Project Name:	Council Rock School District Newtown Elementary School Chiller Replacement DEI Project No. 283091
Project Owner:	Council Rock School District 30 North Chancellor Street Newtown, PA 18940
Engineer:	D'Huy Engineering, Inc. One East Broad St., Suite 310 Bethlehem, PA 18018

BID DUE DATE: Tuesday, March 19, 2024, at 2:00 p.m.

*This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated **February 2024**. This addendum must be acknowledged on the Bid Form in the space provided for this purpose. Failure to so acknowledge this addendum may subject the Bidder to disqualification.*

1.0 GENERAL INFORMATION:

1.1 This addendum consists of 5 pages including the following attachments:

- 1 Page of revised and reissued Drawing H2.1, "Partial Mech Room / Chiller Plan - Demolition and New Work."
- 1 Page of revised and reissued Drawing H8.1, "Schedules and Details".

2.0 CHANGES TO PREVIOUS ADDENDA:

2.1 None

3.0 CHANGES TO THE BIDDING REQUIREMENTS, CONTRACT FORMS, & CONDITIONS OF THE CONTRACT:

3.1 None.

4.0 CHANGES TO THE SPECIFICATIONS:

4.1 Section 23 09 93 "Sequence of Operations for HVAC Controls" **ADD** the following to page 230993-3, paragraph 1.7.B:

"4. The existing chilled water pump motor starters will be replaced with variable frequency drives. Retain the existing pump staging controls including chilled water system differential pressure sensor and pressure relief by-pass valve. Modify the existing sequence to include the

following: Lead pump shall soft start and ramp to minimum speed setpoint to achieve chiller minimum flow rate as verified by the Testing and Balancing Agent. Upon a fall in system differential pressure below setpoint, the existing staging control shall soft start he lag pump and ramp to maximum speed as verified by the Testing and Balancing Agent. Display pump speed and VFD status on the BMS."

5.0 CHANGES TO THE DRAWINGS:

5.1 Drawing H2.1 "Partial Mech Room / Chiller Plan - Demolition and New Work" **REVISE** the current drawing as follows:

a. Replace existing pump motor starters with variable frequency drives for existing chilled water pumps P-6 and P-7.

b. Revise Key Note #6 pertaining to existing glycol feeder drain valve.

5.2 Drawing H8.1 "Schedules and Details" **REVISE** the current drawing as follows:

a. Add Variable Frequency Drive Schedule

5.3 Drawing E1.1, "Partial Floor Plans", **REVISE** the current drawing as follows:

a. **ADD** Demolition Key Note #5: "Disconnect feeder wiring from pump motor starter. Pull back wiring to an accessible location, coil and tag for reconnection. Remove circuiting from motor starter to pump."

b. In the Partial Floor Plan – Demolition, **ADD** Key Note #5 to DS P-6 and DS P-7.

c. **ADD** Power Key Note #4: "HC to provide new VFD with disconnecting means at location of demolished motor starter. Extend and reconnect coiled circuit to VFD."

d. **ADD** Power Key Note #5: "Provide VFD shield cable between VFD and Pump P-6. Cabling shall be 100% shielded with copper tape, 3 #10 & 3 #10 symmetric ground conductors in 1" conduit, with listed fittings and terminations."

e. **ADD** Key Note #6: "Provide VFD shield cable between VFD and Pump P-7. Cabling shall be 100% shielded with copper tape, 3#8 & 3#10 symmetrical grounds in 1.25" conduit, with listed fittings and terminations."

f. In the Partial Floor Plan – Power, **ADD** Key Note #4 and Key Note #5 to new VFD for Pump 6 (at location shown on the power plan as DS P-6).

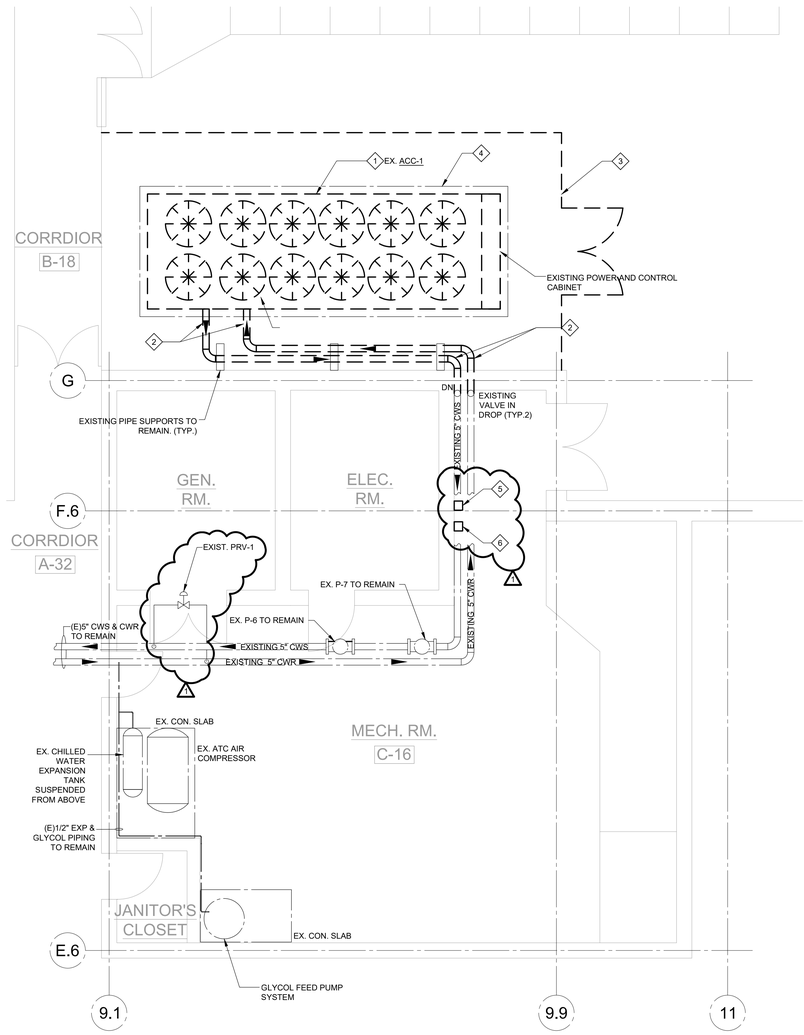
g. In the Partial Floor Plan – Power, **ADD** Key Note #4 and Key Note #6 to new VFD for Pump P-7 (at location shown on power plan as DS P-7).

6.0 BIDDERS QUESTIONS:

6.1 None.

NOTE:

- **ALL BIDDERS MUST indicate receipt of this Addendum on Page 1 of the Bid Form.**
- **No other acknowledgment is needed or requested to be returned as the receipt of Addenda is tracked through the Sharefile service Addenda are issued through.**

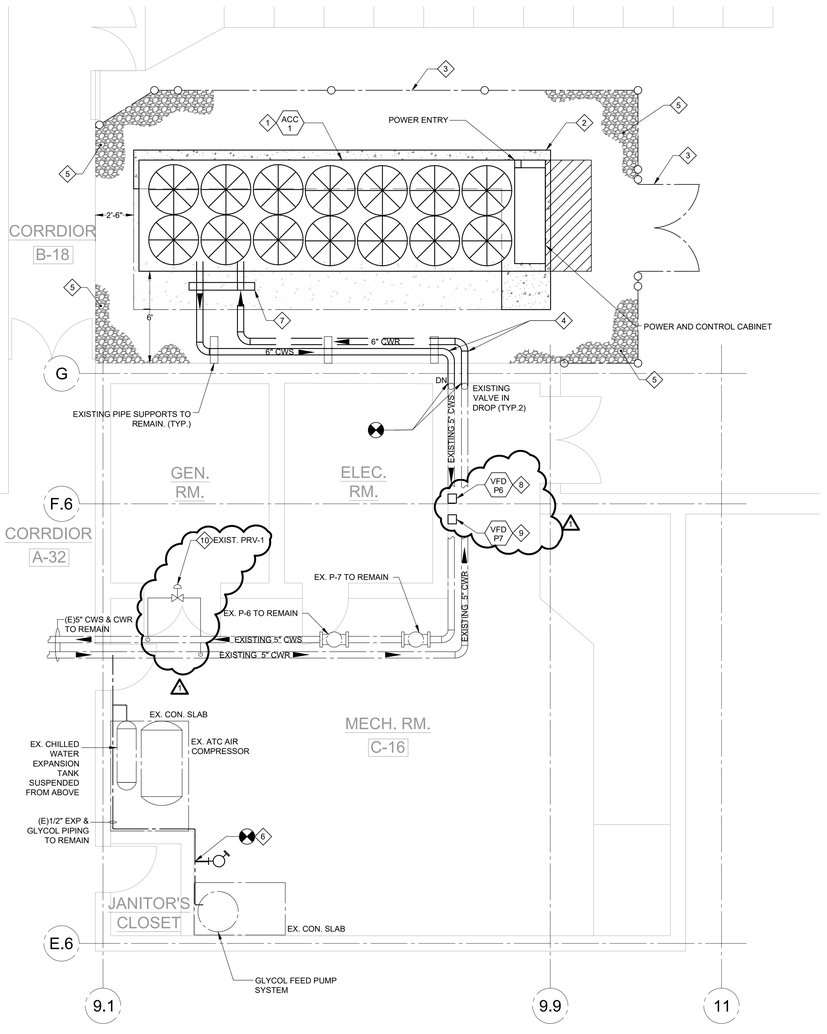


PARTIAL MECH ROOM / CHILLER PLAN DEMOLITION

N

0 1' 2' 4' 8'

Scale: 1/4" = 1'-0"



PARTIAL MECH ROOM / CHILLER PLAN

N

0 1' 2' 4' 8'

Scale: 1/4" = 1'-0"

KEYNOTES - DEMOLITION

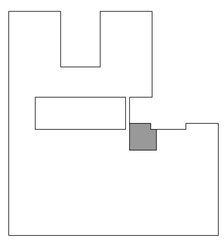
1. REMOVE AIR COOLED CHILLER INCLUDING ASSOCIATED PIPING, VALVES, AND CONTROLS. RECLAIM REFRIGERANT.
2. REPLACE EXISTING 5" CHILLED WATER SUPPLY AND RETURN UP TO BUILDING.
3. REMOVE EXISTING VINYL CLAD CHAIN LINK ENCLOSURE.
4. EXISTING 6" CONCRETE SLAB ON GRADE TO REMAIN.
5. REPLACE EXISTING P-6 MOTOR STARTER
6. REPLACE EXISTING P-7 MOTOR STARTER

GENERAL NOTES - DEMOLITION

1. PRIOR TO START OF WORK DRAIN OR PUMP DOWN AND FILTER EXISTING CHILLED WATER SOLUTION FOR REUSE. FLUID SHALL BE TESTED TO ENSURE PROPER FREEZE PROTECTION SOLUTION CONCENTRATION. SUBMIT TEST REPORT TO ENGINEER PRIOR TO RE-FILLING SYSTEM.
2. DISCONNECT, REMOVE AND PREPARE EXISTING ATC WIRING FOR RE-USE AS CONFIRMED BY ATC CONTRACTOR.
3. EXISTING ISOLATION VALVES FOR ACC-1 SHALL REMAIN IN PLACE UNTIL THE NEW CHILLER IS SET AND READY FOR INSTALLATION.

KEYNOTES

1. INSTALL AIR COOLED CHILLER TO MAINTAIN MIN. CLEARANCE TO BUILDING WALL AS INDICATED.
2. EXTEND EXISTING CONCRETE SLAB TO ACCOMMODATE NEW CHILLER LOCATION AND DIMENSIONS; EXTEND PAD IN TWO DIRECTIONS.
3. INSTALL NEW 6'-0" VINYL CLAD CHAIN LINK FENCE ENCLOSURE AND PROVIDE 6'-0" WIDE GATE.
4. REPLACE EXISTING 5" CHILLED WATER SUPPLY AND RETURN UP TO BUILDING. PROVIDE SHUT OFF VALVES, STRAINERS, & TRIM.
5. REMOVE EXISTING SOD AND TOP SOIL WITHIN FENCE ENCLOSURE. REMOVE SOIL TO DEPTH OF 6" BELOW EXISTING GRADE. PROVIDE WEED BARRIER AND 6" LAYER OF COMPACT 2B NATURAL STONE BASE. LEGALLY DISPOSE OF SOILS OFF SITE.
6. INSTALL DRAIN VALVE IN ASSOCIATED EXISTING GLYCOL FEED PUMP SYSTEM. PROVIDE DRAIN VALVE w/THREADED HOSE CONNECTION AND CAP
7. INSTALL NEW PIPE SUPPORT.
8. PROVIDE VFD-P6, RECONNECT TO EXISTING ATC SYSTEM.
9. PROVIDE VFD-P7, RECONNECT TO EXISTING ATC SYSTEM.
10. EXISTING PRESSURE RELIEF VALVE TO REMAIN. COORDINATE P-6, P-7 MINIMUM SPEED SETTINGS w/ENGINEER.



KEYPLAN

N

NOT TO SCALE

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CHILLER REPLACEMENT
for
NEWTOWN ELEMENTARY SCHOOL
1 WRIGHTS RD
NEWTOWN, PA 18940

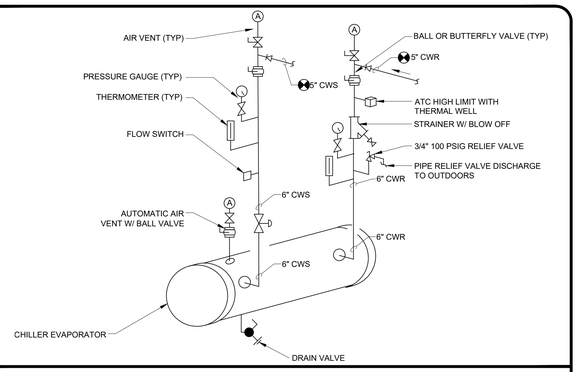
VERIFY SCALE
0 1
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING

No.	Date	By	Description
1	MARCH 12, 2024	CNP	ADDENDUM 3

Date: FEBRUARY 2024
Scale: AS NOTED
Job No. DEI-283091
Drawn: CNP | Appd.: DCD

Sheet Title:
PARTIAL MECH ROOM / CHILLER PLAN - DEMOLITION AND NEW WORK

Sheet No.
H-2.1



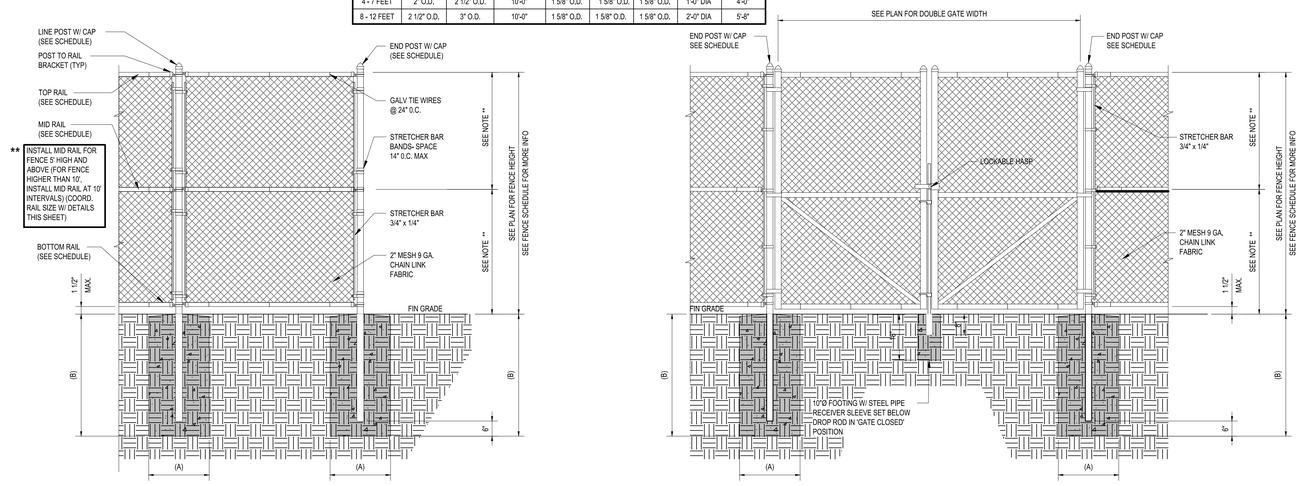
CHILLER - EVAPORATOR PIPING DIAGRAM

NOT TO SCALE

NOTE:
INSTALL STRETCHER BAR AT ENDS & CORNERS & EVERY 100' MIN.

FENCE SCHEDULE

CHAIN LINK FENCE							FOOTER	
HEIGHT	LINE POSTS	END POSTS	MAX. SPACING	TOP RAIL	** MID RAIL	BOT. RAIL	DIA. (A)	DEPTH (B)
4 - 7 FEET	2" O.D.	2 1/2" O.D.	10'-0"	1 5/8" O.D.	1 5/8" O.D.	1 5/8" O.D.	1'-0" DIA	4'-0"
8 - 12 FEET	2 1/2" O.D.	3" O.D.	10'-0"	1 5/8" O.D.	1 5/8" O.D.	1 5/8" O.D.	2'-0" DIA	5'-8"



CHAIN LINK FENCE DETAIL

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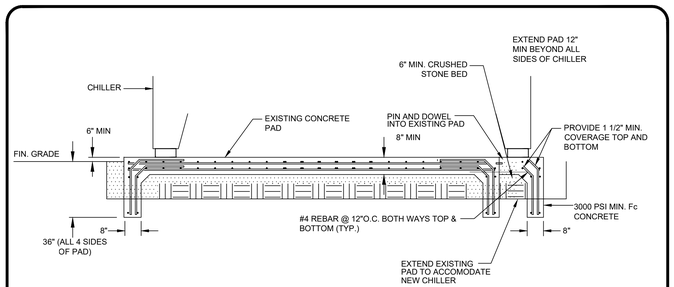
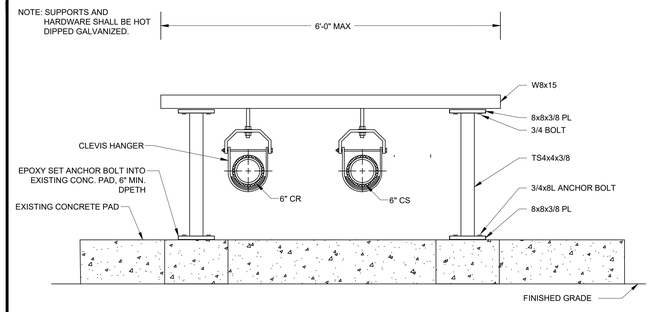


CHILLER CONCRETE PAD DETAIL

NOT TO SCALE

321401

NOTE: SUPPORTS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.



TYPICAL PIPE SUPPORT DETAIL

NOT TO SCALE

AIR COOLED CHILLER SCHEDULE

ACC #

SYMBOL	MANUFACTURER	MODEL	REFRIG-ERANT	NOMINAL TONS	EER	EVAPORATOR				CONDENSER			COMPRESSOR		ELECTRIC			NOMINAL DIMENSIONS LxWxH (IN.)	APROX. WEIGHT (LBS.)	dBA	NOTES
						GPM	EWT °F	LWT °F	WPD (FT.)	EAT °F	NO. OF FANS	FLA/ FAN	NO.	KW (TOTAL)	V/P/Hz	MCA	MOP				
ACC-1	TRANE	RTAF	R-513A	223	9.7	550	54	44	22.9	95.0	14	2.5	2	257.7	460/3/60	487	600	318x87x94	13,300	76	1,2,3,4,5

NOTES:
1. PERFORMANCE RATINGS IN ACCORDANCE WITH ARI STANDARD 550/590. SOUND LEVEL PRESSURE RATED IN ACCORDANCE WITH AHRI 370
2. PROVIDE COMPRESSOR SOUND ATTENUATION BLANKETS OR ENCLOSURE. PROVIDE SOUND ATTENUATION LOUVERED INLET WALL PANELS.
3. PROVIDE VIBRATION ISOLATORS, HOUSED, HOT DIPPED GALVANIZED, 1" DEFLECTION.
4. PROVIDE SINGLE POINT POWER CONNECTION WITH DISCONNECT SWITCH.
5. PROVIDE BACNET COMMUNICATION INTERFACE.

VFD SCHEDULE

VFD #

TAG NOS.	SERVICE	BASIS OF DESIGN MANUFACTURER	MODEL	NEMA ENCLOSURE	MOTOR DATA		NOTES
					HP	V/PH/HZ	
VFD-P6	P-6	ABB	ACH 550	1	5	480/3/60	1, 2, 3
VFD-P7	P-7	ABB	ACH 550	1	10	480/3/60	1, 2, 3

NOTES:
1. PROVIDE COMBINATION TYPE W/ SERVICE DISCONNECT SWITCH AND OVERCURRENT PROTECTION.
2. COORDINATE BMS INTERFACE & ATC VOLTAGE CHARACTERISTICS WITH ATC CONTRACTOR.
3. PROVIDE AEGIS SHAFT GROUNDING RING TO FIT EXISTING MOTOR SHAFT.

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Sheet Title:
SCHEDULES & DETAILS

Sheet No.
H-8.1