

## Florida Recreation and Park Association

How to Upgrade Your Sports Lighting without Breaking the Bank

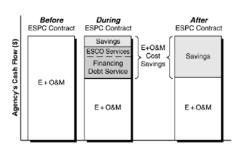
2012 Annual Conference



### **Energy Performance Contracting**



- Energy Performance Contract:
  - Project Development
  - Savings Guarantee
  - Lease Financing
  - Construction Management
  - Savings Measurement and Verification
- How Does it Work?
  - Financing and services paid from savings



# Martin County Sports Lighting Project Overview



- Sports Lighting for 19 Parks
  - Light Levels Increased
  - 32% Less Fixtures
  - 25 year warranty
- Perimeter security lighting at Holt Correctional
- Site Lighting for Big Mound and South County Park
- Maintenance of Sports Lighting is included
- \$8,318,628 Project Cost
- \$263,083 Guaranteed Energy Savings





#### **Sustainability**



- "Green" solution
- Reduced light pollution
  - Protects the night sky
  - Reduces light trespass
- Guaranteed Energy Savings
- Energy conservation metrics:
  - Removes 2,188,174 pounds of atmospheric Carbon Dioxide per year
  - Equivalent to:
    - Annual emissions of 190 passenger vehicles
    - Annual emissions of 111,674 gallons of gasoline
    - Carbon sequestered annually by 212 acres of pine forest

#### **Environmental Benefits**



- Recycling
  - All metals and cardboard sent to
    Martin County Solid Waste for recycling
  - 60 tons of metals recycled
  - 1 ton of cardboard recycled
  - 250 tons of concrete poles donated and delivered to the Artificial Reef program
  - 98% of all byproducts were recycled
- Osprey Nests
  - Relocated Three Osprey Nests
  - Assisted by Fish & Wildlife Commission



## **Warranty Benefits**



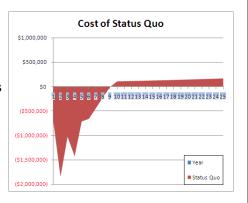
- Project includes maintenance of sports lighting by Musco
  - 25 years parts and labor warranty
    - Includes fixtures, aiming, ballasts, contactors, and Control Link
    - Including wiring harnesses on existing poles to be reused
- Guaranteed light levels per IESNA standard
- Lamp replacement is included for individual failures and group relamp based on a 5,000 hour interval
- Hurricane survivability



#### **Cost of Status Quo**



- Most Expensive Option
  - Lifecycle cost is \$4,278,560 more than Trane Project
- \$6,875,000 capital required
- One park per year for 9 years
- Does not leverage energy or maintenance savings
- County at risk for repairs and maintenance costs
- Unfunded additional costs



#### **Cost Comparison**



- Trane Project is Best Option
- 19 parks included
- Maximizes energy and maintenance savings
- Has a guaranteed outcome
- Maintenance is included
- Lifecycle cost is optimal
- Saves \$4,278,560 versus cost of status quo



#### **Financial Summary**



- Performance Contract
  - 25 Year complete solution funded by 10 year lease
  - Saves \$5,086,644 over 25 year lifecycle versus capital budget approach
- Capital Budget Approach
  - Costs More and does not meet light levels or keep parks open
  - \$6,875,000 CIP Required for 9 parks
  - Currently not in Capital Improvement Program
  - Does not address other parks
  - 25 Year Maintenance cost by Martin County

#### **Sports Lighting Year 1 Results**



- Project completed on time and budget with no change orders
- Year 1 Savings Results

Year 1 - Guaranteed Energy Savings = \$263,083 Installation Period Actual Savings = \$198,805 Year 1 - Actual Energy Savings = \$276,121 Year 1 - Excess Energy Savings = \$13,039 Total Excess Savings To Date = \$211,845