

Benning Park Community Center Baseball

Washington,DC

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	60'	60'	2	TLC-LED-1200	2.34 kW	A
		30'	1	CREE OSQ	0.13 kW	B
B1-B2	60'	60'	3	TLC-LED-1200	3.51 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
		30'	1	CREE OSQ	0.13 kW	B
C1	60'	60'	4	TLC-LED-1200	4.68 kW	A
		16'	3	TLC-BT-575	1.73 kW	A
		30'	2	CREE OSQ	0.26 kW	B
5			25		20.04 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Baseball	19.25 kW	19
B	Walkway	0.78 kW	6

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	14
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	5
CREE OSQ	LED 5700K - 70 CRI	130W	16,599	--	--	--	6

Light Level Summary

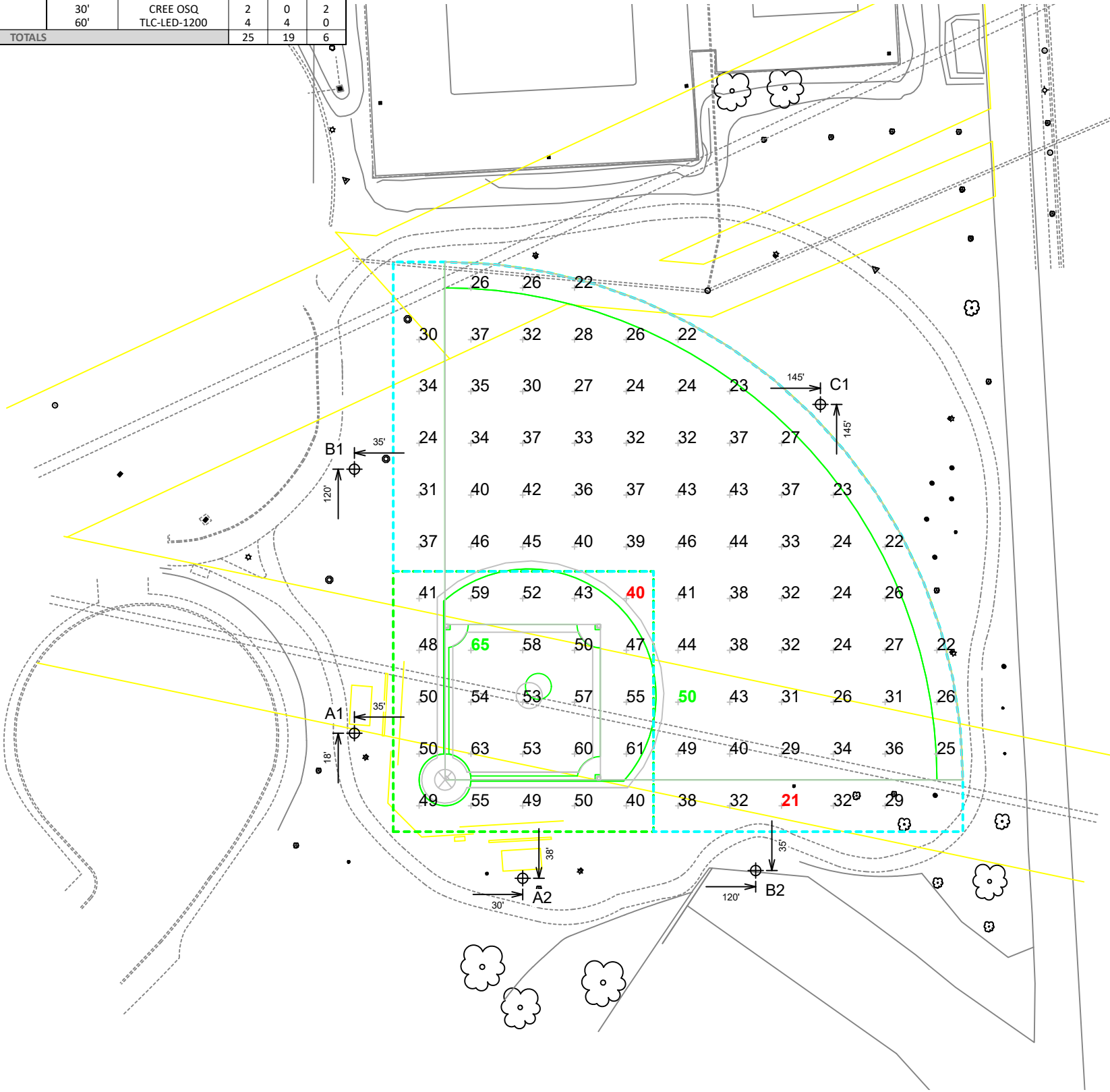
Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
150' Spill	Horizontal Illuminance	0.02	0	0.11	37.69		A,B	25
150' Spill	Max Candela Metric	1363	196	3402	17.39	6.97	A,B	25
150' Spill	Max Vertical Illuminance Metric	0.08	0.02	0.41	22.24	4.11	A,B	25
Baseball (Infield)	Horizontal Illuminance	52.1	40	65	1.62	1.30	A	19
Baseball (Outfield)	Horizontal Illuminance	32.9	21	50	2.38	1.57	A	19
Walkway	Horizontal	1.50	0.02	5.28	278.40	74.93	B	6

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	60'	-	30'	CREE OSQ	1	0	1
				60'	TLC-LED-1200	2	2	0
2	B1-B2	60'	-	15.5'	TLC-BT-575	1	1	0
				30'	CREE OSQ	1	0	1
				60'	TLC-LED-1200	3	3	0
1	C1	60'	-	15.5'	TLC-BT-575	3	3	0
				30'	CREE OSQ	2	0	2
				60'	TLC-LED-1200	4	4	0
5	TOTALS					25	19	6



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

ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	52.10	32.87
Maximum:	65	50
Minimum:	40	21
Avg / Min:	1.29	1.55
Guaranteed Max / Min:	2	2.5
Max / Min:	1.62	2.38
UG (adjacent pts):	1.50	1.61
CU:	0.69	
No. of Points:	25	71
LUMINAIRE INFORMATION		
Applied Circuits:	A	
No. of Luminaires:	19	
Total Load:	19.26 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.

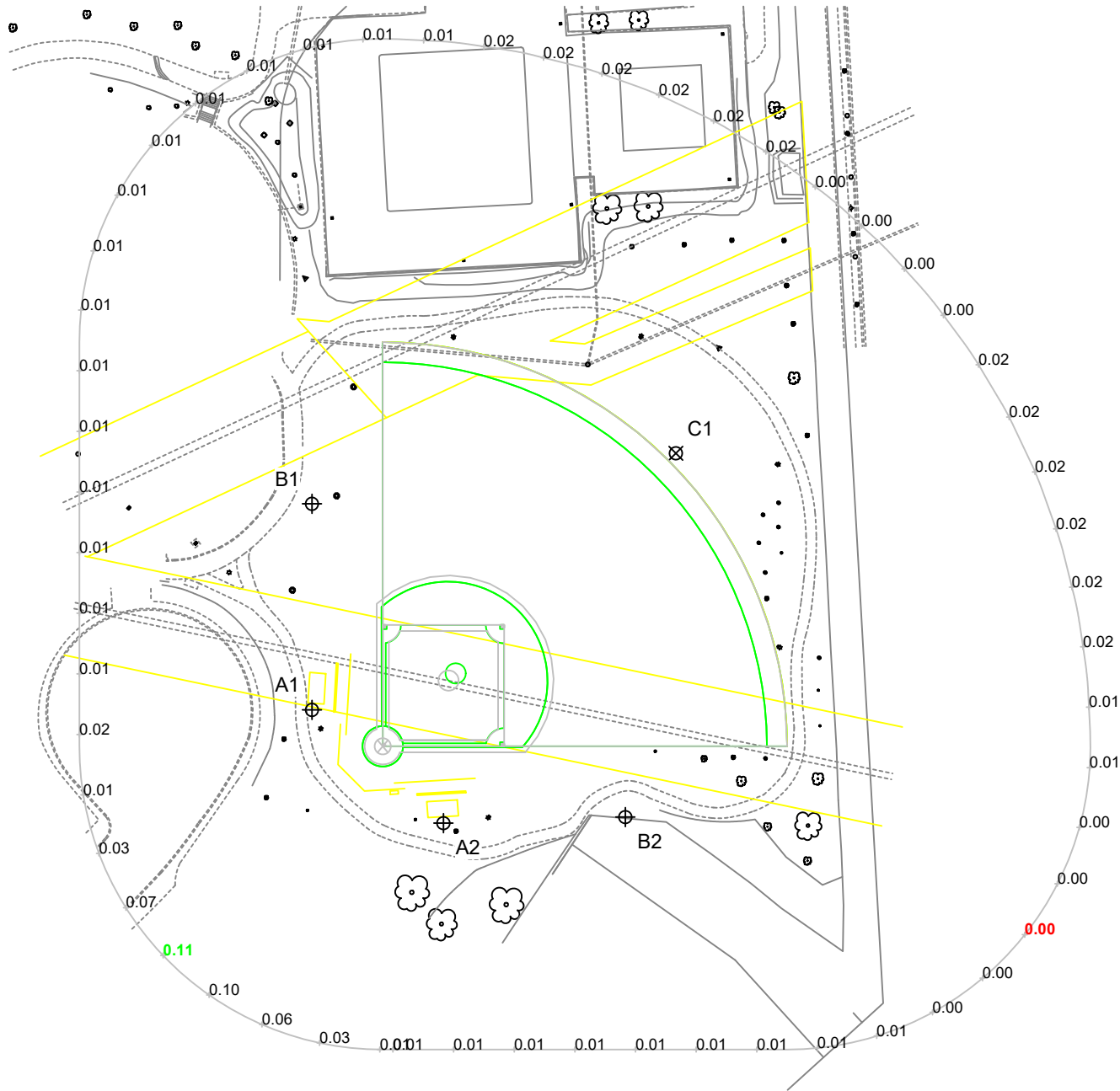
Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	60'	-	30'	CREE OSQ	1	1	0
				60'	TLC-LED-1200	2	2	0
2	B1-B2	60'	-	15.5'	TLC-BT-575	1	1	0
				30'	CREE OSQ	1	1	0
				60'	TLC-LED-1200	3	3	0
1	C1	60'	-	15.5'	TLC-BT-575	3	3	0
				30'	CREE OSQ	2	2	0
				60'	TLC-LED-1200	4	4	0
5	TOTALS					25	25	0



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Washington,DC

GRID SUMMARY	
Name:	150' Spill
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0177
Maximum:	0.11
Minimum:	0.00
No. of Points:	56
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	25
Total Load:	20.04 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.

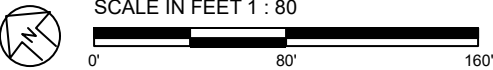
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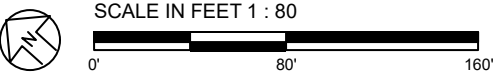
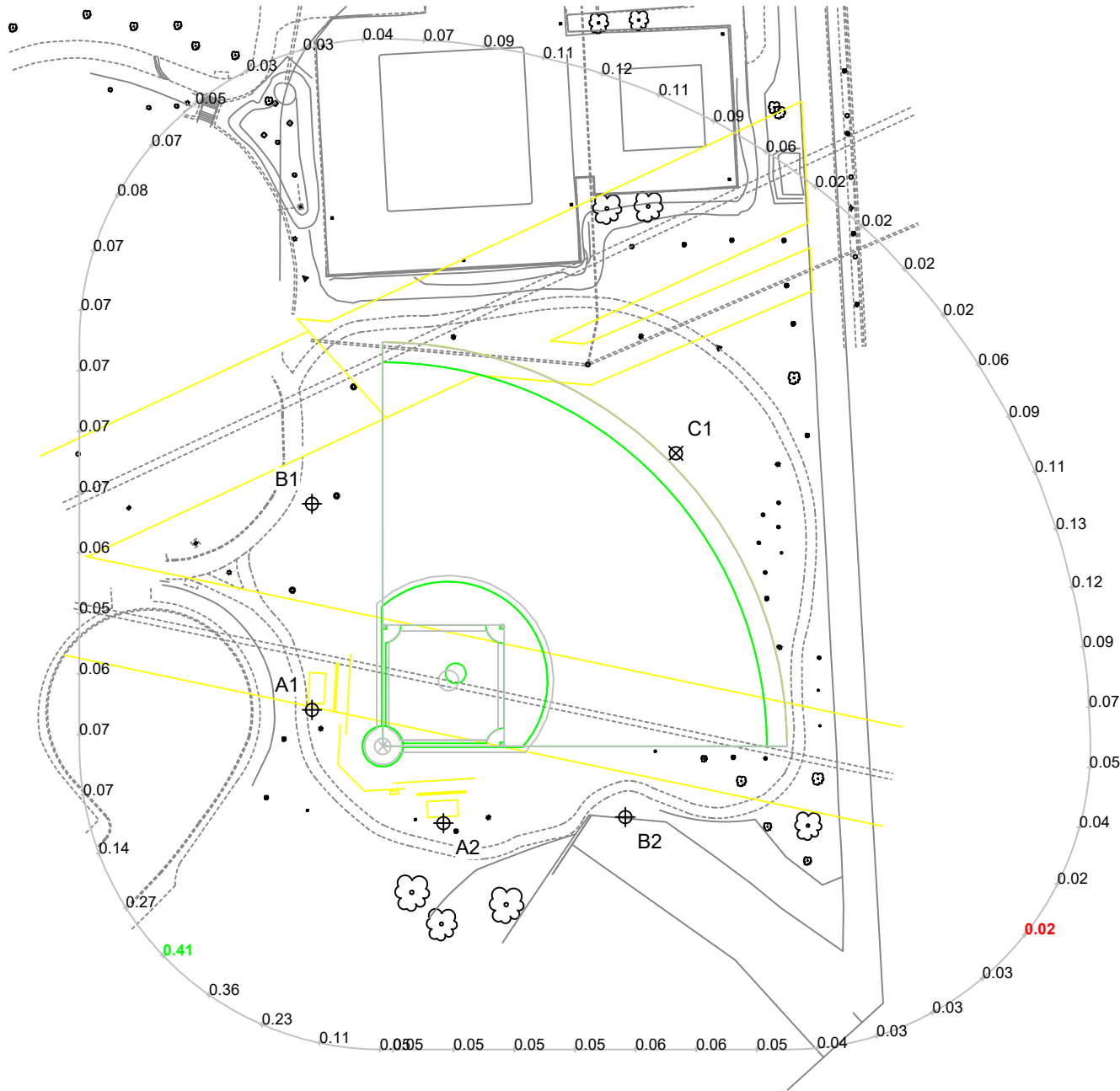
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ILLUMINATION SUMMARY



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
2	A1-A2	60'	-	30'	CREE OSQ	1	1
				60'	TLC-LED-1200	2	2
2	B1-B2	60'	-	15.5'	TLC-BT-575	1	1
				30'	CREE OSQ	1	1
				60'	TLC-LED-1200	3	3
1	C1	60'	-	15.5'	TLC-BT-575	3	3
				30'	CREE OSQ	2	2
				60'	TLC-LED-1200	4	4
5	TOTALS					25	25
							0



ENGINEERED DESIGN By: Matt Sullivan · File #210358A · 17-Feb-21

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

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Washington,DC

GRID SUMMARY	
Name:	150' Spill
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0821
Maximum:	0.41
Minimum:	0.02
No. of Points:	56
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	25
Total Load:	20.04 kW

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

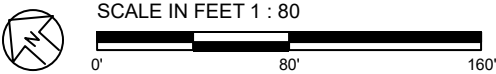
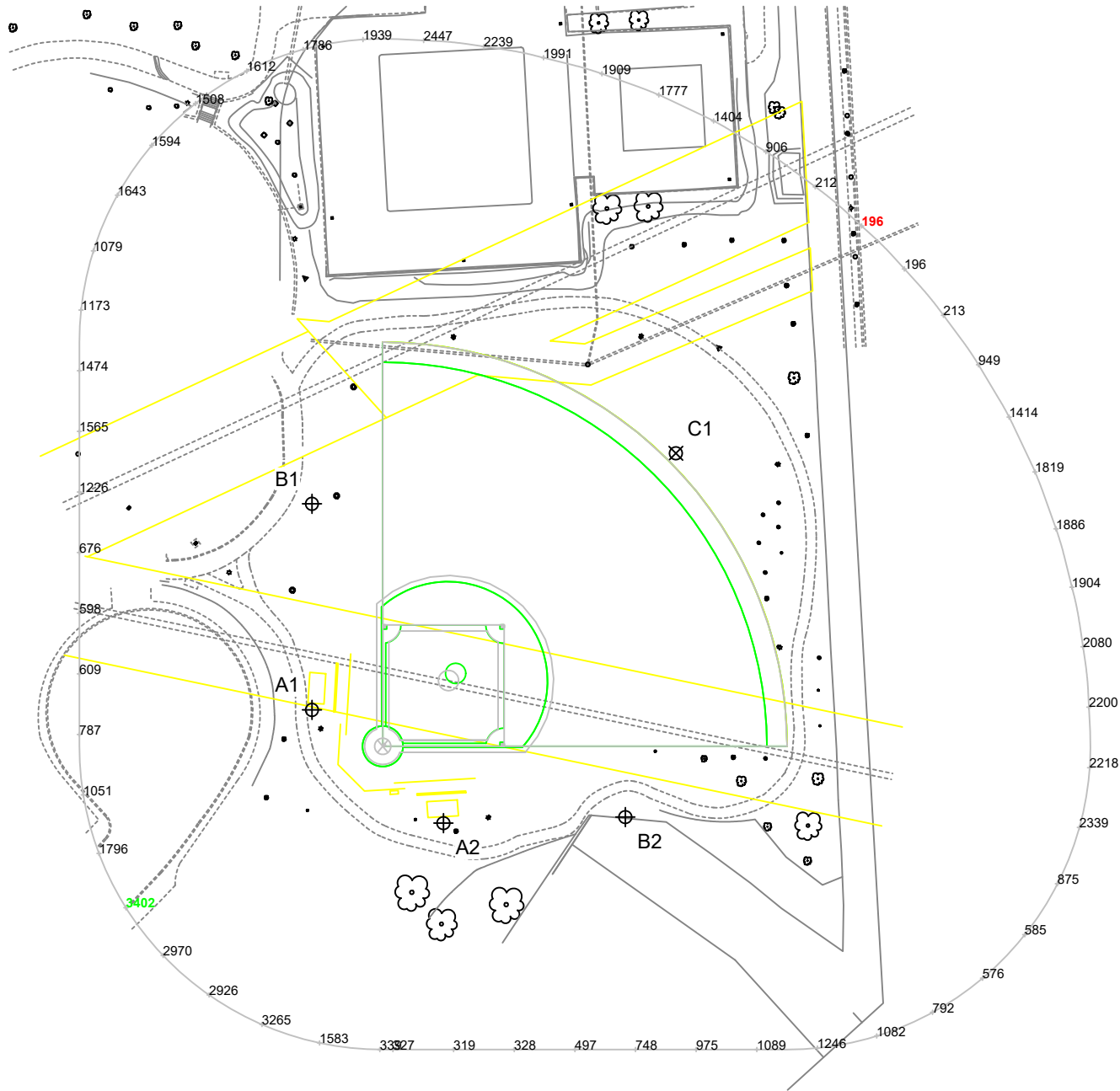
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	60'	-	30'	CREE OSQ	1	1	0
				60'	TLC-LED-1200	2	2	0
2	B1-B2	60'	-	15.5'	TLC-BT-575	1	1	0
				30'	CREE OSQ	1	1	0
				60'	TLC-LED-1200	3	3	0
1	C1	60'	-	15.5'	TLC-BT-575	3	3	0
				30'	CREE OSQ	2	2	0
				60'	TLC-LED-1200	4	4	0
5	TOTALS					25	25	0



ENGINEERED DESIGN By: Matt Sullivan · File #210358A · 17-Feb-21

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

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GRID SUMMARY	
Name:	150' Spill
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 1363.2137
Maximum:	3402.11
Minimum:	195.63
No. of Points:	56
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	25
Total Load:	20.04 kW

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

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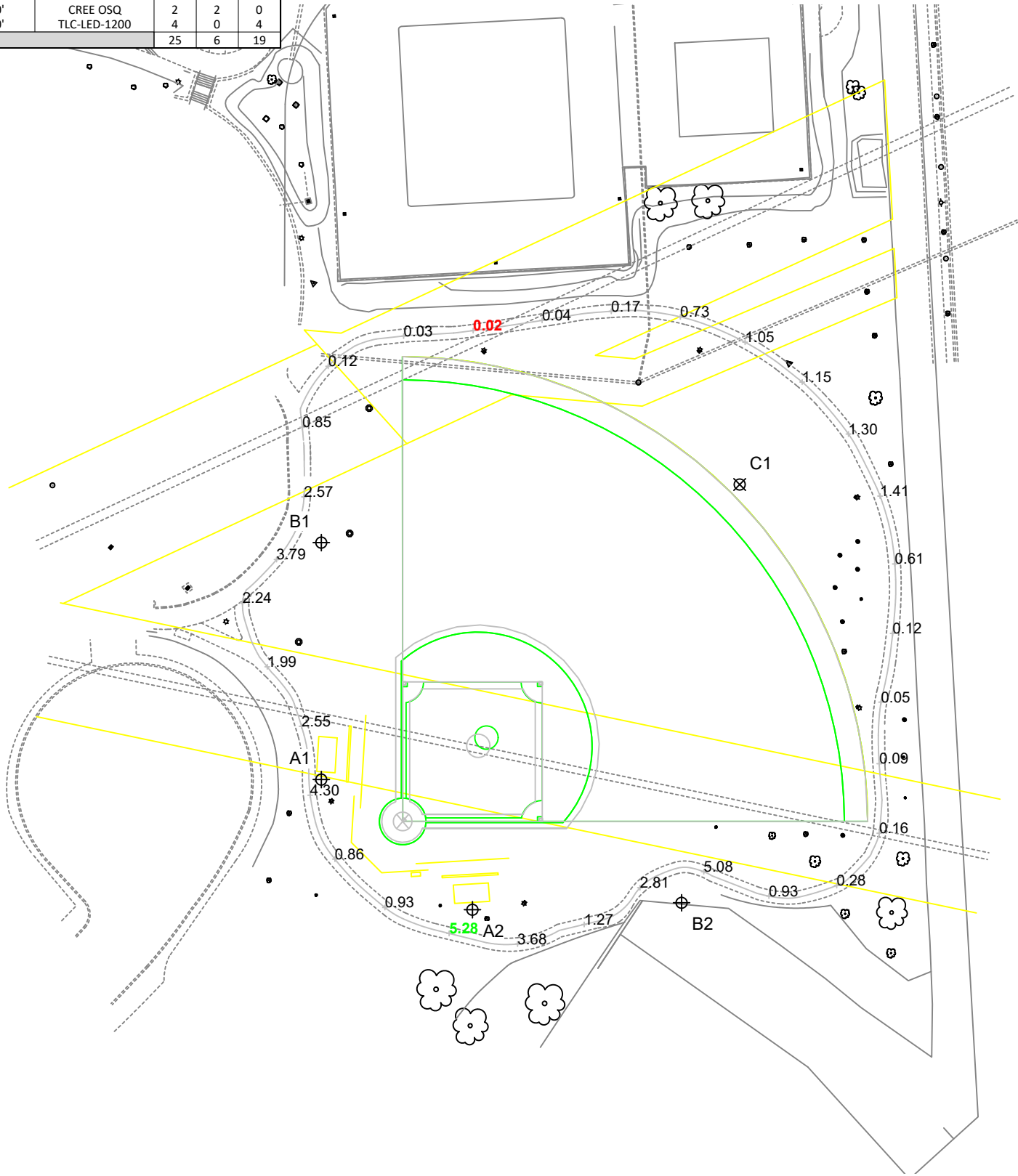
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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	60'	-	30'	CREE OSQ	1	1	0
				60'	TLC-LED-1200	2	0	2
2	B1-B2	60'	-	15.5'	TLC-BT-575	1	0	1
				30'	CREE OSQ	1	1	0
				60'	TLC-LED-1200	3	0	3
1	C1	60'	-	15.5'	TLC-BT-575	3	0	3
				30'	CREE OSQ	2	2	0
				60'	TLC-LED-1200	4	0	4
5	TOTALS					25	6	19



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GRID SUMMARY	
Name:	Walkway
Spacing:	30.0'
Height:	3.0' above grade

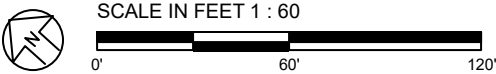
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 1.4986
Maximum:	5.28
Minimum:	0.02
No. of Points:	31
LUMINAIRE INFORMATION	
Applied Circuits:	B
No. of Luminaires:	6
Total Load:	0.78 kW

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ILLUMINATION SUMMARY

EQUIPMENT LAYOUT

INCLUDES:

· Baseball

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

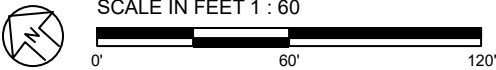
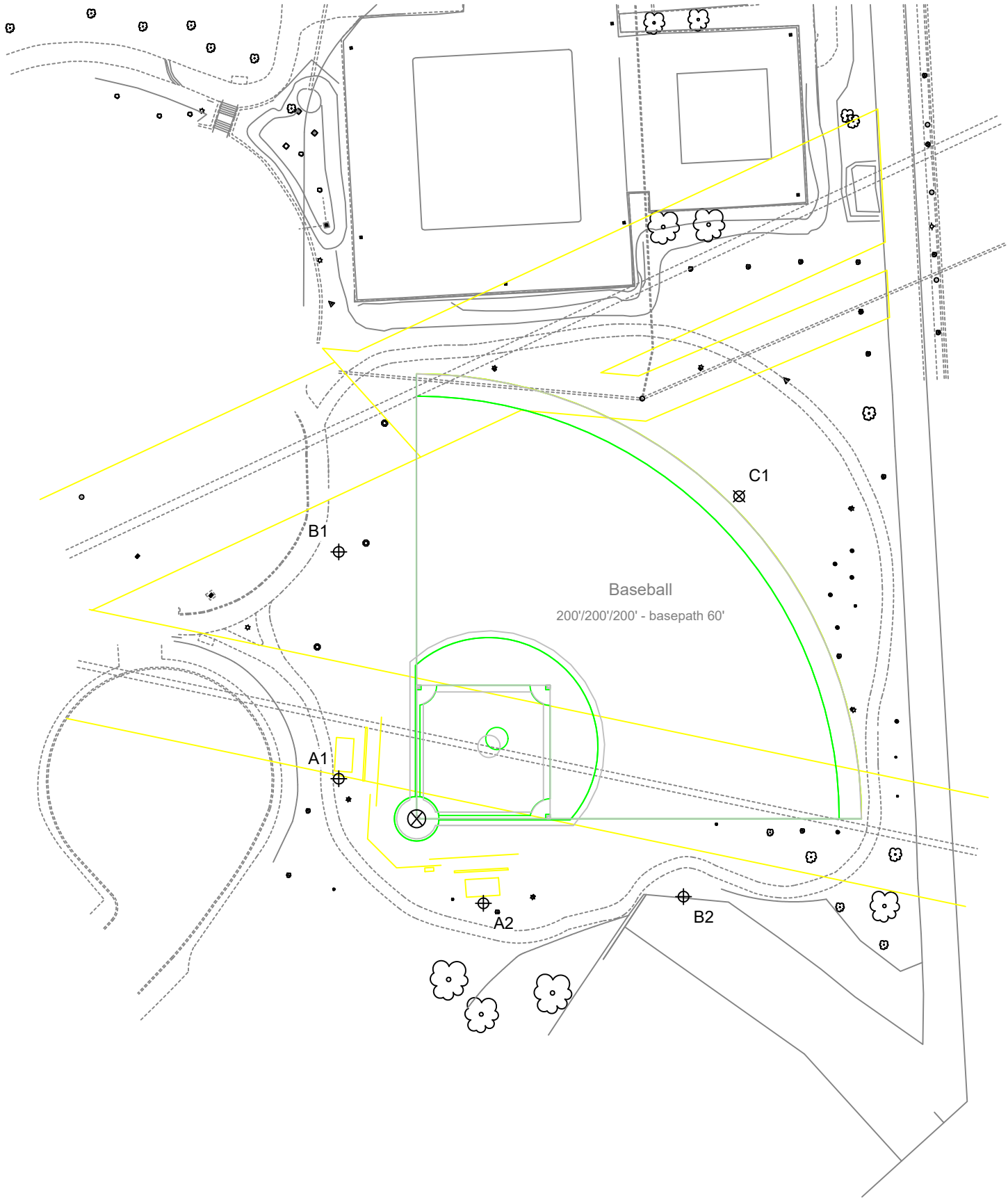
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	A1-A2	60'	-	30'	CREE OSQ	1
				60'	TLC-LED-1200	2
2	B1-B2	60'	-	15.5'	TLC-BT-575	1
				30'	CREE OSQ	1
				60'	TLC-LED-1200	3
1	C1	60'	-	15.5'	TLC-BT-575	3
				30'	CREE OSQ	2
				60'	TLC-LED-1200	4
5	TOTALS					25

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							
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
Cree OSQ	-	-	-	-	0.4	-	0.3



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