ADDENDUM #2

Project Name:
IMCC Boiler #1 Replacement
DAS#9054.01
RFB 905401-01
Addendum #2
Dated: April 8, 2021

This Addendum forms a part of the bidding and contract documents. This Addendum supersedes and supplements all portions of the original bidding and contract documents dated March 17, 2021 with which it conflicts.

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM. FAILURE TO DO SO MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

1. BID CLARIFICATIONS

2. SPECIFICATIONS

A. Section 23 0520 Steam Meters
   1. REPLACE 2.1.D with: "Manufacturer: McCrometer, Cameron, DDTOP, Tek-Trol, or Engineer pre-approved equivalent."

B. Section 23 5239 Firetube Boilers
   1. REPLACE 2.6.A.2 with: "The burner shall be modulating with minimum turndowns of 8:1 on natural gas and 7:1 on No. 2 oil."
   2. REPLACE 2.3.G with: "Tube sheet and rear return no less than 0.625" thick."

3. DRAWINGS

A. Sheet A10 - Added 10'-0" by 5'-0" concrete approach pad to the exterior of the new overhead door

B. Sheet M51 – Updated Boiler Schedule

4. QUESTIONS AND CLARIFICATIONS

A. How have the burners been designed for using natural gas or fuel oil? Is it anticipated there will be tow burners permanently installed? *A> It is anticipated that there will be one burner installed that can burn natural gas or fuel oil.*

B. Is there an existing blowdown tank? *A> Yes, but it will be demolished, and a new tank installed with the new boiler.*

C. Will the facility take down and replace the outer fences as needed to deliver the new overhead door and other equipment? *A> Yes, but please limit the size of the opening needed as much as possible.*

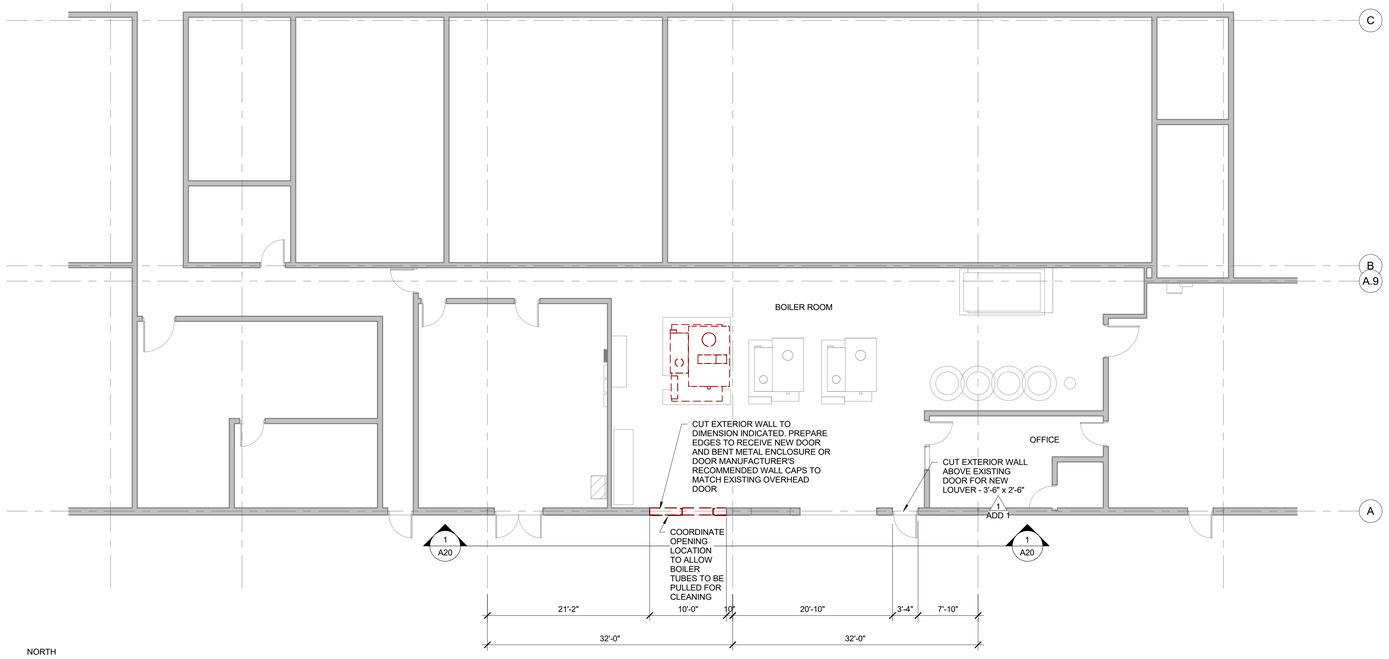
D. Are there tunnels underneath the ground between the outer fence and the building? *A> No tunnels but several utilities run underground in that area.*

5. ATTACHMENTS

A. Sheet A10 – FLOOR PLAN

B. Sheet M51 – MECHANICAL DETAILS

END OF ADDENDUM



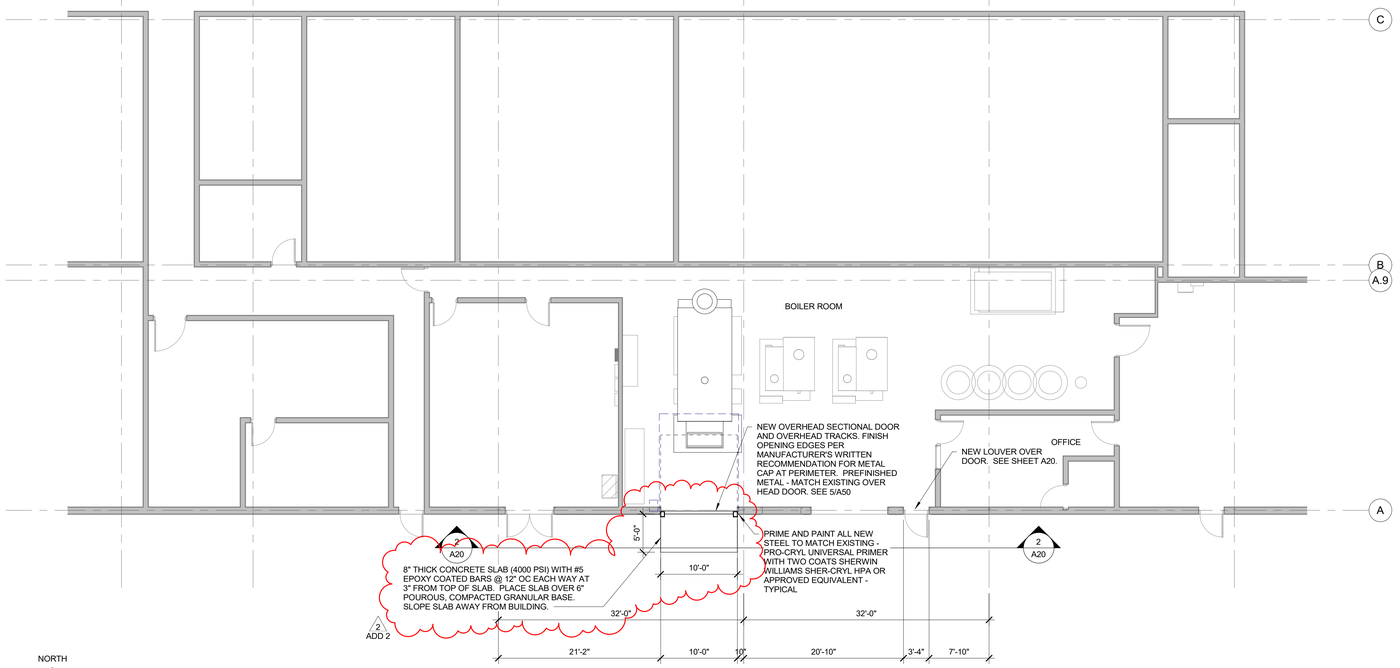
NORTH

1 FIRST FLOOR DEMOLITION PLAN

1/8" = 1'-0" 0 12'

FLOOR PLAN NOTES

1. ALL DIMENSION SHALL BE FIELD VERIFIED PRIOR TO DEMOLITION AND RECONSTRUCTION. COORDINATE LOCATION OF PROPOSED COLUMNS, HEADERS, AND GIRTS WITH DOOR AND LOUVER MANUFACTURER INFORMATION FOR CLEAR OPENING DIMENSIONS.
2. ALL PROPOSED STRUCTURAL STEEL CHANNELS, PLATES, AND ANGLES SHALL BE MINIMUM ASTM A36 STEEL.
3. CONCRETE SCREWS SHALL BE GALVANIZED OR STAINLESS STEEL.
4. CONCRETE SCREWS SHALL BE ANCHORED INTO SOUND CONCRETE. CONTACT ENGINEER IF SCREW, WHERE INDICATED TO BE INSTALLED PER DETAILS, IS LOCATED IN CRACKED OR DELAMINATED CONCRETE PRIOR TO ANY STEEL FABRICATION.
5. REFER TO DRAWINGS OF ALL TRADES FOR ADDITIONAL INFORMATION REGARDING ITEMS PENETRATING FLOORS, WALLS, AND CEILINGS.
6. ALL NEW PARTITIONS ARE DIMENSIONED TO FACE OF STUD, MASONRY, OR CONCRETE COMPONENT UNLESS NOTED OTHERWISE. DIMENSIONS TO EXISTING ELEMENTS ARE TO EXPOSED FACE.
7. CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO OWNER'S OCCUPIED AREAS ADJACENT TO NEW CONSTRUCTION. CONTRACTOR TO PROVIDE ALL LABOR AND MATERIALS TO REPAIR ALL DISTURBED ELEMENTS AT CONSTRUCTION ACCESS AND ACCESS ROUTES. ALL REPAIRS SHALL MATCH EXISTING CONSTRUCTION AND FINISHES.
8. COORDINATE LOCATION OF CEILING MOUNTED OVERHEAD DOOR ITEMS WITH EXISTING CONDITIONS.
9. CONTRACTOR SHALL COVER ANY OPENINGS WITH TEMPORARY CLOSURES WHEN NOT WORKING ON SITE TO PREVENT WEATHER, INSECTS, RODENTS AND INTRUDERS FROM ENTERING FACILITY.



NORTH

2 FIRST FLOOR PLAN

1/8" = 1'-0" 0 12'

SECTION 08 3613 - SECTIONAL DOORS

PART 1 GENERAL
1.1 SECTION INCLUDES
A. OVERHEAD SECTIONAL DOORS, MANUALLY OPERATED.
1.2 SUBMITTALS
A. SHOP DRAWINGS: INDICATE OPENING DIMENSIONS AND REQUIRED TOLERANCES, CONNECTION DETAILS, ANCHORAGE SPACING, HARDWARE LOCATIONS, AND INSTALLATION DETAILS.
B. MANUFACTURER'S CERTIFICATE: CERTIFY PRODUCT MEETS OR EXCEEDS SPECIFIED REQUIREMENTS.
C. MANUFACTURER'S INSTALLATION INSTRUCTIONS: INCLUDE ANY SPECIAL PROCEDURES REQUIRED BY PROJECT CONDITIONS.
D. WARRANTY: SUBMIT MANUFACTURER WARRANTY AND ENSURE FORMS HAVE BEEN COMPLETED IN OWNER'S NAME AND REGISTERED WITH MANUFACTURER.

PART 2 PRODUCTS
2.1 MANUFACTURERS
A. OVERHEAD DOOR CORPORATION
B. CLOPAY DOOR CORPORATION
C. C.H.I. OVERHEAD DOORS
D. OR ARCHITECT APPROVED EQUIVALENT
2.2 STEEL DOOR COMPONENTS
A. BASIS OF DESIGN: INSULATED STEEL SECTIONAL OVERHEAD DOORS: 591 SERIES THERMACORE INSULATED STEEL DOORS BY OVERHEAD DOOR CORPORATION. UNITS SHALL HAVE THE FOLLOWING CHARACTERISTICS:
1. DOOR ASSEMBLY: METAL/FOAM/METAL SANDWICH PANEL CONSTRUCTION, WITH PVC THERMAL BREAK AND FLUSH DESIGN.
A. PANEL THICKNESS: 1-5/8 INCHES (41 MM).
B. EXTERIOR SURFACE: RIBBED, TEXTURED.
C. EXTERIOR STEEL: .015 INCH (.38 MM), HOT-DIPPED GALVANIZED.
D. END STILES: 16 GAUGE.
E. SPRINGS:
1) 25,000 CYCLES.
2) SHAFT TYPE: SOLID
F. INSULATION: CFC-FREE AND HCFC-FREE POLYURETHANE, FULLY ENCAPSULATED.
G. THERMAL VALUES: R-VALUE OF 14.86; U-VALUE OF 0.067.
H. AIR INFILTRATION: 0.08 CFM AT 15 MPH: 0.08 CFM AT 25 MPH.
1) PANEL THICKNESS: 1-3/4 INCHES (44 MM).
2) EXTERIOR SURFACE: FLUSH, TEXTURED.
3) THERMAL VALUES: R-VALUE OF 14.8;
2. FINISH AND COLOR: TWO COAT BAKED-ON POLYESTER:
A. INTERIOR COLOR, WHITE.
B. EXTERIOR COLOR, TO BE DETERMINED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF STANDARD COLORS.
3. HARDWARE: GALVANIZED STEEL HINGES AND FIXTURES. BALL BEARING ROLLERS WITH HARDENED STEEL RACES.
4. WEATHERSTRIPPING:
A. EPDM BULB-TYPE STRIP AT BOTTOM SECTION.
B. FLEXIBLE JAMB SEALS.
C. FLEXIBLE HEADER SEAL.
5. TRACK: PROVIDE HIGH HEADROOM TRACK AS RECOMMENDED BY MANUFACTURER TO SUIT LOADING REQUIRED AND CLEARANCES AVAILABLE. VERIFY MECHANICAL SYSTEM LOCATIONS WHEN RECOMMENDING.

2.3 MATERIALS
A. SHEET STEEL: HOT-DIPPED GALVANIZED STEEL SHEET, ASTM A 653/A 653M, WITH G60/Z180 COATING, PLAIN SURFACE.
B. INSULATION: FIBROUS GLASS BATT, UNFACED, BONDED TO FACING.

PART 3 EXECUTION
3.1 EXAMINATION
A. VERIFY THAT WALL OPENINGS ARE READY TO RECEIVE WORK AND OPENING DIMENSIONS AND TOLERANCES ARE WITHIN SPECIFIED LIMITS.
3.2 PREPARATION
A. PREPARE OPENING TO PERMIT CORRECT INSTALLATION OF DOOR UNIT TO PERIMETER AIR AND VAPOR BARRIER SEAL.
3.3 INSTALLATION
A. INSTALL DOOR UNIT ASSEMBLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. ANCHOR ASSEMBLY TO WALL CONSTRUCTION AND BUILDING FRAMING WITHOUT DISTORTION OR STRESS.
C. SECURELY BRACE DOOR TRACKS SUSPENDED FROM STRUCTURE. SECURE TRACKS TO STRUCTURAL MEMBERS ONLY.
D. FIT AND ALIGN DOOR ASSEMBLY INCLUDING HARDWARE.
E. COORDINATE INSTALLATION OF SEALANTS AND BACKING MATERIALS AT FRAME PERIMETER AS SPECIFIED IN SECTION 07 9005.
F. INSTALL PERIMETER TRIM.
3.4 TOLERANCES
A. MAXIMUM VARIATION FROM PLUMB: 1/16 INCH.
B. MAXIMUM VARIATION FROM LEVEL: 1/16 INCH.
C. LONGITUDINAL OR DIAGONAL WARP: PLUS OR MINUS 1/8 INCH FROM 10 FT STRAIGHT EDGE.
D. MAINTAIN DIMENSIONAL TOLERANCES AND ALIGNMENT WITH ADJACENT WORK.
3.5 ADJUSTING
A. ADJUST DOOR ASSEMBLY FOR SMOOTH OPERATION AND FULL CONTACT WITH WEATHERSTRIPPING.
B. HAVE MANUFACTURER'S FIELD REPRESENTATIVE PRESENT TO CONFIRM PROPER OPERATION AND IDENTIFY ADJUSTMENTS TO DOOR ASSEMBLY FOR SPECIFIED OPERATION.

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9054.01 IMCC BOILER #1 REPLACEMENT

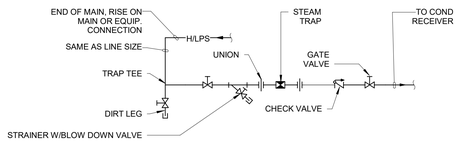
IOWA MEDICAL CLASSIFICATION CENTER
2700 CORAL RIDGE AVE, CORALVILLE, IA 52241

ADD 1	1	03/29/21	ADDENDUM #1
ADD 2	2	04/08/21	ADDENDUM #2

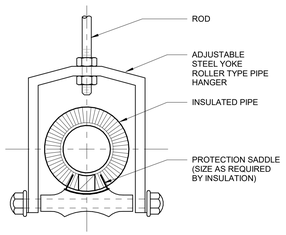
DRAWN: MSR
APPROVED: MSR/AMC
ISSUED FOR BID
DATE: 03/17/2021
PROJECT #: 1208200
FIELD BOOK:

FLOOR PLAN

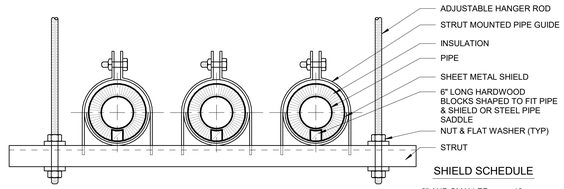
A10



1 STEAM DRIP LEG AND STEAM TRAP DETAIL
NOT TO SCALE



2 ROLLER HANGER DETAIL
NOT TO SCALE



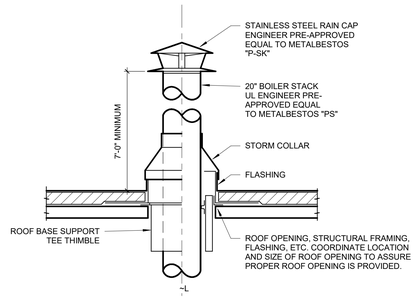
NOTES:
1. SIZE STRUT AND CLAMP TO ADEQUATELY SUPPORT LOAD
2. STRUT SHALL BE EPOXY PAINTED

SHIELD SCHEDULE

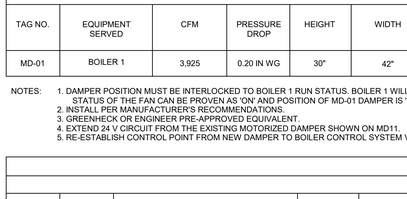
2" AND SMALLER: GAGE	16
2 1/2" TO 6": GAGE	14
8" AND LARGER: GAGE	12

LENGTH OF SHIELD TO BE AT LEAST 6" LONGER THAN THE OUTSIDE DIAMETER OF THE INSULATION

3 TRAPEZE TYPE HANGER DETAIL
NOT TO SCALE



4 BOILER STACK ROOF PENETRATION DETAIL
NOT TO SCALE



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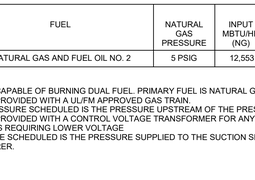
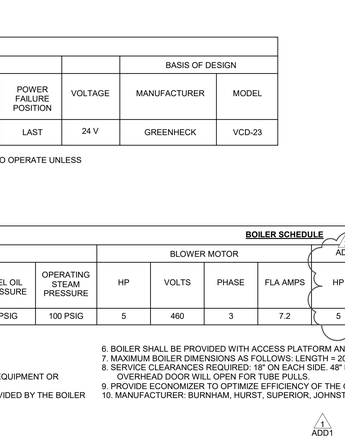
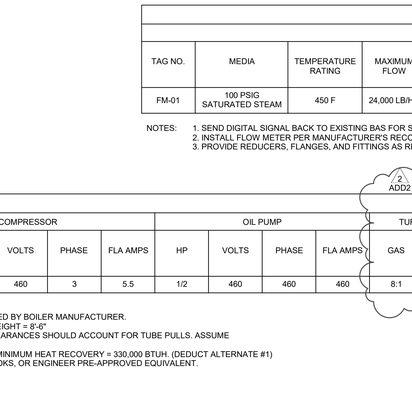


5 INSULATED PIPE HANGER DETAIL
NOT TO SCALE



6 SAFETY VALVE DISCHARGE PIPING DETAIL
NOT TO SCALE



7 BLOWDOWN SEPARATOR DETAIL
NOT TO SCALE

NOTES:
1. CONCRETE COMPRESSIVE STRENGTH (28 DAY)(f'c): 4000 PSI (W/C = .45).
2. REINFORCEMENT PROTECTION: 1 1/2" UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL BE SECURELY FASTENED IN FORMS PRIOR TO POURING CONCRETE. WET SETTING OF REINFORCING STEEL WILL NOT BE ACCEPTED PER ACI.
4. WHERE NEW CONCRETE IS TO BE CAST AGAINST EXISTING CONCRETE, PREPARE SURFACE OF EXISTING BY REMOVING ALL SPALLS, CORROSION AND LOOSE CONCRETE.

8 EQUIPMENT PAD DETAIL
NOT TO SCALE

LOUVER SCHEDULE

REMARKS:
1. RUSKIN, GREENHECK, OR ENGINEER PRE-APPROVED EQUIVALENT
2. 4" FRAME DEPTH. EXTRUDED 6063 ALUMINUM FRAME AND BLADES. WELDED CONSTRUCTION.
3. BAKED ENAMEL FINISH. COLOR APPROVED BY OWNER PRIOR TO PLACING ORDER.
4. WATER PENETRATION NO GREATER THAN 0.012 OZ/SQ FT AT 1000 FPM FACE VELOCITY.

MARK	AREA SERVED	AIR FLOW (CFM)	DIMENSIONS H	W	D	MAX FREE AREA (%)	FREE AREA VELOCITY (FPM)	PRESSURE DROP (WG)	DESIGN BASIS	REMARKS
LD-01	SF-01	3925	30	42	0' - 4"	46	980	0.30	GREENHECK EDD-401	1, 2, 3,4

ADJUSTABLE LOUVERED SUPPLY GRILLE SCHEDULE

TAG NO.	EQUIPMENT SERVED	CFM	PRESSURE DROP @ 0° BLADE ANGLE	FREE AREA REQUIRED	DELFECTION DIRECTION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL
SG-01	BOILER 1	3,925	0.1 IN WG	6.25 FT²	VERTICAL	PRICE INDUSTRIES	150

NOTES:
1. LOUVERS MUST BE ADJUSTABLE FOR USE BY IMCC STAFF. INSTALL AT 0° BLADE ANGLE UNLESS DIRECTED OTHERWISE BY IMCC STAFF.
2. BLADES MUST LOCK IN TO PLACE TO AVOID UNWANTED CHANGES IN BLADE DIRECTION.
3. MANUFACTURERS: PRICE INDUSTRIES OR ENGINEER PRE-APPROVED EQUIVALENT.

MOTORIZED DAMPER SCHEDULE

TAG NO.	EQUIPMENT SERVED	CFM	PRESSURE DROP	HEIGHT	WIDTH	DEPTH	POWER FAILURE POSITION	VOLTAGE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL
MD-01	BOILER 1	3,925	0.20 IN WG	30"	42"	5"	LAST	24 V	GREENHECK	VCD-23

NOTES:
1. DAMPER POSITION MUST BE INTERLOCKED TO BOILER 1 RUN STATUS. BOILER 1 WILL NOT BE ALLOWED TO OPERATE UNLESS STATUS OF THE FAN CAN BE PROVEN AS 'ON' AND POSITION OF MD-01 DAMPER IS 'OPEN'.
2. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3. GREENHECK OR ENGINEER PRE-APPROVED EQUIVALENT.
4. EXTEND 24 V CIRCUIT FROM THE EXISTING MOTORIZED DAMPER SHOWN ON MD11.
5. RE-ESTABLISH CONTROL POINT FROM NEW DAMPER TO BOILER CONTROL SYSTEM VIA MODBUS.

BOILER SCHEDULE

TAG NO.	NOMINAL BHP	FUEL	NATURAL GAS PRESSURE	INPUT MBTU/HR (NG)	GROSS OUTPUT MBTU/HR	FUEL OIL PRESSURE	OPERATING STEAM PRESSURE	BLOWER MOTOR HP	VOLTS	PHASE	FLA AMPS	AIR COMPRESSOR HP (2 ADD2)	RPM	VOLTS	PHASE	FLA AMPS	OIL PUMP HP	VOLTS	PHASE	FLA AMPS	TURNDOWN GAS (2 ADD2)	TURNDOWN OIL	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL
BLR-1	300	NATURAL GAS AND FUEL OIL NO. 2	5 PSIG	12,553	10,167	2 PSIG	100 PSIG	5	460	3	7.2	5	1750	460	3	5.5	1/2	460	460	460	8:1	7:1	BURNHAM	3P-300

NOTES:
1. BOILER SHALL BE CAPABLE OF BURNING DUAL FUEL. PRIMARY FUEL IS NATURAL GAS.
2. BOILER SHALL BE PROVIDED WITH A UL/FM APPROVED GAS TRAIN.
3. NATURAL GAS PRESSURE SCHEDULED IS THE PRESSURE UPSTREAM OF THE PRESSURE REGULATOR
4. BOILER SHALL BE PROVIDED WITH A CONTROL VOLTAGE TRANSFORMER FOR ANY ASSOCIATED BOILER EQUIPMENT OR ACCESSORIES REQUIRING LOWER VOLTAGE
5. FUEL OIL PRESSURE SCHEDULED IS THE PRESSURE SUPPLIED TO THE SUCTION SIDE OF THE PUMP PROVIDED BY THE BOILER MANUFACTURER.
6. BOILER SHALL BE PROVIDED WITH ACCESS PLATFORM AND LADDER, PROVIDED BY BOILER MANUFACTURER.
7. MAXIMUM BOILER DIMENSIONS AS FOLLOWS: LENGTH = 20'-0" WIDTH = 8'-0" HEIGHT = 8'-6".
8. SERVICE CLEARANCES REQUIRED: 18" ON EACH SIDE. 48" BEHIND. FRONT CLEARANCES SHOULD ACCOUNT FOR TUBE PULLS. ASSUME OVERHEAD DOOR WILL OPEN FOR TUBE PULLS.
9. PROVIDE ECONOMIZER TO OPTIMIZE EFFICIENCY OF THE OVERALL SYSTEM. MINIMUM HEAT RECOVERY = 330,000 BTUH. (DEDUCT ALTERNATE #1)
10. MANUFACTURER: BURNHAM, HURST, SUPERIOR, JOHNSTON, CLEAVER-BROOKS, OR ENGINEER PRE-APPROVED EQUIVALENT.

(1 ADD1)

FAN SCHEDULE

TAG NO.	MEDIA	TEMPERATURE RATING	AIR FLOW	STATIC PRESSURE	MOTOR DATA	DRIVE TYPE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL
SF-01	COMBUSTION AIR	-20 TO 120 F	3,925 CFM	1.25 IN WC	2 HP / 480 V / 3 PH	DIRECT	LOREN COOK	165SQ17D

NOTES:
1. FAN TO SUPPLIED WITH MOTOR STARTER. FAN STATUS MUST BE INTERLOCKED TO BOILER 1 RUN STATUS. BOILER 1 WILL NOT BE ALLOWED TO OPERATE UNLESS STATUS OF THE FAN CAN BE PROVEN AS 'ON' AND POSITION OF LD-01 DAMPER IS 'OPEN'.
2. INSTALL FAN PER MANUFACTURER'S RECOMMENDATIONS.
3. PROVIDE REDUCERS, FLANGES, AND FITTINGS AS REQUIRED TO MAKE FAN CONNECTIONS TO INLET AND OUTLET DUCTWORK.

STEAM FLOW METER SCHEDULE

TAG NO.	MEDIA	TEMPERATURE RATING	MAXIMUM FLOW	MINIMUM FLOW	PIPING CONNECTIONS	UPSTREAM PIPE DIAMETERS	DOWNSTREAM PIPE DIAMETERS	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL
FM-01	100 PSIG SATURATED STEAM	450 F	24,000 LB/HR	2,400 LB/HR	CLASS 150 FLANGE	1	2	McCROMETER	V-CONE

NOTES:
1. SEND DIGITAL SIGNAL BACK TO EXISTING BAS FOR STEAM FLOW.
2. INSTALL FLOW METER PER MANUFACTURER'S RECOMMENDATIONS.
3. PROVIDE REDUCERS, FLANGES, AND FITTINGS AS REQUIRED TO MAKE FLOW METER CONNECTION TO PIPING SYSTEM.

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DRAWN: TAB
APPROVED: JJS
ISSUED FOR BID
DATE: 03/17/2021
PROJECT #: 1208200
FIELD BOOK:

MECHANICAL DETAILS

M51

BIM 360://1208200 IDA Boiler #1 Replacement/1208200-MEP-Central.rvt
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