



Purchase College

STATE UNIVERSITY OF NEW YORK

735 Anderson Hill Road

Purchase, NY 10577-1402

www.purchase.edu

Procurement Department
RFQ: Study of Music & PAC HVAC Mechanical System
Project SU-120720
Addendum #1 * December 21, 2020

To: Prospective Bidders

No. of Pages: 8 pages

SUNY Purchase hereby issues this Addendum, dated 12/18/2020, for the above referenced RFQ, in order to provide the following clarification:

Item 1:

SUNY Purchase received questions at the pre-bid meeting and via email. Answers with additional clarification is provided on pages 2 – 8.

Please be sure to sign THIS ADDENDUM (as acknowledgment that your firm received it) and submit it with your bid package.

Respectfully,

Elizabeth Pleva

Interim Director of Procurement and Accounts Payable

Acknowledgement of ADDENDUM #1

Signature

Date

Typed printed name and title

Company name



Addendum #01

Study of Music & PAC Building Mechanical System
SU-120720

dated December 21, 2020

Proposal Due Date
January 19, 2021 at 2:00PM

Submit Proposals to:
State University of New York Purchase College
730 Anderson Hill Road
Campus Center South 3rd Floor
Purchase, New York 10577
Elizabeth Pleva
Interim Director, Procurement and Accounts Payable

Purchase College Project #SU-120720
Study of Music & PAC Buildings Mechanical Systems

Addendum #01 – RFQ Bidder's Questions & Answers

Q1. We are interested in bidding on your project and are requesting a copy of the bid documents. Please inform how we can receive a copy of the bid documents.

A1. You can find the requested documents at:

<https://www.purchase.edu/offices/purchasing/procurement-opportunities/>

Please note, there is a virtual pre-bid meeting scheduled for Tuesday, December 15th at 1:00 PM.

Q2. With regards to the assigned goals of M-WBE / SDVOB participation, and given the limited nature of this task, do all the goals of 30% and 6% have to be strictly met during to the study phase of the project, or can meeting the goals take place over the course of the complete project including the construction phase?

A2. Vendors should act in good faith to attempt to meet the assigned goals. If the solicited does not lend allow for the utilize of MWBEs, vendors may request a waiver if their proposal is ultimately chosen. The construction phase of the project will have its own unique goals assigned.

Q3. Out of the three forms listed below, are all three forms required or is only Form 7555-15: Subconsultant Staffing List—Architecture and Engineering, required at this time?

- 1) Form 7555-15: Subconsultant Staffing List—Architecture and Engineering
- 2) Form 7555-16: Subconsultant Staffing List—Construction Management
- 3) Form 7555-17: Subconsultant Staffing List--Commissioning

A3. Only Form 7555-15: Architecture and Engineering is required.

Q4. Will the selected consultant serve only during the study, or will the selected consultant also serve during the construction phase?

A4. The study (which is this RFQ) will include both short-term solutions and long-term recommendations. As this portion of the work will include developing and implementing the short-term solutions, you'll be involved in that construction. The long-term recommendations will be used as a basis to develop a larger project (or maybe phased projects) that will be administered either through the college or the State Construction Fund. That will require us to go out through the RFQ process again for design services as it's viewed as a separate project.

Q5. To what degree will this initial effort to develop short-term fixes be part of the effort to develop a "larger long-term project?"

A5. It would be nice if the short-term fixes could be incorporated into the long-term recommendations (so as not to waste money), however, that will really depend upon what eth long-term recommendations are.

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Q6. With regards to the moisture problems in both buildings, is the problem year-round or just during the summer months?

A6. We are having this issue during the summer months.

Q7. Does the short-term work require the awarded firm to hire a hazmat design consultant?

A7. Given we've run into hazardous materials on past projects in both of these buildings, I'd recommend showing a hazmat consultant as part of your design team in your RFQ response. If for some reason you are not allowed to carry a hazmat sub-consultant under your contract, please indicate so in your proposal. This will not be held against you in our review of your RFQ. We've handled it as a sub-contractor under the design team and we also had the hazmat consultant as a separate contract that the College holds who closely coordinates with the rest of the design team.

Q8. Is there site access allowed before the submissions are due in January?

A8. Under normal conditions, I'd say yes. Given the Covid-19 environment, we can try and accommodate access if you feel this is critical to your proposal but can't guarantee it as a number of my staff are working remotely. You can send me an e-mail and I'll try and accommodate your request. You'll also need to fill out some documentation on protocols that need to be followed, prior to arriving on campus.

Q9. Are their service logs or an equipment schedule for the buildings that could be shared?

A9. We can share work order logs with the awarded design firm. We also have some original design drawings (can't verify if these are as-builts) that I will attach to the Addendum for your reference.

Q10. Can you please confirm if questions are due tomorrow and at what time?

A10. The open question period closes tomorrow (12/17) at the end of the day (11:59PM).

Q11. Once a qualified agent is selected will that agent have opportunity to ask further questions for pricing such as the ability to conduct surveys during normal business hours, access to elevated areas, etc.

A11. Yes. At this point, we're looking just at qualifications, not price. One we determine the best qualified, they'll be a whole round of discussions and questions in developing costs for these design services.

Q12. Will such agent have the opportunity to recommend additional more in-depth testing after their initial surveys such as electronic leak detection testing, blower

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door testing, nuclear testing, etc., either performed directly within house, added as a sub, or as a separate survey hired directly by SUNY Purchase?

- A12. For the awarded design firm, if you feel some specialized testing would be required to help determine the source(s) of our problems, and those type of tests aren't included in your design services proposal, then I'd recommend listing them under your services exclusions. If during the study process, you feel that certain testing is required, outside of your services, we can review that and determine if it would be best for your firm to be the lead (for additional compensation) or if the College will hire a third-party firm directly to perform the testing.**
- Q13. Three months for the study including bidding documents for the short-term solution seems tight.
- A13. We're hoping the short-term fixes aren't too complex and can be completed fairly quickly. However, given that we don't know what the study will uncover and what the final recommendations will be, we realize the schedule may need to be adjusted as the study evolves. If you feel any of the allotted timeframe may be too aggressive, or too conservative, please comment and reflect this in your response to the RFQ.**

AIR HANDLING UNIT SCHEDULE										
UNIT NO.	SERVICE	LOCATION SEE DWG.	TYPE	FAN NO.	COIL NO.	FACE & BYPASS DAMPERS	HUMIDIFIER	FILTER	MIN. CS	REMARKS
AC-1	SOUTH PRACT. ETC.	H-2	M.Z.	S-1	PHC-1 CC-1	HC-1	PHC-1	F-1	20%	P FIELD ERECTED UNIT
AC-2	REHEARSAL HALLS	H-3	D.T.	S-2	PHC-2 CC-2	—	—	F-2	20%	Q FIELD ERECTED UNIT
AC-3	NORTH PRACT. ETC.	H-4	M.Z.	S-3	PHC-3 CC-3	HC-2	PHC-3	H-14	20%	P FIELD ERECTED UNIT
NOTES: ALL COMPONENTS ARE FIELD ASSEMBLED. TYPE: D.T.-DRAW-THRU, M.Z.-MULTI-ZONE. BYPASS DAMPER AROUND THE COIL INDICATED. SEE ALSO FAN, COIL, HUMIDIFIER AND FILTER SCHEDULES.										

FAN SCHEDULE													
FAN NO.	SERVICE OR A.C. UNIT NO.	LOC. SEE DWG.	CFM	TOTAL S.P.	O.V. FPM	FAN RPM	BHP	DRIVE TYPE	STAND. MFR.	MODEL NO.	MOTOR H.P.	C.S.	NOTES
S-1	AC-1	H-4	47,000	4	2300	815	39.2	B C	AAF	445	50	P	
S-2	AC-2	H-3	50,500	4	2000	543	38.7	B C	AAF	660	50	Q	SEE NOTE (2)
S-3	AC-3	H-4	54,720	4	2200	566	43.9	B C	AAF	660	50	P	
S-4	SWITCHGEAR RM.	H-4	2,500	1/2	—	690	—	B C	ILG	CTB-33	3	S	
R-1	AC-1	H-4	49,615	2	1700	418	17.5	B C	AAF	660	25	P	
R-2	AC-2	H-3	46,350	2	1950	450	21.0	B C	AAF	660	25	Q	SEE NOTE (2)
R-3	AC-3	H-4	49,650	2	1800	430	18.9	B C	AAF	660	25	P	
E-1	TOILETS/STASH RM.	H-11	1,200	3/4	—	890	—	B R	SWARTOUT	316FCB	1/3	M	
E-2	TOILETS & SHOWERS	H-8	350	3/8	—	1140	—	D W	SWARTOUT	110 HA	1/2	M	
E-3	TOILETS & KIT.	H-11	1,850	1/2	—	1110	—	B R	SWARTOUT	414FCB	1/2	M	
E-4	PROJECTION RM.	H-8	270	1/4	—	1550	—	D W	SWARTOUT	27 HA	1/25	M	
E-5	FAN RM.	H-4	12,000	1/2	—	1110	—	B P	BUFFALO	30"53	3	M.S.	
S-5	STAIR #1	H-11	50,000	5/8	—	1100	9.5	D R	SWARTOUT	150-LINE	10	V	ALTERNATE #1 BY UNIT COMPONENTS
NOTES: (1) SEE SPEC. FOR CLASS, ARRANGEMENT, MOTOR DATA, ETC. SEE DWGS. FOR ROTATION, DISCHARGE POSITION, MOTOR POSITION, APPROXIMATE DIMENSIONS, ETC. S.P.-INCHES W.G., O.V.-OUTLET VELOCITY, D-DIRECT, B-BELT, C-CENTRIFUGAL, R-ROOF, W-WALL, P-PROPELLER.													
(2) REVERSIBLE INLET VALVE & 2-SPEED, 2 WINDING MOTOR.													

FILTER SCHEDULE (AMERICAN AIR FILTER AS STANDARD)										
FILTER NO.	SERVICE	CFM	MODEL	H.P.	ARR	TYPE	CS			
F-1	AC-1	47,000	10V120	1/10	SA	ROLL-O-PAK	L			
F-2	AC-2	50,500	10V120	1/10	SA	ROLL-O-PAK	L			
F-3	AC-3	54,720	10V120	1/10	SA	ROLL-O-PAK	L			

CENTRAL COIL SCHEDULE											(AEROFIN AS STANDARD)										
AIR DATA						WATER DATA					COIL DATA					TIER					
COIL NO.	AIR NO.	HSH	CFM	ENT	LEAV.	FRIC.	GPM	ENT.	P.C.	FACE	TUBE	TUBE	W.P.R.	ROWS	CIRCUIT	HIGH	WIDE				
				DB/WB	DB/WB			IN.	WC.		°F	PT.	SQ.FT.	FACE				LENGTH	TYPE	TOTAL	
PHC-1	AC-1	1880	47000	2	37	.15	120	165	6.2	66	24	6'-0"	CH	1	HALF	2	2				
PHC-2	AC-2	1960	50,500	2	37	.15	81	165	5.7	70	21	9'-6"	CH	1	HALF	3	1				
PHC-3	AC-3	2140	54,720	2	37	.15	111	165	10.8	73	21	10'-0"	CH	1	HALF	3	1				
CC-1	AC-1	1800	47000	82.5/67	57/55	1.1	260	44	24.0	74	21	10'-0"	C	6	FULL	3	1				
CC-2	AC-2	2060	50,500	80.5/65.7	58/54	.8	290	44	21.0	97	21	10'-0"	C	6	FULL	4	1				
CC-3	AC-3	2050	54,720	82.5/67	57/55	.9	293	44	21.0	97	21	10'-0"	C	6	FULL	4	1				
HC-1	AC-1	1070	33000	57	87	.37	80	165	5.6	41	18	10'-0"	CH	2	FULL	2	1				
HC-2	AC-3	1210	33500	57	87	.37	102	165	5.8	47	21	10'-0"	CH	2	FULL	2	1				

DUCT REHEATER SCHEDULE - (WATER)											(AEROFIN AS STANDARD)										
COIL NO.	SYSTEM NO.	LOC. SEE DWG.	TOTAL MBH	CFM	AIR DATA			WATER DATA			COIL DATA					WFR'S TYPE					
					ENT. TEMP. °F	LEAV. TEMP. °F	IN-W.C.	ENT. TEMP. °F	P.D. °F	SPM	FACE SQ. FT.	TURF. FACE	LENGTH	ROWS	CIRCUIT	TYPE					
RH-1-1	1	H-2	53.4	2200	58°	80°	.087	10.0	165°	.73	4.2	15	2 1/2"	1	1	CH					
RH-2-1	1	H-6	9.2	840	58°	69°	.087	1.2	165°	.48	1.9	8	2 1/2"	1	1	MP					
RH-3-1	1	H-6	9.2	840	58°	69°	.087	1.2	165°	.48	1.9	8	2 1/2"	1	1	MP					
RH-4-1	1	H-6	9.0	600	58°	72°	.087	0.9	165°	.20	1.2	6	1 1/2"	1	1	MP					
RH-5-1	1	H-6	6.3	700	58°	66°	.087	0.9	165°	.21	1.4	6	2 1/2"	1	1	MP					
RH-6-1	1	H-6	6.3	700	58°	66°	.087	0.9	165°	.21	1.4	6	2 1/2"	1	1	MP					
RH-7-1	1	H-6	24.5	650	58°	92°	.087	1.8	165°	.10	1.4	6	2 1/2"	1	1	MP					
RH-8-1	1	H-6	14.7	6050	58°	80°	.117	11.25	165°	.84	10.3	18	5 1/2"	1	1	CH					
RH-9-1	1	H-6	10.4	800	58°	70°	.087	1.2	165°	.44	1.6	8	1 1/2"	1	1	MP					
RH-10-1	1	H-6	9.1	700	58°	70°	.087	1.2	165°	.40	1.4	8	1 1/2"	1	1	MP					
RH-11-1	1	H-6	10.4	800	58°	70°	.087	1.2	165°	.44	1.6	8	1 1/2"	1	1	MP					
RH-12-1	1	H-8	29.5	1615	58°	75°	.117	3.0	165°	.44	2.6	10	2 1/2"	1	2	MP					
RH-13-1	1	H-8	9.0	560	58°	73°	.087	0.9	165°	.18	1.1	6	1 1/2"	1	1	MP					
RH-14-1	1	H-8	11.8	810	58°	71.5°	.087	1.2	165°	.44	1.6	8	1 1/2"	1	1	MP					
RH-15-1	1	H-8	6.7	310	58°	78°	.087	0.6	165°	.05	0.6	4	1 1/2"	1	1	MP					
RH-16-1	1	H-6	3.6	520	80°	88°	.087	0.9	165°	.16	0.9	6	1 1/2"	1	1	MP					
RH-17-1	1	H-6	7.8	1200	80°	86°	.087	1.5	165°	.98	2.6	10	2 1/2"	1	1	MP					
RH-18-1	1	H-8	6.4	590	68°	78°	.117	0.9	165°	.18	1.1	6	1 1/2"	1	1	MP					
RH-19-1	1	H-8	14.2	400	68°	91°	.087	1.8	165°	.07	0.9	6	2 1/2"	1	2	MP					
RH-20-1	1	H-11	10.8	810	68°	95°	.117	1.8	165°	.10	1.4	6	2 1/2"	1	2	MP					

DUCT REHEATER SCHEDULE														CONT.		
RH-2-1	1	H-5	46.5	1170	58°	95°	.090	3	165°	.22	2.4	10	2 1/2"	1	2	MP
RH-1-2	2	H-7	66.5	2540	58°	82°	.087	10.0	165°	.75	5.0	15	3 1/2"	1	1	CH
RH-2-2	2	H-7	91.0	2350	58°	88°	.087	10.0	165°	.77	5.9	15	3 1/2"	1	1	CH
RH-3-2	2	H-7	66.0	1800	58°	92°	.087	7.5	165°	.75	4.0	12	3 1/2"	1	1	CH
RH-4-2	2	H-6	66.0	1800	58°	92°	.087	7.5	165°	.75	4.0	12	3 1/2"	1	1	CH
RH-5-2	2	H-9	3.5	1700	58°	90°	.075	7.5	165°	.75	4.0	12	3 1/2"	1	1	CH
RH-6-2	2	H-9	11.0	920	58°	85°	.080	1.2	165°	.50	2.5	8	2 1/2"	1	1	MP
RH-7-2	2	H-9	211.2	8910	58°	80°	.117	15.0	165°	.88	16.5	24	6 1/2"	1	1	CH
RH-8-2	2	H-9	150.0	5715	58°	82°	.117	11.25	165°	.84	10.3	18	5 1/2"	1	1	CH
RH-9-2	2	H-8	29.0	1200	58°	80°	.087	7.5	165°	.71	2.6	12	2 1/2"	1	1	CH
RH-10-2	2	H-8	193.0	7500	58°	82°	.117	13.75	165°	.86	13.2	21	6 1/2"	1	1	CH
RH-11-2	2	H-6	70.0	1000	58°	101°	.155	15.0	165°	.75	4.0	12	3 1/2"	2	1	CH
RH-11A-2	2	H-6	70.0	1000	58°	83°	.081	1.2	165°	.21	2.5	8	2 1/2"	1	2	MP
RH-12-2	2	H-7	17.6	650	58°	97°	.150	1.6	165°	.21	1.4	6	2 1/2"	2	2	MP
RH-13-2	2	H-8	59.0	1820	58°	88°	.087	7.5	165°	.73	3.3	12	2 1/2"	1	1	CH
RH-14-2	2	H-8	150.0	5700	58°	82°	.258	15.0	165°	.88	8.2	12	6 1/2"	2	1	CH
RH-15-2	2	H-7	35.9	180	58°	77°	.117	0.6	165°	.04	0.5	4	1 1/2"	1	1	MP
RH-16-2	2	H-7	5.0	425	58°	80°	.081	1.0	165°	.16	.90	6	1 1/2"	1	1	MP
RH-1-3	3	H-7	126.5	3600	58°	90.5°	.087	10	165°	.79	6.8	15	4 1/2"	1	1	CH
RH-2-3	3	H-7	37.6	1055	58°	91°	.087	2.4	165°	.23	1.3	8	2 1/2"	1	2	MP
RH-3-3	3	H-7	21	670	58°	87°	.087	2.4	165°	.17	1.2	8	1 1/2"	1	2	MP
RH-4-3	3	H-7	6.1	1900	58°	61°	.151	1.5	165°	1.07	2.9	10	2 1/2"	1	1	MP
RH-5-3	3	H-7	10.2	890	58°	68°	.087	1.2	165°	.48	1.9	8	2 1/2"	1	1	MP
RH-6-3	3	H-7	10.2	840	58°	68°	.087	1.2	165°	.48	1.9	8	2 1/2"	1	1	MP
RH-7-3	3	H-4	17.2	800	50°	100°	.087	2.4	165°	.21	1.6	8	1 1/2"	1	2	MP
RH-8-3	3	H-3	20.5	1230	58°	78°	.117	2.4	165°	.23	1.9	5	2 1/2"	1	2	MP
RH-9-3	3	H-10	26.3	1220	58°	78°	.117	2.4	165°	.23	1.9	5	2 1/2"	1	2	MP
RH-10-3	3	H-11	271	1320	58°	77°	.117	3.0	165°	.42	2.3	10	2 1/2"	1	2	MP
RH-11-3	3	H-11	151	700	58°	78°	.117	1.8	165°	.06	1.1	6	1 1/2"	1	2	MP
RH-12-3	3	H-11	101	470	58°	78°	.117	.9	165°	.14	.7	6	1 1/2"	1	1	MP

HTR-LTW HEAT EXCHANGER SCHEDULE (WALA AS STANDARD)														
UNIT NO.	TUBE SIDE					SHELL SIDE					HTG. SURF. MODEL NO.	CS		
	MBH	ENT °F.	LWT °F.	GPM	PD(1) PRESSURE	ENT °F.	LWT °F.	GPM	PD(2) PRESSURE					
HX-1	8200	590	240	120	3.0	500	130	165	500	5.0	125	101	HCV-WF-48B	C

HUMIDIFIER SCHEDULE (ARMSTRONG AS STANDARD)						
HUMIDIFIER NO.	A.C. UNIT NO.	TOTAL STEAM LB/HR.	MODEL NO.	ORIFICE SIZE INCHES	CS	AREA SERVED
H-1	AC-1	515	AMR-34D-M	1-1/4	P	CENTRAL UNIT
H-2	AC-1	65	AMR-32D-M	11/32	P	COLLEGIUM MUSIC
H-3	AC-1	175	AMR-33D-M	5/8	P	ELECTRONIC MUSIC ETC.
H-4	AC-1	20	AMR-32D-M	3/16	P	INSTRUMENT REPAIR
H-5	AC-2	140	AMR-33D-M	5/8	Q	CHORAL RM.
H-6	AC-2	30	AMR-32D-M	1/4	Q	RECITAL STAGE
H-7	AC-2	180	AMR-33D-M	5/8	Q	RECITAL HALL
H-8	AC-1	1:5	ΔMR-31D-M	1/16	P	RARE INST. STORAGE
H-9	AC-2	215	AMR-34D-M	3/4	Q	OPERA REHEARSAL
H-10	AC-2	140	AMR-33D-M	1/2	Q	ORCHESTRA REHEARSAL
H-11	AC-2	65	AMR-32D-M	11/32	Q	CHAMBER MUSIC
H-12	AC-2	70	AMR-32D-M	11/32	Q	WIND ENSEMBLE
H-13	AC-2	5	AMR-31D-M	3/32	Q	LARGE INST. STORAGE
H-14	AC-3	515	AMR-34D-M	1-1/4	P	CENTRAL UNIT

AIR HANDLING UNIT SCHEDULE															
UNIT NO.	SERVICE	LOC. SEE DWG.	FAN NO.	MIX. O.A. %	COMPONENT ASSEMBLY -- O.A.I. TO FAN SECTION										
					MIX. FILTER ACCESS DEPTH INCHES	PHC DAMPER	PHC COIL	ACCESS C. COIL	C. COIL	RH. COIL	FLEX. CONN.	HUMID-IFER	MODEL NO.		
AC-1	STAGE-TH, A	HL-2	S-1	20	YES	F-1	16	--	PHC-1	30	CC-1	--	YES	H-1	H6WACE
AC-2	AUDITORIUM-TH, A	HL-2	S-2	30	YES	F-2	16	--	PHC-2	30	CC-2	--	YES	H-2	H52ACE
AC-3	DRESSING-TH, A, B, C	HL-2	S-3	34	YES	F-3	16	YES	PHC-3	30	CC-3-1 THRU 4	--	YES	H-3	V52ACE
AC-4	AUDITORIUM-TH, B	HL-1	S-4	33	YES	F-4	16	--	PHC-4	30	CC-4	--	YES	H-4	V36ACE
AC-5	STAGE-TH, B	HL-1	S-5	20	YES	F-5	16	--	PHC-5	30	CC-5	RH-1-5	YES	H-5	V52ACE
AC-6	STAGE-TH, C	HL-1	S-6	30	YES	F-6	16	--	PHC-6	30	CC-6	RH-1-6	YES	H-6	V36ACE
AC-7	AUDITORIUM-TH, C	HL-1	S-7	35	YES	F-7	16	--	PHC-7	30	CC-7	--	YES	H-7	H25ACE
AC-8	CENTRAL LOBBY	HL-1	S-8	15	YES	F-8	36	--	PHC-8	24	CC-8	--	YES	--	*
AC-9	CENTRAL PRODUC.	HL-1	S-9	25	YES	F-9	30	--	PHC-9	30	CC-9	--	YES	--	V52ACE
AC-10	SHOP-TH, A	HA-5	S-10	20	NO	F-10	--	--	PHC-10	30	CC-10	--	YES	--	V36ACE
HV-1	EQUIP. RM. & CRAWL SPACE	HL-2	S-11	--	YES	F-11	--	--	--	--	--	--	NO	--	H22HV
HV-2	EQUIP. RM.	HL-1	S-12	--	YES	F-12	--	--	--	--	--	--	NO	--	H22HV
HV-3	SWITCHGEAR RM.	HL-1	S-13	--	YES	F-13	--	--	--	--	--	--	NO	--	H25HV

NOTES: 1. STANDARD MFR.: AMERICAN AIR FILTER
2. ALL UNITS ARE FACTORY ASSEMBLED UNLESS MARKED *.
3. ALL UNITS ARE DRAW-THRU TYPE.

4. DAMPER IS INTERNAL FACE AND BYPASS.
5. SEE ALSO FAN, COIL, FILTER AND HUMIDIFIER SCHEDULES; AND GENERAL NOTES ON DRAWINGS HL-1, 2, and 3.

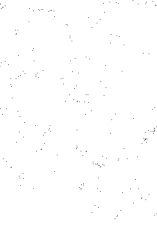
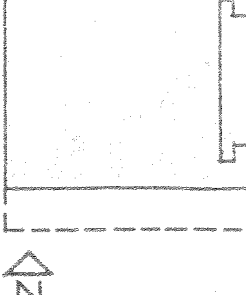

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FAN SCHEDULE													
FAN NO.	SERVICE OR A.C. UNIT NO.	LOC. SEE DWG.	CFM	TOTAL O.V. S.P.	FAN RPM	BHP	DRIVE TYPE	STAND. MFR.	MODEL	MOTOR NO.	H.P.	C.S.	NOTES
S-1	AC-1	HL-2	35,000	4-1/2	1930	120.8	35	B	DWD1	AAF	64	40	VARIABLE INLET VANES-MANUAL
S-2	AC-2	HL-2	26,000	4	1735	121.9	23	B	DWD1	AAF	52	30	VARIABLE INLET VANES-MANUAL
S-3	AC-3	HL-2	26,000	4	1735	121.9	23	B	DWD1	AAF	52	30	VARIABLE INLET VANES-MANUAL
S-4	AC-4	HL-1	17,000	4	1720	125.5	15	B	DWD1	AAF	36	20	VARIABLE INLET VANES-MANUAL
S-5	AC-5	HL-1	24,000	4	1600	117.5	19	B	DWD1	AAF	52	25	VARIABLE INLET VANES-MANUAL
S-6	AC-6	HL-1	17,000	4	1720	125.5	15	B	DWD1	AAF	36	20	VARIABLE INLET VANES-MANUAL
S-7	AC-7	HL-1	13,000	4	1950	161.3	12.5	B	DWD1	AAF	25	15	VARIABLE INLET VANES-MANUAL
S-8	AC-8	HL-1	43,000	4	2100	785	32	B	DWD1	AAF	445A	40	VARIABLE INLET VANES-MANUAL
S-9	AC-9	HL-1	22,000	4	1640	113.5	18	B	DWD1	AAF	52	25	VARIABLE INLET VANES-MANUAL
S-10	AC-10	HA-5	18,000	3-1/2	1810	125.6	13.5	B	DWD1	AAF	36	15	VARIABLE INLET VANES-MANUAL
S-11	HV-1	HL-2	13,000	3/4	1950	1120	4.3	B	DWD1	AAF	22	5	VARIABLE INLET VANES-MANUAL
S-12	HV-2	HL-1	10,000	3/4	1940	930	3	B	DWD1	AAF	22	5	VARIABLE INLET VANES-MANUAL
S-13	HV-3	HL-1	15,000	3/4	2240	1250	6.3	B	DWD1	AAF	25	7-1/2	VARIABLE INLET VANES-MANUAL
S-14	EMER. VENT. TH, A	HL-2	50,000	2	3900	1150	28	D	AV	JOY	48-26	30	VARIABLE INLET VANES-MANUAL
S-15	EMER. VENT. TH, B	HL-1	39,000	2	3100	1150	18.5	D	AV	JOY	48-21	20	VARIABLE INLET VANES-MANUAL
S-16	EMER. VENT. TH, C	HL-1	39,000	1.5	3100	1150	15.1	D	AV	JOY	48-21	20	VARIABLE INLET VANES-MANUAL
R-1	AC-1	HL-2	28,000	1	1650	430	6.5	B	SWSI	AAF	542A	10	VARIABLE INLET VANES-MANUAL
R-2	AC-2	HL-2	23,000	1	1360	385	5.0	B	SWSI	AAF	542A	7-1/2	VARIABLE INLET VANES-MANUAL
R-3	AC-3	HL-2	17,250	1	1520	495	4.1	B	SWSI	AAF	44.5A	7-1/2	VARIABLE INLET VANES-MANUAL
R-4	AC-4	HL-1	15,750	1	1690	590	4.0	B	SWSI	AAF	402A	5	VARIABLE INLET VANES-MANUAL
R-5	AC-5	HL-1	19,300	1	1700	535	4.8	B	SWSI	AAF	445A	7-1/2	VARIABLE INLET VANES-MANUAL
R-6	AC-6	HL-1	12,900	1	1670	640	3.1	B	SWSI	AAF	365A	5	VARIABLE INLET VANES-MANUAL
R-7	AC-7	HL-1	11,500	1	1840	800	3.6	B	SWSI	AAF	330A	5	VARIABLE INLET VANES-MANUAL
R-8	AC-8	HL-1	35,000	3/4	1690	380	6.8	B	SWSI	AAF	600A	10	VARIABLE INLET VANES-MANUAL
R-9	AC-9	HL-1	16,500	1	1770	610	4.3	B	SWSI	AAF	402A	7-1/2	VARIABLE INLET VANES-MANUAL
R-10	AC-10	HA-5	14,500	3/4	1550	530	2.7	B	SWSI	AAF	402A	5	VARIABLE INLET VANES-MANUAL
E-1	EQUIP. RM.	HA-5	13,000	1/2	1040	340	1.3	B	SWSI	AAF	445	2	VARIABLE INLET VANES-MANUAL
E-2	EQUIP. RM.	HL-1	10,000	1/2	1070	380	1.2	B	SWSI	AAF	402	2	VARIABLE INLET VANES-MANUAL
E-3	TH, A, C TOILETS	HL-2	6,660	3/4	1290	670	1.3	B	SWSI	AAF	300	2	VARIABLE INLET VANES-MANUAL
E-4	TH, B TOILETS	HL-1	2,420	3/4	1275	960	.4	B	SWSI	AAF	182	3/4	VARIABLE INLET VANES-MANUAL
E-5	TRANSFORMERS RM.	HL-1	15,000	1/2	--	1150	2.9	D	A.V.	JOY	838-17	5	VARIABLE INLET VANES-MANUAL
E-6	LAUNDRY	HL-1	900	1	2100	1090	.37	B	C	ILG	MH1009	1/2	VARIABLE INLET VANES-MANUAL
E-7	TH, A STAGE	HL-5	7,000	3/8	--	505	--	B	R	SWARTWOUT	431FCB	1-1/2	VARIABLE INLET VANES-MANUAL
E-8	TH, A PROJECTION	HL-5	2,000	1/4	--	870	--	B	R	SWARTWOUT	316FCB	1/3	VARIABLE INLET VANES-MANUAL
E-9	TH, A FOLLOWSPOT	HL-5	600	1/4	--	1050	--	B	R	SWARTWOUT	110FCB	1/8	VARIABLE INLET VANES-MANUAL
E-10	TH, B STAGE	HL-5	4,600	3/8	--	470	--	B	R	SWARTWOUT	331FCB	1	VARIABLE INLET VANES-MANUAL
E-11	TH, B FOLLOWSPOT	HL-5	1,000	1/4	--	400	--	B	R	SWARTWOUT	212FCB	1/6	VARIABLE INLET VANES-MANUAL
E-12	CENT. PROD. TOILETS	HL-5	4,245	3/4	--	575	--	B	R	SWARTWOUT	528FCB	1-1/2	VARIABLE INLET VANES-MANUAL
E-13	TH, C STAGE	HL-5	3,800	3/8	--	720	--	B	R	SWARTWOUT	522FCB	3/4	VARIABLE INLET VANES-MANUAL
E-14	TH, C FOLLOWSPOT	HL-5	1,100	1/4	--	1590	--	B	R	SWARTWOUT	310FCB	1/4	VARIABLE INLET VANES-MANUAL
E-15	TH, C TOILETS	HL-5	250	1/4	--	1550	--	D	R	SWARTWOUT	266C	1/25	VARIABLE INLET VANES-MANUAL
E-16	TH, A SHOP	HA-5	3,500	1	2000	2180	.98	B	T	ACME	H183	1	VARIABLE INLET VANES-MANUAL
E-17	TH, A EMER. VENT.	HA-6	50,000	1/2	--	875	--	D	--	--	DEBOTHZAT BL-4833	25	VARIABLE INLET VANES-MANUAL
E-18	TH, B EMER. VENT.	HA-4	39,000	1/2	--	875	--	D	--	--	DEBOTHZAT BL-4823	35	VARIABLE INLET VANES-MANUAL
E-19	TH, C EMER. VENT.	HC-5	39,000	1/2	--	875	--	D	--	--	DEBOTHZAT BL-4823	35	VARIABLE INLET VANES-MANUAL

NOTES: SEE SPEC. FOR CLASS, ARRANGEMENT, MOTOR DATA, ETC. SEE DWGS. FOR ROTATION, DISCHARGE POSITION, MOTOR POSITION, APPROXIMATE DIMENSIONS, ETC. S.P., IN INCHES W.G. O.V. = OUTLET VELOCITY, D = DIRECT, B = BELT

FILTER SCHEDULE - (AMERICAN AIR FILTER AS STANDARD)													
FILTER NO.	SERVICE	CFM	MODEL	H. P.	ARR.	TYPE	C/S	REMARKS					
F-1	AC-1	35,000	45H100	1/10	SA	ROLL-O-PAK	M	2 REQUIRED					
F-2	AC-2	26,000	69H94	1/10	SA	ROLL-O-PAK	M						
F-3	AC-3	26,000	69H94	1/10	SA	ROLL-O-PAK	M						
F-4	AC-4	17,000	57H94	1/10	SA	ROLL-O-PAK	M						
F-5	AC-5	24,000	69H94	1/10	SA	ROLL-O-PAK	M						
F-6	AC-6	17,000	57H94	1/10	SA	ROLL-O-PAK	M						
F-7	AC-7	13,000	45H78	1/10	SA	ROLL-O-PAK	M						
F-8	AC-8	43,000	10V100	1/10	--	ROLL-O-PAK	M						
F-9	AC-9	22,000	69H94	1/10	SA	ROLL-O-PAK	M						
F-10	AC-10	18,000	57H94	1/10	SA	ROLL-O-PAK	M						
F-11	HV-1	13,000	H45-70	1/10	--	ROLL-O-MATIC	M						
F-12	HV-2	10,000	H45-70	1/10	--	ROLL-O-MATIC	M						
F-13	HV-3	15,000	H45-78	1/10	--	ROLL-O-MATIC	M						

CENTRAL COIL SCHEDULE				(AMERICAN AIR FILTER TYPE W AS STANDARD)											
COIL NO.	AHU NO.	MEH	CFM	AIR DATA			WATER DATA			COIL DATA			ROWS	CIRCUIT	NOTES
				ENT. DB/WB	LEAV. DB/WB	FRICT. IN. W.C.	GPM	ENT. P.D.	P.D.	FACE SQ.FT.	TUBE FACE	TUBE LENGTH INCHES			
CC-1	1	1360	35000	80.5/65.6	54/53	.90	195	44	10	63	56	108	6	FULL	2 TIER COIL
CC-2	2	1060	26000	81.5/68	57.5/55.3	.70	150	44	10	51.8	46	108	6	FULL	2 TIER COIL
CC-3-1	3	310	6900	84/67.8	58/56.5	.70	50	44	5	13.5	24	54	6	FULL	
CC-3-2	3	380	8900	84/69.2	58/56.5	.70	60	44	5	18	24	72	6	FULL	
CC-3-3	3	240	5600	84/62.2	58/56.5	.70	40	44	5	11.25	20	54	6	FULL	
CC-3-4	3	200	4500	84/62.2	58/56.5	.70	30	44	5	9	16	54	6	FULL	
CC-4	4	740	17000	82/68.6	57/55	.70	105	44	10	36	32	108	6	FULL	
CC-5	5	840	24000	80/64.8	54/53	.60	135	44	10	51.8	46	108	6	FULL	2 TIER COIL
CC-6	6	710	17000	81.5/66.7	54/53	.60	105	44	10	36	32	108	6	FULL	
CC-7	7	570	13000	82.5/68.8	57.5/55.2	.75	85	44	5	25	30	80	6	FULL	
CC-8	8	1650	43000	79.7/66.6	56/54.2	.70	235	44	10	88.3	72	111	6	FULL	3 TIER COIL
CC-9	9	890	22000	81/67.7	56/55	.60	130	44	10	51.8	46	108	6	FULL	2 TIER COIL
CC-10	10	630	18000	81/66.2	56/55.2	.70	90	44	10	36	32	108	6	FULL	
PHC-1	1	1250	35000	2/-	35/-	.15	70	165	2	63	56	108	1	HALF	2 TIER COIL
PHC-2	2	925	26000	2/-	35/-	.12	60	165	2	51.8	46	108	1	HALF	2 TIER COIL
PHC-3	3	925	26000	2/-	35/-	.22	45	165	2	36.8	36	98	1	HALF	2 TIER COIL
PHC-4	4	605	17000	2/-	35/-	.10	40	165	2	36	32	108	1	HALF	
PHC-5	5	856	24000	2/-	35/-	.10	60	165	2	51.8	46	108	1	HALF	2 TIER COIL
PHC-6	6	606	17000	2/-	35/-	.10	40	165	2	36	32	108	1	HALF	
PHC-7	7	465	13000	2/-	35/-	.15	40	165	2	25	30	80	1	HALF	
PHC-8	8	1540	43000	2/-	35/-	.12	90	165	2	88.25	72	111	1	HALF	3 TIER COIL
PHC-9	9	785	22000	2/-	35/-	.10	60	165	2	51.8	46	108	1	HALF	2 TIER COIL
PHC-10	10	642	18000	2/-	35/-	.12	40	165	2	36	32	108	1	HALF	
RH1-5	5	600	24000	54/-	77/-	.17	60	165	5	40.5	36	108	1	HALF	2 TIER COIL
RH1-6	6	425	17000	54/-	77/-	.20	45	165	5	27	24	108	1	HALF	
RH1-1	1	765	30500	54/-	77/-	.25	80	165	2	42	56	72	1	HALF	2 TIER COIL
RH2-1	1	34	4700	54/-	80/-	.22	12	165	2	6	8	72	1	HALF	☐

	
STATE UNIVERSITY OF NEW YORK	COLLEGE AT
<h1 style="margin: 0;">PURCHASE</h1>	
STATE UNIVERSITY CONSTRUCTION FUND	
project number	29283
<h2 style="margin: 0;">PERFORMING ARTS CENTER</h2>	
<h3 style="margin: 0;">THEATRE D</h3>	
EDWARD LARRABEE BARNES F.A.A.A.	
PETER G. ROLLAND	
WEISKOPF AND PICK-UTH	
SEGNER AND DALTON	
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 45%;"> <p>architect</p> <p>landscape architect</p> <p>consulting engineers</p> <p>consulting engineers</p> </div> <div style="width: 10%; text-align: center;">  </div> </div>	
<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p>EQUIPMENT SCHEDULE & SYMBOLS LIST</p> </div>	
<h1 style="margin: 0;">PAC-D H-U</h1>	
SCALE	DRAWING
DATE	