

Total Load:		0.00 kVA	0.00 kVA	0.00 kVA
0				
Notes: NEW PANEL INTERIOR AND COVER. 20"W x 50"H. FIELD VERIFY PANEL DEPTH.				
TOTAL CONNECTED				ESTIMATED DEMAND
0 kVA				0 kVA (0 A/D)

Total Load:		0.00 kVA	0.00 kVA	0.00 kVA
Notes: NEW PANEL INTERIOR AND COVER. 20"W x 40"H. FIELD VERIFY PANEL DEPTH.				
TOTAL CONNECTED				ESTIMATED DEMAND
0 kVA				0 kVA (0 A)

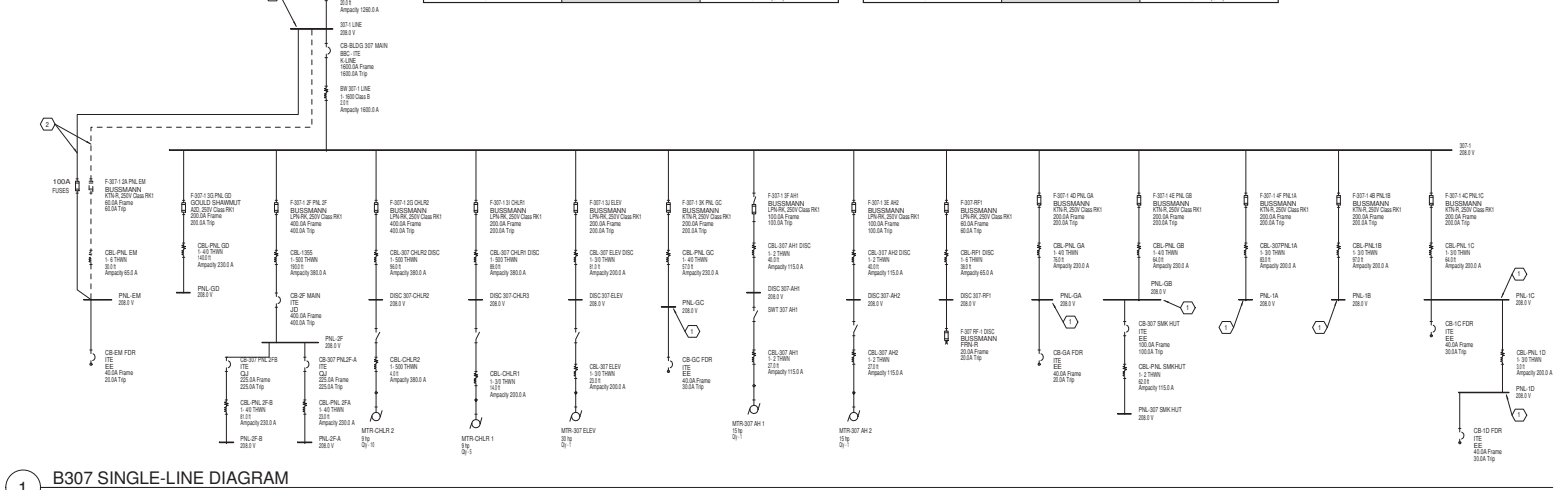
Total Load:		0.00 kVA	0.00 kVA	0.00 kVA
Notes: NEW PANEL INTERIOR AND COVER, 20"W x 49"H, FIELD VERIFY PANEL DEPTH.				
TOTAL CONNECTED				ESTIMATED DEMAND
0 kVA				0 kVA (0 A)

Total Load:		0.00 kVA	0.00 kVA	0.00 kVA
Notes: NEW PANEL INTERIOR AND COVER. 20"W x 56"H, FIELD VERIFY PANEL DEPTH.				
TOTAL CONNECTED				ESTIMATED DEMAND
0 kVA				0 kVA (0 A)

Total Load:		0.00 kVA	0.00 kVA	0.00 kVA
Notes: NEW PANEL INTERIOR AND COVER. 20"W x 50"H, FIELD VERIFY PANEL DEPTH.				
TOTAL CONNECTED				ESTIMATED DEMAND
0 kVA				0 kVA (0 A)

Total Load:		0.00 kVA	0.00 kVA	0.00 kVA			
Notes:							
TOTAL CONNECTED					ESTIMATED DEMAND		

Total Load:		0.00 kVA	0.00 kVA	0.00 kVA
Notes: NEW PANEL INTERIOR AND COVER. 20"W x 50"H, FIELD VERIFY PANEL DEPTH.				
TOTAL CONNECTED			ESTIMATED DEMAND	

[illegible]

1 B307 SINGLE-LINE DIAGRAM
Scale: N.T.S.





[illegible]



A. WORK IN BUILDING 307 TO BE BID AS DEDUCT ALTERNATE #1.
B. SCHEDULE ANY OUTAGES WITH THE COR 4 WEEKS PRIOR TO PERFORMING WORK.
C. WORK SHALL BE PERFORMED OUTSIDE NORMAL WORKING HOURS.
D. UNDER DEDUCT ALT. #2 TRACE EACH BRANCH CIRCUIT FED BY EACH PANEL MODIFIED UNDER THIS PROJECT AND UPDATE PANEL SCHEDULE ACCORDING TO ROOMS/EQUIPMENT IT SERVES.

1. REMOVE ANTIQUATED PANELBOARD INTERIOR (COVER, BUSSING, BREAKERS, ETC.) AND REPLACE WITH NEW. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
2. REMOVE EXISTING PANELBOARD FEEDER AND REPLACE WITH 4-#2/0, #6 GND. IN 2". COORDINATE OUTAGES AS INDICATED IN SPECIFICATIONS.



		CONSULTANTS:		 Heapy Engineering MEP Design Technology Planning Commissioning Energy <i>Nationally Recognized Leader in Sustainability</i> 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ptn 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 01538				ARCHITECT/ENGINEERS:  JOHN POE ARCHITECTS 3131 NEWMARK DRIVE, SUITE 200 MARIETTA, OHIO 43002 937-481-5290 PHONE 937-481-5290 FAX jpa@johnpoe.com		Drawing Title B307 1ST & 2ND FLOOR POWER PLANS Approved: Project Director		Project No. 552-16-551 VA Project No. 93A Building Number		Project Title CORRECT ARC FLASH DEFICIENCIES Location Dayton, Ohio Date 07/06/2017		Drawing Number 307EP100 Checked MSG Drawn JRS Date 07/06/2017		Office of Construction and Facilities Management  Department of Veterans Affairs	
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NOTE: **FIELD VERIFY BREAKER SIZE PRIOR TO ORDERING



1200 A
MAIN

(A)

	CONSULTANTS:
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Heapy Engineering
MEP Design Technology Planning Commissioning Erection



JOHN POE ARCHITECTS



Drawing Title	B315 SINGLE-LINE DIAGRAM
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Approved: Project Director

Project Title	CORRECT ARC FLASH DEFICIENCIES
Location	Dayton, Ohio

Date	Checked	Drawn
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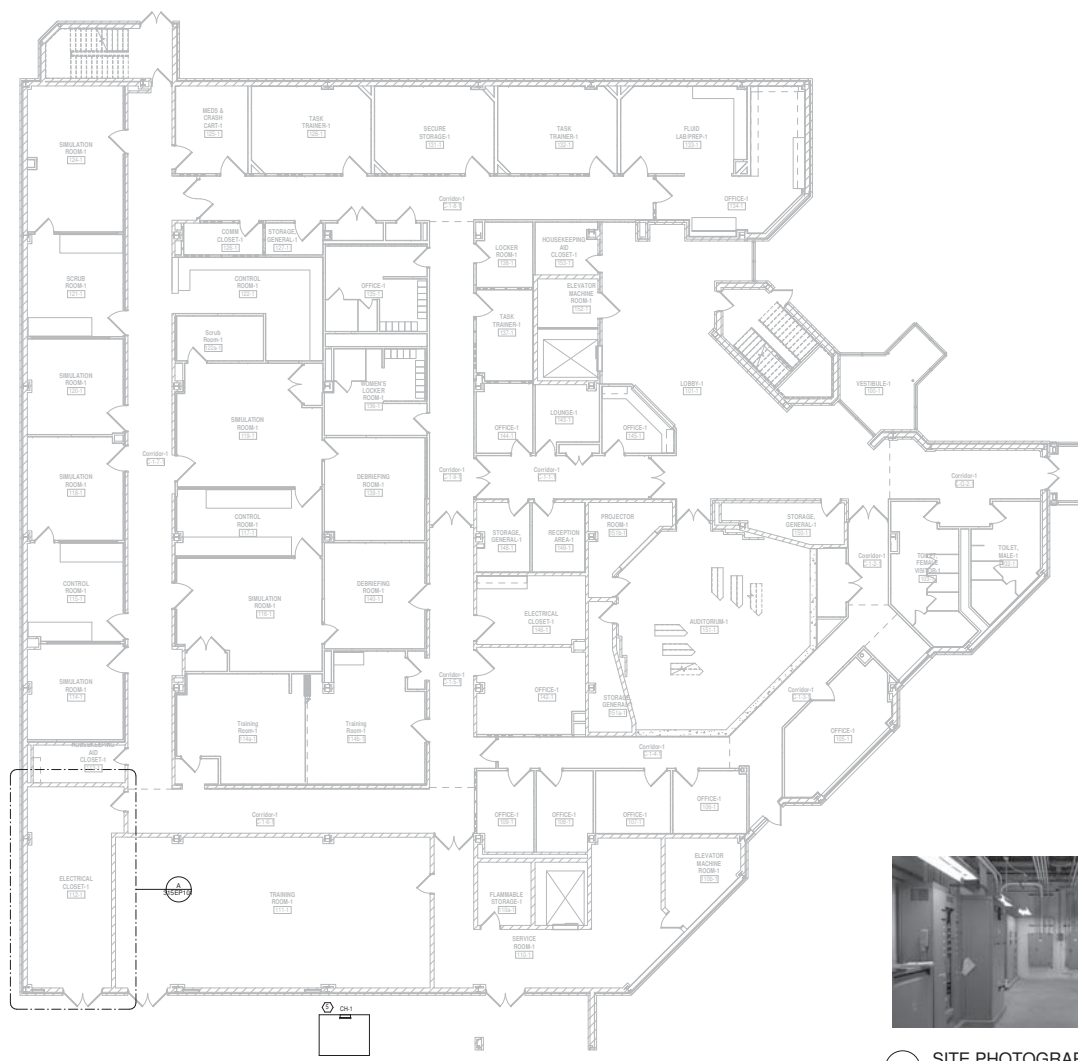
Project No.	
VA Project No.	552-18-551
JPA Project No.	-
Building Number	

Drawing Number	315E001
Dwg. of	

Office of
Construction
and Facilities
Management



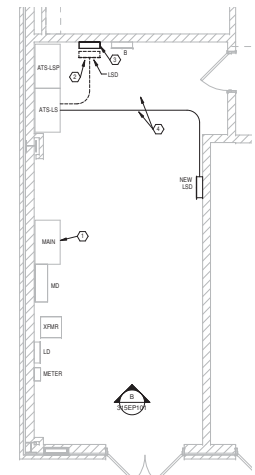
one-eighth inch = one foot
one-quarter inch = one foot
three-eighths inch = one foot
one-half inch = one foot
three-quarters inch = one foot
one inch = one foot
one and one-half inches = one foot
two inches = one foot
three inches = one foot



1 B315 - FIRST FLOOR PLAN - POWER
Scale: 1/8" = 1'-0"



B SITE PHOTOGRAPH



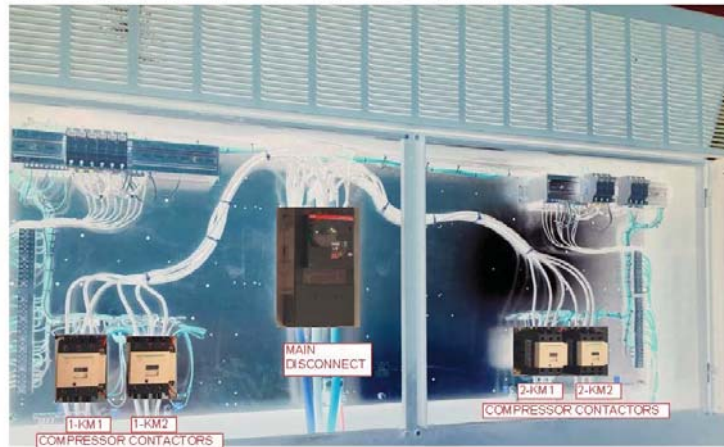
A ELECTRIC ROOM
Scale: 1/4" = 1'-0"

- GENERAL NOTES**
- SCHEDULE ANY OUTAGES WITH THE COR 4 WEEKS PRIOR TO PERFORMING WORK. CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION NARRATIVE TO THE COR AND ENGINEER FOR APPROVAL PRIOR TO SCHEDULING SHUTDOWN. NARRATIVE SHALL INCLUDE DATE AND TIME OF SHUTDOWN, ANTICIPATED DURATION, AND SEQUENCE OF REPAIRS AND INSTALLATION. CONTRACTOR SHALL SCHEDULE A WALK THRU WITH THE COR AND ENGINEER PRIOR TO PERFORMING WORK.
 - PROVIDE THE SPECIFIED CLEARANCE FOR ALL CONDUITS UNLESS OTHERWISE INDICATED. EMT CONDUIT SHALL BE 6-1/2" MINIMUM.
 - CONTRACTOR SHALL INSTALL ELECTRICAL CONDUIT/RECESSED TIGHT TO STRUCTURE TO ALLOW FOR REQUIRED CLEARANCES AROUND OTHER TRADES ABOVE CEILING EQUIPMENT.
 - IF EACH BRANCH CIRCUIT HUBBINS SHALL HAVE NO MORE THAN THREE CIRCUITS. EACH BRANCH CIRCUIT SHALL HAVE A SEPARATE NEUTRAL AND A SHARED GROUND INSULATED EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY.
 - UNDER THE PROJECT AND IN EACH BRANCH CIRCUIT FEED BY EACH PANEL MODIFIED UNDER THE PROJECT AND IN EACH PANEL SCHEDULE ACCORDING TO ROOM/EQUIPMENT IT SERVES.
- NOTES**
- REMOVE EXISTING MAIN BREAKER AND REPLACE WITH GROUND FAULT PROTECTED MAIN. COORDINATE WITH SUBSTATION MANUFACTURER PRIOR TO ORDERING. REFER TO SINGLE LINE DIAGRAM FOR SIZING.
 - REMOVE EXISTING PANEL. INTERCEPT EXISTING CONDUITS AND CIRCUITRY AND EXTEND TO NEW PANEL LOCATION.
 - SPUR BOX SHALL BE INSTALLED A MINIMUM 10'-0" AFF.
 - RELOCATE FEEDS TO NEW PANEL LOCATION.
 - REFER TO SHEET TIEPHER FOR CHILLER PANEL WORK.

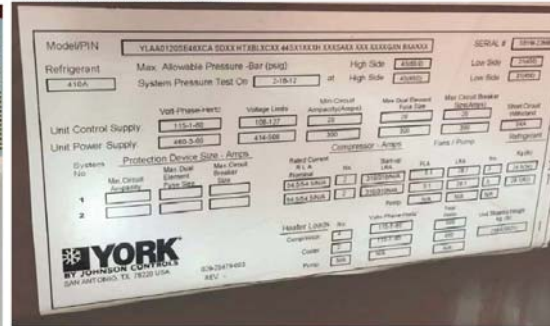
CONSULTANTS: MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528		ARCHITECT/ENGINEERS: JOHN POE ARCHITECTS 3131 BERNARDSON DRIVE, SUITE 200 MARIETTA, OHIO 45752 937-481-5200 PHONE 937-481-5200 FAX jpo@johnpoe.com		Drawing Title B315 1ST FLOOR PLAN Approved: Project Director		Project Title CORRECT ARC FLASH DEFICIENCIES Location: Dayton, Ohio Date: 07/06/2017 Checked: MSG Drawn: JRS Design: of		Project No. JPA Project No.: 520-16-051 Building Number Drawing Number 315EP101 Dep. of		Office of Construction and Facilities Management Department of Veterans Affairs	
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BUILDING 315 CHILLER#1 CONTROL PANEL EXISTING LAYOUT BEFORE MODIFICATIONS



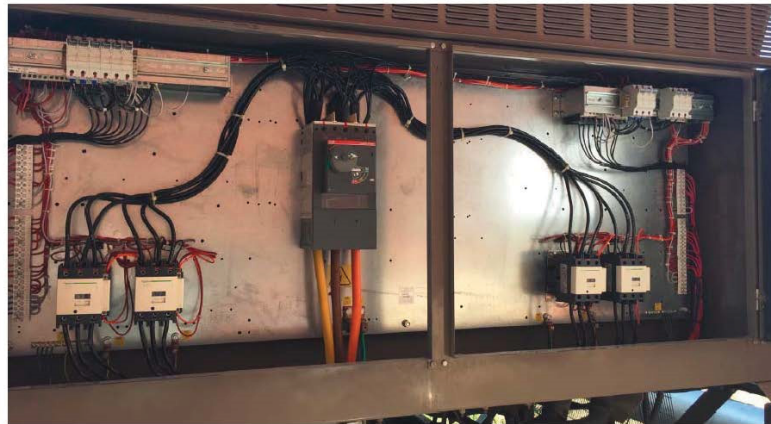
NAMEPLATE BUILDING 315 CHILLER#1



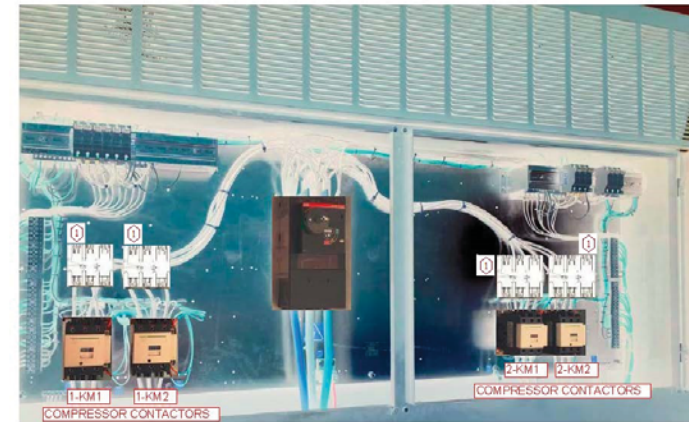
GENERAL NOTES:

- Chiller 315-1:**
- The compressor contactors 1-KM1, 1-KM2, 2-KM1 and 2-KM2 (Schneider type LC1000) are rated for a SCRR of 10 kA. As documentation is available on SCRR with upstream devices, these need to be provided with upstream 125 Ampere class J fuses.
 - For the contactors to be rated for the needed SCRR, additional suitable fuses (125A) with suitable fuse holders (200A, 600V class J fuses) have to be installed ahead of these contactors.
 - Utilize existing wires from main disconnect to compressor controllers for this (wire from main disconnect to line side of new fuse blocks). New wires rated for at least 75C, AWG#6 to be utilized to connect from the load side of new fuse blocks to line side of compressor controllers.
 - Ensure proper mounting of all components as well as proper terminations.
- Fuse Replacement Marking Required:**
- 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:**
- Due to the installation requirements of a short-circuit current rating (SCCR) of at least 60,000 rms symmetrical amperes, the following caution marking shall be installed in the control panel:
"Warning-High level 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:**
- The drawings should be updated after correction of discrepancies.
 - Confirm all new components to be labelled as per schematic. Label adjacent to components, not on components and not on wireway cover.
 - Southwest Energy Systems will be doing the inspection and labelling under a separate contract.

BUILDING 315 CHILLER# 1 CONTROL PANEL LAYOUT BEFORE MODIFICATIONS



BUILDING 315 CHILLER#1 CONTROL PANEL MODIFICATIONS REQUIRED FOR SCRR



- Install new listed 3 pole 200A, 600V class J fuseholders on line side of compressor contactors, one per compressor. Install 125A class J fuses (total 12 fuses) Use existing/wiring of same size and type with proper terminations.

<p>DATE: 11/25/2019 10:50:00 PM</p> <p>PROJECT: B315 CHILLER SCCR MODIFICATIONS</p> <p>DRAWN: MBS</p> <p>CHECKED: MBS</p> <p>APPROVED: MBS</p>	<p>CONSULTANTS:</p> <p>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.: 2018-05088 Firm License No.: 01538</p>	<p>ARCHITECT/ENGINEERS:</p> <p>Southwest Energy Systems</p>	<p>Drawing Title:</p> <p>B315 CHILLER SCCR MODIFICATIONS</p> <p>Approved: Project Director</p>	<p>Project Title:</p> <p>CORRECT ARC FLASH DEFICIENCIES</p> <p>Location: Dayton, Ohio</p> <p>Date: 7/6/17</p> <p>Checked: MBS</p> <p>Draw: MBS</p>	<p>Project No.: 032-18-001</p> <p>Building Number: 315</p> <p>Drawing Number: 315EP102</p> <p>Dep. of: 01</p> <p>Office of Construction and Facilities Management Department of Veterans Affairs</p>
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1. REPLACE EXISTING 100A BREAKER WITH NEW 100A, 3 POLE BREAKER WITH 22 KA SCCR. FIELD VERIFY PANEL INFORMATION PRIOR TO ORDERING. REFER TO FLOOR PLAN FOR ADDITIONAL INFORMATION.

1 B320 POD E SINGLE-LINE DIAGRAM

Scale: N.T.S.

Priorización		Custo

CONSULTANTS:



ARCHITECT/ENGINEERS:

JOHN POE ARCHITECTS



3131 NEWMARK DRIVE
SUITE 200
MIAMISBURG, OHIO
45342
937 461 3290 PHONE
937 461 0260 FAX
info@inhouse.com

	Drawing Title
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B320 POD E SINGLE-LINE DIAGRAM

Approved: Project Director

Project Title	
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DEFICIENCIES

Location	Dayton, Ohio
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Date

☐ Check

Drawn

Drawn

Project No.

VA Project No. 552-16-551

Building Number

	Drawing Number

320E001

320E0

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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



GENERAL NOTES

A. SCHEDULE ANY OUTAGES WITH THE COR 4 WEEKS PRIOR TO PERFORMING WORK. CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION NARRATIVE TO THE COR AND ENGINEER FOR APPROVAL PRIOR TO SCHEDULING SHUTDOWN. NARRATIVE SHALL INCLUDE DATE AND TIME OF SHUTDOWN, ANTICIPATED DURATION, AND SEQUENCE OF REPAIRS AND INSTALLATION. CONTRACTOR SHALL SCHEDULE A WALK THRU WITH THE COR AND ENGINEER PRIOR TO PERFORMING WORK.

B. PROVIDE TWO EXTERIOR CONDUITS BY APPROPRIATE LIFE SAFETY CIRCUITS TO EVERY POD TO FEED EQUIPMENT DURING OUTAGE. COORDINATE WITH COR TO DETERMINE EQUIPMENT TO BE SERVED AND INCLUDE IN SEQUENCE OF CONSTRUCTION NARRATIVE.

NOTES

1. REPLACE BREAKERS AS INDICATED ON SINGLE LINE DIAGRAM.

1	SPACE
2	3
4	5
6	7
8	9
10	11
12	SPACE

- DETAIL NOTES**
- 1 400-TRANSFORMER T.E
 - 2 225-SPACE
 - 3 225-PANEL OP-EM
 - 4 225-PANEL LP-EC
 - 5 225-PANEL MCF-D AND T-D
 - 6 225-PANEL MCF-A AND T-A
 - 7 225-PANEL MCF-C AND T-C
 - 8 225-PANEL MCF-B-E1
 - 9 225-PANEL MCF-B AND T-B
 - 10 100-ELEV-2
 - 11 100-SPARE
 - 12 100-ELEV-1

A DISTRIBUTION PANEL 320E-1

Scale: N.T.S.



B SITE PHOTOGRAPH



C SITE PHOTOGRAPH



D SITE PHOTOGRAPH

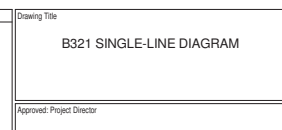
<p>7/11/2017 5:40:22 PM</p>		<p>CONSULTANTS:</p> <p>Heapy Engineering MEP Design Technology Planning Commissioning Energy Nationally Recognized Leader in Sustainability 1400 W Dorothy Lane, Dayton, OH 45409-1310 Ph 937-224-0861 Fax 937-224-5777 www.heapy.com Heapy Project No.: 2016-05088 Firm License No.: 91528</p>		<p>ARCHITECT/ENGINEERS:</p> <p>JOHN POE ARCHITECTS 3131 BIRMINGHAM DRIVE, SUITE 200 MARIETTA, OHIO 45750 937-481-5200 PHONE 937-481-5200 FAX jpo@johnpoe.com</p>		<p>Drawing Title</p> <p>B320 POD E POWER PLAN</p> <p>Approved: Project Director</p>		<p>Project Title</p> <p>CORRECT ARC FLASH DEFICIENCIES</p> <p>Location: Dayton, Ohio</p> <p>Date: 6/16/2017 Checked: MSG Drawn: JRS</p>		<p>Project No.: 520-16-051 JPA Project No.: Building Number: Drawing Number: 320EEP100 Dep. of</p>		<p>Office of Construction and Facilities Management Department of Veterans Affairs</p>	
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Scale: N.T.S.

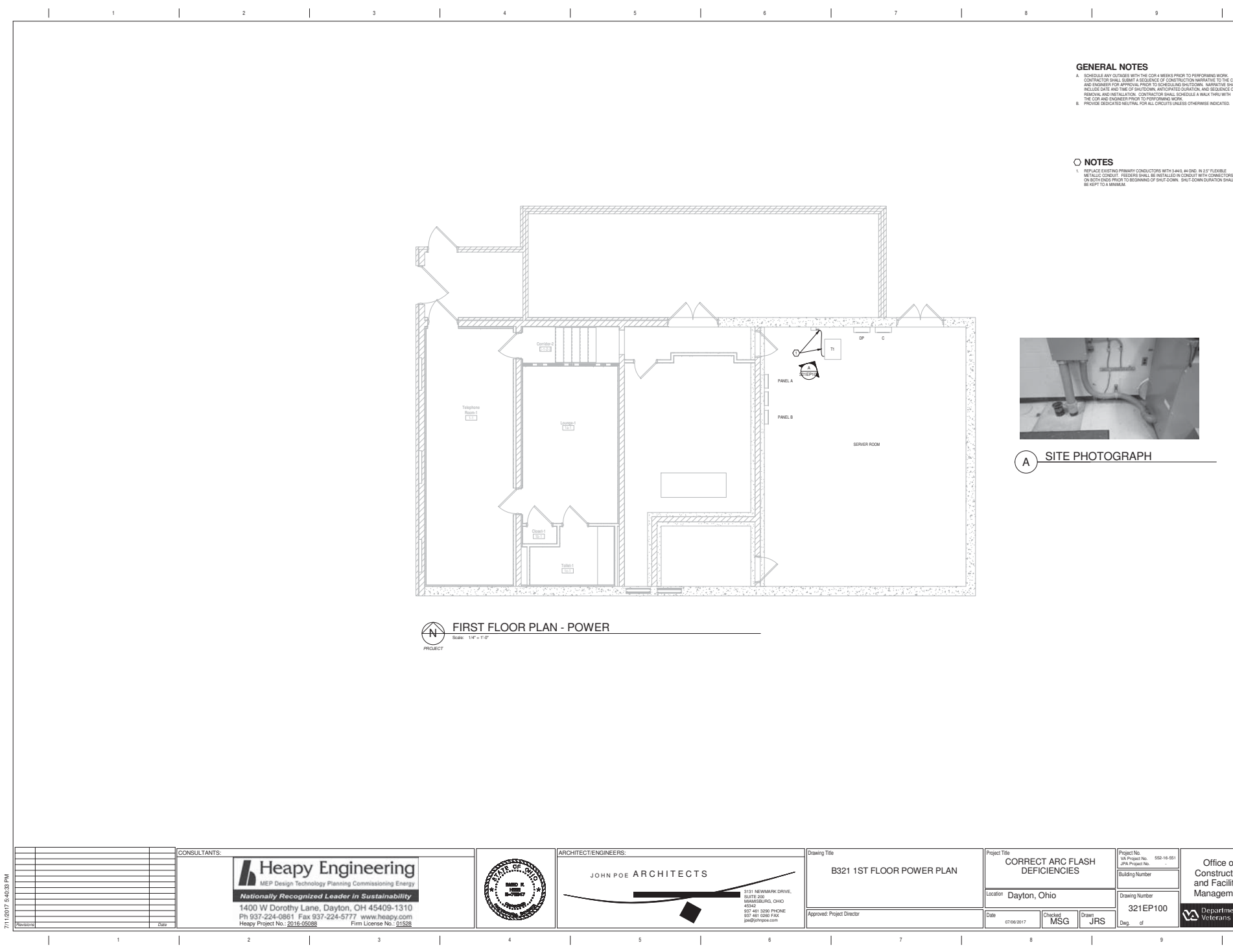
CONSULTANTS:

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 MEP Design Technology Planning Commissioning Energy
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 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



Project Title CORRECT ARC FLASH DEFICIENCIES			Project No. VA Project No. 552-16-051 JPA Project No. -		Office of Construction and Facilities Management
Location Dayton, Ohio			Building Number		
Drawing Number 321E001			 Department of Veterans Affairs		
Date 07/06/2017	Checked MSG	Drawn JRS			

one-eighth inch = one foot
one-quarter inch = one foot
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



GENERAL NOTES

A. SCHEDULE ANY OUTAGES WITH THE COR 4 WEEKS PRIOR TO PERFORMING WORK. CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION NARRATIVE TO THE COR AND ENGINEER FOR APPROVAL PRIOR TO SCHEDULING SHUTDOWN. NARRATIVE SHALL INCLUDE DATE AND TIME OF SHUTDOWN, ANTICIPATED DURATION, AND SEQUENCE OF REPAIRS AND INSTALLATION. CONTRACTOR SHALL SCHEDULE A WALK THRU WITH THE COR AND ENGINEER PRIOR TO PERFORMING WORK.

B. PROVIDE DEDICATED NEUTRAL FOR ALL CIRCUITS UNLESS OTHERWISE INDICATED.

NOTES

1. REPLACE EXISTING PRIMARY CONDUCTORS WITH 3/4" INCH, 44 O.D., IN 2-1/2" FLEXIBLE METALLIC CONDUIT. PRESSURE SHALL BE INSTALLED IN CONDUIT WITH CONNECTORS ON BOTH ENDS PRIOR TO BEGINNING OF SHUT DOWN. SHUT DOWN DURATION SHALL BE KEPT TO A MINIMUM.



A SITE PHOTOGRAPH

FIRST FLOOR PLAN - POWER
Scale: 1/4" = 1'-0"

<div>7/11/2017 5:40:33 PM</div>	<div>CONSULTANTS:</div> <div>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.: 91528</div>	<div>ARCHITECT/ENGINEERS:</div> <div>JOHN POE ARCHITECTS 2131 BERNARD DRIVE, SUITE 200 MARIETTA, OHIO 45752 937-481-5280 PHONE 937-481-5280 FAX jpa@johnpoe.com</div>	<div>Drawing Title</div> <div>B321 1ST FLOOR POWER PLAN</div> <div>Approved: Project Director</div>	<div>Project Title</div> <div>CORRECT ARC FLASH DEFICIENCIES</div> <div>Location Dayton, Ohio</div> <div>Date 07/06/2017 Checked MSG Drawn JRS</div>	<div>Project No. 550-16-551 JPA Project No.</div> <div>Building Number</div>	<div>Office of Construction and Facilities Management Department of Veterans Affairs</div>
					<div>Drawing Number</div> <div>321EP100</div> <div>Dep. of</div>	