The Wooten Company

120 North Boylan Avenue Raleigh, North Carolina 27603 919-828-0531 919-834-3589



CUMBERLAND COUNTY EXPO CENTER CHILLER REPLACEMENT TWC PROJECT # 2877-R

CUMBERLAND COUNTY FAYETTEVILLE, NORTH CAROLINA

SUBJECT: ADDENDUM NO. 01

12/10/2024

To the Plans and Specifications for: Cumberland County Expo Center Chiller Replacement Fayetteville, N.C.

To: PROSPECTIVE BIDDERS AND OTHER CONCERNED PARTIES

This ADDENDUM forms a part of the Contract Documents and modifies the original Bidding Documents as noted below. Bidders shall acknowledge receipt of the ADDENDUM in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

- A. Contracting Requirements
 - 1. Pre-Bid Meeting Minutes attached.
 - 2. Pre-Bid Sign-IN Sheet attached.
- B. Technical Specification Requirements
 - 1. N/A
- C. Drawing Requirements
 - 1. M-102 Gas Meter and pipe shutoffs shown.
 - M-601 Schedules modified.

Bids will be received until 2:00 pm, December 18, 2024

FOR THE OWNER
THE WOOTEN COMPANY

Scott L. Ennis, P.E.

END OF DOCUMENT

2877-R: 12/10/2023 Addendum No. 01

The Wooten Company

120 North Boylan Avenue Raleigh, North Carolina 27603 919-828-0531 919-834-3589



MINUTES FOR MANDATORY PRE-BID CONFERENCE CUMBERLAND COUNTY EXPO CENTER CHILLER REPLACEMENT TWC PROJECT # 2877-R DECEMEMBER 06, 2024

- 1. Bid Date: **December 18, 2024** @ **2:00 PM**
- 2. Contract Overview
 - a. Owner is the Cumberland County.
 - b. Project covers replacing a Chiller in the Expo Center.
 - c. Contractor shall coordinate with Owner for replacement in-between events in the Expo center.
- 3. Minority Participation Goals: Bidders are encouraged to make positive efforts to utilize minority businesses.
- 4. Basis of Bid
 - a. Bid Form describes the basis of bid and has room for an Alternate #1 price per the documents.
- 5. Submittal of Bid: Submit the following with the Bid Form. Review Section Instructions to Bidders carefully to ensure all requirements are being satisfied with bid submission.
 - a. Acknowledgement of any Addenda
 - **b.** Bid Security (5%)
 - c. E-Verify Affidavit-Form needs to be included, regardless if your firm has less than 25 employees.
- 6. Contract Times
 - a. Contract Final Completion dependent on NTP, 155 Calendar Days.
 - b. Liquidated Damages \$500 / Day for Final Completion
- 7. The pre-bid conference was mandatory.
- 8. The pre-bid meeting summary will be issued along with the attendance list in bid addenda. (see attached sign in sheet)
- 9. Questions regarding this contract may be faxed or emailed. Fax number is (919) 834-3589. Email address is sennis@thewootencompany.com

2877-R

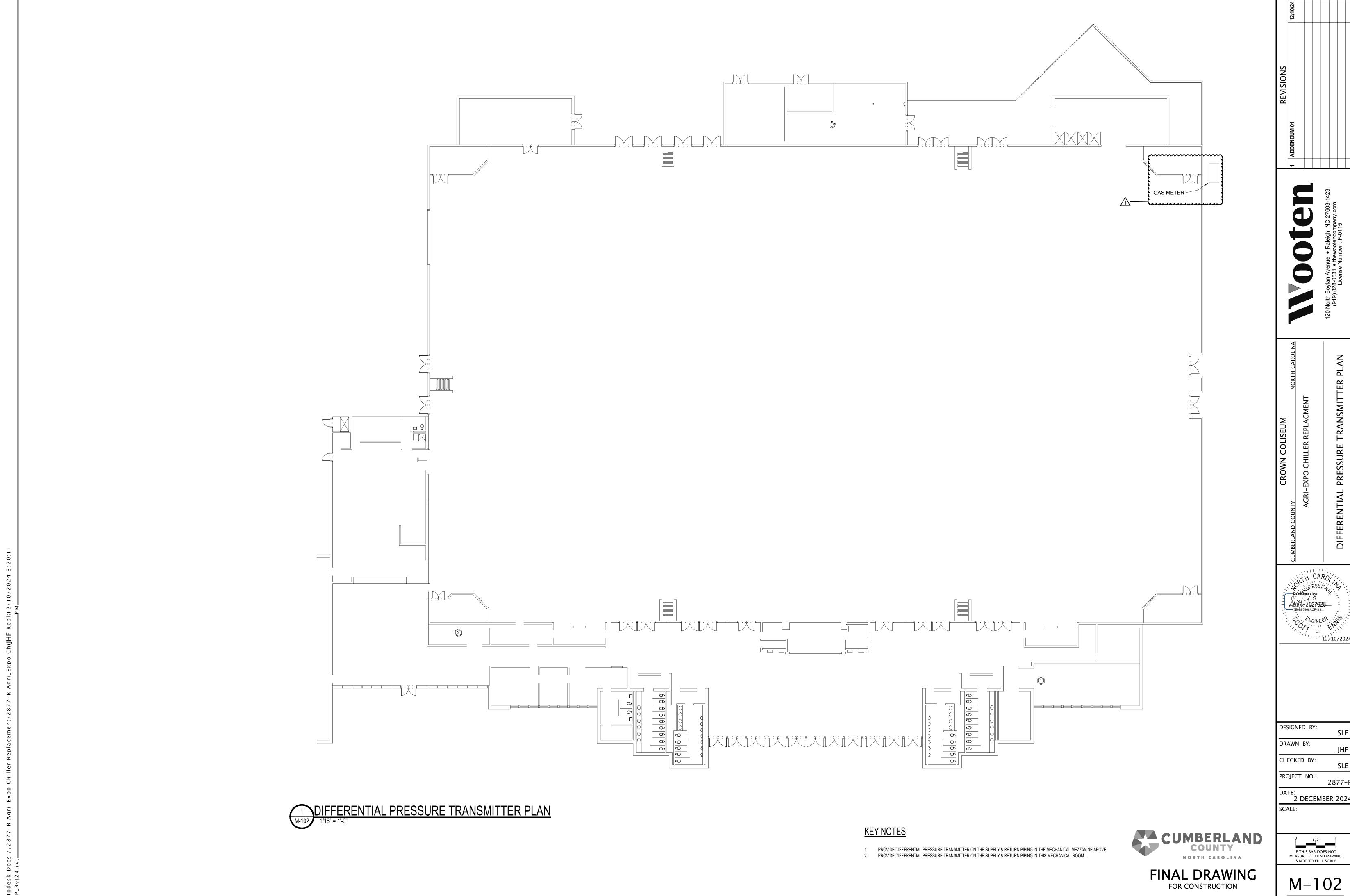
- 10. To request copies of the bid documents, email Scott Ennis. E-mail Address is sennis@thewootencompany.com
- 11. Documents will all be electronically transmitted. RFIs, ASIs, COs, etc.
- 12. O&Ms Owner will want two (2) bound paper copies, each with an electronic copy on a flash drive.
- 13. Contractor Questions/Comments:
 - a. Chiller will be allowed to be purchased broken down to be assembled in place.
 - b. Gas valve shutoff for the boilers is at the meter which is now shown on dwg included in addendum 01.

2877-R 2



PRE-BID MEETING - SIGN IN SHEET EXPO CENTER CHILLER REPLACEMENT CUMBERLAND COUNTY

TWC No. 2877-R **DATE/TIME**: December 6, 2024 @ 10:00 A.M. **EMAIL** PHONE # **COMPANY** NAME sennis@thewootencompany.com 919.828.0531 The Wooten Company Scott Ennis 910-524-3491 5c 910-520-4122 prior tenfair esmither of rigger wion com 919-907-1472 SMITHS REFLICTERATION BRIAN LANFAIR 910. 237. 9430 JIMMY . DRISCOLL DIVEY MECHANICAL. COM JIMMY DRISCOLI VEY 910-739-7970 Willransom@ smith's rebrige of ion, lang WILL KANSOM SRI AJJohnson@dai/mechanical.com 919 353 3676 Dail Mechanical AJ Johnson Eddie @ Bills Mobile Crano, Con 910-527-6553 Bills Mobile Crane EDDIE BARTlett stields Esoperior mech servicon Gene Mayne Je 910-718-0482 HAIRE Superior Mechanical Services 336-274-3008 Daniel Leach 919)418-2247 Lock. L@mosiandocrane.com JOEL LEWALLEN MeriAndo CYANE 336-272-9044 ADMINEBMIATLANTIC. COM Marlin Harbert BMI

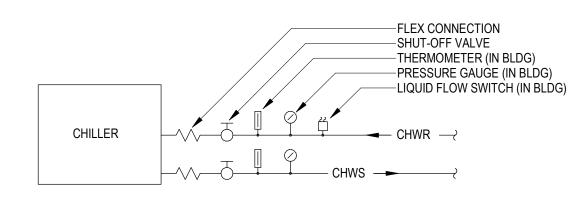




2877-F

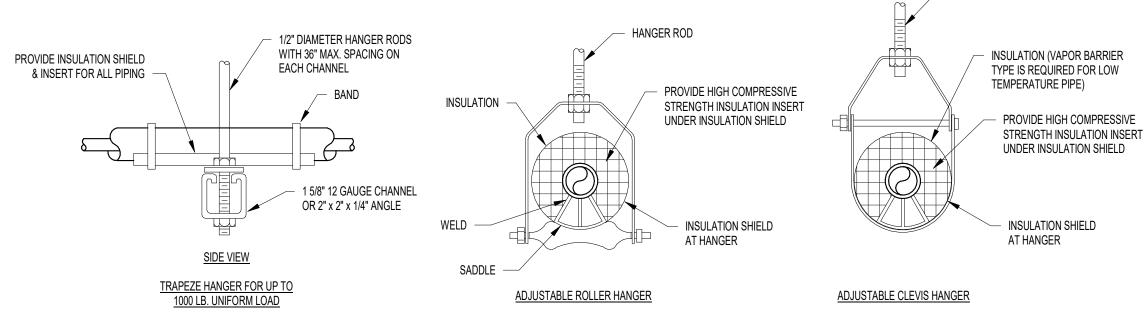
DATE: 2 DECEMBER 2024

M - 102



WATER COOLED CHILLER PIPING DETAIL

 $^{/}$ NOT TO SCALE



PIPE HANGER DETAIL

 \nearrow NOT TO SCALE

WATER-COOLED CHILLER SCHEDULE (BASIS OF DESIGN)															
MARK	BRAND	MODEL	COMPRESSOR TYPE	DESIGN CAP. (TONS)	IPLV (100%)	EVAPORATOR EWT LWT GPM ΔP (FT)				KW	MCA MCA	ECTRICA RLA	L V	Р	WEIGHT (TONS)
CH-1	TRANE	HDWA	300	250	0.3412	85	95	600	19.7	140.6	236	189.6	460	3	6.2985

CHILLER SCHEDULE

TRANE CHILLER, MODEL HWDA HIGH EFFICIECY, REFRIGERANT R-134A, 250.0 FULL LOAD TONS, AND MCA OF 236 AT 95°F AMBIENT PER AHRI 550/590. IPLV OF 0.3412. PROVIDE NEOPRENE VIBRATION ISOLATORS. PROVIDE SINGLE POINT 480 VOLT POWER CONNECTION THAT FEEDS CHILLER. PROVIDE FACTORY MOUNTED AND WIRED CONTROL TRANSFORMER. PROVIDE CONTROL PANEL THAT PROVIDES CHILLED WATER SETPOINT ADJUSTMENT AND DEMAND LIMITING VIA A 4-20MA INPUT. PROVIDE HIGH SHORT CIRCUIT CURRENT RATED CONTROL PANEL. CONTROL PANEL SCCR RATING SHALL BE MINIMUM 65 kA. 54°F EWT AND 44°F LWT, WEIGHT = 6.299 TONS. PROVIDE BACNET INTERFACE.

EQUIVALENTS BY JCI, DAIKIN, AND CARRIER, OR AS LISTED IN SPECIFICATIONS. MAINTAIN MINIMUM CLEARANCES AND UNIT TO UNIT CLEARANCES AS REQUIRED BY MANUFACTURER. MANUFACTURER SHALL PROVIDE FACTORY INSTALLED FLOW SWITCH AND ANY CONTROLS AND ACCESSORIES REQUIRED.

CHILLER ACOUSTICS

THE CHILLER MANUFACTURER SHALL PROVIDE A NOISE REDUCTION SYSTEM TO LIMIT THE CHILLER NOISE TO NC25 ON THE OTHER SIDE OF THE SOUTH WALL OF MECH ROOM

THE NOISE REDUCTION SYSTEM SHALL BE SPECIFICALLY ENGINEERED AND INCLUDE, BUT NOT LIMITED TO, HUSH COVER™ REMOVABLE INSULATION COVERS FOR THE CHILLER COMPRESSORS, DISCHARGE/SUCTION LINES AND OIL SEPARATORS, HUSH QUILT™ ACOUSTICAL INSULATION BLANKETS MANUFACTURED WITH TANERA GORE™ THREAD AND VINYL COATED POLYESTER MATERIALS. THE NOISE REDUCTION SYSTEM SHALL BE MANUFACTURED BY A COMPANY SPECIALIZING IN THE MANUFACTURE OF ACOUSTICAL SYSTEMS AND RELATED ACCESSORIES WITH NOT LESS THAN 10 YEARS DOCUMENTED SUCCESSFUL EXPERIENCE WITH WORK COMPARABLE TO WORK OF THIS PROJECT. ALL NOISE CONTROL MATERIALS MANUFACTURERS SHALL DELIVER A COMPLETE SUBMITTAL INCLUDING A COPY OF AN ACOUSTICAL REPORT IN COMPLIANCE WITH THE ACOUSTICAL PERFORMANCE AS PER THIS SPECIFICATION AND THE COMPLETED SYSTEM SHALL RESULT IN A CHILLER DEGRADATION OF NO MORE THAN 2.5%.

THE COMPLETE NOISE REDUCTION SYSTEM SHALL BE INSTALLED BY THE NOISE MATERIALS MANUFACTURER TO ENSURE GUARANTEED FIT AND MEET THE ACOUSTICAL PEFORMANCE AS PER THIS SPECIFICATION. CHILLER MANUFACTURERS' FACTORY ATTENAUTION PACKAGES ARE NOT ACCEPTABLE. CHILLER MANUFACTURERS' LOW NOISE FANS ARE ACCEPTABLE. BRD NOISE AND VIBRATION CONTROL, INC., LOTEC AND KINETICS ARE CONSIDERED AN ACCEPTABLE SUPPLIER OF THESE PRODUCTS AND SERVICES. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A THIRD PARTY TO PERFORM SOUND MEASUREMENTS ON THE COMPLETE SYSTEM TO VERIFY COMPLIANCE WITH REQIUIREMENTS OF THIS SPECIFICATION.

IF OVERALL NC LEVEL TEST RESULTS DO NOT MEET THE REQUIREMENTS OF THIS SPECIFICATION, THEN THE CHILLER MANUFACTURER/VENDOR SHALL SUPPLY ADDITIONAL SOUND ATTENUATION AND/OR FACILITY MODIFICATIONS TO MEET THIS REQUIREMENT AT NO ADDITIONAL COST TO THE OWNER.



WA	TER-COO	LED C	HILLE	ER SCI	HEDULE (Al	TERNATE #1)
			DESIGN	FEFICIENCY	FVAPORATOR	FI FCTRICAL

<u> </u>									1					<u>/</u>	
MARK	BRAND	MODEL	COMPRESSOR TYPE	DESIGN CAP. (TONS)	EFFICIENCY	EVAPORATOR			ELECTRICAL					WEIGHT	
					IPLV (100%)	EWT	LWT	GPM	M ΔP (FT)	KW	MCA	FLA	V	P	(TONS)
						(°F)	(°F)		, ,		IVIO/		•	'	` ,
CH-1	YORK	YZ_MA024AN022P033HA	CENTRIFUGAL	250	0.6084	54	44	600	14.2	152.1	251	201	460	3	7.181

CHILLER SCHEDULE

YORK CHILLER, MODEL YZ_MA024AN022P033HA HIGH EFFICIECY, REFRIGERANT R-134A, 250.0 FULL LOAD TONS, AND MCA OF 251 AT 95°F AMBIENT PER AHRI 550/590. IPLV OF 0.3423. PROVIDE NEOPRENE VIBRATION ISOLATORS. PROVIDE SINGLE POINT 480 VOLT POWER CONNECTION THAT FEEDS CHILLER. PROVIDE FACTORY MOUNTED AND WIRED CONTROL TRANSFORMER. PROVIDE CONTROL PANEL THAT PROVIDES CHILLED WATER SETPOINT ADJUSTMENT AND DEMAND LIMITING VIA A 4-20MA INPUT. PROVIDE HIGH SHORT CIRCUIT CURRENT RATED CONTROL PANEL. CONTROL PANEL SCCR RATING SHALL BE MINIMUM 65 KA. 54°F EWT AND 44°F LWT. PROVIDE BACNET INTERFACE.

EQUIVALENTS BY TRANE, DAIKIN, AND CARRIER, OR AS LISTED IN SPECIFICATIONS. MAINTAIN MINIMUM CLEARANCES AND UNIT TO UNIT CLEARANCES AS REQUIRED BY MANUFACTURER. MANUFACTURER SHALL PROVIDE FACTORY INSTALLED FLOW SWITCH AND ANY CONTROLS AND ACCESSORIES REQUIRED.

CHILLER ACOUSTICS

THE CHILLER MANUFACTURER SHALL PROVIDE A NOISE REDUCTION SYSTEM TO LIMIT THE CHILLER NOISE TO NC25 ON THE OTHER SIDE OF THE SOUTH WALL OF MECH ROOM N THE EXPO SPACE.

THE NOISE REDUCTION SYSTEM SHALL BE SPECIFICALLY ENGINEERED AND INCLUDE, BUT NOT LIMITED TO, HUSH COVER™ REMOVABLE INSULATION COVERS FOR THE CHILLER COMPRESSORS, DISCHARGE/SUCTION LINES AND OIL SEPARATORS, HUSH QUILT™ ACOUSTICAL INSULATION BLANKETS MANUFACTURED WITH TANERA GORE™ THREAD AND VINYL COATED POLYESTER MATERIALS. THE NOISE REDUCTION SYSTEM SHALL BE MANUFACTURED BY A COMPANY SPECIALIZING IN THE MANUFACTURE OF ACOUSTICAL SYSTEMS AND RELATED ACCESSORIES WITH NOT LESS THAN 10 YEARS DOCUMENTED SUCCESSFUL EXPERIENCE WITH WORK COMPARABLE TO WORK OF THIS PROJECT. ALL NOISE CONTROL MATERIALS MANUFACTURERS SHALL DELIVER A COMPLETE SUBMITTAL INCLUDING A COPY OF AN ACOUSTICAL REPORT IN COMPLIANCE WITH THE ACOUSTICAL PERFORMANCE AS PER THIS SPECIFICATION AND THE COMPLETED SYSTEM SHALL RESULT IN A CHILLER DEGRADATION OF NO MORE THAN 2.5%.

HE COMPLETE NOISE REDUCTION SYSTEM SHALL BE INSTALLED BY THE NOISE MATERIALS MANUFACTURER TO ENSURE GUARANTEED FIT AND MEET THE ACOUSTICAL PEFORMANCE AS PER THIS SPECIFICATION. CHILLER MANUFACTURERS' FACTORY ATTENAUTION PACKAGES ARE NOT ACCEPTABLE. CHILLER MANUFACTURERS' LOW NOISE FANS ARE ACCEPTABLE. BRD NOISE AND VIBRATION CONTROL, INC., LOTEC AND KINETICS ARE CONSIDERED AN ACCEPTABLE SUPPLIER OF THESE PRODUCTS AND SERVICES. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A THIRD PARTY TO PERFORM SOUND MEASUREMENTS ON THE COMPLETE SYSTEM TO VERIFY COMPLIANCE WITH REQIUIREMENTS OF THIS SPECIFICATION.

F OVERALL NC LEVEL TEST RESULTS DO NOT MEET THE REQUIREMENTS OF THIS SPECIFICATION, THEN THE CHILLER MANUFACTURER/VENDOR SHALL SUPPLY ADDITIONAL SOUND ATTENUATION AND/OR FACILITY MODIFICATIONS TO MEET THIS REQUIREMENT AT NO ADDITIONAL COST TO THE OWNER.

PUMP SCHEDULE											
MARK	MANUFACTURER	MODEL	GPM	HEAD (FT)	HP	RPM	V	РН			
EXISTING CHWP	EXISTING	EXISTING	600	60	15	1750	480	3			

GENERAL NOTES:

PROVIDE AEGIS SHAFT GROUNDING RING FOR EXISTING PUMP.

CONTROLS CONTRACTOR TO PROVIDE VFD FOR PUMP.





DESIGNED BY: DRAWN BY:

PROJECT NO.: 2877-

CHECKED BY:

2 DECEMBER 2024 SCALE:

0 1/2 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING
IS NOT TO FULL SCALE

M - 601



FOR CONSTRUCTION