

ADDENDUM 001

Date: March 18, 2019 Attn: Project Bidders

Project Name: SUNY Purchase Hub – Café Addition and

Renovation

Project Address: 735 Anderson Hill Road

Purchase, NY 10577

PZD Project Number: 1517347

SUNY Project Number:

The following information shall amend the Construction Documents for the project listed above.

#### **GENERAL COMMENTS:**

### CHANGE: ...

• Product data sheet provided for condensing units for reference.

### **DRAWING COMMENTS:**

### A-103, NOTE

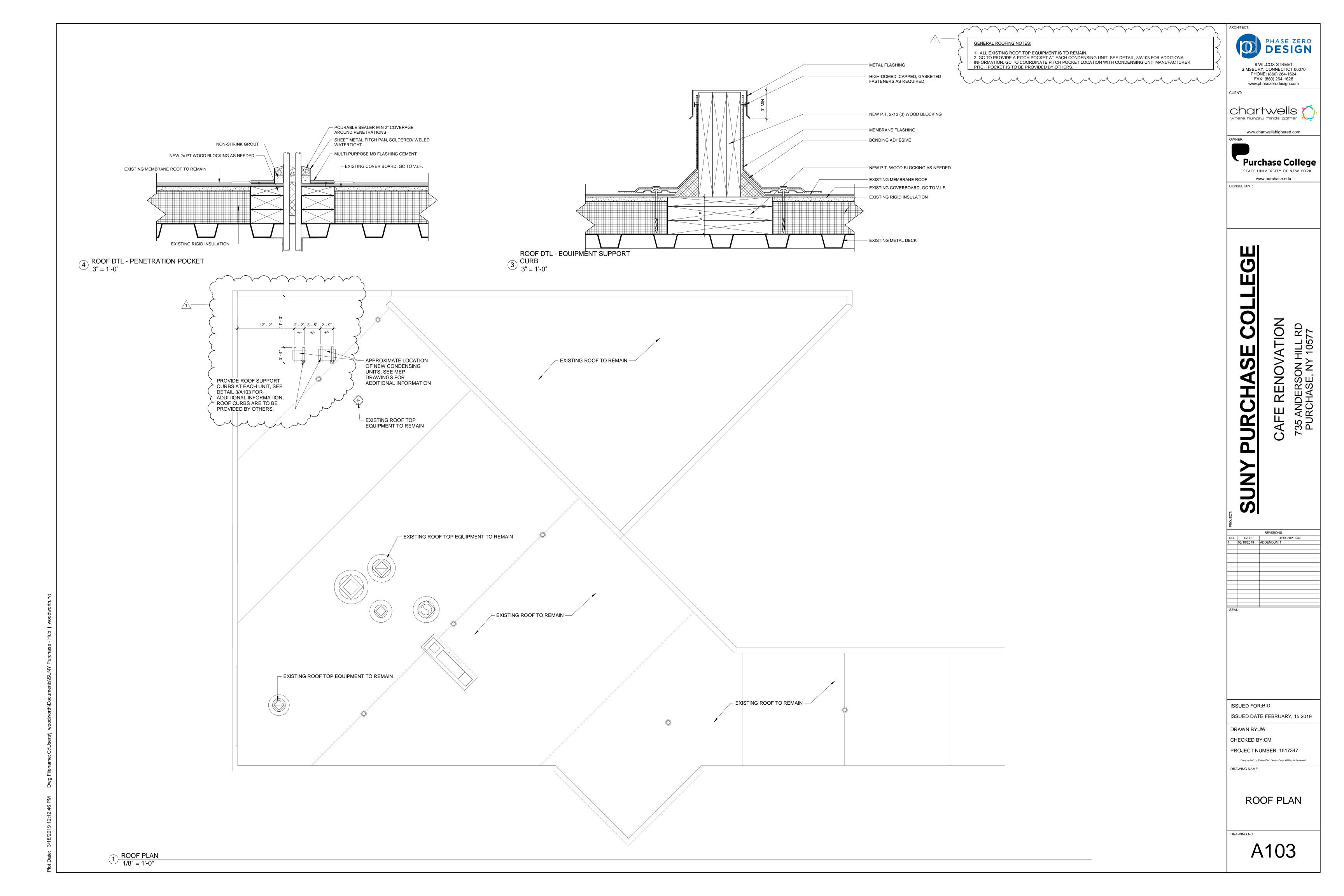
 Clarification: Roof curbs are to be provided by others. Size of curbs have changed.

End of Architectural Addendum #1

Please feel free to contact me should you have any questions. Sincerely,

Phase Zero Design INC

Jason Woodworth Project Coordinator



# Copeland Scroll<sup>™</sup> air cooled refrigeration condensing units

# 1.5 to 5 HP extended medium temperature applications

Copeland Scroll FFAP models offer broad application flexibility and refrigerant options. Available in nominal sizes from 1.5 to 6 horsepower, FFAP units are ideal for many cooler and freezer applications including display cases, merchandisers, and walk-ins.

## Reliability and efficiency

- Improved efficiency from 10%-15% annually
- Optimized for Imultiple applications

# **Application flexibility**

- Operating range of -30°F to 45°F evap (R-404A)
- Designed for up to 110° ambient
- Designed to work with multiple refrigerants
- R-134a, R-22, R-404A, R-407A, R-407C, R-448A, R-449A
- Optional hood available

## Diagnostic protection

Equipped with electronic unit controller:

- Troubleshooting diagnostics
- System protection
- Reduces potential service costs



# **Fully featured**

- Integrated electronic controls
- Advanced system protection
- Factory installed filter drier, moisture indicator/sight glass, and suction accumulator are standard
- Part of the industry's broadest line of integral horsepower condensing units for refrigeration applications



Physical and electrical data

	Voltages*	Comp	Overall dimensions (In)			Connecting lines		Minimum circuit ampacity - Max fuse size					Ship
Model			L	W	Н	Suction	Liquid	208/230-1	230-3	460-3	575-3	down capacity (lbs)	weight (lbs)
FFAP-015Z	CFV, TFC, TFD	ZS09KAE	24.1	18.3	16.6	7/8 S	3/8 S	13.9 - 20	11.4 - 15	6.4 - 15		6.4	121
FFAP-017Z	CFV, TFC, TFD	ZS11KAE	24.1	18.3	16.6	7/8 S	3/8 S	17.2 - 25	14.4 - 20	7.1 - 15		6.4	130
FFAP-020Z	CFV, TFC, TFD	ZS13KAE	25.2	34	19	7/85	3/8 S	16.8 - 25	13.9 - 20	7.1 - 15		11.2	191
FFAP-022Z	CFV, TFC, TFD	ZS15KAE	25.2	34	19	7/8 S	3/8 S	22.4 - 35	16.1 - 20	15-Oct		11.2	191
FFAP-030Z	CFV, TFC, TFD	ZS19KAE	25.2	34.1	19	7/8 S	3/8 S	25.3 - 40	19.9 - 30	11.3 - 15		11.2	209
FFAP-032Z	CFV, TFC, TFD	ZS21KAE	25.2	34.1	19	7/8 S	3/8 S	31.8 - 50	21.8 - 30	11.8 - 15		11.2	209
FFAP-035Z	CFV, TFC	ZS26KAE	25.2	34.1	19	7/8 S	3/8 S	32.3 - 50	22.2 - 30			11.2	223
FFAP-040Z	CFV, TFC, TFD	ZS26KAE	28.2	44.1	26.8	1 1/8 S	1/2 S	33.1 - 50	23 - 35	15-Nov		18.4	290
FFAP-042Z	CFV, TFC, TFD	ZS33KAE	28.2	44.1	26.8	1 1/8 S	1/2 S	38.9 - 60	31.5 - 50	14.9 - 20		18.4	296
FFAP-050Z (	CFV, TFC, TFD, TFE	ZS38K4E	28.2	44.1	26.8	1 1/8 S	1/2 S	43.4 - 70	30.4 - 45	14.4 - 20	11.9 - 15	18.4	297
FFAP-060Z	TFC, TFD	ZS45K4E	28.2	44.1	26.8	1 1/8 S	1/2 S		33.5 - 50	14 - 20		18.4	342

<sup>\*</sup>CFV = single phase, 208/230 volt TFC = three phase, 208/230 volt TFD = three phase, 460 volt TFE = three phase, 575 volt. All models available for use with R-22, R-134a, R-404A, R-407C. See OPI for current list of approved refrigerants.

BOM Feature	-071	-072	-075
Fan motor	Fixed speed	Fixed speed	Fixed speed
Head pressure control	Fan cycle	N/A	Head Pressure Control Valve
Service valves	Steel	Steel	Steel
Receiver	✓	$\checkmark$	✓
Liquid shut off	✓	$\checkmark$	✓
Moisture indicator	✓	✓	✓
Filter drier	✓	✓	✓
Fixed HP /Adj. LP	✓	✓	✓
CCH	✓		✓
Accumulator	✓		Specific

	С	90° amb									
Model	R-134a		R-404A	R-407C	R-448A R- 449A	-20° evap R-404A					
FFAP-015Z	7,540	11,400	11,500	10,400	10,500	4,000					
FFAP-017Z	8,900	13,100	13,100	12,500	12,300	5,200					
FFAP-020Z	10,200	15,200	15,300	14,000	13,800	6,280					
FFAP-022Z	12,300	18,300	18,900	17,300	16,900	7,360					
FFAP-030Z	14,100	20,800	21,600	19,700	19,100	8,330					
FFAP-032Z	18,500	27,400	27,300	25,400	26,600	11,200					
FFAP-035Z	20,300	29,600	27,600	24,400	28,100	12,000					
FFAP-040Z	21,300	31,700	34,200	30,700	30,800	12,900					
FFAP-042Z	26,100	38,700	40,800	36,300	38,900	15,800					
FFAP-050Z	29,400	43,100	45,400	41,600	44,600	16,900					
FFAP-060Z	34,700	51,000	50,500	50,500	56,500	22,300					
Capacities are at 60 Hertz with 40° return gas and 5°F subcooling											

Base	MT Indoor AWEF								MT Outdoor AWEF						
Model	134a	22	404A	407A	407C	448A	449A	134a	22	404A	407A	407C	448A	449A	Hood
FFAP-015Z	6.4	6.68	6.04	6.34	5.8	5.68	5.68	8.45	9.01	8.83	9.02	8.62	8.23	8.24	505-7066-01
FFAP-017Z	6.52	6.48	6	6.2	5.86	5.81	5.76	8.72	8.96	8.91	9	8.77	8.49	8.49	505-7066-01
FFAP-020Z	5.75	6.07	5.72	5.74	5.39	5.31	5.31	7.59	8.23	8.25	8.16	7.91	7.63	7.63	505-7066-02
FFAP-022Z	6.17	6.18	5.92	5.89	5.68	5.57	5.57	8.18	8.47	8.69	8.55	8.4	8.08	8.08	505-7066-02
FFAP-030Z	6.65	6.64	6.47	6.47	6.07	5.96	5.98	8.69	8.97	9.32	9.14	8.92	8.54	8.54	505-7066-02
FFAP-032Z	7.11	6.93	6.18	6.35	6.42	6.05	6.05	9.54	9.63	9.31	9.34	9.59	9.06	9.05	505-7066-02
FFAP-035Z	7.14	6.87	6.03	6.21	6.4	5.92	5.93	9.71	9.68	9.21	9.33	9.63	8.87	8.87	505-7066-02
FFAP-040Z	7.24	7.54	6.82	6.9	6.84	6.44	6.44	9.19	9.74	9.48	9.52	9.73	9.07	9.06	505-7066-03
FFAP-042Z	7.27	7.37	6.74	6.66	6.76	6.67	6.66	9.4	9.77	9.61	9.31	9.76	9.52	9.52	505-7066-03
FFAP-050Z	6.92	NA	5.94	6.25	6.27	NA	NA	8.03	NA	8.04	8.27	8.35	NA	NA	505-7066-03
FFAP-060Z	7.02	6.6	6.09	6.37	6.3	6.21	6.2	8.9	8.65	8.51	8.69	8.57	8.65	8.64	505-7066-03



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