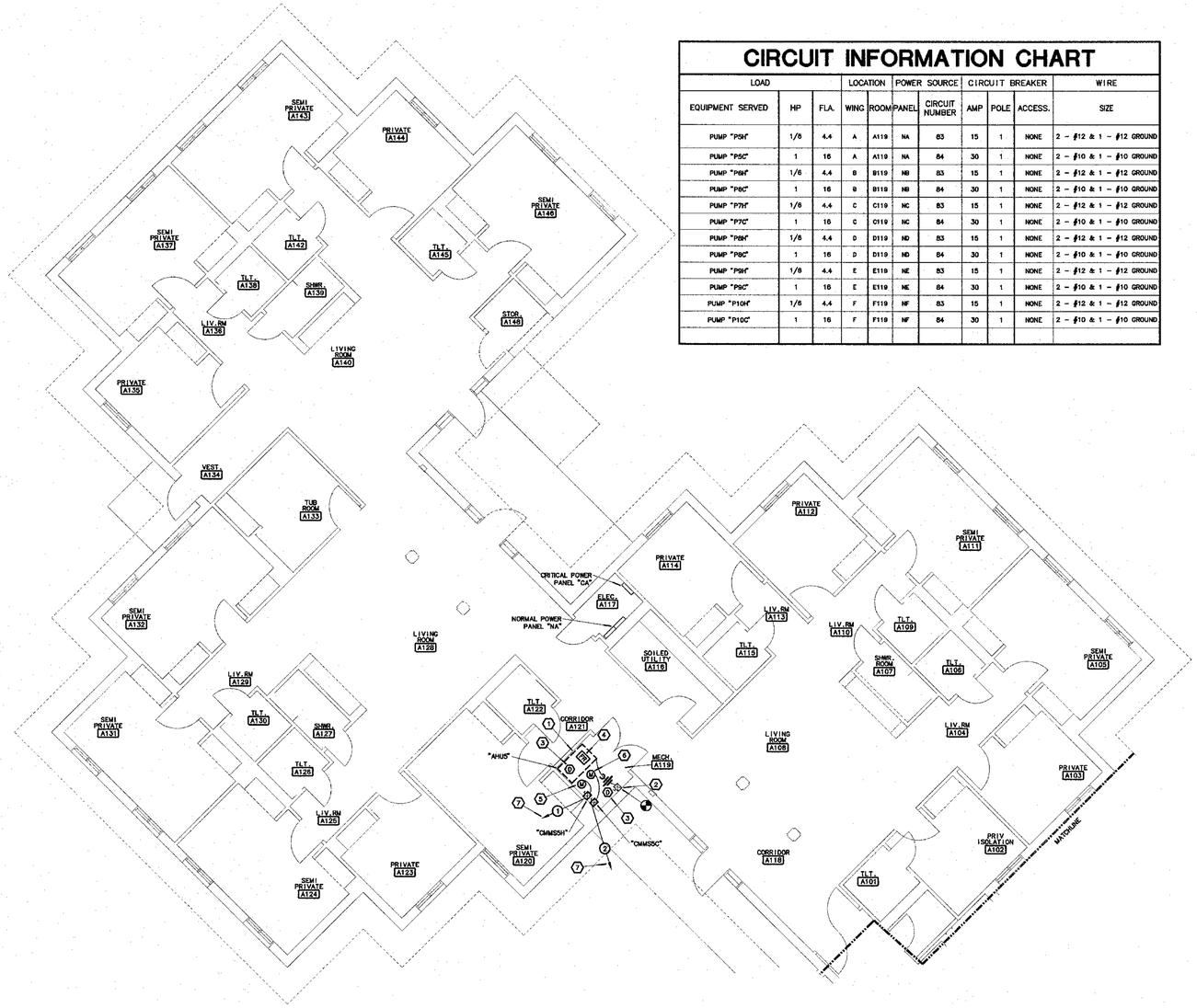
WORK SHOWN ON THIS SHEET IS FOR WING "A". CONTRACTOR SHALL PERFORM SIMILAR WORK IN WINGS "B", "C", "D", "E" & "F". REFER TO MECHANICAL PLANS. WORK IN THOSE WINGS IS SIMILAR TO WORK IN WING "A". PROVIDE ALL REQUIRED WORK FOR REPLACEMENT OF AHU – 5, 6, 7, 8, 9 & 10 AND THE ADDITION OF THEIR ASSOCIATED PUMPS IN THEIR RESPECTIVE WINGS.

CIRCUIT INFORMATION CHART

LOAD			LOCATION		POWER SOURCE		CIRCUIT BREAKER			WIRE
EQUIPMENT SERVED	HP	FLA.	WING	ROOM	PANEL	CIRCUIT NUMBER	AMP	POLE	ACCESS.	SIZE
PUMP "P5H"	1/6	4.4	A	A119	NA	83	15	1	NONE	2 – #12 & 1 – #12 GROUND
PUMP "P5C"	1	16	A	A119	NA	84	30	1	NONE	2 – #10 & 1 – #10 GROUND
PUMP "P6H"	1/6	4.4	B	B119	NB	83	15	1	NONE	2 – #12 & 1 – #12 GROUND
PUMP "P6C"	1	16	B	B119	NB	84	30	1	NONE	2 – #10 & 1 – #10 GROUND
PUMP "P7H"	1/6	4.4	C	C119	NC	83	15	1	NONE	2 – #12 & 1 – #12 GROUND
PUMP "P7C"	1	16	C	C119	NC	84	30	1	NONE	2 – #10 & 1 – #10 GROUND
PUMP "P8H"	1/6	4.4	D	D119	ND	83	15	1	NONE	2 – #12 & 1 – #12 GROUND
PUMP "P8C"	1	16	D	D119	ND	84	30	1	NONE	2 – #10 & 1 – #10 GROUND
PUMP "P9H"	1/6	4.4	E	E119	NE	83	15	1	NONE	2 – #12 & 1 – #12 GROUND
PUMP "P9C"	1	16	E	E119	NE	84	30	1	NONE	2 – #10 & 1 – #10 GROUND
PUMP "P10H"	1/6	4.4	F	F119	NF	83	15	1	NONE	2 – #12 & 1 – #12 GROUND
PUMP "P10C"	1	16	F	F119	NF	84	30	1	NONE	2 – #10 & 1 – #10 GROUND



1 E-105 **WING "A" - ELECTRICAL PLAN**

SCALE: 1/8"=1'-0" NORTH

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Consulting Engineers
3333 East Battlefield, Suite 1000
Springfield, Missouri 65804
phone 417.881.0020
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mfec.com
mfec Mulderink, Fechhardt & Collins, Inc.

NOTES:

1. EXISTING UNIT TO BE REPLACED. CONNECT NEW UNIT TO EXISTING CIRCUIT.
2. CONNECT CIRCUIT TO EXISTING COMBINATION MAGNETIC MOTOR STARTER. PROVIDE NEW FUSES TO MATCH REQUIREMENTS OF NEW AIR HANDLER.
3. REPLACE EXISTING DUCT DETECTOR WITH NEW DETECTOR. CONNECT TO EXISTING FIRE ALARM SYSTEM.
4. PROVIDE NEW FAN SHUTDOWN RELAY. INTERCONNECT WITH ASSOCIATED DUCT DETECTOR.
5. PUMP "P5H". COORDINATE EXACT LOCATION IN FIELD WITH OTHER TRADES.
6. PUMP "P5C". COORDINATE EXACT LOCATION IN FIELD WITH OTHER TRADES.
7. PROVIDE NEW CIRCUIT BREAKER IN NORMAL POWER PANEL ASSOCIATED WITH WORK IN RESPECTIVE WING. REFER TO CIRCUIT INFORMATION CHART FOR ASSOCIATED PANEL AND CIRCUIT BREAKER SIZE.

BRANCH CIRCUIT & FEEDER SCHEDULE:

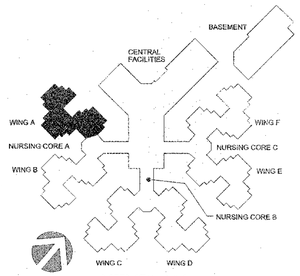
1. REFER TO CIRCUIT INFORMATION CHART FOR WIRE SIZE
2. REFER TO CIRCUIT INFORMATION CHART FOR WIRE SIZE

GENERAL DEMOLITION NOTES:

1. INFORMATION ON THESE DRAWINGS REPRESENT INFORMATION FROM EXISTING DRAWINGS AND LIMITED SITE INSPECTIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BID. NO EXTRAS SHALL BE PAID DUE TO UNANTICIPATED CONDITIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING, PATCHING, AND REPAIR OF ALL WALL AND FLOOR SYSTEM AS REQUIRED DUE TO NEW CONSTRUCTION. MAINTAIN ALL FIRE RATINGS.
3. FOR ALL EXISTING WIRING, EQUIPMENT, ETC. SHOWN TO BE REMOVED, THE OWNER SHALL HAVE THE FIRST RIGHT OF REFUSAL.
4. WHERE DEMOLISHED DEVICES ARE PART OF A CIRCUIT THAT IS THRU-WIRED, OR HAS ADDITIONAL DEVICES ON THE CIRCUIT THAT ARE TO REMAIN UNCHANGED, THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF THE EXISTING CIRCUIT. ANY ADDITIONAL CONDUIT, CONDUCTOR, BOXES, ETC NEEDED TO MODIFY THE EXISTING CIRCUIT TO MAINTAIN THE INTEGRITY ARE THE RESPONSIBILITY OF THIS CONTRACTOR AND SHALL BE INCLUDED IN BID.
5. REMOVE ANY UNUSED CONDUCTORS, CONDUIT, AND WIRING LOCATED WITHIN THE AREA OF CONSTRUCTION.

GENERAL NOTES:

1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRIC CODE.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONSTRUCTION PRIOR TO SUBMITTING HIS BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.
3. THE CONTRACTOR SHALL SCHEDULE AND EXECUTE ALL WORK WITH REGARD TO THE OWNER'S USE OF THE BUILDING.
4. PLANS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED.
5. ALL WIRING SHALL BE IN CONDUIT.
6. CONDUIT CONNECTORS AND COUPLINGS SHALL COMPRESSION TYPE. SET SCREW TYPE CONDUIT FITTINGS SHALL NOT BE ALLOWED.
7. ALL POWER CIRCUITS SHALL HAVE A GROUNDING CONDUCTOR.
8. ELECTRICAL CONTRACTOR SHALL PROVIDE A TYPED CIRCUIT DIRECTORY FOR ALL PANELS. DIRECTORY INFORMATION SHALL INCLUDE CIRCUIT NUMBER AND EQUIPMENT SERVED.17 ELECTRICAL CONTRACTOR SHALL PROVIDE DUCT SMOKE DETECTORS FOR ALL HVAC UNITS GREATER THAN 2,000 CFM SUPPLY. DUCT DETECTORS SHALL HAVE SAMPLING TUBE IN LENGTH PROPER FOR DUCT SIZE AND REMOTE KEYED TEST STATION.
9. CONTRACTOR SHALL CONFIRM EXISTING POWER, VOLTAGE AND PHASE OF AVAILABLE CIRCUITS FOR EQUIPMENT BEING REPLACED PRIOR TO SUBMISSION OF EQUIPMENT SHOP DRAWINGS.
10. FOR ALL ELECTRICAL QUESTIONS DURING BIDDING OR CONSTRUCTION, CONTACT ANTHONY BEIER (417)-861-0020)



KEYPLAN

STATE OF MISSOURI
ERIC R. GREITENS,
GOVERNOR

CAMERON K. COLLINS NUMBER E-24499 10-27-17

Missouri State Certificate of Authority #001075
PROFESSIONAL SEAL

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e-mail: architect@esterlyschneider.com
Certificate of Authority #000718

COMM. # 4092

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF PUBLIC SAFETY, MISSOURI VETERANS COMMISSION

HVAC REPLACEMENT PROJECT

MISSOURI VETERANS HOME

620 N. JEFFERSON
ST. JAMES, MO 65559

PROJECT # **U1503-03**
FAI # **29-051**
SITE # **4700**
FACILITY # **55019**

REVISION:
DATE:
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE: **10-27-17**

CAD DWG FILE: **E-105.DWG**
DRAWN BY: **AGB**
CHECKED BY: **CKC**
DESIGNED BY: **AGB**

SHEET TITLE:

ELECTRICAL PLAN

SHEET NUMBER:

E-105

40 OF 41 SHEETS

10-27-17