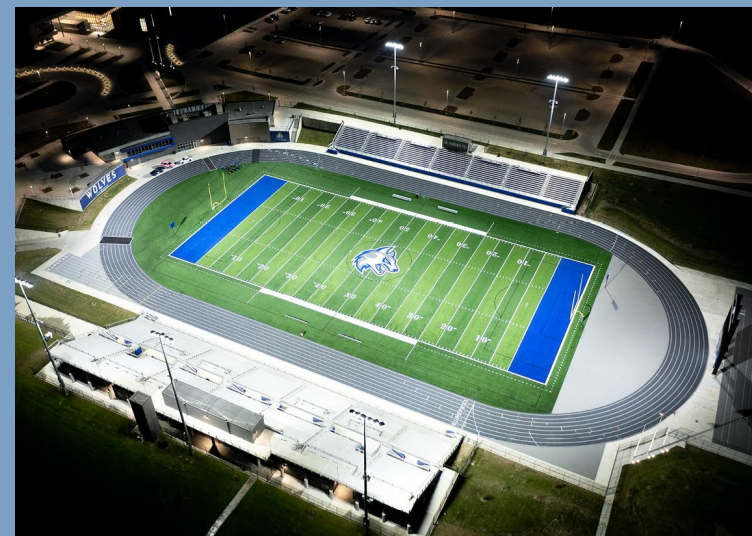
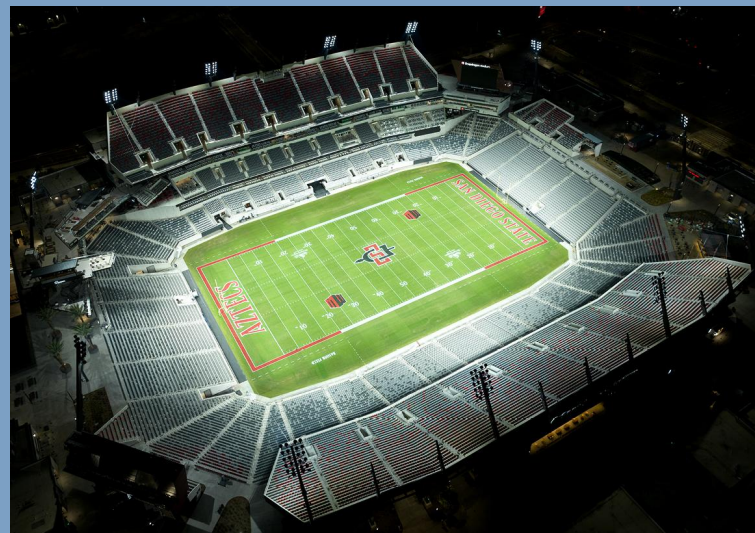




Elk River High School Stadium, Elk River, Minnesota, USA



Waukee Northwest High School, Waukee, Iowa, USA



San Diego State University, Snapdragon Stadium, San Diego, California, USA



AT&T Stadium, Dallas Cowboys, Arlington, Texas, USA

## Kaukauna New Middle School

Kaukauna, WI



Sales Representative: Tim Prosek · Designed By: Curt Lamberson · Design No.: 247237A · August 13, 2025

Kaukauna New Middle School  
Kaukauna,WI

LIGHTING SYSTEM

Structure/Fixture Summary						
Structure ID	Structure Height	Fixt. Attachment Ht.	Fixture Qty	Fixture Type	Design Load	Circuit
F1-F2	80'	80'	1	TLC-LED-550	0.53 kW	B
		80'	2	TLC-LED-1200	2.33 kW	A
		80'	4	TLC-LED-1500	5.59 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
F3-F4	70'	70'	2	TLC-LED-1200	2.33 kW	A
		70'	4	TLC-LED-1500	5.59 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
4			34		37.33 kW	

\*Fixtures in this design have dimmed output values to meet design specific needs.

Circuit Summary			
Circuit	Description	Design Load	Fixture Qty
A	Multipurpose Field	36.27 kW	32
B	Bleacher Egress	1.05 kW	2

Fixture Type Summary								
Type	Circuit	Source	Avg. Wattage	Avg. Lumens	L90	L80	L70	Quantity
TLC-BT-575	A	LED 5700K - 75 CRI	575W	52,651	>120,000	>120,000	>120,000	8
TLC-LED-1200	A	LED 5700K - 75 CRI	1165W	152,324	>120,000	>120,000	>120,000	8
TLC-LED-1500	A	LED 5700K - 75 CRI	1397W	182,872	>120,000	>120,000	>120,000	16
TLC-LED-550	B	LED 5700K - 75 CRI	527W	68,415	>120,000	>120,000	>120,000	2

Single Fixture Amperage Draw Chart								
Driver Specifications (.90 min power factor)			Line Amperage Per Fixture (max draw)					
Single Phase Voltage			208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)
TLC-LED-1500			8.4	7.9	7.3	6.3	5.0	4.6
TLC-LED-1200			6.9	6.5	6.0	5.2	4.2	3.8
TLC-BT-575			3.3	3.2	2.9	2.5	2.0	1.8
TLC-LED-550			3.2	3.0	2.8	2.4	1.9	1.8

\*Amp draw based on 100% fixture output, consult design specific datasheet for adjusted amperage draw chart

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination Ave					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Bleacher Egress	Horizontal Illuminance	8.56	3	11	4.33	3.31	B	2
Football	Horizontal Illuminance	32.96	29	41	1.42	1.15	A	32
Soccer	Horizontal Illuminance	33.28	29	43	1.50	1.16	A	32
Track	Horizontal Illuminance	13.46	4	25	6.30	3.40	A	32

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

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions.

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

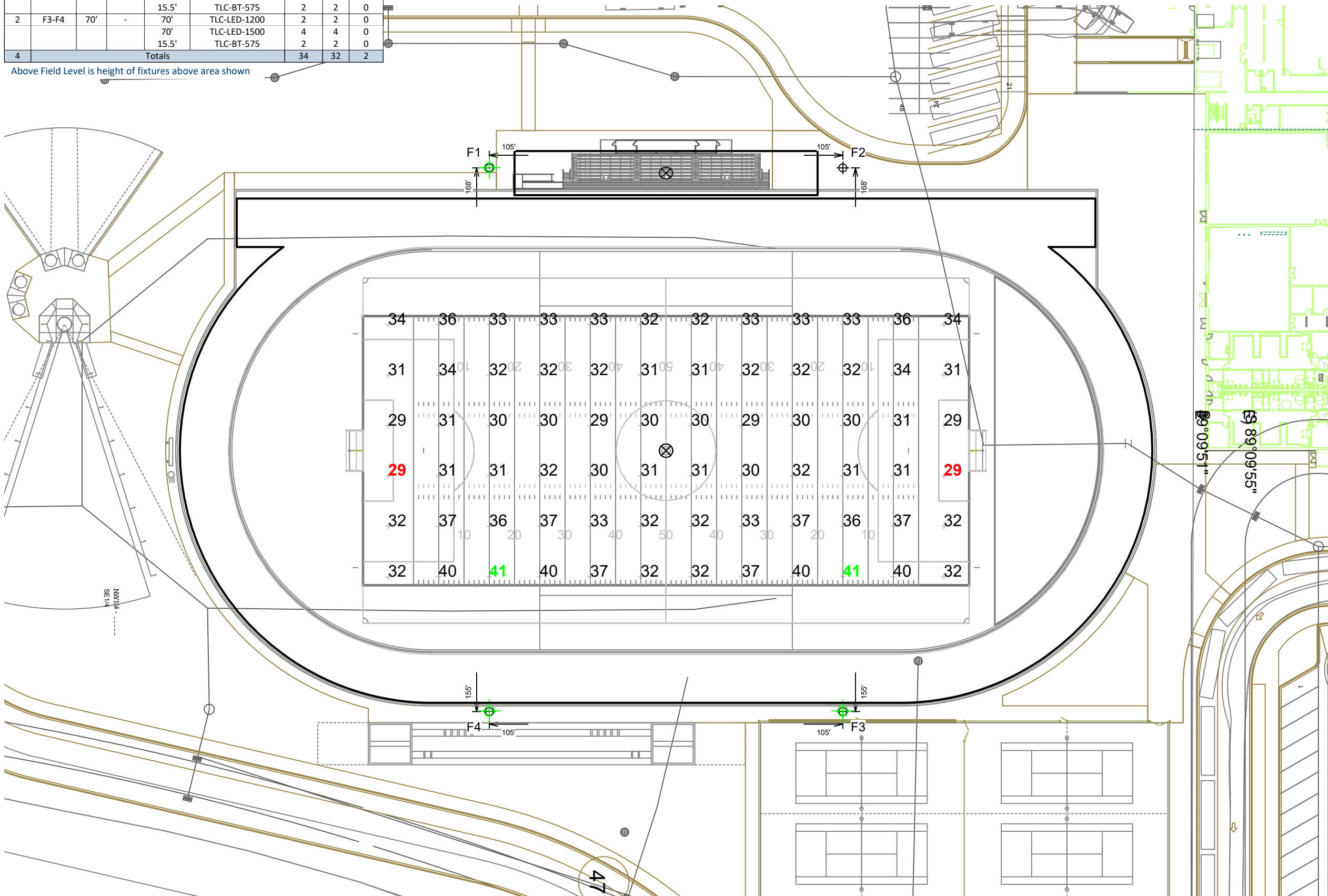
**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.





Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	80'	TLC-LED-1200	2	2	0
				80'	TLC-LED-1500	4	4	0
				80'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1200	2	2	0
				70'	TLC-LED-1500	4	4	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					34	32	2

Above Field Level is height of fixtures above area shown



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

# Kaukauna New Middle School

Kaukauna,WI

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

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	30
Scan Average:	32.96
Maximum:	41
Minimum:	29
Avg/Min:	1.15
Guaranteed Max/Min:	2.5
Max/Min:	1.42
UG (adjacent pts):	1.25
CU:	0.47
CV:	0.10
No. of Points:	72
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	32
Total Load:	36.27 kW

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

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions.

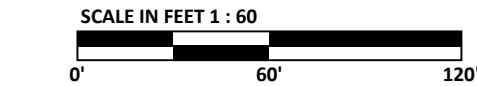
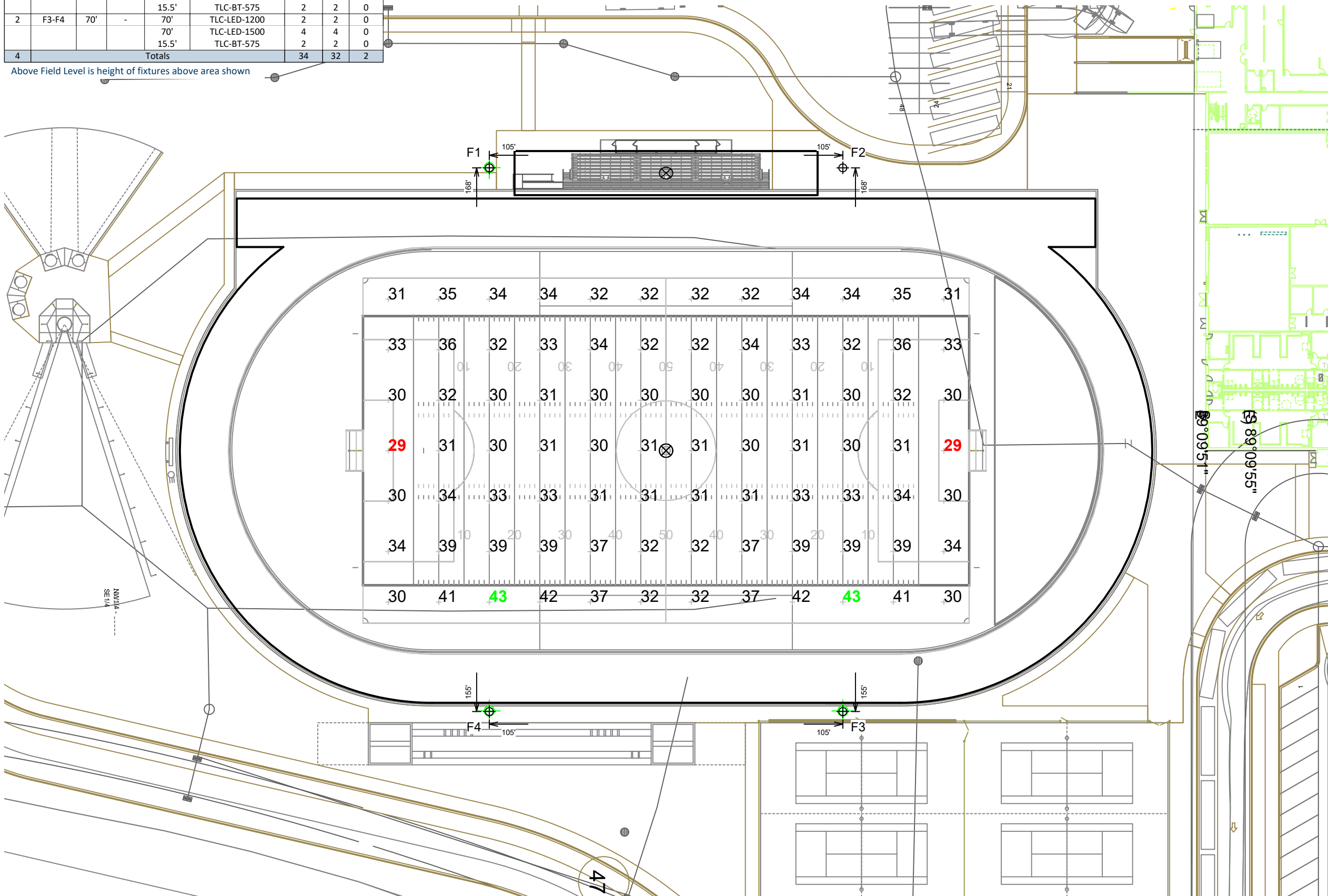
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	80'	TLC-LED-1200	2	2	0
				80'	TLC-LED-1500	4	4	0
				80'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1200	2	2	0
				70'	TLC-LED-1500	4	4	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					34	32	2

Above Field Level is height of fixtures above area shown



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

# Kaukauna New Middle School

Kaukauna,WI

Grid Summary	
Name:	Soccer
Size:	360' x 205'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	30
Scan Average:	33.28
Maximum:	43
Minimum:	29
Avg/Min:	1.16
Guaranteed Max/Min:	2.5
Max/Min:	1.50
UG (adjacent pts):	1.38
CU:	0.55
CV:	0.11
No. of Points:	84
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	32
Total Load:	36.27 kW

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

**Field Measurements:** Individual field measurements may vary from computer-calculated 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 driver and structures located within 3 feet (1m) of design locations.

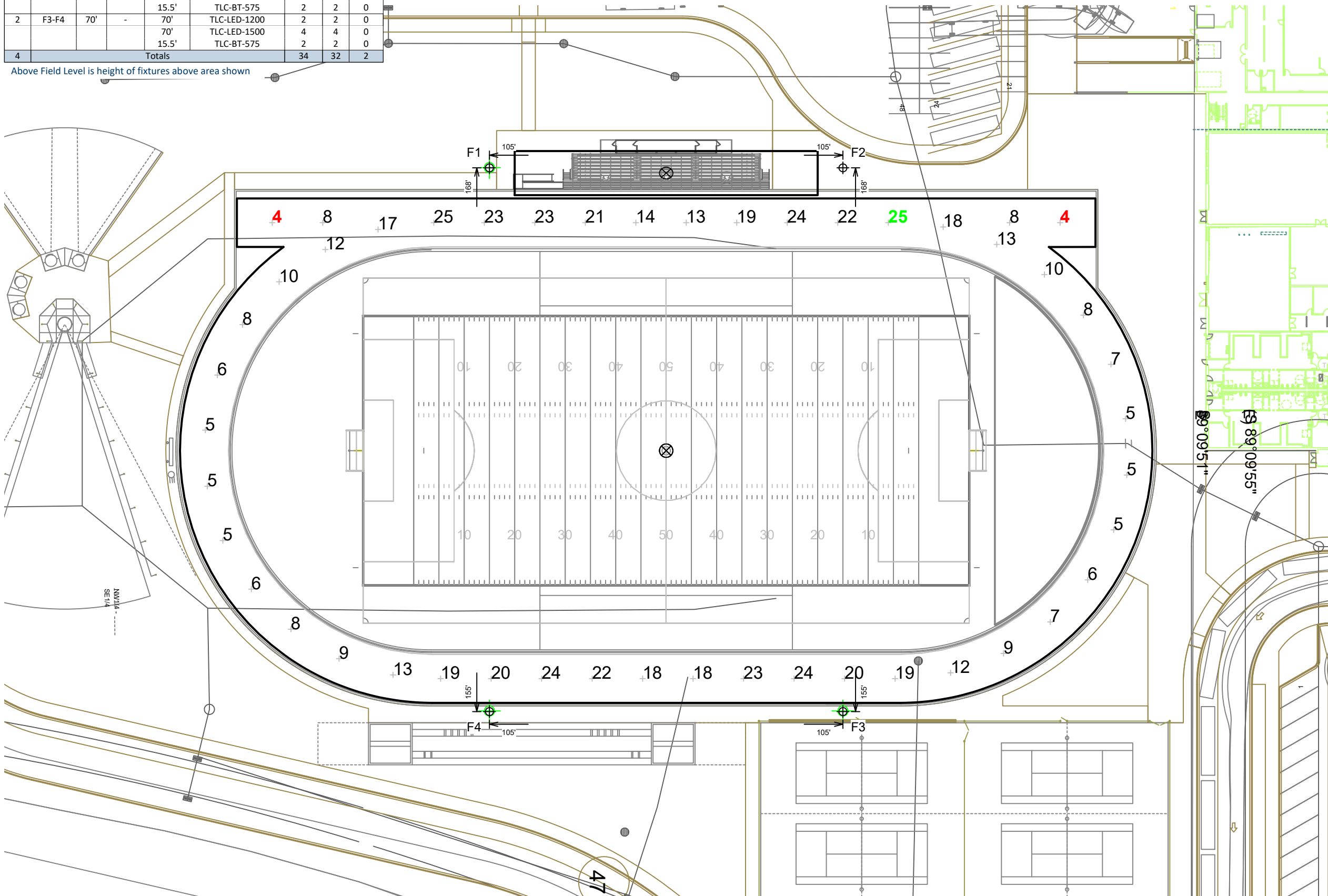


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## ILLUMINATION SUMMARY

Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	80'	TLC-LED-1200	2	2	0
				80'	TLC-LED-1500	4	4	0
				80'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1200	2	2	0
				70'	TLC-LED-1500	4	4	0
				15.5'	TLC-BT-575	2	2	0
4	Totals					34	32	2

Above Field Level is height of fixtures above area shown



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

Kaukauna New Middle School

Kaukauna,WI

Grid Summary

Name: Track

Size: Irregular

Spacing: 30.0' x 30.0'

Height: 3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

Scan Average: 13.46

Maximum: 25

Minimum: 4

Avg/Min: 3.40

Max/Min: 6.30

UG (adjacent pts): 0.00

CU: 0.13

CV: 0.54

No. of Points: 48

FIXTURE INFORMATION

Applied Circuits: A

No. of Fixtures: 32

Total Load: 36.27 kW

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

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions.

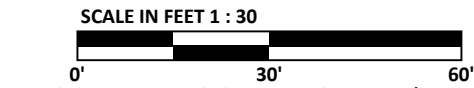
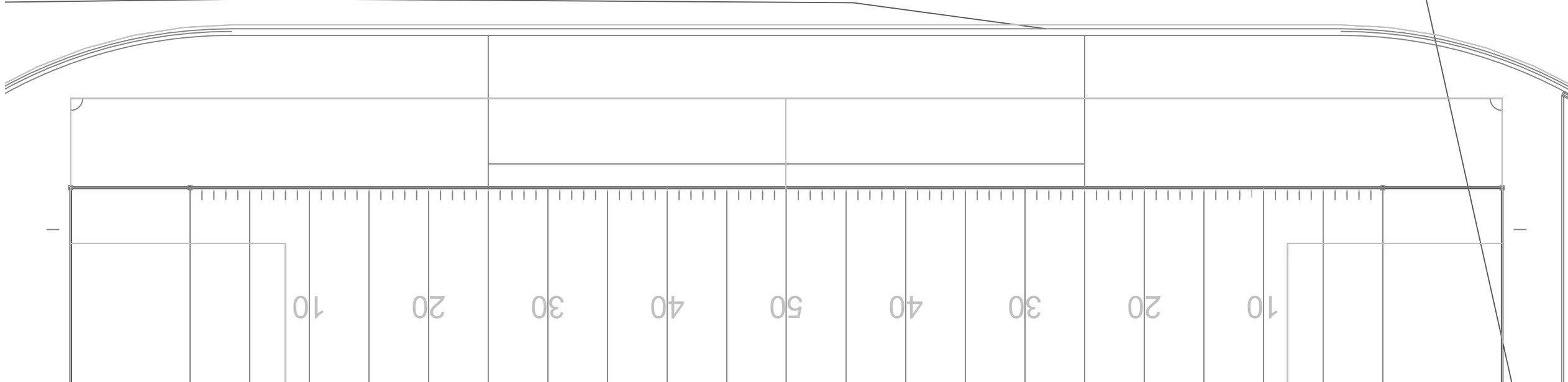
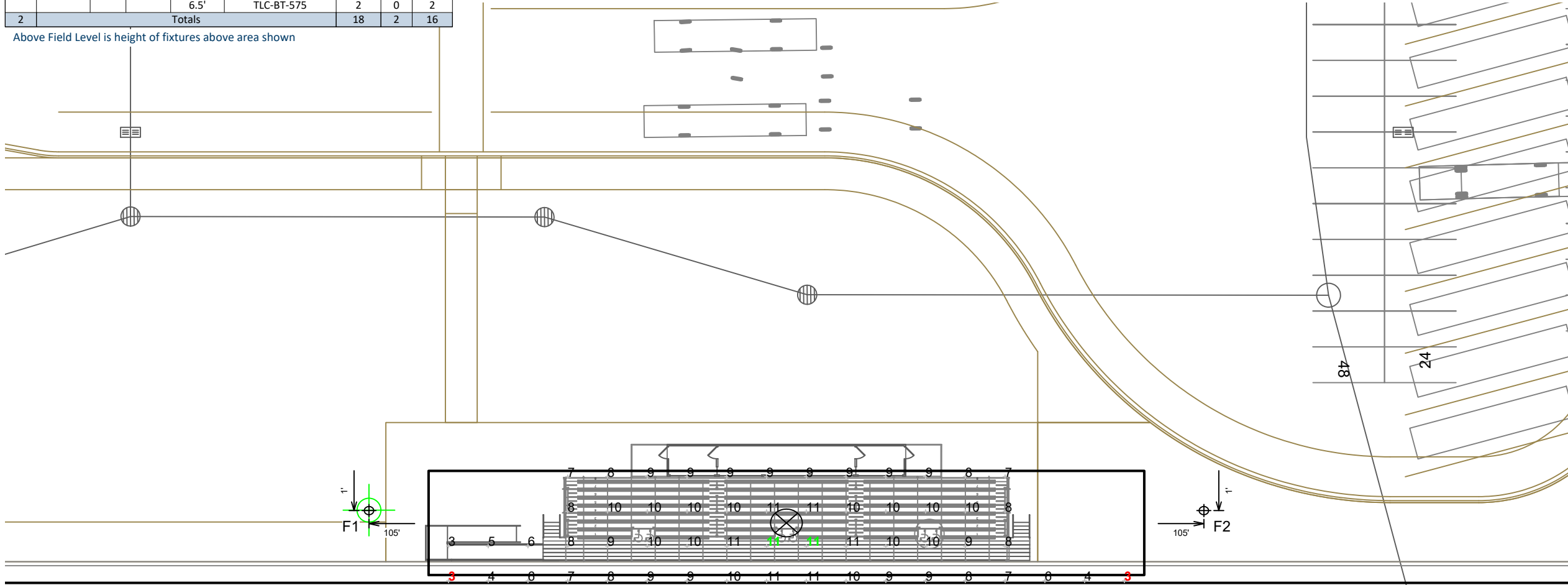
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-9'	71.0'	TLC-LED-1200	2	0	2
				71.0'	TLC-LED-1500	4	0	4
				71.0'	TLC-LED-550	1	1	0
				6.5'	TLC-BT-575	2	0	2
2	Totals					18	2	16

Above Field Level is height of fixtures above area shown



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

## Kaukauna New Middle School

Kaukauna,WI

### Grid Summary

Name: Bleacher Egress  
Size: 180' x 30'  
Spacing: 10.0' x 10.0'  
Height: 3.0' above grade

### Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	8.56
Maximum:	11
Minimum:	3
Avg/Min:	3.31
Max/Min:	4.33
UG (adjacent pts):	1.69
CU:	0.36
CV:	0.25
No. of Points:	57
FIXTURE INFORMATION	
Applied Circuits:	B
No. of Fixtures:	2
Total Load:	1.05 kW

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

**Field Measurements:** Individual field measurements may vary from computer-calculated 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 driver and structures located within 3 feet (1m) of design locations.



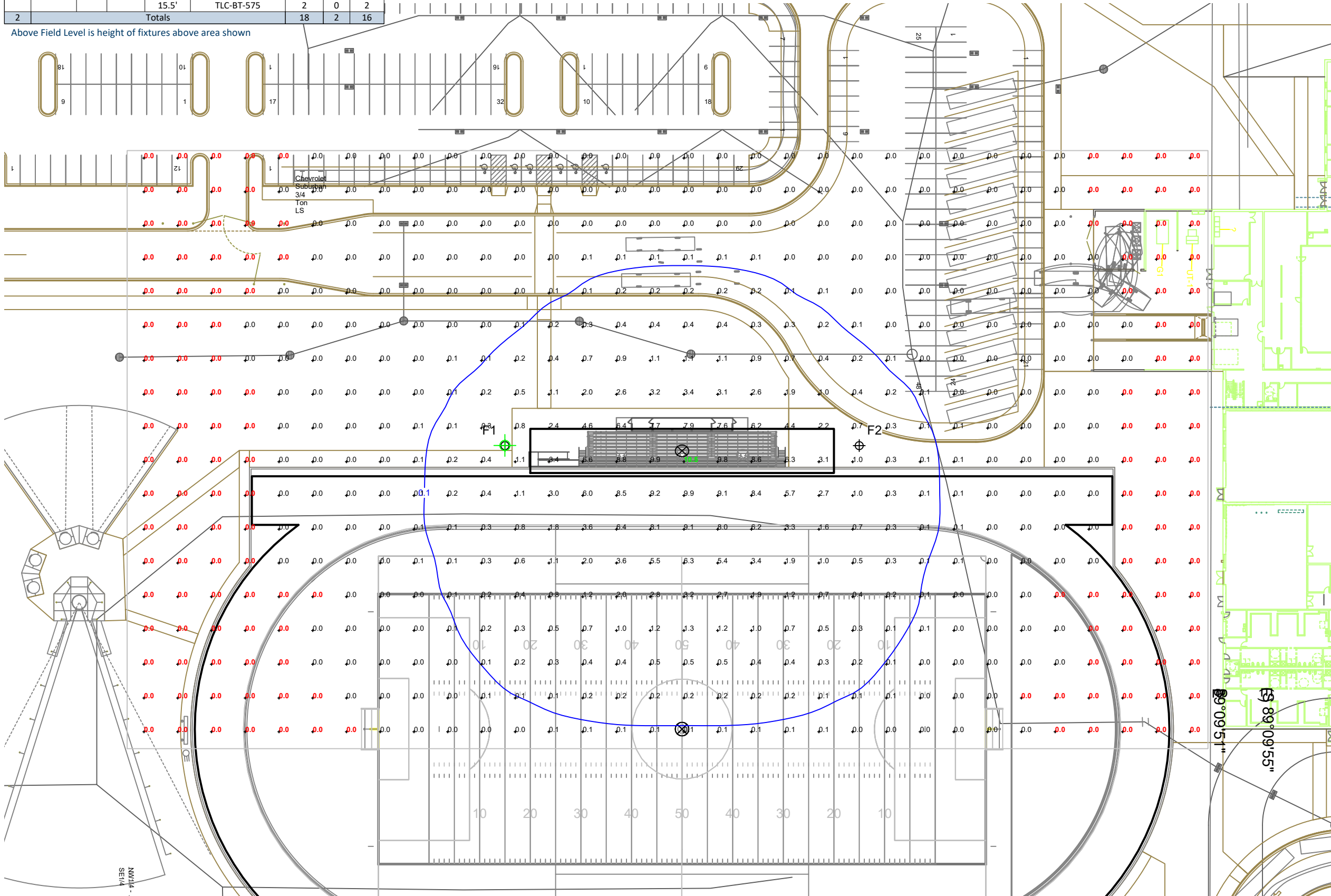
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## ILLUMINATION SUMMARY



Equipment List For Areas Shown							
Structure				Fixtures			
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID
2	F1-F2	80'	-	80'	TLC-LED-1200	2	0
				80'	TLC-LED-1500	4	0
				80'	TLC-LED-550	1	1
				15.5'	TLC-BT-575	2	0
2	Totals					18	2

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 60  
0' 60' 120'  
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Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

## Kaukauna New Middle School

Kaukauna, WI

### Grid Summary

Name: Blanket Egress  
Spacing: 20.0' x 20.0'  
Height: 3.0' above grade

### Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	0.59
Maximum:	10
Minimum:	0
Avg/Min:	-
Max/Min:	-
UG (adjacent pts):	63.67
No. of Points:	576
FIXTURE INFORMATION	
Applied Circuits:	B
No. of Fixtures:	2
Total Load:	1.05 kW

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

**Field Measurements:** Individual field measurements may vary from computer-calculated 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 driver and structures located within 3 feet (1m) of design locations.

NOTES: BLUE CONTOUR LINE REPRESENTS 0.1FC



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## ILLUMINATION SUMMARY

Kaukauna New Middle School

Kaukauna,WI

Grid Summary

Name: Track Spill @ 5ft.(4)  
Spacing: 30.0'  
Height: 5.0' above grade

Illumination Summary

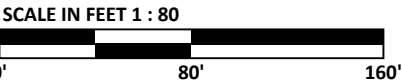
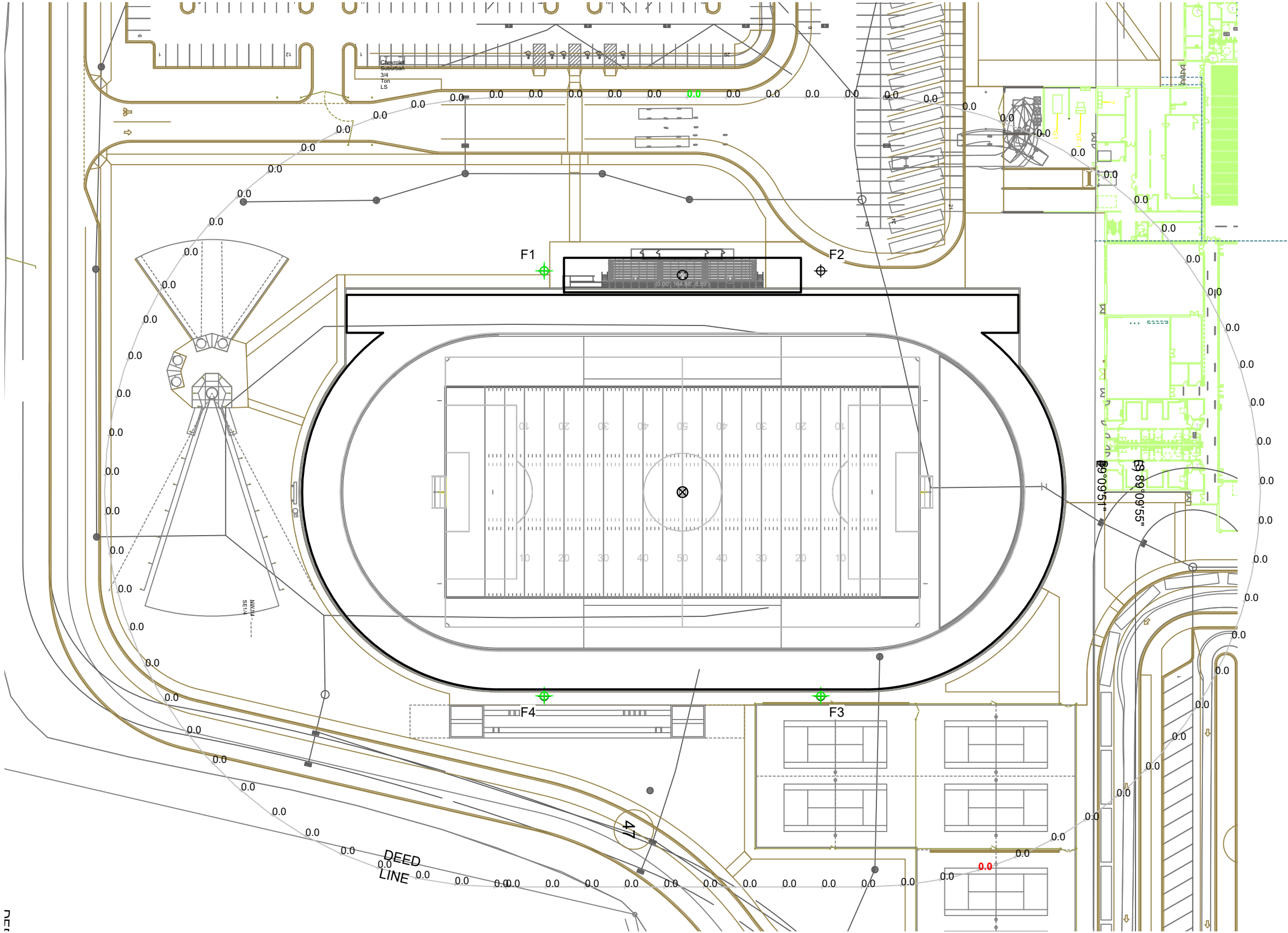
INITIAL HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	0.0127
Maximum:	0.04
Minimum:	0.00
No. of Points:	82
FIXTURE INFORMATION	
Applied Circuits:	A,B
No. of Fixtures:	34
Total Load:	37.33 kW

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

**Field Measurements:** Individual field measurements may vary from computer-calculated 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 driver and structures located within 3 feet (1m) of design locations.



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



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ILLUMINATION SUMMARY



Kaukauna New Middle School

Kaukauna, WI

Grid Summary

Name: Track Spill @ 5ft.(5)  
Spacing: 30.0'  
Height: 5.0' above grade

Illumination Summary

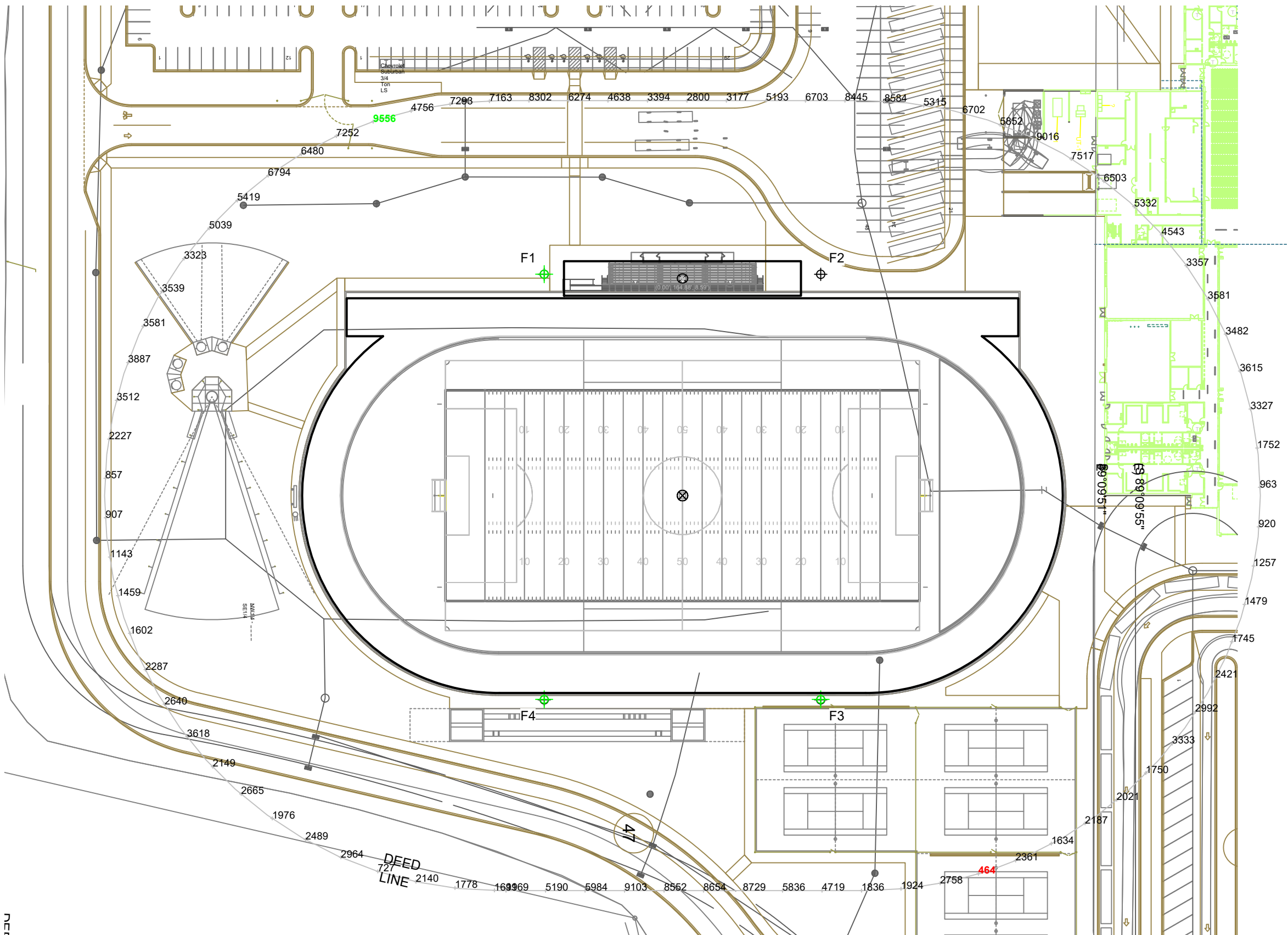
INITIAL CANDELA (PER FIXTURE)	
Entire Grid	
Scan Average:	4037.7500
Maximum:	9555.83
Minimum:	464.30
No. of Points:	82
FIXTURE INFORMATION	
Applied Circuits:	A,B
No. of Fixtures:	34
Total Load:	37.33 kW

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

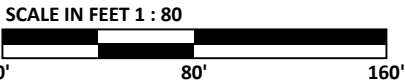
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions.

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



NET



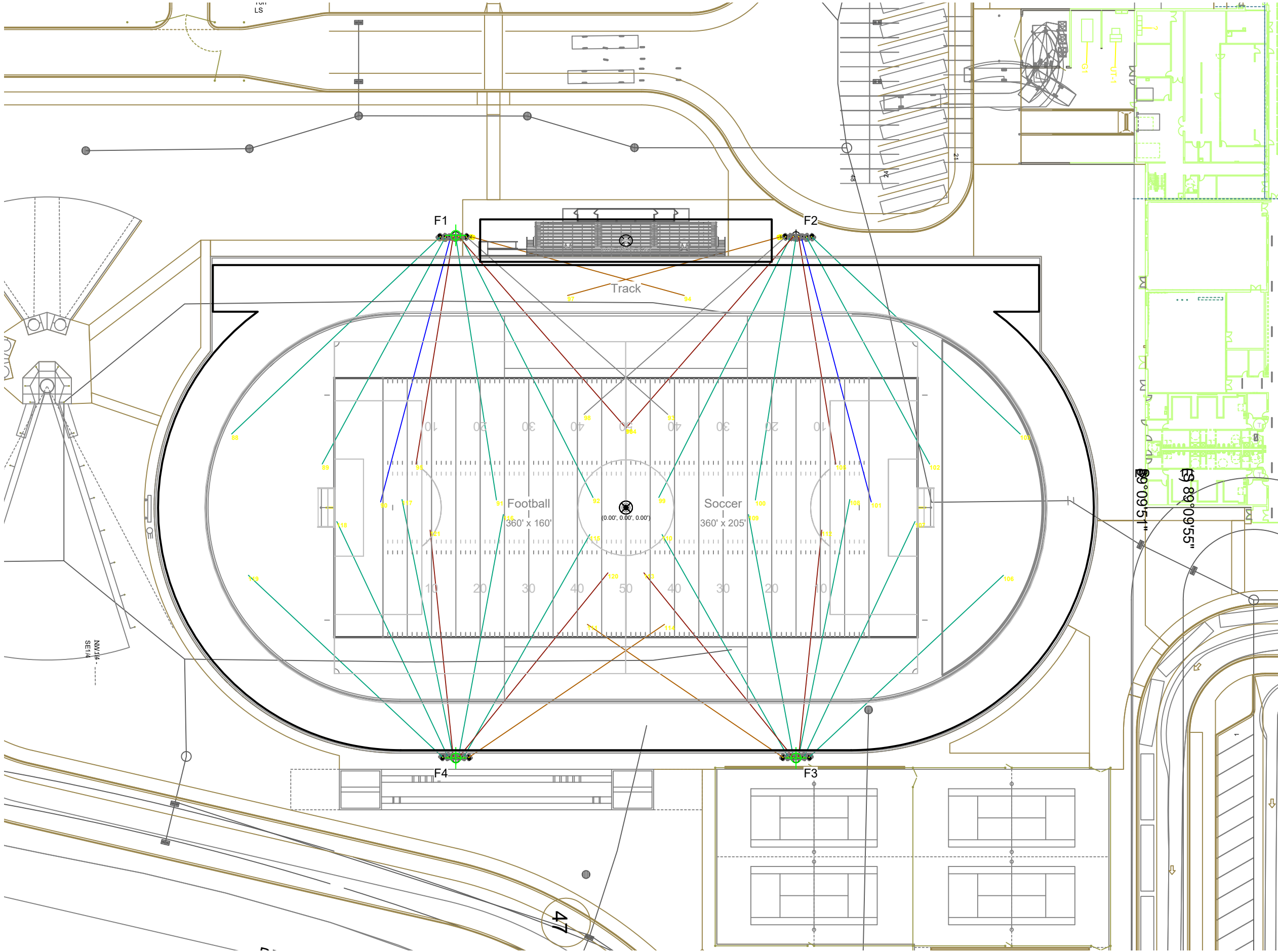
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Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



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ILLUMINATION SUMMARY



Kaukauna New Middle School

Kaukauna,WI

Equipment Layout

INCLUDES:

- Bleacher Egress
- Football
- Soccer
- Track

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

Structure				Fixtures		
QTY	STRUCTURE ID	SIZE	GLOBAL ELEVATION	ABOVE GLOBAL LEVEL	FIXTURE TYPE	QTY/POLE
2	F1-F2	80'	-	80'	TLC-LED-1200	2
				80'	TLC-LED-1500	4
				80'	TLC-LED-550	1
				15.5'	TLC-BT-575	2
2	F3-F4	70'	-	70'	TLC-LED-1200	2
				70'	TLC-LED-1500	4
				15.5'	TLC-BT-575	2
4	Totals					34

Above Global Level is height of fixtures above design (0,0,0)

Single Fixture Amperage Draw Chart

Driver Specifications (.90 min power factor)	Line Amperage Per Fixture (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
Single Phase Voltage							
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-550	3.2	3.0	2.8	2.4	1.9	1.8	1.4

\*Amp draw based on 100% fixture output, consult design specific datasheet for adjusted amperage draw chart



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