DOCUMENT 00 90 00 ADDENDUM

ADDENDUM NO. [2] Date: March 21, 2018

- RE: EAU CLAIRE AREA SCHOOL DISTRICT McKINLEY CHARTER SCHOOL 1266 McKINLEY RD EAU CLAIRE, WISCONSIN 54701 HSR PROJECT NO. 17057
- 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 March 2018. 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, Pre-bid attendance, and [9] 30 x 42 drawings.

1. Pre-bid attendance attached hereto.

CHANGES TO PREVIOUS ADDENDUM: Addendum 1

- 2. Sheet E001R ELECTRICAL SITE PLAN
 - a. Delete connection and branch circuit wiring to heat tape equipment connection.
- 3. Sheet E100R ELECTRICAL POWER PLAN
 - a. Classroom 109: Provide 120 volt branch circuit from Panel A to feed new exhaust fan PV4. Electrical to install speed controller furnished with unit

CHANGES TO SPECIFICATIONS:

- 4. Section 22 10 06 PLUMBING SPECIALTIES
 - a. At sink S-2, provide plaster trap per spec section 22 10 06

CHANGES TO DRAWINGS

- 5. <u>C100R DEMOLITION PLAN</u> 30 x 42 attached hereto
 - a. Revisions clouded on Drawing
- 6. <u>C101R LAYOUT PLAN 30 x 42 attached hereto</u>
 - a. Revisions clouded on Drawing
- 7. <u>Sheet A090 REMOVAL PLAN</u> 30 x 42 attached hereto a. Revisions clouded on Drawing.
- 8. <u>Sheet A100R1 FIRST FLOOR</u> 30 x 42 attached hereto a. Revisions clouded on Drawing.

9. Sheet A300 SECTIONS

- a. 5 and 6A300: At roof ladders the pieces tying the top of the ladder back to the parapet shall be 2" x 3/8" flat stock, same as the side rails. Bend bottom legs 90°, minimum 3 inches to allow for securing to roof edge blocking. Refer to Section 05 50 00 for breakdown of ladder parts.
- 10. Sheet S110R FOUNDATION PLAN 30 x 42 attached hereto
 - a. Revisions clouded on Drawing
- 11. <u>Sheet M090R MECHANICAL REMOVAL PLANS</u> 30 x 42 attached hereto a. Revisions clouded on Drawing
- 12. <u>Sheet M100R MECHANICAL VENTILATION REMODEL PLAN</u> 30 x 42 attached hereto a. Revisions clouded on Drawing
- 13. <u>Sheet M600R1 MECHANICAL SCHEDULES</u> 30 x 42 attached hereto a. Revisions clouded on Drawing.
- 14. Sheet E101R1 REVISED LIGHTING PLAN 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.

END OF DOCUMENT 00 90 00

"SIGN-IN" SHEET

PROJECT: Eau Claire School District-McKinley Charter School

HSR NO.: 17057 DATE: March 16, 2018



PLEASE PRINT ALL INFORMATION CLEARLY

NAME	COMPANY	E-MAIL ADDRESS	TELEPHONE	58
Wayne Brown	RJ. Jurouski	Waynes ar jurowski const	(115) 226-280 ruction . Com	20
HOLLY KITCHELL	ECASD	HKITCHELL@ECHODUS	715 579 950	
Aavon Van Hove	Bartingale Mechanic	avon van hore Bhart gue	di 515 894-71	77
MANK JOHANSEN	RISHRU ELACTARE	MANKISHNSON Q Los ANUELLE	715 723-2881 Ehrc, con	
LUCAS KRAMER	QUALITY ROSFING INC	LUCAS@ QROOF.com	715 384 8881	
Jason Pelke	Perke Plumbing	Joson & pelleiplumbing	715 495-2	756
Nick Schuch	Brick Bros	nSchuch@brick1bros.co		
Broan Bein	Certified Inc.	brianbo ccotified plumbing Meri	ig.com 715-834-5	409
Troy Ellis	Hudson Electric	troy & hudsanelectris com	715-723-3661	
- LON KEISER	NETTEL COMM	Jow, Keiser Horrel.us	715-456-8295	
Nic Sonderfoot	Miran Construction	estimating@miron-construction.c	orin 715-598-5711	
Travis Turawski	Northwest Roofing	nwroof @ chibardyn. net	715-924-364	4
ERIL STOLD	MES	CStol De market- johnson. Con	7 715 577 -206	5
Jevenny Drahe	M+J	jarake Omarket- johnson.co.	n 715-577-0836	e
Taylor Mattson	RTS Roofing	Taylor ORTS Rooting.con	715-B32-1910	
Phdy Rosentrater RUSS RUMN	RTS Rooking, Inc.	andy@rtsporting.com	715-832-1910	
RUSS RYMN	CERTIFIED ANK	plumbing-nearing . com	715-834-540	1
Danian Rince	Chippewa Valley Exa	Mypersporting.com russing centrified plumbing-hearing .com Chippewavalleyer & Roomer.net	715-559-0843	
Train Schuebel	Itagen Decorators	craig & hagendecorators, a	m 715 379 6950	9
0				

"SIGN-IN" SHEET

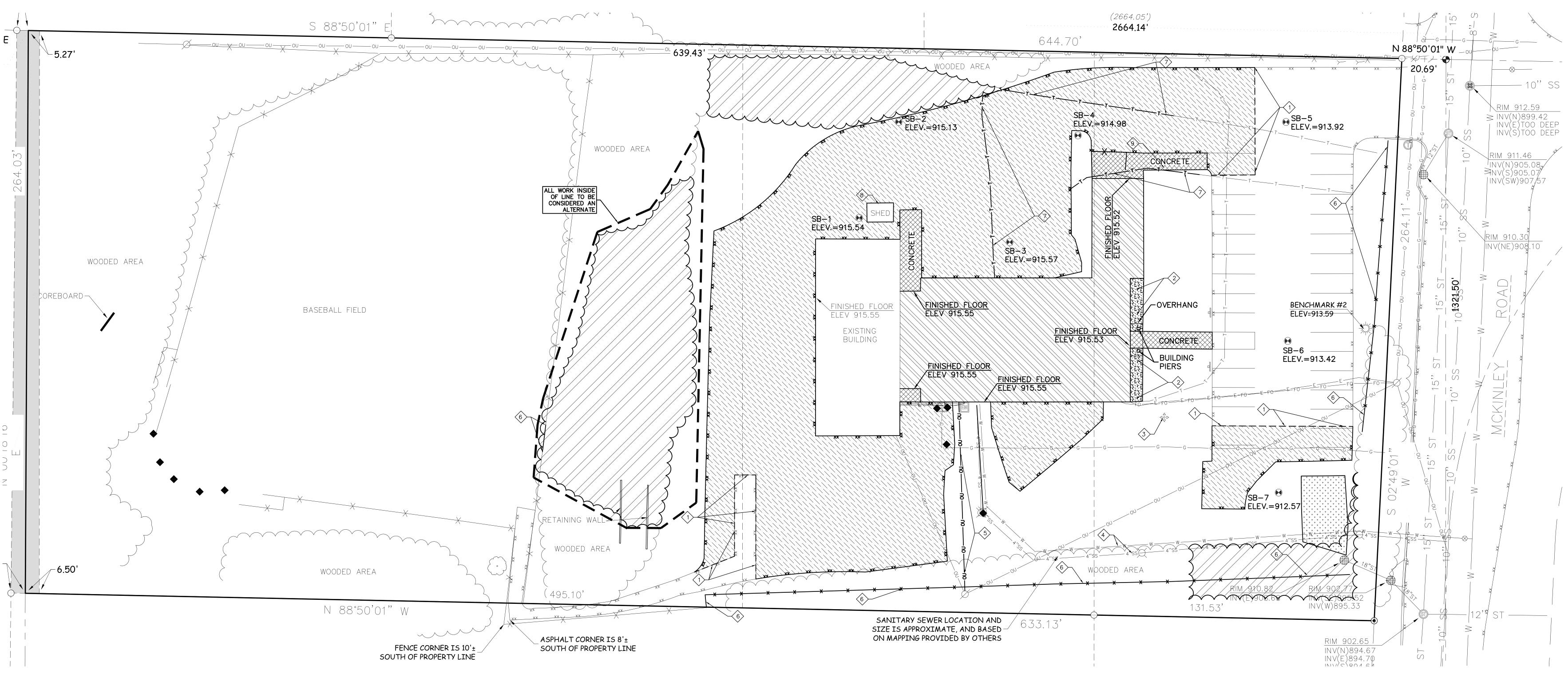
PROJECT: Eau Claire School District-McKinley Charter School

HSR NO.: 17057 DATE: March 16, 2018

PLEASE PRINT ALL INFORMATION CLEARLY



NAME	COMPANY	E-MAIL ADDRESS	TELEPHONE
Gray Backhays	Certified Inc	Inegs@contified Plumbing heating a	rem (75) 834-5409
Feff Nester	Ecr4512		715/852-9505
Ryon Thewsetts	HAR Electric	Mon@hr-electnicinc.com	715 - 456 - 1979
MIKESTEINKR	Houranois	msteinkeehovlands.	715-832-1691 Inc. com
Josh Day	Met Gruzial Search	Diplus - Day Qne-towardpro.a	m 715-532-2349
1			



GENERAL NOTES:

© 2018 POINT OF BEGINNING, INC.

ASSIGNMENT OF THE SAME MAY OCCUR WITHOUT THE PRIOR WRITTEN PERMISSION OF POINT OF BEGINNING, INC.

- 1. CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION. 2. ALL DEMOLITION MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER EXCEPT
- FOR THOSE ITEMS NOTED TO BE SALVAGED, WHICH SHOULD BE TURNED OVER TO THE OWNER. 3. INSTALL AND MAINTAIN ALL REQUIRED EROSION CONTROL MEASURES FOR PERIMETER PROTECTION PRIOR TO THE
- START OF DEMOLITION/CONSTRUCTION, IN ACCORDANCE WITH THE LOCAL AND STATE GOVERNING AUTHORITIES.
- 4. ALL BIDDERS PLANNING ON SUBMITTING A BID SHALL VISIT THE SITE AND REVIEW THE EXISTING CONDITIONS PRIOR TO THE BID DATE.
- 5. COORDINATE WITH THE OWNER AND LOCAL UTILITY COMPANIES TO LOCATE ANY EXISTING UTILITIES ON SITE PRIOR TO THE START OF WORK.
- 6. ANY EXISTING UTILITIES NOT SHOWN ON THIS DOCUMENT WHICH NEED TO BE REMOVED, RELOCATED AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE GRADING CONTRACTOR AND INCLUDED IN THE BASE BID
- CONTRACT. 7. STRIP TOPSOIL WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE PROJECT MANUAL SPECIFICATIONS. 8. IF STRIPPED TOPSOIL IS STOCKPILED ON SITE, SILT FENCE SHALL BE INSTALLED AROUND THE BASE OF THE
- STOCKPILE TO PREVENT SEDIMENT TRANSPORT. STOCKPILE LOCATION TO BE DETERMINED BY SITE CONTRACTOR. 9. PRIOR TO PERFORMING WORK WITHIN PUBLIC RIGHT OF WAYS, NOTIFY AND COORDINATE WORK WITH THE LOCAL
- MUNICIPALITY. 10. EXISTING BUILDING TO REMAIN UNTIL PROPOSED ADDITION IS COMPLETED AND OPERATIONAL.

KEYNOTES:

	SAWCUT EXISTING BITUMINOUS PAVEMENT
	2 REMOVE LANDSCAPE AREA
	3 REMOVE FLAG POLE
	4 MAINTAIN WATER AND SEWER SERVICE LATERAL
	5 REMOVE OVERHEAD SERVICE LINE AT TIME OF BUILDING REMOVAL
DESCRIPTION	6 REMOVE EXISTING FENCE
BEING A PART OF THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 15, TOWNSHIP 27 NORTH, RANGE 9 WEST, CITY OF EAU CLAIRE, EAU CLAIRE	7 REMOVE TELEPHONE LINE
COUNTY, WISCONSIN, DESCRIBED AS FOLLOWS; COMMENCING AT THE NORTH ¼ CORNER OF SECTION 15, TOWNSHIP 27 NORTH, RANGE 9 WEST; THENCE N 88'50'01'W ALONG THE NORTH LINE OF THE	SHED TO BE RELOCATED BY OWNER (SEE LAYOUT PLAN FOR LOCATION)
NORTHWEST ¼ OF SAID SECTION 15, 20.69 FEET TO THE EAST LINE OF MCKINLEY ROAD AND THE POINT OF BEGINNING (POB) OF THE PARCEL TO BE DESCRIBED; THENCE S 02°49'01'W ALONG THE EAST LINE OF MCKINLEY ROAD, 264.11 FEET; THENCE	9 SALVAGE BIKE RACK (SEE LAYOUT PLAN FOR RELOCATION)
N 88'50'01"W, 633.13 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SAID SECTION 15;	
THENCE N 00°18'16'E ALONG SAID WEST LINE, 264.03 FEET TO THE NORTH LINE OF THE NORTHWEST ¼ OF SAID SECTION 15; THENCE S 88° 50'01'E ALONG THE NORTH LINE OF THE NORTHWEST ¼ OF SAID SECTION 15, 644.70 FEET TO THE POINT OF BEGINNING.	ELEVATIONS ARE REFERENCED TO NAVE 88 DATUM.
CONTAINING: 168,673 SQUARE FEET, 3.872 ACRES	BENCHMARK #1 BURY BOLT ON FIRE HYDRANT LOCATED IN THE NORTHEAST

QUADRANT OF MCKINLEY ROAD AND TOWER DRIVE. ELEVATION = 916.04POINT OF BEGINNING, INC. HOLDS THE RIGHTS TO COPYRIGHT IN AND TO THESE PRINTS, DRAWINGS AND DOCUMENTS. NO REPRODUCTION, COPYING, ALTERATION, MODIFICATION, USAGE, INCORPORATION INTO OTHER DOCUMENTS OR

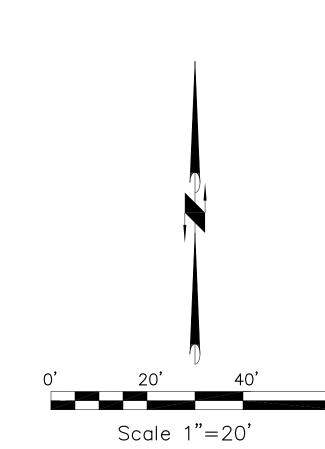
BENCHMARK #1 60D SET IN POWER POLE LOCATED ON THE WEST SIDE OF MCKINLEY ROAD, APPROXIMATELY 100 FEET SOUTH OF TOWER DRIVE. ELEVATION = 913.59

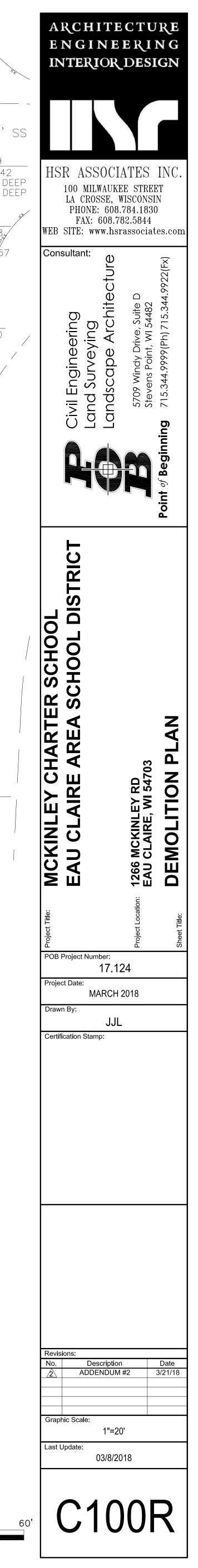
DEMOLITION HATCH PATTERNS:

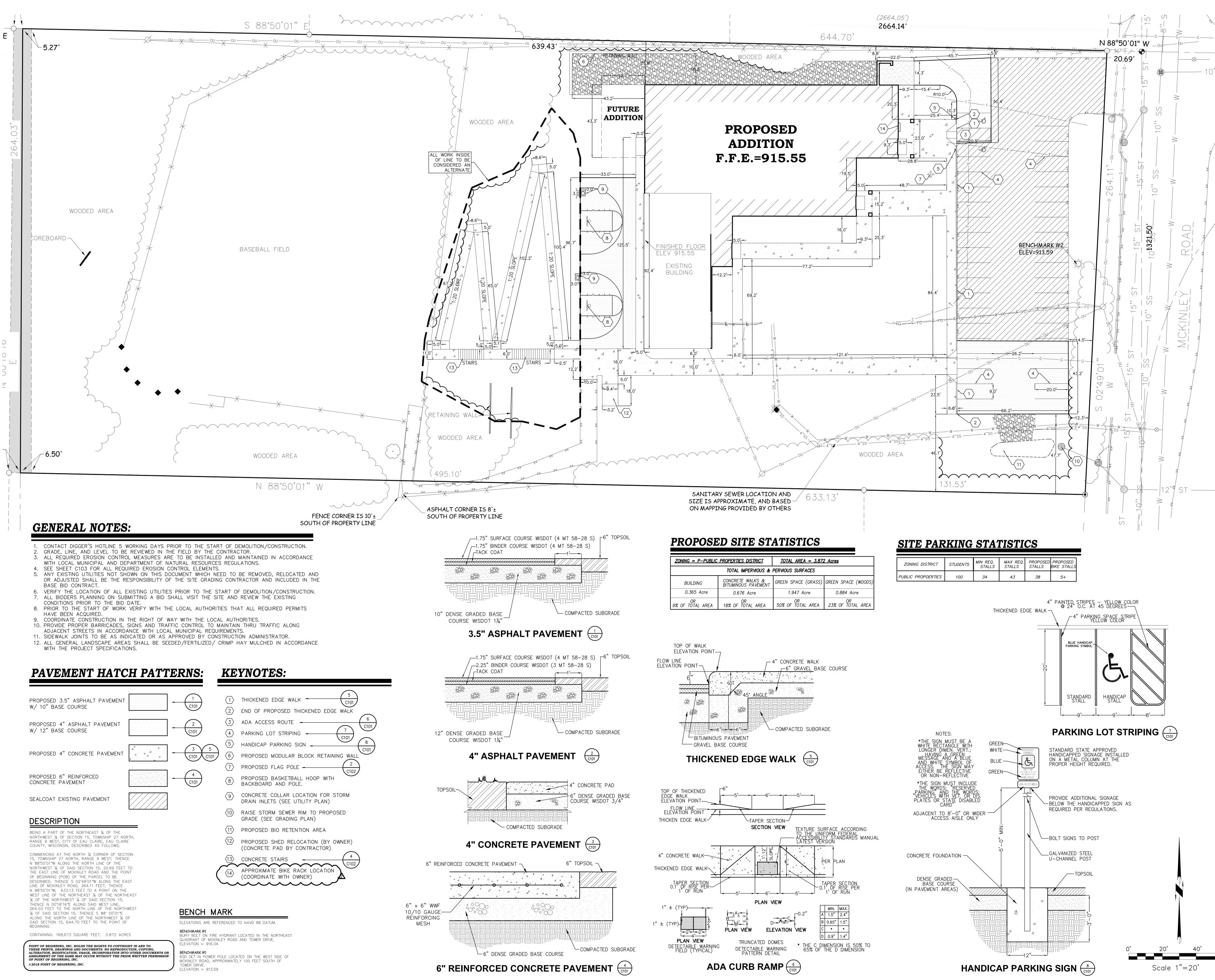
BITUMINOUS REMOVAL	
CONCRETE REMOVAL	
GRAVEL REMOVAL	
BUILDING REMOVAL (SEE GENERAL NOTE #10)	
CLEAR AND GRUB EXISTING WOODED AREA	

EXISTING SITE STATISTICS

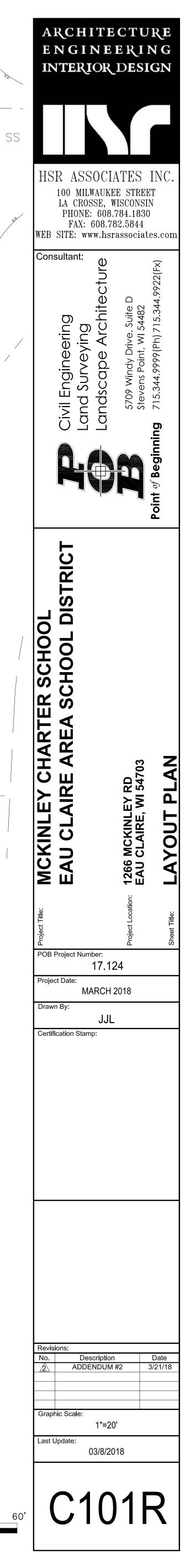
ZONING = P-PUBLIC	PROPERTIES DISTRICT	TOTAL AREA = 3.872 Acres									
TOTAL IMPERVIOUS & PERVIOUS SURFACES											
BUILDING	CONCRETE WALKS & BITUMINOUS PAVEMENT	GREEN SPACE (GRASS)	GREEN SPACE (WOODS)								
0.256 Acre	0.956 Acre	1.475 Acre	1.185 Acre								
OR 7% OF TOTAL AREA	OR 25% OF TOTAL AREA	OR 38% OF TOTAL AREA	OR 30% OF TOTAL AREA								

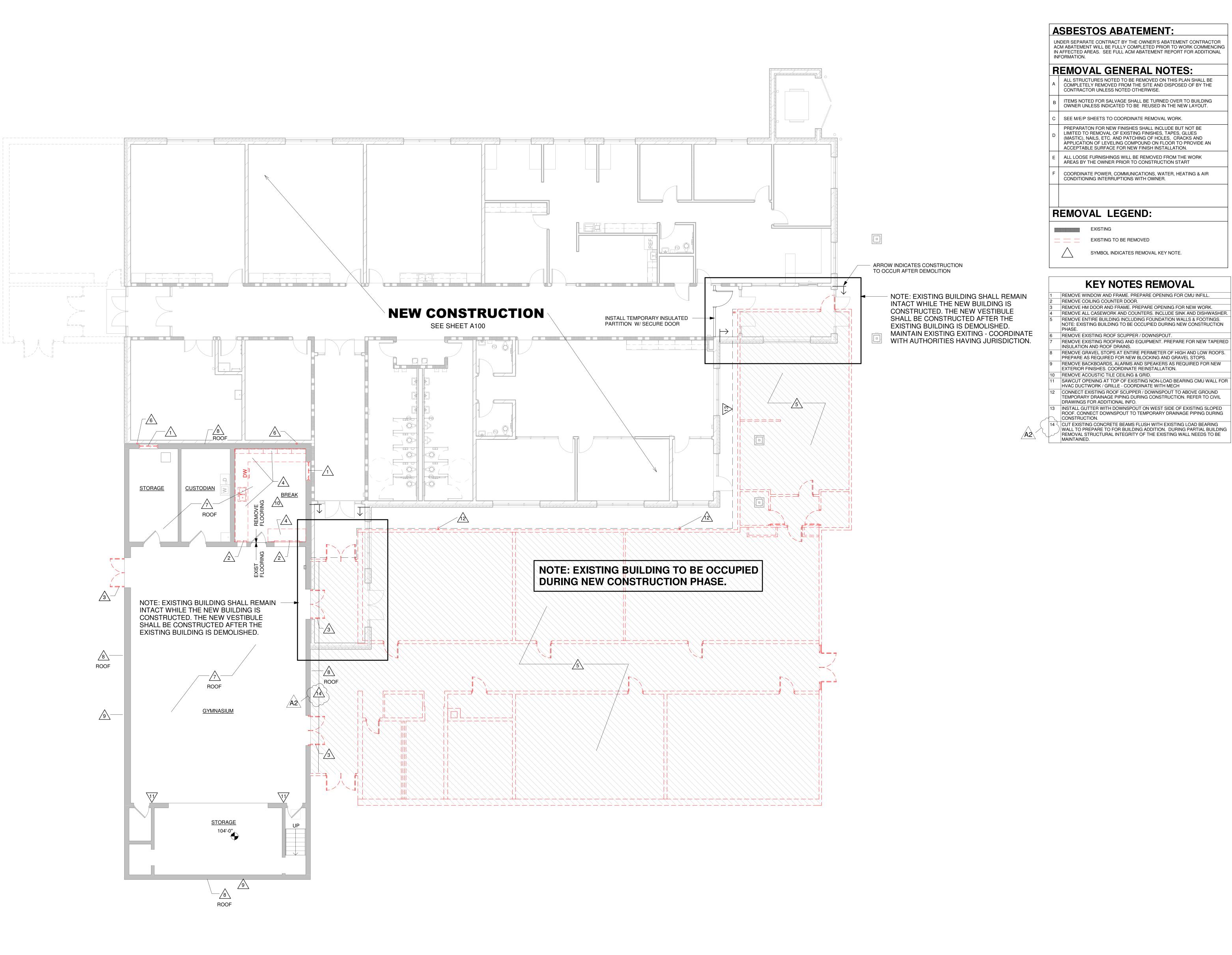


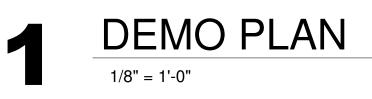


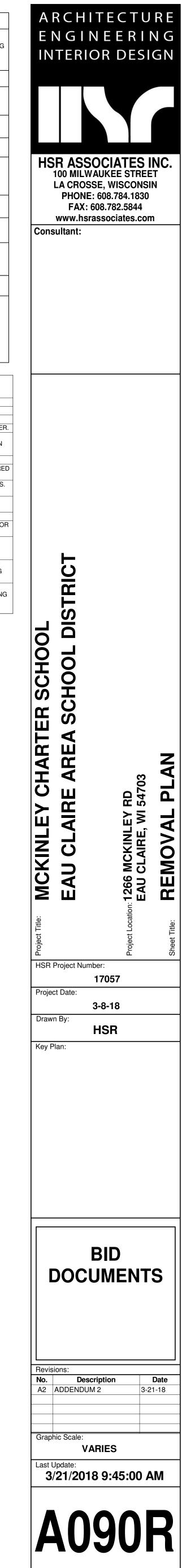


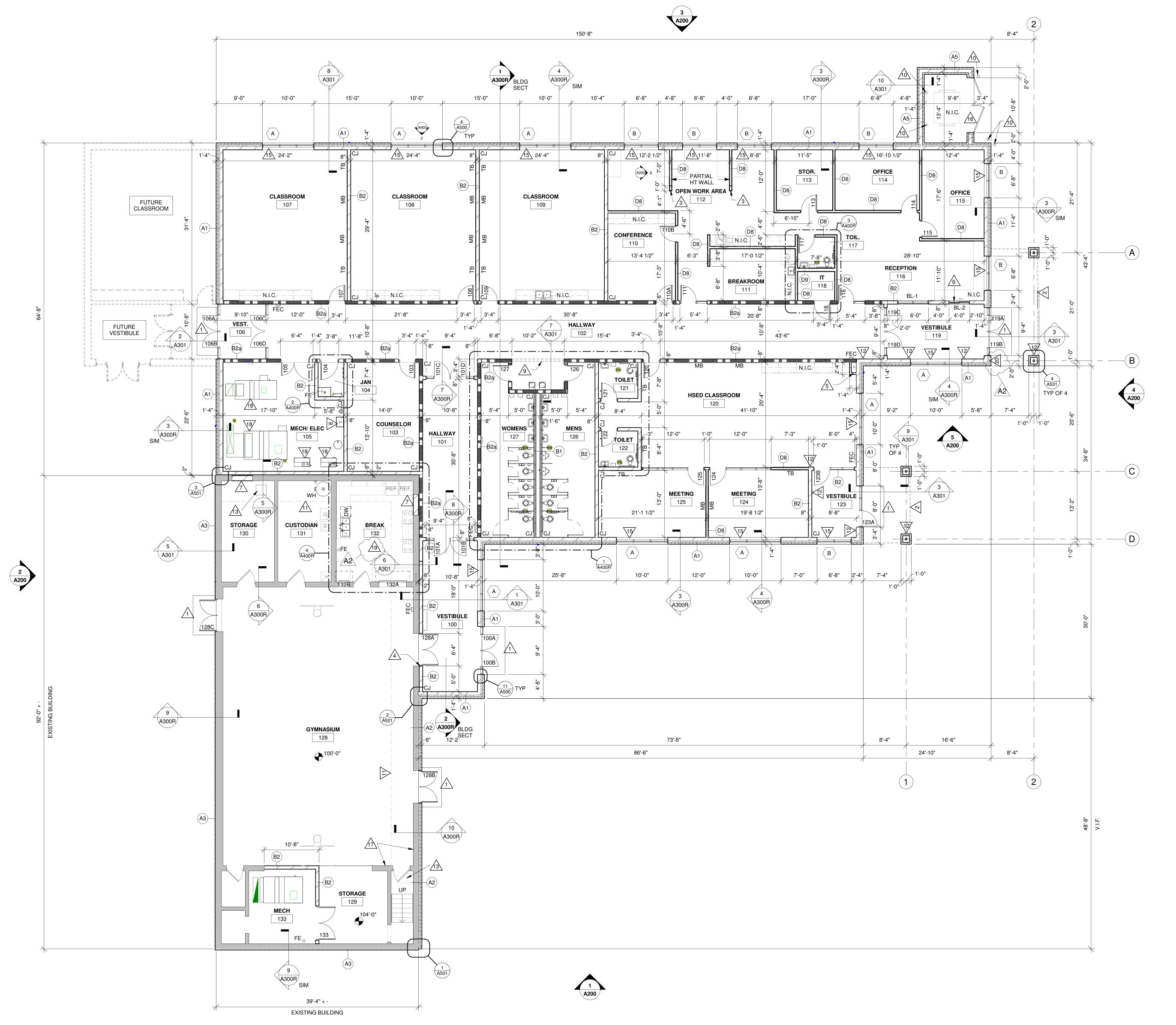
CONTAINING:	168,673	SQUARE	FEET,	3.872 ACRES	

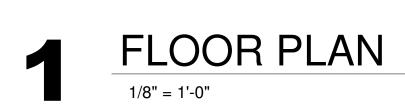














	GENERAL NOTES:
A	SEE ID SHEETS FOR FLOOR AND WALL FINISH LAYOUTS.
в	LOOSE FURNISHINGS EXCEPT AS NOTED SHALL BE PROVIDED AND INSTALLED BY THE OWNER.
С	VERIFY EXACT SIZE AND LOCATION OF ALL MECHANICAL / PLUMB AN OPENINGS - GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH AT ALL VISIBLE AREAS. ALL OPENINGS SHALL BE SEALEI UTILITY INSTALLATION.
D	PAINT ALL EXPOSED STEEL LINTELS.
E	INSTALL BULLNOSE CMU AT ALL OUTSIDE CORNERS W/O TILE AND A JAMBS AS DETAILED. NO BULLNOSE AT WINDOW JAMBS.
F	SEE STRUCTURAL FOR SLAB CONTROL JOINTS AND CMU CONTROL IN LOAD BEARING CMU WALLS.
G	SEE THIS PLAN FOR CONTROL JOINTS IN NON-LOAD BEARING CMU V SEE A501 FOR CONTROL JOINT DETAILS. CJ = CONTROL JOINTS
н	REFER TO CODE PLANS FOR FIRE RATING LOCATIONS AND ACCESS ROUTES.
J	EXTEND ALL WALLS TO DECK UNLESS NOTED OTHERWISE. SEE 544 FOR TOP OF WALL DETAIL.
к	UNLESS NOTED OTHERWISE RESTROOM FLOORS SHALL BE SLOPED MIN. 1/16" : 12" TO FLOOR DRAINS - TO "CENTER", IF NO FLOOR DRAI
L	SEE A500 FOR TYPICAL HEAD FLASHING ISOMETRIC DETAIL.
м	GEN. CONTRACTOR TO PROVIDE CONC. EQUIP. PADS / CURBS AS REQUIRED FOR MECH / ELECTRICAL EQUIP VERIFY SIZE / PROFILE LOCATION WITH MECH / ELECTRICAL.
N	ALL CASEWORK- BY OWNER. GC TO PROVIDE BLOCKING IN STUD WAAS REQUIRED.

SYMBOL INDICATES WALL TYPE - SEE SHEET A400 FOR WALL TYPE DETAILS.

WINDOW FRAME ELEVATIONS.

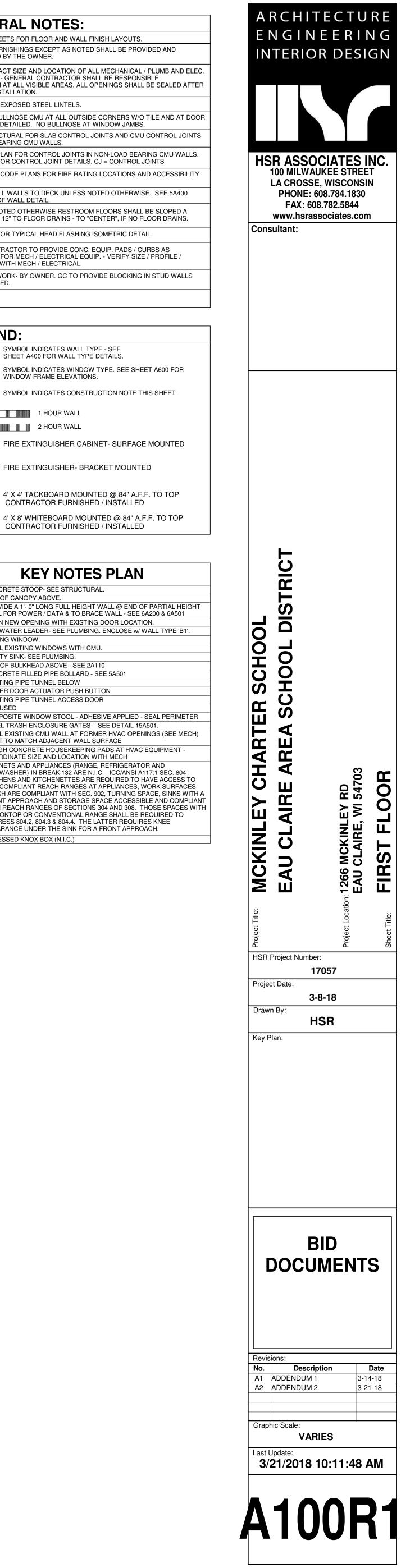
(A)—

(A)

SYMBOL INDICATES CONSTRUCTION NOTE THIS SHEET 1 HOUR WALL 2 HOUR WALL FIRE EXTINGUISHER CABINET- SURFACE MOUNTED FEC FIRE EXTINGUISHER- BRACKET MOUNTED TB 4' X 4' TACKBOARD MOUNTED @ 84" A.F.F. TO TOP CONTRACTOR FURNISHED / INSTALLED MB 4' X 8' WHITEBOARD MOUNTED @ 84" A.F.F. TO TOP CONTRACTOR FURNISHED / INSTALLED **KEY NOTES PLAN** CONCRETE STOOP- SEE STRUCTURAL. LINE OF CANOPY ABOVE. PROVIDE A 1'- 0" LONG FULL HEIGHT WALL @ END OF PARTIAL HEIGHT WALL FOR POWER / DATA & TO BRACE WALL - SEE 6A200 & 6A501 ALIGN NEW OPENING WITH EXISTING DOOR LOCATION. RAINWATER LEADER- SEE PLUMBING. ENCLOSE w/ WALL TYPE 'B1'. SLIDING WINDOW. INFILL EXISTING WINDOWS WITH CMU UTILITY SINK- SEE PLUMBING. LINE OF BULKHEAD ABOVE - SEE 2A110 CONCRETE FILLED PIPE BOLLARD - SEE 5A501 EXISTING PIPE TUNNEL BELOW POWER DOOR ACTUATOR PUSH BUTTON EXISTING PIPE TUNNEL ACCESS DOOR NOT USED COMPOSITE WINDOW STOOL - ADHESIVE APPLIED - SEAL PERIMETER STEEL TRASH ENCLOSURE GATES - SEE DETAIL 15A501. INFILL EXISTING CMU WALL AT FORMER HVAC OPENINGS (SEE MECH) PAINT TO MATCH ADJACENT WALL SURFACE 4" HIGH CONCRETE HOUSEKEEPING PADS AT HVAC EQUIPMENT -COORDINATE SIZE AND LOCATION WITH MECH CABINETS AND APPLIANCES (RANGE, REFRIGERATOR AND DISHWASHER) IN BREAK 132 ARE N.I.C. - ICC/ANSI A117.1 SEC. 804 -KITCHENS AND KITCHENETTES ARE REQUIRED TO HAVE ACCESS TO AND COMPLIANT REACH RANGES AT APPLIANCES, WORK SURFACES WHICH ARE COMPLIANT WITH SEC. 902, TURNING SPACE, SINKS WITH A /A2\ FRONT APPROACH AND STORAGE SPACE ACCESSIBLE AND COMPLIANT WITH REACH RANGES OF SECTIONS 304 AND 308. THOSE SPACES WITH A COOKTOP OR CONVENTIONAL RANGE SHALL BE REQUIRED TO ADDRESS 804.2, 804.3 & 804.4. THE LATTER REQUIRES KNEE CLEARANCE UNDER THE SINK FOR A FRONT APPROACH.

RECESSED KNOX BOX (N.I.C.)

A2

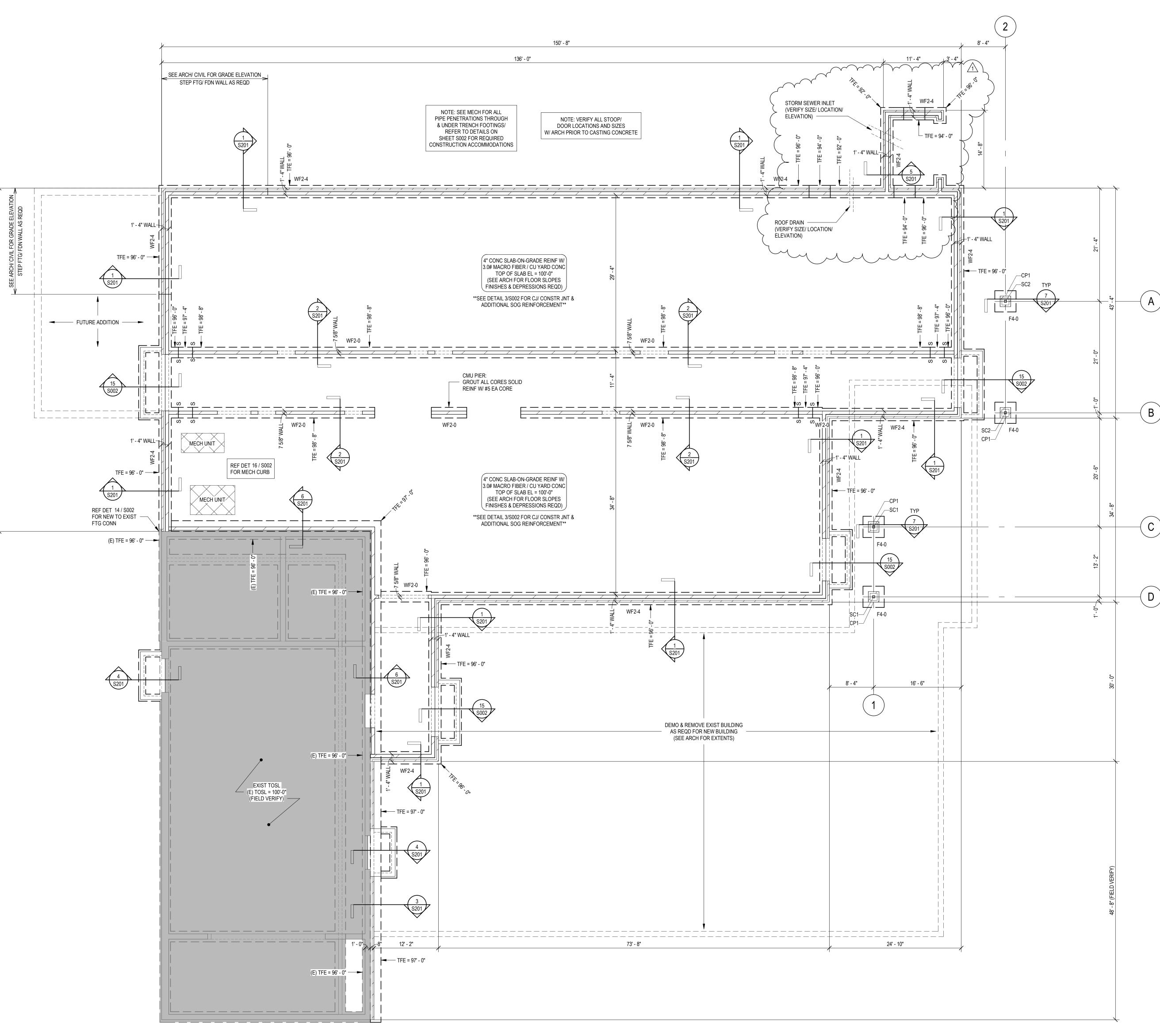


FOUNDATION PLAN SHEET NOTES A. General 1. See Cover Sheet for structural sheet index defining sheet name, sheet number and issue status. 2. See Cover Sheet for Structural Abbreviations, Typical Marks & Symbols and Plan Legends. 3. Review General Structural Notes and typical details in conjunction with applicable plans. See sheet index on Cover Sheet. 4. Coordinate stoop sizes and locations with Architectural and Civil. See typical details for stoop construction. 5. If present, coordinate the sizes and locations of tunnels, electrical cells, pits, pipes, floor drains, trenches and floor recesses with Architectural, Structural, Mechanical, Civil, and Electrical drawings. 6. Frost protection is required for all foundations if winter conditions are present. 7. Contractor shall coordinate all embedded items required for precast connections. Embedded items shall be provided by precast supplier and installed by concrete contractor. 8. Dimensions shown with +/- indicate dimensions that have been rounded to the nearest 1/16 of an inch. B. Footings 1. "F-" denotes footing mark. See schedule for size and reinforcing. "WF-" denotes wall footing mark See schedule for size and reinforcing. 2. Top of footing elevation (TFE) is shown on plan. See typical detail sheets for stepped footing detail. 3. Locations of footing steps on plan are approximate. Contractor shall verify all step locations with Civil grade elevations to maintain minimum frost depths and all Mechanical, Electrical and Plumbing pipe elevations prior to pouring footings. Coordinate footing step locations with precaster if applicable. See typical detail sheets for pipes perpendicular and parallel to footing. 4. All footings shall be centered below walls, columns and piers unless dimensioned otherwise. 5. Provide dowels to walls, columns and piers above. Hooked dowels shall be tied to footing reinforcing prior to pouring concrete. F. Concrete Piers 1. "CP-" denotes concrete pier mark. See pier schedule for size and reinforcing. 2. Top of pier elevation (TPE =) is shown on plan. 3. All concrete piers shall be centered on grid intersections unless dimensioned otherwise on plan. H. Slab On Grade 1. Top of slab elevation (TOSL =) is shown on plan. 2. See Architectural drawings for depressions, slab slopes, finishes and drains. 3. Concrete slab thickness shall be as noted on plan. See Architectural drawings for vapor barrier requirements and geotech report for slab sub-base thickness and material specification. 4. Unless noted otherwise, reinforce slab with 3.0 pounds of macro fiber per cubic yard of concrete. Coordinate finishing requirements with owner. Contractor may substitute 6 x 6 - W1.4 x W1.4 WWF chaired in place 1" below top of slab in lieu of macro fiber. 5. Provide control joints(CJ) and construction joints (CONST JT) in slab. See typical foundation details. 6. Concrete Contractor shall submit location of slab construction joints for review three weeks minimum prior to slab pour. I. Steel Columns 1. "SC-" denotes steel column mark. See column schedule for size, base plate and anchor bolt information. 2. All steel columns shall be centered on grid intersections unless dimensioned otherwise on plan. 3. Steel columns, base plates, and anchor bolts below grade exposed to soil shall be coated with two heavy coats of bitumastic paint. L. CMU Walls 1. "CMU-" denotes CMU wall reinforcing mark. See schedule and typical detail sheets for additional reinforcing requirements. 2. See Architectural for masonry control joint spacing. Locate control joints a minimum of 24" from the edges of all openings.

- 3. See Architectural drawings for non-load bearing CMU wall thickness and locations. See typical detail sheets for non-load bearing CMU details.
- 4. Coordinate all exterior wall finish ledge elevations for brick, stone, etc. with architectural drawings.

M. Concrete Walls

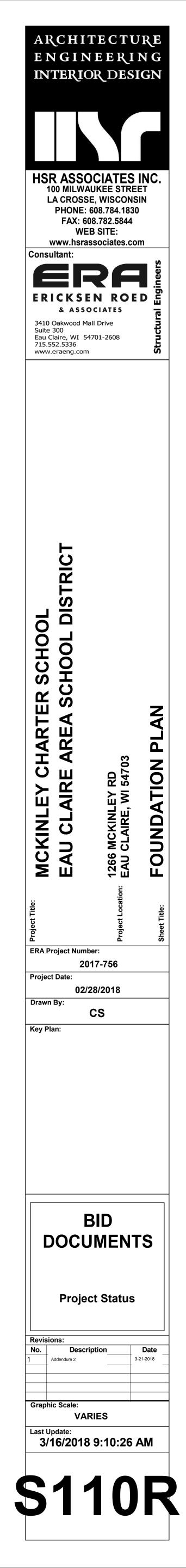
- 1. See wall schedule for reinforcing. Provide additional reinforcing per typical details.
- 2. See typical details for concrete wall construction joint spacing requirements.
- 3. See shear wall elevation sheets and details for reinforcing required.
- 4. Coordinate all exterior wall finish ledge elevations for brick, stone, etc. with architectural drawings.

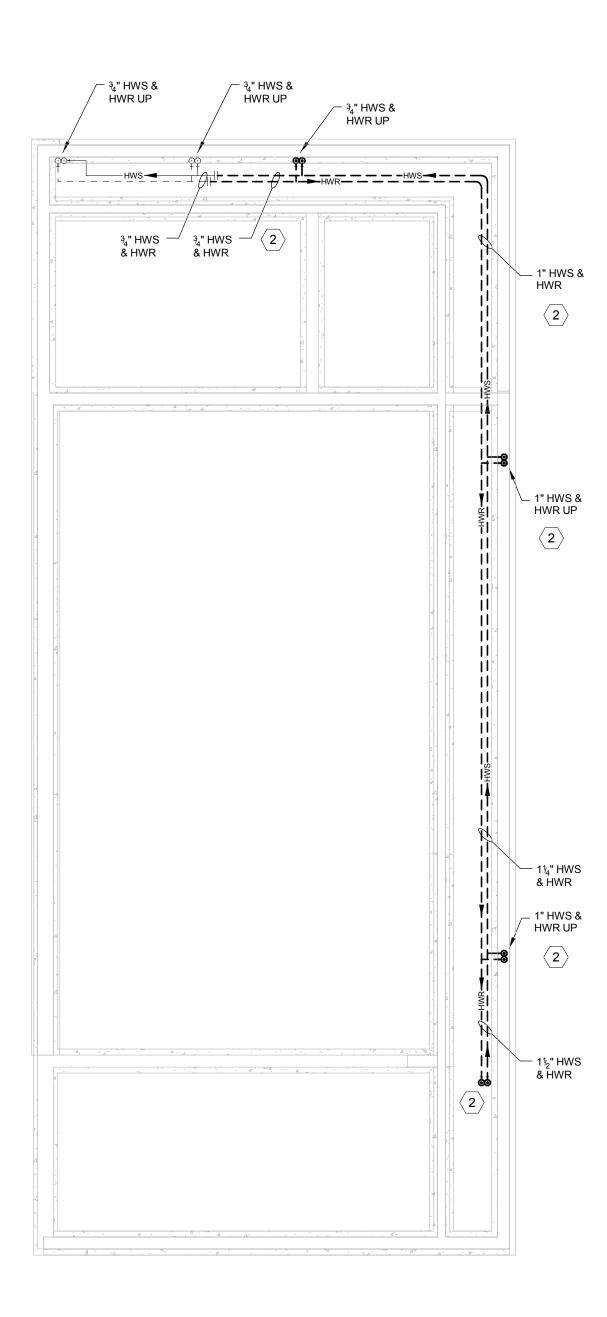


NORTH T FOUNDATION PLAN S110R 1/8" = 1'-0"

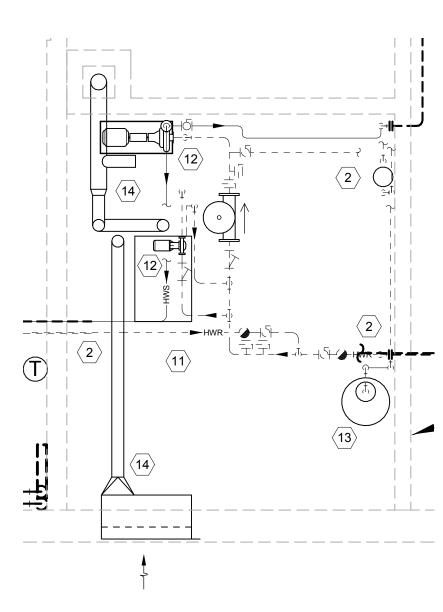
> 1. SEE S000 SERIES SHEETS FOR GENERAL STRUCTURAL NOTES, TYPICAL DETAILS, NOTES & SCHEDULES.

INFORMATION ON THIS PLAN REGARDING EXISTING STRUCTURE WAS TAKEN FROM EXISTING CONSTRUCTION DOCUMENTS. ACTUAL FIELD CONDITION MAY VARY FROM WHAT IS SHOWN. ALL DIMENSIONS, ELEVATIONS AND CONDITIONS OF EXISTING STRUCTURE TO BE FIELD VERIFIED PRIOR TO FABRICATION.

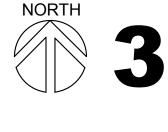




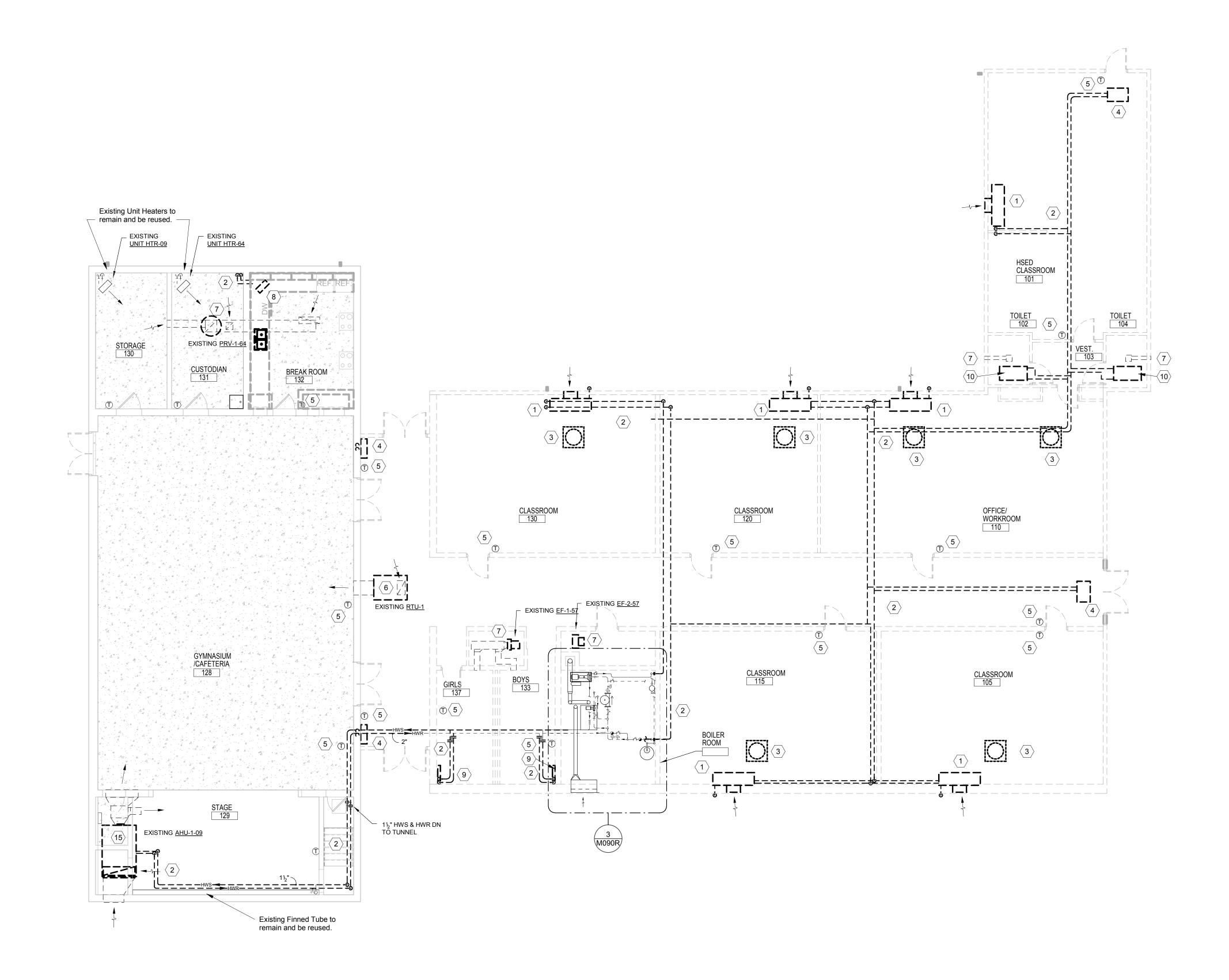








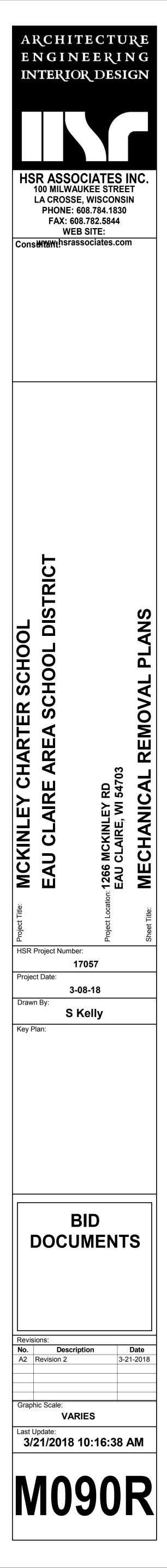
ENLARGED BOILER ROOM REMOVAL PLAN

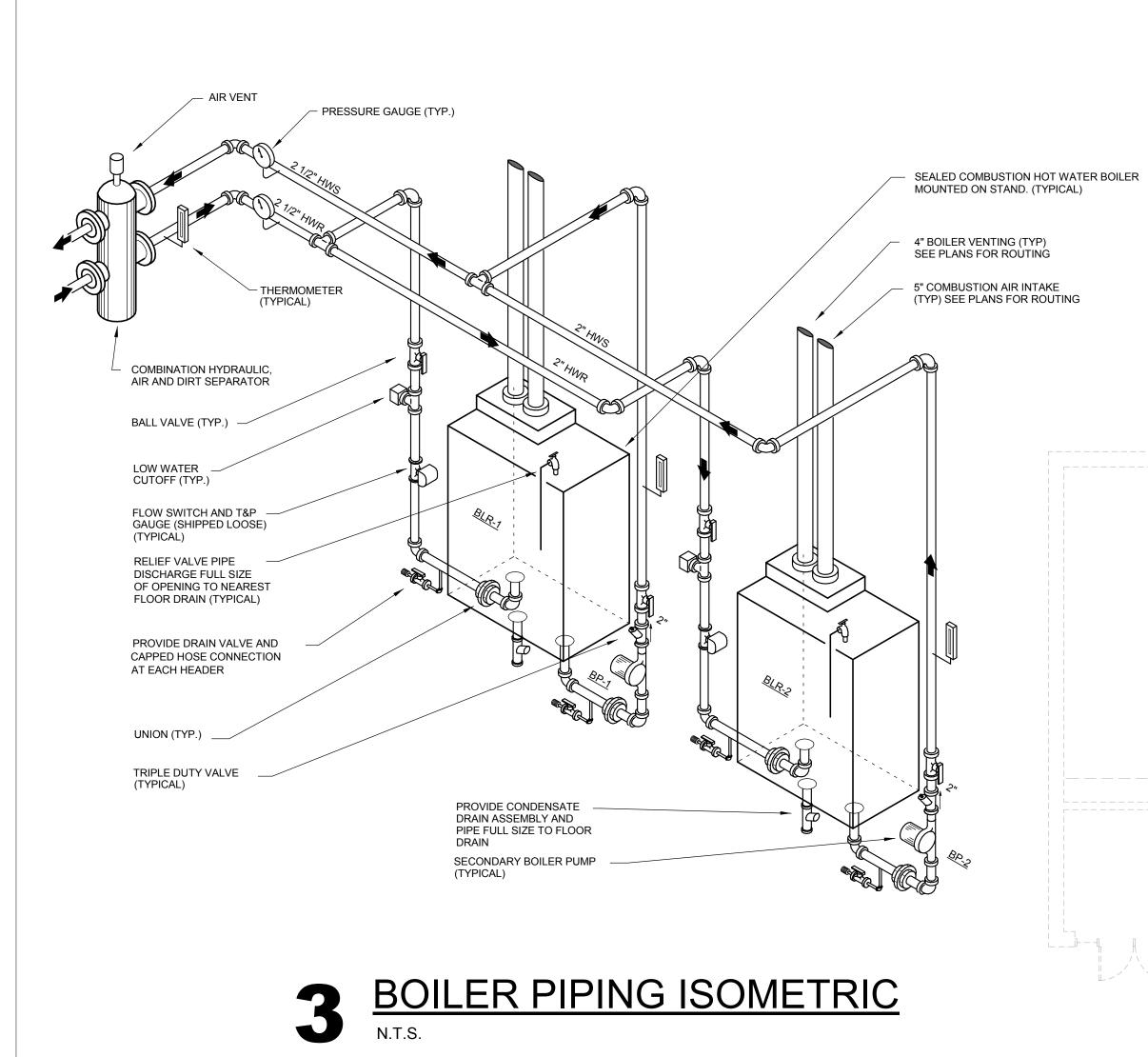


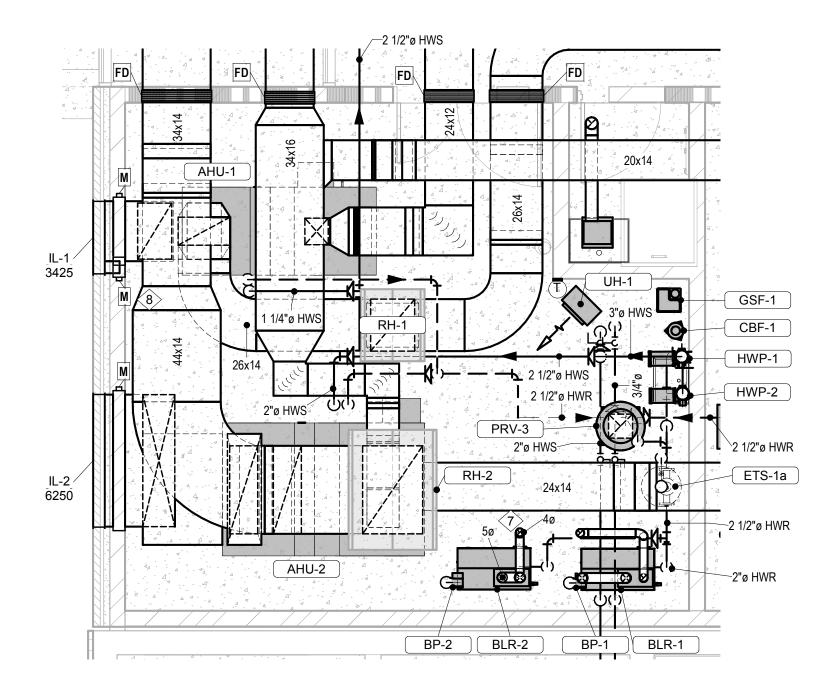


MECHANICAL REMOVAL PLAN

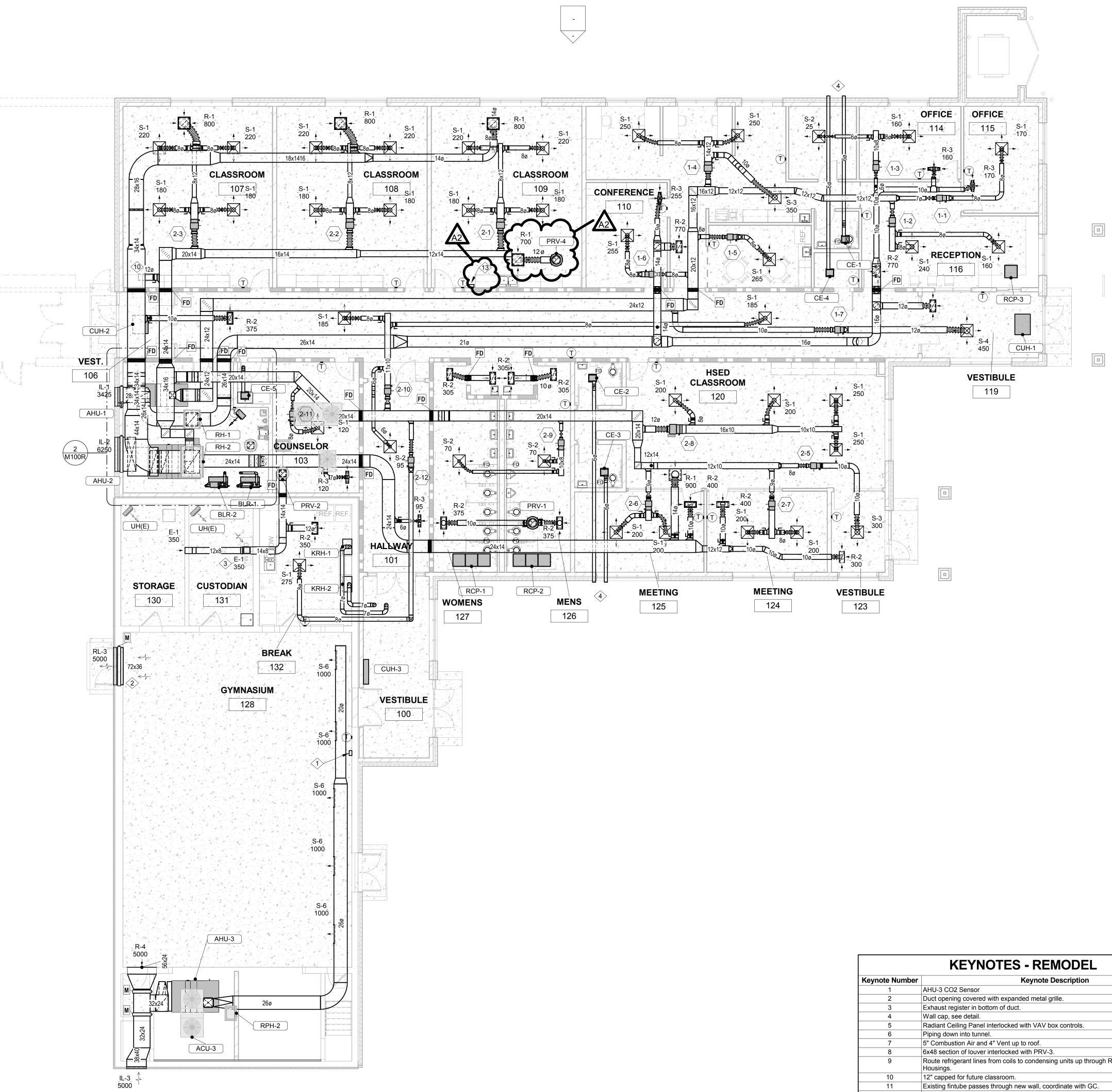
	KEYNOTES - REMOVAL
Keynete Number	Keynote Description
	Remove and dipose of Classroom UV.
2	Heating Water piping to be removed and disposed of.
3	Remove condensing unit located on roof and turn over to Owner.
4	Remove and dispose of cabinet heater.
5	Remove and dispose of thermostat.
6	Remove and dispose of Rooftop Unit.
7	Remove and dispose off exhaust fan and associated ductwork.
8	Remove and dispose of Unit Heater.
9	Remove and dispose of Convector.
4	Remove and dispose off Ceiling Radiant Panel.
11	Remove and dispose of Boiler.
12	Remove Pumps and turn over to Owner.
13	Expansion Tank to be removed and turned over to Owner.
14	Flue and combustion air to be removed and disposed of.
15	Remove Air Handling Unit and turn over to Owner







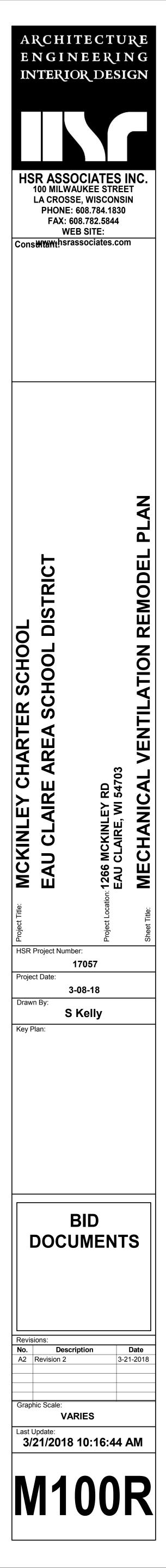






	KEYNOTES - REMODEL										
Keynote Number	Keynote Description										
1	AHU-3 CO2 Sensor										
2	Duct opening covered with expanded metal grille.										
3	Exhaust register in bottom of duct.										
4	Wall cap, see detail.										
5	Radiant Ceiling Panel interlocked with VAV box controls.										
6	Piping down into tunnel.										
7	5" Combustion Air and 4" Vent up to roof.										
8	6x48 section of louver interlocked with PRV-3.										
9	Route refrigerant lines from coils to condensing units up through Roof Penetration Housings.										
10	12" capped for future classroom.										
11	Existing fintube passes through new wall, coordinate with GC.										
12	Extend coil condensate drain to outside.										
13	PRV-4 speed control switch.										

MECHANICAL VENTILATION REMODEL PLAN 1/8" = 1'-0"



					EXF	PAN	SION		NK	SYSI	FEN	IS (2	2321	17)			
		APPROX.	SYS	STEM	PS	IG	MAX. P	RESS.	MIN	I. VOL.		AIR S	EPARAT	OR	PIF	PE SIZE	
		SYS. VOL.	TE	MP.	INITAL	SYS.	RELIEF	TANK	TANK	ACCEPT				BUILT-IN	то	GLYCOL	
MARK	SYSTEM	GAL.	MIN.	MAX.	TANK	FILL	VALVE		GAL.	GAL.	SIZE	GPM	Cv	STRAINER	TANK	FILL	REMARKS
ETS-1	Heating	300	60	140	15.5	12	30	33.5	29.8	12	3"	90		YES	1"	3/4"	1
Based or	n products by B	ELL & GOSSI	ETT an	d CALE	FFI												#N/A
Equal tar	nks by WESSEI	_S, ARMSTRO	ONG, T	ACO or	AMTROL	are acce	eptable.										3/2/2018 7:43
Equal air	separators by ⁻	TACO, ARMS	TRON	G, WES	SELS or S	Spirove	ENT are acc	ceptable.									
1 Pladd	or Typo Eypope	tion Tank D&	mode	J # D 10		uk ta inalı	Ido: oborai		and drain		ronlago	abla blac	Idor				

Bladder Type Expansion Tank B&G model # B-130LA. Tank to include: charging valve and drain. ASME with replaceable bladder. Caleffi 549 HydroCAL combination hydraulic, air and dirt separator. Automatic air release valve, drain valve and insulation.

			CIRC	GPM @		MAX		ELEC	TRICAL	OPTIONS/		
MARK	MODEL No.	SYSTEM	FLUID	FREE FLOW	50 PSI	TEMP	TANK SIZE	WATTS	VOLT/PH	ACCESSORIES	REMARKS	
GFS-1	MF300	Heating Water	30% P.G.	0.7			17 Gallon	50	115/1	1 thru 6	A, B	
Based on p	products by AXIOM.										#1	
Equal prod	lucts by Wessels, J.L.	Wingert and Neptun	e are accep	otable.							2/28/2018 12	
OPTIONS/	ACCESSORIES:					REMARKS :						
1. Pump s	uction hose with strain	er.				A. High impact polystyrene mixing and storage tank and lid.						
2. Pressur	re pump with thermal c	ut-out.				B. 3-prong plug and cord.						
3. Integral	pressure switch and c	heck valve.										
4. Adjusta	be pressure regulating	valve.										
		with CDDM diamhra	am									
5. Pre-cha	arged accumulator tank	. With EPDIVI diaphra	igini									

					H\	/AC	PU	MPS	5 (23	3212	23)						
				CIRCULATING FLUID			ID	MAX.		%	IMP.	MOTOR					
MARK	MODEL No.	SYSTEM	TYPE	FLUID	GPM	FT HD	сР	HD. **	NPSH	EFF	DIA.	BHP	HP	RPM	VOLT/PH	ACCESS.	REMARKS
HWP-1	B&G E-90	Heating	Inline	30% PG	90	45		49	8.22	71.2	6 3/4		3	1725	208/3	1, 2	A, B, C
& 2	2AB	Water														3, 4	
BP-1	B&G PL-130	Boiler	Perm. Lub.	30% PG	31	15							1/6	3200	115/1		Α
& 2		Circ	Circ														
Based on	n products by BELL & C	SOSSETT.						** Maxin	num head	d in feet	@ shutof	f.					#N/
Equal pro	oducts by GRUNDFOS	, ARMSTRON	IG and TACO	are accept	able.												3/15/2018 16:1
ACCESS	ORIES:						REMAR	KS:									
1. Differe	ana-Pressue Gauge.	\sim)					A. Moto	or selected	d as non-	overload	ing.						
2. Balan	ce for Variable Freque	ncy Drive.	3				B. Stan	dby (alter	nating) op	peration.							
3. Provid	té non-s'ann check van	e and iscretio	n valves.				C. VFD	control p	ressure,	PSI							
4. Ventu	ri with measurement po	orts.															

FANS - CABINET/CEILING EXHAUST (233416)

 MANUFACTURER'S
 SERVING/
 TOT.
 CONTROL/
 FAN
 ELECT.
 ACCESSORIES/

 MARK
 MODEL NO.
 LOCATION
 CFM
 S.P.
 TYPE
 SONES
 INTERLOCK
 RPM
 DRIVE
 WATTS
 VOLT/PH
 OPTIONS
 REMARKS

CE-1 SP-B110 Toilet 117 95 0.25 Ceiling 2 AHU-1 950 Direct 80.2 115/1 1,2,4 SP-B110 0.25 AHU-2 115/1 1,2,4 Toilet 12⁻ Ceiling 80.2 SP-B110 AHU-2 1,2,4 0.25 Ceiling 80.2 115/1 Toilet 122 Direct SP-B150 1,2,4 IT 118 Ceiling 0.25 Reverse T-stat SP-B110 Jan 104 0.25 Ceiling AHU-2 950 Direct 80.2 115/1 1,2,5 Based on products by GREENHECK Equal products by Penn and Cook are acceptable. **REMARKS:** 3/2/18 7:4

ACCESSORIES/OPTIONS:

. Integral Plug-In Disconnect & Backdraft Damper. 2. Rubber Isolators.

3. Control Switch

<u>A1</u>

4. Wall Cap. 5. Roof Jack.

FANS - POWER ROOF VENTILATORS (233423) MANUFACTURER'S SERVING/ CFM TOT. OPENING FAN ELECT. ACCESSORIES/ MODEL NO. LOCATION S.P. TYPE SIZE RPM DIA. DRIVE H.P. VOLT/PH OPTIONS REMARKS MARK G-103-VG Tlt 126 & 127 50 0.375 Cent. Roof 14.5" Sq Variable VG-1/4 А Direct .2.3.4 A2 130, 131, 132 1050 0.375 Cent. Roof 14.5" Sq Variable 12" Direct VG-1/4 G-123-VG 1,2,3,4 В 115/1 Mech/Elect 105 850 0.25 Cent. Roof 14.5" Sq Variable 10" Direct VG-1/4 115/1 G-103-VG 1,2,3,4 PRV-4 G-103-VG Cla based on products by GREENHECK. Classroom 109 700 0.375 Cent. Roof 14.5" Sq Variable 10" Direct VG-1/4 115/1 D 1,2,4,5 Equal products by Penn and Cook are acceptable. **REMARKS**: 3/21/18 9:30 ACCESSORIES/OPTIONS: A. Fan speed 1189 RPM, Interlock with AHU-2. Aproximately 55 lbs. 1. Roof curb. B. Fan speed 1108 RPM, Interlock with existing AHU-3. Approximately 60 lbs. 2. Disconnect switch. C. Fan speed 1190 RPM Interlock with reverse acting thermostat and MOD in IL-2. Aproximately 55 lbs. D. Fan speed 1148 RPM, Controlled with a variable speed wall switch. Aproximately 55 lbs. B. Vari-Green speed control for balancing. . Gravity backdraft damper. 5. Variable speed wall switch. VAV AIR TERMINAL UNITS (233600) COIL DATA (based on PLAN CFM) MARK TERMINAL UNIT PIPING ACCESS./ AREA PLAN DUCT
 PLAN
 DUCT
 TERMINAL UNIT
 COLL DATA (based on PLAN CFM)
 PIPING
 ACCESS./

 CFM
 RUNOUT
 INLET
 INLET
 COOLING CFM*
 MAX.
 MBH
 ROWS
 30% PG / WATER
 E.A.T.
 L.A.T.
 RUNOUT
 CONTROL
 REMARKS

 SIZE
 SIZE
 S.P.
 MAX
 MIN
 PD"**
 FPI
 GPM
 PD'
 E.W.T.
 REQ.
 SIZE
 VALVE
VAV-SERVED 0.25 185 70 0.05 9.1 2-10 3 1.04 160 60 Office 115 8 8 0.31 440 160 0.11 10.7 1-12 1 0.89 160 60 85 Reception 116 1/2" 2-Way 1. A 400 Office 114
 6
 5
 0.26
 205
 75
 0.06
 10.3
 2-10
 3
 1.04
 160
 60
 112
 3/4" 3-Wav 1. A 850 10 10 0.45 935 340 0.25 22.6 2-10 2 0.52 160 60 85 3/4" 1-4 Open Area 112 2-Wav 1. A Break Room 111 265 8 6 0.24 290 105 0.04 6.5 1-10 1 0.64 160 1, A 8 6 0.24 280 100 0.04 6.4 1-10 1 0.64 160 60 83 Conference 110 255 1/2" 1, A 2-Wav 10 8 0.55 495 180 0.35 24.0 3-10 3 1.52 160 Vestibule 119 450 60 109 3/4" 2-Wav 1, A Classroom 109 0.43 320 0.23 23.2 2-10 2 0.52 2-Way Classroom 108 0.43 880 320 0.23 23.2 2-10 0.52 Classroom 107 0.57 880 320 0.37 27.0 2-12 2 0.64 800 uture Classroom 0.61 935 340 0.41 29.0 2-12 2.3 0.85 160 120 0.22 16.6 2-12 3.1 Vestible 123 0.42 330 1.54 8 0.33 440 160 0.13 11.9 2-10 1 0.33 160 Meeting 124 60 88 1. B 400 9 8 0.33 440 160 0.13 12.2 2-10 1 0.33 160 Meeting 125 1, B 400 60 88 2-Wav 12 12 0.36 990 360 0.16 25.6 2-10 2 0.58 160 60 86 3/4" -8 HSED Class 120 900 2-Way 1, B 0.17 160 Mens & Womens 0.27 0.07 8.8 2-12 140 60 | 118 1, B,D
 Hallway 101 & 102
 465
 10
 9
 0.35
 510
 185
 0.15
 21.6
 2-12
 2
 0.64
 160
 60
 103
 3/4" 2-Way 1, B
 6
 4
 0.23
 130
 50
 0.03
 6.6
 2-10
 1
 0.23
 160
 60
 111
 1/2" Counselor 103 120 2-Way 1. B Break Room 132 275 8 6 0.25 305 110 0.05 6.8 1-10 1 0.64 160 60 83 1/2" 2-Way 1. B AHU-1 System Totals = 2575 0.55 2830 1030 302.1 34.4 1.54 AHU-2 System Totals = 6250 0.61 6875 2500 MAX. 17.6 deg. Aver. delta T. 3/15/18 16:03 Based on TITUS Model DESV CCESSORIES: **REMARKS**: * 110% Max. and 40% Min.of plan CFM = cooling CFM. A. Served by AHU-1 Access panel in bottom or side of box. ** Press. Diff. Between inlet and discharge including coil. B. Served by AHU-2 *** Use PLAN CFM for heating CFM. C. Future D. Axillary Heat in zone. mannen

						ROC)F H		S (2:	3372	3)				
	MANUFACTURER'S		THR	OAT		HOOD				VELOCI	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 - Gavity	AHU-1	22	26	32	36	4.03	RELIEF	2575	639	648	0.06	Aluminum	2, 3, 4, 5	A, B
RH-2	Fabra Hood - Gavity	AHU-2	30	44	44	60	9.17	RELIEF	6250	682	682	0.06	Aluminum	2, 3, 4, 5	A, C
Based on	products by GREENHE	CK.													#N/#
Equal pro	ducts by Penn and Ces	co are accept	able.												3/6/18 7:39
ACCESS	ORIES/OPTIONS:											REMARK	S:		
1. Insect	Screen.											A. Ducted	d.		
2. Bird S	creen and 0.5" internal i	nsulation.										B. Approx	ximately 105 lbs.		
3. 12" Ro	oof Curb.											C. Approx	ximately 155 lbs.		
4. Motori	ized damper in throat.														
5. 5" bas															

	MANUFACTURER'S		DIMENS	SIONS IN	INCHES	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 & PRV-3	36	48	6	6.91	Intake	3425	0.04	Aluminum	1, 3, 4, 5	A, B
IL-2	ESD-635	AHU-2	66	48	6	12.84	Intake	6250	0.04	Aluminum	1, 3, 4, 5	A
IL-3	ESD-435	AHU-3	38	40	4	5.60	Intake	5000	0.04	Aluminum	1, 3, 4, 5	A
RL-3	ESD-635	AHU-3	72	36	6	10.14	Relief	5000	0.03	Aluminum	1, 3, 4, 5	A
Based or	n products by GREENHEC	K.										#N
Equal pro	oducts by American Warnir	ng and Ventilating, A	Arrow and C	Cesco are	acceptable	Э.						3/2/18 7:
ACCESS	SORIES/OPTIONS:							REMARKS	S:			
1. Bird S	Screen							A. Color se	elected by o	owner.		
2. Flang	e Frame							B. 30x48	serves AHl	J-1, 6x48 serves	PRV-3.	
3. Chan	nel Frame											
4. Baked	d enamel finish											

MARK	MANUFACTURER'S	CFM	SONES	TYPE	LOCATION	DIST. ABOVE		DIME	NSIONS		ACCESSORIES/	REMARKS
	MODEL NO.					SURFACE	LEN.	HGT.	DEPTH	EXHAUST	OPTIONS	
KRH-1	Broan EVOLUTION QP130SS	110 / 300	0.8 / 5	Under Cab.	Break Room 132		30"	6-3/4"	20-1/8"	7" Dia.	1 thru 5	А
KRH-2	Broan EVOLUTION QP130SS	110 / 300	0.8 / 5	Under Cab.	Break Room 132		30"	6-3/4"	20-1/8"	7" Dia.	1 thru 5	А
lased o	n products by BROAN.											2/28/18 1

3. Aluminum mirco-mesh filters filters.

. Two speed fan.

BOILERS - HIGH FEFICIENCY (235233)

											JZJJ	')			1
	MANUFACTURER	TOTA	AL MBH	М	INIMUM	%	PIPE CO	NN. SIZE	VEN	T SIZE	GAS PR	ESSURE		ACCESS./	
MARK	MODEL NO.	INPUT	OUTPUT	GPM *	RET. TEMP.	EFF	SUP.	RET.	Intake	Exhaust	Min.	Max.	TYPE	OPTIONS	REMARKS
BLR-1	CM-500	500.0	460.0	31		92	1-1/2"	1-1/2"	5"	4"	6"	14"	Aluminum	1,2,3	A,B,C
BLR-2	CM-500	500.0	460.0	31		92	1-1/2"	1-1/2"	5"	4"	6"	14"	Aluminum	1,2,3	A,B,C
Based or	n products by PK MACI	۲.		* at 30 d	elta T.										#N/A
Equal pro	oducts by other manufa	cturers are	e acceptable												2/28/18 12:56
ACCESS	SORIES/OPTIONS:				REMARKS:										
1. ASME	Boiler Certification				A. Burner gas	s train a	and control	wiring shall	be the resp	onsibility of t	he Mechani	cal Cont'r.			
2. Flow S	Switch				B. 120/1, 15 a	amp ele	ectrical pow	er required							

. Temperature/Pressure gauge.

C. Operating weight 313 Lbs, 1.58 gallon water content.

		SERVING	TOTAL	MAX.	0.A.T.	STEPS/	NO.	REFRIG	MIN.		ELECT	Г.	ACCESSORIES/	
MARK	MODEL No.	SYSTEM	MBH *	SST	TEMP.	SPEEDS	COMP	TYPE	EER	KW	MCA	VOLT/PH	OPTIONS	REMARKS
ACU-1	TTA-073	AHU-1	77	45	95	2	2	R-410a	12.5		24	208/3	1 thru 8	A, B, C, F
ACU-2	TTA-240	AHU-2	256	45	95	2	2	R-410a	12.1		98	208/3	1 thru 8	A, B, D, F
ACU-3	TTA-240	AHU-3	256	42	95	2	2	R-410a	12.1		98	208/3	1 thru 8	A, B, E, G
	oducts by TRANE. cts by Aaon, Daikin and C	Carrier are accepta	* AT 95 deg ble.	. F O.A.T.	1	1			<u> </u>					3/15/2018 1
	S/OPTIONS:					REMARK	S:			_		1		
ACCESSOR														
(not used)						. I wo re	rigo ant o	equipment	$\mathbf{\gamma}$	Y				

6. Refrigerant service valves, high and low pressure switches.

. Condenser coil hail guard.

8. Separate insulated compressor compartment.

A1

F. Route refrigerant circuit piping up through roof through RPH-1. G. Route refrigerant circuit piping up through roof through RPH-2.

B. Vertical Unit, fan discharge - Top Back, 35 MCA, Fuse size 60 A.

C. Vertical Unit, fan discharge - Top Back, 28 MCA, Fuse size 50 A.

	MANUFACTURER'S	SERVING/		EXT	%		F	AN		CO	ILS	N	IOTOR	ACCESSORIES/	
MARK	MODEL NO.	LOCATION	CFM	S.P.	O.A.	RPM	SIZE	TYPE	DRIVE	HEAT	COOL	HP	VOLT/PH	OPTIONS	REMARKS
AHU-1	CSAA-06	Office Area	2575	2	14	1761	10"	FC	Belt	HC-1	DX-1	3	208/3	1, 2, 3, 4, 5	A
AHU-2	CSAA-12	Classrooms	6250	2	28	2399	15"	AF	Belt	HC-2	DX-2	7 1/2	208/3	1, 2, 3, 4, 5	В
AHU-3	CSAA-10	Gym	5000	1.5	46	1362	15"	FC	Belt	HC-3	DX-3	7 1/2	208/3	1, 2, 3, 5	С
Based or	n products by TRANE.														 #N/
Equal pr	oducts from other manu	facturers are acce	eptable.												3/5/2018 7:4
· ·	SORIES/OPTIONS							REMAR	KS:						
1 Anale	d filter section with 2" plea	ated 35% filters.						A. Verti	cal Unit, fa	n discharge	- Top Back	. 19.0 N	ICA, Fuse siz	ze 30 A.	

2. Mixing box section, opposed blade dampers less actuator.

3. Coil and access section. 1. VAV fan with VFD shipped loose for field mounting.

5. Disconnect.

AHU DX COOLING COILS (237500) AIR COND. MAX. MAX. EAT LAT MBH CAPACITY REFRIGERANT COIL ACCESSORIES MARK COIL SIZE UNIT UNIT CFM PD " FV DB WB TOTAL SENS. TYPE SST LIQ. T TYPE FPF ROWS REMARKS ACCESSORIES AHU-1 ACU-1 2575 0.412 426 77.0 64.7 56.2 54.9 76.2 58.68 R-410a 45 115 3F 113 4 26" x 34" DX-2 32" x 55" AHU-2 ACU-2 6250 0.488 516 78.9 66.4 56.5 54.8 223.3 153.57 R-410a 45 115 3F 99 4 28" x 50" AHU-3 ACU-3 5000 0.648 514 79.3 66.7 53.8 52.8 210.7 140.06 R-410a 45 115 3F 88 6 DX-3 Based on products by TRANE. Equal products from other manufacturers are acceptable. Entering Air Temps. 2/28/18 12:56 ACCESSORIES/OPTIONS: REMARKS: are based on DB WB Α. RAT 75 63 OAT 89 75

				AHU	WA	TEF	R HE		NG (COIL	_ S ()	2375	500)				
				MAX.	MAX.	EAT	LAT	TOT.		30% PG	/ WATE	R		COIL		ACCESSORIES/	
MARK	COIL SIZE	UNIT	CFM	PD "	FV			МВН	GPM	ENT	LVG	PD. FT	TYPE	FPF	ROWS	OPTIONS	REMARKS
HC-1	24" x 32"	AHU-1	2,575	0.128	483	57.5	91.1	93.7	9.9	160	140	0.93	5W	146	1		
HC-2	30" x 55"	AHU-2	6,250	0.179	508	44.8	91.9	319.5	33.7	160	140	1.63	UW	111	2		
HC-3	27" x 49"	AHU-3	5,000	0.33	544	32.1	94	335.7	25.36	160	132	0.75	W	144	3		
Based on	n products by TRA	NE.							·			-					#N/A
Products	by other manufac	tures are acc	eptable.											Enteri			2/28/18 12:57
ACCESS	ORIES/OPTIONS:						REMAR	KS:						are			
1.							Α.							DB	WB		
2.							В.						RAT	70	56		
3.							C.						OAT	-20	-19		

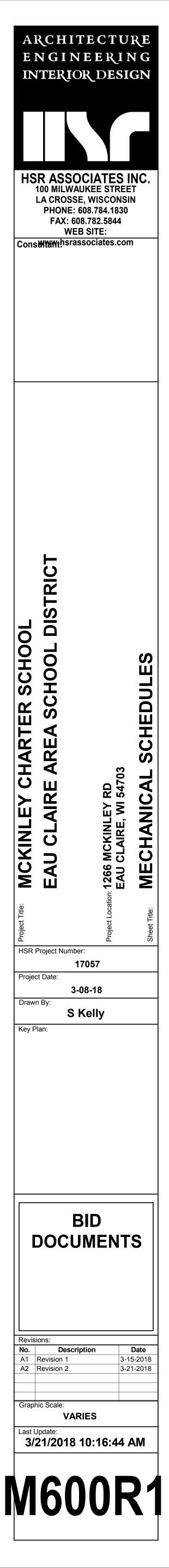
		F	RADIAN	JT CFI	IING	ΡΔΝ	FIS	5 (23	381()1)		
	MANUFACTURER'S	- 			ROOM	BTUH		· (WATEF		ACCESSORIES/	
MARK	MODEL NO.	QUANTITY	SIZE	TYPE	ТЕМР	EACH	GPM	EWT	LWT	PD. FT	OPTIONS	REMARKS
RCP-1	HPH	3	24"x24"	Tegular	70	615	0.5	160	152	0.36	1, 2, 3, 4	А, В
RCP-2	HPH	3	24"x24"	Tegular	70	615	0.5	160	152	0.36	1, 2, 3, 4	A, B
RCP-3	HPH	1	24"x24"	Tegular	70	615	0.5	160	157	0.12	1, 2, 3, 4	А, В
	products by AIRTEX.											#N
	oducts by Aero-Tech and S	Sterling are accep	table.									3/6/18 7:
ACCESS	ORIES/OPTIONS:					REMARKS	;					
1. Provid	e Isolation valves, P/T plugs	on each circuit.				A. Capacit	y based o	on perime	eter locat	ion and 15	5 deg. F mean water tem	perature.
2. Provid	e control valve and calibrate	ed balancing valve	on each circuit.			B. See pip	ing detail	on plans	5.			
3. Backs	of all panels shall be covere	ed with 1" of 3/4 lbs	density fibergla	ass insulation.								

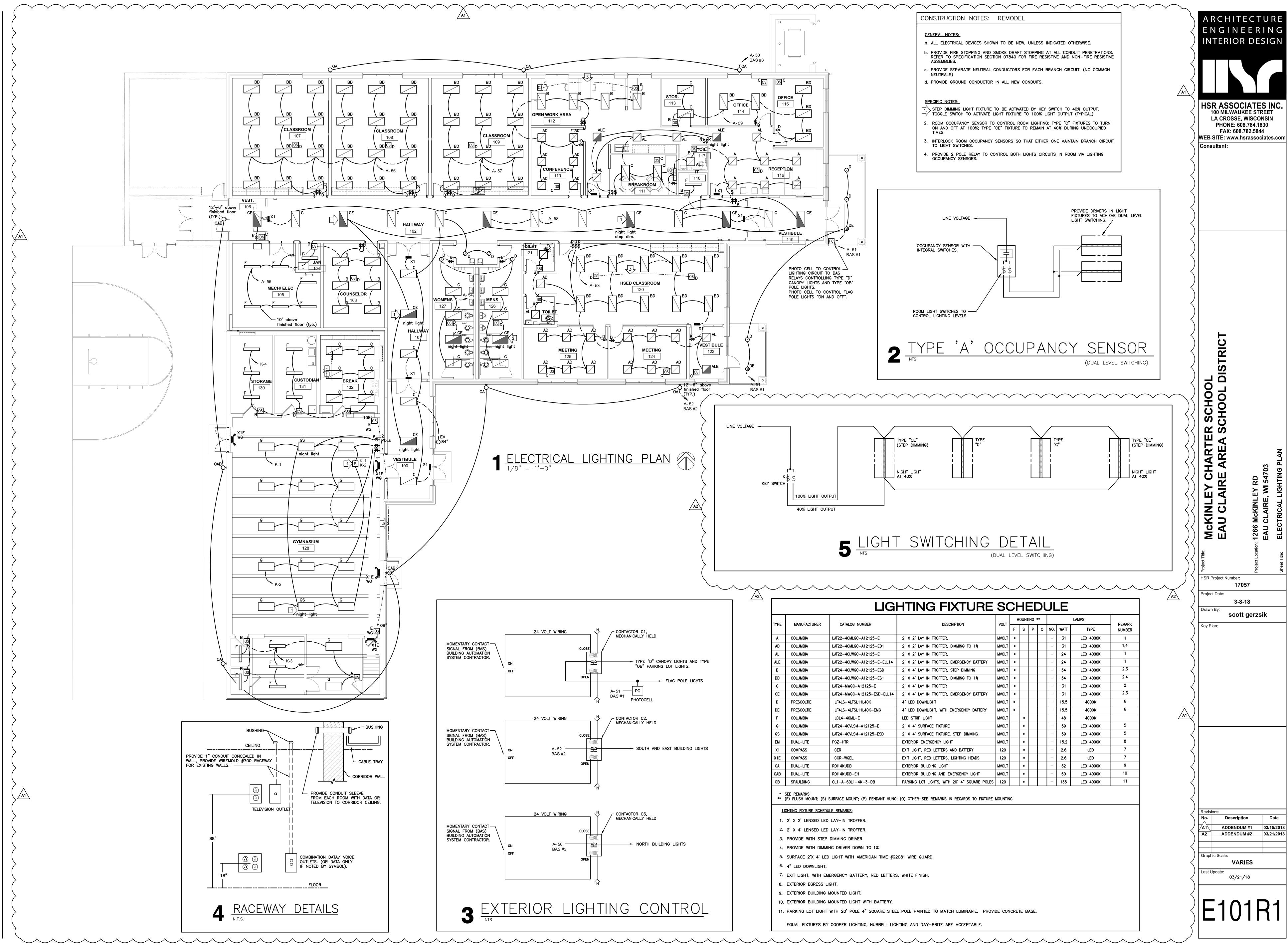
4. Silkscreen panel to match adjacent acoustic tile.

CABINET HEATER - HOT WATER (238101) HEATING COIL ELECT. ACCESSORIES/ MANUFACTURER'S CFM MBH EAT LAT EWT LWT GPM PD.FT. AMPS VOLT/PH OPTIONS REMARKS STYLE MARK MODEL NO. LOCATION FFEB-040 Vest 119 Horiz. Recessed 338 19.4 70 123 160 134 1.5 5.6 3.1 115/1 1, 3, 4, 5 A, B CUH-1 Vest 106 Horiz. Recessed 193 15.8 70 146 160 144 2 3.3 3.1 115/1 2, 3, 4, 5 A, B FFEB-030 CUH-2
 Vest 100
 Vert. Cabinet
 403
 28.8
 70
 136
 160
 146
 4
 3.2
 3.1
 115/1
 1, 3, 4, 5
 FFBB-060 A, B CUH-3 7.5 GPM Based on products by TRANE Equal products by Airtherm and Vulcan are acceptable 3/6/18 7:3 ACCESSORIES/OPTIONS REMARKS: A. Sized at high fan speed. . 3-row Hot Water coil. B. Color selected by Owner. 2. 4-row Hot Water coil. Piping Package. 4. Free Discharge ECM Motor.

		U	JNIT H		EKS) - H		VVA		K (23	001U	()			
	MANUFACTURER'S								WA	TER		E	LECT.	ACCESSORIES/	
MARK	MODEL NO.	LOCATION	TYPE	CFM	MBH	EAT	LAT	GPM	EWT	LWT	PD.FT.	Watts	VOLT/PH	OPTIONS	REMARKS
UH-1	S-A18	Mech/Elec 105	Horizontal	500	11.0	60	81	1.5	160	145	2	16	115/1		
Based on	products by TRANE.														#N//
Equal pro	ducts by Sterling and Airthe	erm are acceptable	.												3/6/18 7:3
ACCESS	ORIES/OPTIONS:							REMAR	KS:						
1.								Α.							
2.								В.							

	MANUFACTURER'S	APPL'N	SIZE (W x H)	Ν	IAXIMUN	1	Tł	HROW *				ACCESSORIES/	
MARK	MODEL NO.		DUCT	FACE	CFM	PD" *	NC*	FT **	DIRECT.	ТҮРЕ	CONSTR.	DAMPER	OPTIONS	REMARKS
S-1	PLQ	Supply	8"	24x24	280	0.07	17	6	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
S-2	PLQ	Supply	6"	24x24	170	0.06	17	4	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
S-3	PLQ	Supply	10"	24x24	420	0.1	19	8	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
S-4	PLQ	Supply	12"	24x24	550	0.12	19	10	4-Way	Arch. Ceiling Diff.	Steel	No	1	В
S-5	(not used)													
S-6	DMGDU	Supply	36x8	39x9	1020	0.084	29	32	22.5 Deg	Univ. Spiral Duct	Aluminum	Extractor	1	A, D
R-1	EGC-15	Ret/Exh	22x22	24x24	1600	0.04	21			Eggcrate	Aluminum	No	1, 3	B, C
R-2	EGC-15	R/T/E	22x10	24x12	800	0.05	22			Eggcrate	Aluminum	No	1, 3	B, C
R-3	EGC-15	Return	22x6	24x8	350	0.03	14			Eggcrate	Aluminum	No	1, 3	B, C
R-4	S80	Return	56x24	58x26	5000	0.024	24		0 deg. Def.	3/4" single deflect.	Steel	No	1	А
E-1	EGC-15	Exhaust	12x12	14x14	530	0.05	18			Eggcrate	Aluminum	Yes	1, 3	Α
ased or	n products by KRUEGE	R.			*at Maxir	num			** Distance in	FT at 100 FPM with o	direction patte	ern indicated	J.	#
Equal pro	oducts by TITUS and PI	RICE are a	cceptable.						*** Horizontal	distance/Vertical dista	ance @ 15 de	eg. Delta T.		3/21/18 9
CCESS	ORIES/OPTIONS:							REMAR	KS:					
. Stand	ard White Finish.							A. Surfa	ce Mounted.					
. Alumi	num Finish.							B. T-bar	lay-in.					
. 1/2" o	penings x 1" deep.							C. Plenu	um with bellmo	uth takeoff, see detail.				





					N	IOUNT	'ING *	*			LAMPS	
IYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	VOLT	F	s	Р	0	NO.	WATT	TYPE	- REMARK NUMBER
Α	COLUMBIA	LJT22-40MLGC-A12125-E	2' X 2' LAY IN TROFFER,	MVOLT	*				-	31	LED 4000K	1
AD	COLUMBIA	LJT22-40MLGC-A12125-ED1	2' X 2' LAY IN TROFFER, DIMMING TO 1%	MVOLT	*				-	31	LED 4000K	1,4
AL	COLUMBIA	LJT22-40LWGC-A12125-E	2' X 2' LAY IN TROFFER,	MVOLT	*				-	24	LED 4000K	1
ALE	COLUMBIA	LJT22-40LWGC-A12125-E-ELL14	2' X 2' LAY IN TROFFER, EMERGENCY BATTERY	MVOLT	*				-	24	LED 4000K	1
В	COLUMBIA	LJT24-40LWGC-A12125-ESD	2' X 4' LAY IN TROFFER, STEP DIMMING	MVOLT	*				-	34	LED 4000K	2,3
BD	COLUMBIA	LJT24-40LWGC-A12125-ES1	2' X 4' LAY IN TROFFER, DIMMING TO 1%	MVOLT	*				-	34	LED 4000K	2,4
С	COLUMBIA	LJT24-MWGC-A12125-E	2' X 4' LAY IN TROFFER	MVOLT	*				-	31	LED 4000K	2
CE	COLUMBIA	LJT24-MWGC-A12125-ESD-ELL14	2' X 4' LAY IN TROFFER, EMERGENCY BATTERY	MVOLT	*				-	31	LED 4000K	2,3
D	PRESCOLTIE	LF4LS-4LFSL11L40K	4" LED DOWNLIGHT	MVOLT	*				-	15.5	4000K	6
DE	PRESCOLTIE	LF4LS-4LFSL11L40K-EMG	4" LED DOWNLIGHT, WITH EMERGENCY BATTERY	MVOLT	*				-	15.5	4000K	6
F	COLUMBIA	LCL4-40ML-E	LED STRIP LIGHT	MVOLT		*				48	4000K	
G	COLUMBIA	LJT24-40VLSM-A12125-E	2' X 4' SURFACE FIXTURE	MVOLT		*			-	59	LED 4000K	5
GS	COLUMBIA	LJT24-40VLSM-A12125-ESD	2' X 4' SURFACE FIXTURE, STEP DIMMING	MVOLT		*			-	59	LED 4000K	5
EM	DUAL-LITE	PGZ-HTR	EXTERIOR EMERGENCY LIGHT	MVOLT		*			-	15.2	LED 4000K	8
X1	COMPASS	CER	EXIT LIGHT, RED LETTERS AND BATTERY	120		*			-	2.6	LED	7
X1E	COMPASS	CCR-WGEL	EXIT LIGHT, RED LETTERS, LIGHTING HEADS	120		*			-	2.6	LED	7
OA	DUAL-LITE	RDI14KUDB	EXTERIOR BUILDING LIGHT	MVOLT		*			-	32	LED 4000K	9
OAB	DUAL-LITE	RDI14KUDB-EH	EXTERIOR BUILDING AND EMERGENCY LIGHT	MVOLT		*			-	50	LED 4000K	10
OB	SPAULDING	CL1-A-60L1-4K-3-DB	PARKING LOT LIGHTS, WITH 20' 4" SQUARE POLES	120		*			-	135	LED 4000K	11
<u>Ll</u> 1. 2. 3. 4.	2' X 2' LENSED LEU 2' X 2' LENSED LEU 2' X 4' LENSED LEU PROVIDE WITH STEP PROVIDE WITH DIMM	ULE REMARKS: D LAY-IN TROFFER. D LAY-IN TROFFER.	(0) OTHER-SEE REMARKS IN REGARDS TO FIXTURE	MOUNTIN	NG.							
	4" LED DOWNLIGHT,											
		MERGENCY BATTERY, RED LETTERS	, WHITE FINISH.									
8	EXTERIOR EGRESS L	JGHT.										
9	EXTERIOR BUILDING	MOUNTED LIGHT.										
		MOUNTED LIGHT WITH BATTERY.										