

ADDENDUM NO. 6

November 14, 2022

**LIBERTY ELEMENTARY SCHOOL RENOVATIONS
Chesterton, IN 46304**

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated October 17, 2022 by Gibraltar Design. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Page ADD 6-1 and attached Addendum No. 6 from Gibraltar Design dated November 14, 2022 and consisting of 3 pages and 3 Drawings.

ADDENDUM SIX

Addendum Three (AD.06) to the drawings and specifications prepared by Gibraltar Design for **Liberty Elementary School Renovations** for Duneland School Corporation, Chesterton, Indiana.

All Contractors bidding on this project shall read all of the items covered below and shall comply with all of the requirements as set forth, including any necessary refinements or additions generated by this Addendum and required by the intent of the original contract documents. All Contractors shall acknowledge on their bid form that they have received this Addendum, Addendum One and Addendum Two, and include the appropriate content of same within their bid proposal.

SPECIFICATIONS

1. Specification Section 23 62 13 Air Cooled Liquid Chiller

A. Add paragraph 2.04 to read as follows:

"REFRIGERANT MONITORING SYSTEM:

- A. Refrigerant Detection and Evacuation Control system: Provide breathing apparatus and refrigerant leak monitoring system in accordance with BSR/ASHRAE 15-2016 "Safety Standard For Mechanical Refrigeration Systems." Monitoring system shall be MSA Chillgard 5000 or approved equivalent. The system includes a remote control panel and a minimum of four (4) sampling points and shall meet the following criteria:
1. Monitor shall be compound specific with a measurement and display range 0-1000 ppm.
 2. The monitor must be calibrated for the specified refrigerant used in the chiller.
 3. The display accuracy shall be +/- 1 ppm.
 4. Three (3) factory-set alarm levels shall be provided, each with a front panel light and a latching binary contact closure for the control of remote devices.
 5. An analog output corresponding to the unit display is required for connection to the FMS.
 6. Ambient temperature operating range shall be 40 to 105 degrees F.
 7. Monitor system shall include:
 - a. Horn and strobe
 - b. Manual pull station"

2. Specification Section 23 09 23 Temperature Controls

- A. Remove paragraph 4.04 and sub paragraphs in their entirety
- B. Remove paragraph 4.14 and sub paragraphs in their entirety
- C. Remove "Return Fan" and "Return Fan VFD's" from AHU point list.
- D. Add paragraph 4.05.B.4.b.1).b) to read as follow: Minimum outside air reset control is to be provided to change the minimum outside air quantity between the minimum and maximum CFM values scheduled on the contract documents based on carbon dioxide



Pages 1 through 3, inclusive; and Three (3) Full-Size Drawings, constitutes the total makeup of **Addendum Six**.

**GIBRALTAR**

DESIGN

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MECHANICAL EQUIPMENT SCHEDULE																																																											
TAG	MANUFACTURER	MODEL NUMBER	DESCRIPTION <div>AD-1</div>	FAN MOTOR DATA								DX COOLING EQUIP./COIL DATA									GAS FIRED HEATING DATA							CHILLED WATER COOLING EQUIP./COIL DATA										HOT WATER HEATING EQUIPMENT DATA						ELECTRICAL DATA								UNITS CONTROLLED BY	EQUIP WEIGHT	REMARKS <div>AD-1</div>					
				CM	HIGH	LOW	TSP	EFP	BHP	HP	RPM	MBH	SFC	EDB	EUB	LDB	LUB	CAT	STAGES	(IN)	(OUT)	EAT	LAT	STAGES	MBH	SFC	GPM	EDB	EUB	LDB	LUB	EUT	LUT	MAX WPD	CAT	MBH (OUT)	GPM	EAT	LAT	EUT	LUT	MAX WPD	HP	MCA	FLA	Amps	VOLTS	PHASE	HZ	MC	EC								
C-1	TRANE	ACS-21B	ROOF MOUNTED AIR COOLED CHILLER WITH REMOTE INTERIOR BUNDLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23TB	-	464	-	-	-	-	54	44	20	95	-	292	25.2	52.8	93.6	180	160	15	-	438	-	-	600	480	3	60	X	-	EX R16	1050	NOTE 1.						
AH-3	TRANE	CSAA 012	INTERIOR AIR HANDLING UNIT - CHILLED WATER COOLING / HOT WATER HEATING	5100	1365	510	-	1.6	6.4	7.5	2290	-	-	-	-	-	-	-	-	-	-	25I	160	50	78.4	612	53.0	52.1	44	54	15	-	252	25.2	52.8	93.6	180	160	15	-	14	-	-	20	480	3	60	X	-	EX R16	3050	NOTE 2.							
RT-1	TRANE	YZC-04	ROOF MOUNTED GAS FIRED / DX COOLING ROOFTOP UNIT-VAV	1500	315	-	-	15	0.9	1	1173	44.3	37.9	79.5	6.42	56.1	54.1	95	MOD	120	96	51.4	III	MOD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	15	480	3	60	X	-	EX R16	1015	NOTE 3.								
AC-1-CU-	TRANE	TKA024/TFY024	WALL MTD AC UNIT / ROOF MOUNTED CONDENSING UNIT	715	-	-	-	-	-	-	24	-	-	-	-	-	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	-	26	208	1	60	-	X	WALL MTD TSTAT	55/15	NOTE 4.										
GEF-1	TWIN CITY	DRCD-05BE	ROOF MOUNTED GENERAL EXHAUST FAN- CONSTANT EXH REF EXH SYSTEM (BOILER ROOM A-128)	810	-	-	0.3	-	-	-	1/2	141	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	120	1	60	-	X	CONTINUOUS	125	NOTE 5.											
GEF-2	TWIN CITY	DRCD-110BE	ROOF MOUNTED GENERAL EXHAUST FAN - REFRIGERANT EXH SYSTEM (BOILER ROOM A-128)	1395	-	-	0.3	-	-	-	1	813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	120	1	60	-	X	REF CONT'L PANEL	175	NOTE 5.											
TEF-1	TWIN CITY	VC - 009	ROOF MOUNTED TOILET EXHAUST FAN <div>AD-1</div>	200	-	-	0.5	-	-	-	1/6	1391	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/6	-	-	-	120	1	60	-	X	EX R16	100	NOTE 5.											
CH-1	VULCAN	RW 06	SEMI-RECESSED HOT WATER CABINET HEATER	630	-	-	-	-	-	-	1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	120	1	60	-	X	INTEGRAL TSTAT	151	NOTE 6.									
CH-2	VULCAN	RC 08	CEILING MOUNTED HOT WATER CABINET HEATER	860	-	-	-	-	-	-	1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	120	1	60	-	X	WALL MTD TSTAT	185	NOTE 1.									
CJ-2	MITSUBISHI	NTHMFB30	ROOF MOUNTED CONDENSING UNIT <div>AD-2</div>	-	-	-	-	-	-	-	-	-	-	-	-	-	28.4	-	-	-	-	-	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	-	-	40	208	1	60	X	-	VRF CONTROLLER	-	NOTE 8.								

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EM-L													
TOTAL KW: 9.2		ENCLOSURE:				PHASE: 3Ø		VOLTAGE: 277 / 480					
MOUNTING: BUBBING:						FAULT CURRENT RATING: 22 AIC		MCB		100			
FEEDER: 4 # 4 1/2" GRD. - 1/2"		LOCATION:											
		C/B				LOAD				C/B			
LOAD DESCRIPTION	TRIP	POLE	A*	B*	C*	CCT. NO.	A*	B*	C*	TRIP	POLE	LOAD DESCRIPTION	
EM LIGHTING	20	1	1000			1	2	50				EXIT SIGNS	
EM LIGHTING	20	1	1000			3	4		50			EXIT SIGNS	
EM LIGHTING	20	1		1000		5	6			50		EXIT SIGNS	
EM LIGHTING	20	1	1000			7	8					EXIT SIGNS	
EM LIGHTING	20	1		1000		9	10				- 1	SPACE	
EM LIGHTING	20	1			1000	11	12				- 1	SPACE	
EM LIGHTING	20	1	1000			13	14				- 1	SPACE	
EM LIGHTING	20	1		1000		15	16				- 1	SPACE	
EM LIGHTING	20	1			1000	17	18				- 1	SPACE	
SPACE	-	1				19	20				- 1	SPACE	
SPACE	-	1				21	22				- 1	SPACE	
SPACE	-	1				23	24				- 1	SPACE	
SPACE	-	1				25	26				- 1	SPACE	
SPACE	-	1				27	28				- 1	SPACE	
SPACE	-	1				29	30				- 1	SPACE	
SPACE	-	1				31	32				- 1	SPACE	
SPACE	-	1				33	34				- 1	SPACE	
SPACE	-	1				35	36				- 1	SPACE	
SPACE	-	1				37	38				- 1	SPACE	
SPACE	-	1				39	40				- 1	SPACE	
SPACE	-	1				41	42				- 1	SPACE	
SPD	30												
		3		3000	3000	3000		100	50	50			
NOTE: REFER TO GENERAL NOTE "B" FOR ADDITIONAL INFORMATION													
TOTAL:												3,200	