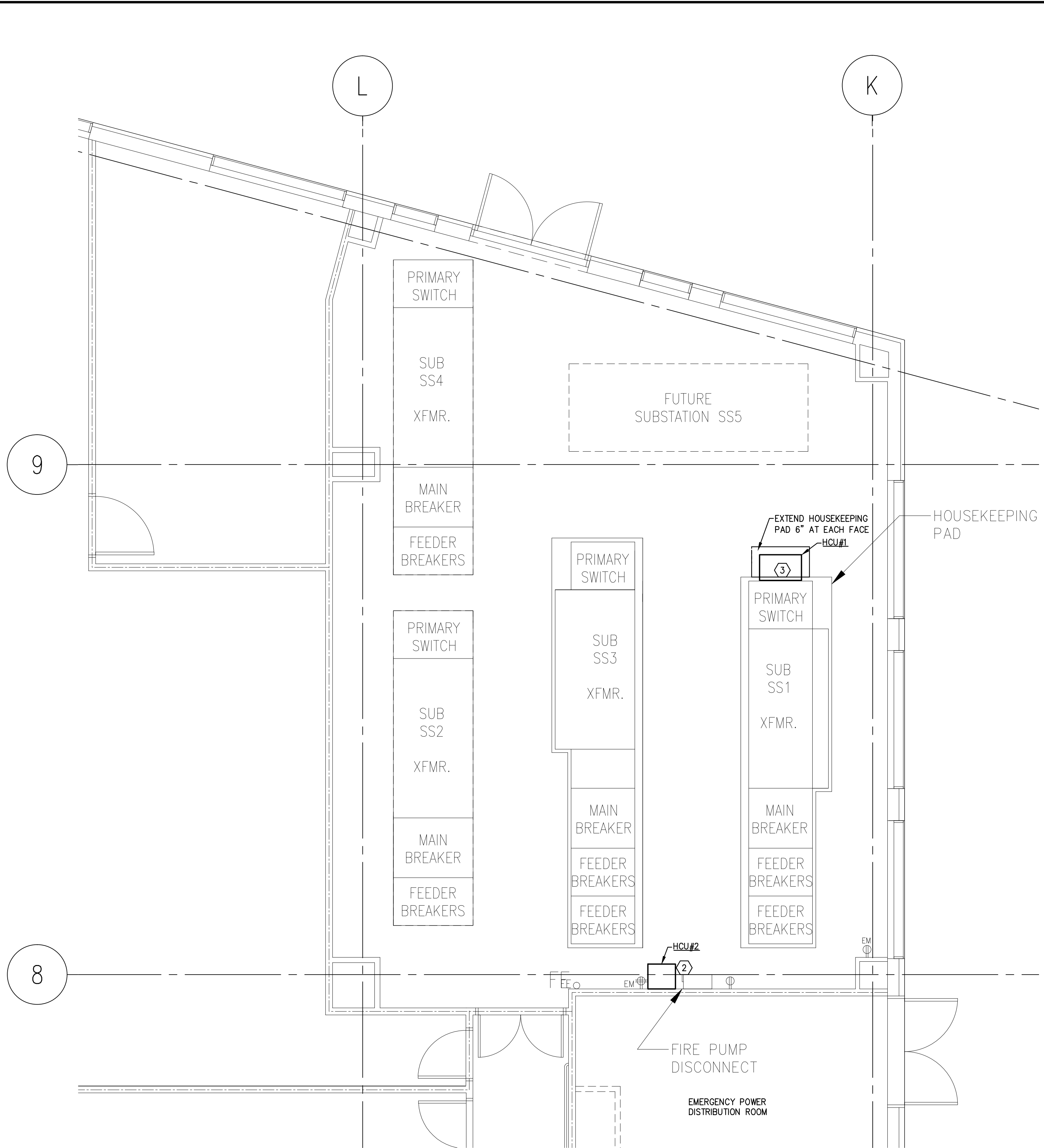


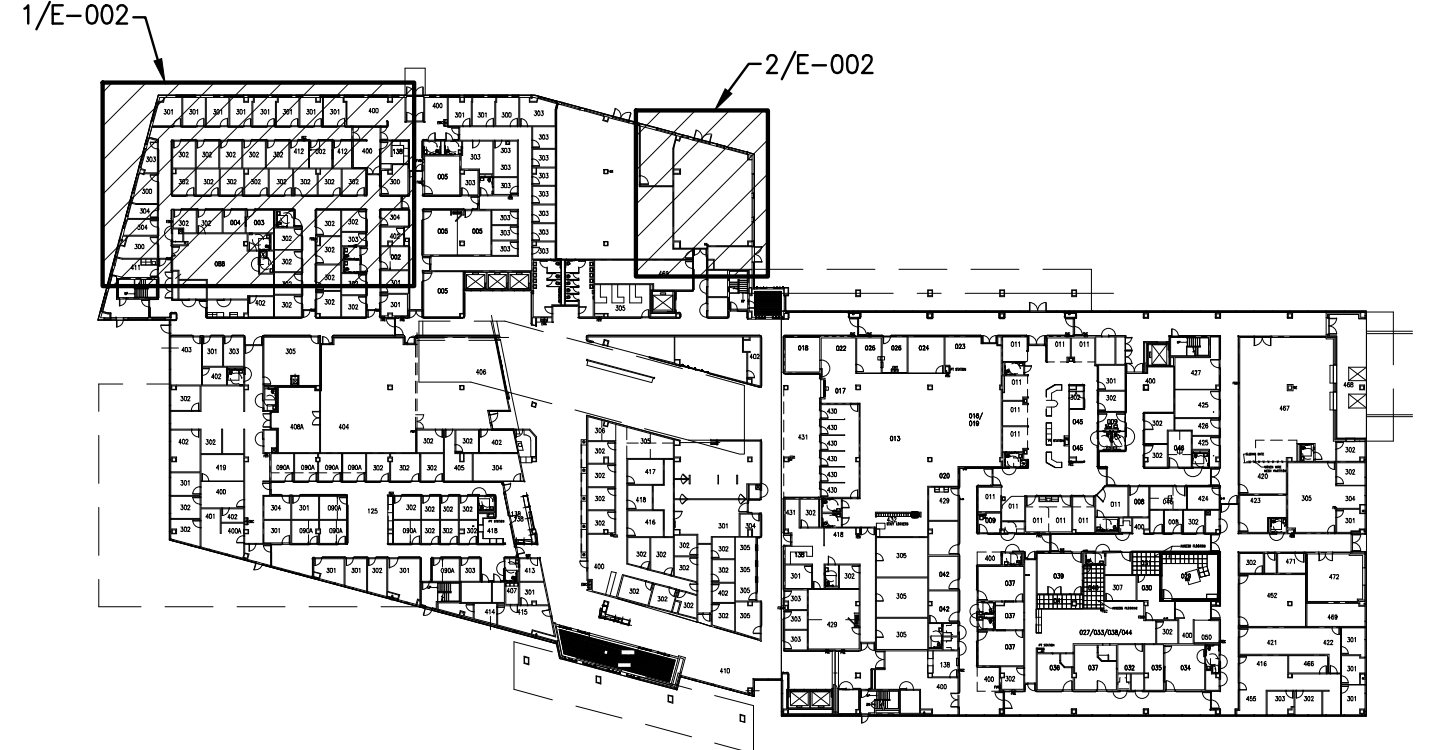
1 SERVICE ENTRANCE PLAN - ELECTRICAL  
SCALE: 3/32"=1'-0"



2 ELECTRICAL ROOM PLAN - ELECTRICAL  
SCALE: 1/4"=1'-0"




- GENERAL NOTES:
- A. EC SHALL HIRE EATON ENGINEERING SERVICES (OR AUTHORIZED DEALERS) FOR THE INSTALLATION OF THE EATON XPERT POWER METER AND OVERSIGHT OF INSTALLATION OF HARMONIC CORRECTION UNITS. EATON ENGINEERING SERVICES OR AUTHORIZED DEALERS SHALL ALSO PERFORM VERIFICATION AND REPROGRAMMING OF THE HARMONIC CORRECTION UNITS AS NECESSARY SIX (6) MONTHS FOLLOWING PROJECT COMPLETION. THE EATON POINT OF CONTACT FOR THIS PROJECT IS:
- KEVIN R. FREEMAN  
EATON CORPORATION  
600 NORTH CLEVELAND AVENUE, SUITE 150  
WESTERVILLE, OH 43082  
(614) 899-4106  
KEVINR.FREEMAN@EATON.COM
- B. EQUIPMENT AND SERVICES TO BE PROVIDED BY EATON ENGINEERING SERVICES (OR AUTHORIZED DEALERS) ARE AS FOLLOWS:
- 1 - 300A HARMONIC CORRECTION UNIT, 480V
  - 1 - 100A HARMONIC CORRECTION UNIT, 480V
  - 1 - SET OF 3 CURRENT TRANSFORMERS FOR INPUT TO HCU1
  - 1 - STARTUP SERVICE INCLUDING 6-MONTH FOLLOW-UP FOR HCU1
  - 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 - EATON IQ2290 SERIES POWER QUALITY METER
  - 1 - PARTS AND LABOR TO MOUNT IQ2290 METER TO EXISTING MV SWITCH
  - 1 - MODIFICATIONS TO EXISTING EQUIPMENT AS REQUIRED FOR INSTALLATION OF IQ2290 METER
  - 1 - SET UP AND PROGRAMMING FOR HARMONIC MONITORING
- INSTALLATION OF ALL ABOVE-MENTIONED EQUIPMENT (EXCEPT POWER METER) SHALL BE BY EC.
- C. EC SHALL COORDINATE EXACT LOCATION OF ELECTRICAL METER. INSTALLATION ON MV SWITCH WITH MANUFACTURER'S REPRESENTATIVE.
- D. CURRENT TRANSFORMER (CT) WIRES SHALL BE INSTALLED IN APPROVED RACEWAY BETWEEN THEIR POINTS OF TERMINATION AT THE LOAD SIDE OF THE USS-1 MAIN BREAKER, THE TWO (2) HARMONIC MITIGATION FILTERS (HCU#1 AND HCU#2) AND THE FEEDER BREAKERS FEEDING EACH OF THE HARMONIC MITIGATION UNITS.

- CODED NOTES:
- ELECTRICAL METER SHALL BE EATON 2290 POWER XPERT METER WITH THE CAPABILITY OF COMMUNICATING DATA TO VAACC COMPUTER NETWORK AND/OR LOGGING DATA ON-BOARD.
  - PROVIDE MINIMUM CLEARANCE OF SIX (6) INCHES BETWEEN FIRE PUMP DISCONNECT AND HCU#2.
  - DOWEL THE NEW PORTION OF THE HOUSEKEEPING PAD INTO THE EXISTING CONCRETE FLOOR USING 4 EACH 5/8" DOWELS. EMBEDMENT SHALL BE 4" INTO THE EXISTING FLOOR. DOWELING INTO THE EXISTING PAD IS NOT REQUIRED. HEIGHT OF NEW PAD SHALL MATCH EXISTING. INSERT RUBBER EXPANSION JOINT BETWEEN EXISTING AND NEW PADS. HOUSEKEEPING PAD SHALL EXTEND 6" BEYOND THE HCU AT THE THREE EXPOSED FACES AS SHOWN ON PLAN.
  - METER SHALL BE INSTALLED IN/ON EXISTING MEDIUM VOLTAGE SWITCH BY EATON ENGINEERING SERVICES (OR AUTHORIZED DEALERS). EC SHALL COORDINATE WITH EATON ENGINEERING SERVICES OR AUTHORIZED DEALERS FOR INSTALLATION OF CONDUIT AT MEDIUM VOLTAGE SWITCH LOCATION. CONDUIT SHALL BE INSTALLED FROM THE POWER METER TO THE EXISTING UNDERGROUND AEP SIGNAL CONDUIT. EC SHALL FISH CAT6 INTO EXISTING CONDUIT TO INSIDE THE BUILDING, AND THEN ROUTE CAT6 IN EXISTING CABLE TRAY TO THE NETWORK SWITCH INSIDE ROOM 1A024. COMMUNICATION WIRE SHALL BE DIRECT BURIAL CAT6. INSTALLED IN 3/4" CONDUIT. FOR THE INTERIOR PORTION OF THE RUN THE EC SHALL COORDINATE ROUTING OF CONDUIT WITH CONTRACTING OFFICER REPRESENTATIVE.
  - EC SHALL TERMINATE COMMUNICATION CONDUIT AND WIRE AT SWITCH IN THIS ROOM. JOHNSON CONTROLS SHALL BE RESPONSIBLE FOR INTEGRATION OF METER DATA INTO THE METASYS SYSTEM AFTER INSTALLATION OF THE METER AND COMMUNICATION WIRE.



KEY PLAN  
SCALE: NTS

100 PERCENT SUBMISSION

		<b>ENGINEERS:</b>				<b>ARCHITECT:</b>		<div>Project Title ELECTRICAL FLOOR PLANS</div> <div>Approved:</div>		<div>Project Title CHALMERS P. WYLIE VA AMBULATORY CARE CLINIC HARMONIC REMEDIATION</div> <div>Location COLUMBUS OH</div> <div>Date 2013/08/16</div> <div>Checked GL</div> <div>Drawn KC</div>		<div>Project Number 757-13-104</div> <div>Building Number</div> <div>Drawing Number E-002</div> <div>Dwg. 03 of 4</div>		<div>Office of and Facilities Management</div> <div> Department of Veterans Affairs</div>	
		<div><b>ADVANCED ENGINEERING CONSULTANTS</b></div> <div>Electrical - Mechanical - Plumbing - Fire Protection 1310 DUBLIN ROAD COLUMBUS, OHIO 43215 TEL: (614) 486-4778 FAX: (614) 486-4082</div>		<div><b>emersion DESIGN</b></div> <div>emersion DESIGN LLC 1775 Mentor Ave Suite 202 Cincinnati, Ohio 45212 513 841 9100 emersiondesign.com</div>											
Revisions:		Date													