DOCUMENT 00 90 00 ADDENDUM

ADDENDUM NO. [2] Date: March 4, 2020

RE: MINERAL POINT UNIFIED SCHOOL DISTRICT

ELEMENTARY SCHOOL 611 COTHERN ST MINERAL POINT, WI HSR PROJECT NO. 19001

FROM: HSR Associates, Inc

100 Milwaukee Street La Crosse, WI 54603 (608) 784-1830

To: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated February 2020. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [2] pages and [7] 30 x 42 drawings.

CHANGES TO SPECIFICATIONS:

- 1. Section 06 18 00 GLUED LAMINATED CONSTRUCTION
 - a. 1.05, C: Designer shall determine final member sizes. Sizes indicated on plans are nominal and not based on any selected species or industry design/size format.
 - b. 2.02, A: Change "Western Red Cedar (north)" to "Alaska Cedar for exterior locations. Douglas Fir or Southern Yellow Pine for interior locations".
- 2. Section 09 64 66 WOOD ATHLETIC FLOORING
 - a. 3.01, B: Change "1/4 inch in 10 feet" to "1/8 inch in 10 feet meeting MFMA standards."
- 3. Section 11 66 23 GYMNASIUM EQUIPMENT
 - a. Add the following:

WRESTLING MAT LIFT

Stationary Mat Lift

- 1. Hoist shall consist of structural integrity for a single mat lift.
- 2. Motor as required by manufacturer's standard model.
- 3. Housing shall enclose gear drive, motor shaft and related equipment.
- 4. Manufacturer:
 - a. Draper: Single Mat Lifter 502060.
 - b. Porter: 91107000 Ceiling Mounted Stationary Mat Mover.
- 5. Substitutions: See Section 01 60 00 Product Requirements
- 4. Section 11 66 43 INDOOR SCOREBOARDS AND TIME CLOCKS
 - a. 2.01, D: Delete paragraph 2. Provide manufacturer's standard LED digital technology.
 - b. 2.02, A: Controller's listed shall be wired/wireless. Provide required receivers and any other required accessories.
 - c. 2.02, F, 5: Control cable is for wired operation option.

5. Section 12 66 33 TELESCOPING BLEACHERS

- a. 2.04: Add railings as follows;
 - i. End of Row Guardrails: Self-storing, at both open ends of each portable section beginning at row 2.
 - ii. Top Row Rear Guardrail at Each Section: Non-removable, mounted behind rear seat with tubular supports, running full width of section. Height: 42 inches above adjacent platform or tread.
- b. 2.05: Add the following;
 - Back of Units: Full width plywood panels, finished to match platforms, up to 8 feet above floor
- c. Bleachers shall be divided into (5) sections for portability as shown on Drawings in this addendum.

6. Section 28 13 01 AIPHONE DOOR ENTRY INTERCOM SYSTEM

a. 2.1, B: Change "Sparta" to "A/E".

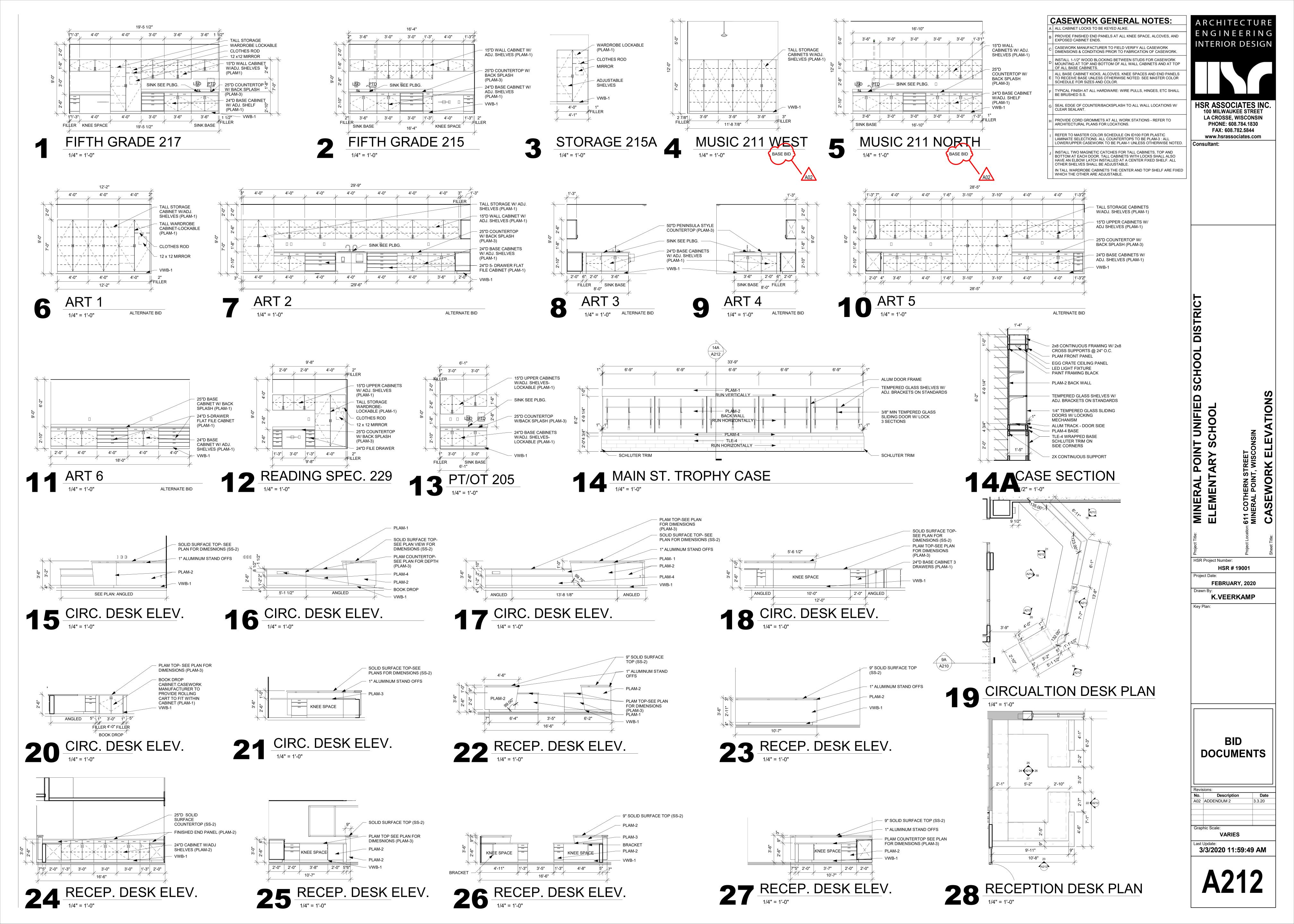
CHANGES TO DRAWINGS

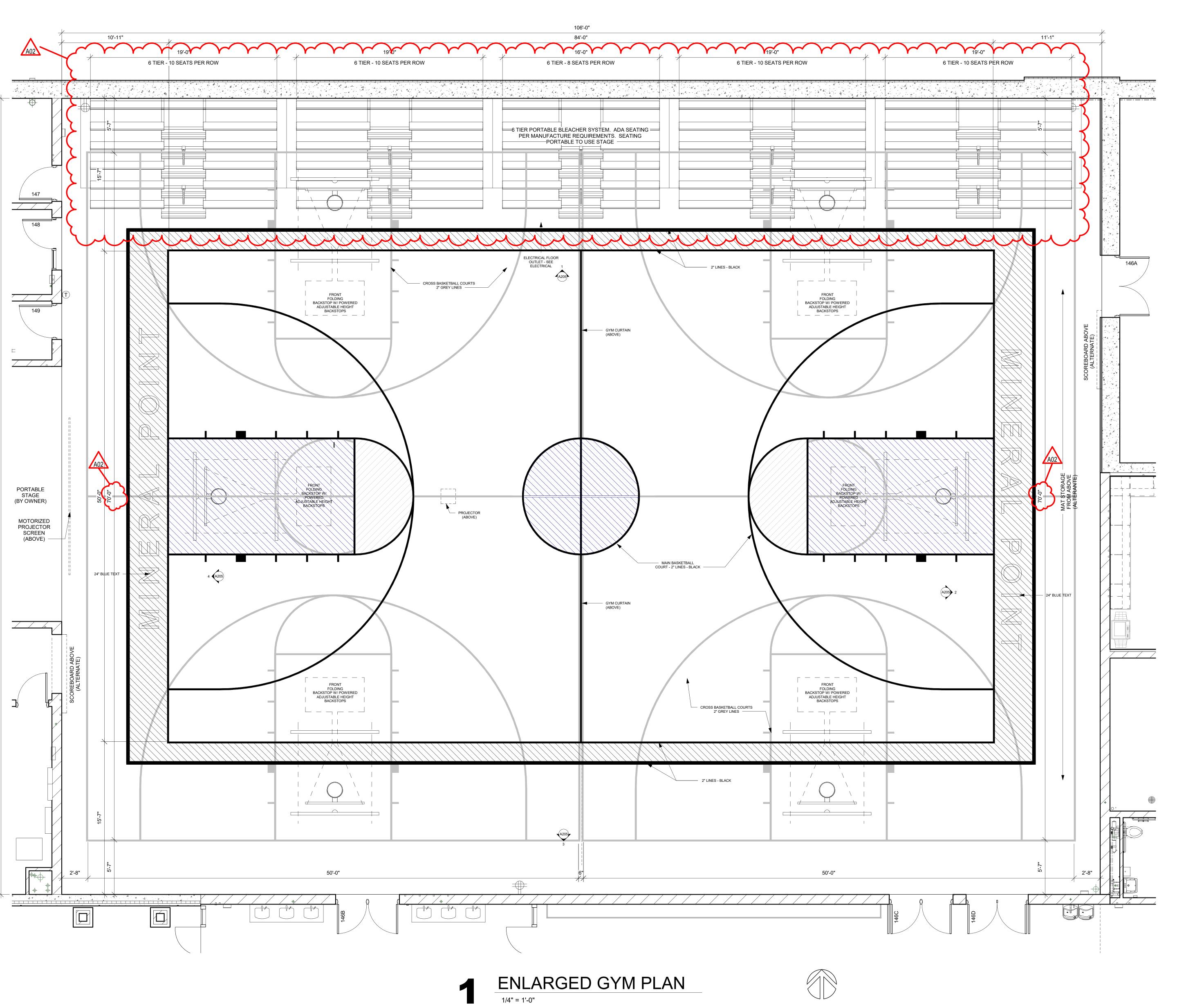
- 7. Sheet A212 CASEWORK ELEVATIONS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 8. Sheet A401 ENLARGED GYM PLANS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 9. Sheet A401 ENLARGED GYM PLANS-VOLLEYBALL COURT 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 10. Sheet S120 ROOF FRAMING PLAN 30 x 42 attached hereto
 - a. Revisions clouded on Drawing
- 11. Sheet S820 ROOF FRAMING DETAILS
 - a. Detail 14S820: Delete note referencing radius. There are no arcs on trusses.
- 12. Sheet M300 HVAC SECTIONS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 13. Sheet M600 HVAC SCHEDULES 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 14. Sheet M601 HVAC SCHEDULES 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.

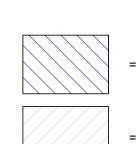
PRIOR APPROVALS

- 1. Section 08 63 00 UNIT SKYLIGHTS
 - a. Imperial Glass Structures Custom Skylights and Enclosures
- 2. Section 09 72 00 WALL COVERINGS
 - a. Write Walls: Tackable Wall Covering.

END OF DOCUMENT 00 90 00







= BLUE STAINED HARDWOOD GYMNASIUM FLOORING

= GREY STAINED HARDWOOD GYMNASIUM FLOORING

PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com Consultant:

ARCHITECTURE

ENGINEERING

INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

HSR Project Number: HSR # 19001 FEBRUARY, 2020

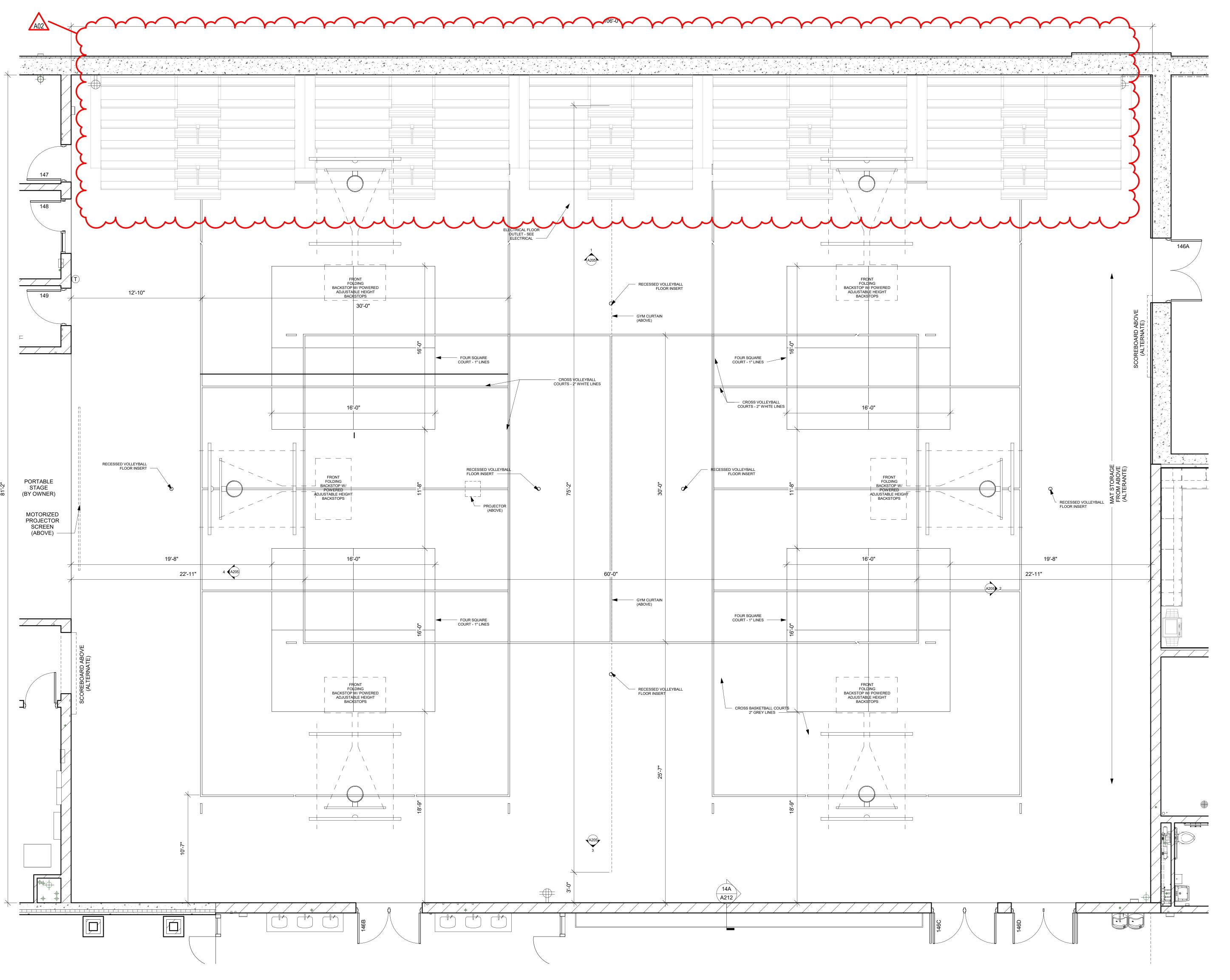
Key Plan:

BID **DOCUMENTS**

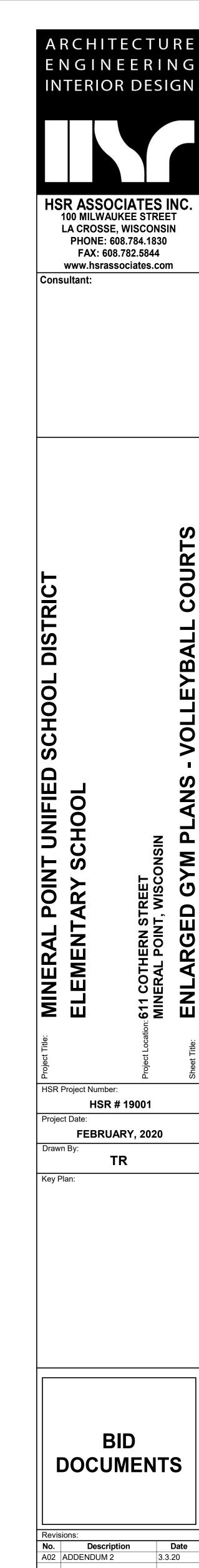
No. Description
A02 ADDENDUM 2

Graphic Scale: **VARIES**

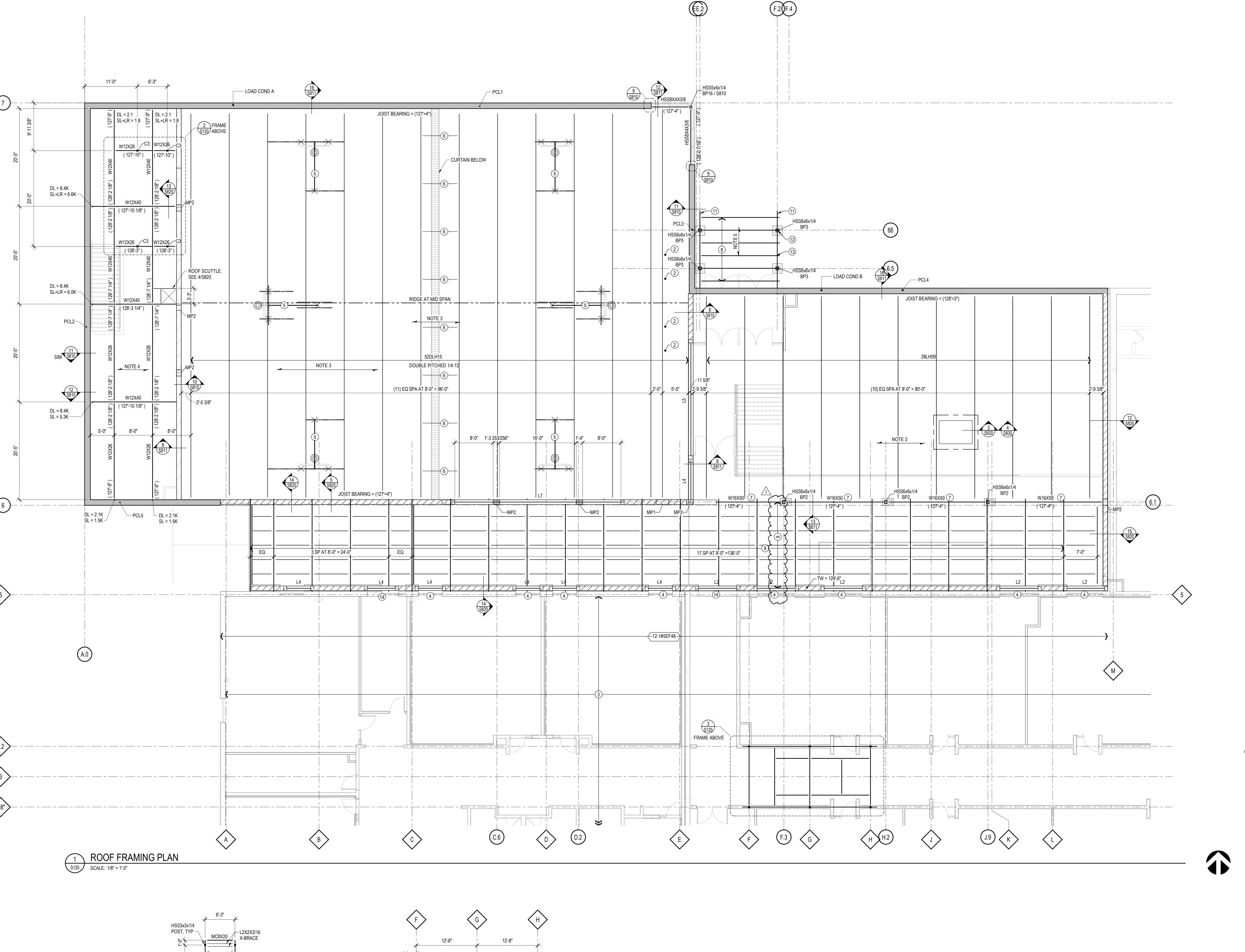
Last Update: 3/3/2020 11:59:51 AM

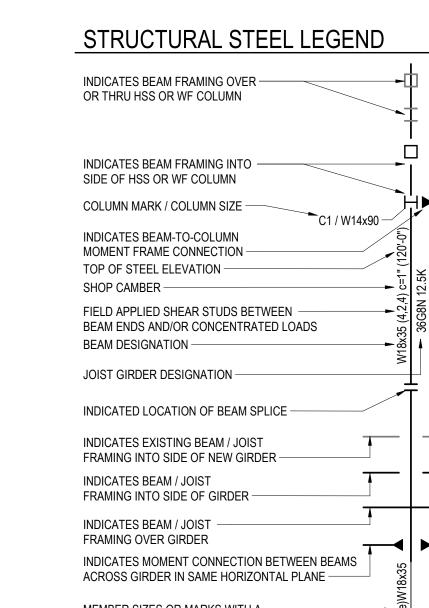


ENLARGED GYM PLANS - VOLLEYBALL COURTS



Last Update: 3/3/2020 11:59:53 AM





ROOF FRAMING PLAN NOTES

- 1. TOP OF BASE STEEL (JOIST BEARING) ELEVATION = AS NOTED ROOF DECKING SHALL BE 1 1/2" x 20GA WIDE RIB PRIME PAINTED METAL ROOF DECK FASTENED TO SUPPORTING STRUCTURE USING 36/4 PATTERN OF ANY OF THE ATTACHMENT METHODS SHOWN IN DETAIL 1/S820 WITH #10 TEK SIDELAP FASTENERS AT 18" OC
- ROOF DECKING SHALL BE 3" x 20GA ACOUSTIC METAL ROOF DECK FASTENED TO SUPPORTING STRUCTURE USING 36/4 PATTERN OF ANY OF THE ATTACHMENT METHODS SHOWN IN DETAIL 1/S820 WITH #10 TEK SIDELAP FASTENERS AT 18" OC
- 4. ROOF DECKING SHALL BE 3" x 20GA WIDE RIB PRIME PAINTED METAL ROOF DECK FASTENED TO SUPPORTING STRUCTURE USING 36/4 PATTERN OF ANY OF THE ATTACHMENT METHODS SHOWN IN DETAIL 1/S20 WITH #10 TEK SIDELAP FASTENERS AT 18" OC
- 5. ROOF ASSEMBLY IS 3" TG DECKING W/ 15/32" (PLYWOD OR OSB). ATTACH SHEATHING TO TG W/ 10d NAILS 6" OC AT PANEL EDGES AND 12" OC AT PANEL FIELDS. MIN DIST. FOR NAILS IS 3/8" FROM PANEL EDGE. STAGGER ROOF SHEATHING JOINTS.

ROOF FRAMING KEY NOTES

- 1) CONDENSING UNIT BASED ON YORK-140"x38", 5100#
- (2) MAT HOIST SLING SUPPORT WITH LINDAPTOR CLAMPS. ASSUME 1800# PER LOCATION AT 10' SPACING. W6x20x40'-0" SPREADER BEAM AS NEEDED.
- (3) NON-BEARING CMU WALLS REFER TO ARCH FOR LOCATIONS. REFER TO 9/S811 FOR TOP OF WALL DETAIL, MISC LINTEL SCHEDULE (S002) FOR OPENINGS
- (4) EXISTING OPENING

(5) 4" OD 11 GA TUBING PER HOOP MFR

MISCELLANEOUS STEEL ANGLES OR UNISTRUT BY HOOP INSTALLER BASED ON MFR REQUIREMENTS JOIST DESIGNER TO ACCOUNT FOR ADDITIONAL LOADS FROM BASKETBALL GOALS AS FOLLOWS:

LOADS ARE BASED ON ASSUMED GOAL WEIGHT OF 2,500 LBS IN PLAYING POSITION, INCLUDING 750 LBS ALLOWANCE FOR PLAYERS. COORDINATE EXACT LOCATIONS, WEIGHTS AND CONNECTION REQUIREMENTS WITH ARCHITECT AND GOAL SUPPLIER. PROVIDE ADDITIONAL BRIDGING AT EACH GOAL AS REQUIRED TO RESIST LATERAL HSR Project Number: LOADS IMPOSED UPON JOISTS FROM MOVING GOAL. COORDINATE LOAD

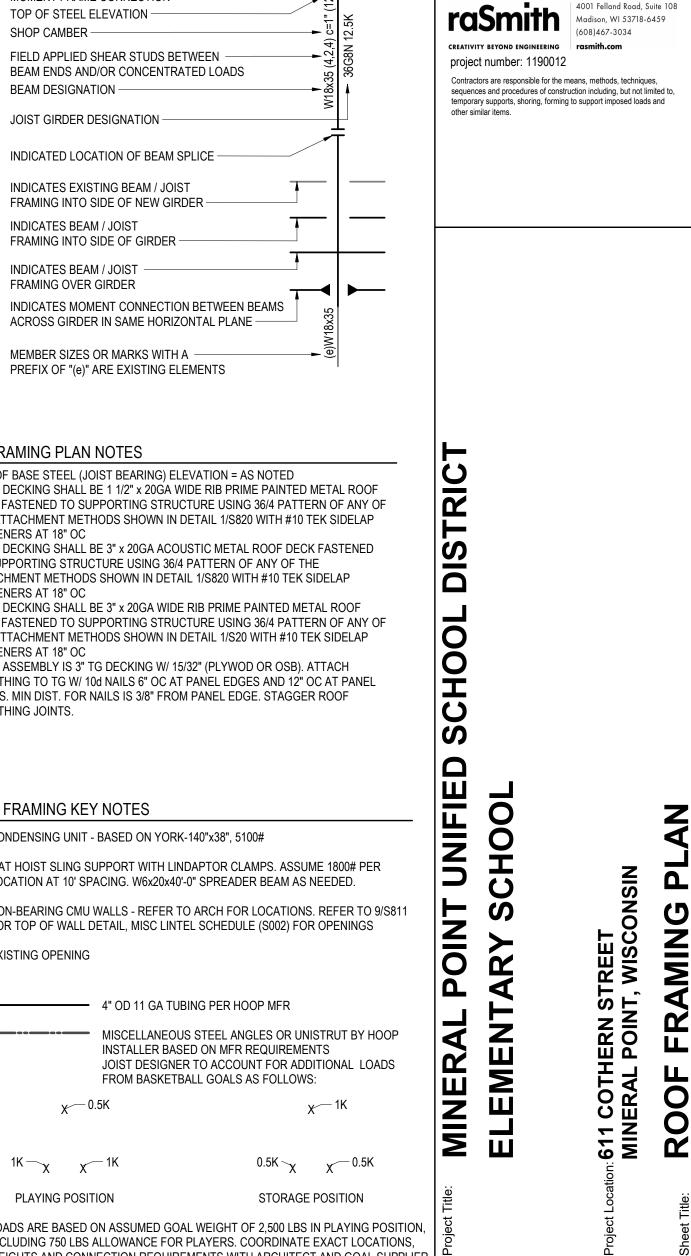
(6) "Z" BRACKET ASSEMBLIES OR OTHER ATTACHMENT DESIGNED AND PROVIDED BY MFR. LOAD TO DLH APPROXIMATELY 100 PLF - VERIFY W/ SUPPLIER

JOIST DESIGNER TO ACCOUNT FOR WEIGHT OF DIVIDER CURTAIN AND ALL REQUIRED ACCESSORIES FOR COORDINATION WITH CURTAIN SUPPLIER

(7) WITH CMU ABOVE. REFER TO DETAIL.

MAGNITUDES WITH GOAL SUPPLIER.

- (8) GLULAM TRUSS W/ 3 1/2x9 TOP CHORDS. COORDINATE SHAPE AND COLLAR TIE WITH ARCHITECT. TRUSS DESIGN BY SUPPLIER. (9) (7) 3 1/2x7 1/2" GLULAM PURLINS, TRIMMED AS DETAILS. COORDINATE WITH ARCHITECTURE. SUPPLIER SIZES MAY VARY. BEST MATCH PLAN SIZES THAT MEET LOAD REQUIREMENTS.
- (10) GLULAM TRUSS W/ 3 1/2"x9" TOP CHORDS. COORDINATE SHAPE AND COLLAR TIE W/ ARCH. TRUSS DESIGN BY SUPPLIER (11) 5 1/2"x9 1/2" GLULAM BEAM. VERIFY SHAPE AT ENDS WITH ARCH (SEE SPECS)
- (12) FASTEN GLULAM BEAM TO HSS COLUMN W/ SIMPSON CCO COLUMN CAP (PER MANUFACTURER SPECIFICATIONS) WELDED TO HSS COLUMN W/ 1/4" WELD ALL AROUND OR APPROVED EQUIVALENT.
- (13) WL REACTIONS AT TRUSS: WL = +/- 2.0K, SEE S001 AND S002 FOR ADDITIONAL
- (14) REFER TO MISC LINTEL SCHEDULE



ARCHITECTURE

INTERIOR DESIGN

HSR ASSOCIATES INC. 100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

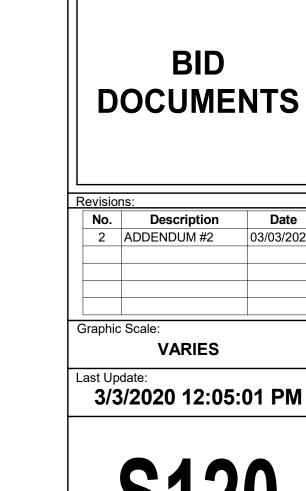
PHONE: 608.784.1830

FAX: 608.782.5844

www.hsrassociates.com

4001 Felland Road, Suite 108

Consultant:



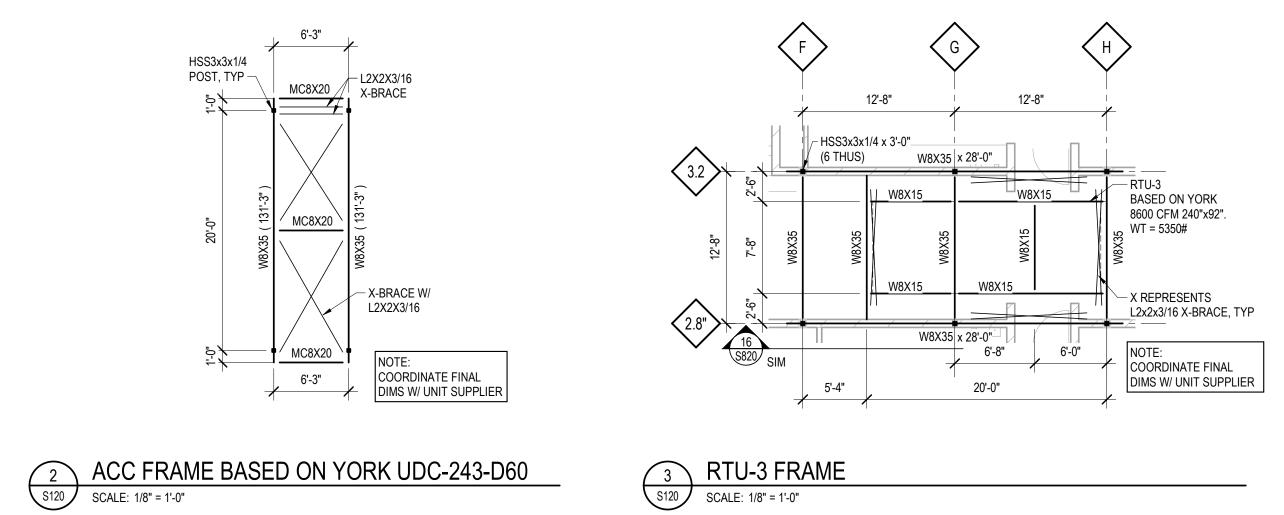
Project Date:

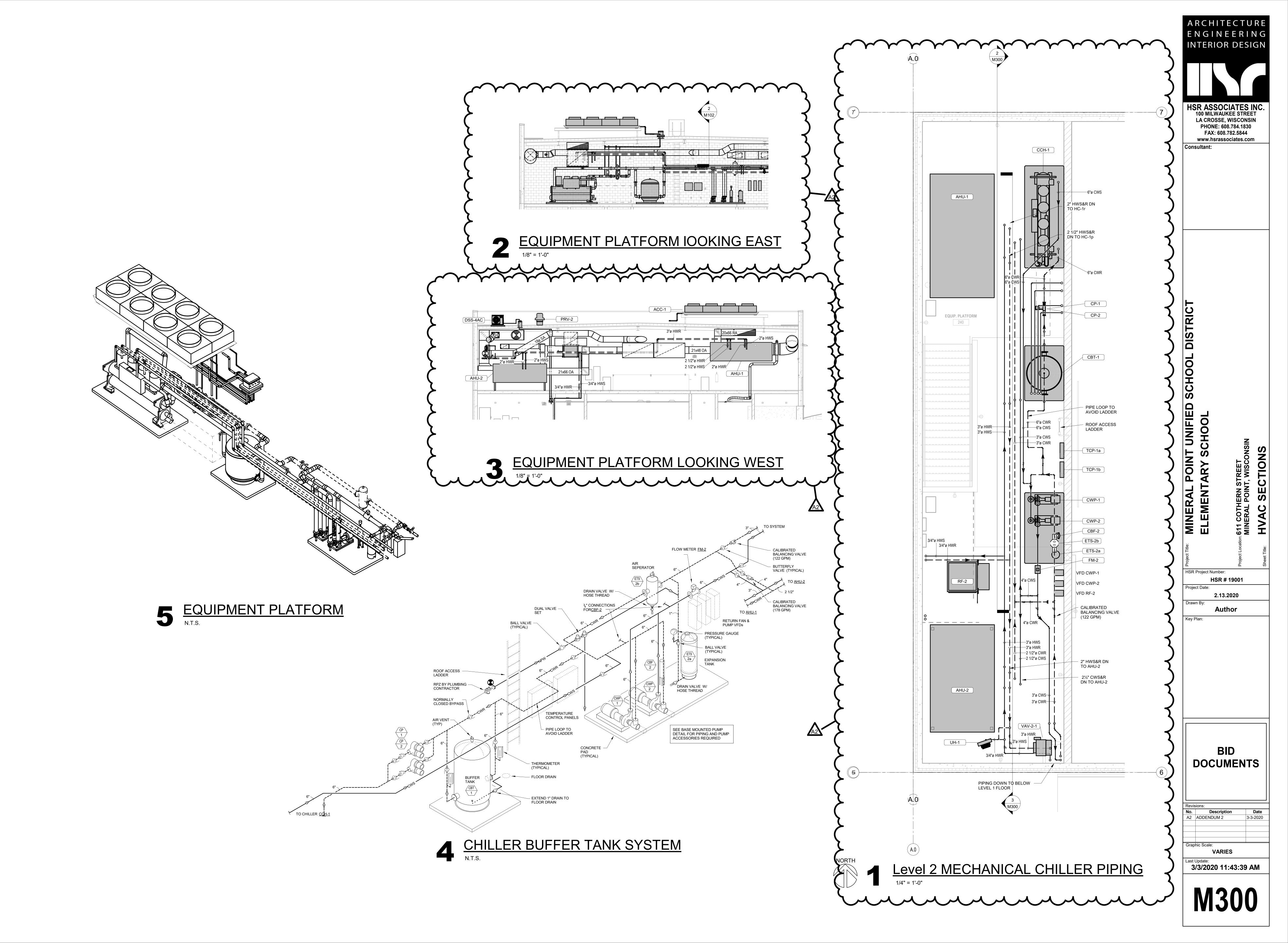
Drawn By:

2.13.2020

raSmith

KEY PLAN





	MANUFACTURER'S		THR	COAT		HOOD				VELOC	TY (FPM)	MAX		ACCESSORIES/	
MARK	MODEL NO.	SERVING	WID.	LEN.	WID.	LEN.	SF	APPL	CFM	HOOD	THROAT	P.D. "	CONSTR.	OPTIONS	REMARKS
RH-1	Fabra Hood - FGR	AHU-1	54	60	81	87	26.44	RELIEF	12,400	469	551	0.05	Aluminum	2, 3, 4	A, B
RH-2	Fabra Hood - FGR	AHU-2	48	60	73	87	24.10	RELIEF	10,800	448	540	0.05	Aluminum	2, 3, 4	A, C
RH-3	Fabra Hood - FGI	AHU-3	30	66	66	99	31.63	INTAKE	8,000	253	582	0.05	Aluminum	1, 3, 4	A, D
Based on	products by GREENHECK.					•	•	•			•				#N
See the sp	pecifications for detailed pro	oduct and install	ation requi	irements.											2/6/20 14:
ACCESSO	ORIES/OPTIONS:											REMARKS	:		
1. 12" bas	se, Bird Screen.											A. Ducted.			
2. 5" base	e, Bird Screen and 0.5" inte	rnal insulation.										B. Approxi	mately 336 lbs.		
3. 12" Ro	of Curb.											C. Approxi	mately 286 lbs.		
	zed insulated damper in thro	act										D Approvi	mately 269 lbs.		

	MANUFACTURER'S		DIMEN	SIONS IN I	NCHES	F. A.			MAX		ACCESSORIES/	
MARK	MODEL NO.	SERVING	WIDTH	HGT.	DEPTH	SQ FT	APPL.	CFM	P.D. "	CONSTR.	OPTIONS	REMARKS
IL-1	ESD-635	AHU-1	95	45	6	17.16	Intake	12,400	0.08	ALUM.	1, 3, 4, 5	A, B
IL-2	ESD-635	AHU-2	95	45	6	17.16	Intake	10,800	0.06	ALUM.	1, 3, 4, 5	A, B
	products by GREENHECK. Decifications for detailed produ	ct and installation re	quirements.									#t 1/9/20 7
	ORIES/OPTIONS:		•					REMARKS:				
	creen.							A. Color sele	ected by Ow	ner/Architect.		
 Bird So 								B. Plus 12%	additional p	ressure drop for 1	/2" birdscreen on intake louvers.	
 Bird So Flange 	Frame.											
2. Flange	Frame. el Frame.											

	MANUFACTURER	TOTA	L MBH	M	IINIMUM	%	PIPE CO	NN. SIZE	VEN	T SIZE	GAS PR	RESSURE		ACCESS./	
MARK	MODEL NO.	INPUT	OUTPUT	GPM *	RET. TEMP.	EFF	SUP.	RET.	Intake	Exhaust	Min.	Max.	TYPE	OPTIONS	REMARKS
BLR-1	KS 850	850.0	813.0	54		95	2"	2"	6"	6"	5"	13"	Stainless	1 - 9	A, B, C
BLR-2	KS 850	850.0	813.0	54		95	2"	2"	6"	6"	5"	13"	Stainless	1 - 9	A, B, C
BLR-3	KS 850	850.0	813.0	54		95	2"	2"	6"	6"	5"	13"	Stainless	1 - 9	A, B, C
See the sp	products by TRIANGLE T pecifications for detailed p DRIES/OPTIONS:		nstallation req	* at 30 de uirements.		REMA	RKS:								#N/ 2/7/20 9:5
	d Stainless Steel Fire-tube	heat excha	nger					and control	wiring shall be	e the responsib	ility of the M	echanical Co	nt'r.		
	x Stainless Steel Burner.	71.001 0710.10	90			B. 120)/1, 15 amp e	electrical pow	er required. N	Иах 7.4 FLA pu	mp connect	ion.			
5 to 1 to	urndown ratio.					C. 24.	5"W x 55"D :	x 38"H.							
3. Flow S	witch.														
4. Tempe	rature/Pressure gauge.														
5. IRI gas	train.														
6. ASME	"H" stamp.														
7. BacNet	t interface.														
Conder	nsate neutralizer kit.														

			AIR C	JUUL	בט (CN1	EK3	(23	03 1,	3)			
		SERVING	HEAT REJECT	REFRIG	MAX.	O.A.T.	NUM.	CONNE	CTIONS		ELECT		ACCESSORIES/	
MARK	MODEL No.	SYSTEM	МВН	TYPE	SDT	TEMP.	CIRC.	GAS	LIQ.	МОСР	MCA	VOLT/PH	OPTIONS	REMARKS
ACC-1	VDC-243D60	CCH-1	1823.6	R-410a		95	2	1 5/8	1 5/8	35	31	460/3	1, 2, 3	A, B, C
Based on pro	oducts by YORK.													#1
See the spec	cifications for detailed produ	uct and installation	requirements.											1/9/2020 7
ACCESSOR	IES/OPTIONS:					REMAR								
1. Provide m	nounting rails roof support.					A. 219.5"L	x 88.6"W	x 53.8"H, v	veight, 263	35 LBS.				
						B. Coil vol	ume 3.7 Cı	. Et not in	cludina lin	00				
2. Liquid line	e solenoid valves.					D. COII VOI	uille 5.7 Ct	a i t, 110t iii	cidding iii i	. .				

	MANU.	MIN.	REFRIG	NUM	NUM	MIN	FULL LOAD		EVAPO	RATOR			ELECTRIC	CAL	ACCESSORIES/	
MARK	MODEL NO.	TONS	TYPE	COMP	STEPS	STEP	EER	EWT	LWT	PD.FT.	GPM	MCA	MOCP	VOLT/PH	OPTIONS	REMARKS
CCH-1	YCRL-0156HE46	123	R-410a	6	6	20%	10.53	55	45	8.33	300	257	300	460/3	1 thru 9	A, B, C, D, E
Based on	products by YORK.															#N/
See the s	pecifications for detaile	ed product	and installati	ion requiren	nents.											1/9/2020 7:2
ACCESS	ORIES/OPTIONS:									REMARK	S:					
	ORIES/OPTIONS: oller capable of interfac	ing with Bu	ilding Autom	nation Syste	em.					REMARK A. Evapo		Sallon voli	ıme.			
1. Contro		•	ŭ	•	·m.					A. Evapo	rator 77 (ume. ch concre	te pad.		
Contro Contro	oller capable of interfac	Loss/Voltaç	ge Protection	•	m.					A. Evapo	rator 77 (ed on nor	ninal 4" in	ch concre	te pad.		
 Contro Contro Single 	oller capable of interfac ol Transformer, Phase	Loss/Voltaç	ge Protection	•	m.					A. Evapo B. Mount C. Double	rator 77 (ed on nor e discharç	ninal 4" in ge risers r	ch concretequired.	te pad. 2 circuits, total	126 LBS.	
 Contro Contro Single Two re 	oller capable of interface of Transformer, Phase Point Power and Non-	Loss/Voltaç	ge Protectior onnect.	•	m.					A. Evapo B. Mount C. Double D. Refrige	rator 77 (ed on nor e discharç erant char	ninal 4" in ge risers r ge, 63 LB	ch concre equired. S each in :	·		
 Contro Contro Single Two re 5 Year 	oller capable of interfac ol Transformer, Phase Point Power and Non- frigerant circuits	Loss/Voltaç	ge Protectior onnect.	•	em.					A. Evapo B. Mount C. Double D. Refrige E. Opera	rator 77 (ed on nor e discharç erant char ting weigh	ninal 4" in ge risers r ge, 63 LB nt, 5439 L	ch concrei equired. S each in : BS, 140.8	2 circuits, total	64.5"H.	
 Contro Contro Single Two re 5 Year 2.8" ne 	oller capable of interface of Transformer, Phase Point Power and Non- efrigerant circuits Extended Compresso	Loss/Voltaç	ge Protectior onnect.	•	m.					A. Evapo B. Mount C. Double D. Refrige E. Opera	rator 77 (ed on nor e discharç erant char ting weigh	ninal 4" in ge risers r ge, 63 LB nt, 5439 L	ch concrei equired. S each in : BS, 140.8	2 circuits, total "L x 38.0"W x	64.5"H.	

		PACKA	GED	GAS	S/EI	LEC	TRIC	RO	OFT	OP I	JNIT	(23	74 1	3)		
	MANUFACTURER'S	SERVING/		FAN			OLING M			ATING M		CFM		ECT.	ACCESSORIES/	REMARKS
MARK	MODEL NO.	LOCATION	CFM	E.S.P.	HP	M.A.T.	SENS	TOTAL	M.A.T.	IN	OUT	O.A.	MCA	VOLT/PH	OPTIONS	/ACCESS
RTU-1	J07ZTN12G4B5GCD2A1	Office	2,500	1.25	3	79/66	62.6	86.3	51	120	96	600	24.8	460/3	1,2,3,7	
RTU-2	(not used)															
RTU-3	JV30S3CG4L1CFS12E1	Core Classrooms	8,600	1.5	10	79/66	204.3	318.6	40	533	426	2,400	76.0	460/3	4,6,8	Addendum
 Ultra Alumi Baran Four Powe Modu Single 	ORIES/OPTIONS: High Efficiency, three Stage Cocinized steel, two stage gas heat. netric relief with hoods. Stage cooling. IT Exhaust Kit with Barametric relilating control gas heat. We wall unit cabinet, with foil faced le wall insulated cabinet.	ief and exhaust hoods.					R-410A r Dry bulb Unit mou Hinged A BACnet (Supply ai 14" Roof	N FEATU efrigerant. low leak E nted disco access Par Communic ir smoke di Curb for R en VAV sup	Meets IEC conomizer nnect, sing els & 2" M ations inter etector. Un	with Ecolule point page 18 poi	nomizer Fa power conn ers	ault Detect nection. Co	ion & Diag	nostics.	ered Separately.	
							RTU-1 - RTU-2 (I	ed in accor 13.1 EER/ not used)	20.5 IEER	, 1478 Lb	s, 89"L x 5	59"W at cu			mps, 85 dB(A). amps, 89 dB(A).	

	MANUFACTURER'S			тот.			CONTROL/	F	AN	EL	ECT.	ACCESSORIES/	
MARK	MODEL NO.	SERVING	CFM	S.P.	TYPE	SONES	INTERLOCK	RPM	DRIVE	WATTS	VOLT/PH	OPTIONS	REMARKS
CE-1	CSP-B110	New Moms 127	95	0.38	Cabinet	1.5	RTU-3	931	Direct	84	115/1	1,2,3,5,6,7	Α
CE-2	SP-A200	Toilet 140	95	0.38	Ceiling	2	AHU-2	722	Direct	24	115/1	1,2,3,4,5,6,8	
CE-3	CSP-B200	Toilet 105A	150	0.38	Cabinet	1.3	RTU-1	929	Direct	106	115/1	1,2,3,5,6,7	В
CE-4	SP-A200	Toilet 111A	95	0.50	Ceiling	3	RTU-1	806	Direct	33	115/1	1,2,3,4,5,6,8	
CE-5	CSP-A390	Staff Work 111	200	0.50	Cabinet	2	RTU-1	1015	Direct	48	115/1	1,2,3,4,5,6,8	С
CE-6	CSP-B200	LMC Work 144	150	0.50	Cabinet	1.5	AHU-2	950	Direct	112	115/1	1,2,3,5,6,8	D
	products by GREENHECk		requireme	nts.			REMARKS:						#I 1/9/20 7
ACCESSO	ORIES/OPTIONS:		·				A. Located above Sec	ond Grade 1	28 ceiling, v	vith wall disc	harge.		
I. Integra	l Plug-In Disconnect & Bad	ckdraft Damper.					B. Located above Toile	et 105A ceili	ng, with wal	discharge.			
2. Rubbei	Isolators.						C. Located above Hall	way 112 ceil	ling, with roo	of discharge.			
3. Galvan	ized Steel Housing.						D. Located above LMC	Work 144	ceiling, with	roof dischar	ge.		
4. Housin	g Lined with 1/2" Acoustic	al Insulation.											
5. AMCA	Certified Sound and Air Pe	erformance, UL Listed	l.										
S. Speed	Controller.												
7. Wall Ca	ар.												

MARK	MANUFACTURER'S		•	SERVING	MOUNT	AREA		FAN		DUCT		ELECT.		ACCESSORIES/	REMARKS
DF-	MODEL NO.	CEILING	ZONE	ROOM	HEIGHT	SQ FT	CFM	dBA	DRIVE	SIZE	WATTS	AMPS	VOLT/PH	OPTIONS	
1	H25 EC HI EFF				25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230/1		
2	H25 EC HI EFF				25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230/1		
3	H25 EC HI EFF	Open	1	Gymnasium 146	25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230/1	1, 2, 3, 6	A, C, E
4	H25 EC HI EFF				25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230/1		
5	H25 EC HI EFF				25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230/1		
6	H25 EC HI EFF				25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230/1		
7	H25 EC HI EFF	Open		Entry 136	30	561	655	51.8	EC Direct	n/a	57	0.50	208-230/1	1, 2, 3, 6	A, C, F
8	H25 EC HI EFF	Open	2	Mainstreet 139	30	655	655	51.8	EC Direct	n/a	57	0.50	208-230/1	1, 2, 3, 6	A, C, F
9	H25 EC HI EFF				30	655	655	51.8	EC Direct	n/a	57	0.50	208-230/1		
10	IC30 Silent AC	Suspended	3	LMC 142	~ 22	1,273	530	-	Direct	8" dia.	100	1.00	115/1	1, 3, 4, 5, 7	B, C, D, F
11	IC30 Silent AC	Cloud			~ 22	1,273	530		Direct	8" dia.	100	1.00	115/1		
Based on p	products by ZOO FANS.				•	•									#
See the sp	ecifications for detailed prod	duct requirements	3.												1/9/20
ACCESSO	RIES/OPTIONS:							REMARKS):						
1. Suspen	sion cable(s), stabilization o	able and attachm	ent hardware	-				A. Size, 20	lbs, 18" dia. X	21" long.					
2. Intake a	and exhaust safety grilles.							B. Leave r	eturn duct opei	n above clou	ıd ceiling.				
3. 24V pov	wer hard wired from transfor	mer to controller.						C. (1) Wall	Mount Control	, (2) Sensor	(In Truss & 1	12" AFF), C	Controller In Sec	cured	
4. 8" Jet B	sall supply diffuser and supp	ort bracket.						Space,	in single gang	box.					
5. Insulate	ed flex duct with Flex-90 elbo	ows.						D. Auto trai	nsformer for sil	ent operatio	n.				
3. AVS-EC	C Controller.							E. Controlle	er located in Gy	m Office					
7 AVETE	Power Pack and controller.							Combinella	er located in LM	10 M/I- D-	111				

	MANUFACTURER'S	SERVING/	CFM	TOT.	TYPE	CONFIG.		F.	AN		E	LECT.	ACCESSORIES/	
MARK	MODEL NO.	LOCATION		S.P.			RPM	DIA.	DRIVE	dBA	H.P.	VOLT/PH	OPTIONS	REMARKS
RF-2	BSQ-300-30	AHU-2	10,800	0.5	Square		677	30.5	Belt	70	3	460/3	1, 2, 3, 4	A, B
Based on	products by GREENHECK.													
See the sp	pecifications for detailed prod	uct and installation	requirements	i.		REMARKS:								1/9/20
ACCESSO	ORIES/OPTIONS:					A. 46"x 46" x 38	3"L , Aproxi	mately 558	Blbs.					
1. Discon	nect switch.					B. Interlock with	n AHU-2. 42	2"x 42" duc	t connection	ıs.				
2. Hangin	ng spring isolators.					C.								
3. Inlet ar	nd outlet guards.													

	MANUFACTURER'S	SERVING/	CFM	TOT.		OPENING		FAI	١		E	LECT.	ACCESSORIES/	
MARK	MODEL NO.	LOCATION		S.P.	TYPE	SIZE	RPM	DIA.	DRIVE	dBA	H.P.	VOLT/PH	OPTIONS	REMARKS
PRV-1	G-095-VG	Tlt 137 & 138	600	0.5	Cent. Roof	12.5" Sq.	Variable	10.88"	Direct	57	1/6	115/1	1,2,3,4	А
PRV-2	G-133-VG	Eqiup. Plat. 219	2,000	0.375	Cent. Roof	14.5" Sq.	Variable	13.13"	Direct	67	1/2	115/1	1,2,3,4	В
PRV-3	G-070-VG	Jan 220	200	0.375	Cent. Roof	10.5" Sq.	Variable	8.13"	Direct	59	1/15	115/1	1,2,3,4	С
PRV-4	CUE-099-VG	Dishwasher	600	0.375	Cent. Upblast	14.5" Sq.	Variable	11.19"	Direct	52	1/4	115/1	1,2,3,5	D, E
PRV-5	G-090-VG	Equipment 113A	600	0.625	Cent. Roof	12.5" Sq.	Variable	10.88"	Direct	56	1/10	115/1	1,2,3,4	F
PRV-6	CUE-099-VG	General Kitchen	600	0.375	Cent. Upblast	14.5" Sq.	Variable	11.19"	Direct	52	1/4	115/1	1,2,3,5	D
PRV-7	G-070-VG	Jan 206 & Tlt 203	200	0.375	Cent. Roof	10.5" Sq.	Variable	8.13"	Direct	59	1/15	115/1	1,2,3,4	G
	products by GREENHECK pecifications for detailed pr		equirement	s.		REMARKS:								#I 1/9/20 7
ACCESSO	ORIES/OPTIONS:		•			A. Fan speed 1	541 RPM, Ir	nterlock w	ith AHU-1.	Aproxin	nately 49	lbs.		
1. 16" flat	roof curb.					B. Fan speed 1	546 RPM, Ir	nterlock w	ith reverse	acting t	hermost	at. Approximat	ely 69 lbs.	
2. Discon	nect switch.					C. Fan speed 1	585 RPM, Ir	nterlock w	ith RTU-3.	Aproxin	nately 39	lbs.		
3. Vari-Gr	een speed control for bala	ncing.				D. Fan speed 1	180 RPM, Ir	nterlock w	ith wall sw	itch. Ap	proximat	tely 68 lbs.		
4. Gravity	backdraft damper.					E. Dishwasher	loading end	= 200 CF	M, unloadi	ing end	= 400 CF	M.		
5. Alumin	um motorized backdraft da	mper.				F. Fan speed 1	663 RPM, re	everse act	ing thermo	ostat. Ap	roximate	ely 47 lbs.		
						G. Fan speed 1	LEGE DOM I	. 4	:45 DTU 0	A	4 - 1 00	.		

MARK	AREA	PLAN	DUCT		т.	ERMINAL U	INIT			C	NI DATA	(based o	on PLAN CF	:M\		DII	PING	ZONE	ACCESS./
VAV-	SERVED	CFM	RUNOUT	INLET	INLET		G CFM *	MAX.	MBH			% PG / W		E.A.T.	L.A.T.	RUNOUT	CONTROL	LOSS	REMARKS
VAV-	OLIVED	(a)	SIZE	SIZE	SP(c)	MAX	MIN	PD" **	(b)	ROWS	GPM	PD'	E.W.T.	L.7.11	REQ.	SIZE	VALVE	MBH	TEMPARIO
1-1	Office 102	110	6	4	0.25	110	45		2.7	1 kW	115/1	n/a	n/a	65	88	n/a	n/a	2.45	A, D
1-2	Principal 103	360	8	6	0.25	360	145		6.6	2 kW	208/1	n/a	n/a	65	82	n/a	n/a	6.73	A, D, E
1-3	Office 101 & Wait.	450	10	7	0.25	450	180		7.1	2.5 kW	208/1	n/a	n/a	65	80	n/a	n/a	6.07	A, D
1-4	Nurse 105	515	10	7	0.25	515	205		9.7	3 kW	208/1	n/a	n/a	65	82	n/a	n/a	9.57	A, D, E
1-5	Hallway	100	6	4	0.25	100	40		1.5	0.5 kW	115/1	n/a	n/a	65	79	n/a	n/a	0.00	A, D
1-6	Entry 100	500	10	7	0.25	500	200		3.1	1 kW	115/1	n/a	n/a	65	71	n/a	n/a	9.20	A, D, E
1-7	Conf 108	230	8	5	0.25	230	90		5.5	2 kW	208/1	n/a	n/a	65	87	n/a	n/a	5.01	A, D
1-8	109 &110	175	8	5	0.25	175	70		3.1	1 kW	115/1	n/a	n/a	65	81	n/a	n/a	0.00	A, D
1-9	Staff Work 111	200	8	5	0.25	200	80		3.1	1 kW	115/1	n/a	n/a	65	79	n/a	n/a	1.60	A, D
2-1	Mainstreet	3600	20	16	1.42	3600	1440	1.17	100.1	3	8	1.71	140	60	86	1"	2-Way	58.04	В
2-2	LMC Work Rm 144	145	6	5	0.27	145	60	0.02	3.9	1	1	0.48	140	60	85	1/2"	3-Way	2.29	B
2-3	LMC 141 & 142	1500	14	14	0.7	1500	600	0.45	66.7	4	6	2.06	140	60	101	1"	2-Way	51.48	B
2-4	Maker Space 142A	1700	14	14	0.85	1700	680	0.6	66.8	4	6	2.06	140	60	96	1"	2-Way	48.39	В
2-5	LMC Collab.	370	8	6	0.49	370	150	0.24	9.6	2	1	0.12	140	60	84	1/2"	2-Way	5.53	В
2-6	Corr 201 & 202	3600	20	16	1.42	3600	1440	1.17	106.4	3	10	2.35	140	60	87	1"	3-Way	69.92	В
3-1	First Grade 130	500	7	7	0.36	500	200	0.11	8.3	1	1	0.64	140	60	75	1/2"	2-Way	0.00	С
3-2	First Grade 131	500	7	7	0.36	500	200	0.11	8.3	1	1	0.64	140	60	75	1/2"	2-Way	0.00	С
3-3	Kindergarten 132	540	7	7	0.38	540	215	0.13	8.6	1	1	0.64	140	60	75	1/2"	2-Way	0.00	С
3-4	Link 133 & Hall	600	7	7	0.4	600	240	0.15	8.9	1	1	0.64	140	60	74	1/2"	2-Way	0.00	С
3-5	Kindergarten 134	540	7	7	0.38	540	215	0.13	8.6	1	1	0.64	140	60	75	1/2"	2-Way	0.00	С
3-6	Reading Spec 229	330	9	5	0.33	330	130	0.08	5.5	1	1	0.48	140	60	75	1/2"	2-Way	1.76	С
3-7	Third Grade 230	620	12	7	0.59	620	250	0.34	15.0	2	1	0.17	140	60	82	1/2"	2-Way	6.74	С
3-8	Third Grade 231	640	12	7	0.6	640	255	0.35	15.0	2	1	0.17	140	60	82	1/2"	2-Way	7.60	С
3-9	Fourth Grade 233	680	12	8	0.65	680	270	0.4	16.5	2	3	1.4	140	60	82	1"	2-Way	8.88	С
3-10	Fourth Grade 234	680	12	8	0.65	680	270	0.4	16.8	2	3	1.4	140	60	83	1"	2-Way	9.13	С
3-11	Fifth Grade 235	680	12	8	0.65	680	270	0.4	16.6	2	3	1.4	140	60	83	1"	2-Way	8.96	С
3-12	Corr's & Link 232	900	14	9	0.75	900	360	0.5	34.0	3	5	2.19	140	60	95	1"	3-Way	23.88	С
3-13	Corr's & Link 207	920	14	9	0.77	920	370	0.52	34.0	3	5	2.19	140	60	94	1"	2-Way	23.90	С
3-14	New Mom 127&116	220	8	5	0.35	220	90	0.1	4.5	2	1	0.12	140	60	79	1/2"	2-Way	0.00	С
3-15	SPED/Sens 143	340	9	6	0.45	340	135	0.2	8.0	2	1	0.12	140	60	82	1/2"	2-Way	4.17	С
3-16	OT/PT 205	270	7	6	0.33	270	110	0.08	5.5	1	1	0.48	140	60	79	1/2"	2-Way	2.14	С
G-1	Entry 136	2000	18	16	0.84	2000	800	0.59	93.6	4	9	1.58	140	60	103	1 1/4"	2-Way	75.61	F
RT	U-1 System Totals =	2640			0.25	2640	1055		42		0	2.35							#N/
Al	HU-2 System Totals =	10915			1.42	10915	4370	1	354	1	32	MAX.		18.3	deg. Aver	. delta T.			1/9/20 7:2
R'	TU-3 System Totals =	10960			0.77	8960	3580		214.1		30	PD'		70	deg. Roo	n Temp			
	TITUS Model DESV pecifications for detailed	d product :	and installation	n regulare	nents			-	_	-					-	lan CFM = cod d discharge in	•		
	Decilications for detailed	a product a	anu mbialiali01	ıı requirett	iciiio.	REMARKS										_	cluding coll. es with water col		

(c) Minimum static pressure required at inlet to box.

C. Served by RTU-3

D. Use minimum CFM for heating on this box.

E. This zone has supplemental heat source.

3. Shaft only - with control enclosure.

4. Slip and drive connection.

				VAL	VE		FLU	ID PROPERTIE	S		ACCESSORIES/	REMARKS
MARK	DESCRIPTION	MODEL NO.	SYSTEM	MATERIAL	NOMIMAL DIAMETER	TEMPE	RATURE	MAXIMUM FLOW	GLYCOL		OPTIONS	
					DIAWILTER	MINIMUM	MAXIMUM	1200	TYPE	%		
FM-1	Electromagnetic Flow Meter	F-3200	Heating Water	STAINLESS	4"	60	180	240 GPM	PROPYLENE	30	1	A, C
FM-2	Electromagnetic Flow Meter	F-3200	Chilled Water	STAINLESS	6"	40	100	300 GPM	n/a	n/a	1	B, C

ACCESSORIES/OPTIONS:

1. Remote Mount Transmitter.

MARK	MODEL No.	GALLON	SIZE,	INCHES	INLET CO	ONNECTION	OUTLET C	ONNECTION	ACCESSORIES	REMARKS
		Сар.	WxD	HEIGHT	SIZE	HEIGHT*	SIZE	HEIGHT*		
CBT-1	CBT-300	300	54" dia.	72"	6"	17.5"	6"	17.5"	1, 2, 3, 4, 5	A, B, C, D
	ecifications for detai		d installation	requirements		* Height to cer	nter-line.			#N 1/9/2020 7:
	oroducts by WESSE ecifications for detai		d installation	ı requirements		* Height to cer	nter-line.			
See the spe	ecifications for detai	led product and	d installation	ı requirements	i.	REMARKS:				
See the spe	ecifications for detai	led product and	d installation	ı requirements		ŭ				
See the spe ACCESSO 1. Carbon	ecifications for detai	led product and	d installation	ı requirements	i.	REMARKS: A. Shipping W	eight 690 lbs.	sulation Requiren	nents.	
See the spe ACCESSO 1. Carbon 2. Top Ver	ecifications for detai RIES: Steel ASME Constr	led product and	d installation	requirements		REMARKS: A. Shipping W B. See Specifi	eight 690 lbs.	sulation Requiren		

A. Located in Mechanical Room 124A.

B. Located on Equipment Platform 240.

C. Provided by Controls Contractor, installed by Mechanical Contractor.

MARK	MODEL No.	GALLON	PORTS	SIZE, I	NCHES	PR	RIMARY CONN	ECTION	SECO	ONDARY CON	NECTION	ACCESSORIES	REMARKS
		Сар.		WIDTH	HEIGHT	SIZE	TYPE	HEIGHT*	SIZE	TYPE	HEIGHT*		
BBT-1	HBT-120	120	4	24" dia.	60"	4"	Grooved	24"	4"	Grooved	48"	1, 2, 3	A, B, C, D
Based on p	products by WESSEI	LS						* Height to cente	r-line of top	connection.			
See the sp	ecifications for detail		d installation	n requireme	nts.			v	r-line of top	connection.			1/9/202
See the sp	ecifications for detail	led product an	d installation	n requireme	nts.			REMARKS:	·	connection.			1/9/202
See the sp ACCESSO 1. Carbon	ecifications for detail	led product an	d installation	n requireme	nts.			v	ght 264 lbs.		ements.		1/9/202
See the sp ACCESSO 1. Carbon 2. Top Ver	ecifications for detail ORIES: Steel ASME Constru	led product an	d installation	n requireme	nts.			REMARKS: A. Shipping Wei	ght 264 lbs. Itions For ins	sulation Requir			1/9/202

		APPROX. SYS. VOL.		TEM MP.	PS	IG	MAX. PI	RESS.	MIN	. VOL.		AIR/DIR	T SEPARA	TOR	PIP	PE SIZE	
		GAL.	'-		INITAL	SYS.	RELIEF	TANK	TANK	ACCEPT	SEI	BUFFEF	R TANK SC	HEDULE	то	GLYCOL	
MARK	SYSTEM		MIN.	MAX.	TANK	FILL	VALVE		GAL.	GAL.	SIZE	GPM	Cv		TANK	FILL	REMARKS 1 2
ETS-1	Heating Water	1254	60	160	15.5	12	30	25.7	158	53	4"	240	210	BBT-1	1"	3/4"	1
ETS-2	Chilled Water	947	40	90	16.3	12	30	34.3	13	11	5"	300	360	CBT-1	1"	n/a	2
•	ks by WESSELS, separators by TAC					•											1/9/2020

			CIRC	GPM (@	MAX		ELEC	TRICAL	OPTIONS/	
MARK	MODEL No.	SYSTEM	FLUID	FREE FLOW	50 PSI	TEMP	TANK SIZE	WATTS	VOLT/PH	ACCESSORIES	REMARKS
GSF-1	MF300	Heating Water	30% P.G.	0.7			19 Gallon	50	115/1	1 thru 6	A, B, C, D
Based on pr	oducts by AXIOM.		•	'		<u>'</u>		•	•		#N//
See the spe	cifications for detailed pr	oduct and installation r	equirements.								1/9/2020 7:2
OPTIONS/A	CCESSORIES:					REMARKS:					
1. Pump su	ction hose with strainer.					A. High impac	t polystyrene mix	ing and stor	age tank and lid.		
2. Pressure	pump with thermal cut-c	out.				B. 3-prong pl	ug and cord.				
3. Integral p	pressure switch and chec	k valve.				C. 12" x 12" >	< 36" Н				
4. Adjustab	e pressure regulating val	ve.				D. Mounted of	on concrete pad.				
5. Pre-char	ged accumulator tank wit	h EPDM diaphragm									
	-	tch with dry contact.									

				CI	RCULAT	ING FLUII	D	MAX.		%	IMP.		N	IOTOR			
MARK	MODEL No.	SYSTEM	TYPE	FLUID	GPM	FT HD	сР	HD. **	NPSH	EFF	DIA.	ВНР	HP	RPM	VOLT/PH	ACCESS.	REMARKS
HWP-1	B&G e-1510	Heating	Base	30% PG	240	70	0.975	92.8	10.5	73.9	9.5"	5.74	7.5	1750	460/3	1, 2, 3	A, B, C
& 2	2BD	Water	Mounted	140 F												4, 5	
CWP-1	B&G e-1510	Chilled	Base	Water	300	63	1.363	78.3	8.06	76.0	9.5"	6.43	10	1750	460/3	1, 2, 3	A, B, D
& 2	2.5BB	Water	Mounted	45 F												4, 5	
BP-1	GRUNDFOS	Boiler	Inline	30% PG	54	20							440		208-230/1	1, 3	A, E
2 & 3	MAGNA3 40-120	Circ	ECM Circ	140									Watts				
CP-1	GRUNDFOS	Chiller	Inline	Water	300	15							1052		208-230/1	1, 3	A, B, E
& 2	MAGNA3 D 80-100	Circ	ECM Circ	45 F									Watts				
Based on	products by BELL & GOS	SETT and GRU	NFOS.					** Maxim	um head ir	n feet @ s	hutoff.					•	#
See the s	pecifications for detailed p	oduct and insta	llation requirem	ients.													2/7/2020 9
ACCESS	ORIES:							REMARK	(S:								
1. Differe	ntial Pressure Gauge.							A. Motor	selected a	as non-ove	erloading.						
2. Baland	ce for Variable Frequency [Orive, drive prov	ided by others.					B. Stand	by (alterna	iting) oper	ation.						
3. Provid	e non-slam check valve an	d isolation valve	es.					C. VFD	control pre	ssure, 15	ft, PLEV 7	74.3%.					
4. Ventur	i with measurement ports.							D. VFD	control pre	ssure, 15	ft, PLEV 7	76.3%.					
5 Suction	n Diffuser.							E. ECM	Motor.								

	MANUFACTURER'S			TOT.	DIA	METER	dB		F	AN		ELECT.	ı	ACCESSORIES/	
MARK	MODEL NO.	LOCATION	CFM	S.P.	HOSE	HOOD	HIGH	STYLE	RPM	DRIVE	HP	AMPS	VOLT/PH	OPTIONS	REMARKS
VAK-1	37NB Hood	Kiln 235	450	n/a	6"	37"	n/a	Hood and counter weight	n/a	n/a	n/a	n/a	n/a	1, 2, 3	A, B, C, D
Based on p	products by VENT-A-KILN														#N/ <i>P</i>
See the sp	ecifications for detailed pro	oduct and installatio	n requirem	ents.				REMARKS:							1/9/20 7:22
CCESSO	RIES/OPTIONS:							A. Secure support bar to	wall.						
. Spun al	uminum hood with counter	weight.						B. Reuse existing PRV, s	ee plans	& specification	ons.				
. Triple p	ly lamanate aluminized pol	lyester hose.						C. Overhead pulley syste	m, hood f	or kilns 29" t	o 33" inche	es in diamete	er.		
11-47.9	Swing wall braket support b	ar and pully system	ı					D. Provide iris damper in	8" dia. du	ct for balanc	ing.				



HSR ASSOCIATES INC.

100 MILWAUKEE STREET

LA CROSSE, WISCONSIN

PHONE: 608.784.1830 FAX: 608.782.5844

www.hsrassociates.com

Consultant:

OOL DISTRICT

RAL POINT UNIFIED SCH

HSR Project Number:

HSR # 19001

2.13.2020 Drawn By: SJK/MSB

SJK/MSB ey Plan:

A B

KEY PLAN

BID DOCUMENTS

Revisions:

No. Description Date

A2 ADDENDUM 2 3-3-2020

Graphic Scale:

VARIES

Last Update:

3/3/2020 11:43:39 AM

M600

		SERVING	TOTAL	O.A.T.	STEPS/	NO.	REFRIG	MIN.	SYS	TEM		EI	LECT.		ACCESSORIES/	
MARK	MODEL No.	SYSTEM	MBH*	TEMP.	SPEEDS	СОМР	TYPE	EER	SEER	IEER	KW	MCA	МОСР	VOLT/PH	OPTIONS	REMARKS
CU-3	J25YCC00AJAB4	AHU-3	269.8	95	2	2	R-410a	10.2	11.4	12.2	23.65	48.3	60	460/3	1 thru 9	A,B,C,D
Based on p	roducts by YORK.		* ARI Net Co	oling Capac	ity.											#N
See the spe	ecifications for detailed product	and installation re	quirements.													2/7/2020 7:
ACCESSO	RIES/OPTIONS:				REMARKS	i:										
1. Scroll Co	ompressor(s)				A. One ref	rigerant cir	cuit.									
2. Crankca	ase heater.				B. Unit mo	unted on e	quipment rail:	s on roof.								
3. Time de	lay timer on compressor start.				C. Weight	945 lb, 59"	L x64"W x 50	"H								
4. Low aml	beint kit to allow operation dow	n to 40 deg.			D. Route r	efrigerant o	circuit piping ι	ıp througl	n roof thre	ough RP	H-2.					
5																
6								UNIT A	COUSTIC	CS: Sou	nd Power	Levels (d	dB), Octive	Band (Hz)		
7. Separate	e insulated compressor compa	rtment.				63	125	250	500	1000	2000	4000	8000			
8 15 amn	convenience outlet, powered s	eparately				a. 93	93	96	93	90	89	84	77			

		AIR	COND.		MAX.	MAX.	EAT		LAT		MBH CA	PACITY	REI	RIGERA	NT		COIL		ACCESSORIE
MARK	COIL SIZE	UNIT	UNIT	CFM	PD "	FV	DB	WB	DB	WB	TOTAL	SENS.	TYPE	SST	SCT	TYPE	FPI	ROWS	REMARKS
DX-3	37.5"x60"	AHU-3	CU-3	8000	0.57	515	79.0	66.0	55.4	53.8	287	200	R-410a	45	115		10	5	1, A
ased on	products by YOF	RK.										•							
	products by YOF pecifications for c		luct and inst	allation req	uirements	i.				'						Enter	ing Air Te	emps.	2/7
ee the sp		detailed prod	luct and inst	allation req	uirements	i.			REMAR	RKS:							ing Air Te		2/7
ee the sp	pecifications for o	detailed prod	luct and inst	allation req	uirements	i.					217 lbs, fluid	15 lbs.					·		2/
ee the sp	pecifications for o	detailed prod	luct and inst	allation req	uirements	i.					217 lbs, fluid	15 lbs.					e based o	on .	21

	<u> </u>			NTRAL						I		0.00"			140.00	'			EL EATE:	0.41	100=00:	T
MADIZ	MODEL NO		LY FAN	ГАТ		DLING C	_	тот	CENC	EAT		G COIL *		MDII		L MBH	MIN	MCA	ELECTRI		ACCESS./	DEMARKS
MARK	MODEL NO.	CFM	ESP	EAT	GPM	WPD	R	тот	SENS	EAI	GPM	WPD	R	MBH	SUM.	WINT.	O.A.	MCA	MOCP	VOLT/PH	OPTIONS	REMARKS
CAH-1	Freshman HCW IQ	1000	0.25	79/65.8	8.0	1.5	4	32.7	24.5	50.3/37	5.0	0.51	2	34.3	9.30	21.46	250	9.55	15	208-230/3	1,2,5	A, B
CAH-2	Freshman HCW IQ	1000	0.25	79/65.8	8.0	1.5	4	32.7	24.5	50.3/37	5.0	0.85	2	49.0	9.30	21.46	250	9.55	15	208-230/3	1,2,5	A, B
CAH-3	Freshman HCW IQ	1400	0.25	78.4/65.4	9.0	2.0	5	45.0	34.1	53.4/39.4	5.0	0.85	2	59.1	10.88	25.18	300	9.55	15	208-230/3	1,2,5	A, B
CAH-4	Freshman HCW IQ	1200	0.25	79/65.8	8.0	1.7	5	41.0	30.1	50.3/37	5.0	0.85	2	54.8	10.88	25.18	300	9.55	15	208-230/3	1,2,5	A, B
CAH-5	Freshman HCW IQ	1600	0.25	78/65.1	10.0	2.4	5	48.7	37.9	55.7/41.3	6.0	0.66	2	46.0	10.88	25.18	300	14.43	20	208-230/3	1,2,5	A, C
CAH-6	Freshman HCW IQ	1400	0.25	77.9/65	8.0	1.5	4	35.8	30.5	56.5/41.9	4.0	0.38	2	38.8	9.30	21.46	250	9.55	15	208-230/3	1,2,5	A, B
CAH-7	Freshman HCW IQ	1400	0.25	78.4/65.4	9.0	2.0	5	45.0	34.1	53.4/39.4	5.0	0.85	2	59.1	10.88	25.18	300	9.55	15	208-230/3	1,2,5	A, B
CAH-8	Freshman HCW IQ	850	0.25	79.7/66.2	6.0	1.0	4	28.3	21.0	46.4/34	4.0	0.61	2	42.7	9.30	21.46	250	9.55	15	208-230/3	1,2,6	A, B
CAH-9	Freshman HCW IQ	1400	0.25	77.9/65	8.0	1.7	5	42.7	33.2	56.5/41.9	5.0	0.51	2	40.5	9.30	21.46	250	9.55	15	208-230/3	1,2,6	A, B
CAH-10	Freshman HCW IQ	1000	0.25	79/65.8	8.0	1.7	5	37.1	26.4	50.3/37	5.0	0.85	2	49.0	9.30	21.46	250	9.55	15	208-230/3	1,2,6	A, B
CAH-11	Freshman HCW IQ	1000	0.25	79/65.8	8.0	1.7	5	37.1	26.4	50.3/37	5.0	0.85	2	49.0	9.30	21.46	250	9.55	15	208-230/3	1,2,6	A, B
CAH-12	Freshman HCW IQ	1100	0.25	78.6/65.5	8.0	1.7	5	38.6	28.2	52.2/38.5	5.0	0.85	2	51.6	9.30	21.46	250	9.55	15	208-230/3	1,2,6	A, B
CAH-13	Freshman HCW IQ	1750	0.25	77.3/64.6	10.0	2.4	5	49.2	40.0	59.6/44.3	6.0	1.1	2	68.5	9.30	21.46	250	14.43	20	208-230/3	1,2,6	A, C
CAH-14	Freshman HCW IQ	1400	0.25	77.9/65	8.0	1.5	4	35.8	30.5	56.5/41.9	4.0	0.61	2	54.6	9.30	21.46	250	9.55	15	208-230/3	1,2,6	A, B
	products by CHANGEAII		nd installat	ion requireme	nts.					* Based on 1	140 deg.	EWT to h	eatin	g coil.								#N 1/9/20 7:
ACCESS	ORIES/OPTIONS:																					
0 - 1- 14 -	Common Items	111	1 -41						-	4 T D	Specifi		-1-1-	£		l l 4 !!	61	ll l - 4l-				
	onstructed from 16 gauge polyester powder paint.	e aluminize	ea steet.							 Top Duct Hot water 					cess pane	i and i'' no	n-tibrous	nusncioth	insulation.			
	und package.									3. (not used	-	uon - Pos	ы пе	al.								
	ck acoustic foam insulation	n 0.7 lhs	ner cubic t	foot						4. (not used	,											
	oly air and relief fan moto		po. 000.0							5. Top pipin	•	tions.										
	eated MERV 8 filters.									6. Bottom p	•											
Full Econo	omizer mode.									·												
Silica gell	desiccant enthalpy trans	fer wheel,	ARI Stand	lard 1060																		
Smoke De	etector.									REMARKS:												
Exterior L	ouver and Wall Sleeve.									A. Standard	color se	ected by	Arch	itect.								
Insulated	stainless steel drain pan.									B. Size B-C	abinet, 9	1"h x 39.7	75"w	x 25"d.								
Diaconno										C Sizo C C		4III 40 °	7511	05"-1								

	MANUFACTURER'S								WA	TER		E	LECT.	ACCESSORIES/	
MARK	MODEL NO.	LOCATION	TYPE	CFM	MBH	EAT	LAT	GPM	EWT	LWT	PD.FT.	HP	VOLT/PH	OPTIONS	REMARKS
UH-1	HS-136A	Mech 219	Horizontal	750	22.0	60	91.7	2	140	118		1/20	115/1	1, 2	А
UH-2	HS-118A	Sprinkler 150	Horizontal	420	8.0	60	80.6	1	140	124		16 W	115/1	1, 2	В
UH-3	HS-118A	Storage 203B	Horizontal	420	8.0	60	80.6	1	140	124		16 W	115/1	1, 2	В
Based on pro	oducts by STERLING.														#N//
See the spec	cifications for detailed product	t and installation requ	uirements.												2/6/20 14:4
ACCESSOR	IES/OPTIONS:							REMARI	KS:						
1. Individually	y adjustable horizontal louver	S.						A. 18.5"	h x 21.5"w	x 11"d, 3	1 lbs.				
2 OSHA for	n guards.							B. 16"h	x 18"w x 9	9.5"d, 24 II	bs.				

C. Size C-Cabinet, 91"h x 46.75"w x 25"d.

Disconnect Switch.

ACCESSORIES/OPTIONS:

Standard White Finish.

1/2" openings x 1" deep.

Square to round adapter.

O. Concealed plaster frame.

5. 24"x24" panel frame. 6. 1/2" blade spacing.

. 2B finish.

3. (not used)

Aluminum Finish.

			Н١	/AC \	/ARIAI	BLE FR	EQUEN	CY DI	RIVE	S (23	05 1	3)		
		MOTOR		VOLT	AGE / PH	CONTROL	ENCLOSURE		PROV	IDED		ELECTRICAL	BASIS OF	ACCESS. & OPTIONS
LOCATION	ВНР	HP	FLA	INPUT	OUTPUT	INTERFACE	TYPE	w/ EQUIP	by MC	by TCC	by EC	MARK#	DESIGN	REMARKS
Equip Platform 240	11.45	15	17.4	460/3	460/3	4-20 mA	NEMA 1	Х						1, A
Equip Platform 240	9.6	10	11.7	460/3	460/3	4-20 mA	NEMA 1	Х						1, A
Equip Platform 240	2.76	3	4.8	460/3	460/3	4-20 mA	NEMA 1		Х				ABB	1, A, C
Equip Platform 240	6.43	10		460/3	460/3	4-20 mA	NEMA 1		X				ABB	1, A, C
Equip Platform 240	6.43	10		460/3	460/3	4-20 mA	NEMA 1		Х				ABB	1, A, C
Boiler Room 124A	5.74	7.5		460/3	460/3	4-20 mA	NEMA 1		Х				ABB	1, A, C
Boiler Room 124A	5.74	7.5		460/3	460/3	4-20 mA	NEMA 1		Х				ABB	1, A, C
fications for detailed prod	uct and ins	tallation r	 equiremen	its.										#N//
ES & OPTIONS:									REMAR					1/9/20 7:2
onnect.									A. Variabl	e torque loa	d.			
ors.									B. Consta	nt torque loa	ad.			
-pass.									C. Shippe	d loose for f	ield mounti	ng.		
filter.														
	Equip Platform 240 Boiler Room 124A Boiler Room 124A	Equip Platform 240 9.6 Equip Platform 240 9.6 Equip Platform 240 2.76 Equip Platform 240 6.43 Equip Platform 240 6.43 Equip Platform 240 5.74 Boiler Room 124A 5.74 Boiler Room 124A 5.74 ifications for detailed product and insees & OPTIONS: connect. ors.	LOCATION Equip Platform 240 Equip Platform 2	MOTOR BHP HP FLA	MOTOR VOLTA	MOTOR VOLTAGE / PH	MOTOR VOLTAGE / PH CONTROL INTERFACE Equip Platform 240 11.45 15 17.4 460/3 460/3 4-20 mA Equip Platform 240 9.6 10 11.7 460/3 460/3 4-20 mA Equip Platform 240 2.76 3 4.8 460/3 460/3 4-20 mA Equip Platform 240 6.43 10 460/3 460/3 4-20 mA Equip Platform 240 6.43 10 460/3 460/3 4-20 mA Equip Platform 240 6.43 10 460/3 460/3 4-20 mA Boiler Room 124A 5.74 7.5 460/3 460/3 4-20 mA Boiler Room 124A 5.74 7.5 460/3 460/3 4-20 mA Flications for detailed product and installation requirements. ES & OPTIONS: onnect.	MOTOR WOLTAGE / PH CONTROL ENCLOSURE TYPE	LOCATION	NOTOR NOTO	NOTOR NOTO	NOTOR NOTO	LOCATION BHP HP FLA INPUT OUTPUT INTERFACE TYPE W/EQUIP by MC by TCC by EC MARK #	LOCATION

	MANUFACTURER'S	APPL'N	SIZE (W x H)	ı	MUMIXAN		TI	HROW *				ACCESSORIES/	
MARK	MODEL NO.		DUCT	FACE	CFM	PD" *	NC*	FT **	DIRECT.	TYPE	CONSTR.	DAMPER	OPTIONS	REMARKS
CD-1	SPD	Supply	6"	24x24	175	0.06	19	4	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
CD-2	SPD	Supply	8"	24x24	280	0.08	19	5	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
CD-3	SPD	Supply	10"	24x24	435	0.12	22	6	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
CD-4	SPD	Supply	12"	24x24	550	0.13	21	7	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
CD-5	SPD	Supply	14"	24x24	750	0.17	18	9	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
CD-6	SPD	Supply	6"	12x12	155	0.15	20	6	4-Way	Arch. Ceiling Diff.	Steel	No	1	А
CD-7	SPD	Supply	8"	12x12	240	0.21	22	7	4-Way	Arch. Ceiling Diff.	Steel	No	1	Α
EG-1	81	Exhaust	22x4	24x6	350	0.08	22			Eggcrate	Aluminum	No	1, 3	B, F
EG-2	730	Exhaust	16x16	18x18	640	0.05	19		45 deg. def.	3/4" Single Deflect.	Stainless	No	7	А
EG-3	81	Exhaust	6x6	8x8	100	0.05	<15			Eggcrate	Aluminum	No	1, 3	А
EG-4	81	Exhaust	10x10	12x12	360	0.05	<15			Eggcrate	Aluminum	No	1, 3	А
EG-5	81	Exhaust	22x12	24x14	960	0.05	<15			Eggcrate	Aluminum	No	1, 3	В
EG-6	81	Exhaust	8x8	10x10	260	0.07	19			Eggcrate	Aluminum	No	1, 3	А
LB-1	LBP - 25C	Supply	5x36	5x36	425	0.04	18	15	0 deg. Def.	7/16" Linear Bar	Aluminum	No	2, 9	
LS-1	TBD4-150	Supply	8"	24x4	175	0.11	21	18	2-way Horiz	2 @ 1.5" Slot Diff.	Steel	Yes	1	В
										_				
RG-1	81	Return	22x22	24x24	1200	0.02	<10			Eggcrate	Aluminum	No	1, 3, 5	В
RG-2	635	Return	48x18	50x20	1850	0.05	22		45 deg. def.	1/2" Single Deflect.	Aluminum	No	1	Α
RG-3	81	Return	22x4	24x6	350	0.08	22			Eggcrate	Aluminum	No	1, 3	B, F
RG-4	99	Return	60x48	62x50	10400	0.1	27		30 deg. def.	1/2" Single Deflect.	HD Alum	No	1	Α
RG-5	99	Return	16x16	18x18	640	0.05	15		30 deg. def.	1/2" Single Deflect.	HD Alum	No	1	A
RG-6	99	Return	84x48	86x50	8000	0.02	20		30 deg. def.	1/2" Single Deflect.	HD Alum	No	1	A
SD-1	RCDA	Supply	12"	27	470	0.05	18	6	360 deg.	Adj Round Ceil. Diff.	Steel	Yes	1	С
SD-2	RCDA	Supply	14"	32	690	0.06	22	7	360 deg.	Adj Round Ceil. Diff.	Steel	Yes	1	С
SD-3	RCDA - Vert	Supply	14"	32	690	0.07	22	8 Vert	360 deg.	Adj Round Ceil. Diff.	Steel	Yes	1	C, H
SG-1	SDG AL	Supply	32x10	33x13	1040	0.09	16	18	3/4" 45 deg.	Spiral Duct - Univ	Aluminum	Scoop	1	A
SG-2	SDGE - 18" dia duct	Supply	20x6	21x8	350	0.09	15	10	3/4" 45 deg.	Spiral Duct - Curved	Aluminum	Scoop	1	А
SG-3	620DAL	Supply	24x12	26x14	1260	0.13	26	23	45 deg. def.	3/4" Double Deflect.	Aluminum	Yes	1	А
SG-4	620DAL	Supply	36x6	38x8	940	0.13	24	20	45 deg. def.	3/4" Double Deflect.	Aluminum	Yes	1	А
SG-5	SDGE - 18" dia duct	Supply	36x6	37x8	700	0.09	19	26	3/4" 22 deg.	Spiral Duct - Curved	Aluminum	Scoop	1	А
SG-6	SDG AL	Supply	22x6	23x9	400	0.05	<15	23	3/4" 0 deg.	Spiral Duct - Univ	Aluminum	Scoop	1	Α
SG-7	SDG AL	Supply	36x8	37x11	900	0.05	15	17	3/4" 45 deg.	Spiral Duct - Univ	Aluminum	Scoop	1	Α
TG-1	81	Plen. Ret.	22x4	24x6	250	0.04	11			Eggcrate	Aluminum	No	1, 3	B, D
TG-2	81	Plen. Ret.	22x10	24x12	570	0.03	<10			Eggcrate	Aluminum	No	1, 3	B, D
TG-3	99	Transfer	16x16	18x18	640	0.05	15		30 deg. def.	1/2" Single Deflect.	HD Alum	No	1	А
TG-4	99	Transfer	16x8	18x10	200	0.02	<15		30 deg. def.	1/2" Single Deflect.	HD Alum	No	1	Α
VD-1	VPD-Varitherm	Supply	6"	24x24	180	0.2	25	4	4-Way	VAV Ceiling Diff.		VAV	1	В

A. Surface Mounted.

Ruskin Style "G".

H. Air flow adjusted down.

C. Neck connected to spiral ductwork.

F. Plenum with bellmouth takeoff, see detail.

D. Non-ducted grille located in ceiling below return air plenum, max. 400 FPM core velocity.

G. 1-1/2 hour fire damper at wall behind grille, with steel mounting frame and grille mounting angles,

E. Add a black painted vision screen panel above grille, see detail.

B. T-bar lay-in.

	MANUFACTURER'S	SERVING/		EXT	CFM		FAN			COILS		N	IOTOR	ACCESSORIES/	
MARK	MODEL NO.	LOCATION	CFM	S.P.	O.A.	RPM	TYPE	DRIVE	PRE-HEAT	COOL	HEAT	HP	VOLT/PH	OPTIONS	F
AHU-1	XTI-51x96 Solution	Gym	12,400	1.5	4250	1,873	Airfoil	Direct	HC-1p	CC-1	HC-1r	15	460/3	1 - 9	
AHU-2	XTI-51x84 Solution	LMC	10,800	2	1370	1,747	Airfoil	Direct	HC-2p	CC-2		10	460/3	1,2,5,6,7,8, 9	Т
AHU-3	XTI-48x72 Solution	Café/Multi	8,000	1.5	2100	2,214	Airfoil	Direct		DX-3	HC-3r	10	460/3	1,2,4,5,6,7,8,9	\blacksquare
	products by YORK.	product and install	ation requi	rements.	<u> </u>										
ACCESSO	DRIES/OPTIONS		·				REMARK	(S:							
1. Angled	filter/mixing with 2" pleated	MERV 8 filters.					A. Horiz	ontal Unit, T	op Front Fan dis	charge, 22.4	MCA, MOCF	9 40 A.			
2. Air Bler	nder section.						Weig	ht 4,742 lbs	, 189" L x 96" W	x 57" H. Sus _l	ended from	roof structi	ıre.		
3. Heating	coil section.						B. Horizo	ontal Unit, T	op Front Fan dis	charge, 14.6	MCA, MOCF	25 A.			
4. Access	section.						Weigh	nt 3,647 lbs,	165" L x 84" W x	к 57" Н.					
5. Heating	and Cooling coil section.						Moun	ted on stand	l above floor.						
6. Plenum	fan section.						C. Horiz	ontal Unit, F	ront Top Fan dis	charge, OA i	n top, RA in I	oottom of m	nixing box.		
7. VAV fa	n with VFD.						Weigh	nt 3,330 lbs,	172" L x 72" W x	6 54" H, 11.3	MCA, MOCF	20 A			
8. Disconi	nect.						Moun	ted on stand	l above floor.						
9. 6" Base	e Rail.														
									UNIT ACOUS	TICS: dB @	Supply Dis	charge, Od	tive Band (Hz)		
							63	125	250 500	1000	2000	4000 8	000		
							- 00	00	00 00	0.0	0.5	00 -			_
							a. 82	82	93 88	86	85	82 7	'1		

AHU CHILLED WATER COILS (23 73 13)

		AIR		MAX.	MAX.	EAT		LAT		MBH C	APACITY		0% PG	/ WATER			COIL		ACCESSORIES
MARK	COIL SIZE	UNIT	CFM	PD "	FV	DB	WB	DB	WB	TOTAL	SENS	. GPN	ENT	LVG	PD. FT	TYPE	FPI	ROWS	REMARKS
CC-1	42.5"x84"	AHU-1	12,400	0.92	500	80.5	66.7	51.1	50.6	573	385	114	45	55	13.7		11	8	Α
CC-2	42.5"x72"	AHU-2	10,800	0.47	507	77.3	64.0	55.5	53.6	324	249	64	45	55	19.9		10	5	В
Based on	n products by YOR	K K																	#N
	specifications for d		luct and in	stallation	requireme	nts.										Ente	ering Air T	emps.	1/9/20 7::
	ORIES/OPTIONS:	.о.аоа р.оа						REMAR	RKS:								are based		
								A. Dry	Weight 4	98 lbs, fluid	l 183 lbs.						DB	WB	
										73 lbs, fluid						RAT	75	63	
								D. Diy	vvoigi it 2	70 ibs, iidid	102 100.					OAT	91	74	
					AH	U W	ATE	ER I	HEA	TING	CO	ILS	(23 7	3 13)					
					MAX.	MAX.	EAT	Γ L	AT	тот.	;	30% PG / V	VATER		C	OIL	-	ACCESSORIES	<i>il</i>
MARK	COIL SIZE	UN	IT	CFM	PD "	FV				MBH	GPM	ENT	LVG PI). FT T	/PE F	PF RO	ws	OPTIONS	REMARKS
HC-1p	42.5"x84"	AHU	J-1 '	12,400	0.17	500	38.9	90	0.7	720.0	73.4	140	120	3.6	1	2 :	2	1	Α
HC-1r	42.5"x84"	AHU	J-1 '	12,400	0.05	500	50.0) 70	0.3	277.0	29	140		6.8	1	0	1	2	В
HC-2p	42.5"x72"	AHL		10,800	0.11	507	59.0	_		351.0	35	140		5.6			2	1	С
		AHU	J-3	8,000	0.14	515	47.6	89	9.9	379.0	39	140	120	7.5	1	0 :	2	2	D
HC-3r	37.5"x60"	7 11 15					1												
Based on	products by YOR	K.		etallation r	oguiromor	nte.									Entoring	Air Tompo			2(6)20.1
Based on See the s	n products by YOR specifications for d	K.		stallation re	equiremer	nts.		REN	MARKS:						Entering A	•	3.		
Based on See the s	n products by YOR specifications for d	K. etailed prod		stallation re	equiremer	nts.			MARKS:	ht 194 lbs. f	fluid 64 lbs	s.			are ba	sed on	s. VB		# 2/6/20 1
Based on See the s ACCESSO	n products by YOR specifications for doorles/OPTIONS:	K. etailed prode		stallation re	equiremer	nts.		Α. [Ory Weig	ht 194 lbs, f ht 107 lbs, f				F	are ba	sed on B W	VB		
Based on See the s	n products by YOR specifications for d	K. etailed prode		stallation re	equiremer	nts.		A. [B. [Ory Weig Ory Weig	ht 107 lbs, f	luid 26 lbs	3.			are ba	sed on B W	VB		
Based on See the s	n products by YOR specifications for doorles/OPTIONS:	K. etailed prode		stallation re	equiremer	nts.		A. [B. [Ory Weig Ory Weig		luid 26 lbs	3.			are ba	sed on B W	VB		
Based on See the s ACCESSO	n products by YOR specifications for doorles/OPTIONS:	K. etailed prode		stallation r	<u>.</u>			A. [B. [Ory Weig Ory Weig	ht 107 lbs, f	fluid 26 lbs	s. s.			are ba	sed on B W	VB	→	
Based on See the s ACCESSO	n products by YOR specifications for doorles/OPTIONS:	K. etailed prode		stallation re	<u>.</u>	nts.		A. [B. [Ory Weig Ory Weig	ht 107 lbs, f	fluid 26 lbs	3.	<u></u>		are ba	sed on B W	VB		
Based on See the s ACCESSO	n products by YOR specifications for doorles/OPTIONS:	K. etailed prode			~	ىر	HE	A. [B. [C. [Ory Weig Ory Weig Ory Weig	ht 107 lbs, f	fluid 26 lbs	s. s.			are ba	sed on B W	VB	~	
Based on See the s ACCESSO 1. Locate 2. Locate	n products by YOR specifications for doorles/OPTIONS:	K. etailed produstion.			~	ىر		A. [B. [C. [Ory Weig Ory Weig Ory Weig	ht 107 lbs, f	fluid 26 lbs	TER			are ba	sed on B W	VB 566 114	ACCESSORIE	2/6/20 1
Based on See the s ACCESSO 1. Locate 2. Locate	n products by YOR specifications for d ORIES/OPTIONS: ed in the preheat posid in the reheat posid	K. etailed produstion.		C	~	سر IET I	1	A. [B. [C. [Ory Weig Ory Weig Ory Weig	ht 107 lbs, f ht 134 lbs, f HOT	fluid 26 lbs	TER	(23 8		are ba	sed on B W 0 5 5 5	VB 566 114	ACCESSORIE OPTIONS	2/6/20 1
Based on See the s ACCESS(1. Locate 2. Locate	n products by YOR specifications for done of the preheat post of t	K. etailed produstion.	uct and ins	C.	ABIN	IET I	I ED	A. I. B. I. C. I	Dry Weig Dry Weig Dry Weig	ht 107 lbs, f ht 134 lbs, f HOT	fluid 26 lbs	TER	(23 8	31 01	are ba	sed on B W 0 5 5 ELECT. S VOL	WB 566 114		2/6/20 1.
Based on See the s ACCESSO 1. Locate 2. Locate	products by YOR specifications for dones/OPTIONS: and in the preheat post of in the reheat post of in the reheat post of the model. MANUFACTURES MODEL NO.	K. etailed production.	uct and ins	C,	ABIN	JET I	ED	A. [B. [C. [Dry Weig Dry Weig Dry Weig	ht 107 lbs, f ht 134 lbs, f HOT	fluid 26 lbs fluid 46 lbs	TER HEAT	(23 8 TING COIL GPM	31 01 PD.F1	are ba	Sed on	T/PH	OPTIONS	2/6/20 1. ES/ REMARKS

	MANUFACTURER'S MODEL NO.	LOCATION	QUANTITY	PANEL		ROOM	BTUH	MIN.		WATER		ACCESSORIES/		
MARK				SIZE	TYPE	TEMP	EACH	GPM	EWT	LWT	PD. FT	OPTIONS	REMARKS	
RCP-1	Modular Radiant Panel	Tlt 111A	1	24"x24"	Tegular	70	470	0.5	140	138		1, 2, 3, 4	A, B	
RCP-2	Modular Radiant Panel	Tit 105A	1	24"x24"	Tegular	70	470	0.5	140	138		1, 2, 3, 4	A, B	
RCP-3	Modular Radiant Panel	Girls 137	2	24"x24"	Tegular	70	470	0.5	140	136		1, 2, 3, 4	A, B	
RCP-4	Modular Radiant Panel	Nurse 105	2	24"x24"	Tegular	70	470	0.5	140	136		1, 2, 3, 4	A, B	
RCP-5	Modular Radiant Panel	Principal 103	2	24"x24"	Tegular	70	470	0.5	140	136		1, 2, 3, 4	A, B	
Based on p	products by STERLING.												#	
See the sp	ecifications for detailed prod	uct and installatior	requirements.										1/9/20 7	
ACCESSO	RIES/OPTIONS:						REMARKS:							
I. Provide	Isolation valves, P/T plugs on	each circuit.					A. Capacity based on perimeter location and 135 deg. F mean water temperature.							
2. Provide	control valve and calibrated ba	alancing valve on ea	ach circuit.				B. See piping detail on plans.							

A. Sized at MEDIUM fan speed.

C. Style 1200, 135 lbs, 25"x47"

D. Style 1100, 115 lbs, 25"x43"

E. Style 1200, 121 lbs, 25"x43"

B. Color selected by Architect from printed color chart.

Based on products by STERLING.

ACCESSORIES/OPTIONS:

1. 1-row Hot Water coil. 2. 2-row Hot Water coil.

4. Free Discharge ECM Motor. 5. Unit Mounted Disconnect Switch.

B. Piping Package.

5. Condensing Unit Mounting Pad.

4. Hail Guard.

See the specifications for detailed product and installation requirements.

				111 01	JILS	- HO	T W	ATE	R (23	81 ()2)					
	MANUFACTURER'S			T						HEATIN	G COIL		FAN	I ELECT.	ACCESSORIES/	
MARK	MODEL NO.	LOCATION	STYLE	CFM	ESP	МВН	EAT	LAT	EWT	GPM	ROWS	PD	HP	VOLT/PH	OPTIONS	REMAR
FC-1	FNX06	Gym Stor 146A	Ceiling Exposed	600	0.15	15.40	70	94	140	2	2	1.4	1/3	208/1	1,2,3,4,5	Α
~~~L	RIES/OPTIONS:								REMARK							
	1. Double deflection supply grille, return air collar.								A. Sized at MEDIUM fan speed.							
									B. 31"W	x 32"D x 18	8"H					
2. Closed	cell foam insulation.															
2. Closed																
Closed     Disconi	cell foam insulation.															

				וטטע	LE35 5	PLII	51511		C (23 81 26	)						
MARK			EVAPORAT	OR SECTION				COND	ENSING (							
		MANUFACTURER'S	CFM	COOLING	HEATING I	MBH **	ELECTR	RICAL	MANUFACTURER'S	SEER	ELECTRI	CAL	ACCESS./	REMARKS		
DSS-	SERVING	MODEL NO.	LOW-MED-HI	BTUH *	HEAT PUMP	ELECT.	VOLT/PH	WATTS	MODEL NO.		VOLT/PH	MCA	OPTIONS			
1	IT 135	AC018MNADCH/AA	265 - 336 - 406	18,000	N/A	N/A	208/230/1	27	AC018MXSCCC/AA	18.8	208/230/1	13.0	1,2,3,4,5	A, B, C		
2	IT 220A	AC018MNADCH/AA	265 - 336 - 406	18,000	N/A	N/A	208/230/1	27	AC018MXSCCC/AA	18.8	208/230/1	13.0	1,2,3,4,5	A, B, C		
3	IT 145	AC018MNADCH/AA	265 - 336 - 406	18,000	N/A	N/A	208/230/1	27	AC018MXSCCC/AA	18.8	208/230/1	13.0	1,2,3,4,5	A, B, C		
4	Elect 148	AC024MNADCH/AA	410 - 477 - 551	24,000	N/A	N/A	208/230/1	27	AC024MXSCCC/AA	18.3	208/230/1	16.0	1,2,3,4,5	A, D, E		
5	Elect 113B	AC036MNADCH/AA	699 - 752 - 830	36,000	N/A	N/A	208/230/1	58	AC036MXSCCC/AA	18.0	208/230/1	24.0	1,2,3,4,5	A, F, G		
Based on	products by SAI	MSUNG.			* BASED ON 80	 /67 EAT, 95	OAT	** BASED	ON 47 DEG. OAT					#N/		
See the sp	pecifications for	detailed product and insta	llation requirements	S.										1/9/20 7:2		
ACCESS	ORIES/OPTION	S:					REMARKS:									
1. Backlit	, wall-mounted,	wireless remote controller.					A. R410A Refrigerant, Low ambient cooling to -40 deg.									
2. BACne	t Interface.						B. Indoor unit	23.8 lbs, 35	5.5"W x 10.5"D x10.5"H &	outdoor ur	nit 79.8 lbs, 25"	'H x 36"W	x14.5"D.			
3. Built-in	condensate pui	mp.					C. 4,000 Btuh	Minimum o	apacity, Indoor unit 32-37	7-42 dBA,	outdoor unit 48	dBA.				

D. Indoor unit 32.2 lbs, 50.5"L x 11.5"D x12"H & outdoor unit 114.6 lbs, 31.5"H x 36.5"W x14.5"D.

F. Indoor unit 40.6 lbs, 50.5"W x 10"D x13.5"H & outdoor unit 159.6 lbs, 40"H x 37"W x15"D.

E. 7,000 Btuh Minimum capacity, Indoor unit 35-39-43 dBA, outdoor unit 50 dBA.

G. 10,000 Btuh Minimum capacity, Indoor unit 46-48-51 dBA, outdoor unit 54 dBA.



HSR ASSOCIATES INC. 100 MILWAUKEE STREET LA CROSSE, WISCONSIN PHONE: 608.784.1830 FAX: 608.782.5844 www.hsrassociates.com

MINERAL HSR Project Number: HSR # 19001 Project Date: 2.13.2020 SJK/MSB Key Plan:

> BID **DOCUMENTS**

KEY PLAN 💮

Description A2 ADDENDUM 2 Graphic Scale:

**VARIES** 3/3/2020 11:43:39 AM