



Enviro-Lite Solutions, LLC.

Hidalgo County L.E.D. Lighting Project

Presented By: John Phillips, President - Enviro-Lite Solutions, LLC
Jaime A Rodriguez, Vice President – Enviro-Lite Solutions, LLC



Hidalgo County



Why L.E.D.'s?

1. Energy Savings – Energy savings of 4,500,000 kwh / year = \$630,000 savings
2. Reduce heat factors caused by incandescent and fluorescent lighting – save on HVAC equipment and HVAC energy costs. Up to 30% savings on HVAC energy consumption.
3. Reduced maintenance – LED lights last 50 times longer than incandescent and up to 5 times longer than fluorescent = lower replacement costs and man hours changing lights and ballast.
4. Lower demand = lower TDSP charges.
5. Reduce health hazards for staff and visitors – Reduce eye strain and eye stress caused by fluorescent light flickering – improved light increases attention span and improves behavior. (clinically proven)
6. Reduce Carbon Footprint – **GO Green!**
7. No bio hazardous materials – environmentally friendly lighting!
8. Improved lighting means improved security and safety for staff and citizens at night.
9. Technology of the future Today!



Analysis Current Lighting VS LED Lighting



Enviro-Lite Solutions, LLC.

Hidalgo County Summary										
Existing Bulb Type	Replacement Bulb Type	Existing Bulb Wattage	LED Wattage	Bulb Count	LED Count	Weekly Usage (hr)	Yearly Energy Usage (kwh)	LED Yearly Energy Usage (kwh)	Price / Unit	Pricing
2' T12 Bi-Pin Tube	LED 2' Tube	20	9	407	407	55	23280	10476	\$23.00	\$9,361.00
2' T8 U-Shape Tube	LED 2' U-shape Tube	32	15	958	958	48	76517	33868	\$45.50	\$43,589.00
CFL 2-Pin Canlight	LED 2-Pin Bulb	13	7	155	155	84	8802	4739	\$28.78	\$4,460.90
CFL 2-Pin Canlight	LED 2-Pin Bulb	18	9	68	68	55	3501	1750	\$31.98	\$2,174.64
3' T8 Bi-Pin Tube	LED 3' Tube	25	10	34	34	55	2431	972	\$32.75	\$1,113.50
4' T8 Bi-Pin Tube	LED 4' Tube	32	18	46026	46026	55	4212300	2369418	\$32.00	\$1,472,832.00
CFL 4pin Canlight	LED 4-pin Bulb	13	7	62	62	55	2305	1241	\$28.78	\$1,784.36
CFL 4pin Canlight	LED 4-pin Bulb	26	9	476	476	55	35395	12252	\$31.98	\$15,222.48
Triple Twin 4-Pin Canlight	LED 4-pin Bulb	32	11	729	729	48	58227	20015	\$36.78	\$26,812.62
8' T12 Single-Pin Tube	LED 8' Tube	60	36	1372	1372	84	359574	215744	\$75.00	\$102,900.00
CFL E-26 Open	LED A19 Bulb	13	6	435	435	55	16173	7463	\$9.40	\$4,089.00
INC E-26 Track	LED A19 Bulb	60	8	778	778	55	133505	17801	\$12.50	\$9,725.00
CFL E-26 Canlight	LED A19 Bulb	100	12	40	40	55	11440	1373	\$28.85	\$1,134.00
INC E-26 Open	LED A19 Bulb	150	16	211	211	55	90519	3635	\$28.85	\$6,087.35
Halogen E-26 Security Lamp	LED A19 E-26 Bulb WP	90	10	10	10	55	2574	286	\$18.95	\$189.50
Candelabra E-12 Wall Lamp	LED Candelabra	60	4	223	223	55	38267	2551	\$19.95	\$4,448.85
CFL E-26 Canopy	LED Canopy Light	26	21	98	98	55	7287	3886	\$270.95	\$26,553.10
MH E-26 Side Mounted Canopy	LED Canopy Light	150	40	17	17	55	7293	1945	\$225.00	\$3,825.00
M/H E-26 Canopy	LED Canopy Light	175	60	2	2	84	1529	524	\$375.00	\$750.00
Canopy	LED Canopy Light	250	80	12	12	84	13104	4193	\$425.00	\$5,100.00
MH Mogul Canopy	LED Canopy Light	400	120	12	12	55	13728	4118	\$636.00	\$7,632.00
M/H Mogul Cobra	LED Cobra Head	250	120	5	5	84	5460	2621	\$445.60	\$2,228.00
Nema Head	LED Cobra Head	400	150	10	10	20	4160	1560	\$510.30	\$5,103.00
CFL Mogul Nema	LED Corn Cob W/ MA	65	20	2	2	84	568	175	\$105.00	\$210.00
HPS Mogul Canlight	LED Corn Cob W/ MA	150	45	15	15	84	9828	2948	\$285.00	\$4,275.00
M/H Mogul Canlight	LED Corn Cob W/ MA	250	65	15	15	84	16380	4259	\$371.85	\$5,577.75
CFL Mogul Nema Head	LED Floodlight	65	10	8	8	30	811	125	\$45.00	\$360.00
M/H Mogul Floodlight	LED Floodlight	175	50	14	14	84	10702	3038	\$175.85	\$2,461.90
Halogen Floodlight	LED Floodlight	250	80	8	8	84	8736	2796	\$295.95	\$2,367.60
Halogen Whole Fixture	LED Floodlight	300	100	4	4	55	3432	1144	\$400.95	\$1,603.80
M/H Mogul Floodlight	LED Floodlight	400	120	66	66	84	115315	43243	\$310.00	\$33,660.00
M/H Mogul Floodlight	LED Floodlight	1000	300	93	93	84	406224	121567	\$1,214.40	\$112,939.20
Hai GU-10 Track	LED GU10 Bulb	50	7	3	3	55	429	60	\$25.50	\$76.50
M/H Mogul Hanging	LED Highbay	250	100	8	8	55	5720	2288	\$339.95	\$2,719.60
MH Mogul Highbay	LED Highbay	400	150	156	156	55	178464	66924	\$375.00	\$89,700.00
INC E-26 Jelly Jar	LED Jelly Jar Vapor Proof	60	14	38	38	55	6521	1522	\$218.75	\$8,312.50
Hai MR-16 Canlight	LED MR16 Bulb	50	7	18	18	55	2574	360	\$25.50	\$459.00
HPS Mogul Nema Head	LED Pac 40 Bulb w/ MA	175	40	2	2	84	1529	349	\$100.50	\$201.00
Par 30 INC E-26 Canlight	LED Par-30 Bulb	75	10	17	17	55	3647	486	\$27.25	\$463.25
Par-38 E-26 Spotlight	LED Par-38 Bulb	75	15	168	168	84	55037	11007	\$33.95	\$5,703.60
Par-38 INC E-26 Spotlight	LED Par-38 Bulb WP	75	18	28	28	84	9173	2201	\$40.00	\$1,120.00
R-40 E-26 Canlight	LED Par-40 Bulb	150	20	13	13	55	5577	744	\$83.25	\$1,082.25
M/H Mogul Nema	LED Shoebox	175	80	20	20	84	15288	6989	\$367.50	\$7,330.00
MH Mogul Shoebox	LED Shoebox	400	100	355	16	60	443040	4992	\$385.00	\$9,360.00
M/H Mogul Shoebox	LED Shoebox	1000	300	14	14	84	61152	18346	\$1,330.00	\$18,620.00
E-26 Spotlight	LED Spotlight	75	10	11	11	40	1716	229	\$45.00	\$495.00
M/H E-26 Spotlight	LED Spotlight	100	50	6	6	84	2621	1310	\$175.85	\$1,035.10
M/H Mogul Spotlight	LED Spotlight	250	80	3	3	84	3276	1048	\$295.95	\$887.85
HPS Mogul Spotlight	LED Spotlight	250	100	2	2	84	2184	874	\$400.95	\$801.90
Wholefix Spotlight	LED Spotlight	300	120	4	4	55	3432	1373	\$467.50	\$1,870.00
Mh Mogul Spotlight	LED Spotlight	400	150	86	86	55	98384	36894	\$310.00	\$43,860.00
Mh Mogul Spotlight	LED Spotlight	1000	300	56	56	55	160160	48048	\$1,214.40	\$68,006.40
MH E-26 Wallpack	LED Wallpack	70	20	278	278	55	55656	15902	\$160.23	\$44,549.30
HPS E-26 Wallpack	LED Wallpack	150	40	106	106	84	69451	18520	\$265.00	\$28,090.00
M/H Mogul Wallpack	LED Wallpack	250	60	543	543	84	392956	142309	\$365.00	\$198,195.00
Halogen Glasstube Wallpack	LED Wallpack	500	120	50	50	84	109200	26208	\$600.00	\$30,000.00
MH Mogul Wallpack	LED Wallpack	400	120	4	4	55	4576	1373	\$600.00	\$2,400.00
CFL T9 Dome	LED New Fixture	22	15	1	1	55	63	63	\$130.00	\$130.00
Hai Crystal WallSconce	LED New Fixture	100	18	7	7	60	2184	2184	\$165.00	\$1,155.00
MH Mogul Wall Sconce	LED New Fixture	250	70	16	16	84	17472	17472	\$275.00	\$4,400.00
Emergency B/U				200	200				\$250.00	\$50,000.00
Dimmer				10	10				\$175.00	\$1,750.00
Occupancy				100	12	60			\$125.00	\$1,500.00
Total							7610846	3342145	Parts	\$2,544,924.00
							Saving:	56.09%	Labor	\$508,984.80
A/C Savings (kwh)							426,870	Energy only	Disposal	\$15,000.00
Energy Savings (kwh)							4,268,702	Annual Savings	R.O.I.	Total
Energy Rate	\$0.1344	Total Energy Savings (kwh)					4,695,572	\$631,084.85	4.86	\$3,068,908.80



Analysis Results

Simple Return on Investment



ECONOMICS SUMMARY

Life Cycle Savings
\$7,636,826

Equipment Life: 15.0 yrs

Gross Project Cost

\$3,709,225

Increase in Facility Value

\$8,164,994

Cap Rate: 8.00 %

Annual Savings

\$653,200

IRR

17.75 %

Utility Escalation Rate: 2.00 %

Simple Payback (yrs)

5.6

NPV

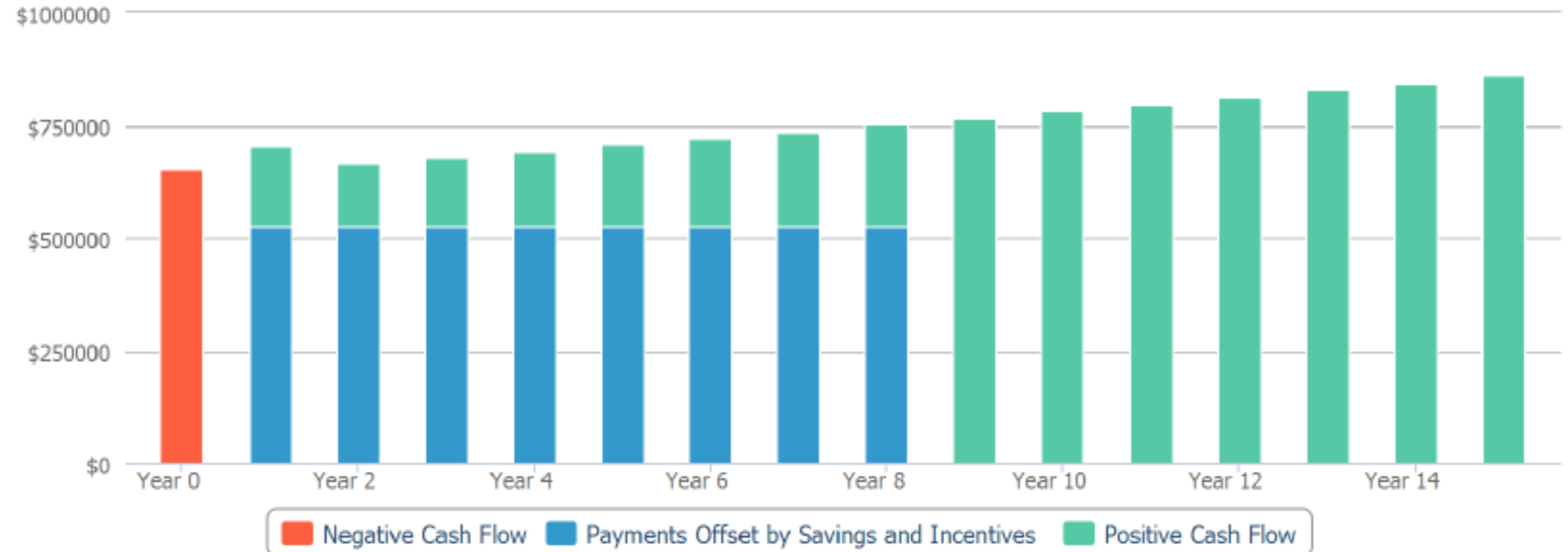
\$7,636,826

Discount Rate: 0.00 %

EXAMPLE NOESIS FINANCING CASH FLOW

Enviro-Light Solutions has partnered with Noesis Financing to provide you with competitive financing from 3rd-party lenders. Monthly payments may be significantly less than the energy savings making the investment cash-flow positive on day one. *(Estimate assumes a good credit rating and final payments may vary.)*

Term: **8 years** | Annual Payment: **\$527,599** | Avg. Annual Cash Flow: **\$179,450**





Project Details



PROJECT SCOPE

Savings Measure	Annual Savings	Gross Costs	Incentives	Payback (yrs)
LED Light Retrofit	\$653,200	\$3,709,225	\$50,000	5.6
Net Project Cost				\$3,659,225

ANNUAL SAVINGS

Utility Type	Utility Impact	Unit Cost	Savings
 Electricity	4,501,489 kWh	\$0.134 / kWh	\$603,200
 Maintenance			\$50,000
Total			\$653,200

LIFE CYCLE SAVINGS (15 years, nominal)

Utility Type	Historical	Projected	Savings
 Electricity	--	--	\$10,431,381
 Maintenance	--	--	\$864,671
Net Project Cost			(\$3,659,225)
Total	--	--	\$7,636,826

Analysis Details



Enviro-Lite Solutions, LLC.



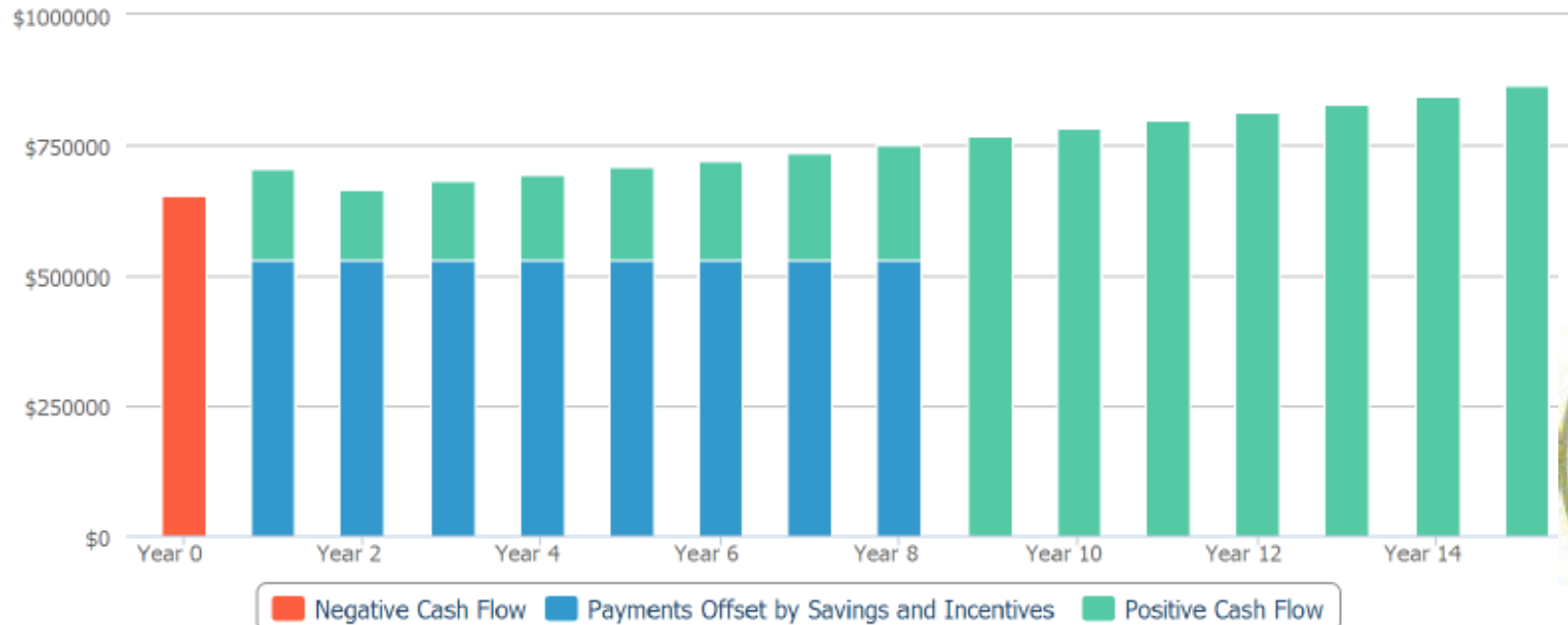
EXAMPLE LIFE CYCLE CASH FLOW

Term 8 years	Amount Financed \$3,709,225	Gross Project Cost \$3,709,225	Monthly Payment \$43,967
Financed Life Cycle Savings \$7,125,261	Annual Savings \$653,200	Avg. Monthly Savings \$58,921 (during term)	Monthly Cash Flow \$14,954 (during term)
Down Payment: \$0 Buyout: \$1 Utility Escalation Rate: 2.00 %			

Analysis of Savings - Financed



Performance Rebate For a year after the install, Noesis will perform a 3rd party measurement to verify the forecasted savings. If your facility doesn't see the savings you will receive a rebate of \$222,554 (6% of the gross project cost).



Sample of Product Sheets

T8 Lamps Plastic



COLOR TEMP 3000/3500/4000/5000

> Outstanding Performance

- 100+ lumens per Watt
- Smooth and pleasant light source
- Instant on, no flicker or buzz
- Glass-free for use in food displays and kids areas
- 50,000 hrs life time



> Energy Savings = Money Savings

- Over 40% energy savings compared with fluorescent!
- Less heat dissipation and less cost in bill of AC.

> Go Green and Sustainable

- No mercury
- 5 year limited warranty



(1. See second page for footnotes)

All products are U/L
And
DLC Certified

94 Watt LED Floodlight Fixture USA

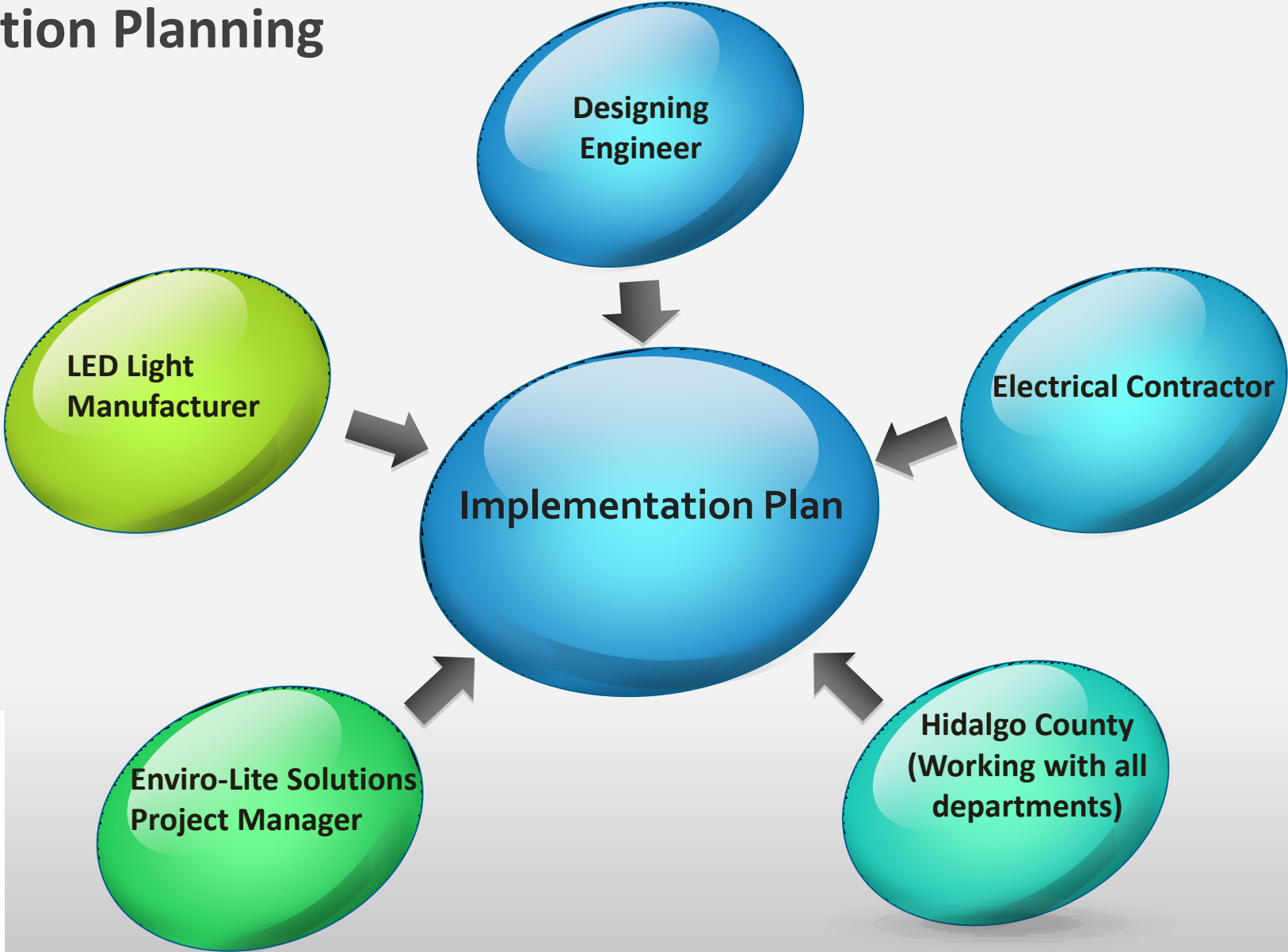


USA Outdoor LED Floodlight Fixture

MODEL#	FLA-90U
CATEGORY	LED Floodlight
PRODUCT TYPE	LED Floodlight Fixture
LED WATTAGE	94 Watt
EQUIVALENT WATTAGE	150 Watt
POWER FACTOR	>.95
LIFE	>75,000 Hours
LIGHT OUTPUT	10340 Lumens
EFFICACY	110 m/watts
WARRANTY	10 Years
LED TYPE	Lumileds Luxeon
CRI	>75
CERTIFICATION	ARRA, Buy American, cULus, DLC, RoHS
VOLTAGE	120, 277, 347, 480 Volts
BASE	Surface Mount
DIMENSIONS	5"H x 12.9"W x 11.9"L
COLOR TEMP	5000K
BEAM ANGLE	T1S, T1M, T2M, T3L, T5W, T7M Degrees
WEIGHT	13.42 lbs
DIMMING	Yes

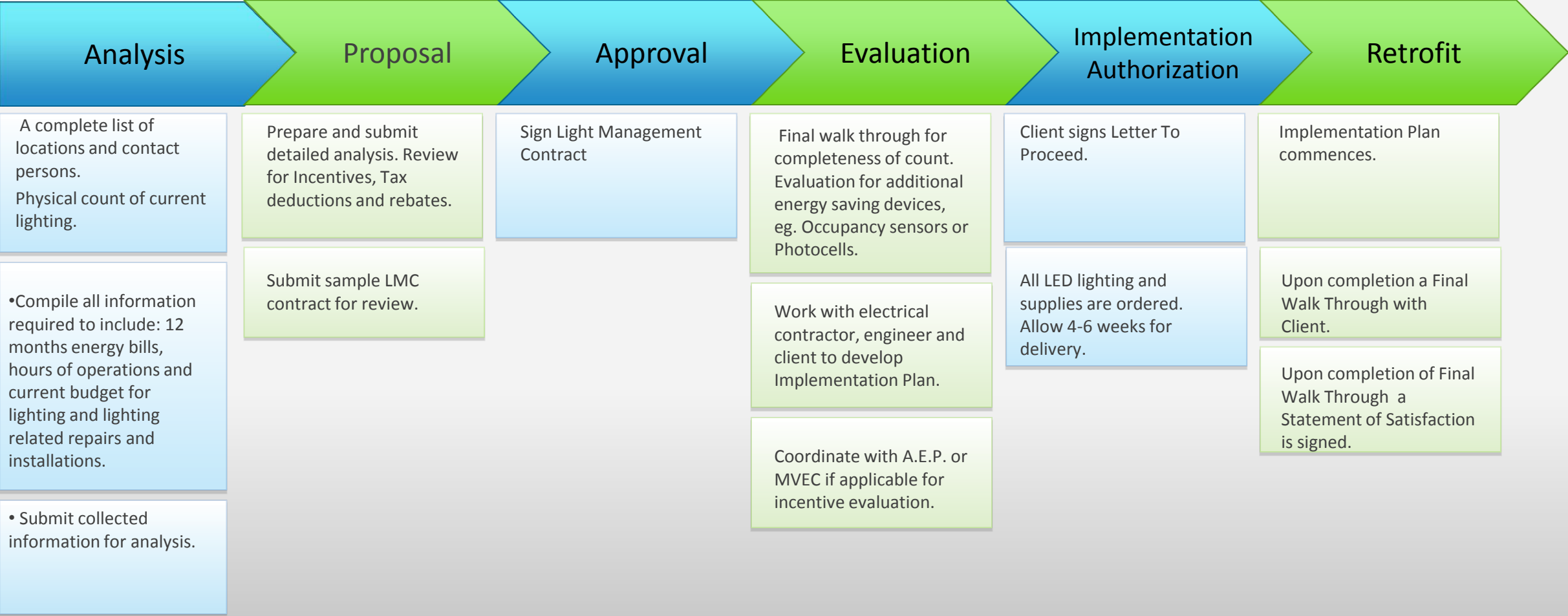
***Additional Notes:** User friendly design for easy installation and maintenance. Industry leading 10 year warranty against manufacturing defects. LM79 & LM80 Available. Custom photometric layouts for any project available. Waterproof IP67 rated & DLC listed. ARRA & Buy American compliant American engineering & manufacturing. WAGO terminal block and MOLEX quick connectors. Mechanical impact resistance IK08. Aluminum alloy construction, stainless steel lens protective cover and screws, and corrosion resistant polyester powder coating.

Implementation Planning



Flow Chart

Current Status



Support Local Business

- ❖ All Services Performed by Local Companies
- ❖ Enviro-Lite is 100% locally owned and operated company.
- ❖ Electric Contractor is 100% locally owned and operated.



Enviro-Lite Solutions, LLC.



Conclusion

Choose Enviro-Lite Solutions

Up to 70% energy savings

Great financing options

Support local business

Professional team

Quality Commercial LED lights

Great local service

Proven track record - City of Hidalgo & State Farm Arena
City of Falfurrias
City of Donna
Edinburg CISD

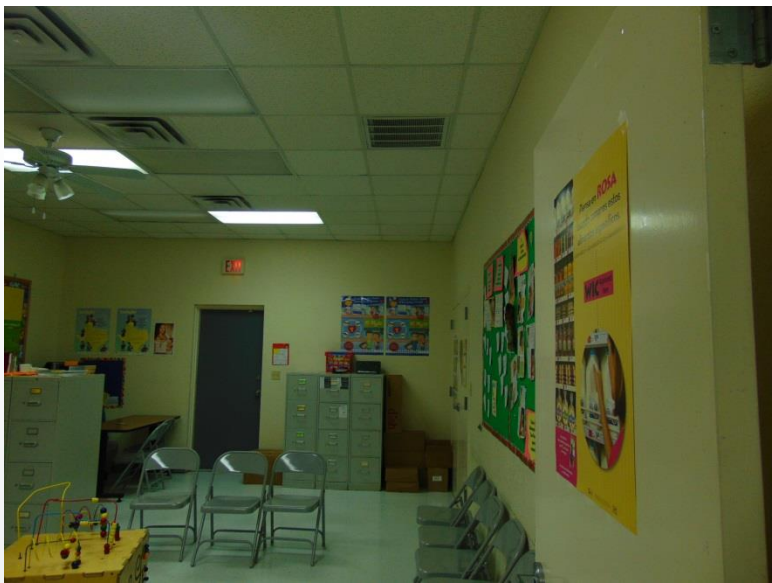
Great promotional coverage – Hidalgo County Goes Green!

NO UP FRONT COST TO Hidalgo County (If financed)



Enviro-Lite Solutions, LLC.





Hidalgo County Interior Lights





Some fixtures need replacing



Exterior lights susceptible to vandals and weather

Hidalgo County Exterior Lights



Buildings look yellow compared to LED lights





State Farm Arena Before and After pictures





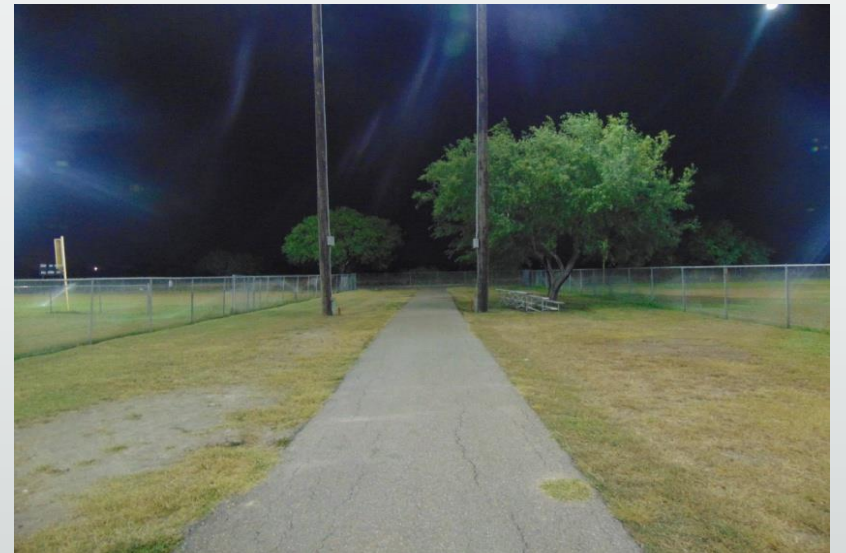
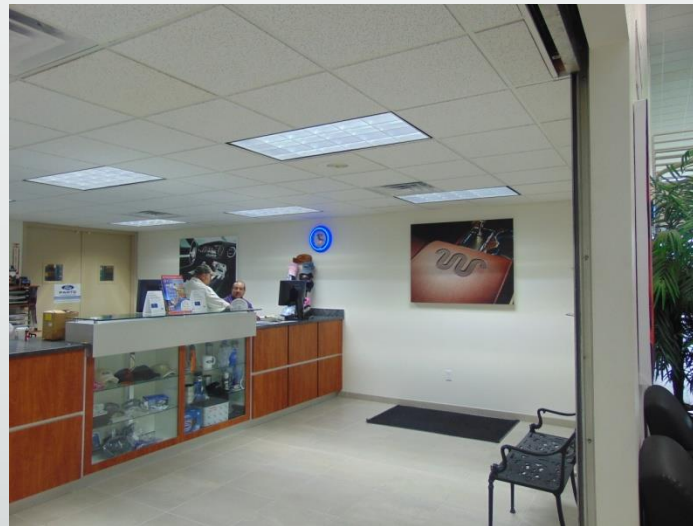
Spikes Ford - Before



Spikes Ford - After



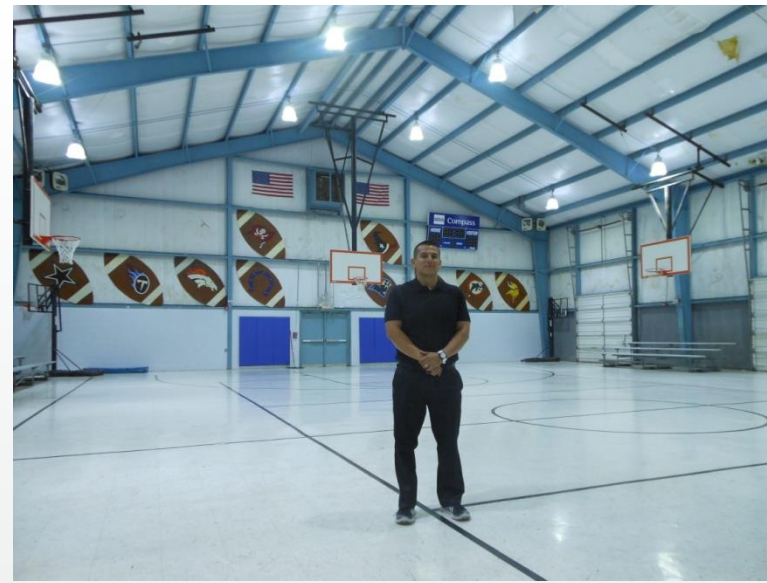
100w LED Light Vs 400w Metal Halide



10 pm at Hidalgo Baseball Park



Hidalgo Library



Hidalgo Youth Center – Improved light, Lower temperature!




LED Lighting Upgrades-The lamp of learning will glow brighter at Cavazos, Escandon, Eisenhower, Truman, Zavala, and Monte Cristo Elementary Schools as the result of major LED lighting upgrades over the summer. The school board has included monies in the new budget to upgrade the lighting systems next summer at Trevino, Betts, JFK Elementary Schools, Barrientes Middle School, and South Middle School.



**C
I
S
D**



Martin Cepeda, Mayor
Daniel (Dan) Dillard II, Mayor Pro-Tem

COUNCILMEMBERS
Rodolfo (Rudy) Franz
Gustavo "Gus" Sanchez
Sergio Coronado
Noé Reyes

August 15, 2014

Enviro-Lite Solutions, LLC

Attn: John Phillips, CEO

The work that Mr. Robert Dale and his crew have done at the Hidalgo Youth Center with Enviro-Lite Solutions has been outstanding. Not only are we getting better quality lighting in our building, but the positive responses we have gotten from visitors and the parents of the children we provide services to, are in "awe". The softer yet adequate lighting is very gentle on mine, my staff's, and the children's eyes throughout the day. We have nothing but positive feedback regarding the job performance we received, and know firsthand that as time passes, we will be even more grateful for the many visitors our facility is going to welcome.

Thank You,

Mario A. Alday
City of Hidalgo Youth Center Director



"This institution is an equal opportunity provider and employer"

704 East Texano Drive Hidalgo, Texas 78557 (956) 843-2286 FAX: (956) 843-2317



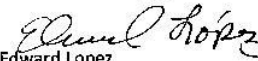
Hidalgo Public Library
710 E Texano Drive
Hidalgo, Texas 78557
Ph 956-843-2093
Fx 956-843-8841



Edward Lopez, Director
eddie@hidalgo.lib.tx.us

August 15, 2015

My experience with Enviro-Lite Solutions has been a delight. In comparison to traditional lighting, the change to LED lights was an enhancement to the overall ambience of the Library. We have noticed that our library is now better lit, seems more colorful and the strain on our eyes has significantly diminished. One of the most important improvements that we have noticed when the new LED lights were installed is that the library seems quieter, we all got used to the "humming" of fluorescent tubes that took a while for us to notice that certain sounds/noises ceased after the switch. Overall we are happy with the change of lighting at the Library.


Edward Lopez
Library Director
Hidalgo Public Library



Hidalgo Police Department

211 E. Esperanza * Hidalgo, Texas 78557
(956) 843-2737 * Fax (956) 843-6813



August 15, 2014

Enviro-Lite Solutions, LLC

Attn: John Phillips, CEO

Recently the City of Hidalgo Police Department underwent a change in replacement of incandescent and florescent lighting to LED lighting. Numerous observations by the staff and commented was heard immediately.

I wear glasses and as a photographer, I noted that the yellow haze by the non-natural lighting was immediately gone. I assist in photographing the staff for ID's and the colored background used was very visible and required little or no enchantments. Skin tones and detail were clearly enhanced.

The ability to see with ease was also heard from the staff. Comments ranged from, "I don't have to wear my reading glasses or the colors are very vivid."

Another example, the explosions of colors come to mind. The interior of our office building had recently been painted white. However the walls appeared a yellowish off white color due to the florescent lights. The new LED lighting exemplified the surroundings, making colors brighter, showing flaws where the painters has missed areas, which were easily corrected. The building's interior looks brighter, cleaner and professional. The LED light shows colors in its true vivid form.

I also observed that my eyes are less tired at the end of the eight hour shift. I did note that going home to my conventional incandescent lighting diminishes my eyesight. My home lighting appears darker and more difficult to see. As the saying goes, "We have seen the light".

Sincerely,

Rodolfo "Rudy" Espinoza
Chief of Police



Hidalgo Public Library
710 E Texono Drive
Hidalgo, Texas 78557
Ph 956-843-2093
Fx 956-843-8841



Edward Lopez, Director
eddie@hidalgo.lib.tx.us

August 15, 2015

My name is David Vergara and I working in the Library five years and eight months and the with change of the LED lights is much better because the lighting is more clear and white and as the patrons have told me I can read better and I don't get tired reading, especially people who spend time in the library.

I expect that with these lights we will see some savings on our energy bill and also we have noticed that the building is cooler because these lights don't generate too much heat. Overall we are very pleased with the new LED lights.

David Vergara
Staff Member
Hidalgo Public Library



Experience our Lights,
See the difference!

Thank You