

RFB-2023-52 SUNY SCCC Student Center Renovations C2 Design Group

ADDENDUM #1

Issued Date: 08/31/2023

The purpose of this addendum is to provide detailed information to all Bidders. This addendum is hereby included in and made part of the Contract Documents, whether or not attached thereto. Receipt of this Addendum must be acknowledged on the bid form.

CONTENTS/RESPONSE TO QUESTIONS/REFERENCE TO ATTACHMENTS

General:

- 1. This addendum changes the documents for Bid #RFB-2023-52.
- 2. Project will contain Four prime contracts:
 - a. Contract No. 1: General Construction (GC)
 - b. Contract No. 2: Plumbing and Fire protection (P&FP)
 - c. Contract No. 3: HVAC (M)
 - d. Contract No. 4: Electrical (E)
- 3. The bid due date is September 14, 2023 at 2:00pm
- 4. Find attached sign in sheet from the August 24th 2023 Pre-Bid Walkthrough



Revised/New Contract Drawings and Specifications

- 1. Drawing E201 First Floor Removal Plan: (See Attachment)
 - a. Description: Updated Alternate to be 3E
- 2. Drawing E401 First Floor Power & Systems Plan: (See Attachment)
 - a. Description: Updated Alternate to be 3E
- 3. Drawing M401 First Floor Piping Plan: (See Attachment)
 - a. Description: Added Alternate 3M notes.
- 4. Drawing M501 First Floor Enlarged Mechanical Room Removal Plan: (See Attachment)
 - a. Description: New drawing
- 5. Drawing M502 First Floor Enlarged Mechanical Room Plans: (See Attachment)
 - a. Description: Added Alternate 3M notes.
- 6. Drawing M503 Boiler Piping Schematic: (See Attachment)
 - a. Description: Added Alternate 3M notes.
- 7. Drawing M701 Temperature Controls: (See Attachment)
 - a. Description: Added Alternate 3M notes.
- 8. Specification 00-04-02 Bid Form: Contract 4 Electrical (See Attachment)
 - a. Description: Replace existing Bid form: Contract 4 Electrical (page 70) with revised Bid Form (page 70-71) which includes Add Alternate #3(E). See documents for Alternate description.
- 9. Specification 01-23-00 ALTERNATES
 - a. Description: (Page 2) 3.1 SCHEDULE OF ALTERNATES: Add the following Electrical Alternate.
 - i. ADD ALTERNATE #3(E) ELECTRICAL WORK ASSOCIATED WITH THE REPLACEMENT OF THE EXISTING BOILERS.



Disconnect (2) Boilers, (2) HWPs, (2) DTPs for removal by others in Mechanical room. Disconnect and remove all associated controls and circuitry back to source. Provide electrical connection to new Boilers, Boiler pumps, Hot water pumps and DTPs. Install VFDs provided by MC. Provide EPO buttons for emergency Boiler shut off. See all associated documents for detailed scope of work.

General Bid RFI's

- 10. Is the M/WBE 5 % or 5% for MBE and 5% for WBE?
 - a. Response: See Specifications 00-07-10 page 98 for Schenectady County funded project requirements.
- 11. Dumpsters
 - a. Response: Dumpsters are required by each prime.
- 12. Rooms 106,109 and 111 that look to have shelving but we have no elevations to confirm.
 - a. Response:
 - i. For room 106, shelving will be 5'-0" wide by 1'-3" deep in a white laminate. There will be 5 adjustable shelfs.
 - ii. For room 109, there is no shelving. This is an office.
 - For room 111, this will be an L-Shaped shelving. The longer side measures 7'-7" wide (measures to wall) by 1'-3" deep. The shorter side measures 3'-3" wide by 1'-3" deep. There will be 5 adjustable shelfs in white laminate.
 - iv. Room 119 Storage does have shelves. Shelving will be 5'-5" wide by 1'-3" deep in a white laminate. There will be 5 adjustable shelfs
- 13. The concrete infill patches, are we required to drill and dowel no detail of the concrete infill patch?
 - a. Response: No dowels required.
- 14. Changing Room is there (2) curtain rod required? Are we to provide the curtain or is this by the owner?
 - a. Response: There is only (1) curtain rod required. GC to provide and install curtain rod.



- 15. Changing room elevation shows robe hooks and mirror is this by the GC?
 - a. Response: Robe hooks and mirror to be provided and installed by GC.
- 16. The Kitchenette shows a mini frig, is this by the GC.?
 - a. Response: Mini Fridge is provided and installed by GC. See Keynote 602 on sheet 2/A600.
- 17. You show an elevation for door signs but do not show what type goes where, please clarify?
 - a. Response: See specifications, section 10 14 23 page 2
- 18. Drawing E201 Shows Alt 1 to remove (3) recessed fixtures and replace with (3) new as stated on the Bid Form. However, on drawing E301 it shows (4) F1 Fixtures. Please confirm correct quantity.
 - a. Response: Quantity is correct
- 19. Drawing E001 General Notes- Communications Notes A & B contradict each other along with Note J. Confirm what the Electrical Contract is responsible for, for the communication scope of work?
 - a. Response: EC to provide low voltage cabling (CAT6), Testing of CAT6 cable, Termination & installation of caver plate and jack, Landing cabling on patch panel as directed by owner.
- 20. Drawing E401 Note 2 references a 6-Strand SM Fiber optic armored cable from IT room 120 to the 4th Floor MDF in Elston Hall. Contractor to assume 1000'. Since there isn't a designated pathway shown on the drawings, will the allowance be used to coordinate this scope of work?

Response: No, contractor to include installation in base bid.

21. Who is responsible for network switches and patch cords?

Response: No, Owner

22. Where is the existing data rack located in relation to the area being renovated as all existing data cabling needs to be removed back to source?

Response: Existing IT Rack is located on 2nd floor in electric room.



23. If the alternate (1M) is not accepted, where does that leave the new hot water mains? I don't think they are part of the base bid. Those new mains only get installed if the new boilers and pumps are accepted, correct?

Response: See M401 from addendum #1 with clarification

24. On M201 removal plan, there is a blow up for the chiller/mechanical room that references drawing M501 but there is no drawing M501?

Response: See addendum #1 for M501 drawing.

25. In order to install new boiler flue chimney will need to be opened up in mechanical room. Will this be performed by GC or MC?

Response: All work required to install the new chimney is the responsibility of the MC.

26. What is the current revision of the Metasys software that is onsite at SCCC?

Response: The controls sub-contractor should visit the site and gather all information they require to tie the new into the existing BMS.

27. How many remote workstations/laptops are onsite?

Response: The controls sub-contractor should visit the site and gather all information they require to tie the new into the existing BMS.

28. Is the current server architecture virtual or physical?

Response: The controls sub-contractor should visit the site and gather all information they require to tie the new into the existing BMS.

29. What revision of Windows Server is being used for Metasys?

Response: The controls sub-contractor should visit the site and gather all information they require to tie the new into the existing BMS.

Please acknowledge this addendum on your bid form.

END OF ADDENDUM #1



Contractor Sign in Sheet

Bid #RFB-2023-52

SUNY SCCC STUDENT CENTER RENOVATIONS STOCKADE BUILDING, 78 WASHINGTON AVE., SCHENECTADY, NY 12305

Pre-Bid Walk thr	ough	August 24,	2023 - 1:00 PM
Name	(Contract type) Business Name	e Phone #	Email
Pete Best-Hall	Iron Sword	914-403-689	1 p. besthall@ironswordlie.con
Efet Smith	BUNKOFF	J13-701-4462	PSm, the Buntlifle ca
John MElligott	TMi .nc.	5182107022	Mike@ trucelligoTTime, com
Frika Tee	Jwpanhr4h	(512)400-1400	etce judanhith com
KERRY CHESTERFIEL	2 340 INDUSTRIES	518 400-7412	Kchestofield abandd
Mark Caulfield	AOW	518477 0976	Mcaulfield Cause construction
Steve Persau	d JCI	518-764-4414	Steve. Chandicopersond @ jci.com
Jon Willso	N TNEA	518 694 6785	TOW OTWA-CM.COM
BREDN DEAVE	ANS ANS	514-817-109	e bje ouvons O ANS CORRORATIE

Name (Contract type) Business Name Phone # Email Stephen, Luciano SU erectory con Ny. Soir Sel 518-557-5281 JASON M 516:821-0882 GArnet IMAURIDOS EGN 12451 DETUUL HATFIELD 518-373-2000 ELD-10M Sch. 518 3388026 Evin Reich erady ntyny.gov 518-463-6985 Math Cristo cristidendition matte Robel Boh Lewis Scherecte 518-729-7760 y.gov Casey, Sy 518-690-6510 oconnellela Symmer Gse COM NUTTER 518-320-8250 NUTTER @C2-034460.P. COM JEFF C2 DEGLEN GRAP DEANNA CAMPCHERO C2 DESIGN GROUP 518-320-8250 CAMPCHERO @ C2-DESIGN GROUP. COM



REMOVAL NOTES 🔘

- 1. EXISTING TO REMAIN 480V/3PH 600A/3P MCB ELECTRICAL PANEL (SQUARE D "QMB" SERIES).
- 2. EXISTING TO REMAIN 480:208Y/120V 3PH 45KVA TRANSFORMER (SQUARE D "45T3H").
- SERIES).
- "NF" SERIES).
- 5. EXISTING TO REMAIN 480V/3PH 100A/3P MCB ELECTRICAL PANEL (SQUARE D "NF" SERIES).
- 7. DISCONNECT AND REMOVE EXIT SIGN AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- 8. DISCONNECT AND REMOVE EMERGENCY LIGHT AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- BACK TO SOURCE.
- SOURCE.
- 11. DISCONNECT UNIT VENT FOR REMOVAL BY OTHERS. DISCONNECT AND REMOVE ALL ASSOCIATED WIRING AND CONTROLS BACK TO SOURCE.
- 12. DISCONNECT RETURN FAN FOR REMOVALS BY OTHERS. DISCONNECT AND SOURCE.
- 13. DISCONNECT AIR HANDLING UNIT FOR REMOVALS BY OTHERS. DISCONNECT AN REMOVE ALL ASSOCIATED CONTROLS AND DISCONNECTS. MAINTAIN BRANCH CIRCUITRY FOR RECONNECTION.
- BACK TO SOURCE.

- 3. EXISTING TO REMAIN 208V/3PH 225A MLO ELECTRICAL PANEL (SQUARE D "NF"
- 4. EXISTING TO REMAIN 208V/3PH 100A/3P MCB ELECTRICAL PANEL (SQUARE D
- 6. DISCONNECT AND REMOVE ALL LIGHTING FIXTURES & CONTROLS IN ROOM, AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- 9. DISCONNECT BOILER FOR REMOVAL BY OTHERS. DISCONNECT AND REMOVE ALL ASSOCIATED WIRING, CONTROLS, DISCONNECTS, AND BRANCH CIRCUITRY
- 10. DISCONNECT PUMPS FOR REMOVALS BY OTHERS. DISCONNECT AND REMOVE ALL ASSOCIATED CONTROLS, BRANCH CIRCUITRY, AND DISCONNECTS BACK TO
- REMOVE ALL ASSOCIATED CONTROLS, DISCONNECTS AND CIRCUITRY BACK TO
- 14. DISCONNECT AND REMOVE RECEPTACLE AND ALL ASSOCIATED CIRCUITRY

- 15. DISCONNECT AND REMOVE JUNCTION BOX AND ALL ASSOCIATED CIRCUITRY BACK TO SOURCE.
- 16. DISCONNECT AND REMOVE PROJECTOR AND ALL ASSOCIATED CIRCUITRY BACK TO SOURCE. TURN PROJECTOR OVER TO OWNER.
- 17. DISCONNECT PROJECTOR SCREEN AND ALL ASSOCIATED CIRCUITRY & CONTROLS BACK TO SOURCE.
- 18. DISCONNECT AND REMOVE PUSH BUTTON AND ALL ASSOCIATED CIRCUITRY BACK TO SOURCE.
- 19. DISCONNECT AND REMOVE FLOOR BOX AND ALL ASSOCIATED CIRCUITRY BACK TO SOURCE. GC TO FILL FLOOR BOX OPENING TO BE FLUSH WITH FLOOR SURFACE.
- 20. DISCONNECT AND REMOVE MULTIMEDIA OUTLET AND ALL ASSOCIATED CIRCUITRY BACK TO SOURCE.
- 21. DISCONNECT AND REMOVE CATV OUTLET AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- 22. DISCONNECT AND REMOVE DATA DEVICE AND ALL ASSOCIATED CABLING BACK TO SOURCE.
- 23. DISCONNECT AND REMOVE FIRE ALARM DEVICE, MAINTAIN LOOP FOR EXISTING TO REMAIN DEVICES.
- 24. DISCONNECT AND REMOVE FIRE ALARM CONTROL PANEL AFTER NEW CONTROL PANEL IS INSTALLED AND OPERATIONAL. CONTRACTOR TO EXTEND ALL EXISTING TO REMAIN LOOPS, FIBER AND DATA CABLING TO NEW LOCATION.
- 25. DISCONNECT AND REMOVE DUCT SMOKE DETECTOR, MAINTAIN FOR RECONNECTION.
- 26. DISCONNECT AND REMOVE CLOCK AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- 27. DISCONNECT AND REMOVE SPEAKER AND ALL ASSOCIATED WIRING BACK TO SOURCE.
- 28. DISCONNECT AND REMOVE LIGHT FIXTURE, MAINTAIN CIRCUITRY AND CONTROLS FOR NEW LIGHTING.



		Bid Docume	ent - F	RFB-2023-52
	No.	SUBMITTAL / REVISION	DATE:	CONSULTANT:
	.	ADDENDUM #1	8/30/23	
2				engineeredsolutions
				646 Plank Road #104 Phone: (518) 280-2410
				Clifton Park, NY 12065 Fax: (518) 280-2481
NV 12305				www.esolutionspllc.com ES # 22104



E201





First Floor Power & Systems Plan

DRAWING NOTES

- 1. PROVIDE NEW FIRE ALARM CONTROL PANEL. EXTEND FIBER, EXISTING TO REMAIN LOOPS AND DATA DROPS TO NEW LOCATION. REFER TO DETAIL 1/E002 FOR ADDITIONAL REQUIREMENTS.
- PROVIDE 4-POST RACK WITH (2) 48 PORT PATCH PANELS. PROVIDE 6 STRAND SM FIBER OPTIC ARMORED CABLE FROM 4-POST RACK IN IT ROOM 120 TO 4TH FLOOR MDF IN ELSTON HALL. CONTRACTOR TO ASSUME 1000' IN LENGTH.
- 3. PROVIDE EPO FOR BOILER SHUT DOWN, REFER TO DETAIL 1/E600 FOR ADDITIONAL REQUIREMENTS.
- 4. PROVIDE 208V/3PH ELECTRICAL CONNECTION TO AHU. UTILIZE EXISTING CIRCUITRY SALVAGED FROM REMOVALS, EXTEND CIRCUITRY AS NEEDED. RECONNECT EXISTING FAN SHUT DOWN MODULE.
- PROVIDE COMMUNICATIONS GROUND BAR AND CORRESPONDING GROUND WIRE SYSTEM. REFER TO DETAIL 2/E600 FOR ADDITIONAL REQUIREMENTS.
- PROVIDE (1) CAT6 CABLE, FOR WIRELESS ACCESS POINT BY OTHERS, BACK TO IT RACK IN ROOM 120 AND LAND ON PATCH PANEL AS DIRECTED BY OWNER'S IT DEPARTMENT. REFER TO DETAIL 3/E600 FOR ADDITIONAL REQUIREMENTS.
- PROVIDE (2) CAT6 CABLES BACK TO IT RACK IN ROOM 120 AND LAND ON PATCH PANEL AS DIRECTED BY OWNER'S IT DEPARTMENT. REFER TO DETAIL 4/E600 FOR ADDITIONAL REQUIREMENTS.
- PROVIDE (4) GANG FLOOR BOX WITH (2) DUPLEX RECEPTACLES AND (2) CAT6 CABLES BACK TO IT RACK IN ROOM 120 AND LAND ON PATCH PANEL AS DIRECTED BY OWNER'S IT DEPARTMENT. PROVIDE (2) 1" CONDUITS IN SLAB FROM FLOOR BOX TO ABOVE THE CEILING. GC TO PROVIDE ALL CUTTING & PATCH REQUIRED.
- PROVIDE HARDWIRE CONNECTION TO FURNITURE BASEFEED. COORDINATE INSTALL WITH FURNITURE VENDOR PRIOR TO ROUGH-IN.
- 10. PROVIDE 20A/1P CIRCUIT BREAKER IN SPACE OF EXISTING ELECTRICAL PANEL.
- 11. PROVIDE (4) CAT6 CABLES FOR FURNITURE FEED BACK TO IT RACK IN IT 120 AND LAND ON PATCH PANEL AS DIRECTED BY OWNER'S IT DEPARTMENT. COORDINATE INSTALL WITH FURNITURE VENDOR PRIOR TO ROUGH-IN.
- 12. ALL OUTLETS AND CAT6 CABLE/DATA IN ROOM TO BE MOUNTED AT 12" AFF.
- 13. PROVIDE 120V ELECTRICAL CONNECTION TO DOOR ACCESS POWER SUPPLY ACTUATOR, REFER TO DETAIL 5/E600 FOR ADDITIONAL REQUIREMENTS. COORDINATE WITH ARCHITECT HARDWARE SET PRIOR TO ROUGH-IN.
- 14. PROVIDE HANDICAP PUSH BUTTON HARDWARE SET TO OPERATE DOOR AND ACTUATOR. COORDINATE WITH ARCHITECT HARDWARE SET PRIOR TO ROUGH-IN.
- 15. PROVIDE (1) CAT6 CABLE FOR FUTURE SECURITY CAMERA BACK TO IT RACK IN IT 120 AS DIRECTED BY OWNER'S IT DEPARTMENT. REFER TO DETAIL 3/E600 FOR ADDITIONAL REQUIREMENTS.
- 16. PROVIDE PANIC PUSH BUTTON, CONTRACTOR TO CONTRACT WITH COLLEGE'S SECURITY VENDOR FOR COMPLETE WORK. REFER TO SPECIFICATION SECTION 281410 FOR ADDITIONAL REQUIREMENTS.

			IUTIONS	(518) 280-2410	(518) 280-2481
RB-2023-52	CONSULTANT:		engineereasc	646 Plank Road #104 Phone:	Clifton Park, NY 12065 Fax:
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	No.	.			



E401

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DRAWING NOTES

1. RUN REFRIGERANT LINE SET DOWN BUILDING EXTERIOR. COMPLETELY CONCEAL ALL PIPING IN PVC SLIM DUCT.

2. PROVIDE 4" CONCRETE PAD FOR MOUNTING CONDENSING UNIT.

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M401

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REMOVAL NOTES: 〇

- 1. DISCONNECT AND REMOVE EXISTING BOILER, CONTROLS, PIPING TO LOCATIONS SHOWN AND ALL ASSOCIATED ACCESSORIES.
- 2. DISCONNECT AND REMOVE EXISTING PUMP, CONTROLS, PIPING TO LOCATIONS SHOWN AND ALL ASSOCIATED EQUIPMENT.
- 3. DISCONNECT AND REMOVE EXISTING HWS&R PIPING, VALVES, HANGERS, AND ALL SPECIALTIES TO LOCATION SHOWN.
- 4. DISCONNECT AND REMOVE BREECHING FROM BOILER TO CHIMNEY INCLUDING BREECHING UP CHIMNEY.
- 5. DISCONNECT EXISTING GAS LINE AND ALL SPECIALTIES TO LOCATION SHOWN.
- 6. DISCONNECT & REMOVE EXISTING GAS VENT PIPING BACK TO BOILERS. REMOVE VENTS THROUGH WALL & PATCH WALL TO MATCH EXISTING.
- 7. REMOVE EXISTING OVERHEAD EXPANSION TANKS AND ALL ASSOCIATED PIPING.

A Boiler Breeching Pipe Removal Diagram

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Bid Document - submittal / Revision DATE:

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- 1. RUN (3) 8" AL294C VENT PIPES UP TO EXISTING CHIMNEY. SUPPORT VENT PIPES AT TOP AND BOTTOM
- 2. RUN (3) 8" CPVC COMBUSTION AIR INTAKES THRU WALL. CORE DRILL WALL, SEAL AIR TIGHT AND ELBOW DOWN. SEE DETAIL ON THIS DRAWING.

DRAWING NOTES: 🔿

- 1. PROVIDE NEW SECTION OF CONCRETE PAD TO FILL IN BETWEEN THE TWO EXISTING BOILER PADS. PIN NEW PAD TO EXISTING & PROVIDE BONDING AGENT. REFER TO CONCRETE PAD DETAIL ON DRAWING M601.
- 2. PROVIDE RE-COMMISSIONING AND SERVICE OF EXISTING CHILLER BY CHILLER MANUFACTURERS SERVICE COMPANY. VERIFY REFRIGERANT CHARGE, ENTERING AND LEAVING WATER TEMPERATURES. PROVIDE FACTORY SERVICE, LUBRICATION AND MAINTENANCE OF EXISTING UNIT AND ALL OTHER REQUIRED SERVICES.
- 3. CONNECT TO EXISTING PRV & EXPANSION TANK TO NEW SYSTEM AS SHOWN.
- 4. PROVIDE CONCRETE PAD.

ALL WORK ON THIS DRAWING TO 1BE PART OF ALTERNATE 3M

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Internite First Floor Enlarged Mechanical Room Plans Bid Document - RFB-2023-52 Routing Renovations To: Renovations To: Routing Renovations Renovations Routing Renovations Renovations <td< th=""><th></th><th></th><th></th></td<>			
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First Floor Enlarged Mechanical Room Plans ROJECT: Renovations To: SCCC Student Center Renovation 78 Washington Avenue, Stockade Building Schenectady, NY 12305 Schenectady, NY 12305	Bid Document - RFB-2023-52	No. SUBMITTAL / REVISION DATE: CONSULTANT: 1 ADDENDUM#1 8/30/23	Engineeredsolutions 646 Plank Road #104 Phone: (518) 280-2410 Clifton Park, NY 12065 Fax: (518) 280-2481 www.esolutionspillc.com ES # 22104
	First Floor Enlarged Mechanical Room Plans	PROJECT: Renovations To:	SCCC Student Center Renovation ^{78 Washington Avenue, Stockade Building} Schenectady, NY 12305

U Πu N 218 Phone Fax: ES#2 RFB-2023-52 engineere 646 Plank Road #104 Clifton Park, NY 12065 www.esolutionspllc.com 1 Bid Document -submittal / Revision Date: addendum#1 8/30/23 Ž – Renovations To: Student Center Renovation e, Stockade Building Schenectady, NY 12 REMOVAL AND NEW PIPING SCHEMATIC SCCC DRAWN BY: FVC 08/07/2023 SCALE: AS NOTED JOB NO: 2240 M503

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POINT NAME	DEVICE NAME	AI	AO	DI	DO	AV	BV	SCHED	TREND	ALARM	GRAPH
OILER PUMPS (BP-1,BP-2,BP-3)											
PUMP START/STOP	CR-1				Х				Х		Х
PUMP STATUS	CFS-1			х					Х		х
PUMP ALARM										Х	
RIMARY LOOP SUPPLY TEMP	ITS	Х							Х		х
OW PRIMARY LOOP SUPPLY TEMP										Х	
RIMARY LOOP RETURN TEMP	ITS	Х							Х		х
OW PRIMARY LOOP RETURN TEMP										Х	
SECONDARY LOOP SUPPLY TEMP	ITS	Х							Х		Х
OW SECONDARY LOOP SUPPLY TEMP										Х	
SECONDARY LOOP RETURN TEMP	ITS	Х							Х		Х
DIVERT VALVE	CVT		Х						Х		х
BOILER B-1 SUPPLY TEMP	ITS	Х							Х		Х
SOILER B-2 SUPPLY TEMP	ITS	Х							Х		х
SOILER B-3 SUPPLY TEMP	ITS	Х							Х		х
DUTSIDE AIR TEMP	SENSOR	Х							Х		Х
BOILER B-1 START/STOP					Х				Х	Х	х
BOILER B-1 STATUS				Х					Х	Х	Х
OILER B-1 ALARM										Х	
BOILER B-2 START/STOP					Х				Х	Х	Х
BOILER B-2 STATUS				Х					Х	Х	х
30ILER B-2 ALARM										Х	
BOILER B-3 START/STOP					Х				Х	Х	Х
BOILER B-3 STATUS				Х					Х	Х	Х
OILER B-3 ALARM										Х	
BELLABIKA	•	-									

1. ALARM TO INCLUDE FAILURE, RUNNING IN HAND, & RUNTIME EXCEEDED.

2. TREND TO INCLUDE DEMAND, PEAK MONTH-TO-DATE, PEAK TODAY, PEAK YEAR-TO-DATE, USAGE MONTH-TO-DATE, USAGE TODAY, AND USAGE YEAR-TO-DATE. 3. CONTROL VALVE SHALL MAINTAIN ALL TRENDING, ALARM, AND ANY OTHER CAPABILITIES THAT EXISTING CONTROL VALVE SERVING EXISTING TO REMAIN HEAT EXCHANGER HAS. 4. ALARM TO INCLUDE HIGH AND HIGH DIFFERENTIAL PRESSURE.

5. BOILER MANUFACTURER TO CONTROL PUMPS, BMS TO READ STATUS.

6. REFER TO DIAGRAM THIS SHEET AND ON 500 SERIES FOR LOCATIONS AND QUANTITIES OF ADDITIONAL TEMPERATURE SENSORS NOT SPECIFICALLY LISTED ON THIS POINT LIST. 7. THIS SECTION WILL BE THE SAME FOR ALL PUMPS. REFER TO THE DIAGRAM AND SCHEDULES FOR PUMP TAGS AND QUANTITIES.

2. TYPICAL EACH BOILER FOR ENABLE-DISABLE AND ALARM OR TIE-INTO BOILER MANUFACTURE MICRO-PROCESSOR UNIT FROM BMS, SEE BOILER SPECIFICATION.

REFER TO MH 500 SERIES DRAWINGS FOR LOCATIONS OF ADDITIONAL TEMPERATURE SENSORS

New Schematic Heating Piping Controls (M701) SCALE: NTS

NOTES:

NORTH SIDE

- A. HOT WATER RESET & PUMP CONTROL SEQUENCE:
- 1. HOT WATER SUPPLY TO SECONDARY PIPING ZONES SHALL MAINTAIN A RESET SCHEDULE IN ACCORDANCE WITH OAT. 2. BOILERS B-1, B-2, B-3 AND THEIR ASSOCIATED BOILER PUMPS WILL START (IN SEQUENCE) WHEN OUTDOOR TEMPERATURE DROPS BELOW 62°F AND WILL STOP WHEN OUTDOOR TEMPERATURE IS 65°F. HOWEVER,
- WHEN BOILERS ARE TURNED OFF INLINE PUMPS WILL RUN FOR AN ADDITIONAL 5 MINUTES AFTER BOILERS ARE OFF.
- 3. SOFTWARE BIAS ADJUSTMENT SHALL BE PROVIDED FOR EACH ZONE. BIAS ADJUSTMENT SHALL BE 20°F MIN. ABOVE AND BELOW SETPOINT. DAY-NIGHT WATER TEMPERATURE RESET, RESET 20°F (ADJUSTABLE) BELOW DAY TEMPERATURE SETPOINT AT NIGHT. a) OCCUPIED SETPOINTS: 30°F OA, HWS 180°F + 60°F OA, HWS 120°F.
- b) UNOCCUPIED SETPOINTS: 0°F OA, HWS 160°F + 60°F OA, HWS 100°F WITH A STRAIGHT LINE GRADIENT BETWEEN END POINTS 4. SET PUMP MOTOR STARTERS/VFDS TO AUTO MODE. WHEN OAT FALLS BELOW 62°F START LEAD PUMP (SOFTWARE SELECTABLE).
- 5. BOILER PUMPS ARE CONSTANT SPEED. 6. BOILER PUMPS SHALL BE ENABLED BY THE BOILER SO THE BOILER CAN PROVE FLOW. THE TC SHALL PROVIDE ALL CONTROLS AS SHOWN AND SHALL LEAVE THE PUMPS ENABLED.
- 7. DIFFERENTIAL PRESSURE TRANSMITTER WILL MAINTAIN 10 PSIG (ADJ) DIFFERENTIAL PRESSURE BETWEEN SUPPLY AND RETURN HOT WATER LINE BY VARYING THE VFD DRIVES ON SECONDARY PUMPS. BYPASS VALVE SHALL MODULATE TO MAINTAIN DIFFERENTIAL PRESSURE SETPOINT/PUMP MINIMUM FLOW.
- 8. BOILER CONTROL BY BOILER MANUFACTURER. REFER TO I/O LIST FOR SPECIFIC ANALOG AND DIGITAL CONTROL POINTS.
- 9. BOILER SEQUENCING IS BASED ON OUTDOOR AIR AND BUILDING HOT WATER SCHEDULE, HOT WATER TEMPERATURE ABOVE 130°F-180°F (ADJUSTABLE) BOILER IS IN OPERATION. BOILERS NOT IN OPERATION AT ANY TIME WILL BE IN STANDBY MODE ABLE TO FIRE IF NEED BE. ALTERNATE BOILERS EVERY 30 DAYS. CVT-1 (ON HOT WATER PIPING) SHALL OPEN WHEN AMBIENT TEMPERATURE FALLS BELOW 50 DEG. (ADJ). CVT-1 (ON CHILLED WATER PIPING) SHALL OPEN ON A CALL FOR COOLING.

B. SECONDARY ZONE PUMP CONTROL

- 1. SET BOTH MOTOR VFDS TO AUTO MODE. WHEN OAT FALLS BELOW 62°F START LEAD PUMP (SOFTWARE SELECTABLE). WHEN OAT RISES ABOVE 65°F, STOP PUMP.
- 2. WHEN PUMP(S) OPERATING CONTINUOUSLY, CONTROLLER SHALL AUTOMATICALLY ALTERNATE PUMPS EVERY (7) DAYS (SOFTWARE SELECTABLE).
- 3. DUPLEX PUMPS SHALL BE INTERLOCKED TO PREVENT SIMULTANEOUS OPERATION.

ALL WORK ON THIS DRAWING TO BE PART OF ALTERNATE 3M

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engineeredsolutions 646 Plank Road #104 Phone: (518) 280-2410 Clifton Park, NY 12065 Fax: (518) 280-2481 www.esolutionsplic.com ES # 22104 RFB-2023-52 Document -Bid submit add

TEMPERATURE CONTROLS	PROJECT:	Renovations To:	SCCC Student Center Renova	78 Washington Avenue. Stockade Building
DRAWN I	3Y:			=VC
DATE:			08/07/2	2023

SCALE: AS NOTED JOB NO: M701

\$

Schenectady County Request for Bid SUNY SCCC STUDENT CENTER RENOVATIONS RFB-2023-52 **Bid Form: Contract 4 – Electrical**

Bidder Name/Stamp:

SUNY SCCC STUDENT CENTER RENOVATIONS: ELECTRICAL

BASE BID

+ **\$20,000.00** = \$_ Allowance

TOTAL

(TOTAL WRITTEN AMOUNT)

ADD ALTERNATE #1(E) – REPLACEMENT OF ROOM ENTRANCE SOFFIT LIGHTING

Remove existing corridor lights. This alternate includes new (3) New LED light replacements at gypsum drywall soffit at corridor side. See A904 for coordination of work. See all associated contract documents for detailed scope of work.

\$

ADD ALTERNATE: #1(E)

(Add Alternate: #1(E) WRITTEN AMOUNT)

ADD ALTERNATE #3(E) – ELECTRICAL WORK ASSOCIATED WITH THE REPLACEMENT OF THE EXISTING BOILERS

(REFERENCE MECHANICAL ADD ALTERNATE #3(M))

Disconnect (2) Boilers, (2) HWPs, (2) DTPs for removal by others in Mechanical room. Disconnect and remove all associated controls and circuitry back to source. Provide electrical connection to new Boilers, Boiler pumps, Hot water pumps and DTPs. Install VFDs provided by MC. Provide EPO buttons for emergency Boiler shut off.

\$

ADD ALTERNATE: #3(E)

(Add Alternate: #3(E) WRITTEN AMOUNT)

DIVISION 0 00-04-02

The following documents are attached to and made a part of this bid:

- a) Certified Copy of Resolution of Board of Directors
- b) Non-Collusion Bid Certification
- c) Iranian Divestment Form
- d) Disclosure of Prior Non-Responsibility Determinations
- e) Certification for the Prevention of Sexual Harassment
- f) Subcontractors Listing
- g) Bidder's Qualifications
- h) Apprenticeship Form (if required)
- i) MWBE Documents (if required)
- j) Bid Bond
- k) W-9