Bishop Little League Bishop, CA

Lighting System

Pole / Fixture	e Summary					
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	60'	60'	1	TLC-LED-1200	1.17 kW	Α
		60'	3	TLC-LED-900	2.64 kW	Α
		16'	1	TLC-BT-575	0.58 kW	Α
A3-A4	60'	60'	1	TLC-LED-1200	1.17 kW	В
		60'	2	TLC-LED-900	1.76 kW	В
		16'	1	TLC-BT-575	0.58 kW	В
A5-A6	70'	70'	4	TLC-LED-1200	4.68 kW	С
		16'	1	TLC-BT-575	0.58 kW	С
B1	80'	80'	2	TLC-LED-1200	2.34 kW	Α
		80'	3	TLC-LED-1500	4.23 kW	Α
		16'	2	TLC-BT-575	1.15 kW	Α
B2	80'	80'	1	TLC-LED-1200	1.17 kW	Α
		80'	2	TLC-LED-1500	2.82 kW	Α
		80'	3	TLC-LED-900	2.64 kW	Α
		16'	2	TLC-BT-575	1.15 kW	Α
B3-B4	70'	70'	2	TLC-LED-1200	2.34 kW	В
		70'	3	TLC-LED-900	2.64 kW	В
		16'	1	TLC-BT-575	0.58 kW	В
B5-B6	80'	80'	2	TLC-LED-1200	2.34 kW	С
		80'	4	TLC-LED-1500	5.64 kW	С
		16'	1	TLC-BT-575	0.58 kW	С
C1-C2	70'	70'	3	TLC-LED-1200	3.51 kW	С
		70'	2	TLC-LED-1500	2.82 kW	С
		16'	2	TLC-BT-575	1.15 kW	С
14			83		84.97 kW	

Circuit Summ	Circuit Summary										
Circuit	Description	Load	Fixture Qty								
Α	Field 2	24.27 kW	25								
В	Field 3	18.12 kW	20								
С	Field 4	42.58 kW	38								

Fixture Type Summary												
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity					
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	29					
TLC-LED-900	LED 5700K - 75 CRI	880W	104,000	>120,000	>120,000	>120,000	19					
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	18					
TLC-LED-1500	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	17					

Single Luminaire Amperage Draw Chart											
Driver (.90 min power factor)	Max Line Amperage Per Luminaire					re					
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)				
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0				
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3				
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5				
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6				

Light Level Summary

ı	Calculation Grid Summar	у							
	Grid Name	Calculation Metric			Illumination			Circuits	Fixture Qty
ш	Ona Hume	Salealation metric	Ave	Min	Max	Max/Min	Ave/Min	Onouno	Tixture Gty
	Field 2 (Infield)	Horizontal Illuminance	51.9	37	65	1.78	1.40	Α	25
	Field 2 (Outfield)	Horizontal Illuminance	30.2	21	49	2.34	1.44	Α	25
	Field 3 (Infield)	Horizontal Illuminance	51.4	40	60	1.48	1.28	В	20
	Field 3 (Outfield)	Horizontal Illuminance	31.9	21	48	2.26	1.52	В	20
	Field 4 (Infield)	Horizontal Illuminance	51.8	45	58	1.29	1.15	С	38
	Field 4 (Outfield)	Horizontal Illuminance	32.4	21	46	2.14	1.54	С	38

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From Hometown to Professional











Bishop Little League Bishop, CA

Calculation Grid Summar	Calculation Grid Summary											
Grid Name	Calculation Metric			Illumination			Circuits	Fixture Qty				
Grid Name	Calculation Metric	Ave	Min	Max	Max/Min	Ave/Min	Circuits					
Hanley & Yaney Ave	Horizontal	0.04	0	0.70	0.00		A,B,C	83				
Hanley & Yaney Ave	Max Candela (by Fixture)	1147	0	9263	0.00		A,B,C	83				
Hanley & Yaney Ave	Max Vertical Illuminance Metric	0.07	0	0.87	0.00		A,B,C	83				

From Hometown to Professional











EQUIPMENT LIST FOR AREAS SHOWN LOCATION SIZE TYPE TLC-LED-1200 15.5' TLC-BT-575 TLC-LED-900 TLC-LED-1200 80' 15.5' TLC-BT-575 TLC-LED-1500 TLC-LED-1500 В2 80' TLC-LED-1200 15.5' TLC-BT-575 TLC-LED-900 TOTALS SCALE IN FEET 1:40 to 0,0 reference point(s) \otimes

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Bishop Little League

Bishop, CA

GRID SUMMARY Name: Field 2 Size: Irregular 230' / 248' / 229' Spacing: 20.0' x 20.0' Height: 3.0' above grade

ILLUMINATION SUMMARY									
MAINTAINED HORIZONTA	L FOOTCANDL	ES							
	Infield	Outfield							
Guaranteed Average:	50	30							
Scan Average:	51.93	30.22							
Maximum:	65	49							
Minimum:	37	21							
Avg / Min:	1.42	1.45							
Guaranteed Max / Min:	2	2.5							
Max / Min:	1.78	2.34							
UG (adjacent pts):	1.23	1.33							
CU:	0.65								
No. of Points:	25	104							
LUMINAIRE INFORMATIO	N								
Applied Circuits:	Α								
No. of Luminaires:	25								
Total Load:	24.27 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 LOCATION SIZE A3-A4 TLC-BT-575 15.5' TLC-LED-1200 TLC-LED-900 70' TLC-BT-575 15.5' TLC-LED-1200 TLC-LED-1200 TLC-BT-575 70' 15.5' TLC-LED-900 .27 SCALE IN FEET 1:40

ENGINEERED DESIGN By: Aaron Rose · File #160104A · 27-Sep-23

Bishop Little League

Bishop, CA

GRID SUMMARY Name: Field 3 Size: 200'/200'/200' - basepath 60' Spacing: 20.0' x 20.0' Height: 3.0' above grade

	ILLUMINATION SUMMARY									
ı	MAINTAINED HORIZONTAL FOOTCANDLES									
ı		Infield	Outfield							
ı	Guaranteed Average:	50	30							
	Scan Average:	51.37	31.88							
ļ	Maximum:	60	48							
ı	Minimum:	40	21							
ı	Avg / Min:	1.28	1.50							
	Guaranteed Max / Min:	2	2.5							
ı	Max / Min:	1.48	2.26							
	UG (adjacent pts):	1.24	1.35							
	CU:	0.67								
	No. of Points:	25	71							
	LUMINAIRE INFORMATIO	N								
ı	Applied Circuits:	В								
	No. of Luminaires:	20								
	Total Load:	18.12 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.



to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN LOCATION 70' TLC-LED-1200 TLC-LED-1500 TLC-BT-575 B5-B6 15.5' TLC-LED-1200 TLC-LED-1500 C1-C2 15.5' 70' TLC-BT-575 TLC-LED-1200 41 40 41 43 40 33 29 24 23 **21** 40 40 42 42 38 33 28 26 27 26 37 40 37 37 35 31 30 29 28 31 27 43 40 39 35 34 32 33 34 35 33 28 27 27 42 40 33 31 30 30 32 34 34 32 31 29 38 / 33 30 27 26 28 29 30 30 34 36 29 40 40 38 35 33 30 27 25 24 25 27 31 33 33 37 32 42 38 35 35 31 27 25 24 24 24 26 29 31 31 33 29 42 37 34 33 30 27 26 25 25 25 27 30 31 30 28 35 34 33 30 28 28 27 27 28 31 30 28 27 24 33 32 33 34 32 30 31 31 30 31 31 27 25 22 30 34 36 34 30 32 33 32 32 29 25 22 26 29 31 33 34 30 33 33 32 30 27 28 28 28 32 34 37 37 34 28 25 30 31 27 31 36 35 29 26 29 29 SCALE IN FEET 1:60 to 0,0 reference point(s) \otimes

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Bishop Little League

Bishop, CA

GRID SUMMARY

Name: Field 4
Size: 320'/360'/320' - basepath 80'
Spacing: 20.0' x 20.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY									
MAINTAINED HORIZONTA	MAINTAINED HORIZONTAL FOOTCANDLES								
	Infield	Outfield							
Guaranteed Average:	50	30							
Scan Average:	51.84	32.39							
Maximum:	58	46							
Minimum:	45	21							
Avg / Min:	1.14	1.51							
Guaranteed Max / Min:	2	2.5							
Max / Min:	1.29	2.14							
UG (adjacent pts):	1.15	1.26							
CU:	0.72								
No. of Points:	25	249							
LUMINAIRE INFORMATIO	N								
Applied Circuits:	С								
No. of Luminaires:	38								
Total Load:	42.58 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.



EQUIPMENT LIST FOR AREAS SHOWN LOCATION SIZE TLC-BT-575 15.5' TLC-LED-900 TLC-LED-900 A3-A4 60' 60' 15.5' TLC-BT-575 TLC-LED-1200 TLC-BT-575 A5-A6 15.5' 70' TLC-LED-1200 80' TLC-LED-1200 В1 80' 15.5' TLC-BT-575 TLC-LED-1500 80' 80' TLC-LED-1500 B2 80' 80' TLC-LED-1200 15.5' TLC-BT-575 80' TLC-LED-900 TLC-LED-900 В3 70' 15.5' TLC-BT-575 TLC-LED-1200 70' TLC-LED-1200 TLC-BT-575 70' 70' 15.5' TLC-LED-900 TLC-LED-1500 B5-B6 80' 80' 15.5' TLC-BT-575 TLC-LED-1200 C1-C2 TLC-LED-1500 70' 15.5' TLC-BT-575 TLC-LED-1200 66-B6

SCALE IN FEET 1:150

ENGINEERED DESIGN By: Aaron Rose · File #160104A · 27-Sep-23

to 0,0 reference point(s) \otimes

Bishop Little League

Bishop, CA

GRID SUMMARY Name: Hanley & Yaney Ave Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY Entire Grid Scan Average: Maximum: Minimum: 0.00 No. of Points: 143 LUMINAIRE INFORMATION Applied Circuits: A, B, C No. of Luminaires: 83 Total Load: 84.97 kW

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

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 LOCATION SIZE TLC-BT-575 15.5' TLC-LED-900 TLC-LED-900 A3-A4 60' 60' 15.5' TLC-BT-575 TLC-LED-1200 TLC-BT-575 A5-A6 15.5' 70' TLC-LED-1200 80' TLC-LED-1200 В1 80' 15.5' TLC-BT-575 TLC-LED-1500 80' 80' TLC-LED-1500 B2 80' 80' TLC-LED-1200 15.5' TLC-BT-575 80' TLC-LED-900 TLC-LED-900 В3 70' 15.5' TLC-BT-575 TLC-LED-1200 70' TLC-LED-1200 TLC-BT-575 70' 70' 15.5' TLC-LED-900 TLC-LED-1500 B5-B6 80' 80' 15.5' TLC-BT-575 TLC-LED-1200 C1-C2 TLC-LED-1500 70' 15.5' TLC-BT-575 TLC-LED-1200 66-B6

SCALE IN FEET 1:150

ENGINEERED DESIGN By: Aaron Rose · File #160104A · 27-Sep-23

to 0,0 reference point(s) \otimes

Bishop Little League

Bishop, CA

GRID SUMMARY Name: Hanley & Yaney Ave Spacing: 30.0' Height: 3.0' above grade

ILLUMINATION SUMMARY MAX VERTICAL FOOTCANDLES **Entire Grid** Scan Average: Maximum: 0.87 Minimum: 0.00 No. of Points: 143 LUMINAIRE INFORMATION Applied Circuits: A, B, C No. of Luminaires: 83 Total Load: 84.97 kW

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

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 LOCATION SIZE TLC-BT-575 15.5' TLC-LED-900 TLC-LED-900 A3-A4 60' 60' 15.5' TLC-BT-575 TLC-LED-1200 TLC-BT-575 A5-A6 15.5' 70' TLC-LED-1200 80' TLC-LED-1200 В1 80' 15.5' TLC-BT-575 TLC-LED-1500 80' 80' TLC-LED-1500 B2 80' 80' TLC-LED-1200 15.5' TLC-BT-575 80' TLC-LED-900 TLC-LED-900 В3 70' 15.5' TLC-BT-575 TLC-LED-1200 70' TLC-LED-1200 TLC-BT-575 70' 70' 15.5' TLC-LED-900 TLC-LED-1500 B5-B6 80' 80' 15.5' TLC-BT-575 TLC-LED-1200 C1-C2 TLC-LED-1500 70' 15.5' TLC-BT-575 TLC-LED-1200 66-B6

SCALE IN FEET 1:150

ENGINEERED DESIGN By: Aaron Rose · File #160104A · 27-Sep-23

to 0,0 reference point(s) \otimes

Bishop Little League Bishop, CA

GRID SUMMARY Name: Hanley & Yaney Ave

Spacing: 30.0'

Height: 3.0' above grade

ILLUMINATION SUMMARY CANDELA (PER FIXTURE)

> **Entire Grid** Scan Average: 1147.4349 Maximum: 9263.22

Minimum: 0.00 No. of Points: 143 LUMINAIRE INFORMATION

Applied Circuits: A, B, C No. of Luminaires: 83 Total Load: 84.97 kW

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

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 1:150

ENGINEERED DESIGN By: Aaron Rose · File #160104A · 27-Sep-23

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

Bishop Little League

Bishop, CA

EQUIPMENT LAYOUT

INCLUDES: Field 2 Field 3 Field 4

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

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

EQ	EQUIPMENT LIST FOR AREAS SHOWN									
	Po	ole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE Type	QTY / POLE				
2	A1-A2	60'	-	60'	TLC-LED-1200	1				
				15.5'	TLC-BT-575	1				
				60'	TLC-LED-900	3				
2	A3-A4	60'	-	60'	TLC-LED-900	2				
				15.5'	TLC-BT-575	1				
				60'	TLC-LED-1200	1				
2	A5-A6	70'	-	15.5'	TLC-BT-575	1				
				70'	TLC-LED-1200	4				
1	B1	80'	-	80'	TLC-LED-1200	2				
				15.5'	TLC-BT-575	2				
				80'	TLC-LED-1500	3				
1	B2	80'	-	80'	TLC-LED-1500	2				
				80'	TLC-LED-1200	1				
				15.5'	TLC-BT-575	2				
				80'	TLC-LED-900	3				
1	В3	70'	-	70'	TLC-LED-900	3				
				15.5'	TLC-BT-575	1				
				70'	TLC-LED-1200	2				
1	B4	70'	-	70'	TLC-LED-1200	2				
				15.5'	TLC-BT-575	1				
				70'	TLC-LED-900	3				
2	B5-B6	80'	-	80'	TLC-LED-1500	4				
				15.5'	TLC-BT-575	1				
				80'	TLC-LED-1200	2				
2	C1-C2	70'	-	70'	TLC-LED-1500	2				
				15.5'	TLC-BT-575	2				
				70'	TLC-LED-1200	3				
14			TOTAL	S		83				

SINGLE LUMINAIRE AMPERAGE DRAW CHART											
Driver (.90 min power factor)	Line Amperage Per Luminaire (max draw)										
Single Phase Voltage	208	220	240	277	347 (60)	380	480 (60)				
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0				
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3				
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5				
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6				

