| EQUIPMENT LIST FOR AREAS SHOWN |          |      |                    |                    |              |               |              |                |
|--------------------------------|----------|------|--------------------|--------------------|--------------|---------------|--------------|----------------|
| Pole                           |          |      |                    | Luminaires         |              |               |              |                |
| QTY                            | LOCATION | SIZE | GRADE<br>ELEVATION | MOUNTING<br>HEIGHT | LAMP<br>TYPE | QTY /<br>POLE | THIS<br>GRID | OTHER<br>GRIDS |
| 2                              | A1-A2    | 70'  | -                  | 70'                | 1500W MZ     | 5             | 5            | 0              |
| 2                              | A3-A4    | 60'  | -                  | 60'                | 1500W MZ     | 4             | 4            | 0              |
| 2                              | B1-B2    | 80'  | -                  | 80'                | 1500W MZ     | 10            | 10           | 0              |
| 2                              | B3-B4    | 70'  | -                  | 70'                | 1500W MZ     | 6             | 6            | 0              |
| 2                              | C1-C2    | 80'  | -                  | 80'                | 1500W MZ     | 8             | 8            | 0              |
| 10                             | TOTALS   |      |                    | 66                 | 66           | 0             |              |                |



| MY PROJECT |                         |  |  |  |
|------------|-------------------------|--|--|--|
| Name:      | Ciaola Baseball Complex |  |  |  |
| Location:  | Morrisville, PA         |  |  |  |

## GRID SUMMARY Name: Oxford Valley Road Spill

Spacing: 30.0' Height: 9.0' above grade

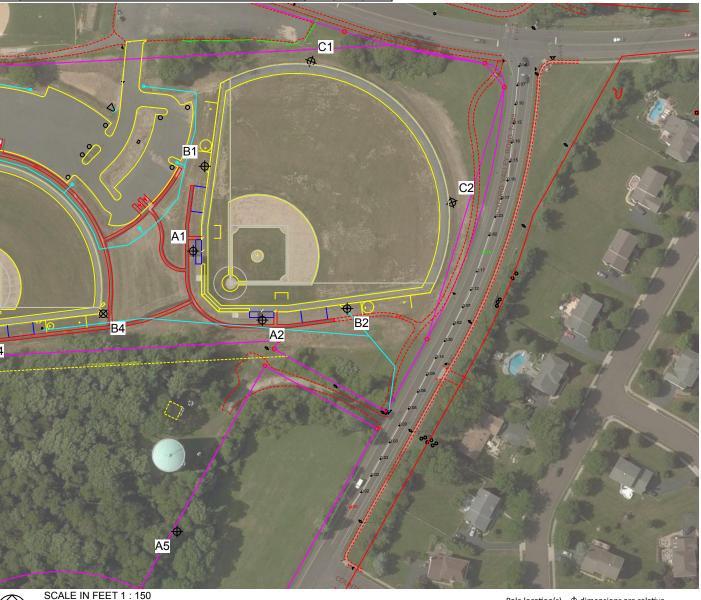
| CONSTANT ILLUMINATION |                        |  |  |  |
|-----------------------|------------------------|--|--|--|
| SUMMARY               | HORIZONTAL FOOTCANDLES |  |  |  |
|                       | Entire Grid            |  |  |  |
| Scan Average:         | 0.3032                 |  |  |  |
| Maximum:              | 1.19                   |  |  |  |
| Minimum:              | 0.01                   |  |  |  |
| No. of Points:        | 26                     |  |  |  |
| LUMINAIRE INFORMATIO  | N                      |  |  |  |
| Luminaire Type:       | Green Generation       |  |  |  |
| Design Usage Hours:   | 5,000 hours            |  |  |  |
| Design Lumens:        | 134,000                |  |  |  |
| Avg Lamp Tilt Factor: | 1.000                  |  |  |  |
| No. of Luminaires:    | 66                     |  |  |  |
| Avg KW:               | 103.22 (112.2 max)     |  |  |  |

**Guaranteed Performance:** The CONSTANT ILLUMINATION described above is guaranteed for the design usage hours of the system.

**Field Measurements:** Illumination measured in accordance with IESNA RP-6-15 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

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

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



Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$ 

ENGINEERED DESIGN

By: A. Boersma
File # / Date: 179022\_glare

18-Apr-16

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2016 Musco Sports Lighting, LLC.

| EQUIPMENT LIST FOR AREAS SHOWN |          |      |                    |                    |              |               |              |                |
|--------------------------------|----------|------|--------------------|--------------------|--------------|---------------|--------------|----------------|
| Pole                           |          |      | Luminaires         |                    |              |               |              |                |
| QTY                            | LOCATION | SIZE | GRADE<br>ELEVATION | MOUNTING<br>HEIGHT | LAMP<br>TYPE | QTY /<br>POLE | THIS<br>GRID | OTHER<br>GRIDS |
| 2                              | A1-A2    | 70'  | -                  | 70'                | 1500W MZ     | 5             | 5            | 0              |
| 2                              | A3-A4    | 60'  | -                  | 60'                | 1500W MZ     | 4             | 4            | 0              |
| 2                              | B1-B2    | 80'  | -                  | 80'                | 1500W MZ     | 10            | 10           | 0              |
| 2                              | B3-B4    | 70'  | -                  | 70'                | 1500W MZ     | 6             | 6            | 0              |
| 2                              | C1-C2    | 80'  | -                  | 80'                | 1500W MZ     | 8             | 8            | 0              |
| 10                             | TOTALS   |      |                    | 66                 | 66           | 0             |              |                |



| MY PROJECT |                         |  |  |  |  |
|------------|-------------------------|--|--|--|--|
| Name:      | Ciaola Baseball Complex |  |  |  |  |
| Location:  | Morrisville, PA         |  |  |  |  |

## **GRID SUMMARY**

Name: Oxford Valley Road Spill
Spacing: 30.0'

Height: 9.0' above grade

| CONSTANT ILLUMINATION |                          |  |  |  |
|-----------------------|--------------------------|--|--|--|
| SUMMARY               | MAX VERTICAL FOOTCANDLES |  |  |  |
|                       | Entire Grid              |  |  |  |
| Scan Average:         | 0.7501                   |  |  |  |
| Maximum:              | 2.24                     |  |  |  |
| Minimum:              | 0.13                     |  |  |  |
| No. of Points:        | 26                       |  |  |  |
| LUMINAIRE INFORMATIO  | N                        |  |  |  |
| Luminaire Type:       | Green Generation         |  |  |  |
| Design Usage Hours:   | 5,000 hours              |  |  |  |
| Design Lumens:        | 134,000                  |  |  |  |
| Avg Lamp Tilt Factor: | 1.000                    |  |  |  |
| No. of Luminaires:    | 66                       |  |  |  |
| Avg KW:               | 103.22 (112.2 max)       |  |  |  |

**Guaranteed Performance:** The CONSTANT ILLUMINATION described above is guaranteed for the design usage hours of the system.

**Field Measurements:** Illumination measured in accordance with IESNA RP-6-15 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

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

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

|                       | C1       | 2 A V A A A A A A A A A A A A A A A A A  |
|-----------------------|----------|--|
|                       | B1<br>A1 | C2   550   5 |
| B4                    | A2<br>B2 |  |
|                       |          | 122  |
| SCALE IN FEET 1 : 150 | A5       | Pole location(s)   |

Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$ 

**ENGINEERED DESIGN** 

By: A. Boersma
File # / Date: 179022\_glare

•

18-Apr-16

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2016 Musco Sports Lighting, LLC.