

Appendix F Lighting Plans for San Gorgonio High School

Appendix

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San Gorgonio 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	70'	70'	4	TLC-LED-1200	4.68 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
A3-A4	60'	60'	3	TLC-LED-900	2.67 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
B1-B2	80'	80'	8	TLC-LED-1500	11.44 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
B3-B4	70'	70'	6	TLC-LED-1200	7.02 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
C1-C2, D1-D2	70'	70'	3	TLC-LED-1200	3.51 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
C3-C4	60'	60'	3	TLC-LED-1200	3.51 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
P1-P2	60'	60'	2	TLC-LED-400	0.80 kW	F
		60'	1	TLC-LED-600	0.58 kW	E
		60'	1	TLC-LED-900	0.89 kW	E
P3-P4	60'	60'	2	TLC-LED-400	0.80 kW	F
		60'	2	TLC-LED-900	1.78 kW	E
T1, T6	50'	50'	2	TLC-LED-1200	2.34 kW	C
		50'	1	TLC-LED-900	0.89 kW	C
T2	50'	50'	2	TLC-LED-1200	2.34 kW	C
		50'	2	TLC-LED-1200	2.34 kW	D
		50'	1	TLC-LED-900	0.89 kW	D
		50'	1	TLC-LED-900	0.89 kW	C
T3-T4	50'	50'	2	TLC-LED-1200	2.34 kW	D
		50'	1	TLC-LED-900	0.89 kW	D
T5	50'	50'	2	TLC-LED-1200	2.34 kW	D
		50'	2	TLC-LED-1200	2.34 kW	C
		50'	1	TLC-LED-900	0.89 kW	C
		50'	1	TLC-LED-900	0.89 kW	D
24			114		116.27 kW	

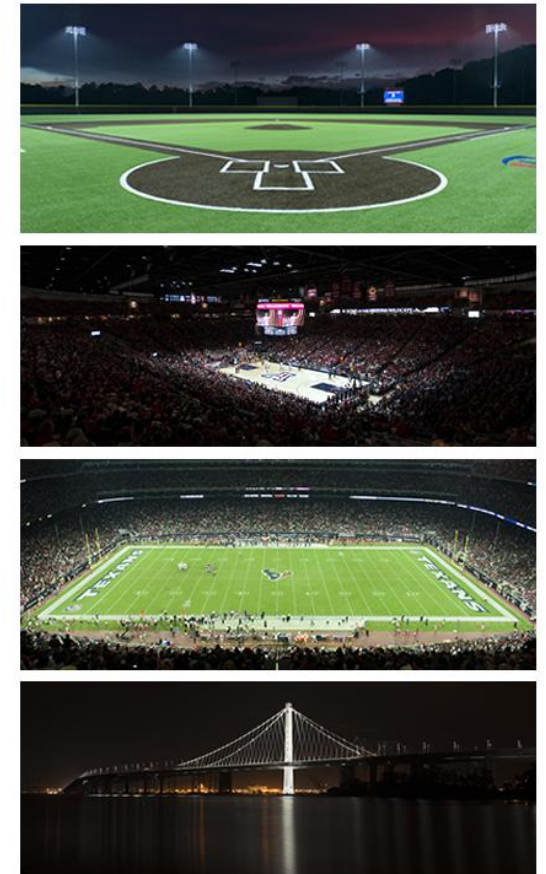
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Varsity Baseball	50.88 kW	44
B	Varsity Softball	29.85 kW	30
C	Tennis 1-4	12.92 kW	12
D	Tennis 5-8	12.92 kW	12
E	Pool	6.5 kW	8
F	Pool Egress	3.2 kW	8

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	54
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>120,000	>120,000	>120,000	8
TLC-LED-600	LED 5700K - 75 CRI	580W	65,600	>120,000	>120,000	>120,000	2
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	16
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	20
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	14

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Baseball Spill Grid	Horizontal	0.35	0	2.39	0.00		A,B	74
Baseball Spill Grid	Max Candela (by Fixture)	9775	0.81	66186	82127.99	12067.66	A,B	74
Baseball Spill Grid	Max Vertical Illuminance Metric	0.55	0	3.24	0.00		A,B	74
Bullpen BB 1st baseline	Horizontal	14.2	6	20	3.24	2.36	A	44
Bullpen BB 3rd Baseline	Horizontal	17.6	5	39	7.19	3.52	A	44

From Hometown to Professional



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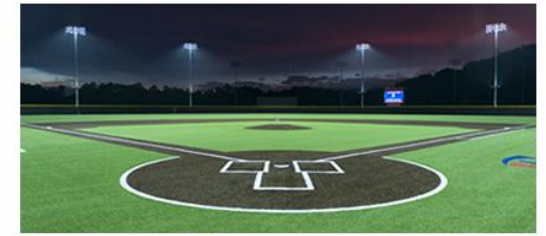
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San Gorgonio High School Athletic Playfields

San Bernardino, CA

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Bullpen SB 1st baseline	Horizontal	17	8	39	4.79	2.12	B	30
Bullpen SB 3rd baseline	Horizontal	18.3	8	43	5.19	2.29	B	30
Diving Pool	Horizontal	50.5	42	55	1.33	1.20	E,F	16
Pool Deck	Horizontal	39.2	22	59	2.68	1.78	E,F	16
Pool Egress	Horizontal	11.6	2	32	15.92	5.79	F	8
Swimming Pool	Horizontal	52.1	36	63	1.74	1.45	E,F	16
Tennis 1-4	Horizontal Illuminance	55.1	40	65	1.61	1.38	C	12
Tennis 5-8	Horizontal Illuminance	51.8	40	60	1.51	1.30	D	12
Tennis Spill Grid	Horizontal	0	0	0.01	0.00		C,D	24
Tennis Spill Grid	Max Candela (by Fixture)	596	0	3071	0.00		C,D	24
Tennis Spill Grid	Max Vertical Illuminance Metric	0.01	0	0.04	0.00		C,D	24
Varsity Baseball (Infield)	Horizontal Illuminance	52.6	42	59	1.40	1.25	A	44
Varsity Baseball (Outfield)	Horizontal Illuminance	33.3	24	44	1.84	1.39	A	44
Varsity Softball (Infield)	Horizontal Illuminance	53.3	45	61	1.34	1.18	B	30
Varsity Softball (Outfield)	Horizontal Illuminance	33.5	23	45	1.90	1.46	B	30

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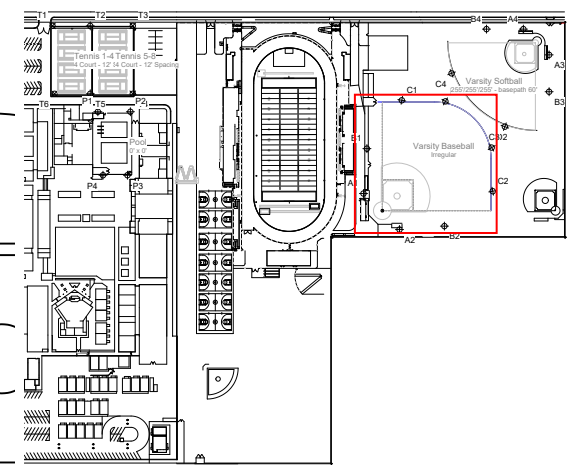
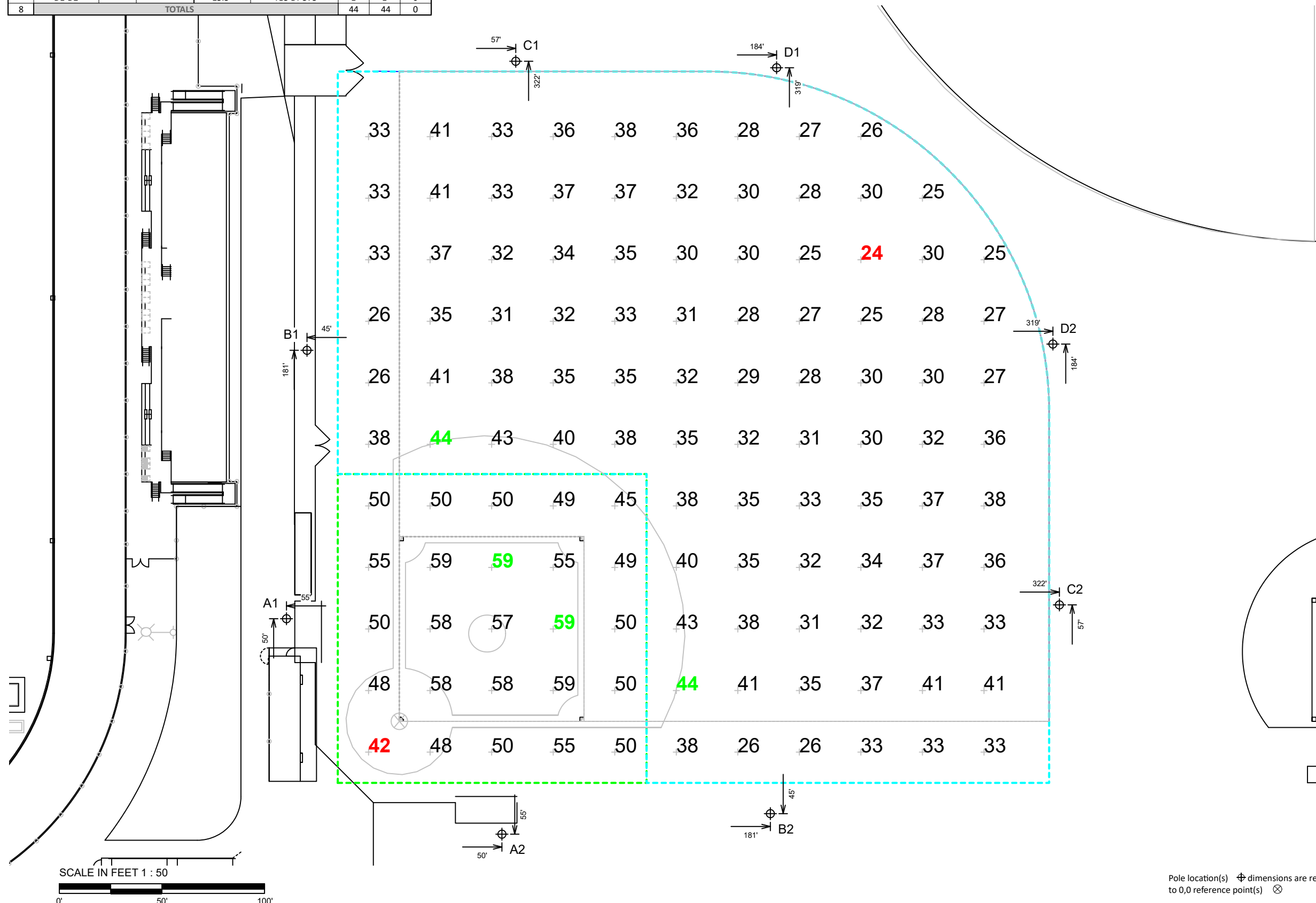
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EQUIPMENT LIST FOR AREAS SHOWN								
Pole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	B1-B2	80'	-	15.5'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	8	8	0
4	C1-C2 D1-D2	70'	-	70'	TLC-LED-1200	3	3	0
				15.5'	TLC-BT-575	1	1	0
8	TOTALS					44	44	0

GRID SUMMARY		
Name:	Varsity Baseball	
Size:	Irregular 317' / 379' / 317'	
Spacing:	30.0' x 30.0'	
Height:	3.0' above grade	

ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	52.55	33.32
Maximum:	59	44
Minimum:	42	24
Avg / Min:	1.25	1.38
Guaranteed Max / Min:	2	2.5
Max / Min:	1.40	1.84
UG (adjacent pts):	1.22	1.58
CU:	0.73	
No. of Points:	25	93

LUMINAIRE INFORMATION		
Applied Circuits:	A	
No. of Luminaires:	44	
Total Load:	50.88 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.

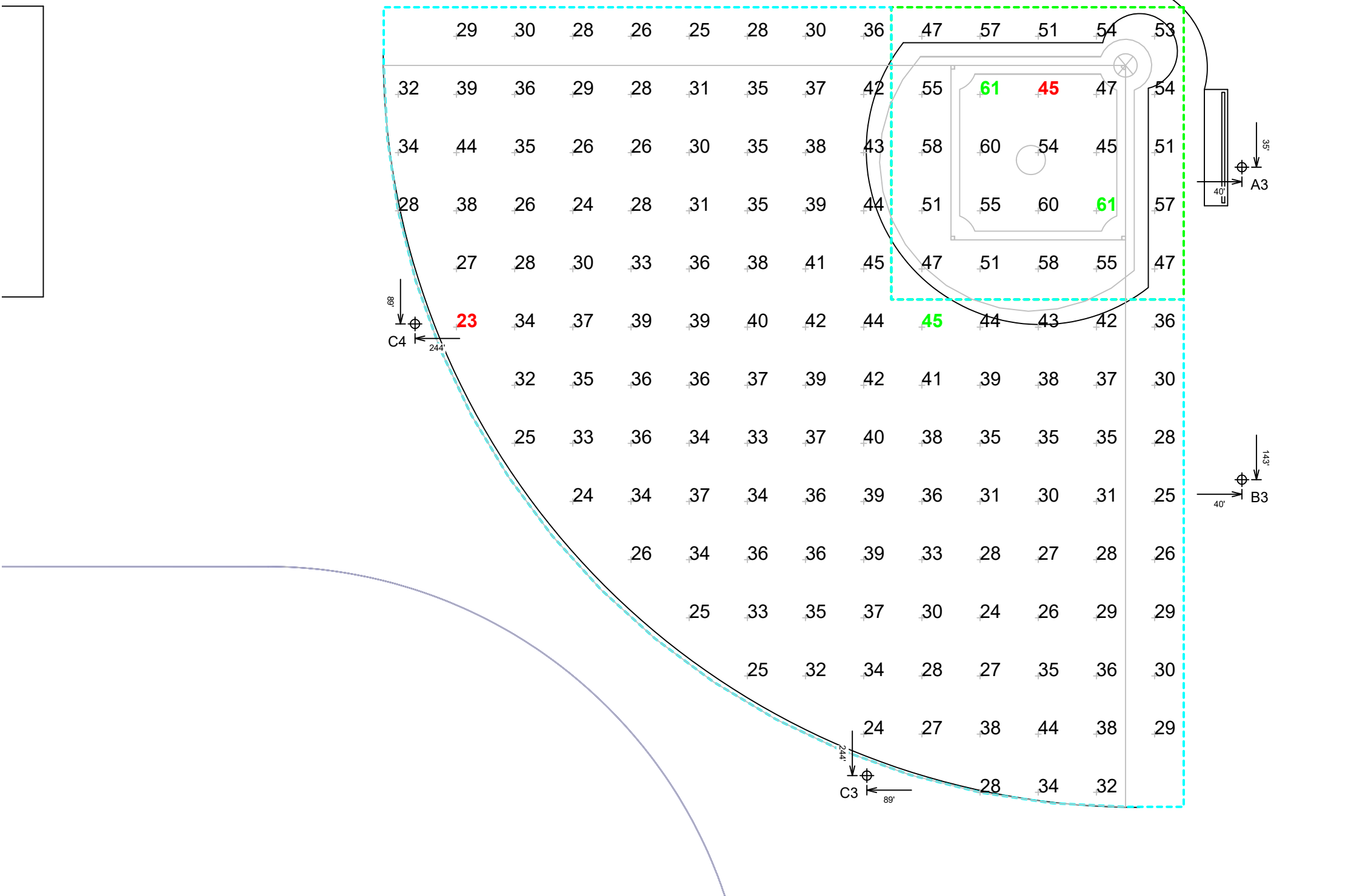
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
2	B3-B4	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	6	6	0
2	C3-C4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1200	3	3	0
6	TOTALS					30	30	0



San Geronio High School Athletic Playfields
San Bernardino, CA

GRID SUMMARY	
Name:	Varsity Softball
Size:	255'/255'/255' - basepath 60'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

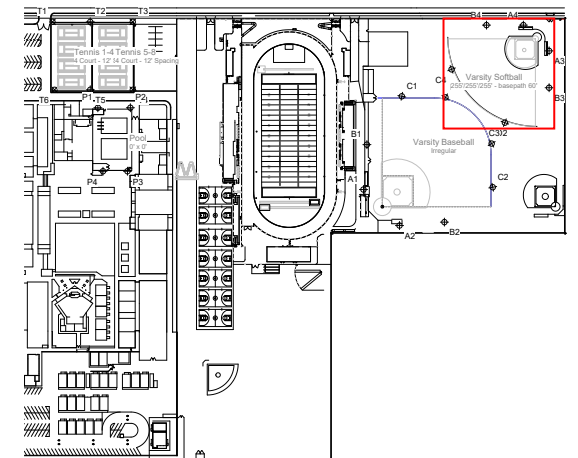
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	53.26	33.54
Maximum:	61	45
Minimum:	45	23
Avg / Min:	1.18	1.43
Guaranteed Max / Min:	2	2.5
Max / Min:	1.34	1.90
UG (adjacent pts):	1.34	1.46
CU:	0.70	
No. of Points:	25	127
LUMINAIRE INFORMATION		
Applied Circuits:	B	
No. of Luminaires:	30	
Total Load:	29.85 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.

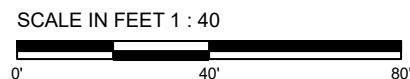
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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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ILLUMINATION SUMMARY



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	T1, T6	50'	-	50'	TLC-LED-1200	2	2	0
				50'	TLC-LED-900	1	1	0
2	T2, T5	50'	-	50'	TLC-LED-1200	4	2	2
				50'	TLC-LED-900	2	1	1
4	TOTALS					18	12	6

San Geronio High School Athletic Playfields
San Bernardino, CA

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

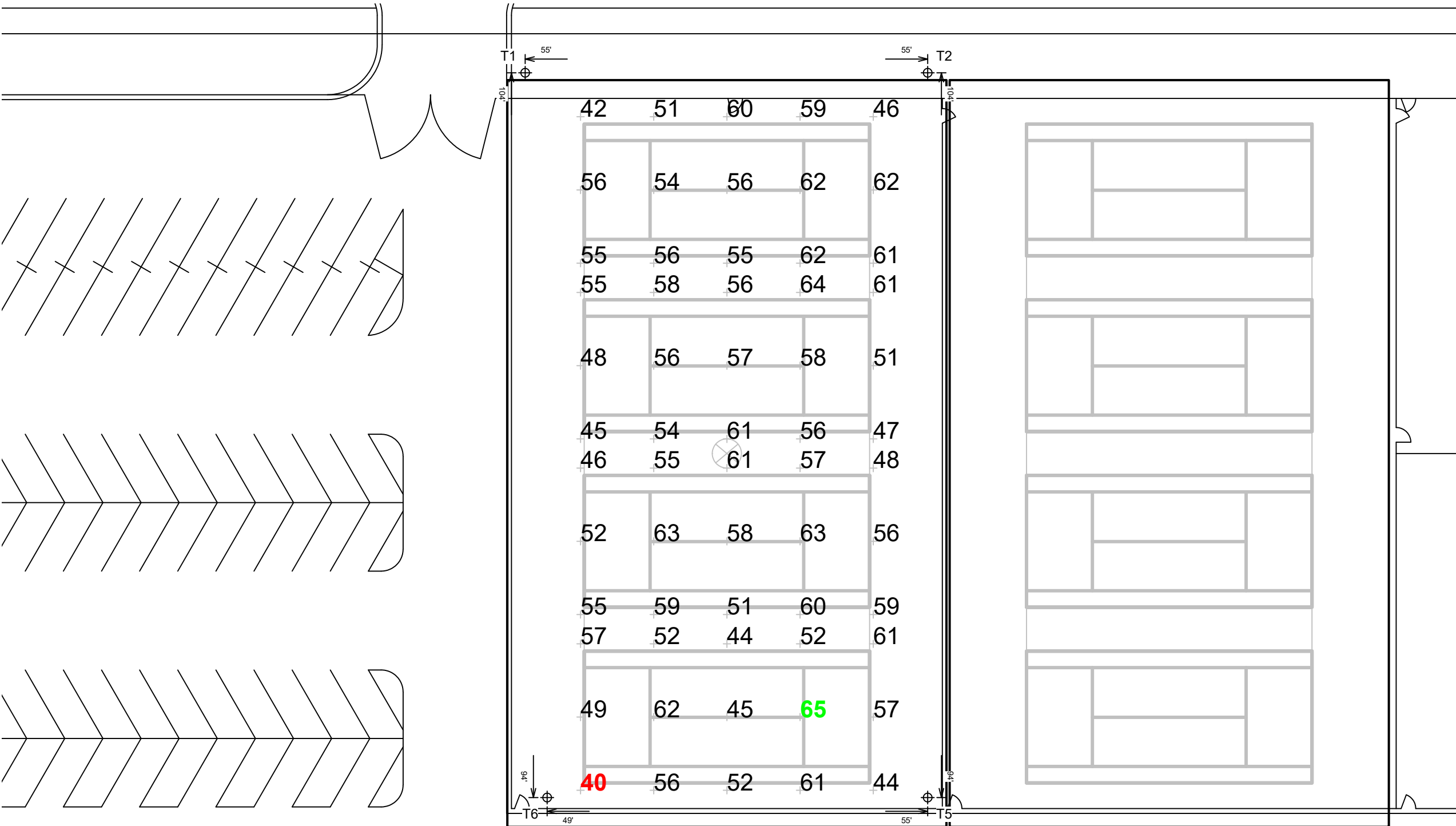
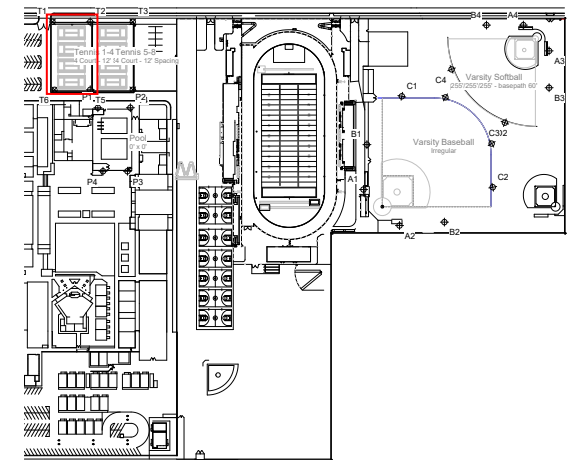
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	55.05
Maximum:	65
Minimum:	40
Avg / Min:	1.36
Guaranteed Max / Min:	2
Max / Min:	1.61
UG (adjacent pts):	0.00
CU:	0.92
No. of Points:	60
LUMINAIRE INFORMATION	
Applied Circuits:	C
No. of Luminaires:	12
Total Load:	12.92 kW

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

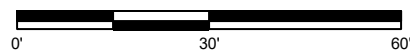
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 : 30



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



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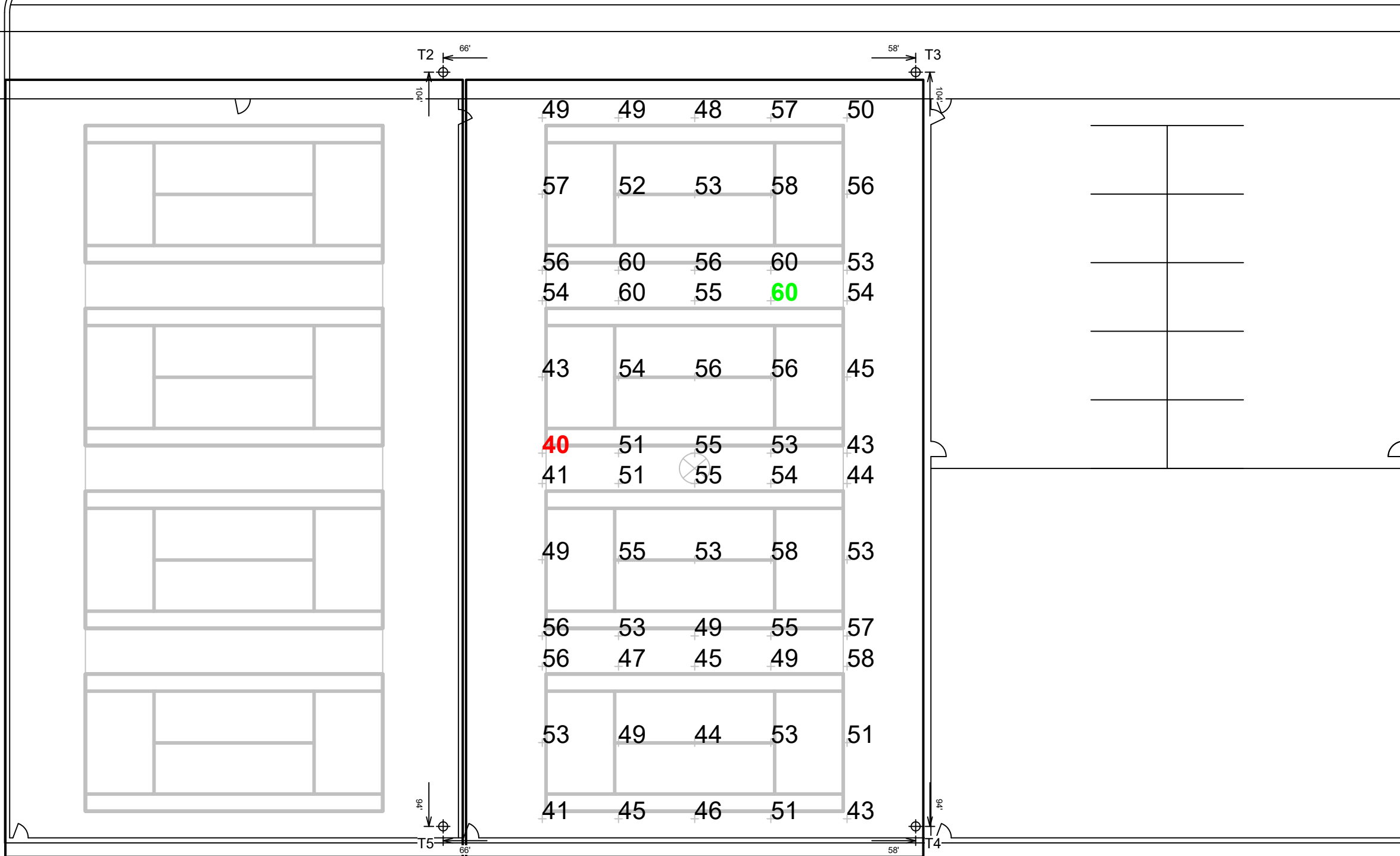
EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	T2, T5	50'	-	50'	TLC-LED-1200	4	2	2
				50'	TLC-LED-900	2	1	1
2	T3-T4	50'	-	50'	TLC-LED-1200	2	2	0
				50'	TLC-LED-900	1	1	0
4	TOTALS					18	12	6

San Geronio High School Athletic Playfields
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:	51.82
Maximum:	60
Minimum:	40
Avg / Min:	1.30
Guaranteed Max / Min:	2
Max / Min:	1.51
UG (adjacent pts):	0.00
CU:	0.87
No. of Points:	60
LUMINAIRE INFORMATION	
Applied Circuits:	D
No. of Luminaires:	12
Total Load:	12.92 kW

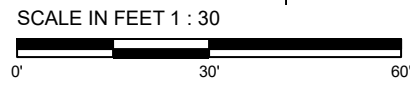
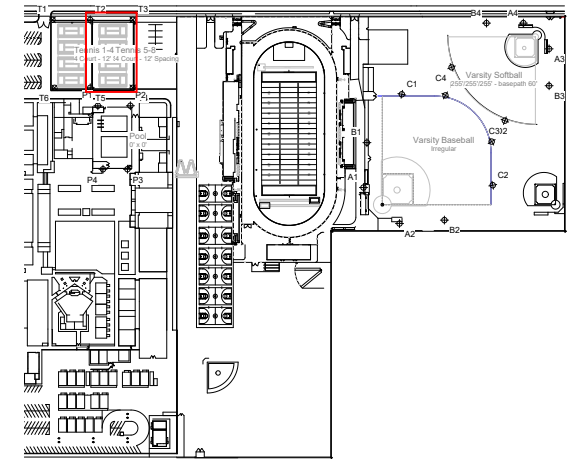


Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

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	70'	0'	15.48'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	B1-B2	80'	0'	15.48'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	8	8	0
4	C1-C2 D1-D2	70'	0'	70'	TLC-LED-1200	3	3	0
				15.48'	TLC-BT-575	1	1	0
8	TOTALS					44	44	0



GRID SUMMARY	
Name:	Bullpen BB 3rd Baseline
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

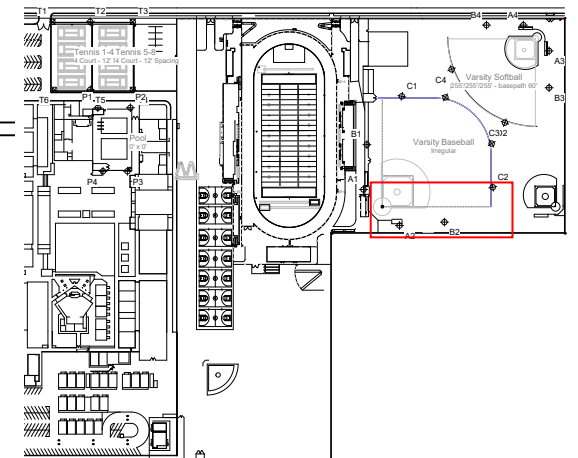
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	17.60
Maximum:	39
Minimum:	5
Avg / Min:	3.28
Max / Min:	7.19
UG (adjacent pts):	1.57
CU:	0.02
No. of Points:	52
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	44
Total Load:	50.88 kW

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

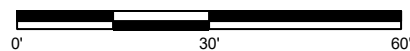
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 : 30



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

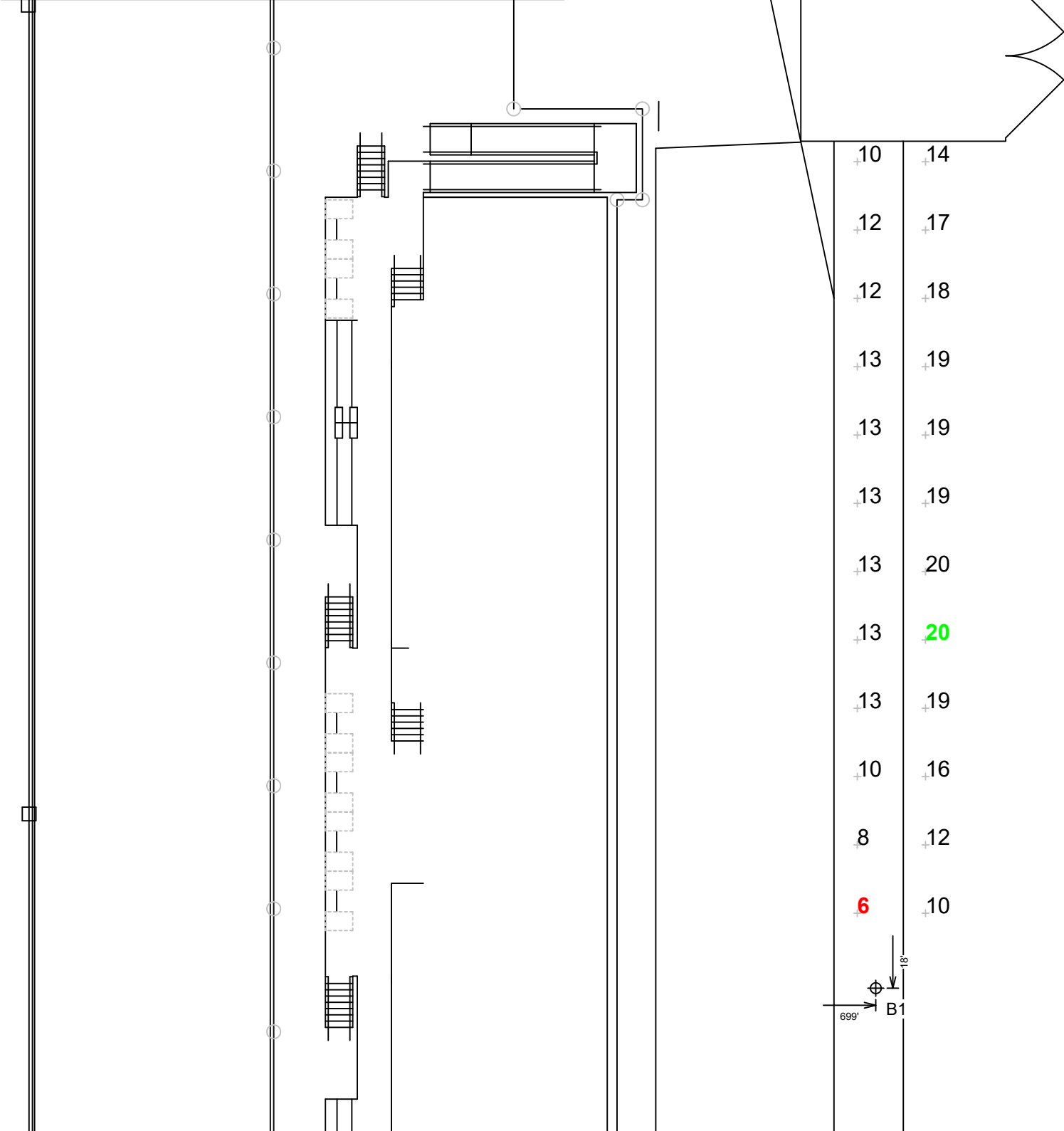


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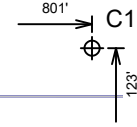
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ILLUMINATION SUMMARY

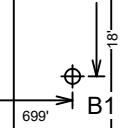
EQUIPMENT LIST FOR AREAS SHOWN							
Pole				Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID
2	A1-A2	70'	0'	15.48'	TLC-BT-575	1	1
				70'	TLC-LED-1200	4	4
2	B1-B2	80'	0'	15.48'	TLC-BT-575	1	1
				80'	TLC-LED-1500	8	8
4	C1-C2 D1-D2	70'	0'	70'	TLC-LED-1200	3	3
				15.48'	TLC-BT-575	1	1
8	TOTALS					44	44



SCALE IN FEET 1 : 20
 0' 20' 40'



±10	±14
±12	±17
±12	±18
±13	±19
±13	±19
±13	±19
±13	±20
±13	±20
±13	±19
±13	±19
±10	±16
8	±12
6	±10



GRID SUMMARY	
Name:	Bullpen BB 1st baseline
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

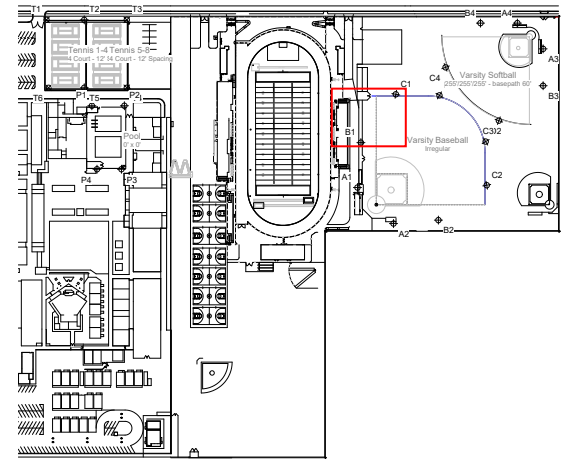
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	14.17
Maximum:	20
Minimum:	6
Avg / Min:	2.28
Max / Min:	3.24
UG (adjacent pts):	1.56
CU:	0.01
No. of Points:	24
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	44
Total Load:	50.88 kW

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.

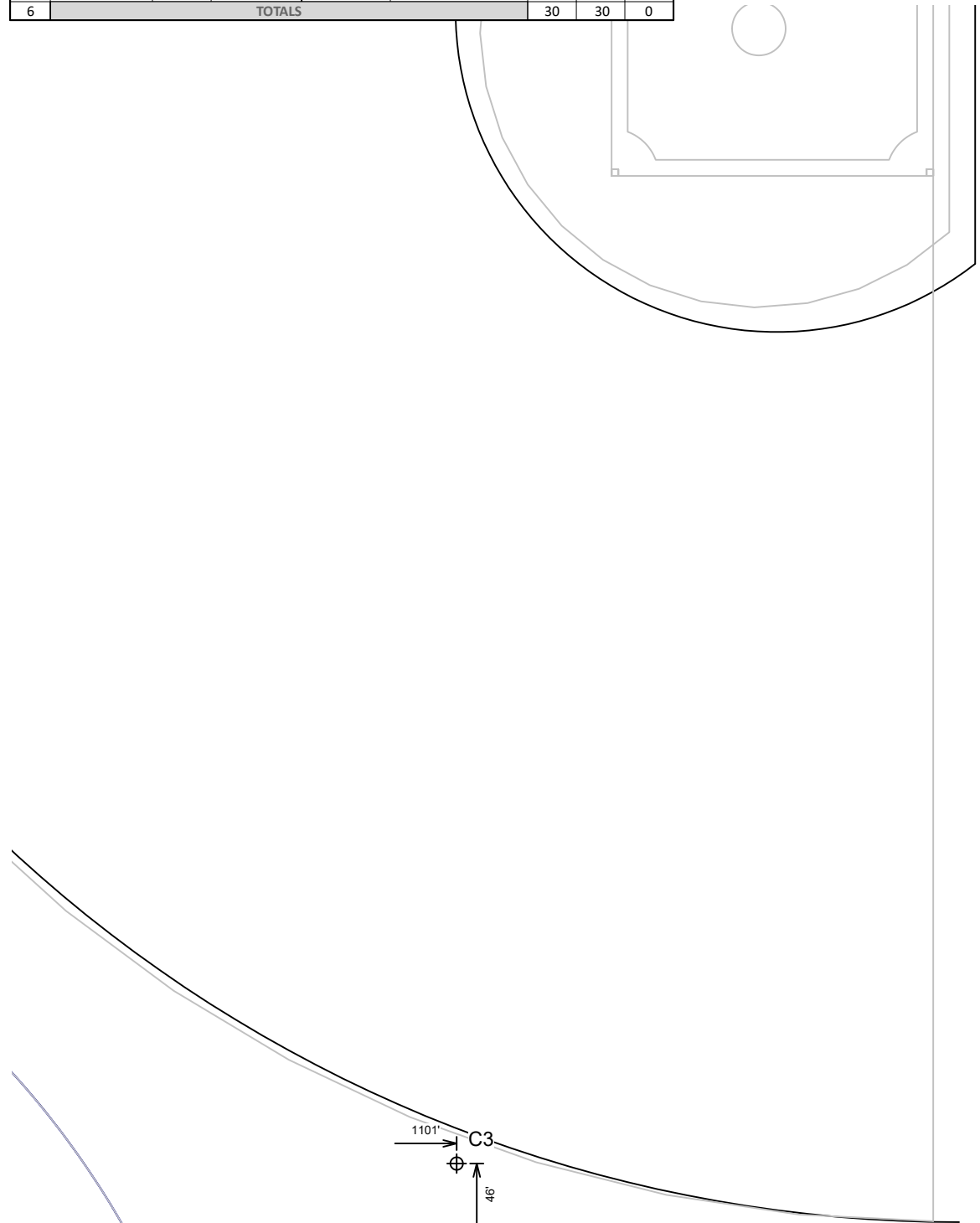
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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



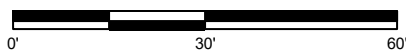
Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

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	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
2	B3-B4	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	6	6	0
2	C3-C4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1200	3	3	0
6	TOTALS					30	30	0



48	27
39	24
33	20
28	17
26	17
24	17
22	15
19	12
16	10
15	9
17	11
20	13
22	15
22	15
21	14
20	13
20	12
18	11
16	10
13	8

SCALE IN FEET 1 : 30



GRID SUMMARY	
Name:	Bullpen SB 3rd baseline
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

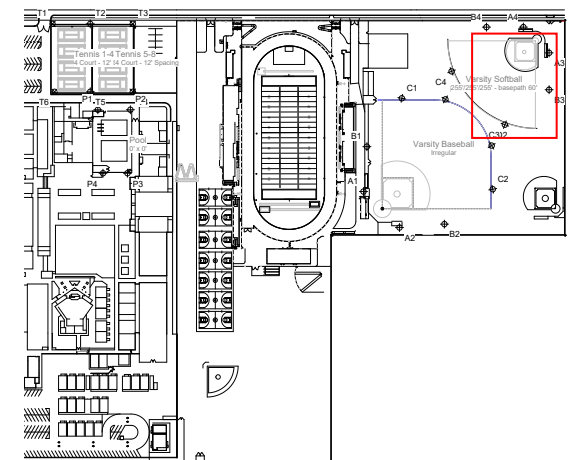
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	18.28
Maximum:	43
Minimum:	8
Avg / Min:	2.19
Max / Min:	5.19
UG (adjacent pts):	1.69
CU:	0.02
No. of Points:	42
LUMINAIRE INFORMATION	
Applied Circuits:	B
No. of Luminaires:	30
Total Load:	29.85 kW

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	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
2	B3-B4	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	6	6	0
2	C3-C4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1200	3	3	0
6	TOTALS					30	30	0

GRID SUMMARY	
Name:	Bullpen SB 1st baseline
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

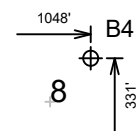
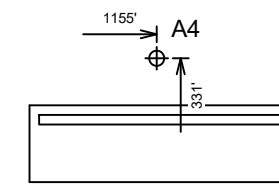
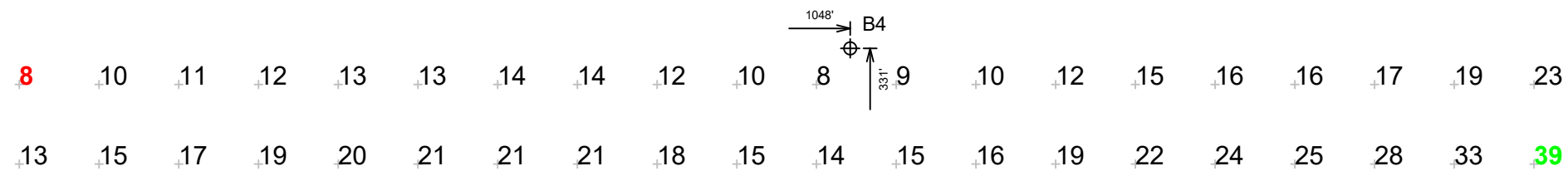
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	16.98
Maximum:	39
Minimum:	8
Avg / Min:	2.07
Max / Min:	4.79
UG (adjacent pts):	1.71
CU:	0.02
No. of Points:	40
LUMINAIRE INFORMATION	
Applied Circuits:	B
No. of Luminaires:	30
Total Load:	29.85 kW

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

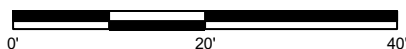
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

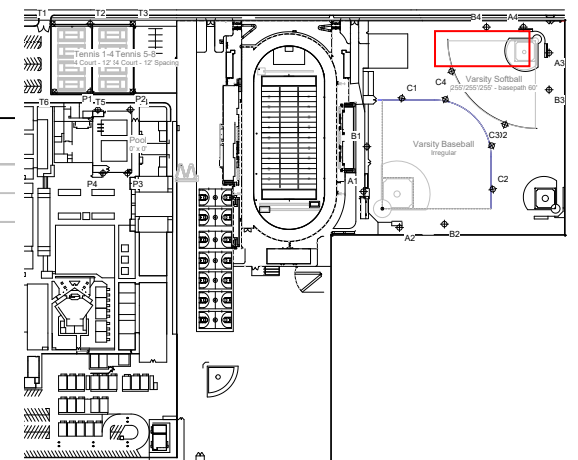
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 20



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	T1, T3-T4 T6	50'	-	50'	TLC-LED-900	1	1	0
				50'	TLC-LED-1200	2	2	0
2	T2, T5	50'	-	50'	TLC-LED-1200	4	4	0
				50'	TLC-LED-900	2	2	0
6	TOTALS					24	24	0

GRID SUMMARY

Name: Tennis Spill Grid
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

Entire Grid
Scan Average: 0.0015
Maximum: 0.01
Minimum: 0.00
No. of Points: 24

LUMINAIRE INFORMATION

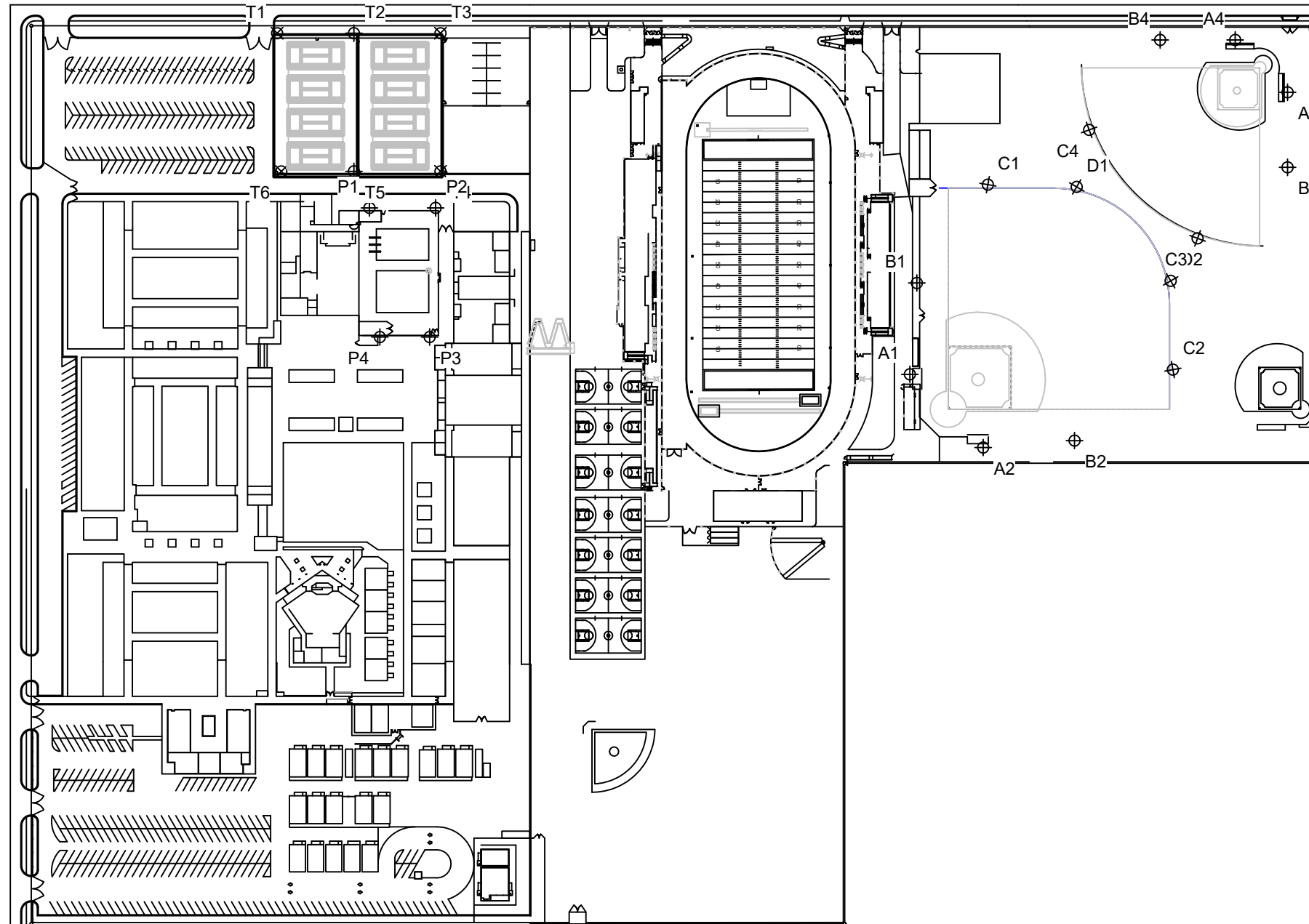
Applied Circuits: C, D
No. of Luminaires: 24
Total Load: 25.84 kW

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.



SCALE IN FEET 1 : 200



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	T1, T3-T4 T6	50'	-	50'	TLC-LED-900	1	1	0
				50'	TLC-LED-1200	2	2	0
2	T2, T5	50'	-	50'	TLC-LED-1200	4	4	0
				50'	TLC-LED-900	2	2	0
6	TOTALS					24	24	0

San Geronio High School Athletic Playfields
San Bernardino, CA

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

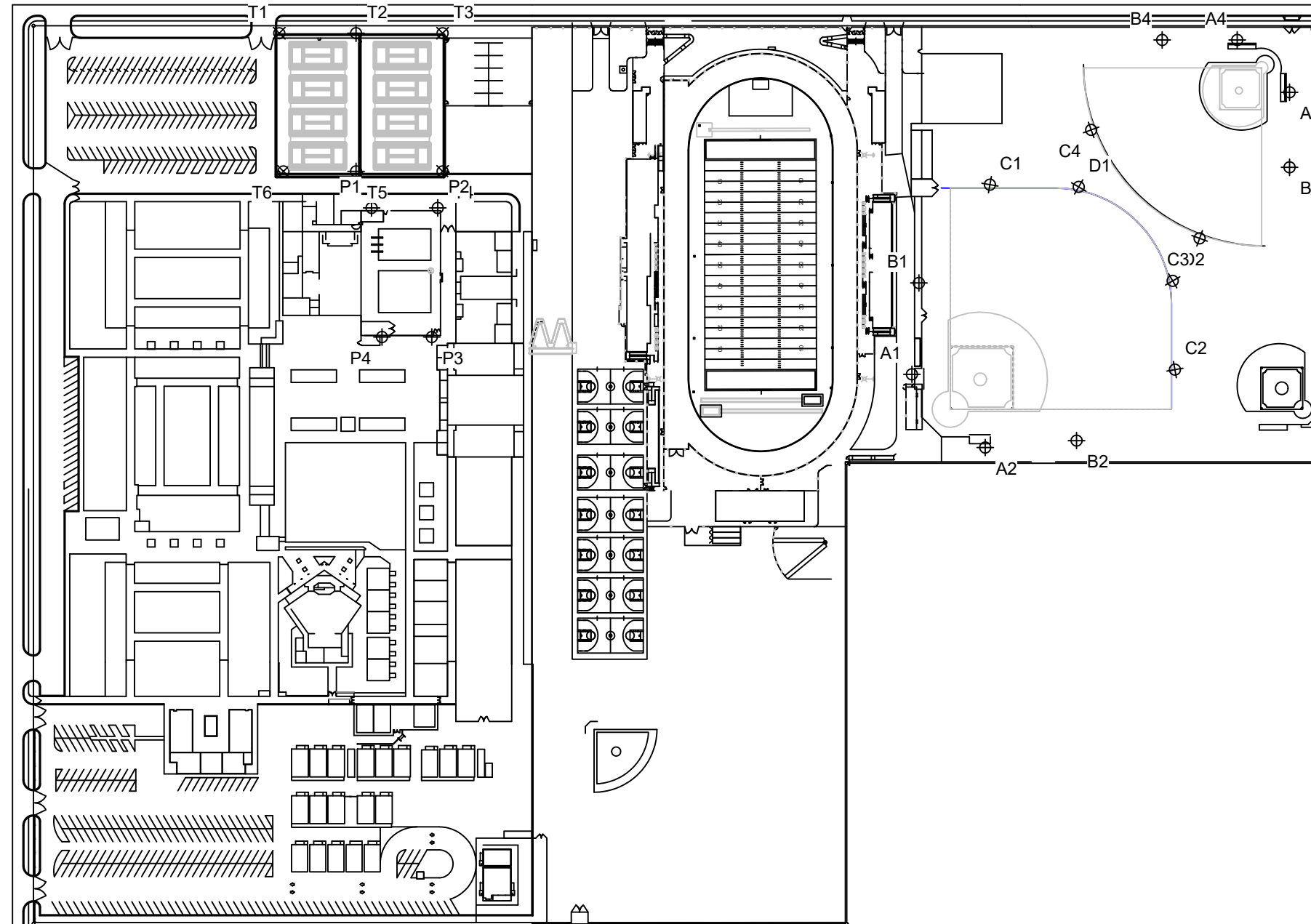
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0095
Maximum:	0.04
Minimum:	0.00
No. of Points:	24
LUMINAIRE INFORMATION	
Applied Circuits:	C, D
No. of Luminaires:	24
Total Load:	25.84 kW

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.



SCALE IN FEET 1 : 200



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	T1, T3-T4 T6	50'	-	50'	TLC-LED-900	1	1	0
				50'	TLC-LED-1200	2	2	0
2	T2, T5	50'	-	50'	TLC-LED-1200	4	4	0
				50'	TLC-LED-900	2	2	0
6	TOTALS					24	24	0

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

ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 595.6179
Maximum:	3071.21
Minimum:	0.00
No. of Points:	24
LUMINAIRE INFORMATION	
Applied Circuits:	C, D
No. of Luminaires:	24
Total Load:	25.84 kW

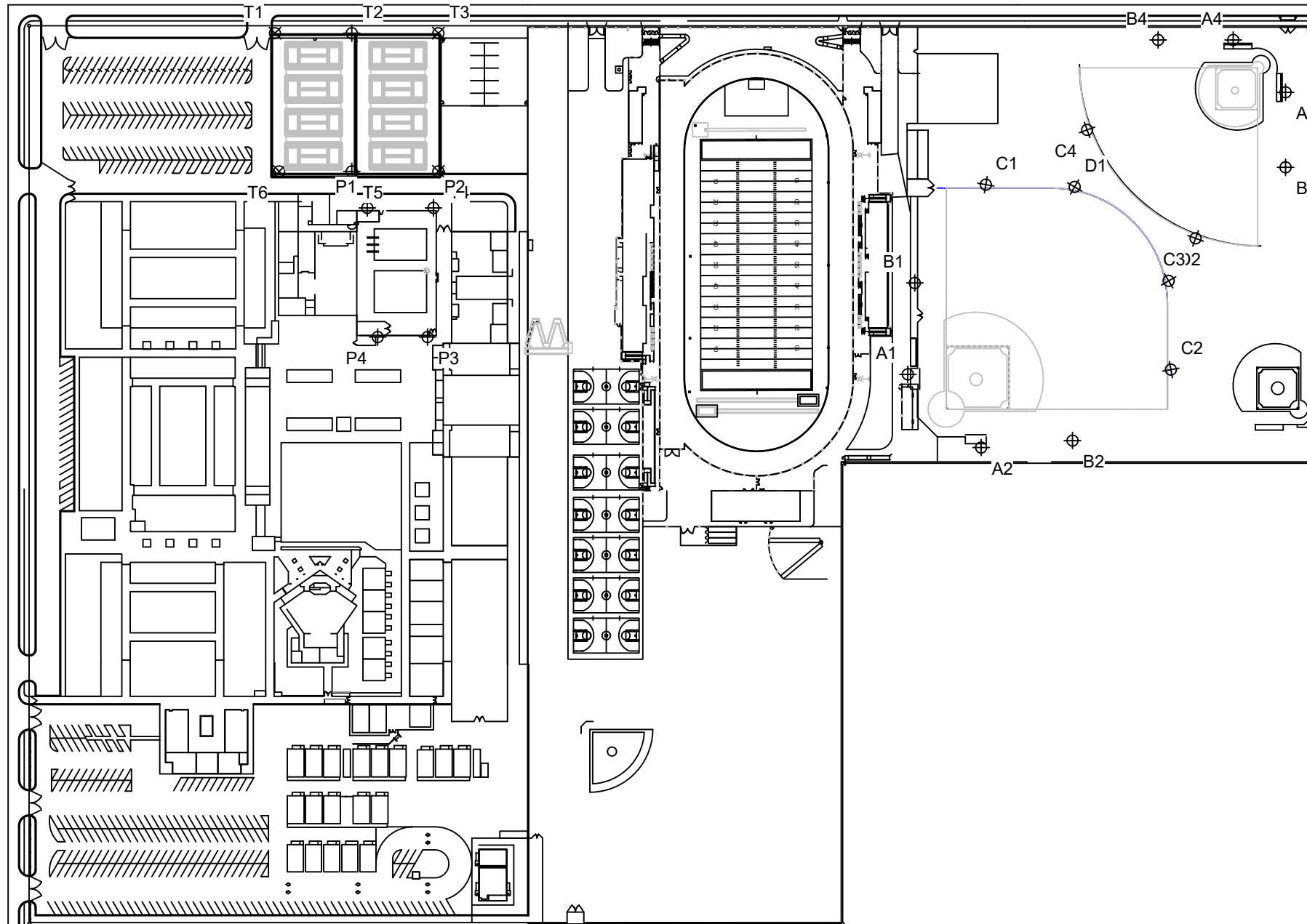
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

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.

2 24 34 39 100 477 1870 2021 1315 1396 1348 2041 1000 204 64 27 6



SCALE IN FEET 1 : 200



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



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EQUIPMENT LIST FOR AREAS SHOWN

QTY	Pole			Luminaires				
	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	70'	0'	15.48'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	A3-A4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
2	B1-B2	80'	0'	15.48'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	8	8	0
2	B3-B4	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	6	6	0
4	C1-C2	70'	0'	70'	TLC-LED-1200	3	3	0
				15.48'	TLC-BT-575	1	1	0
2	D1-D2	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1200	3	3	0
14	TOTALS					74	74	0

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

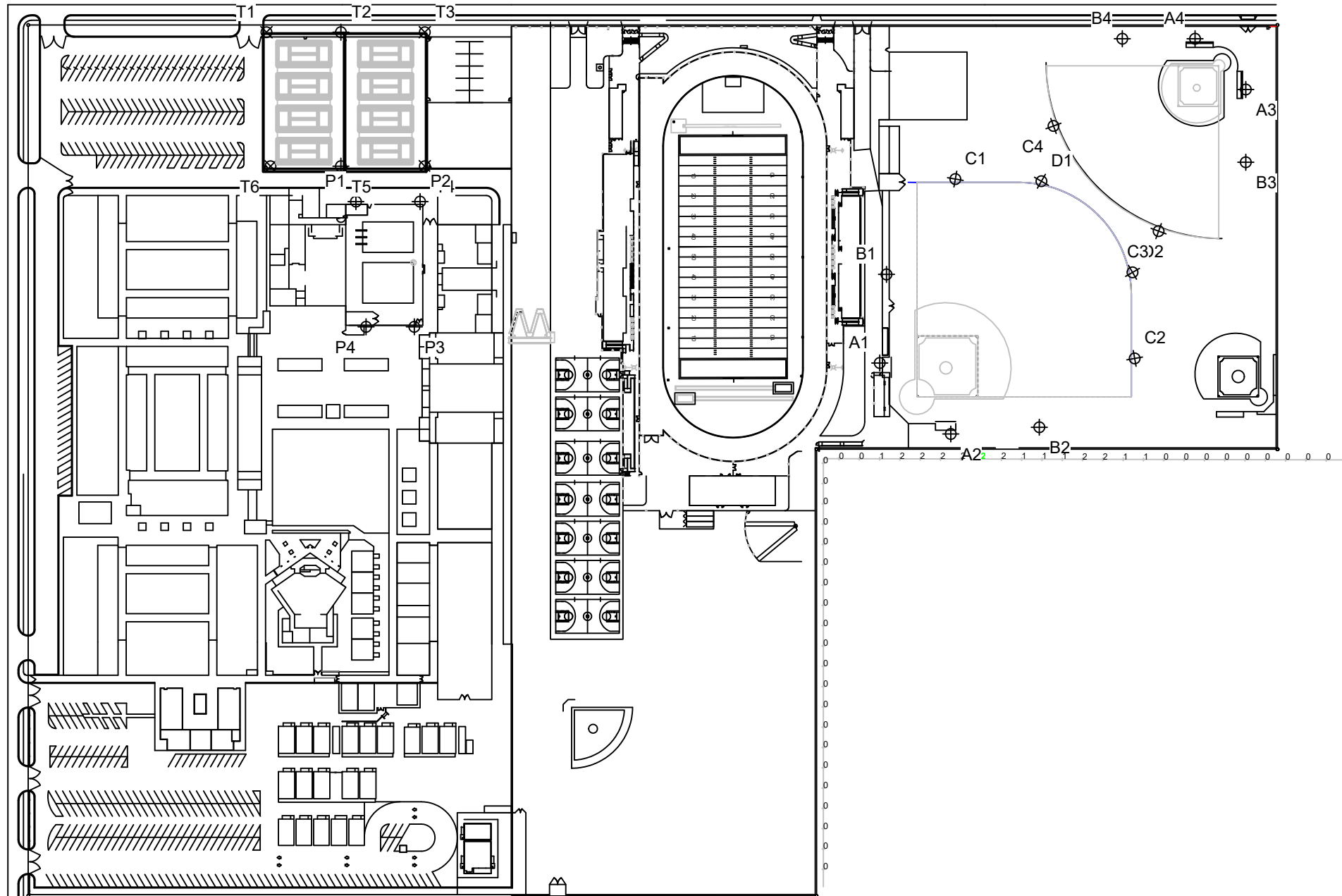
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	0.3516
Maximum:	2.39
Minimum:	0.00
No. of Points:	65
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	74
Total Load:	80.73 kW

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.



SCALE IN FEET 1 : 200



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	A1-A2	70'	0'	15.48'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	A3-A4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
2	B1-B2	80'	0'	15.48'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	8	8	0
2	B3-B4	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	6	6	0
4	C1-C2	70'	0'	70'	TLC-LED-1200	3	3	0
				15.48'	TLC-BT-575	1	1	0
2	D1-D2	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1200	3	3	0
14	TOTALS					74	74	0

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

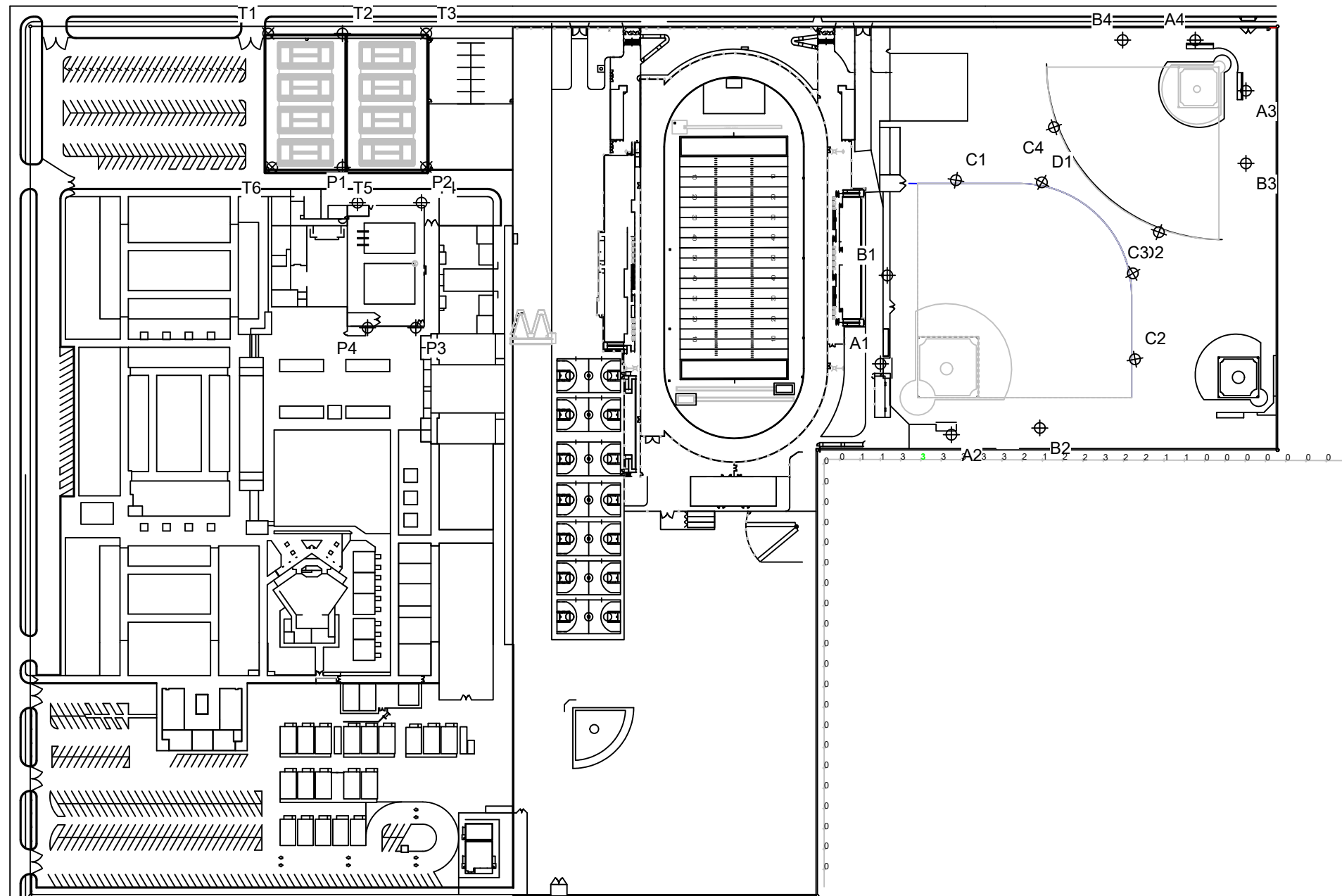
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
	Entire Grid
Scan Average:	0.5525
Maximum:	3.24
Minimum:	0.00
No. of Points:	65
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	74
Total Load:	80.73 kW

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) ⊗



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SCALE IN FEET 1 : 200
0 200' 400'

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	70'	0'	15.48'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	4	4	0
2	A3-A4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
2	B1-B2	80'	0'	15.48'	TLC-BT-575	1	1	0
				80'	TLC-LED-1500	8	8	0
2	B3-B4	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	6	6	0
4	C1-C2	70'	0'	70'	TLC-LED-1200	3	3	0
				15.48'	TLC-BT-575	1	1	0
2	D1-D2	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1200	3	3	0
14	TOTALS					74	74	0

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

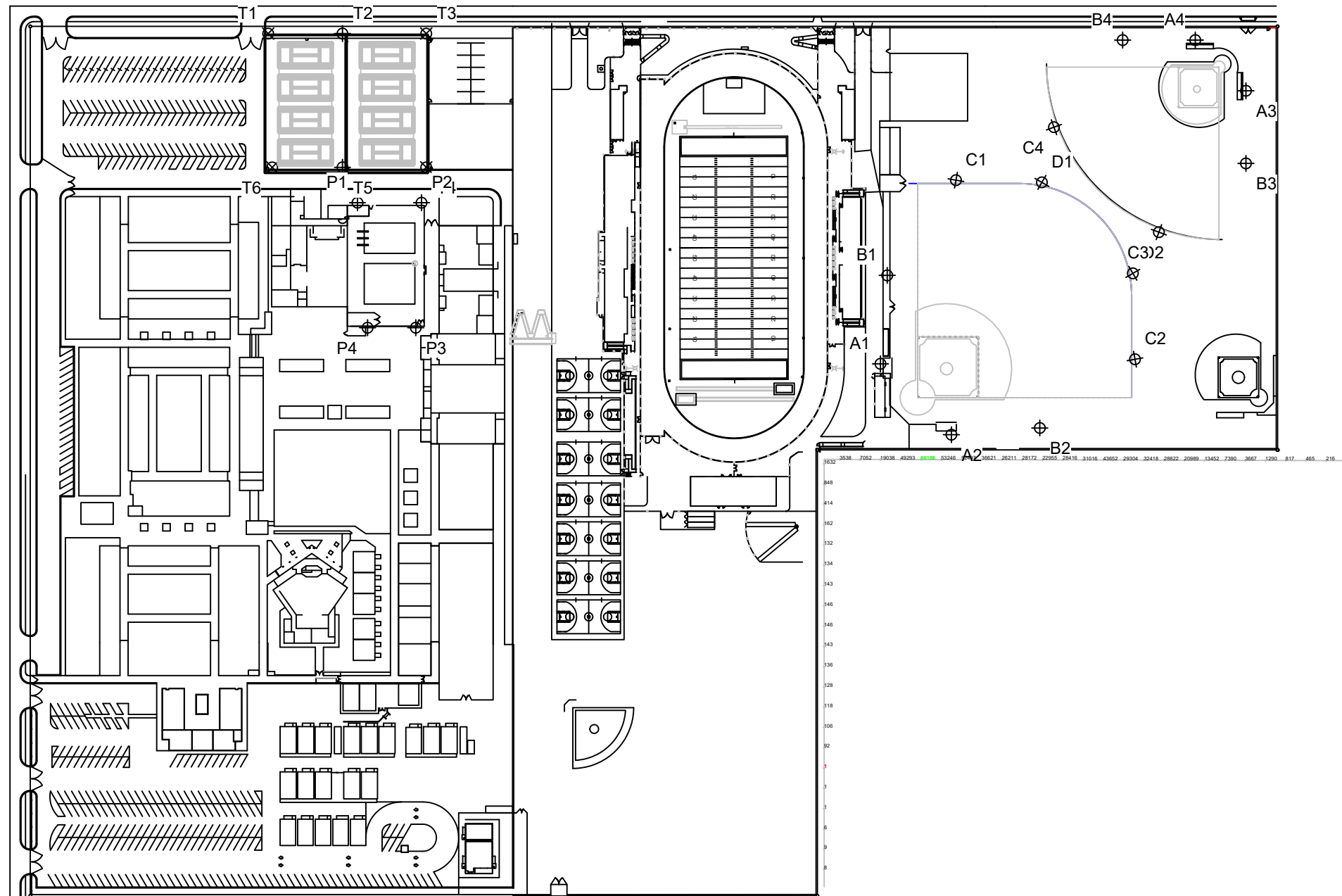
ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 9774.8037
Maximum:	66186.34
Minimum:	0.81
No. of Points:	65
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	74
Total Load:	80.73 kW

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.



SCALE IN FEET 1 : 200

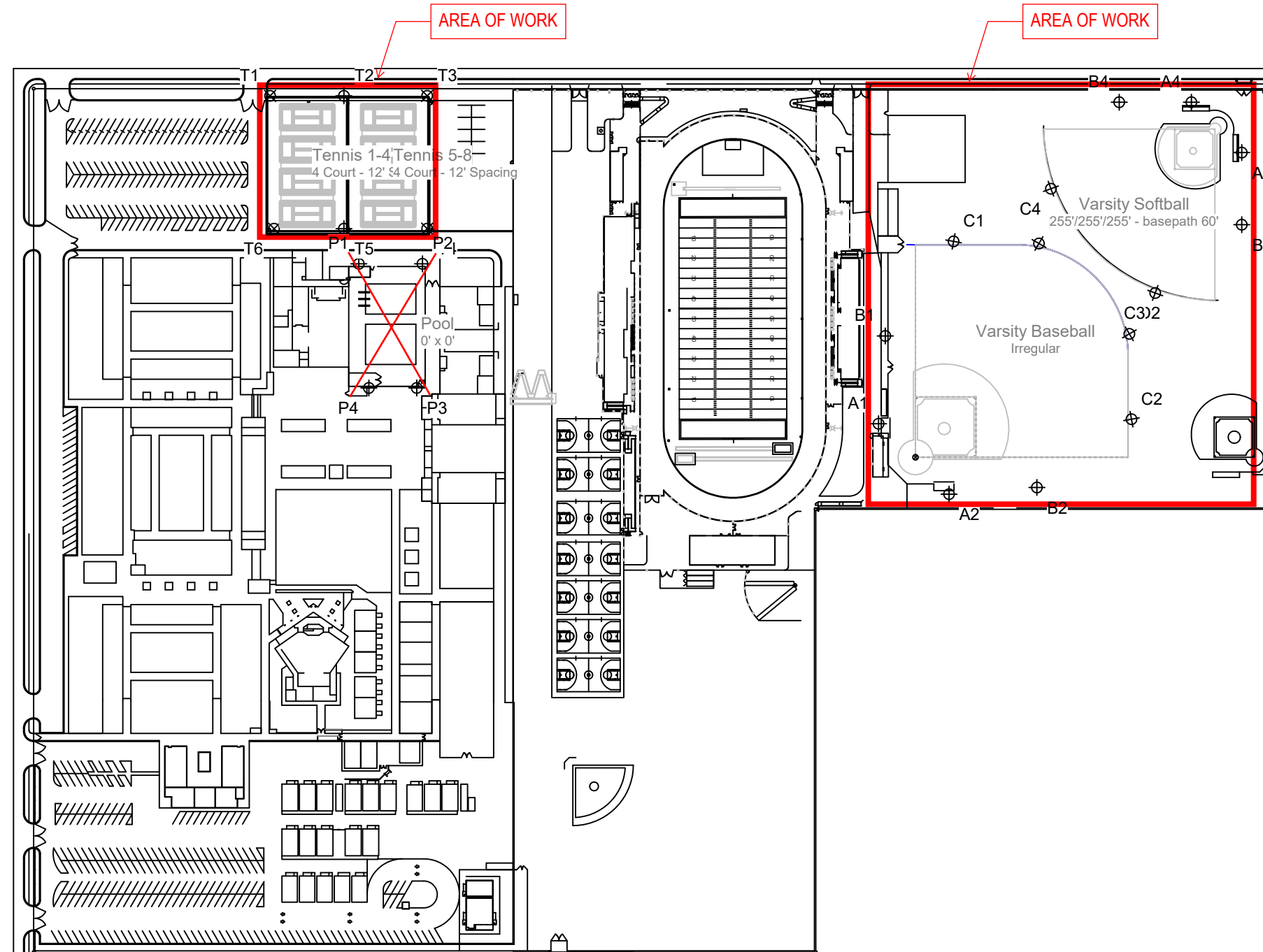


Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



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EQUIPMENT LAYOUT

INCLUDES:

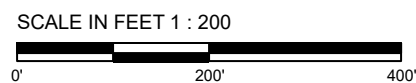
- Pool
- Tennis 1-4
- Tennis 5-8
- Varsity Baseball
- Varsity Softball

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-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0
TLC-LED-400	2.3	2.2	2.0	1.7	1.4	1.3	1.0
TLC-LED-600	3.4	3.2	3.0	2.6	2.0	1.9	1.5
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-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5



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



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