ADDENDUM
BOARD OF ZONING APPEALS STAFF REPORT
BZA 25-009

To: Members of the Board of Zoning Appeals

From: Sergio Mendoza, Planning Director

Meeting Date: February 10, 2026

Agenda Item: BZA 25-009, Developmental Standard Variances, Eads Elementary School.

Subject: Addendum to January 13, 2026 BZA Staff Report

Purpose
This memorandum is an addendum to the previously issued staff report regarding the replacement of parking parking area lighting at Eads Elementary School. The addendum identifies the updated technical and photometric information requested by the Board of Zoning Appeals (BZA) on December 9, 2025, for revised lighting configuration options with performance metrics; to be considered at their January 13, 2026, meeting. On January 13, 2026, the BZA meeting was canceled due to lack of quorum, and the matter of the parking area lighting replacement will now be considered at the February 10, 2026, BZA meeting.

Update.
After the December 9, 2025 meeting of the BZA, the applicant coordinated with their lighting contractor/engineer for updated lighting options and performance metrics. The updated plans now read that all pole heights comply with the Town's 20' pole height standards and the applicant would like to proceed with two variance requests. One for the fixture type, and the other for the color temperature. All other lighting configuration remains as previously proposed, consisting of fourteen (14) poles and thirty-one (31) total light fixtures as identified below:

- **P1:** 1 light fixture
- **P2:** 2 light fixtures
- **P3:** 3 lightf ixtures
- **P4 - P8:** 2 light fixtures
- **P9:** 1 flight fixture
- **P10:** 2 light fixtures
- **P11 - P14:** 3 light fixtures

As part of this review, the applicant has also submitted three lighting analysis for three LED color temperature options (3000K, 4000K, and 5000K). Summary findings are provided on the following page:

Lighting Metric	**3000K**	**4000K**	**5000K**
Color	Warm White	Neutral White	Cool White
Pole Height	20 ft	20 ft	20 ft
Parking Area – Avg. Illumination (fc)	2.47	2.83	2.83
Parking Area – Max Illumination (fc)	9	11	11
Roadway – Avg. Illumination (fc)	2.48	2.86	2.87
Roadway – Max Illumination (fc)	10	12	12
Max Spill at 3 ft (fc)	1.68	1.92	1.93
Light Spill at Property Line	0	0	0

Staff Findings and Recommendation
Staff finds that the proposed 20-foot pole height aligns with the Town's standards and that the photometric data complies with the 0 footcandle at property lines regulations, although not regulated in Civic Zone (CZ). In addition, staff finds that the proposed light fixture demonstrates appropriate light shielding and containment on the subject property. Also, staff finds that the illumination levels across all color temperature options are marginal with virtually no difference between 4000k and 5000k.

Staff review of the revised lighting design plans appear to reduce the spillover impacts due to the compliant pole height and light fixture type. Staff also assesses that the 4000k lighting option represents the most appropriate balance of safety, performance, and neighborhood compatibility, supporting clear visibility for student drop-off, evening events, and security while providing a more neutral, comfortable appearance with clarity and reduced glare compared to higher color temperature lighting.

Finally, staff finds that the strict application of the terms for the light fixture type standard and 3000k will result in practical difficulty for directing light and visibility to an institutional use to safely support pedestrian and vehicular circulation and appropriate security. The code compliant 20' pole height and requested 4000k with the proposed lighting fixtures achieve "0" measurable light spill over at the property line and by not using the 5000k color temperature the impacts to adjacent residential properties will be minimized while preserving neighborhood character. Overall, the 4000k color temperature, and proposed light fixture type is reasonable, appropriate, and consistent with the intent of applicable lighting and use standards that support the public health, safety, and general welfare of the community.

Staff requests that these findings supplement and refine the analysis contained in the original staff report and should be considered part of the full record, while all other findings, analysis, and recommendations in the original staff report remain unchanged unless otherwise noted.

BZA may consider the following the motion:

Motion to approve BZA 25-009, A Developmental Standards Variance for the proposed lighting fixture type and 4000k color temperature as presented, including all discussions and findings:

Attachments:
- Eads Elementary 4000K Lighting Plan (*6 pages*)

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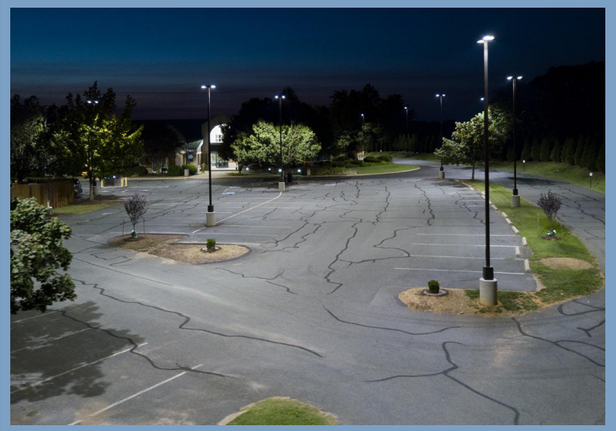
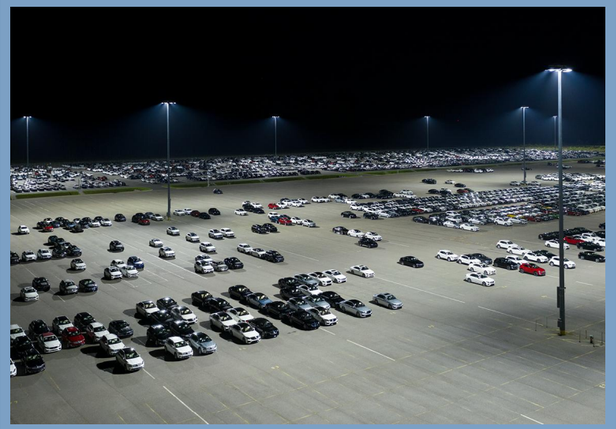


John Porter Library, Stafford, Virginia, USA

Smokey Row, Des Moines, Iowa, USA



Mercedes-Benz Vehicle Center, Brunswick, Georgia, USA

Jaxport Cruise Terminal, Jacksonville, Florida, USA

James B Eads Elementary School Parking

Munster,IN

Sales Representative: Brent Castle · Designed By: Sammi Yelkin · Design No.: 246298C - 4000K · January 07, 2026

James B Eads Elementary School Parking

Munster,IN

LIGHTING SYSTEM

Structure/Fixture Summary

Structure ID	Structure Height	Fixt. Attachment Ht.	Fixture Qty	Fixture Type	Load	Circuit
P1	20'	20'	1	LSI VALS	0.11 kW	A
P2	20'	20'	2	LSI VALS	0.22 kW	A
P3	20'	20'	3	LSI VALS	0.33 kW	A
P4-P8	20'	20'	2	LSI VALS	0.22 kW	A
P9	20'	20'	1	LSI VALS	0.11 kW	A
P10	20'	20'	2	LSI VALS	0.22 kW	A
P11-P14	20'	20'	3	LSI VALS	0.33 kW	A
14			**31**		**3.44 kW**	

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Parking	3.44 kW	31

Fixture Type Summary

Type	Circuit	Source	Wattage	Lumens	L90	L80	L70	Quantity
LSI VALS	A	LED 4000K - 70 CRI	111W	13,564	--	--	--	30
LSI VALS	A	LED 4000K - 70 CRI	111W	14,806	--	--	--	1

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)
LSI VALS	-	-	-	-	-	-	-

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination Ave					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Parking	Horizontal Illuminance	2.83	0	11	969.86	253.37	A	31
Road Way	Horizontal Illuminance	2.86	0	12	497.30	121.92	A	31

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.

James B Eads Elementary School Parking

Munster,IN

Equipment List For Areas Shown

Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	P1 P9	20'	-	20'	LSI VALS	1	1	0
7	P2 P4-P8 P10	20'	-	20'	LSI VALS	2	2	0
1	P3	20'	-	20'	LSI VALS	1/2*	3	0
4	P11-P14	20'	-	20'	LSI VALS	2/1*	3	0
14	Totals					31	31	0

Above Field Level is height of fixtures above area shown

*This structure utilizes a back-to-back mounting configuration

Grid Summary

Name:	**Road Way**
Size:	575' x 400'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average:	**2.86**
Maximum:	12
Minimum:	0
Avg/Min:	121.92
Max/Min:	**497.30**
UG (adjacent pts):	9.26
CU:	0.36
CV:	0.82
No. of Points:	530
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	**31**
Total Load:	3.44 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.

SCALE IN FEET 1 : 60

0' 60' 120'

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

ENGINEERED DESIGN By: Sammi Yelkin • File #246298C - 4000K • 07-Jan-26

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Equipment List For Areas Shown

Structure				Fixtures				
QTY	STRUCTURE ID	SIZE	GRADE ELEVATION	ABOVE FIELD LEVEL	FIXTURE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	P1 P9	20'	-	20'	LSI VALS	1	1	0
7	P2 P4-P8 P10	20'	-	20'	LSI VALS	2	2	0
1	P3	20'	-	20'	LSI VALS	1/2*	3	0
4	P11-P14	20'	-	20'	LSI VALS	2/1*	3	0
14	Totals					31	31	0

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James B Eads Elementary School Parking

Munster,IN

Grid Summary

Name:	**Parking**
Size:	580' x 100'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average:	**2.83**
Maximum:	11
Minimum:	0
Avg/Min:	253.37
Max/Min:	**969.86**
UG (adjacent pts):	2.79
CU:	0.26
CV:	0.80
No. of Points:	386
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	**31**
Total Load:	3.44 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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James B Eads Elementary School Parking

Munster,IN

Grid Summary

Name:	**Spill**
Size:	580' x 100'
Spacing:	30.0' x 10.0'
Height:	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average:	**0.18**
Maximum:	2
Minimum:	0
No. of Points:	88
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	**31**
Total Load:	3.44 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.

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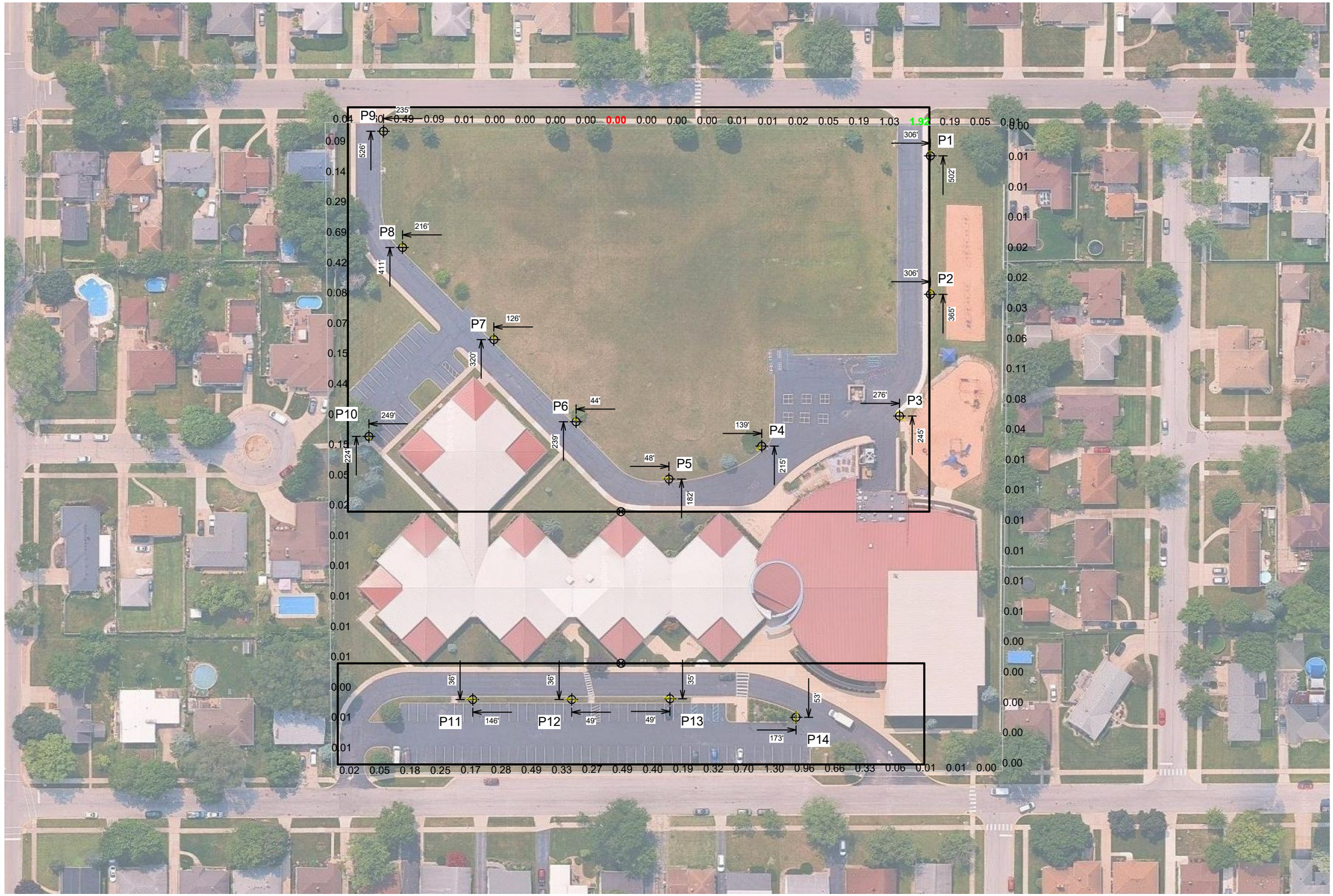

SCALE IN FEET 1 : 100

0' 100' 200'

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

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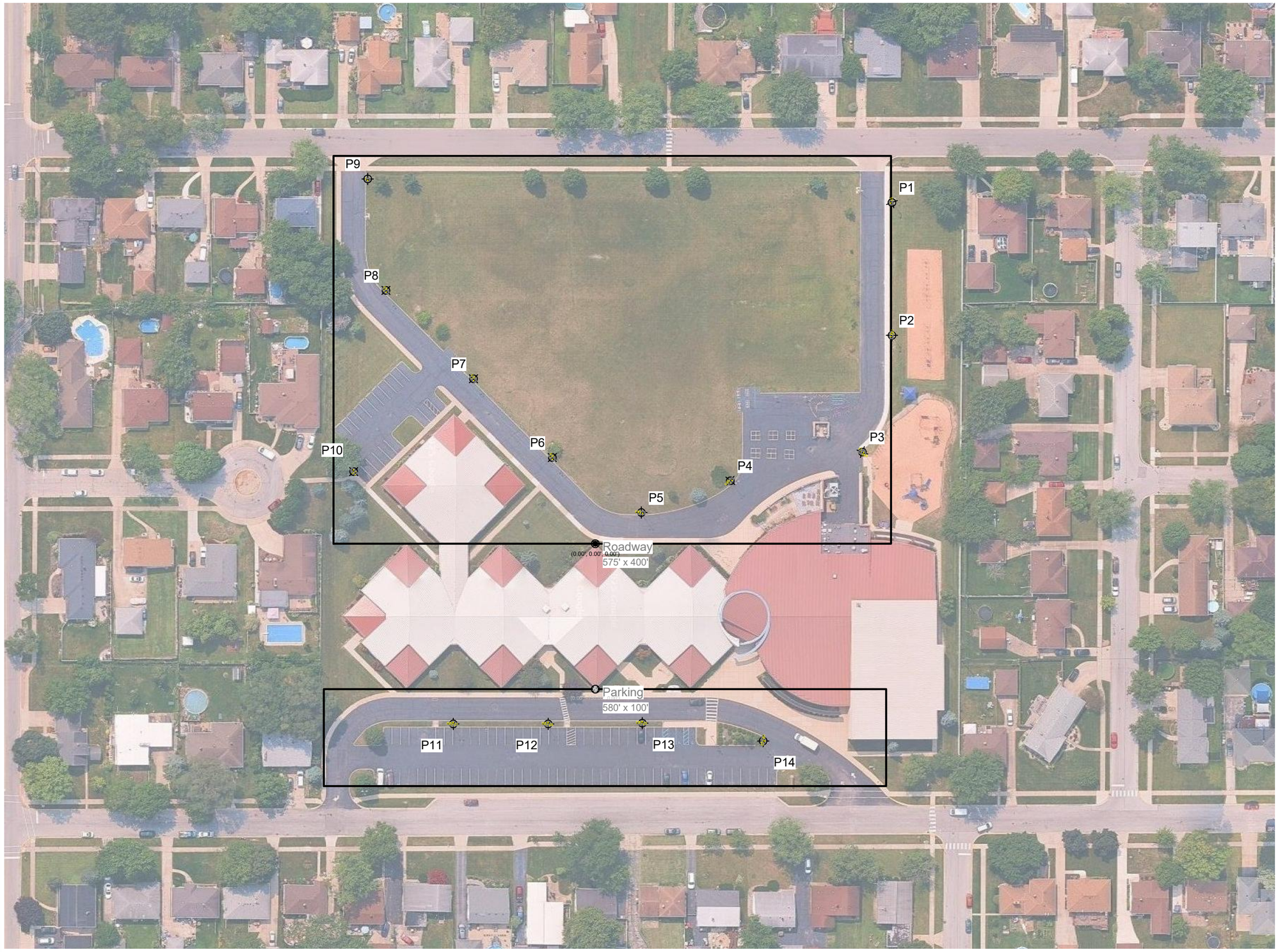

James B Eads Elementary School Parking

Munster,IN

Equipment Layout

INCLUDES:
· Parking
· Roadway

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
2	P1 P9	20'	-	20'	LSI VALS	1
7	P2 P4-P8 P10	20'	-	20'	LSI VALS	2
1	P3	20'	-	20'	LSI VALS	1/2*
4	P11-P14	20'	-	20'	LSI VALS	2/1*
14	Totals					31

*This structure utilizes a back-to-back mounting configuration

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)
LSI VALS	-	-	-	-	-	-	-

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