to indemnify Client from and against damages and costs to the extent caused by AET's negligent performance of the Services.
- 14.2 Client agrees to indemnify AET from and against damages and costs to the extent caused by the intentional acts or negligence of the Client, Owner, Client's contractors and subcontractors or other third parties.
- 14.3 If Client has an indemnity agreement with other persons or entities relating to the project for which AET's Services are performed, the Client shall include AET as an Additional Insured.
- 14.4 AET's indemnification to the Client, including any indemnity required or implied by law, is limited solely to losses or damages caused by its failure to meet the standard of care and only to the extent of its negligence.

#### **SECTION 15 - NON-SOLICITATION**

Each party to this Agreement (a "Party") agrees that it will not encourage, induce, or actively solicit any employee of the other party to leave their employment for any reason, provided that neither Party is precluded from (a) hiring any such employee who has been terminated by a Party or its subsidiaries prior to commencement of employment discussions between a Party and such employee, or (b) soliciting any such employee by means of a general advertisement or through an employment agency that does not specifically pursue the employee, or (c) hiring employees or former employees of the other Party who contact the Party on its own accord. This Non-Solicitation provision shall be effective and enforceable for six (6) months following termination of this Agreement.

#### SECTION 16- MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES

Except as specifically set forth herein and to the extent permitted by applicable law, Client and AET waive against each other, and each other's officers, directors, members, subcontractor, agents, assigns, successors, partners, and employees any and all claims for or entitlement to special, incidental, indirect, punitive, or consequential damages arising out of, resulting from, or in any way related to the Services provided by AET under this Agreement. This mutual waiver of consequential damages includes, but is not limited to, the following: loss of profits; loss of revenue; rental costs/expenses incurred; loss of income; loss of use of property, equipment, materials or services; loss of opportunity; loss of rent; loss of good will; loss of financing; loss of credit; diminution of value; loss of business and reputation; loss of management or employee productivity or the services of such persons; increased financing costs; cost of substitute facilities; cost of substitute goods/property/equipment; cost of substitute services; and/or cost of capital. This mutual waiver is applicable, without limitation,

to all consequential damages due to either party's termination of this Agreement in accordance with the provisions of the Agreement and related documents and shall survive any such termination.

#### **SECTION 17 - LIMITATION OF LIABILITY**

To the fullest extent permitted by applicable law, the total aggregate liability of AET and its officers, directors, partners, employees, subcontractors, agents, and sub-consultants, to Client and/or Client's employees, officers, directors, members, agents, assigns, successors, or partners, or anyone claiming through Client, for any and all injuries, damages, claims, losses, or expenses (including attorney's fees and costs) arising out of, resulting from or in any way related to Services provided by AET from any cause or causes, including, but not limited to, its negligence, professional errors and omissions, strict liability, breach of contract, or breach of warranty shall not exceed the total compensation in excess of costs received by AET for Services or \$50,000, whichever is less. The limitation of liability set forth herein does not apply to claims arising solely out of or related to the willful or intentional acts of AET.

#### **SECTION 18 - POSTING OF NOTICES ON EMPLOYEE RIGHTS**

Effective June 21, 2010, prime contracts with a value of \$100,000 or more and signed by federal contractors on projects with any agency of the United States government must comply with 29 CFR Part 471, which requires physical posting of a notice to employees of their rights under Federal labor laws. The required notice may be found at 29 Code of Federal Regulations Part 471, Appendix A to Subpart A. The regulation also has a "flow-down" requirement for subcontractors under the prime agreement for subcontracts with a value of \$10,000 or more. AET requires strict compliance of its subcontractors working on federal contracts subject to this regulation. The regulation has specific requirements for location of posting and language(s) for the poster.

#### **SECTION 19 - TERMINATION**

After 7 days' written notice, either party may elect to terminate work for justifiable reasons. In this event, the Client shall pay AET for all Services performed, including demobilization and reporting costs to complete the Services.

#### **SECTION 20 - SEVERABILITY**

Any provisions of this Agreement later held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force. However, Client and AET will in good faith attempt to replace an invalid or unenforceable provision with one that is valid and enforceable, and which comes as close as possible to expressing the intent of the original provision.

#### **SECTION 21 - GOVERNING LAW**

This Agreement shall be construed in accordance with the Laws of the State of Minnesota without regard to its conflicts of law provisions.

#### **SECTION 22 - ENTIRE AGREEMENT**

This Agreement, including these terms and conditions and attached proposal and appendices, is the entire agreement between AET and Client. Regardless of method of acceptance of this Agreement by the Client, this Agreement supersedes any written or oral agreements, including purchase/work orders or other Client agreements submitted to AET after the start of our Services. Any modifications to this Agreement must be mutually acceptable to both parties and accepted in writing. No considerations will be given to revisions to AET's terms and conditions or alternate contract format submitted by the Client as a condition for payment of AET's accrued Services.

GENERAL AGGREGATE

**EACH CLAIM** 

PRODUCTS - COMP/OP AGG \$

4,000,000



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/1/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 20443386	CONTACT Ann Ross	CONTACT Ann Ross		
HUB International Great Plains, LLC 245 E. Roselawn Avenue	PHONE (A/C, No, Ext): (651) 288-5137 FAX (A/C, No): (651)	286-0560		
Suite 31	E-MAIL ADDRESS: ann.ross@hubinternational.com			
Saint Paul, MN 55117-1940	INSURER(S) AFFORDING COVERAGE	NAIC #		
	INSURER A: The Phoenix Insurance Company	25623		
INSURED AMERICAN CONSULTING SERVICES INC	INSURER B: The Travelers Indemnity Company of America 25666			
AMERICAN CONSULTING SERVICES INC	INSURER C: Travelers Property Casualty Company of America	25674		
AMERICAN PETROGRAPHIC SERVICES INC	INSURER D : Charter Oak Fire Insurance Company	25615		
550 CLEVELAND AVE N ST PAUL. MN 55114-1804	INSURER E: Continental Casualty Company	20443		
011 A02, IIII 00114-1004	INSURER F :			

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER: THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. NSR LTR POLICY EFF POLICY EXP
(MM/DD/YYYY) (MM/DD/YYYY) ADDL SUBR INSD WVD TYPE OF INSURANCE **POLICY NUMBER** LIMITS A X COMMERCIAL GENERAL LIABILITY 2,000,000 EACH OCCURRENCE CLAIMS-MADE X OCCUR DAMAGE TO RENTED PREMISES (Ea occurrence) 1,000,000 P630539K8896PHX25 1/1/2025 1/1/2026 25,000 MED EXP (Any one person) 2,000,000 PERSONAL & ADV INJURY 4,000,000

В COMBINED SINGLE LIMIT (Ea accident) 2,000,000 AUTOMOBILE LIABILITY X ANY AUTO 8102L6457122543G 1/1/2025 1/1/2026 BODILY INJURY (Per person) SCHEDULED AUTOS OWNED AUTOS ONLY BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) NON-OWNED AUTOS ONLY HIRED AUTOS ONLY X UMBRELLA LIAB 15,000,000 X OCCUR EACH OCCURRENCE 5 CUP3K2260092543 1/1/2025 1/1/2026 15,000,000 **EXCESS LIAB** CLAIMS-MADE **AGGREGATE** 

n DED X RETENTION\$ OTH-WORKERS COMPENSATION AND EMPLOYERS' LIABILITY X PER STATUTE UB9H9151012543G 1/1/2025 1/1/2026 1,000,000 ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) E.L. EACH ACCIDENT N N/A 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ If yes, describe under DESCRIPTION OF OPERATIONS below 1,000,000 E L DISEASE - POLICY LIMIT PROF/POLL LIABILITY ECH254066939 1/1/2025 1/1/2026 10,000,000

RETRO: 070287 ECH254066939 1/1/2025 1/1/2026 **AGGREGATE** 15,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) RENEWALS: contracts@teamAET.com

ILLUSTRATION ONLY

GEN'L AGGREGATE LIMIT APPLIES PER:

X LOC

POLICY X PRO-

OTHER:

CERTIFICATE HOLDER	CANCELLATION
ILLUSTRATION CERTIFICATE 25-26	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE
	9. Row

# Form W-9 (Rev. March 2024) Department of the Treasury Internal Revenue Service

# Request for Taxpayer Identification Number and Certification

Go to www.irs.gov/FormW9 for instructions and the latest information.

Give form to the requester. Do not send to the IRS.

Befo	re you begin. For guidance related to the purpose of Form W-9, see	Purpose of Form, below	C)	
	1, and enter the business/disregarded			
	American Engineering Testing, Inc.			
	Business name/disregarded entity name, if different from above.			
Print or type. Specific Instructions on page 3.	3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only one of the following seven boxes.  Individual/sole proprietor C corporation S corporation Partnership Trust/estate			Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
	LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership)		Exempt payee code (if any)	
	Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner.			Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any)
P	Other (see instructions)			code (ii ariy)
Specifi	3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions			(Applies to accounts maintained outside the United States.)
See	5 Address (number, street, and apt. or suite no.). See instructions.		Requester's name a	and address (optional)
	550 Cleveland Ave. N.			
	6 City, state, and ZIP code			
	St. Paul, MN 55114			
	7 List account number(s) here (optional)			
Par	Taxpayer Identification Number (TIN)			
	your TIN in the appropriate box. The TIN provided must match the r	same given on line 1 to av	social sec	curity number
backu	up withholding. For individuals, this is generally your social security rent alien, sole proprietor, or disregarded entity, see the instructions for	number (SSN). However, f		
	es, it is your employer identification number (EIN). If you do not have	а питber, see How to ge	et a or	
TIN, la				identification number
	If the account is in more than one name, see the instructions for line are To Give the Requester for guidelines on whose number to enter.	e 1. See also What Name	and 4 1 -	0 9 7 7 5 2 1
Par	t II Certification			
Jnder	penalties of perjury, I certify that:			
	e number shown on this form is my correct taxpayer identification nu			
Ser	n not subject to backup withholding because (a) I am exempt from b vice (IRS) that I am subject to backup withholding as a result of a fai longer subject to backup withholding; and			•
3. I ап	n a U.S. citizen or other U.S. person (defined below); and			
1. The	FATCA code(s) entered on this form (if any) indicating that I am exe	mpt from FATCA reportin	g is correct.	
ecau: acquis	ication instructions. You must cross out item 2 above if you have bee se you have failed to report all interest and dividends on your tax return sition or abandonment of secured property, cancellation of debt, contrib than interest and dividends, you are not required to sign the certification	n. For real estate transactio outions to an individual reti	ons, item 2 does no irement arrangemer	t apply. For mortgage interest paid, at (IRA), and, generally, payments
Sign Here		D	Pate \	2025
Ger	neral Instructions	New line 3b has be	een added to this t	form. A flow-through entity is
	on references are to the Internal Revenue Code unless otherwise	required to complete foreign partners, own	e this line to indicat ners, or beneficiari	te that it has direct or indirect es when it provides the Form W-9

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted

after they were published, go to www.irs.gov/FormW9.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-5 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

## **Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

## **BLANK PAGE**



# REQUEST FOR COUNCIL ACTION

Meeting Date	April 7, 2025
Agenda Item	Consent G9
Attachment	Resolution 25-33
Submitted By	Jack Linehan, City Administrator

	·
Item	Authorizing Support and Execution of Capitol Region Watershed District
	Stewardship Grant Agreement - Falcon Woods Outlet Control Structure
Description	Following a recommendation from Roseville Engineering's Environmental Manager Ryan Johnson, the City of Falcon Heights has been selected to receive \$10,000 through the Capitol Region Watershed District's (CRWD) Stewardship Grant Program for the Falcon Woods Outlet Control Structure (OCS) project, located between Prior Avenue and Garden Avenue. The CRWD Stewardship Grant supports projects that protect and improve water resources through best practices in stormwater management.
	This project is part of the city's broader stormwater infrastructure maintenance strategy and aligns with CRWD's 2021–2030 Watershed Management Plan. The agreement outlines CRWD's provision of 100% reimbursement (not to exceed \$10,000) for eligible construction expenses related to this improvement. The grant also requires the City to maintain the project for a 10-year effective life and permits annual inspections and limited public access for educational purposes. Staff recommends the City Council authorize the City Administrator to execute the grant agreement with CRWD and accept the grant award to advance water quality improvements in Falcon Heights.
Budget Impact	There is no net cost to the City. The CRWD grant will fully reimburse eligible construction costs up to \$10,000. Any ineligible or excess costs beyond the grant amount will be covered through the city's stormwater utility fund.
Attachment(s)	<ul> <li>CRWD Stewardship Grant Agreement – Falcon Woods OCS</li> <li>Resolution 25-33 Authorizing Participation in CRWD Stewardship Grant Program</li> </ul>
Action(s) Requested	Motion to approve Resolution 25-33, authorizing the City Administrator to execute the Capitol Region Watershed District Stewardship Grant Agreement and accept the \$10,000 grant for the Falcon Woods Outlet Control Structure project.

Families,	Fields	and	Fair



# STEWARDSHIP GRANT PROGRAM AGREEMENT

Clean Water Project Grants - Maintenance Grants

		ment is made and entered into on 4/7/2025  District (CRWD) and City of Falcon Heights	between Capitol Region (GRANTEE)
for Fal	lcon Wood	ds Outlet Control Structure (OCS) / Prior Avenue to Garden Avenue, Falcon Heights, MN	
The Pefforts	ROJE s of the rants f	ECT defined within this agreement directly supports wanter CRWD Stewardship Grant Program. CRWD provides for property owners within its watershed boundaries as Management Plan.	ter resource protection and education technical assistance, design services
There	fore, i	it is hereby mutually agreed that:	
1)	PRO	OJECT:	Vita.
		e PROJECT must be installed in accordance with the te the CRWD approved plans attached and incorporated i	
2)	GR	RANT AMOUNT(S):	
	a)	Construction <b>Grant: CRW</b> D agrees to <b>rei</b> mburse 100 associated with construction of items identified in E	
	b)	Construction grant expires 2 years from the	ast signature date of this Agreement.
	c)	Maintenance Grant: Some projects may be eligible, a reimbursement of annual maintenance cost for the defined in OPERATION AND MAINTENANCE belowith CRWD Maintenance Grant Guidelines and Poligrant Grant E's eligibility for reimbursement of annual indicated below.	luration of the Effective Life as w. If eligible, GRANTEE must comply cies as identified in <b>Exhibit B</b> . The
		GRANTEE is not eligible	
		GRANTEE is eligible for 50% not to exceed \$2,0	00 annually
		GRANTEE is eligible for 75% not to exceed \$2,0	00 annually
3)	PAY	YMENT:	
	a)	Some projects may be eligible, as determined by CR grant amount to be paid prior to the completion of t deemed an advance on the grant amount and is subj	he GRANTEE's obligations. This is

RETURN OR REFUND OF GRANT FUNDS below. Payment does not indicate approval of

the reimbursable expenses of the PROJECT. If eligible, the amount indicated below is approved to be paid upon signing of this Agreement. GRANTEE is not eligible GRANTEE is eligible for a grant advance of \$ 0.00 Up to \$10,000.00 will be reimbursed at final completion of the **PROJECT**. Final b) completion occurs when the construction of the PROJECT has ended and CRWD staff have approved the PROJECT. In no event may the amount of reimbursement in Section 3(b) and the advance payment of Section 3(a) exceed the amount provided in Section 2. If eligible for a Maintenance Grant, one request for reimbursement of maintenance costs c) shall be submitted by December 1st of each year. d) All other costs incurred by GRANTEE in connection with performance of GRANTEE'S obligations under this Agreement will be the responsibility of GRANTEE. Expenses incurred prior to CRWD's signature date are not eligible for reimbursement. **OPERATIONS AND MAINTENANCE:** The GRANTEE shall ensure the PROJECT identified in Exhibit A is fully functional and adequately maintained for a period of 10 years (Effective Life) after CRWD approval of final completed PROJECT, This includes permanent signage if required as indicated in Section 11(a). The PROJECT shall be maintained according to the Operations and Maintenance Plan(s) attached and incorporated into this agreement as Exhibit B. Should the GRANTEE fail to maintain the PROJECT during the Effective Life, the GRANTEE may be liable to CRWD for up to one hundred percent (100%) of the Construction Grant of the PROJECT. The GRANTEE will not be held liable if failure of the PROJECT was caused by reasons beyond their control, as determined by CRWD, or the GRANTEE provides equivalent water quality benefit through other means at their own expense. For projects awarded over \$20,000.00 of grant funding and eligible for maintenance grants, CRWD may require GRANTEE to hire a qualified maintenance contractor for the first 3 years after final completion of the PROJECT. Contracted maintenance should include tasks and frequencies identified in the Operation and Maintenance Plan (Exhibit B). Contracted maintenance expenses are the responsibility of the GRANTEE and may be eligible for reimbursement through the Maintenance Grant program. CRWD reserves the right to require additional terms of contracted maintenance if the initial 3-year term is not completed in accordance with the Operation and Maintenance Plan. GRANTEE is not required to hire a maintenance contractor GRANTEE is required to hire a maintenance contractor

## 5) ACCESS:

4)

The GRANTEE will allow CRWD, after prior notice, access to the PROJECT for annual inspections. The GRANTEE will also allow members of the public, while in the company of a CRWD staff representative and after prior notice, periodic access to the property to view the

PROJECT. This does not create any right of public entry onto the PROJECT property except as coordinated and permitted with the GRANTEE's prior notice.

#### PERMITS: 6)

The GRANTEE is responsible for securing and complying with all permits and/or other legal requirements applicable to the work.

#### POLICIES: 7)

The GRANTEE must comply with CRWD Grant Policies effective as of the date of this Agreement, which were provided to the GRANTEE during the PROJECT planning and design process. CRWD reserves the right to refuse disbursement of funds for the PROJECT if it is not completed in accordance with CRWD policies or the terms of this executed Stewardship Grant Agreement.

#### LIABILITY: 8)

The GRANTEE agrees to defend, indemnify, and hold harmless CRWD against any and all claims, liability, loss, damage, or expense arising under the provisions of this Agreement, whether by the parties or by their agents, employees or contractors. Neither the CRWD, or the GRANTEE, if applicable, waive any immunities provided by any law or doctrine, including those of Minnesota Statutes Chapter 466. Nothing herein shall be construed to allow a claimant to obtain separate judgments or separate liability limits from the individual parties.

#### CRWD/GRANTEE RELATIONSHIP: 9)

GRANTEE acknowledges and agrees that GRANTEE is not an employee of the CRWD, and is not entitled to any rights, privileges, or benefits provided by CRWD to its employees. GRANTEE is not a contractor of goods or services to CRWD. This agreement does not establish a joint powers agreement or joint partnership between the GRANTEE and CRWD.

#### MODIFICATION: 10)

It is understood and agreed by the parties hereto that this agreement shall not be modified or amended except in writing duly signed by each of the parties.

#### PROJECT PROMOTION: 11)

The GRANTEE agrees to list the CRWD as a project partner on all public promotional materials, including but not limited to educational signage, written materials, and websites. The signage requirements for this PROJECT is indicated below:

gnage requir	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·ho
PROTEC	ill be permitted to place reasonable, non-permanent signage on t T property informing the public about the PROJECT and the CR' ship Grant Program at no cost to the GRANTEE.	WD
GRANT:	EE is required to install permanent, educational signage on the P. CRWD approval of sign content and location must be obtained EE prior to fabrication and installation. CRWD may provide fund abrication, and installation. If applicable, additional grant funding	ling for sign

support signage is included in the Construction Grant award in Section 2a and will be itemized in **Exhibit A**.

#### 12) ACCESS AND RETENTION RECORDS:

GRANTEE acknowledges that records related to this grant may be governed by Minnesota Statutes and Rules.

#### 13) CANCELLATION:

- a) CRWD may cancel this Grant Agreement for just cause. Just cause means that the GRANTEE is not disbursing funds in accordance with established procedures, policies or has otherwise breached a term of this Agreement. The GRANTEE will be given written or electronic notice fourteen (14) calendar days prior to cancellation. The cancellation shall be effective on the beginning of the 15th day after such notice is delivered unless an agreement is reached within such fourteen (14) day period and CRWD allows an extension or withdrawal of the cancellation in writing.
- b) In the event of cancellation by CRWD, the GRANTEE will only be entitled to payment of reimbursable expenses for the portion of work completed that provides measurable water quality benefits, as determined by CRWD. If CRWD cancels this grant agreement for just cause, the GRANTEE may not be eligible for reimbursement of expenses that were approved in its application, due to the failure of the PROJECT to provide tangible water quality benefits.
- c) In the event of cancellation by GRANTEE, the GRANTEE will only be entitled to payment of reimbursable expenses for the portion of work completed that provides measurable water quality benefits, as determined by CRWD. Expenses related to incomplete elements may not be eligible for payment if the related element doesn't provide water quality benefits.
- d) If title to this land is transferred to another party before expiration of the effective life, it shall be the responsibility of the GRANTEE to advise CRWD before the sale or transfer of property containing the PROJECT. The GRANTEE will inform the new property owner of the presence and the maintenance responsibilities of the PROJECT.

#### 14) RETURN OR REFUND OF GRANT FUNDS:

In the event that the PROJECT is abandoned, cancelled or eligible reimbursable expenses do not total the amount paid to GRANTEE, the portion of ineligible grant funds must be returned to CRWD within thirty (30) calendar days.

#### 15) **TERMINATION** AND SURVIVABILITY:

This agreement shall remain in full force and effect until  $\frac{4/7/2027}{}$ , unless earlier terminated by mutual agreement of the GRANTEE and CRWD. Those portions that must survive to attribute meaning to them, shall continue after expiration. However, the obligation to reimburse for expenses under the grant shall terminate upon expiration of the agreement.

#### 16) DIVERSITY AND INCLUSION:

In performing the work that is subject to this agreement, the GRANTEE will ensure that no person is excluded from full employment rights, or participation in, or benefits of any program, service, or activity on the basis of race, color, creed, religion, age, sex, disability, marital status, sexual orientation, public assistance status, or national origin, and that no person protected by applicable federal or state laws, rules, or regulations against discrimination is subject to discrimination.

GRANTEE	CAPITOL REGION WATERSHED DISTRICT
By	Ву
Name Jack Linehan	Anna Eleria District Administrator
Title City Aministrator	The state of the s
Date	Date
A Control of the Cont	
The Administration of the Control of	All the second s
A STATE OF THE PARTY OF THE PAR	

# EXHIBIT A – Plans



# **EXHIBITA**

## **Project Funding Summary and Project Designs**

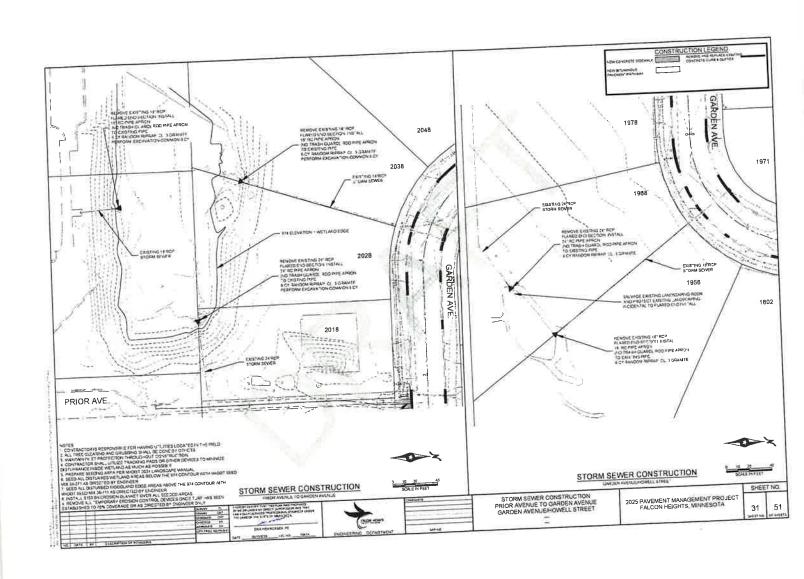
The following serves as a scope for Capitol Region Watershed District's (CRWD) Clean Water Project Grant Award for the Falcon Woods Outlet Control Structure (OCS) Project. This exhibit will be incorporated into a grant agreement that shall be executed prior to the initiation of any grant eligible activities. All project elements must be approved by CRWD staff before construction and verified as completed by CRWD staff in order to be eligible for reimbursement.

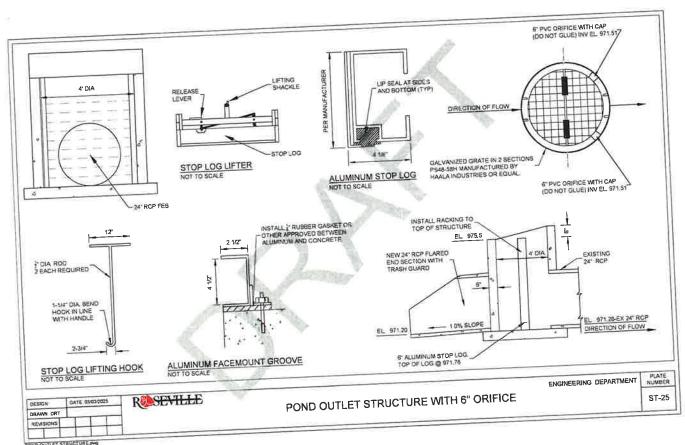
## **Grant Requirements**

Grant reimbursements will only be made for documented eligible expenses imperative to the implementation of the Project identified in the grant agreement. The project elements and maximum grant award specific to each element are identified in the Project Funding Summary table.

OTHER REQUIREMENTS / NOTES	
None.	
Project Funding Summary	
CLEAN WATER PROJECT ELEMENTS	CRWD MAXIMUM GRANT AWARD
Falcon Woods Outlet Control Structure (OCS)	\$ 10,000.00
Permanent sign design, <b>fabri</b> cation, and installation (if required) †	\$ 0.00
Clean Water Projects Sub-Total CRWD Grant Award	\$ 10,000.00
Signage Sub-Total CRWD Grant Award	\$ 0.00
TOTAL MAXIMUM CRWD GRANT AWARD	100%, not to exceed \$10,000.00
†Condition: If permanent signage is required, CRWD approval of sign condition by the grantee prior to fabrication and installation.	ontent and location must be

**Project Designs: See Attached** 





PONO OUTLET STRUCTURE PM

# EXHIBIT B – Operations & Maintenance Plan



# Small Stormwater Pond Maintenance Plan

The following serves as a general inspection and maintenance plan for small stormwater pond systems and can be applied to wet or dry ponds. This plan may not apply to all projects, and actual inspection and maintenance activities may vary based on site conditions and designs.

## **Inspection and Maintenance**

- Ensure the proper water level and ponding depth in the main pond area is maintained and remove sediment from pond area as needed.
- Remove accumulated trash and debris from the project area.
- Manage existing vegetation and monitor and fix any erosion.
- Inspect inlet structures and overflow structures annually and/or after large rain events
  for accumulated sediment and debris. Clean these areas as needed to ensure the proper
  flow of water into and out of the pond.
- Inspect for and repair broken inlets, pipes, and/or control structures.
- Ensure weir is clear and properly holding back water.
- During winter freeze periods, inspect pond area, inlets, and overflow structures for signs of improper operation.

### CITY OF FALCON HEIGHTS COUNCIL RESOLUTION

April 9, 2025

No. 25-33

### RESOLUTION AUTHORIZING THE CITY TO ENTER INTO A GRANT AGREEMENT WITH THE CAPITOL REGION WATERSHED DISTRICT TO ACCEPT FUNDS FOR THE FALCON WOODS OUTLET CONTROL STRUCTURE PROJECT

WHEREAS, the Capitol Region Watershed District (CRWD) offers Stewardship Grants to support projects that protect and improve water resources within its boundaries; and

WHEREAS, Minnesota Statutes Section 465.03 requires that all gifts and donations of real or personal property be accepted only with the adoption of a resolution of the governing body; and

WHEREAS, the CRWD has awarded the City of Falcon Heights a grant of up to \$10,000 for the Falcon Woods Outlet Control Structure (OCS) project located between Prior Avenue and Garden Avenue in Falcon Heights; and

WHEREAS, the grant supports the implementation of stormwater infrastructure improvements and aligns with the City's goals for long-term water quality and sustainability; and

WHEREAS, the City of Falcon Heights will be responsible for the installation and ongoing maintenance of the project for a period of ten (10) years, in accordance with the terms of the CRWD grant agreement;

**NOW THEREFORE BE IT RESOLVED** by the City Council of the City of Falcon Heights, Minnesota, that the grant award of \$10,000 from the Capitol Region Watershed District is hereby accepted; and

**BE IT FURTHER RESOLVED** that the City Council authorizes the City Administrator to execute the CRWD Stewardship Grant Program Agreement for the Falcon Woods OCS project and to undertake all necessary administrative actions to implement the terms of the grant.

and to undertain	c un recommy	
ADOPTED by	the Falcon Heights City Co	uncil this 9h day of April, 2025.
Moved by:	Wassenberg	Approved by:  Randall C. Gustafson  Mayor
GUSTAFSON MEYER	5 In Favor	Attested by:  Jack Linehan

LEEHY WASSENBERG MIELKE



City Administrator

### **BLANK PAGE**



### REQUEST FOR COUNCIL ACTION

Meeting Date	April 9, 2025
Agenda Item	Policy H1
Attachment	Bid Tabulation, Resolution 25-34
Submitted By	Erik Henricksen, City Engineer

Item	Award Contract for the Falcon Heights 2025 Pav FH 25-01.	vement Management Project,
Description	On February 26, 2025, the City Council approve for the 2025 Pavement Management Project (PM for bids. The following neighborhoods and street PMP for pavement rehabilitation and minor util Falcon Woods Neighborhood: Autumn St, Prior Howell St N and Garden Ave  Northome Neighborhood: California Ave W, Identify the St on Thursday, March 20, 2025. Seven qualified bis summary is below and the full abstract is included.	IP) and ordered advertisement ets are included in the 2025 ity work:  r Ave N, Summer St, Moore St, laho Ave W, and Iowa Ave W. the bids received were opened ds were received. The bid
	Country	Base Bid
	Contractor  Riturningus Readuunus Inc	\$ 1,236,579.00
	Bituminous Roadways, Inc.  Park Construction Company	\$ 1,268,706.61
	North Valley Inc.	\$ 1,294,855.30
	Northwest Asphalt, Inc.	\$ 1,323,358.84
	OMG Midwest Inc. dba Minnesota Paving & Materials	\$ 1,329,870.21
	Valley Paving Inc.	\$ 1,367,048.91
	GMH Asphalt Corporation	\$ 1,384,415.46
	Engineer's Estimate	\$ 1,521,388.00
	Staff has reviewed the bid submittals and recomawarded to the lowest responsible bidder, Bitun	
Budget Impact	The low base bid submitted by Bituminous Road was 18.7% lower than the Engineer's construction \$1,521,388.00.	-

This project has the following financial implications for the city and property owners along the streets being considered for construction:

- Assessments levied in accordance with the City's assessment policy.
- Use of Municipal State Aid (MSA) and street infrastructure funds to pay the City's portion of the project. Expenditure of utility fund dollars to pay for repairs needed to the existing utility system.

The following table shows the proposed funding breakdown for the project:

he follo	wing table sn		Street Fund	Assessment**	Utility Funds
	Project Cost	MSA			
Streets*	\$1,154,133.50	\$369,035.27	\$369,035.27	\$416,062.96	\$57,857.00
Sanitary	\$57,857.00		1=		\$101,988.50
Storm	\$101,988.50				\$18,600.00
Water	\$18,600.00			4445.052.05	
Total	\$1,332,579	\$369,035.27	\$369,035.27	\$416,062.96	3170,445.50

<sup>\*</sup>Includes estimated engineering costs

A portion of the costs for the project are proposed to be assessed. Based on the bids, assessments will be less than the feasibility report: 35.5% lower in the Northome Neighborhood and 34.9% lower in the Falcon Woods neighborhood. The city saw a competitive bidding environment which can be seen from the bid abstract where between all seven contractors the lowest and highest bid were within a 10% difference. The final assessment rate will be calculated based on actual costs.

This project is proposed to be completed by August 15, 2025 before the State Fair begins in the Northome Neighborhood, and October 1, 2025 in the Falcon Woods neighborhood. Final assessment amounts would be determined following an assessment hearing in the fall of 2025 and a review of the project costs and proposed assessments by the City Council. The property owners can either pay the assessments in part or in full in November 2025 or have them added to their property taxes with an interest rate to be set by the City Council. The first installment of the assessment would be due in the spring of 2026.

### Attachment(s)

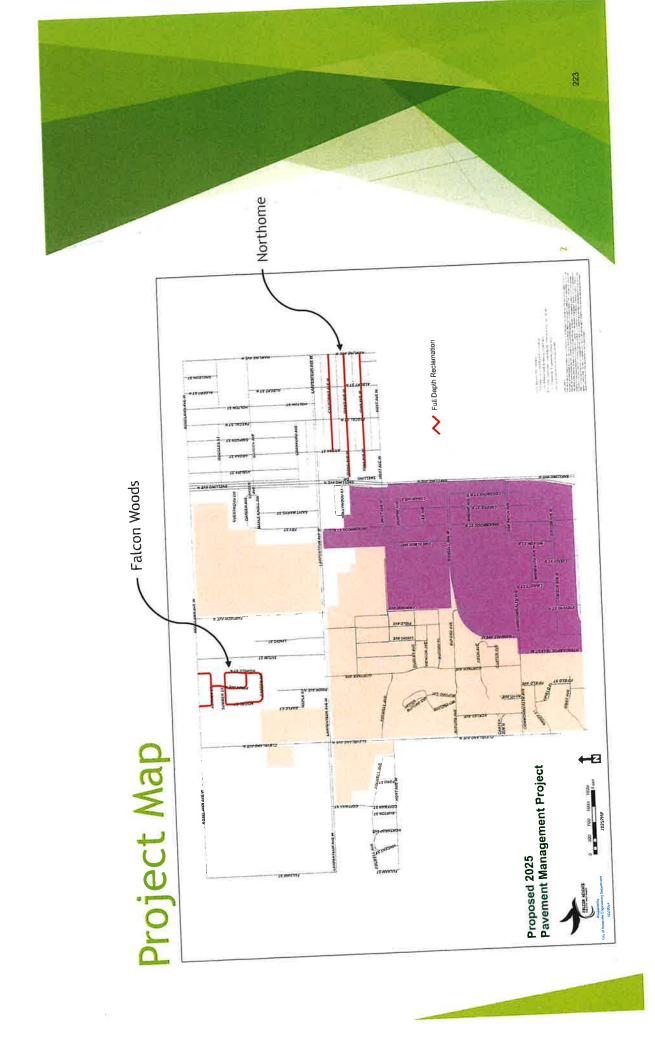
- **Bid Tabulation**
- Resolution 25-34

### Action(s) Requested

Award Contract for the 2025 Pavement Management Project (25-01) to Bituminous Roadways, Inc. in the amount of \$1,236,579.00.

<sup>\*\*</sup>Curtis Field improvements not included in assessable costs

## Management Project (PMP) 2025 Pavement





U	7
C	)
ά	1

		Diff. from	
	Base Bid	Low	
ontractor	A 4 226 EZB 00	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Bituminous Roadways, Inc.	\$ 1,236,377.00		
Vacamo	\$ 1,268,706.61	2.5%	
Park Construction Company	\$ 1 294.855.30	4.5%	
North Valley Inc.			
Morthwest Asphalt, Inc.	\$ 1,323,358.84	%9.9	
1,329,870.21	\$ 1,329,870.21	7.0%	
OMG Midwest Inc. aba ministra	c 1 367 048 91	9.5%	
Valley Paving Inc.	לייטרי, יסריו ל		
	\$ 1,384,415.46	10.7%	
GMH Asphalt Corporation	\$ 1,521,388.00	19%	
Engineer's Estimate			

\*Lowest Responsible Bidder

# Bituminous Roadways ("BR")

- Paving and underground utility contractor in the metro area for more than 75 years
- Operates three asphalt plants (Columbus, Shakopee, Inver Grove Heights)
- Completed similar projects including:
- City of Edina \$7.3M Roadway Construction
- City of Shakopee \$3.8M M&O and Rehabilitation
- City of Bloomington \$5.1M PMP Project
- ► City of St. Paul \$1.9M M&O
- Carver County \$4.5M Highway Resurfacing



### VARDS

- · Trimble Construction Innovation Awards 2024
- B2W Software Customer Innovation Award 2024
- MAPA Quality Parking Lot Award 2024
  - MAPA Paving Award 2024
- MAPA Parking Lot Paving Excellence Awards 2023
- Minnesota Governor's Workplace Safety Award 2023
- CHASE Safety Award since 2004
- LECET Safety Driven Award of Excellence since 2007



# Assessments - Updated Estimates

# Falcon Woods - Assessment Roll (Feasibility / Bid)

- 90 Parcels
- Estimated Cost = \$870,000 / \$565,000
- Assessable Amount = \$348,000 / **\$225,000**
- Assessment/Parcel = \$3,850 / \$2,500

## Northome- Assessment Roll (Feasibility / Bid)

- 181 Parcels
- ► Total Frontage = 11991 feet (2,239 non-assessable)
- Estimated Assessment Rate = \$30.53/ft / **\$19.68/ft**
- Average Residential Assessment = \$1,635.00 / \$1,050
- Approximate Residential Range = \$1,525 to \$2,750 / \$985 to \$1,900

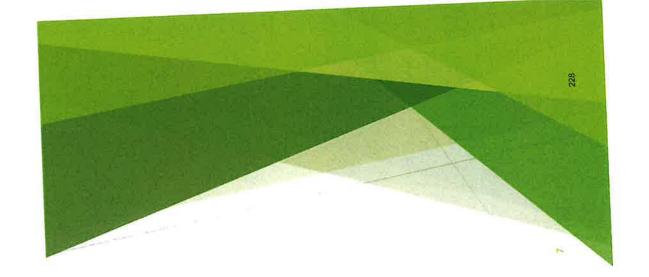


## Project Timeline\*

Council actions are denoted with "CC" and will take place at a public

- April 9, 2025 CC Accept Bids and Award Contract
- April 23, 2025 Preconstruction Meeting
- April, 2025 Construction Newsletter (schedule, construction activities, key personnel, coordination, restoration, etc.)
- March 2025 Begin Construction
- Fall 2025 Final Completion (August 15 Northome, October 1 Falcon Woods)
- October 2025 CC Final Assessment Hearing
- Spring 2026 Final Restoration (as-needed) and Punchlist

\*Please note, this schedule is subject to change



## Requested Council Actions

Staff recommends City Council:

> Award Contract for the 2025 Pavement Management Project (25-01) to Bituminous Roadways, Inc. in the amount of \$1,236,579.00.

			37.707.7023						COURT HOS	Barrer		Perc	100		3	000 NWS 000	544.600.60	\$54,000.00	\$57,334.00	2	1	00 000 005 000 000 005
							HECO ESTIMATE	Price	5.000.00	9,000.00		584,000.00		43.052 NB	-	54,500,00	\$1,550,16	И.	5568.25		11	924.00
			Noumbe	DESCRIPTION		1 170.1		3,000,00	\$350.00	1,250.00		\$1,305,00 61 fells 00		\$1.951.60	-	\$3,460.00	5544.00	1	\$164.25	П		25.00
				1		7		4,800.00	1250.00	2 200 00		\$2,350.60		55,790.47	113	45,750.00	1198.98		\$164.25	1	1	8 92
	The proposed continue of the						-	00 000 0	\$100,00 681.06	11.853.00		42,369.00		400.00	1	\$750.00	\$0,72	1	PA.10	1		\$5.70.00
The contribution of the	The control of the	The control of the					-	000000	\$5.00	\$750.00	25.05	\$757.50		\$223.00		\$500.00	25.63	1	05.00	\$1,360.00		\$339.20
The control of the	The proposed management of the control of the con						-	6900 00	\$2.00	2600.00	\$1.60	and the same		\$343.04	_	\$1,696.00	\$17.50			\$520.00	1	163.75
The control of the	The control of contr			2104 503 SAWING CONCINCTON OF THE OFFICE	7			11 584 00	\$15.00	\$480.00	00.014	247A.00		\$1,306.75	-4	\$255.00	20000	L		\$2,135.00		974.00
The control of the	The control of the	The control of the		2102 SOSSAMMON BILL STORES	1	1		\$250.00	\$25.00	\$625.00	200	\$1 736.00		51,351,00	-44	\$3,414.60				\$1,776.00		2/04/02
			1		1			\$3,000.00	\$15.00	27,100.00	611 10	\$2 62.8.00		\$1,579.70	-4-	17 424 BO				561 851 00	"	00000
	No. 10.   No.				1			\$3,840.00	\$10.00	22,400,00	02.00	150 350 00		\$38,464.00	\$11.10	350,030,050	19 295		\$33.75	34,387.50	Т	000000
			1		1			42,400.00	17.00	37,100.00	636.60			\$7,567.4D	\$63.42	20 0000	14.57		\$20.05	53,035,00	11	2 000 00
			1		1			94550.50	\$25.00	23,250.20	620.40			24,308.00	303.47	CA 196 AC	\$1.00		\$14.72	11,472.00	1	00 050 0
		This interface of the control of t	1		1			\$4,500.00	25580	22 300 00	09.053			\$3.137.00	2000	6000000	\$1.00		\$199.60	\$9,980.00	Ш	800,000
					1		\$45.D0	\$4,500.00	\$20.00	22,000,00	\$172.00		\$91.15	24,557.30	250000	41 740 00	\$100		\$45.28	\$452.80	Т	11 400.00
			1					38,750,00	\$150.00	200000	6269 00		\$58.10	\$500.00	21/300	57 689 03	545.43	\$3,386.10	10.05	0.70	15	13 005 00
	Statistic Continue		1		1			\$550.00	\$50.00	200000	\$25.60		\$42.89	\$3,002.30	2	KKN 976 00	54.40	5148,780,00	\$2.31	377,847.00		635.80
The proposed propos	The control of the		1		1		\$100.00	\$7,000.00	8	200000			\$150	53,746.00	2000	444,445.30	10:05	\$35.80	\$11.90	\$42,781,02	100 000	C 100 CO
			1		+		\$3.50	117,950.00	22.00	00 000 000			\$19.40	259,452.00	2000	CO 1841 CO	340.00	\$1,000.00	224.64	22.401.00	64.30	\$570.00
					t		\$13.00	\$52,700.00	200	2000000			\$35.30	\$3,539.00	20.00	1	51.84	\$184.00	28.50	200000	1	TA 306.00
			1	ea.v.	+		245.00	\$4,000.00	\$40.00	Tar Charles			\$13.40	\$1,340.00	200	1.	55.35	53,408.40	26.32	23,000,00	200	4.0 700 00
			2		1		10.00	\$650.00	\$10.00	21,000.00			58.33	\$4,831.40	20.00	1	\$2.10	53,654,00		\$3,340,80	200	CAGINO
Provision   Pro	Particular   Par	Particular   Par	12		1		415.00	\$9,280.00	\$3.00	21,740,00			\$3.30	\$5,742,00	250		C) 1163	16,470.80		\$7,308.00	Ш	
Particularies   Particularie			22		+		5 63	\$7.610.00	\$1,00	\$1,740,00				\$5,204.00	\$117.74		00.000	1284 600 00		\$300,192.00	4	
Particularies presentation   1	Particular   Par	Particul	12	THE STREET STREET STREET STREET	+		02.00.0	\$4,600.00	\$105.00	\$4,200.00	MAT/18	4177 476 00	\$87.31	\$279,797.00	\$10.00		200 000	4306.720.00		\$326,869.80	4	111.400
Participa   Part		Particular   Par	75	BILLINGS CONTRACTOR STREET STREET (2.11)	4		20100	1251,200.00	\$87.50	2760,000,000	200	C 210 W. C C	\$69.44	\$255,614.40	\$70.74	2759 217 40	44.01	533.817.50	55.20	-	\$4.75	2.0.02
			25	TO THE WOOD OF THE PARTIES IN CT.	4		40.000	8370 620 00	\$71.50	\$304,390.00	3/3/10	47.00.100	35.35	\$36,160.00	\$5.00	_	21.013.02	55 061 91	\$1,420.00		\$106.00	2318
			75	THE STATE OF THE PARTIES CAN BE CAN B	1		200.00	630 375 003		\$20,250,00	20.00	7	41 162 06	\$4,506.18	\$1,465.00	Ш	21,434.0	C0 NV0 V3	03 163 50	U	\$2,645.00	25,790
			23	TVE DE LEGINALITY		1	1	63 676 63		\$4.950.00	21 290 00	н	25 685 75	\$5.361.52	\$1,665.00		100	20 204 64	5114.50	١.,	\$106.00	\$1,000
			33	WWAND BLAL ANTH	100	0	200000	40,000,00		\$3,700.00	22,500.00	-14	610733	\$1,715.68	\$135.00	\$2,160,00	BIOOTE	AN ARK NA	\$129.00		\$116.00	\$1,850
			29	18 RC FIFE APPLICA	ACH.	1	23,000,00	04 404 FE		\$2,000.00	\$103.50	ч	4117.04	\$1,867.20	\$150.00	Ш	2122.58	0.000.00	10.00		\$899.00	\$3,550
Particular Contain Column   Viv.   A 1 mage   A 1 mag	Particularie Control Column   Vi    Alice	National Procession   1	R	2501.502 24"WC PIPE APPOIN	-	1	20.00	100 mm		\$2,240.00	\$113.00	ı	5011	13 615 84	\$1,118.00		Signatus	١	43 209 00	П	\$1,905.00	52,610.
		Particul P	31	2503 503 18 AC FIVE SEWER CLASS III	-	16	20,500	21.400.00		\$5,000.00	\$372.00		2000	NA 162.48	\$1,000.00		\$2,507.38	1	COLE DO	L	31,323.00	\$3.568
		Particularization of the particularization o	37	The Control of the Co	NON	*	\$1 100 00	24,000,00		19,000.00	\$1,610.00	1	27.007.64		00 005\$			1	000000	П	\$476.00	\$13,504
Particular   Par			23	MSIWIN	1OTS	2	\$950.00	31.600.00	4.	13,250.00	\$482.00		75000		10.05				200	T	\$1,561,00	\$4,683
Particul P		Particul	77	NSPECTION HOLE	YACH	0	\$500.00	\$1,500.00	Ц.	49 700 60	\$165.00		\$187.60		61 000 00	ь		16.504.11	200	1	\$215.00	\$6,235
Particular Particula	Particul P		36		FACH	122	\$350.00	\$10,150,00	и.	619 000 00	\$148.00	Ш	\$1.255.30		4813.75	523 528 75		22	NAME OF THE PARTY	1	\$275.00	\$540.00
Special Control of the contr	System         System<		×		FACH	n	\$700.00	\$2,100.00	u	EN 700 00	\$373.00	210	20170	ā	6969 00	\$500.00			1	1	\$375.00	\$18,750
			11		FACH	9.	1450.00	\$13,050,00	1	1			12/521	F	601000	\$10,500.00			1	1	\$588.00	\$5.50
		Second control contr	80		FAG1	2	\$300.00	200,000	١	3.			\$46 09	-11	\$650.00	\$5,200.00			1	1	\$794.00	\$15,860
596.000/1000/1000/1000/1000/1000/1000/1000			2		EACH	8	8700.00	\$33,000.00	1	b.			2007.00	Т	£1 300 00	\$76,000.00		4	1	1	\$465.00	\$10.050
	5500000000000000000000000000000000000	5500000000000000000000000000000000000	40		-	32	\$700.00	\$5,600.00	1	1			\$104.23	1	4603 %	1					\$715.00	\$2,86
State   Stat			117	SAME SCOLONSTRUCT DRAINING STRUCTURE DESIGN SPOOM.	31	20	\$850.00	\$17,000.00	1	ъ.			\$370 18	Н	t total	3			1		000000	\$6.50
	1985   1985		1		CACH	23	\$055.00	\$14,950.00	П	и.				-1	as only the	1.			1	1	4215.00	\$7.150.00
2.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0		Page angle page and	1		10,000	*	\$750.00	\$3,000.00	1					1	2000	78		-			4376.00	\$1.87
	State   Stat		1		1	13	2600.00	\$7,800 00	1	- 1		L		٦		1		H		-+	1	27.73
			5		1	0.	\$750.00	\$7346.00	1	- 1	1			1	2000					\$9,091.50	1	
	Part	Part	9		LACH	2	5460 00	\$2,300.00				+-		22	20013	- 1		5436.00		\$107500		
			9		EACH	-	THE PARTY	17 350.00		\$4,350,00	1		١		77			CO. GAD 40		\$8,250.00	П	33.0
	Strain   S		17		EACH	0	100.00	Cena Da		\$200.00			1			- 1		43 948 00		\$5,354.00	1	25.4
			9		SY	1001	1	46 000 60		54,700.00		24,940,00		-		24.950.00	1	700.00		56,957.00	ı	19.
State   Stat	Structure   Stru	State   Stat	49		CY	99	2210.00	00 000 000		\$5,400.00		No paragraph	1		M	10 \$8,710.00		200000000000000000000000000000000000000		\$110,630.00		\$112,6
State   Stat	5	State   Stat	×	25:11 BOY MANDER RIPRAY CLASS III STORY	SF	600	0000	A 244 A 244	1	\$9,100.00		20 910,012.0				70 \$106,190.00	1	1		\$49,280.40		1,00,1
CONCRETE COMMANIANCE   1   1,550   1,570   1	CONCRETE COMPANION   1	1	21	521 STRICOGGO 4" CONCHETE WAR	3.5	689	124.00	13,000,00	l	2111,000.00		70 \$113,550 CA	1		l	50 \$49,248.00	1	Non-tur-		53 344.80		275
\$251400    CONCRITE COUNTRY LEAVE AND COLUMN LEAVE CONCRITE COUNTRY NATIONAL AND COLUMN LEAVE CONCRITE COUNTRY NATIONAL LEAVE COUNTRY NAT	13.5149   CONCRETE COMPANDE   11   12   13   13   13   13   13   13	2511400(CONCHIET COUNTY NEW YORK WAY MAY WE NEW YORK WAY	55	2521 Stuffer CONCRETE WALK	17	3,700	80903	2136 200 10	1	568 650 00		60 149,572.0	1		l	55 \$4,106.00	١	1	1	41,46.00		**
STATE   STAT	1		5	2431 S03/CONCRETE CURB AND GUITERI DESIGN BRITE	1	1.620	\$35.00	\$56,700.00	1	60,000,00		10 53,724.04			١	35 4175.0			1	2000		51
231.000    CONCRET EQUIVALUE   1	State   Control   Contro	23.1.000 CONCRET DEMININAR MEMBERS 15 1 100 15.000 15.000 15.000 15.00 15.000 15.00	2 3	ACT CONCRETE CURE AND GUTTER DESIGN DATE	2	09	\$110.00	\$4,400.00	1		23	00 \$100.0						П		1	4126.00	213
Control Cont	7531500   1940	STATE   Control   Contro	1	THE PROPERTY DRIVENAY PAVILMENT	1	1001	\$6.00	\$600.00	4	1	75	10 3164.0.	П		1			Ш	1	1	955	П
STATES   S	STATE   STAT	STATE   STAT	2	CONTROLLED TO SUS HIGH FARLY CONCRETE CURB AND GUTTER	-	100	126.00	\$1,000.00		1	5063	000000		51,83160			1	U	ú	1	200 200	1
Transfer Confering	State   Condition   State		8	COLUMN TAVENTAL TOR VIOLE FARLY CONCRETE 6" DRIVEWAY PAVENEM!	1	1	6104.00	\$1,050.00		1	.,,	AN 61 613 D		W 42,127,34		00	l	П		-1	100	
2-33 and munication controls		1	25		2	2	463 00	\$1 HB4 00				2007 13 13 13 13 13 13 13 13 13 13 13 13 13		N 51,930.70			1	U		*	\$159.00	4
1	1	1	3		-		00 600	GD GBG C3				T		1		00 \$12,7504		L			\$177.50	ч.
255.00 SIGNALLI PROCESSION STATE CONTROL SIFETIMENT CONTROL SITE SITE SITE SITE SITE SITE SITE SITE	2-20 GMMLL 18POUNTMAL LOCATION TO THE TOTAL TO THE TOTAL THE POUNTMAL STATE THE POUNTMAL STATE THE POUNTMAL STATE THE POUNTMAL LIPE THE TOTAL THE POUNTMAL STATE THE	255.01 GENERAL UNIVERSITY CONTROL 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S		35		200	43 234 00	l		1	1	L			200 1029	1	1				7
2.5.010   2.5.	25450 QUESTI INFOCUMENT LEPOLATIVITY REPOLICATION TO THE PRODUCT TATABLE STATES AND THE PRODU	2540 00) MINISTRUMENT CONTROL 1 1 20,000 0 10,00	99	Ш	EACH		2000	100 000 100	1			1		1		1000	1	1		L		.1
25210010HINHECONITION, SPERWARDAR 1, 15 1 200,0000 20 15,0000 15,	242010   District (1000 Continuous Continuou	2521400 HANG STANDON CONTINUE STANDON CO	10		It F	n	250.00	the man over				1		Н		10055 001		1				ä
1   1   1   1   1   1   1   1   1   1	264.04 (CONTING). 1,5 1 1,550.00 1,5 1 1,500.00 1,5 1 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1	3	65		51	-	\$20,000,00	000000000000000000000000000000000000000	1	L			1	1		100 24,903	1	1		н	500	ч
257.5(6)(6)(6)(6)(6)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)	2523.59()   10   10   10   10   10   10   10   1	2573.09(20000)COVIND, SUFFRINGON (ACC) 13.20 (2.500.00 13.20 (	13	2563 601	1.5		13,500 00	23,000		1			1	1		500 5300		1		U		
757.25(Milkel 100HIRD) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	557.502/MLT PODICIONALMY & 5450 550.00 5450 550.00	257.260/METEROPORTIC NUMBER CONTROL CO	100		EACH		\$223.00	510,300 per	1	Г		- 1	-	1		3.00 \$43.200		1	1	1	+	ш
7473 4021 5020 5020 1914 CDAPROL 105 191	27. 200 540 150 150 150 150 150 150 150 150 150 15	25/3 500 10/9 EXPRESS CONTROLLOS THY COMPOST SY 3,000 15/16/00 10/9 10/9 10/9 10/9 10/9 10/9 10/9 1	1		-	L	288	2200.00	1	П			1	1		_				J.		
100 Maria Co. 10	12 TO 100 12 TO 100 100 100 100 100 100 100 100 100 10	255-5440 (1980 CBH (241 WHISH FINDINGSELD SY 2000 SI 200 S	1		1	3,600	\$4.00	\$26,600,00	1	1		1				4.	1					

358 84	\$1.32		\$1,268,706.61	\$1,236,579 00	\$1,521,388 00			
510.03	\$20.00		*	8	\$110.00	10 811.00	6.5	2582 STRFFAR MEN MESSAGE MULTICOMPONENT
			l			40.00		the first of the second
					2300.00	72 35.00	1.4	2362 503/4 307/5 DMC MULTI-COMMUNICAL
\$1,985.76 \$100.30	\$27.46	\$27.56 \$220.00 \$1323.358.84 \$1.323.358.84	\$2.00 \$144,00 \$32.44 \$20.00 \$300.00 \$300.00	\$14400 \$2.14 \$154.09 \$2.00 \$14400 \$57.44 \$1.20 \$1.200 \$1.2	12.00   1144.00   12.14   1146.00   12.10   14.00   15.00   14.00   15.00	\$13.00   \$	72         \$50 or         \$10 or         \$11 or         \$11 or         \$11 or         \$12 or	1

### CITY OF FALCON HEIGHTS COUNCIL RESOLUTION

April 9, 2025

No. 25-34

### RESOLUTION AWARDING CONTRACT FOR THE 2025 PAVEMENT MANAGEMENT PROJECT (25-01)

WHEREAS, pursuant to advertisement for bids for the improvement of the 2025 Pavement Management Project (25-01), for the improvement of the streets within the the Falcon Woods neighborhood which includes Autumn St, Prior Ave N, Summer St, Moore St, Howell St N and Garden Ave, as well as the Northome neighborhood which includes California Ave W, Idaho Ave W, and Iowa Ave W;

WHEREAS, bids were received on Thursday, March 20, 2025, at 11:00 a.m., opened, and tabulated according to the law, and the following bids were received complying with the advertisement:

Contractor	Base Bid
Bituminous Roadways, Inc.	\$ 1,236,579.00
Park Construction Company	\$ 1,268,706.61
North Valley Inc.	\$ 1,294,855.30
Northwest Asphalt, Inc.	\$ 1,323,358.84
OMG Midwest Inc. dba Minnesota Paving & Materials	\$ 1,329,870.21
Valley Paving Inc.	\$ 1,367,048.91
GMH Asphalt Corporation	\$ 1,384,415.46

WHEREAS, it appears that Bituminous Roadways, Inc., of Mendota Heights, Minnesota, is the lowest responsible bidder at the tabulated price of \$1,236,579.00; and

**NOW THEREFORE BE IT RESOLVED** by the Council of the City of Falcon Heights, Minnesota:

- 1. The Mayor and City Administrator are hereby authorized and directed to enter into a contract with Bituminous Roadways, Inc., of Mendota Heights, Minnesota, for \$1,236,579.00 in the name of the City of Falcon Heights for the above improvements according to the plans and specifications thereof heretofore approved by the City Council and on file in the office of the City Administrator.
- 2. The City Administrator is hereby authorized and directed to return forthwith to all bidders the deposits made with their bids, except that the deposits of the successful bidder and the next lowest bidder shall be retained until contracts have been signed.

Moved by:

Mielke

Approved by: Randy Gustafson

Mayor

April 9, 2025

**GUSTAFSON** 

LEEHY

**MEYER** 

WASSENBERG

**MIELKE** 

5 In Favor

Against

Attested by: Jack Linehan

City Administrator

April 9, 2025

### **BLANK PAGE**



### REQUEST FOR COUNCIL ACTION (RCA)

Meeting Date	April 9, 2025
Agenda Item	Policy H2
Attachment(s)	Resolution 25-35 Accepting Proposal for
	City Hall Solar Panels
Submitted By	Hannah Lynch, Community
	Development Coordinator

Item	Approval of Resolution 25-35 Accepting the Proposal from All Energy Solar for
Ittili	City Hall Solar Panels, with Contract to be Contingent Upon Receipt of the Solar
	on Public Buildings Grant
Description	In 2023, the Minnesota Legislature established the Solar on Public Buildings (SPB) Grant Program. The purpose of this program is to provide grants to stimulate the installation of solar energy systems on public buildings. The Department of Commerce will administer \$4.3M in grants to local governments in Xcel Energy electric service territory through at least two funding rounds.
	Eligible applicants for this grant program are local units of government including a county, statutory or home rule charter city, town, or other local government jurisdiction.
	Grants will be awarded for up to 70% of the project costs (dependent on the government's financial capacity – Falcon Heights is Tier 2 and would be awarded up to 60%) for a solar array that is built on or adjacent to a public building and is the lesser of 40kW system capacity or 120% of the building's annual energy consumption.
	On January 13, staff was notified the City's Readiness Assessment was selected to move to the full application step, with an eligible award of 60% of project costs, up to \$72,000.
	In February, the City released a Request for Proposals (RFP) to notify vendors that the city was accepting proposals for the removal of the existing City Hall solar panels and a new array based off the requirements of the Solar on Public Buildings grant program.
	The city accepted proposals from qualified vendors from February 24, 2025 through March 28, 2025 at 4:30 PM.

Six proposals were received by the March 28 deadline. Proposals were reviewed by staff with several factors taken into consideration including:

- Municipal government experience
- Cost of removing/recycling the existing City Hall solar panels
- Cost of the full system
- Output of proposed solar array / 25-year cumulative savings
- Warranty and maintenance
- Understanding of the second-round solar grant application process

The six vendors that submitted proposals were:

- Wolf River Electric
- TruNorth Solar
- Planet Solarity
- Cedar Creek Energy
- All Energy Solar
- SolarPod

Each proposal was unique and there was a wide range of system sizes and the amount of energy that would be generated. The total actual city cost proposed also had a wide range, from \$0.00 to \$115,190.

Ultimately All Energy Solar displayed the level of experience and understanding of the project that was needed, the best plan for maintaining and preserving the panels, as well as the second lowest out-of-pocket costs. They have worked with several municipalities, including Red Wing and Little Canada (via the Ramsey Washington Metro Watershed District), and have completed several large installations for Kowalski's Market in Shoreview, Wilson Wolf Manufacturing in New Brighton, and Cretex Medical in Brooklyn Park.

The existing City Hall solar panels will be removed and recycled with The Retrofit Companies, LLC based out of Little Canada. They will collect and transport the discarded solar panels to a processing facility. By partnering with an ISO 14001 and SEIA approved solar module recycler, Retrofit ensures there is no-landfill processing. For more information on Retrofit and their scope of work, visit https://retrofitcompanies.com/environmental/solar\_panel\_recycling/.

The solar modules All Energy Solar has proposed included a 30-year power production warranty with .4% annual degradation, and the inverters include a 10year warranty that is extendable to 20 years. The roof mounting assembly has a 25year warranty.

All Energy Solar's proposal also includes an operations and maintenance plan at no cost for the first 5 years. After that it will be \$1,000 per year with a 3% escalator. The O&M plan includes an annual site visit with a visual inspection of all modules,

electrical connectors, combiner boxes and inverters, monitoring hardware and data acquisition system, and switched. They will also assess any vegetation or debris impact on solar access and perform a torque check on a sampling of mechanical and electrical connections. They will verify all inverters and sensers are connected and reporting and will supply the City with a site summary report within one week of the site visit with all findings. The total cost for the project is \$117,848.00 with \$19,175.56 of that being for the removal and recycling of the existing solar panels. Assuming the City receives the grant funding and federal tax credit payment, the actual cost to the city will be \$29.042.54. This will result in an estimated electric savings of \$121,859.00 over 25 years. The City will work with All Energy Solar as the selected installer to apply for the Solar on Public Buildings Grant Program full grant application. Should the City be awarded one of the grants, the City will move forward with a contract with All Energy Solar for the removal and recycling of the existing solar panels on City Hall and the new array, as outlined above and in the submitted proposal. The 2025 draft budget includes costs for recycling of existing solar panels. Potential grant and direct tax payment funding will cover new panels. **Budget**  Scoring Summary from City Hall Solar Panels RFP Responses Impact Attachment(s) City Hall Solar Panels Proposal from All Energy Solar Resolution 25-35 Accepting the City Hall Solar Panels Proposal from All Energy Solar and Authorizing the Full Application for the Solar on Public **Buildings Grant Program** Staff recommends that City Council approve the attached Resolution 25-35 authorizing a contract with All Energy Solar for new City Hall solar Action(s) panels, contingent upon receipt of the Solar on Public Buildings Grant. Requested

Сотрапу Nате	Total Score Earned	Current Annual Electric Usage (KWh)	Proposed System Size (KWh)	Cost of Removal/Recycling of Existing Panels	Full Cost of System	Solar on Public Buildings Grant	30% Federal Tax Direct Payment	Additional 10% Federal Tax Direct Payment	Total Out of Pocket (Including Removal/Recycling of Existing Panels)	Estimated Electric Savings Over 25 Years
Wolf River Electric	79	80856* WRE based their numbers off 60000 KWh	48000	\$ 60,000.00	\$ 120,000.00		\$ (72,000.00) \$ (36,000.00) \$ (12,000.00)	\$ (12,000.00)	₩	\$ 381,239.00* 60,000.00 Based off 60000 kWh over 30 years
TruNorth Solar	65	80856	46928	\$ 95,082.02	\$ 101,150.57	\$ (60,690.34)	\$ (30,345.17)		\$ 105,197.08	\$ 131,967.00
Planet Solarity	78	80856	56575	%+.º ₩2	\$ 115,500.00	\$ (69,300.00)		\$ (34,650.00) \$ (11,550.00)	₩	\$ 200,358.55
Cedar Creek Energy	73	80856	92054	\$ 65,600.00	\$ 173,700.00	\$ (72,000.00)	\$ (52,110.00)		\$ 115,190.00	\$ 333,947.00
All Energy Solar	06	80856	40150	\$ 19,175.56	\$ 98,672.44	\$ (59,203.46)	\$ (29,602.00)		\$ 29,042.54	\$ 121,859.00
SolarPod	85	80856	45627	\$ 12,000.00	\$ 87,900,00	\$ (52,740.00)			\$ 47,160.00	\$ 160,211.00





### Solar on Public Buildings Program

### **Falcon Heights City Hall**

**Request for Proposals** 

2077 Larpenteur Ave W, St Paul, MN 55113

Response Provided March 28th, 2025 by

All Energy Solar, Inc. - St. Paul, MN



March 28th, 2025

To Hannah B. Lynch and the City of Falcon Heights:

On behalf of the over 230 employees at All Energy Solar, thank you for soliciting a partner to bring rooftop solar to the City Hall in Falcon Heights. As a St. Paul-based turnkey provider of renewable energy systems, we offer the advantage of leveraging an extensive, locally-based team of dedicated solar specialists to assist any client in efficiently navigating the process of project evaluation, installation and long-term full service support, all under one roof. Our broad and experienced team makes us uniquely equipped to support a great variety of renewable projects and customers, big and small, whether local, regional or national in scope.

We still operate much like the smaller, family-owned business from when we opened our doors; however, over the last 15 years we have grown into a company that is much greater in capabilities, while staying true to our original core values of safety, dedication to long-term customer service and a focused emphasis on quality. Above all else, we are a trusted name and long-standing leader in the growing renewable energy industry across Minnesota and the broader Midwest, with experience from over 10,000 customers and projects, mostly here in our home state. We know what it takes to get this kind of work done right, and I am certain we would be the ideal partner for the City in this project of interest for the City Hall.

Releasing a request for solar proposals can solicit all kinds of responses from organizations with varying levels of experience and abilities. As we spent time working through our response, it became clear that All Energy Solar can meet all of the requests outlined in this RFP. The information provided in our response represents who we are and how we feel particularly well-aligned to deliver this solar project for the City of Falcon Heights.

We have also attached a few supplemental resources which we believe speaks to our Company's commercial and industrial experience, and bolsters our proposed offering. We sincerely appreciate your time and I look forward to the opportunity to respond to any questions after your review.

Best,

Samuel D. Wood

Business Development Consultant

All Energy Solar, Inc.

1264 Energy Lane, St. Paul, MN 55108

Direct: 320-493-9338

sam.wood@allenergysolar.com

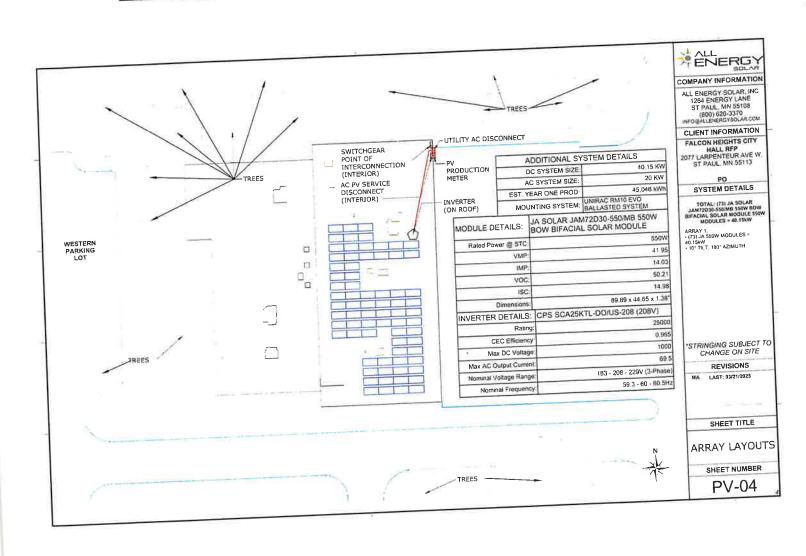


### Principal Elements Overview

- o All Energy Solar, Inc. was established in 2009 and is a family-owned and operated design, installation and service organization supporting commercial, industrial, governmental, agricultural and residential clients with on-site renewable projects. We are structured to internally manage all aspects of the solar process, including system design, project engineering, permitting and utility compliance, full installation, personnel training, array monitoring and maintenance.
- o With All Energy Solar, your project is supported by NABCEP certified technical sales, CAD designers, experienced project managers, NABCEP certified solar installers, as well as master, journeyman and apprentice electricians. Keeping these roles in-house allows us to most efficiently manage each stage of your project without involving multiple third parties or subcontractors. In addition to rooftop, ground mount and carport canopy solar systems, we also support commercial energy storage system design and installation, Level-2 EV charger installations and customized energy monitoring.
- o This flat rooftop project for Falcon Heights City Hall will consist of a solar PV system removal and subsequent new solar PV array installation. This new installation will follow a standard, attachment-free, flat roof ballasted approach. The project utilizes the indicated rooftop surfaces as part of the site walk, and will combine that energy to tie-in to the main service supporting the facility. Energy loads will be reduced relative to the system output, and energy will be realized in the form of net metering Credits on the Xcel Energy utility statements.
- o The proposed system will incorporate balance of systems hardware and a 208V inverter to match the main service voltage. Power will flow to onsite loads, and if there is excess, will spin the main site electrical meter backwards, generating credits that will offset usage from no-sun hours of the day.
- o Our team will provide all of the comprehensive and turnkey services needed to design, install and provide long term maintenance and support to the City of Falcon Heights going forward without the use of third parties or subcontractors.
- o Our team will further support and execute the submission of the Solar on Public Buildings Grant application on behalf of the City of Falcon Heights as well as assist with documentation and submission of the pre-filing registration in order to receive the Direct Pay provisions of the Federal Investment Tax Credit.



### Schematic Design Layout





### **Technical Specifications**

All Energy Solar, Inc. is prepared to furnish the design, installation and commissioning of a newly proposed 40.15 kW DC Solar PV System utilizing an attachment-free, ballasted racking solution.

### Major System Components:

- (73) JA 550W Solar Modules 21.2% Module efficiency
- (1) CPS 25K String Inverter 98% Efficiency

### **UNIRAC EVO Ballasted Racking Assembly**

- o Expected Capacity in kW DC: 40.15
- o Expected Capacity in kW AC: 25
- Expected Year 1 production in kWh: System output may range from 42,758 kWh to 46,073 kWh per year near this location. Year 1 production target from PV Watts is 45,046 kWh.
- Expected Annual Degradation in %: 1% in Year 1 and then 0.45% annually.
- o Annual Module Guaranteed Degradation in %: 0.45%.
- System wind and snow load accounted for in design of ballast layout per regional requirements.
- o All Equipment meets UL standards.

### Data Acquisition & Monitoring System:

CPS' monitoring platform, known as FlexOM Gateway, offers real-time monitoring updates and system production insights to provide reliable system performance analytics.

### Electrical Interconnection Plan:

Output from the panels will be routed from the CPS inverter to balance of systems hardware, and the point of interconnection will be at the switchgear inside of the building via a linetap.

### Cost & Project Financial Performance

Please see attached Project Proposal at the end of this document which outlines in further detail the solar array's features and benefits:



- o Initial Project Cost: \$98,672
- o Federal Tax Credit (Direct Pay): \$29,602
- o Solar on Public Buildings Grant (60% of Project Cost): \$59,203
- o Production meter included, based on real-world weather data via PV Watts.
- o Falcon Heights would qualify for the IRS 30% Direct Payment of the equivalent Tax Credit.
- The Inflation Reduction Act's "elective pay" (often called "direct pay") allows tax-exempt and governmental entities to receive a payment equal to the full value of tax credits for building qualifying clean energy projects.
- City of Falcon Heights would earn annual net metering via the General Service meter on site via Xcel's offerings.
- This project is required to be built at prevailing wage labor rates regardless of the IRA requirements, therefore we have adjusted our project pricing to account for this increase based on the proposed system offered. Please inquire with our team for any additional clarifications.

### Warranties

- o JA Solar Modules 30-Year Power Production Warranty 0.4% annual degradation
- o CPS Inverters 10 Year Warranty (extendable to 20 Years)
- o UNIRAC 25 Year Warranty

### Contact Person and Project Team

### Samuel Wood - Business Development Consultant

Main RFP Contact - sam.wood@allenergysolar.com / 320-493-9338

Samuel is the lead point of communication for this Response and the overall project proposal process. He is responsible for commercial and industrial project development for All Energy Solar. Samuel graduated from the University of Minnesota and spent four years in Orthopedic Device Sales before joining All Energy Solar in 2020, and currently lives in the Otsego / St. Michael-Albertville area with his fiancé.

### Michael Thalhimer - Director of Business Development

Main RFP Contact - michael.thalhimer@allenergysolar.com / 612-916-0118

Michael leads commercial and industrial project development for All Energy Solar.

After earning a degree from the University of Wisconsin-Madison in International Studies with a focus on Environmental Studies, Michael spent many years in California and became exposed to the expansion of many renewable energy companies across the country. He joined All Energy Solar in 2016 to lead the commercial portfolio strategy and sales. He has worked with hundreds of customers



from small independent operators to large multinational corporations.

### John Amundson - Manager, Commercial Solutions

John brings four years of field experience as a lead installer managing crews and building solar systems for All Energy Solar to the role of Manager, Commercial Solutions focusing on our commercial projects. In past years he has spent time around Minnesota developing community solar projects. John graduated from Concordia College in Moorhead, MN with a degree in Environmental Studies. He has personally been involved in the design and installation of hundreds of commercial and residential solar projects across the country.

### Megan Spear - Commercial Project Manager

Megan spent several years with All Energy Solar as a Project Liaison for residential solar installations, managing projects across Minnesota, Wisconsin, Iowa, and Massachusetts before taking on the role of Commercial Project Manager. She has personally managed more than 400 solar projects. Megan graduated from Gustavus Adolphus College with a degree in Environmental Studies. She strives to provide excellent service to customers and enjoys continuing to encourage the growth of clean, renewable energy in our community.

### Benjamin Anderson - Commercial Project Manager

Benjamin joined All Energy Solar and the commercial operations team in 2022 as Commercial Project Manager. He has spent the last 2 decades in California working in commercial construction management. With a background in industrial scale electrical, the education and career in customer service, and a passion for new solar innovations he has been a valued addition to our team. Ben currently resides in the Twin Cities, and is enjoying the sense of community that is native to MN and reflected in the AES culture.

### Steve Bowe - Director of Commercial Operations

Steve has joined the All Energy Solar team late in 2022. Steve came from the tree care industry where he has led and managed various aspects of commercial and residential tree care, sales and operations within the industry. He graduated from University of Stevens Point with degrees in Resource Management and Urban Forestry. Steve enjoys helping clients care for their property in a green and sustainable way. Steve lives in the country with his daughter Meadow, wife Kimberly, and an array of dogs, cats and other farm animals on their hobby farm.

### Jack Mason - Commercial Designer and Estimator

Jack has been working on the Commercial Solutions team at All Energy Solar since July of 2022. He graduated from the University of St. Thomas in St. Paul, MN with a degree in Statistics. He then spent 8 years as a software engineer working on data analytics and project optimization for utility fleets. Jack then earned a certification in Architectural Technology from Minneapolis College to pursue a career with a more



beneficial environmental impact. Since joining the team at AES, Jack has designed over 3MW worth of commercial solar installations.

### Eric Erb - Commercial Designer and Estimator

Eric joined the Commercial Solutions team at All Energy Solar in June of 2023, bringing with him more than two years of field experience as a member of All Energy Solar's Engineering Site Visit team. Eric graduated from Hamline University in St. Paul, MN with a B.S. in Applied Physics and a minor in Mathematics.

### Project Management Plan

Our Commercial project managers Matt Mounie, Ben Anderson and Megan Spear have extensive experience managing project development and coalescing resources to commission successful commercial solar projects. Once we have the pleasure of working with Falcon Heights and following a completed Agreement, our Project Managers will communicate and coordinate the project through each phase up to and including the Witness Testing to energize the solar array.

### **Project References**

As requested, a list of recent and past completed projects by All Energy Solar.

o <u>City of Little Canada, MN</u> - In 2018, All Energy Solar worked with the City of Little Canada to install a solar array at the Ramsey Washington Metro Watershed District. This 48kW DC system powers the District office with clean, dependable energy. Contact: \$97,056.00 Project Cost: Tina Carstens, <a href="mailto:tina.carstens@rwmwd.org">tina.carstens@rwmwd.org</a>.





o <u>City of Red Wing. MN</u> - All Energy Solar has completed multiple rooftop, ground mount and carport canopy PV installations for the City's various public buildings - City Fire Hall (40 kW DC), Incinerator Facility (40 kW DC) and Public Works Buildings (40 kW DC) totaling \$634,544.00, with upcoming projects currently in development. Contact: Shawn Blaney, Public Works Director <a href="mailto:shawn.blaney@ci.red-wing.mn.us">shawn.blaney@ci.red-wing.mn.us</a> / 651-385-3655



o Kowalski's Markets - All Energy Solar recently completed a large flat roof installation on the Kowalski's Market in Shoreview, MN. This is a new installation, and if Falcon Heights would like a particularly recent reference to our team's work here in Xcel Energy territory, we felt this could serve as a good contact with a well-known and reputable company in the Twin Cities metro. Total Project Cost: \$999,800.00 Contact: Darren Hines, FM dahines@kowalskis.com / 651-707-2175





o Wilson Wolf Manufacturing - All Energy Solar completed a large rooftop solar array for Wilson Wolf in 2022 at their New Brighton headquarters office, manufacturing facility and warehouse. This was a 415 kW AC flat rooftop solar project with a Total Project Cost of \$853,000. Contact: Terry O'Reilly, CFO



### terry.oreilly@wilsonwolf.com / 651-467-5020





o <u>Cretex Medical</u> - In 2023, All Energy Solar completed a 1.5MW AC rooftop solar array for Cretex Medical at their new manufacturing facility at US-169 and HWY-610 in Brooklyn Park, still one of the largest commercial behind the meter solar PV installation in the State of Minnesota. Contact: Jim Huelsnitz, (612) 590-1388 / jim.huelsnitz@cretexmedical.com. Total Project Cost: \$2,138,030.00.





### Operations & Maintenance

Our Team at All Energy Solar is set up to support our customers with in-office Customer Support and dispatchable, reactive service in the field for any customer array maintenance or warranty items. That said, if you would like to consider an annual preventative maintenance plan at any time before or after our Workmanship Warranty Period is reached, All Energy Solar can offer this scheduled service and will complete the following site tasks during an annual visit to the Project Site:



- Visual inspection of all array modules
- Visual inspection of electrical connectors
- Visual inspection of combiner boxes and inverters
- o Assess vegetation / debris impact on solar access
- o Torque check on sampling of mechanical and electrical connections
- o Visual inspection of monitoring monitoring hardware and data acquisition system
- o Visual inspection of switches exercise as needed
- o Verify all inverters/sensors are connected and reporting
- o Owner Site Summary Report delivered within one week of site visit with findings.

This O&M Plan is offered to Falcon Heights at no cost for 5 years, and \$1,000 per year following Year 5 with a 3% escalator.

### Proposed Project Milestone Schedule

- o Notice to Proceed April 2025
- o Permitting for new system begins May 2025
- o Final design plans complete May 2025
- o Equipment ordered (assuming timely Xcel Interconnection Approval) July 2025
- o Remove of existing panels begins July 2025
- o Construction begins July 2025
- o Electrical generation begins August 2025

### END OF PROPOSAL RESPONSE DOCUMENT

### PLEASE REFER TO ADDITIONAL ATTACHMENTS ON FOLLOWING PAGES

- o System Proposal Document from All Energy Solar
- Preliminary Schematic Design
- o Specification Sheets for Main System Components
- o 25Y Cashflow Template
- o PVWatts System Production Report



Custom Proposal Provided For:

### Falcon Heights City Hall

2077 Larpenteur Ave W St Paul, MN 55113



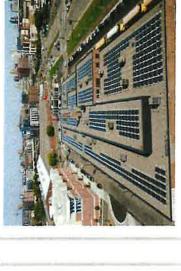




Google









Proposal for: Falcon Heights City Hall

2077 Larpenteur Ave W, Falcon Heights, MN 55113

; Confidential, Prepared for Internal Review

Prepared by: Samuel Wood

## Welcome to All Energy Solar

around the country, those experiences helped build and shape our process of confidently handling term, trusted customer relationships since 2009. With over 10,000 clean energy systems installed All Energy Solar's team of industry professionals has been focused on delivering value with long every aspect of your project experience.

system monitoring and customer support, our in-house team of over 220 dedicated professionals From initial energy analysis and concept work, through engineering and design, construction, prides itself on being experts in all aspects in our field.

contractor licenses. Our associates and field personnel are certified by the North American Board We are one of a few truly full-service solar energy companies holding both building and electrical of Certified Electrical Practitioners (NABCEP), one of the highest technical certifications for solar photovoltaic consultants, installers, electricians and engineers. The experience and continued solutions, stewarded by some of the industry's leading professionals with a focus on reliable, education associated with these licenses allow us to deliver complete, turnkey clean energy proven results.

Take comfort in knowing that your solar project - of any size or scale - will be designed and built to the highest industry engineering standards, all provided under one roof.

### Our Mission...

- To design and build clean energy systems specialized for each individual customer
  - Provide the highest quality customer service for unparalleled customer experiences
    - Ensure a healthy, exciting, and innovative environment for our working professionals







2077 Larpenteur Ave W, Falcon Heights, MN 55113 Confidential, Prepared for Internal Review Proposal for. Falcon Heights City Hall

320-493-9338;

Prepared by: Samuel Wood



## Estimate Notes - All Energy Solar Commercial Solutions

Project Approach: Remove existing solar array then utilize indicated roof spacing to install new, optimal solar PV system (seen right; superimposed in blue over the existing array) to ensure maximum financial benefits for the City,

Roof Protection will be furnished in the form of Unirac Roof Pads.

City to provide internet at meter location for remote monitoring of system.

Our proposed CPS 25K Inverter is a Tier 1 option with reliable performance and a 10 Year Warranty.

Prevailing wage rates are included in total project cost.

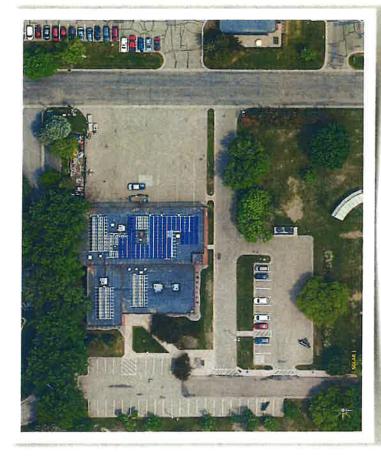
Project cost excludes bond pricing, unforeseen groundwork, backup power during planned electrical outage, and upgrades/repairs to the City Hall or Utility's electrical infrastructure.

System Connection will require power shutdown. If required outside normal business hours, additional costs may be incurred.

City to allow for staging adjacent to installation area, may require temporary closure of parking spaces.

### Falcon Heights City Hall

Proposed Solar Array Layout



Proposal for: Falcon Heights City Hall

2077 Larpenteur Ave W, Falcon Heights, MN 55113

; Confidential, Prepared for Internal Review

Prepared by: Samuel Wood

320-493-9338; sun wasod ballon guyen

Proposal pricing valid until 5/4/25

### Your System Description

ENERGY Solar

System Assumptions

System Size	(W DC)
Inverter(s)	
Panels	
# of Panels	
System Type	

(W DC)	40,150
IIIverier(s)	CPS
raileis	JA Solar 550W
# OI raileis	73
oystem type	Ballast Roof Mount

System Features	

2	30 Year Panel Warranty	Included
>	10 Year Warranty Extendable to 20 Years	Included
>	5 Year Installation Warranty	Included
>	Online Monitoring	Included
>	Grid-Tied	Included

30%	Xcel Energy General Service	\$0.081 /kWh 3.5%	0.45%	10
Direct Pay	Electric Utility Provider	Current blended kWh Electric Rate	System Degradation rate	Orientation (degrees)
Solar on Public Buildings Grant	Electric Rate Schedule	Annual Electric Rate Increase		Tilt (degrees)

Proposal for Falcon Heights City Hall	Prepared by Samuel Wood
2077 Larpenteur Ave W, Falcon Heights, MN 55113	320-493-9338, sam wood@allenergysolar.com
. Confidential, Prepared for Internal Review	Proposal pricing valid until 5:44/25

# Current kWh Usage vs. Expected Solar Production

### Production Estimate from PVWatts®

With 24% System Losses Modeled

Current Electric Usage

Solar Electric Production

80,856 kWh\*

45,046 kWh

\*Xcel allows for solar interconnection up to 120% of this value - subject to final usage reporting during interconnection review

Solar Production Data Customer Usage & Pricing



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

				\$6,588	\$3,670	56%
Utility Energy Savings	<ul><li>Free Solar Energy</li><li>Utility Energy Bill</li></ul>	744%	26%	Current Annual kWh Electric Charges	Year 1 kWh Savings from Solar	Total kWh Usage Offset

Prepared by Saffiuel Wood	320-493-9338; sam.wood@allenergysolar.com	Panancal antimo valid until 5/4/25	Second amodol (	
	Proposal for Falcon Heights City Hall	2077 Larpenteur Ave W, Falcon Heights, MN 55113	Confidential, Prepared for Internal Review	

# Your Environmental Benefits of Going Solar



Solar energy avoids pollution that is created by traditional energy sources such as coal and nuclear plants. While in use, your solar energy will create absolutely no harmful emissions or waste.

Using average emissions factors, over the next 25 years your solar energy will help to avoid

metric tons of CO2

This is equivalent to ....

**18,500** Trees planted

774,973 Pounds of coal burned 18,887

Incandescent light bulbs changed to CFLs

Passenger vehicles taken off the road for a year

Gallons of gas consumed 81,342

Garbage trucks of waste recycled instead of sent to the landfill

320-493-9338; sam Prepared by Samuel Wood

Proposal pricing valid until 5/4/25

2077 Larpenteur Ave W, Falcon Heights, MN 55113

Proposal for: Falcon Heights City Hall

Confidential, Prepared for Internal Review

# Your Solar for Purchase Option Excl. System Removal/Recycling



System Size (W DC)

Inverter

Panels

40,150

CPS

JA Solar 550W

System Features

Price Breakdown		System Type # of Panels
Turnkey Price	\$98,672	Ballast Roof 73
Direct Pay (30%)	\$29,602	
Solar on Public Buildings Grant -	\$59,203	Warrant Warrant
Balance to Offset after Tax Credits and Utility Incentives	29,867	10 Year Inverter Warra 5 Year Installation War

	-0	P	p	p	TC d	3	
	Included	papnloul	Included	Included	habulad		
THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED I	30 Year Panel Warranty	10 Year Inverter Warranty (Extendable to 20 Years)	5 Year Installation Warranty		Online Monitoring	Grid-Tied	
-				<b>S</b> I	>	<b>&gt;</b>	
¢59.203	001707	170 04	100'64				

320.493.9338 sam.wood@allenergysolar.com Prepared by Samuel Wood Confidential, Prepared for Internal Review Proposal for Falcon Heights City Hall



## Your Cash Flow - Cash Purchase

\$3,602 \$3,004 \$3,004 \$3,004 \$3,005 \$3,005 \$3,005 \$3,005 \$3,005 \$4,001 \$4	\$29,002 \$59,003 \$5,000	\$3.000 \$5.20.003 \$3.3704 \$5.3704 \$5.3704 \$5.3704 \$5.3.000		Federal Tax Credit	Buildings Grant	Electric Savings		(46 197)
\$3,704 \$3,704 \$3,704 \$3,816 \$3,816 \$3,932 \$4,051 \$4,051 \$4,051 \$4,051 \$4,174 \$4,174 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,304 \$4,304 \$4,304 \$5,146 \$5,136 \$5	\$3,004 \$29,002 \$5,004 \$	\$59,003 \$53,004 \$53,004 \$53,004 \$53,004 \$53,004 \$53,005 \$53,004 \$53,005 \$53,005 \$53,005 \$53,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$54,005 \$55,00				£3 470	(\$6,197)	(\$0,177)
\$3,816 \$3,932 \$4,051 \$4,174 \$4,174 \$4,174 \$4,301 \$4,431 \$4,431 \$4,431 \$4,431 \$4,431 \$4,431 \$4,431 \$4,431 \$4,744 \$4,744 \$4,744 \$4,744 \$4,744 \$5,403 \$5,704 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149	\$3,932 \$4,051 \$4,051 \$4,174 \$4,174 \$4,174 \$4,301 \$4,431 \$4,431 \$4,431 \$4,431 \$4,431 \$4,431 \$4,301 \$4,304 \$4,304 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$5,104	\$3.816 \$3.816 \$3.816 \$3.816 \$3.816 \$3.8174 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.816 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.4071 \$3.7049 \$3.7		\$29,602	\$59,203	\$3.704	\$3,704	¢1 323
\$3,932 \$4,051 \$4,174 \$4,174 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,304 \$4,704 \$4,847 \$4,904 \$5,146 \$5,146 \$5,146 \$5,146 \$5,302 \$5,463 \$5,463 \$5,463 \$5,463 \$5,799 \$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$5,749 \$7,149	\$3,922 \$4,051 \$4,174 \$4,174 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,506 \$4,704 \$4,704 \$4,704 \$4,704 \$5,104 \$5,104 \$5,104 \$5,105 \$5,022 \$5,403 \$5,403 \$5,403 \$5,403 \$5,709	\$4,051 \$4,174 \$4,174 \$4,174 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,304 \$4,304 \$4,304 \$5,146 \$5	(7/9)			43.816	\$3,816	100 m
\$4,051 \$4,174 \$4,174 \$4,301 \$4,431 \$4,431 \$4,431 \$4,431 \$4,566 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$5,146 \$5,149 \$7,149 \$7,149	\$4,051 \$4,174 \$4,174 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,301 \$4,304 \$4,704 \$4,304 \$5,104	\$4,174 \$4,051 \$4,051 \$4,051 \$5				\$3,932	\$3,932	\$0.50
\$4,774 \$4,774 \$4,301 \$4,431 \$4,431 \$4,431 \$4,431 \$4,566 \$4,704 \$4,704 \$4,904 \$5,404 \$5,404 \$5,146 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,1366 \$5,136	\$4,174 \$4,301 \$4,301 \$5,4,301 \$5,4,304 \$5,4,566 \$5,4,004 \$5,8,47 \$5,847 \$5,847 \$5,847 \$5,847 \$5,847 \$5,946 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,130	\$4,174 \$4,174 \$4,174 \$4,174 \$4,174 \$4,301 \$4,301 \$4,301 \$4,566 \$4,566 \$4,566 \$4,506 \$4,566 \$4,704 \$4,904 \$54,704 \$4,904 \$5,146 \$5,302 \$5,403 \$5,302 \$5,403 \$5,302 \$5,403 \$5,302 \$5,403 \$5,302 \$5,403 \$5,302 \$5,403 \$5,302 \$5,403 \$5,302 \$5,403 \$5,403 \$5,302 \$5,403 \$5,403 \$5,403 \$5,403 \$5,403 \$5,704 \$				\$4,051	\$4,051	613 480
\$4,301 \$4,431 \$4,431 \$4,431 \$4,566 \$4,704 \$4,847 \$4,994 \$5,146 \$5	\$4,301 \$4,301 \$4,304 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$5,104 \$5,104 \$5,104 \$5,104 \$5,104 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$7,366 \$7,366 \$7,366 \$7,366	\$4,301 \$4,304 \$4,304 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$5,146 \$5,146 \$5,146 \$5,302 \$5,728 \$5,728 \$5,728 \$5,728 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$1,7149 \$7,149 \$7,366 \$1,31,726 \$1,31,726 \$1,31,726 \$1,31,726				\$4,174	\$4,174	C17 781
\$4,566 \$4,566 \$4,704 \$4,847 \$4,847 \$4,847 \$4,847 \$4,994 \$5,494 \$5,494 \$5,494 \$5,494 \$5,402 \$5,404 \$5,402 \$5,403 \$5	\$4,566 \$4,566 \$4,704 \$4,847 \$4,847 \$4,847 \$4,944 \$5,146 \$5	\$4,566 \$4,704 \$4,704 \$4,704 \$4,807 \$4,904 \$5,146 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,149 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,137 \$5,136 \$5				\$4,301	\$4,301	C22 242
\$4,566 \$4,704 \$4,704 \$4,704 \$4,704 \$4,904 \$5,146 \$5,149 \$5,149 \$5,149 \$7,149 \$7,149 \$7,149 \$7,149	\$4,566 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,704 \$4,904 \$5,146 \$5,146 \$5,146 \$5,146 \$5,302 \$5,463 \$5,478 \$5,749 \$5,749 \$7,149 \$7,746 \$7,749 \$7,749 \$7,749 \$7,749	\$4,566 \$4,704 \$4,704 \$4,704 \$4,904 \$5,146 \$5,149 \$5,134 \$5,134 \$5,134 \$5,134 \$5,134 \$5,134 \$5,134 \$5,134 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,131 \$7,149 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,136 \$5,137 \$7,366 \$5,136 \$5,137 \$7,366 \$5,137 \$7,467 \$7,366 \$7				\$4,431	\$4,431	E 24.778
\$4,704 \$4,704 \$4,847 \$4,847 \$4,944 \$5,146 \$5,146 \$5,302 \$5,463 \$5,463 \$5,463 \$5,463 \$5,463 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$5,709 \$6,734 \$6,734 \$6,734 \$6,734 \$5,749 \$7,149 \$7,149 \$7,149	\$4,704 \$4,704 \$4,704 \$4,704 \$4,847 \$4,847 \$4,994 \$5,746 \$5,746 \$5,746 \$5,799 \$5	\$4,704 \$4,704 \$4,904 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,146 \$5,179 \$5,179 \$5,179 \$6,156 \$6,156 \$6,156 \$6,156 \$6,156 \$6,156 \$6,156 \$6,134 \$6,134 \$6,134 \$6,134 \$6,134 \$1,149 \$7,366 \$1,149 \$7,366 \$1,149 \$7,366 \$1,149 \$7,366 \$1,149 \$1,140		3		\$4.566	\$4,566	624 463
\$4,847 \$4,944 \$4,994 \$5,146 \$5,146 \$5,302 \$5,463 \$5,463 \$5,463 \$5,463 \$5,463 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$6,156 \$6,156 \$6,136	\$4,847 \$4,847 \$4,944 \$5,302 \$5,146 \$5,302 \$5,463 \$5,463 \$5,463 \$5,463 \$5,709 \$5	\$4,847 \$4,994 \$5,146 \$5,146 \$5,146 \$5,302 \$5,463 \$5,502 \$5,628 \$5,628 \$5,799 \$5,798 \$5				\$4 704	\$4,704	\$31,462
\$4,994 \$5,146 \$5,146 \$5,302 \$5,463 \$5,628 \$5,628 \$5,628 \$5,799 \$5,799 \$5,795 \$6,156 \$6,156 \$6,156 \$6,136 \$6	\$5,746 \$5,302 \$5,302 \$5,463 \$5,463 \$5,628 \$5,789 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$6,36 \$6,36 \$6,36 \$6,36 \$6,36 \$6,36 \$6,36 \$6,36 \$6,36 \$6,36 \$6,734 \$6,36 \$6,734 \$6,734 \$6,736 \$7,149 \$7,366 \$7,149 \$7,366	\$4,994 \$4,994 \$5,146 \$5,146 \$5,302 \$5,302 \$5,302 \$5,302 \$5,302 \$5,302 \$5,463 \$5,463 \$5,799 \$5				70075	\$4,847	\$36,329
\$5,146 \$5,146 \$5,302 \$5,463 \$5,463 \$5,463 \$5,628 \$5,799 \$5,799 \$5,799 \$6,156 \$6,156 \$6,136 \$6,343 \$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$6,734 \$6,736 \$7,149 \$7,149 \$7,366	\$5,146 \$5,302 \$5,463 \$5,463 \$5,463 \$5,463 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$6,156 \$6,156 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$6,736 \$7,149 \$7,149 \$7,149 \$7,366 \$7,366	\$5,146 \$5,146 \$5,302 \$5,302 \$5,302 \$5,463 \$5,463 \$5,463 \$5,769 \$5,779 \$5,779 \$5,779 \$5,779 \$5,779 \$5,734 \$5,734 \$5,734 \$5,734 \$5,734 \$7,749 \$7,749 \$7,749 \$7,749 \$7,749 \$7,366 \$131,726  Prepared by: Samuel Wood \$20,493,9338; monthly states				54,647	\$4,994	\$41,323
\$5,146 \$5,302 \$5,463 \$5,463 \$5,628 \$5,799 \$5,799 \$5,799 \$6,156 \$6,156 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366	\$5,146 \$5,302 \$5,463 \$5,463 \$5,028 \$5,709 \$5,709 \$5,709 \$5,709 \$6,156 \$6,156 \$6,343 \$6,343 \$6,343 \$6,344 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,149 \$7,366 \$7,366	\$5,146 \$5,302 \$5,463 \$5,628 \$5,799 \$5,799 \$5,799 \$6,156 \$6,343 \$6,343 \$6,343 \$6,344 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,149 \$7,149 \$7,149 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366 \$7,369 \$7,360 \$7,369 \$7,369 \$7,369 \$7,369 \$7,369 \$7,369 \$7,369 \$7,369 \$7,360 \$7,369 \$7,369 \$7,369 \$7,360 \$7				\$4,994	¢5 146	\$46,469
\$5,302 \$5,463 \$5,628 \$5,799 \$5,799 \$6,156 \$6,156 \$6,343 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,736 \$7,149 \$7,149 \$7,366	\$5,302 \$5,463 \$5,463 \$5,463 \$5,463 \$5,709 \$5	\$5,302 \$5,463 \$5,628 \$5,799 \$5,799 \$6,156 \$6,343 \$6,343 \$6,343 \$6,343 \$6,343 \$6,343 \$6,343 \$6,734 \$7,149 \$7,366 \$7,666				\$5,146	506 34	\$51,771
\$5,463 \$5,628 \$5,799 \$5,799 \$6,156 \$6,156 \$6,343 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366	\$5,463 \$5,463 \$5,463 \$5,628 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,7156 \$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$6,734 \$5,749 \$7,149 \$7,149 \$7,366 \$1,306 \$1,726	\$5,463 \$5,463 \$5,463 \$5,463 \$5,463 \$5,799 \$5				\$5,302	\$00'0\$	\$57,234
\$5,628 \$5,799 \$5,795 \$6,156 \$6,156 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366	\$5,628 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,7156 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$5,734 \$5,734 \$5,734 \$5,736 \$7,366 \$7,366 \$7,366 \$7,366 \$7,366	\$5,628 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,799 \$5,795 \$6,156 \$6,143 \$5,343 \$5,536 \$6,343 \$5,749 \$5,749 \$5,749 \$7				\$5,463	\$5,463	CA2.862
\$5,799 \$5,795 \$5,975 \$6,156 \$6,156 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$5,749 \$7,149 \$7,149 \$7,366 \$1,366	\$5,799 \$5,795 \$5,7156 \$6,136 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366 \$1,366 \$1,366	\$5,799 \$5,795 \$6,156 \$6,343 \$6,343 \$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$7,149 \$7,149 \$7,149 \$7,149 \$7,149 \$7,149 \$7,366 \$1,304 \$1				\$5,628	\$5,628	468 661
\$5,975 \$5,756 \$6,156 \$6,343 \$6,536 \$6,536 \$6,734 \$6,734 \$6,938 \$7,149 \$7,149 \$7,366 \$1,366	\$5,975 \$5,775 \$6,136 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366 \$131,726	\$5,975 \$5,756 \$6,156 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,149 \$7,149 \$7,149 \$7,149 \$7,149 \$7,366 \$1,666 \$1,666				95 799	\$5,799	100 bos
\$6,156 \$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$6,938 \$7,149 \$7,149 \$7,366 \$1,366	\$6,156 \$6,156 \$6,343 \$6,343 \$6,346 \$6,734 \$6,734 \$5,938 \$7,149 \$7,149 \$7,149 \$7,149 \$7,366 \$131,726	\$6,156 \$6,343 \$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$7,149 \$7,149 \$7,149 \$7,366 \$1,304 \$1				4F 075	\$5,975	\$/4,030
\$6,343 \$6,343 \$6,536 \$6,734 \$6,734 \$7,149 \$7,366 \$1,366 \$1,366	\$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$5,938 \$7,149 \$7,149 \$7,149 \$7,366 \$131,726	\$6,343 \$6,343 \$6,343 \$6,734 \$6,734 \$7,149 \$7,149 \$7,149 \$7,366 \$1,31,726 \$131,726 \$10.493-9338, month of the proposal pricing valid until 5/4/25				7 7 9	\$6,156	\$80,793
\$6,343 \$6,536 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366 \$1,366	\$6,343 \$6,536 \$6,734 \$6,734 \$5,938 \$7,149 \$7,149 \$7,149 \$7,366 \$131,726	\$6,536 \$6,734 \$6,734 \$6,734 \$7,149 \$7,149 \$7,366 \$1,666 \$1				200, 200	\$6,343	\$87,130
\$6,536 \$6,734 \$6,734 \$5,734 \$7,149 \$7,366 \$1366	\$6,734 \$6,734 \$6,734 \$5,938 \$7,149 \$7,149 \$7,366 \$131,726 Prepared by Samuel Wood	\$6,734 \$6,734 \$6,734 \$5,734 \$7,149 \$7,366 \$7,366 \$1,666 \$1				\$6,343	46 536	\$93,672
\$6,734 \$6,938 \$7,149 \$7,366 \$7,366 \$7,366	\$6,734 \$6,938 \$7,149 \$7,149 \$7,366 \$131,726 \$repared by: Samuel Wood	\$6,734 \$6,938 \$56,938 \$7,149 \$7,149 \$7,366 \$				\$6,536	9 6 6	\$100,406
\$6,938 \$7,149 \$7,149 \$7,366 \$1,366 \$131,726	\$6,938 \$7,149 \$7,149 \$7,366 \$131,726 Prepared by Samuel Wood	\$6,938 \$7,149 \$7,149 \$7,366 \$131,726 Prepared by: Samuel Wood 320,493-9338; m. monts and a second states and second				\$6,734	\$6,734	\$107,344
\$7,149 \$7,366 \$7,366 \$131,726	\$7,149 \$7,366 \$7,366 \$131,726 Prepared by: Samuel Wood	87,149 \$7,366 \$7,366 \$131,726 Prepared by: Samuel Wood 320,493-9338, monition with Samuel Wood				\$6,938	\$6,938	\$114,493
\$7,366 \$131,726	\$7,366 \$131,726 \$repared by: Samuel Wood	62 ST.366 ST.366 ST.366  S131,726 Prepared by: Samuel Wood 320.493-9338, mm/life				\$7,149	\$7,149	\$121,859
\$131,726	\$131,726 Prepared by Samuel Wood	92 Prepared by: Samuel Wood 320.493-9338, m. monital Male Falcon Heights, MN 55113				\$7,366	\$7,366	
07/1014	02 \$131,720 Prepared by:	02 Prepared by: Falcon Heights, MN 55113				ACT 2002		\$121,8
	Prepared by:	Prepared by: Falcon Heights, MN 55113	-	400 403		- 1		STATE OF THE STATE OF
				2077 Larpenteur Ave W, Falcon H	Heights, MIN 55115		Proposal pricing valid	until 5:4/25





If your proposed solution is one you are ready to pursue, we will contract facilitate the formal system engineering, design and permitting. Other payments towards the system come in a few months after those initial for the system and request a minimal Deposit payment (up to 5%) to steps are completed and the project is approved to proceed in-full.

## What is the life expectancy of my solar system?

come with a 25-30 year production warranty. Inverters come with 10-25 Using well built and reliable equipment matters. Solar panels typically year warranties. Overall life expectancy of a well designed and built solar system should be 40-50 years.

## What type of maintenance is required?

maintenance is kept to a minimum. While not a necessity, for customers There are typically no moving parts to a solar system, so regular requiring a maintenance plan, we're happy to provide one.

### What about the snow?

Considering solar panels have a strong glass face and aluminum frames, snow begins to wick away once the sun comes out, even in cold temperatures. Mid-season snow removal is not expected.

### Why is monitoring important?

empowers you to not only track your savings but allows All Energy Solar make. Having the ability to see how your solar system is working online We treat your solar system like any type of investment that you would the ability to diagnose potential issues at the click of a mouse.

## What if something damages my system?

Your solar system is covered under your property insurance. If there is ever any damage to your array, you are covered with that same policy.

### What about my roof?

equipment on top of your roof, across all roof types. Our team will ensure Solar hardware is designed to safely and securely support the a proper install approach supports your unique circumstances.

Prepared by: Samuel Wood

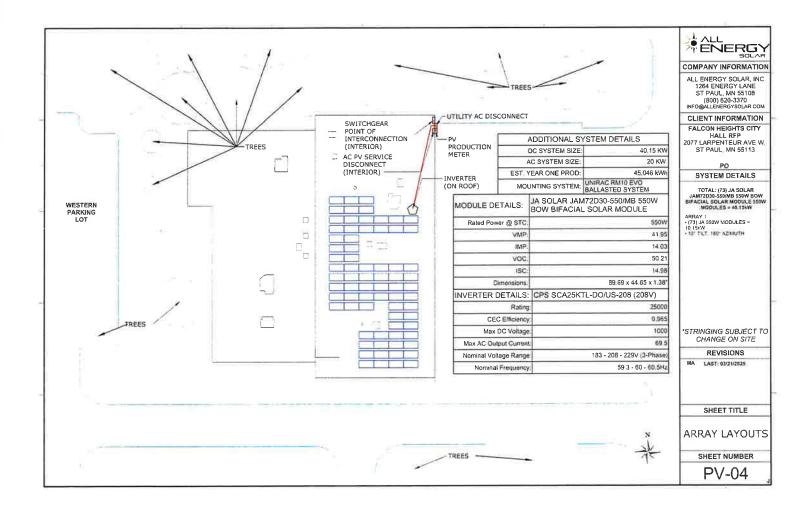
320-493-9338;

Proposal pricing valid until 5/4/25

2077 Larpenteur Ave W, Falcon Heights, MN 55113

Proposal for Falcon Heights City Hall

Confidential, Prepared for Internal Review







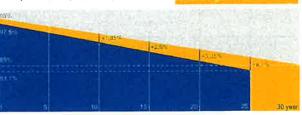
Less shading effect



Lower temperature coefficient

### Superior Warranty

- → 12-year product warranty
- 30-year linear power output warranty



 Bifacial double glass module linear power warranty Standard module linear power warranty

### **Comprehensive Certificates**

- IEC 61215, IEC 61730,UL 61215, UL 61730
- . ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- 1SO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules Guidelines for increased confidence in PV module design qualification and type approval





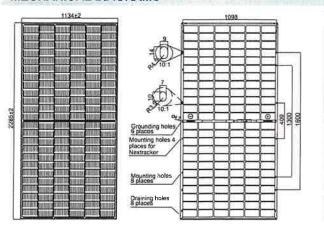








### **MECHANICAL DIAGRAMS**



Cell Weight Dimensions No, of cells Junction Box Connector Short frame

Irradiance 1000W/m², cell temperature 25°C, AM1.5G

Units: mm

**SPECIFICATIONS** 

31.6kg±3% 2285±2mm×1134±2mm×35±1mm 4mm² (IEC), 12 AWG(UL) Cable Cross Section Size 144(6×24) IP68, 3 diodes QC 4.10-35 Portrait:300mm(+)/400mm(-); Landscape:1300mm(+)/1300mm(-) Cable Length (Including Connector) Front Glass/Back Glass 2.0mm/2.0mm Packaging Configuration 31pcs/Pallet, 620pcs/40ft Container

Rentalt ; customized frame color and cable length available upon requise:

<b>ELECTRICAL PARAMETERS</b>	AT STC					Electric po
TYPE	JAM72D30 -525/MB	JAM72D30 -530/MB	JAM72D30 -535/MB	JAM72D30 -540/MB	JAM72D30 -545/MB	JAM72D30 -550/MB
Rated Maximum Power(Pmax) [W]	525	530	535	540	545	550
Open Circuit Voltage(Voc) [V]	49,15	49.30	49.45	49.60	49.75	49.90
Maximum Power Voltage(Vmp) [V]	41.15	41.31	41.47	41.64	41.80	41.96
Short Circuit Current(Isc) [A]	13.65	13.72	13.79	13.86	13,93	14.00
Maximum Power Current(Imp) (A)	12.76	12.83	12.90	12.97	13,04	13.11
Module Efficiency [%]	20.3	20.5	20.6	20.8	21.0	21.2
Power Tolerance				0~+5W		
Temperature Coefficient of Isc(α_Isc)				+0.045%/°C		
Temperature Coefficient of Voc(β_Voc)				-0.275%/°C		
Temperature Coefficient of Pmax(y_Pmp)				-0.350%/°C		

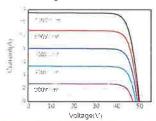
Rentark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL CHARACTERIST ( REFRENCE TO 10% SOLAR I			VER RANGES				OPERATING CONDITION	IS
TYPE	JAM72D30 -525/MB	JAM72D30 -530/MB	JAM72D30 -535/MB	JAM72D30 -540/MB	JAM72D30 -545/MB	JAM72D30 -550/MB	Maximum System Vollage 1	500V DC
Rated Max Power(Pmax) [W]	562	567	572	578	583	589	Operating Temperature -4	0°C~+85°C
Open Circuit Voltage(Voc) [V]	49.54	49.67	49,80	49.93	50.03	50.21	Maximum Series Fuse Rating	30A
Max Power Voltage(Vmp) [V]	41.53	41,77	41.99	42.24	42.43	42.67		Pa(112 lb/ft²) Pa(50 lb/ft²)
Short Circuit Current(Isc) [A]	14.34	14,39	14.45	14.50	14,56	14.63	NOCT	45±2°C
Max Power Current(Imp) [A]	13.52	13.58	13.63	13.69	13.74	13 79	Bifaciality**	'0%±10%
*For NexTracker installations   Maxi **Bifaciality=Pmax,rear/Rated Pma		ed, Front is 2400	OPa while Maxir	num Static Load	. Bank is 2400Pa	a.	Fire Performance U	L Type 29

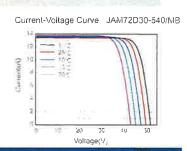
### **CHARACTERISTICS**

STC

Current-Voltage Curve JAM72D30-540/MB



Power-Voltage Curve JAM72D30-540/MB Voltage(V)





### 25kW, 1000Vdc String Inverters for North America

The 25kW CPS three phase string inverter is designed for rooftop and carport applications. These units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 98.5% peak and 98.0% CEC, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 25KTL product ships with a Rapid Shutdown wirebox, fully integrated and separable with touch safe fusing, monitoring, and AC and DC disconnect switches. The integrated PLC transmitter in the Rapid Shutdown wire-box enables PVRSS certified module-level rapid shutdown when used with the Tigo TS4-A-2F products, APS RSD-S-PLC-A products, and NEP PVG-4 products. The CPS Flex Gateway enables monitoring, controls and remote product upgrades.

### **Key Features**

- NEC 2017 PVRSS Certified Rapid Shutdown
- NEC 2017 compliant & UL listed Arc-Fault circuit protection
- 15-90° Mounting orientation for low profile roof installs
- 15° tilt Inverter Rack assembly available from CPS
- Optional Flex Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- 2 MPPT's with 3 inputs each for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- UL1741 SA Certified to CA Rule 21, including SA14 FW and SA15 VW
- Separable wire-box design for fast service
- Standard 10 year warranty with extensions to 20 years
- Generous 1.5 DC/AC Inverter Load Ratio



CPS SCA25KTL-DO-R/US-480







SCA25KTL Wire-box



Model Name CPS SCA25KTL-DO-R/US-480 DC Input Max. PV Power 37.5kW (22kW per MPPT) 1000Vdc Max. DC Input Voltage 200-950Vdc Operating DC Input Voltage Range 330V / 80W Start-up DC Input Voltage / Power 2 Number of MPP Trackers MPPT Voltage Range @ PF>0.991 560-850Vdc 90A (45A/MPPT) Max, PV Short-Circuit Current (Isc x 1.25) 6 inputs, 3 per MPPT Number of DC Inputs Load-rated DC switch DC Disconnection Type Type II MOV, 1240V<sub>C</sub>, 15kA I<sub>TM</sub> (8/20, S) DC Surge Protection **AC Output** 25KW Rated AC Output Power @ PF=1 25KVA Max. AC Apparent Power 480Vac Rated Output Voltage 422 - 528Vac Output Voltage Range<sup>2</sup> 3Ф / PE / N (Neutral optional) Grid Connection Type 30.5A Max. AC Output Current @480Vac 60Hz Rated Output Frequency 57 - 63Hz Output Frequency Range<sup>2</sup> >0.99 (±0.8 adjustable) Power Factor <3% Current THD @ Rated Load 50A Max. OCPD Rating Load-break rated AC switch AC Disconnection Type Type II MOV, 1025V<sub>C</sub>, 15kA I<sub>TM</sub> (8/20..S) AC Surge Protection System and Performance Transformerless Topology 98.5% Max. Efficiency CEC Efficiency 98.0% Stand-by / Night Consumption <1W **Environment** Enclosure Protection Degree NEMA Type 4X Variable speed cooling fans Cooling Method -22°F to +140°F / - 30°C to +60°C Operating Temperature Range No low temp minimum to +158°F / +70°C maximum Non-Operating Temperature Range<sup>3</sup> 0 to 100% Operating Humidity Operating Altitude 13,123,4ft / 4000m (derating from 9842.5ft / 3000m) <50dBA @ 1m Audible Noise **Display and Communication** LED+Wifi User Interface and Display SunSpec, Modbus RS485

Inverter Monitoring Site Level Monitoring

Modbus Data Mapping

Remote Diagnostics / FW Upgrade Functions Mechanical

Dimensions (HxWxD)

Weight

Mounting / Installation Angle

AC Termination DC Termination<sup>4</sup>

Fused String Inputs (3 per MPPT)

Safety

Certifications and Standards Selectable Grid Standard and SRD

Smart-Grid Features

Warranty Standard

Extended Terms

UL1741SA-2016, UL1699B, CSA-C22.2 NO.107.1-01, IEEE1547a-2014; FCC PART15

Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAr, Freq-Watt, Volt-Watt

CPS Flex Gateway (1 per 32 inverters)

CPS

Standard / (with Flex Gateway)

Inverter: 15.95 x 15.75 x 7.87in (405 x 400 x 200mm)

Wirebox: 10.24 x 15.75 x 7.87in (260 x 400 x 200mm) Inverter: 48.5lbs/22kg; Wire-box: 13.23lbs/6kg

15 to 90 degrees from horizontal (vertical or angled)

Screw Clamp (Wire range: #8 - #2 AWG CU/AL)

Screw Clamp, Wire range: #14 - #8AWG CU

Tigo RSD Wire-box: 15A fuses provided (Fuse values up to 20A acceptable)

APS RSD Wire-box: 20A fuses provided (Fuse values up to 20A acceptable)

IEEE1547a-2014, CA Rule 21, ISO-NE

10 years 15 and 20 years

1) See user manual for further information regarding MPPT Voltage Range when operating at non-unity PF.

2) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.

3) See user manual for further requirements regarding non-operating conditions.

4) Wire-box only includes fuses/fuseholders on the positive polarity, compliant with NEC 2017, 690.9 (C)



### THE POWER OF SIMPLICITY

**ROOF MOUNT** introduces the Power of Simplicity to the ballasted flat roof solar industry. The system consists of only two major components, minimizing preparation work and installation time. Seamlessly design around roof obstacles, support most framed modules and bond the system with just the turn of a wrench.

www.unirac.com



Copyright © 2015-701 U Univar (or All rights reserve 1 Publ #2425

### PROJECT CHARACTERISTICS

Allowable Roof Slope:

3 Degrees

Unevenness:

+/- 3.5 Degrees

Max Building Height:

100 ft

Wind Speed:

Up to 120 mph

Wind Exposure:

Categories B and C. (D Upon Request)

PSF on Roof: Surfaces:

As low as 3.5 PSF

EPDM, PVC & TPO Membranes, Bitumen & Concrete

38 in<sup>2</sup> per Module (57 in<sup>2</sup> with Roof Pad)

Min-Local Contact Area: Module Orientation:

Landscape

Nominal Module Tilt Angle:

10 Degrees (Nominal)

Row Spacing:

19 in (Nominal)

### **COMPONENTS MATERIALS**

Ballast Bay

Aluminum 6063-T5

Module Clamp

Aluminum 6005A-T61

Locking 3/8" Hex Bolt

Stainless Steel 300 Series

Roof Pad

TPE 70 Shore A

### **BALLAST BAY GEOMETRY**

Width:

21 in

Length:

17 in

Height:

13 in

Weight:

3.5 lbs

Roof Pad:

3 in x 10 in

### MODULE COMPATIBILITY

Standard 60 and 72 Cell Framed Modules

Module Clamp w/ Integrated Bonding to UL2703

Cable Management

Compatible w/ Strut Accessories

### **WARRANTY & CERTIFICATIONS**

20 Year Manufacturing UL 2703 Certification

wings to a president of the original at

### ROOFMOUNT | RM10 EVO : UNIRA



LAY IT DOWN AND POWER UP! Unirac has taken the tried-and-true form and functionality of RM10 and evolved it to maximize the potential of flat roof solar projects. We have paired simplicity with power by improving the function, strength and reliability of the module clamps and modified the shape of the north row bay to optimize space and increase module density by up to 20%. The system continues to consist of only three major components, minimizing installation time and reducing soft costs. Quickly design around roof obstacles and bond the system with just the turn of a wrench. As with our legacy systems, optional roof attachments, roof pads, and MLPE mounts provide a complete solution. Unirac's unmatched commercial project support makes construction easy, from permitting through installation, and as always, Unirac is supported by North Americas largest distribution network and industry leading 25-year warranty. AERODYNAMIC DESIGN. SIMPLICITY OF FORM.



### LAY IT DOWN AND POWER UP!

FOR QUESTIONS OR CUSTOMER SERVICE VISIT UNIRAC.COM OR CALL (505) 248-2702

### ROOFMOUNT RM10EVO :: UNIRAC



### STREAMLINED DESIGN, EVOLVED SIMPLICITY, OPTIMIZED FOR POWER DENSITY. THREE MAJOR COMPONENTS. ONE TOOL.

RM10 EVO supports most framed PV modules (conventional, bi-facial, and large format) at a 10-degree tilt. The component list consists of three SKUs- a fully assembled ballast bay, a tucked north row bay and a redesigned universal module clamp. Together this system enables improved 13" row spacing and up to a 20% increase in the number of modules installed on the roof. Our legacy RM10 system has over a decade long proven track record, and we have retained all the features that will make RM10 EVO as reliable, simple to install, and robust. UL2703 certified grounding path from module to ballast bay, with just the turn of a wrench, RM10 EVO is designed to conveniently work with off the shelf wire management products.

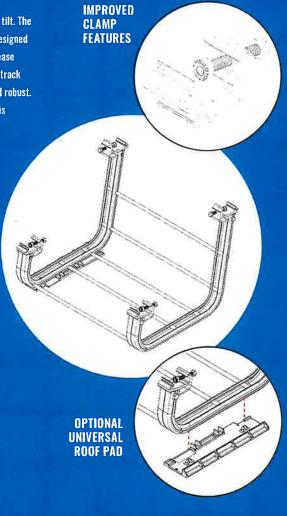
### **AVAILABILITY NATIONWIDE NETWORK**

UNIRAC maintains the largest network of stocking distributors for our racking solutions. Our partners have distinguished their level of customer support, availability, and overall value, thereby providing the highest level of service to users of UNIRAC products. Count on our partners for fast and accurate delivery to meet your project needs. Visit unirac.com for a list of distributors.

### **AUTOMATED DESIGN TOOL** DESIGN PLATFORM AT YOUR SERVICE

Creating a bill of materials is just a few clicks away with U-Builder, a powerful online tool that streamlines the process of designing a code compliant solar mounting system. Save time by creating a user profile, and recall preferences and projects automatically when you log in. You will enjoy the ability to share projects with customers; there's no need to print results and send to a distributor, just click, and share.

EUL2703 BONDING & GROUNDING MECHANICAL LOADING SYSTEM FIRE CLASSIFICATION



### UNIRAC CUSTOMER SERVICE MEANS THE HIGHEST LEVEL OF PRODUCT SUPPORT













### **TECHNICAL SUPPORT**

UNIRAC's technical support team is dedicated to answering questions & addressing issues in real time. An online library of documents including engineering reports, stamped letters and technical data sheets greatly simplifies your permitting and project planning process.

### **CERTIFIED QUALITY PROVIDER**

UNIRAC is the only PV mounting vendor with ISO certifications for 9001:2015, 14001:2015 and OHSAS 18001:2007, which means we deliver the highest standards for fit, form, and function. These certifications demonstrate our excellence and commitment to first class business practices.

### **BANKABLE WARRANTY**

Don't leave your project to chance. UNIRAC has the financial strength to back our products and reduce your risk. Have peace of mind knowing you are receiving products of exceptional quality ROOFMOUNT is covered by a twenty five (25) year limited product warranty.



Caution: Photovoltaic system performance predictions calculated by PVWatts<sup>®</sup> include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts<sup>®</sup> inputs. For example, PV modules with better performance are not differentiated within PVWatts<sup>®</sup> from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advorsom Model at I/sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the vanation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts<sup>®</sup> Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

The names DOE/NREL/ALLIANCE shall not be used in any representation, advertising, publicity or other manner whatsoever to endorse or promote any entity that adopts or uses the Model. DOE/NREL/ALLIANCE shall not provide any support, consulting, training or assistance of any kind with regard to the use of the Model or any updates, revisions or new versions of the Model or any updates, revisions or new versions of the Model.

YOU AGREE TO INDEMNIFY DOE/NREL/ALLIANCE, AND ITS AFFILIATES, OFFICERS, AGENTS, AND EMPLOYEES AGAINST ANY CLAIM OR DEMAND, INCLUDING REASONABLE ATTORNEYS FEES, RELATED TO YOUR USE, RELANGE, OR ADOPTION OF THE MODEL FOR ANY PURPOSE WHATSOEVER. THE MODEL IS PROVIDED BY DOE/NREL/ALLIANCE 'AS IS' AND ANY EXPRESS OR INPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A

### **RESULTS**

### 45,046 kWh/Year\*

System output may range from 42,758 to 46,073 kWh per year near this location.

Month	Solar Radiation	AC Energy
	(kWh/m²/day)	( kWh )
January	2.27	2,214
February	3.40	2,947
March	4.69	4,295
April	5.18	4,413
May	5.67	4,835
June	6.48	5,246
July	6.64	5,473
August	5.98	5,031
September	4.83	4,011
October	3.20	2,877
November	2.26	2,018
December	1.77	1,686
Annual	4.36	45,046

### **Location and Station Identification**

Requested Location 2077 Larpenteur Ave W, St Paul, MN 55113

Weather Data Source Lat, Lng: 45.01, -93.18 1.2 mi

PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. IN NO EVENT SHALL DOE/INREL/ALLIANCE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO CLAIMS ASSOCIATED WITH THE LOSS OF DATA OR PROFITS, WHIGH MAY RESULT FROM ANY ACTION IN CONTRACT, NEGLICENCE OR OTHER TORTICUS CLAIM HALT ARISES OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE MODEL

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

Latitude	45.01° N			
Longitude	93.18° W			
PV System Specifications				
DC System Size	40.15 kW			
Module Type	Premium			
Array Type	Fixed (roof mount)			
System Losses	23.98%			
Array Tilt	10°			
Array Azimuth	180°			
DC to AC Size Ratio	1.606			
Inverter Efficiency	98%			
Ground Coverage Ratio	0.4			
Albedo	From weather file			
Bifacial	No (0)			
	Jan Feb Mar Apr May June			
Ba-Abb. Issadiana I ana	0% 0% 0% 0% 0% 0%			
Monthly Irradiance Loss	July Aug Sept Oct Nov Dec			
	0% 0% 0% 0% 0%			
Performance Metrics				
DC Capacity Factor	12.8%			

### CITY OF FALCON HEIGHTS COUNCIL RESOLUTION

April 9, 2025

No. 25-35

### RESOLUTION ACCEPTING THE PROPOSAL FROM ALL ENERGY SOLAR FOR CITY HALL SOLAR PANELS, WITH CONTRACT TO BE CONTINGENT UPON RECEIPT OF THE SOLAR ON PUBLIC BUILDINGS GRANT

**WHEREAS**, the Minnesota Legislature established the Solar on Public Buildings (SPB) Grant Program in 2023 which provides grants to stimulate the installation of solar energy systems on public buildings; and

WHEREAS, the solar panels installed on Falcon Heights City Hall in 2012 have begun failing and parts for repair are not available; and

**WHEREAS**, the City would directly fund the removal and recycling of the existing panels and utilize grant funding and tax credits for the new solar array; and

WHEREAS, the City submitted an application and readiness assessment for the Solar on Public Buildings Grant Program and was notified on January 13, 2025 of their selection to submit a full application; and

**WHEREAS**, on February 24, 2025, the City issued a Request for Proposals from qualified contractors to remove and recycling the existing solar panels on City Hall and design, build, and maintain a new solar installation on City Hall; and

**WHEREAS**, the City received six responses to the RFP which were reviewed and graded to ensure success of the project; and

WHEREAS, the apparent most complete and highest-scoring response was received from All Energy Solar with a total project price of \$117,848, including \$19,175.56 for the removal and recycling of the existing City Hall solar panels; and

WHEREAS, the City's selected installer must work with staff to complete the full application for the Solar on Public Buildings Grant Program; and

WHEREAS, the City will enter into a contract with the selected installer for the removal and recycling of the existing City Hall solar panels and for the installation of a new solar array if a Solar on Public Buildings grant is awarded to the City of Falcon Heights.

**NOW THEREFORE BE IT RESOLVED** by the City Council of the City of Falcon Heights, Minnesota:

- 1. That the proposal from All Energy Solar is accepted and is the highest-scoring response to the City Hall solar panels RFP.
- 2. All Energy Solar is selected as the City's solar installer for the Solar on Public Buildings Grant Program.
- 3. Staff and All Energy Solar are authorized to submit the full application for the Solar on Public Buildings Grant Program.
- 4. The Mayor and City Administrator are authorized to enter a contract with All Energy Solar, contingent on the award of the Solar on Public Buildings Grant Program, not to exceed \$117,848.00.

ADOPTED by the Falcon Heights City Council this 9th day of April, 2025.

Moved by:	Leehy	Approved by: 2 California Randall C. Gustafson
GUSTAFSON		Mayor /
LEEHY	~	
MEYER	💆 In Favor	Attested by:
WASSENBERG	^	Jack/Linehan
MIELKE	Against	City Administrator