

2018 CASS STREET BOARD OF PUBLIC WORKS MEETING

Cree LED Lighting (Silver)



Cree LED Lighting (Black)



Matchstick HPS Lighting



Comparison



Matchstick Lights

CONSTRUCTION COST

\$61,000 Equal Cost
\$47,000 Wiring
\$322,400 Lights(46)
\$2,300 Restoration
\$12,000 Concrete
\$444,700 Installation

RUNNING COST

▣ 70 W Light
▣ 11.81 Hr Average Night Length
▣ \$0.10/KwH National Avg
 $(70 \times 11.81 \times 365) / 1000$
 $= 301.75 \text{ KwH/yr/light}$
 $(301.75 \times 46) \times \$0.10 = \$1388/\text{yr}$

Cree Lighting

CONSTRUCTION COSTS

\$61,000 Equal Cost
 \$18,500 Wiring
 \$97,800 Lights (38)
 \$2,000 Restoration
 \$10,000 Concrete
 \$189,300 Installation

RUNNING COSTS

□ 70 W Light
 □ 11.81 Hr Average Night Length
 □ \$0.10/KwH National Avg
 $(70 \times 11.81 \times 365) / 1000$
 $= 301.75 \text{ KwH/yr/light}$
 $(301.75 \times 38) \times \$0.10 = \$1147/\text{yr}$

Cost Comparison

MATCHSTICK

□ CC=\$444,700
 □ OC=\$1388/yr
 □ TC=\$446,088 for first year

CREE

□ CC=\$189,300
 □ OC=\$1147/yr
 □ TC=\$190,447 for first year
 □ \$255,641 Initial savings

CC= Construction Cost
 OC= Operation Cost
 TC= Total Cost

Comparison

MATCHSTICK

□ Pro
 □ Ornamental
 □ Con
 □ Higher costs
 □ Heavy
 □ High light pollution
 □ Would need future upgrade
 □ Constant Maintenance required
 □ Dim light

CREE

□ Pro
 □ Lower costs
 □ Lighter weight
 □ Little light pollution
 □ No Maintenance
 □ Brighter Light
 □ Con
 □ Not Ornamental

PIM Results/Comments

Light Type	# of People Selected	Percentage
Matchstick	2	20%
Black Cree LED	5	50%
Silver Cree LED	0	0%

Plan	Liked	Like w/ Concerns	Undecided	Didn't Like	Not Able to See
Proposed	6	3	0	0	1

□ 8 Eight comments left on night of PIM
 □ 2 called in after

Comments

- Parking Both Sides of Street
- Bumpout at 11th Street at Aquinas
- Other Lighting Options Available

Lumec Metroscape



□ CC=\$232,900
 □ OC=\$1147/yr
 □ TC=\$234,047 for first year
 □ \$212,041 savings VS Matchsticks

Lumec Square Lantern



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- CC=\$236,700
- OC=\$1147/yr
- TC=\$237,847 for first year
- \$208,241 savings VS Matchsticks

Sun Valley Colonial

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- CC=\$227,200
- OC=\$1147/yr
- TC=\$228,347 for first year
- \$217,741 savings VS Matchsticks

Sun Valley Sigma



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- CC=\$227,200
- OC=\$1147/yr
- TC=\$228,347 for first year
- \$217,741 savings VS Matchsticks

Holophane Washington

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- CC=\$221,500
- OC=\$1147/yr
- TC=\$222,647 for first year
- \$223,441 savings VS Matchsticks

Comparison

Light Type	Construction	Operation	Total First Year	Saving to Matchsticks
Matchstick	\$444,700	\$1,388	\$446,088	NA
Cree (Black/Silver)	\$189,300	\$1,147	\$190,447	\$255,641
Lumec Metro	\$232,900	\$1,147	\$234,047	\$212,041
Lumec Square	\$236,700	\$1,147	\$237,847	\$208,241
Sun Valley Colonial/Sigma	\$227,300	\$1,147	\$228,347	\$217,741
Holophane Washington	\$221,500	\$1,147	\$222,647	\$223,441

Staff Recommendation

#1) BLACK CREE



#2) HOLOPHANE WASHINGTON



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