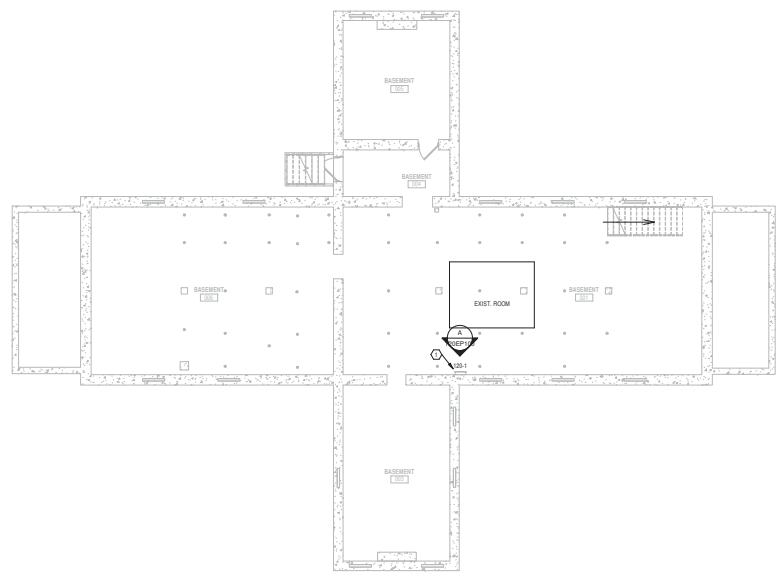


one-eighth inch = one foot
one-quarter inch = one foot
three-eighths inch = one foot
one-half inch = one foot
one inch = one foot
one and one-half inches = one foot
two inches = one foot
three inches = one foot



2 BASEMENT FLOOR PLAN - POWER
Scale: 1/8" = 1'-0"



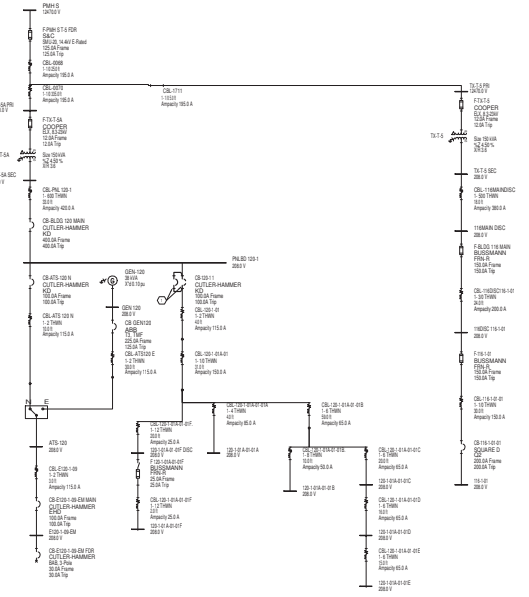
3 FIRST FLOOR PLAN - POWER
Scale: 1/8" = 1'-0"



A SITE PHOTOGRAPH

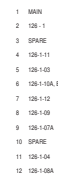
GENERAL NOTES
A. SCHEDULE ANY OUTSIDE WITH THE CORP 4 WEEKS PRIOR TO PERFORMING WORK.
B. WORK SHALL BE PERFORMED OUTSIDE NORMAL WORKING HOURS.
C. PROVIDE DEDICATED NEUTRAL FOR ALL CIRCUITS UNLESS OTHERWISE INDICATED.

NOTES
1. REPLACE EXISTING 100A 5 POLE BREAKER WITH NEW 40A 5 POLE BREAKER. TRACE FEEDER TO VERIFY BREAKER TO BE REPLACED. FIELD VERIFY PANEL INFORMATION PRIOR TO ORDERING.



1 B120 SINGLE-LINE DIAGRAM
Scale: N.T.S.

CONSULTANTS: MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528		ARCHITECT/ENGINEERS: JOHN POE ARCHITECTS 3131 BERNARD DRIVE, SUITE 200 MARIETTA, OHIO 45750 937-481-5200 PHONE 937-481-5200 FAX jpo@johnpoe.com		Drawing Title B120 FLOOR PLANS & SINGLE-LINE DIAGRAM Project Title CORRECT ARC FLASH DEFICIENCIES Location Dayton, Ohio Date 07/06/2017 Checked MSG Drawn JRS Project No. 550-16-051 Building Number 120 Drawing Number 120EP100 Office of Construction and Facilities Management Department of Veterans Affairs	
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2



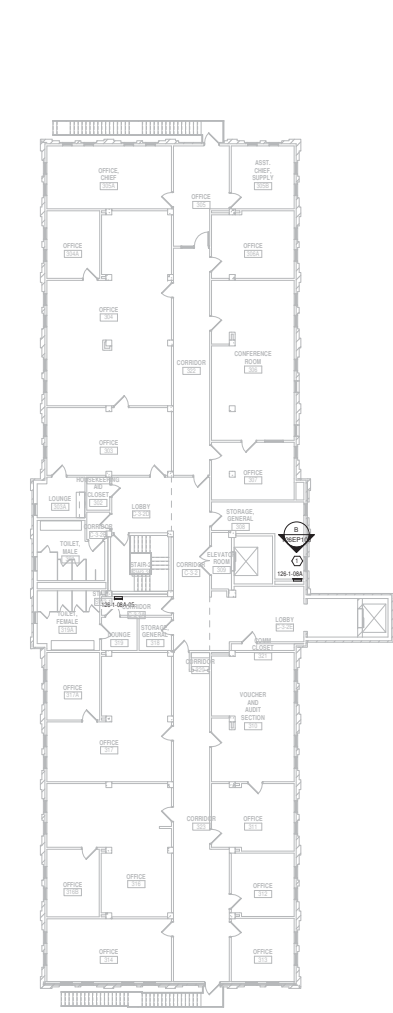
Scale: N.T.S.

1. REPLACE EXISTING 100A, 3 POLE BREAKER WITH NEW 50A, 3 POLE BREAKER. FIELD VERIFY PANEL INFORMATION PRIOR TO ORDERING.

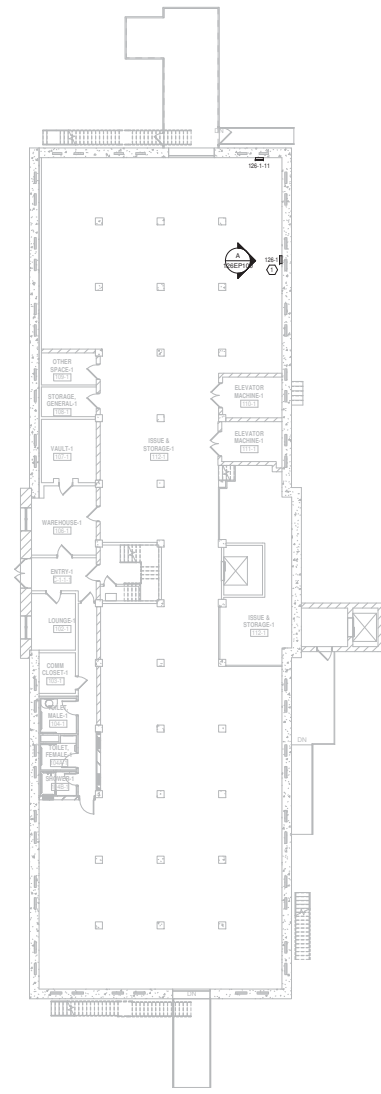
Office of
Construction
and Facilities
Management

 Department of
Veterans Affairs

one-eighth inch = one foot
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 three-eighths inch = one foot
 one-half inch = one foot
 three-quarters inch = one foot
 one inch = one foot
 one and one-half inches = one foot
 two inches = one foot
 three inches = one foot



THIRD FLOOR PLAN - POWER
 Scale: 3/32" = 1'-0"
 PROJECT



FIRST FLOOR PLAN - POWER
 Scale: 3/32" = 1'-0"
 PROJECT

GENERAL NOTES
 A. SCHEDULE ANY OUTAGES WITH THE CORP 4 WEEKS PRIOR TO PERFORMING WORK.
 B. WORK SHALL BE PERFORMED OUTSIDE OF NORMAL WORKING HOURS.

NOTES
 1. REPLACE BREAKER IN PANEL AS INDICATED ON SINGLE LINE DIAGRAM.



A SITE PHOTOGRAPH



B SITE PHOTOGRAPH

Revision Date	CONSULTANTS: MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528			ARCHITECT/ENGINEERS: JOHN POE ARCHITECTS 3131 BIRMINGHAM DRIVE, SUITE 200 MARIETTA, OHIO 45750 937-481-5200 PHONE 937-481-5200 FAX jpo@johnpoe.com		Drawing Title B126 BASEMENT POWER PLAN Approved: Project Director		Project Title CORRECT ARC FLASH DEFICIENCIES Location Dayton, Ohio Date 07/06/2017 Checked MSG Drawn JRS Project No. 550-16-051 JPA Project No. 126 Building Number 126 Drawing Number 126EP100		Office of Construction and Facilities Management Department of Veterans Affairs			

7/11/2017 5:38:42 PM



B128 SINGLE-LINE DIAGRAM

Scale: N.T.S.

Notes: NEW PANELBOARD INTERIOR, 20"W x 5.75"D x 68"H

Notes: NEW PANELBOARD. PROVIDE 175A MAIN BREAKER.

Notes: NEW PANELBOARD INTERIOR, 20"W x 5.75"D x 29"H

Notes: NEW PANELBOARD INTERIOR. 20"W x 5.75"DP x 41"H

GENERAL NOTES

A. WORK IN BUILDING 128 TO BE BID AS DEDUCT ALT. #3

NOTES

- REMOVE ANTIQUATED PANELBOARD INTERIOR COVER, BUSING, BREAKERS, ETC. AND REPLACE WITH NEW. PROVIDE NEW NAMEPLATE. CLEAN AND REMOVE ANY RESTRICTION FROM PANEL BUS. RE-TERMINATE ALL EXISTING BRANCH FEEDERS AND BRANCH CIRCUITS TO ACCOMMODATE NEW CIRCUIT NUMBERS. MATCH NEW INTERCEPT AND EXTEND CONDUCTORS AS REQUIRED TO MAKE CONNECTION TO NEW BREAKERS/LOADS. PRIOR TO SUBMITTING FOR PERMITS AND AGAIN BEFORE ORDERING MATERIALS, INTERIOR AND CUSTOMER CONCURRENCE MUST BE OBTAINED. RE-INSTALL INTERIOR COVER EXCEPT THOSE FOR OPENING AND FEEDER/BRANCH RE-INSTALLATION. WHEN RE-INSTALLING COVER, VERIFY COVER IS PROPERLY COVER TO FIT TUB. NO ALLOWANCES WILL BE MADE FOR FAILURE TO DO SO. REFER TO SEQUENCE OF CONSTRUCTION NOTES FOR MAXIMUM OUTLET INFORMATION. CONTRACTOR SHALL PROVIDE TEMPORARY POWER TO THE RELOCATION OF PANEL TO THE NEW LOCATION. CONTRACTOR SHALL PROVIDE TO INADEQUATE PREPARATION SITE INVESTIGATION, DIMENSIONS LISTED ARE APPROXIMATE.
2. REMOVE EXISTING PANEL WITH NEW, RE-TERMINATE ALL EXISTING CONDUITS TO NEW TUB. EXTEND FEEDERS AND BRANCH CIRCUITS AS REQUIRED TO ACCOMMODATE NEW PANELBOARD. REFER TO PANEL SCHEDULE AND FLOOR

[illegible]

CONSULTANTS:



ARCHITECT/ENGINEERS:

JOHN POE ARCHITECTS



Drawing Title

B128 SINGLE-LINE DIAGRAM

Approved: Project Director

	Project Title
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CORRECT ARC FLASH DEFICIENCIES

Location	Dayton, Ohio
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Date

☐ Check

Project No.	
VA Project No.	552-18-55
JPA Project No.	-
Building Number	

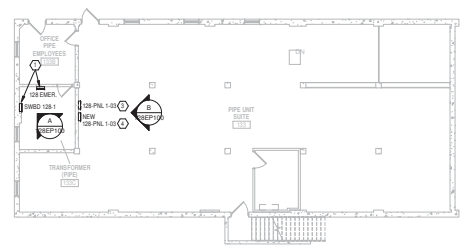
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12020

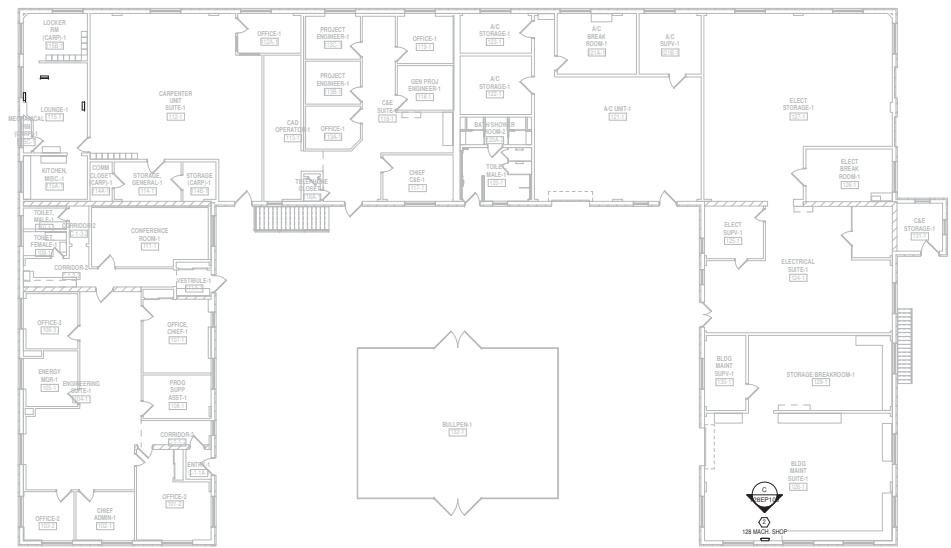
Office of
Construction
and Facilities
Management



one-eighth inch = one foot
one-quarter inch = one foot
three-eighths inch = one foot
one-half inch = one foot
one inch = one foot
one and one-half inches = one foot
three inches = one foot



BASEMENT FLOOR PLAN - POWER
Scale: 3/32" = 1'-0"
PROJECT



FIRST FLOOR PLAN - POWER
Scale: 3/32" = 1'-0"
PROJECT

- GENERAL NOTES**
- A. SCHEDULE ANY SHUT DOWN WITH THE COR 4 WEEKS PRIOR TO PERFORMING WORK.
 - B. SHUTDOWNS IN BUILDING US SHALL BE SCHEDULED OUTSIDE OF NORMAL WORKING HOURS AND SHALL BE COMPLETED A MINIMUM OF 2 HOURS BEFORE NORMAL WORKING HOURS.
 - C. UNDER DEDUCT ALT. 40 TRANCE EACH BRANCH CIRCUIT FED BY EACH PANEL MODIFIED UNDER THIS PROJECT AND UPDATE PANEL SCHEDULE ACCORDING TO MODIFICATION IT SERVICE.
 - D. WORK IN BUILDING USR TO BE BID AS DEDUCT ALT. 45.

- NOTES**
- 1. REMOVE PANEL INTERIOR AND REPLACE WITH BUSING OF ADEQUATE SHORT CIRCUIT CURRENT RATING. REFER TO SINGLE LINE DIAGRAM AND PANEL SCHEDULE FOR ADDITIONAL REQUIREMENTS.
 - 2. REPLACE EXISTING PANEL AS INDICATED ON SINGLE LINE DIAGRAM.
 - 3. REMOVE EXISTING PANEL AND EXISTING CIRCUITRY USING NON REVERSIBLE COMPRESSION TYPE SPICES AND CONDUIT TO NEW PANEL.
 - 4. RETAIL NEW PANEL IN LOCATION INDICATED.



A SITE PHOTOGRAPH



B SITE PHOTOGRAPH



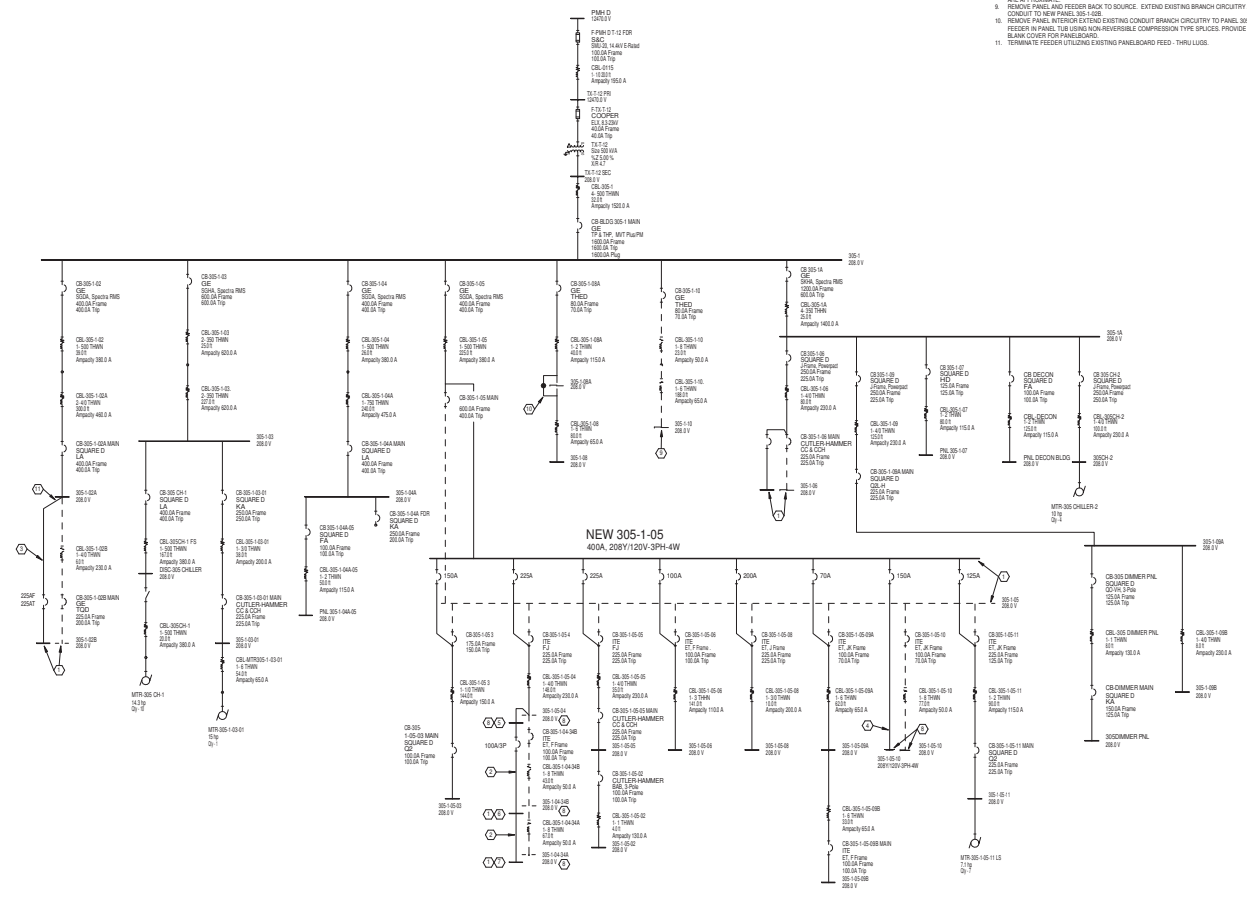
C SITE PHOTOGRAPH

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project No.		Office of Construction and Facilities Management	
 MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528		 JOHN POE ARCHITECTS 2131 BERNARDON DRIVE, SUITE 200 MARIETTA, OHIO 45750 937 481 5286 PHONE 937 481 5286 FAX jpo@johnpoe.com		B128 BASEMENT POWER PLAN		CORRECT ARC FLASH DEFICIENCIES		550-16-551 JPA Project No.		Office of Construction and Facilities Management	
Date		Date		Approved: Project Director		Location Dayton, Ohio		Building Number 128		Department of Veterans Affairs	
7/11/2017 5:38:56 PM						Date 07/06/2017		Checked MSG		Drawing Number 128EP100	
								Drawn JRS		Design of	

one-eighth inch = one foot
one-quarter inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one inch = one foot
one and one-half inches = one foot
two inches = one foot
three inches = one foot

NOTES

1. REPLACE EXISTING PANEL WITH NEW. RE-TERMINATE ALL EXISTING CONDUITS TO NEW TUB. EXTEND FEEDERS AND BRANCH CIRCUITS AS REQUIRED TO ACCOMMODATE NEW PANELBOARD. REFER TO PANEL SCHEDULE AND FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
2. RUN #4-6 AWG IN 1/2" CTS.
3. RUN #4-6 AWG IN 1/2" CTS.
4. RUN #4-6 AWG IN 1/2" CTS.
5. NEW PANEL 305-1-05 480V 120V 3PH 4W 15.75 20" H. FIELD VERIFY PANEL DEPTH. REPLACE PANEL 108 INTERIOR AND COVER WITH NEW.
6. NEW PANEL 305-1-04 480V 100A 18 BREAKER 200T120V 3PH 4W 15.75 20" H. FIELD VERIFY PANEL DEPTH. REPLACE PANEL 108 INTERIOR AND COVER WITH NEW.
7. REMOVE ANTICUT PANELBOARD INTERIOR COVER, BUSING, BREAKERS, ETC. AND REPLACE WITH NEW. PROVIDE NEW NAMEPLATE. CLEAN AND REWIRE ANY FEEDS CONSIDER FROM PANEL TUB. RE-TERMINATE ALL EXISTING BRANCH CIRCUITS AND FEEDERS TO REMAIN TO NEW INTERIOR. EXISTING CIRCUIT NUMBERS SHALL MATCH NEW. INTERCEPT AND RETING CONDUCTORS AS REQUIRED TO MAKE CONNECTION TO NEW BREAKER/FEEDS. PRIOR TO STARTING WORK, CONTRACTOR SHALL VERIFY ALL EXISTING CIRCUITS AND FEEDERS ARE CORRECTLY IDENTIFIED AND Labeled. VERIFY BREAKERS. RE-INSTALL COVER WHEN FINISHED REWIRING. PROVIDE CUSTOM INTERIOR AND COVER TUB. BE ALLOWED TO BE MARKED FOR FAILURE TO DO SO. REPORT TO SEQUENCE OF CONSTRUCTION NOTES FOR MAXIMUM OUTAGE DURATION. CONTRACTOR SHALL PROVIDE TEMPORARY POWER TO THIS PANELBOARD UPON FAILURE TO COMPLY WITH MAXIMUM OUTAGE DURATION DUE TO INADEQUATE PREPARATION SITE INVESTIGATION. DIMENSIONS LISTED ARE APPROXIMATE.
8. REMOVE PANEL AND FEEDER BACK TO SOURCE. EXTEND EXISTING BRANCH CIRCUITS AND CONDUIT TO NEW PANEL 305-1-05.
9. REMOVE PANEL INTERIOR EXTEND EXISTING CONDUIT BRANCH CIRCUITS TO PANEL 305-1-05. PLACE FEEDER IN PLACE. USE USING NON-RESPONSIBLE COMPRESSION TYPE SPLICES. PROVIDE CUSTOM NAME PLATE FOR PANELBOARD.
10. TERMINATE FEEDER UTILIZING EXISTING PANELBOARD FEED - THRU LUGS.



CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project No.		Office of Construction and Facilities Management	
Heapy Engineering MEP Design Technology Planning Commissioning Energy 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528				JOHN POE ARCHITECTS		B305 SINGLE-LINE DIAGRAM		CORRECT ARC FLASH DEFICIENCIES		520-16-551	
						Approved: Project Director		Location: Dayton, Ohio		Building Number	
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DISTRIBUTION PANEL: 305-1-05											
Location: CONSULTATION ROOM-2 113C-2						Mounting: SURFACE		A.I.C. Rating: 10,000A			
Supply From: 305-1						Enclosure:		Main Type: MLO			
Voltage: 120/208 V3PH-4W						MCB Rating: 400 A		Main Rating: 400 A			
Feeder Sigs:								Sigs. Ref. 5			
CKT	CIRCUIT DESCRIPTION	AMP/CL. CONNECTED LOAD	FRAME SIZE	POLES	TRIP SETTING	BREAKER TYPE	NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE	SEE NOTE
1	305-1-05-3	0.00 kVA	175A	3	150 A	—	—	—	—	—	—
2	305-1-05-04	0.00 kVA	225 A	3	225 A	—	—	—	—	—	—
3	305-1-05-05	0.00 kVA	225 A	3	225 A	—	—	—	—	—	—
4	305-1-05-06	0.00 kVA	100 A	3	100 A	—	—	—	—	—	—
5	305-1-05-08	0.00 kVA	200 A	3	200 A	—	—	—	—	—	—
6	305-1-05-08A	0.00 kVA	100 A	3	100 A	—	—	—	—	—	—
7	305-1-05-10	0.00 kVA	175 A	3	150 A	—	—	—	—	—	—
8	305-1-05-11	0.00 kVA	150 A	3	150 A	—	—	—	—	—	—
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
NOTES: NEW PANELBOARD											
TOTAL CONNECTED						ESTIMATED DEMAND					
0.00 kVA											

Panel: 305-1-06											
Location: Corridor 2 111N-2				Mounting: Surface				A.I.C. Rating: 20,000A			
Supply From: 305-1-6				Enclosure: Type 1				Main Type: MCB			
Voltage: 120/208 Wye 3PH-4W								Main Rating: 250 A			
CKT	Circuit Description	Trips	Poles	A	B	C	Poles	Trips	Circuit Description	CKT	
1	Existing	20 A	1	0 VA	0 VA	—	2	20 A	Existing	2	
3	Existing	20 A	1	—	0 VA	0 VA	—	—	—	4	
5	Existing	20 A	1	—	—	0 VA	0 VA	2	20 A	Existing	6
7	Spare	20 A	2	0 VA	0 VA	—	—	—	—	8	
9	—	—	—	—	0 VA	0 VA	—	2	20 A	Existing	10
11	Spare	20 A	1	—	—	0 VA	0 VA	—	—	12	
13	Spare	20 A	1	0 VA	0 VA	—	1	20 A	Spare	14	
15	Spare	20 A	1	—	—	0 VA	0 VA	—	1	20 A	Spare
17	Spare	20 A	1	—	—	0 VA	0 VA	—	1	20 A	Spare
19	Spare	20 A	2	0 VA	0 VA	—	1	20 A	Existing SW D	20	
21	—	—	—	—	0 VA	0 VA	—	1	20 A	Existing SW D	22
23	Existing	20 A	1	—	0 VA	0 VA	1	20 A	Existing SW D	24	
25	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Existing SW D	26	
27	Existing	20 A	1	—	0 VA	0 VA	1	20 A	Existing SW D	28	
29	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Existing	30
31	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Existing	32	
33	Existing	20 A	1	—	0 VA	0 VA	1	20 A	Existing	34	
35	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Spare	36
37	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Spare	38	
39	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Spare	40
41	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Spare	42
Total Load:				0.00 kVA	0.00 kVA	0.00 kVA	—	—	—	—	—
Notes: NEW PANELBOARD											
TOTAL CONNECTED						ESTIMATED DEMAND					
0 kVA						0 kVA (0 A)					





Panel: 305-1-05-04											
Location: Corridor 2 111N-2				Mounting: RECESSED				A.I.C. Rating: 10,000A			
Supply From: 305-1-05				Enclosure: Type 1				Main Type: MLO			
Voltage: 120/208 Wye-3PH-4W								Main Rating: 200 A			
CKT	Circuit Description	Trips	Poles	A	B	C	Poles	Trips	Circuit Description	CKT	
1	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Existing	2	
3	Existing	20 A	1	—	0 VA	0 VA	—	1	20 A	Existing	4
5	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Existing	6
7	Existing	20 A	2	0 VA	0 VA	—	—	—	—	8	
9	—	—	—	—	0 VA	0 VA	—	2	20 A	Existing	10
11	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Existing	12
13	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Existing	14	
15	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Existing	16
17	Existing	20 A	1	—	—	0 VA	0 VA	1	20 A	Existing	18
19	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Existing	20	
21	Existing	20 A	2	—	—	0 VA	0 VA	1	20 A	Existing	22
23	—	—	—	—	0 VA	0 VA	1	20 A	Existing	24	
25	Existing	30 A	2	0 VA	0 VA	—	2	30 A	Existing	26	
27	—	—	—	—	0 VA	0 VA	—	—	—	28	
29	Spare	20 A	1	—	—	0 VA	0 VA	1	20 A	Spare	30
31	Spare	15 A	3	0 VA	0 VA	—	3	15 A	Spare	32	
33	—	—	—	—	0 VA	0 VA	—	—	—	34	
35	Spare	15 A	3	0 VA	0 VA	—	3	15 A	Spare	36	
37	—	—	—	—	0 VA	0 VA	—	—	—	38	
39	—	—	—	—	0 VA	0 VA	—	—	—	40	
41	—	—	—	—	0 VA	0 VA	—	—	—	42	
Total Load				0.00 kVA	0.00 kVA	0.00 kVA	—	—	—	—	—
Notes: NEW PANEL INTERIOR AND COVER: 20"W x 44"H. FIELD VERIFY PANEL DEPTH											
TOTAL CONNECTED						ESTIMATED DEMAND					
0 kVA						0 kVA (0 A)					

Panel: 305-1-02B											
Location: Closet 2 114C-2				Mounting: Surface		A.I.C. Rating: 10,000A		Main Type: MCB			
Supply From: 305-1-02A				Enclosure: Type 1		Main Type: MCB		Main Rating: 225 A			
Voltage: 120/208 Wye-3PH-4W											
CKT	Circuit Description	Trips	Poles	A	B	C	Poles	Trips	Circuit Description	CKT	
1	Existing	20 A	1	0 VA	0 VA	—	1	20 A	Existing	2	
3	Existing	20 A	1	—	0 VA	0 VA	—	1	Existing	4	
5	Existing	20 A	1	—	—	0 VA	0 VA	1	Existing	6	
7	Spare	20 A	1	0 VA	0 VA	—	0 VA	0 VA	1	Existing	8
9	—	—	—	—	0 VA	0 VA	—	1	Existing	10	
11	Spare	20 A	1	—	—	0 VA	0 VA	1	Existing	12	
13	Spare	20 A	1	0 VA	0 VA	—	0 VA	0 VA	1	Existing	14
15	Spare	20 A	1	—	—	0 VA	0 VA	1	Existing	16	
17	Spare	20 A	1	—	—	0 VA	0 VA	1	Existing	18	
19	Spare	20 A	1	0 VA	0 VA	—	0 VA	0 VA	1	Spare	20
21	Spare	20 A	1	—	—	0 VA	0 VA	1	Spare	22	
23	Spare	20 A	1	—	—	0 VA	0 VA	1	Spare	24	
25	Spare	20 A	1	0 VA	0 VA	—	0 VA	0 VA	1	Spare	26
27	Spare	20 A	1	—	—	0 VA	0 VA	1	Spare	28	
29	Spare	20 A	1	—	—	0 VA	0 VA	1	Spare	30	
31	Spare	20 A	3	0 VA	0 VA	—	0 VA	0 VA	2	Spare	32
33	—	—	—	—	0 VA	0 VA	—	—	—	34	
35	Spare	20 A	3	0 VA	0 VA	—	0 VA	0 VA	2	Spare	36
37	—	—	—	—	0 VA	0 VA	—	—	—	38	
39	—	—	—	—	0 VA	0 VA	—	2	Spare	40	
41	—	—	—	—	0 VA	0 VA	—	—	—	42	
Total Load				0.00 kVA	0.00 kVA	0.00 kVA					
Notes: NEW PANELBOARD											
TOTAL CONNECTED						ESTIMATED DEMAND					
0 kVA						0 kVA (0 A)					

Panel: 305-1-04-34B											
Location: MULTIPURPOSE ROOM-2 123-2				Mounting: Surface		A.I.C. Rating: 20000 SCGR		Main Type: MLO			
Supply From: 120/208 Wye-3PH-4W				Enclosure: Type 1		Main Rating: 100 A		Sigs. Ref. 5			
Voltage: 120/208 Wye-3PH-4W											
CKT	Circuit Description	Trips	Poles	A	B	C	Poles	Trips	Circuit Description	CKT	
1	Spare	—	—	0 V/A	0 V/A	—	—	—	Spare	2	
3	Exist	15 A	1	—	0 V/A	0 V/A	—	1	20 A	Exist	4
5	Spare	—	—	—	—	0 V/A	0 V/A	1	20 A	Exist	6
7	Exist	15 A	1	0 V/A	0 V/A	—	1	15 A	Exist	8	
9	Spare	20 A	1	—	—	0 V/A	0 V/A	1	20 A	Spare	10
11	Exist	20 A	1	—	—	0 V/A	0 V/A	1	20 A	Exist	12
13	Spare	—	—	0 V/A	0 V/A	—	1	20 A	Spare	14	
Total Load:		0.00 kVA		0.00 kVA		0.00 kVA		1	20 A		
Notes: NEW PANEL/BOARD											
TOTAL CONNECTED							ESTIMATED DEMAND				
0 V/A							0 V/A				



 **BASEMENT FLOOR PLAN - POWER**
Scale: 3/32" = 1'-0"
PROJECT

		CONSULTANTS:		 Heapy Engineering MEP Design Technology Planning Commissioning Energy <i>Nationally Recognized Leader in Sustainability</i> 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No: 2016-05088 Firm License No.: 01528				ARCHITECT/ENGINEERS:  JOHN POE ARCHITECTS 3151 NEWMARK DRIVE, SUITE 200 MARIETTA, OHIO 45752 937-481-3200 PHONE 937-481-0200 FAX jpo@jpoarch.com		Drawing Title B305 BASEMENT POWER PLANS Approved: Project Director		Project Title CORRECT ARC FLASH DEFICIENCIES Location: Dayton, Ohio Date: 07/06/2017 Checked: MSG Drawn: JRS		Project No.: 202-16-051 Job Project No.: Building Number: 305 Drawing Number: 305EP100 Date: 07/06/2017 Checked: MSG Drawn: JRS		Office of Construction and Facilities Management  Department of Veterans Affairs	
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one-eighth inch = one foot
one-quarter inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one inch = one foot
one and one-half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot
thirteen inches = one foot
fourteen inches = one foot
fifteen inches = one foot
sixteen inches = one foot
seventeen inches = one foot
eighteen inches = one foot
nineteen inches = one foot
twenty inches = one foot
twenty-one inches = one foot
twenty-two inches = one foot
twenty-three inches = one foot
twenty-four inches = one foot
twenty-five inches = one foot
twenty-six inches = one foot
twenty-seven inches = one foot
twenty-eight inches = one foot
twenty-nine inches = one foot
thirty inches = one foot
thirty-one inches = one foot
thirty-two inches = one foot
thirty-three inches = one foot
thirty-four inches = one foot
thirty-five inches = one foot
thirty-six inches = one foot
thirty-seven inches = one foot
thirty-eight inches = one foot
thirty-nine inches = one foot
forty inches = one foot
forty-one inches = one foot
forty-two inches = one foot
forty-three inches = one foot
forty-four inches = one foot
forty-five inches = one foot
forty-six inches = one foot
forty-seven inches = one foot
forty-eight inches = one foot
forty-nine inches = one foot
fifty inches = one foot
fifty-one inches = one foot
fifty-two inches = one foot
fifty-three inches = one foot
fifty-four inches = one foot
fifty-five inches = one foot
fifty-six inches = one foot
fifty-seven inches = one foot
fifty-eight inches = one foot
fifty-nine inches = one foot
sixty inches = one foot
sixty-one inches = one foot
sixty-two inches = one foot
sixty-three inches = one foot
sixty-four inches = one foot
sixty-five inches = one foot
sixty-six inches = one foot
sixty-seven inches = one foot
sixty-eight inches = one foot
sixty-nine inches = one foot
seventy inches = one foot
seventy-one inches = one foot
seventy-two inches = one foot
seventy-three inches = one foot
seventy-four inches = one foot
seventy-five inches = one foot
seventy-six inches = one foot
seventy-seven inches = one foot
seventy-eight inches = one foot
seventy-nine inches = one foot
eighty inches = one foot
eighty-one inches = one foot
eighty-two inches = one foot
eighty-three inches = one foot
eighty-four inches = one foot
eighty-five inches = one foot
eighty-six inches = one foot
eighty-seven inches = one foot
eighty-eight inches = one foot
eighty-nine inches = one foot
ninety inches = one foot
ninety-one inches = one foot
ninety-two inches = one foot
ninety-three inches = one foot
ninety-four inches = one foot
ninety-five inches = one foot
ninety-six inches = one foot
ninety-seven inches = one foot
ninety-eight inches = one foot
ninety-nine inches = one foot
one hundred inches = one foot



- GENERAL NOTES**
- A. SCHEDULE ANY OUTAGES WITHIN 4 WEEKS PRIOR TO PERFORMING WORK. WORK REQUIRING OUTAGES SHALL BE PERFORMED OUTSIDE NORMAL WORKING HOURS.
 - B. PROVIDE SCHEDULED TESTING FOR ALL CIRCUITS UNLESS OTHERWISE INDICATED. EASY CONDUIT SHALL BE 1/2" MINIMUM.
 - C. DISCONNECT PANEL FEEDER AND REMOVE FEEDER AND CONDUIT BACK TO SOURCE. REMOVE PANEL AND REPLACE WITH NEW. INTERCEPT AND EXTEND EXISTING CONDUIT AND CIRCUITRY AS REQUIRED TO NEW PANEL. NEW CIRCUIT NUMBERS SHALL MATCH EXISTING. INSTALL NEW FEEDER AND CONDUIT AS INDICATED ON SINGLE LINE DIAGRAM.
 - D. INSTALL CONDUIT ON WALL, CLIMB TO CEILING. SUPPORT CONDUIT (MIN 1" HOLE STRAPS WITH ANCHOR ON BOTTOM SIDE OF CONDUIT. PANT CONDUIT TO MATCH EXISTING. REFER TO SINGLE LINE DIAGRAM FOR CONDUIT SIZING.
 - E. INSTALL RVP PANEL BOX. REFER TO SHEET SHEEP FOR CHILLER PANEL WORK.
- NOTES**
- 1. REMOVE PANEL INTERIOR AND TUB AND REPLACE WITH NEW. INTERCEPT AND EXTEND EXISTING CONDUIT AND CIRCUITRY AS REQUIRED TO NEW PANEL. CIRCUIT NUMBERS SHALL MATCH EXISTING.
 - 2. DISCONNECT PANEL FEEDER AND REMOVE FEEDER AND CONDUIT BACK TO SOURCE. REMOVE PANEL AND REPLACE WITH NEW. INTERCEPT AND EXTEND EXISTING CONDUIT AND CIRCUITRY AS REQUIRED TO NEW PANEL. NEW CIRCUIT NUMBERS SHALL MATCH EXISTING. INSTALL NEW FEEDER AND CONDUIT AS INDICATED ON SINGLE LINE DIAGRAM.
 - 3. INSTALL CONDUIT ON WALL, CLIMB TO CEILING. SUPPORT CONDUIT (MIN 1" HOLE STRAPS WITH ANCHOR ON BOTTOM SIDE OF CONDUIT. PANT CONDUIT TO MATCH EXISTING. REFER TO SINGLE LINE DIAGRAM FOR CONDUIT SIZING.
 - 4. INSTALL CONDUIT ABOVE CEILING. REFER TO SINGLE LINE DIAGRAM FOR SIZING.
 - 5. INSTALL RVP PANEL BOX. REFER TO SHEET SHEEP FOR CHILLER PANEL WORK.

A SITE PHOTOGRAPH

B SITE PHOTOGRAPH

C SITE PHOTOGRAPH

1ST FLOOR PLAN - POWER
Scale: 3/32" = 1'-0"

PROJECT 7/11/2017 5:39:28 PM Revision Date	CONSULTANTS: Heapy Engineering MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528		ARCHITECT/ENGINEERS: JOHN POE ARCHITECTS 3131 BIRMINGHAM DRIVE, SUITE 200, MARIETTA, OHIO 45750 937-481-5286 PHONE 937-481-5286 FAX jpo@johnpoe.com	Drawing Title B305 1ST FLOOR POWER PLANS Approved: Project Director	Project Title CORRECT ARC FLASH DEFICIENCIES	Project No. 520-16-551	Office of Construction and Facilities Management
					Location Dayton, Ohio	Building Number	
					Date 07/06/2017	Drawing Number 305EP101	
					Checked MSG	Drawn JRS	

The diagram is a technical schematic of an electrical control panel. It features several key components labeled in red boxes: 'FAN CONTACTORS' at the top center, 'COMPRESSOR CONTACTORS' at the bottom center, and 'MICROPROCESSOR & I/O BOARD CONTROL BOARD IP12' on the right side. To the left of the fan contactors is a vertical assembly with a circular component and a 'CAUTION' label. Below the fan contactors is a large circular component. To the left of the compressor contactors is a 'CAUTION' label with a warning symbol. The bottom right corner shows a large terminal block with multiple wires. The diagram includes various electrical symbols, such as switches, relays, and terminal blocks, connected by lines representing wiring. A 'WARNING' label is located at the bottom center. The overall layout is organized into sections for different functional groups of components.

Model/SPN		YCAL08BHE17X8R SDTX SDTX HOORLXDC XXXXXXXX XXXXXX XXX XXXXXXXXXX				Serial #		SCRM-07000	
Refrigerant	Max. Allowable Pressure -Bar (psig):		High Side		ANALOG		Line Side		314/340
ATSA	System Pressure Test On		PSI/PSI		at High Side		Low Side		314/340
OUTDOOR USE			Volt-Phase-Short		Voltage Limits		Max. Circuit Breaker		
Unit Control Supply:			115-140V		20-240V		Size (Amper)		
Unit Power Supply:			100-150V		200-250V		Size (Amper)		
Protection Device Size - Amper			20A		20A		Size (Amper)		
System			Max. Cond. Element		Max. Refriger. Current		Max. F.L.A.		L.A.A.
Amperity			10A		10A		7.5		44.7
1			10A		10A		7.5		44.7
2			10A		10A		7.5		44.7
3			10A		10A		7.5		44.7
4			10A		10A		7.5		44.7
5			10A		10A		7.5		44.7
6			10A		10A		7.5		44.7
7			10A		10A		7.5		44.7
8			10A		10A		7.5		44.7
9			10A		10A		7.5		44.7
10			10A		10A		7.5		44.7
11			10A		10A		7.5		44.7
12			10A		10A		7.5		44.7
13			10A		10A		7.5		44.7
14			10A		10A		7.5		44.7
15			10A		10A		7.5		44.7
16			10A		10A		7.5		44.7
17			10A		10A		7.5		44.7
18			10A		10A		7.5		44.7
19			10A		10A		7.5		44.7
20			10A		10A		7.5		44.7
21			10A		10A		7.5		44.7
22			10A		10A		7.5		44.7
23			10A		10A		7.5		44.7
24			10A		10A		7.5		44.7
25			10A		10A		7.5		44.7
26			10A		10A		7.5		44.7
27			10A		10A		7.5		44.7
28			10A		10A		7.5		44.7
29			10A		10A		7.5		44.7
30			10A		10A		7.5		44.7
31			10A		10A		7.5		44.7
32			10A		10A		7.5		44.7
33			10A		10A		7.5		44.7
34			10A		10A		7.5		44.7
35			10A		10A		7.5		44.7
36			10A		10A		7.5		44.7
37			10A		10A		7.5		44.7
38			10A		10A		7.5		44.7
39			10A		10A		7.5		44.7
40			10A		10A		7.5		44.7
41			10A		10A		7.5		44.7
42			10A		10A		7.5		44.7
43			10A		10A		7.5		44.7
44			10A		10A		7.5		44.7
45			10A		10A		7.5		44.7
46			10A		10A		7.5		44.7
47			10A		10A		7.5		44.7
48			10A		10A		7.5		44.7
49			10A		10A		7.5		44.7
50			10A		10A		7.5		44.7
51			10A		10A		7.5		44.7
52			10A		10A		7.5		44.7
53			10A		10A		7.5		44.7
54			10A						

Chiller 305-2

- A) The compressor controllers (1M, 2M, 4M and 5M) with Schneider type LC1D603 are rated for a 1000A ACB at 480VAC. The disconnects are rated for 1000A ACB at 480VAC. These disconnects need to be provided with upstream 1000 amp class 4 fuses.
- B) For the controllers to be rated for the needed SCRR, additional suitable fuses (100A) with suitable fuse holders (100A, 600V class J fuses) have to be installed ahead of the controllers.
- C) Due to space restrictions, these new fuse holders will have to be installed at the present location of the fan controllers 1M, 2M, 4M, and 5M which will have to be moved to the top right hand side of the control panel maintaining the present incoming and outgoing wiring. Also the fuses must be selected for the required splitting ratio.
- D) Also the fuses and controllers CR1, CR2, as well as control transformer will be required to be moved towards the right in order to make space for an additional 1 pole 100A class J fuseblock for controller 1M.
- E) Utilize existing wiring from Main disconnect to compressor controllers for this (now from main disconnect to line side of new fuse blocks). New wires rated for at least 750, AWG#16 to be utilized to connect from the load side of new fuse blocks to line side of compressor controllers.
- F) Ensure proper mounting of all components as well as proper terminations.

Fuse Replacement Markings Required:

- A.) If fuses are utilized, the fuse holders shall be provided with the required fuse replacement markings.
A permanent marking shall be installed showing the fuse replacement type, current rating, and voltage rating for each fuse installed, or a table listing each fuse with its corresponding replacement marking.

Caution Marking Required:

- A.) Due to the installation requirements of a short-circuit current rating (SCCR) of at least 65,000 rms symmetrical amperes, the following caution marking shall be installed in the control panel:
- "Warning-Risk of fire or electric Shock. The opening of the branch circuit protective devices may be an indication that a fault current has been interrupted. All current carrying parts and other components protected by the branch circuit protective devices should be examined and replaced if damaged".

General Discrepancies/Information Required:

- A.) The drawings should be updated after correction of discrepancies.
- B.) Confirm all new components to be labelled as per schematic. Label adjacent to components, not on components and not on wireway cover.
- C.) Southwest Energy Systems will be doing the inspection and labelling under a separate contract.

- 1 Move existing Fan Connectors from one of Control Panel to top right hand side. Wire size and connections to remain same. If required, new wires of same type and size as required to be installed from existing class cc fuse blocks and/or line motors to prevent splices.
- 2 If required for installing new class J fuse block, existing class cc fuse blocks, controllers and control transformer to be moved retaining existing wiring.
- 3 Install four (4) new listed 3-pole 100A, 600V class J fuse blocks one for each compressor. Rewire from Main switch to these fuse blocks using existing/new AWG#6 wires and from fuse blocks to existing compressor controllers.

[illegible]

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Heapy Project No.: 2016-05088 Firm License No.: 01528



Approved: Project Director

Date	7/6/17	Checked	MBS	Drawn	M
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Page 01 of 01

 Department of
Veterans Affairs