

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF PFLUGERVILLE, TEXAS AMENDING ORDINANCE NO. 874-07-04-10 OF THE CITY OF PFLUGERVILLE, TEXAS, AS AMENDED, BY APPROVING A SPECIFIC USE PERMIT FOR ATHLETIC FIELD LIGHTING ON PROPERTY WITH A LEGAL DESCRIPTION OF 10.52 ACRES OF THE JOHN VAN WINKLE SURVEY NO. 14, ABSTRACT 786 AND THE E. BEBEE SURVEY NO. 5, ABSTRACT 53, LOCATED BETWEEN BLACK LOCUST DR. AND PFLUGERVILLE PKWY LOCALLY KNOWN AS THE HILL COUNTRY BIBLE CHURCH AT 303 E. PFLUGERVILLE PKWY; TO BE KNOWN AS THE HCBC-ATHLETIC FIELD LIGHTING SPECIFIC USE PERMIT (SUP1102-01).

WHEREAS, under the authority of Texas Local Government Code Chapter 211, the City of Pflugerville adopts regulations and establishes zoning to control the use of land within the corporate limits of the City; and

WHEREAS, the City Council approved Ordinance No. 1060-10-11-23, a text amendment to Chapter 157 Unified Development Code to allow Athletic Field Lighting to be considered with conditions through a Specific Use Permit; and

WHEREAS, an application was made for a Specific Use Permit in accordance with Subchapter 3 Procedures of Chapter 157 Unified Development Code; and

WHEREAS, the Planning and Zoning Commission held a public hearing and unanimously recommended approval to the City Council a Specific Use Permit for Athletic Field Lighting on property depicted in Exhibit A with the following conditions:

1. Only six (6) poles shall be installed as shown on the proposed site plan, equipment layout and illumination summary included with the application. (Exhibit B)
2. The proposed lighting shall be as provided in the application and subject to the conditions defined in the Unified Development Code. (Exhibit B)
3. The luminaries shall be allowed to be upgraded to a more efficient luminaire, provided the light levels do not exceed what is proposed in the illumination summary for horizontal footcandles at the property line and remain compliant with the conditions defined in the Unified Development Code.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PFLUGERVILLE, TEXAS:

The City Council finds:

THAT, the zoning amendment is in accordance with the City's Comprehensive Plan for the purpose of promoting the health, safety, morals and general welfare of the City, and is in accordance with the following purposes 1)lessen congestion in the street; 2) secure safety from

fire, panic and other dangers; 3) promote the general health and welfare; 4) provide adequate air and light; 5) prevent undue overcrowding of land; 6) avoid undue concentration of population 7) facilitate the adequate provision of transportation, water, sewer, schools, parks and other public requirements.

Section 1: That the Official Zoning Map of the City of Pflugerville, Texas adopted in Ordinance No. 874-07-04-10 as amended, shall apply the Specific Use Permit in combination with the existing zoning district of Retail (R) to the property depicted in Exhibit A, a 10.52 acre of land between Black Locust and Pflugerville Pkwy and locally known as 303 E. Pflugerville Pkwy.

The property depicted in Exhibit A may be used in accordance with the conditions established by this Specific Use Permit, and other applicable ordinances of the City of Pflugerville, Texas.

Section 2. That this ordinance will become effective on its adoption and passage by the City Council.

PASSED AND APPROVED this _____ day of _____, 2011.

CITY OF PFLUGERVILLE, TEXAS

by: _____
JEFF COLEMAN, Mayor

ATTEST:

KAREN THOMPSON, City Secretary

APPROVED AS TO FORM:

FLOYD AKERS, City Attorney

EXHIBIT A

HILL COUNTRY BIBLE CHURCH: 10.52 ACRES OF THE JOHN VAN WINKLE SURVEY NO. 14, ABSTRACT 786 AND THE E. BEBEE SURVEY NO. 5, ABSTRACT 53, LOCATED BETWEEN BLACK LOCUST DR. AND PFLUGERVILLE PKWY LOCALLY KNOWN AS 303 E. PFLUGERVILLE PKWY.

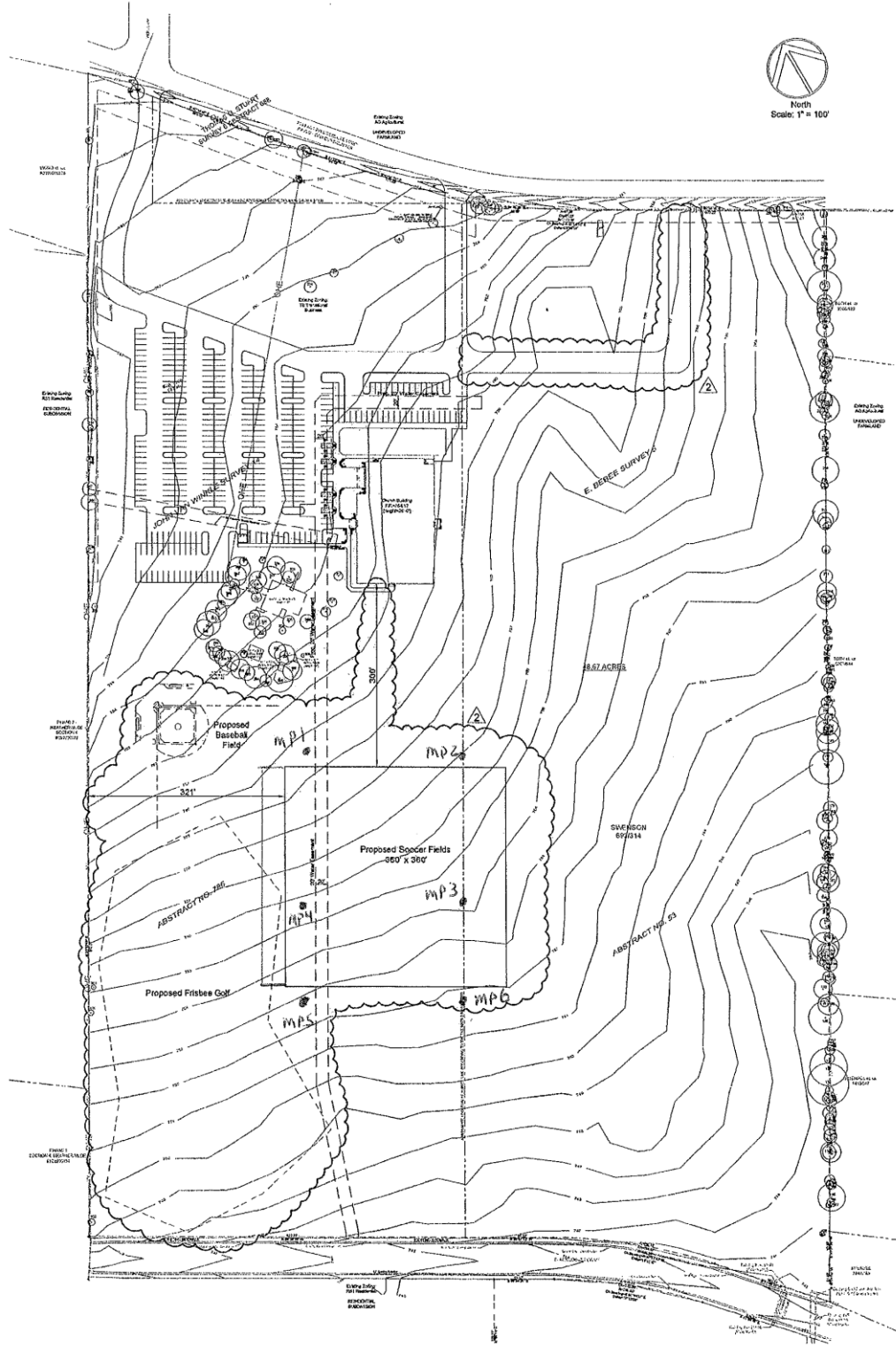
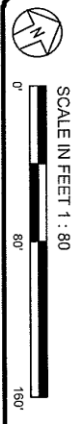
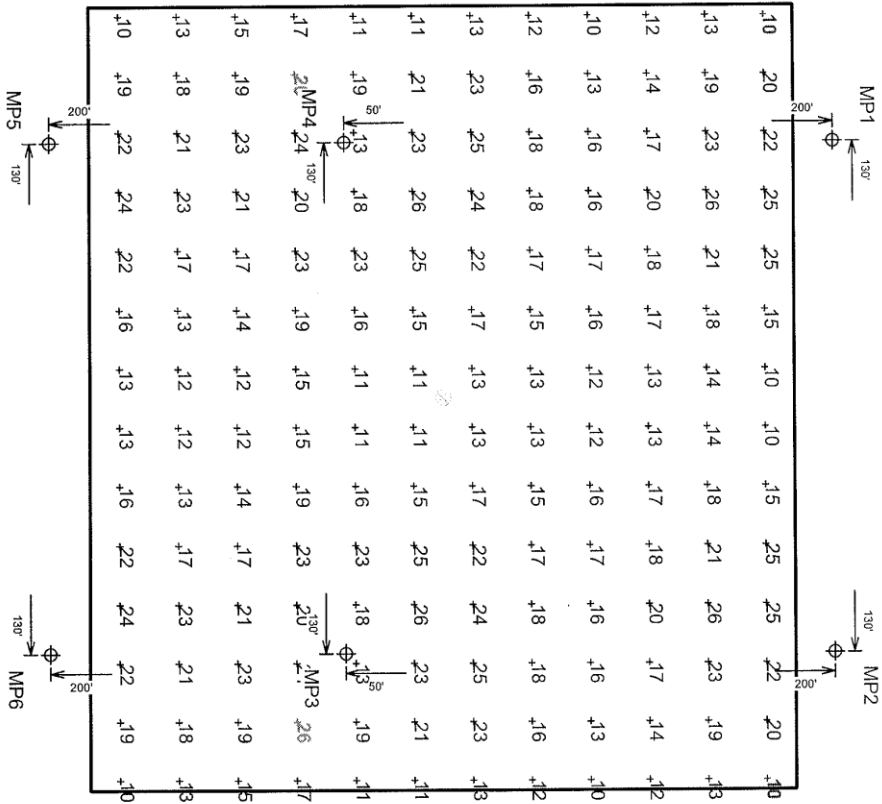


EXHIBIT B

EQUIPMENT LIST FOR AREAS SHOWN									
QTY	LOCATION	SIZE	GRADE ELEVATION	Luminaires		QTY / POLE	THIS GRID	OTHER GRIDS	
				HEIGHT	LAMP TYPE				
2	MP3, MP4	60"	-	60"	1500W MZ	4/3"	7	0	
2	MP1, MP2	60"	-	60"	1500W MZ	4/3"	4	4	0
2	MP5, MP6	60"	-	60"	1500W MZ	4/3"	3	3	0
TOTALS							28	28	0

* This structure utilizes a back-to-back mounting configuration





MUSCO
GREEN GENERATION LIGHTING™

GUARANTEED PERFORMANCE

ILLUMINATION SUMMARY

Multi-Purpose
Pflugerville Hill Country Bible Soccer
Pflugerville, TX

Multi-Purpose
- Size: 400' x 360'
- Grid Spacing = 30.0' x 30.0'
- Values given at 3.0' above grade

- Luminaire Type: Green Generation
- Rated Lamp Life: 5,000 hours
- Avg Lumens/Lamp: 134,000

CONSTANT ILLUMINATION
HORIZONTAL FOOTCANDLES

Entire Grid
No. of Target Points: 168
Average: 17.45
Maximum: 26
Minimum: 10
Avg/Min: 1.83
Max/Min: 2.73
UG (Adjacent Pts): 2.07
CV: 0.26

Average Lamp Tilt Factor: 1.000
Number of Luminaires: 28
Avg KW over 5,000: 43.79
Max KW: 47.6

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Averages shall be +/-10% in accordance with IESNA RP-6-01 and CIBSE LG4. Individual measurements may vary from computer predictions.

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.

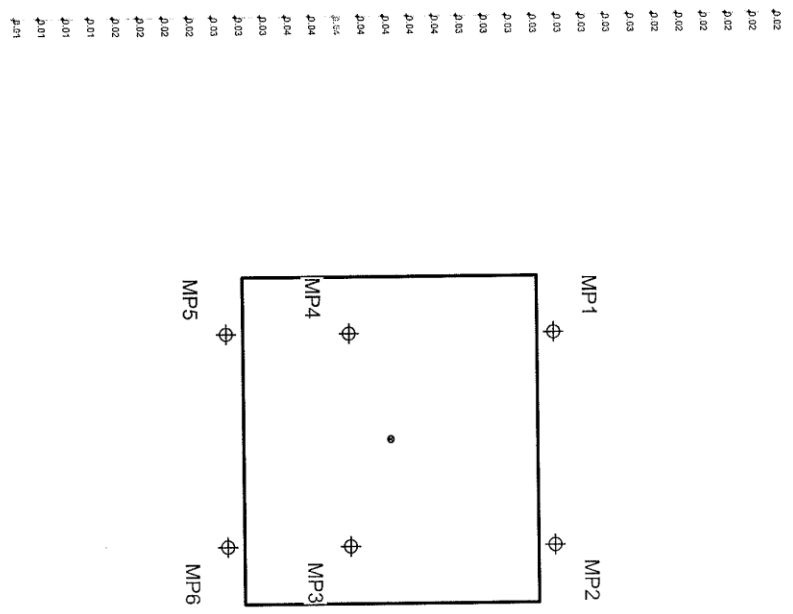
By: Brad Hannon
File #: 146996R1
Date: 21-Dec-10
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EQUIPMENT LIST FOR AREAS SHOWN									
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	Luminaires				
					TYPE	QTY/POLE	THIS GRID	OTHER GRIDS	
2	MP3, MP4	60"	-	60"	1500W MZ	4/3*	7	4	0
2	MP1, MP2	60"	-	60"	1500W MZ	-	4	4	0
2	MP5, MP6	60"	-	60"	1500W MZ	-	3	3	0
TOTALS							28	28	0

* This structure utilizes a back-to-back mounting configuration



SCALE IN FEET 1 : 200



GUARANTEED PERFORMANCE

ILLUMINATION SUMMARY

Spill Scan
 Pflugerville Hill Country Bible Soccer
 Pflugerville, TX

Spill Scan
 - Grid Spacing = 30.0'
 - Values given at 3.0' above grade

- Luminaire Type: Green Generation
 - Rated Lamp Life: 5,000 hours
 - Avg Lumens/Lamp: 134,000

**CONSTANT ILLUMINATION
 HORIZONTAL FOOTCANDLES**

Entire Grid	
No. of Target Points:	32
Average:	0.0261
Maximum:	0.04
Minimum:	0.01
Average Lamp Tilt Factor:	1.000
Number of Luminaires:	28
Avg KW over 5,000:	43.79
Max KW:	47.6

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Averages shall be +/-10% in accordance with IESNA RP-6-01 and CIBSE LG4. Individual measurements may vary from computer predictions.

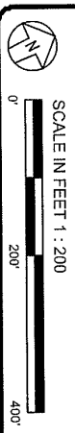
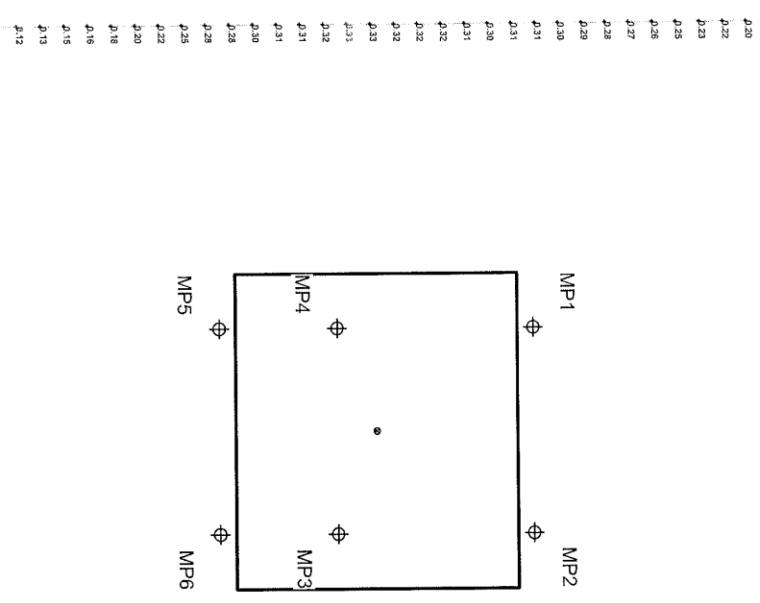
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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

By: Brad Hannon
 File #: 146986R1
 Date: 21-Dec-10
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EQUIPMENT LIST FOR AREAS SHOWN							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	Luminaires		
					LAMP TYPE	POLE	
2	MP3, MP4	60"	-	60"	1500W MZ	4/3*	
2	MP1, MP2	60"	-	60"	1500W MZ	4/3*	
2	MP5, MP6	60"	-	60"	1500W MZ	3/3	
TOTALS						28	28
6						28	0

* This structure utilizes a back-to-back mounting configuration



MUSCO
GREEN GENERATION LIGHTING™
GUARANTEED PERFORMANCE

ILLUMINATION SUMMARY

Spill Scan
Pflugerville Hill Country Bible Soccer
Pflugerville, TX

Spill Scan
Grid Spacing = 30.0'
Values given at 3.0' above grade

Luminaire Type: Green Generation
Rated Lamp Life: 5,000 hours
Avg Lumens/Lamp: 134,000

**CONSTANT ILLUMINATION
MAX VERTICAL FOOTCANDLES**

Entire Grid	
No. of Target Points:	32
Average:	0.2816
Maximum:	0.33
Minimum:	0.12
Average Lamp Tilt Factor:	1.000
Number of Luminaires:	28
Avg KW over 5,000:	43.79
Max KW:	47.6

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Averages shall be +/-10% in accordance with IESNA RP-6-01 and CIBSE LG4. Individual measurements may vary from computer predictions.

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.

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GUARANTEED PERFORMANCE

EQUIPMENT LAYOUT

Pflugerville Hill Country Bible Soccer
Pflugerville, TX

INCLUDES:

- Multi-Purpose
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.

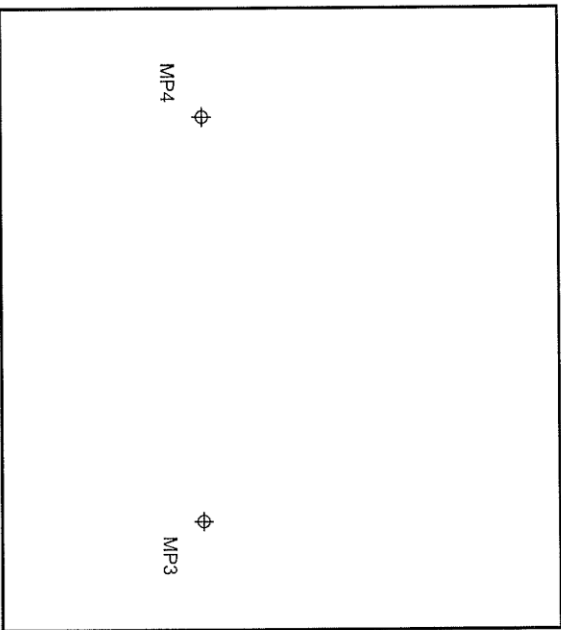
EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	SIZE	GRADE ELEVATION	Mounting		LAMP TYPE	QTY/POLE	
				HEIGHT	HEIGHT			
2	MP3, MP4	60"	-	60"	60"	1500W MZ	4/3*	
2	MP1, MP2	60"	-	60"	60"	1500W MZ	4	
2	MP5, MP6	60"	-	60"	60"	1500W MZ	3	
TOTALS							←	28

*The structure utilizes a back-to-back mounting configuration

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (500 min power factor)	Line Amperage Per Luminaire (amps @ 600v)					
	120 (60)	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)
Single Phase Voltage	15.0	8.6	7.7	7.5	6.5	5.1
1500 watt MZ	8.6	7.7	7.5	6.5	5.1	4.7
						3.7



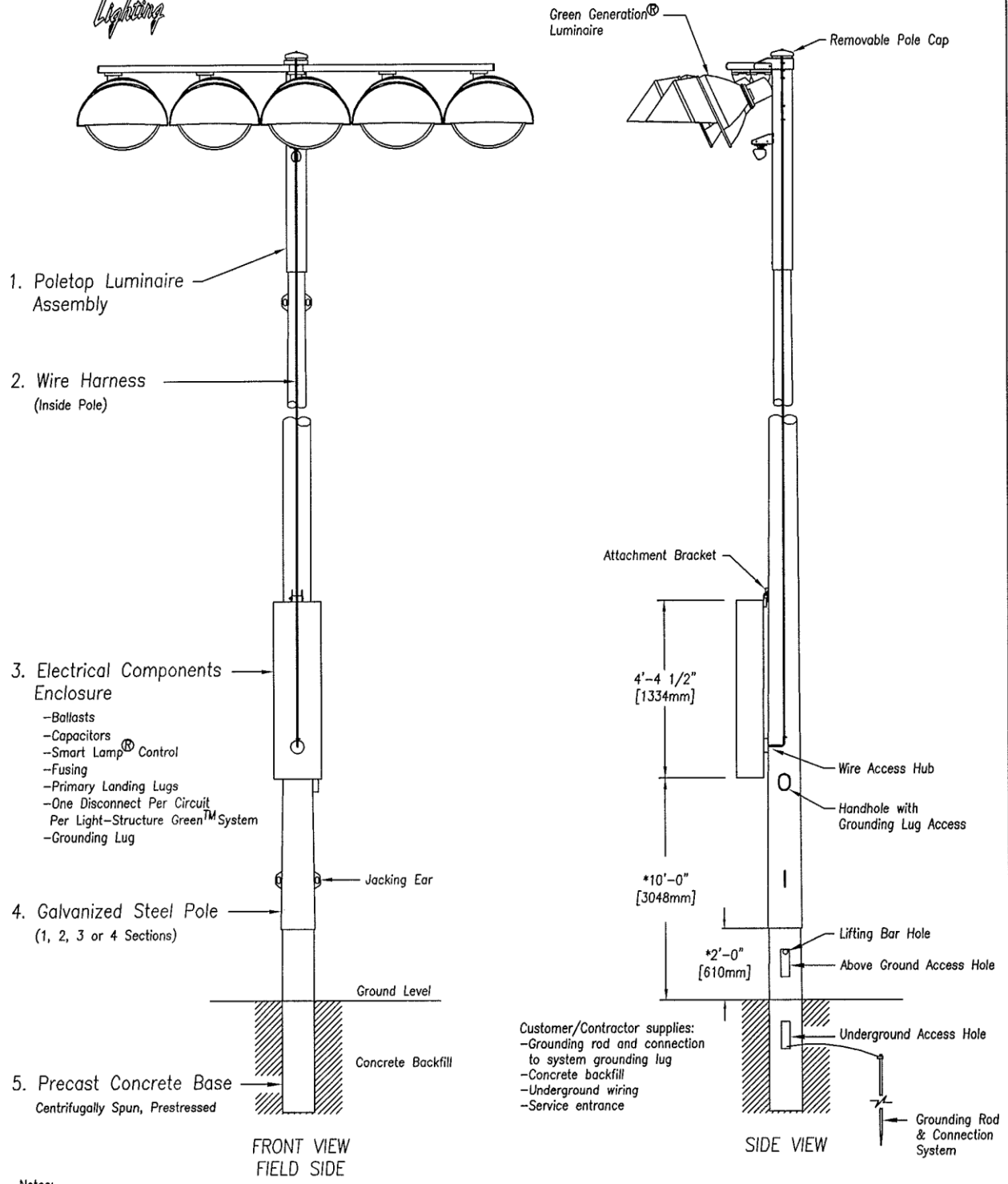
SCALE IN FEET 1 : 100

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗

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Print Date (21/Dec/2010) & Time (11:30)



Typical Light-Structure Green™ System Detail – 5 Luminaires



- 1. Poletop Luminaire Assembly
- 2. Wire Harness (Inside Pole)
- 3. Electrical Components Enclosure
 - Ballasts
 - Capacitors
 - Smart Lamp® Control
 - Fusing
 - Primary Landing Lugs
 - One Disconnect Per Circuit Per Light-Structure Green™ System
 - Grounding Lug

- 4. Galvanized Steel Pole (1, 2, 3 or 4 Sections)
 - Jacking Ear
- 5. Precast Concrete Base (Centrifugally Spun, Prestressed)

- Customer/Contractor supplies:
- Grounding rod and connection to system grounding lug
 - Concrete backfill
 - Underground wiring
 - Service entrance

Notes:

1. This drawing is not to scale.
2. * This dimension for reference only. Variances may occur depending on steel pole tolerances, concrete tolerances, galvanizing thickness, hole depth accuracy.
3. Musco provides a base installation bar, an installation level modified for taper, and installation wedges.
4. Provisions for auxiliary equipment such as speaker or security lighting can be incorporated.
5. Copyright 1991, 2007, 2008 Musco Lighting. Patents issued and pending.

Athletic Field Lighting Ordinance Requirements:

1. Fixture (Luminaire):

- a) Fixture. The proposed fixtures from Musco. They are die-cast aluminum housing and will be placed on galvanized steel poles on a concrete base.
- b) As provided by Musco:

“The Illuminating Engineering Society (IES) defines a cut-off fixture as a “luminaire light distribution where the candela per 1000 lamp lumens does not numerically exceed 2.5 percent at or above an angle of 90 degrees above nadir and 10 percent at or above a vertical angle 80 degrees above nadir.” What this means is that there is a limitation of how much light produced by the fixture can be projected up and above the fixture. The main purpose of a cut-off fixture is to ensure that a high percentage of the light produced by the fixture is directed to the area to be lit and not directed to areas that do not need to be lit such as the sky above the fixture. In order to meet the full-cutoff requirement, fixtures must use internal reflectors and some type of a visor to direct the light in the proper direction. In most cases, the lamp in the fixture will be visible when standing beneath it but is not visible when looking at the fixture from the same level or from above the fixture.

The proposed Musco Green Generation Luminaire is the industry leader in Sports Lighting light control and this fixture meets all of the cut-off fixture requirements defined by IES. This fixture uses customized reflector inserts and a revolutionary visor that achieves this high level of light control while reducing the impact to the environment. Because this system has the ability to precisely direct the light, the required fixture quantities have been reduced by 40% when compared to Musco’s previous technology. This means that the amount of spill light and the amount of energy required to light a field has also been reduced by at least 40% which is a huge value to the customer.”

- c) Power will be extended from the current underground system to the poles. No power lines will be visible. A transformer in a nearby shed is already in place to serve this need.
 - d) 1500 watt metal halide lamp systems will be used.
2. Fixture Height: Design calls for 60’ pole height.
3. Lighting Period.
- a. Soccer practice lighting period is generally 5:30-9:15 Monday through Thursday, with lights off by 9:30. Other special events may be scheduled from time to time but the electronic controller, locked and in the church, will shut off the lights no later than 10:00pm.
 - b. An on-site control switch for on/off function during allowable hours will be provided.
4. As shown in the design, the maximum is 26 fc.
- a. As shows in the design, the maximum horizontal illumination at the edge of the property line is .04 fc; .33 fc measured vertically.
5. Plans
- a. Photometric plan is attached.
 - b. Site Update Plan already submitted to the city is marked with the pole placements.