

Tatlock Park Multipurpose Fields
Summit,NJ

LIGHTING SYSTEM

Structure/Fixture Summary						
Structure ID	Structure Height	Fixt. Attachment Ht.	Fixture Qty	Fixture Type	Load	Circuit
F1-F2	80'	80'	2	TLC-LED-1500	2.82 kW	B
		80'	6	TLC-LED-1500	8.46 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
F3-F4	70'	70'	2	TLC-LED-1500	2.82 kW	B
		70'	5	TLC-LED-1500	7.05 kW	A
		60'	1	TLC-LED-550	0.54 kW	D
		16'	2	TLC-BT-575	1.15 kW	A
		70'	1	TLC-LED-1200	1.17 kW	C
S1	70'	70'	3	TLC-LED-1500	4.23 kW	C
		70'	3	TLC-LED-900	2.64 kW	C
S2	70'	70'	3	TLC-LED-1200	3.51 kW	C
		70'	4	TLC-LED-1500	5.64 kW	C
S3	80'	80'	3	TLC-LED-1200	3.51 kW	C
		80'	4	TLC-LED-1500	5.64 kW	C
S4	80'	80'	1	TLC-LED-1200	1.17 kW	C
		80'	3	TLC-LED-1500	4.23 kW	C
		80'	3	TLC-LED-900	2.64 kW	C
8			68		82.36 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Investors Field	35.62 kW	30
B	Walking Track	11.28 kW	8
C	Upper Field	34.38 kW	28
D	Walkway	1.08 kW	2

Fixture Type Summary								
Type	Circuit	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	A	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-1200	C	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	8
TLC-LED-1500	A	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	22
TLC-LED-1500	B	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	8
TLC-LED-1500	C	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	13
TLC-LED-1500	C	LED 5700K - 90 TYP	1410W	148,420	>120,000	>120,000	>120,000	1
TLC-LED-550	D	LED 5700K - 75 CRI	540W	67,000	>120,000	>120,000	>120,000	2
TLC-LED-900	C	LED 5700K - 75 CRI	880W	104,000	>120,000	>120,000	>120,000	6

Single Fixture Amperage Draw Chart								
Driver Specifications (.90 min power factor)		Line Amperage Per Fixture (max draw)						
Single Phase Voltage		208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1500		8.4	7.9	7.3	6.3	5.0	4.6	3.6
TLC-LED-1200		6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-LED-900		5.2	4.9	4.5	3.9	3.1	2.9	2.3
TLC-BT-575		3.3	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-550		3.2	3.0	2.8	2.4	1.9	1.8	1.4

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination Ave					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Home Bleacher	Horizontal	9.57	4	22	5.48	2.41	A,B	38
Investors Field	Horizontal Illuminance	52.28	39	66	1.67	1.32	A,B	38
Property Spill @ 3ft.	Horizontal Illuminance	0.0076	0.00	0.05	-	-	A,B,C,D	68
Property Spill @ 5ft.	Max Candela Metric	715.3395	3.58	4763.77	1328.938	199.557	A,B,C,D	68
Property Spill @ 5ft.	Max Vertical Illuminance Metric	0.0186	0.00	0.11	-	-	A,B,C,D	68
Track	Horizontal Illuminance	7.96	1	21	24.35	9.42	B	8
Upper field	Horizontal Illuminance	50.49	30	61	2.08	1.71	C	28
Visitor Bleacher	Horizontal	7.54	5	12	2.53	1.61	A,B	38
Walkway	Horizontal	5.57	0	11	35.60	17.70	D	2
Zero FC Grid	Horizontal	3.07	0	71	-	-	A,B,C,D	68

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

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

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


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



Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
1	F1	80'	3'	83'	TLC-LED-1500	8	8	0
				18.5'	TLC-BT-575	2	2	0
1	F2	80'	-	80'	TLC-LED-1500	8	8	0
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1500	7	7	0
				60'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	2	0
4	Totals					40	38	2

Above Field Level is height of fixtures above area shown





SCALE IN FEET 1 : 50

0'

50'

100'

ENGINEERED DESIGN By: D.Abbott • File #116226E • 06-Aug-25

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

Tatlock Park Multipurpose Fields

Summit,NJ

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

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	50
Scan Average:	52.28
Maximum:	66
Minimum:	39
Avg/Min:	1.32
Guaranteed Max/Min:	2
Max/Min:	1.67
UG (adjacent pts):	1.67
CU:	0.58
No. of Points:	72
FIXTURE INFORMATION	
Applied Circuits:	A,B
No. of Fixtures:	38
Total Load:	46.90 kW

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

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

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

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



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ILLUMINATION SUMMARY

Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
1	F1	80'	3'	83.0'	TLC-LED-1500	8	2	6
				18.5'	TLC-BT-575	2	0	2
1	F2	80'	-	80'	TLC-LED-1500	8	2	6
				15.5'	TLC-BT-575	2	0	2
2	F3-F4	70'	-	70'	TLC-LED-1500	7	2	5
				60'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	0	2
4	Totals					40	8	32

Above Field Level is height of fixtures above area shown



Tatlock Park Multipurpose Fields

Summit,NJ

Grid Summary	
Name:	Track
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average:	7.96
Maximum:	21
Minimum:	1
Avg/Min:	9.42
Max/Min:	24.35
UG (adjacent pts):	0.00
CU:	0.22
No. of Points:	44
FIXTURE INFORMATION	
Applied Circuits:	B
No. of Fixtures:	8
Total Load:	11.28 kW

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

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

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

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



Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
1	F1	80'	3'	83'	TLC-LED-1500	8	8	0
				18.5'	TLC-BT-575	2	2	0
1	F2	80'	-	80'	TLC-LED-1500	8	8	0
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1500	7	7	0
				60'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	2	0
4	Totals					40	38	2

Above Field Level is height of fixtures above area shown



Tatlock Park Multipurpose Fields

Summit,NJ

Grid Summary	
Name:	Home Bleacher
Size:	360' x 160'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
Entire Grid	
Scan Average:	9.57
Maximum:	22
Minimum:	4
Avg/Min:	2.41
Max/Min:	5.48
UG (adjacent pts):	1.57
CU:	0.01
No. of Points:	60
FIXTURE INFORMATION	
Applied Circuits:	A,B
No. of Fixtures:	38
Total Load:	46.90 kW

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

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

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

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



Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
1	F1	80'	3'	83'	TLC-LED-1500	8	8	0
				18.5'	TLC-BT-575	2	2	0
1	F2	80'	-	80'	TLC-LED-1500	8	8	0
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1500	7	7	0
				60'	TLC-LED-550	1	0	1
				15.5'	TLC-BT-575	2	2	0
4	Totals					40	38	2

Above Field Level is height of fixtures above area shown



Tatlock Park Multipurpose Fields

Summit,NJ

Grid Summary	
Name:	Visitor Bleacher
Size:	360' x 160'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
Entire Grid	
Scan Average:	7.54
Maximum:	12
Minimum:	5
Avg/Min:	1.61
Max/Min:	2.53
UG (adjacent pts):	1.67
CU:	0.00
No. of Points:	20
FIXTURE INFORMATION	
Applied Circuits:	A,B
No. of Fixtures:	38
Total Load:	46.90 kW

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

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

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

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





Tatlock Park Multipurpose Fields

Summit,NJ

Grid Summary	
Name:	Walkway
Size:	360' x 160'
Spacing:	30.0' x 10.0'
Height:	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
Scan Average:	Entire Grid 5.57
Maximum:	11
Minimum:	0
No. of Points:	11
FIXTURE INFORMATION	
Applied Circuits:	D
No. of Fixtures:	2
Total Load:	1.08 kW

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

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

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


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



Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
1	S1	70'	-	70'	TLC-LED-1200	1	1	0
				70'	TLC-LED-1500	3	3	0
				70'	TLC-LED-900	3	3	0
1	S2	70'	-	70'	TLC-LED-1200	3	3	0
				70'	TLC-LED-1500	4	4	0
1	S3	80'	-7'	73.0'	TLC-LED-1200	3	3	0
				73.0'	TLC-LED-1500	4	4	0
1	S4	80'	-7'	73.0'	TLC-LED-1200	1	1	0
				73.0'	TLC-LED-1500	3	3	0
				73.0'	TLC-LED-900	3	3	0
4	Totals					28	28	0

Above Field Level is height of fixtures above area shown





SCALE IN FEET 1 : 50

0'

50'

100'

ENGINEERED DESIGN

By: D.Abbott • File #116226E • 06-Aug-25

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

Tatlock Park Multipurpose Fields

Summit,NJ

Grid Summary	
Name:	Upper field
Size:	330' x 195'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

Illumination Summary	
	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Guaranteed Average:	50
Scan Average:	50.49
Maximum:	61
Minimum:	30
Avg/Min:	1.71
Guaranteed Max/Min:	2.5
Max/Min:	2.08
UG (adjacent pts):	1.84
CU:	0.81
No. of Points:	77
FIXTURE INFORMATION	
Applied Circuits:	C
No. of Fixtures:	28
Total Load:	34.38 kW

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

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

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

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



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ILLUMINATION SUMMARY

Equipment List For Areas Shown								
Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
1	F1	80'	3'	83'	TLC-LED-1500	8	8	0
				18.5'	TLC-BT-575	2	2	0
1	F2	80'	-	80'	TLC-LED-1500	8	8	0
				15.5'	TLC-BT-575	2	2	0
2	F3-F4	70'	-	70'	TLC-LED-1500	7	7	0
				60'	TLC-LED-550	1	1	0
				15.5'	TLC-BT-575	2	2	0
1	S1	70'	27'	97'	TLC-LED-1200	1	1	0
				97'	TLC-LED-1500	3	3	0
				97'	TLC-LED-900	3	3	0
1	S2	70'	27'	97'	TLC-LED-1200	3	3	0
				97'	TLC-LED-1500	4	4	0
1	S3	80'	20'	100.0'	TLC-LED-1200	3	3	0
				100.0'	TLC-LED-1500	4	4	0
1	S4	80'	20'	100.0'	TLC-LED-1200	1	1	0
				100.0'	TLC-LED-1500	3	3	0
				100.0'	TLC-LED-900	3	3	0
8	Totals					68	68	0

Above Field Level is height of fixtures above area shown



Tatlock Park Multipurpose Fields

Summit,NJ

Grid Summary	
Name:	Property Spill @ 3ft.
Spacing:	30.0'
Height:	3.0' above grade

Illumination Summary	
	INITIAL HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average:	0.00
Maximum:	0
Minimum:	0
CU:	0.00
No. of Points:	52
FIXTURE INFORMATION	
Applied Circuits:	A,B,C,D
No. of Fixtures:	68
Total Load:	82.36 kW

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

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

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

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



Tatlock Park Multipurpose Fields

Summit,NJ

Equipment Layout

INCLUDES:

- Investors Field
- Track
- Upper field

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

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

Equipment List For Areas Shown

Structure				Fixtures		
QTY	STRUCTURE ID	SIZE	GLOBAL ELEVATION	ABOVE GLOBAL LEVEL	FIXTURE TYPE	QTY/POLE
1	F1	80'	3'	83' 18.5'	TLC-LED-1500 TLC-BT-575	8 2
1	F2	80'	-	80' 15.5'	TLC-LED-1500 TLC-BT-575	8 2
2	F3-F4	70'	-	70' 60' 15.5'	TLC-LED-1500 TLC-LED-550 TLC-BT-575	7 1 2
1	S1	70'	27'	97' 97' 97'	TLC-LED-1200 TLC-LED-1500 TLC-LED-900	1 3 3
1	S2	70'	27'	97' 97'	TLC-LED-1200 TLC-LED-1500	3 4
1	S3	80'	20'	100.0' 100.0'	TLC-LED-1200 TLC-LED-1500	3 4
1	S4	80'	20'	100.0' 100.0' 100.0'	TLC-LED-1200 TLC-LED-1500 TLC-LED-900	1 3 3
8	Totals					68

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

Single Fixture Amperage Draw Chart

Driver Specifications (.90 min power factor)	Line Amperage Per Fixture (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3
TLC-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-550	3.2	3.0	2.8	2.4	1.9	1.8	1.4

