

SANTA FE CHRISTIAN SCHOOLS

SPORT FIELD LIGHTING



PHASE 1B & 1C SPORT FIELD LIGHTING

OWNER
SANTA FE CHRISTIAN SCHOOLS
838 ACADEMY DRIVE
SOLANA BEACH, CA 92075
P: 858.755.8900
F: 858.755.2480

ASSESSOR'S PARCEL NUMBER (APN)
298-112-29-00
298-112-30-00

SAFDIE RABINES ARCHITECTS

ENTITLEMENT PACKAGE

838 ACADEMY DRIVE, SOLANA BEACH, SAN DIEGO, CALIFORNIA 92075

ARCHITECT
Safdie Rabines Architects
925 Fort Stockton Drive
San Diego, CA 92103
P: 619.297.6153
F: 619.299.6072
www.safdiearchitects.com

PARKING COUNT

PARKING PROVIDED - SPORT FIELD LIGHTING				
	STANDARD	ACCESSIBLE		SUBTOTAL
		CAR	VAN	
PARKING LOT A	85	2	2	89
PARKING LOT B	63	2	1	66
PARKING LOT C	17	2	-	19
PARKING LOT D	49	2	1	52
PARKING LOT G	13	-	-	13
PARKING LOT H	15	1	1	17
PARKING GARAGE	23	1	1	25
TOTAL (LOOP ROAD COMPLETION)	265	10	6	281

SHEET INDEX

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 - A.100 SPORT FIELD LIGHTING - SITE PLAN
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 - L-012 ILLUMINATION SUMMARY
 - L-013 ILLUMINATION SUMMARY
 - L-014 EQUIPMENT LAYOUT
- SHEET TOTAL: 16

PROJECT/PARCEL INFORMATION

PROJECT SCOPE:
SPORT FIELD LIGHTING FOR THE FOOTBALL FIELD, SOCCER FIELD, BASEBALL FIELD & SOFTBALL FIELD.

PROJECT ADDRESS:
838 ACADEMY DRIVE
SOLANA BEACH
SAN DIEGO, CA 92075

ASSESSOR'S PARCEL NUMBERS:
298-112-29-00, 298-112-30-00

TONING & OVERLAY ZONES:
MHRd (MEDIUM-HIGH RESIDENTIAL)
HILLSIDE OVERLAY ZONE

LEGAL DESCRIPTION:
PARCEL 1: APN: 298-112-29-00

THE NORTH HALF OF LOT 1, NORTHEAST QUARTER OF THE NORTHEAST QUARTER, SECTION 2, TOWNSHIP 14 SOUTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, CITY OF SOLANA BEACH, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT SURVEY APPROVED JANUARY 18, 1876. EXCEPT THAT PORTION OF THE NORTH HALF OF LOT 1, NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 2, TOWNSHIP 14 SOUTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, LYING EASTERLY OF A LINE DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID SECTION 2, AS SHOWN ON L. S. MAP NO. 375, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY; THENCE ALONG THE NORTH LINE OF SAID SECTION 2, NORTH 89°06'50" WEST, 279.69 FEET TO A LINE WHICH BEARS NORTH 25°58' 24" EAST FROM A POINT BEING AT COORDINATES 7-302, 088.66 FEET AND X-1,691.37 FEET; THENCE ALONG SAID LINE SOUTH 25°58'24" WEST, 35.54 FEET TO THE LAST SAID POINT; THENCE SOUTH 8°41'11" EAST 175.07 FEET; THENCE SOUTH 16°43'24" EAST, 446.35 FEET; THENCE SOUTH 89°49'37" WEST 227.20 FEET; THENCE SOUTH 0°40'49" WEST 30.00 FEET TO THE SOUTH LINE OF SAID NORTH HALF OF LOT 1; THENCE ALONG SAID LINE, SOUTH 89°19'11" EAST 356.77 FEET TO THE SOUTHEAST CORNER OF SAID NORTH HALF OF LOT 1, AS SHOWN ON SAID L. S. MAP NO. 375.

PARCEL 2: APN: 298-112-30-00

THAT PORTION OF LOT 1, NORTHEAST QUARTER OF THE NORTHEAST QUARTER, SECTION 2, TOWNSHIP 14 SOUTH, RANGE 4 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT SURVEY APPROVED JANUARY 18, 1876, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY LINE OF SAID LOT 1, DISTANT ALONG SAID LINE NORTH 89°06'50" WEST 279.69 FROM THE NORTHEAST CORNER OF THE LAND DESCRIBED IN DEED TO THE STATE OF CALIFORNIA, RECORDED NOVEMBER 2, 1961, AS INSTRUMENT NO. 190255 OF OFFICIAL RECORDS; THENCE ALONG WESTERLY BOUNDARY OF SAID STATE LAND, SOUTH 25°58'24" WEST 35.54 FEET; THENCE SOUTH 8°41'11" EAST, 175.07 FEET; THENCE LEAVING SAID WESTERLY BOUNDARY NORTH 3°02'11" WEST 205.30 FEET TO THE POINT OF BEGINNING.

JURISDICTIONAL AUTHORITIES:
CITY OF SOLANA BEACH

EXISTING SITE AREA:
16.31 ACRES (710,424 SF)

SET BACK REQUIREMENTS:
MIN. FRONT SETBACK: 25' - 0"
MIN. SIDE SETBACK: 5' - 0"
MIN. STREET SIDE SETBACK: 10' - 0"
MIN. REAR SETBACK: 25' - 0"

PROPERTY OWNER

SANTA FE CHRISTIAN SCHOOL
838 ACADEMY DRIVE,
SOLANA BEACH,
SAN DIEGO, CA 92075
(858) 755-8900

PROJECT TEAM

ARCHITECT
Safdie Rabines Architects
925 Fort Stockton Drive
San Diego, CA 92103
(619) 297-6153

LIGHTING
Musco Sports Lighting, LLC
3002 Dow Ave, Suite 504
Tustin, CA 92780
(858) 232-1620

VICINITY MAP



RECEIVED

MAR 17 2022

Community Development Dept.
City of Solana Beach



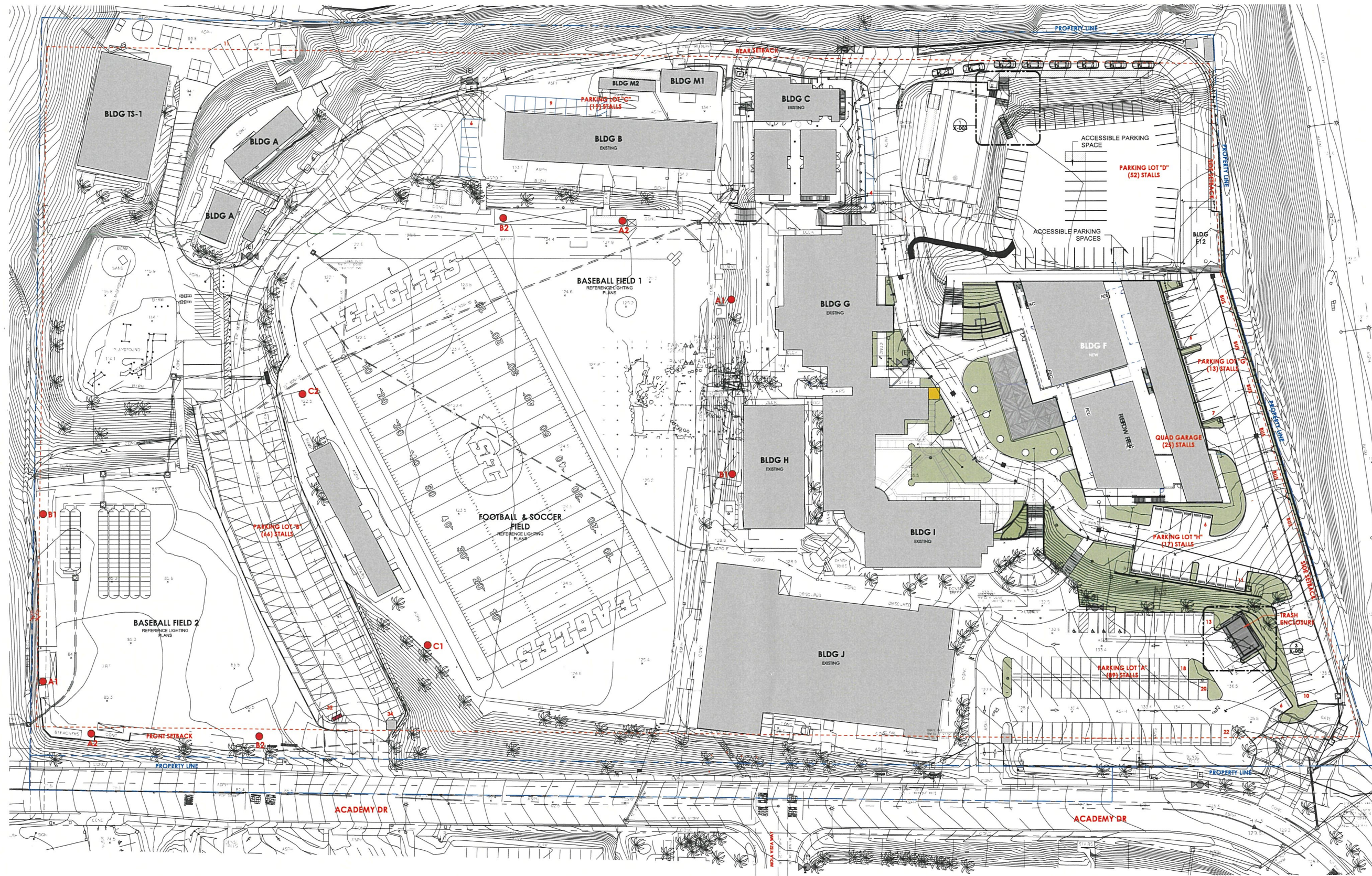
REVISIONS		Date
No.	Description	

Issue Date: MARCH 16, 2022
Scale: _____
SRA Project Number: 1816

TITLE SHEET

G.001

MON 22-001 (1)



1 SITE PLAN
1" = 40'-0"

GENERAL NOTES

- NOTES ON THIS SHEET ARE AN ACCUMULATION OF ITEMS ON THE PLANS, ELEVATIONS, & SECTION SHEETS. NOT ALL ITEMS ARE FOUND ON EACH SHEET.
- DIMENSIONS SHOWN ARE TYPICAL OF THIS SHEET ONLY, UNLESS NOTED OTHERWISE.
- FINISHED FLOOR ELEVATION CALL-OUTS ARE BASED OFF OF 0'-0" AMSL.
- NOT ALL UNDERGROUND & ABOVE GROUND UTILITIES & EQUIPMENT ARE SHOWN IN THESE DRAWINGS.
- NOT ALL PROJECT ITEMS ARE SHOWN IN THESE DRAWINGS. ITEMS SHOWN ARE FOR GRAPHIC PURPOSES AND SHALL BE VERIFIED WITH THE APPROPRIATE DISCIPLINE'S DOCUMENTS FOR ADDITIONAL DETAILED INFORMATION. CONTRACTOR TO COORDINATE ALL PROJECT ITEMS.
- THIS PROJECT SHALL COMPLY WITH THE CITY OF SOLANA BEACH LIGHTING ORDINANCE.
- RALL PROPERTY LINES, EASEMENTS AND BUILDINGS, EXISTING AND PROPOSED, ARE SHOWN ON THIS SITE PLAN

KEYNOTES

LEGEND

REVISIONS
No. Description Date

No.	Description	Date

Issue Date Scale
MARCH 16, 2022 As indicated
SRA Project Number
1816

SPORT FIELD LIGHTING - SITE PLAN

TAAL SAFDIE
LICENSE: C 24394
NOT FOR CONSTRUCTION
ISSUED FOR INFORMATION ONLY

Santa Fe Christian School Football

Solana Beach, CA

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	80'	80'	1	TLC-LED-1200	1.17 kW	A
		80'	3	TLC-LED-900	2.67 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
B1	90'	90'	2	TLC-LED-1500	2.86 kW	A
		90'	2	TLC-LED-1500	2.86 kW	B
		90'	8	TLC-LED-900	7.12 kW	A
		90'	2	TLC-LED-900	1.78 kW	B
		16'	3	TLC-BT-575	1.73 kW	A
B2	90'	90'	1	TLC-LED-1200	1.17 kW	B
		90'	2	TLC-LED-1200	2.34 kW	A
		90'	1	TLC-LED-1500	1.43 kW	B
		90'	1	TLC-LED-1500	1.43 kW	A
		90'	6	TLC-LED-900	5.34 kW	A
		90'	2	TLC-LED-900	1.78 kW	B
C1	80'	16'	3	TLC-BT-575	1.73 kW	A
		80'	3	TLC-LED-1500	4.29 kW	A
		80'	1	TLC-LED-1500	1.43 kW	B
		80'	6	TLC-LED-900	5.34 kW	B
C2	80'	16'	2	TLC-BT-575	1.15 kW	A
		80'	1	TLC-LED-1500	1.43 kW	B
		80'	3	TLC-LED-1500	4.29 kW	A
		80'	4	TLC-LED-900	3.56 kW	B
		80'	2	TLC-LED-900	1.78 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
		6	67		64.81 kW	

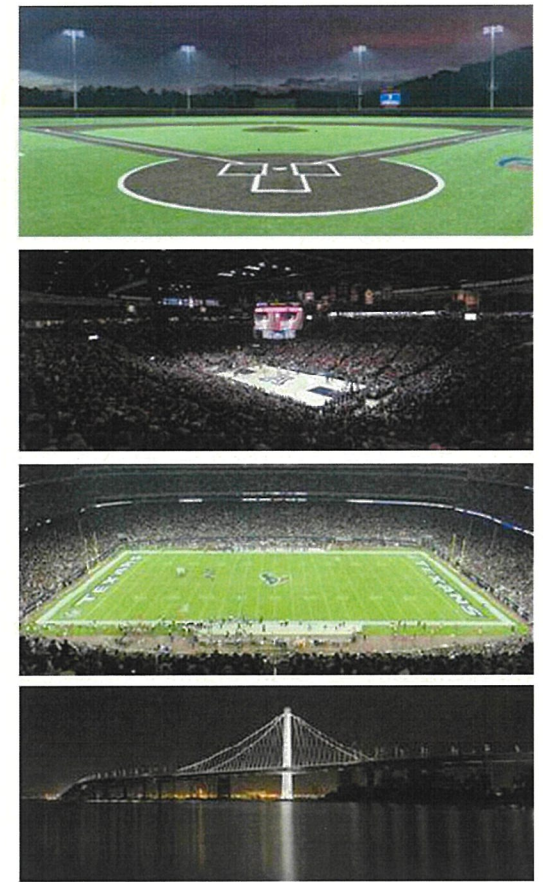
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Baseball	44.03 kW	47
B	Football	20.78 kW	20

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	14
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	36
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	5
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	12

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Baseball (Infield)	Horizontal Illuminance	54.2	38	68	1.80	1.43	A	47
Baseball (Outfield)	Horizontal Illuminance	32.8	21	50	2.38	1.56	A	47
Football	Horizontal Illuminance	50.6	31	61	1.97	1.63	B,A	67
Soccer	Horizontal Illuminance	50.7	32	62	1.91	1.58	B,A	67
Spill	Horizontal	0.01	0	0.05	0.00		A,B,C	67
Spill	Max Candela (by Fixture)	0	0	0	0.00		A,B,C	67
Spill	Max Vertical Illuminance Metric	0	0	0	0.00		A,B,C	67

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
2	A1-A2	80'	-	80'	TLC-LED-1200	1	1	0
				15.5'	TLC-BT-575	1	1	0
				80'	TLC-LED-900	3	3	0
1	B1	90'	-	90'	TLC-LED-900	10	8	2
				15.5'	TLC-BT-575	3	3	0
				90'	TLC-LED-1500	4	2	2
				90'	TLC-LED-900	8	6	2
1	B2	90'	-	90'	TLC-LED-1500	2	1	1
				15.5'	TLC-BT-575	3	3	0
				90'	TLC-LED-1200	3	2	1
				80'	TLC-LED-900	6	0	6
1	C1	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	4	3	1
				80'	TLC-LED-1500	4	3	1
1	C2	80'	-	80'	TLC-LED-1500	4	3	1
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	6	2	4
				80'	TLC-LED-900	6	2	4
6	TOTALS					67	47	20

Santa Fe Christian School Football

Solana Beach, CA

GRID SUMMARY

Name: Baseball
Size: 250'/325'/250' - basepath 90'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

	MAINTAINED HORIZONTAL FOOTCANDLES	
	Infield	Outfield
Guaranteed Average:	50	50
Scan Average:	54.2	32.8
Maximum:	68	50
Minimum:	38	21
Avg / Min:	1.44	1.55
Guaranteed Max / Min:	2	2.5
Max / Min:	1.80	2.38
UG (adjacent pts):	1.41	1.61
CU:	0.69	
No. of Points:	25	67

LUMINAIRE INFORMATION
 Applied Circuits: A
No. of Luminaires: 47
 Total Load: 44.03 kW

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

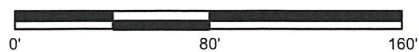
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 : 80



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	80'	0'	80'	TLC-LED-1200	1	1	0
				15.48'	TLC-BT-575	1	1	0
				80'	TLC-LED-900	3	3	0
1	B1	90'	0'	90'	TLC-LED-900	10	10	0
				15.48'	TLC-BT-575	3	3	0
				90'	TLC-LED-1500	4	4	0
				90'	TLC-LED-1200	3	3	0
1	B2	90'	0'	90'	TLC-LED-900	8	8	0
				90'	TLC-LED-1500	2	2	0
				15.48'	TLC-BT-575	3	3	0
				90'	TLC-LED-1200	3	3	0
1	C1	80'	0'	80'	TLC-LED-900	6	6	0
				15.48'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	4	4	0
1	C2	80'	0'	80'	TLC-LED-1500	4	4	0
				15.48'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	6	6	0
6	TOTALS					67	67	0

Santa Fe Christian School Football

Solana Beach, CA

GRID SUMMARY	
Name:	Football
Size:	360' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

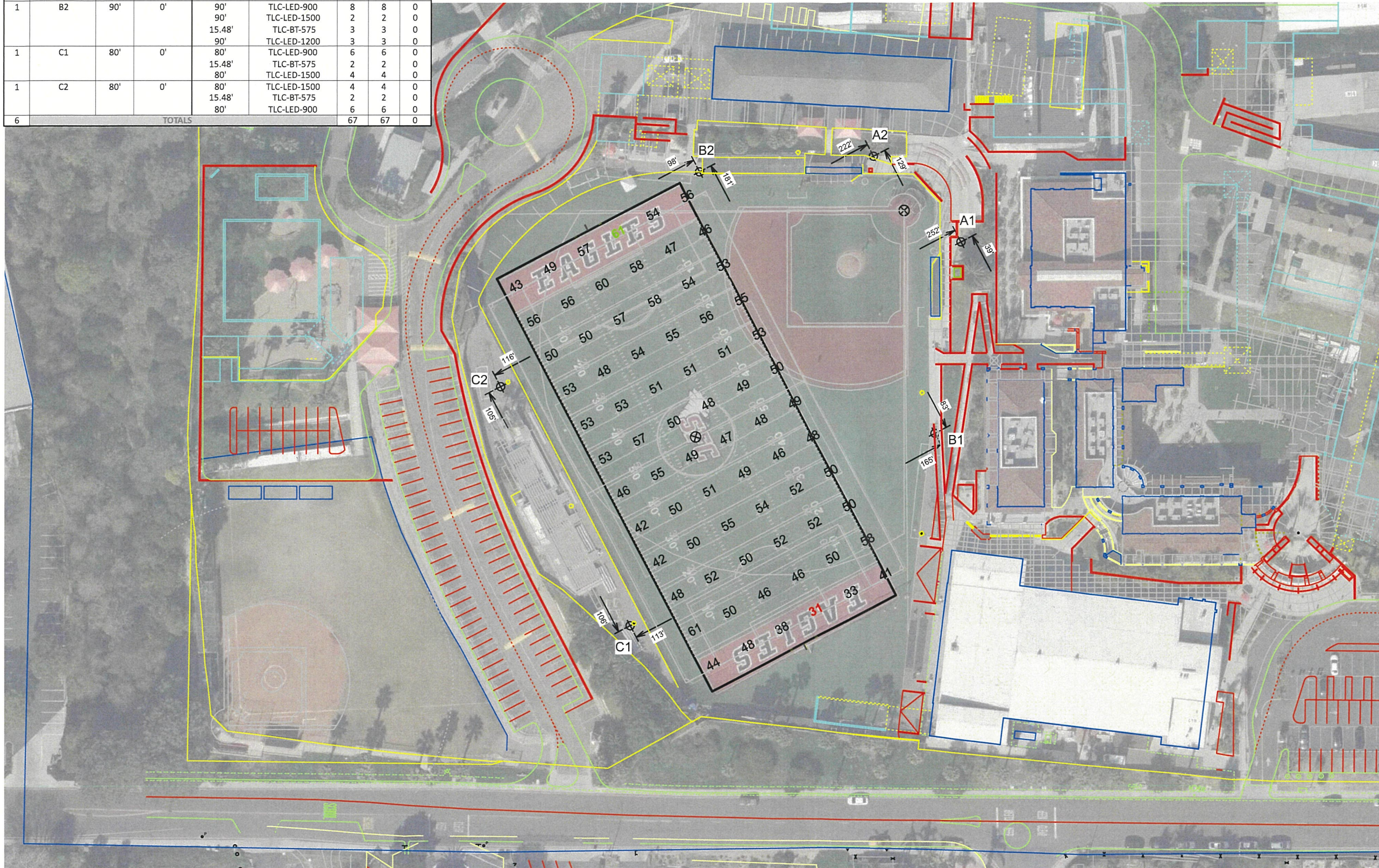
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	50.6
Maximum:	61
Minimum:	31
Avg / Min:	1.63
Guaranteed Max / Min:	2
Max / Min:	1.97
UG (adjacent pts):	1.54
CU:	0.48
No. of Points:	72
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	67
Total Load:	64.81 kW

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

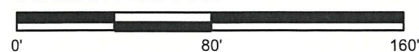
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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 : 80



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



We Make It Happen.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	80'	-1'	79.9'	TLC-LED-1200	1	1	0
				15.4'	TLC-BT-575	1	1	0
				79.9'	TLC-LED-900	3	3	0
1	B1	90'	-1'	89.9'	TLC-LED-900	10	10	0
				15.4'	TLC-BT-575	3	3	0
				89.9'	TLC-LED-1500	4	4	0
				89.9'	TLC-LED-1200	3	3	0
1	B2	90'	-1'	89.9'	TLC-LED-900	8	8	0
				89.9'	TLC-LED-1500	2	2	0
				15.4'	TLC-BT-575	3	3	0
				89.9'	TLC-LED-1200	3	3	0
1	C1	80'	-1'	79.9'	TLC-LED-900	6	6	0
				15.4'	TLC-BT-575	2	2	0
				79.9'	TLC-LED-1500	4	4	0
				79.9'	TLC-LED-1500	4	4	0
1	C2	80'	-1'	79.9'	TLC-LED-1500	4	4	0
				15.4'	TLC-BT-575	2	2	0
				79.9'	TLC-LED-900	6	6	0
				79.9'	TLC-LED-900	6	6	0
6	TOTALS					67	67	0

Santa Fe Christian School Football
Solana Beach, CA

GRID SUMMARY

Name: Soccer
 Size: 330' x 190'
 Spacing: 30.0' x 30.0'
 Height: 3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid	
Guaranteed Average:	50
Scan Average:	50.7
Maximum:	62
Minimum:	32
Avg / Min:	1.56
Guaranteed Max / Min:	2
Max / Min:	1.91
UG (adjacent pts):	1.54
CU:	0.51
No. of Points:	77

LUMINAIRE INFORMATION

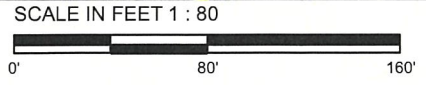
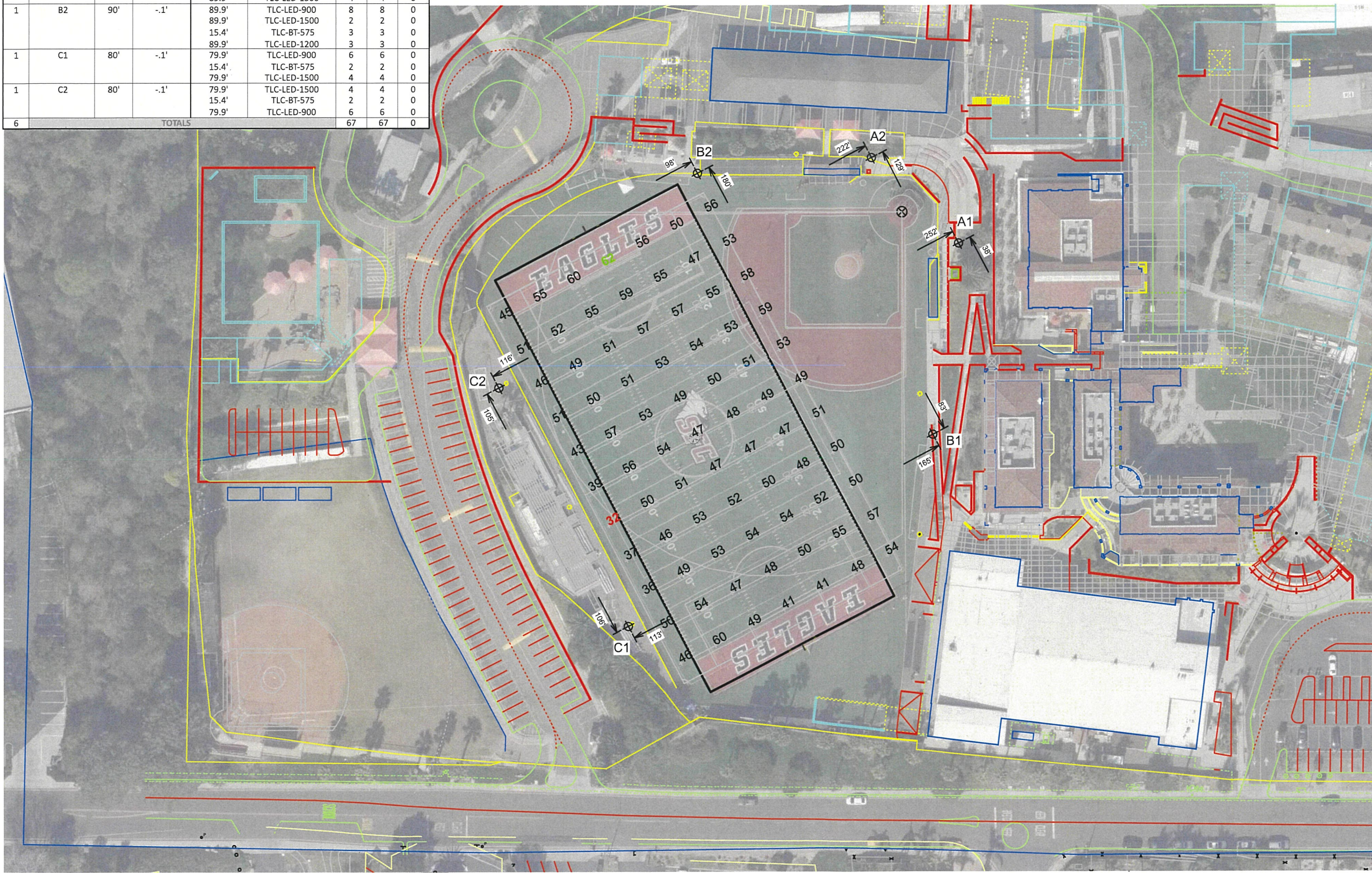
Applied Circuits: A, B
 No. of Luminaires: 67
 Total Load: 64.81 kW

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

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

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

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



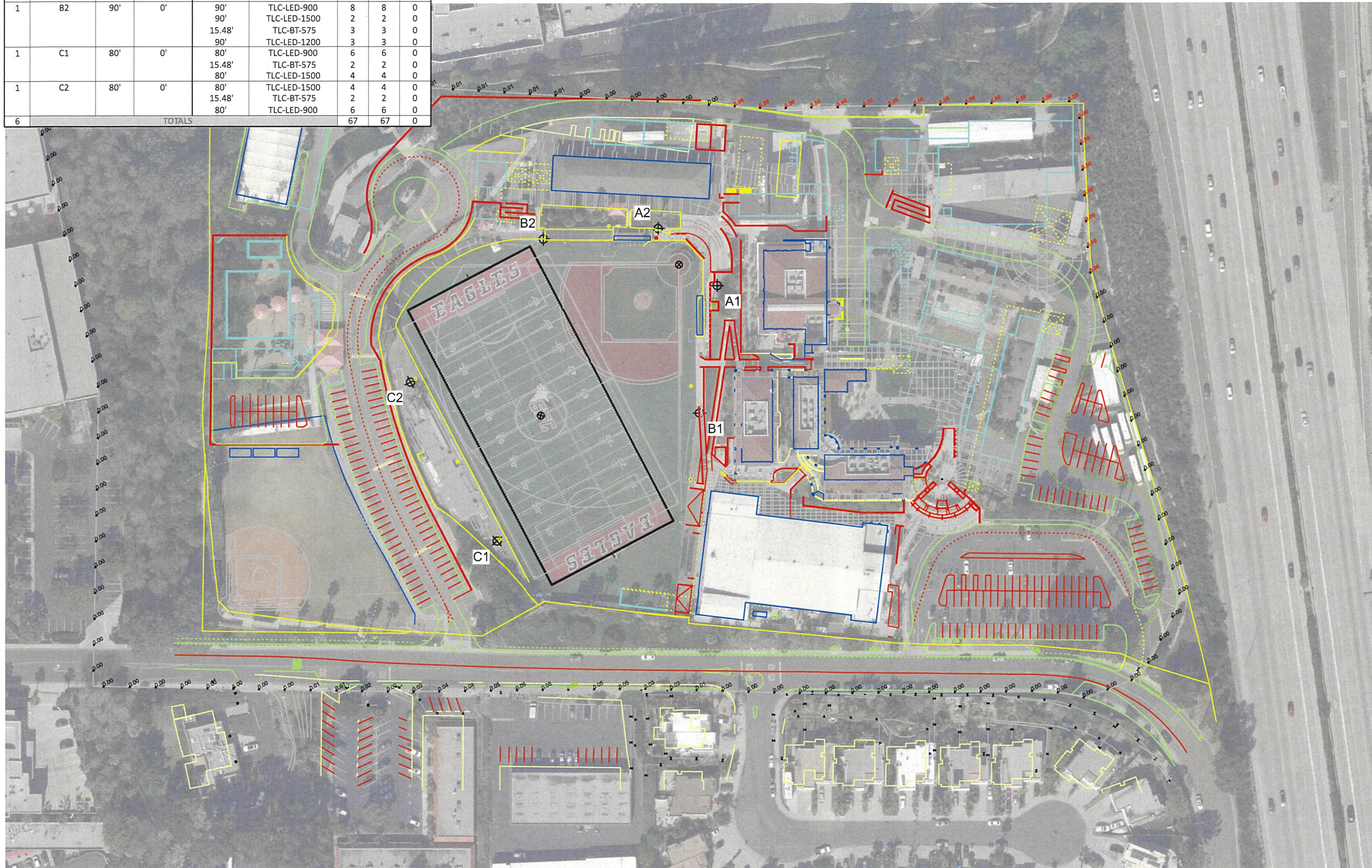
Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN									
Pole				Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY/ POLE	THIS GRID	OTHER GRIDS	
2	A1-A2	80'	0'	80'	TLC-LED-1200	1	1	0	
				15.48'	TLC-BT-575	1	1	0	
				80'	TLC-LED-900	3	3	0	
1	B1	90'	0'	90'	TLC-LED-900	10	10	0	
				15.48'	TLC-BT-575	3	3	0	
				90'	TLC-LED-1500	4	4	0	
				80'	TLC-LED-1200	3	3	0	
1	B2	90'	0'	90'	TLC-LED-900	8	8	0	
				90'	TLC-LED-1500	2	2	0	
				15.48'	TLC-BT-575	3	3	0	
				80'	TLC-LED-1500	4	4	0	
1	C1	80'	0'	80'	TLC-LED-900	6	6	0	
				15.48'	TLC-BT-575	2	2	0	
				80'	TLC-LED-1500	4	4	0	
1	C2	80'	0'	80'	TLC-LED-1500	4	4	0	
				15.48'	TLC-BT-575	2	2	0	
				80'	TLC-LED-900	6	6	0	
6	TOTALS						67	67	0

GRID SUMMARY	
Name:	Spill
Spacing:	30.0'
Height:	-50.9' above grade

ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	0.005
Maximum:	0.05
Minimum:	0.00
No. of Points:	128
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C
No. of Luminaires:	67
Total Load:	64.81 kW

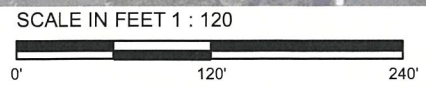


Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

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) ⊗



EQUIPMENT LIST FOR AREAS SHOWN									
Pole				Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY/ POLE	THIS GRID	OTHER GRIDS	
2	A1-A2	80'	0'	80'	TLC-LED-1200	1	1	0	
				15.48'	TLC-BT-575	1	1	0	
				80'	TLC-LED-900	3	3	0	
1	B1	90'	0'	90'	TLC-LED-900	10	10	0	
				15.48'	TLC-BT-575	3	3	0	
				90'	TLC-LED-1500	4	4	0	
				80'	TLC-LED-1200	3	3	0	
1	B2	90'	0'	90'	TLC-LED-900	8	8	0	
				90'	TLC-LED-1500	2	2	0	
				15.48'	TLC-BT-575	3	3	0	
				90'	TLC-LED-1200	3	3	0	
1	C1	80'	0'	80'	TLC-LED-900	6	6	0	
				15.48'	TLC-BT-575	2	2	0	
				80'	TLC-LED-1500	4	4	0	
				80'	TLC-LED-1500	4	4	0	
1	C2	80'	0'	80'	TLC-LED-1500	4	4	0	
				15.48'	TLC-BT-575	2	2	0	
				80'	TLC-LED-900	6	6	0	
6	TOTALS						67	67	0

GRID SUMMARY	
Name:	Spill
Spacing:	30.0'
Height:	-50.9' above grade

ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Entire Grid	
Scan Average:	0.021
Maximum:	0.18
Minimum:	0.00
No. of Points:	128
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C
No. of Luminaires:	67
Total Load:	64.81 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.



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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	80'	0'	80'	TLC-LED-1200	1	1	0	
				15.48'	TLC-BT-575	1	1	0	
				80'	TLC-LED-900	3	3	0	
1	B1	90'	0'	90'	TLC-LED-900	10	10	0	
				15.48'	TLC-BT-575	3	3	0	
				80'	TLC-LED-1500	4	4	0	
				90'	TLC-LED-900	8	8	0	
1	B2	90'	0'	90'	TLC-LED-1500	2	2	0	
				15.48'	TLC-BT-575	3	3	0	
				80'	TLC-LED-1500	4	4	0	
				90'	TLC-LED-1200	3	3	0	
1	C1	80'	0'	80'	TLC-LED-900	6	6	0	
				15.48'	TLC-BT-575	2	2	0	
				80'	TLC-LED-1500	4	4	0	
				80'	TLC-LED-1500	4	4	0	
1	C2	80'	0'	80'	TLC-LED-1500	4	4	0	
				15.48'	TLC-BT-575	2	2	0	
				80'	TLC-LED-1500	4	4	0	
				80'	TLC-LED-900	6	6	0	
6	TOTALS						67	67	0

GRID SUMMARY	
Name:	Spill
Spacing:	30.0'
Height:	-50.9' above grade

ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 3264.302
Maximum:	27726.97
Minimum:	6.19
No. of Points:	128
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C
No. of Luminaires:	67
Total Load:	64.81 kW



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

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

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

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



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



We Make It Happen.

Santa Fe Christian School Football
Solana Beach, CA

EQUIPMENT LAYOUT

INCLUDES:

- Baseball
- Football
- Soccer

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

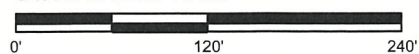
QTY	LOCATION	POLE SIZE	GRADE ELEVATION	Luminaires		
				MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	A1-A2	80'	-	80'	TLC-LED-1200	1
				15.5'	TLC-BT-575	1
				80'	TLC-LED-900	3
1	B1	90'	-	90'	TLC-LED-900	10
				15.5'	TLC-BT-575	3
				90'	TLC-LED-1500	4
1	B2	90'	-	90'	TLC-LED-900	8
				90'	TLC-LED-1500	2
				15.5'	TLC-BT-575	3
				90'	TLC-LED-1200	3
				80'	TLC-LED-900	6
1	C1	80'	-	80'	TLC-LED-900	2
				15.5'	TLC-BT-575	4
				80'	TLC-LED-1500	4
1	C2	80'	-	80'	TLC-LED-1500	4
				15.5'	TLC-BT-575	2
				80'	TLC-LED-900	6
6	TOTALS					67

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)	480 (60)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8



SCALE IN FEET 1 : 120



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



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Santa Fe Christian School Football

Solana Beach, CA

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A3-A4	60'	60'	3	TLC-LED-900	2.67 kW	C
		16'	1	TLC-BT-575	0.58 kW	C
B3	70'	70'	1	TLC-LED-1200	1.17 kW	C
		70'	2	TLC-LED-1500	2.86 kW	C
		70'	3	TLC-LED-900	2.67 kW	C
		16'	2	TLC-BT-575	1.15 kW	C
B4	70'	70'	1	TLC-LED-1500	1.43 kW	C
		70'	4	TLC-LED-900	3.56 kW	C
		16'	2	TLC-BT-575	1.15 kW	C
4			23		20.48 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
C	Softball	20.48 kW	23

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	3
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	13
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	6
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	1

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Softball (Infield)	Horizontal Illuminance	51.9	36	68	1.87	1.44	C	23
Softball (Outfield)	Horizontal Illuminance	32.2	19	40	2.12	1.69	C	23
Spill	Horizontal	0.19	0	3.43	0.00		A,B,C	23
Spill	Max Candela (by Fixture)	33048	0	290469	0.00		A,B,C	23
Spill	Max Vertical Illuminance Metric	0.51	0	7.46	0.00		A,B,C	23

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	
2	A3-A4	60'	-	15.5'	TLC-BT-575	1	1	0	
				60'	TLC-LED-900	3	3	0	
1	B3	70'	-	70'	TLC-LED-900	3	3	0	
				70'	TLC-LED-1200	1	1	0	
				15.5'	TLC-BT-575	2	2	0	
				70'	TLC-LED-1500	2	2	0	
1	B4	70'	-	70'	TLC-LED-900	4	4	0	
				15.5'	TLC-BT-575	2	2	0	
				70'	TLC-LED-1500	1	1	0	
4	TOTALS					23	23	0	

Santa Fe Christian School Football

Solana Beach, CA

GRID SUMMARY	
Name:	Softball
Size:	Irregular 201' / 184' / 198'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

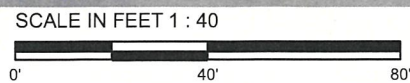
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Scan Average:	51.9	32.2
Maximum:	68	40
Minimum:	36	19
Avg / Min:	1.43	1.69
Max / Min:	1.87	2.12
UG (adjacent pts):	1.40	1.51
CU:	0.69	
No. of Points:	25	66
LUMINAIRE INFORMATION		
Applied Circuits:	C	
No. of Luminaires:	23	
Total Load:	20.48 kW	

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

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

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

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



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



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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
2	A3-A4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
1	B3	70'	-	70'	TLC-LED-900	3	3	0
				70'	TLC-LED-1200	1	1	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1500	2	2	0
1	B4	70'	-	70'	TLC-LED-900	4	4	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1500	1	1	0
4	TOTALS					23	23	0

Santa Fe Christian School Football
Solana Beach, CA

GRID SUMMARY

Name: Spill
Spacing: 30.0'
Height: -50.9' above grade

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

Entire Grid
Scan Average: 0.185
Maximum: 3.43
Minimum: 0.00
No. of Points: 128

LUMINAIRE INFORMATION

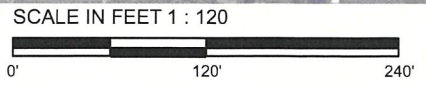
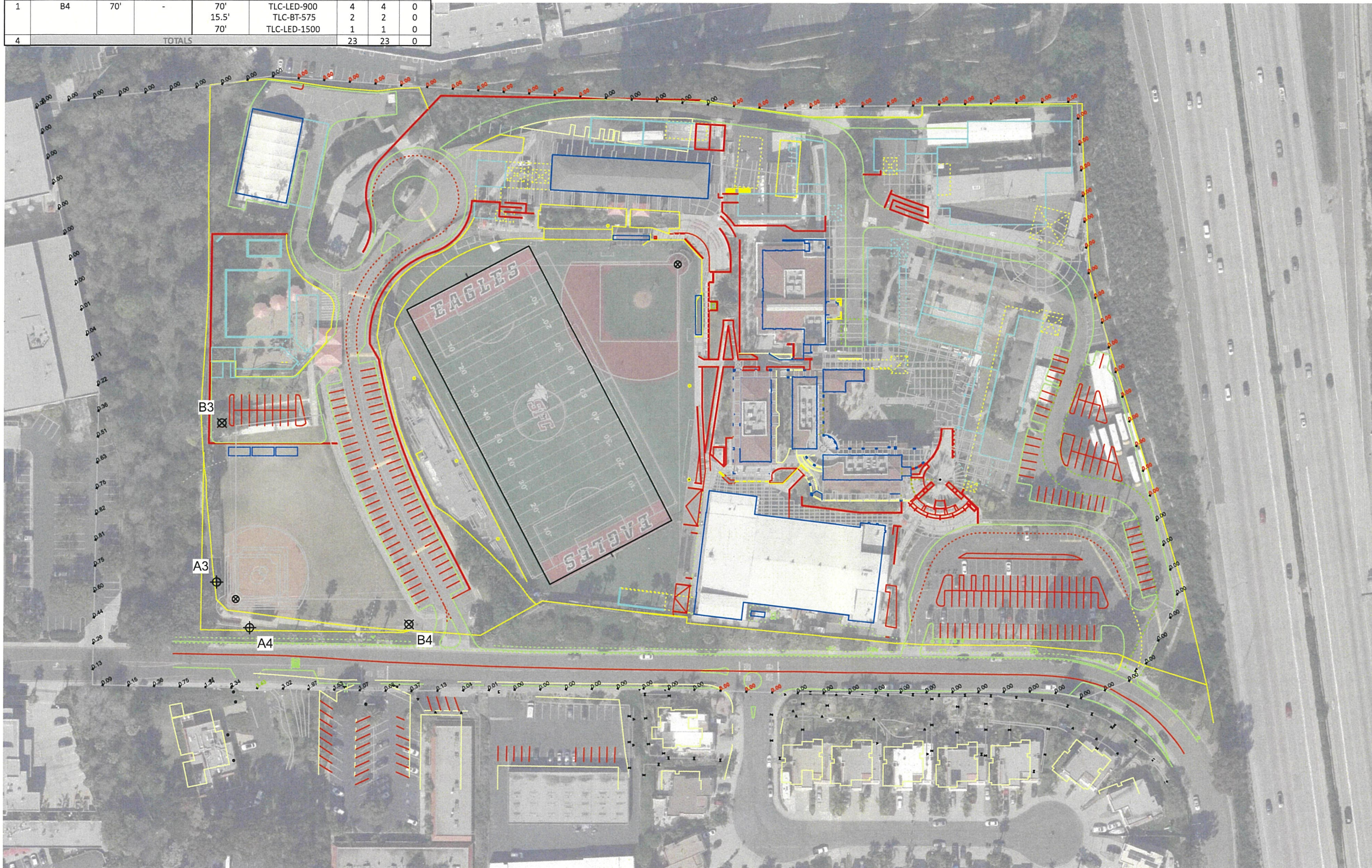
Applied Circuits: A, B, C
No. of Luminaires: 23
Total Load: 20.48 kW

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) ⊗



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	
				70'	TLC-LED-900	3	3	0	
1	B3	70'	-	70'	TLC-LED-1200	1	1	0	
				15.5'	TLC-BT-575	2	2	0	
				70'	TLC-LED-1500	2	2	0	
				70'	TLC-LED-900	4	4	0	
1	B4	70'	-	15.5'	TLC-BT-575	2	2	0	
				70'	TLC-LED-1500	1	1	0	
				TOTALS			23	23	0

Santa Fe Christian School Football
Solana Beach, CA

GRID SUMMARY	
Name:	Spill
Spacing:	30.0'
Height:	-50.9' above grade

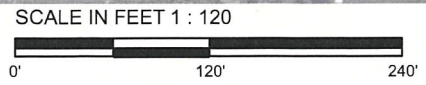
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	0.509
Maximum:	7.46
Minimum:	0.00
No. of Points:	128
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C
No. of Luminaires:	23
Total Load:	20.48 kW

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) ⊗



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
				70'	TLC-LED-900	3	3	0
1	B3	70'	-	70'	TLC-LED-1200	1	1	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1500	2	2	0
				70'	TLC-LED-900	4	4	0
1	B4	70'	-	15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1500	1	1	0
				70'	TLC-LED-900	4	4	0
4	TOTALS					23	23	0

Santa Fe Christian School Football

Solana Beach, CA

GRID SUMMARY	
Name:	Spill
Spacing:	30.0'
Height:	-50.9' above grade

ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Entire Grid	
Scan Average:	33048.484
Maximum:	290468.63
Minimum:	0.00
No. of Points:	128
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C
No. of Luminaires:	23
Total Load:	20.48 kW

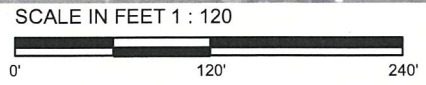


Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

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



Pole location(s) \oplus dimensions are relative to 0,0 reference point(s) \otimes



Santa Fe Christian School Football
Solana Beach, CA

EQUIPMENT LAYOUT

INCLUDES:

- 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.

EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	SIZE	GRADE ELEVATION	Luminaires		
				MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	A3-A4	60'	-	15.5'	TLC-BT-575	1
				60'	TLC-LED-900	3
1	B3	70'	-	70'	TLC-LED-900	3
				70'	TLC-LED-1200	1
				15.5'	TLC-BT-575	2
				70'	TLC-LED-1500	2
1	B4	70'	-	70'	TLC-LED-900	4
				15.5'	TLC-BT-575	2
				70'	TLC-LED-1500	1
4	TOTALS					23

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-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
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0



SCALE IN FEET 1 : 120



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



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