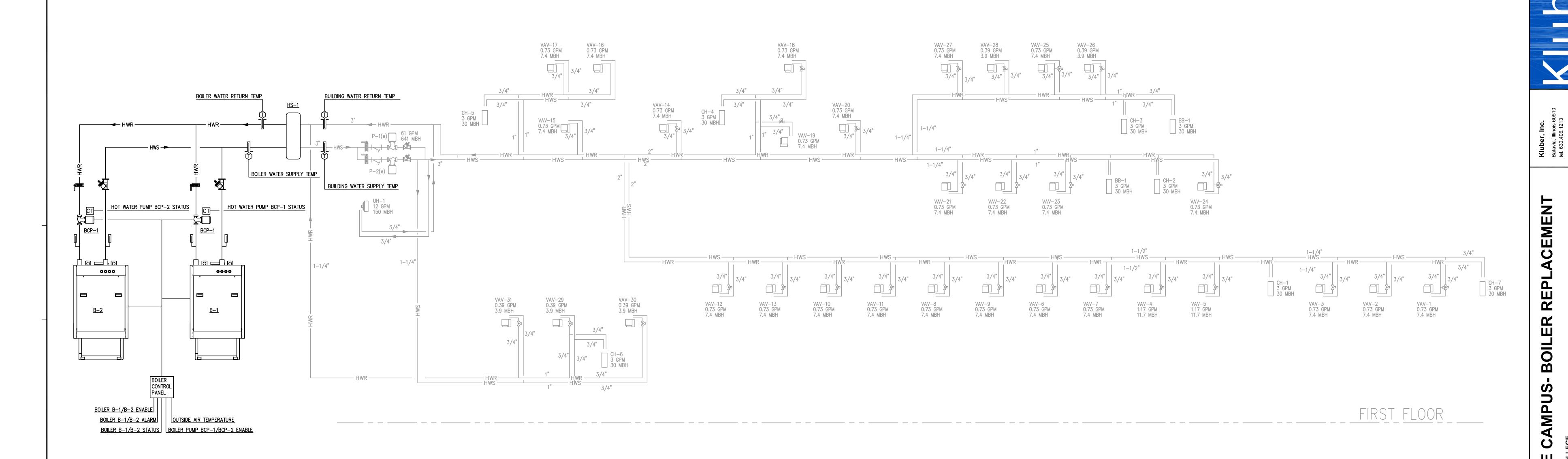
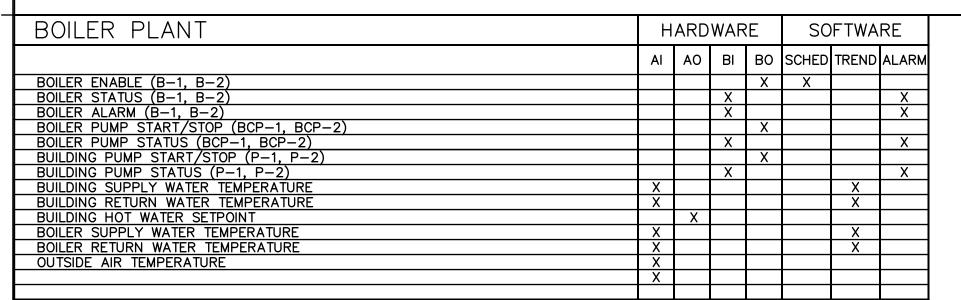
GENERAL NOTES								INDEX OF DRAWINGS		
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY 2003 IBC AND SHALL CONFORM TO ALL OTHER APPLICABLE MUNICIPAL, STATE, AND FEDERAL REGULATIONS INCLUDING THE ILLINOIS ACCESSIBILITY CODE (1997) AND THE AMERICANS WITH DISABILITIES ACT.						R 8 A12.24	DRA		G100 COVER SHEET, GENERAL NOTES, SYMBOLS, & DRAWING INDEX ME310 MECHANICAL & ELECTRICAL FLOOR PLANS	
A. GENERAL NOTES 1. ALL CONTRACTORS ARE REQUIRED TO VISIT THE SITE AND BE KNOWLEDGEABLE REGARDING EXISTING CONDITIONS AND THEIR EFFECT ON THE PROPOSED WORK. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR, ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE PROJECT. B: MISCELLANEOUS AND DEMOLITION NOTES 1. DEFINITIONS: 1.1. DEMOLISH: DISCONNECT FROM SERVICES, UNFASTEN, REMOVE, DISASSEMBLE AND LEGALLY DISPOSE OF OR RECYCLE OFF—SITE.					DRAWING NUMBE	23 A7.19	FTING	MOLIET	M410 MECHANICAL SCHEDULES AND DETAILS	
3. CONTRACTO	OWNER'S REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR ORS AND SUBCONTRACTORS SHALL COORDINATE THEIR WORK	MTH THAT OF OTHER TRADES.	1.2. <u>SALVAGE</u> : CAREFULLY, SO AS TO PRESERVE INTEGRITY AND USEFULNESS, DISCONNECT FROM SERVICES, UNFASTEN, REMOVE, DISASSEMBLE IF NECESSARY, AND STORE TEMPORARILY FOR REINCORPORATION INTO THE WORK OR FOR DELIVERY/TURN-OVER TO THE OWNER AS INDICATED IN		DETAIL NUMBE		M M	JUNIOR COLLEGE		r o h i t
COMPLETE 5. DO NOT SO	MILL BE PERMITTED TO BE INSTALLED WITHOUT RECEIPT AND S SUBMITTALS BY THE ARCHITECT/ENGINEER. CALE DRAWINGS, DIMENSIONS INDICATED TAKE PRECEDENCE OV	ER SCALE.	THE CONSTRUCTION DOCUMENTS. 1.3. SALVAGE IN PLACE: PROTECT, RE-USE, CLEAN, RE-CONDITION IF NECESSARTY, REFINISH IF INDICATED IN THE DRAWINGS, EXISTING INSTALLED ITEM/COMPONENT WITHOUT DISCONNECTING, UNFASTENING OR REMOVING FROM THE WORK.		KEYNOT	10.21	ER	1901-		31
 VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD. WHERE DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS OR ELEVATIONS SHOWN AND ACTUAL FIELD CONDITIONS, NOTIFY ARCHITECT/ENGINEER. DEFINITIONS: 1.1. <u>EURNISH</u>: SUPPLY, DELIVER TO AND UNLOAD AT PROJECT SITE READY FOR ASSEMBLY AND INCORPORATION INTO THE WORK. 1.2. <u>INSTALL</u>: AT THE PROJECT SITE, UNPACK/UNCRATE ASSEMBLE, PLACE, ANCHOR, FINISH, PROTECT, CLEAN, AND PERFORM ALL OTHER SIMILAR OPERATIONS REQUIRED TO FULLY AND PROPERLY INCORPORATE AN ITEM INTO THE WORK. LEGALLY DISPOSE OF OR RECYCLE PACKAGING AND EXTRA MATERIAL OFF—SITE. 1.3. <u>PROJECT SITE</u>: THE SPACE AVAILABLE TO THE CONTRACTOR FOR PERFORMANCE OF CONSTRUCTION ACTIVITIES. THE EXTENT OF THE PROJECT SITE IS THE AREAS TO BE REMODELED AS INDICATED ON THE DRAWINGS, AND EXTENDS TO SUCH AREAS AS CONTAIN TERMINATIONS FOR POWER, DATA AND OTHER SERVICES. 1.4. <u>OFF—SITE</u>: OUTSIDE THE PROPERTY IN WHICH THE PROJECT SITE IS LOCATED. T.5. <u>PROVIDE</u>: FURNISH AND INSTALL, AS DEFINED ABOVE. 8. WHERE CONFLICTS MAY EXIST BETWEEN THE REQUIREMENTS OF PORTIONS OF THE CONTRACT DOCUMENTS, THE GREATER QUANTITY, HIGHER QUALITY OR MORE STRINGENT REQUIREMENT SHALL GOVERN. THEREFORE, BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT, IF IT RAISED NO QUESTIONS REGARDING SUCH CONFLICTS DURING THE BIDDING PROCESS, AND IN THE ABSENCE OF A CLARIFYING ADDENDUM ISSUED DURING THE BIDDING PROCESS, IT HAS VOLUNTEERED TO COMPLY WITH THE MORE EXPENSIVE DEPOLITION TO PERSOLVE. 			COORDINATE PENETRATIONS AND MECHANICAL AND ELECTRICAL WO PLUMBING DRAWINGS.	IDENTIFICATIO		 	JOLIET JUNIOR COLLEGE - ROMEOVILLE CAMPUS BOILER REPLACEMENT		ber, Inc. ia, Illinois 605: 30.406.1213 ee, Illinois 6003 47.336.3428	
			 SEAL WITH UL APPROVED MATERIALS PENETRATIONS OF DUCTWORK, CONDUIT AND PIPES THROUGH FIRE—RATED ASSEMBLIES, TO MAINTAIN THE RATING INTEGRITY OF THOSE ASSEMBLIES. PROVIDE FIRE DAMPERS AS INDICATED ON THE DRAWINGS. SEAL WITH ACOUSTICAL SEALANT PENETRATIONS OF DUCTWORK, CONDUIT AND PIPES THROUGH NON—RATED FLOORS, FULL—HEIGHT WALLS/PARTITIONS, ACOUSTICALLY INSULATED WALLS/PARTITIONS, AND SOUND—RATED WALLS/PARTITIONS, TO MAINTAIN THE ACOUSTICAL INTEGRITY OF THOSE ASSEMBLIES. APPLY APPROPRIATE & COMPATIBLE SEALANT MATERIALS AS REQUIRED TO SEPARATE DISSIMILAR METALS, FILL GAPS IN EXISTING ASSEMBLIES OR WHERE NEW AND EXISTING ASSEMBLIES MEET OR WHERE OTHERWISE REQUIRED BY THE SPECIFICATIONS. BRING ANY UNFORESEEN OR CONFLICTING CONDITIONS TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. REPAIR, PATCH, OR REPLACE FINISH MATERIALS OR VISIBLE ASSEMBLIES THAT ARE SOILED, CUT OR DAMAGED IN ANY FASHION DURING THE COURSE OF THE WORK. PERFORM PATCHING SUCH THAT EDGES BLEND INTO CONTIGUOUS SURFACES SMOOTHLY, MATCHING TEXTURE AND COLOR OF ADJACENT SURFACES. 			RIGID		EGE		Klub Batavi tel. 63 Gurne tel. 84
						BLOCKING DISCONTINUOUS				<u> </u>
						BLOCKING CONTINUOUS		PROJECT		N N N
					ES					ACE
REQUIREMENT AS PART OF ITS BASE BID AND IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION TO RESOLVE THE CONFLICT. 9. THE CONTRACT DOCUMENTS REQUIRE THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE PRODUCTS, SYSTEMS AND SERVICES. BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT THE DRAWINGS SET FORTH THE DESIGN INTENT AND, THEREFORE, MAY NOT EXPRESSLY DEPICT EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE. THE CONTRACTOR FURTHER AGREES THAT, AS								JJC PROJECT NO. JJC-14-582		REPL
PART OF ITS BID, IT MUST FURNISH AND INSTALL EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE AND, CONSEQUENTLY, THE CONTRACTOR IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION FOR ANY LENGTH, SEGMENT, PIECE, PART COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE BECAUSE IT IS NOT EXPRESSLY DEPICTED HEREIN.				VIDE A \$5,000 ALLOWANCE IN HIS/HER BID FOR			OWNER	JOLIET JUNIOR COLLEGE		H. H.
10. ARCHITECT SHALL BE NAMED AS ADDITIONAL INSURED ON ALL REQUIRED INSURANCE POLICIES. UNFORSEEN/MISCELLANEOUS CONDITIONS. WHEN FIGURING THIS ALLOWANCE IN THE BID, CONTRACTOR IS TO INCLUDE ALL NECESSARY OVERHEAD AND PROFIT. THIS ALLOWANCE IS NOT FOR THE CONTRACTOR'S BENEFIT, AND IS ONLY AUTHORIZED TO CHARGE AGAINST THIS ALLOWANCE WHEN DIRECTED AND APPROVED BY JOLIET JUNIOR COLLEGE. THE CONTRACTOR WILL BE ALLOWED TO INVOICE FOR MATERIAL AND RAW LABOR COST ONLY.				R'S			1215 HOUBOLT ROAD JOLIET, IL 60431		BOIL	
			2. <u>CONSTRUCTION SCHEDULE:</u> START: MAY 19, 2014 COMPLETE: MAY 30, 2014							no-Sno
							ARCHITECT	/ KLUBER, INC.		SE S
STANDARD ABBREVIATIONS © - AT EXP - EXPANSION PL - PLATE							ENGINEER	10 S. SHUMWAY AVE.		LEC.
A B ABR	- ANCHOR BOLT - ABRASIVE	EXP CONST — EXPOSED (FD — FLOOR DRA FDN — FOUNDATIO	CONSTRUCTION AIN ON	PL - PLATE PL LAM - PLASTIC LAMINATE PL - PLASTER PLB'G - PLUMBING PLB'G CONTR - PLUMBING CONTRACTOR				BATAVIA, ILLINOIS 60510 TEL 630-406-1213		OVILE JUNIO
AFF AFG ACOUS ADD'N ADD'L	ABOVE FINISH GRADEACOUSTICADDITIONADDITIONAL	FHC		PLYWD - PLYWOOD PNT - PAINT PVC - POLYVINYL CHLORIDE PL-(1) - GYPSUM PLASTER (TYPE)				FAX 630-406-9472 www.kluberinc.com		JME(JOILE 1125 ROIN
ADJ ADJT AL ALT ANCH	- ACOUSTIC TILE CEILING (TYPE) - ABOVE FINISH FLOOR - ACOUSTIC - ACOUSTIC - ADDITION - ADDITIONAL - ADJACENT - ADJUSTABLE - ALUMINUM - ALTERNATE - ANCHOR - ACCESS PANEL - APPROXIMATE - ASPHALT	FRT — FIRE RETAI FUR CHN'L — FURRING C FTG — FOOTING GA — GAUGE GALV — GALVANIZE	RDANT TREATED (RATED) CHANNEL	R OR RAD — RADIUS R — RISER RD — ROOF DRAIN RO — ROUGH OPENING RF (1) — RUBBER FLOORING (TYPE)				W W W.Ridbernic.com		
	- AUTOMATIC	GEN CONTR — GENERAL (GC — GENERAL (CONTRACTOR CONTRACTOR VALL BOARD (DRYWALL)(TYPE) LASTER (TYPE)	RH — RIGHT HAND REF — REFERANCE REINF — REINFORCING REQ'D — REQUIRED						EGE
AUTO AVG BSMT BD BITUM	 AVERAGE BASEMENT BOARD BITUMINOUS/BITUMASTIC BUILDING 	GYP PL—(1) — GYPSUM PI H — HIGH HD — HEAVY DU' HD — HARD HDNR — HARDENER	TY	RM - ROOM SF - SQUARE FOOT SI - SQUARE INCH SK - SINK SS - STAINLESS STEEL SSK - SERVICE SINK						COLL
BITUM BLDG BLK'G BM B.M. BT STL PL	 BLOCKING (WOOD) BEAM BENCH MARK BENT STEEL PLATE 	HD WD-(1) - HARD WOO HDWRE - HARDWARE HGT - HEIGHT	D (TYPE)	SQ — SQUARE SCHED — SCHEDULE						OR C
BRG BRKT BRK BTM	BEARINGBRACKETBRICKBOTTOM		T AL /ENTILATING/AIR CONDITIONING	SEC - SECTION SHT - SHEET SIM - SIMILAR						
BTW'N CJ CAB CEM PL-(1) CT PAV-(1)	 BETWEEN CONSTRUCTION/CONTRACTION JOINT CABINET CEMENT PLASTER (TYPE) CERAMIC PAVER TILE (TYPE) 	IN - INCH ID - INSIDE DIA INCL - INCLUDE (I INSUL - INSULATION I JT - JOINT	METER D) N OR INSULATING	SOG - SLAB ON GRADE SPEC - SPECIFICATION(S) SPC'G - SPACING SPK'R - SPEAKER STN - STN STD - STANDARD						Ē
CIPC CLG CLR CO	 CAST- IN- PLACE CONCRETE CEILING CLEAR CLEAN OUT 	KD – KNOCK DO L – LONG LAM – LAMINATED LAV – LAVATORY		STD WGT - STANDARD WEIGHT STL - STEEL STRUCT - STRUCTURAL OR STRUCTU SUSP - SUSPEND(ED)	RE					JOL
CMU COL COMB - COMP COMPT'D	 CONCRETE MASONRY UNIT COLUMN COMBINATION COMPRESSIBLE COMPACTED 	LH — LEFT HAND LP — LOW POINT LGT WGT — LIGHTWEIGH LL — LIVE LOAD LLH — LONG LEG	- I T	SYM — SYMMETRÌCAĹ T — TREAD T&G — TONGUE AND GROOVE T/B — TOP OF BEAM T/C — TOP OF CURB						
COMPT D CONC CONC OPNG COND CONT	- COMPACTED - CONCRETE - CONCRETE OPENING - CONDITION - CONTINUOUS	LLH	VERTICAL OPENING	T/F - TOP OF CORB T/F - TOP OF CORB T/STL - TOP OF SUAB T/STL - TOP OF STEEL T/W - TOP OF WALL						
CONTR CPT-(1) CT-(1) CTR	CONTRACT (OR)CARPET (TYPE)CERAMIC TILE (TYPE)COUNTER	MAS'Y — MASONRY MAT'L — MATERIAL MAX — MAXIMUM MB—(16) — MARKERBO	ARD— (LENGTH)	TB (4) — TACKBOARD (LENGTH) TOM — TOP OF MASONRY TYP — TYPICAL UNO — UNLESS NOTED OTHERWISE				SEALS & CERTIFICATES		SUED
CTR SK CTS CUH CUV	 COUNTER SINK CENTER(S) CABINET UNIT HEATER CABINET UNIT VENTILATOR DIAMETER 	MECH — MECHANICA MECH CONTR — MECHANICA MFR — MANUFACT MIN — MINIMUM MISC — MISCELLAN	AL CONTRACTOR URER	VBC - VINYL BASE COVED VBS - VINYL BASE STRAIGHT VCT - VINYL COMPOSITION TILE VEN PL (1) - VENEER PLASTER (TYPE) VERT - VERTICAL				MECHANICAL ENGINEER'S SEAL ELECTRICAL ENGINEER'S SEAL		18 HID DO
DIA DIM DN DR DWG'S	DIMENSIONDOWNDOORDRAWINGS	MSB	ICE BASIN (SINK))	W - WIDE OR WIDTH W/O - WITHOUT WCG - WALL CORNER GUARD			I HAVE PREPARED, OR CAUS PREPARED UNDER MY D SUPERVISION, THE ATTACHE AND SPECIFICATIONS AND ST	DIRECT ED PLANS TATE THAT		02/27
DTL DWL'S EA EJ	DETAILDOWELSEACHEXPANSION JOINT	NOM	CALE	WD - WOOD WDN - WINDOW WGT - WEIGHT WP - WATER PROOF			TO THE BEST OF MY KNOWL BELIEF, AND TO THE EXTE CONTRACTURAL OBLIGATION ARE IN COMPLIANCE WITH EDITION, THE ENVIRONME	EDGE AND ENT OF MY N, THEY IBC 2003		JOB NO. 14-292-8 DRAWN JN CHECKED JN APPROVED JN
ELEC ELEC CONTR ELEV EMBED	ELEVATIONELECTRIC/ELECTRICALELECTRICAL CONTRACTORELEVATOREMBEDMENT	OC — ON CENTER OD — OUTSIDE D OF — OUTSIDE F. OPN'G — OPENING OPP — OPPOSITE	IAMETER	WWF — WELDED WIRE FABRIC WSB — WALL SERVICE BASIN THE MATERIALS, ABBREVIATIONS, AND DRAFTI			BARRIERS ACT AND THE ACCESSIBILITY CODI KLUBER, INC. ILLINOIS PROF	ILLINOIS E. FESSIONAL		SHEET TITLE COVER
EMBED EMER EP PNT EQ EW	EMERGENCYEPOXY PAINTEQUALEACH WAY	OPP HD — OPPOSITE PSF — POUNDS PI PSI — POUNDS PI PT — PRESSURE	ER SQUARE FOOT ER SQUARE INCH	SYMBOLS LEGEND ARE EACH AN ALL INCLUSI MASTER LIST USED BY THIS FIRM. THE INCLUSIOF THESE LEGENDS INTO THESE DOCUMENTS NOT IMPLY THAT ALL THE SYMBOLS OR MATERIAL SYMBOLS OF MATERIAL SYMBOLS.	SION POES RIALS		DESIGN FIRM LICENSE #184	H-001284		SHEET SHEET NUMBER
EWC EWH ER-(26) EXIST	 ELECTRIC WATER COOLER ELECTRIC WATER HEATER EXHIBIT RAIL (LENGTH) EXISTING 	PTN — PARTITION PAV'T — PAVEMENT PC — PIECE PFM — PERMANEN		INCLUDED IN THESE LEGENDS ARE INCORPORATION THIS PROJECT.				"G" SERIES "ME" SERIES "ME" SERIES		C400

GIUU

P:\879 - Joliet Junior College - Romeoville Boiler Replacement\Dwgs\DD-CD_Mech\879ME0310.dwg, 2/26/2





BOILER (B-1, B-2):

THE BOILER CONTROLLER SHALL CONTROL THE OPERATION OF THE TWO BOILERS. THE LEAD BOILER SHALL BE ENABLED WHEN THE OUTSIDE AIR TEMPERATURE FALLS BELOW 60 DEGREES F (ADJ). THE BOILER CONTROL PANEL SHALL EQUALIZE THE RUN TIME OF THE TWO BOILERS AUTOMATICALLY AT SET INTERVALS.

THE LEAD BOILER SHALL MODULATE IT'S FIRING RATE TO MAINTAIN THE HEATING WATER TEMPERATURE SETPOINT. IF THE LEAD BOILER IS NOT ABLE TO MAINTAIN SETPOINT THE LAG BOILER SHALL BE ENERGIZED.

THE HEATING WATER TEMPERATURE SHALL BE RESET BASED ON OUTDOOR AIR TEMPERATURE. THE WATER TEMPERATURE SHALL BE 180 DEGREES F WHEN THE OUTDOOR AIR TEMPERATURE IS O DEGREES F. THE WATER TEMPERATURE SHALL BE 160 DEGREES F WHEN THE OUTDOOR AIR TEMPERATURE IS 60 DEGREES F. TEMPERATURE RESET CURVES AND SETPOINTS SHALL BE ADJUSTABLE.

AN ALARM SHALL BE GENERATED IF THERE IS A BOILER ALARM OR A LOW WATER LEVEL ALARM.

COMBUSTION AIR DAMPER - THE COMBUSTION AIR DAMPER SHALL BE OPEN PRIOR TO THE BOILER BEING ENERGIZED. THE DAMPER SHALL BE PROVEN OPEN PRIOR TO THE BOILERS FIRING.

<u>PUMP (P-1(e), P-2(e))</u>

THE HEATING WATER PUMPS SHALL OPERATE IN A LEAD/LAG SEQUENCE. IF THE LEAD PUMP FAILS, THE LAG PUMP SHALL BE ENERGIZED. THE PUMPS SHALL BE ALTERNATED AS LEAD AT SET INTERVALS.

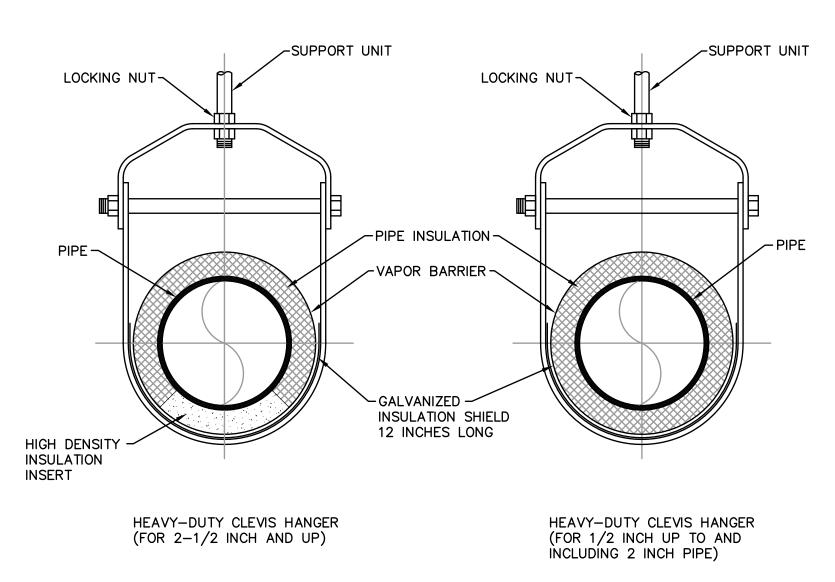
UPON A CALL FOR HEAT THE LEAD PUMP SHALL BE ENERGIZED.

AN ALARM SHALL BE GENERATED UPON A PUMP FAULT STATUS.

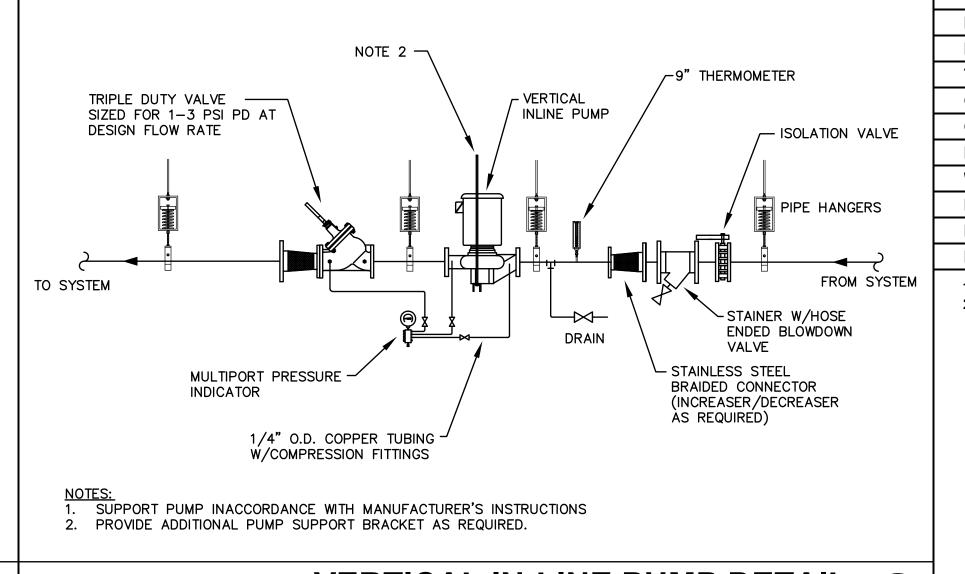
BOILER PUMP (BCP-1, BCP-2)

THE BOILER PUMPS SHALL OPERATE WHEN THE ASSOCIATED BOILER IS ENABLED. IF THE PUMP FAILS, THE LAG BOILER AND ASSOCIATED PUMP SHALL BE ENERGIZED.

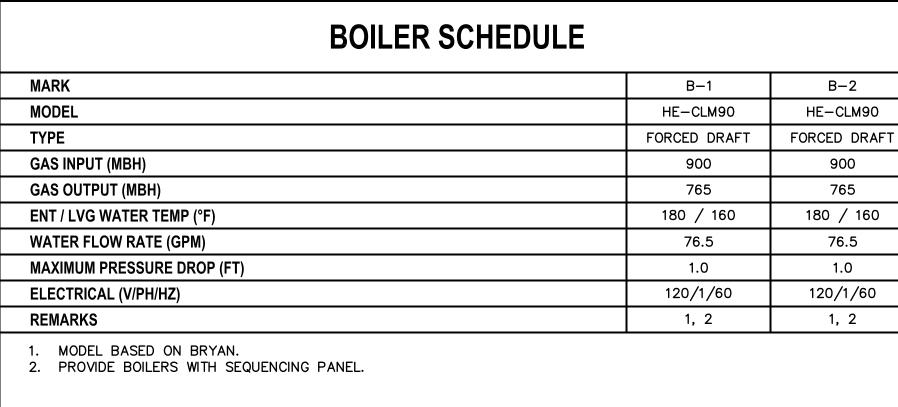
AN ALARM SHALL BE GENERATED UPON A PUMP FAULT STATUS.



PIPE HANGER DETAILS
SCALE: NTS



VERTICAL IN-LINE PUMP DETAIL (2) SCALE: NTS



HEATING SCHEMATIC DETAIL

PUMP SCHEDULE BCP-2 MODEL 4300 4300 WATER FLOW RATE (GPM) 76.5 76.5 HEAD (FT) 20 20 TYPE INLINE INLINE **MOTOR SIZE (HP)** ELECTRICAL (V/PH/HZ) 460/3/60 460/3/60 MOTOR SPEED (RPM) 1800 1800 SERVICE BOILER PUMP BOILER PUMP REMARKS

1. MODEL BASED ON ARMSTRONG.

OVIL

Z

SCALE: NTS

SHEET TITLE **MECHANICAL** SCHEDULES AND **DETAILS**

M410

SHEET NUMBER

ITEM DESCRIPTION

1 SHUT OFF VALVE

2 P/T PLUG

3 BOILER PUMP

4 UNION

5 RELIEF VALVE

6 NOT USED

7 THERMOMETER

8 TRIPLE DUTY VALVE

BOILER PIPING DETAIL SCALE: NTS