DANE COUNTY DEPT. OF PUBLIC WORKS, HIGHWAY & TRANSPORTATION

1919 Alliant Energy Center Way Madison, Wisconsin 53713 Office: 608/266-4018 ⋄ Fax: 608/267-1533 Public Works Engineering Division Public Works Solid Waste Division

ADDENDUM

WEDNESDAY, JANUARY 17, 2018

ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS

RFB NO. 317035 - ADDENDUM NO. 1

COLISEUM PERFORMANCE AREA LIGHTING & RIGGING UPGRADES

<u>BIDS DUE</u>: TUESDAY, FEBRUARY 6, 2018, 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

PLEASE MAKE THE FOLLOWING CHANGES:

1. Section 26 01 01 – Sports and Event Lighting System Scope Design Narrative

Page 6 – Item 8.b

Delete existing Item 8.b and replace with the following: "All demolition material shall be property of the contractor and removed from site."

Page 6 – Item 8.d

Add item 3 as follows:

"3. Demolition of center cage spotlights. Center cage spotlights and cage structure shall be removed. Existing cage spotlight wiring, contactors on catwalk and control switches in lighting booth shall be removed. Blank off switch with Brushed Stainless Steel cover plate. Cage structure will be removed by GC."

2. Sheet E100

Modify current Sheet E100 as follows: revise keyed note 13 as follows:

"Existing east and west cage spotlights, 8 total, are currently switched in pairs via switches in the lighting booth. Provide relays in the booth to control the existing control circuit from the new lighting control system. Existing switches shall be removed and blanked off with Brushed Stainless Steel cover plate. Existing contactors, control wire and power wiring shall remain in use."

3. Sheet E101

Modify current Sheet E101 as follows: revise keyed note 2 as follows:

"Existing follow spotlights, 8 total as well as east and west cage spotlights, 8 total, to remain. Center cage spotlights and cage structure shall be removed. Existing cage spotlight wiring, contactors on catwalk and control switches in lighting booth shall be removed. Blank off switch with Brushed Stainless Steel cover plate"

RFB No. 317035 -1 - rev. 06/17

4. Exhibit 1

Delete current Exhibit 1; replace with new Exhibit 1, issued with this Addendum.

5. Exhibit 2

Delete current Exhibit 2; replace with new Exhibit 2, issued with this Addendum.

PLEASE NOTE THE FOLLOWING SUBMITTED QUESTIONS:

- Q1: The existing fall protection and the proposed fall protection shown on detail 1/S3 of the contract plans is the Uni-8 system by 3M/Capital Safety. Will 3M/Capital Safety be added to the list of approved manufactures?
- **A1:** It isn't necessary to update the spec for an alternate. ZS approves the proposed fall protection system as an alternate.
- **Q2:** What is the desired quantity of harnesses and lanyards?
- **A2:** Harnesses and lanyards are not required to be provided in the specifications. The Owner typically purchases these separately and their riggers likely have a sufficient number of these presently.
- **Q3:** The specification requires a rescue plan. Is rescue equipment is required?
- **A3:** No additional rescue equipment is required with this project. Owner shall develop separate rescue plan outside of this project in the case of a fall event.
- **Q4:** Is drilling and bolting the fall protection brackets directly to the existing rib beam acceptable?
- **A4:** No drilling permitted. Use Lindapter or approved equal as specified.
- **Q5:** The depicted product manufacturer does not require post installation load testing, please confirm that load testing is not required.
- **A5:** Load testing is not required.

If any additional information about this Addendum is needed, please call Eric Urtes, AIA, at 608/266-4798, urtes.eric@countyofdane.com.

Sincerely,
J. Eric Urtes, AIA
Project Manager

Enclosures:

Exhibit 1

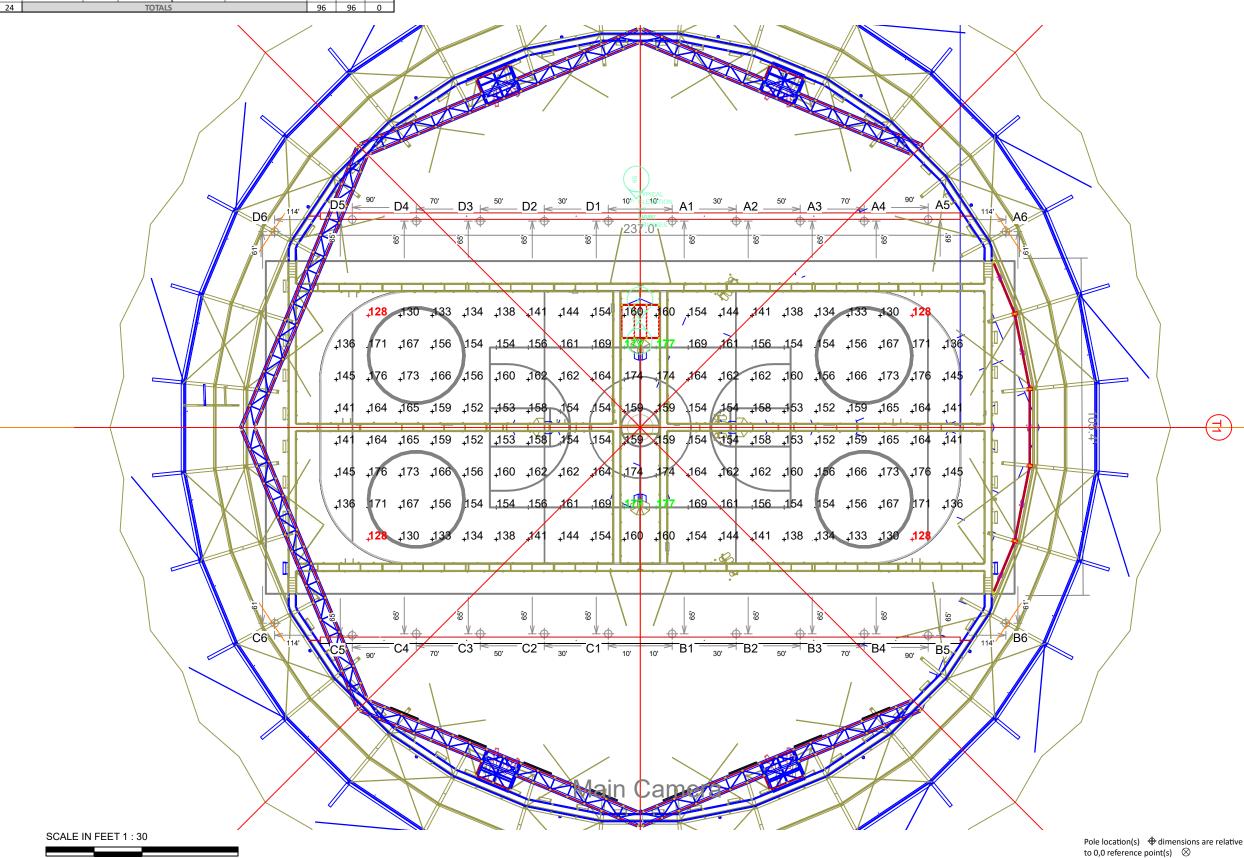
Exhibit 2

RFB No. 317035 - 2 - rev. 07/17

EQUIPMENT LIST FOR AREAS SHOWN LOCATION A1-A6 B1-B6 C1-C6 D1-D6

ENGINEERED DESIGN By: C.Hoy • File #185796D1 • 11-Jan-18

EXHIBIT 1



Madison Coliseum - Dane County

Madison,WI

GRID SUMMARY Name: Hockey Size: 200' x 85' Spacing: 10.0' x 10.0' Height: 5.0' above grade

ILLUMINATION SUMMARY							
MAINTAINED HORIZONTAL FOOTCANDLES							
Entire Grid							
Guaranteed Average:	125						
Scan Average:	155.36						
Maximum:	177						
Minimum:	128						
Avg / Min:	1.21						
Guaranteed Max / Min:	1.5						
Max / Min:	1.38						
UG (adjacent pts):	1.34						
CU:	0.63						
No. of Points:	156						
LUMINAIRE INFORMATION							
Color / CRI:	5700K - 75 CRI						
Luminaire Output:	38,600 lumens						
No. of Luminaires:	96						
Total Load:	38.4 kW						
		Lum	en Maintenance				
Luminaire Type	L90 hrs	L80 hrs	L70 hrs				
TLC-LED-400	61,000	>72,000	>72,000				
Reported per TM-21-11. See luminaire datasheet for details.							

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.



LOCATION A1-A6 B1-B6 C1-C6 D1-D6 96 96 0 D2 ⊨ - D1 ⊨ D6 123 118 124 129 129 124 118 123 130 130 125 120 129 _120 _120 _125 _130 _130 136 _142 _132 140 137 132 127 133 143 143 133 127 132 137 140 _132 _143 123 142 137 134 136 131 131 ₁130 133 144 143 ₄133 ₊130 ₊131 ₊131 136 134 137 14° 126 127 127 128 124 131 131 117 117 131 131 124 128 125 127 104 126 131 125 123 122 131 126 128 29 129 128 126 131 122 123 125 128 126 103 139 141 129 122 126 132 131 131 134 134 131 131 ₊132 ₊126 122 129 140 139 115 121 _130 _139 145 45 ₁139 ₁126 121 <u>117 123</u> .127 125 .123 .117 104 103 105 104 105 104 ₁04 ₁05 ₁104 104₊ 105₊ 104 /B6 SCALE IN FEET 1:30 to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: C.Hoy • File #185796D1 • 11-Jan-18

Madison Coliseum - Dane County

Madison,WI

RID SUMMARY

Name:
Size:
Spacing:
10.0' x 10.0'
Height:
5.0' above grade

ILLUMINATION SUMMARY						
MAINTAINED TV FOOTCANDLES: Main Camera						
Entire Grid						
Guaranteed Average:	125					
Scan Average:	126.00					
Maximum:	145					
Minimum:	103					
Avg / Min:	1.23					
Guaranteed Max / Min:	1.5					
Max / Min:	1.41					
UG (adjacent pts):	1.35					
CU:	0.63					
No. of Points:	156					
LUMINAIRE INFORMATION						
Color / CRI:	5700K - 75 CRI					
Luminaire Output:	38,600 lumens					
No. of Luminaires:						
Total Load:	38.4 kW					
		Lum	en Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs			
TLC-LED-400	61,000	>72,000	>72,000			
Reported per TM-21-11. See luminaire datasheet for details.						

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.



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LOCATION A1-A6 B1-B6 C1-C6 D1-D6 96 96 0 D2 ⊨ - D1 ⊨ D6 125 127 125 114 99 108 114 119 121 121 **.**91 **.**83 **.**84 120 123 126 133 129 124 110 105 98 114 124 119 100 100 100 100 100 102 114 107 115 118 122 126 121 **.**78 .90 _104 _100 _110 _110 _115 **,11**2 \110 *|*,106 <u>,110 9</u>5 170,0,30 90 104 100 110 110 115 120 114 116 12 110 110 110 95 **,**91 **,**95 **,**87 .77 103 114 107 115 118 122 126 121 123 .102 .100 .104 .109 .109 .102 .102 .102 .102 .102 **.**91 **6**1 121 121 125 127 125 114 11₄ **.**91 **£**83 /B6 SCALE IN FEET 1:30 to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: C.Hoy • File #185796D1 • 11-Jan-18

Madison Coliseum - Dane County

Madison,WI

RID SUMMARY

Name: Hockey
Size: 200' x 85'
Spacing: 10.0' x 10.0'
Height: 5.0' above grade

ILLUMINATION SUMMARY MAINTAINED TV FOOTCANDLES: Estimated End Camera Entire Grid Guaranteed Average: 75 Scan Average: 102.76 Maximum: 133 Minimum: 55 Avg / Min: 1.88 Guaranteed Max / Min: 2.5 Max / Min: 2.43 UG (adjacent pts): 1.43						
Entire Grid						
Guaranteed Average: 75 Scan Average: 102.76 Maximum: 133 Minimum: 55 Avg / Min: 1.88 Guaranteed Max / Min: 2.5 Max / Min: 2.43						
Scan Average: 102.76 Maximum: 133 Minimum: 55 Avg / Min: 1.88 Guaranteed Max / Min: 2.5 Max / Min: 2.43						
Maximum: 133 Minimum: 55 Avg / Min: 1.88 Guaranteed Max / Min: 2.5 Max / Min: 2.43						
Minimum: 55 Avg / Min: 1.88 Guaranteed Max / Min: 2.5 Max / Min: 2.43						
Avg / Min: 1.88 Guaranteed Max / Min: 2.5 Max / Min: 2.43						
Guaranteed Max / Min: 2.5 Max / Min: 2.43						
Max / Min: 2.43	1.88					
•						
UG (adjacent pts): 1.43						
CU: 0.63	0.63					
No. of Points: 156						
LUMINAIRE INFORMATION						
Color / CRI: 5700K - 75 CRI						
Luminaire Output: 38,600 lumens						
No. of Luminaires: 96						
Total Load: 38.4 kW						
Lumen Mainte	nance					
Luminaire Type L90 hrs L80 hrs L70	ırs					
TLC-LED-400 61,000 >72,000 >72,0	000					
Reported per TM-21-11. See luminaire datasheet for details.						

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.



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LOCATION A1-A6 B1-B6 C1-C6 D1-D6 96 96 0 81 81 110 117 119 124 125 127 132 137 137 132 137 119 117 119 61 81 ₋146 175 ,170 ,159 ,156 ,156 ,156 ,159 ,163 ,172 ,172 ,163 ,159 ,156 ,156 153 159 170 175 ₊151 ₊153 ₊156 155 154 161 ₊161 ₊154 **155 156 153 151** 85 133 156 159 154 149 148 155 150 151 153 153 151 750 155 148 149 154 159 156 167 165 159 151 153 156 155 154 161 161 154 155 156 153 151 159 165 167 **172** 170 159 153 156 156 159 163 172 **17**2 **16**3 **159 156 156 1**53 **1**59 **1**70 **175 1**46 110 111 111 111 121 125 127 137 137 137 131 125 127 125 124 119 117 110 111 51 64 73 79 85 89 92 95 98 102 102 102 98 95 92 89 85 79 73 64 51 /B6 SCALE IN FEET 1:30 to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN

ENGINEERED DESIGN By: C.Hoy • File #185796D1 • 11-Jan-18

Madison Coliseum - Dane County

Madison,WI

GRID SUMMARY Name: MP Area Size: 234' x 104' Spacing: 10.0' x 10.0' Height: 3.0' above grade

ILLUMINATION SUMMARY						
MAINTAINED HORIZONTAL FOOTCANDLES						
Entire Grid						
Scan Average:	125.86					
Maximum:	175					
Minimum:	42					
Avg / Min:	3.01					
Max / Min:	4.18					
UG (adjacent pts):	2.50					
CU:	0.82					
No. of Points:	248					
LUMINAIRE INFORMATION						
Color / CRI:	5700K - 75 CRI					
Luminaire Output:	38,600 lumens					
No. of Luminaires:	No. of Luminaires: 96					
Total Load:	38.4 kW					
Lumen Maintenance						
Luminaire Type	L90 hrs	L80 hrs	L70 hrs			
TLC-LED-400	61,000	>72,000	>72,000			
Reported per TM-21-11. See luminaire datasheet for details.						

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.

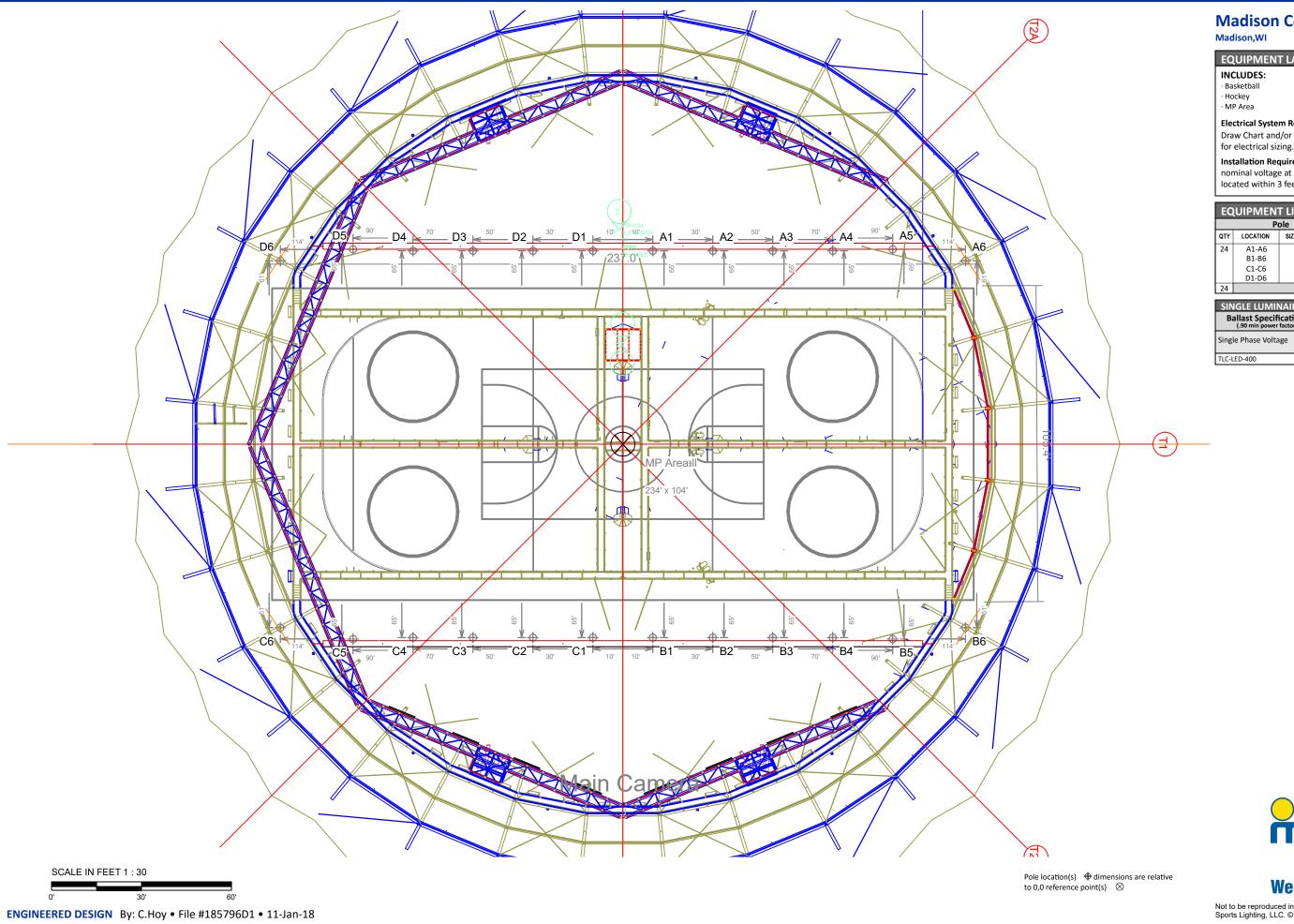
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Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY



Madison Coliseum - Dane County

Madison,WI

EQUIPMENT LAYOUT

INCLUDES:

 $\cdot \, \mathsf{Basketball}$

· MP Area

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

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
24	A1-A6		62'	62'	TLC-LED-400	4
	B1-B6					
	C1-C6					
	D1-D6					
24 TOTALS				96		

SINGLE LUMINAIRE AM Ballast Specifications (.90 min power factor)			mper		r Lum	ninaire	2
Single Phase Voltage	208	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-400	2.5	2.3	2.1	1.9	1.5	1.4	1.1



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