

# Appendix E    Lighting Plans for San Bernardino High School

## Appendix

*This page intentionally left blank.*

# San Bernardino High School Athletic Fields

San Bernardino, CA

## Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	80'	80'	4	TLC-LED-1200	4.68 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
A3-A4	70'	70'	1	TLC-LED-1200	1.17 kW	D
		70'	2	TLC-LED-900	1.78 kW	D
		16'	1	TLC-BT-575	0.58 kW	D
B1-B2	90'	90'	8	TLC-LED-1500	11.44 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
B3-B4	70'	70'	5	TLC-LED-1500	7.15 kW	D
		70'	3	TLC-LED-1500	4.29 kW	I
		16'	2	TLC-BT-575	1.15 kW	D
C1-C2, D1-D2	80'	80'	4	TLC-LED-1500	5.72 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
P1-P4	60'	60'	1	TLC-LED-1200	1.17 kW	E
		60'	2	TLC-LED-900	1.78 kW	E
		50'	1	TLC-LED-600	0.58 kW	F
T1	60'	60'	3	TLC-LED-1200	3.51 kW	G
T2	60'	60'	3	TLC-LED-1200	3.51 kW	G
		60'	2	TLC-LED-1200	2.34 kW	H
		60'	1	TLC-LED-900	0.89 kW	H
T3	60'	60'	2	TLC-LED-1200	2.34 kW	H
		60'	1	TLC-LED-900	0.89 kW	H
T4	60'	60'	3	TLC-LED-1200	3.51 kW	H
T5	70'	70'	4	TLC-LED-1200	4.68 kW	G
		70'	3	TLC-LED-1200	3.51 kW	H
T6	70'	70'	3	TLC-LED-1200	3.51 kW	G
<b>22</b>			<b>117</b>		<b>134.76 kW</b>	

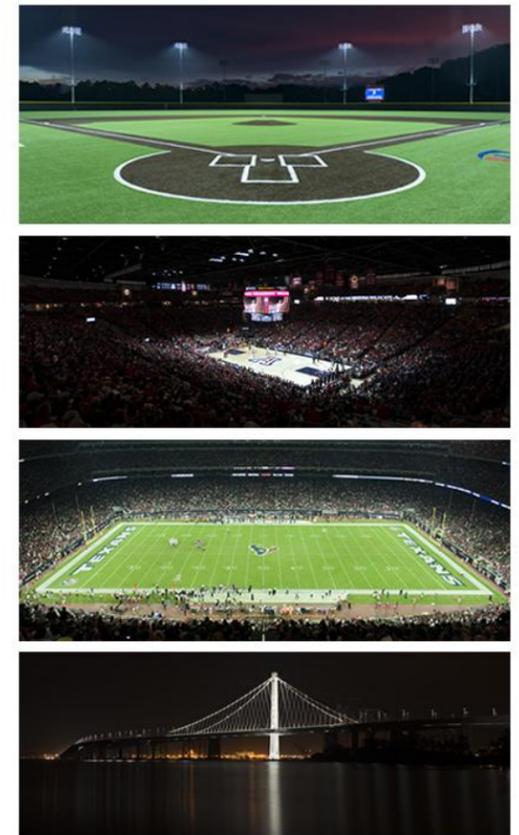
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Varsity Baseball	59.72 kW	48
D	Varsity SB	23.65 kW	22
E	Pool	11.8 kW	12
F	Pool Egress	2.32 kW	4
G	Tennis 1-4	15.21 kW	13
H	Tennis 5-8	13.48 kW	12
I	Soccer Practice	8.58 kW	6

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	37
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	48
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	14
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	14
TLC-LED-600	LED 5700K - 75 CRI	580W	65,600	>120,000	>120,000	>120,000	4

## Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Diving Pool	Horizontal	58.7	46	67	1.43	1.28	E	12
East Spill	Horizontal	0.09	0	0.38	1162.81		A,B,C,D,E, F,G,H	111
East Spill	Max Candela (by Fixture)	8661	1007	18889	18.77	8.60	A,B,C,D,E, F,G,H	111
East Spill	Max Vertical Illuminance Metric	0.22	0	0.86	185.39		A,B,C,D,E, F,G,H	111

## From Hometown to Professional



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

# San Bernardino High School Athletic Fields

San Bernardino, CA

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
North Spill	Horizontal	0.15	0	0.74	0.00		A,B,C,D,E, F,G,H	111
North Spill	Max Candela (by Fixture)	8602	65.1	25239	387.50	132.07	A,B,C,D,E, F,G,H	111
North Spill	Max Vertical Illuminance Metric	0.28	0	1.23	7775.62		A,B,C,D,E, F,G,H	111
Pool Deck	Horizontal	40.1	15	67	4.47	2.67	E	12
Pool Egress	Horizontal	7.76	3	14	4.71	2.59	F	4
Soccer Practice	Horizontal Illuminance	9.83	2	30	16.87	4.92	I	6
Swimming Pool	Horizontal	55	38	68	1.76	1.45	E	12
Tennis 1-4	Horizontal Illuminance	53.3	35	64	1.81	1.52	G	13
Tennis 5-8	Horizontal Illuminance	50.5	34	63	1.84	1.48	H	12
VBB 3rd Base Bullpen	Horizontal	20.8	15	27	1.82	1.39	A	48
Varsity Baseball (Infield)	Horizontal Illuminance	50.9	42	60	1.42	1.21	A	48
Varsity Baseball (Outfield)	Horizontal Illuminance	33.4	21	49	2.39	1.59	A	48
Varsity Softball (Infield)	Horizontal Illuminance	55.7	45	68	1.50	1.24	C,D	22
Varsity Softball (Outfield)	Horizontal Illuminance	33.1	19	46	2.45	1.74	C,D	22

## From Hometown to Professional



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN							
Pole			Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID / OTHER GRIDS
2	A1-A2	80'	-	15.5'	TLC-BT-575	1	1 0
				80'	TLC-LED-1200	4	4 0
2	B1-B2	90'	-	15.5'	TLC-BT-575	1	1 0
				90'	TLC-LED-1500	8	8 0
4	C1-C2	80'	-	80'	TLC-LED-1500	4	4 0
	D1-D2			15.5'	TLC-BT-575	1	1 0
8	TOTALS					48	48 0

GRID SUMMARY	
Name:	Varsity Baseball
Size:	Irregular 328' / 408' / 325'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

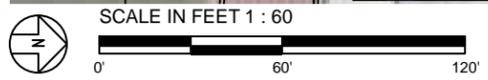
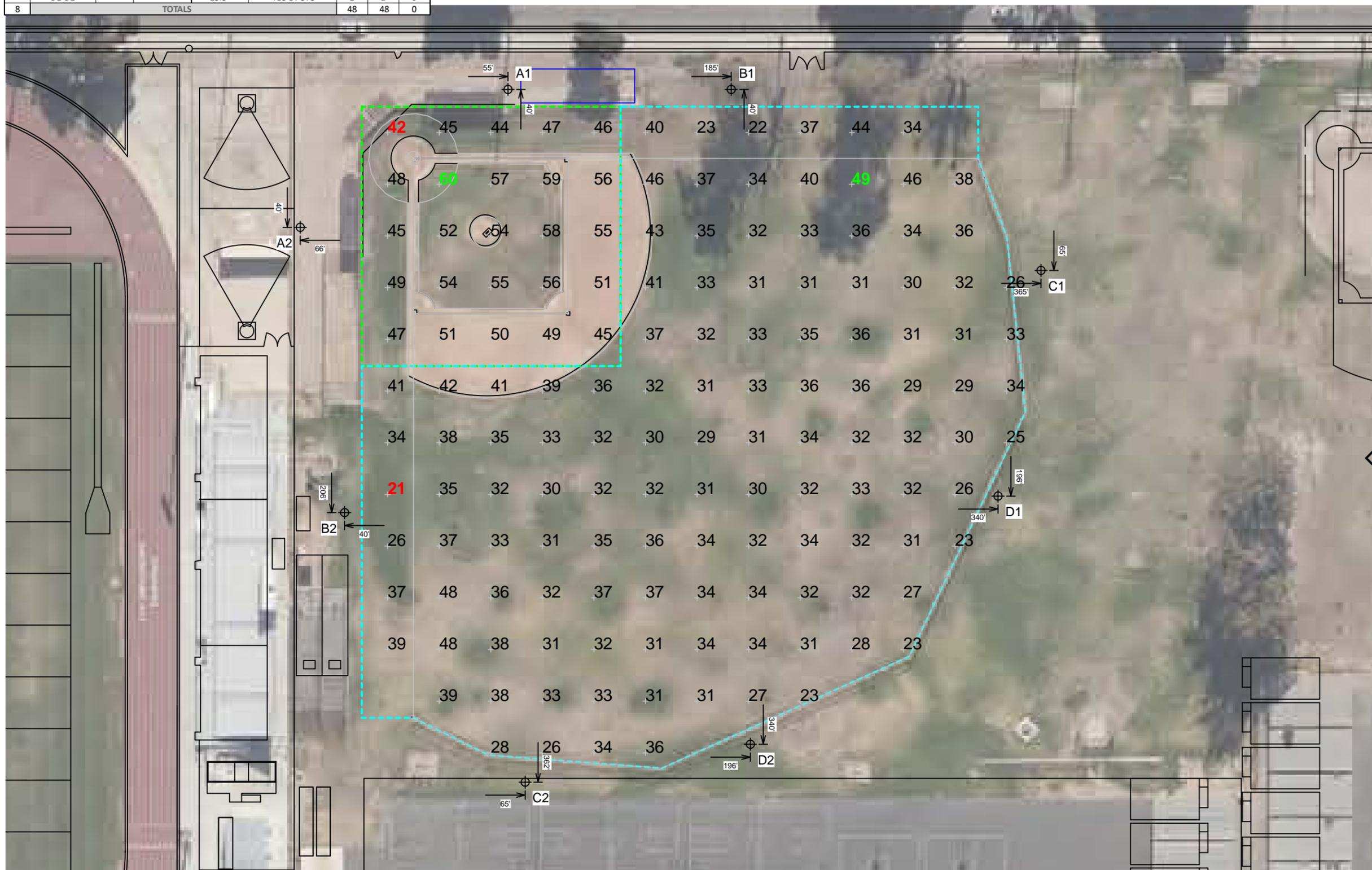
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	50.90	33.43
Maximum:	60	49
Minimum:	42	21
Avg / Min:	1.22	1.63
Guaranteed Max / Min:	2	2.5
Max / Min:	1.42	2.39
UG (adjacent pts):	1.31	1.73
CU:	0.75	
No. of Points:	25	120
LUMINAIRE INFORMATION		
Applied Circuits:	A	
No. of Luminaires:	48	
Total Load:	59.72 kW	

**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.



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	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	80'	-	15.5'	TLC-BT-575	1	1	0
				80'	TLC-LED-1200	4	4	0
2	B1-B2	90'	-	15.5'	TLC-BT-575	1	1	0
				90'	TLC-LED-1500	8	8	0
4	C1-C2 D1-D2	80'	-	80'	TLC-LED-1500	4	4	0
				15.5'	TLC-BT-575	1	1	0
8	TOTALS					48	48	0

GRID SUMMARY	
Name:	VBB 3rd Base Bullpen
Size:	Irregular 328' / 408' / 325'
Spacing:	10.0' x 10.0'
Height:	0.0' above grade

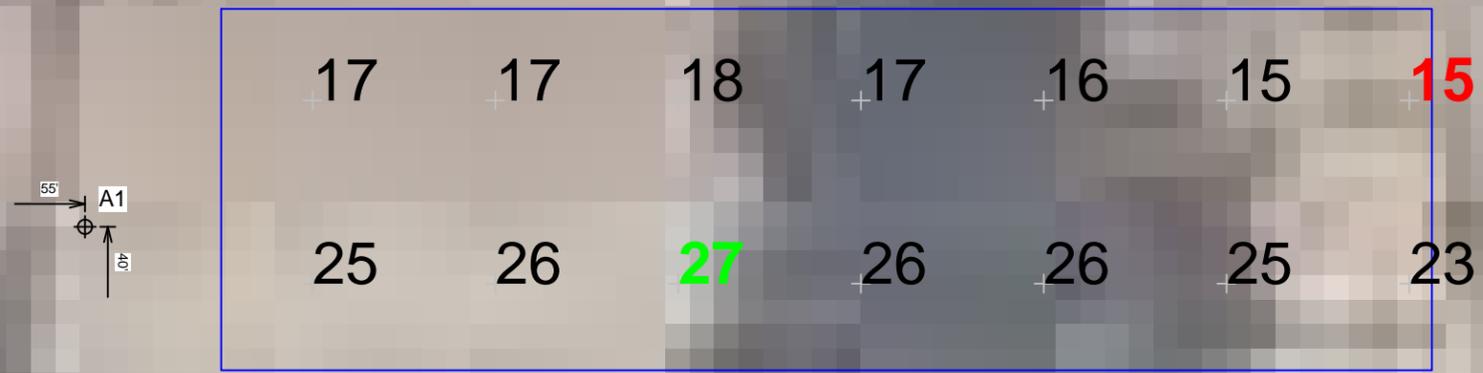
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	20.83
Maximum:	27
Minimum:	15
Avg / Min:	1.43
Max / Min:	1.82
UG (adjacent pts):	1.60
CU:	0.00
No. of Points:	14
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	48
Total Load:	59.72 kW

**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.



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



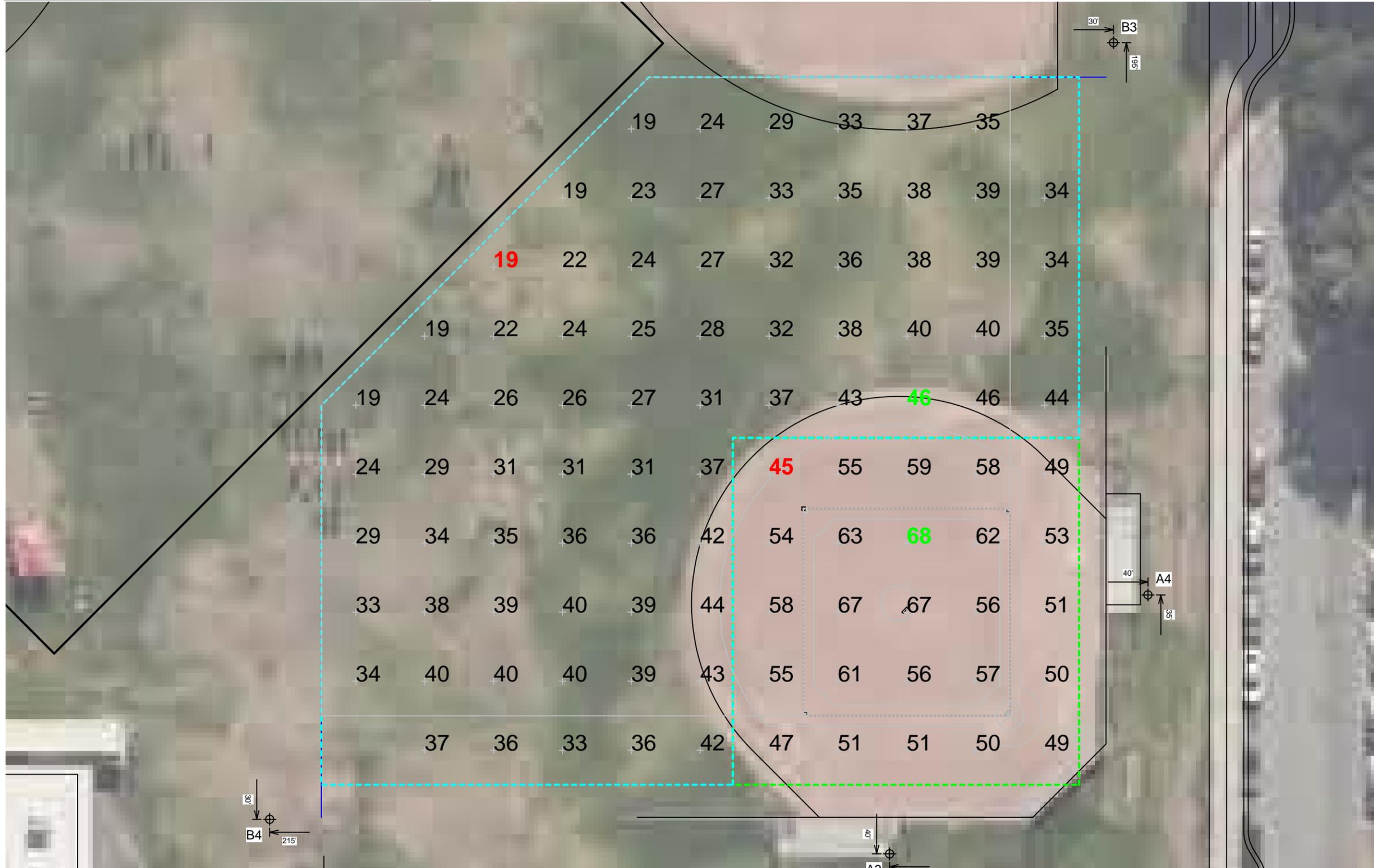
**EQUIPMENT LIST FOR AREAS SHOWN**

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A3-A4	70'	-	70'	TLC-LED-900	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	1	1	0
2	B3-B4	70'	-	70'	TLC-BT-575	2	2	0
				15.5'	TLC-LED-1500	8	5	3
				70'	TLC-LED-1500	8	5	3
4	TOTALS					28	22	6

San Bernardino High School Athletic Fields  
San Bernardino, CA

GRID SUMMARY	
Name:	Varsity Softball
Size:	Irregular 200' / 205' / 185'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
<b>Guaranteed Average:</b>	<b>50</b>	<b>30</b>
Scan Average:	55.71	33.14
Maximum:	68	46
Minimum:	45	19
Avg / Min:	1.23	1.75
<b>Guaranteed Max / Min:</b>	<b>2</b>	<b>2.5</b>
Max / Min:	1.50	2.45
UG (adjacent pts):	1.21	1.28
CU:	0.61	
No. of Points:	25	73
LUMINAIRE INFORMATION		
Applied Circuits:	C, D	
<b>No. of Luminaires:</b>	<b>22</b>	
Total Load:	23.65 kW	

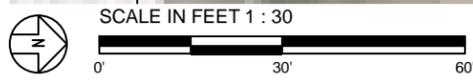


**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**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.



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	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	P1, P4	60'	-	60'	TLC-LED-1200	1	1	0
				50'	TLC-LED-600	1	0	1
				60'	TLC-LED-900	2	2	0
2	P2-P3	60'	-	60'	TLC-LED-1200	1	1	0
				50'	TLC-LED-600	1	0	1
				60'	TLC-LED-900	2	2	0
4	TOTALS					16	12	4

GRID SUMMARY	
Name:	Diving Pool
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	0.0' above grade

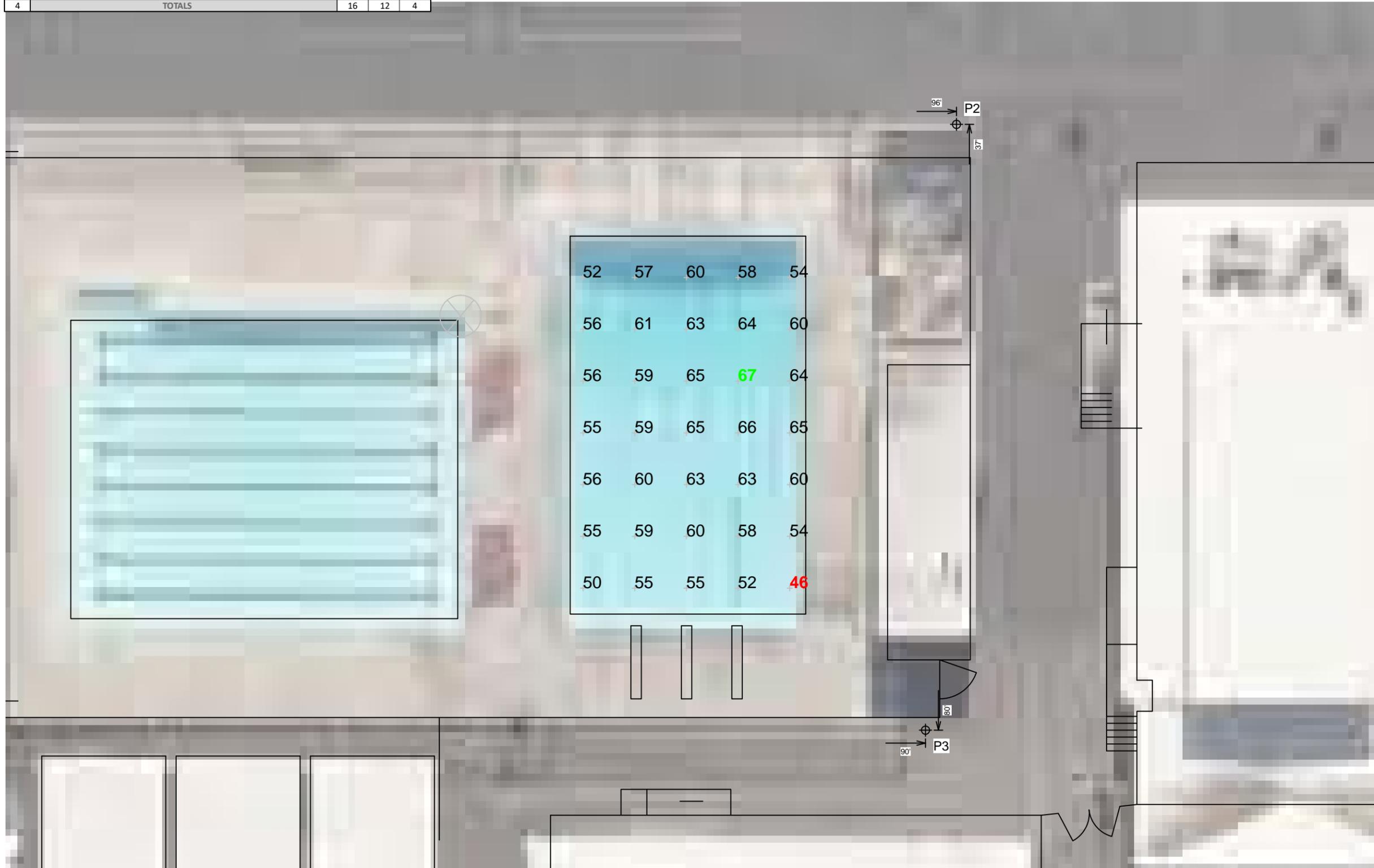
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Guaranteed Average:	50
Scan Average:	58.66
Maximum:	67
Minimum:	46
Avg / Min:	1.26
Guaranteed Max / Min:	2
Max / Min:	1.43
UG (adjacent pts):	1.16
CU:	0.17
No. of Points:	35
LUMINAIRE INFORMATION	
Applied Circuits:	E
No. of Luminaires:	12
Total Load:	11.8 kW

**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.



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	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	P1, P4	60'	-	60'	TLC-LED-1200	1	1	0
				50'	TLC-LED-600	1	0	1
				60'	TLC-LED-900	2	2	0
2	P2-P3	60'	-	60'	TLC-LED-1200	1	1	0
				50'	TLC-LED-600	1	0	1
				60'	TLC-LED-900	2	2	0
4	TOTALS					16	12	4

San Bernardino High School Athletic Fields  
San Bernardino, CA

GRID SUMMARY	
Name:	Swimming Pool
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	0.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	54.97
Maximum:	68
Minimum:	38
Avg / Min:	1.43
Max / Min:	1.76
UG (adjacent pts):	1.22
CU:	0.19
No. of Points:	42
LUMINAIRE INFORMATION	
Applied Circuits:	E
No. of Luminaires:	12
Total Load:	11.8 kW

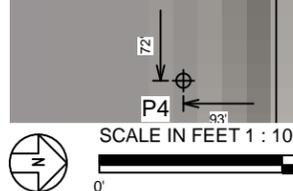


**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**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.



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	P1, P4	60'	-	60'	TLC-LED-1200	1	1	0
				50'	TLC-LED-600	1	0	1
				60'	TLC-LED-900	2	2	0
2	P2-P3	60'	-	60'	TLC-LED-1200	1	1	0
				50'	TLC-LED-600	1	0	1
				60'	TLC-LED-900	2	2	0
4	TOTALS					16	12	4

GRID SUMMARY	
Name:	Pool Deck
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	40.06
Maximum:	67
Minimum:	15
Avg / Min:	2.68
Max / Min:	4.47
UG (adjacent pts):	1.49
CU:	0.40
No. of Points:	122
LUMINAIRE INFORMATION	
Applied Circuits:	E
No. of Luminaires:	12
Total Load:	11.8 kW



**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.



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

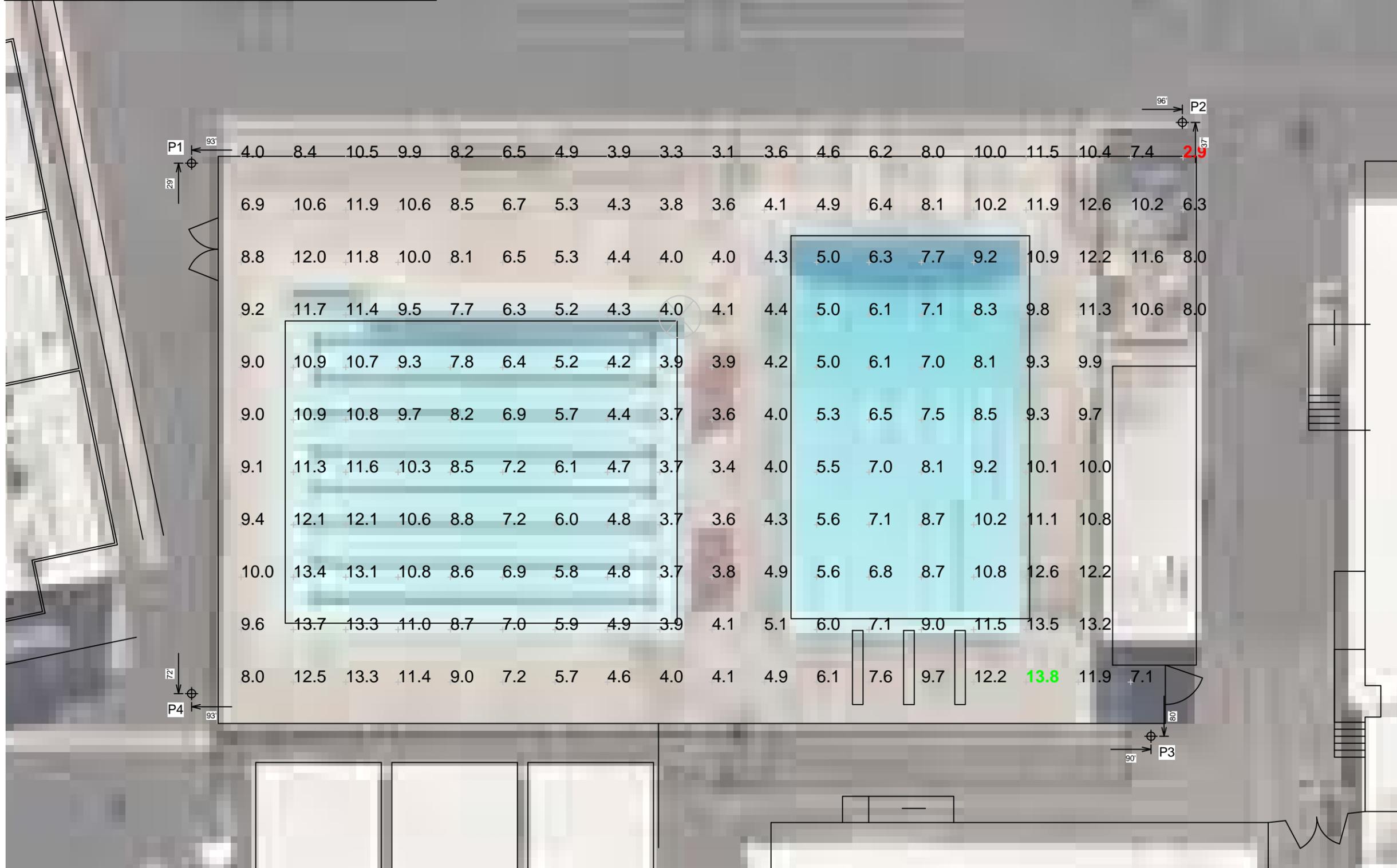


EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	P1, P4	60'	-	60'	TLC-LED-1200	1	0	1
				50'	TLC-LED-600	1	1	0
				60'	TLC-LED-900	2	0	2
2	P2-P3	60'	-	60'	TLC-LED-1200	1	0	1
				50'	TLC-LED-600	1	1	0
				60'	TLC-LED-900	2	0	2
4	TOTALS					16	4	12

GRID SUMMARY	
Name:	Pool Egress
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	7.76
Maximum:	14
Minimum:	3
Avg / Min:	2.65
Max / Min:	4.71
UG (adjacent pts):	2.53
CU:	0.64
No. of Points:	196
LUMINAIRE INFORMATION	
Applied Circuits:	F
No. of Luminaires:	4
Total Load:	2.32 kW



**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**

Pole		Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	T1	60'	-	60'	TLC-LED-1200	3	3	0
1	T2	60'	-	60'	TLC-LED-900	1	0	1
				60'	TLC-LED-1200	5	3	2
1	T5	70'	-	70'	TLC-LED-1200	7	4	3
1	T6	70'	-	70'	TLC-LED-1200	3	3	0
4	TOTALS					19	13	6

GRID SUMMARY	
Name:	Tennis 1-4
Size:	4 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	53.32
Maximum:	64
Minimum:	35
Avg / Min:	1.51
Guaranteed Max / Min:	2
Max / Min:	1.81
UG (adjacent pts):	0.00
CU:	0.75
No. of Points:	60
LUMINAIRE INFORMATION	
Applied Circuits:	G
No. of Luminaires:	13
Total Load:	15.21 kW



**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.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

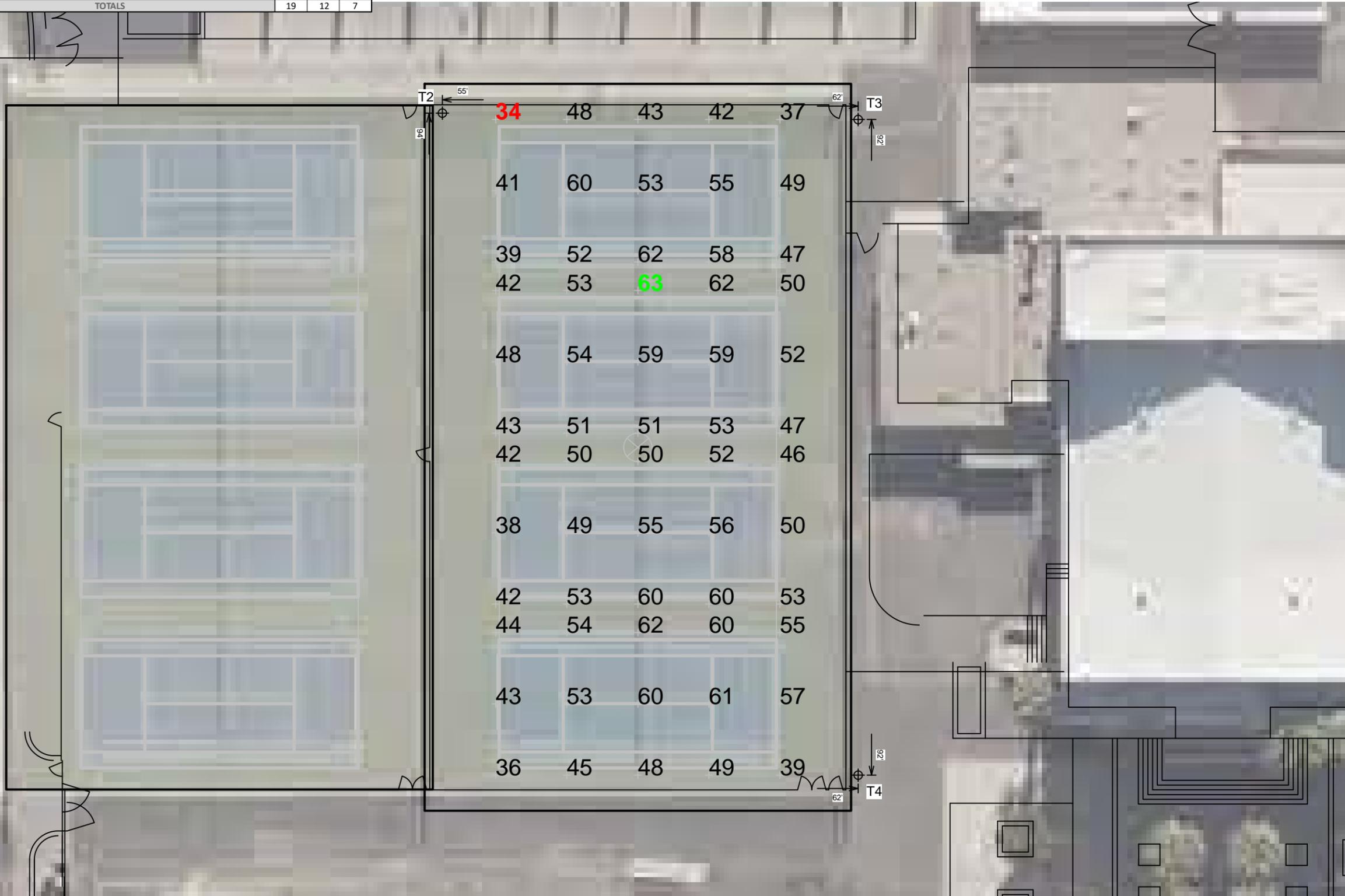
**EQUIPMENT LIST FOR AREAS SHOWN**

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	T2	60'	0'	60'	TLC-LED-900	1	1	0
				60'	TLC-LED-1200	5	2	3
1	T3	60'	-	60'	TLC-LED-900	1	1	0
				60'	TLC-LED-1200	2	2	0
1	T4	60'	-	60'	TLC-LED-1200	3	3	0
1	T5	70'	0'	70'	TLC-LED-1200	7	3	4
4	TOTALS					19	12	7

San Bernardino High School Athletic Fields  
San Bernardino, CA

GRID SUMMARY	
Name:	Tennis 5-8
Size:	4 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	50.45
Maximum:	63
Minimum:	34
Avg / Min:	1.48
Guaranteed Max / Min:	2
Max / Min:	1.84
UG (adjacent pts):	0.00
CU:	0.82
No. of Points:	60
LUMINAIRE INFORMATION	
Applied Circuits:	H
No. of Luminaires:	12
Total Load:	13.48 kW



**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.



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN						
Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	B3-B4	70'	-	15.5'	TLC-BT-575	2
				70'	TLC-LED-1500	8
2	TOTALS					20
						6
						14

GRID SUMMARY	
Name:	Soccer Practice
Size:	250' x 150'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	9.83
Maximum:	30
Minimum:	2
Avg / Min:	5.52
Max / Min:	16.87
UG (adjacent pts):	2.26
CU:	0.42
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	1
No. of Luminaires:	6
Total Load:	8.58 kW



**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.



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



GRID SUMMARY	
Name:	North Spill
Spacing:	30.0'
Height:	3.0' above grade

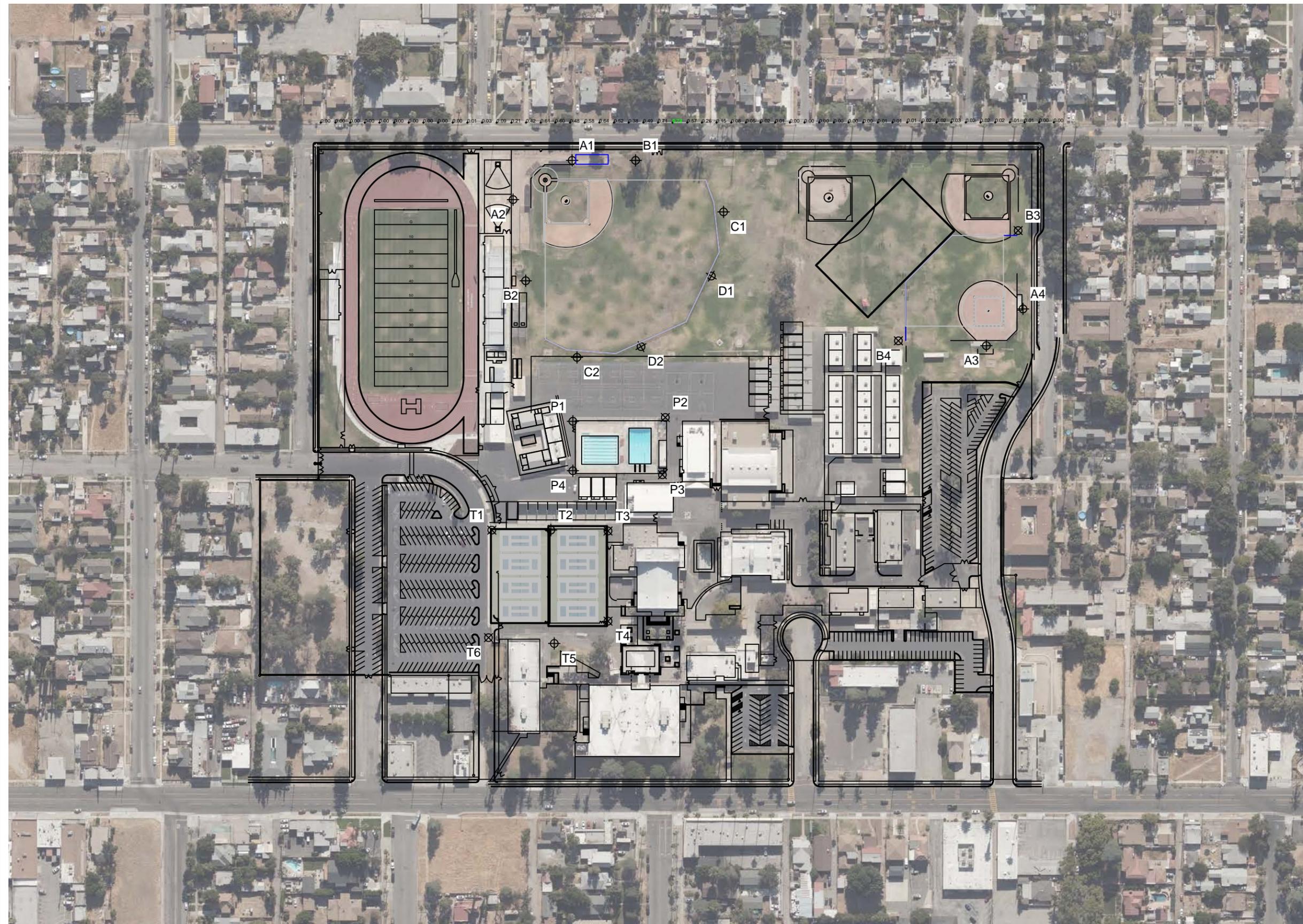
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.1539
Maximum:	0.74
Minimum:	0.00
No. of Points:	51
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H
No. of Luminaires:	111
Total Load:	126.18 kW

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

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



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

GRID SUMMARY	
Name:	North Spill
Spacing:	30.0'
Height:	3.0' above grade

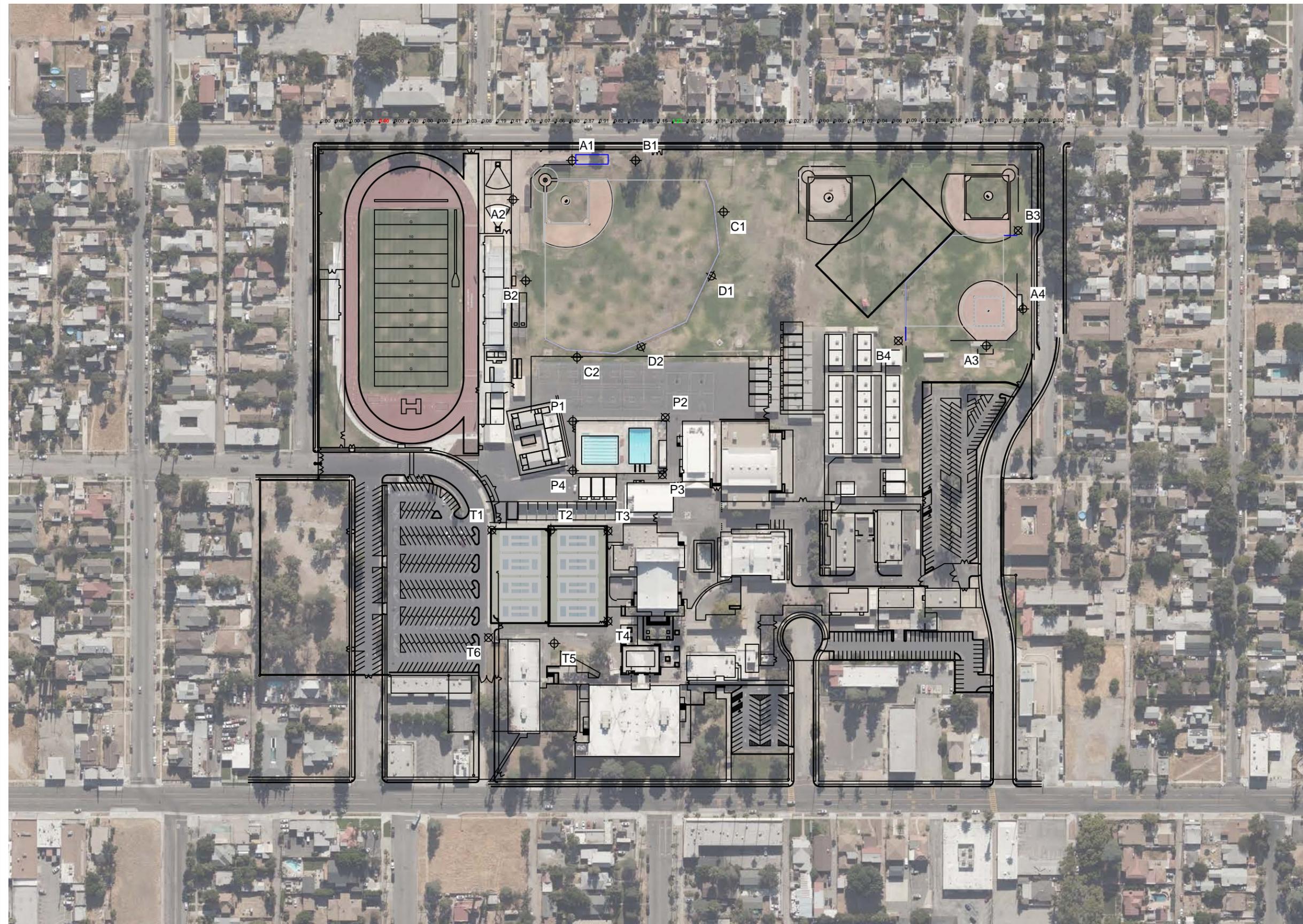
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.2848
Maximum:	1.23
Minimum:	0.00
No. of Points:	51
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H
No. of Luminaires:	111
Total Load:	126.18 kW

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

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



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



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

GRID SUMMARY	
Name:	North Spill
Spacing:	30.0'
Height:	3.0' above grade

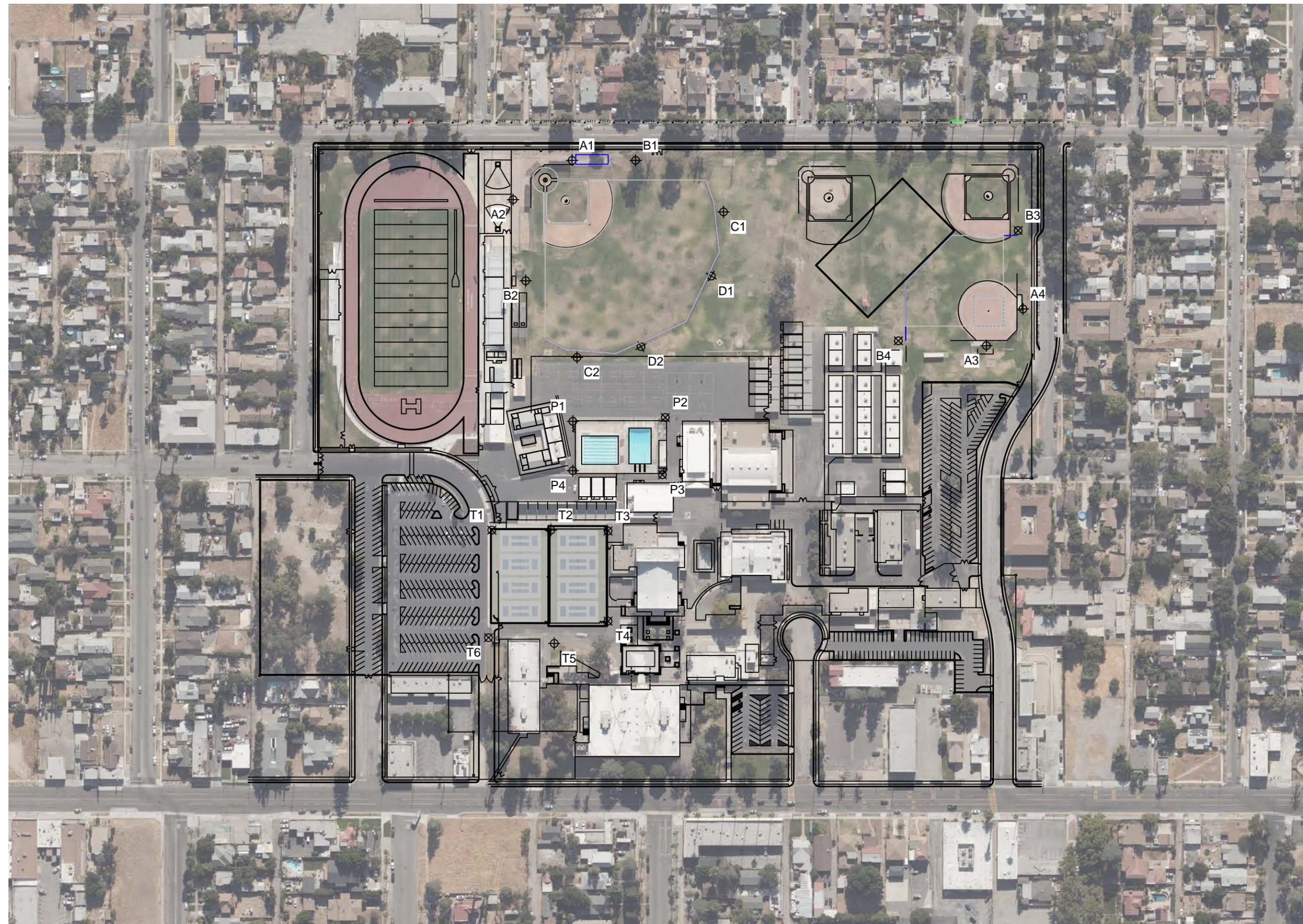
ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 8601.9717
Maximum:	25239.10
Minimum:	65.13
No. of Points:	51
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H
No. of Luminaires:	111
Total Load:	126.18 kW

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

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



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

GRID SUMMARY	
Name:	East Spill
Spacing:	30.0'
Height:	3.0' above grade

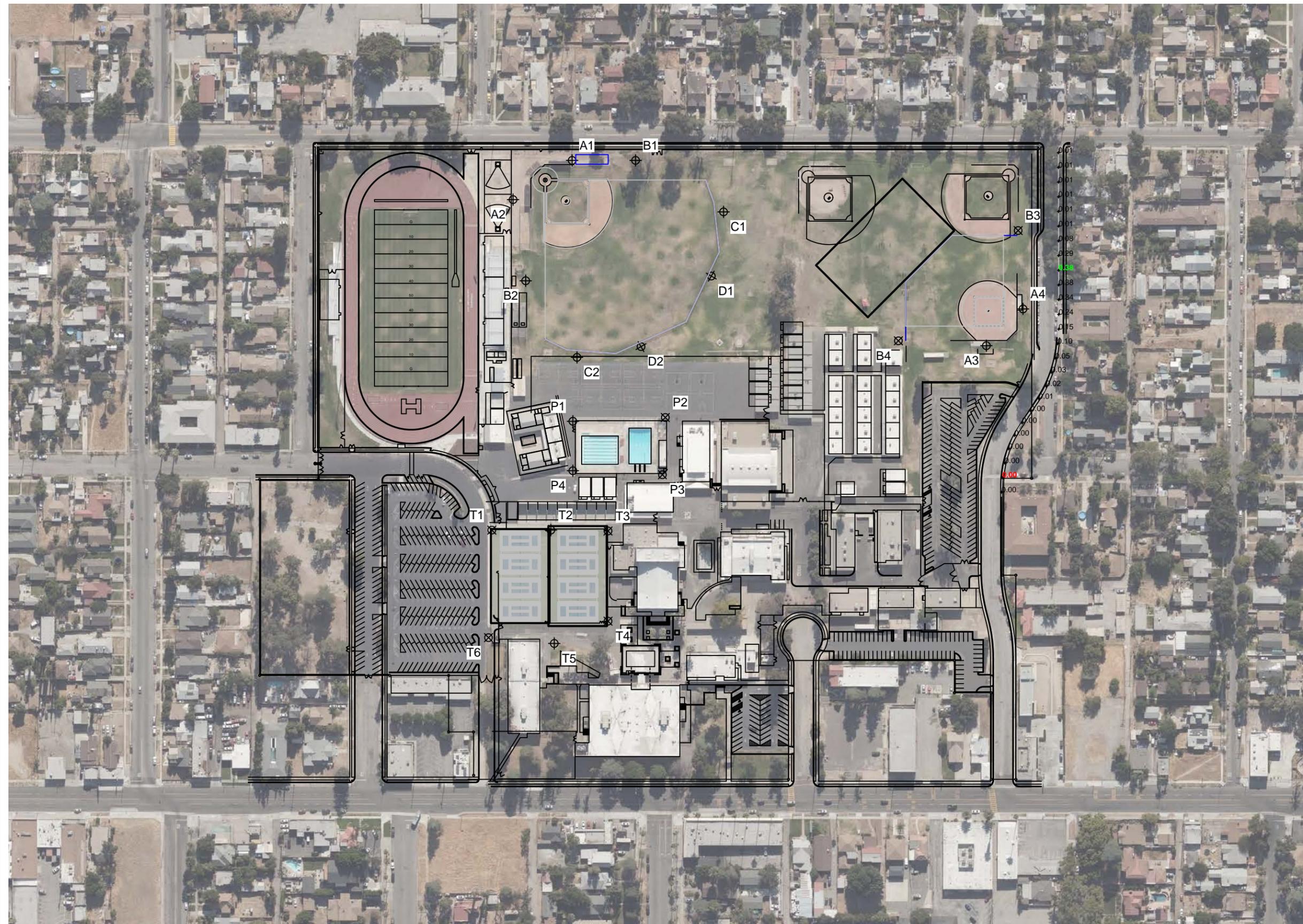
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0859
Maximum:	0.38
Minimum:	0.00
No. of Points:	25
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H
No. of Luminaires:	111
Total Load:	126.18 kW

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

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



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

GRID SUMMARY	
Name:	East Spill
Spacing:	30.0'
Height:	3.0' above grade

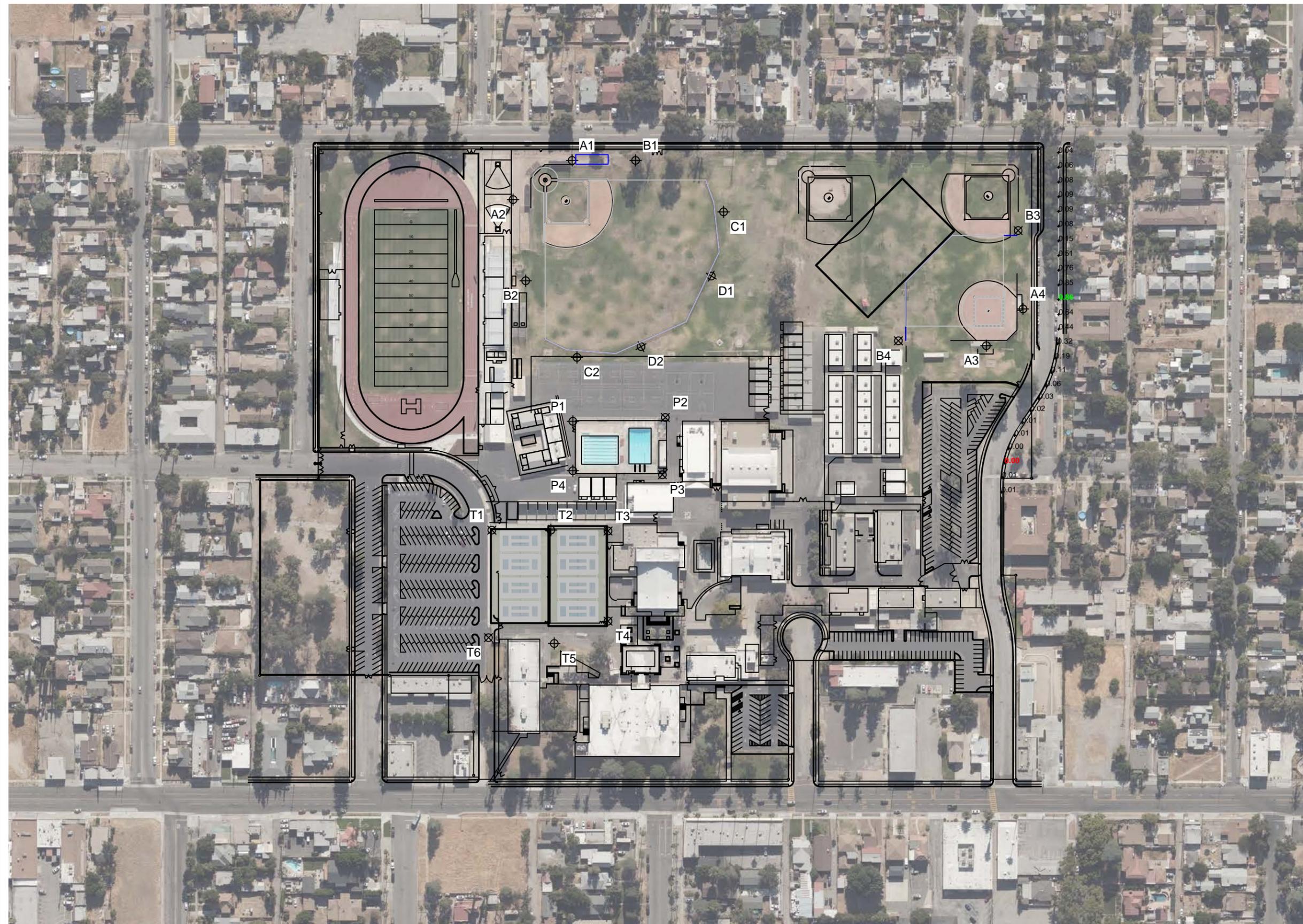
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.2164
Maximum:	0.86
Minimum:	0.00
No. of Points:	25
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H
No. of Luminaires:	111
Total Load:	126.18 kW

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

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



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**



GRID SUMMARY	
Name:	East Spill
Spacing:	30.0'
Height:	3.0' above grade

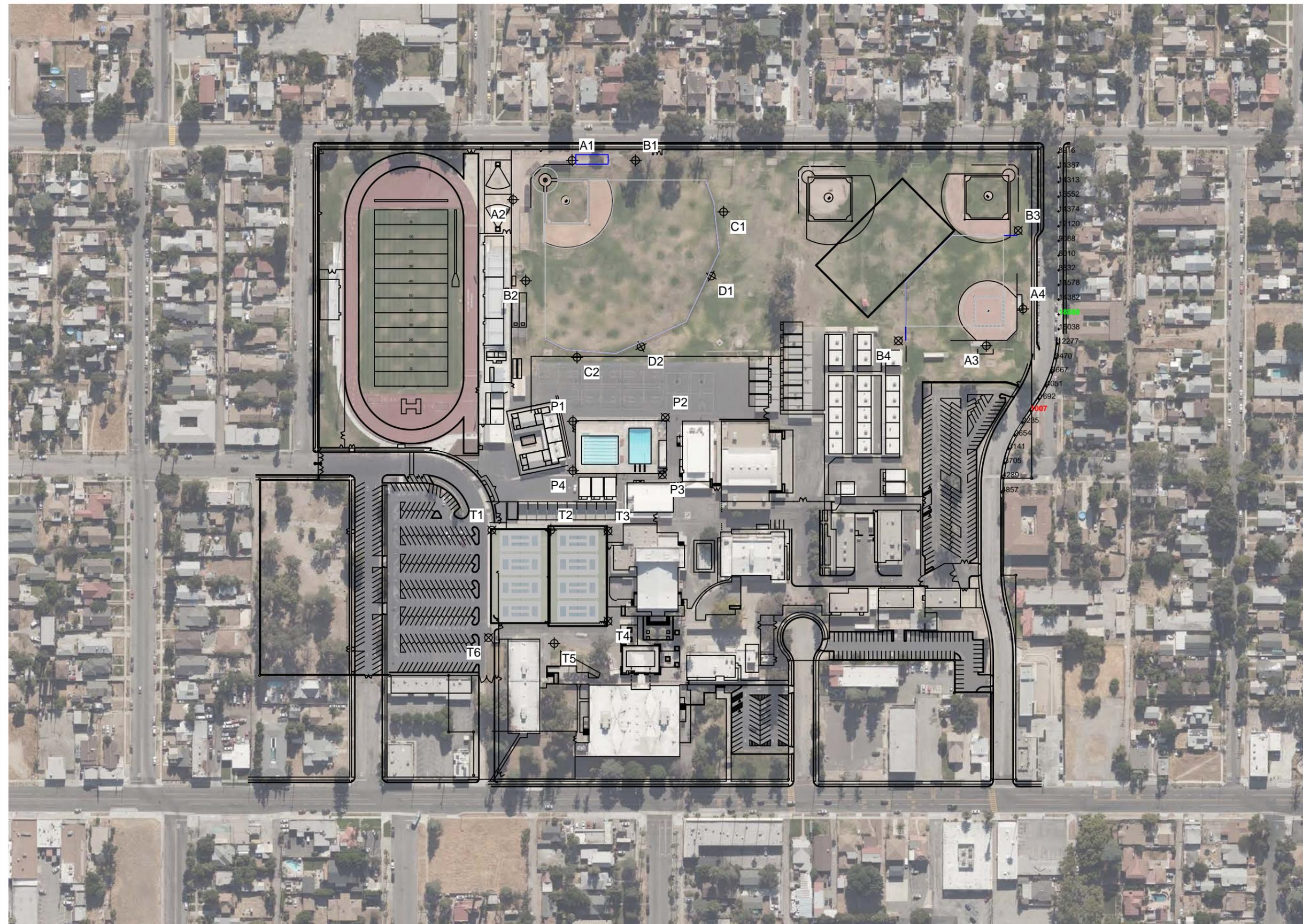
ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 8660.9854
Maximum:	18888.50
Minimum:	1006.51
No. of Points:	25
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H
No. of Luminaires:	111
Total Load:	126.18 kW

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

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



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



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2021 Musco Sports Lighting, LLC.