




BOOTHBAY, ME (CMP) "NETWORKED" LED STREETLIGHT CONVERSION PROPOSAL

Proposed: Mar. 25, 2020



Municipality Boothbay, Maine		Account Number 3501-3847-799		ANNUAL HOURS 4,260		ELECTRIC SUPPLY* \$0.045200 per kwh		CONSTELLATION NEW ENERGY SUPPLY COST QUOTED FROM PROVIDED BOOTHBAY CMP BILL		RATE SL - DELIVERY ONLY SERVICE \$0.049367 per kwh		ELECTRIC SUPPLY* \$0.045200 per kwh																	
MUNICIPAL STREET LIGHTING SUMMARY										CURRENT LIGHTING										PROPOSED LED LIGHTING									
Current Lighting Description		Fixture Qty	Existing Rated Watts	ANNUAL kWh per fixture	TOTAL ANNUAL KWH	DELIVERY CHARGES		ELECTRIC SUPPLY	ANNUAL Cost Per Fixture	TOTAL ANNUAL COST	Models	LED Rated Watts	ANNUAL kWh per fixture	TOTAL ANNUAL KWH	DELIVERY SERVICE ONLY	ELECTRIC SUPPLY	ANNUAL Cost Per Fixture	TOTAL ANNUAL COST	FUSEHOLDER KIT & FUSE		NETWORKED LIGHTING CONTROLS		INSTALLATION SERVICES		EQUIPMENT		ALL-IN EQUIPMENT & INSTALLATION		
		179				Current Delivery Service	Lighting Equipment	355 monthly hrs X fixture rated watts/1000 X electric rate per kwh							355 hrs X above rate per kwh	355 monthly hrs X fixture rated watts/1000 X above rate per kwh			Cost per Fixture	Fixture	TOTAL COST	Cost per Fixture	TOTAL COST	Cost per Fixture	TOTAL COST	Cost per Fixture	TOTAL COST		
50HPS CUT OFF COBRA		18	65	277	4,984	\$1.14	\$9.67	\$1.04	\$142.24	\$2,560	Affinity S900D-18W-30K-T2-GR	18	77	1,380	\$0.32	\$0.29	\$7.25	\$131	\$52.00	\$936.00	\$128.39	\$2,310.97	\$125.56	\$2,260.01	\$153.00	\$2,754.00	\$458.94	\$8,260.98	
70HPS CUT OFF COBRA		48	95	405	19,426	\$1.68	\$9.04	\$1.52	\$146.93	\$7,053	Affinity S900D-18W-30K-T2-GR	18	77	3,681	\$0.32	\$0.29	\$7.25	\$348	\$52.00	\$2,496.00	\$128.39	\$6,162.58	\$125.56	\$6,026.71	\$153.00	\$7,344.00	\$458.94	\$22,029.29	
100HPS CUT OFF COBRA		4	130	554	2,215	\$2.27	\$9.12	\$2.09	\$161.71	\$647	Affinity S901D-50W-30K-T2-GR	50	213	852	\$0.88	\$0.80	\$20.14	\$81	\$52.00	\$208.00	\$128.39	\$513.55	\$125.56	\$502.23	\$203.00	\$812.00	\$508.94	\$2,035.77	
150HPS CUT OFF COBRA		1	195	831	831	\$3.41	\$10.11	\$3.13	\$199.79	\$200	Affinity S901D-50W-30K-T2-GR	50	213	213	\$0.88	\$0.80	\$20.14	\$20	\$52.00	\$52.00	\$128.39	\$128.39	\$125.56	\$125.56	\$203.00	\$203.00	\$508.94	\$508.94	
250HPS SPECIAL MONGOOSE		1	300	1,278	1,278	\$5.28	\$26.58	\$4.81	\$440.09	\$440	Affinity S902D-75W-30K-T2-GR	75	320	320	\$1.31	\$1.20	\$30.21	\$30	\$52.00	\$52.00	\$128.39	\$128.39	\$125.56	\$125.56	\$221.00	\$221.00	\$526.94	\$526.94	
1000MH FLOOD		1	1075	4,580	4,580	\$18.91	\$37.34	\$17.25	\$881.99	\$882	Affinity P904D-150W-30K-T3-BR-TNM	150	639	639	\$2.63	\$2.41	\$60.43	\$60	\$52.00	\$52.00	\$128.39	\$128.39	\$125.56	\$125.56	\$459.00	\$459.00	\$764.94	\$764.94	
250HPS FLOOD		2	300	1,278	2,556	\$5.28	\$12.07	\$4.81	\$265.97	\$532	Affinity P903D-100W-30K-T3-BR-TNM	100	426	852	\$1.75	\$1.60	\$40.29	\$81	\$52.00	\$104.00	\$128.39	\$256.77	\$125.56	\$251.11	\$299.00	\$598.00	\$604.94	\$1,209.89	
205INC OPEN SUBURBAN		1	205	873	873	\$3.60	\$9.24	\$3.29	\$193.55	\$194	Affinity S900D-50W-30K-T2-GR	50	213	213	\$0.88	\$0.80	\$20.14	\$20	\$52.00	\$52.00	\$128.39	\$128.39	\$125.56	\$125.56	\$203.00	\$203.00	\$508.94	\$508.94	
50HPS ENCLOSED COBRA		39	65	277	10,799	\$1.14	\$8.04	\$1.04	\$122.68	\$4,784	Affinity S900D-18W-30K-T2-GR	18	77	2,991	\$0.32	\$0.29	\$7.25	\$283	\$52.00	\$2,028.00	\$128.39	\$5,007.10	\$125.56	\$4,896.70	\$153.00	\$5,967.00	\$458.94	\$17,898.80	
70HPS ENCLOSED COBRA		60	95	405	24,282	\$1.68	\$8.32	\$1.52	\$138.29	\$8,298	Affinity S900D-18W-30K-T2-GR	18	77	4,601	\$0.32	\$0.29	\$7.25	\$435	\$52.00	\$3,120.00	\$128.39	\$7,703.23	\$125.56	\$7,533.38	\$153.00	\$9,180.00	\$458.94	\$27,536.61	
100HPS ENCLOSED COBRA		4	130	554	2,215	\$2.27	\$8.74	\$2.09	\$157.15	\$629	Affinity S901D-50W-30K-T2-GR	50	213	852	\$0.88	\$0.80	\$20.14	\$81	\$52.00	\$208.00	\$128.39	\$513.55	\$125.56	\$502.23	\$203.00	\$812.00	\$508.94	\$2,035.77	
OTHER EQUIPMENT (poles/brackets, etc)								monthly	\$4.76	\$57																			
179					74,039					\$26,275				16,593				\$1,569	avg \$52.00	\$9,308	avg \$128.39	\$22,981	avg \$125.56	\$22,475	avg \$159.51	\$28,553	avg \$465.46	\$83,317	
ANNUAL ENERGY SAVINGS (kwh)										(57,446)	ANNUAL OPEX SAVINGS										(\$24,706)								
										-77.6%											-94.0%								
LONG TERM ENERGY SAVINGS											LONG TERM SAVINGS																		
5 Years										(287,231)	5 Years										(\$123,529)								
10 Years										(574,461)	10 Years										(\$247,057)								
20 Years										(1,148,922)	20 Years										(\$494,114)								
ANNUAL CO2 EMISSIONS REDUCTION											SHORT TERM CUMULATIVE ROI																		
94,253 lbs										47.1 tons	Year 1										(\$71,119)	-85.4%							
											Year 2										(\$46,413)	-55.7%							
											Year 3										(\$21,708)	-26.1%							
5 Years										471,265 lbs	235.6 tons	Year 4										\$2,998	3.6%						
											Year 5										\$27,704	33.3%							
10 Years										942,530 lbs	471.3 tons	LONG TERM CUMULATIVE ROI																	
											Year 10										\$151,232	181.5%							
20 Years										1,885,061 lbs	942.5 tons	Year 20										\$398,289	478.0%						
with NETWORKED LIGHTING CONTROLS																													
+ ALL-IN EQUIP & INSTALLATION \$83,317																													
+ NET BOOK VALUE** \$12,508																													
= TOTAL PROJECT COST \$95,825																													
ANNUAL OPEX SAVINGS (\$24,706)																													
SIMPLE PAYOFF																													
Years 3.88																													
Months 46.5																													
** Net Book Value provided by Town of Boothbay																													