

## MEMORANDUM

DATE: August 2, 2011

TO: City Council

THROUGH: City Manager Judie Zimomra

FROM: Public Works Director Gates Castle *JAC*

RE: Interconnectivity Path Lighting and Signage

RECOMMENDATION: Approve lighting and signage for interconnectivity path linking the Library, City Hall, BIG Arts and the Historic Village.

At its June 7, 2011 meeting, City Council awarded the contract to construct the Dunlop Road / Wooster Lane shared use path, including an interconnectivity path between the Library and City Hall. Next year the City will construct an ADA – compliant pedestrian bridge utilizing Community Development Block Grant (CDBG) funds to replace the existing non-compliant bridge which links City Hall and BIG Arts. In addition, the City will work with BIG Arts to complete the interconnectivity path in front of BIG Arts to the Historic Village.

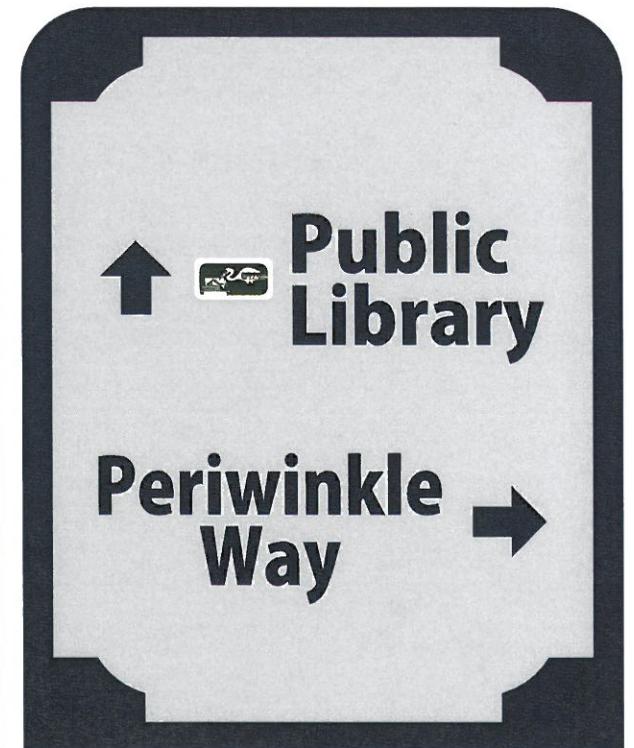
In order for the interconnectivity path to be most useful, lighting and signage must be incorporated into the path design. Wayfinding signage similar to the signage approved by Council for the Dunlop Road / Wooster Lane path is recommended for the interconnectivity path signage as well. The signage would be made of dibond with gray background, blue border, blue lettering and a logo for each facility next to its name. Each sign will have a small code-compliant light since the path will be utilized at night. Attached is an example of the proposed signage. Also attached is a plan of where the proposed signage would be placed along the path between the Library and City Hall.

The plan also indicates where code-compliant bollard lights would be proposed along the path. Solar and LED lights were considered and the LED option is recommended due to the large number of trees along the path which would restrict the use of solar. Two LED light options were explored, namely the Princeton by Stonelight and the Edge Pathway Light by Beta LED. Information on each light is attached for reference. If both fixtures are equal with respect to functionality and aesthetics, the Stonelight would have the advantage due to its low maintenance concrete construction with the color being integrated into the concrete.

Staff recommends that Council approve the proposed lighted signage for the interconnectivity path between the Library and City Hall at an estimated cost of \$4,000. It is further recommended that Council approve the Princeton light fixtures by Stonelight for the same path at an estimated cost of \$25,000 to \$30,000. Funding for the work is available in the Public Works portion of the Capital Improvements budget (Fund 301).

If approved, the same signage and lighting will be used for the remainder of the interconnectivity path from City Hall to the Historic Village.

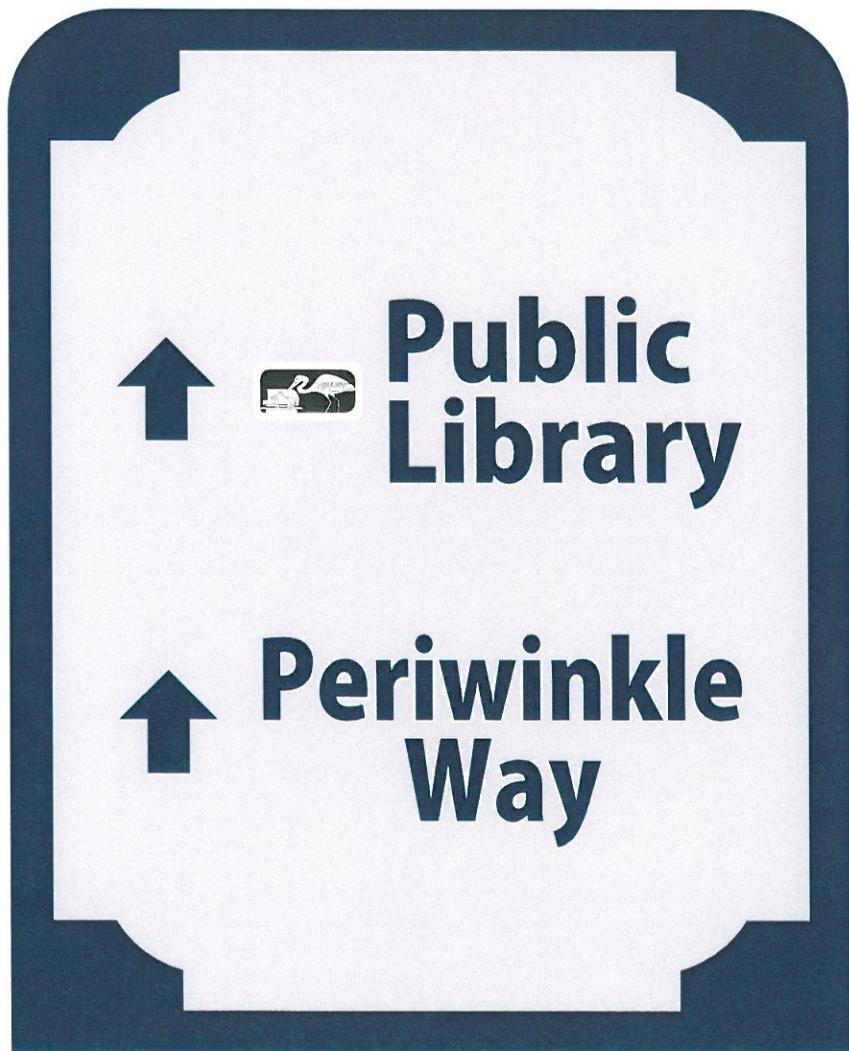
Cc: City Attorney Ken Cuyler  
Finance Director Sylvia Edwards



Customer:	Gates Castle
Company:	City of Sanibel
Address:	
City:	State/ZIP:
Phone:	
Fax:	



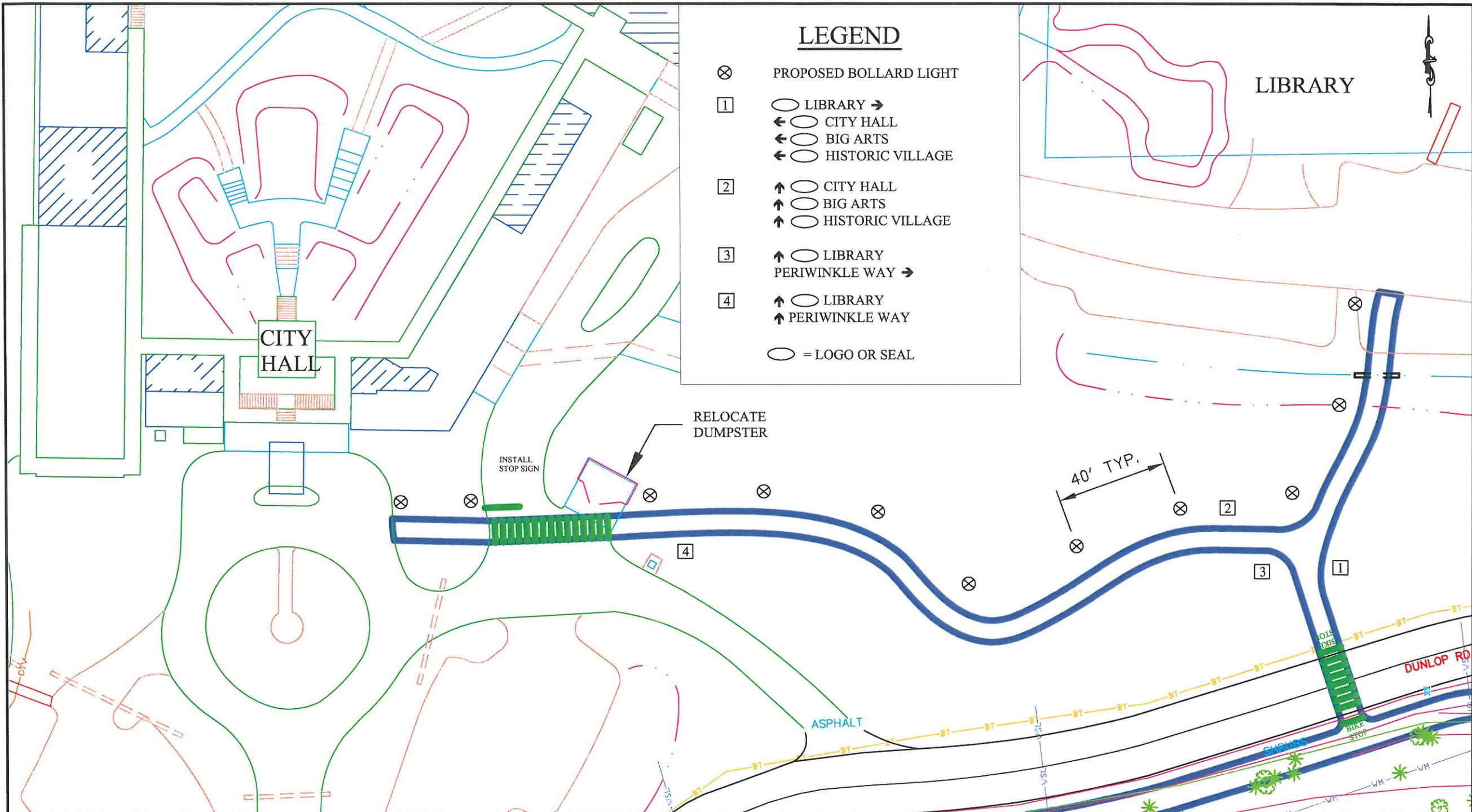
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Order Date:	Salesperson:
Sign Dimensions:	30" x 24"
Comments:	<p><b>Sabal Signs Inc.</b>          16325 San Carlos, Blvd.          Fort Myers, Florida 33908          Phone: 239-466-2910 Fax: 239-466-6962          sabalsigns@earthlink.net</p> <p>This Artwork Is Property          Of SABAL SIGNS INC.          The Use Of This Rendering          Or Any Part Thereof, Will          Result In A Design Charge.</p>



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### LEGEND

- ⊗ PROPOSED BOLLARD LIGHT
- 1 ○ LIBRARY →  
← ○ CITY HALL  
← ○ BIG ARTS  
← ○ HISTORIC VILLAGE
- 2 ↑ ○ CITY HALL  
↑ ○ BIG ARTS  
↑ ○ HISTORIC VILLAGE
- 3 ↑ ○ LIBRARY  
PERIWINKLE WAY →
- 4 ↑ ○ LIBRARY  
↑ PERIWINKLE WAY
- = LOGO OR SEAL

REVISION No.	REVISION	DATE	BY	CHK	APPD



**City of Sanibel**  
 800 Dunlop Road  
 Sanibel, FL 33957

**INTERCONNECTIVITY PATH - LIGHTING & SIGNAGE - PHASE 1**

DRAWN BY: JMH	APPROVED BY: GATES D. CASTLE, P.E.	CHECKED BY: SBK
DATE: 7/6/2011	SCALE: 1"=40'	PROJECT NO.
		SHEET NO. 1



## Outdoor Lighting

### LED Lights

[Solar Bollards with LED\(PDF\)](#)

[Security Bollards with LED\(PDF\)](#)

Durable, low-maintenance pre-cast concrete with energy-efficient LEDs—perfect for your green projects.

Most Stonelight® designs will accept either a 4-watt or 8-watt LED. Due to the efficiency of the LED lamp it is now being used as the new standard in the lighting industry. The 4-watt LED gives 40 watts of light and the 8-watt LED produces 75 watts of light on a pathway where the lights are mounted 24" above grade. Both LEDs have an average lamp life of 50,000 hours.

#### Applications

LEDs are applicable for pathways and roadways at residences, community centers, parks, hospitals, retirement facilities, hotels, schools, corporate buildings, and a host of other sites.

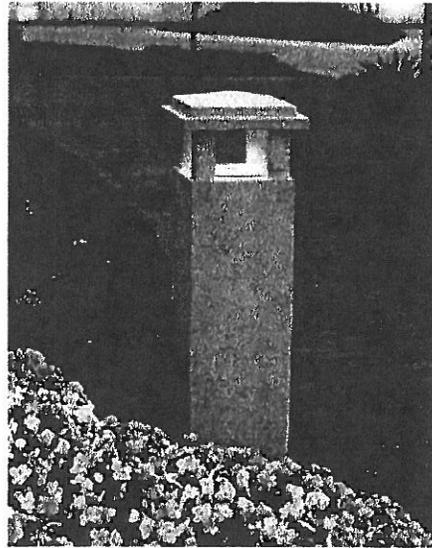
#### Performance

A microprocessor inside the Stonelight turns on the 4-watt LED in the following pattern:

1. Full brightness from dusk for 3 hours
2. Then 50% brightness for next 3 hours
3. Afterwards dark until next sunset
4. But motion by a person (not an animal) within 20 ft. will cause the motion detector to activate the light for 5 minutes at full brilliancy

#### Features & Specifications

- LED lens is made of impact resistant glass and LED Fixture has a 2,500 Hour salt spray test rating
- LEDs can be used with a remote solar panel in certain Stonelight models
- Light fixture and panel components are designed and manufactured to UL and C-UL Standards for wet locations, rated IP 66
- The LEDs are dimmable and are impervious to extreme temperatures
- Maintenance advantage: computer with a thumb-drive aimed at the Stonelight can calculate the life remaining on the battery and the lamp
- Motion detectors can be used in Stonelight bollards with LEDs to detect movement by a person within 20 ft. and turn on the LED lamp for 5 minutes
- The color of Stonelights is integrated with the concrete before it is poured. It is not a surface application.
- The texture of the pre-cast concrete Stonelight is a simulation of coral rock that was quarried from coral reefs.

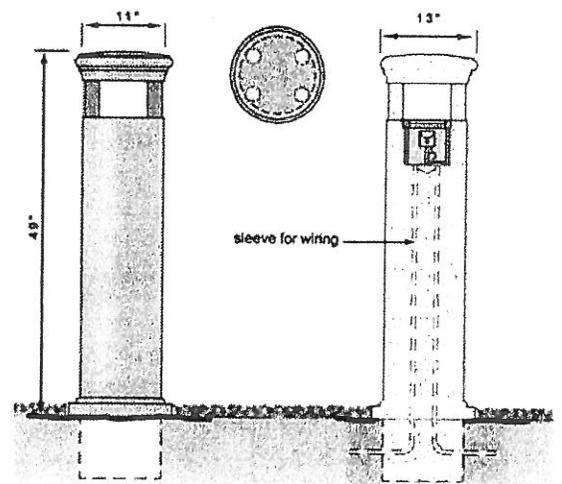


The Valencia-Open bollard

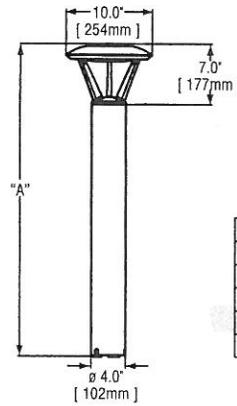
[> Click here to download our 8-page Product Details PDF](#)

[> Click here to download our 2-page Solar flyer PDF](#)

### Princeton



BetaLED Catalog #: PWY - EDG - 5M - P4 - 02 - C - UL - BZ - 43K -



Model	Dim. "A"
Landscape-12	13"
Landscape-18	18"
Pathway	36"
Pathway	42"
Pedestrian	96"

Notes:

City of Sanibel-Dunlop Rd./Wooster Ln.  
Shared Use Path Lighting

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Factory-Installed Options
PWY	EDG Pathway Light	5M1 Type V Medium	<input type="checkbox"/> P0 <sup>2</sup> <input type="checkbox"/> P1 <sup>3</sup> <input type="checkbox"/> P3 <sup>4</sup> <input type="checkbox"/> P4 <sup>5</sup> <input type="checkbox"/> P8 <sup>6</sup>	02 <sup>7</sup>	C	<input type="checkbox"/> UL Universal 120-277V <input type="checkbox"/> UH <sup>8</sup> Universal 347-480V <input type="checkbox"/> 12 120V <input type="checkbox"/> 27 277V <input type="checkbox"/> 34 <sup>9</sup> 347V	<input type="checkbox"/> SV Silver <input type="checkbox"/> BK Black <input type="checkbox"/> WH White <input type="checkbox"/> BZ Bronze <input type="checkbox"/> PB Platinum Bronze	Please type additional options in manually on the lines provided above. <input type="checkbox"/> 43K 4300K Color Temperature <sup>9</sup> <input type="checkbox"/> 525 525mA Drive Current <sup>10</sup> <input type="checkbox"/> F Fuse <sup>11,12</sup> <input type="checkbox"/> HL Hi/Low (175/350/525, dual circuit input) <sup>13,14</sup> <input type="checkbox"/> TL Two-Level (175/525 w/ integrated sensor control) <sup>13,14</sup> <input type="checkbox"/> TL2 Two-Level (0/350 w/ integrated sensor control) <sup>13,14</sup> <input type="checkbox"/> TL3 Two-Level (0/525 w/ integrated sensor control) <sup>13,14</sup>

Footnotes

- |  |   |  |
|--|---|--|
| <p>1. IESNA Type V Medium distribution<br/>                 2. 13" landscape fixture<br/>                 3. 18" landscape fixture<br/>                 4. 3' pathway fixture (bollard)<br/>                 5. 42" pathway fixture (bollard)<br/>                 6. 8' pedestrian fixture<br/>                 7. Actual number of LEDs provided is 18</p> | <p>8. Available with 3, 4 and 8 mounting options<br/>                 9. Color temperature per fixture; minimum 70 CRI<br/>                 10. Driver operates at 525mA instead of the standard 350mA providing a higher lumen output and a shorter life</p> | <p>11. Not available when UH voltage is selected<br/>                 12. When code dictates fusing use time delay fuse<br/>                 13. Refer to <u>multi-level spec sheet</u> for availability and additional information<br/>                 14. Available with 1, 3, 4 and 8 mounting options</p> |
|--|---|--|

LED PERFORMANCE SPECS																
# of LEDs	Initial Delivered Lumens – Type V Medium @ 6000K	Rating**			Initial Delivered Lumens – Type V Medium @ 4300K	Rating**			System Watts 120-277V	Total Current @ 120V	Total Current @ 230V	Total Current @ 277V	System Watts 347-480V	Total Current @ 347V	Total Current @ 480V	L <sub>70</sub> Hours* @ 25° C (77° F)
		B	U	G		B	U	G								
<b>350mA (Standard) Fixture Operating at 25° C (77° F)</b>																
18	1,500 (02)	1	1	1	1,316 (02)	1	1	1	24	0.20	0.11	0.10	30	0.10	0.14	150,000
<b>525mA Fixture Operating at 25° C (77° F)</b>																
18	1,950 (02)	2	1	1	1,711 (02)	2	1	1	38	0.32	0.18	0.16	44	0.13	0.15	92,000

\* Utilizes magnetic step-down transformer when 525mA drive current or multi-level options are selected  
 \*\* For recommended lumen depreciation data see TD-13  
 \*\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit [www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf](http://www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf)

NOTE: All data subject to change without notice.

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Made in the U.S.A. of U.S. and imported parts.  
 Meets Buy American requirements within the ARBA.



**General Description**

Durable die-cast aluminum fixture housing mounts directly to 4" diameter pole without visible mounting hardware for clean appearance. Pole mounts to rugged die cast aluminum internal flange secured to grade by (3) 3/8-16 anchor bolts (provided). Note: T45 Torx 3/8 socket required for head installation. Top mounted LEDs for superior optical performance and light control. 5 year limited warranty on fixture.

**Electrical**

Fixture lit by 18W high power, white, 6000K (+/- 500k per full fixture), minimum 70 CRI, long life LED sources. 120-277V 50/60Hz, Class 1 LED drivers are standard. 347-480V 50/60 Hz driver is optional. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Surge protection tested in accordance with IEEE C62.41.2 and ANSI standard 62.41.2.

**Testing & Compliance**

UL listed in the U.S. and Canada for wet locations. Consult factory for CE Certified products. RoHS compliant. International Dark-Sky Association approved.

**Finish**

Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

**Patents**

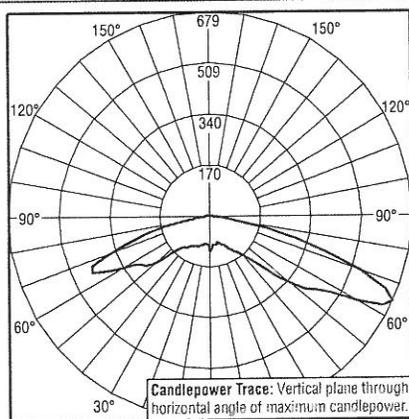
U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit [www.uspto.gov](http://www.uspto.gov).

**Field-Installed Accessories**

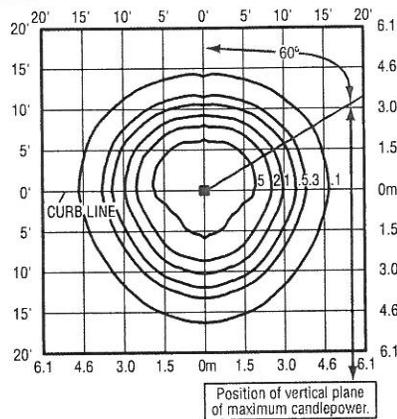


- Retro-Fit Kit**  
Used for replacement of existing bollards.
- XA-XBP8RSV
  - XA-XBP8RBK
  - XA-XBP8RWH
  - XA-XBP8RB2
  - XA-XBP8RPB

**Photometrics**



Independent Testing Laboratories certified test. Report No. ITL64678. Candlepower trace of 6000K, 18 LED Type V Medium pathway luminaire with 1,511 initial delivered lumens operating at 350mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.



Isofootcandle plot of 6000K, 18 LED Type V Medium pathway luminaire at 3' A.F.G. Luminaire with 1,500 initial delivered lumens operating at 350mA. Initial FC at grade.



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