



Section B Executive Summary

The Village of Pelham is interested in improving the overall energy usage. Pelham has elected to replace the existing and inefficient street lighting “cobrahead” fixtures with modern, energy efficient LED fixtures.

The Village of Pelham has elected to participate in the New York Power Authority’s (NYPA) Energy Efficiency Program for the purchase and full implementation of LED Street Lighting fixtures for the project. The scope of work for this project shall include procurement and delivery of approximately 497 fixtures of various wattages, as detailed in Section D of this document.

The fixtures will be purchased from the NYPA Philips Street Lighting Contract.

The project will be implemented by Candela Systems Inc., who is a qualified Minority Owned Business.

NYPA has retained the services of Guth DeConzo as the Engineer of Record and Construction Managers (Implementation Contractors).

Total Project Cost:	\$205,542.33
Total Annual Energy Savings:	93,861 KWh
Total Annual Cost Savings:	\$ 25,051
Simple Payback:	8.2 years

Total Project Summary
New York Power Authority - Statewide Energy Efficiency Program
Village of Pelham LED Street Lighting Upgrade

ES-GSN-0985

February 5, 2019

Project Cost: Initial CIC				
	Construction Costs:	\$124,157.27		
	Payment, Performance, and Bid Bonds:	\$2,170.90		
	Wood Pole Rewire Allowance:	\$5,900.00	(See Note #5)	
	Registry Deficiency Allowance:	\$5,000.00		
	Subtotal:	\$137,228.17		
	Contingency: 10%	\$13,722.82		
	Subtotal:	\$150,950.99		
	Abatement Design & Monitoring:	\$0.00		
	Hazardous Waste Disposal Cost:	\$3,976.00		
	Environmental Subtotal:	\$3,976.00		
	Design, & Construction Mgt:	\$24,152.16	(See Note # 1)	
	NYPA Project Mgt. & Administrative:	\$22,384.89	(See Note # 2)	
	Project Management Subtotal:	\$46,537.05		
	Project Subtotal:	\$201,464.04		
	Interest During Construction (IDC):	\$4,078.29	(See Note # 3)	
	Total Project Cost:	\$205,542.33		
Estimated Energy Savings				
<u>Estimated Electrical Savings:</u>	<u>Estimated Fuel Savings:</u>	<u>MMBtu Savings</u>	<u>Cost Savings:</u>	
kWh Savings: 93,861	Natural Gas: 0 Thm	0.0	\$0.00	
kWh Cost Savings: \$22,566.00	Oil Savings: 0 gal	0.0	\$0.00	
Monthly kW Savings: 22.0	Steam (100 psi): 0 Lbs	0.0	\$0.00	
kW Cost Savings: \$0.00	Water: 0.0 Kgal	0.0	\$0.00	
Total Electrical Savings: \$22,566.00		0.0	\$0.00	
Total Energy Savings: \$22,566.00	Maint. Savings: \$2,485.00	Est. Total Savings:	\$25,051.00	
Simple Payback				
	Total Project Cost With IDC:	\$205,542.33		
	Estimated Rebates & Incentives:	\$0.00		
	Net Project Cost:	\$205,542.33		
	Total Amount Saved:	\$25,051.00		
	Simple Payback:	8.20		
Project Financing				
	TOTAL AMOUNT FINANCED:	\$205,542.33	(Rebates & Incentives Not Included)	
	Interest Rate:	4.00%	(See Note # 4)	
	Years Financed:	5.0		
	Number of Payments:	60		
	Annual Debt Service to NYPA:	\$45,424.50		
	Monthly Debt Service to NYPA:	\$3,785.37		
	Total Project Cost after Financing:	\$227,122.49		
	Total Annual Savings:	\$25,051.00		
	Payback With Financing:	9.07		
	Annual Cash Flow:	(\$20,373.50)		

Notes:

1. Audit, Design, & Construction Mgt represents a cost of 16.0% of the direct Construction and Asbestos Abatement cost and are applied to contingency to provide budget estimates. Final costs will exclude unused contingency and will be calculated at end of project based on final material and labor costs and applicable abatement costs.
2. NYPA Project Mgt. & Administrative represents a fee of 12.5% of all project except Material Handling and IDC Costs.
3. Interest During Construction (IDC) is estimated based on 4.00% interest rate. See Appendix 1.
4. Interest rate is estimated at 4.00%, long-term conservative estimate. The actual interest rate is variable and is adjusted on January 1 annually.
5. Rewire allowance based on unit pricing and estimated 200 pole rewire.