

300 West 26th Street, Bryan, Texas 77803 P: 210.447.6100 | TBPE No. F-9357

Addendum No. 001

Project:	Blinn A & G
Project No.	240566
Date:	1/13/2025

This Addendum forms a part of the Contract Documents. This addendum modifies and supplements the Contract Documents as described herein for the afore referenced Project and includes:

- Three (3) page narrative
- Zero (0) attachment(s)
- Eight (8) revised drawing sheet(s)



Changes to Drawings

Mechanical

- 1. Sheet T0.0 TITLE SHEET
 - a. Project location map has been added.
 - b. E2.3 has been added to the table of contents.
- 2. Sheet MD1.2 MECHANICAL DEMOLITION PLAN MECH ROOM BUILDING G
 - a. Building G floorplan has been added.
 - b. Enlarged floorplan of Mech F113 has been added.
 - c. Demolition keyed note 12 has been modified.
 - d. Demolition keyed note 13 has been added.
 - e. Demolition keyed note 14 has been added.
 - f. HW bypass loop was removed from demolition plan.
 - g. 1/4" Scale bar has been added.
 - h. 1/8" scale bar has been moved.
- 3. Sheet M1.2 MECHANICAL NEW WORK PLAN SECOND FLOOR BUILDING A
 - a. Keyed note 8 has been added.
- 4. Sheet M1.3 MECHANICAL NEW WORK PLAN FIRST FLOOR BUILDING G
 - a. Keyed note 7 has been modified.
 - b. Building G first floor plan has been added.
 - c. MECH F113 enlarged floorplan has been added.
 - d. 1/4" scalebar has been added.
- 5. Sheet M3.1 MECHANICAL SCHEDULES
 - a. Note 8 has been added to the Air Handling Unit Schedule.
 - b. Boiler schedule has been updated.
- 6. Sheet M4.1 MECHANICAL CONTROLS
 - a. AHU controls schematic has been modified.
 - b. AHU points list has been modified.
- 7. Sheet M4.2 MEHCANICAL CONTROLS
 - a. Responsibility Matrix has been updated.



Electrical

Sheet E2.3 – ELECTRICAL NEW WORK PLAN – FIRST FLOOR – BUILDING G

 New sheet.



Questions from Contractors

1. Are both the AHU and the boiler being provided by Blinn? If so will the boiler come with a venting package?

Response: The boiler will be provided by the mechanical contractor.

2. I have a submittal on the AHU, can a submittal for the boiler be provided or give us a contact person.

Response: The boiler will be provided by the mechanical contractor.

Sheet M3.1 Air Handling Unit Schedule

 Pre-heat coil. Please confirm if this valve will be 2-way or 3-way.

Response: Refer to M3.1 Air handling Unit Schedule for valve information.

4. Sheet M3.1 Boiler Schedule

a. Note 6 indicates that indicates that the boiler is to be provided with an Oslin Nation CO100-N1 Carbon Monoxide Monitor. M4.2 Responsibility matrix indicates that the Carbon Monoxide sensor is provided by the Controls vendor. Please confirm who will provide.

Response: Refer to Addendum #1 changes on sheet M4.2 Responsibility Matrix.

5. M4.1 I/O list and Responsibility matrix indicates a new Outside Air Flow Measuring Station to be provided by the Controls vendor. Upon site visit, with the current transition there is not applicable room to install the AFMS. Location and size will impact related pricing. Please advise

Response: Refer to Addendum #1 changes on sheet M4.1 Responsibility Matrix. AFMS will be installed and provided with AHU by AHU manufacturer.



December 13, 2024

..... COLLEGE DISTRICT®

Mechanical:

- M0.0 Mechanical Symbols and Abbreviations

- M3.1 Mechanical Schedules
- M4.1 Mechanical Controls
- M4.2 Mechanical Controls
- M5.1 Mechanical Details
- M5.2 Mechanical Details

Electrical:

1

- E0.0 Electrical Symbols and Abbreviations
- E2.1 Electrical Power Plan First Floor Building A

100% CD

Project Number 21055





2598 BLINN BLVD BRYAN, TEXAS 77802

DING

BUIL

INN

 \mathbf{m}

Addendum #1 01/13/202

TITLE SHEET

T0.0

SHEET TITLE

SHEET NO.

MD1.1 Mechanical Demolition Plan - Second Floor - Building A MD1.2 Mechanical Demolition Plan - Mech Room - Building G M1.1 Mechanical New Work Plan - First Floor - Building A M1.2 Mechanical New Work Plan - Second Floor - Building A M1.3 Mechanical New Work Plan - Mech Room - Building G

ED2.1 Demolition Power Plan - Second Floor - Building A E2.2 Electrical Mechanical Power Plan - Second Floor - Building A E2.3 Electrical New Work Plan - First Floor - Building G



MECHANICAL KEYED NOTES: $\begin{bmatrix} 1 \end{bmatrix}$ EXISTING DUCT TO REMAIN. [2] EXISTING CHW PIPING TO REMAIN. [3] EXISTING HW PIPING TO REMAIN. 4 EXISTING FCU TO REMAIN. REBALANCE EXISTING FCU OUTSIDE AIR. REFER TO M3.1 FOR DETAILS. 5 PROVIDE NEW MOTORIZED OUTSIDE AIR DAMPER ON INLET OF MAU. 6 CONTRACTOR TO PROVIDE 36"X36" BAROMETRIC RELIEF DAMPERS SET TO 0.05" W.C. AS HIGH UP AS POSSIBLE IN EXISTING BUILDING RELIEF DUCT. CONTRACTOR TO VERIFY EXISTING BUILDING RELIEF DUCT DIMENSIONS PRIOR TO ORDERING DAMPERS. (7) CONNECT 1-1/4" INSULATED COPPER CONDENSATE LINE TRAPPED PER DETAIL TO EXISTING MAU CONDENSATE LINE 8 MAU-C IS OWNER PROVIDED AND CONTRACTOR INSTALLED. MAU-C TO BE SHIPPED IN SECTIONS AND ASSEMBLED IN MECHANICAL ROOM. _____

- ENSURE FULL FUNCTIONALITY. TO THE EXTENT NECESSARY FOR NEW WORK. AFTER CONSTRUCTION, CEILINGS SHALL BE REINSTALLED, AND ANY
- OF PROJECT, ALL EXISTING EQUIPMENT SHALL BE TESTED TO
- 2. CEILING AND ASSOCIATED SYSTEMS SHALL ONLY BE REMOVED

- RETURNED TO LIKE-NEW CONDITIONS. PRIOR TO COMPLETION

OFFICE C248

FC#C248

OFFICE C247

- 1. ALL EQUIPMENT TO BE REUSED SHALL BE CLEANED AND

- DAMAGE INCURRED DURING CONSTRUCTION WILL BE REPAIRED.

MECHANICAL GENERAL NOTES:

1

OFFICE C239

FC#C236

— 20"X66"

<u>भ</u> इ

 \sim

<u>FC#C271</u>

6

OFFICE C238

CLASSROOM C268

FC#C269

CLASSROOM C269

4

<u>FC#C268</u>

OFFICE

C241

C242

OFFICE

C244

OFFICE

C245

OFFICE C243

46

FC#C267

~4

CLASSROOM C267

6

FC#C238

OFFICE C246

CLASSROOM C266

4

FC#C266

OFFICE C236

- 3. CONTRACTOR TO FIELD VERIFY ALL EXISTING EQUIPMENT.

OFFICE

OFFICE C232

OFFICE

C231

CORRIDOR

C203

OFFICE C235

MAU-C

CHWR

42"X36"

CLASSROOM

CORRIDOR

WOMENS TLT.

3







Rs Rs

* AC G. STEVENS

BUILDINGS

5

SCALE: 1/8"=1'-0"



AC G. STEVENS 141032 •' ⁄ S U Z

CLEARY ZIMMER

BLVD 5 77802 BLINN B , TEXAS 2598 E BRYAN,

H

 $\mathbf{\Omega}$

NN

 $\mathbf{\Omega}$

Date 13 DECEMBER 2024 CZE Project No. 240566 Revisions 1 Addendum #1 01/13/2025

Checked

SHEET TITLE

AH

ZS

MECHANICAL NEW WORK PLAN - FIRST FLOOR - BUILDING G SHEET NO. M1.3

FC OUTSIDE AIR			
FCU#	CFM		
C214	100		
C216	110		
C224	110		
C225	100		
C236	105		
C238	100		
C248	100		
C255	100		
C256	95		
C265	400		
C266	500		
C267	400		
C268	500		
C269	440		
C271	400		
C274	500		
C275	440		
C276	500		
C277	500		
TOTAL CFM	5500		

FC OUTSIDE A	٨IR
FCU#	CFM
C101	60
C102	75
C106	60
C113	550
C114	550
C115	450
C116	450
C117	450
C118	550
C119	450
C120	400
C121	475
C122	60
C128	60
C132	60
C134	75
C136	75
C144	100
C149	60
TOTAL CFM	5010

GENERAL NOTES:

1

1. RE-BALANCE FCU FRESH ARE INTAKE TO INDICATED FLOWS.

GENERAL NOTES: 1. RE-BALANCE FCU FRESH ARE INTAKE TO INDICATED FLOWS.

2

	HOT WATER BOILER S	CHEDULE
	MARK	B-1
	SERVICE	HYDRONIC HEATING
	MIN. BOILER EFFICIENCY	96.1%
	INPUT (MBH)	2,500
		2,146
\wedge (ELEC. SERVICE (FLA/V/PH)	4.5 / 208 / 3
	FUEL	NATURAL GAS
	BURNER TYPE	CONDENSING
	FLOW (GPM)	209
	SAFETY RELIEF VALVE (PSIG)	75
	ASME WORKING PRESSURE	160
	MAX. WATER PRESSURE DROP (FT)	5.3
	OPERATING WEIGHT (LBS.)	1,025
	MANUFACTURER	LOCHINVAR
	WODELNUMBER	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
$\Lambda($	NOTES	1 - 8
(NOTES: 1. EFFICIENCY @ 130°F INLET, 110°F OUTLET WATER TE 2. LOW NOX COMPLIANT IN STATE OF TEXAS. 3. PROVIDE WITH MANUFACTURER'S ISOLATION MOUN 4. PROVIDE WITH BACRET INTERFACE	EMP, AT HIGH FIRE. TS.

4

GA	GAS PRESSURE REGULATOR SCHEDULE						
MARK	DESCRIPTION	TOTAL CFH	INLET PRESSURE (P.S.I./OZ)	OUTLET PRESSURE (P.S.I./W.C.)	PIPE SIZE	MANUFACTURER / MODEL	NOTES
GR-1	LOCHINVAR BOILER B-1	2,500	2 PSI	4-14" WC	2-1/2"	SENSUS # 243-12-1	
NOTES							

3

4. PROVIDE WITH BACHELINTERPACE. 5. PROVIDE WITH MOTORIZED ISOLATION VALVE. 6. PROVIDE WITH MANUFACTURER STANDARD CARBON MONOXIDE MONITOR. 7. PROVIDE WITH CONDENSATE NEUTRALIZATION KIT. 8. CONTRACTOR TO VERIFY EXISTING BOILER ELECTRICAL SERVICE.

	AIR HANDLING UNIT
ŀ	MARK
	AREA SERVED
ŀ	
ŀ	O.A. CFM
I	EXT. S.P. *
	DISCHARGE PLENUM
ľ	REQUIRED?
I	FAN
ł	ТҮРЕ
ľ	DRIVE
	CONTROLS SEQUENCE #
	FAN QTY / FAN DIAMETER (IN.) [EACH]
ļ	FAN RPM [EACH] / MOTOR FLA [EACH]
ŀ	
	FAN MOTOR (MIN. HP [EACH] / V / PH)
	ACCESS SECTION
	DOOR REQUIRED?
	DOOR SIZE (MIN.)
	COOLING COIL
	ТҮРЕ
	CFM
	EAT (DB / WB)
	MAX. FACE VEL. (FPM)
	GPM AT 44 EWT (TEMP. RISE = 12°F)
	MAX. WPD (FT.)
	MIN. ROWS / MAX. FINS (PER IN.)
	VALVE TYPE
	TOTAL CAPACITY (MBH)
	SENS. CAPACITY (MBH)
	ACCESS SECTION
	DOOR REQUIRED?
	DOOR SIZE (MIN.)
	PRE-HEAT COIL
	TYPE
	CFM
	EAT (DB)
	MAX. APD (IN WATER)
	GPM AT 160 EWT (TEMP. DROP = 30°F)
	MAX. WATER PD (FT)
	MAX-ROWS-(MAX-FINS-(RER.IN-)
	VALVE TYPE
	OUTPUT (MIN. MBH)
	ACCESS SECTION
	DOOR REQUIRED?
	DOOR SIZE (MIN.)
	INLET SECTION
	ТҮРЕ
	·····
	INLETS
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS)
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)**
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.)
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES = DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE TO PRESSURE
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES = DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING LINIT MOTES:
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES = DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO DE DROVIDED WITH STREET
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES = DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE * 2. PROVIDE ALL UNITS WITH STAINLESS ST
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES S DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE S 2. PROVIDE ALL UNITS WITH STAINLESS ST 3. AHU TO BE MOUNTED ON EXISTING HOU
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES TO DROP AND LOSSES DUE TO ITEMS IN UNIT IN ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE TO 2. PROVIDE ALL UNITS WITH STAINLESS ST 3. AHU TO BE MOUNTED ON EXISTING HOU 4. PROVIDE WEATHER-RESISTANT, GASKET
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES TO DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE TO 2. PROVIDE ALL UNITS WITH STAINLESS ST 3. AHU TO BE MOUNTED ON EXISTING HOU 4. PROVIDE WEATHER-RESISTANT, GASKET 5. PROVIDE WITH VELOCITY PRESSURE AIR
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES 3 DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE 7 2. PROVIDE ALL UNITS WITH STAINLESS ST 3. AHU TO BE MOUNTED ON EXISTING HOU 4. PROVIDE WEATHER-RESISTANT, GASKET 5. PROVIDE WITH VELOCITY PRESSURE AIF 6. PROVIDE WITH CONDENSATE DRAIN PAN 7. PROVIDED UNIT WITH DWYFR DIGIHEURS
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES 3 DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE 3 2. PROVIDE ALL UNITS WITH STAINLESS ST 3. AHU TO BE MOUNTED ON EXISTING HOU 4. PROVIDE WEATHER-RESISTANT, GASKE 5. PROVIDE WITH VELOCITY PRESSURE AIR 6. PROVIDE WITH CONDENSATE DRAIN PAN 7. PROVIDED UNIT WITH DWYER DIGIHELIC 8. OWNER PROVIDED AHU TO BE SHIPPED I
	INLETS FILTER TYPE FINAL FILTER MERV (DIMENSIONS) FILTER MOUNTING OA DAMPERS MAX. INITIAL FILTER PD @ 500 FPM DIRTY FILTER ALLOWANCE (IN)** OPERATING WEIGHT (LBS.) REFERENCE NOTES * EXTERNAL STATIC PRESSURE INCLUDES TO DROP AND LOSSES DUE TO ITEMS IN UNIT I ** DIRTY FILTER ALLOWANCE IS PRESSURE AIR HANDLING UNIT NOTES: 1. UNIT TO BE PROVIDED WITH 2" DOUBLE TO 2. PROVIDE ALL UNITS WITH STAINLESS ST 3. AHU TO BE MOUNTED ON EXISTING HOU 4. PROVIDE WEATHER-RESISTANT, GASKET 5. PROVIDE WITH VELOCITY PRESSURE AIR 6. PROVIDE WITH VELOCITY PRESSURE AIR 6. PROVIDE WITH CONDENSATE DRAIN PAN 7. PROVIDED UNIT WITH DWYER DIGIHELIC 8. OWNER PROVIDED AHU TO BE SHIPPED I 9. UNIT WAS PURCHASED AS PART OF A PE

1

1

4

	1-9
	0.75 6 428
	0.18
	FLAT YFS
	13 (20"x24"x4" / 20"x20"x4")
	1 4" PLEATED
	FILTER
	18" x 67.5"
	VEQ
	<u>442.8</u>
	2-WAY
······	.4
	30.0
	0.1
	<u> </u>
	20.0
	10,510
	HW
	C.10 X OI
	YES 18" x 67 5"
	547.3
	808.0
	6 / 10 2-WAY
	7.0
	161.0
	500 0.66
	54.4 / 54.3
	105 / 78
	CHW 10.510
	18" x 67.5"
	YES
	3.5 / 460 / 3
	2514 / 4.5 CONSTANT
	4 / 16
	M4.1
	DIRECT
	NO
	1.5
	10,510
	C234

TEEL DRAIN PAN AND COIL CASING.

JSEKEEPING PAD.

KETED, INCADESCENT MARINE LED LIGHT IN FAN SECTION AND 120v CONVENIENCE OUTLET.

IRFLOW STATION ON EACH SUPPLY FAN.

AN CONNECTION ON OPPOSITE SIDE OF COIL CONNECTIONS.

IC II DIFFERENTIAL PRESSURE CONTROLLER.

PREVIOUS EQUIPMENT PACKAGE. CONTRACTOR TO COORDINATE WITH OWNER FOR DELIVERY.

6

 $(\mathbf{7})$

 $\mathbf{\omega}$

SDN

H

BLVD 5 77802

BLINN B , TEXAS

2598 B Bryan, '

CLEAR

G. STEVEN

Date 13 DECEMBER 2024 CZE Project No. 240566 Revisions 1 Addendum #1 01/13/2025

Drawn

Checked

AH

ZS

2

1

		RESPONSIBILITY MATRIX		
	SUPPLIED BY	INSTALLED BY	WIRING BY CONTROLS	WIRING BY ELECTRICAL
ensors	Controls Contractor	Controls Contractor	DDC Panel to Sensors	N/A
	Mechanical Contractor	Mechanical Contractor	DDC panel to VFD	Electrical panel to VFD/Fan
	AHU Manufacturer	Mechanical Contractor	DDC Panel to Starter or VFD	Electrical panel to starter/VFD
	Controls Contractor	Controls Contractor	DDC Panel to CSR	N/A
	Controls Contractor	Mechanical Contractor	N/A	N/A
or	Controls Contractor	Controls Contractor	DDC Panel to Actuator	N/A
	Mechanical Contractor	Mechanical Contractor	N/A	N/A
/ Misc.)	Controls Contractor	Controls Contractor	DDC Panel to Actuator	N/A
$\langle \rangle$	AHU-Manufacturer	Mechanical Contractor		
	AHU Manufacturer	AHU Manufacturer	DDC Panel to Sensors	N/A
\sim		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		

Constant Volume CW w/ HW preheat Run Conditions - Scheduled: The unit shall run according to a user definable time schedule. The supply fan shall run per a user defined schedule unless shutdown on safeties. The outside air damper shall close when the unit is off. Any associated sfd shall close when the unit is off.

AHU Optimal Start: The unit shall use an optimal start algorithm for morning start-up. This algorithm shall minimize the unoccupied warm-up or cool-down period while still achieving comfort conditions by the start of scheduled occupied period.

FREEZE PROTECTION: Interlock freezestat with fan starter / VFD. Alarm input (dry contacts) to DDC,.

Via hardwire interlock: - Force CW control valve to open 50% - HW control valve to 100% open

- Open return air damper - Close outside air damper Manual reset at freezestat.

Supply Fan:

The supply fan shall run anytime the unit is commanded to run, unless shutdown on safeties.

- Alarms shall be provided as follows: Supply Fan Failure: Commanded on, but the status is off. • Supply Fan in Hand: Commanded off, but the status is on.
- Supply Fan Runtime Exceeded: Status runtime exceeds a user definable limit (adj.).

<u>Cooling Mode:</u> The controller shall measure the supply air temperature and modulate the cooling coil valve to maintain its cooling setpoint.

- Cooling mode shall be enabled whenever: • The supply air temperature is above cooling setpoint.
- AND the supply fan status is on.

• AND the HW control valve position is closed. Heating Mode:

The controller shall measure the outdoor air temperature and modulate the heating coil valve to maintain the supply air temperature setpoint. Heating mode shall be enabled whenever:

• The outside air temperature is below the supply air temperature setpoint.

• AND the supply fan status is on.

Supply Air Temperature: The controller shall monitor the supply air temperature.

 The supply air temperature setpoint shall be 55°F (adj.) Alarms shall be provided as follows:

High Supply Air Temp: If the supply air temperature is greater than 120°F (adj.). Low Supply Air Temp: If the supply air temperature is less than 45°F (adj.).

3

4

GENERAL CONTROLS NOTES:

AND PERPENDICULAR TO BUILDING LINES. WIRING TO BE RUN ON J-HOOKS IN ACCESSIBLE LOCATIONS, IN CONDUIT IN EXPOSED LOCATIONS, ABOVE GYP CEILINGS, AND BELOW 8 FOOT (ALL WIRING WITHIN WALLS TO BE RUN IN CONDUIT).

2. ALL DAMPERS, AIRFLOW MEASURING STATIONS AND SENSORS ARE TO

BE LOW VOLTAGE (24V) POWERED BY DDC CONTRACTOR.

1. ALL WIRING TO BE RUN IN A NEAT AND WORKMANLIKE MANNER, PARALLEL

Zsa CLEARY ZIMMERY

$\mathbf{\Theta}$ **DINGS** 님

U

2598 BLINN BLVD BRYAN, TEXAS 77802

NN Ω

AH ZS Checked Date 13 DECEMBER 2024 CZE Project No. 240566 Revisions /1 Addendum #1 01/13/2025

> SHEET TITLE MECHANICAL CONTROLS

	H	ardwar	e Poir	nts	
Point Name	Al	AO	BI	BO	
Boiler Hot Water Supply Temperature Setpoint Reset					Γ
Boiler Alarm Status			•		
CO Monitor Alarm			٠		
Low Water Level			٠		
Boiler Status			٠		
Boiler Stage			٠		
Boiler Enable				•	
Boiler Failure					
Boiler Running in Hand					

2

1

		RESPONSIBILITY MATRIX		
DEVICE	SUPPLIED BY	INSTALLED BY	WIRING BY CONTROLS	WIRING BY ELECTRICA
Boiler	Boiler Manufacturer	Mechanical Contractor	N/A	Electrical Panel to Boiler
Boiler BACnet Interface	Boiler Manufacturer	Boiler Manufacturer	DDC Panel to Boiler BACnet	N/A
Temperature Sensors	Controls Contractor	Controls Contractor	DDC Panel to Sensors	N/A
Sensor Wells	Controls Contractor	Mechanical Contractor		
Carbon Monoxide Sensor	Mechanical Contractor	Controls Contractor	DDC Panel to Alarm	N/A

3

BOILER SYSTEM RUN CONDITIONS: The boiler system shall be enabled based on an operator adjustable occupied/unoccupied schedule.

To prevent short cycling, the boiler system shall run for a minimum of 30 minutes (adj.), unless shutdown on safeties. The boiler shall run subject to its own internal safeties and controls. The boiler system shall also run for freeze protection whenever outside air temperature is less than 38°F (adj.).

The boiler shall be modulated to maintain 130°F with a 20°F change in temperature.

BOILER OPTIMAL START:

The boiler system shall start prior to scheduled occupancy based on air handler operation status.

- BOILER SAFETIES: The following safeties shall be monitored: · Boiler alarm.
- Low water level.
- CO Monitor Alarm Alarms shall be provided as follows:
- · Boiler alarm.
- · Low water level alarm. · CO Monitor Alarm

BOILER ENABLE: The boiler and associated control valves shall be enabled when the boiler system is commanded on. The boiler shall be enabled after main pump status is proven through the hot water flow switch and shall run subject to its own internal safeties and controls. Boiler shall be modulated based upon a siginal from hot water supply temperature and hot water return temperature.

Alarms shall be provided as follows:

Boiler failure: commanded on, but the status is off.
Boiler running in hand: commanded off, but the status is on.

HOT WATER TEMPERATURE MONITORING:

- The following temperatures shall be monitored: Hot water supply.
- Hot water return.
- Alarms shall be provided as follows:

4

- High hot water supply temp: if greater than 200°F (adj.).
 Low hot water supply temp: if less than 100°F (adj.).

GENERAL CONTROLS NOTES:

1. ALL WIRING TO BE RUN IN A NEAT AND WORKMANLIKE MANNER, PARALLEL AND PERPENDICULAR TO BUILDING LINES. WIRING TO BE RUN ON J-HOOKS IN ACCESSIBLE LOCATIONS, IN CONDUIT IN EXPOSED LOCATIONS, ABOVE GYP CEILINGS, AND BELOW 8 FOOT (ALL WIRING WITHIN WALLS TO BE RUN IN CONDUIT).

2. ALL DAMPERS, AIRFLOW MEASURING STATIONS AND SENSORS ARE TO BE LOW VOLTAGE (24V) POWERED BY DDC CONTRACTOR.

3. CONTROLS CONTRACTOR TO MODIFY EXISTING BOILER CONTROLS ONLY TO THE EXTENT INDICATED.

HOT WATER SUPPLY TEMPERATURE SETPOINT RESET: The hot water supply temperature setpoint shall reset based on outside air temperature. As outside air temperature rises from 40°F (adj.) to 70°F (adj.) the hot water supply temperature setpoint shall reset downwards by subtracting from 0°F (adj.) up to 20°F (adj.) from the current boiler setpoint.

4 SDNIG. UIL Ω ZZI

Ω

U

00

2598 BLINN BLVD BRYAN, TEXAS 77802

AH Drawn ZS Checked Date 13 DECEMBER 2024 CZE Project No. 240566 Revisions

/1 Addendum #1 01/13/2025

SHEET TITLE MECHANICAL

CONTROLS

DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE REMOVE FROM OWNER OCCUPIED AREAS DAILY. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.

2. DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED. COMPLETE SELECTIVE DEMOLITION OPERATIONS ABOVE EACH FLOOR OR TIER BEFORE DISTURBING SUPPORTING MEMBERS ON THE NEXT LOWER LEVEL.

3. EXISTING ITEMS TO REMAIN: PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION AND REINSTALLED IN THEIR ORIGINAL LOCATIONS AFTER SELECTIVE DEMOLITION OPERATIONS ARE COMPLETE.

4. COORDINATE ALL DEMO ACTIVITIES WITH OWNER AND ARCHITECT AND PROVIDE 10 DAYS NOTICE FOR ANY POWER OUTAGES.

5. CEILING AND ASSOCIATED SYSTEMS (LIGHTS, SPEAKERS, ETC) SHALL ONLY BE REMOVED TO THE EXTENT NECESSARY FOR DEMOLITION AND NEW WORK. AFTER CONSTRUCTION, CEILINGS WILL BE REINSTALLED, AND ANY DAMAGE INCURRED DURING CONSTRUCTION SHALL BE REPAIRED.

6. CONTRACTOR TO COORDINATE WITH OWNER TO VIEW EXISTING CONDITIONS PRIOR TO BIDDING PROJECT.

1

- ON ROOF.
- (3) EXISTING HW PIPING TO REMAIN.
- (4) EXISTING CHW PIPING TO REMAIN.
- (5) EXISTING MECHANICAL EQUIPMENT TO REMAIN.
- 6 EXISTING PUMPS TO REMAIN.
- (7) DEMOLISH EXISTING NATURAL GAS PIPING AND SUPPORTS UP TO POINT INDICATED.
- HW CIRCULATION PUMP.
- (9) DEMOLISH EXISTING NATURAL GAS REGULATOR.
- (10) EXISTING NATURAL GAS PIPING TO REMAIN.
- 7 (12) EXISTING BOILER HOUSEKEEPING PAD TO REMAIN.
- (13) DEMOLISH EXISTING BOILER HOUSEKEEPING PAD.
- (14) EXISTING BOILER AND CIRCULATING PUMP ELECTRICAL CIRCUITS TO REMAIN AS SPARE.

2

