

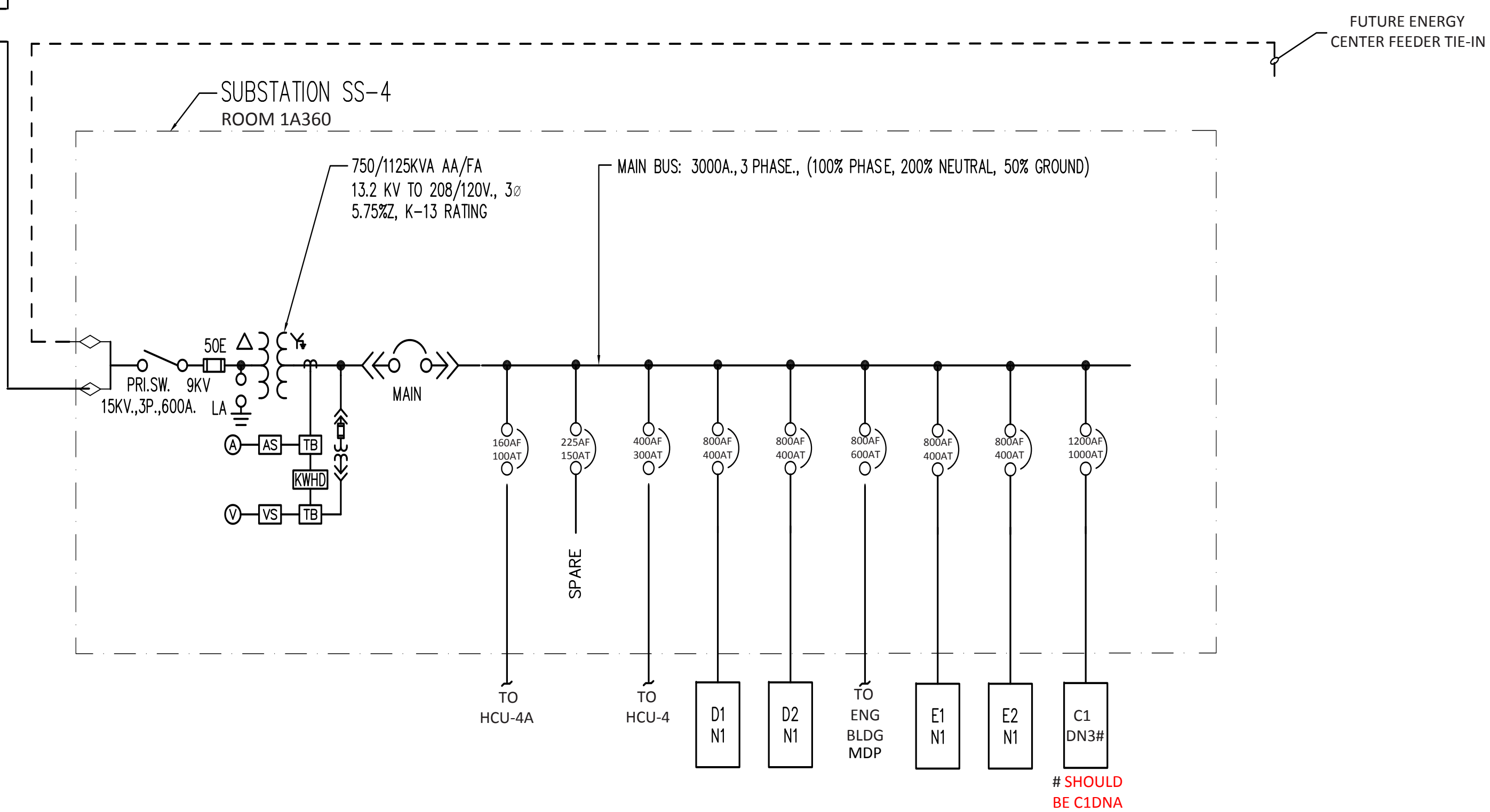
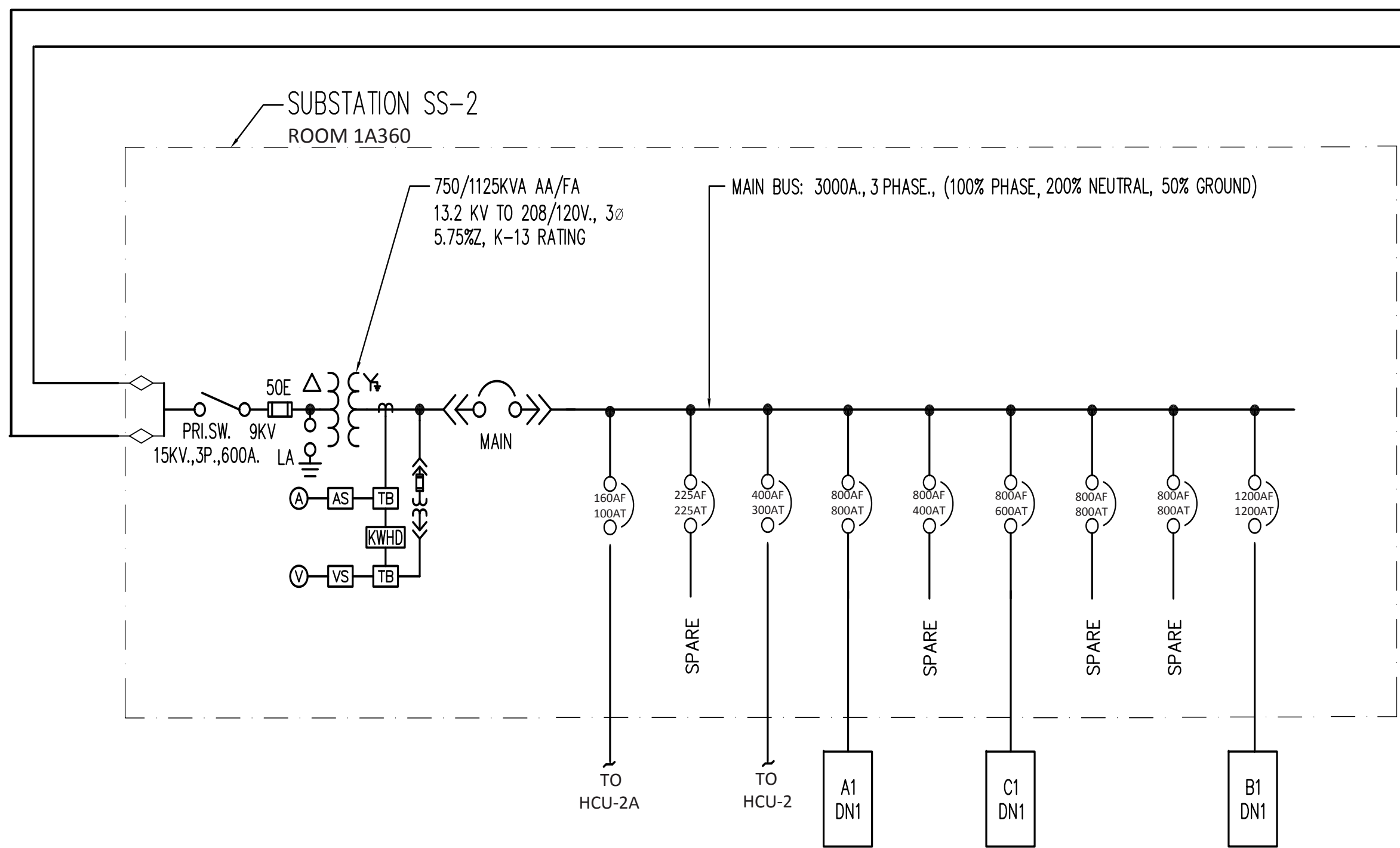
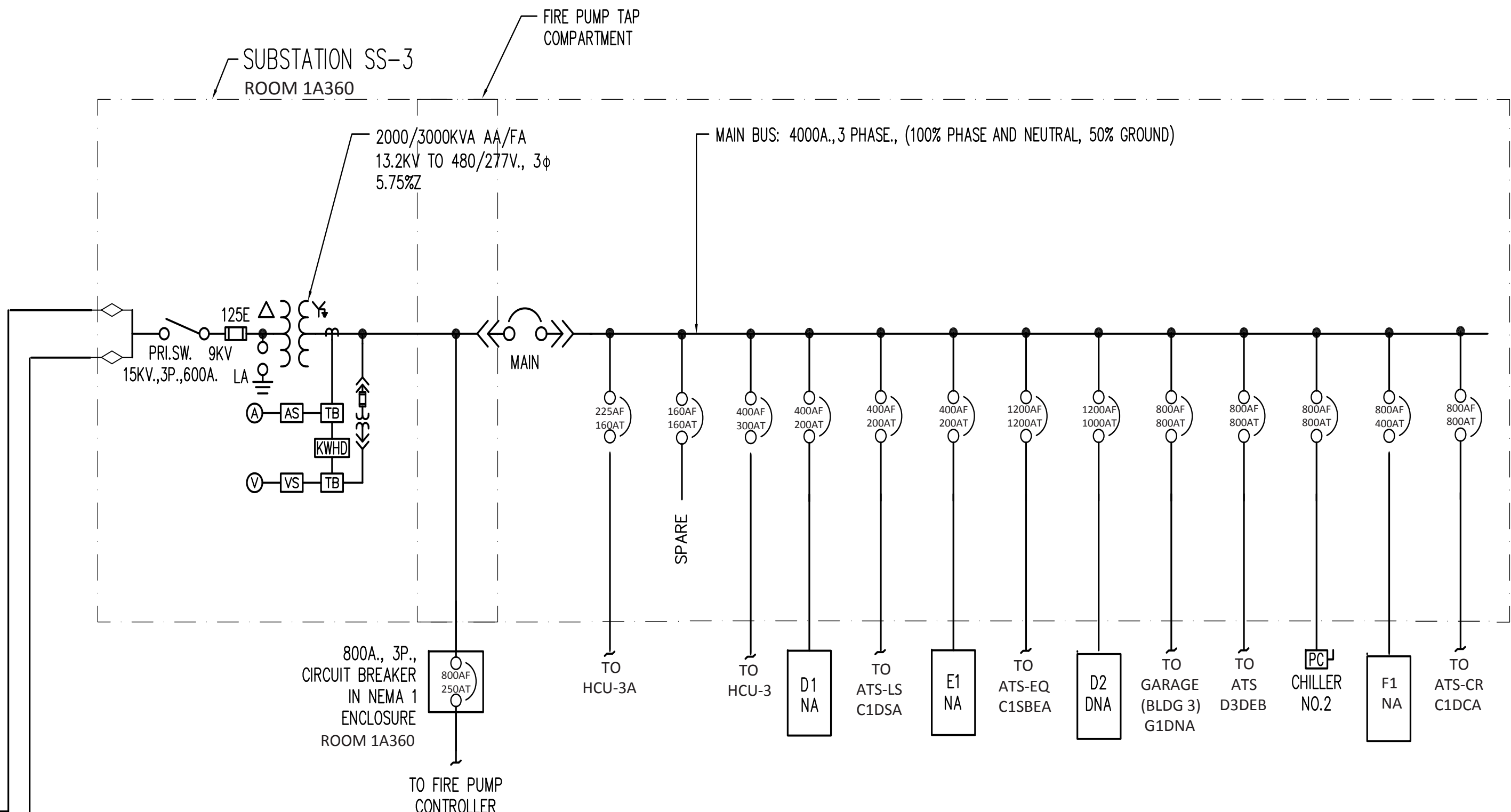
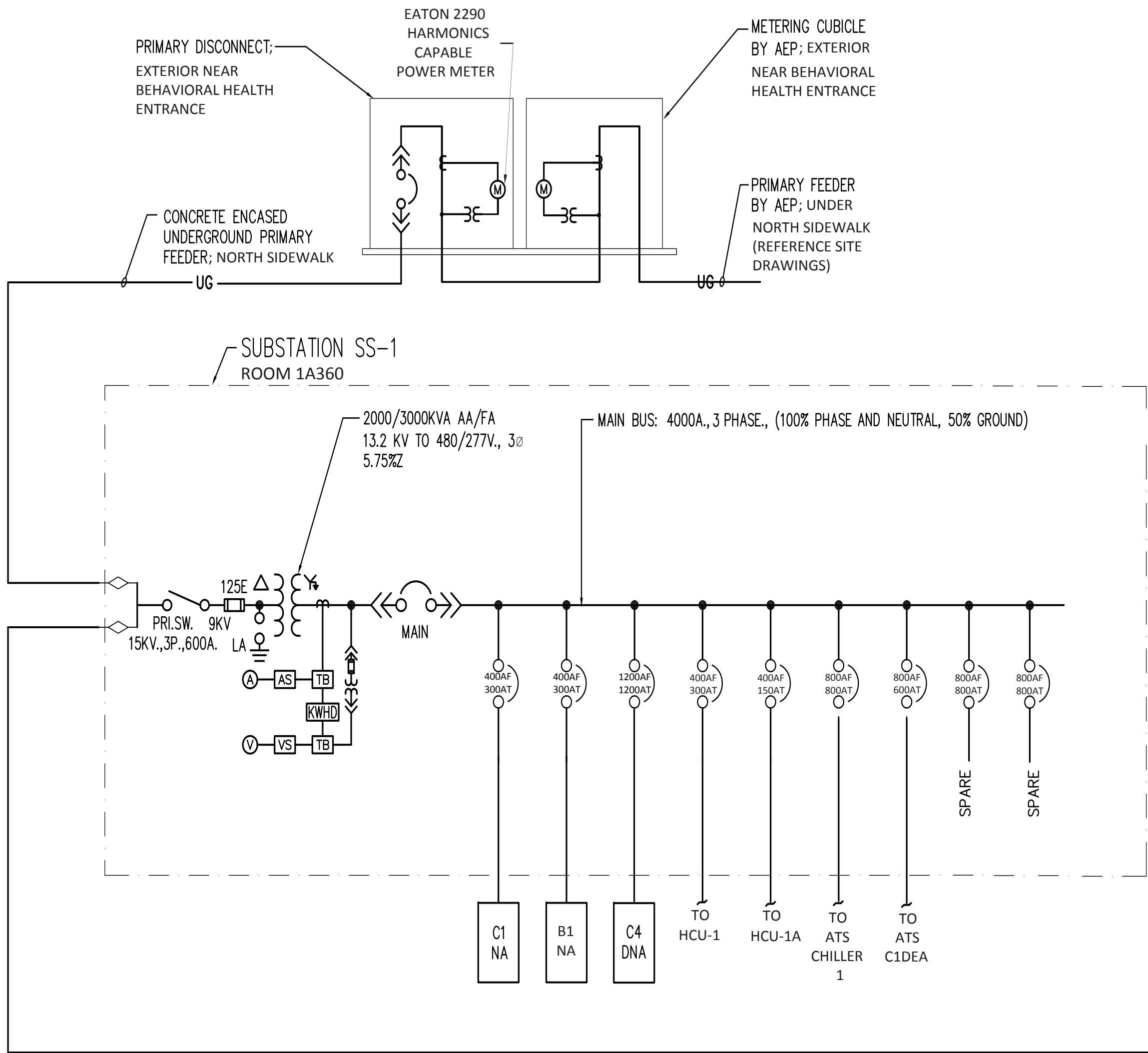


RECORD DRAWINGS					
Drawing Title Meter Cubical Notes	Project Title 		Project Number 757	 Columbus VA Veterans Affairs Medical Center	
			Building Number 1A		
Approved: FARID MEHR, PE CHIEF, ENGINEERING SERVICE	Location CHALMERS P. WYLIE VA AMBULATORY CARE CENTER		Drawing Number E-MCN		 U.S. Department of Veterans Affairs
			Date 2017-10-19		



RECORD DRAWING CREATED	2017-10-19
Revisions:	Date

CONSULTANTS:



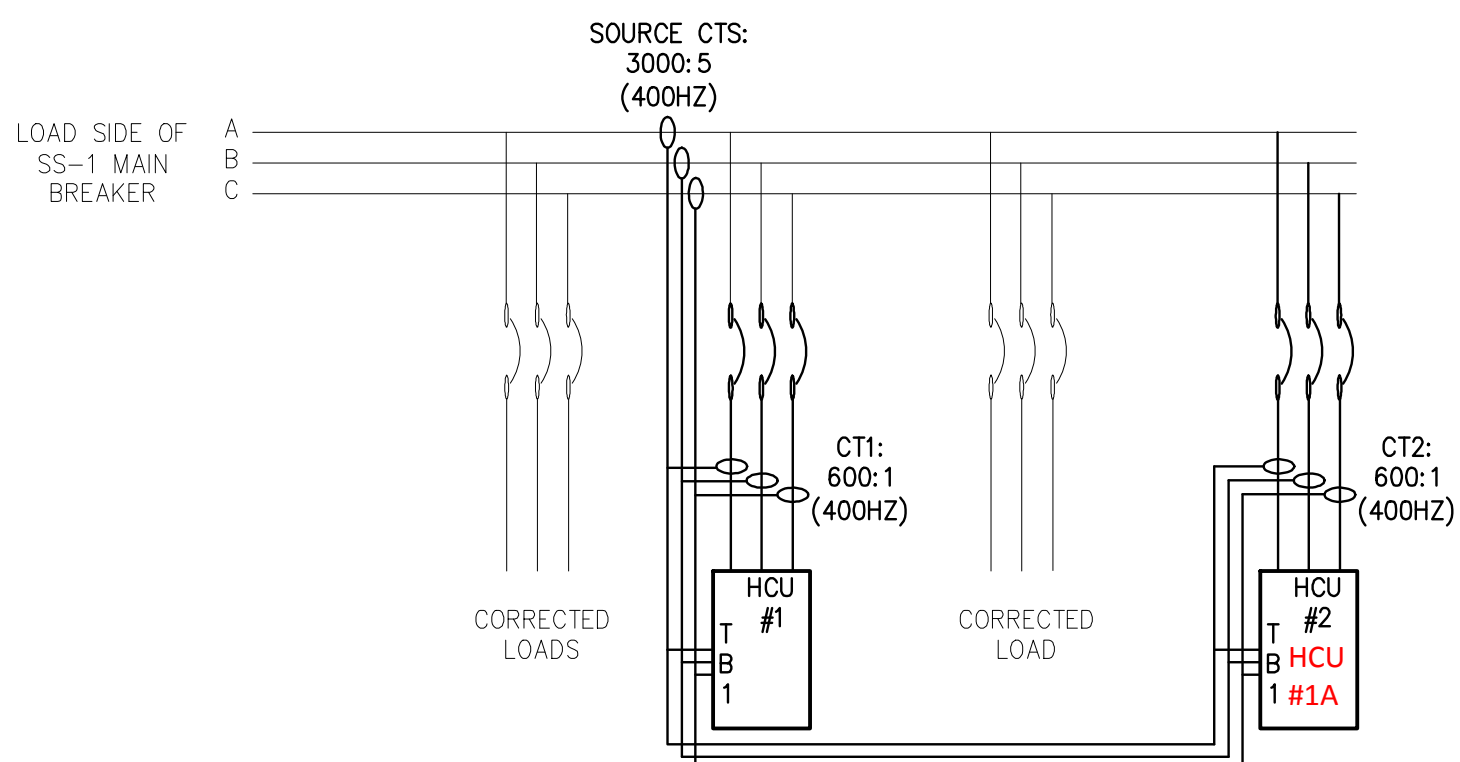
ARCHITECT/ENGINEERS:

Drawing Title		Project Title		Project Number	
Normal Power Circuit				757	
Commercial Power One-Line				Building Number	
				1A	
Approved:		Location		Drawing Number	
FARID MEHR, PE		CHALMERS P. WYLIE VA AMBULATORY CARE CENTER		E-NPL	
CHIEF, ENGINEERING SERVICE		Date		Checked By:	
		2017-10-19		P.J.H.	
				Drawn By:	
				Sheet 2 of 9	

Chalmers P. Wylie Ambulatory Care Center
VA U.S. Department of Veterans Affairs

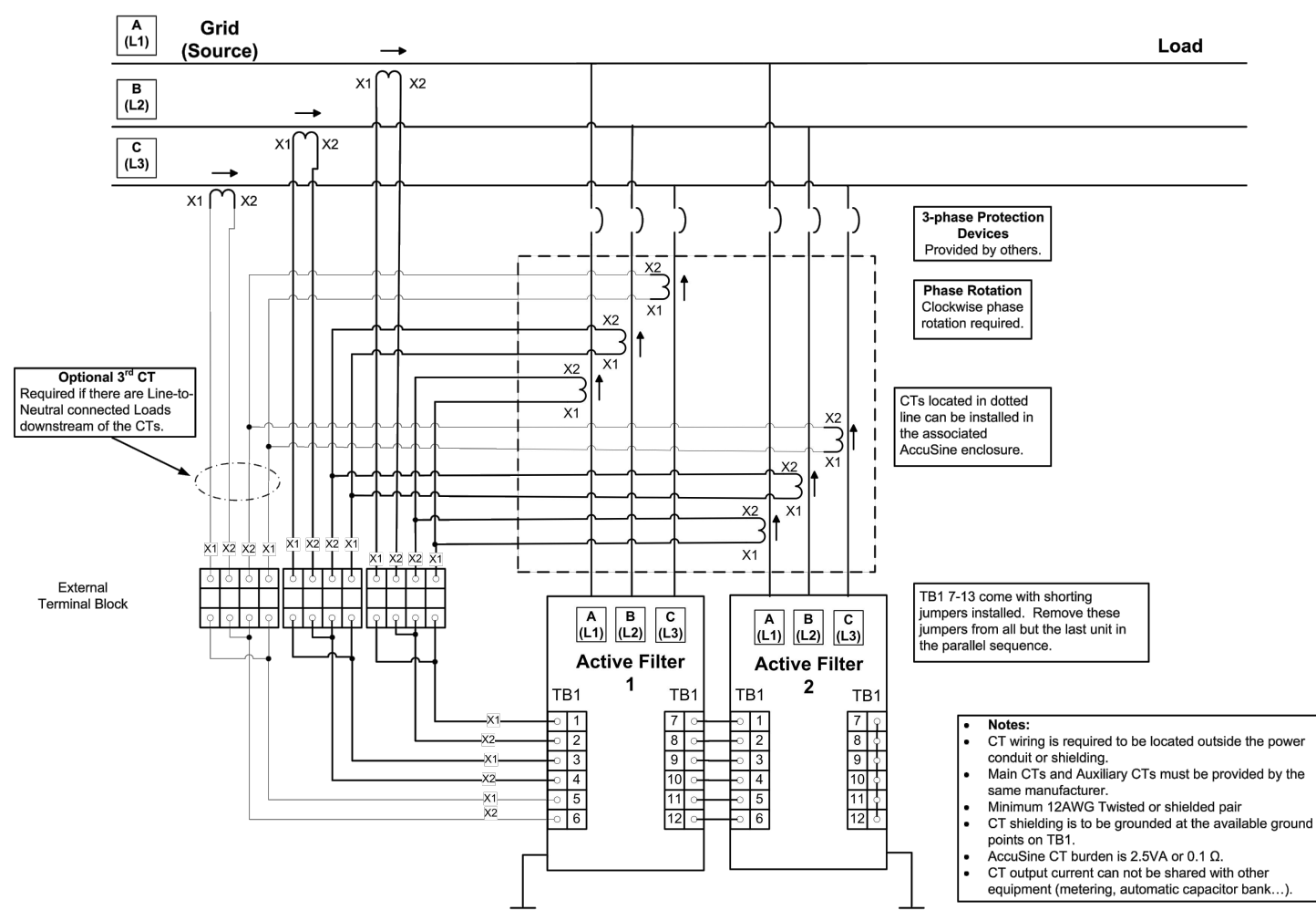
HARMONICS NOTES

HARMONICS DESIGNATIONS IN RED ARE WHAT THE CORRECT DESIGNATION SHOULD BE FOR KNOWN ERRORS IN THE BUILDING 1A ELECTRICAL DISTRIBUTION SYSTEM. DESIGNATIONS TO BE CORRECTED IN THE FUTURE; INCORRECT DESIGNATION KEPT AS REFERENCE FOR COMPLETED PROJECT RECORD DRAWINGS.



HARMONIC CANCELLATION AND/OR POWER-FACTOR CORRECTION OF ALL LOADS ON SS-1

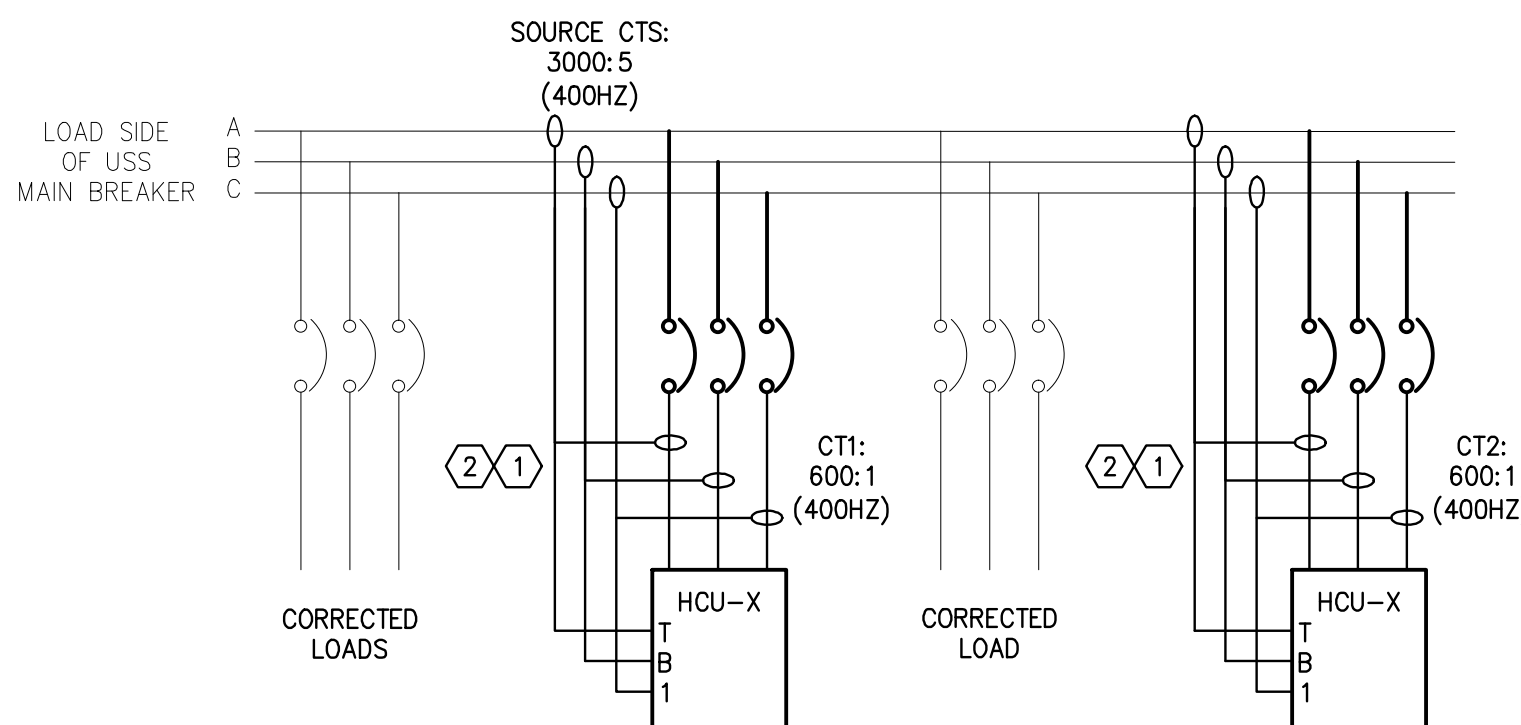
1 **DIAGRAM - HCU #1 INSTALLATION**
SCALE: NTS



2 **DIAGRAM - EATON HCU #1 GRID (SOURCE) SIDE CT POSITION PARALLEL UNITS**
SCALE: NTS

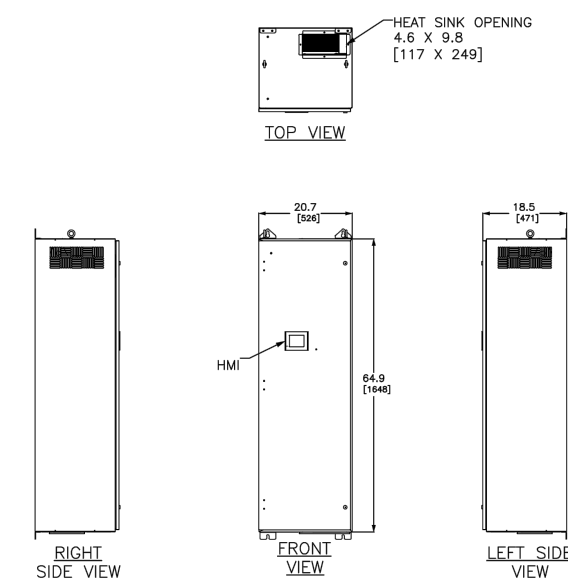
EQUIPMENT AND SERVICES PROVIDED BY EATON ENGINEERING SERVICES ON 3 DEC 2008:

- 1 - 300A HARMONIC CORRECTION UNIT, 480V
- 1 - 100A HARMONIC CORRECTION UNIT, 480V
- 1 - SET OF 3 CURRENT TRANSFORMERS FOR INPUT TO HCUS
- 1 - STARTUP SERVICE INCLUDING 6-MONTH FOLLOW-UP FOR HCUS
- 2 - 400A FRAME MOLDED CASE CIRCUIT BREAKERS WITH MICROPROCESSOR BASED TRIP UNITS; ONE WITH 400A TRIP, ONE WITH 150A TRIP. INCLUDES ALL MOUNTING HARDWARE, COPPER STRAPS AND DEADFRONT COVERS.
- 1 - SET UP AND PROGRAMMING FOR HARMONIC MONITORING



HARMONIC CANCELLATION AND/OR POWER-FACTOR CORRECTION OF ALL LOADS ON SUBSTATIONS SS-2, SS-3 AND SS-4

3 **DIAGRAM - TYPICAL HCU-2/3/4 INSTALLATION**
SCALE: NONE



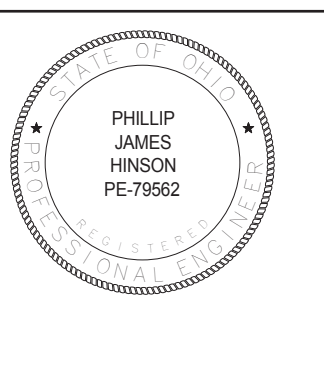
- NOTES:
1. HCU100DSN1 EATON 100A, 208-480 VAC, 50-60Hz, N1 ENCLOSURE
 2. AMBIENT TEMP OS 0-40°C
 3. ALTITUDE-1000M(3300FT)
 4. HUMIDITY-95 PERCENT NONCONDENSING
 5. INDOOR INSTALLATION IN CLEAN ENVIRONMENT
 6. AIC RATING AMPERES
 7. UL, CSA, ABS, APPROVED
 8. SIDE AND BOTTOM CLEARANCE OF 6" REQUIRED FOR AIR DISCHARGE
 9. TOP CLEARANCE OF 12" REQUIRED FOR AIR EXHAUST

DUAL DIMENSIONS: INCHES MILLIMETERS



4 **DETAIL - HARMONIC CORRECTION UNIT (HCU) 2/3/4 100A, 208-480V**
SCALE: NTS

RECORD DRAWING CREATED	2017-10-19
Revisions:	Date

CONSULTANTS:

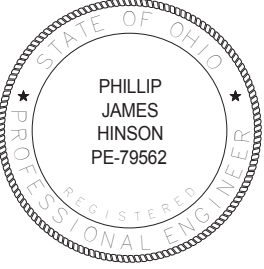




ARCHITECT/ENGINEERS:

RECORD DRAWINGS				
Drawing Title	Project Title	Project Number	 Chalmers P. Wylie Ambulatory Care Center	
Normal Power Circuit		757		
Harmonic Control Unit Details		Building Number		
Approved:	Location	Drawing Number		
FARID MEHR, PE	CHALMERS P. WYLIE VA AMBULATORY CARE CENTER	E-NPH		
CHIEF, ENGINEERING SERVICE	Date	Sheet 3 of 9		
	2017-10-19	Checked By:	Drawn By:	
			PJH	

DRAWING CREATION PENDING

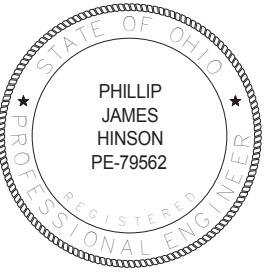


one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inches = one foot
three inches = one foot

<div>RECORD DRAWING CREATED</div> <div>Revisions:</div>		<div>CONSULTANTS:</div>		<div></div>	<div>ARCHITECT/ENGINEERS:</div>		<div>RECORD DRAWINGS</div>			
					<div>Drawing Title</div> <div>Normal Power Circuit Distribution Panels One-Line</div>		<div>Project Title</div>		<div>Project Number</div> <div>757</div>	<div> Columbus VA Chalmers P. Wylie Ambulatory Care Center</div> <div> U.S. Department of Veterans Affairs</div>
					<div>Approved:</div> <div>FARID MEHR, PE CHIEF, ENGINEERING SERVICE</div>		<div>Location</div> <div>CHALMERS P. WYLIE VA AMBULATORY CARE CENTER</div>		<div>Building Number</div> <div>1A</div>	
					<div>Date</div> <div>2017-10-19</div>		<div>Checked By:</div>	<div>Drawn By:</div> <div>PJH</div>	<div>Drawing Number</div> <div>E-NPD</div>	
									<div>Sheet 4 of 9</div>	

DRAWING CREATION PENDING

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A
B
C
D
E
F

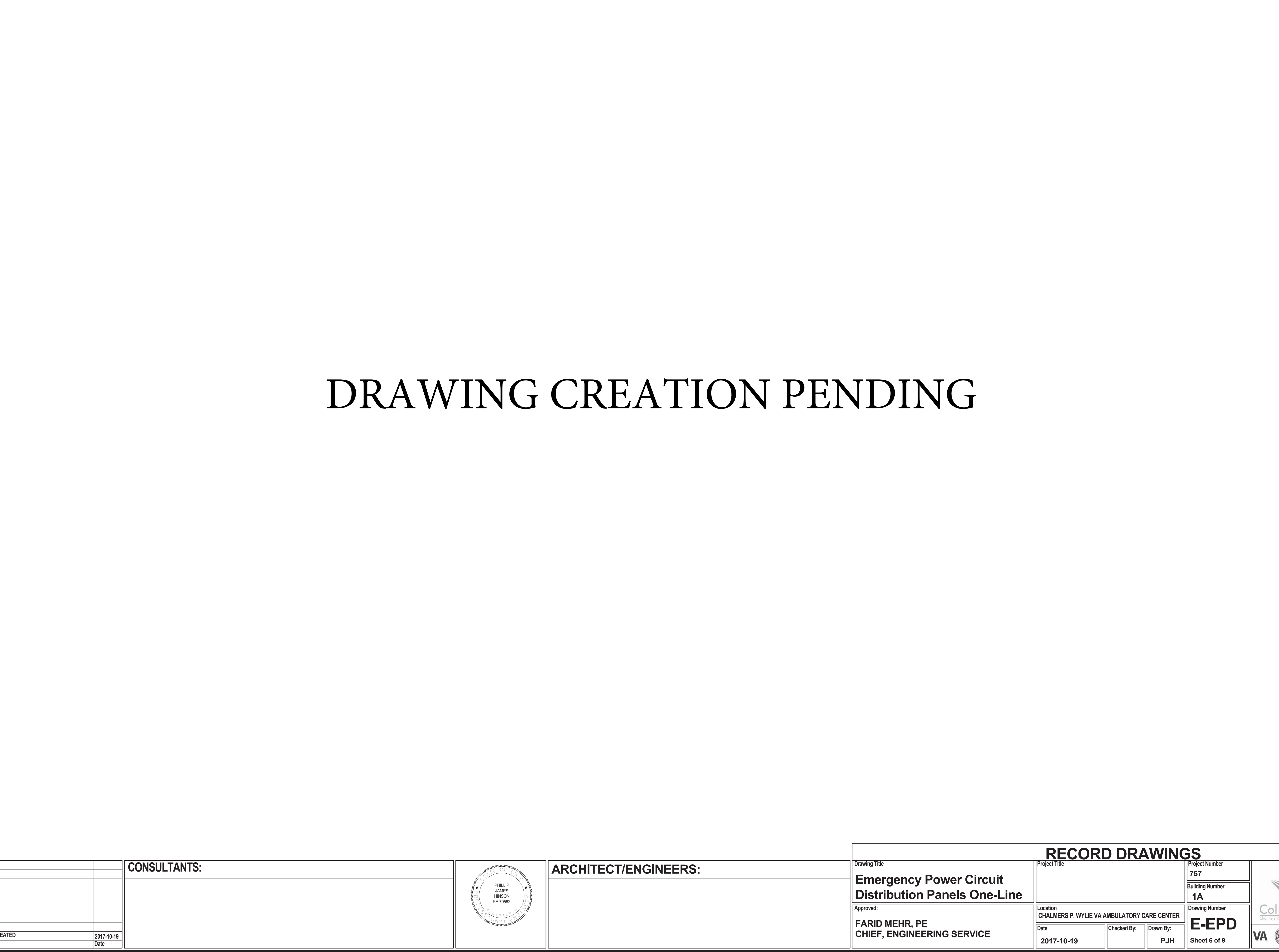
<div>RECORD DRAWING CREATED</div> <div>Revisions:</div>		<div>CONSULTANTS:</div>		<div></div>	<div>ARCHITECT/ENGINEERS:</div>		<div>RECORD DRAWINGS</div>					
							<div>Drawing Title</div> <div>Emergency Power Circuit Generator Power One-Line</div>		<div>Project Title</div>		<div>Project Number</div> <div>757</div>	<div> Columbus VA Chalmers P. Wylie Ambulatory Care Center</div> <div>VA  U.S. Department of Veterans Affairs</div>
							<div>Approved:</div> <div>FARID MEHR, PE CHIEF, ENGINEERING SERVICE</div>		<div>Location</div> <div>CHALMERS P. WYLIE VA AMBULATORY CARE CENTER</div>		<div>Building Number</div> <div>1A</div>	
							<div>Date</div> <div>2017-10-19</div>		<div>Checked By:</div>	<div>Drawn By:</div> <div>PJH</div>	<div>Drawing Number</div> <div>E-EPL</div>	
											<div>Sheet 5 of 9</div>	

DRAWING CREATION PENDING

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		CONSULTANTS:			ARCHITECT/ENGINEERS:		RECORD DRAWINGS								
							Drawing Title		Project Title		Project Number		 Chalmers P. Wylie Ambulatory Care Center		
							Emergency Power Circuit Distribution Panels One-Line				757				
							Approved: FARID MEHR, PE CHIEF, ENGINEERING SERVICE		Location CHALMERS P. WYLIE VA AMBULATORY CARE CENTER		Building Number 1A				
Revisions:		Date						Date 2017-10-19		Checked By:		Drawn By: PJH		Drawing Number E-EPD Sheet 6 of 9	

A
B
C
D
E
F



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EXISTING RISER DATA
(INCLUSIVE OF THE FOLLOWING COMPLETED PROJECTS)

757-13-131 IMPROVE ENERGY EFFICIENCY (2014)
757-500 ACCESS IMPROVEMENTS, COLUMBUS ACC (2015)
757-14-502 PREPARE LABORATORY FOR EQUIPMENT (2015)
757-200 CONSTRUCT SPECIALTY CARE ADDITION (2016)
757-13-104 REMEDIATE ELECTRICAL HARMONICS ISSUES (2016)
757-201 CONSTRUCT PARKING GARAGE (2017)
757-15-101 MODIFY ENTRANCE AND CORRECT SPRINKLER COVERAGE- FCA (2017)
757-15-204 INSTALL ACTIVE HARMONICS ON SUBSTATIONS - FCA (2017)
757-16-102 UPGRADE CCTV TO DIGITAL SYSTEM (2017)
757-16-201 CORRECT ELECTRICAL DEFICIENCIES - FCA (2017)

FUTURE RISER WORK
(IN PROGRESS OR UPCOMING PROJECTS)

757-202 CONSTRUCT MENTAL HEALTH AND SPECIALTY CARE ADDITION
(TO BE COMPLETED 2018)
757-14-101 COLUMBUS BOILER PLANT REPLACEMENT
(TO BE COMPLETED 2018)
757-16-101 EXPAND LAB AND SPS DEPARTMENTS
(TO BE COMPLETED 2018)
757-203 CONSTRUCT SURGERY ADDITION
(TO BE COMPLETED 2019)
757-15-102 CONSTRUCT CHILLER PLANT
(TO BE COMPLETE 2019)

ELECTRICAL PANEL DESIGNATION
NOMENCLATURE SYSTEM

ALPHANUMERIC 1 (A-F): RISER STACK
ALPHANUMERIC 2 (B-5): FLOOR
ALPHANUMERIC 3 (D): 800A+ DISTRIBUTION PANEL FED DIRECTLY FROM A SS OR
ATS/UPS; SKIPPED IF NOT NEEDED
ALPHANUMERIC 4 (N, E, C, S): CIRCUIT/BRANCH
N - NORMAL
E - EQUIPMENT
C - CRITICAL
S - LIFE SAFETY
ALPHANUMERIC 5 (1-5/A-B): NUMBER SEQUENTIAL ORDER BY STACK AND FLOOR;
LETTER SEQUENTIAL ORDER FOR 480/277V PANELS
BY STACK AND FLOOR

SPECIAL PANELS

OPERATING ROOM PANELS
IPU# AND IPU#X: # CORRESPONDS TO OR NUMBER
MRI PANELS
MANUFACTURER'S DESIGNATIONS/LABELS
EMERGENCY GENERATOR PANEL
PPGEN: POWER PANEL GENERATOR

EMERGENCY CIRCUIT DISTRIBUTION
PANELS ABOVE RISERS

C15BEMA: EMERGENCY POWER DISTRIBUTION PANEL TO FIRE PUMP AND SIX ATS
C15BEA: EQUIPMENT BRANCH DISTRIBUTION PANEL
C1DCA: CRITICAL BRANCH DISTRIBUTION PANEL
C1DSA: LIFE SAFETY DISTRIBUTION PANEL

KNOWN MISLABLED PANELS
AND TRANSFORMERS

C1DNA SEC 2 - SHOULD BE C1DEA SEC 2
C1DN3 - SHOULD BE C1DNA
D1CTA - SHOULD BE D1NB
D2NB - SHOULD BE D2EA
C2EA - SHOULD BE C2E2
A4E4 (RM 48003B) - SHOULD BE A4E6
T-C4E4 - SHOULD BE T-C4E6

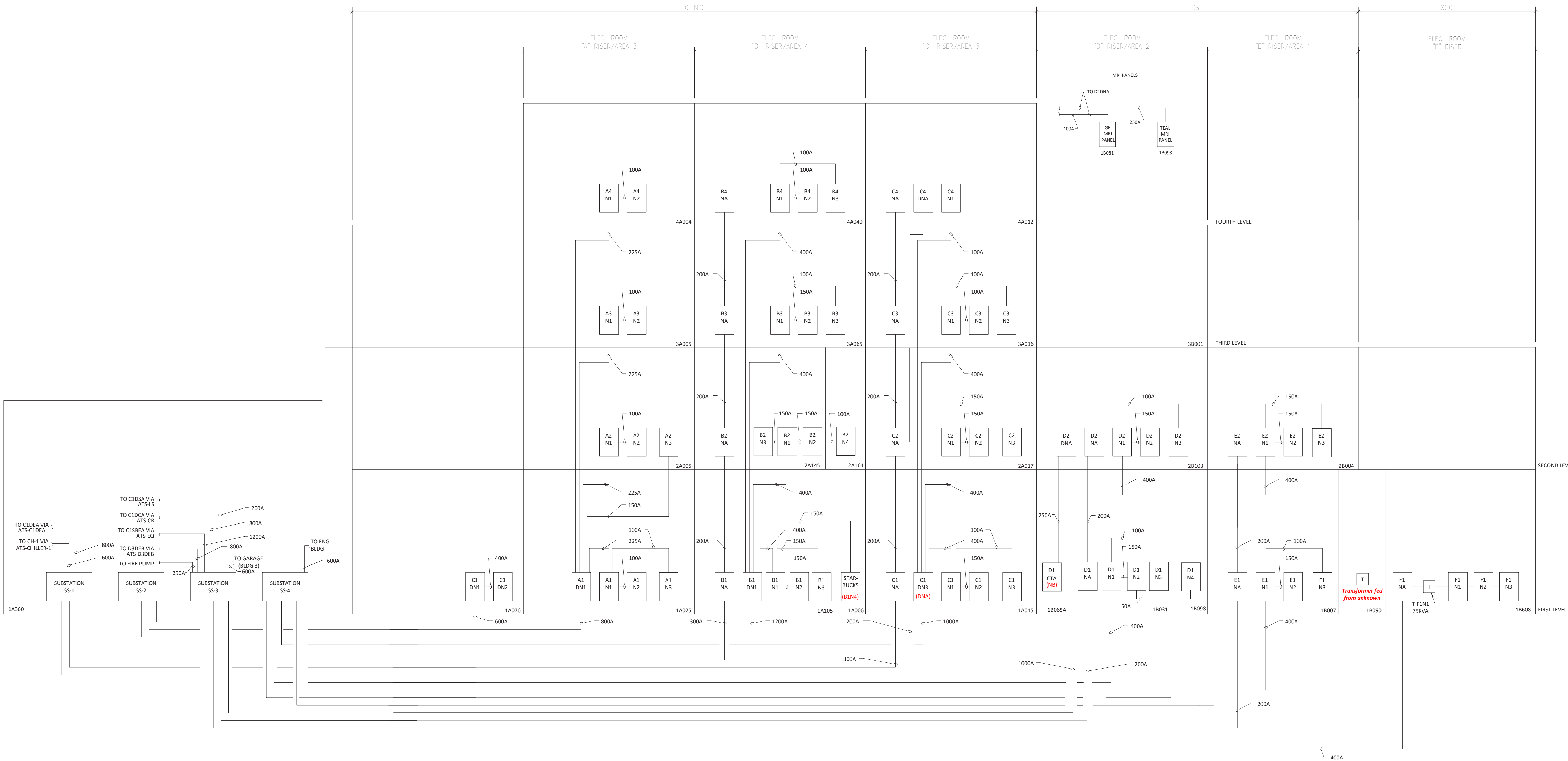
RISER NOTES

PANEL AND TRANSFORMER DESIGNATIONS IN RED AND PARENTHESIS ARE WHAT
THE CORRECT DESIGNATION SHOULD BE FOR KNOWN ERRORS IN THE BUILDING
1A ELECTRICAL DISTRIBUTION SYSTEM. DESIGNATIONS TO BE CORRECTED IN THE
FUTURE; INCORRECT DESIGNATION KEPT AS REFERENCE FOR COMPLETED PROJECT
RECORD DRAWINGS.

<div>RECORD DRAWING CREATED 2017-10-19 Date</div>		CONSULTANTS:		<div>PHILLIP JAMES HINSON PE-79562</div>	ARCHITECT/ENGINEERS:		RECORD DRAWINGS					
Revisions:							Drawing Title Riser Diagram Notes		Project Title		Project Number 757 Building Number 1A Drawing Number E-RN Sheet 7 of 9	
							Approved: FARID MEHR, PE CHIEF, ENGINEERING SERVICE		Location CHALMERS P. WYLIE VA AMBULATORY CARE CENTER		Columbus VA Chalmers P. Wylie Ambulatory Care Center VA U.S. Department of Veterans Affairs	
							Date 2017-10-19		Checked By:		Drawn By: PJH	

RISER NOTES

PANEL AND TRANSFORMER DESIGNATIONS IN RED AND PARENTHESIS ARE WHAT THE CORRECT DESIGNATION SHOULD BE FOR KNOWN ERRORS IN THE BUILDING 1A ELECTRICAL DISTRIBUTION SYSTEM. DESIGNATIONS TO BE CORRECTED IN THE FUTURE; INCORRECT DESIGNATION KEPT AS REFERENCE FOR COMPLETED PROJECT RECORD DRAWINGS.



RECORD DRAWINGS	
Drawing Title Normal Power Circuit Risers	Project Title CHALMERS P. WYLIE VA AMBULATORY CARE CENTER
Approved: FARID MEHR, PE CHIEF, ENGINEERING SERVICE	Location CHALMERS P. WYLIE VA AMBULATORY CARE CENTER
Date 2017-10-19	Checked By: PJM
Drawn By: PJM	Project Number 757
	Building Number 1A
	Drawing Number E-NPR
	Sheet 8 of 9

CONSULTANTS:

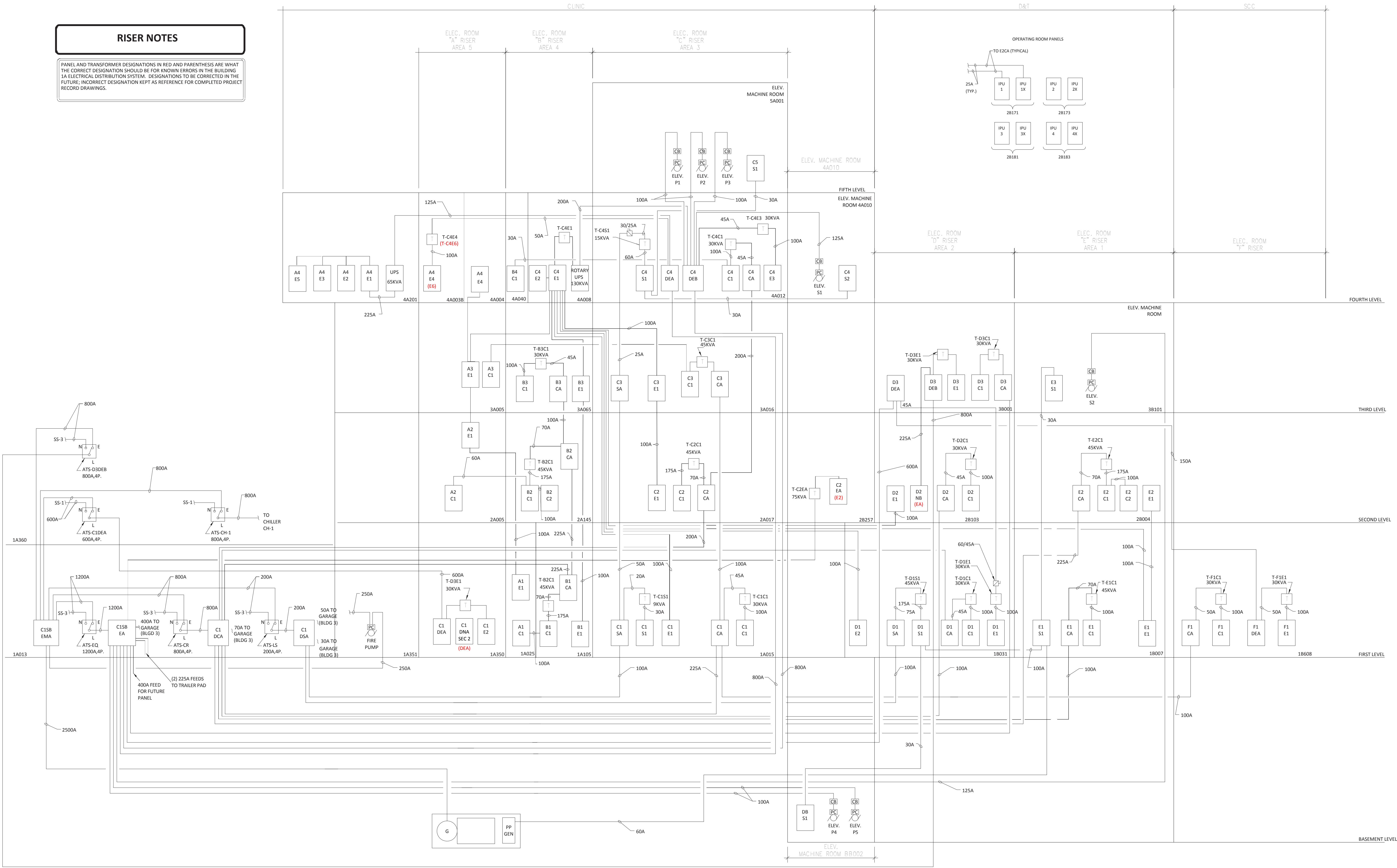
ARCHITECT/ENGINEERS:

PHILLIP JAMES HINSON
PE-79562

Columbus VA
Chalmers P. Wylie Ambulatory Care Center
U.S. Department of Veterans Affairs

RISER NOTES

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RECORD DRAWING CREATED

Revisions:

2017-10-19

Date

CONSULTANTS:

PHILLIP JAMES HINSON

PE-79562

ARCHITECT/ENGINEERS:

Drawing Title

Emergency Power Circuit Risers

Approved:

FARID MEHR, PE
CHIEF, ENGINEERING SERVICE

Date

2017-10-19

Checked By:

PJH

Drawn By:

PJH

Project Title

CHALMERS P. WYLIE VA AMBULATORY CARE CENTER

Project Number

757

Building Number

1A

Drawing Number

E-EPR

Sheet 9 of 9

Columbus VA

Chalmers P. Wylie Ambulatory Care Center

VA

U.S. Department of Veterans Affairs