

EQUIPMENT LIST FOR AREAS SHOWN

Pole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	60'	-	60'	1500W MZ	3	3	0
4	B1-B2, C1 C3	70'	-	70'	1500W MZ	4	4	0
TOTALS						22	22	0



MY PROJECT

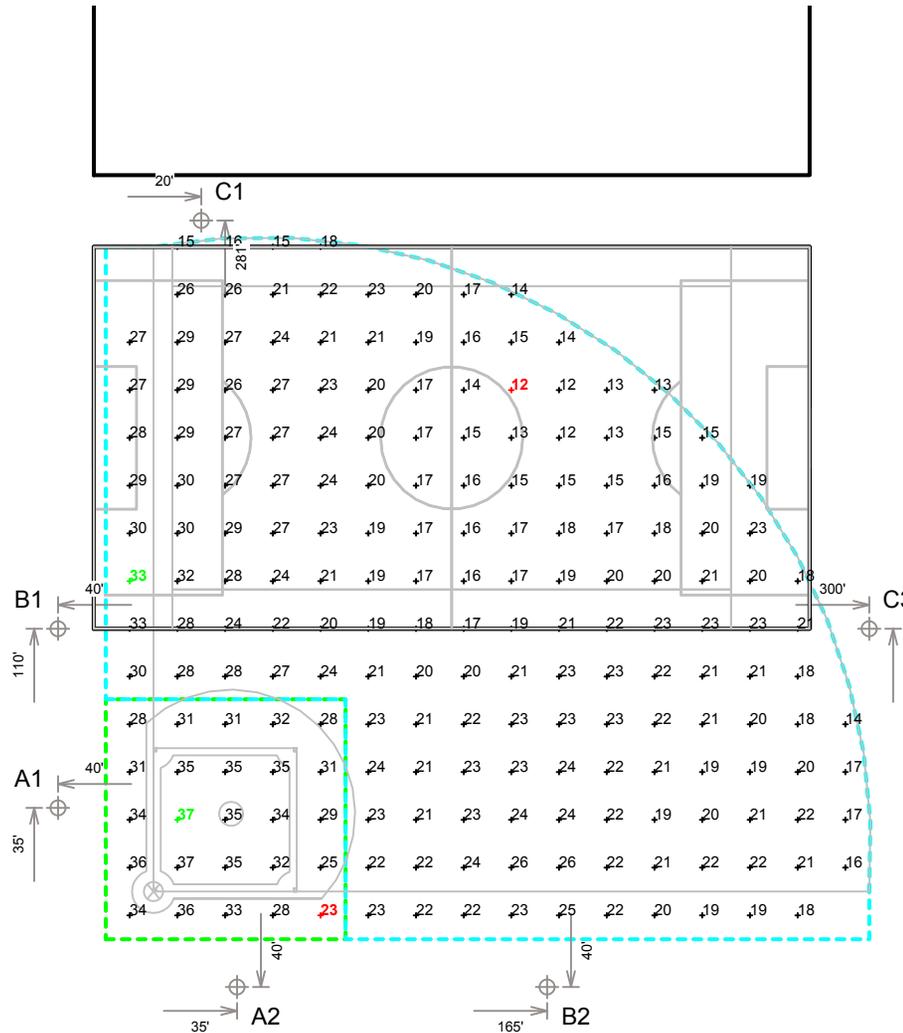
Name: Friendship Field
Location: Phoenixville, PA

GRID SUMMARY

Name: Softball
Size: 270'/300'/300' - basepath 60'
Spacing: 20.0' x 20.0'
Height: 3.0' above grade

CONSTANT ILLUMINATION

SUMMARY	HORIZONTAL FOOTCANDLES	
	Infield	Outfield
Guaranteed Average:	30	20
Scan Average:	32.2	21.2
Maximum:	37	33
Minimum:	23	12
Avg / Min:	1.43	1.74
Guaranteed Max / Min:	2.5	3
Max / Min:	1.64	2.75
UG (adjacent pts):	1.25	1.73
CU:	0.61	
CV:	0.12	0.21
No. of Points:	25	174
LUMINAIRE INFORMATION		
Luminaire Type:	Green Generation	
Rated Lamp Life:	5,000 hours	
Design Lumens:	134,000	
Avg Lamp Tilt Factor:	1.000	
No. of Luminaires:	22	
Avg KW:	34.41 (37.4 max)	



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

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 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.

ENGINEERED DESIGN

By: Curt Lamberson
File # / Date: 130094A 20-Aug-14

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SCALE IN FEET 1 : 80



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

ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	B1, C1-C3	70'	-	70'	1500W MZ	4	4	0
4	TOTALS					16	16	0



MY PROJECT

Name: Friendship Field
Location: Phoenixville, PA

GRID SUMMARY

Name: Soccer
Size: 300' x 160'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

CONSTANT ILLUMINATION

SUMMARY	HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	20
Scan Average:	23.1
Maximum:	29
Minimum:	13
Avg / Min:	1.79
Guaranteed Max / Min:	3
Max / Min:	2.23
UG (adjacent pts):	1.36
CU:	0.48
CV:	0.16
No. of Points:	50
LUMINAIRE INFORMATION	
Luminaire Type:	Green Generation
Rated Lamp Life:	5,000 hours
Design Lumens:	134,000
Avg Lamp Tilt Factor:	1.000
No. of Luminaires:	16
Avg KW:	25.02 (27.2 max)

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

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

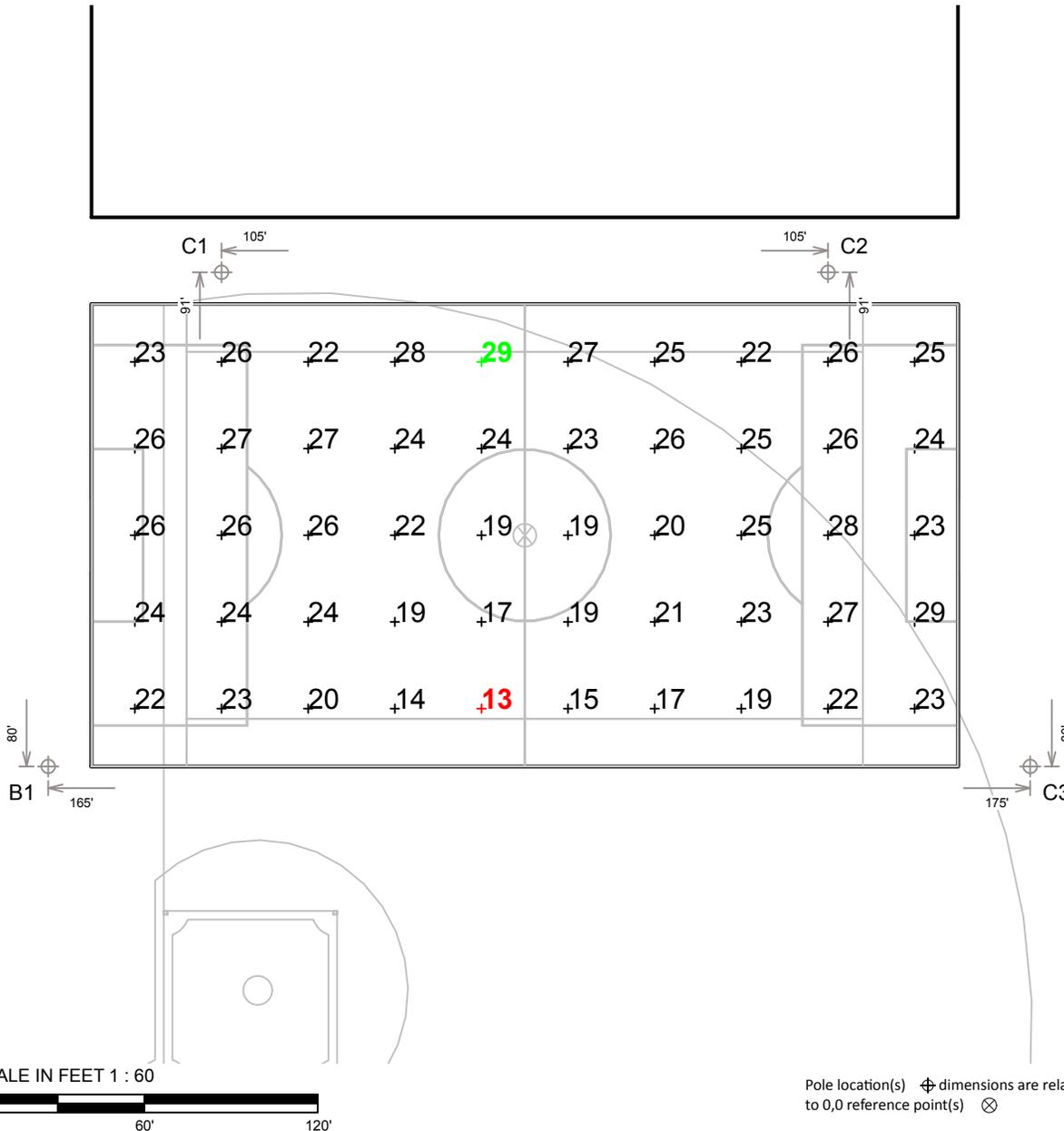
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Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	B1, C1-C3	70'	-	70'	1500W MZ	4	4	0
TOTALS						16	16	0



MY PROJECT

Name: Friendship Field
Location: Phoenixville, PA

GRID SUMMARY

Name: Rugby
Size: 234' x 160' - 33' Try Area
Spacing: 32.8' x 32.8'
Height: 3.0' above grade

CONSTANT ILLUMINATION

SUMMARY	HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	20
Scan Average:	22.5
Maximum:	29
Minimum:	12
Avg / Min:	1.87
Guaranteed Max / Min:	3
Max / Min:	2.42
UG (adjacent pts):	1.41
CU:	0.45
CV:	0.18
No. of Points:	40
LUMINAIRE INFORMATION	
Luminaire Type:	Green Generation
Rated Lamp Life:	5,000 hours
Design Lumens:	134,000
Avg Lamp Tilt Factor:	1.000
No. of Luminaires:	16
Avg KW:	25.02 (27.2 max)

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

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

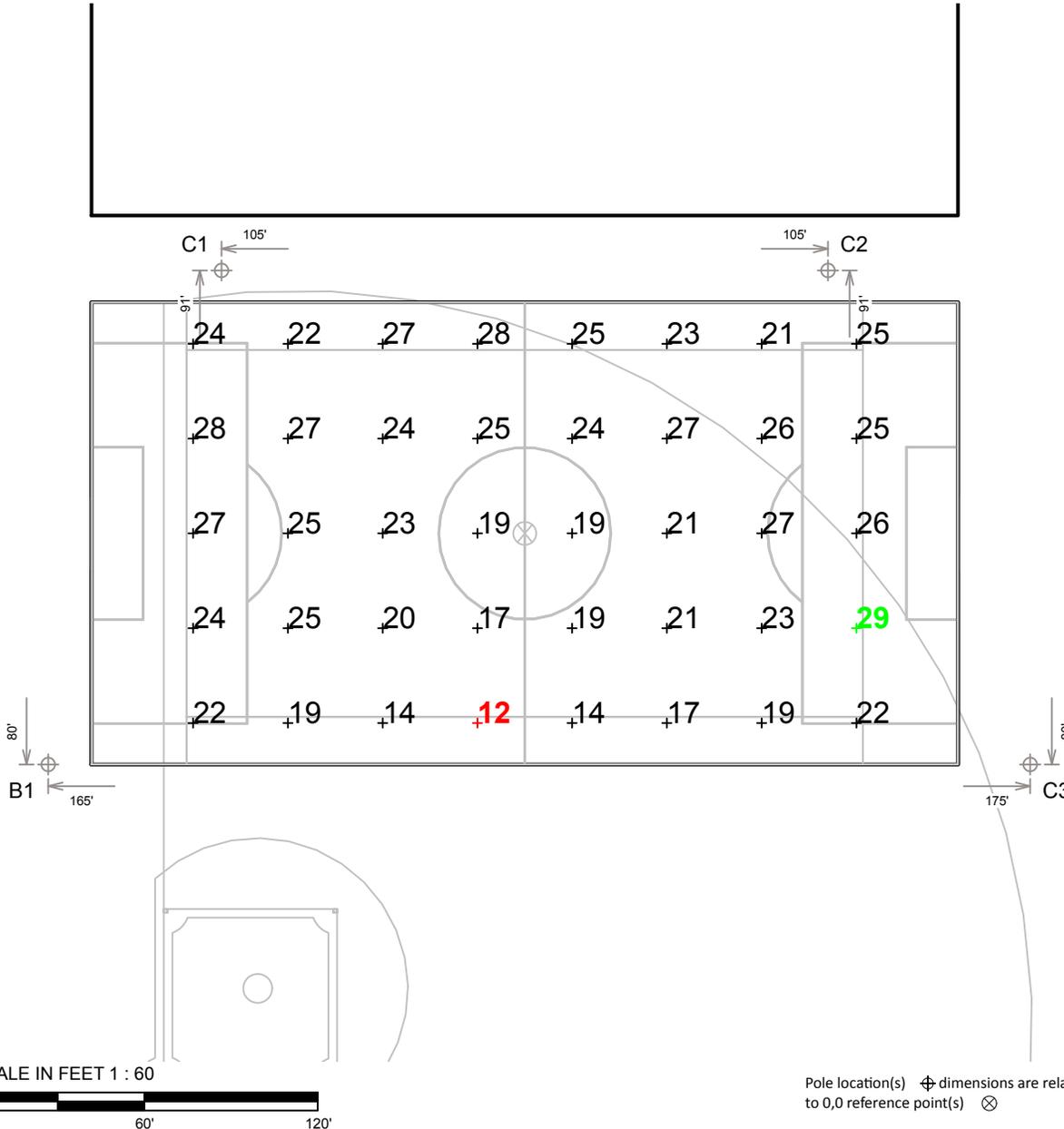
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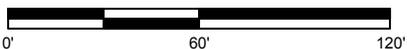
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SCALE IN FEET 1 : 60



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

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	B1, C1-C3	70'	-	70'	1500W MZ	4	4	0
TOTALS						16	16	0



MY PROJECT

Name: Friendship Field
Location: Phoenixville, PA

GRID SUMMARY

Name: Rugby Try Area
Size: 234' x 160' - 33' Try Area
Spacing: 267.2' x 32.8'
Height: 3.0' above grade

CONSTANT ILLUMINATION

SUMMARY	HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	20
Scan Average:	24.2
Maximum:	30
Minimum:	21
Avg / Min:	1.13
Guaranteed Max / Min:	3
Max / Min:	1.40
UG (adjacent pts):	1.31
CU:	0.99
CV:	0.11
No. of Points:	10
LUMINAIRE INFORMATION	
Luminaire Type:	Green Generation
Rated Lamp Life:	5,000 hours
Design Lumens:	134,000
Avg Lamp Tilt Factor:	1.000
No. of Luminaires:	16
Avg KW:	25.02 (27.2 max)

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

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

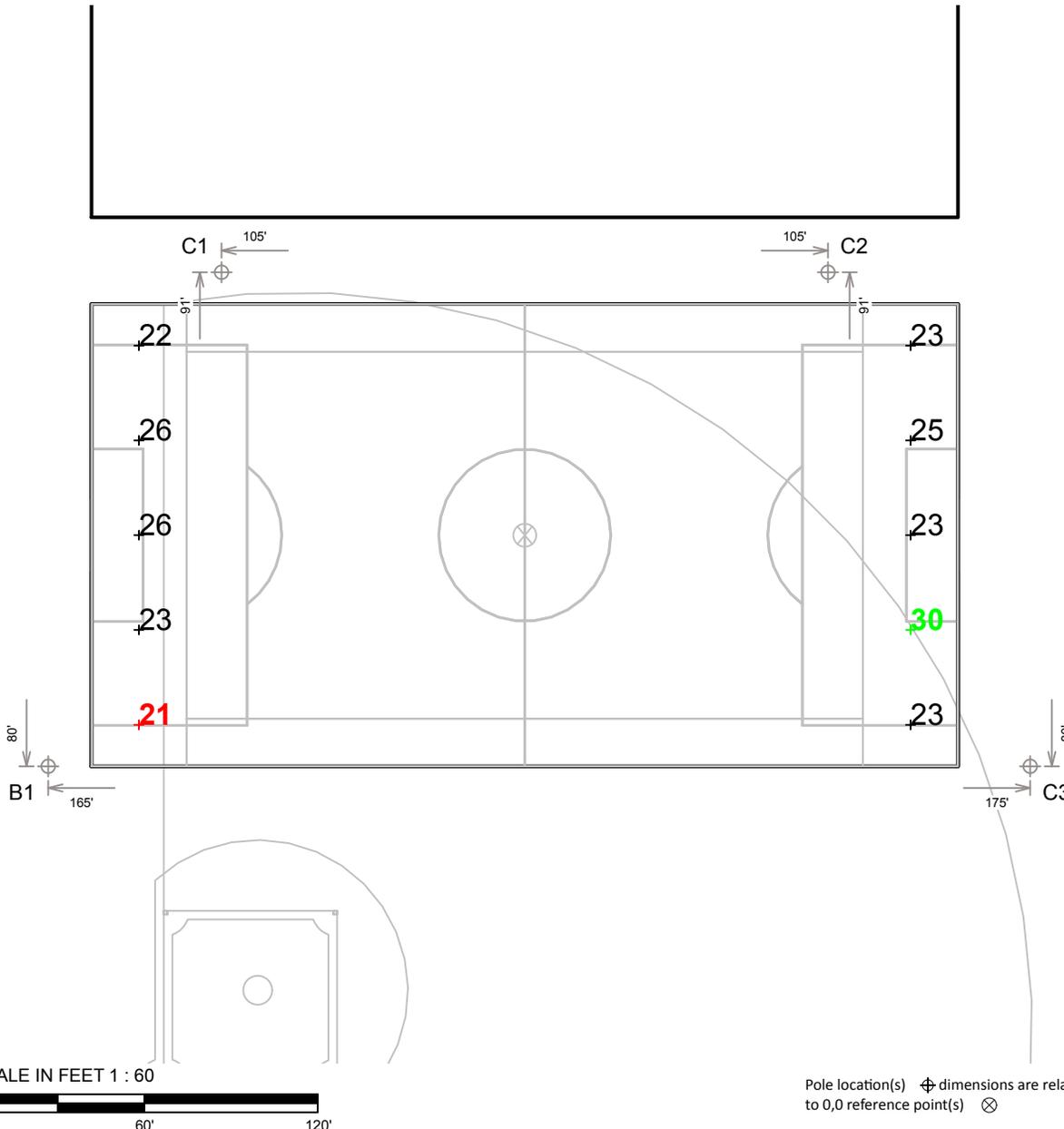
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EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	P1	70'	-	70'	1500W MZ	6	6	0
1	TOTALS					6	6	0



MY PROJECT

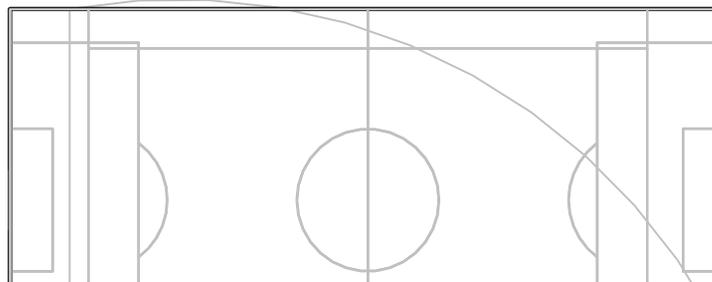
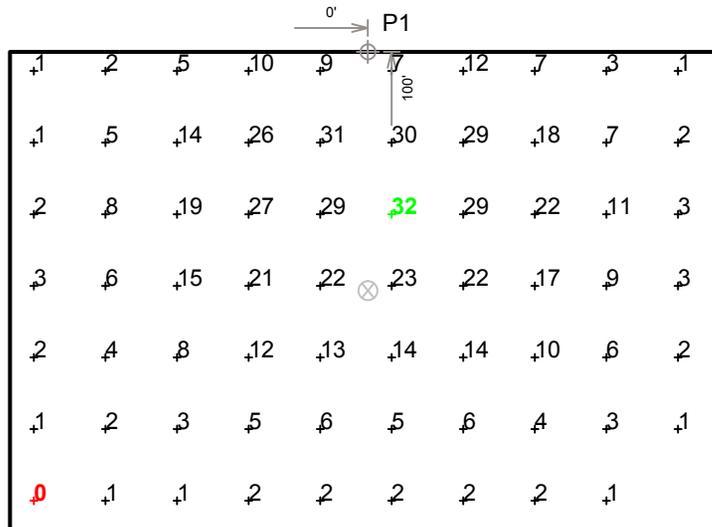
Name: Friendship Field
Location: Phoenixville, PA

GRID SUMMARY

Name: Practice Field
Size: 300' x 200'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

CONSTANT ILLUMINATION

SUMMARY	HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average:	9.8
Maximum:	32
Minimum:	0
Avg / Min:	21.19
Max / Min:	69.84
UG (adjacent pts):	4.08
CU:	0.76
CV:	0.96
No. of Points:	69
LUMINAIRE INFORMATION	
Luminaire Type:	Green Generation
Rated Lamp Life:	5,000 hours
Design Lumens:	134,000
Avg Lamp Tilt Factor:	1.000
No. of Luminaires:	6
Avg KW:	9.38 (10.2 max)



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

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 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.

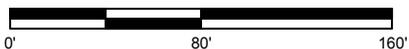
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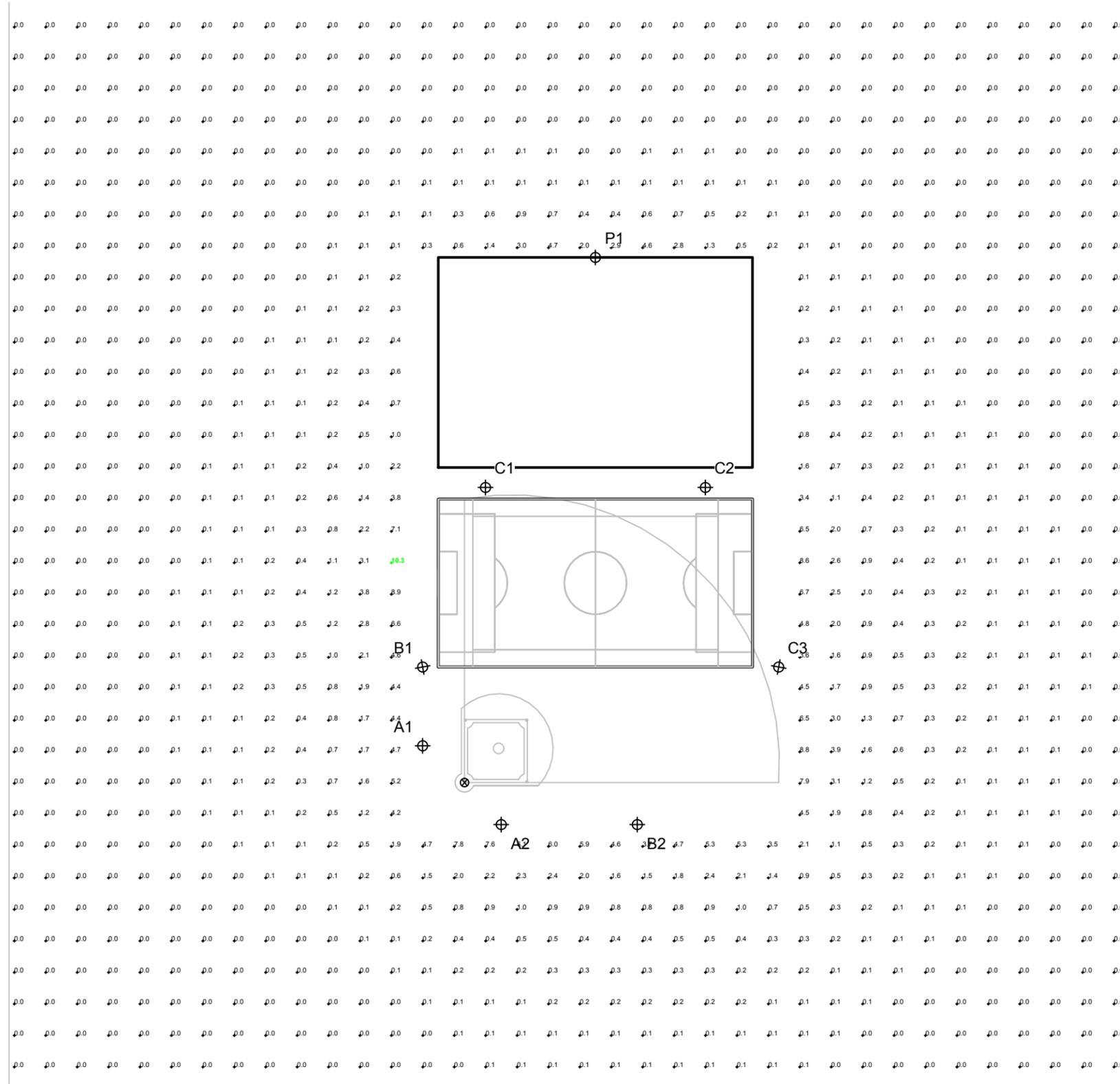
SCALE IN FEET 1 : 80



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



EQUIPMENT LIST FOR AREAS SHOWN							
Pole				Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID
2	A1-A2	60'	-	60'	1500W MZ	3	3
5	B1-B2 C1-C3	70'	-	70'	1500W MZ	4	4
1	P1	70'	-10'	60'	1500W MZ	6	6
8	TOTALS					32	32



MY PROJECT	
Name:	Friendship Field
Location:	Phoenixville, PA

GRID SUMMARY	
Name:	Blanket Grid
Spacing:	30.0' x 30.0'
Height:	-7.0' above grade

CONSTANT ILLUMINATION	
SUMMARY	HORIZONTAL FOOTCANDLES
Entire Grid	
Scan Average:	0.4
Maximum:	10
Minimum:	0
Avg / Min:	145.28
Max / Min:	4207.43
UG (adjacent pts):	7.78
CU:	0.09
No. of Points:	1152
LUMINAIRE INFORMATION	
Luminaire Type:	Green Generation
Rated Lamp Life:	5,000 hours
Design Lumens:	134,000
Avg Lamp Tilt Factor:	1.000
No. of Luminaires:	32
Avg KW:	50.05 (54.4 max)

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

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 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.

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By:	Curt Lamberson	
File # / Date:	130094A	20-Aug-14

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MY PROJECT
Name: Friendship Field
Location: Phoenixville, PA

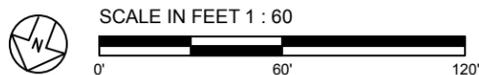
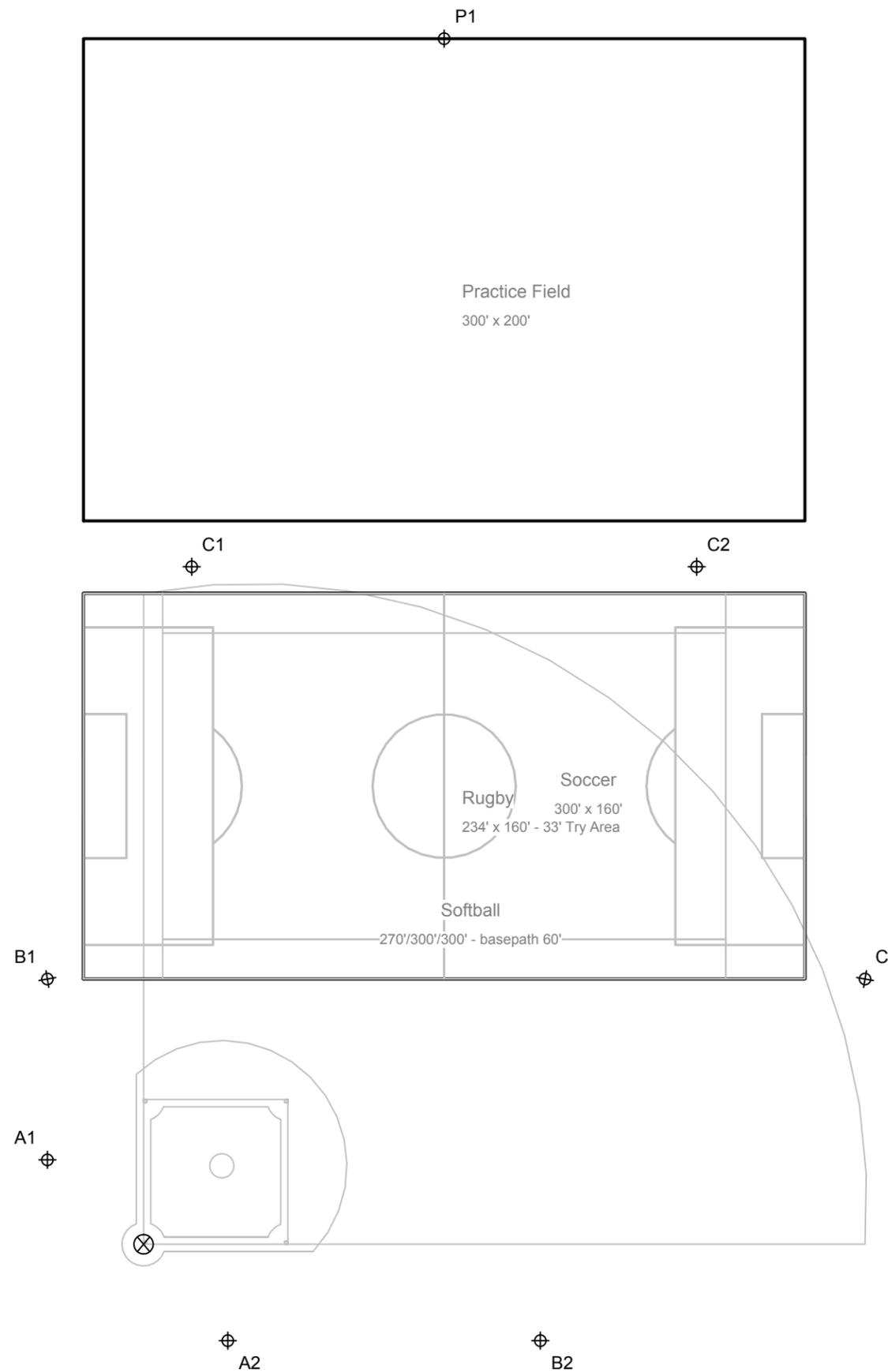
EQUIPMENT LAYOUT
INCLUDES:
 · Practice Field
 · Rugby
 · Soccer
 · Softball
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.
Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

QTY	Pole			Luminaires		
	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE
2	A1-A2	60'	-	60'	1500W MZ	3
5	B1-B2 C1-C3	70'	-	70'	1500W MZ	4
1	P1	70'	-	70'	1500W MZ	6
8	TOTALS					32

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)					
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)
1500 watt MZ	8.6	8.3	7.5	6.5	5.1	4.7



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