

Completed Project: VOA Crystal Care Center



<u>Energy Consumption Before Upgrade</u>	
Annual Electrical & Maint. Costs	\$108,214
Demand (kW)	70.067
Energy (kWh)	358,042
CO ₂ (lbs)	1,016,451
Foot Candles	11

<u>Projected Energy Consumption After Upgrade</u>	
Annual Electrical & Maint. Costs	\$80,187
Demand (kW)	32.957
Energy (kWh)	159,668
CO ₂ (lbs)	682,443
Foot Candles	18

Investment and Rebate

Project Cost	\$88,544.73
Less Utility Rebate	\$23,876.41
Net Project Cost	\$64,668.32
EPACT Tax Incentive	\$65,049.82*
Maintenance Savings	\$6,980.00

Installation and Results

Order to Install Lead Time	2-3 Weeks
Time to Install	12 Days
Rebate Check Received	3 Weeks
Payback in Years	2.32
Return on Investment	43.1%

* EPACT Available to For-Profit Entities Only

Project Description and Deliverables:

- Retrofit fixtures, lamps and ballasts in Offices and Rooms from T12 fluorescent 156 watts (fixture wattage) to T8 fluorescent 85 watts.
- Retrofit all CFL, Incandescent and HID lights in Chandeliers, Recessed Cans and Track Lights from 60 - 150 watts (fixture wattage) to LED equipment 8 – 24 watts.
- Replace fixtures, lamps and ballasts in Laundry, Boiler Room and Stairwell from T12 fluorescent 84.2 watts (fixture wattage) to T8 fluorescent 43 watts (fixture wattage).
- Upgrade fixtures, lamps and ballasts on Floor Hallways from T12 fluorescent 84.2 watts (fixture wattage) to T8 fluorescent 43 watts (fixture wattage).

Additional Benefits

- Every 2,700 w reduced = AC tonnage required reduced by 1 ton
- Electricity rates are in TODAY'S DOLLARS, will increase over time
- Ballasts warranted for 5 years, lamps warranted for 2-5 years
- Lower cost of future light bulb purchasing through Noble CS procurement program
- Maintenance costs will be reduced due to longer lamp life (from 8,000 hours to 50,000 hours)
- Increase or maintain light levels at significant energy reduction