



To: Prospective Bidders

From: Shannon McIntyre
City of Mobile Architectural Engineering Department
Brock Jones, P.E.
Kimley-Horn and Associates

RE: Medal of Honor – Site and Lighting Improvements

Project #PR-001-23

Date: April 23, 2024

This Addendum forms a part of, and modifies, the Bid Documents for the above referenced project, dated March 25, 2024. Acknowledge the receipt of this Addendum No. 3 in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

RFI's:

Question 1: Is the Contractor responsible for the foundation of the owner furnished softball field lighting for fields C & D.

Response: Yes, the Contractor will be responsible for installation of the foundation and coordinating installation with MUSCO. If you have any questions pertaining to the lighting please contact Gaines Todd at (334)-313-2176. See attached for additional information for the lighting foundation design.

ATTACHMENTS

ATTACHMENT 1 – MUSCO Lighting Design

END OF ADDENDUM NO. 3

Medal Of Honor Park Softball Fields 3 And 4

Mobile,AL

Lighting System

Pole/Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A5-A6	60'	60'	3	TLC-LED-900	2.64 kW	D
		16'	1	TLC-BT-575	0.57 kW	D
A7-A8	60'	60'	3	TLC-LED-900	2.64 kW	E
		16'	1	TLC-BT-575	0.57 kW	E
B5-B6	60'	60'	6	TLC-LED-1200	7.02 kW	D
		16'	1	TLC-BT-575	0.57 kW	D
B7-B8	60'	60'	6	TLC-LED-1200	7.02 kW	E
		16'	1	TLC-BT-575	0.57 kW	E
C5-C6	60'	60'	4	TLC-LED-1200	4.68 kW	D
		16'	1	TLC-RGB-U	0.43 kW	D
C7-C8	60'	16'	2	TLC-BT-575	1.15 kW	D
		60'	4	TLC-LED-1200	4.68 kW	E
		16'	1	TLC-RGB-U	0.43 kW	E
		16'	2	TLC-BT-575	1.15 kW	E
12			72		68.28 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
D	Field 3	34.14 kW	36
E	Field 4	34.14 kW	36

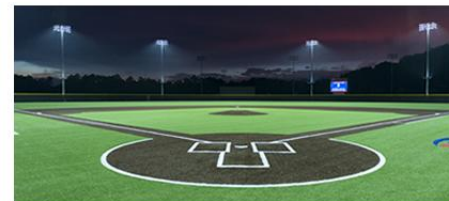
Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	16
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	40
TLC-LED-900	LED 5700K - 75 CRI	880W	104,000	>120,000	>120,000	>120,000	12
TLC-RGB-U	RED-GREEN (Shown)-BLUE	430W	16,000	21,300	>36,300	>36,300	4

Single Luminaire Amperage Draw Chart							
Driver 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-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5
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-RGB-U	3.0	2.8	2.6	2.2	1.8	1.3	1.3

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Field 3 (Infield)	Horizontal Illuminance	51.33	34	60	1.77	1.52	D	36
Field 3 (Outfield)	Horizontal Illuminance	32.92	21	48	2.27	1.54	D	36
Field 4 (Infield)	Horizontal Illuminance	50.62	33	61	1.84	1.52	E	36
Field 4 (Outfield)	Horizontal Illuminance	33.02	20	48	2.44	1.66	E	36

From Hometown to Professional



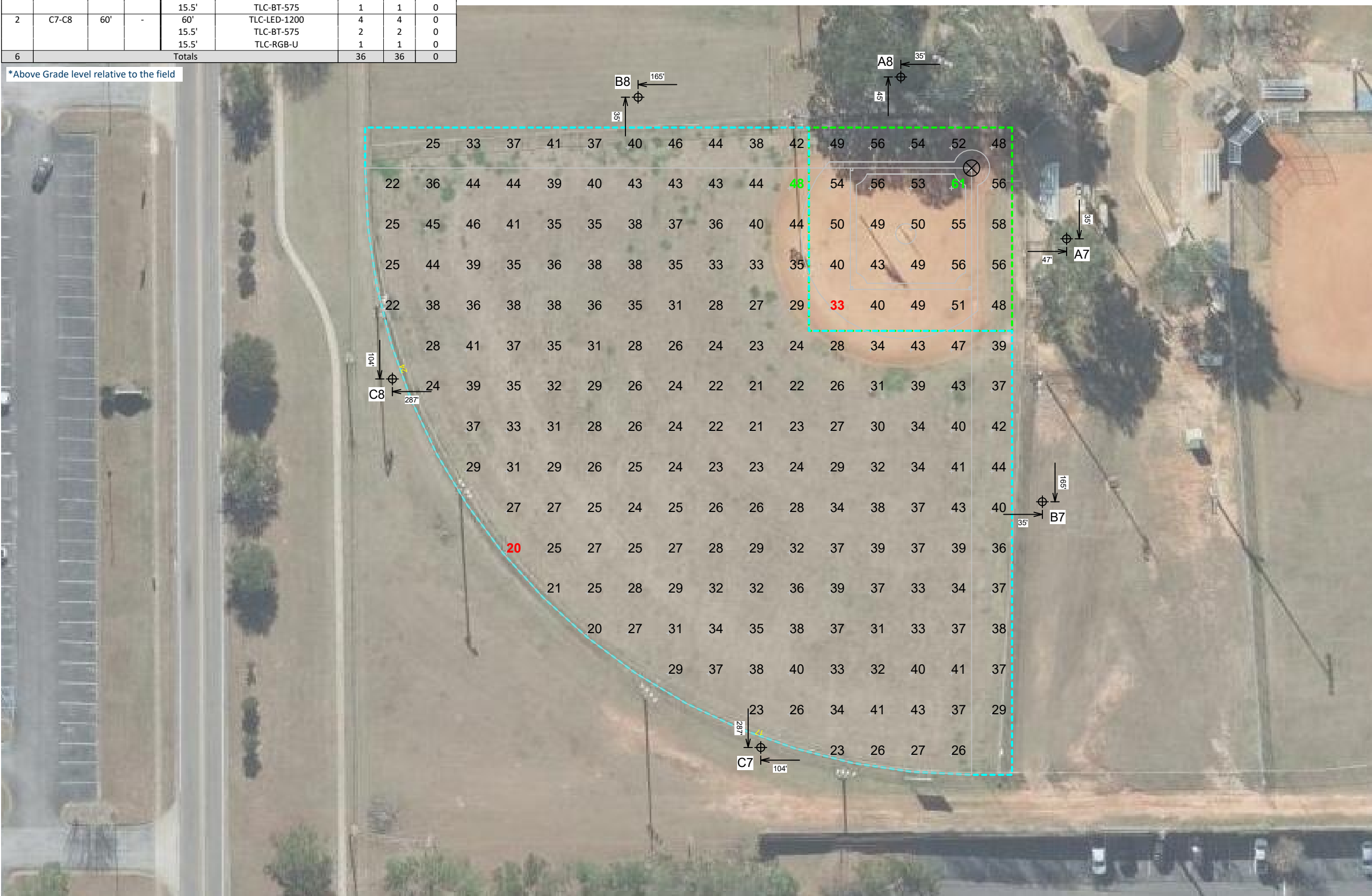
We Make It Happen.

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Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	A7-A8	60'	-	60'	TLC-LED-900	3	3	0
				15.5'	TLC-BT-575	1	1	0
2	B7-B8	60'	-	60'	TLC-LED-1200	6	6	0
				15.5'	TLC-BT-575	1	1	0
2	C7-C8	60'	-	60'	TLC-LED-1200	4	4	0
				15.5'	TLC-BT-575	2	2	0
				15.5'	TLC-RGB-U	1	1	0
6	Totals					36	36	0

*Above Grade level relative to the field



Medal Of Honor Park Softball Fields 3 And 4

Mobile, AL

Grid Summary	
Name	Field 4
Size	300'/300'/300' - basepath 60'
Spacing	20.0' x 20.0'
Height	3.0' above grade

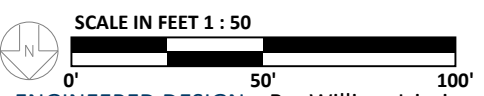
	MAINTAINED HORIZONTAL FOOTCANDLES	
	Infield	Outfield
Guaranteed Average	50	30
Scan Average	50.62	33.02
Maximum	61	48
Minimum	33	20
Avg/Min	1.52	1.66
Guaranteed Max/Min	2	2.5
Max/Min	1.84	2.44
UG (adjacent pts)	1.23	1.81
CU	0.73	
No. of Points	25	181
LUMINAIRE INFORMATION		
Applied Circuits	E	
No. of Luminaires	36	
Total Load	34.14 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.



ENGINEERED DESIGN By: William Isiminger • File #200860C • 05-Apr-24

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	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	A5-A6	60'	-	60'	TLC-LED-900	3	3	0
				15.5'	TLC-BT-575	1	1	0
2	B5-B6	60'	-	60'	TLC-LED-1200	6	6	0
				15.5'	TLC-BT-575	1	1	0
2	C5-C6	60'	-	60'	TLC-LED-1200	4	4	0
				15.5'	TLC-BT-575	2	2	0
				15.5'	TLC-RGB-U	1	1	0
6	Totals					36	36	0

*Above Grade level relative to the field



Medal Of Honor Park Softball Fields 3 And 4

Mobile, AL

Grid Summary	
Name	Field 3
Size	300'/300'/300' - basepath 60'
Spacing	20.0' x 20.0'
Height	3.0' above grade

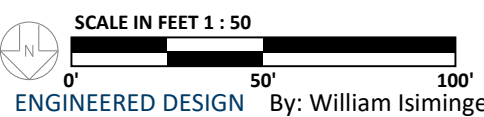
	MAINTAINED HORIZONTAL FOOTCANDLES	
	Infield	Outfield
Guaranteed Average	50	30
Scan Average	51.33	32.92
Maximum	60	48
Minimum	34	21
Avg/Min	1.52	1.54
Guaranteed Max/Min	2	2.5
Max/Min	1.77	2.27
UG (adjacent pts)	1.23	1.63
CU	0.73	
No. of Points	25	181
LUMINAIRE INFORMATION		
Applied Circuits	D	
No. of Luminaires	36	
Total Load	34.14 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) ⊗



Medal Of Honor Park Softball Fields 3 And 4

Mobile, AL

Equipment Layout

INCLUDES:
 · 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.

Equipment List For Areas Shown

QTY	LOCATION	SIZE	Pole		Luminaires	
			GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE
4	A5-A8	60'	-	60'	TLC-LED-900	3
				15.5'	TLC-BT-575	1
4	B5-B8	60'	-	60'	TLC-LED-1200	6
				15.5'	TLC-BT-575	1
4	C5-C8	60'	-	60'	TLC-LED-1200	4
				15.5'	TLC-BT-575	2
				15.5'	TLC-RGB-U	1
12	Totals					72

Single Luminaire Amperage Draw Chart

Driver 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-BT-575	3.3	3.2	2.9	2.5	2.0	1.8	1.5
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-RGB-U	3.0	2.8	2.6	2.2	1.8	1.3	1.3



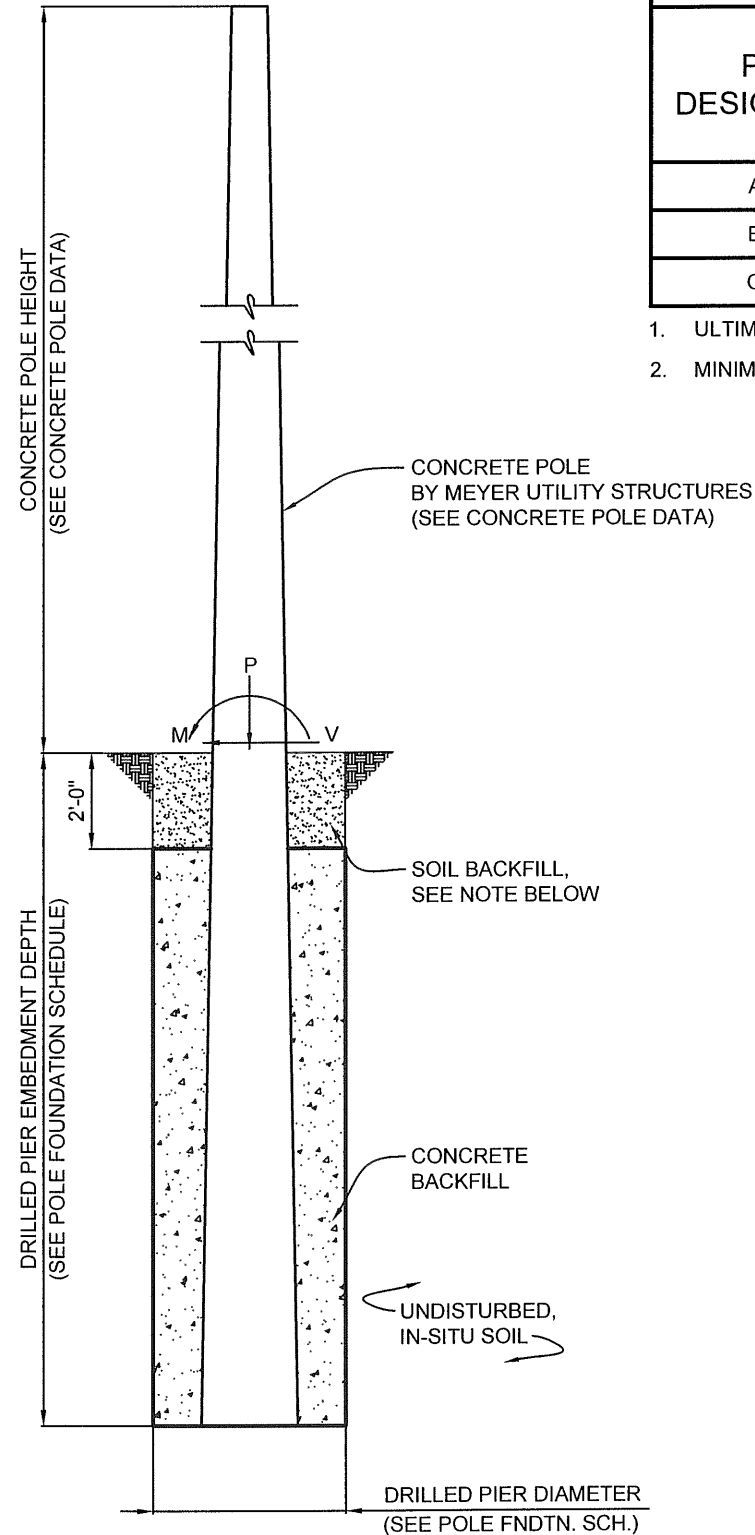
SCALE IN FEET 1 : 100
 0' 100' 200'
 ENGINEERED DESIGN By: William Isiminger • File #200860C • 05-Apr-24

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



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EQUIPMENT LAYOUT



POLE FOUNDATION ELEV.

SCALE: NOT TO SCALE

SOIL BACKFILL NOTE:
 THE TOP TWO FEET OF ANNULUS SHALL BE BACKFILLED WITH SOIL, WITH A CLASSIFICATION OF CLASS 5 (TABLE 1806.2) OR BETTER. COMPACTION, 95% FOR COHESIVE SOIL AND 98% FOR A COHESIONLESS SOIL BASED UPON STANDARD PROCTOR TESTING (ASTM D698).

POLE FOUNDATION SCHEDULE					
POLE DESIGNATION	FORCES (1.)		DRILLED PIER		
	MOMENT (M) FT-K	SHEAR (V) KIPS	DIAMETER INCHES	EMBEDMENT DEPTH	CONCRETE BACKFILL YD ³ (2.)
A5 - A8	213.3	5.9	42	14'-0"	3.2
B5 - B8	236.6	6.3	42	14'-0"	3.2
C5 - C8	222.6	6.1	42	14'-0"	3.2

1. ULTIMATE GROUNDLINE FORCES PROVIDED BY MEYER UTILITY STRUCTURES.
2. MINIMUM CONCRETE BACKFILL VOLUME, SITE CONDITIONS MAY REQUIRE ADDITIONAL BACKFILL.

CONCRETE POLE DATA (1.)					
POLE HEIGHT ABOVE GRADE	POLE WEIGHT	OVERALL LENGTH	EMBEDMENT BELOW GRADE	O.D. TIP	O.D. BUTT
60'-0"	10,290 LBS	74'-0"	14'-0"	9.1"	22.42"

1. REFERENCE DOCUMENTATION BY MEYER UTILITY STRUCTURES.

POLE IDENTIFICATION			
POLE DESIGNATION	POLE HEIGHT ABOVE GRADE	FIXTURE CONFIGURATION (FIX. PER XARM)	FIXTURE AND ACCESSORIES EPA (FT ²)
A5 - A8	60'-0"	4 (3)	11.0
B5 - B8	60'-0"	7 (6)	16.0
C5 - C8	60'-0"	7 (4)	13.0

- POLES A5 - A8 & B5 - B8 HAVE (1) MUSCO LED FIXTURE AT 15'-6" AGL INCLUDED ABOVE.
- POLES C5 - C8 HAVE (3) MUSCO LED FIXTURES AT 15'-6" AGL INCLUDED ABOVE.

DESIGN NOTES

DESIGN PARAMETERS:

WIND: V = 160 MPH, V_{asd} = 124 MPH (EXPOSURE C, RISK CATEGORY II) PER INTERNATIONAL BUILDING CODE, 2021 EDITION (ASCE 7-16). DESIGN WIND PARAMETERS ARE AS NOTED, ACTUAL EXPOSURE MUST BE VERIFIED FOR THE SITE BY THE PROPER GOVERNING OFFICIAL.

GEOTECHNICAL PARAMETERS:

ALLOWABLE END BEARING SOIL PRESSURE: 1,500 PSF OR SKIN FRICTION: 250 PSF
 ALLOWABLE LATERAL SOIL BEARING PRESSURE:
 100 PSF/FT (GRADE TO -2'-0"); 200 PSF/FT (BELOW -2'-0")
 IN ACCORDANCE WITH THE 2021 EDITION OF THE INTERNATIONAL BUILDING CODE, CHAPTER 18. SEE TABLE 1806.2, SOIL MATERIAL CLASS 5 & SECTION 1806.3.4.

DESIGN SOIL PARAMETERS ARE AS NOTED. ACTUAL ALLOWABLE SOIL PARAMETERS MUST BE VERIFIED ON SITE.

A GEOTECHNICAL ENGINEER OR REPRESENTATIVE OF IS RECOMMENDED (NOT REQUIRED) TO BE AVAILABLE AT THE TIME OF THE FOUNDATION INSTALLATION TO VERIFY THE SOIL DESIGN PARAMETERS AND TO PROVIDE ASSISTANCE IF ANY PROBLEMS ARISE IN FOUNDATION INSTALLATION.

ENCOUNTERING SOIL FORMATIONS THAT WILL REQUIRE SPECIAL DESIGN CONSIDERATIONS OR EXCAVATION PROCEDURES MAY OCCUR. POLE FOUNDATIONS WILL NEED TO BE ANALYZED ACCORDING TO THE SOIL CONDITIONS THAT EXIST. IF ANY DISCREPANCIES OR INCONSISTENCIES ARISE, NOTIFY THE ENGINEER OF SUCH DISCREPANCIES. FOUNDATIONS WILL THEN BE REVISED ACCORDINGLY. REVISIONS WILL BE ANALYZED PER RECOMMENDATIONS DIRECTED BY A REGISTERED ENGINEER.

ALL EXCAVATIONS MUST BE FREE OF LOOSE SOIL AND DEBRIS PRIOR TO FOUNDATION INSTALLATION AND CONCRETE BACKFILL PLACEMENT. TEMPORARY CASINGS OR DRILLERS SLURRY MAY BE USED TO STABILIZE THE EXCAVATION DURING INSTALLATION. CASINGS MUST BE REMOVED DURING CONCRETE BACKFILL PLACEMENT. CONCRETE BACKFILL MUST BE PLACED WITH A TREMIE WHEN SLURRY OR WATER IS PRESENT WITHIN THE EXCAVATION OR WHEN THE FREE DROP EXCEEDS 6'-0".

CONTRACTOR MUST BE FAMILIAR WITH THE COMPLETE SOIL INVESTIGATION REPORT AND BORINGS, AND CONTACT THE GEOTECHNICAL FIRM (IF NECESSARY) TO UNDERSTAND THE SOIL CONDITIONS AND THE POSSIBILITY OF GROUND WATER PUMPING AND EXCAVATION STABILIZATION OR BRACING DURING CONCRETE POLE INSTALLATION AND PLACEMENT OF CONCRETE BACKFILL.

CONCRETE:

CONCRETE SHALL BE AIR-ENTRAINED AND HAVE A MINIMUM COMPRESSIVE DESIGN STRENGTH AT 28 DAYS OF 3,000 PSI. ALL PIERS AND CONCRETE BACKFILL MUST BEAR ON AND AGAINST FIRM UNDISTURBED SOIL.

GENERAL NOTES:

FIXTURES MUST BE LOCATED TO MAINTAIN 10'-0" MINIMUM HORIZONTAL CLEARANCE FROM ANY OBSTRUCTION. ENGINEER MUST BE NOTIFIED IF FOUNDATIONS ARE NEAR ANY RETAINING WALLS OR WITHIN / NEAR ANY SLOPES STEEPER THAN 3H : 1V. CONCRETE POLES BY MEYER UTILITY STRUCTURES. FIXTURES, ELECTRICAL ITEMS AND INSTALLATION PER MUSCO LIGHTING.



KYLE G. LACINA - NO. 26859

**MEDAL OF HONOR PARK
 SOFTBALL FIELDS 3 AND 4
 FIELD LIGHTING
 MOBILE, AL**



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 MARSHALLTOWN, IOWA 50158
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 EMAIL: MSL.INFO@SEPC.BIZ

DRAWING TITLE: FOUNDATION	DRAWING NUMBER: C1
SCALE: SEE PLAN	PROJECT NUMBER: 200860
NOTES: SCAN: #200860B	DATE: 04 MARCH 2024
	DRAWING NUMBER: C1
	OF ONE