



Town of Cortland

Agenda Request

(SUBMIT FORM TO THE TOWN CLERK NO LATER THAN ONE WEEK BEFORE THE SCHEDULED MEETING)

ALL REQUESTS ARE SUBJECT TO THE APPROVAL OF THE MAYOR

☐ RESOLUTION ☐ ORDINANCE ☐ INFORMATION ☒ OTHER

DATE PREPARED: 03/25/24

FOR MEETING ON: 04/08/24

DESCRIPTION/TITLE: AUTHORIZATION TO PURCHASE 2 (TWO) SOLAR LIGHT POLE UNITS

REQUIRED ACTION: MOTION FOR BOARD APPROVAL AND AUTHORIZATION FOR MAYOR TO EXECUTE QUOTE (ACTION ITEM)

STAFF RECOMMENDATION: ENGINEER RECOMMENDS THE BOARD CONSIDER THE PURCHASE

STATEMENT OF SUMMARY: SEVERAL RESIDENTS HAVE REQUESTED ADDITIONAL LIGHTING ALONG ROBINSON AVENUE. FOR OVER A YEAR, THE TOWN HAS BEEN IN COMMUNICATION WITH COMED REGARDING POSSIBLE INSTALLATION OF TWO LIGHTS POLES ALONG ROBINSON AVENUE AT THE INTERSECTIONS WITH WALNUT AND LLANOS STREETS. LAST YEAR'S AND THE CURRENT YEAR'S BUDGET HAVE INCLUDED \$15,000 FOR THE INSTALLATION OF TWO POLES. DUE TO ADDITIONAL WORK AND COSTS ASSOCIATED WITH THE INSTALLATION OF POLES SIMILAR TO THE EXISTING POLES, STAFF HAS RESEARCHED SOLAR POWERED LIGHT POLES.

AGENDA PLACEMENT:

☐ BOARD REVIEW OF PENDING BUSINESS ☒ NEW BUSINESS ☐ CONCERNS ☐ STAFF REPORTS
☐ COMMITTEE OF THE WHOLE ☐ PRESIDENT'S REPORT ☐ CONSENT AGENDA ☐ UNFINISHED BUSINESS
☐ PUBLIC HEARING

Prepared by: BCW

Approved by:

Date

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APPLICATION DESIGN

Robinson Ave Intersections Cortland - IL



River Landing - West Chapel, FL

Project Number:	<u>G7140</u>
Date:	9/26/2023
Written by:	Cuong VU
Version :	A



The global leader in solar lighting



Fonroche Lighting America is proud to be part of Fonroche Lighting, the global leader in off-grid solar street lighting. The deep resources and broader scope of an established market leader lets us take solar lighting even further, from the State Treasury in Salem, Oregon to the West African Republic of Senegal. Over 150,000 Fonroche SmartLight systems have been deployed worldwide.

With five offices in the USA and installations across the country, Fonroche is never far away. Some solution providers enter the solar lighting market—then move on. We're a reliable partner that sticks around. You get the responsive support and smart answers that you need now—and the confidence that we'll be here for you far in the future. And we can take on projects of any size, from local to national. That's why so many municipalities, military and federal facilities, tribes, commercial properties, and developers trust us to deliver the full promise of solar lighting.



Olton City Park – Olton, TX

The **3** key benefits for your project

- OFF-GRID

100% solar, not connected to the utility grid. No outages.

365 nights of light a year – guaranteed.

- POWERFUL

Powerful illumination, on a par with grid-connected systems.

- COST-EFFICIENT

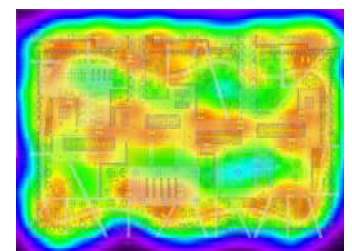
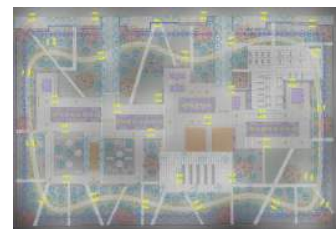
No maintenance for the first 10 years. Rapid installation. No operating costs.

Feasibility of your solar lighting project

To guarantee powerful, cost-effective off-grid lighting, Fonroche operates its own **design offices**.

We assess the feasibility of each project in four stages:

1. First, we define your **lighting requirements**.
2. Next, we analyze the last 10 years of **local weather data** to determine how much energy our PV panels will generate.
3. On this basis, we **calculate** what size and how many products we need to install.
4. Finally, our sales team draws up a **cost estimate**.



1 Project = 1 Study



✓1



10-Year Analysis of local weather data

We use the **PVsyst** software suite and **Meteonorm** historical time series irradiation data to calculate the real-world operating conditions — orientation and tilt angle of the panel, shadow, etc. — and external parameters, such as direct and diffuse irradiation, temperature and the solar calendar.

✓2



Simulation of product(s) over a typical year

Our teams have developed a solar sizing software application, which we use to determine which products will best meet your needs. We then simulate how these products operate over a typical year, based on the average conditions for **the last decade**.

✓3



Sizing the project to your needs

We use a set of key criteria to optimally specify your project:

- Average battery charge level over the year
- Minimum charge level
- Comparative analysis of energy generated by the panel vs. energy used by the system
- Worst-case scenario (lowest irradiation, longest night)

✓4



Results

Based on our experience, we propose the **optimal solution** in terms of lighting **performance** and **cost effectiveness**.

Autonomy of
365
nights of lighting /year

SMARTLIGHT SYSTEM CONFIGURATION



Non pro-rated

Project-Specific System Specifications

PHOTOVOLTAIC MODULE

PV panel power rating 310 Wp

PV panel tilt angle 45°



POWER 365: SMART STORAGE AND MANAGEMENT

Battery capacity (Must be NiMH) 1248 Wh



LED LIGHT UNIT

Lighting power 30 W nominal

LED light unit specification 4000K - 180 Lm/w



POLE & CROSSPIECE

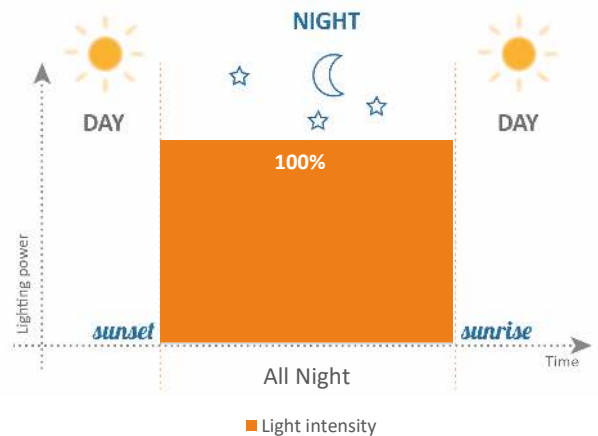
Pole height 20'

Protective treatment Powder Coated

POWER 365
Ultimate Solar Lighting Technology by Fonroche



Chosen lighting profile for your project



PHOTOMETRIC STUDY

**Note: these results are only valid if the Smartlight PV panel is at an azimuth angle of zero degrees and is completely free of shadow.*

***These results are subject to change due to technological or regulatory advances. This technical report is valid for 60 days from the date you receive it.*

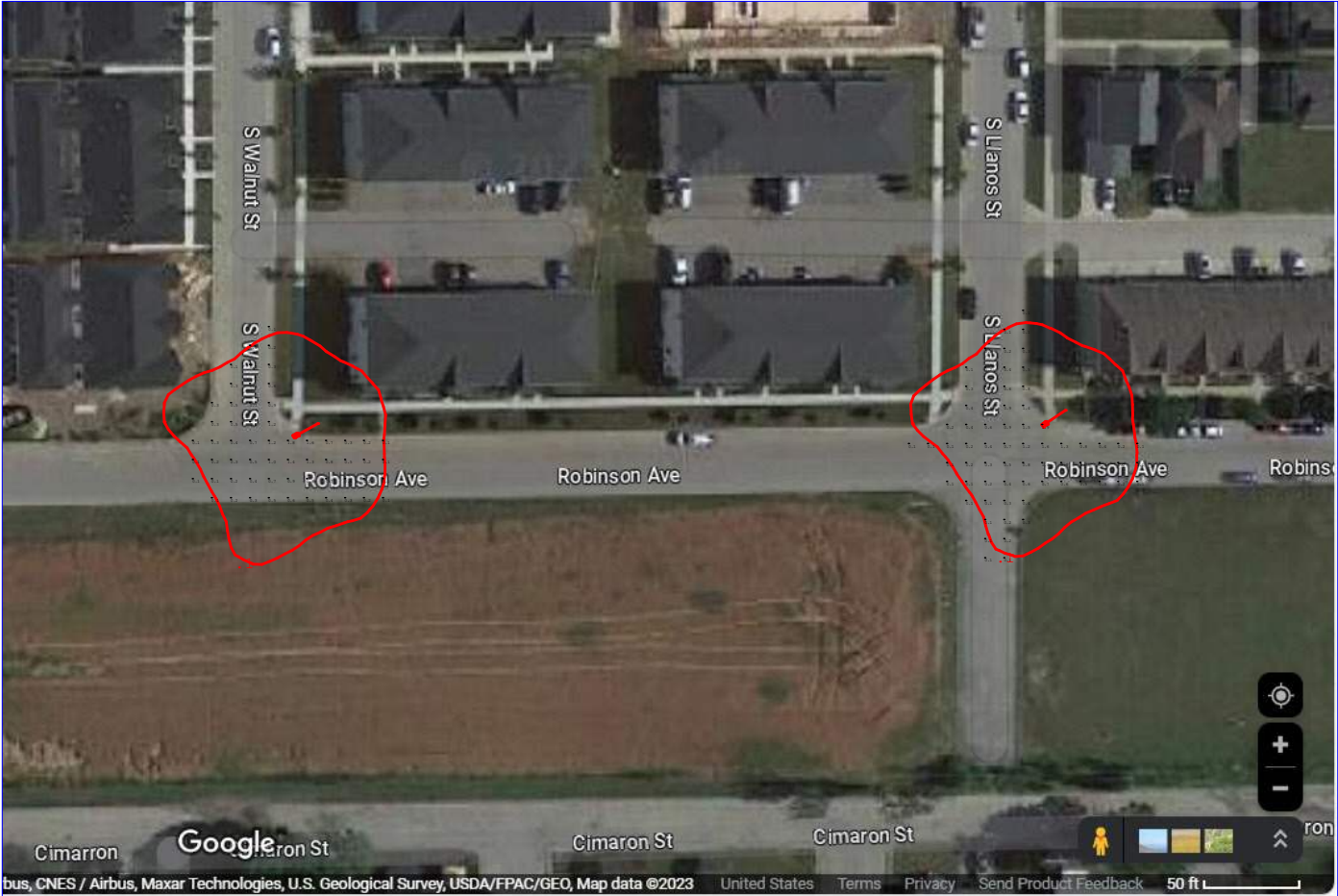
Robinson Ave Intersections




Lighting Plan Rev A
Project Number: G7140

By: Cuong Vu
cuong.vu@fonroche.us
Date:9/26/2023

4900 David Strickland Road
Forest Hill, TX 76119 | USA
Phone Number: (339) 225 4530
www.fonrochesolarlighting.com



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	2	T4-CK16B-4K-30W-20'	Single	5400	0.900	YTR215964

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Intersection - Left	Illuminance	Fc	0.49	1.8	0.1	4.90	18.00
Intersection - Right	Illuminance	Fc	0.45	1.9	0.1	4.50	19.00

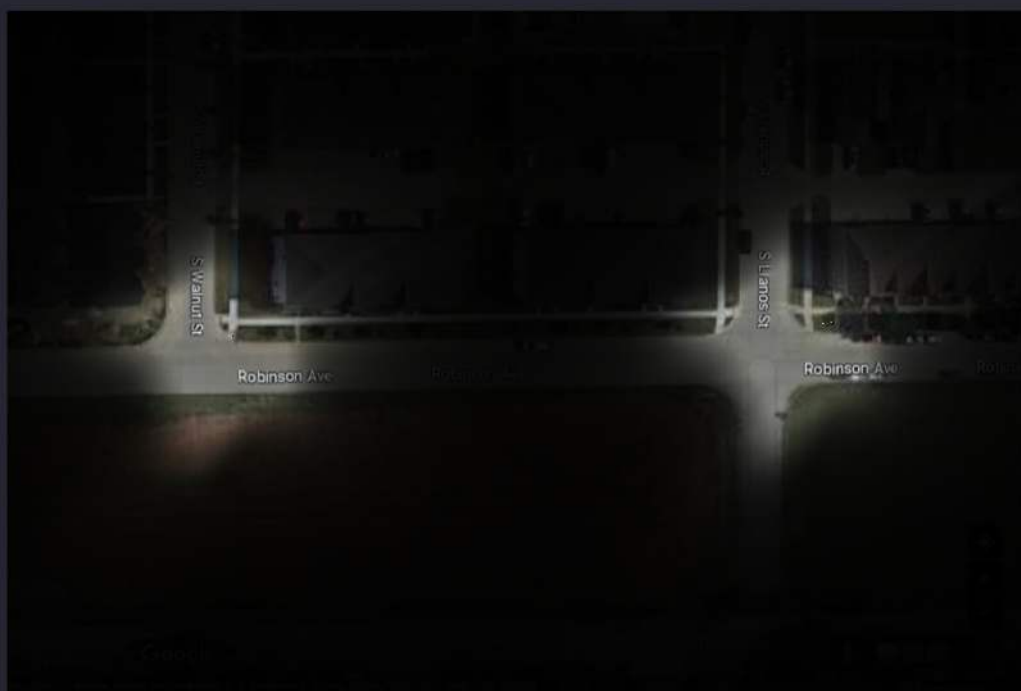
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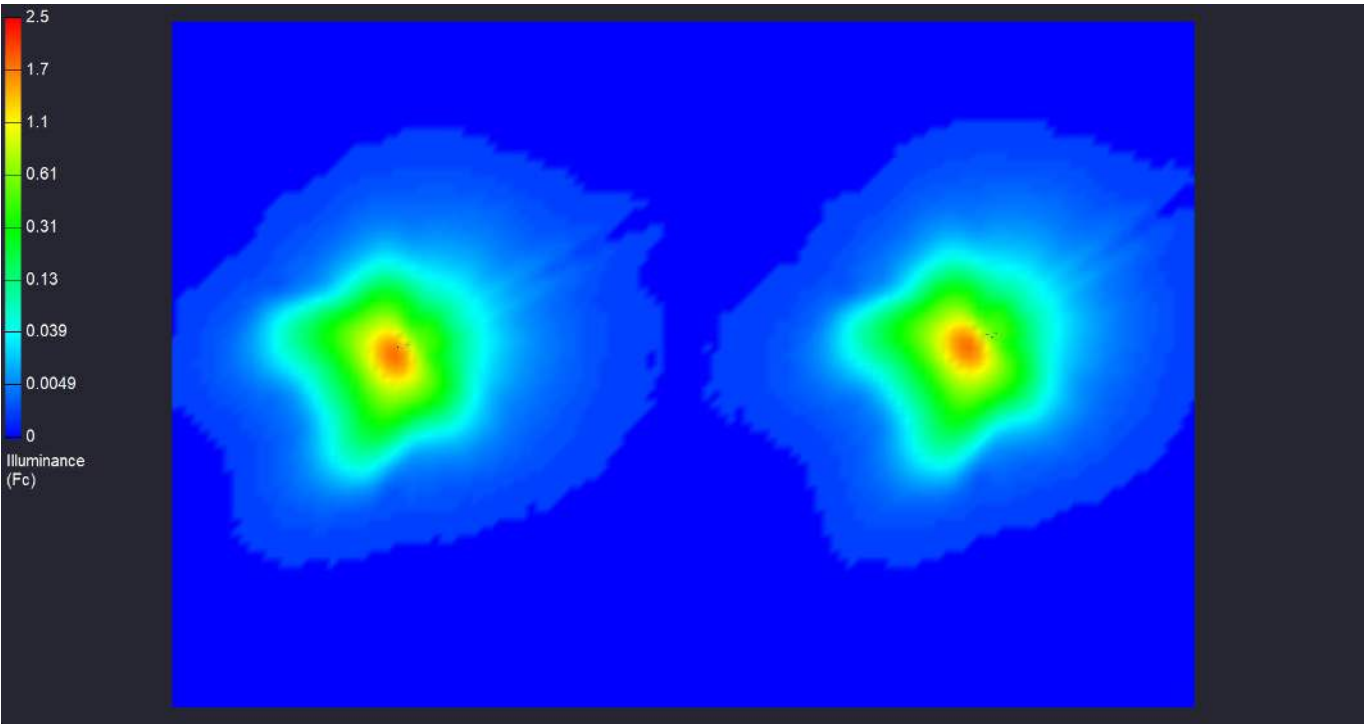
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A few examples





Solar lighting

Your commitment to sustainability

Contact us

Austin Brennan

Inside Sales Representative

P: (339) 225-4530 x207

E: Austin.brennan@fonroche.us

FIND OUT MORE AT

www.FonrocheSolarLighting.com

FONROCHE LIGHTING AMERICA | 4900 David Strickland Road
Forest Hill, TX 76119 | USA
Telephone : 339-225-4530

Opportunity Owner	Austin Brennan	Quote Number	00082120
Payment Terms	50% deposit, 50% Net 30 from Ship Date-contingent on credit approval	Quote Name	G7140-Cortland IL-Robinson Ave Intersections-RevA
Shipping Terms	Prices are FOB Origin	Quote Date	3/21/2024
		Quote Expiration Date	5/31/2024
		Est. Lead Time	8-12 Weeks
		Ship To Name	Town of Cortland
		Ship To	United States

Beware of Fraud: Any advance payment request will only be made on the basis of a proforma invoice sent by Fonroche Lighting America.
 Shipping estimated; final cost determined on day of shipping and added to invoice.

Fonroche Model Number	Fonroche Product Description	Price System	Quantity	Amount
[T54-CK16B-4K-T4] [P310F-4P]HW-MC Fixture Color: BK POLE: 20Ft. Round Tapered Pole-Anchor Base-1-4FT Arm -Arm Color: Black -Pole Color: BK	SmartLight Assembly with 1248Wh-24V NiMH Battery , special extreme temperature (from -40 °F to +158 °F), 310W solar module with Top of Pole assembly and Intelligent management/control system. Provisioned for Single Fixture configuration. Single Essential (Formerly CK16B) Fixture 4K Color Temp.-Type 4 Fixture Color: BK - . Power Assembly color is black. Mount: High wind and enhanced marine coating. 20Ft. Round Tapered Pole-Anchor Base-1-4FT Arm -Arm Color: Black -Pole Color is BK 5 Year Warranty All Night Lighting 365 Days a Year - Full Battery Replacement Assumes No Shading Tilt optimized for snow conditions 45 Degrees Tilt 100% =30 Watts worst case conditions.All Night at 100%	USD 5,159	2.00	USD 10,318
Total Line Items				USD 10,318
Shipping and Handling				USD 2,043
Quote Total				USD 12,361

This quotation is subject to the following terms and conditions

Seller's Terms and Conditions of Sale in effect on the date of this order shall apply to this quote and are hereby incorporated by reference.
 Seller's Terms and Conditions of Sale may be viewed at <https://www.fonrochesolarlighting.com/about-us/terms/>.

Pricing is based on Fonroche Lighting America's Standard Terms & Conditions and any additional terms stipulated herein. It is the Representative's responsibility to convey these terms to the customer. Without prior written approval from Fonroche Lighting America's Sales Director, any deviation from these terms may constitute a change in this pricing at the time of order. In the event that Fonroche Lighting America is unable recuperate difference in pricing from end customer, it may deduct the difference from representative's commission.