

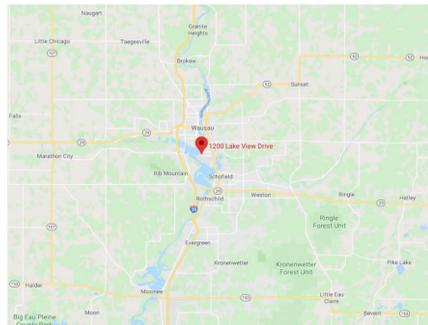
MARATHON COUNTY | LAKE VIEW PROFESSIONAL PLAZA (LVPP) FACILITY BOILER CONVERSION

BID SET - 06/23/2020

1200 LAKE VIEW DRIVE
WAUSAU, WISCONSIN 54403



VICINITY MAP



PROJECT LOCATION



PROJECT TEAM

MECHANICAL & PLUMBING DYNAMIC CONSULTING ENGINEERS LLC



7338 NORTH NAVAJO ROAD
FOX POINT, WI 53217

PROJECT CONTACT: DAVID GRASSL | PE
DIRECT PHONE: 414.731.9559
EMAIL ADDRESS: DAVID.GRASSL@DYNAMICMKE.COM

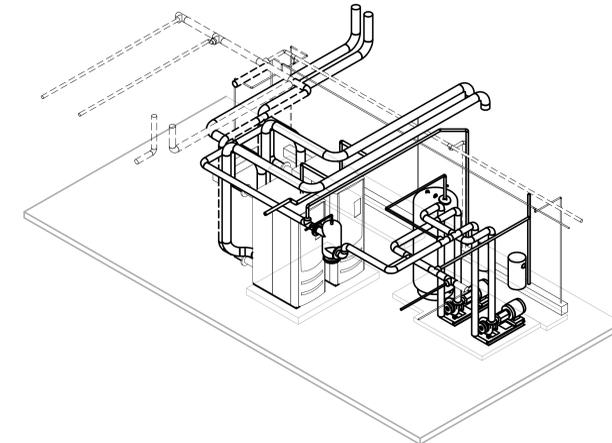
ELECTRICAL LEEDY & PETZOLD ASSOCIATES, LLC



11046 WEST BLUEMOUND ROAD
WAUWATOSA, WI 53226

PROJECT CONTACT: JIM HAUG | PE
DIRECT PHONE: 262.860.1544
EMAIL ADDRESS: JRH@LEEDYPETZOLD.COM

PROJECT MODEL OVERVIEW



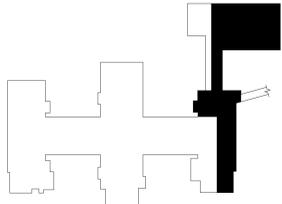
SHEET INDEX

OVERALL SHEET INDEX	
SHEET NUMBER	SHEET NAME
C0.0	COVER SHEET
M0.0	SYMBOLS & ABBREVIATIONS
MD1.0	FIRST FLOOR DEMOLITION PLANS
M1.0	FIRST FLOOR NEW WORK PLANS
M2.0	DETAILS
M3.0	SCHEDULES
PE.0	FIRST FLOOR NEW WORK PLAN
E0.0	SYMBOLS & ABBREVIATIONS
ED1.0	FIRST FLOOR DEMOLITION PLANS
E1.0	FIRST FLOOR NEW WORK PLANS

PROJECT TITLE
MARATHON COUNTY
LAKE VIEW PROFESSIONAL
PLAZA (LVPP) FACILITY
BOILER CONVERSION

1200 LAKE VIEW DRIVE
WAUSAU, WI 54403

KEYPLAN



BID SET

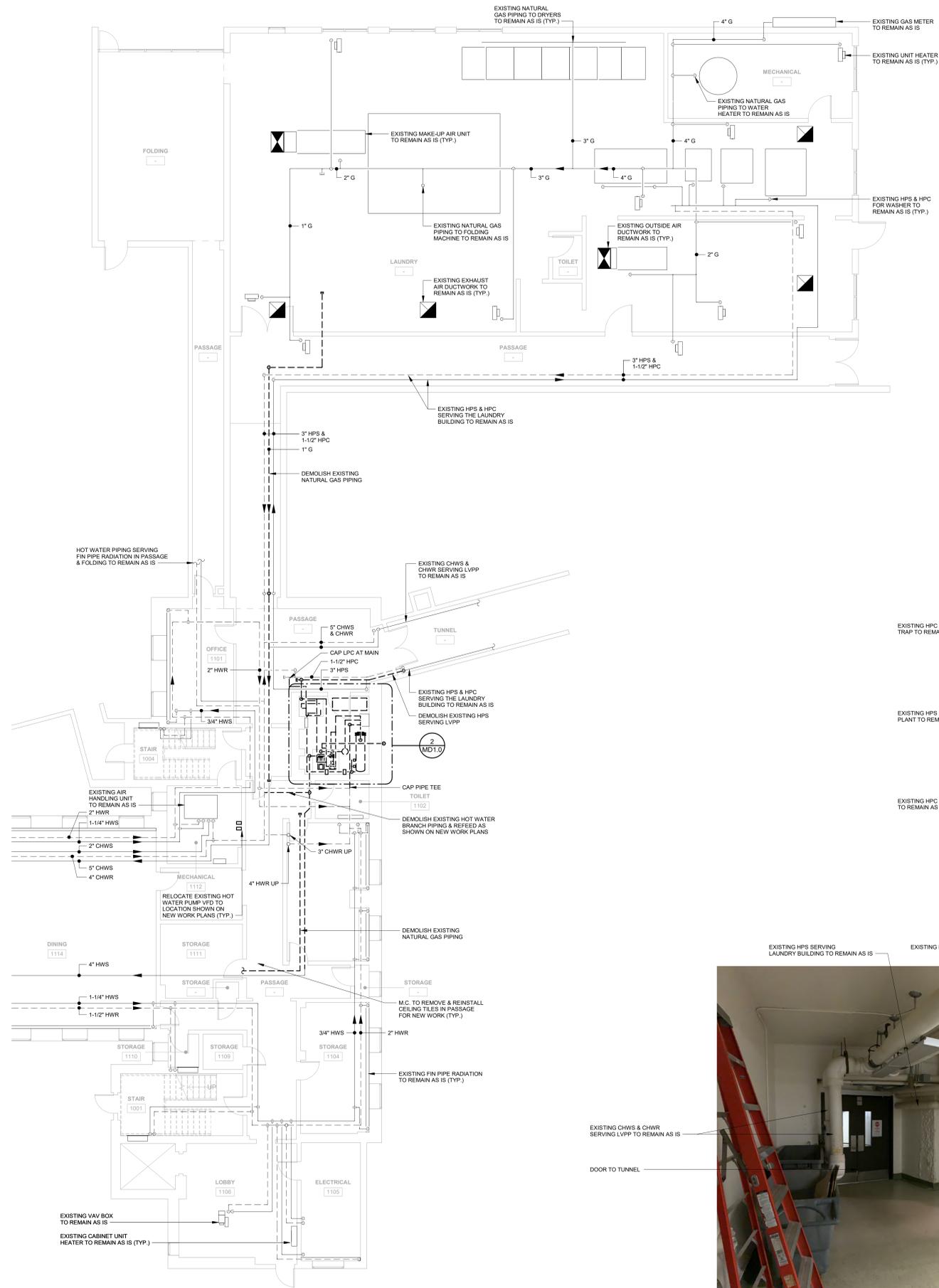
#	DATE	DESCRIPTION

DCE PROJECT NUMBER 2005
ISSUANCE DATE 06.23.2020
PROJECT MANAGER DG

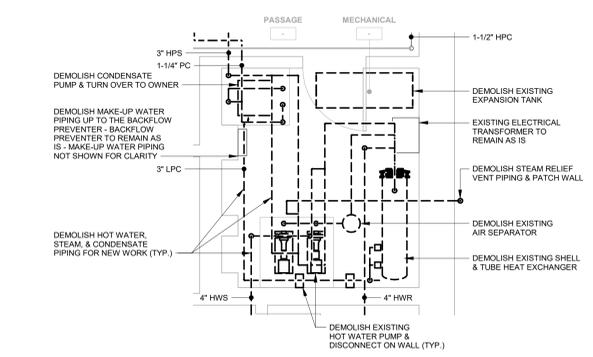
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COVER SHEET

C0.0



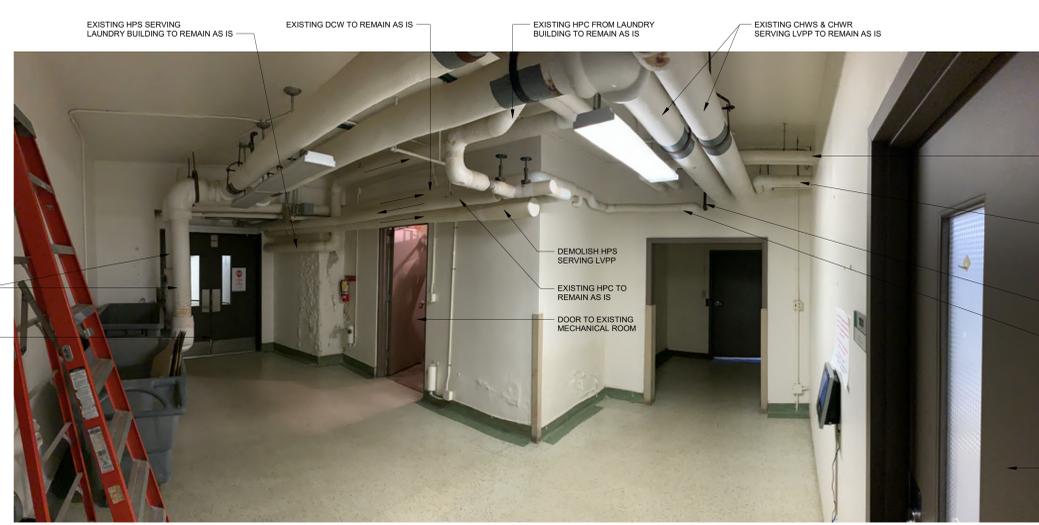
1 FIRST FLOOR DEMOLITION PLAN
1/8" = 1'-0"



2 ENLARGED MECHANICAL ROOM DEMOLITION PLAN
1/4" = 1'-0"



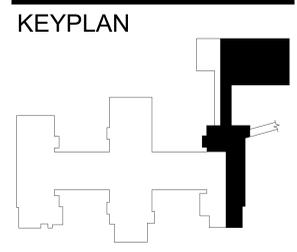
3 EXISTING STEAM PIPE CONNECTION
NTS



4 EXISTING PIPING FROM TUNNEL
NTS

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LAKE VIEW PROFESSIONAL
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BOILER CONVERSION

1200 LAKE VIEW DRIVE
WAUSAU, WI 54403



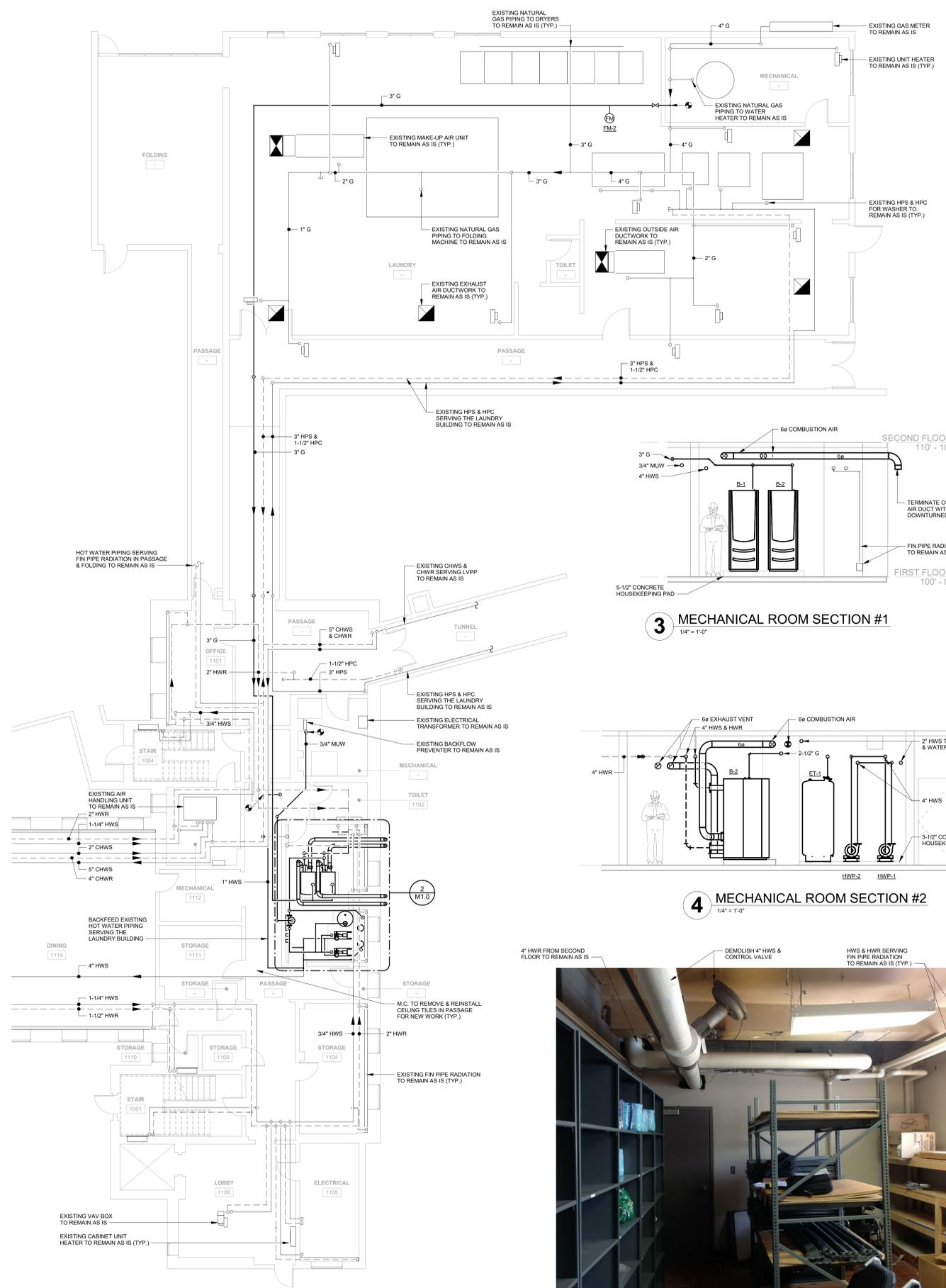
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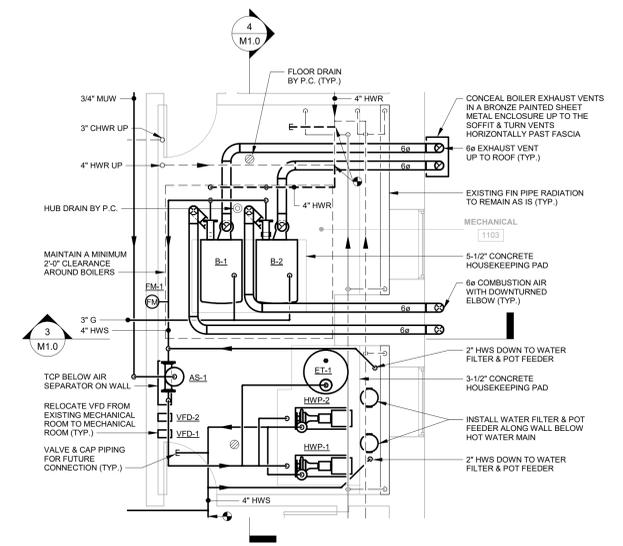
DCE PROJECT NUMBER 2005
ISSUANCE DATE 06.23.2020
PROJECT MANAGER DG

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**FIRST FLOOR
DEMOLITION PLANS**

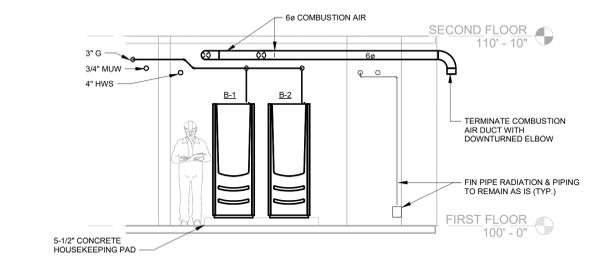
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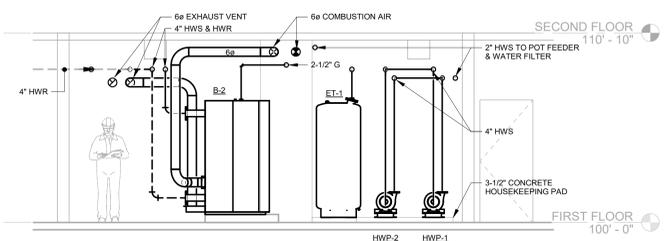
1 FIRST FLOOR NEW WORK PLAN
1/8" = 1'-0"



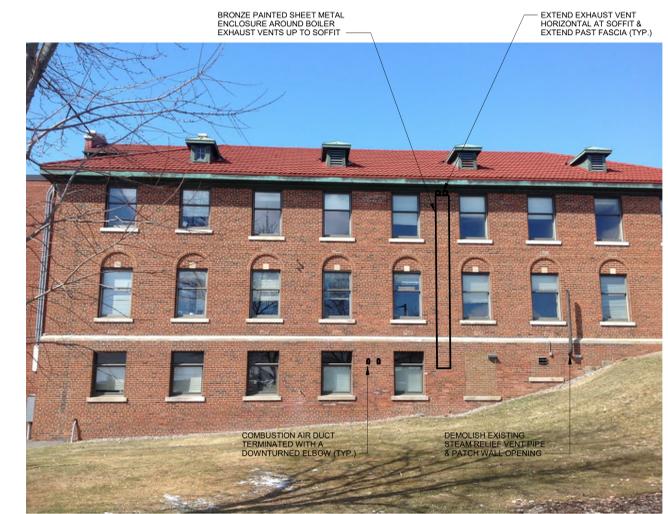
2 ENLARGED MECHANICAL ROOM PLAN
1/4" = 1'-0"



3 MECHANICAL ROOM SECTION #1
1/4" = 1'-0"



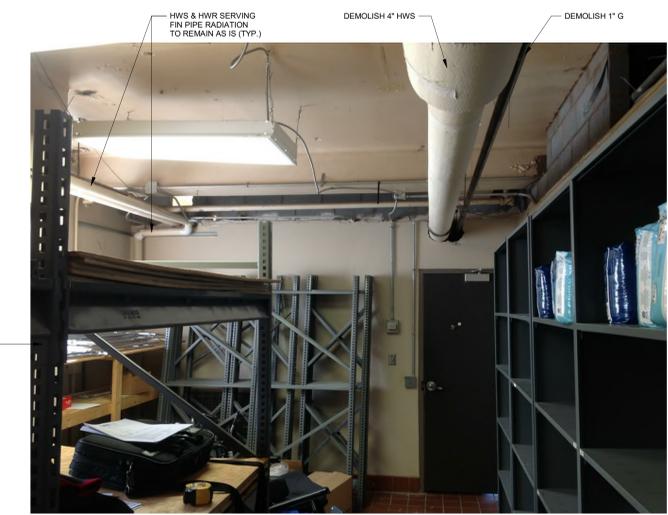
4 MECHANICAL ROOM SECTION #2
1/4" = 1'-0"



5 LVPP FACILITY EAST ELEVATION
NTS



6 EXISTING MECHANICAL 1103 LOOKING NORTH
NTS

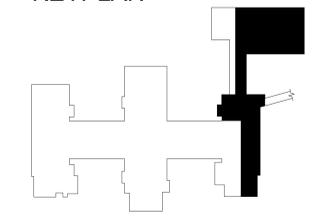


7 EXISTING MECHANICAL 1103 LOOKING SOUTH
NTS

PROJECT TITLE
MARATHON COUNTY
LAKE VIEW PROFESSIONAL
PLAZA (LVPP) FACILITY
BOILER CONVERSION

1200 LAKE VIEW DRIVE
WAUSAU, WI 54403

KEYPLAN



BID SET

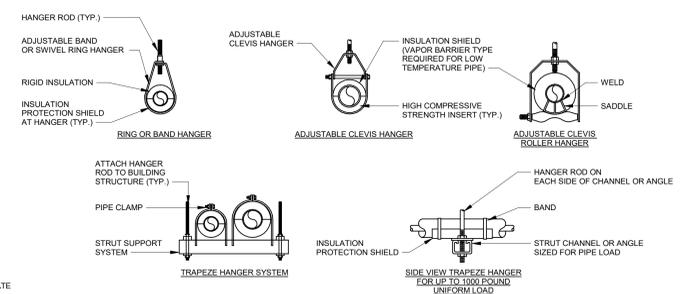
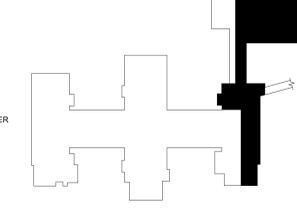
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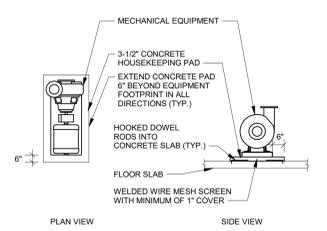
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FIRST FLOOR NEW
WORK PLANS

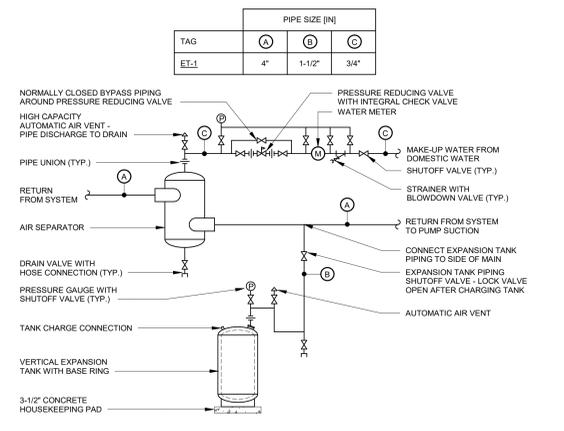
M1.0



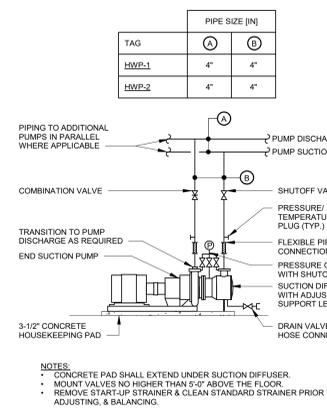
1 PIPE HANGERS & SUPPORTS DETAIL
NTS



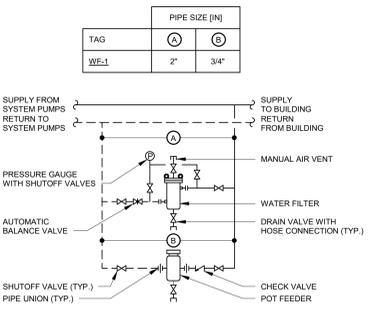
5 CONCRETE PAD DETAIL
NTS



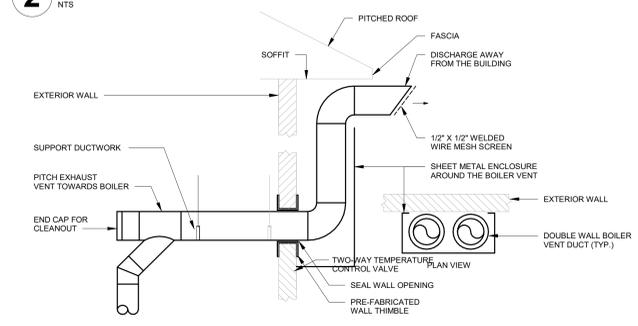
2 HYDRONIC AIR REMOVAL & EXPANSION TANK DETAIL
NTS



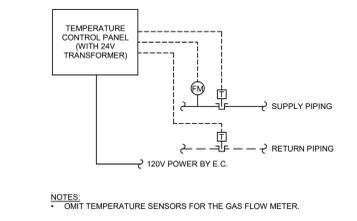
6 END SUCTION PUMP DETAIL
NTS



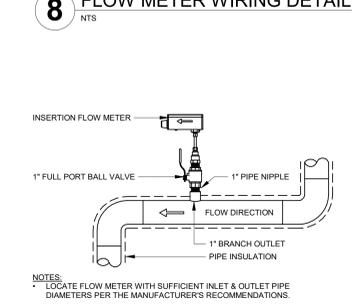
7 WATER FILTER & POT FEEDER DETAIL
NTS



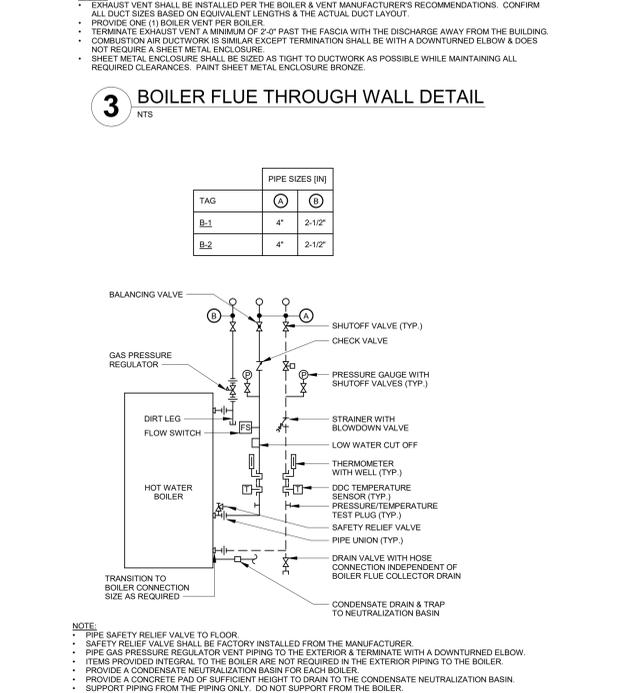
3 BOILER FLUE THROUGH WALL DETAIL
NTS



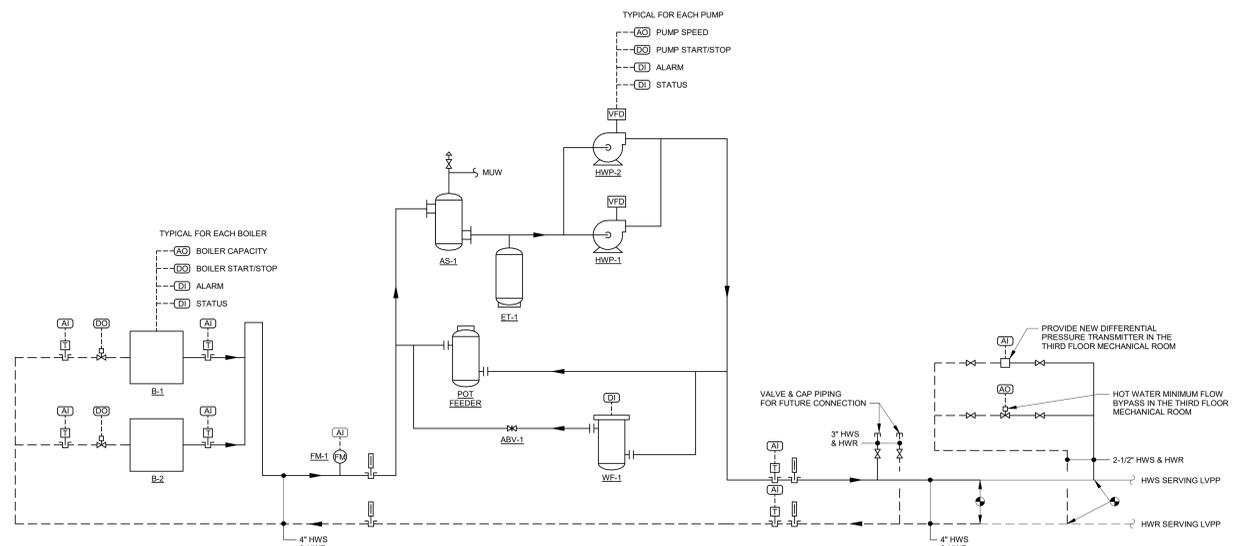
8 FLOW METER WIRING DETAIL
NTS



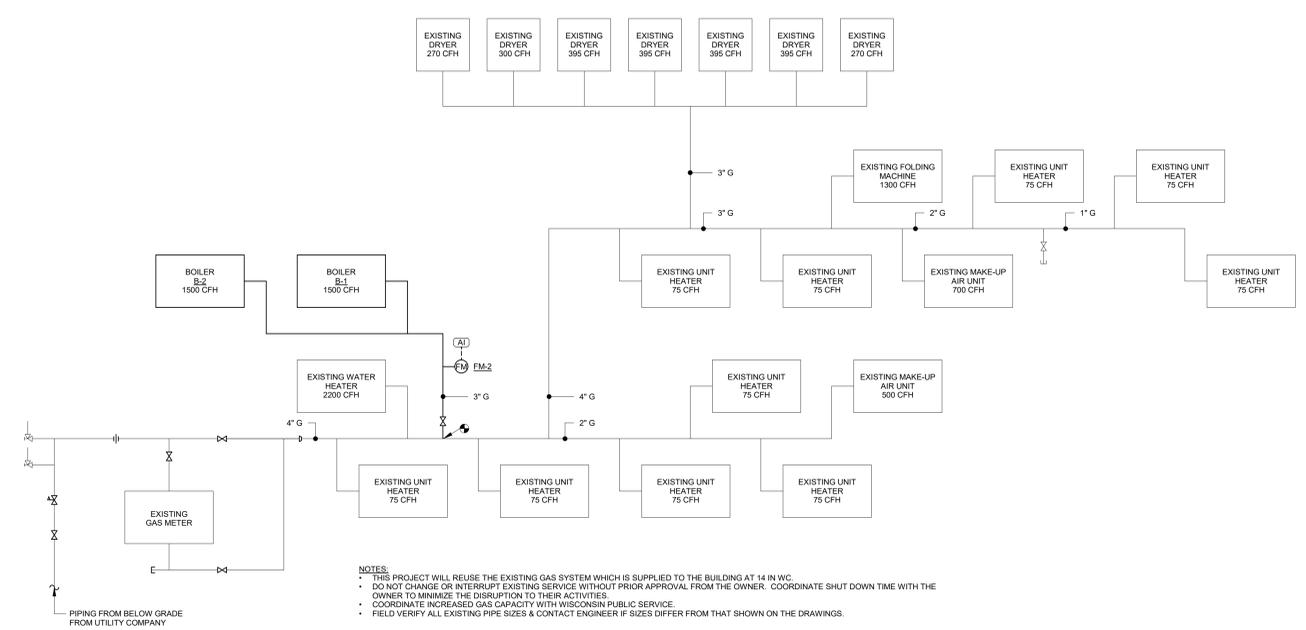
9 FLOW METER PIPING DETAIL
NTS



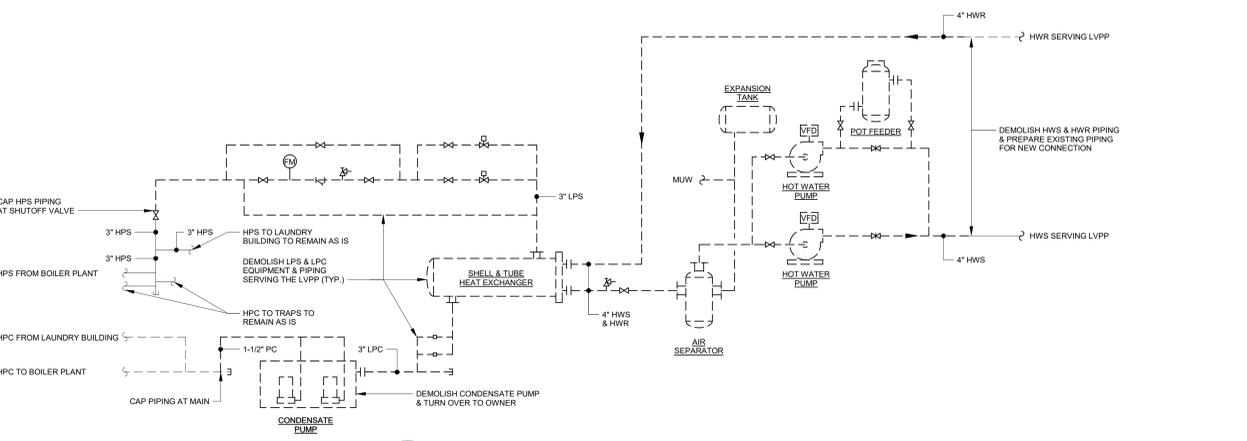
4 HOT WATER BOILER PIPING DETAIL
NTS



10 HOT WATER SYSTEM SCHEMATIC
NTS



11 NATURAL GAS SYSTEM SCHEMATIC
NTS



12 STEAM & CONDENSATE SYSTEM SCHEMATIC
NTS



MOTOR STARTER & ELECTRICAL CONNECTIONS																							
TAG	EQUIPMENT TYPE	LOCATION	ELECTRICAL DATA							MOTOR STARTER					REMOTE DISCONNECT AT EQUIPMENT								NOTES
			HP	KW	FLA	MCA	MOP	VOLTAGE	PHASE	EMERG POWER	TYPE	FURNISHED BY	INSTALLED BY	HAND-OFF-AUTO	PILOT LIGHT	ACCESSORIES	NOT REQUIRED	WEATHER PROOF	FUSED	NON FUSED	FURNISHED BY	INSTALLED BY	
B-1	BOILER	MECHANICAL 1103	-	-	16	-	20	120	1	NO	VFD	MFR.	MFR.	X	X	-	-	-	X	E.C.	E.C.		
B-2	BOILER	MECHANICAL 1103	-	-	16	-	20	120	1	NO	VFD	MFR.	MFR.	X	X	-	-	-	X	E.C.	E.C.		
HWP-1	HOT WATER PUMP	MECHANICAL 1103	10	-	-	-	-	208	3	NO	VFD	EXISTING	E.C.	X	X	X	-	-	-	-	-	1	
HWP-2	HOT WATER PUMP	MECHANICAL 1103	10	-	-	-	-	208	3	NO	VFD	EXISTING	E.C.	X	X	X	-	-	-	-	-	1	
TCP	TEMPERATURE CONTROL PANEL	MECHANICAL 1103	20 AMP CIRCUIT					120	1	NO	-	-	-	-	-	-	-	-	-	-	-	-	

- NOTES:
 1. RELOCATE EXISTING VARIABLE FREQUENCY DRIVE FROM THE MECHANICAL ROOM TO THE NEW PUMP ROOM AS PART OF THE BASE BID. PROVIDE NEW VARIABLE FREQUENCY DRIVE AS PART OF THE ALTERNATE BID.

EQUIPMENT SUPPORT COORDINATION												
TAG	EQUIPMENT TYPE	LOCATION	SUPPORT INFORMATION					VIBRATION ISOLATION			EQUIPMENT WEIGHT	NOTES
			TYPE	LOCATION	FURNISHED BY	INSTALLED BY	DIMENSIONS L X W	ROOF CURB/ RAIL HEIGHT	TYPE	FURNISHED BY		
B-1	BOILER	MECHANICAL 1103	CONCRETE PAD	FLOOR	M.C.	M.C.	-	-	ELASTOMERIC PAD	M.C.	1,800 #	1, 2, 3
B-2	BOILER	MECHANICAL 1103	CONCRETE PAD	FLOOR	M.C.	M.C.	-	-	ELASTOMERIC PAD	M.C.	1,800 #	1, 2, 3
HWP-1	HOT WATER PUMP	MECHANICAL 1103	CONCRETE PAD	FLOOR	M.C.	M.C.	-	-	-	-	400 #	1, 2, 3
HWP-2	HOT WATER PUMP	MECHANICAL 1103	CONCRETE PAD	FLOOR	M.C.	M.C.	-	-	-	-	400 #	1, 2, 3
ET	EXPANSION TANK	MECHANICAL 1103	CONCRETE PAD	FLOOR	M.C.	M.C.	-	-	-	-	2,500 #	1, 2, 3
AS	AIR SEPARATOR	MECHANICAL 1103	HANGER ROD	STRUCTURE	M.C.	M.C.	-	-	-	-	300 #	1, 2, 3
WF	WATER FILTER	MECHANICAL 1103	CONCRETE PAD	FLOOR	M.C.	M.C.	-	-	-	-	100 #	1, 2, 3
VFD	VARIABLE FREQUENCY DRIVES	MECHANICAL 1103	STRUT STANDWALL	FLOORWALL	M.C.	M.C.	-	-	-	-	VARIES	1, 2, 3
TCP	TEMPERATURE CONTROL PANEL	MECHANICAL 1103	STRUT STANDWALL	FLOORWALL	M.C.	M.C.	-	-	-	-	VARIES	1, 2, 3

- NOTES:
 1. ALL SCHEDULED DATA IS THE BASIS OF DESIGN & ESTIMATES NET WEIGHTS WITH EQUIPMENT ACCESSORIES.
 2. M.C. IS RESPONSIBLE FOR COORDINATING & DESIGNING ALL EQUIPMENT SUPPORTS & OPENINGS. COORDINATE ALL INFORMATION WITH OTHER TRADES BASED ON ACTUAL EQUIPMENT & FIELD CONDITIONS.
 3. M.C. SHALL PROVIDE ALL WALL, FLOOR, ROOF, & PARTITION OPENINGS FOR DUCTWORK, PIPING, & CONDUITS. M.C. SHALL PROVIDE LINTELS WHERE DICTATED BY STRUCTURAL CONDITIONS.

AIR SEPARATORS												
TAG	SERVICE	FLOW RATE (GPM)	SIZE (IN)	WATER PRESSURE DROP (FT HD)	DIRT SEPARATOR		STRAINER		MODEL	MANUFACTURER	NOTES	
					YES	NO	YES	NO				
AS-1	HOT WATER SYSTEM	235	4"	2"		X	X		R-4F	BELL & GOSSETT		

SAFETY RELIEF VALVES								
TAG	SERVICE	PRESSURE (PSIG)	CAPACITY (MBH)	INLET SIZE (IN)	OUTLET SIZE (IN)	MODEL	MANUFACTURER	NOTES
SRV-2	HOT WATER BOILER B-2	100	1,500	-	-	-	-	1

- NOTES:
 1. BOILER MANUFACTURER SHALL PROVIDE FACTORY INSTALLED SAFETY RELIEF VALVE FOR EACH BOILER.

HOT WATER BOILERS																				
TAG	SERVICE	FUEL	FLUID	EFFICIENCY	INPUT (MBH)	OUTPUT (MBH)	WATER CONDITIONS				SAFETY RELIEF VALVE	MAXIMUM GAS PRESSURE (IN WG)	BURNER TURNDOWN	CONDENSING		VENTING		MODEL	MANUFACTURER	NOTES
							LEAVING WATER (°F)	ENTERING WATER (°F)	FLOW RATE (GPM)	WATER PRESSURE DROP (FT HD)				YES	NO	COMBUSTION AIR (IN)	EXHAUST AIR (IN)			
B-1	HOT WATER SYSTEM	NATURAL GAS	100% WATER	87%	1,500	1,300	180	160	130	5'	SRV-1	14"	20:1	X		6"	6"	BENCHMARK	AERCO	1, 2
B-2	HOT WATER SYSTEM	NATURAL GAS	100% WATER	87%	1,500	1,300	180	160	130	5'	SRV-2	14"	20:1	X		6"	6"	BENCHMARK	AERCO	1, 2

- NOTES:
 1. PROVIDE A CONDENSATE NEUTRALIZATION BASIN FOR EACH BOILER.
 2. ROUTE CONDENSATE FROM THE NEUTRALIZATION BASIN TO THE HUB DRAIN.

PUMPS																				
TAG	SERVICE	SYSTEM FLUID	PUMP TYPE	FLOW RATE (GPM)	PUMP HEAD (FT HD)	NPSH REQUIRED (FT)	MINIMUM EFFICIENCY (%)	DIMENSIONS			MOTOR				SPEED CONTROL	MINIMUM FLOW (GPM)	MODEL	MANUFACTURER	NOTES	
								SUCTION (IN)	DISCHARGE (IN)	IMPELLER (IN)	BHP	HP	RPM	VOLTAGE						PHASE
HWP-1	HOT WATER PUMP	100% WATER	END SUCTION	235	75	7'	76.0%	3"	2-1/2"	9"	6.05	10	1750	208	3	VFD-1	25	e-1510 - 2.58B	BELL & GOSSETT	1
HWP-2	HOT WATER PUMP	100% WATER	END SUCTION	235	75	7'	76.0%	3"	2-1/2"	9"	6.05	10	1750	208	3	VFD-2	25	e-1510 - 2.58B	BELL & GOSSETT	1
HWP-1	HOT WATER PUMP	100% WATER	END SUCTION	305	80	9'	77.5%	3"	2-1/2"	9-1/2"	7.99	10	1750	208	3	VFD-1	25	e-1510 - 2.58B	BELL & GOSSETT	2
HWP-2	HOT WATER PUMP	100% WATER	END SUCTION	305	80	9'	77.5%	3"	2-1/2"	9-1/2"	7.99	10	1750	208	3	VFD-2	25	e-1510 - 2.58B	BELL & GOSSETT	2

- NOTES:
 1. BALANCE THE PUMP TO THE INITIAL INSTALLATION CONDITIONS. USE VARIABLE FREQUENCY DRIVE FOR PUMP BALANCING.
 2. PUMP SHALL BE CAPABLE OF PROVIDING 305 GPM AT 80 FT HD IN THE FUTURE. INFORMATION PROVIDED FOR REFERENCE ONLY.

EXPANSION TANKS																	
TAG	SERVICE	TANK TYPE	CONFIGURATION	SYSTEM FLUID	SYSTEM VOLUME (GALLONS)	TANK ACCEPTANCE VOLUME (GALLONS)	TOTAL TANK VOLUME (GALLONS)	DIMENSIONS		EXPANSION TANK CHARGE (PSIG)	PRESSURE REDUCING VALVE SETTING (PSIG)	RELIEF VALVE SETTING (PSIG)	SAFETY RELIEF VALVE TAG	EXPANSION PIPE SIZE TO TANK (IN)	MODEL	MANUFACTURER	NOTES
								DIAMETER (IN)	HEIGHT (IN)								
ET-1	HOT WATER SYSTEM	BLADDER	VERTICAL	100% WATER	2,800	211	211	30"	81-3/4"	15	16	100	SRV-1 & 2	1-1/2"	B-800	BELL & GOSSETT	1

- NOTES:
 1. PIPE SIZE FROM THE SYSTEM TO THE EXPANSION TANK SHALL BE THE SAME AS THE TANK CONNECTION SIZE BUT NO LESS THAN 1".

VARIABLE FREQUENCY DRIVES										
TAG	EQUIPMENT	HORSEPOWER	VOLTAGE	PHASE	AUTO RESTART		BYPASS		MANUFACTURER	NOTES
					YES	NO	YES	NO		
VFD-1	HOT WATER PUMP HWP-1	10	208	3	-	-	-	-	EXISTING	1, 2
VFD-2	HOT WATER PUMP HWP-2	10	208	3	-	-	-	-	EXISTING	1, 2
VFD-1	HOT WATER PUMP HWP-1	10	208	3	X	-	X	-	ABB	1, 3
VFD-2	HOT WATER PUMP HWP-2	10	208	3	X	-	X	-	ABB	1, 3

- NOTES:
 1. PROVIDE SHAFT GROUNDING RINGS & MOTORS CAPABLE OF BEING DRIVEN BY A VARIABLE FREQUENCY DRIVE.
 2. RELOCATE & REUSE THE EXISTING VARIABLE FREQUENCY DRIVE AS PART OF THE BASE BID.
 3. PROVIDE NEW VARIABLE FREQUENCY DRIVE AS PART OF THE ALTERNATE BID.

FLOW METERS												
TAG	SERVICE	TYPE	INSERTION	FULL BORE	FLOW RATE (GPM)	FLOW RATE (CFH)	PIPE SIZE (IN)	BTU METER	TOTALIZATION	MODEL	MANUFACTURER	NOTES
FM-2	NATURAL GAS SYSTEM	THERMAL MASS	X	-	-	3,000	3"	X	X	F-5400	ONICON	2

- NOTES:
 1. PROVIDE INTEGRAL TEMPERATURE SENSORS & ENERGY METER.
 2. PROVIDE GAS FLOW METER AS PART OF THE ALTERNATE BID.

AUTOMATIC BALANCING VALVES							
TAG	SERVICE	FLOW RATE (GPM)	SPRING RANGE (PSIG)	PIPE SIZE (IN)	MODEL	MANUFACTURER	NOTES

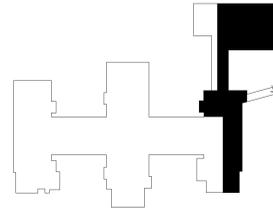
WATER FILTERS						
TAG	SERVICE	FLOW RATE (GPM)	BRANCH PIPE SIZE (IN)	MODEL	MANUFACTURER	NOTES

- NOTES:
 1. PROVIDE INLINE PIPING CONNECTIONS.

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 MARATHON COUNTY
 LAKE VIEW PROFESSIONAL
 PLAZA (LVPP) FACILITY
 BOILER CONVERSION

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 WAUSAU, WI 54403

KEYPLAN



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SCHEDULES

M3.0

GENERAL NOTES:

- FIELD VERIFY EXISTING CONDITIONS & COORDINATE INSTALLATION BASED ON ACTUAL CONDITIONS.
- DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, PIPING, ETC. ARE DIAGRAMMATIC & MAY NOT ALWAYS REFLECT ACTUAL INSTALLATION CONDITIONS. DRAWINGS ARE INTENDED TO CONVEY SCOPE & SHOW THE GENERAL ARRANGEMENT OF ALL PIPING & EQUIPMENT ONLY. DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS THE ACTUAL BUILDING INSTALLATION & THE WORK OF OTHER TRADES WILL PERMIT.
- DO NOT SCALE DRAWINGS FOR EXACT LOCATIONS. VERIFY ALL DIMENSIONS & CLEARANCES FROM PROJECT SUBMITTALS & OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT THE SITE. READ ALL SPECIFICATIONS & REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES.
- PROVIDE ALL MATERIALS & EQUIPMENT & PERFORM ALL LABOR REQUIRED TO INSTALL A COMPLETE & OPERATIONAL PLUMBING SYSTEM AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AS REQUIRED BY CODE, & IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- LAYOUT & COORDINATE THE CONSTRUCTION OF PLUMBING WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, & TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES.
- SEE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- NOT ALL ITEMS SHOWN ARE NECESSARILY USED ON THIS PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING & CORRELATING ALL QUANTITIES, SIZES, CAPACITIES, ACCESSORIES, SEQUENCES, MATERIALS, MEANS & METHODS, SPACE REQUIREMENTS, ACCESSIBILITY, CODE CLEARANCES, PERFORMANCE, FABRICATION PROCESSES, & TECHNIQUES OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THAT OF ALL OTHER TRADES & PERFORM ALL WORK IN A SAFE MANNER.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN BUILD CHANGES, EQUIPMENT SUBSTITUTIONS, & VALUE ENGINEERING CHANGES PERFORMED. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED ANY CHANGES ASSOCIATED WITH CHANGES DEVIATING FROM THE BASIS OF DESIGN.
- PROVIDE ACCESS PANELS IN WALLS & CEILINGS TO PROVIDE ACCESS TO ALL EQUIPMENT INCLUDING VALVES, AIR VENTS, WATER HAMMER ARRESTORS, CLEANOUTS, & OTHER ITEMS LOCATED BEHIND INACCESSIBLE SURFACES THAT REQUIRE SERVICE AND/OR INSPECTION.
- LOCATIONS & SIZES OF ALL FLOOR & WALL OPENINGS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL SUPPORTS & LINTELS REQUIRED FOR OPENINGS.
- ALL PIPING IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE THE SUSPENDED CEILING. EXPOSED PIPING IS PROHIBITED EXCEPT FOR SPACES WITHOUT A SUSPENDED CEILING.
- IF THERE IS CONFLICTING INFORMATION IN THE BIDDING DOCUMENTS, INCLUDE THE COST FOR THE CONFLICT RESULTING IN THE HIGHEST FIRST COST.
- COMPLY WITH ALL CODE REQUIREMENTS FOR ALLOWABLE MATERIALS WITHIN THE PLUMBING SPACES. COORDINATE PLUMBING CONSTRUCTION LOCATION & REQUIREMENTS WITH OTHER TRADES.
- SEAL ALL PIPING PENETRATIONS AIR TIGHT THRU WALLS, FLOORS, OR PARTITIONS IDENTIFIED AS SOUND WALLS, SMOKE TIGHT WALL, FIRE BARRIERS, SMOKE BARRIERS, SHAFTS, OR FIRE RATED CONSTRUCTION INDICATED ON THE ARCHITECTURAL DRAWINGS INCLUDING LIFE SAFETY PLANS. MAINTAIN ALL DESIGNATED RATINGS.
- ALL PLUMBING PIPING IS LOCATED IN THE DRAWN SPACE BELOW THE FIRST FLOOR & IS BASED ON EXISTING FLOOR PLANS. FIELD VERIFY EXISTING PIPE SIZES & LOCATIONS PRIOR TO ORDERING EQUIPMENT. CONTACT ENGINEER IF EXISTING CONDITIONS VARY FROM THOSE SHOWN ON THE DRAWINGS.

GENERAL ABBREVIATIONS:

- A ARCHITECT/ENGINEER
 AD ACCESS DOOR
 ADA AMERICANS WITH DISABILITIES ACT
 AFF ABOVE FINISHED FLOOR
 AFG ABOVE FINISHED GRADE
 AMP AMPERAGE
 AP ACCESS PANEL
 ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS
 ASSE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
- B BUILDING AUTOMATION SYSTEM
 BHP BRAKE HORSEPOWER
 BIP BOTTOM OF PIPE
 BOS BOTTOM OF STEEL
 BTU BRITISH THERMAL UNIT
 BTUH BRITISH THERMAL UNIT PER HOUR
- C CUBIC FEET PER HOUR
 CFH CUBIC FEET PER HOUR
 CLW CLEARWATER WASTE VENT
 CLWV CLEARWATER WASTE VENT
 CO CLEANOUT
 CPVC CHLORINATED POLYVINYL CHLORIDE
 CSW COLD SOFT WATER
 CW COLD WATER
- D DRAIN
 D/W DOMESTIC COLD WATER
 DEG DEGREES
 D/HW DOMESTIC HOT WATER
 D/HWR DOMESTIC HOT WATER RECIRCULATION
- E ELECTRICAL CONTRACTOR EXISTING
- F DEGREES FAHRENHEIT
 FCO FLOOR CLEANOUT
 FLA FULL LOAD AMP'S
 F.P.C. FIRE PROTECTION CONTRACTOR
 FFS FEET PER SECOND
 FT FEET OR FOOT
 FT HD FEET OF HEAD
- G NATURAL GAS
 GAL GALLONS
 G.C. GENERAL CONTRACTOR
 GPD GALLONS PER DAY
 GPH GALLONS PER HOUR
 GPM GALLONS PER MINUTE
 GW GREASE WASTE
- H HEIGHT
 HD HEAD
 HP HORSEPOWER
 HW HOT WATER
 HWR HOT WATER RECIRCULATION
 HZ HERTZ
- I INPUT/OUTPUT
 ID INSIDE DIAMETER
 IE INVERT ELEVATION
 IN INCH OR INCHES
 IN H INCHES MERCURY
 IN WC INCHES WATER COLUMN
 IN WG INCHES WATER GAUGE

EQUIPMENT ABBREVIATIONS:

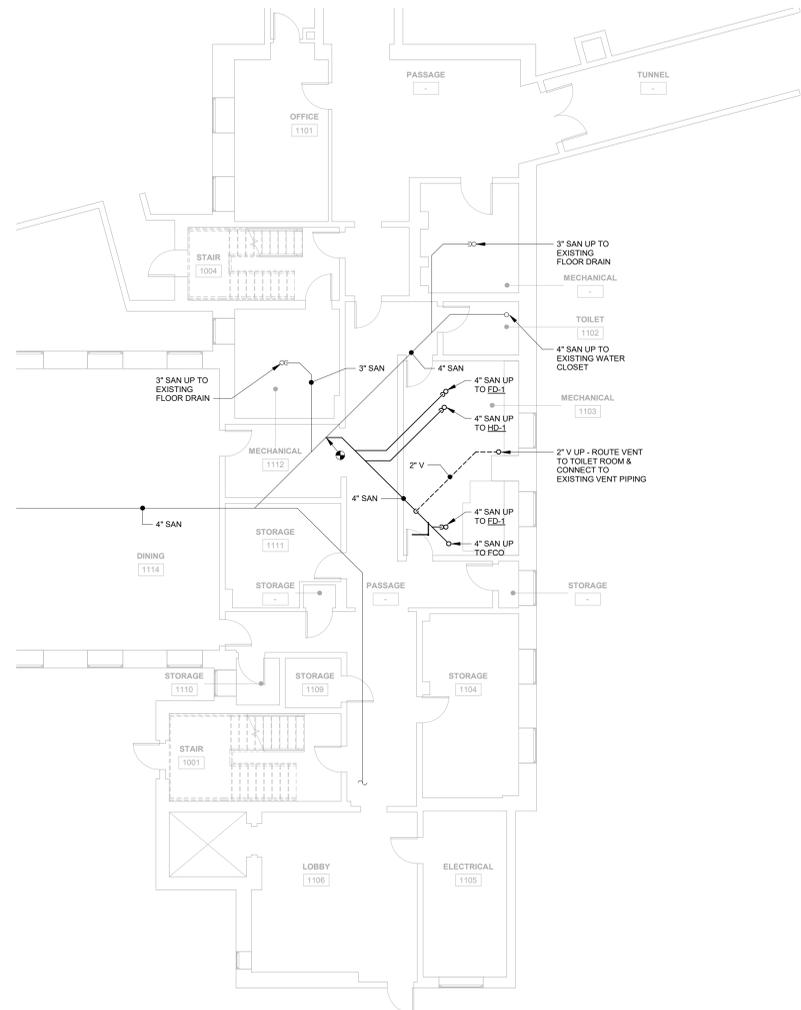
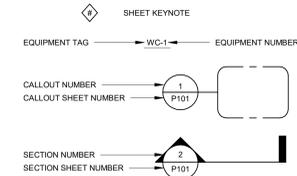
- B BACKFLOW PREVENTER
 BFP BATHTUB
 CB CATCH BASIN
 CCD CROSS-CONNECTION CONTROL DEVICE
- D DRINKING FOUNTAIN
 DF DOWNSPOUT NOZZLE
- E EMERGENCY EYEWASH & SHOWER
 EES EMERGENCY EYEWASH
 ETW EXPANSION TANK
 EWC ELECTRIC WATER COOLER
- F FLOOR DRAIN
 FD FLOOR SINK
- G GREASE INTERCEPTOR
- H HOSE BIBB
 HB HUB DRAIN
- L LAVATORY
- M MOP BASIN
- P PLUMBING CONTRACTOR
 PC PLUMING CONTRACTOR
 PCF POUNDS PER CUBIC FOOT
 PH PHASE
 PRV PRESSURE REDUCING VALVE
 PSI POUNDS PER SQUARE INCH
 PSIA POUNDS PER SQUARE INCH - ABSOLUTE
 PSIG POUNDS PER SQUARE INCH - GAUGE
 PW PUMPED WASTE
- R RUNNING LOAD AMPERES
 RPM REVOLUTIONS PER MINUTE
 RPZ REDUCED PRESSURE ZONE ASSEMBLY
- S SANITARY WASTE
 SFC SQUARE FEET
 SS STAINLESS STEEL
 ST STORM DRAIN
 STR STARTER
- T THERMOSTAT
 T.C.C. TEMPERATURE CONTROLS CONTRACTOR
 T/CP TEMPERATURE CONTROL PANEL
 TDH TOTAL DYNAMIC HEAD
 TOP TOP OF PIPE
 TTS TIGHT TO STRUCTURE
 TYP. TYPICAL
- V VENT OR VOLTS OR VOLTAGE
 VFD VARIABLE FREQUENCY DRIVE
 VTR VENT THROUGH ROOF
- W WIDTH OR WATTS
 WCO WALL CLEANOUT

SYMBOLS:

- SHUTOFF VALVE
 SHUTOFF VALVE WITH HOSE CONNECTION
 BALANCE VALVE
 CHECK VALVE
 COMBINATION VALVE
 AUTOMATIC BALANCING VALVE
 PRESSURE REDUCING VALVE
 SAFETY RELIEF VALVE
 TEMPERATURE CONTROL VALVE - TWO-WAY
 TEMPERATURE CONTROL VALVE - THREE-WAY
 STRAINER - WYE
 STRAINER - WYE WITH BLOWDOWN VALVE & HOSE CONNECTION
 BACKWATER VALVE
 STRAINER - BASKET
 TEMPERATURE/PRESSURE TEST PLUG
 WATER HAMMER ARRESTOR
 PRESSURE GAUGE WITH VALVE
 THERMOMETER WITH WELL
 TEMPERATURE SENSOR WITH WELL
 FLOW METER
 WATER METER
 PIPE ELBOW - UP OR UP/DOWN
 PIPE ELBOW - DOWN
 PIPE TEE
 PIPE ELBOW - BOTTOM TAKEOFF
 PIPE TEE - TOP TAKEOFF
 PIPE FLOW DIRECTION
 PIPE REDUCER/LARGER
 PIPE CAP
 PIPE UNION
 PIPE FLANGE
 FLOOR DRAIN
 HUB DRAIN
 ROOF DRAIN
 FLOOR SINK
 ACCESS PANEL

PIPING SYSTEM ABBREVIATIONS:

- DOMESTIC COLD WATER
 DOMESTIC HOT WATER RECIRCULATION
 SANITARY WASTE
 GREASE WASTE
 STORM DRAINAGE
 COLD SOFT WATER
 CLEARWATER WASTE
 CLEARWATER WASTE VENT
 OVERFLOW
 VENT
 MAKE-UP WATER
 NON-POTABLE WATER
 NATURAL GAS



DRAINS										
TAG	DRAIN TYPE	DRAIN DESCRIPTION	BODY MATERIAL	STRAINER MATERIAL	MANUFACTURER	MODEL	ROUGH-IN SIZES		NOTES	
							WASTE	VENT		
FD-1	FLOOR DRAIN (MECHANICAL AREAS)	DRAIN: 3" DIAMETER DRAIN, BOTTOM OUTLET, SEEPAGE PAN & COMBINATION MEMBRANE FLASHING CLAMP, MEDIUM DUTY ACCESSORIES: UNDERDECK CLAMP, SEDIMENT BUCKET, HEEL-PROOF GRATE	CAST IRON	CAST IRON	ZURN	Z550	4"	2"	1	
HD-1	HUB DRAIN	DRAIN: PIPE EXTENDED 2" ABOVE FINISHED FLOOR WITH INCREASER ONE (1) PIPE SIZE LARGER THAN PIPE SIZE	SAME AS PIPING	-	-	-	4"	2"	1	

- NOTES:
 1. COORDINATE FINAL DRAIN LOCATION WITH THE FINAL EQUIPMENT LAYOUT.

CLEANOUTS									
TAG	CLEANOUT TYPE	CLEANOUT DESCRIPTION	BODY MATERIAL	PLUG MATERIAL	COVER MATERIAL	MANUFACTURER	MODEL	NOTES	
FCD	FLOOR CLEANOUT (FINISHED FLOOR)	CLEANOUT: ADJUSTABLE CLEANOUT, ROUND SCORRIATED SECURED TOP ACCESSORIES: CLEANOUT PLUG, ROUND TOP	CAST IRON	BRONZE	BRONZE	ZURN	Z1400		

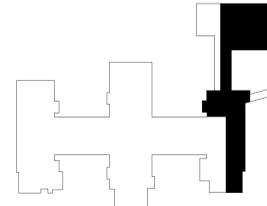
PLUMBING SHEET INDEX	
SHEET NUMBER	SHEET NAME
P1.0	FIRST FLOOR NEW WORK PLAN



PROJECT TITLE
 MARATHON COUNTY
 LAKE VIEW PROFESSIONAL
 PLAZA (LVPP) FACILITY
 BOILER CONVERSION

1200 LAKE VIEW DRIVE
 WAUSAU, WI 54403

KEYPLAN



BID SET

#	DATE	DESCRIPTION

DCE PROJECT NUMBER 2005
 ISSUANCE DATE 06.23.2020
 PROJECT MANAGER DG

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**FIRST FLOOR NEW
 WORK PLAN**

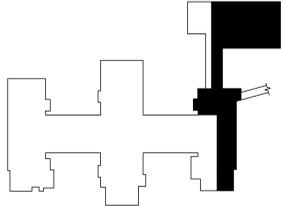


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 MARATHON COUNTY LAKE VIEW PROFESSIONAL PLAZA (LVPP) FACILITY BOILER CONVERSION

1200 LAKE VIEW DRIVE
 WAUSAU, WI 54403

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SYMBOLS & ABBREVIATIONS

E0.0

GENERAL NOTES

- ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER DRAWINGS RELATED TO THE PERFORMANCE OF THE WORK.
- THE CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THIS WORK SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT SPECIFICATIONS BEFORE COMMENCING ANY WORK. THE PROJECT SPECIFICATIONS AND DRAWINGS FORM THE BASIS OF THE CONTRACT REQUIREMENTS AND INCLUDE THE TYPE AND GRADE OF MATERIALS TO BE INSTALLED, EQUIPMENT TO BE FURNISHED, THE MANNER BY WHICH TO BE INSTALLED AND WHERE TO BE LOCATED. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT SPECIFICATIONS AND DRAWINGS, SPECIFICATIONS GOVERN UNLESS THE ARCHITECT/ENGINEER DIRECTS OTHERWISE.
- THE ELECTRICAL CONTRACTOR SHALL CHECK CAREFULLY ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS THAT ARE PART OF THIS PROJECT TO ENSURE THAT NO FIXTURE, OUTLET, ALARM STATION OR CONTROL AND POWER WIRING IS OMITTED. HE SHALL CONSULT ALL TRADES FURNISHING EQUIPMENT AND OBTAIN FROM THEM ALL DATA. IN SOME CASES EQUIPMENT, FIXTURES AND DEVICES ARE SHOWN ONLY, ASCERTAIN AND PROVIDE THE WIRING AND CONTROL STATIONS REQUIRED FOR THE PROPER FUNCTION OF BUILDING EQUIPMENT. NO EXTRA CHARGES SHALL BE ACCEPTED BY OWNER AFTER BIDDING FOR SUCH EQUIPMENT AND LABOR.
- EQUIPMENT LABELS AND INSTRUCTIONS REGARDING THE APPLICATION AND INSTALLATION OF THE LISTED EQUIPMENT SHALL BE FOLLOWED TO ENSURE THAT THE EQUIPMENT IS BEING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING INSTRUCTIONS. THE TEMPERATURE RATING OF THE EQUIPMENT TERMINATIONS MUST BE CAREFULLY CORRELATED WITH THE CONDUCTOR AMPACITY TO PREVENT OVERHEATING AND PREMATURE FAILURE.
- COORDINATE WORK WITH OTHER TRADES AND INSTALL CONDUIT AND BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS, AND OTHER STRUCTURAL FEATURES.
- ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE APPLICABLE CODES AND REGULATIONS.
- ALL LIGHTING FIXTURES ARE TO BE LOCATED AS REQUIRED ON THE JOB TO CLEAR DUCTS, PIPING, EQUIPMENT, AND/OR MECHANICAL UNITS.
- CONDUIT RUNS SHOWN ON DRAWINGS ARE DIAGRAMMATIC. ALL CONDUITS SHALL RUN CONCEALED, EXCEPT IN EQUIPMENT ROOMS AND WHERE APPROVED BY ARCHITECT.
- FURNISH AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS.
- ALL OUTDOOR RECEPTACLES SHALL BE W.P. AND GFI TYPE.
- ALL OUTDOOR ENCLOSURES SHALL BE NEMA 3R CORROSION RESISTANT AND GASKETED.
- CONTRACTOR SHALL PROVIDE WIRING THROUGHOUT THIS PROJECT AS REQUIRED SO THE VOLTAGE DROP STIPULATED IN THE GOVERNING CODE IS NOT EXCEEDED.
- ALL OUTAGES SHALL BE SCHEDULED WITH OWNER AND SHALL BE PERFORMED DURING NON-BUSINESS HOURS.

ABBREVIATIONS LIST

A	AMP	MS	MANUAL STARTER
ACT	ABOVE COUNTER TOP	MSB	MAIN SWITCHBOARD
AFF	ABOVE FINISHED FLOOR	MSP	MANUAL SWITCH WITH PILOT LIGHT
AFG	ABOVE FINISHED GRADE	MT	EMPTY
ALT	ALTERNATE	MTD	MOUNTED
AQ	AQUASTAT	NC	NEAR CIRCULATOR (REFER TO HVAC & PLUMBING DRWS FOR EXACT LOCATION.)
AS	AS SHOWN	NIC	NOT IN CONTRACT
AU	AT UNIT	NP	NEAR PUMP (REFER TO HVAC & PLUMBING DRWS FOR EXACT LOCATION.)
B,JB	JUNCTION BOX	NTS	NOT TO SCALE
B,CP	BOILER CONTROL PANEL	NU	NEAR UNIT (REFER TO HVAC & PLUMBING DRWS FOR EXACT LOCATION.)
BD#	BUS DUCT, # INDICATES BUS DUCT DESIGNATION	OOS	OUT OF SCHEDULE
BFG	BELOW FINISHED GRADE	OU	ON UNIT
BOL	BUILT-IN OVERLOAD	PH	PHOTOCELL, # INDICATES PHOTOCELL DESIGNATION
CB, CB	CONTACTOR	PBL	PUSH BUTTON WITH PILOT LIGHT
CCB	CIRCUIT BRACKER(S)	PBS	PUSH BUTTON STATION
	COMBINATION CIRCUIT BREAKER	PC	PLUMBING CONTRACTOR
	FULL VOLTAGE STARTER	PCP	PRE-WIRED CONTROL PANEL
CDT	CONDUIT	PE	PNEUMATIC ELECTRIC SWITCH
CEF	CEILING EXHAUST FAN	PEC	PROJECT ELECTRICAL CONTRACTOR
CF	COMBINATION FUSIBLE FULL VOLTAGE STARTER	PL	PILOT LIGHT
CKT	CIRCUIT	PRV	POWER ROOF VENTILATOR
CPT	CONTROL POWER TRANSFORMER	PW	PART WINGING STARTER
CS	COMBINATION STARTER	R	RECEPTACLE
CJ	COPPER	RAF	RETURN AIR FAN
CUH	CABINET UNIT HEATER	RAI	REMAIN AS IS
D, DS	DISCONNECT SWITCH	RAT	REVERSE ACTING THERMOSTAT
DM	DOOR MANUFACTURER	RVS	REDUCED VOLTAGE STARTER
DRWGS	DRAWINGS	S	STERILIZER
E, EC, X	BY ELECTRICAL CONTRACTOR	SAV	SOLENOID AIR VALVE
EDH	ELECTRIC DUCT HEATER	SC	STERILIZER CONTROLS
EF	EXHAUST FAN	SF	SUPPLY FAN
EM	EMERGENCY	SP	SHOCK-PROOF
EP	EXPLOSION PROOF	SPC	SPACE
ET	ELAPSED TIMER	SPR	SPARE
EUH	ELECTRIC UNIT HEATER	SPS	SELECTOR SWITCH
EWH	ELECTRIC WALL HEATER	SS	SPEED SWITCH
EX	EXISTING	SSP	START/STOP WITH PILOT LIGHT
F	FURNISHED BY	STAT	THERMOSTAT
FS	FLOW SWITCH	SVS	SUPERVISORY SWITCH
FZS	FREEZE STAT	SWBD	SWITCHBOARD
G, GFI	GROUND FAULT INTERRUPTER TYPE	SWGR	SWITCHGEAR
GC	PROJECT GENERAL CONTRACTOR	TC	TIME CLOCK
GND, GRND	GROUND	TCC	TEMPERATURE CONTROL PANEL
GS	MAGNETIC STARTER	TCP	TEMPERATURE CONTROL PANEL
GV	GATE VALVE	TL#	TRACKLIGHT, # INDICATES TRACK LIGHT DESIGNATION
H, HV	HEATING/VENTILATING CONTRACTOR	TO	TYPICAL OUTLET
HQA	HAND-OFF-AUTO SELECTOR SWITCH	TS	TAMPER SWITCH
HP	HORSEPOWER	TV	TELEVISION
I	INSTALLED BY	UFD	UNDERFLOOR DUCT
IL	INTERLOCK	UG	UNDERGROUND
IU	IN STARTER COVER	UGD	UNDERGROUND DUCT
IS	IN UNIT	UH	UNIT HEATER
IU	IN UNIT	UO	UNIQUE OUTLET
KS	KEY SWITCH	UOI	UNLESS OTHERWISE INDICATED
KVA	KILOVOLT-AMPERES	USS	UNIT SUBSTATION
KW	KILOWATT	V	VENDOR-SUPPLYING EQUIPMENT
LD	LOAD (KW OR HP)	W	WIRED BY
LVT	LINE VOLTAGE THERMOSTAT (120V)	W	WITH
MCB	MAIN CIRCUIT BREAKER	WP	WEATHERPROOF
MD	MOTORIZED DAMPER	WT	WIRING TROUGH
MFR	MANUFACTURER	XFMR	TRANSFORMER
MG	MOTOR GENERATOR		
MLO	MAIN LUGS ONLY		
MR#	MULTI-RECEPTACLE, # INDICATES MULTI-RECEPTACLE DESIGNATION		

SYMBOLS LIST

	CONVENIENCE OUTLET - DUPLEX RECEPTACLE, WALL MOUNTED 15" AFF SUBSCRIPTS: (G) GROUND FAULT INTERRUPTER, (C) MOUNTED 6" ABOVE COUNTER, (WP) WEATHERPROOF, (EQ) MOUNTED ON EQUIPMENT FURNISHED BY OTHERS, (H) MOUNTED HORIZONTALLY, (S) UPPER-HALF SWITCHED, (TS) MOUNTED HORIZONTALLY IN TOE SPACE, (EP) EXPLOSION PROOF, (IG) ISOLATED GROUND, (TSS) TRANSIENT SURGE SUPPRESSOR
	SPECIAL PURPOSE OUTLET - SEE SCHEDULE
	JUNCTION BOX, TWO-GANG SUBSCRIPTS: (S) SURFACE MOUNTED, (F) FLUSH MOUNTED, (C) COMMUNICATIONS, (AL) AISLE LIGHT, (PP) TELE-POWER POLE IN CEILING
	MOTOR
	PROTECTIVE DEVICE - DISCONNECT SWITCH
	PANELBOARD, SURFACE OR RECESSED MOUNTED, AS SHOWN. # INDICATES PANELBOARD DESIGNATION
	SEE NOTE N#S# - N# INDICATES NOTE NUMBER, S# INDICATES SHEET NUMBER
	SEE DETAIL DW#S# - DW# INDICATES DETAIL NUMBER, S# INDICATES SHEET NUMBER
	DISTRIBUTION PANEL - MOUNTED ON IN WALL, SURFACE OR RECESSED AS SHOWN, # INDICATES ALPHA-NUMERIC PANEL DESIGNATION
	POWER PANEL - MOUNTED ON IN WALL, SURFACE OR RECESSED AS SHOWN, # INDICATES ALPHA-NUMERIC PANEL DESIGNATION
	MAIN DISTRIBUTION PANEL - MOUNTED ON IN WALL, SURFACE OR RECESSED AS SHOWN, # INDICATES ALPHA-NUMERIC PANEL DESIGNATION
	TRANSFORMER - DRAWN TO SCALE IF POSSIBLE, # INDICATES ALPHA-NUMERIC DESIGNATION

EXISTING PROJECT CONDITIONS

INFORMATION RELATIVE TO EXISTING PROJECT CONDITIONS, SUCH AS PRESENT LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON THESE DRAWINGS. WHILE SUCH INFORMATION HAS BEEN BASED ON AVAILABLE RECORDS AND COLLECTED WITH REASONABLE CARE, THE ARCHITECT AND ENGINEER DO NOT ASSUME ANY EXPRESSED OR IMPLIED GUARANTEE THAT CONDITIONS AS INDICATED ARE SHOWN ENTIRELY COMPLETE, CORRECT AND REPRESENTATIVE OF THOSE ACTUALLY EXISTING. ALL CONTRACTORS SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL EXISTING JOB CONDITIONS PRIOR TO BIDDING AND SHALL FIELD VERIFY ALL DIMENSIONS SHOWN HEREIN.

INDEX OF DRAWINGS

E0.0	SYMBOLS & ABBREVIATIONS
ED1.0	FIRST FLOOR DEMOLITION PLANS
E1.0	FIRST FLOOR NEW WORK PLANS

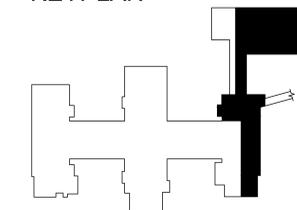


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 WAUSAU, WI 54403

KEYPLAN



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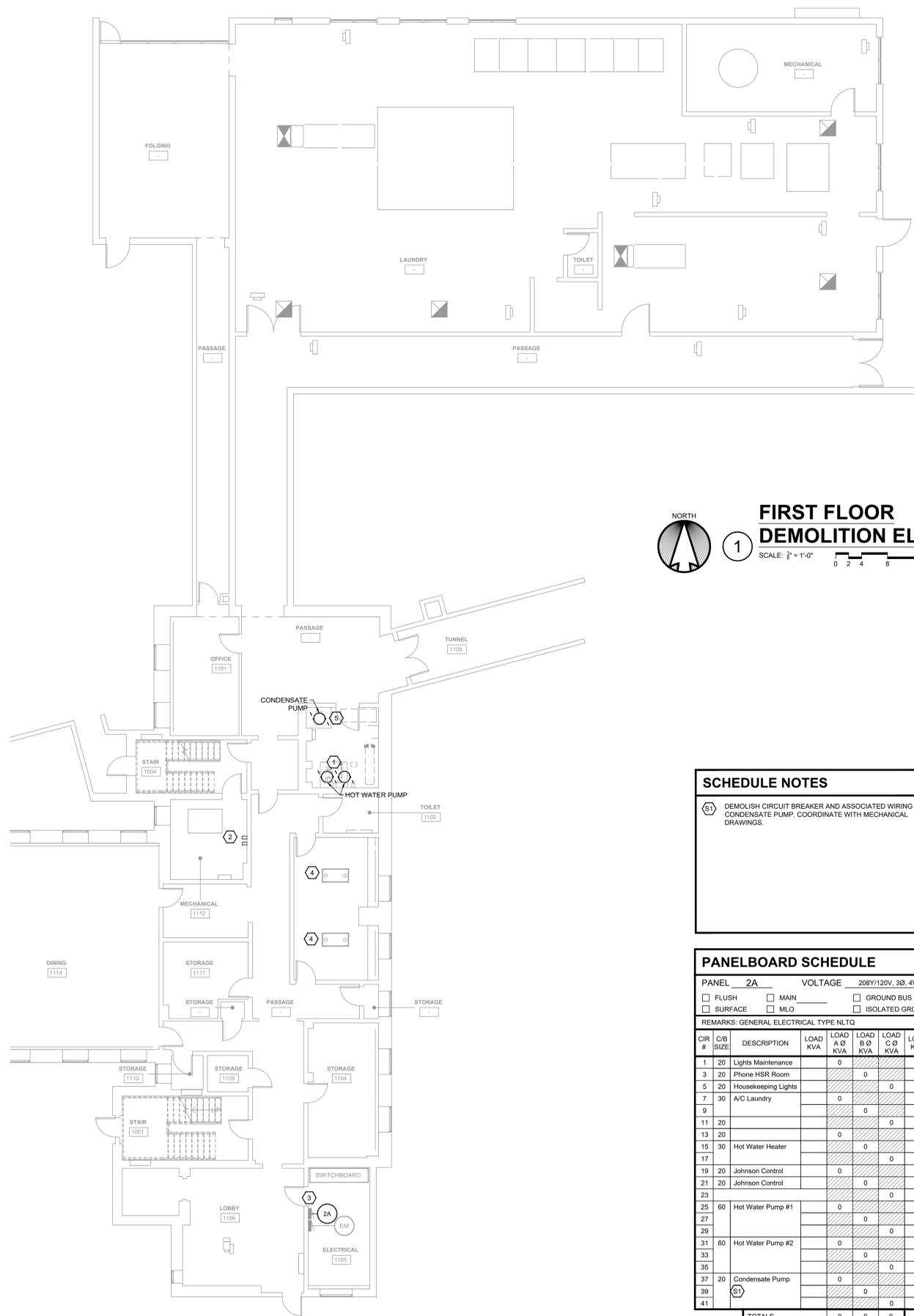
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 PROJECT MANAGER DG

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**FIRST FLOOR
 DEMOLITION PLANS**

ED1.0

- SHEET NOTES**
- HOT WATER PUMP TO BE DEMOLISHED BY OTHERS. ELECTRICAL CONTRACTOR TO DEMOLISH DISCONNECT ON WALL AND ASSOCIATED WIRING FROM SOURCE TO DISCONNECT TO MOTOR. RE USE CONDUIT AND WIRING WHERE POSSIBLE.
 - DISCONNECT EXISTING VFDS FOR THE HOT WATER PUMPS. SEE NEW PLANS FOR LOCATION OF NEW VFDS.
 - EXISTING PANEL SERVING THIS AREA. SEE NEW PLANS FOR PANEL SCHEDULE AND NEW AND EXISTING CIRCUITS.
 - EXISTING 2X4 LIGHT FIXTURES TO BE RELOCATED AS NEEDED TO ACCOMMODATE THE NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL PLANS.
 - CONDENSATE PUMP TO BE DEMOLISHED BY OTHERS. ELECTRICAL CONTRACTOR TO DEMOLISH ASSOCIATED WIRING FROM SOURCE TO THE MOTOR.



**FIRST FLOOR
 DEMOLITION ELECTRICAL PLANS**
 SCALE: 1/8" = 1'-0"
 0 2 4 8 16 32

- SCHEDULE NOTES**
- DEMOLISH CIRCUIT BREAKER AND ASSOCIATED WIRING TO THE CONDENSATE PUMP. COORDINATE WITH MECHANICAL DRAWINGS.

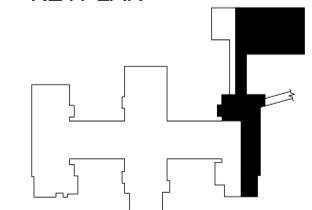
PANELBOARD SCHEDULE		EXISTING	
CIR #	C/B SIZE	DESCRIPTION	CIR #
1	20	Lights Maintenance	20 2
3	20	Phone HSR Room	20 4
5	20	Housekeeping Lights	20 6
7	30	A/C Laundry	20 8
9			20 10
11	20		20 12
13	20		20 14
15	30	Hot Water Heater	20 16
17			20 18
19	20	Johnson Control	20 20
21	20	Johnson Control	20 22
23			20 24
25	60	Hot Water Pump #1	20 26
27			20 28
29			20 30
31	60	Hot Water Pump #2	20 32
33			20 34
35			20 36
37	20	Condensate Pump	35 38
39			40 40
41			42 42
TOTALS		0 0 0	
TOTAL CONNECT, KVA		0	



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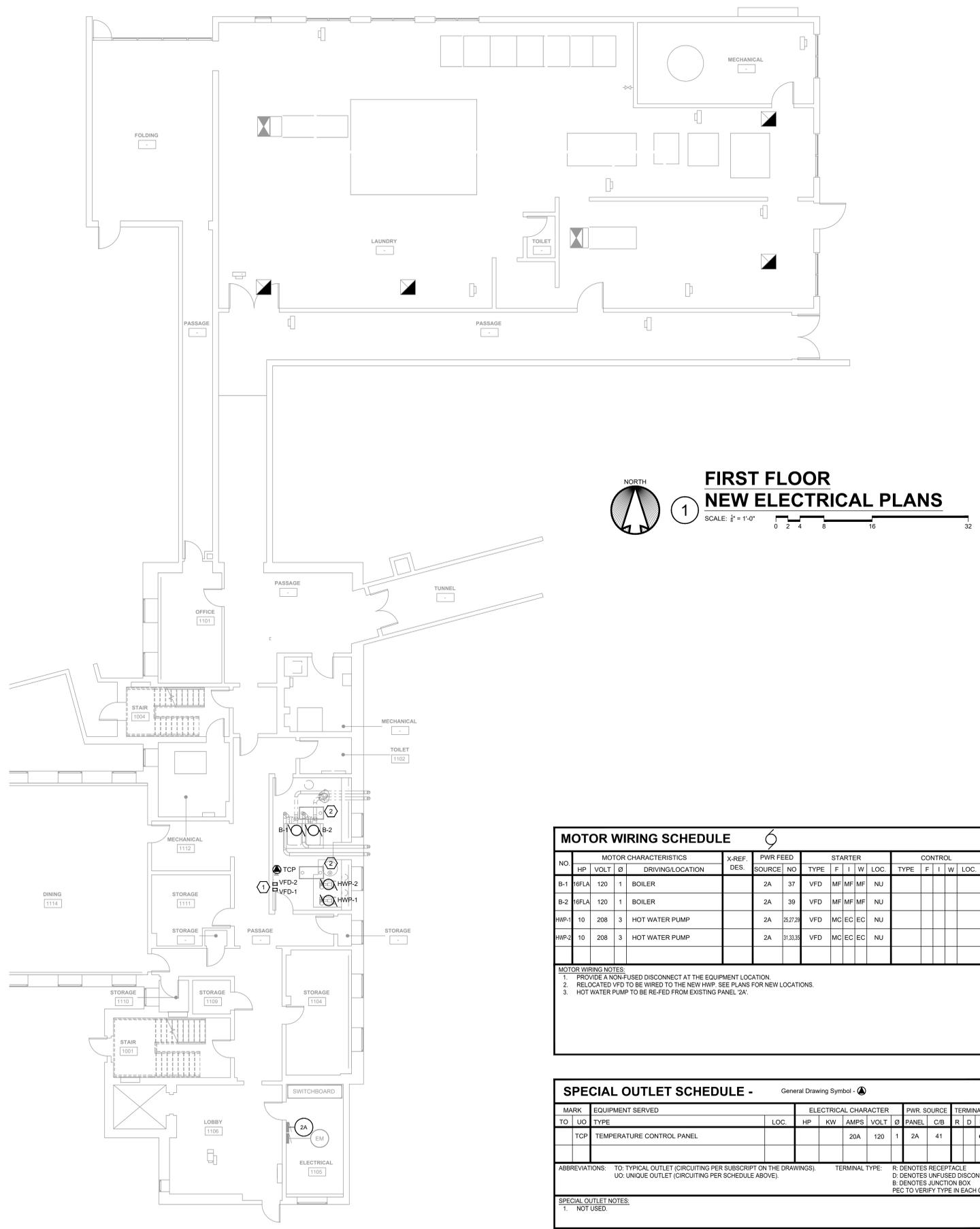
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**FIRST FLOOR NEW
 WORK PLANS**

E1.0



**FIRST FLOOR
 NEW ELECTRICAL PLANS**
 SCALE: 1/8" = 1'-0"
 NORTH

SHEET NOTES

- EXISTING VFDs TO BE RELOCATED TO NEW LOCATIONS SHOWN. COORDINATE WITH MECHANICAL PLANS.
- RELOCATE LIGHT FIXTURES IN MECHANICAL ROOM AS REQUIRED TO AVOID NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL PLANS.

GENERAL NOTES

- CONTRACTOR SHALL COORDINATE ANY NEEDED POWER OUTAGES WITH THE OWNER. CONTRACTOR WILL NEED TO PROVIDE A (2) TWO WEEK NOTICE TO THE OWNER PRIOR TO ANY SHUTDOWN.

SCHEDULE NOTES

- RE-FEED NEW HOT WATER PUMP FROM EXISTING 60A 3P CIRCUIT BREAKER IN PANEL 2A.
- INSTALL NEW CIRCUIT BREAKER TO FEED NEW MECHANICAL EQUIPMENT.

MOTOR WIRING SCHEDULE

NO.	MOTOR CHARACTERISTICS			X-REF. DES.	PWR FEED		STARTER			CONTROL			MW NOTE			
	HP	VOLT	Ø		SOURCE	NO	TYPE	F	I	W	LOC.	TYPE		F	I	W
B-1	16FLA	120	1	BOILER	2A	37	VFD	MF	MF	MF	NU					1
B-2	16FLA	120	1	BOILER	2A	39	VFD	MF	MF	MF	NU					1
HWP-1	10	208	3	HOT WATER PUMP	2A	25,27,29	VFD	MC	EC	EC	NU					2,3
HWP-2	10	208	3	HOT WATER PUMP	2A	31,33,35	VFD	MC	EC	EC	NU					2,3

MOTOR WIRING NOTES:

- PROVIDE A NON-FUSED DISCONNECT AT THE EQUIPMENT LOCATION.
- RELOCATED VFD TO BE WIRED TO THE NEW HWP. SEE PLANS FOR NEW LOCATIONS.
- HOT WATER PUMP TO BE RE-FED FROM EXISTING PANEL 2A.

SPECIAL OUTLET SCHEDULE - General Drawing Symbol - (A)

MARK	EQUIPMENT SERVED		ELECTRICAL CHARACTER				PWR. SOURCE		TERMINAL				SO NOTE
	TO	UO	HP	KW	AMPS	VOLT	Ø	PANEL	C/B	R	D	B	
TCP	TEMPERATURE CONTROL PANEL				20A	120	1	2A	41				

ABBREVIATIONS: TO: TYPICAL OUTLET (CIRCUITING PER SUBSCRIPT ON THE DRAWINGS). UO: UNIQUE OUTLET (CIRCUITING PER SCHEDULE ABOVE).
TERMINAL TYPE: R: DENOTES RECEPTACLE. D: DENOTES UNFUSED DISCONNECT. B: DENOTES JUNCTION BOX. PEC TO VERIFY TYPE IN EACH CASE.

SPECIAL OUTLET NOTES:
 1. NOT USED.

PANELBOARD SCHEDULE EXISTING

PANEL 2A VOLTAGE 208Y/120V, 3Ø, 4W AIC 10K

FLUSH MAIN GROUND BUS BUS 225A
 SURFACE MLO ISOLATED GROUND BUS FEED THRU

REMARKS: GENERAL ELECTRICAL TYPE NLTQ

CIR #	C/B SIZE	DESCRIPTION	LOAD KVA	LOAD A Ø KVA	LOAD B Ø KVA	LOAD C Ø KVA	LOAD KVA	DESCRIPTION	C/B SIZE	CIR #
1	20	Lights Maintenance		0				Housekeeping Recep	20	2
3	20	Phone HSR Room		0				Lights Mech Room	20	4
5	20	Housekeeping Lights				0		Contactors	20	6
7	30	A/C Laundry		0				Outside Lights	20	8
9					0			Outside Lights	20	10
11	20				0			Parking Lot Lights	20	12
13	20			0					20	14
15	30	Hot Water Heater			0			Health Dept Comp EC	20	16
17						0		Spare	20	18
19	20	Johnson Control			0			Spare	20	20
21	20	Johnson Control			0			Chapel Lights EM	20	22
23						0		Chapel Lights/ Recep	20	24
25	60	Hot Water Pump #1			0			Tunnel Door/ Lights	20	26
27	(S1)					0		Recep Hallway	20	28
29							0	Recep Locker Room	20	30
31	60	Hot Water Pump #2			0			Recep Hallway	20	32
33	(S1)					0		Recep Maint Storage	20	34
35							0	Outlet by Meter	20	36
37	20	B-1 (S2)	1.9	0				AC Unit #5	207	38
39	20	B-2 (S2)	1.9	0						40
41	20	TCP (S2)	0.2	0						42
TOTALS			0	0	0	0				
TOTAL CONNECT, KVA			0							