

RESOLUTION 2010-05

A RESOLUTION BY THE CITY OF LAKE WALES, FLORIDA, TO APPLY FOR AN ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT FROM THE STATE OF FLORIDA CLIMATE COMMISSION AND THE EXECUTIVE OFFICE OF THE GOVERNOR AND TO AUTHORIZE THE CITY MANAGER TO EXECUTE ALL RELATED DOCUMENTS.

WHEREAS, energy efficiency is an important part of our community's future; and

WHEREAS, the City of Lake Wales desires to apply for an Energy Efficiency Conservation Block Grant which would provide monies in which to help fund the replacement of lights at the Little League Fields; and

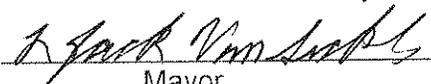
WHEREAS, the City of Lake Wales desires to apply for an Energy Efficiency Conservation Block Grant which would provide lighting for Barnes and Barranco fields that would meet official Little League standards.

NOW, THEREFORE, BE IT RESOLVED by the City Commission of Lake Wales, Florida:

Section 1. The City Commission authorizes the submission by the City of Lake Wales of Energy Efficiency Conservation Block Grant application for funding to replace inefficient lighting at the Lake Wales Little League Fields.

Section 2. The City Commission authorizes the City Manager to execute the grant application and to execute all related documents.

INTRODUCED, PASSED AND ADOPTED THIS THE 2ND DAY OF FEBRUARY 2010.

BY: 

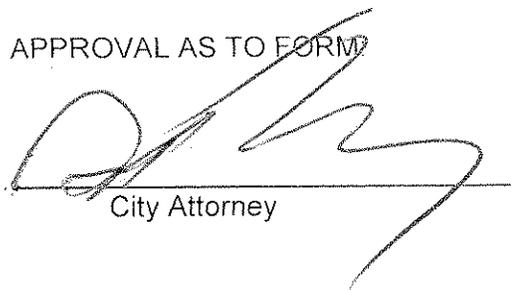
Mayor

ATTEST:

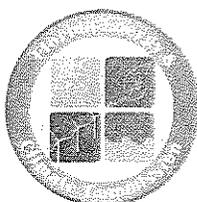


City Clerk

APPROVAL AS TO FORM



City Attorney



**GRANT ASSISTANCE PURSUANT
TO THE FLORIDA
ENERGY EFFICIENCY &
CONSERVATION SUBGRANTS**

A. PROJECT INFORMATION

Title:	Lake Wales Little League Lights		
Project Location:	Little League Fields 300 LakeShore Blvd. Lake Wales 33853		
Are there multiple partners? If so, state how many partners.	2	Grant Application Category:	2

LEAD APPLICANT

Contact Name:	Judith H. Delmar, City Manager		
Organization:	City of Lake Wales		
Address Line 1:	201 W. Central Ave.		
Address Line 2:			
City:	Lake Wales	State:	FL
Zip:	33853-4013		
Email:	jdelmar@cityoflakewales.com		
Phone:	863-678-4182x225	Fax:	863-678-4180

PARTNERING APPLICANT(S)

Contact:	James Hurst		
Organization:	Lake Wales Little League		
Address Line 1:	300 Lake Shore Blvd.		
Address Line 2:			
City:	Lake Wales	State:	FL
Zip:	33853		
Email:	james.hurst@willis.com		
Phone:	863.293.2787	Fax:	863.299.5654

**Include additional partners as an addendum.*

REQUIRED REGISTRATION INFORMATION

Legal Name of Lead Applicant:	City of Lake Wales
FEID No:	59-6000357
DUNS No:	073212201
CCR Expiration Date:	August 4, 2010
MFMP Status:	Registered

FUNDING REQUEST AND COST SHARE

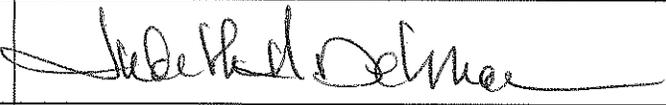
1. Total Amount of Grant Funds Requested:	\$200,000
2. Total Matching Funds (Provided by applicant and project partners):	0
3. Total Project Cost (Add amounts in 1 and 2):	\$200,000
4. Match Percentage (Divide amount in 2 by amount in 3):	0

JOBS CREATED/RETAINED

1. Total Short Term Jobs	0.9
2. Total Long Term Jobs	0
3. Total Jobs (Add the numbers from 1 and 2)	0.9
4. Total EECBG Funds Requested	200,000
5. Jobs Divisor (Divided the amount in 4 by \$92,000)	2.17
6. Job Score (Divide the number in 3 by the number in 5)	0

Please round to nearest whole number

ENERGY SAVINGS AND ENERGY PRODUCTION

Activity	Million Source Btu Saved	MWh Saved	Thousand Cubic Feet Natural Gas Saved	Gallons Gasoline Saved
Retrofitting Sports Lighting	624.5	183	N/A	N/A
Total Source Btu Saved (millions)	624.5			
Total Cost Savings	\$157,679			
<i>*Include additional activities as an addendum. 10 Year Cycle Cost/Energy Savings</i>				
GREENHOUSE GAS REDUCTION				
Activity	Metric Tons Carbon Reduced			
Retrofitting Sports Lighting	131			
Total Carbon Reduced (metric tons)	131			
<i>*Include additional activities as an addendum. 10 Year Cycle Cost/Energy Savings</i>				
SPECIAL COMMUNITY DESIGNATION(S)				
Identify any Special Community Designation(s) and provide documentation for any Special Community Designation claimed as an addendum.		REDI (Rural Economic Development Initiative)		
CERTIFYING OFFICIAL				
Certifying Official's Signature <i>*If signed by a person designated by the local governing body, a copy of the resolution must be included.</i>				
Certifying Official's Name (printed):		Judith H. Delmar		
Title:		City Manager		
Organization:		City of Lake Wales		

PROJECT NARRATIVE

B. PROJECT BACKGROUND: Provide a summary of the project and the background justification supporting the need for the Commission to fund the project. Include experience and qualifications of the project team for their assigned role with the project. This section is limited to one page. If multiple jurisdictions choose to partner in their application, the page limit is increased to two pages. Pages submitted beyond the page limit will not be reviewed.

The scope of the proposed project is to remove the existing wooden poles and 20+ year old lighting at the Lake Wales Little League Complex located at 300 N. Lakeshore Blvd., Lake Wales, FL, 33853 and will replace the wooden poles, which are currently unsafe, with new poles designed to meet the more stringent Florida Building code.

We will replace the existing lighting which is not only energy inefficient, but also well past its useful life, with Green Generation Sports lighting. This Green generation Lighting was introduced in 2005 and has a proven track record of reducing energy while maintaining safe lighting standards. The system also provides long term parts and labor warranties which guarantees system performance.

This project was chosen based on the amount energy saved by replacing the lights and the amount of usage these fields get each year. These fields draw a heavy demand during peak demand hours of energy providers. We believe this will provide the largest overall energy benefit and benefit to the community at large.

Barnes and Barranco Fields are used primarily for baseball teams as well as boys and girls t-ball. Over 650 youth take part in Little League programs annually with 450 of them using these fields. Over the course of the past 55 years over 200,000 students have been involved in Little League to some extent. Those who participate in Little League learn valuable skills such as teamwork, leadership, and the importance of working hard and doing one's best. Functional efficient lighting and a safe place to play is critical to the success of Lake Wales Little League. Additionally, a variety of other organizations use the fields such as Wiffle ball leagues, Challenger (handicap) baseball, Church leagues, and dad and son on Sundays. Thus the fields are used almost daily especially during the winter months when it is darker earlier. Therefore new, improved, cost efficient lighting is vital to the success of all these programs.

PROJECT NARRATIVE (cont.)

C. DESIRED OUTCOMES: Provide a list of outcomes, in bullet format, expected to be achieved as a result of completing this project. This section is limited to one page. If multiple jurisdictions choose to partner in their application, the page limit is increased to two pages. Pages submitted beyond the page limit will not be reviewed.

Fixtures

- Generate energy savings by installing sports lighting fixtures that direct more light onto the field of play thus reducing the number of fixtures needed (approximate 39% reduction)
- Generate maintenance savings through long term product warranties
- Increase the overall quality of light (uniformities), creating a visually pleasing, safe, and productive environment guaranteed to meet I.E.S. safety standards.
- Significantly decrease the amount of off site spill light, glare, and skyglow to the neighboring communities
- Fixture housing is die cast instead of the current systems having round spun aluminum – eliminates damage to fixture optics
- Innovative technology increases lamp life from 3,000 to 5,000 hours due to efficient control of lamp, thereby reducing hazardous waste
- Increased pole strength due to significant EPA reduction from fixture reduction making structures more hurricane resistant
- Fixtures and cross-arms rated to 150 mph winds – current system rated to 125 mph

Controls

- Web based controls eliminates the need to issue keys to league organizations.
- Ability to track who turns on and off lighting through the use of usernames and passwords – lighting system abusers can be identified
- 24/7/365 controls call center available for scheduling and troubleshooting
- Advanced scheduling feature eliminates unauthorized usage.

PROJECT NARRATIVE (cont.)

D. PROJECT DESCRIPTION: Indicate the eligible activity(ies) selected and provide a detailed description of the work to be performed for the project. Include maps, graphs, charts, etc. to support project activities. Project descriptions should consist of a list of major tasks for accomplishing the project with specific sub-activities detailed within each task heading. This section is limited to two pages. If multiple jurisdictions choose to partner in their application, the page limit is increased to three pages. Pages submitted beyond the page limit will not be reviewed.

Bid Process:

- 1) Develop project specifications for bid advertisement
- 2) Advertise bid
- 3) Receive bids and award project with City Council approval.

Construction Task List:

1. Contract for completion will be 120 days from the time of approved submittals. This project is "shovel ready" and will be able to immediately be installed.
2. Removal of existing sports lighting
 - This will include the recycling of lamps, aluminum reflectors, ballast and steel as necessary.
 - Existing metal halide lamps to be disposed of following hazardous waste procedures
3. Installation of new sports lighting
 - Install new poles & fixtures according to structural engineered foundation designed to meet Florida Building Code.
 - Locate and mark existing irrigation systems necessary for construction.
4. Verification Process
 - Energy reduction is easily verifiable based on the replacing 56 x 1500w Metal Halide lamps with 34 x 1500w Metal Halide lamps.
 - Conduct a light test to verify that light levels and uniformities meet I.E.S. safety standards with the fewer fixtures.

Diagram of fields is Attachment G

PROJECT NARRATIVE (cont.)

E. PROJECT MILESTONES/DELIVERABLES/OUTPUTS: Identify the month of the project during which each task will start and be completed. Identify in which months of the project the outputs/deliverables will be accomplished. This section is limited to three pages. If multiple jurisdictions choose to partner in their application, the page limit is increased to five pages. Pages submitted beyond the page limit will not be reviewed.

1. **Bid Process** – Begin within 1 month of grant award, will be completed 6 months after grant award.
2. **Construction Task List** – Contract for completion will be 4 months from the time the bid process is complete.

This project will be complete within a year of grant award.

The primary benefits in cost savings and energy efficiency will be seen after the following Little League season is complete.

PROJECT BUDGET

F. PROJECT BUDGET SUMMARY: Summarize the Total Project Cost by budget (including both requested grant funds and match/leveraged funds) by Budget Category and round each Budget Category subtotal to the nearest whole dollar value.

Budget Category	Grant Funds	Cost Share: matching Funds and Other In-Kind Contributions	
		Funding	Source of Funds
1. Salaries	0		00
2. Fringe Benefits	0		00
3. Travel (if authorized)	0		00
4. Supplies/Other Expenses	0		00
5. Equipment	0		00
6. Contractual Services	200,000		00
7. Indirect (if authorized)	0		00
Total Project Budget	200,000		00
Total Project Cost	200,000	= Grants Funds + Cost Share	
Cost Share Percentage		0 = Cost Share / Total Project Cost	

PROJECT BUDGET (cont.)

G. BUDGET DETAIL: Provide a detailed, line-item budget using the worksheet format shown below. Provide accurate calculations to justify the cost of each budget line-item. Round only the subtotals for each Budget Category amount to the nearest whole dollar value. Use additional lines if necessary. For each budget line-item, identify in the appropriate column if the cost is: 1) Grant or match, 2) a direct cost used to calculate Indirect Costs (if approved) and 3) whether the cost is Administrative in nature. Up to 10% of grant funds may be used for administrative expenses, excluding the cost of meeting the reporting requirements of the program. Administrative costs are allowable, reasonable, and allocable direct and indirect costs related to overall management of the awarded grant.

A description of what is required for each Budget Category is as follows:

5. Salaries - Identify the persons to be compensated for work on this project by name (if known), position, and title. Show the hourly cost and total hours to be charged for each person or position. Divide annual salaries by 2080 hours and nine month academic salaries by 1560 hours, to find the hourly rate.
6. Fringe Benefits - Multiply the rate by the total salaries to which fringe benefits apply. If the rate is variable, explain and show calculations.
7. Travel - List trips by their purpose and/or destination. Indicate the number of days for each trip and the per diem. The Commission can only pay for travel at the approved State of Florida rate (Section 112.061, Florida Statutes). Be prepared to provide the Commission with details on costs utilized to calculate the "Amount Budgeted" for each trip.
8. Supplies & Other Expenses - List expendable supplies by category description, unit costs and quantity. List other expenses not included in any of the above categories. Examples would be printing, copying, postage, communications, etc. Non-expendable equipment valued at less than \$1,000 may be listed also. Include only expenses directly related to the project, not expenses of a general nature.
9. Equipment - List non-expendable personal property/equipment valued at \$1,000 or more by description, unit cost, and quantity. Computers and data-processing equipment should be described in detail.
10. Contractual Services - Subcontractors should provide the same information required by this budget table, with the following exceptions: (a) when professional services are provided at a pre-existing approved rate or fee shown on the budget; or (b) the subcontract is to be obtained competitively. For either (a) or (b), show an estimated maximum amount.
11. Indirect Costs/Rate - The FECC prefers that Indirect Costs, if required, are utilized as match. If Indirect Costs are requested to be reimbursed with grant funds, they must be authorized and based on a specified rate in consultation with the Commission. The Indirect Cost Rate and the direct costs upon which the amount of Indirect Cost is calculated must be reasonable, measurable, documented and the Indirect Cost Rate must be consistently applied. Indirect Costs are included in project Administrative expenses as described above.
12. Total Budget Category - Show the total of all line-items within a Budget Category.
13. Total Budget - Show the total of all categories.

1. Salaries

Salaries (Name/Position)	Hourly Cost (\$)	Hours/wk. or % FTE	Total Gross Salary (\$)	Grant = G or match = M	direct costs used to calculate Indirect Cost? Y/N	Admin. Cost? Y/N
	\$	*	= \$			
	\$	*	= \$			
	\$	*	= \$			
	\$	*	= \$			
Sub-Totals for Salaries Category \$0						

2. Fringe Benefits

Name of Employee	Amount Gross Salary (\$)	Approved % per Work Plan or enter "N/A" & provide break-out	Benefit # 1 & Cost	Benefit # 2 & Cost	Benefit # 3 & Cost	Total Fringe Benefits (\$)	Grant = G or match = M	direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
	\$		\$	\$	\$	\$			
	\$		\$	\$	\$	\$			
	\$		\$	\$	\$	\$			
Sub-Total of Fringe Benefits Category \$0									

3. Travel * Cannot exceed cost limitations described in Ch. 112.061, F.S.

Name of Employee	Destination	Period of Trip (# of days)	Purpose of Trip	Amount Budgeted	Grant = G or match = M	direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
				\$			
				\$			
				\$			
				\$			
Sub-Total of Travel Category \$0							

4. Supplies - Other Expenses

Description	Unit Cost (\$)	*	Quantity	=	Total Cost (\$)	Grant = G or match = M	direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
	\$	*		=				
	\$	*		=				
	\$	*		=				
	\$	*		=				
Sub-Total of Supplies - Other Expenses Category \$0								

5. Equipment								
Description	Unit Cost (\$)	*	Quantity	=	Total Cost (\$)	Grant = G or match = M	direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
	\$	*		=				
	\$	*		=				
	\$	*		=				
	\$	*		=				
Sub-Total of Equipment Category \$0								

6. Contractual Services									
Name of Vendor	Description	Fee/Rate (\$)	*	Quantity	=	Total Cost (\$)	Grant = G or match = M	direct costs used to calculate Indirect Cost? Y/N	Admin. Cost Y/N
Musco Lighting	8 Light Poles	\$25,000	*	8	=	\$200,000	G	N	N
		\$	*		=				
		\$	*		=				
		\$	*		=				
Sub-Total of Contractual Services Category \$200,000									

7. Indirect Cost (if approved)

Budget Category included in Base of Indirect Cost Calculations	Total direct costs for Budget Category	*	Approved Indirect Cost Rate (%) from Grant Work Plan	Total Indirect Cost for Budget Category (\$)	=	Total Indirect Costs for Grant	+	Total Indirect Costs for match
\$		*		\$	=	\$	+	\$
\$		*		\$	=	\$	+	\$
\$		*		\$	=	\$	+	\$
\$		*		\$	=	\$	+	\$
Sub-Total of Indirect Costs Category				\$0	=	\$	+	\$

8. Total Project Budget

Budget Category	Total Costs for Budget Category	=	Total Grant Costs	+	Total match Costs
Contractual Services	\$200,000	=	\$200,000	+	\$0
\$		=	\$	+	\$
\$		=	\$	+	\$
\$		=	\$	+	\$
Total Project Budget	\$200,000	=	\$200,000	+	\$0

LIST OF ATTACHMENTS

- | | |
|----------------------|---|
| Attachment B: | Environmental checklist |
| Attachment C: | Resolution |
| Attachment D: | REDI Letter |
| Attachment E: | 10 Year Life Cycle Cost |
| Attachment F: | MUSCO Lighting Quote |
| Attachment G: | Little League Lighting Diagram |
| Attachment H: | Lighting test results for Little League Fields |
| Attachment I: | Little League Lighting Standards |

PMC-
EF1

(2/06/02)

**U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
ENVIRONMENTAL CHECKLIST
(To Be Completed by Potential Recipient)**



PART I: General Information

DOE Project Officer:

Date: 2/4/2010

Project Title: Lake Wales Little League Lights

ST: FL

Organization Name: City of Lake Wales

Solicitation Number: DE-EE0000800

Award No:

1. Please describe the intended use of DOE funding in your proposed project. For example, would the funding be applied to the entire project or only support a phase of the project? Describe the activity as specifically as possible, i.e. planning, feasibility study, design, data analysis, education or outreach activities, construction, capital purchase and/or equipment installation or modification. If the project involves construction, also describe the operation of the completed facility/equipment.

The scope of the proposed project is to remove the 10 existing wooden poles and 20+ year old lighting at the Lake Wales Little League Complex located at 300 N. Lakeshore Blvd., Lake Wales, FL, 33853 and will replace the wooden poles, which are currently unsafe, with 8 new poles designed to meet the more stringent Florida Building code.

We will replace the existing lighting which is not only energy inefficient, but also well past its useful life, with Green Generation Sports lighting. This Green generation Lighting was introduced in 2005 and has a proven track record of reducing energy while maintaining safe lighting standards. The system also provides long term parts and labor warranties which guarantees system performance.

2. Does any part of your project require review and/or permitting by any other federal, state, regional, local, environmental, or regulatory agency? Yes No

City of Lake Wales Building Permit and Plan Review

3. Has any review (e.g., NEPA documentation, permits, agency consultations) been completed?
 Yes No If yes, is a finding or report available and how can a copy be obtained?

4. Is the proposed project part of a larger scope of work? Yes No If yes, please describe.

Do you anticipate requesting additional federal funding for subsequent phases of this project?
 Yes No If yes, please describe.

5. Does the scope of your project **only** involve one or more of the following:

- Information gathering such as literature surveys, inventories, audits,
- Data analysis including computer modeling,
- Document preparation such as design, feasibility studies, analytical energy supply and demand studies, or
- Information dissemination, including document mailings, publication, distribution, training, conferences, and informational programs.

Preparer:
Jennifer Nanek
Business Contact:
Jennifer Nanek

Phone:
863-678-4182
Phone:
863-678-4182

Email:
jnanek@cityoflakewales.com
Email:
jnanek@cityoflakewales.com

RESOLUTION 2010-05

A RESOLUTION BY THE CITY OF LAKE WALES, FLORIDA, TO APPLY FOR AN ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT FROM THE STATE OF FLORIDA CLIMATE COMMISSION AND THE EXECUTIVE OFFICE OF THE GOVERNOR AND TO AUTHORIZE THE CITY MANAGER TO EXECUTE ALL RELATED DOCUMENTS.

WHEREAS, energy efficiency is an important part of our community's future; and

WHEREAS, the City of Lake Wales desires to apply for an Energy Efficiency Conservation Block Grant which would provide monies in which to help fund the replacement of lights at the Little League Fields; and

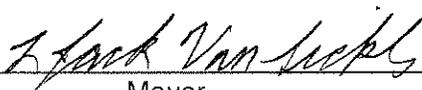
WHEREAS, the City of Lake Wales desires to apply for an Energy Efficiency Conservation Block Grant which would provide lighting for Barnes and Barranco fields that would meet official Little League standards.

NOW, THEREFORE, BE IT RESOLVED by the City Commission of Lake Wales, Florida:

Section 1. The City Commission authorizes the submission by the City of Lake Wales of Energy Efficiency Conservation Block Grant application for funding to replace inefficient lighting at the Lake Wales Little League Fields.

Section 2. The City Commission authorizes the City Manager to execute the grant application and to execute all related documents.

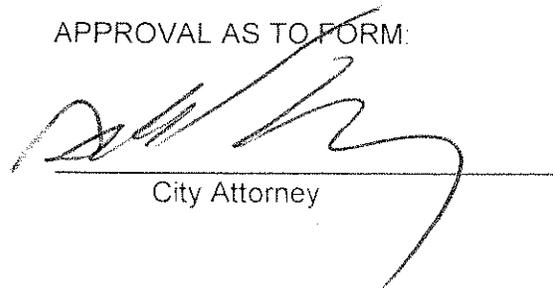
INTRODUCED, PASSED AND ADOPTED THIS THE 2ND DAY OF FEBRUARY 2010.

BY: 
Mayor

ATTEST:


City Clerk

APPROVAL AS TO FORM:


City Attorney



CHARLIE CRIST
GOVERNOR

STATE OF FLORIDA

Office of the Governor

THE CAPITOL
TALLAHASSEE, FLORIDA 32399-0001

www.flgov.com
850-488-7146
850-487-0801 fax

RECEIVED
9/28/09

September 28, 2009

The Honorable Jack Van Sickle
Mayor, City of Lake Wales
P.O. Box 1320
Lake Wales, Florida 33859-1320

Re: Eligibility for Waiver or Reduction of Match Requirements

Dear Mayor Van Sickle:

I have reviewed and verified the information submitted on behalf of the City of Lake Wales. Because the City has a prominent agricultural base with a population of 25,000 or less, and has three or more factors of economic distress levels worse than the State, the City does qualify as a rural community and is eligible for the Waiver or Reduction of Match Requirement.

Please note that this qualification will expire one year from the date on this letter. To continue designation, a new request with supporting documentation as defined in F.S. 288.0656 (2)(b)(4), will need to be submitted to the Office of Tourism, Trade, and Economic Development on or before September 28, 2010.

If you have any questions or wish to discuss this further please contact me at (850) 487-2568.

Sincerely,

A handwritten signature in cursive script, appearing to read "Keisha Rice".

Keisha Rice, Deputy Director
Executive Office of the Governor
Office of Tourism, Trade, and Economic Development

10-Year Life Cycle Cost

City of Lake Wales

Little League

Prepared for: State Energy Grant

1/25/2010

	Existing	Light-Structure GREEN	Your Savings
Total MWh	1,243	729	696
Metric Tons of CO ₂	892.4	523.1	500
		BTU's	2376.5
Energy	\$186,430	\$109,277	\$77,153
Group Relamp	\$199,792	\$0	\$199,792
Lamp Maintenance	\$30,000	\$0	\$30,000
Controls - Energy	\$37,286	\$0	\$37,286
Controls - Labor	\$0	\$0	\$0
10-Year Life Cycle Cost	\$453,508	\$109,277	\$344,231

Assumptions

Customer Provided Energy Data:

*Energy Cost per kWh \$0.150
Annual Operating Hours 1370

Controls Information:

Controls Energy Savings 20%
Labor Rate per Hour \$0.00
On/Off Cycles per Year 0
Labor Hours per Cycle 0

Technology Specific Data:

Green Generation Lighting[®] Fixture Qty. 34
Average kW demand per fixture 1.56
Useful lamp life (Hours) 5,000
Typical Floodlighting Fixture Qty. 56
Average kW demand per fixture 1.62
Rated Life (Hours) 3,000
Useful lamp life (Hours) 1,200

Lamp Maintenance Data:

Lamp replacement cost \$125
including parts, equipment & labor

Annual Energy Savings = **\$11,444**

Average Annual Savings = **\$34,423.08**

NOTE:

Life cycle costs are based upon the assumptions given above. Any variation in this data will change the life cycle cost proportionately.

Carbon dioxide (CO₂) is emitted by the power plant when generating the total kWh used by the lighting system. Generating one kWh of electricity in the United States emits an average of 1.583 lbs of CO₂. One metric ton equals 2,204.6 lbs.

Source for CO₂ calculations: <http://www.epa.gov/cleanenergy/energy-resources/refs.html> (4-15-09)





Quote

LAKE WALES LITTLE LEAGUE
2 x 200' RADIUS BASEBALL FIELDS
Date: January 13, 2010

Equipment Description – Equipment for lighting Little League Fields

Sports Cluster Green™ System to be attached to existing poles

- 8 x Crossarm Assemblies
- 8 x Galvanized Steel poles
- UL Listed remote electrical component enclosure
- Pole length wire harness
- 34 x Factory-aimed and assembled luminaires

Also Includes:

- Energy savings of more than 50% over a standard lighting system
- 50% less spill and glare light than Musco's prior industry leading technology
- Musco Constant 25™ warranty and maintenance program that eliminates 100% of your maintenance costs for 25 years, including labor and materials
- Guaranteed light levels of 50/30fc for 25 years, +/- 10% per IESNA RP-06-01
- 1 Group re-lamp (based on 350 hours annual usage.)
- Control Link® Control & Monitoring System for control and management of your lighting system
- Lighting Contactors sized for Voltage and phase at jobsite
- Installation of poles & Fixtures according to conditions set forth on page 2 of quote.
- Based on FBC, 110mph wind

Musco will attempt to coordinate shipment so that delivery corresponds with the customer's payment schedule. It will be the responsibility of the wholesaler to ensure that Musco is aware of this delivery timeframe. Terms: Net 30 days upon delivery

- **Delivery to the job site from the time of order, submittal approval, and confirmation of order details including voltage and phase, pole locations is approximately 30-45 days. Due to the built-in custom light control per luminaire, pole locations need to be confirmed prior to production. Changes to pole locations after the product is sent to production could result in additional charges.**

Budget Estimate

Pricing as per Clay County Bid

\$197,000.00

Robert A. DeCouto

Pricing furnished is effective for 60 days unless otherwise noted and is considered confidential. Divulging technical or pricing information to competitive vendors will result in removal from the bid list.

Scope of Work, Turnkey Installation

Owner Responsibilities:

- ◆ Complete access to the site for construction.
- ◆ Removal of any trees, limbs, shrubs, etc. for total access to pole locations.
- ◆ Locate existing underground utilities and irrigation systems.
- ◆ Removal, replacement, and repair of all fencing necessary for construction.
- ◆ Repair and replacement of any field turf, asphalt, curbs, and concrete damage.
- ◆ Provide a source of water such as a fire hydrant or 2" water line for foundation excavation.
- ◆ Extra costs associated with foundation excavation in non-standard soils (rock, caliche, high water table, collapsing holes, etc).
- ◆ Permitting Fees associated with project.

Musco Responsibilities:

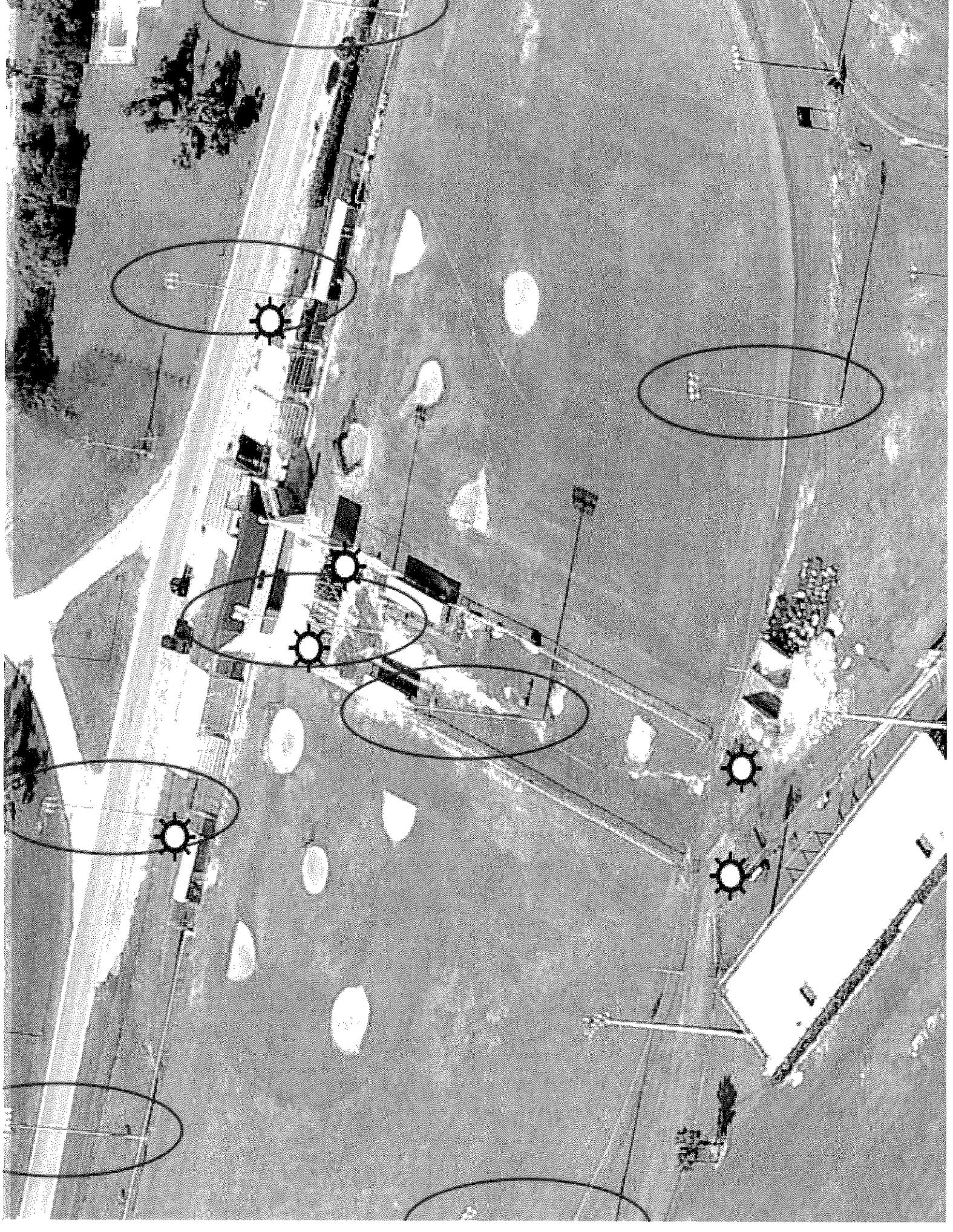
- ◆ Provide required fixtures
- ◆ Provide layout of pole locations and aiming diagram.
- ◆ Provide Project Management assistance as needed.
- ◆ Provide Structural Foundation designs

Musco Subcontractor Responsibilities:

- ◆ Installing 2 Musco Contactor Cabinets
- ◆ Demo of existing electrical wiring to existing poles (underground conduit to be abandoned in place)
- ◆ Provide equipment and materials to off load equipment at jobsite per scheduled delivery.
- ◆ Provide storage containers for material as necessary and dumpsters for waste disposal.
- ◆ Provide required permits (paid for by owner)
- ◆ Provide electrical design for Musco to review prior to installation
- ◆ Provide materials and equipment to install or upgrade existing electrical service panels as required or necessary
- ◆ Provide materials and equipment to install all underground conduit wiring, pull boxes etc. and terminate wiring as per electrical code and design
- ◆ Confirm the existing underground utilities and irrigation systems have been located and are clearly marked so as to avoid damage from construction equipment. Repair any such damage during construction.
- ◆ Provide and install ground rods (one per pole location) for lightning protection per NFPA 780 Code. Poles 70' and below require a #2 ground wire. Poles 80' and above require 2/0 ground wire. Ground rods to be 3/4"x10' or 5/8"x8' with a 10' embedment. Ground rods must be installed in soil, not in the concrete backfill.
- ◆ Remove augured spoils to owner-designated location at jobsite.
- ◆ Provide materials and equipment to assemble and install Light Structure Green™ fixtures and terminate all necessary wiring.
- ◆ Provide equipment and materials to assemble and erect Light Structure System Poles.
- ◆ Provide equipment and materials to demo & dispose of existing fixtures
- ◆ Provide equipment and materials to terminate all necessary wiring.
- ◆ Provide startup and aiming as required to provide complete and operating sports lighting system.

Thank you for considering Musco for your sports-lighting needs. Please contact me with any questions.

Bob DeCouto
Sales Representative



Robert A. DeCouto

Musco Lighting

Phone: 352/243-9999 ext. 6304

888/962-8080 toll free

Fax: 352/243-2791

E-mail: bob.decouto@musco.com

2220 Cluster Oak Dr - #H

Clermont, FL 34711

www.musco.com

January 12, 2009

Jim Hurst
950 1st Street South
Suite 203
Winter Haven, FL 33880

Dear Mr. Hurst,

On January 6th, 2009 at approximately 6:30 P.M., we had initiated a light test on the Barnes and Barranko fields at the Lake Wales Little League Complex. It should be noted that there were some lights out at the time of the testing. This test was done by Jimmy Bent with Progress Energy. It should be noted that there were visible bright spots and shadows in both the infield and the outfield. The results of the test are as follows;

Barnes Field;

- The infield achieved an average light level of 23.72 footcandles (fc) with a uniformity max/min ratio of 5.33:1.
- The outfield achieved an average light level of 16.91 footcandles with a uniformity max/min ratio of 3.33:1.

Barranko Field;

- The infield achieved an average light level of 31.44 footcandles (fc) with a uniformity max/min ratio of 3.71:1.
- The outfield achieved an average light level of 21.73 footcandles with a uniformity max/min ratio of 3.50:1.

Both IES (Illuminating Engineers Society of America) and Little League Baseball standards require a minimum of 50fc infield with a max/min uniformity of 2:1 and 30fc outfield with a 2.5:1 max/min ratio. As you can see, this field does not meet these established standards.

For your records, I have enclosed a copy of the point tested for this light test.

If I can be of further assistance, please contact me at (888) 962-8080.

Sincerely,



Robert A. DeCouto
Musco Representative

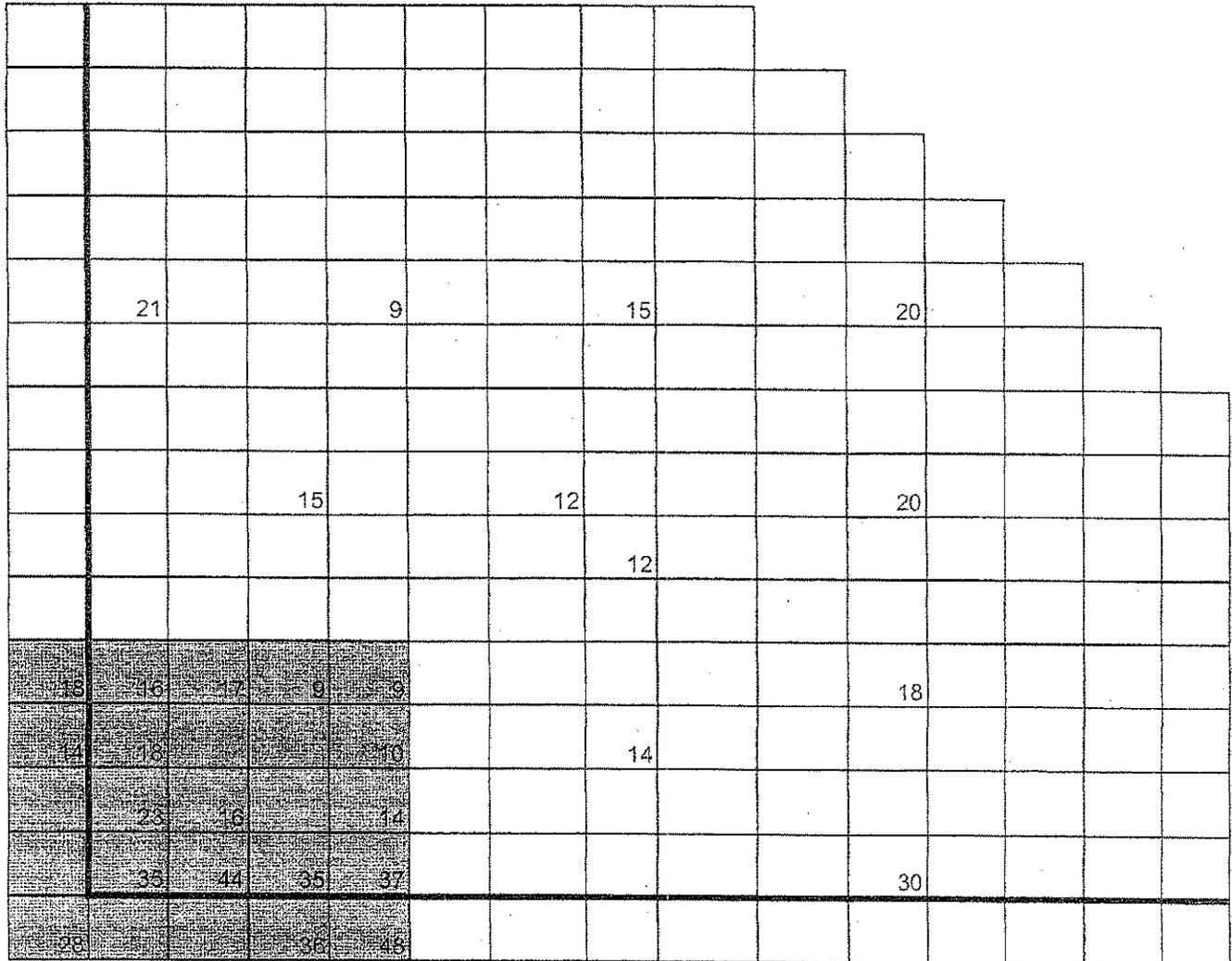


Lighting Performance Report

Project Name: Lake Wales LL
 Location: Lake Wales FL
 Project Number: 138844

Light readings taken by: Jim Bent,
 Progress Energy
 Conditions: Clear
 Date of Readings: 1/6/09

Barnes



Summary of Lighting Performance

	Infield	Outfield
Grid Points	18	11
Average	23.72	16.91
Max	48	30
Min	9	9
Uniformity	5.33	3.333

2009 Little League® Lighting Standards & Safety Audit



Excerpted from the Little League® 2009 Operating Manual

TABLE OF CONTENTS

Introduction	4
I. Recommended Standards	
Part 1 - General	
1.1 Lighting Performance	5
1.2 Environmental Light Control	6
1.3 Life Cycle Costs	6
1.4 Warranty and Guarantee	6
Part 2 - Product	
2.1 Lighting System Construction	6
2.2 Structural Parameters	7
Part 3 - Execution	
3.1 Field Quality Control	8
II. Desirable Features	
4.1 Controls & Monitoring System	8
4.2 Auxiliary Brackets	9
4.3 Field Perimeter Lighting	9
III. Life Cycle Operating Cost Evaluation	10
IV. Little League Lighting Standards Checklist	11
V. Facility Drawings	12-13
VI. Safety Audit	14-17

Artificial Lighting

Night games have been permitted in Little League starting in 1957 with the second Little League International Congress in Chicago. Standards set by the Illuminating Engineering Society (IES) of North America were adopted by Little League Baseball in 1957, and have been updated with recommendations from the National Electric Code, the Uniform Building Code, and others.

Over the years, these standards have been refined and have been adopted by Little League Baseball, the National Recreation Society and other organizations. **THE IMPORTANCE OF ADHERING TO THESE STANDARDS CANNOT BE UNDERSTATED, TO ASSURE THE UNIFORMITY OF LIGHTING LITTLE LEAGUE FIELDS MAKES THE GAME SAFER FOR CHILDREN AND VOLUNTEERS. ALL LIGHTING SYSTEMS MUST COMPLY WITH LITTLE LEAGUE STANDARDS, WITHOUT REGARD TO WHO INSTALLS OR FINANCES THE SYSTEM (such as city, county, private individual, etc.).**

Many leagues operate in conjunction with other organizations or municipalities. This does not need to be a roadblock in making sure that standards are met. Instead, it is a matter of educating people at all levels on this vital aspect of league operations.

The District Administrator (and each local Little League President) are directly responsible for ensuring that any fields on which night games are played within his/her league or district are up to these standards. The potential liability risks we all face makes compliance even more imperative.

As the Little League program grows and leagues charter more divisions, the demand for fields increases dramatically. For many leagues, a less costly alternative to constructing new fields is the installation of artificial lighting, providing optimum use of available fields within the curfew limitations for each division. In planning for artificial lights, it is most important that minimum lighting standards be attained. Every precaution should be taken to guard against mishaps that might result because of the installation of an inadequate lighting system. **The local district administrator must pre-approve plans for any new lighting system as being adequate and within minimum standards for safe play.** It is recommended that the District Administrator involve the lighting specialist in Williamsport in his/her review. The District Administrator and President of the league must check the system after installation to determine that the installed system complies with the plans and meets or exceeds the minimum standards for play. Lighting systems must be checked once per year, and should be done before the season begins. Copies of project plans must be submitted to the District Administrator, for prior approval that the plans and installation comply with required standards.

The following standards have been adopted by Little League. They are divided into required minimum standards and desirable optional features. The minimum standards establish criteria which are important to the safe conduct of Little League activities. The desirable features are established to provide guidelines for adding important value to your lighting system.

Lighting systems installed prior to July 1, 1992 on fields with outfield fences 200 feet or less from home plate are temporarily "grandfathered" if they have a minimum of 24 -- 1500 watt metal halide fixtures mounted a minimum of 40 feet above the playing surface on four poles or more. These systems must provide a minimum average maintained illumination of 30 footcandles in the infield and 20 footcandles in the outfield. Since September, 1994, wood poles are not approved for use on Little League fields.

Notice: Any upgrade or addition of lighting equipment to existing systems after July 1, 1992, must be done so that the systems will be in complete compliance with current standards.

Standards for Lighting

I. Required Minimum Standards

These minimum standards are required for all lighting installations after the date of adoption of these standards. Any modification in existing lighting systems after this date must be done so as to result in a lighting system in compliance with these standards. To be in compliance, a system must meet all required minimum standards.

PART 1 – GENERAL

1.1 LIGHTING PERFORMANCE RECOMMENDATION

Achieving proper light levels on the field is important for participant playability and safety. Systems should be designed to not drop below specified light levels. The quantity of equipment needed is determined by the efficiency of the lighting system and maintenance practices, particularly relamping. Leagues should evaluate the energy efficiency of the system and consider the warranty, maintenance program and light level guarantee provided by the manufacturer. There are two acceptable methods of achieving the specified light levels.

A. Preferred technology

By utilizing a series of power adjustments, a lighting system is able to provide “constant light levels” and greatly extend the life of the lamps. In addition, this generation of lighting has high performance optic characteristics that enable reductions in the quantities of luminaires needed to meet design targets, lowering installation and operating costs. Light levels are typically guaranteed for up to 25 years with this technology.

B. Prior technology

Computer designs are done using two sets of values. One predicts “initial light levels” when lamps are new. The other predicts “maintained light levels” after the lamps have passed through a depreciation in light output. It is important to have the lighting designer use a maintenance factor adequate to account for this depreciation in light output throughout the life of the lamp. A value no greater than .70 shall be applied to initial light levels to predict these maintained values. Quality manufacturers are willing to provide guarantees of lighting performance.

C. Performance Requirements

Playing surfaces shall be lit to an average constant or target light level and uniformity as specified in the chart below. Lighting calculations shall be developed and field measurements taken on the grid spacing with the minimum number of grid points specified on page 13 of these standards with the light meter held horizontally 36 inches above the field surface. Measured average illumination level shall be +/- 10% of predicted mean in accordance with IESNA RP-6-01, and measured at the first 100 hours of operation. Uniformity of the lighting shall be such that the highest measure of quantity of light on the field is not greater than the lowest measurement per the ratio listed in the table below. On the entire field area, the changes in the quantity of horizontal footcandles should not occur at a greater rate than 10 percent per 10 feet, except for the outside perimeter readings which may change at a greater rate.

Level of Play/Description	Average Constant or Target Light Levels (Horizontal)	Maximum to Minimum Uniformity Ratio	Maximum Rate of Change
Standard — Competition	50 footcandles – Infield 30 footcandles – Outfield	2:1 – Infield 2.5:1 – Outfield	10% per 10 feet

D. Glare for Participants Aiming Angles

To achieve placement of lights in positions that enhance playability, pole heights, pole locations and fixture placements should be as shown on the layouts in the appendix. Aiming angles are a function of both pole height and the distance from fixture to aiming point. Little League minimum pole heights and minimum aiming angles must both be met to be in compliance.

1. Light fixtures which are set back from the foul lines between home plate to third base and between home plate to first base shall be mounted at a height above the playing surface such that a line from the lighting fixture to the point on the field where its maximum intensity is aimed is a line that is at least 25 degrees below horizontal.
2. Light fixtures positioned beyond the outfield fence or along the foul line beyond third base and first base shall be mounted at a height with a minimum aiming angle of 25 degrees below horizontal for fixtures aimed toward the infield and 21 degrees for fixtures aimed across the outfield.

1.2 ENVIRONMENTAL LIGHT CONTROL

Many facilities are located near residential or commercial properties or roadways, creating the possibility of spill and glare onto adjoining properties. Consideration should be given to this issue during the initial lighting design stage to minimize this effect. Some communities are implementing ordinances designed to minimize light pollution. Contact your local planning committee or zoning board.

The lighting equipment manufacturer can assist in assessing this issue and provide drawings showing maximum footcandles at any points of concern on adjacent properties. Do not hesitate to investigate a manufacturer's reputation, abilities and past experiences in working with local authorities and private property owners regarding glare and spill issues.

1.3 LIFE CYCLE COSTS

Leagues continue to struggle with operating budgets. Because the efficiency of lighting systems currently available can vary greatly, a life cycle operating cost analysis should be considered when evaluating lighting systems. Owners should expect a quality lighting system to last a minimum of 25 years.

These standards provide a Life Cycle Operating Cost Evaluation form to assist with the process. Items that should be included are energy consumption based upon the facility's expected usage, cost for spot relamping and maintenance, and any additional savings in energy or labor cost provided by automated on/off control systems.

Contract price and life cycle operating cost should both be considered in determining a lighting manufacturer for the project.

1.4 WARRANTY AND GUARANTEE

Product warranties are a good gauge of a manufacturer's confidence in their products. Prior generation equipment can range from 5 years to 10 years, and details of covered items and conditions vary greatly. New generation technology comes with warranty periods that may extend up to 25 years and includes guaranteed light levels, parts, labor, lamp replacements, energy usage, monitoring and control services, spill light control and structural integrity. The manufacturer should provide specially-funded reserves to assure fulfillment of the warranty for the full term. It is highly recommended you consider these all-inclusive warranties to limit your league's future exposure to escalating costs and maintenance hassle.

PART 2 – PRODUCT

2.1 LIGHTING SYSTEM CONSTRUCTION

A lighting system should consist of lighting, electrical and structural components designed to work together as a system that is durable and provides safety features.

A. Outdoor lighting systems should consist of the following:

1. Galvanized steel poles and crossarm assembly. Wood poles are not allowed after September 1, 1994. Based on current data, Little League does not recommend direct burial of steel poles because of the potential for deterioration at or below ground at critical stress points. If direct bury steel poles are used, leagues should have a foundation design completed by a structural engineer. Poles should be hot-dip galvanized to ASTM-123 standards. All accompanying hardware shall be galvanized or stainless steel.

2. Reinforced concrete pole foundation. Foundations should provide for pole attachment a minimum of 18 inches above ground to avoid corrosive deterioration. Concrete should cure a minimum of 28 days to develop adequate strength before stress loads are applied.
3. All ballasts and supporting electrical equipment shall be mounted onto the pole, away from the fixtures and crossarm to avoid problems of misalignment caused by the weight of these components. It is recommended that this equipment be placed in aluminum enclosures mounted remotely approximately 10' above grade. The enclosures shall be lockable and include ballast, capacitor and individual fusing for each luminaire. Safety disconnect per circuit for each pole structure will be located in the enclosure. Enclosures should be kept locked except during times of maintenance.
4. All wiring conductors above ground must be in enclosed in rigid cover. It is recommended that the lighting system include a wire harness complete with an abrasion protection sleeve, and strain relief.
5. The approved lamp for Little League play is a 1500-watt metal halide. Lamps must have an ASNI code – M48PC-1500/BU. Musco/Philips, Sylvania, and General Electric are the only manufacturers currently approved.
6. The lighting and electrical equipment on each ball field lighting structure shall have a UL Listing to confirm that the equipment has passed the safety tests of Underwriters Laboratory not only as to the individual components but also as to the use of the components in the configuration of the lighting system on the field.

B. Manufacturing Requirements

It is recommended that all components be designed and manufactured as a system. All luminaires, wire harnesses (if provided), ballast and other enclosures should be factory assembled, aimed, wired and tested for reduced installation time and trouble-free operation.

C. Durability

It is recommended that all exposed components be constructed of corrosion resistant material and/or coated to help prevent corrosion. Look for items like hot dip galvanizing for steel poles, stainless steel fasteners, powder coat painted aluminum and wiring enclosed within the crossarms, conduit, pole or electrical enclosure.

D. Lightning Protection:

All outdoor structures need to be equipped with lightning protection meeting NFPA 780 standards. In many instances the supplemental ground may not provide adequate lightning ground, creating the potential for a faulty electrical system in the case of a lightning strike.

E. Safety

All system components need to be UL Listed for the appropriate application. All electrical conductor wires for distribution of power around the playing field should be buried underground at depths provided by local code.

F. Maximum total voltage drop

Voltage drop to the disconnect switch located on the poles should not exceed three (3) percent of the rated voltage per IESNA RP-6-01.

2.2 STRUCTURAL PARAMETERS

A. Location

Poles shall be located as shown on the drawings in the appendix to these standards. Whenever possible, poles should be located outside of fences to avoid causing an obstruction or safety hazard to the participants.

B. Foundation Strength

Project specific foundation drawings stamped by a licensed structural engineer illustrating that the foundation design is adequate to withstand the forces imposed from the pole, fixtures and other attachments to prevent the structure from leaning.

C. Support Structure Wind Load Strength

Poles and other support structures, brackets, arms, bases, anchorages and foundations shall be determined based on the 50 year mean recurrent isotach wind maps for the appropriate county per the State Building Code.

D. Structural Design

The stress analysis and safety factor of the poles shall conform to AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

E. Soil Conditions

The design criteria for these specifications are based on soil design parameters as outlined in the geotechnical report. If a geotechnical report is not provided by the school, the foundation design shall be based on soils that meet or exceed those of a Class 5 material as defined by 2001 IBC, Table 1804.2-I-A.

PART 3 – EXECUTION

3.1 FIELD QUALITY CONTROL

A. Illumination Measurements

Upon substantial completion of the project and in the presence of the Contractor, Project Engineer, League Representative, and Manufacturer's Representative, illumination measurements shall be taken and verified. The illumination measurements shall be conducted in accordance with IESNA RP-6-01, Appendix B.

B. Correcting Non-Conformance

If, in the opinion of the Owner or his appointed Representative, the actual performance levels including footcandles, uniformity ratios and maximum kilowatt consumptions are not in conformance with the requirements of the performance specifications and submitted information, the Manufacturer shall be liable to any or all of the following:

1. Manufacturer shall, at his expense, provide and install any necessary additional fixtures to meet the minimum lighting standards. The Manufacturer shall also either replace the existing poles to meet the new wind load (EPA) requirements or verify by certification by a licensed structural engineer that the existing poles will withstand the additional wind load.
2. Manufacturer shall minimize the Owner's additional long term fixture maintenance and energy consumption costs created by the additional fixtures by reimbursing the Owner the amount of \$1,000.00 (one thousand dollars) for each additional fixture required.
3. Manufacturer shall remove the entire unacceptable lighting system and install a new lighting system to meet the specifications.

3.2 ONGOING QUALITY ASSURANCE

- A.** Full light and safety audits should be performed every year. See Lighting Safety Audit at the back of these standards.

II. Desirable Features

The following practices are recommended for increasing the lighting system performance.

4.1 CONTROLS AND MONITORING SYSTEM

A remote controls and monitoring system will provide ease of operation and management for your facility. Manufacturers providing systems with a 25 year warranty will utilize this system to ensure your lighting performs as required.

A. Remote Monitoring

Monitoring systems can check the lighting system each time it is turned on for luminaire outages. When an outage is detected, the manufacturer should notify the owner within one business day so that appropriate maintenance can be scheduled.

B. Remote Lighting Control

Lighting control systems allow owners and users with a security code to schedule on/off system operation in a variety of methods including web sites, phone, fax or email. Look for manufacturers that provide trained staff available 24/7 to provide scheduling support. Also evaluate features such as memory back up in the event of power outages.

C. Management Tools

Some manufacturers provide a web-based database of actual field usage and provide reports by facility and user group.

D. Communication Costs

Leagues should request that manufacturers include communication costs for operating the controls and monitoring system for the life of the lighting system.

4.2 AUXILIARY BRACKETS

Sports lighting manufacturers can provide accommodations for mounting auxiliary equipment such as speakers on sport lighting poles. This ensures poles will be sized to accommodate the weight, dimensions and EPA of the additional equipment. Brackets shall be welded to the pole and fabricated from hot-dip galvanized steel with a covered hand hole access and internal wiring in the pole.

4.3 FIELD PERIMETER LIGHTING

The parking areas, major areas utilized for passage, and areas immediately bordering the facilities should be lighted to an average of approximately 2 footcandles. Care should be taken to eliminate darkly shadowed areas.

For additional information, contact the Little League Baseball® and Softball

**Little League Baseball® International
PO Box 3485
Williamsport, PA 17701
570/326-1921
Fax: 570/326-1074**