REVISION ENERGY

Taylor Maguire
Environmental Planner
Town of York
186 York Street
York ME 03909

Taylor

ReVision Energy is pleased to provide this proposal in response to the Town's RFP for a solar system at the Village Fire Station. Our design meets his RFP's stated goal of 35,000 kWh of generation in year one. The system will utilize a behind-the-meter interconnection allowing the fire station to reduce their kWh consumption on real time and benefit from the kWh net energy billing program.

The system is a 31.24 KW dc array that includes 71 Silfab 440 watt modules and 71 Enphase micro-inverters. It is projected to produce 36,072 kWhs in year one. Because the system's 27.24 ac size, the installation will require a CMP transformer upgrade of which the estimated cost will be $3200 and this allowance is included in our project costs.

Our system designers and engineers have significant experience with installation on buildings that have public safety antennas and systems. We have chosen the more conservative design approach which includes Enphase Micro-inverters and ferrite toriods (FT)on each panel. While the FTs increases the cost of the system ~$2,900, it should further protect against any radio interference.

The attached Project Summary reflects the net savings and includes the cost of an annual Operations and Maintenance contract for the life of the system. While this is optional, we highly recommend its inclusion. Also attached is the Helioscope production report that includes several key data points and a monthly production estimate.

Having install for than 20,000 clean energy systems over the past 20+ years ReVision has earned the designation as the #1 solar installer in Northern New England for the past several years. I believe that this experience and the fact that we are one of the few solar companies with a dedicated Maintenance and Operations team which positions us as the best partner for the Town of York for this project.

As designed the project will qualify for the 30% "direct pay" option, which in essence is like a 30% rebate to the Town. If we can secure equipment that will also

qualify for the additional 10% ITC adder we will present the option and any impact it may have on the project cost.

Taylor, please feel free to call or email me if you have any questions.

Thanks for your consideration,

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Below are some examples of rooftop projects with buildings that have public safety and or communication antennas. These facilities have not reported any interference issues.

York Beach Fire Station

Windham Fire Station

Isleboro Fire Station

Stratham Police Department

Hanove Police and Fire Station

- Hanover Public Works (public safety comms; not sure re: antennas)
- Stratham Police
- Keene Police and Public Works
- Nashua Lake St Fire
- Nashua Public Works
- Nashua Transit (public safety comms; not sure re: antennas)
- Nottingham Fire

Town of York

Fire Station Solar Proposal Project Summary

For Contract Proposal Date
October 24, 2025

Solar Design Summary

Project Size (DC)	31.24 kW
Project Size (AC)	27.264 kW
Annual Generation (kWh)	36,073

Investment Summary

Turnkey System Cost (incl. Allowances)	$111,472
Permitting & Site Preparation Allowance	$500
Utility Applications & Upgrades Allowance	$5,967
Average Annual O&M cost (Recommended)	$1,500
Investment Tax Credit	-$33,442
Depreciation Benefits	$0
Rebate/Grant (Estimate)	$0
Net investment	$78,030

Pricing guaranteed for 15 days

Engineer's Rendering

Main Street (Satellite Data)

Project Savings/Revenue

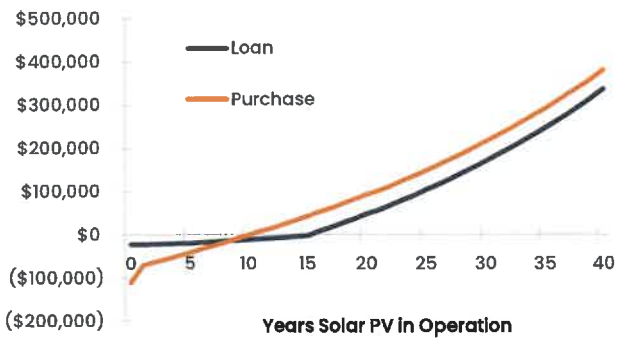
Energy Savings (Year 1)	$7,539
Renewable Energy Credits (Year 1)	$1,082
Simple Payback (Years)*	10
Purchase 25-Year Internal Rate of Return*	9.09%
25-Year Net Savings (Warranty Period)	$148,024
40-Year Net Savings (Commercial Lifespan)	$379,660

**Analysis assumes energy savings invested back into company (untaxed)*

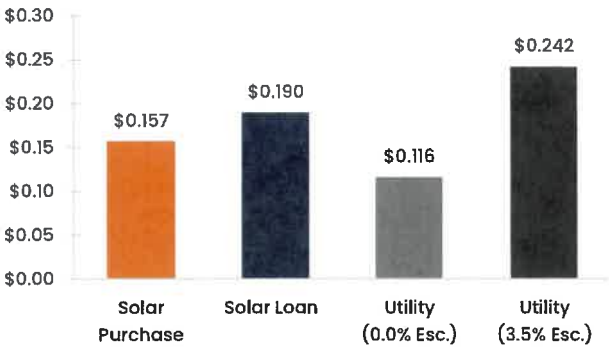
Environmental Benefits

Annual CO2e Offset (pounds)	34,991
Equivalent To...	
Gallons of Gasoline Not Burned	1,786
Passenger Cars Removed From the Road	3
Pounds of Coal Not Burned	17,487
Tons of Waste Recycled	5

Solar Savings vs. Utility



Levelized Cost of Energy ($/kWh, 40 Yr.)



REVISION ENERGY
An Employee-Owned Solar Company

20251014 Design for RFP (Enphase) York Village Fire Station, 266 York St., York, ME 03909

Report

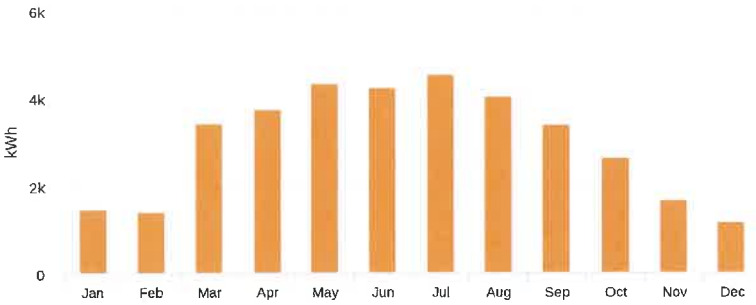
Project Name	York Village Fire Station
Project Address	266 York St., York, ME 03909
Prepared By	Jillian Hoyt jhoyt@revisionenergy.com

System Metrics

Design	20251014 Design for RFP (Enphase)
Module DC Nameplate	31.24 kW
Inverter AC Nameplate	27.26 kW Load Ratio: 1.15
Annual Production	36.07 MWh
Performance Ratio	73.6%
kWh/kWp	1,154.7
Weather Dataset	TMY, PORTLAND, NSRDB (tmy2)
Simulator Version	5a8140c56d-7092f1f585-d729296f19-5457387107

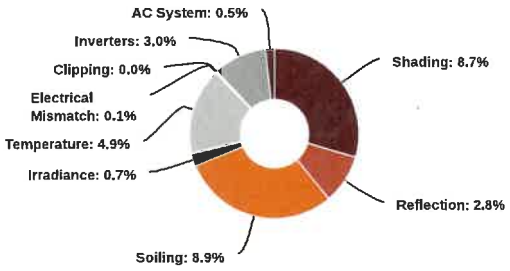
Project Location

Monthly Production



Month	GHI (kWh/m²)	POA (kWh/m²)	Shaded (kWh/m²)	Nameplate (kWh)	Grid (kWh)
January	58.5	78.4	68.5	1,483.3	1,475.1
February	83.8	99.8	89.0	1,406.4	1,395.5
March	123.4	138.4	125.3	3,601.5	3,414.4
April	144.9	151.3	139.1	4,062.4	3,736.1
May	173.8	176.0	163.7	4,783.1	4,336.3
June	180.9	177.5	165.1	4,826.6	4,247.5
July	190.5	191.5	178.8	5,233.3	4,528.5
August	165.2	170.8	157.9	4,620.3	4,040.2
September	127.9	143.2	130.4	3,812.0	3,409.4
October	90.4	109.4	98.4	2,862.5	2,646.3
November	54.8	69.4	60.7	1,754.7	1,674.3
December	46.7	63.6	55.2	1,179.4	1,169.5

Sources of System Loss



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m²)	Annual Global Horizontal Irradiance	1,440.9	
	POA Irradiance	1,569.2	8.9%
	Shaded Irradiance	1,432.1	-8.7%
	Irradiance after Reflection	1,392.1	-2.8%
	Irradiance after Soiling	1,268.2	-8.9%
	Total Collector Irradiance	**1,268.2**	**0.0%**
Energy (kWh)	Nameplate	39,625.6	
	Output at Irradiance Levels	39,347.2	-0.7%
	Output at Cell Temperature Derate	37,413.4	-4.9%
	Output after Electrical Mismatch	37,389.3	-0.1%
	Optimal DC Output	37,389.3	0.0%
	Constrained DC Output	37,386.1	0.0%
	Inverter Output	36,262.3	-3.0%
	Energy to Grid	**36,073.1**	**-0.5%**
Temperature Metrics			
	Avg. Operating Ambient Temp		10.7 °C
	Avg. Operating Cell Temp		23.7 °C
Simulation Metrics			
	Operating Hours		4719
	Solved Hours		4719

Condition Set

Description	Condition Set - 25 degree tilt, tmy2 Portland
Weather Dataset	TMY, PORTLAND, NSRDB (tmy2)
Solar Angle Location	Meteo Lat/Lng
Transposition Model	Perez Model
Temperature Model	Sandia Model

Temperature Model Parameters

Rack Type	a	b	Temperature Delta
Fixed Tilt	-3.56	-0.075	3°C
Flush Mount	-2.81	-0.0455	0°C
East-West	-3.56	-0.075	3°C
Carport	-3.56	-0.075	3°C

Soiling (%)

J	F	M	A	M	J	J	A	S	O	N	D
27.9	47.7	5.4	4	4	4	4	4	4	4	4	28.8

Irradiation Variance	5%
Cell Temperature Spread	4° C
Module Binning Range	-2.5% to 2.5%
AC System Derate	2.00%

Trackers

Maximum Angle	Backtracking
60°	Enabled

Module & Component Characterizations

Type	Component	Characterization
Module	SIL-440QD (Silfab Solar Inc.)	SILFAB_SIL_440QD_INTERNAL_045_250117.PAN, PAN
Inverter	IQ8HC-72-M-US (240V) (Enphase)	Spec Sheet
Buck Boost Optimizer	U650B (SolarEdge)	Mfg Spec Sheet

Components

Component	Name	Count
Inverters	IQ8HC-72-M-US (240V) (Enphase)	71 (27.26 kW)
AC Branches	6 AWG (Copper)	8 (1,156.2 ft)
Module	Silfab Solar Inc., SIL-440QD (440W)	71 (31.24 kW)

Wiring Zones

Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	-	Along Racking
Wiring Zone 2	-	-	Along Racking

Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Portrait (Vertical)	22.62°	307.87497°	0.0 ft	1x1			0
Field Segment 1 (copy)	Flush Mount	Portrait (Vertical)	22.62°	127.874985°	0.0 ft	1x1	32	32	14.08 kW
Field Segment 3	Flush Mount	Portrait (Vertical)	22.62°	308.8087°	0.0 ft	1x1			0
Field Segment 3 (copy)	Flush Mount	Portrait (Vertical)	22.62°	128.80869°	0.0 ft	1x1	39	39	17.16 kW

Detailed Layout2