CITY OF LYNWOOD
NOTICE INVITING BIDS
FOR THE PURCHASE OF SOLAR LED WALKWAY LIGHTS
ADDENDUM #1
ADDENDUM ISSUE DATE: <u>September 25, 2018</u>

The following clarifications, answers to questions, amendments, additions, deletions, revisions and/or modifications are hereby made part of the Notice Inviting Bids (NIB) for the Purchase of Solar LED Walkway Lights ("Project").

1. **The City will not be accepting any more questions after the posting of Addendum #1**

2. **The City is issuing additional specification attached to this addendum. (Attachment A)**

Questions received from potential Bidders and Answers from the City.

3. Question: I am curious of the amount of light that is being sought at the location, as your specs say the city is seeking 80W lamps. Typically, our 80W lamps are mounted on about a 28' pole and light an area of over 2,000 sq. ft, depending on the lens used. If we modified our design for such a small pole, the lighting distribution will be affected and further modifications would have to be made. Perhaps you can provide a description of the pathway to be lit and the light at ground level that is being sought? Please understand that we are seeking to offer the City of Lynwood the best solution for your application.

   Answer: See attached additional specifications.

4. Question: I have a question regarding to the Solar LED Walkway Lights bid. I noticed that there's only two lines on the price (Unit Price and Total Price). Should I include the tax in the total price?

   Answer: Do not include tax in the total price. Add a separate line item for the tax.

5. *Question: How many hours a night will the lights need to be on? How many days of backup needed in case of continuous overcast? Do the lights need a dimming feature for off- peak hours?*

   Answer: See attached additional specifications.

6. *Question: With the exception of 80w for wattage (assuming that's for the solar array), the specification is vague. Battery capacity, luminaire wattage, profiles and other solar lighting information is not provided but significantly impacts overall system performance and cost. For example; "custom" lighting profile. What does that require? Could you clarify the system and/or performance specifications/requirements?*

   Answer: See attached additional specifications.

ATTACHMENT A

ADDITIONAL SPECIFICATIONS
Solar LED Walkway Lights

Summary of lighting specifications:

- Pole mounted lighting systems shall provide all night security lighting.
- Solar lighting solution shall be low profile, with the solar array flush mounted directly onto the battery enclosure. Design should be aesthetic and vandal resistant.
- LED luminaire rated for a minimum of 100,000 hours of operation shall be used.
- To ensure a minimum safety standard each complete PV LED lighting system shall carry a Nationally Recognized Testing Laboratory (NRTL – https://www.osha.gov/dts/otpca/nrtl/nrtllist.html) certification such as Underwriters Laboratory (UL) or equivalent. NRTL's for (multiple) individual sub-components shall not be considered.
- Battery back-up (autonomy) shall be minimum of five (5) days.
- Solar controller shall be a smart controller and possess a self-test feature.

1. Vandal Resistance:

   - Solar units to be designed to include vandal resistant hardware and designed to withstand abuse.
   - Security fasteners will be used for any exposed points.

2. LED Luminaire:

   - LED technology shall be used with a minimum of 100,000 hours of operation.
   - Must be field serviceable with minimal time and effort.
   - LED luminaire (fixture) shall have a CCT of 4000 Kelvin and use a Type II IES light distribution.
   - Luminaire shall be powder coated to match system color.

3. Operating Profile:

   - Year round, the system must provide a minimum output of 1900 lumens from dusk until 11pm.

- After 11pm, the system may be dimmed no lower than 760 lumens (40% of its evening setting) until dawn.

4. Solar Panel

- Power rating (Pmax): 80W
- Must be field serviceable with minimal time and effort.
- Must be oriented due South and tilted from horizontal at an angle of 45 degrees to ensure maximum sun exposure.

5. Pole

- Pole shall be engineered for local wind conditions, considering the EPA of solar lighting system and luminaire.
- Pole shall be no more than 16 feet in length, and the luminaire shall be mounted at 14' above grade.
- Pole shall be of steel construction.
- All mounting hardware, bolt pattern and anchor bolts shall be included.
- Pole shall be powder coated to match color of solar lighting system (Black or White).

6. Modular Design:

- Solar units and their components must be of modular design to allow for independent replacement of solar panel, luminaire, batteries and lighting control module.
- Solar lighting solution shall be low profile, with the solar array flush mounted directly onto the battery enclosure. Systems with non-flush mounted solar arrays shall not be considered.

7. Batteries & Autonomy:

- Batteries shall have a minimum five days of autonomy or battery reserve. Solar unit must be capable of meeting Operating Profile for a minimum of five nights with no charge from the panel or any external source.
- Batteries shall be industry approved rechargeable, non-spillable, sealed, AGM (absorbed glass mat).
- Batteries must have appropriate temperature ratings for local environmental conditions.
- Minimum battery capacity 100 Ah.
- Battery enclosure shall be powdercoated aluminum.

- Batteries must be capable of providing a minimum of five years of trouble free charging and discharging and warranted for a five-year prorated period.

8. Solar Controller:

- The controller for all solar lighting systems shall be a single solutions and be circuit board based and contain a real time clock for accuracy.
- Where applicable, the controller as described above must automatically adjust for daylight savings.
- Each controller should have an integral low voltage disconnect and be able to operate the LED luminaires as specified.
- To avoid false transitions due to overhead and/or ambient light conditions, controllers which rely on solar module voltages or photocell to transition between on and off only will not be considered.
- Functionality must also include a self-test feature which easily demonstrates LED operation and battery state of health. The self-test must be able to be performed by City staff during the day, without the use of any specialty tools.
- The controller should be one complete unit; including a regulator, LED driver with a real time clock and self-test feature. A solar regulator coupled with a third-party timer for LED light operation will not be considered.

9. Warranty Requirements:

- Batteries will have a minimum five (5) year prorated warranty.
- All system components other than batteries including LEDs, controllers, wiring, metal work, finishes, and associated hardware will have a minimum ten (10) year warranty.
- Solar panels will have a minimum twenty-five (25) year warranty.
- Replacement components under warranty must be made available within four (4) weeks of reported issue and determined remedy.