

# City of Copperas Cove

## Information Item

October 15, 2013

### Golf Course Road and Texas Street Lighting

Contact - Daryl Uptmore, Public Works Director  
(254) 547-0751, [dutpmore@copperascovetx.gov](mailto:dutpmore@copperascovetx.gov)

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**SUBJECT:** Lighting for Golf Course Road.

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**1. PROJECT DESCRIPTION**

Install additional lighting on Texas Street, near Golf Course Road.

**2. BACKGROUND/HISTORY**

During the September 3, 2013 Regular Meeting of the Copperas Cove City Council under Items for Future Agendas, Councilman Gary Kent requested staff research the need to improve lighting along Golf Course Road due to visibility issues for runners and walkers.

**3. FINDINGS/CURRENT ACTIVITY**

City staff contacted Oncor regarding installation cost. Oncor's response is there will be no charge if installation does not exceed \$2,000. Staff also contacted GenPro Energy Solutions, LLC to provide a quote associated with solar power units (the estimate received is attached for Council review).

**4. FINANCIAL IMPACT**

Funds available Y/N: Y

The cost associated with utilizing Oncor would be \$20.00 per month, and no installation fee. GenPro Energy Solutions, LLC provided an estimate for four solar streets lights at a total cost of \$17,634.78.

**5. ACTION ITEMS/RECOMMENDATION**

City staff recommends the City Council request a future agenda item to authorize the City Manager to utilize Oncor for the installation of a 100 Watt high pressure sodium light on Texas, near Golf Course Road if the Council's desire is to move forward with the original request.



Full View of Texas Street



Proposed Solar Lighting Area Option



60W Solar Street Lighting System

## SOLAR LIGHTING THAT'S JUST SMARTER

High-performance solar LED lighting systems - great for new projects or retrofits

- **Smart Controller:** Adaptively manages charge state, regulating light as needed to provide 4+ days autonomous operation
- **NiMH Battery:** Greater performance than lead acid with 100% discharge, -40 C to +70 C operating range, more than 3,650 cycles for up to a 12 year lifespan; hidden and tamper proof
- **High Output LED:** Cree 60W lamp (130 lm/W)
- **Custom Solutions:** We custom design and engineer poles to meet AASHTO lighting standards or any project requirements



We custom design contemporary or traditional poles that enhance any project.

**5 YEAR WARRANTY**  
25 YEAR POWER WARRANTY

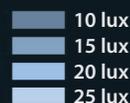


### You're in Control

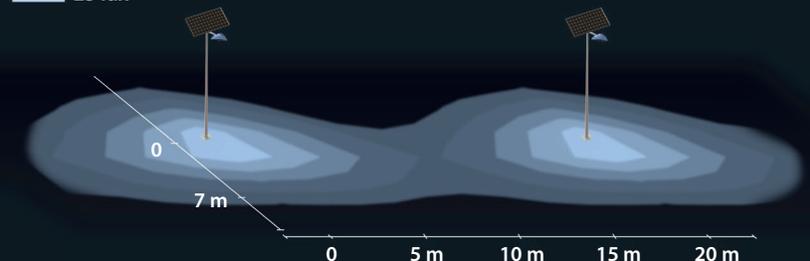
Easily program your own custom lighting profiles with a tablet app for seasonal and hourly efficiency.

### Simple Installation

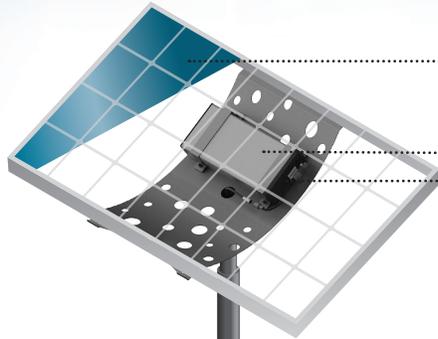
Plug-and-play wiring, plus an option for concrete-free foundations, make installation a breeze.



More light than other solar LEDs



## 60W Solar Street Lighting System



### Fonroche Photovoltaic Panel

High-quality 190-watt module with a 25-year power guarantee for sustained output and ease of maintenance

Technology .....	Silicon monocrystalline
Capacity .....	190 W
Lifespan .....	> 25 years
Size .....	1593 x 803 x 46 mm
Power Guarantee .....	10 years to 90% / 25 years to 80% nominal power <sup>[1]</sup>
Standards .....	IEC-61215, IEC-61730 I and II

### State-of-the Art NiMH Battery

Hidden, compact battery with optimized design and NEMA enclosure for unmatched long life and efficiency

Technology .....	24 V NiMH, 480 Wh usable capacity
Lifespan .....	More than 3650 cycles, up to 12 years <sup>[2]</sup>
Operating Temperature .....	-40°C to +70°C (-40°F to +158°F) / outperforms lead acid
Depth of Discharge (DOD) .....	100% / far exceeds lead-acid technologies
Standards .....	EN 550 14-1 ; EN 55014-2; EN 61000-6-2 ; EN 61000-6-3

### Smart Battery Management

Monitors available battery energy and adjusts light output 20%-100% to extend autonomous operation

Autonomous Operation .....	4 winter nights, with no charging source <sup>[3]</sup>
Programming .....	Custom lighting profiles (seasonal/hourly)
Individual Control .....	Tablet app; optional motion sensor

### High Output LED

White light 60-watt luminaire for efficiency and visibility - provides more efficient distribution of light than traditional sodium lighting technology

Lamp .....	60W Cree LED, 24 V
Lamp Output .....	5000K, 130 lm/W, CRI: 70; max output 6000 Lumens <sup>[4]</sup>
Electric Yield .....	98%
Rated .....	IP 65
Low-Voltage Directives .....	EN 60598-1 ; EN 60598-2-3
Electromagnetic	
Compatibility .....	EN 61000-6-1 ; EN 61000-6-3

### Custom-Engineered Poles

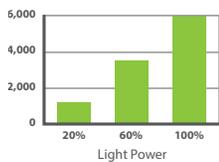
Sturdy steel traditional and contemporary designs for safety and aesthetics

Customization .....	Foundation, base, lighting arm, lamp housing and RAL color
Total Height .....	6.4 m or per project requirements
Lighting Point Height .....	5.8 m or per project requirements
Wind Resistance .....	Zone 4 C1 or per project requirements
Pole Standards .....	Engineered and manufactured per site requirements
Conformity Declaration .....	CE

### Foundations

Concrete or concrete-free, buried or above-ground options for convenient installation in varied locations.

### Output (Lumens)

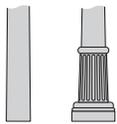


Light power is regulated to conserve charge when needed. Even at lower power, lumen output is significant.

### Pole Color



Optional RAL color match - choose from hundreds of powder coated finishes to meet any project requirements.



### Pole Base

Standard and decorative designs for compatibility with site design features.

[1] Power guarantee pursuant to IEC-61215 standard. [2] Depending on the battery discharge level and room temperature. [3]. During winter period, assuming minimum production capacity of 1400KWh/m<sup>2</sup>/year. [4] Efficiency of LED may improve quickly due to permanent technological research.



GenPro Energy Solutions, LLC

PO Box 30  
 Piedmont, SD 57769-0030  
 Ph: 605.341.9920

# Estimate

Date	Estimate #
9/12/2013	153239

Name / Address
Industrial Projects, LLC 8400 N State Highway 6 Waco, TX 76712-2611

Ship To
Industrial Projects, LLC 8400 N State Highway 6 Waco, TX 76712-2611

Item	Description	Rep		Project	
		Qty	Rate	Total	
408052224137	Solar Street Light, 30 Watt LED Fixture, 190 Watt Solar Module, NiH Battery, 4 days autonomy	4	4,408.695	17,634.78	
FRTKC	Shipping and Handling - LTL Pallet (tbd) Buyer responsible for any applicable state or local taxes		0.00	0.00	

<b>Subtotal</b>		\$17,634.78
<b>Sales Tax (0.0%)</b>		\$0.00
<b>Total</b>		\$17,634.78

PRICES ARE GOOD FOR THIRTY DAYS (30) FROM DATE ON ESTIMATE. ALL INVOICES ARE FOB FACTORY UNLESS OTHERWISE NOTED ON LINE ITEM. TERMS ARE PER GENPRO'S STANDARD TERMS AND CONDITIONS. PRICES IN US DOLLARS. FREIGHT CHARGES TO BE ADDED AT TIME OF INVOICE UNLESS ALREADY LISTED ON LINE ITEM.