

# CITY COUNCIL AGENDA ITEM

REQUESTED COUNCIL MEETING DATE 11/7/2006

| SUBJECT:          | Discussion with Mayor and Council on different lighting options for ballfields.  |
|-------------------|--|
| DEPARTMENT:       | PARKS AND RECREATION   |
| RECOMMENDE        | D MOTION:  |
| SUMMARY:<br>Ballf | Discussion of different lighting options for the City's ields.   |
| ATTACHMENTS       | 6: [ ] Ordinance [ x ] Resolution [ ] Budget Resolution  |
| [ ]Other          |  |
| [ ] Support Docu  | ments/Contracts Available for Review in Manager's Office   |
| DEPARTMENT        | HEAD- Glen T. Walker   |
| FINANCE DEPA      | ARTMENT Approved as to Budget Requirements Date  |
| CITY ATTORNE      | Approved as to Form and Legality Date  |
| CITY MANAGEI      | Approved Agenda Item for:  Date 11706  |
| COUNCIL ACTION:   | [] Approved as Recommended [] Disapproved [] Tabled Indefinitely [] Continued to Date Certain [] Approved with Modification: |

What about nomborn parking? Phase 1? It so, now tree plantings & phase lake? Relentian panas + all drainage Pallfields CAPLATTER tall field lighting Concessions building w/rections Ballfield fewong Walks between loalifields What about only drive? PHILI? PH/KEIL! Community Conter (20,000 8P) Play area **CONCEPT 5 Revised Port Orange Community Park** Bellomo-Herbert and Co., Inc. August 28, 2006 Softball paining EDW Multipurpose fields Bile paths Parking area Splash yad The latter along Caguna Cave edge Pionic parillians w/tables Trees around ballfields

## 25-Year Life Cycle Cost

## Port Orange Wagon Wheel Port Orange, FL

Prepared for: Mr. Glen Walker, City of Port Orange 09/19/06

|                         | Prior Technology Light-Structure   |           | Your Savings     |  |
|-------------------------|--|-----------|------------------|--|
| Hours                   | 7,500  | 7,500     |                  |  |
| Average kW              | 100 Part   100 A 100 A 100 Part   100 Part | 284.3     |                  |  |
| Energy                  | \$675,540  | \$396,474 | \$279,066        |  |
| Group Relamp            | \$86,875   | \$0       | \$86,875         |  |
| Lamp Maintenance        | \$3,750  | \$0       | \$3,750          |  |
| Controls - Energy       | <b>\$</b> 67,554   | \$0       | \$67,554         |  |
| Controls - Labor        | \$0  | \$0       | \$0              |  |
| 25-Year Life Gycle Gost | \$833,719  | \$396,474 | <b>34</b> 877245 |  |

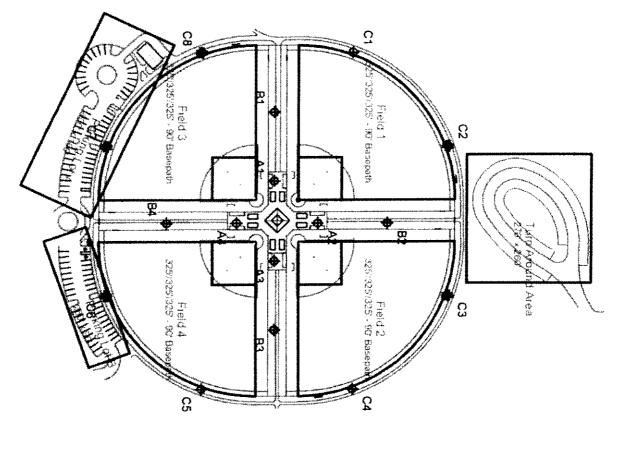
#### **Assumptions**

| Annual<br>Operati  |       |         | Prior Technology |        | Light-Structure<br>Green |        | Controls<br>Energy | Labor<br>Rate | # On/Off<br>Cycles | Labor<br>Hours per |
|--|-------|---------|------------------|--------|--------------------------|--------|--------------------|---------------|--------------------|--------------------|
| Field Name   | Hours | per kWh | Fixtures         | Avg kW | Fixtures                 | Avg kW | Savings            | per Hour      | per Year           | Cycle              |
| All Fields<br>Field #1<br>Field #2<br>Field #3<br>Field #4 | 300   | \$0.20  | 278              | 450.4  | 169                      | 264.3  | 10.0%              | N/A           | N/A                | N/A                |

#### NOTE:

Life cycle costs are based upon the assumptions given by the customer above. Any variation in this data will change the life cycle cost proportionately. Group Relamp calculates using a per lamp replacement cost of \$125, including parts, equipment, and labor. Useful lamp life of Prior Technology is 3000 hours. Musco guarantees the average Light-Structure Green system kW and 5000 hours useful life of the lamp.







# GUARANTEED PERFORMANCE

# EQUIPMENT LAYOUT

Port Orange, FL Port Orange Wagon Wheel

## INCLUDES:

SE SE

Faid 3

Parking Lot A Parking Lot B

Turn Around Area

for electrical sizing. Draw Chart and/or the "Musco Control System Summary" Electrical System Requirements: Refer to Amperage

located within 3 feet (1m) of design locations. nominal voltage at line side of the ballast and structures Installation Requirements: Results assume +/- 3%

|            | 8            |         |      |                | ŏ  |
|------------|--------------|---------|------|----------------|----|
| 1500W MZ   | 70'          |         | 70   | ß              | -  |
| 1500W MZ   | 7 <b>0</b> ʻ |         | ã    | 08-07          | N  |
| 1500W MZ   | 70           |         | 70   | ន្ត            | N  |
|            |              |         |      | C4<br>&        | Ĺ  |
| 1500W MZ   | 70           | •       | 70   | Ω              | تن |
| 1500W MZ   | 70*          | ,       | ਕੋ   | 81.94<br>19.19 | 4  |
| 1500W MZ   | 70"          | ,       | 70   | A1-A4          | 4  |
| 3          | MOUNTER      | EL WIND | S    | LOCATION       | 3  |
| Luminaires |              |         | 7010 | T              |    |

| Min | The state of the s |       | Single Phase Voltage | (, M) min power factor) | SINGLE LUMINAIR |
|-----|--|-------|----------------------|-------------------------|-----------------|
|     | ٠  | (88)  | 120                  |                         | - 10            |
| 9.  | 8.6  | (80)  | 800                  | 3                       |                 |
| 0.0 | 7.7  | (8.3  | 220                  | 1                       | 2               |
| 5.9 | 7.5  | 90    | 240                  | 3                       | ě               |
| 5.1 | 65   | (LEG) | 277                  | (max Grav)              |                 |
| å   | Ç  | 3     | (M                   | 3.                      |                 |
| ×   | ,  | (800) | 380                  |                         | 5 5             |
| ×   | ,  | 8     | 415                  | (max daw)               |                 |
| 2.0 | 3.7  | 9     | <b>48</b> 0          | Í                       |                 |

By: Micha Hudack

Date: 19-Sep-06

File #: 122780

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to 0,0 reference point(s) 🛞 Pole location(s) + dimensions are relative · Provides constant light levels

#### Same 5 Easy Pieces™

- Complete system from foundation-to-poletop
- · Factory wired, aimed and tested
- · Fast, trouble free installation
- Comprehensive corrosion package

Now covered by

*Musco Constant 25*<sup>™</sup> 25-Year Warranty and Maintenance Program

Provides 25 years of trouble-free lighting equipment operation, including parts, labor and group lamp replacement.



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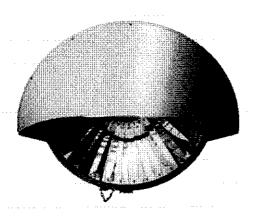
Ground line All you add is: · Grounding rod and connection to system arounding lua · Concrete backfill · Underground wiring Service entrance

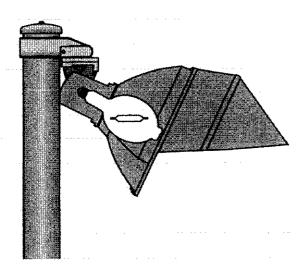
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# Light-Studus.

# For your budget, for the environment.





New Technology

# New Technology

### New Technology

- · Cuts operating costs in half
- Reduces spill light by 50%