

## Appendix B Lighting Plans for Cajon High School

## Appendix

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# Cajon High School Athletic Playfields

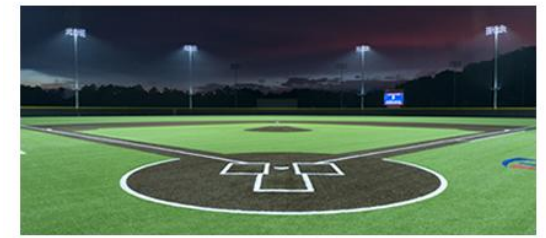
San Bernardino, CA

## Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2, D2	70'	70'	4	TLC-LED-1200	4.68 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
A3-A4	70'	70'	3	TLC-LED-1200	3.51 kW	C
		70'	1	TLC-LED-1500	1.43 kW	C
		16'	1	TLC-BT-575	0.58 kW	C
A5-A6	70'	70'	4	TLC-LED-1200	4.68 kW	D
		16'	1	TLC-BT-575	0.58 kW	D
A7	70'	70'	1	TLC-LED-1200	1.17 kW	B
		70'	2	TLC-LED-900	1.78 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
A8	70'	70'	4	TLC-LED-1200	4.68 kW	G
		70'	1	TLC-LED-1200	1.17 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
		70'	2	TLC-LED-900	1.78 kW	B
B1-B2	80'	80'	1	TLC-LED-1200	1.17 kW	A
		80'	7	TLC-LED-1500	10.01 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
B3	80'	80'	6	TLC-LED-1500	8.58 kW	C
		16'	3	TLC-BT-575	1.73 kW	C
B4	80'	80'	2	TLC-LED-1200	2.34 kW	A
		80'	5	TLC-LED-1500	7.15 kW	C
		16'	1	TLC-BT-575	0.58 kW	A
		16'	2	TLC-BT-575	1.15 kW	C
B5-B6	70'	70'	4	TLC-LED-1500	5.72 kW	B
		16'	2	TLC-BT-575	1.15 kW	B
C2	70'	70'	4	TLC-LED-1200	4.68 kW	A
		70'	1	TLC-LED-900	0.89 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
D1	70'	70'	7	TLC-LED-1500	10.01 kW	C
		16'	1	TLC-BT-575	0.58 kW	A
		70'	4	TLC-LED-1200	4.68 kW	A
		70'	1	TLC-LED-400	0.40 kW	C
		16'	3	TLC-BT-575	1.73 kW	C
P1-P4	60'	60'	3	TLC-LED-900	2.67 kW	H
		40'	1	TLC-LED-400	0.40 kW	I
T1-T2	60'	60'	4	TLC-LED-1200	4.68 kW	F
T3	60'	60'	4	TLC-LED-1200	4.68 kW	F
		60'	4	TLC-LED-1200	4.68 kW	G
T4	60'	60'	4	TLC-LED-1200	4.68 kW	G
T6	60'	60'	4	TLC-LED-1200	4.68 kW	G
		60'	4	TLC-LED-1200	4.68 kW	F
<b>26</b>			<b>162</b>		<b>176.38 kW</b>	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Varsity Baseball	53.59 kW	47
B	Varsity Softball	20.79 kW	20
C	JV Baseball	41.77 kW	37
D	JV Softball Infield	10.51 kW	10
F	Tennis 1-5	18.72 kW	16
G	Tennis 6-10	18.72 kW	16
H	Pool	10.68 kW	12
I	Pool Egress	1.6 kW	4

## From Hometown to Professional



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# Cajon High School Athletic Playfields

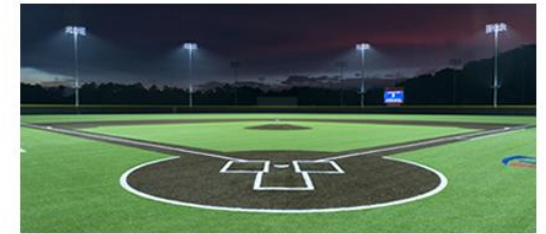
San Bernardino, CA

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	26
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	72
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	42
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	17
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>120,000	>120,000	>120,000	5

## Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
JV Baseball (Infield)	Horizontal Illuminance	51.3	44	60	1.38	1.17	C,D	47
JV Baseball (Outfield)	Horizontal Illuminance	31.9	23	48	2.09	1.39	C,D	47
JV Softball (Infield)	Horizontal Illuminance	53.4	36	68	1.89	1.48	D,C	47
JV Softball (Outfield)	Horizontal Illuminance	32.4	21	48	2.24	1.54	D,C	47
JVBB 1st Base Bullpen	Horizontal	26	17	37	2.14	1.53	C,D,E	47
Pool 1	Horizontal	59.4	45	70	1.55	1.32	H	12
Pool 2	Horizontal	61.5	46	71	1.52	1.34	H	12
Pool Deck	Horizontal	39.7	9	68	7.84	4.41	H	12
Pool Egress	Horizontal	6.32	0	14	83.32		I	4
Tennis 1-5	Horizontal Illuminance	52.3	36	67	1.87	1.45	F	16
Tennis 6-10	Horizontal Illuminance	52.1	38	72	1.91	1.37	G	16
VBB 1st Base Bullpen	Horizontal	24.8	21	29	1.36	1.18	A	47
VBB 3rd Base Bullpen	Horizontal	28	14	35	2.44	2.00	A	47
Varsity Baseball (Infield)	Horizontal Illuminance	51.1	39	59	1.50	1.31	A	47
Varsity Baseball (Outfield)	Horizontal Illuminance	30.9	21	47	2.23	1.47	A	47
Varsity Softball (Infield)	Horizontal Illuminance	50.2	42	61	1.46	1.19	B	20
Varsity Softball (Outfield)	Horizontal Illuminance	31.5	20	44	2.23	1.58	B	20

## From Hometown to Professional

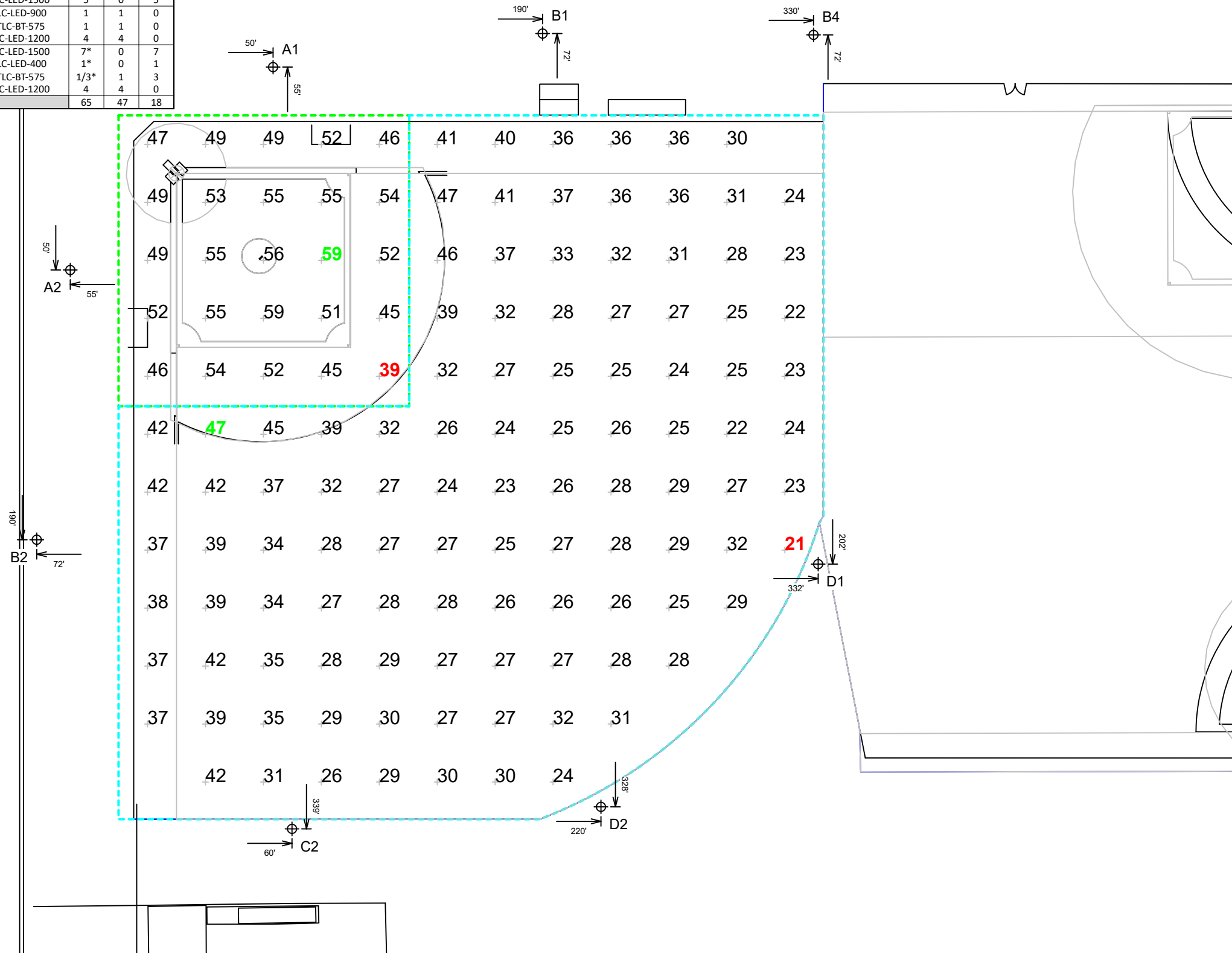


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EQUIPMENT LIST FOR AREAS SHOWN							
Pole				Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID / OTHER GRIDS
3	A1-A2, D2	70'	-	15.5'	TLC-BT-575	1	1 0
				70'	TLC-LED-1200	4	4 0
2	B1-B2	80'	-	80'	TLC-LED-1200	1	1 0
				15.5'	TLC-BT-575	1	1 0
				80'	TLC-LED-1500	7	7 0
1	B4	80'	0'	80'	TLC-LED-1200	2	2 0
				15.54'	TLC-BT-575	3	1 2
				80'	TLC-LED-1500	5	0 5
1	C2	70'	-	70'	TLC-LED-900	1	1 0
				15.5'	TLC-BT-575	1	1 0
				70'	TLC-LED-1200	4	4 0
1	D1	70'	0'	70'	TLC-LED-1500	7*	0 7
				70'	TLC-LED-400	1*	0 1
				15.5'	TLC-BT-575	1/3*	1 3
				70'	TLC-LED-1200	4	4 0
8	TOTALS					65	47 18

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



GRID SUMMARY	
Name:	Varsity Baseball
Size:	Irregular 335' / 391' / 334'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

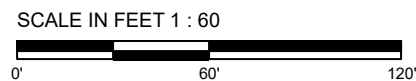
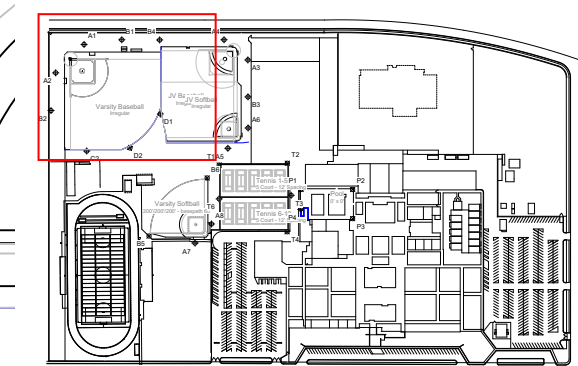
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
<b>Guaranteed Average:</b>	<b>50</b>	<b>30</b>
Scan Average:	51.10	30.92
Maximum:	59	47
Minimum:	39	21
Avg / Min:	1.30	1.47
<b>Guaranteed Max / Min:</b>	<b>2</b>	<b>2.5</b>
Max / Min:	1.50	2.23
UG (adjacent pts):	1.19	1.51
CU:	0.70	
No. of Points:	25	107
LUMINAIRE INFORMATION		
Applied Circuits:	A	
No. of Luminaires:	47	
Total Load:	53.59 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) ⊗



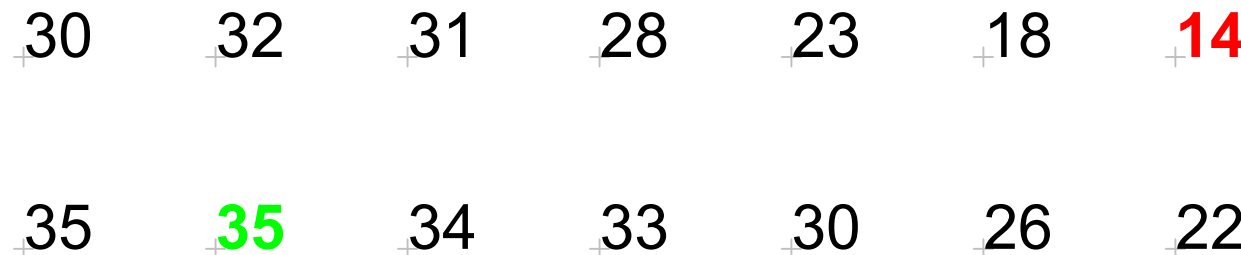
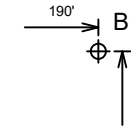
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**ILLUMINATION SUMMARY**

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
3	A1-A2, D2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	B1-B2	80'	-	80'	TLC-LED-1200	1	1	0
				15.5'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	7	7	0
1	B4	80'	0'	80'	TLC-LED-1200	2	2	0
				15.54'	TLC-BT-575	3	1	2
				80'	TLC-LED-1500	5	0	5
				70'	TLC-LED-900	1	1	0
1	C2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
				70'	TLC-LED-1500	7*	0	7
1	D1	70'	0'	70'	TLC-LED-400	1*	0	1
				15.5'	TLC-BT-575	1/3*	1	3
				70'	TLC-LED-1200	4	4	0
				TOTALS		65	47	18

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



GRID SUMMARY	
Name:	VBB 3rd Base Bullpen
Size:	Irregular 335' / 391' / 334'
Spacing:	10.0' x 10.0'
Height:	0.0' above grade

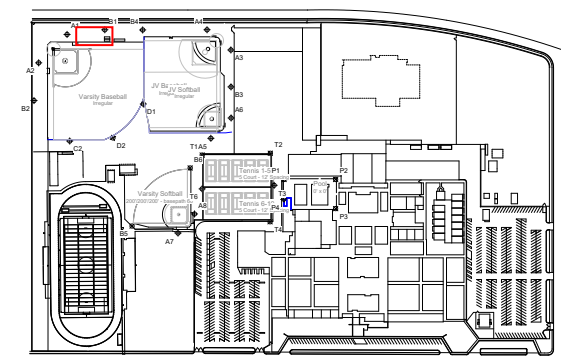
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	27.98
Maximum:	35
Minimum:	14
Avg / Min:	1.96
Max / Min:	2.44
UG (adjacent pts):	1.56
CU:	0.01
No. of Points:	14
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	47
Total Load:	53.59 kW

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

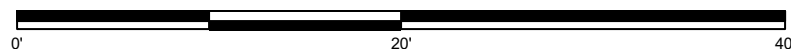
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**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.



SCALE IN FEET 1 : 10



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



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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
3	A1-A2, D2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	B1-B2	80'	-	80'	TLC-LED-1200	1	1	0
				15.5'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	7	7	0
1	B4	80'	0'	80'	TLC-LED-1200	2	2	0
				15.54'	TLC-BT-575	3	1	2
				80'	TLC-LED-1500	5	0	5
				70'	TLC-LED-900	1	1	0
1	C2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
				70'	TLC-LED-1500	7*	0	7
1	D1	70'	0'	70'	TLC-LED-400	1*	0	1
				15.5'	TLC-BT-575	1/3*	1	3
				70'	TLC-LED-1200	4	4	0
				TOTALS				65

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

22 27

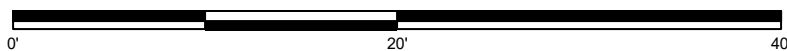
22 28

23 29

22 28

21 26

SCALE IN FEET 1 : 10



GRID SUMMARY	
Name:	VBB 1st Base Bullpen
Size:	Irregular 335' / 391' / 334'
Spacing:	10.0' x 10.0'
Height:	0.0' above grade

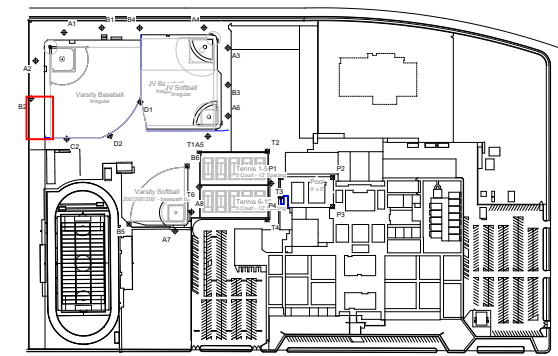
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	24.84
Maximum:	29
Minimum:	21
Avg / Min:	1.18
Max / Min:	1.36
UG (adjacent pts):	1.27
CU:	0.00
No. of Points:	10
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	47
Total Load:	53.59 kW

**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.



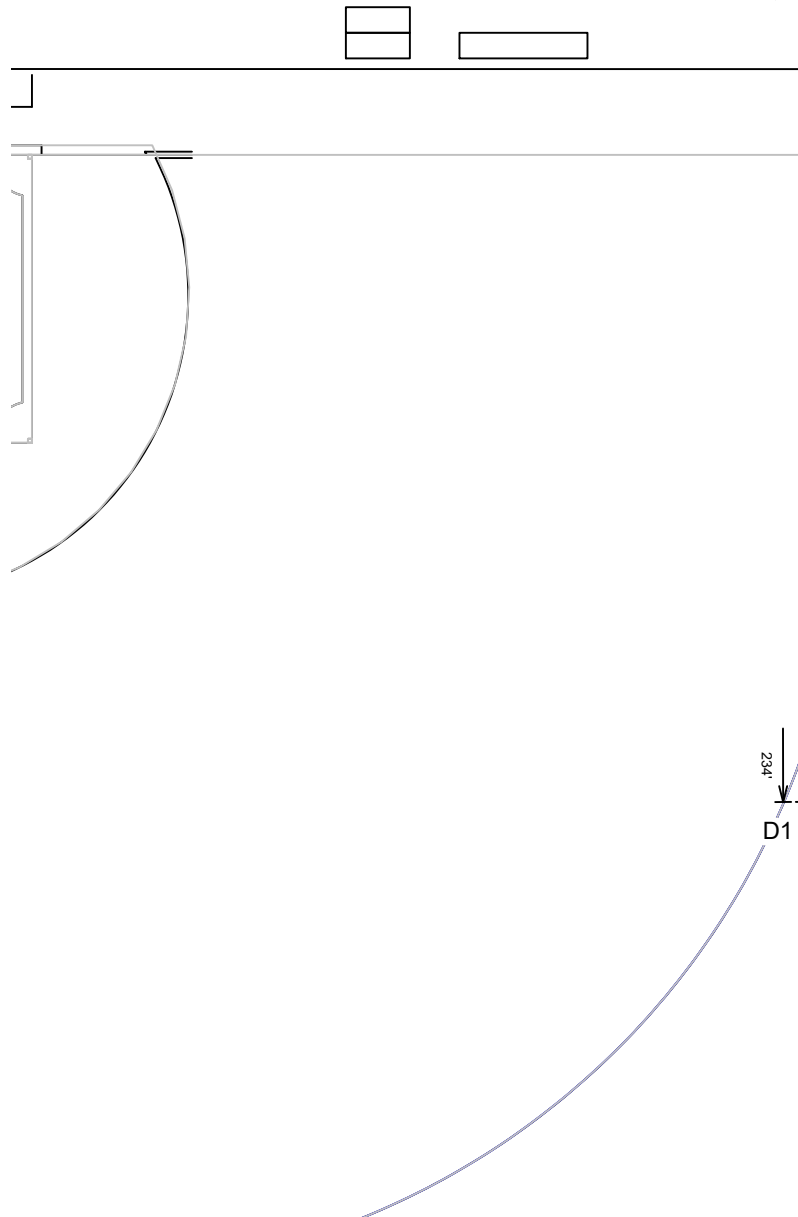
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Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



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-1500	1	1	0	
				15.5'	TLC-BT-575	1	1	0	
				70'	TLC-LED-1200	3	3	0	
1	A5	70'	0'	15.48'	TLC-BT-575	1	1	0	
				70'	TLC-LED-1200	4	4	0	
1	A6	70'	0'	15.48'	TLC-BT-575	1	1	0	
				70'	TLC-LED-1200	4	4	0	
1	B3	80'	0'	15.5'	TLC-BT-575	3	3	0	
				80'	TLC-LED-1500	6	6	0	
1	B4	80'	0'	80'	TLC-LED-1200	2	0	2	
				15.5'	TLC-BT-575	3	2	1	
				80'	TLC-LED-1500	5	5	0	
1	D1	70'	0'	70'	TLC-LED-1500	7*	7	0	
				70'	TLC-LED-400	1*	1	0	
				15.46'	TLC-BT-575	1/3*	3	1	
				70'	TLC-LED-1200	4	0	4	
7	TOTALS					55	47	8	

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



27	32	29	26	33	45	50	46	52
27	32	31	30	33	46	56	51	48
25	33	31	31	36	47	58	60	60
24	31	30	31	36	44	50	54	54
24	29	31	30	33	37	41	45	47
26	30	30	28	29	32	35	38	41
27	31	29	29	28	29	30	32	32
36	36	35	33	28	25	24	27	30
27	39	36	32	26	23	25	34	43
30	44	39	32	25	25	31	44	48
36	33	28	25	27	32	40	40	

GRID SUMMARY	
Name:	JV Baseball
Size:	Irregular 342' / 370' / 268'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

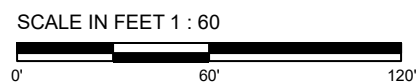
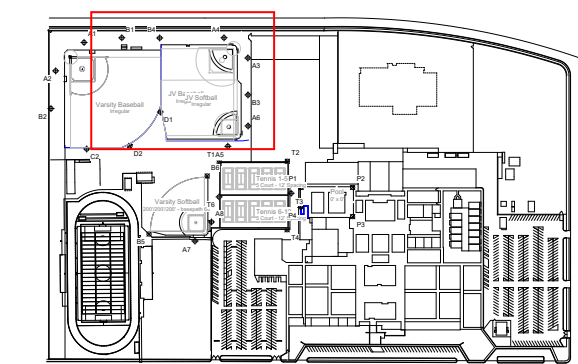
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
<b>Guaranteed Average:</b>	<b>50</b>	<b>30</b>
Scan Average:	51.28	31.91
Maximum:	60	48
Minimum:	44	23
Avg / Min:	1.18	1.39
<b>Guaranteed Max / Min:</b>	<b>2</b>	<b>2.5</b>
Max / Min:	1.38	2.09
UG (adjacent pts):	1.26	1.49
CU:	0.55	
No. of Points:	16	82
LUMINAIRE INFORMATION		
Applied Circuits:	C, D	
<b>No. of Luminaires:</b>	<b>47</b>	
Total Load:	52.28 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) ⊗



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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-1500	1	1	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	3	3	0
1	A5	70'	0'	15.48'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
				15.48'	TLC-BT-575	1	1	0
1	A6	70'	0'	70'	TLC-LED-1200	4	4	0
				15.48'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
1	B3	80'	0'	15.5'	TLC-BT-575	3	3	0
				80'	TLC-LED-1500	6	6	0
				80'	TLC-LED-1200	2	0	2
1	B4	80'	0'	15.5'	TLC-BT-575	3	2	1
				80'	TLC-LED-1500	5	5	0
				70'	TLC-LED-1500	7*	7	0
1	D1	70'	0'	70'	TLC-LED-400	1*	1	0
				15.46'	TLC-BT-575	1/3*	3	1
				70'	TLC-LED-1200	4	0	4
				70'	TLC-LED-1200	4	0	4
7	TOTALS					55	47	8

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

GRID SUMMARY	
Name:	JVBB 1st Base Bullpen
Size:	Irregular 342' / 370' / 268'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

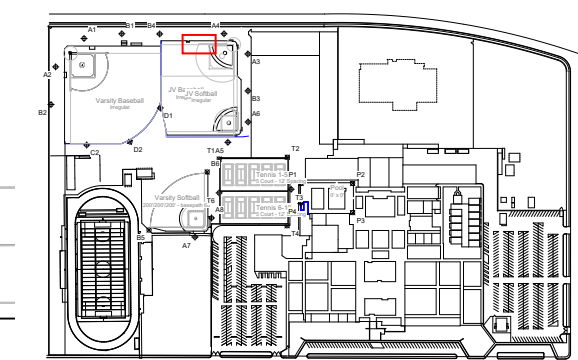
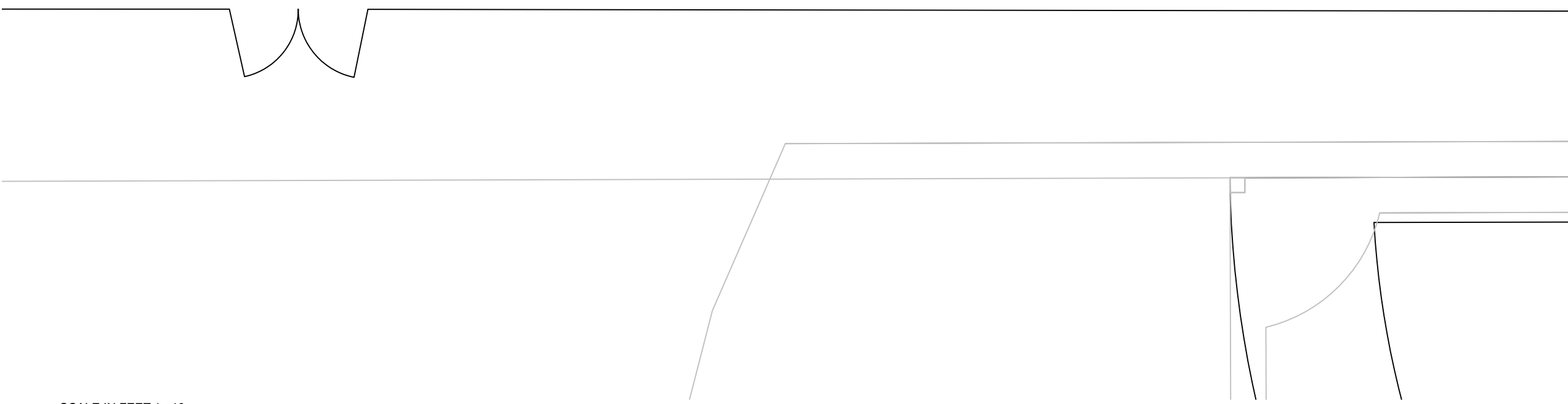
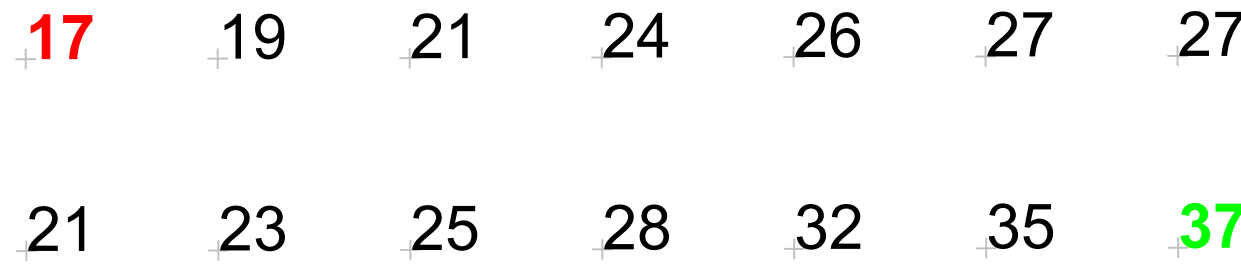
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	25.95
Maximum:	37
Minimum:	17
Avg / Min:	1.50
Max / Min:	2.14
UG (adjacent pts):	1.36
CU:	0.01
No. of Points:	14
LUMINAIRE INFORMATION	
Applied Circuits:	C, D, E
No. of Luminaires:	47
Total Load:	52.28 kW

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

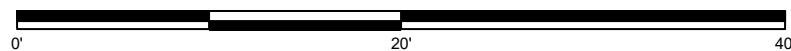
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**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.



SCALE IN FEET 1 : 10



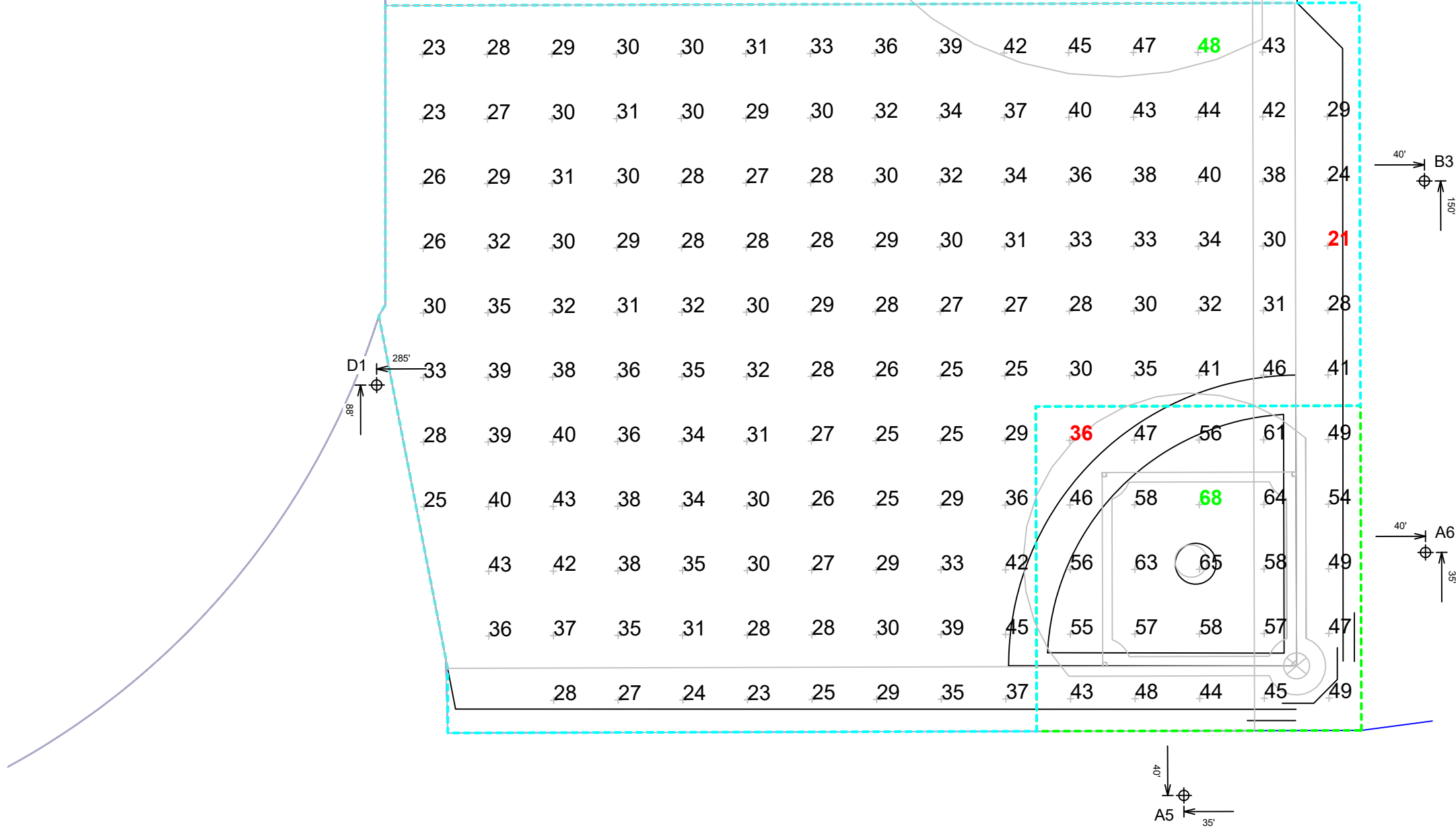
Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



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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'	0'	70'	TLC-LED-1500	1	1	0	
				15.52'	TLC-BT-575	1	1	0	
				70'	TLC-LED-1200	3	3	0	
1	A5	70'	-	15.5'	TLC-BT-575	1	1	0	
				70'	TLC-LED-1200	4	4	0	
				15.5'	TLC-BT-575	1	1	0	
1	A6	70'	0'	15.5'	TLC-BT-575	1	1	0	
				70'	TLC-LED-1200	4	4	0	
				15.52'	TLC-BT-575	3	3	0	
1	B3	80'	0'	15.52'	TLC-BT-575	3	3	0	
				80'	TLC-LED-1500	6	6	0	
				15.52'	TLC-BT-575	3	2	1	
1	B4	80'	0'	80'	TLC-LED-1200	2	0	2	
				15.52'	TLC-BT-575	3	2	1	
				80'	TLC-LED-1500	5	5	0	
1	D1	70'	0'	70'	TLC-LED-1500	7*	7	0	
				70'	TLC-LED-400	1*	1	0	
				15.48'	TLC-BT-575	1/3*	3	1	
				70'	TLC-LED-1200	4	0	4	
7	TOTALS					55	47	8	

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



GRID SUMMARY	
Name:	JV Softball
Size:	Irregular 263' / 290' / 205'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

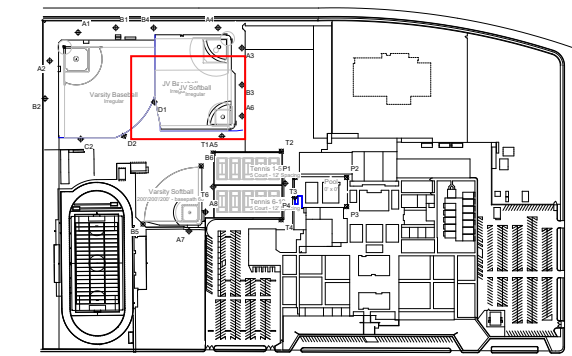
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
<b>Guaranteed Average:</b>	<b>50</b>	<b>30</b>
Scan Average:	53.42	32.42
Maximum:	68	48
Minimum:	36	21
Avg / Min:	1.48	1.53
<b>Guaranteed Max / Min:</b>	<b>2</b>	<b>2.5</b>
Max / Min:	1.89	2.24
UG (adjacent pts):	1.31	1.62
CU:	0.41	
No. of Points:	25	135
LUMINAIRE INFORMATION		
Applied Circuits:	C, D	
<b>No. of Luminaires:</b>	<b>47</b>	
Total Load:	52.28 kW	

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

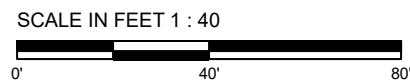
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**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.



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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
1	A7	70'	-	70'	TLC-LED-900	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	1	1	0
1	A8	70'	-	70'	TLC-LED-900	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	1/4*	1	4
2	B5-B6	70'	-	15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1500	4	4	0
4	TOTALS					24	20	4

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

GRID SUMMARY	
Name:	Varsity Softball
Size:	200'/200'/200' - basepath 60'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	50.16	31.50
Maximum:	61	44
Minimum:	42	20
Avg / Min:	1.20	1.61
Guaranteed Max / Min:	2	2.5
Max / Min:	1.46	2.23
UG (adjacent pts):	1.27	1.58
CU:	0.66	
No. of Points:	25	73

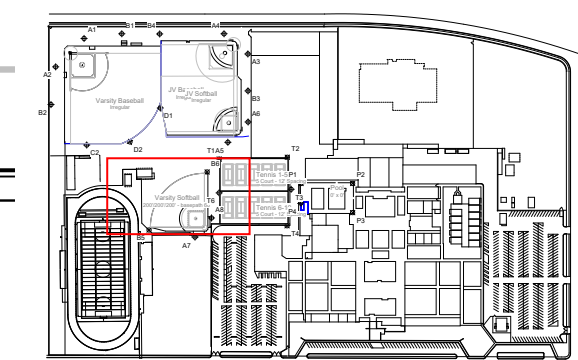
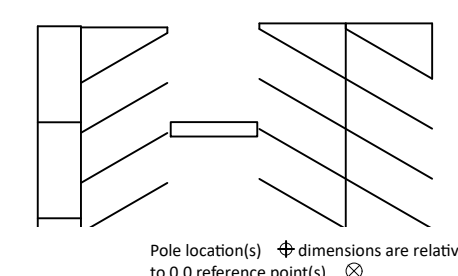
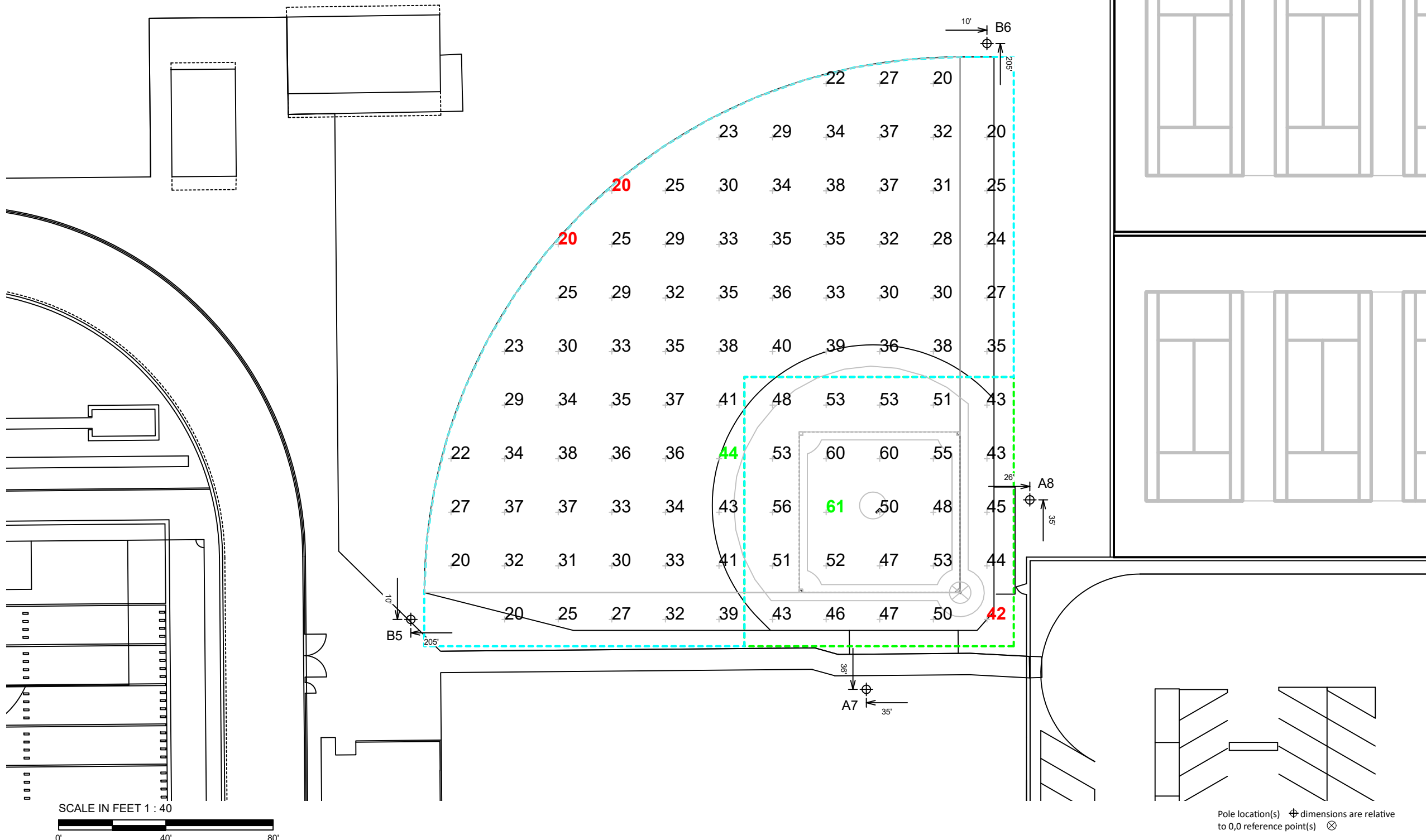
LUMINAIRE INFORMATION	
Applied Circuits:	B
No. of Luminaires:	20
Total Load:	20.79 kW

**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.



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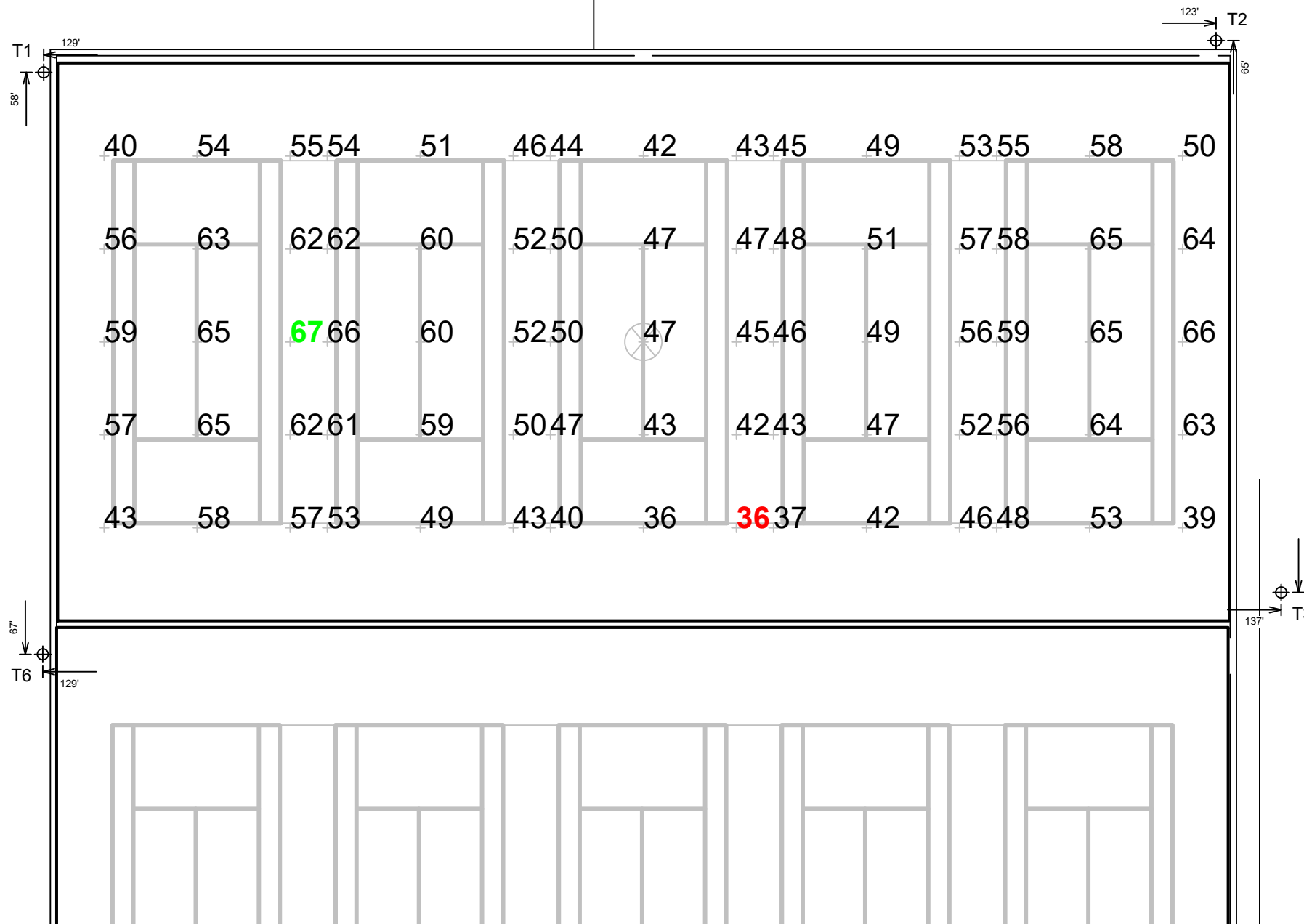
**EQUIPMENT LIST FOR AREAS SHOWN**

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	T1-T2	60'	-	60'	TLC-LED-1200	4	4	0
2	T3, T6	60'	-	60'	TLC-LED-1200	8	4	4
4	TOTALS					24	16	8

Cajon High School Athletic Playfields  
San Bernardino, CA

GRID SUMMARY	
Name:	Tennis 1-5
Size:	5 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:	52.29
Maximum:	67
Minimum:	36
Avg / Min:	1.46
Guaranteed Max / Min:	2
Max / Min:	1.87
UG (adjacent pts):	0.00
CU:	0.75
No. of Points:	75
LUMINAIRE INFORMATION	
Applied Circuits:	F
No. of Luminaires:	16
Total Load:	18.72 kW

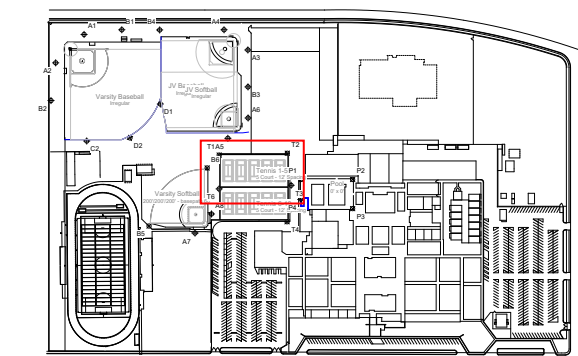


**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**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.

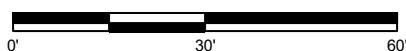
**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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SCALE IN FEET 1 : 30



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
1	A8	70'	-	70'	TLC-LED-900	2	0	2
				15.5'	TLC-BT-575	1	0	1
				70'	TLC-LED-1200	1/4*	4	1
2	T3, T6	60'	-	60'	TLC-LED-1200	8	4	4
1	T4	60'	-	60'	TLC-LED-1200	4	4	0
4	TOTALS					28	16	12

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



GRID SUMMARY	
Name:	Tennis 6-10
Size:	5 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

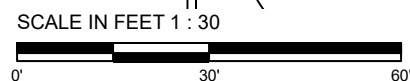
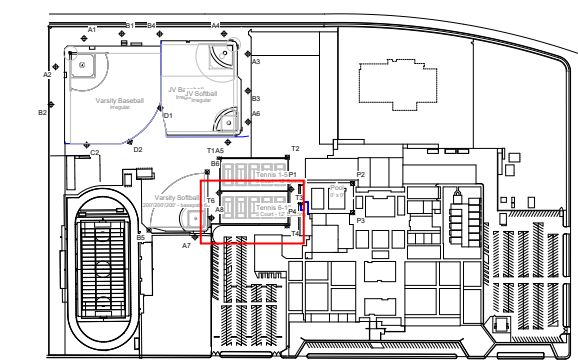
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	52.13
Maximum:	72
Minimum:	38
Avg / Min:	1.38
Guaranteed Max / Min:	2
Max / Min:	1.91
UG (adjacent pts):	0.00
CU:	0.73
No. of Points:	75
LUMINAIRE INFORMATION	
Applied Circuits:	G
No. of Luminaires:	16
Total Load:	18.72 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
4	P1-P4	60'	-	40'	TLC-LED-400	1	0	1
				60'	TLC-LED-900	3	3	0
4	TOTALS					16	12	4

GRID SUMMARY	
Name:	Pool 1
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

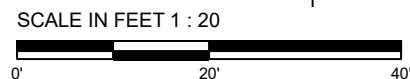
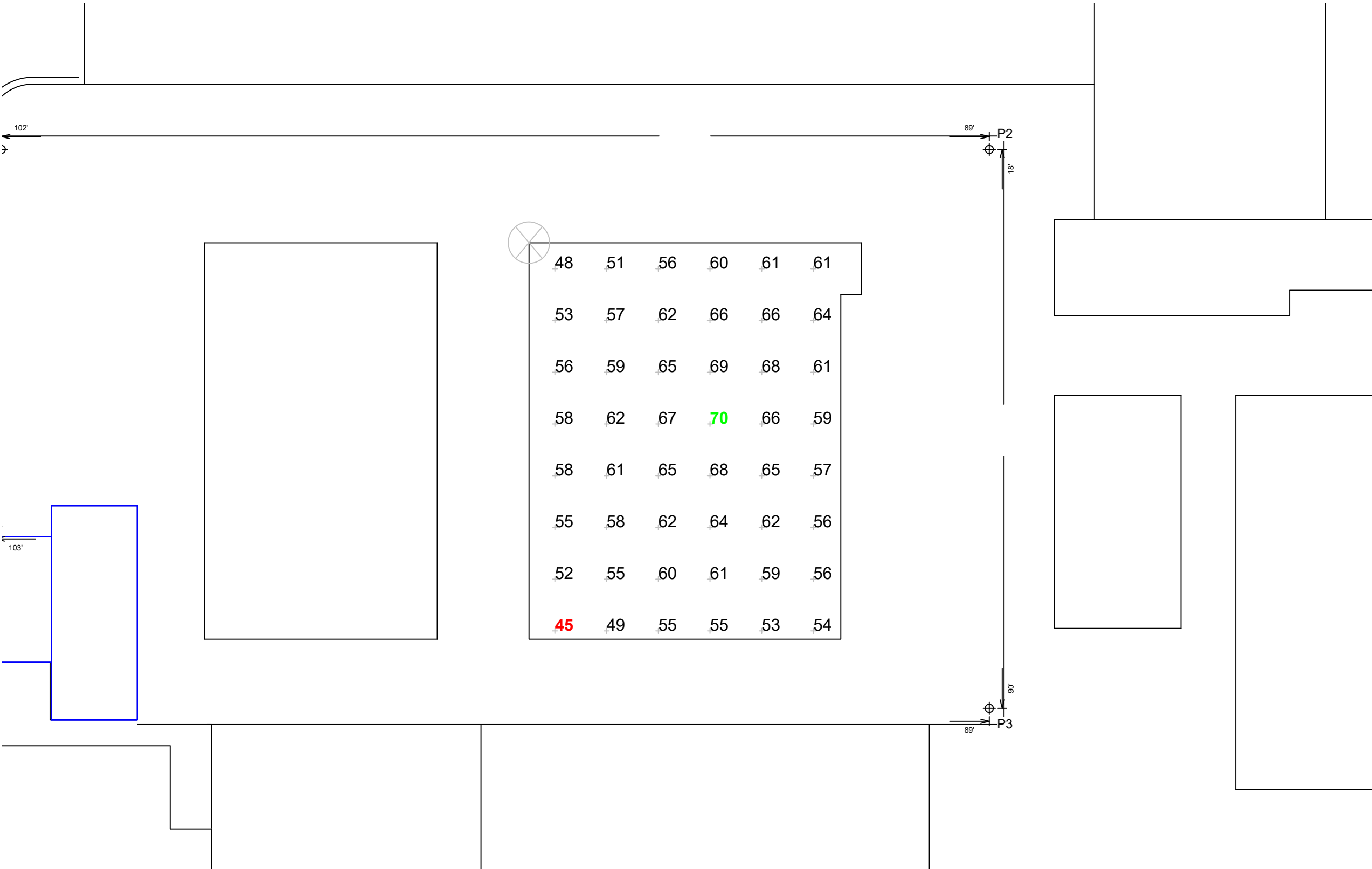
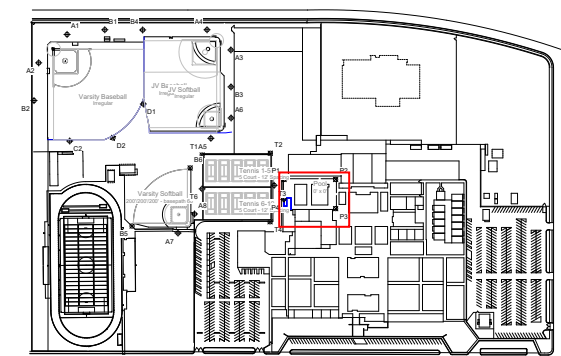
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	59.41
Maximum:	70
Minimum:	45
Avg / Min:	1.31
Max / Min:	1.55
UG (adjacent pts):	1.14
CU:	0.25
No. of Points:	48
LUMINAIRE INFORMATION	
Applied Circuits:	H
No. of Luminaires:	12
Total Load:	10.68 kW

**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
4	P1-P4	60'	-	40'	TLC-LED-400	1	0	1
				60'	TLC-LED-900	3	3	0
4	TOTALS					16	12	4

GRID SUMMARY	
Name:	Pool 2
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

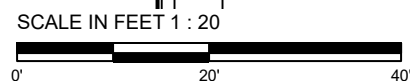
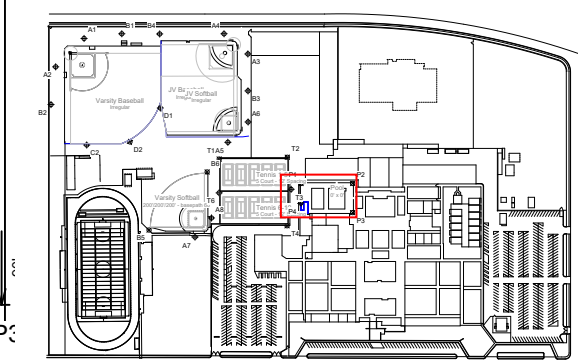
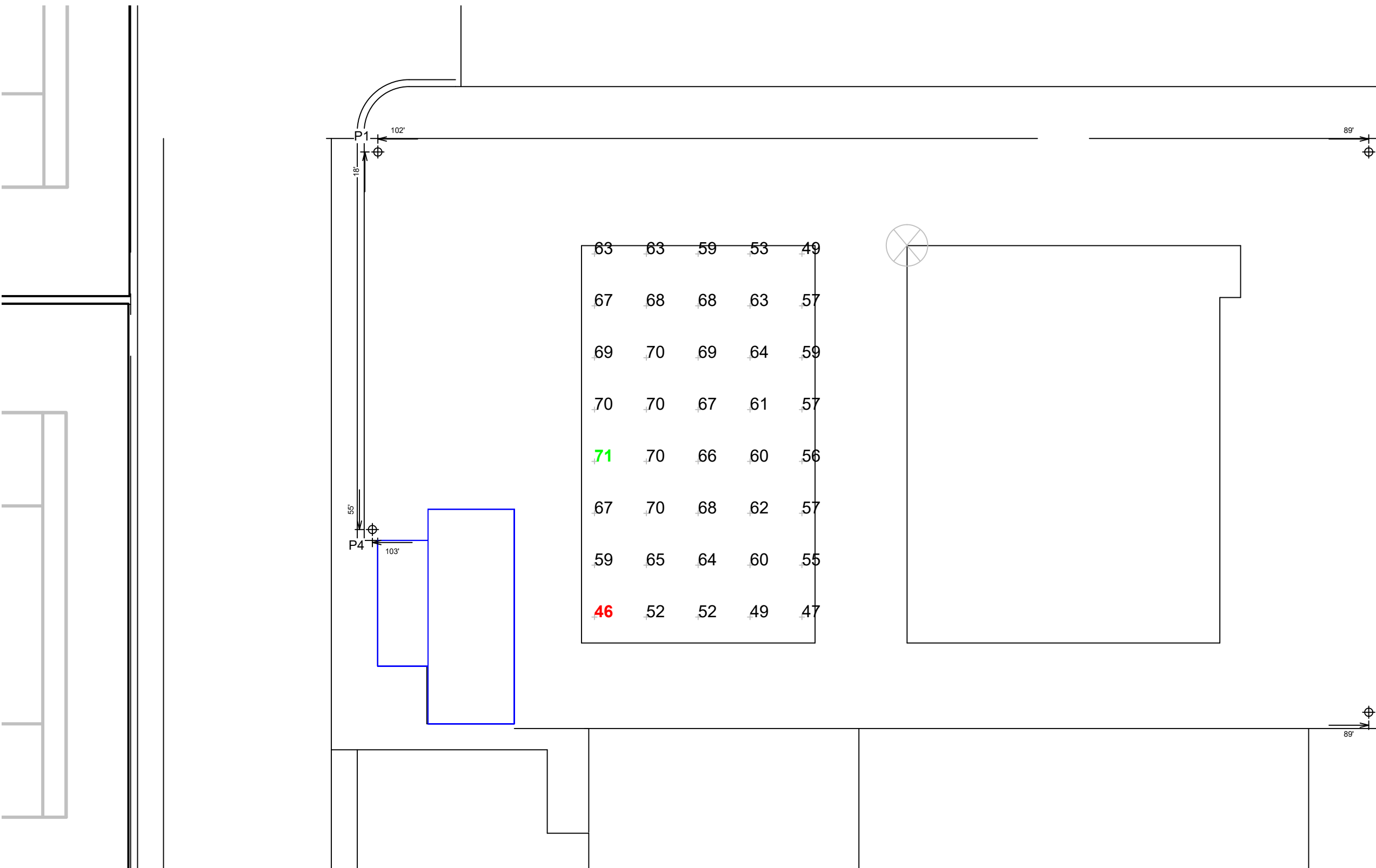
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	61.49
Maximum:	71
Minimum:	46
Avg / Min:	1.33
Max / Min:	1.52
UG (adjacent pts):	1.28
CU:	0.21
No. of Points:	40
LUMINAIRE INFORMATION	
Applied Circuits:	H
No. of Luminaires:	12
Total Load:	10.68 kW

**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) ⊗



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EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	40'	TLC-LED-400	1	0	1
				60'	TLC-LED-900	3	3	0
4	TOTALS					16	12	4

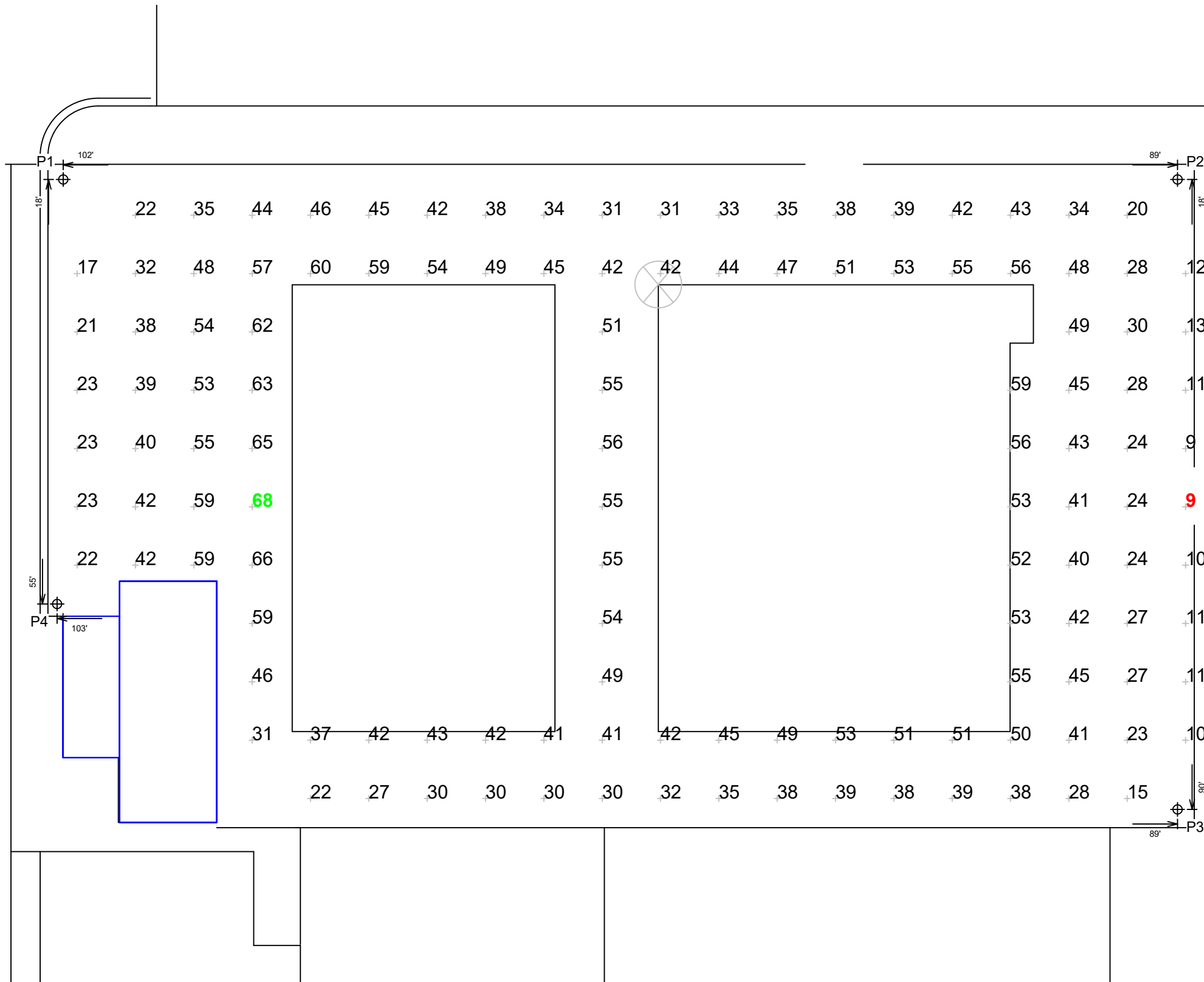
GRID SUMMARY	
Name:	Pool Deck
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	39.66
Maximum:	68
Minimum:	9
Avg / Min:	4.56
Max / Min:	7.84
UG (adjacent pts):	2.74
CU:	0.43
No. of Points:	126

LUMINAIRE INFORMATION	
Applied Circuits:	H
No. of Luminaires:	12
Total Load:	10.68 kW

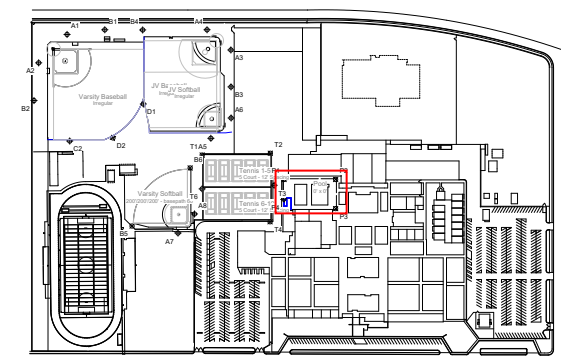


**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**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.

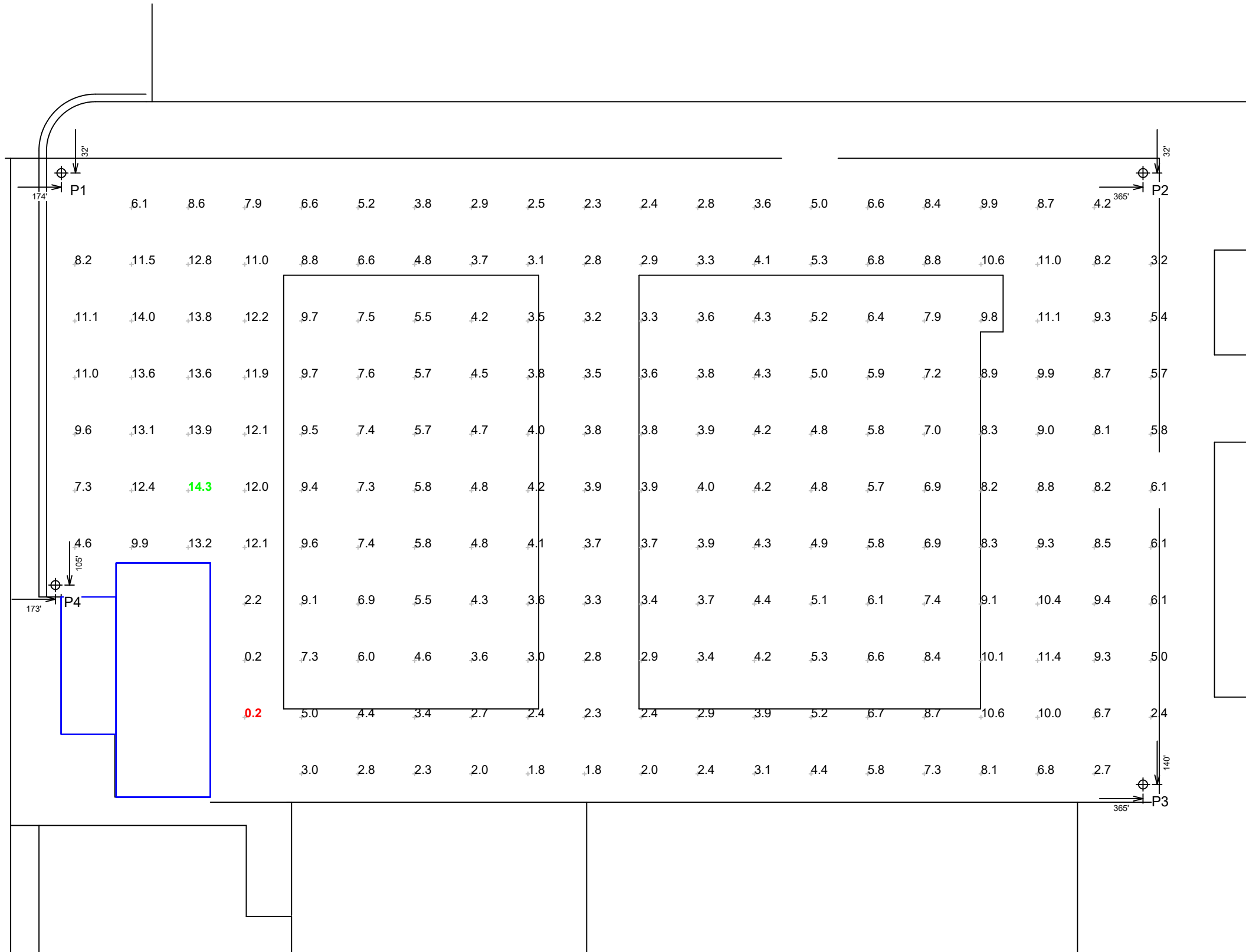


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EQUIPMENT LIST FOR AREAS SHOWN									
Pole				Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
4	P1-P4	60'		40'	TLC-LED-400	1	1	0	
				60'	TLC-LED-900	3	0	3	
4	TOTALS					16	4	12	

GRID SUMMARY	
Name:	Pool Egress
Size:	5 Court - 12' Spacing
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	6.32
Maximum:	14
Minimum:	0
Avg / Min:	36.82
Max / Min:	83.32
UG (adjacent pts):	38.99
CU:	0.76
No. of Points:	204
LUMINAIRE INFORMATION	
Applied Circuits:	1
No. of Luminaires:	4
Total Load:	1.6 kW

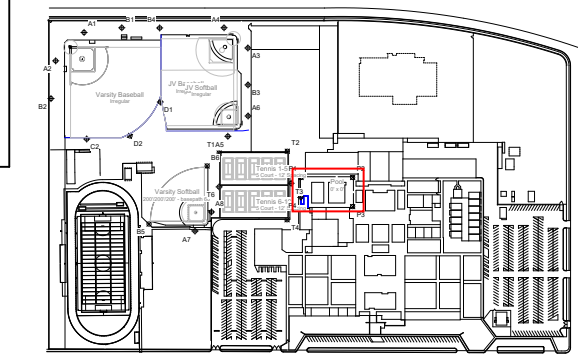


**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**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.



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

**EQUIPMENT LAYOUT**

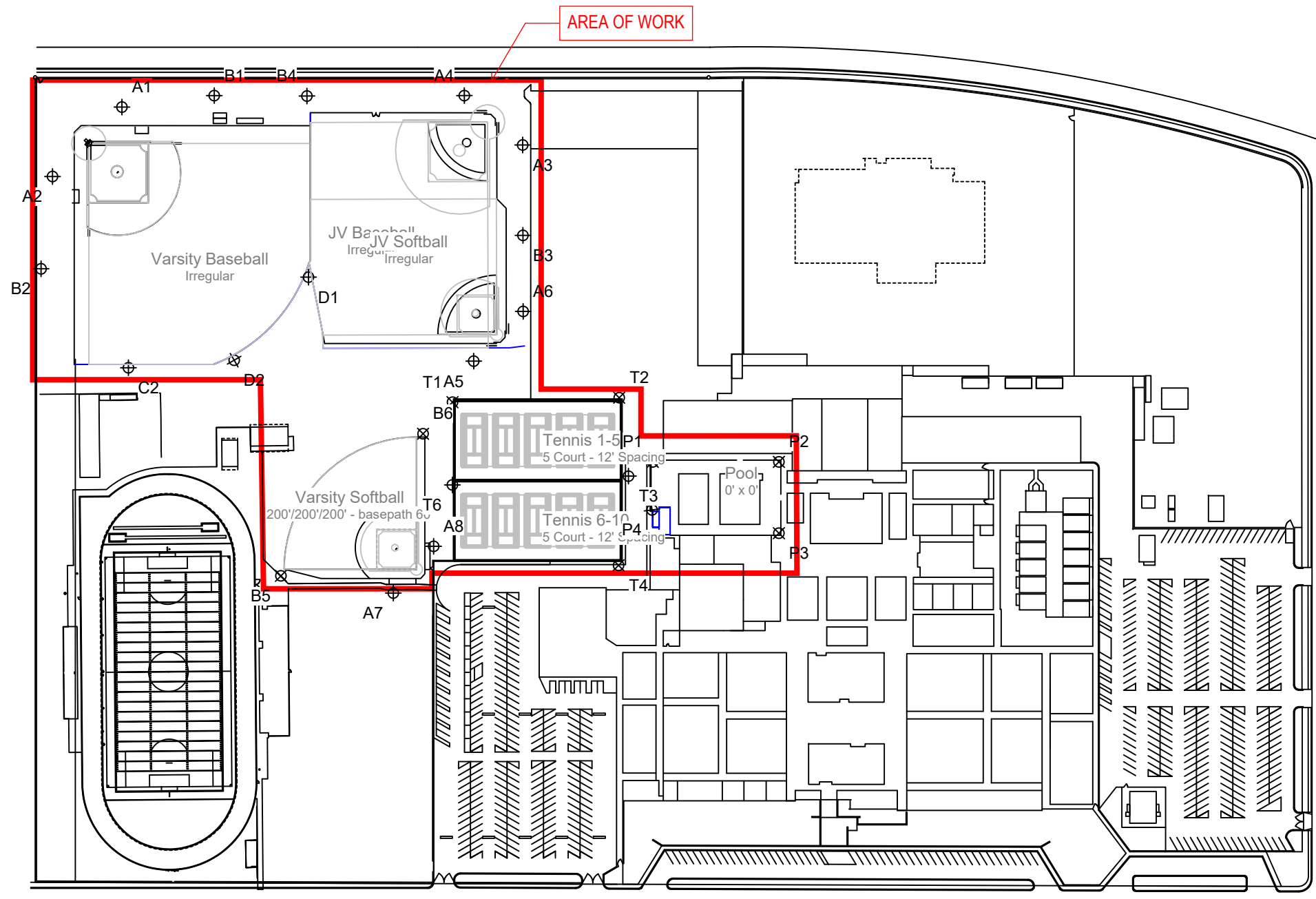
- INCLUDES:**
- JV Baseball
  - JV Softball
  - Pool
  - Tennis 1-5
  - Tennis 6-10
  - Varsity Baseball
  - Varsity Softball

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

**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)	480 (60)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
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-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9	2.3
TLC-LED-400	2.3	2.2	2.0	1.7	1.4	1.3	1.0



SCALE IN FEET 1 : 200



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



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GRID SUMMARY	
Name:	Grid
Size:	200'/200'/200' - basepath 60'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

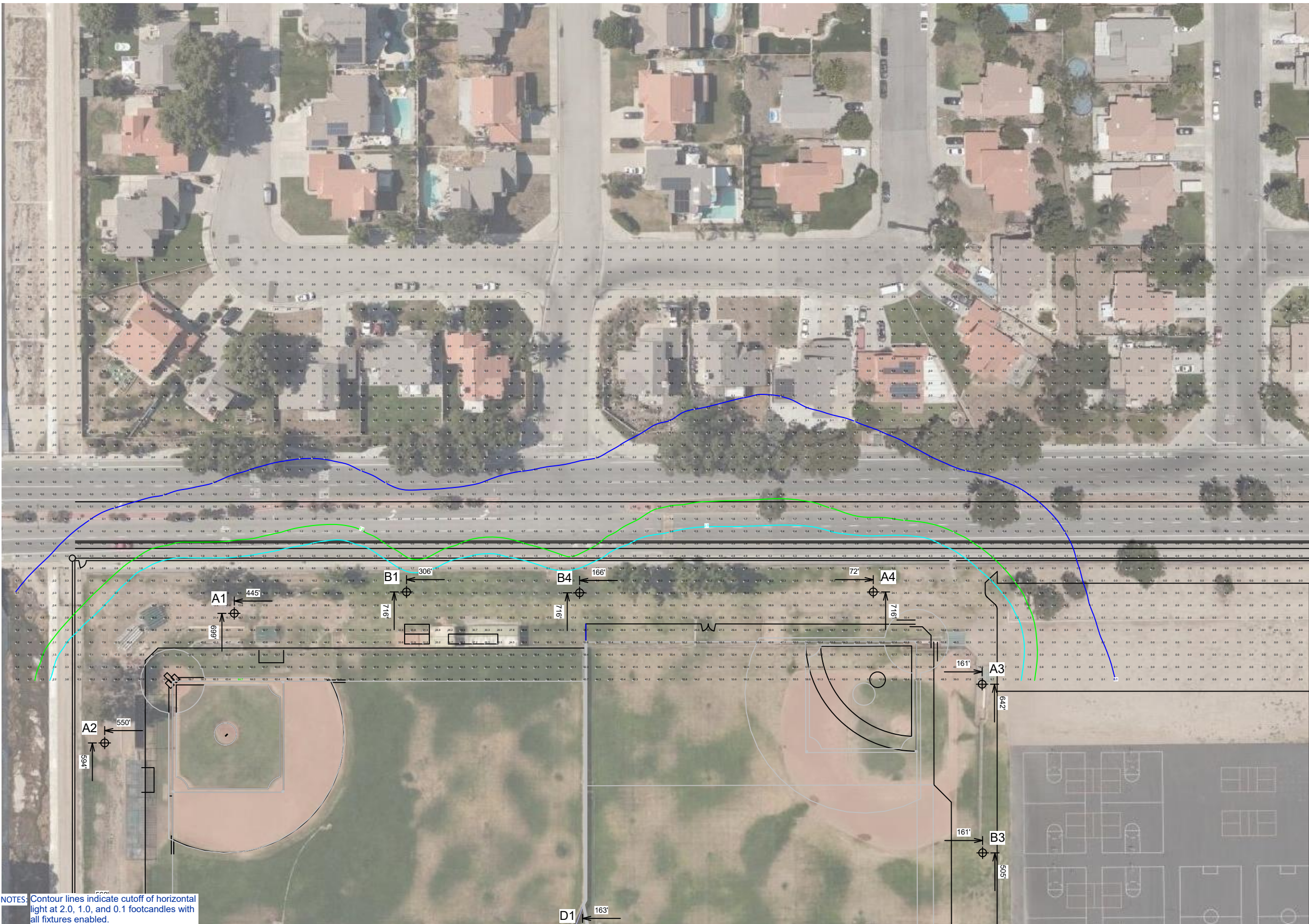
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	5.53
Maximum:	65
Minimum:	0
Avg / Min:	-
Max / Min:	-
UG (adjacent pts):	3.39
CU:	0.10
No. of Points:	3816
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H, I
No. of Luminaires:	162
Total Load:	176.38 kW

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

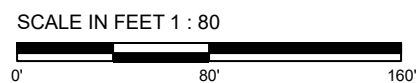
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**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.



NOTES: Contour lines indicate cutoff of horizontal light at 2.0, 1.0, and 0.1 footcandles with all fixtures enabled.



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



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