Lighting System

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F2	68'	68'	6	TLC-LED-1500	8.58 kW	Α
		15'	2	TLC-BT-575	1.15 kW	Α
THE SE		50'	1	TLC-LED-1200	1.17 kW	Α
F3-F4	68'	68'	4	TLC-LED-1500	5.72 kW	Α
		68'	2	TLC-LED-900	1.78 kW	Α
		15'	2	TLC-BT-575	1.15 kW	Α
4			34		39.10 kW	

Circuit Summary					
Circuit	Description	Load	Fixture Qty		
A	Football	39.1 kW	34		

kture Type Summary							
Туре	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	20
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	2
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	4

Light Level Summary

Cold Name	Calculation Metric		Illumination					Fixture Qty
Grid Name	Calculation Metric	Ave	Min	Max	Max/Min	Ave/Min	Circuits	Fixture Gty
Bleachers	Horizontal	19.3	13	31	2.37	1.48	Α	34
Football	Horizontal Illuminance	31.5	20	45	2.24	1.58	Α	34
Property Line	Horizontal	0.01	0	0.03	0.00		Α	34
Soccer	Horizontal Illuminance	32.3	20	45	2.19	1.61	Α	34
Track	Horizontal Illuminance	8.80	0	21	54.70		Α	34

From Hometown to Professional

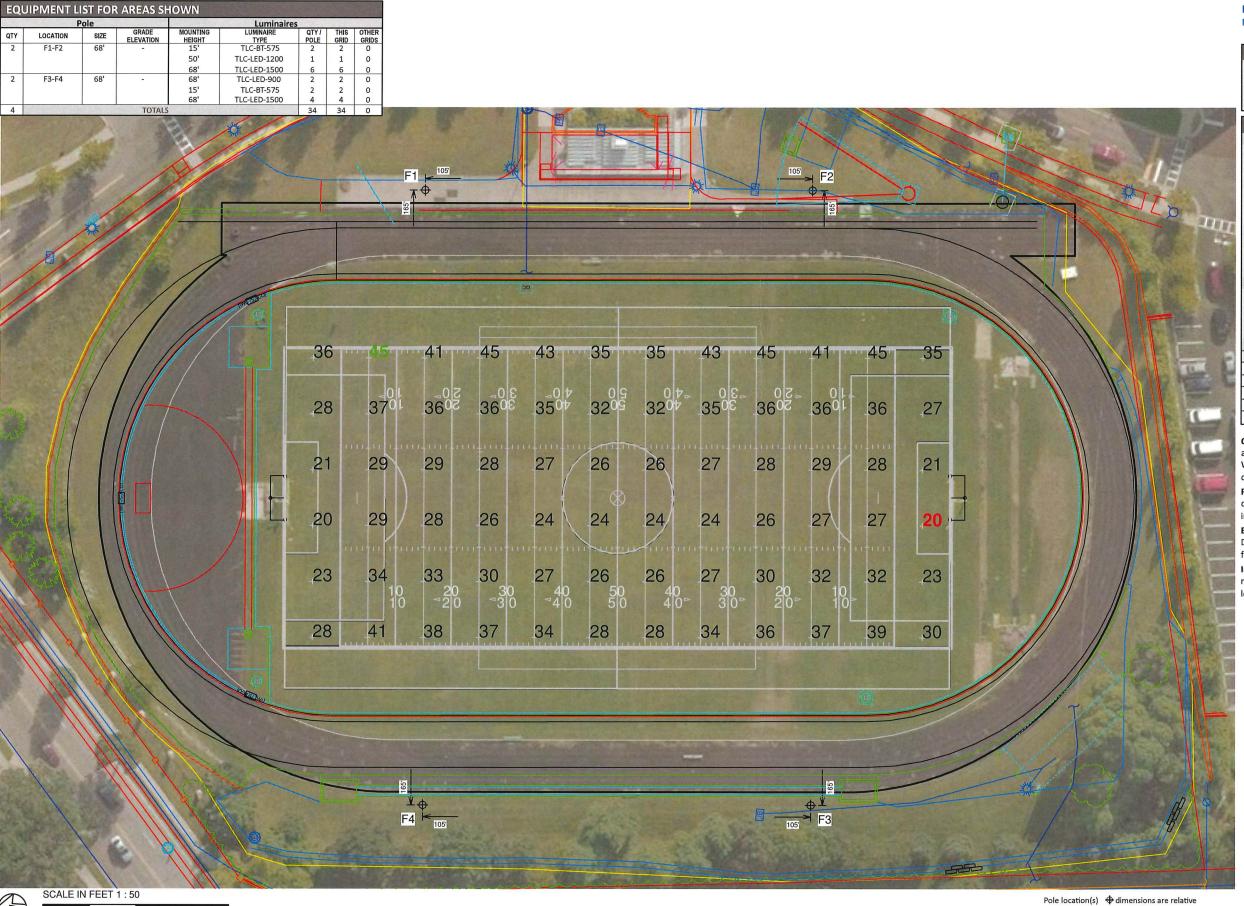












ENGINEERED DESIGN By: Connor Ramstead • File #172583G • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

RID SUMMARY

Name: Football
Size: 360' x 160'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

	AL FOOTCANDLE		
	Entire Grid		
Guaranteed Average:	30		
Scan Average:	31.50		
Maximum:	45		
Minimum:	20		
Avg / Min:	1.56		
Guaranteed Max / Min:	2.5		
Max / Min:	2.24		
UG (adjacent pts):	1.52		
CU:	0.49		
No. of Points:	72		
LUMINAIRE INFORMATIO	N		
6 1 1601	5700K - 75 CF	01	
Color / CRI:	3/00K - /3 CI	71	
Luminaire Output:		000 / 136,000 /	' 89,600 lumer
	160,000 / 52,		⁷ 89,600 lumer
Luminaire Output:	160,000 / 52, 34		⁷ 89,600 lumer
Luminaire Output: No. of Luminaires:	160,000 / 52, 34	000 / 136,000 /	89,600 lumer
Luminaire Output: No. of Luminaires:	160,000 / 52, 34	000 / 136,000 /	
Luminaire Output: No. of Luminaires: Total Load:	160,000 / 52, 34 39.1 kW	000 / 136,000 /	nen Maintenance
Luminaire Output: No. of Luminaires: Total Load: Luminaire Type	160,000 / 52, 34 39.1 kW	000 / 136,000 /	nen Maintenance L70 hrs
Luminaire Output: No. of Luminaires: Total Load: Luminaire Type TLC-LED-1500	160,000 / 52, 34 39.1 kW L90 hrs >120,000	Lurr L80 hrs >120,000	nen Maintenance L70 hrs >120,000

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

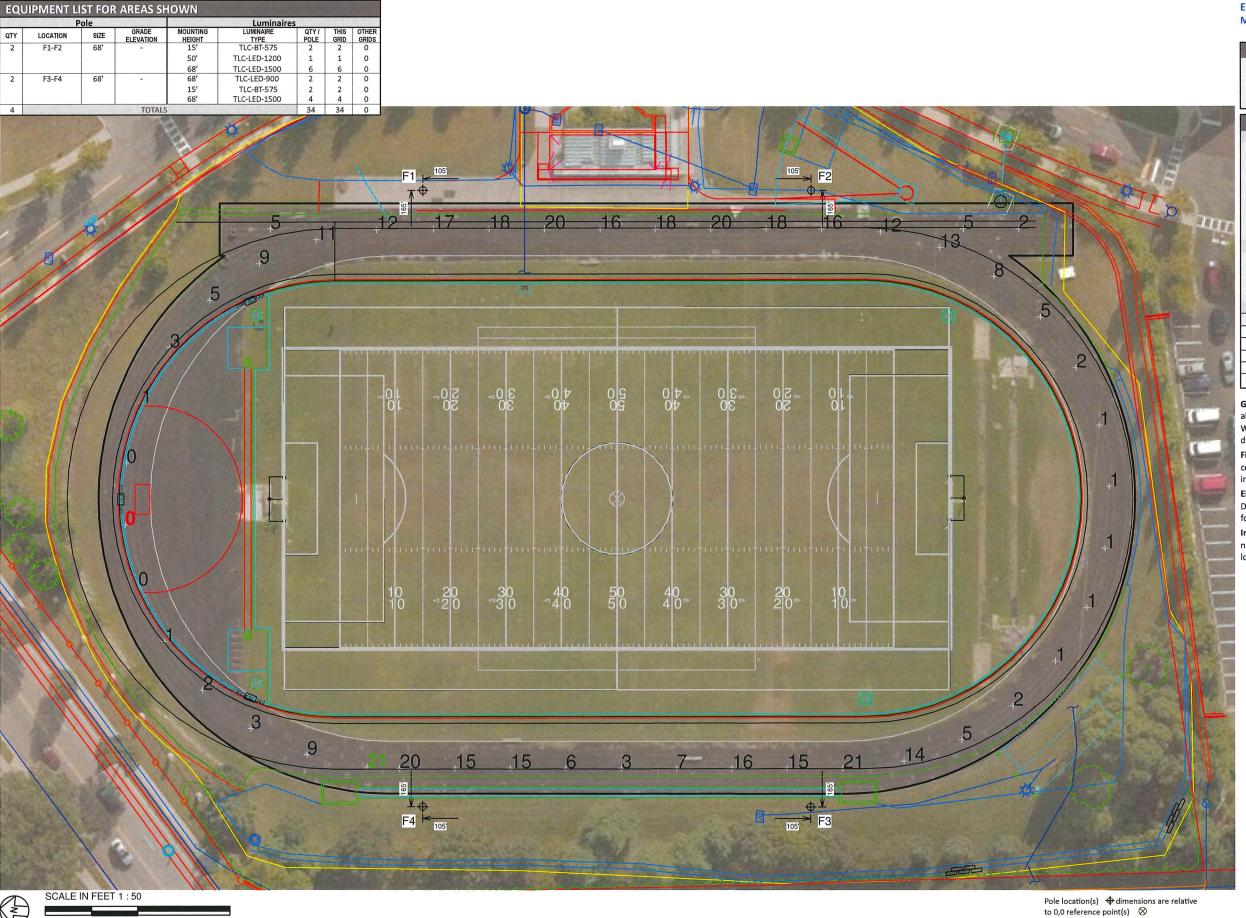
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.



to 0,0 reference point(s) \otimes



ENGINEERED DESIGN By: Connor Ramstead • File #172583G • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Track
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

MAINTAINED HORIZONTA	L FOOTCANDLE	S	
	Entire Grid		
Scan Average:	8.80		
Maximum:	21		
Minimum:	0		
Avg / Min:	22.90		
Max / Min:	54.70		
. CU:	0.09		
No. of Points:	47		
LI IN AIN IAIDE INICODA ANTIO	M		
LUMINAIRE INFORMATIO	N		
Color / CRI:		RI	
Color / CRI:	5700K - 75 CI	RI ,000 / 136,000 /	/ 89,600 lumer
	5700K - 75 CI		⁷ 89,600 lumer
Color / CRI: Luminaire Output: No. of Luminaires:	5700K - 75 Cl 160,000 / 52, 34		/ 89,600 lumer
Color / CRI: Luminaire Output: No. of Luminaires:	5700K - 75 Cl 160,000 / 52, 34	,000 / 136,000 /	/ 89,600 lumer
Color / CRI: Luminaire Output: No. of Luminaires:	5700K - 75 Cl 160,000 / 52, 34	,000 / 136,000 /	•
Color / CRI: Luminaire Output: No. of Luminaires: Total Load:	5700K - 75 Cl 160,000 / 52, 34 39.1 kW	,000 / 136,000 /	nen Maintenance
Color / CRI: Luminaire Output: No. of Luminaires: Total Load: Luminaire Type	5700K - 75 Cl 160,000 / 52, 34 39.1 kW	Lun L80 hrs	nen Maintenance L70 hrs
Color / CRI: Luminaire Output: No. of Luminaires: Total Load: Luminaire Type TLC-LED-1500	5700K - 75 Cl 160,000 / 52, 34 39.1 kW L90 hrs >120,000	Lun L80 hrs >120,000	nen Maintenance L70 hrs >120,000

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco
Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.



EQUIPMENT LIST FOR AREAS SHOWN GRADE ELEVATION LOCATION SIZE TYPE TLC-BT-575 HEIGHT 15' F1-F2 TLC-LED-1200 50' TLC-LED-1500 TLC-LED-900 F3-F4 68' TLC-BT-575 TLC-LED-1500 15' 68' 4 TOTALS 34 34 0 19 18 16 22 28 15 15 25 20 18 25 16 SCALE IN FEET 1:10 Pole location(s) ♦ dimensions are relative to 0,0 reference point(s) \otimes

ENGINEERED DESIGN By: Connor Ramstead • File #172583G • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Bleachers
Size:	360' x 205'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

MAINTAINED HORIZONTA	L FOOTCANDLE	5	
	Entire Grid		
Scan Average:	19.26		
Maximum:	31		
Minimum:	13		
No. of Points:	24		
LUMINAIRE INFORMATIO	N		
Color / CRI: Luminaire Output: No. of Luminaires: Total Load:	5700K - 75 CF 160,000 / 52, 34	स ००० / 136,000 /	′ 89,600 lume
Color / CRI: Luminaire Output: No. of Luminaires:	5700K - 75 CF 160,000 / 52, 34	000 / 136,000 /	/ 89,600 lume
Color / CRI: Luminaire Output: No. of Luminaires:	5700K - 75 CF 160,000 / 52, 34	000 / 136,000 /	
Color / CRI: Luminaire Output: No. of Luminaires: Total Load:	5700K - 75 CF 160,000 / 52, 34 39.1 kW	000 / 136,000 /	nen Maintenance
Color / CRI: Luminaire Output: No. of Luminaires: Total Load:	5700K - 75 CF 160,000 / 52, 34 39.1 kW	000 / 136,000 / Lum L80 hrs	nen Maintenance L70 hrs
Color / CRI: Luminaire Output: No. of Luminaires: Total Load: Luminaire Type TLC-LED-1500	5700K - 75 CF 160,000 / 52, 34 39.1 kW	Lurr L80 hrs >120,000	L70 hrs

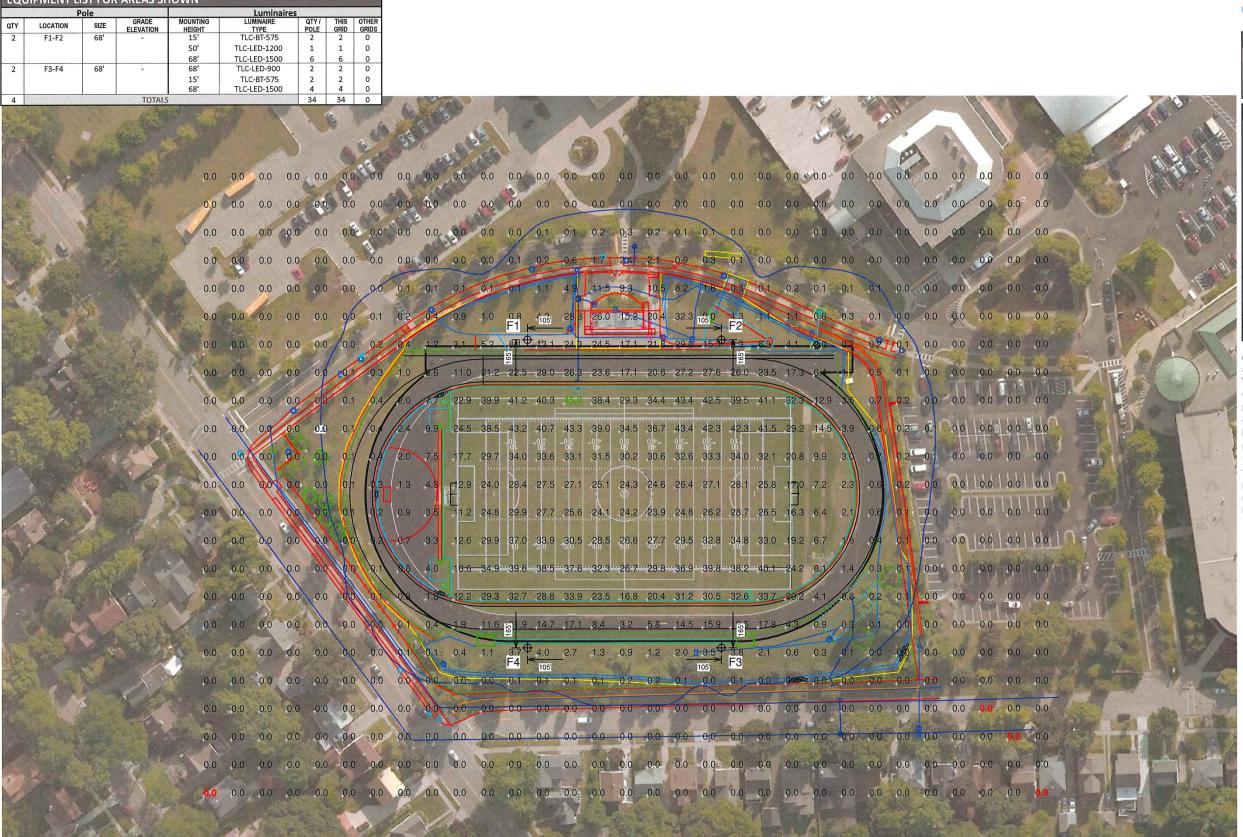
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.





GRID SUMMARY	
Name:	Blanket Grid
Size:	360' x 205'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

Height:	3.0' above gra	ade	
ILLUMINATION S	UMMARY		
MAINTAINED HORIZONTA	L FOOTCANDLES		
	Entire Grid		
Scan Average:	5.90		
Maximum:	45		
Minimum:	0		
No. of Points:	713		
LUMINAIRE INFORMATIO	N		
Color / CRI: Luminaire Output: No. of Luminaires:	160,000 / 52,	RI 000 / 136,000 /	' 89,600 lumer
Total Load:	39.1 kW		
		Lun	nen Maintenance
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>120,000	>120,000	>120,000
TLC-BT-575	>120,000	>120,000	>120,000
TLC-LED-1200	>120,000	>120,000	>120,000
TLC-LED-900	>120,000	>120,000	>120,000
Reported per TM-21-11.	See luminaire da	tasheet for deta	ils.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.



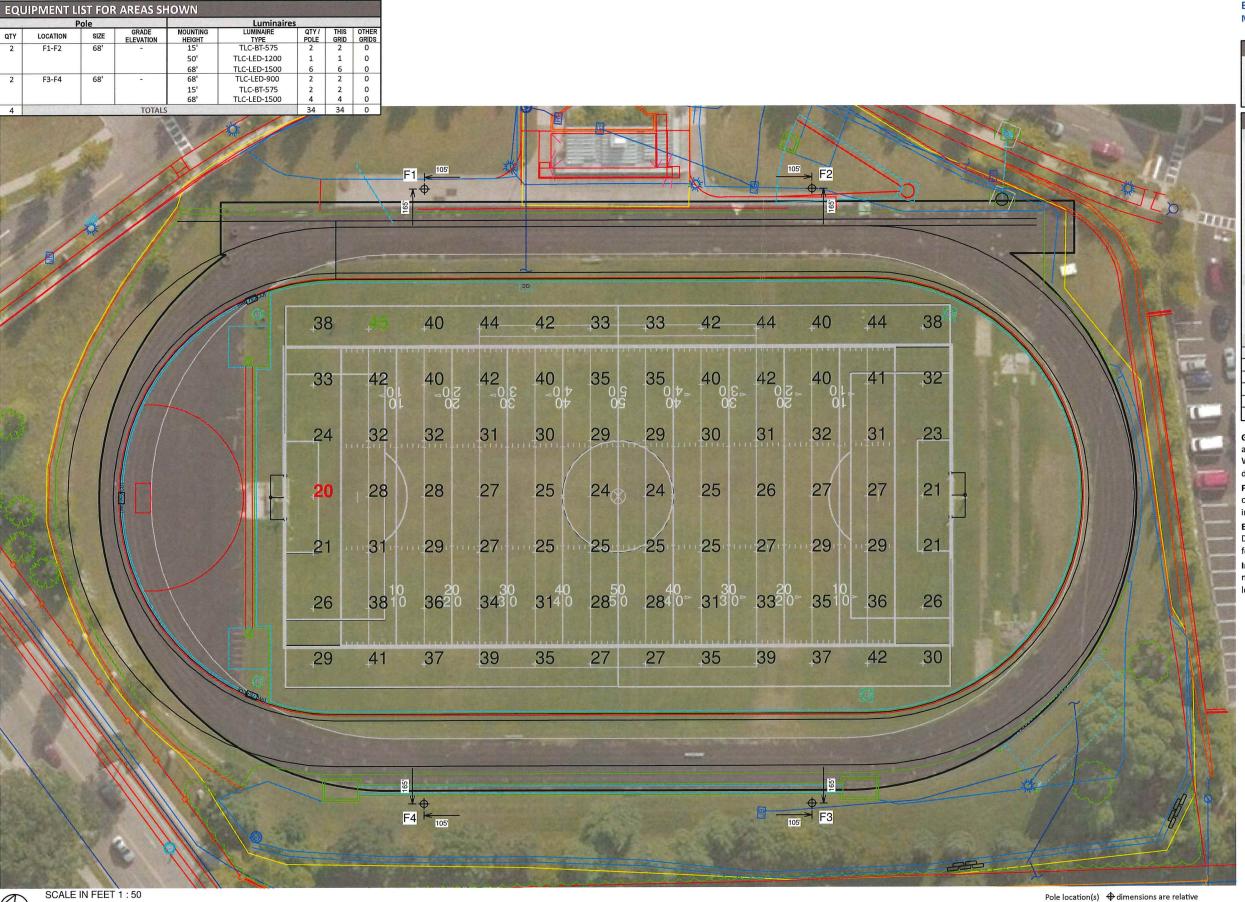
We Make It Happen

Pole location(s) \bigoplus dimensions are relative

to 0,0 reference point(s) \otimes

SCALE IN FEET 1:100

EQUIPMENT LIST FOR AREAS SHOWN



ENGINEERED DESIGN By: Connor Ramstead • File #172583G • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Soccer
Size:	360' x 205'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION S			
MAINTAINED HORIZONTA	Entire Grid	3	
Guaranteed Average:	30		
Scan Average:	32.27		
Maximum:	45		
Minimum:	20		
Avg / Min:	1.58		
Guaranteed Max / Min:	2.5		
Max / Min:	2.19		
UG (adjacent pts):	1.50		
CU:	0.58		
No. of Points:	84		
LUMINAIRE INFORMATIO	N		
Color / CRI:	5700K - 75 CF	र।	
Luminaire Output:	160,000 / 52,	000 / 136,000 /	89,600 lumen
No. of Luminaires:	34		
Total Load:	39.1 kW		
		Lun	nen Maintenance
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>120,000	>120,000	>120,000
TLC-BT-575	>120,000	>120,000	>120,000
TLC-LED-1200	>120,000	>120,000	>120,000
TLC-LED-900	>120,000	>120,000	>120,000
Reported per TM-21-11.	See luminaire da	atasheet for deta	ils.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.



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to 0,0 reference point(s) ⊗

EQU	IPMENT L	IST FOR	R AREAS SH	lown				
Pole				THE RESEARCH	Luminaire	s		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	68'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1200	1	1	0
				68'	TLC-LED-1500	6	6	0
2	F3-F4	68'	-	68'	TLC-LED-900	2	2	0
				15'	TLC-BT-575	2	2	0
				68'	TLC-LED-1500	4	4	0
4			TOTALS			34	34	0

SCALE IN FEET 1:120

ENGINEERED DESIGN By: Connor Ramstead • File #172583G • 10-Mar-20

NOTES: Light reading calculations follow the elevation changes of the roads.

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

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Property Line
Spacing:	30.0'
Height:	18.0' above grade

ILLUMINATION S	UMMARY				
HORIZONTAL FOOTCAND	LES				
	Entire Grid				
Scan Average:	0.0064				
Maximum:	0.03				
Minimum:	0.00				
No. of Points:	36				
LUMINAIRE INFORMATIC	N				
Color / CRI: Luminaire Output: No. of Luminaires: Total Load:	: 160,000 / 52,000 / 136,000 / 89,600 lum : 34				
		Lun	nen Maintenance		
Luminaire Type	L90 hrs	L80 hrs	L70 hrs		
TLC-LED-1500	>120,000	>120,000	>120,000		
TLC-BT-575	>120,000	>120,000	>120,000		
TLC-LED-1200	>120,000	>120,000	>120,000		
TLC-LED-900	>120,000	>120,000	>120,000		
Reported per TM-21-11.	See luminaire da	atasheet for deta	ils.		

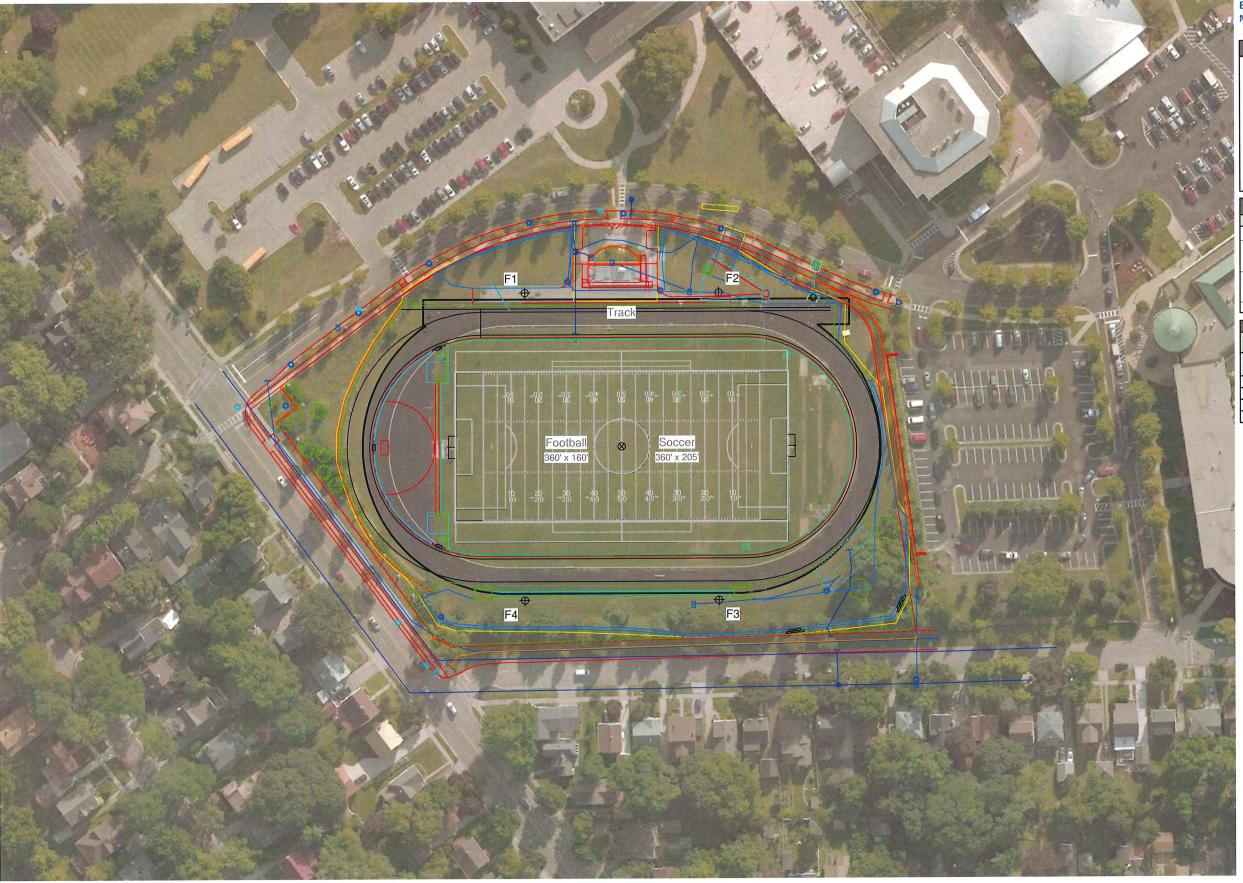
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.





EQUIPMENT LAYOUT

INCLUDES:

· Football

·Soccer

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 driver and structures located within 3 feet (1m) of design locations.

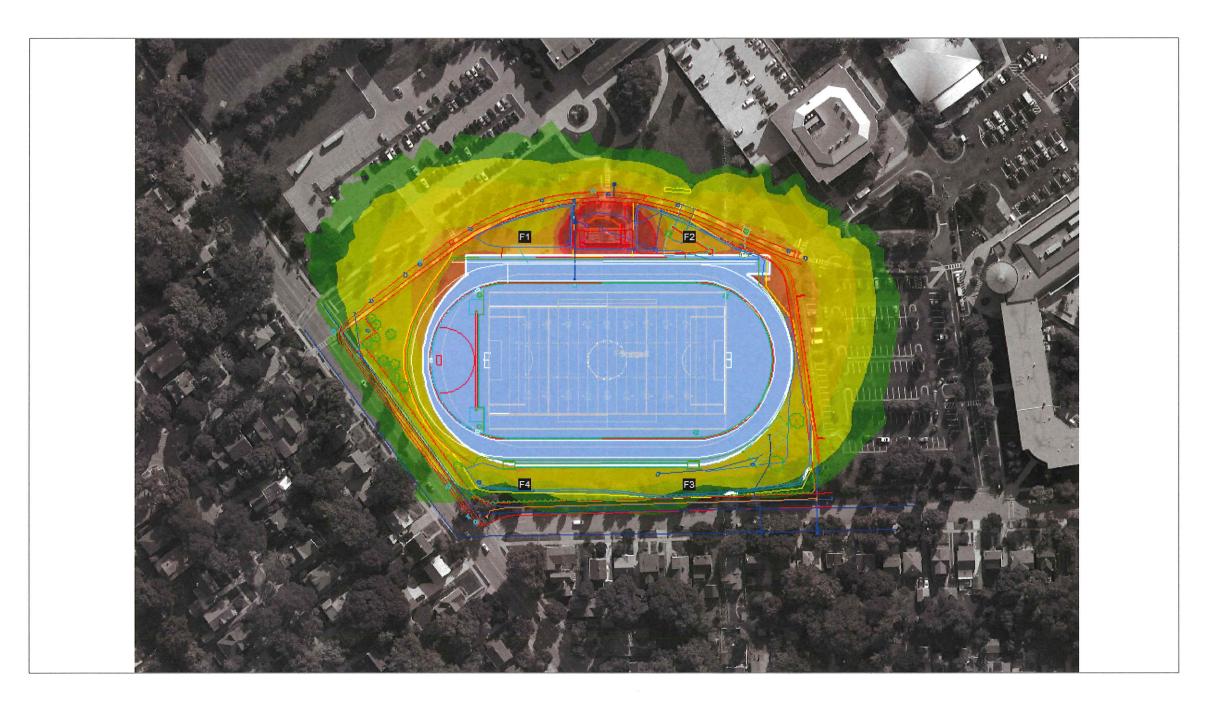
EQ	UIPMEN	T LIST	FOR AR	EAS SHO	OWN	
Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE
2	F1-F2	68'	-	15'	TLC-BT-575	2
		50000		50'	TLC-LED-1200	1
				68'	TLC-LED-1500	6
2	F3-F4	68'	-	68'	TLC-LED-900	2
1000				15'	TLC-BT-575	2
				68'	TLC-LED-1500	4
4		\$ 15 TO	TOTAL	5	42 to 3	34

SINGLE LUMINAIRE AMPERAGE DRAW CHART							
Ballast Specifications (.90 min power factor)						inaire	
Single Phase Voltage	208	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9	2.3

musco

We Make It Happen

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





GLARE IMPACT

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

High Glare: 150,000 or more candela

Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

Significant Glare: 25,000 to 75,000 candela

Equivalent to high beam headlights of a car.

Minimal to No Glare: 500 or less candela Equivalent to 100W incandescent light bulb.



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Lighting System

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circui
F1-F2	80'	80'	6	TLC-LED-1500	8.58 kW	Α
- 10		15'	2	TLC-BT-575	1.15 kW	Α
		50'	1	TLC-LED-1200	1.17 kW	Α
F3-F4	80'	80'	4	TLC-LED-1500	5.72 kW	Α
		80'	2	TLC-LED-900	1.78 kW	Α
		15'	2	TLC-BT-575	1.15 kW	Α
4			34		39.10 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
Α	Football	39.1 kW	34

xture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	20
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	4
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	2

Light Level Summary

Grid Name	Calculation Metric			Illumination			Circuits	Firsture Ot
Grid Name	Calculation Metric	Ave	Min	Max	Max/Min	Ave/Min	Circuits	cuits Fixture Qty
Bleachers	Horizontal	19.4	13	31	2.35	1.49	Α	34
Football	Horizontal Illuminance	33	21	44	2.06	1.57	Α	34
Property Line	Horizontal	0.01	0	0.05	0.00		Α	34
Soccer	Horizontal Illuminance	33.2	21	42	2.00	1.58	Α	34
Track	Horizontal Illuminance	8.10	0	19	52.82		Α	34

From Hometown to Professional











EQUIPMENT LIST FOR AREAS SHOWN GRADE ELEVATION LOCATION SIZE HEIGHT 15' TYPE TLC-BT-575 F1-F2 80' 50' TLC-LED-1200 TLC-LED-1500 F3-F4 80' TLC-LED-900 15' 80' TLC-BT-575 TLC-LED-1500 34 34 0 SCALE IN FEET 1:50 Pole location(s) \bigoplus dimensions are relative

ENGINEERED DESIGN By: Connor Ramstead • File #172583H • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY Name: Football Size: 360' x 160' Spacing: 30.0' x 30.0' Height: 3.0' above grade

MAINTAINED HORIZONTA	AL FOOTCANDLE	S	
	Entire Grid		
Guaranteed Average:	30		
Scan Average:	32.96		
Maximum:	44		
Minimum:	21		
Avg / Min:	1.56		
Guaranteed Max / Min:	2.5		
Max / Min:	2.06		
UG (adjacent pts):	1.73		
CU:	0.51		
No. of Points:	72		
LUMINAIRE INFORMATIC	IN		
Color / CRI:	5700K - 75 CI	RI	
Luminaire Output:	160,000 / 52,	000 / 89,600 /	136,000 lume
No. of Luminaires:	34		
Total Load:	39.1 kW		
		Lun	nen Maintenand
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>120,000	>120,000	>120,000
TLC-BT-575	>120,000	>120,000	>120,000
TLC-LED-900	>120,000	>120,000	>120,000
	>120,000	>120,000	>120,000

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.



to 0,0 reference point(s) \otimes



ENGINEERED DESIGN By: Connor Ramstead • File #172583H • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Track
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION S	UMMARY		
MAINTAINED HORIZONTA	L FOOTCANDLE	ES	1 E 2
	Entire Grid		
Scan Average:	8.10		
Maximum:	19		
Minimum:	0		
Avg / Min:	21.94		
Max / Min:	52.82		
CU:	0.08		
No. of Points:	47		
LUMINAIRE INFORMATIO	N		
Color / CRI:	5700K - 75 C	:RI	
Luminaire Output:	160,000 / 52	,000 / 89,600 /	136,000 lumen
No. of Luminaires:	34		
Total Load:	39.1 kW		
		Lun	nen Maintenance
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>120,000	>120,000	>120,000
TLC-BT-575	>120,000	>120,000	>120,000
TLC-LED-900	>120,000	>120,000	>120,000
TLC-LED-1200	>120,000	>120,000	>120,000
Reported per TM-21-11.	See luminaire c	latasheet for deta	ils.

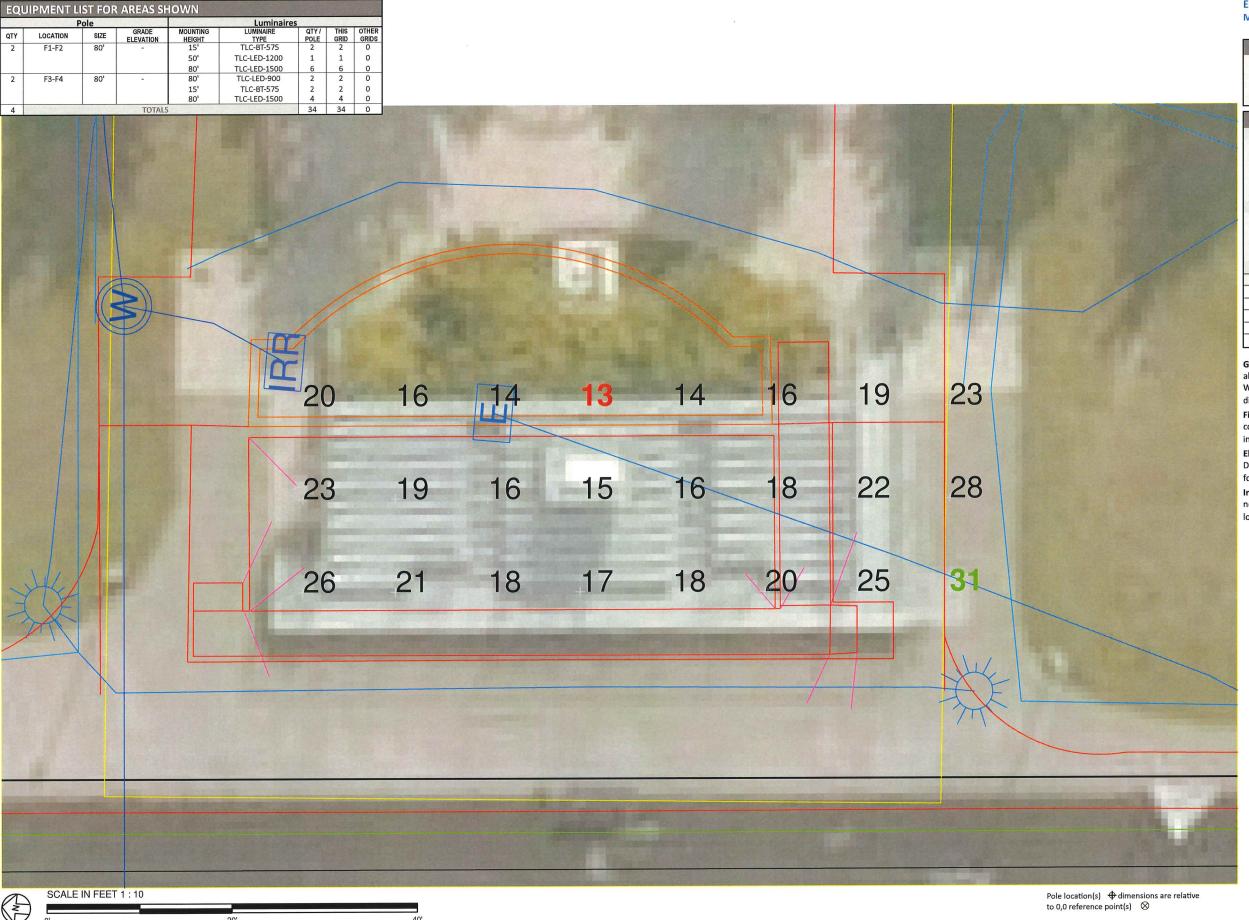
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.





ENGINEERED DESIGN By: Connor Ramstead • File #172583H • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Bleachers
Size:	360' x 205'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

MAINTAINED HORIZONTA	L FOOTCANDLE	5	
	Entire Grid		
Scan Average:	19.41		
Maximum:	31		
Minimum:	13		
No. of Points:	24		
LUMINAIRE INFORMATIO	N		
Color / CRI:	5700K - 75 CF	81	
COIOI / CIVI.	3700K - 73 CI	11	
Luminaire Output:		000 / 89,600 /	136,000 lum
	160,000 / 52,		136,000 lum
Luminaire Output:	160,000 / 52, 34		136,000 lum
Luminaire Output: No. of Luminaires:	160,000 / 52, 34	000 / 89,600 /	136,000 lum
Luminaire Output: No. of Luminaires:	160,000 / 52, 34	000 / 89,600 /	
Luminaire Output: No. of Luminaires: Total Load:	160,000 / 52, 34 39.1 kW	000 / 89,600 /	nen Maintenan
Luminaire Output: No. of Luminaires: Total Load: Luminaire Type	160,000 / 52, 34 39.1 kW	000 / 89,600 / Lun L80 hrs	nen Maintenan L70 hrs
Luminaire Output: No. of Luminaires: Total Load: Luminaire Type TLC-LED-1500	160,000 / 52, 34 39.1 kW L90 hrs >120,000	Lun L80 hrs >120,000	nen Maintenan L70 hrs >120,000

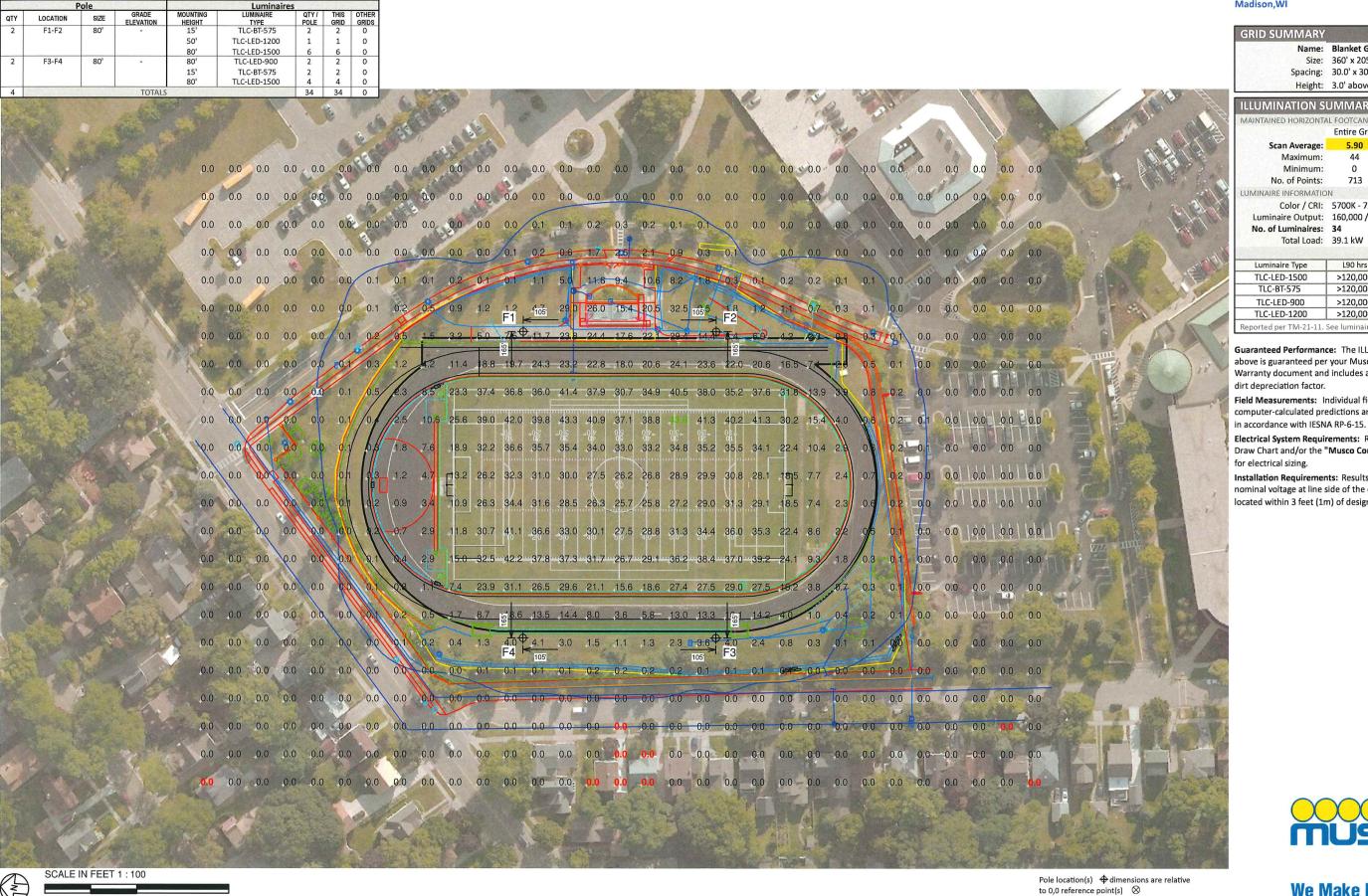
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.





EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: Connor Ramstead • File #172583H • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY Name: Blanket Grid Size: 360' x 205' Spacing: 30.0' x 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY Entire Grid Scan Average: 5.90 Maximum: 44 Minimum: 0 713 No. of Points: JMINAIRE INFORMATION Color / CRI: 5700K - 75 CRI Luminaire Output: 160,000 / 52,000 / 89,600 / 136,000 lumen. No. of Luminaires: 34 Total Load: 39.1 kW L90 hrs L80 hrs L70 hrs Luminaire Type TLC-LED-1500 >120,000 >120,000 >120,000 TLC-BT-575 >120,000 >120,000 >120,000 TLC-LED-900 >120,000 >120,000 >120,000 TLC-LED-1200 >120,000 >120,000 >120,000

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

oorted per TM-21-11. See luminaire datasheet for details

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken

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 driver and structures located within 3 feet (1m) of design locations.



EQUIPMENT LIST FOR AREAS SHOWN GRADE ELEVATION LOCATION SIZE F1-F2 80' TLC-LED-1200 TLC-LED-1500 F3-F4 80' 15' 80' TLC-LED-900 TLC-BT-575 TLC-LED-1500 TOTALS 34 34 0 SCALE IN FEET 1:50 Pole location(s) \bigoplus dimensions are relative

ENGINEERED DESIGN By: Connor Ramstead • File #172583H • 10-Mar-20

Edgewood High School Of Sacred Heart SO Madison, WI

GRID SUMMARY	
Name:	Soccer
Size:	360' x 205'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

MAINTAINED HORIZONTA	L FOOTCANDLE	S	
	Entire Grid		
Guaranteed Average:	30		
Scan Average:	33.20		
Maximum:	42		
Minimum:	21		
Avg / Min:	1.57		
Guaranteed Max / Min:	2.5		
Max / Min:	2.00		
UG (adjacent pts):	1.67		
CU:	0.60		
No. of Points:	84		
LUMINAIRE INFORMATIO	N		
Color / CRI:	5700K - 75 CF	रा	
Luminaire Output:	160,000 / 52,	000 / 89,600 / 3	136,000 lumen
No. of Luminaires:	34		
Total Load:	39.1 kW		
		Lum	nen Maintenance
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>120,000	>120,000	>120,000
TLC-BT-575	>120,000	>120,000	>120,000
TLC-LED-900	>120,000	>120,000	>120,000
ILC-LLD-300			>120,000

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95

dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.



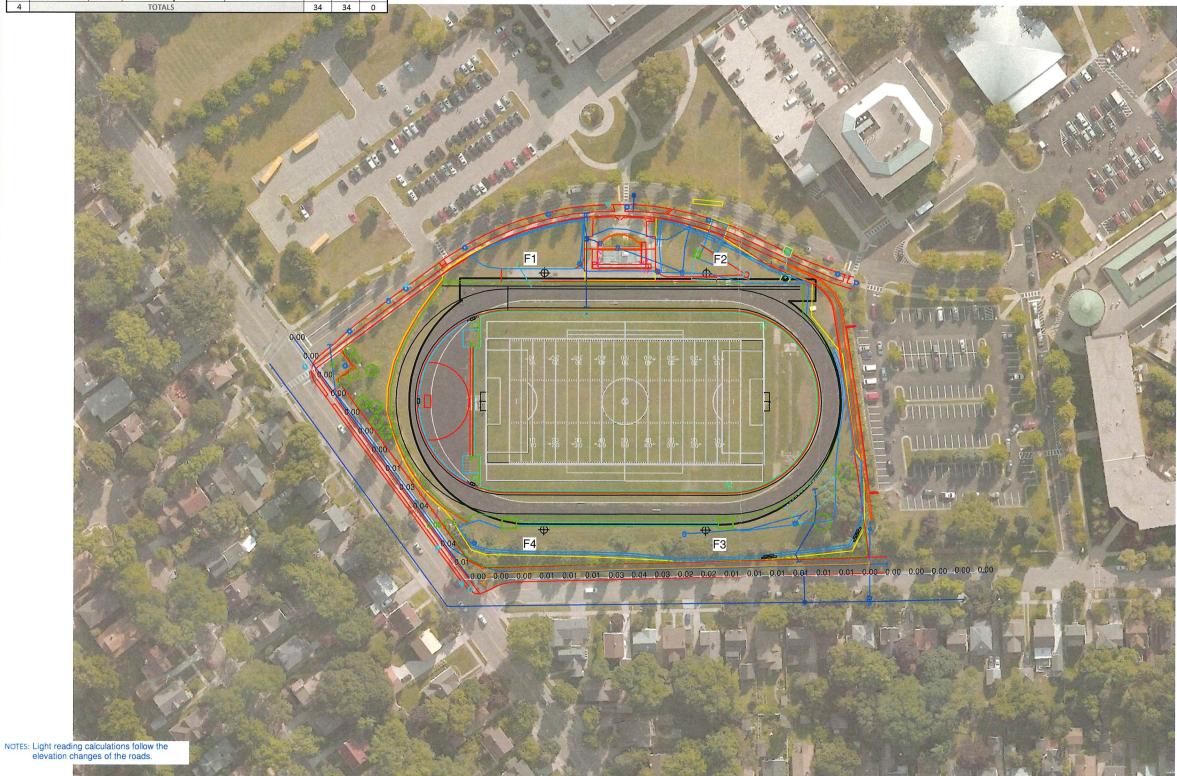
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to 0,0 reference point(s) ⊗

	P	ole			Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS	OTHER
2	F1-F2	80'		15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1200	1	1	0
				80'	TLC-LED-1500	6	6	0
2	F3-F4	80'	-	80'	TLC-LED-900	2	2	0
				15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	4	4	0
4			TOTALS			34	34	0

SCALE IN FEET 1:120

ENGINEERED DESIGN By: Connor Ramstead • File #172583H • 10-Mar-20



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

Edgewood High School Of Sacred Heart SO Madison,WI

GRID SUMMARY	
Name:	Property Line
Spacing:	30.0'
Height:	18.0' above grade

HORIZONTAL FOOTCAND			
	Entire Grid		
Scan Average:	0.0115		
Maximum:	0.05		
Minimum:	0.00		
No. of Points:	36		
LUMINAIRE INFORMATIO	N		
Color / CRI: Luminaire Output: No. of Luminaires:	5700K - 75 C 160,000 / 52 34	RI .000 / 89,600 /	136,000 lum
Luminaire Output:	160,000 / 52 34		136,000 lum
Luminaire Output: No. of Luminaires:	160,000 / 52 34	000 / 89,600 /	136,000 lum
Luminaire Output: No. of Luminaires:	160,000 / 52 34	000 / 89,600 /	and the second second second
Luminaire Output: No. of Luminaires: Total Load:	160,000 / 52 34 39.1 kW	000 / 89,600 /	nen Maintenand
Luminaire Output: No. of Luminaires: Total Load: Luminaire Type	160,000 / 52 34 39.1 kW	000 / 89,600 / Lun L80 hrs	nen Maintenand L70 hrs
Luminaire Output: No. of Luminaires: Total Load: Luminaire Type TLC-LED-1500	160,000 / 52 34 39.1 kW L90 hrs >120,000	Lun L80 hrs >120,000	nen Maintenan L70 hrs >120,000

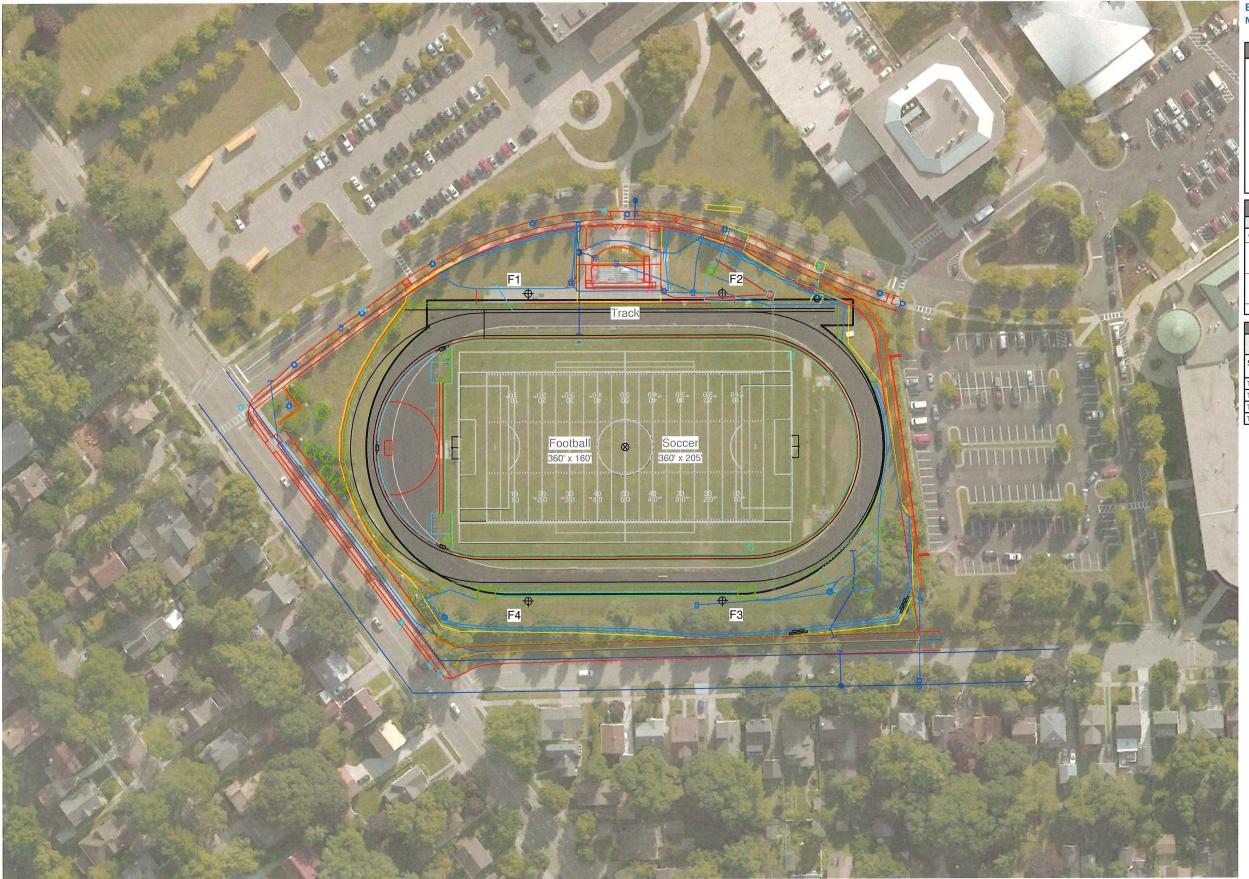
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 driver and structures located within 3 feet (1m) of design locations.





EQUIPMENT LAYOUT

INCLUDES:

· Football · Soccer

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 driver and structures located within 3 feet (1m) of design locations.

EQ	EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY/ POLE			
2	F1-F2	80'	-	15'	TLC-BT-575	2			
				50'	TLC-LED-1200	1			
				80'	TLC-LED-1500	6			
2	F3-F4	80'	-	80'	TLC-LED-900	2			
				15'	TLC-BT-575	2			
				80'	TLC-LED-1500	4			
4		TANK.	TOTAL	5		34			

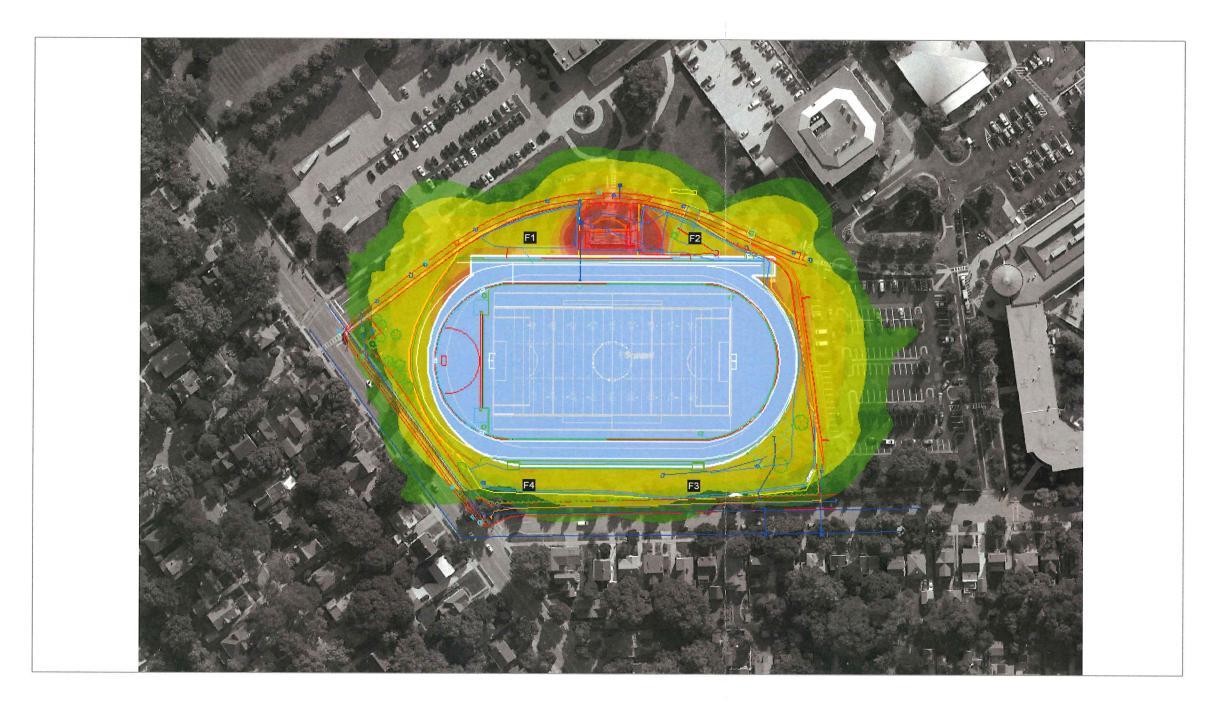
Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9	2.3
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0



We Make It Happen

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

SCALE IN FEET 1:100





GLARE IMPAC

Summar

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

GLAR

Candela Leve

High Glare: 150,000 or more candela

Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

Significant Glare: 25,000 to 75,000 candela Equivalent to high beam headlights of a car.

Minimal to No Glare: 500 or less candela Equivalent to 100W incandescent light bulb.



		*