TETRA TECH

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Addendum No. 3

Smyrna Readiness Center – Packaged Air Terminal Conditioning (PTAC) Units
Delaware Army Reserve National Guard (DEARNG)
Smyrna, Delaware
DEARNG Contract No.: 15-2016
OMB/DFM Contract No.: MC7601000088
Tt Project No.: 200-76984-16009

Addendum No. 3
to
Drawings and Project Manual

September 18, 2017

To: ALL BIDDERS

This ADDENDUM forms a part of the BIDDING AND CONTRACT DOCUMENTS and modifies the following documents:

Original DRAWINGS dated September 6, 2017
PROJECT MANUAL dated September 6, 2017 and

Acknowledge receipt of the ADDENDUM in the space provided on the FORM OF PROPOSAL

This ADDENDUM consists of three (3) pages and the attachments:

3.1 CHANGES TO PROJECT MANUAL

A. Spec Section 00 43 13; DEARNG Bid Bond Form

1. **REPLACE** "Original Bid Bond Form" with "Revised Bid Bond Form" attached to this addendum, indicating the correct year.

3.2 CHANGES TO DRAWINGS

A. Sheet M-501

1. Dedicated VRF Outside Air Unit Schedule

a. **CHANGE** the Electrical Characteristics for DOAS-1 and DOAS-2 from "208-1-60" to read "208-3-60."

B. Sheet E-401

1. **EDIT** Branch Circuit # "MLP3-23-25" Feeding CVRF-2j-2h (See Room #176) to read as "MLP1-23-25."

2. **EDIT** Brand Circuit # “MLP3-23-25” Feeding CVRF-1v & CVRF -1w” (See Rooms #186 & #187) to read as “MLP1-23-25.”

3. **EDIT** Labels for Disconnect Switches serving Equipment Namely CU-1a, CU-1b, CU-2, OACU-1 and OACU-2 respectively as follows:

    a. **CHANGE** CU-1a to read as “30/3” with New Work Note 4.

    b. **CHANGE** CU-1b to read as “60/3” with New Work Note 4.

    c. **CHANGE** CU-2 to read as “60/3” with New Work Note 4.

    d. **CHANGE** OACU-1 to read as “60/3” with New Work Note 4.

    e. **CHANGE** OACU-2 to read as “60/3” with New Work Note 4.

4. **ADD** the following sentence to the end of Work Note #4 in its entirety.

    “Stack Disconnect Switches as required with Front clearance per NEC.”

5. **EDIT** Power Circuit for “DOAS-2” to read as “LDP-7” instead of “MLP2-25, 27” shown on Plan.

6. **EDIT** Label of Disconnect Switch to read as “200/3/240.”

7. **EDIT** Label of Disconnect Switch for “DOAS-1” to read as “200/3/240.”

C. Sheet E-402

1. **EDIT** Branch Circuit # “MLP3-11-13” to read as “MLP2-23-25” serving CVRF-1m,-1k, CVRF-2m,-2k” (see Rooms #143, 144 & 146.)

2. **ADD** the following sentence to the end of Work Note #4 in its entirety.

    “Stack Disconnect Switches as required with Front clearance per NEC.”

D. Sheet E-602

1. **ADD** the following New Panelboard Schedules in their entirety, attached to this addendum:

    a. Schedule of Existing Panel “MHP3.”

    b. Revised Schedule of Existing Panel “MHP3.”

    c. Schedule of Existing Panel “LDP.”

    d. Revised Schedule of Existing Panel “LDP.”

2. **REPLACE** the following Panelboard Schedule shown on Drawings in their entirety with the ones attached to this addendum:

    a. Revised Schedule of Existing Panel “MLP1.”

    b. Revised Schedule of Existing Panel “MLP3.”

3.3 **CLARIFICATIONS/REQUEST FOR INFORMATION (RFI'S)**

A. Joseph T. Richardson, Inc. September 18, 2017 phone call.

Question #1: The pipe sizes on Sheet M-601 are not completely legible.

Response: The VRF System Pipe Trees were all enlargements of pdf's from the factory. Attached are the actual pdf's from the factory which are more legible.

END OF ADDENDUM 03

Attachments:
00 43 13 DEARNG Bid Bond Form
LATS VRF System Pipe Trees
Schedule of Existing Panel "MHP3"
Revised Schedule of Existing Panel "MHP3"
Revised Schedule of Existing Panel "MLP1"
Revised Schedule of Existing Panel "MLP3"

STATE OF DELAWARE
DELAWARE ARMY NATIONAL GUARD

BID BOND

TO ACCOMPANY PROPOSAL
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: _____ _____ of _____ in the County of _____ _____ and State of _____ as **Principal**, and _____ _____ of _____ in the County of _____ and State of _____ as **Surety**, legally authorized to do business in the State of Delaware ("**State**"), are held and firmly unto the **State** in the sum of _____ _____ Dollars ($_____), or _____ percent not to exceed _____ _____ Dollars ($_____) of amount of bid on DEARNG SMYRNA RC – PTAC REPLACEMENT - CONTRACT NO.: 15-2016 to be paid to the **State** for the use and benefit of Delaware National Guard for which payment well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bonded **Principal** who has submitted to the Delaware National Guard a certain proposal to enter into this contract for the furnishing of certain material and/or services within the **State**, shall be awarded this Contract, and if said **Principal** shall well and truly enter into and execute this Contract as may be required by the terms of this Contract and approved by the Delaware National Guard this Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with _____ seal and dated this _____ day of _____ in the year of our Lord two thousand and seventeen (2017).

SEALED, AND DELIVERED IN THE
Presence of

_____
Name of Bidder (Organization)

Corporate Seal

By: _____
Authorized Signature

Attest _____

_____
Title

_____
Name of Surety

Witness: _____

By: _____

_____
Title

PAGE

INTENTIONALLY

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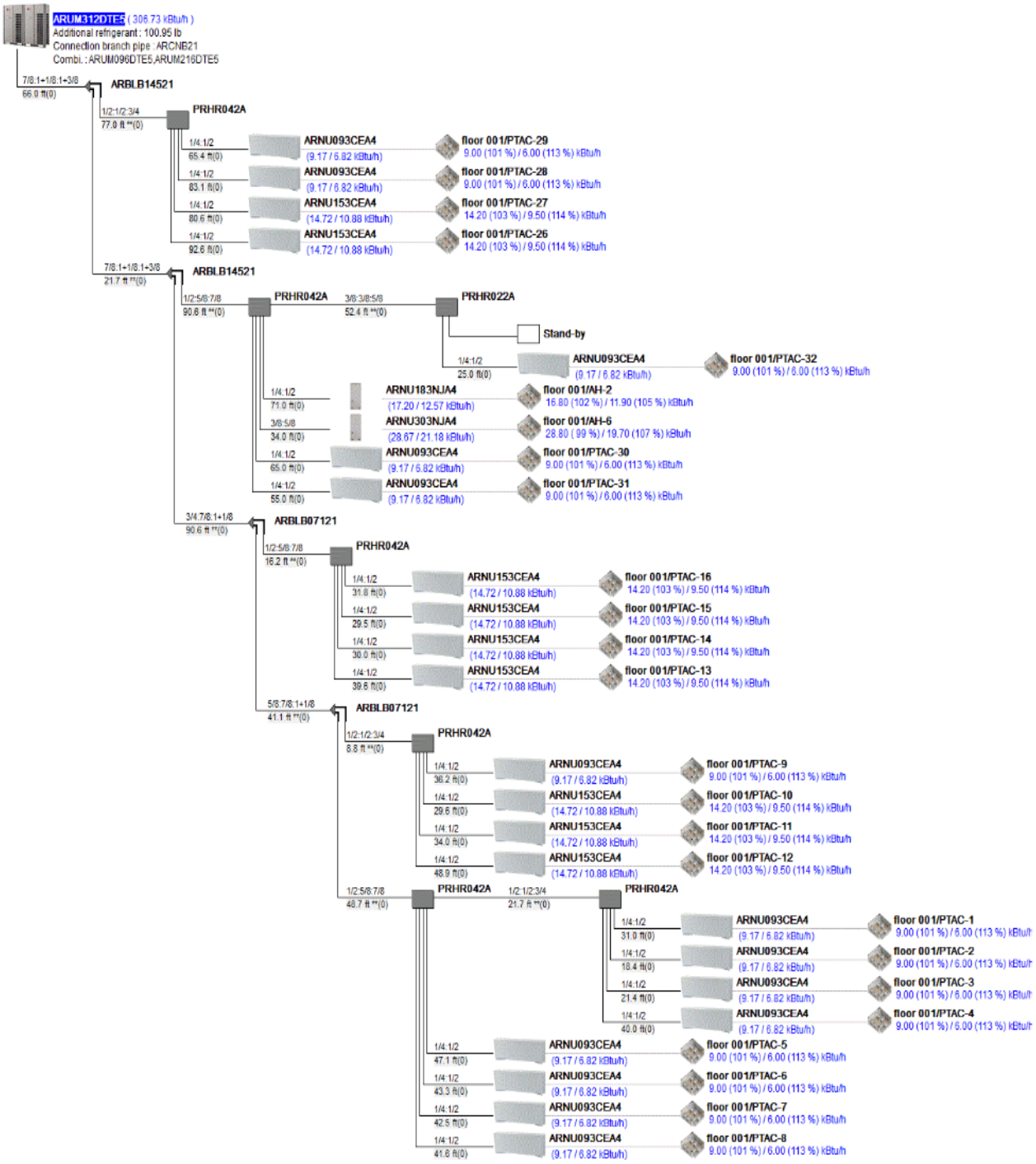
Project Name :Delaware Army National Guard 7-21-17

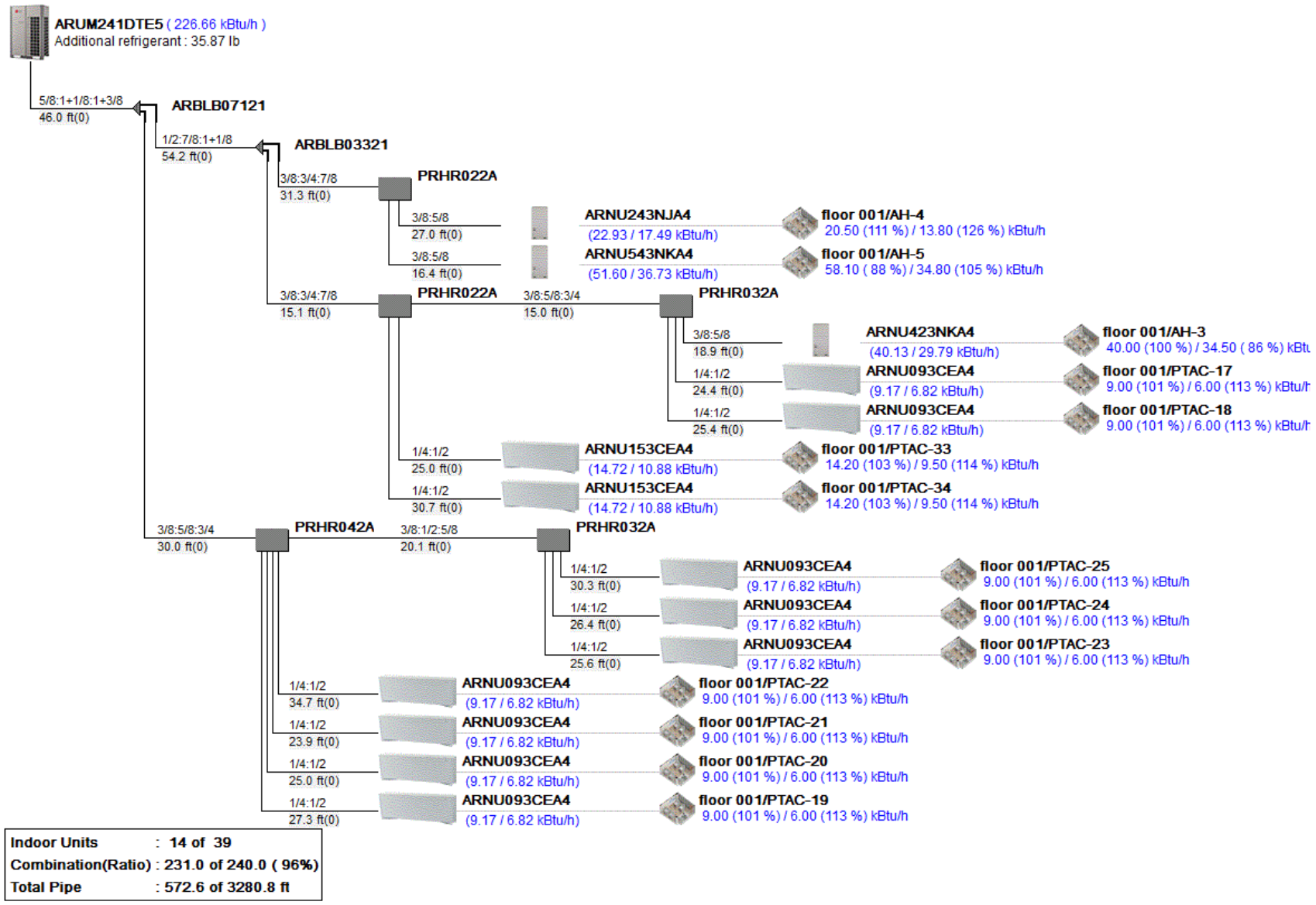
System No :1/2



Indoor Units	: 25 of 52
Combination(Ratio)	: 309.0 of 312.0 (99%)
Total Pipe	: 2140.5 of 3280.8 ft

Project Name :Delaware Army National Guard 7-21-17

System No :2/2



SCHEDULE OF EX. PANEL		MHP3	225A, 277/480V, 3PHASE, 4WIRES (FED FROM 225A,3P,600V SIEMENS ENCLOSED CB, LOCATED IN MECH.RM.#171. POWER TO THIS CB IS TAPPED FROM BUSES OF SWBD)			SURFACE	MOUNTED;			LOCATION: TRAINING AID STORE#109				
		MAIN:		MLO		SQUARE D, TYPE HCP						KAIC:	14	
CKT#	DESCRIPTION	BREAKER			WIRING		PHASES				CKT#	DESCRIPTION	BREAKER			WIRING
		FRAME	P	TRIP	C-QTY#AWG,G#AWG	KVA	A	B	C	KVA			FRAME	P	TRIP	C-QTY#AWG,G#AWG
1	RF-1	100A	3P	15A	EXISTING TO REMAIN	1.5	3.0			1.5	2	RF-2	100A	3P	15A	EXISTING TO REMAIN
3						1.5		3.0		1.5	4					
5						1.5			3.0	1.5	6					
7	AH-2		3P	15A	EXISTING TO REMAIN	1.2	2.7			1.5	8	AH-6		3P	15A	EXISTING TO REMAIN
9						1.2		2.7		1.5	10					
11						1.2			2.7	1.5	12					
13	AH-8		3P	15A	EXISTING TO REMAIN	1.3	2.8			1.5	14	AH-9		3P	15A	EXISTING TO REMAIN
15						1.3		2.8		1.5	16					
17						1.3			2.8	1.5	18					
19	**SPARE**		**3P**	**15A**	**XX**	0.0	3.4			3.4	20	CC-3		3P	35A	EXISTING TO REMAIN
21						0.0		3.4		3.4	22					
23						0.0			3.4	3.4	24					
25	CC-2		3P	50A	EXISTING TO REMAIN	1.5	1.5			0.0	26	**SPARE. SEE DEMO. WORK NOTE 2.**		**3P**	**15A**	**XX**
27						1.5		1.5		0.0	28					
29						1.5			1.5	0.0	30					
31	**SPARE. SEE DEMO. WORK NOTE 2.**		**1P**	**20A**	**XX**	0.0	0.0			0.0	32	**SPARE. SEE DEMO. WORK NOTE 2.**		**1P**	**20A**	**XX**
33	**SPARE. SEE DEMO. WORK NOTE 2.**		**1P**	**20A**	**XX**	0.0		0.0		0.0	34	**SPARE. SEE DEMO. WORK NOTE 2.**		**1P**	**20A**	**XX**
35	**SPARE. SEE DEMO. WORK NOTE 2.**		**1P**	**20A**	**XX**	0.0			0.0	0.0	36	**SPARE. SEE DEMO. WORK NOTE 2.**		**1P**	**20A**	**XX**
37	SPARE		1P	20A	XX	0.0	0.0			0.0	38	SPARE		1P	20A	XX
39	SPARE		1P	20A	XX	0.0		0.0		0.0	40	SPARE		1P	20A	XX
41	SPARE		1P	20A	XX	0.0			0.0	0.0	42	SPARE		1P	20A	XX
SUB-TOTAL=						**16.5**			PLUS	**23.8**		**TOTAL=**	**40.3**			
TOTAL WITH SPARE OF		**25%**	**50.4**		**KVA**	**CURRENT AT 277/480V, 3PHASE, 4 WIRES=**							**60.6**	**A**		

Proj # 200-26912-16009

Date: 9/18/17

Drawn By: KG/RLH

Drawing No.: E/SK-0.01

Description:

Date:

Rev.:

TETRA TECH

DEARNG SMYRNA HVAC PTAC REPLACEMENT

ELECTRICAL SCHEDULES

REVISED SCHEDULE OF EX. PANEL		MHP3	225A, 277/480V, 3PHASE, 4WIRES (FED FROM 225A,3P,600V SIEMENS ENCLOSED CB, LOCATED IN MECH.RM.#171. POWER TO THIS CB IS TAPPED FROM BUSES OF SWBD)								SURFACE	MOUNTED;			LOCATION: TRAINING AID STORE#109
		MAIN:			MLO	SQUARE D, TYPE HCP									KAIC:	14
CKT#	DESCRIPTION	BREAKER			WIRING		PHASES				CKT#	DESCRIPTION	BREAKER			WIRING
		FRAME	P	TRIP	C-QTY#AWG,G#AWG	KVA	A	B	C	KVA			FRAME	P	TRIP	C-QTY#AWG,G#AWG
1	RF-1	100A	3P	15A	EXISTING TO REMAIN	1.5	3.0			1.5	2	RF-2	100A	3P	15A	EXISTING TO REMAIN
3						1.5		3.0		1.5	4					
5						1.5			3.0	1.5	6					
7	AH-2		3P	15A	EXISTING TO REMAIN	1.2	2.7			1.5	8	AH-6		3P	15A	EXISTING TO REMAIN
9						1.2		2.7		1.5	10					
11						1.2			2.7	1.5	12					
13	AH-8		3P	15A	EXISTING TO REMAIN	1.3	2.8			1.5	14	AH-9		3P	15A	EXISTING TO REMAIN
15						1.3		2.8		1.5	16					
17						1.3			2.8	1.5	18					
19	SPARE		3P	15A	XX	0.0	3.4			3.4	20	CC-3		3P	35A	EXISTING TO REMAIN
21						0.0		3.4		3.4	22					
23						0.0			3.4	3.4	24					
25	CC-2		3P	50A	XX	1.5	12.9			11.4	26	**CU-2 (480V,3PH.,41.1MCA,50A-MOCP). SEE NEW WOPK NOTE 3**		**3P**	**50A**	**PROVIDE 1"C-(3#6, 1#10G)**
27						1.5		12.9		11.4	28					
29						1.5			12.9	11.4	30					
31	**CU-1a (480V,3PH.,16.4 MCA,25A-MOCP). SEE NEW WORK NOTEs 3 & 4.**		**3P**	**25A**	**PROVIDE 3/4"C-(3#8,1#10G).**	4.5	15.2			10.6	32	**CU-1b (480V,3PH.,38.3 MCA,50A-MOCP). SEE NEW WORK NOTEs 3 & 4.**		**3P**	**50A**	**PROVIDE 1"C-(3#6,1#8G).**
33						4.5		15.2		10.6	34					
35						4.5			15.2	10.6	36					
37	SPARE		1P	20A	XX	0.0	0.0			0.0	38	SPARE		1P	20A	XX
39	SPARE		1P	20A	XX	0.0		0.0		0.0	40	SPARE		1P	20A	XX
41	SPARE		1P	20A	XX	0.0			0.0	0.0	42	SPARE		1P	20A	XX
SUB-TOTAL=						**30.2**			PLUS	**89.8**		**TOTAL=**	**120.0**			
TOTAL WITH SPARE OF		**25%**	**150.0**		**KVA**	**CURRENT AT 277/480V, 3PHASE, 4 WIRES=**								**180.4**	**A**	

Proj # 200-26912-16009

Date: 9/18/17

Drawn By: KG/RLH

Drawing No.: E/SK-0.02

Description:

Date:

Rev.:

TETRA TECH

DEARNG SMYRNA HVAC PTAC REPLACEMENT

ELECTRICAL SCHEDULES

EXISTING SCHEDULE OF EX. SWITCHBOARD		LDP	1200A, 120/208V, 3HASE, 4WIRES								SURFACE	MOUNTED;			LOCATION: ELEC. RM. #174
		MAIN:	1000A		MCB	SIEMENS (3B3 REV A, S.O.17-51163-H00010)								KAIC:	30
CKT#	DESCRIPTION	BREAKER			WIRING		PHASES				CKT#	DESCRIPTION	BREAKER			WIRING
		FRAME	P	TRIP	C-QTY#AWG,G#AWG	KVA	A	B	C	KVA			FRAME	P	TRIP	C-QTY#AWG,G#AWG
	SPACE	100A	3P	XX	XX	0.0	0.0			0.0		SPACE	100A	3P	XX	XX
1						0.0		0.0		0.0	2					
						0.0			0.0	0.0						
	TVSS		3P	30A	EXISTING TO REMAIN	0.7	9.1			8.4		PANEL MP IN MOTORPOOL		3P	100A	EXISTING TO REMAIN
3						0.7		9.1		8.4	4					
						0.7			9.1	8.4						
	SPEC. RECPT.		3P	50A	EXISTING TO REMAIN	3.6	7.2			3.6		SPEC. RECPT.		3P	50A	EXISTING TO REMAIN
5						3.6		7.2		3.6	6					
						3.6			7.2	3.6						
	SPARE		**3P**	**100A**	**XX**	0.0	0.0			0.0		**SPARE**		**3P**	**100A**	**XX**
7						0.0		0.0		0.0	8					
						0.0			0.0	0.0						
	SPARE		3P	30A	XX	0.0	8.4			8.4		LP-3A		3P	100A	EXISTING TO REMAIN
9						0.0		8.4		8.4	10					
						0.0			8.4	8.4						
	LP-1	250A	3P	100A	EXISTING TO REMAIN	9.6	18.1			8.4		LP-4		3P	100A	EXISTING TO REMAIN
11						9.6		18.1		8.4	12					
						9.6			18.1	8.4						
	MLP-1		3P	225A	EXISTING TO REMAIN	11.5	29.6			18.1		UNKNOWN	250A	3P	225A	EXISTING TO REMAIN
13						11.5		29.6		18.1	14					
						11.5			29.6	18.1						
	MLP-2		3P	225A	EXISTING TO REMAIN	22.9	39.3			16.5		MLP-3		3P	225A	EXISTING TO REMAIN
						22.9		39.3		16.5	16					
						22.9			39.3	16.5						
							111.7			111.7		MAIN	1200A	3P	1000A	EXISTING TO REMAIN
15								111.7		111.7						
									111.7	111.7						
SUB-TOTAL=						**145.0**			PLUS	**190.2**		**TOTAL=**	**335.2**			
TOTAL WITH SPARE OF			**335.2**		**KVA**	**CURRENT AT 120/208V, 3PHASE, 4 WIRES=**							**928.6**	**A**		

Proj # 200-26912-16009
Date: 9/18/17
Drawn By: KG/RLH
Drawing No.: E/SK-0.03

Description:
Date:
Rev.:

TETRA TECH

DEARNG SMYRNA HVAC PTAC REPLACEMENT

ELECTRICAL SCHEDULES

REVISED EX. SCHEDULE OF EX. SWITCHBOARD		LDP	1200A, 120/208V, 3HASE, 4WIRES									SURFACE	MOUNTED;			LOCATION: ELEC. RM. #174
		MAIN:	1000A		MCB	SIEMENS (3B3 REV A, S.O.17-51163-H00010)									KAIC:	30
CKT#	DESCRIPTION	BREAKER			WIRING		PHASES				CKT#	DESCRIPTION	BREAKER			WIRING
		FRAME	P	TRIP	C-QTY#AWG,G#AWG	KVA	A	B	C	KVA			FRAME	P	TRIP	C-QTY#AWG,G#AWG
	SPACE	100A	3P	XX	XX	0.0	0.0			0.0		SPACE	100A	3P	XX	XX
1						0.0		0.0		0.0	2					
						0.0			0.0	0.0						
	TVSS		3P	30A	EXISTING TO REMAIN	0.7	9.1			8.4		PANEL MP IN MOTORPOOL		3P	100A	EXISTING TO REMAIN
3						0.7		9.1		8.4	4					
						0.7			9.1	8.4						
	SPEC. RECPT.		3P	50A	EXISTING TO REMAIN	3.6	7.8			4.2		SPEC. RECPT.		3P	50A	EXISTING TO REMAIN
5						3.6		7.8		4.2	6					
						3.6			7.8	4.2						
	DOAS-1 (208V,3PH.,96MCA, 100A-MOCP). PROVIDE 200A,3,240V DISCONN. SWITH IN NEMA 3R ENCLO.		**3P**	**100A**	**2"C-(3#1/0, 1#6G)**	**11.6**	23.1			**11.6**		**DOAS-1 (208V,3PH.,96MCA, 100A-MOCP). PROVIDE 200A,3,240V DISCONN. SWITH IN NEMA 3R ENCLO.**		**3P**	**100A**	**2"C-(3#1/0, 1#6G)**
7						**11.6**		23.1		**11.6**	8					
						11.6			23.1	**11.6**						
	SPARE		3P	30A	XX	0.0	8.4			8.4		LP-3A		3P	100A	EXISTING TO REMAIN
9						0.0		8.4		8.4	10					
						0.0			8.4	8.4						
	LP-1	250A	3P	100A	EXISTING TO REMAIN	9.6	18.1			8.4		LP-4		3P	100A	EXISTING TO REMAIN
11						9.6		18.1		8.4	12					
						9.6			18.1	8.4						
	MLP-1		3P	225A	EXISTING TO REMAIN	11.5	29.6			18.1		UNKNOWN	250A	3P	225A	EXISTING TO REMAIN
13						11.5		29.6		18.1	14					
						11.5			29.6	18.1						
	MLP-2		3P	225A	EXISTING TO REMAIN	22.9	45.7			22.9		MLP-3		3P	225A	EXISTING TO REMAIN
						22.9		45.7		22.9	16					
						22.9			45.7	22.9						
							141.8			141.8		MAIN	1200A	3P	1000A	EXISTING TO REMAIN
15								141.8		141.8						
									141.8	141.8						
SUB-TOTAL=						**179.7**			PLUS	**245.8**		**TOTAL=**	**425.5**			
TOTAL WITH SPARE OF			**425.5**		**KVA**	**CURRENT AT 120/208V, 3PHASE, 4 WIRES=**							**1,178.7**		**A**	

Proj # 200-26912-16009

Date: 9/18/17

Drawn By: KG/RLH

Drawing No.: E/SK-0.04

Description:

Date:

Rev.:

TETRA TECH

DEARNG SMYRNA HVAC PTAC REPLACEMENT

ELECTRICAL SCHEDULES