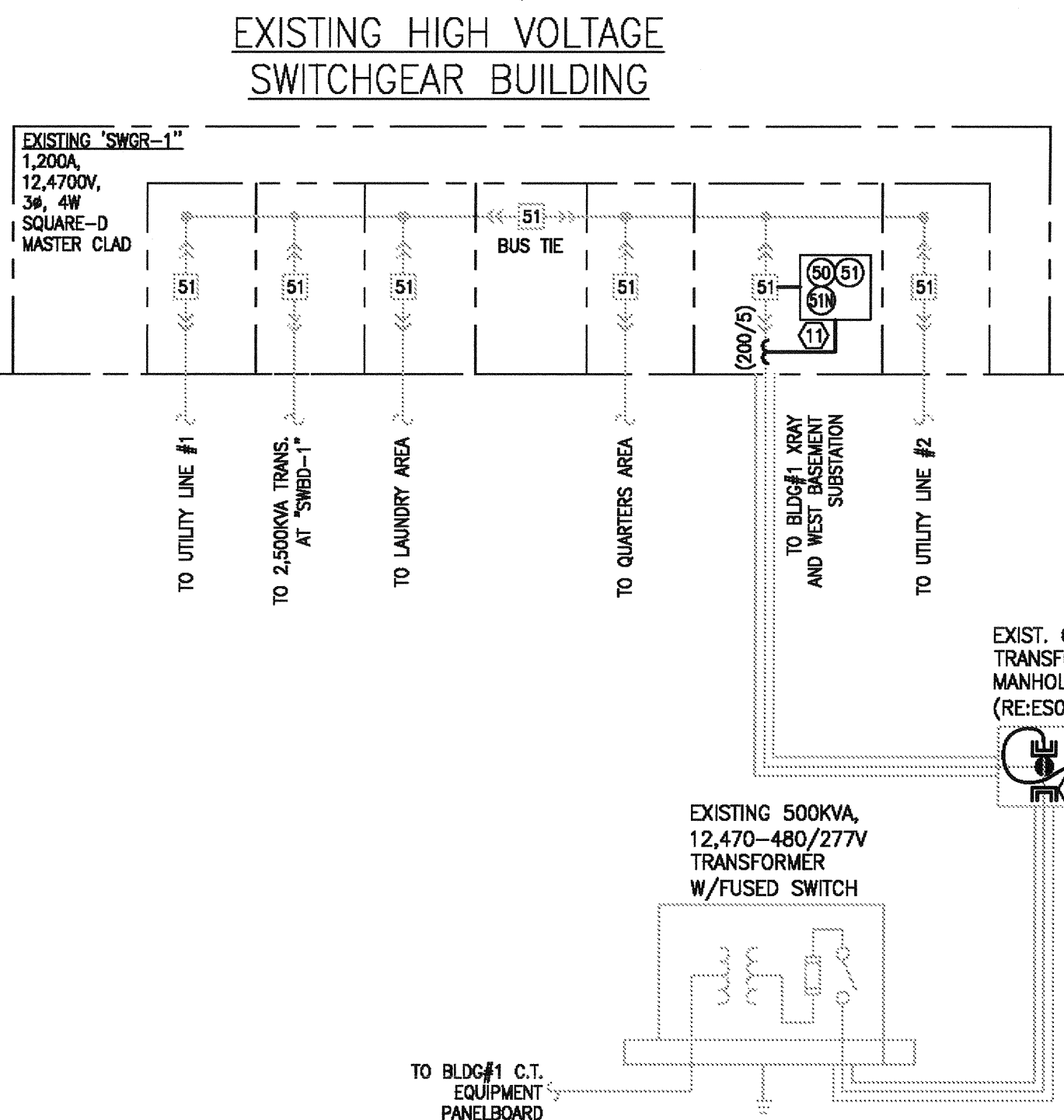


three inches = one foot
one and one half inches = one foot
one inch = one foot
one half inch = one foot
three quarters inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one sixteenth inch = one foot

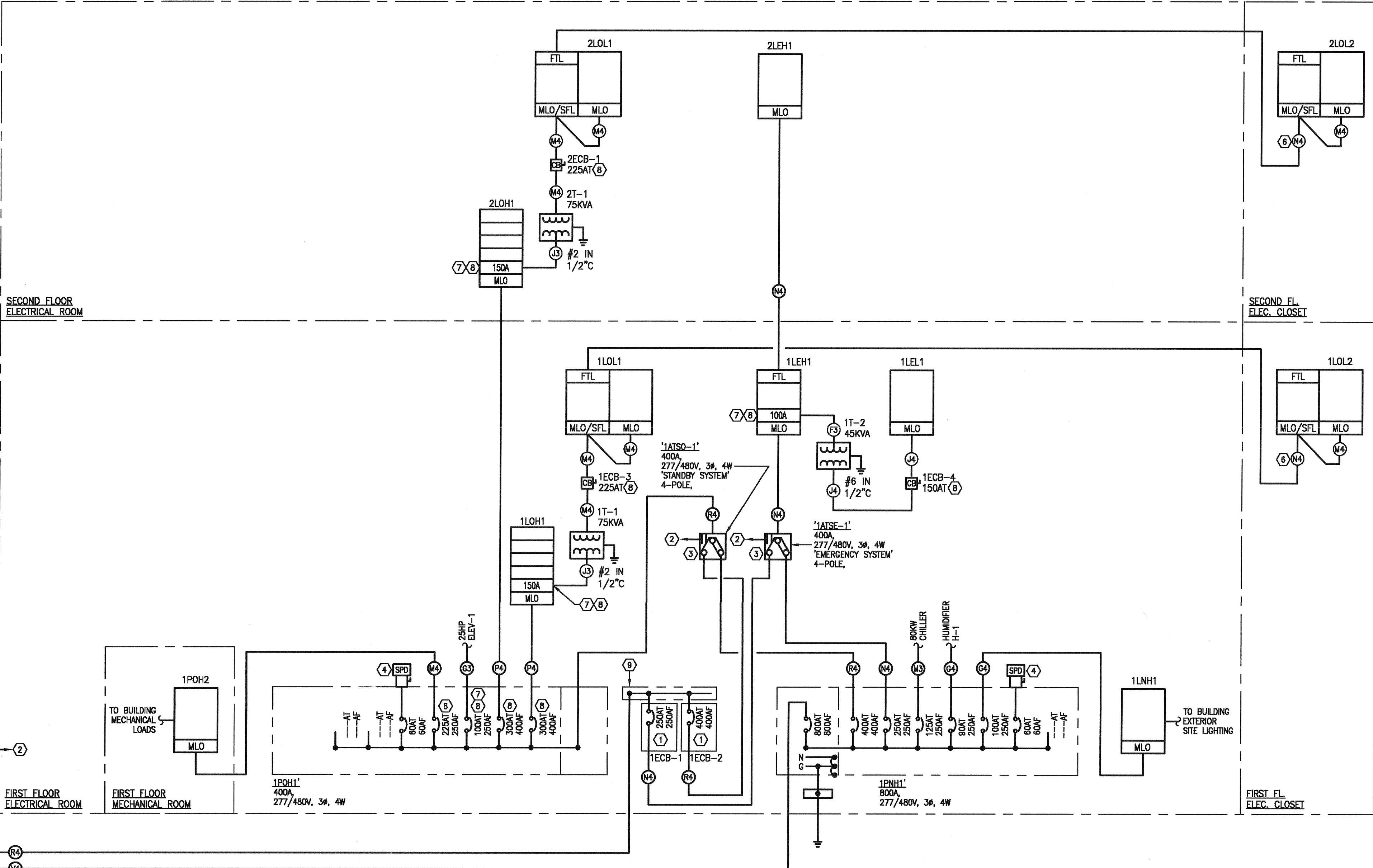
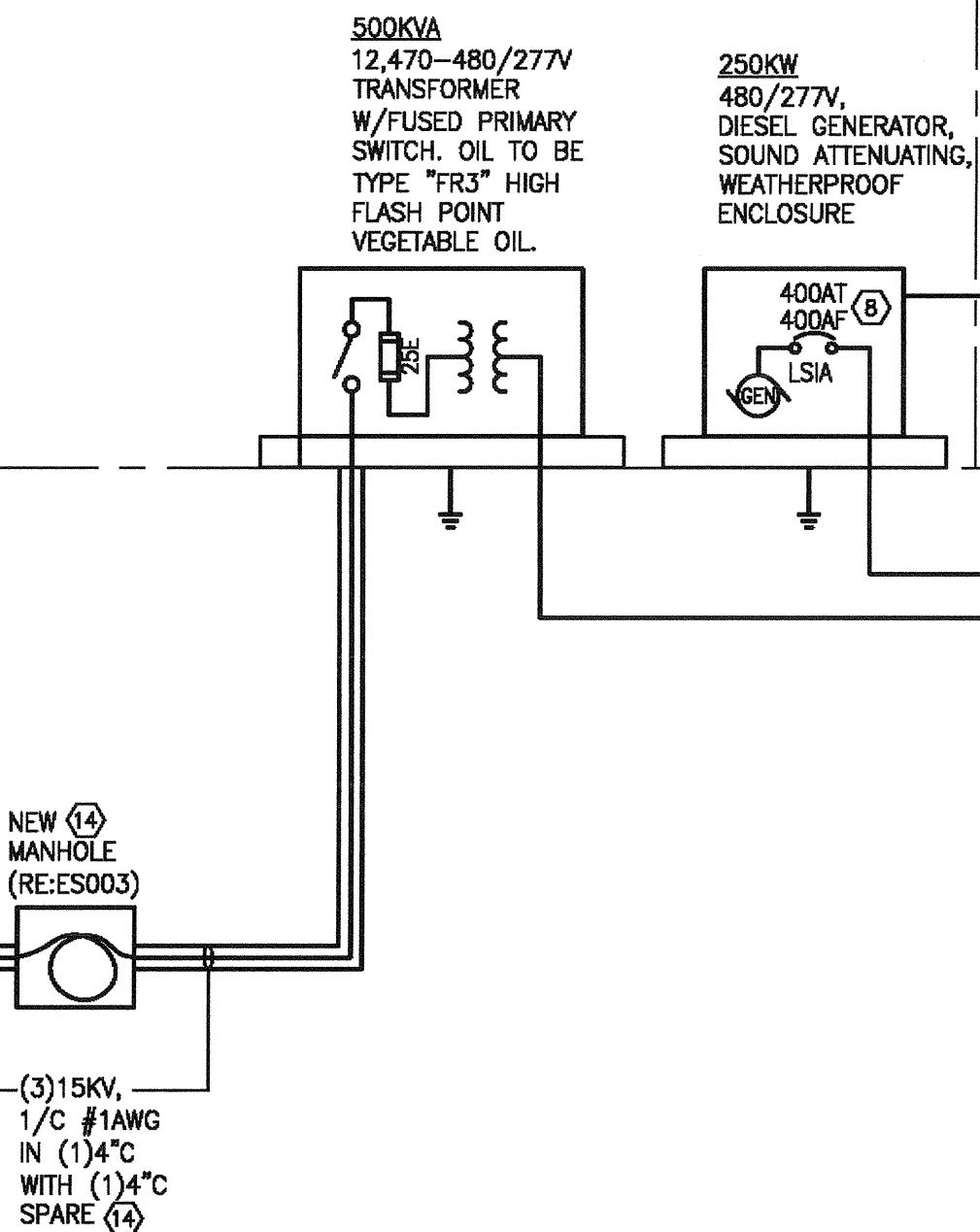
2 FEEDER SCHEDULE - COPPER CONDUCTORS									
FEEDER ID	OCPO	PHASE WIRES (AWG)	NEUTRAL WIRES (AWG)	EQUIP. GND (AWG)	MIN. CONDUIT SIZE	FEEDER ID	OCPO	PHASE WIRES (AWG)	NEUTRAL WIRES (AWG)
A3	30	(3)10	---	10	3/4	P3	300	(3)350KCMIL	---
A4	30	(3)10	(1)10	10	3/4	P4	300	(3)350KCMIL	(1)350KCMIL
A5	30	(3)10	(1)8	10	3/4	P5	300	(3)350KCMIL	(2)350KCMIL
B3	40	(3)8	---	10	3/4	Q3	350	(3)500KCMIL	---
B4	40	(3)8	(1)8	10	3/4	Q4	350	(3)500KCMIL	(1)500KCMIL
B5	40	(3)8	(1)2	10	1	Q5	350	(3)500KCMIL	(2)500KCMIL
C3	50	(3)6	---	10	1	R3	400	(6)3/0	---
C4	50	(3)6	(1)6	10	1-1/4	R4	400	(6)3/0	(2)3/0
C5	50	(3)6	(1)2	10	1-1/4	R5	400	(6)3/0	(4)3/0
D3	60	(3)4	---	10	1-1/4	S3	500	(6)250KCMIL	---
D4	60	(3)4	(1)4	10	1-1/4	S4	500	(6)250KCMIL	(2)250KCMIL
D5	60	(3)4	(1)1/0	10	1-1/4	S5	500	(6)250KCMIL	(4)250KCMIL
E3	70	(3)4	---	8	1-1/4	T3	600	(6)350KCMIL	---
E4	70	(3)4	(1)4	8	1-1/4	T4	600	(6)350KCMIL	(2)350KCMIL
E5	70	(3)4	(1)1/0	8	1-1/4	T5	600	(6)350KCMIL	(4)350KCMIL
F3	90	(3)2	---	8	1-1/4	U3	700	(6)500KCMIL	---
F4	90	(3)2	(1)2	8	1-1/2	U4	700	(6)500KCMIL	(2)500KCMIL
F5	90	(3)2	(1)3/0	8	1-1/2	U5	700	(6)500KCMIL	(4)500KCMIL
G3	100	(3)1	---	8	1-1/2	V3	800	(9)300KCMIL	---
G4	100	(3)1	(1)1	8	2	V4	800	(9)300KCMIL	(3)300KCMIL
G5	100	(3)1	(1)3/0	8	2	V5	800	(9)300KCMIL	(3)1/0
H3	125	(3)1	---	6	1-1/2	W3	1000	(9)400KCMIL	---
H4	125	(3)1	(1)1	6	2	W4	1000	(9)400KCMIL	(3)400KCMIL
H5	125	(3)1	(1)250KCMIL	6	2	W5	1000	(9)400KCMIL	(6)400KCMIL
J3	150	(3)1/0	---	6	1-1/2	X3	1200	(12)350KCMIL	---
J4	150	(3)1/0	(1)1/0	6	2	X4	1200	(12)350KCMIL	(4)350KCMIL
J5	150	(3)1/0	(2)1/0	6	2	X5	1200	(12)350KCMIL	(4)3/0
K3	175	(3)2/0	---	6	2	Y3	1500	(12)500KCMIL	---
K4	175	(3)2/0	(1)2/0	6	2	Y4	1500	(12)500KCMIL	(4)500KCMIL
K5	175	(3)2/0	(2)2/0	6	2	Y5	1500	(12)500KCMIL	(6)500KCMIL
L3	200	(3)3/0	---	6	2	Z3	1800	(15)400KCMIL	---
L4	200	(3)3/0	(1)3/0	6	2	Z4	1800	(15)400KCMIL	(5)400KCMIL
L5	200	(3)3/0	(2)3/0	6	2-1/2	Z5	1800	(15)400KCMIL	(10)400KCMIL
M3	225	(3)4/0	---	4	2	AA3	2000	(18)400KCMIL	---
M4	225	(3)4/0	(1)4/0	4	2-1/2	AA4	2000	(18)400KCMIL	(6)400KCMIL
M5	225	(3)4/0	(2)4/0	4	2-1/2	AA5	2000	(18)400KCMIL	(12)400KCMIL
N3	250	(3)250KCMIL	---	4	2-1/2	BB3	2500	(24)400KCMIL	---
N4	250	(3)250KCMIL	(1)250KCMIL	4	2-1/2	BB4	2500	(24)400KCMIL	(8)400KCMIL
N5	250	(3)250KCMIL	(2)250KCMIL	4	2-1/2				

CONDUIT METRIC CONVERSION:			
	INCHES	MM	
1/2	16	10	5.28
3/4	21	8	8.38
1-1/4	35	6	13.3
1-1/2	41	4	21
2	53	2	34
2-1/2	63	1	42
3	78	1/0	54
4	103	2/0	67
5	129	3/0	85
6	155	4/0	107
		250	127
		300	152
		350	178
		400	203
		500	254

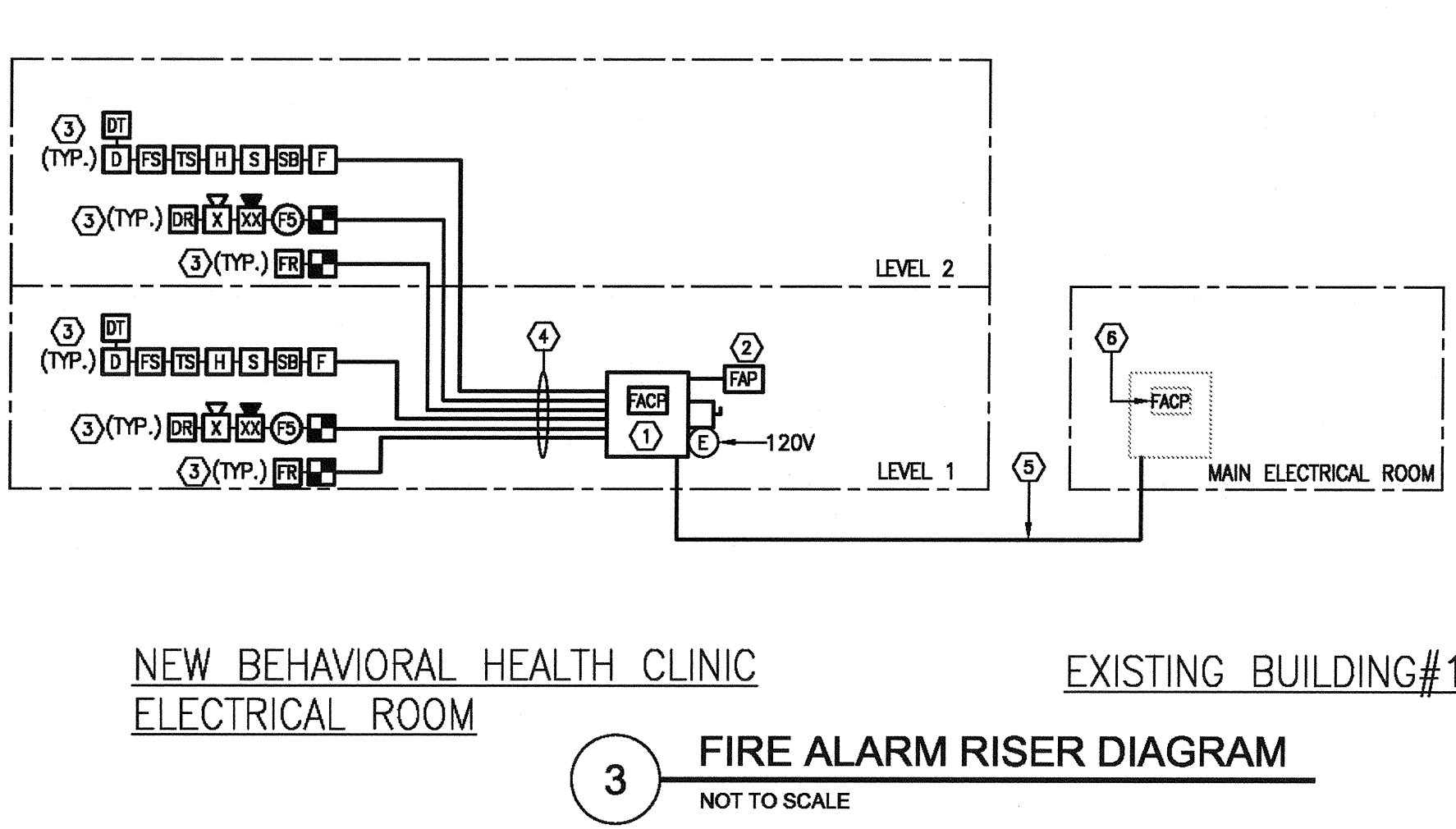


- 1A NOTES:
- SEPARATELY ENCLOSED CIRCUIT BREAKER. PROVIDE ELECTRONIC TRIP, LSI TYPE CIRCUIT BREAKER.
 - EXTEND (2) #12AWG IN 1/2" CONDUIT GENERATOR START CONTACT WIRING FROM EACH ATS BACK TO GENERATOR START CONTROL WIRING JUNCTION BOX LOCATED IN ELECTRICAL ROOM. PROVIDE (6) #12AWG IN 1-1/2" CONDUIT FROM JUNCTION BOX BACK TO GENERATOR CONTROL PANEL. EXTEND (2) #12AWG IN 1/2" CONDUIT FROM ATS TO ELEVATOR CONTROLLER IN ELEVATOR MACHINE ROOM.
 - PROVIDE INTEGRAL ATS MONITORING AND CONTROL MODULE FOR OWNER REMOTE MONITORING OF EQUIPMENT THROUGH CAMPUS NETWORK SYSTEM.
 - PROVIDE OVERCURRENT DEVICE AND CIRCUIT CONDUCTORS AS RECOMMENDED BY TVSS MANUFACTURER.
 - PROVIDE INSULATED, PARALLEL FEEDER TAP WITH MECHANICAL TYPE POWER TERMINAL BLOCK IN NEW-1 ENCLOSURE.
 - FEEDER UPSIZED FOR VOLTAGE DROP.
 - ADJUST CIRCUIT BREAKER TRIP SETTINGS TO PROTECT TRANSFORMER/ CABLES & COORD. WITH UP/DOWN STREAM BREAKERS.
 - PROVIDE ELECTRONIC TRIP, LSI TYPE CIRCUIT BREAKER.
 - CABLE WIRING. PROVIDE INSULATED PARALLEL TAPS.
 - ADJUST CIRCUIT BREAKER TRIP SETTINGS TO PROTECT ELEVATOR MOTOR FEEDER AT 70-AMPS. COORDINATE FINAL CIRCUIT BREAKER SELECTION AND SETTING WITH APPROVED ELEVATOR SHOP DRAWINGS.
 - EXISTING SQUARE-D HIGH VOLTAGE FEEDER BREAKER. PROVIDE NEW C.T. AS INDICATED TO ACCOMMODATE THE ADDITION OF NEW BEHAVIORAL HEALTH BUILDING TO THE EXISTING LAUNDRY FACILITY FEEDER. FINALIZE BREAKER SETTINGS WITH DW-28 COORDINATION STUDY.
 - PROVIDE FEEDER CABLE TAP WITHIN EXISTING MANHOLE. INSTALL 15KV, 200A LOAD BREAK CONNECTORS ON THE EXISTING C.T. TRANSFORMER(S) AND NEW BEHAVIORAL HEALTH BUILDING OUTGOING CABLES. INSTALL WALL MOUNTING PLATE FOR CONNECTORS.
 - COORDINATE THE INSTALLATION OF NEW FEEDER CABLE IN EXISTING MANHOLE WITH THE VA FACILITIES GROUP. EXISTING MANHOLE CONTAINS FEEDER CABLE SERVING EXISTING BUILDING #1 EXTERIOR C.T. TRANSFORMERS.
 - INSTALL NEW HIGH-VOLTAGE FEEDER CABLE AND CONDUIT IN NEW CONCRETE DUCTBANK FROM EXISTING MANHOLE TO NEW BEHAVIORAL HEALTH BUILDING MANHOLE.
 - ADJUST CIRCUIT BREAKER TRIP SETTINGS TO PROTECT ELEVATOR MOTOR/ CABLES & COORD. WITH UP/DOWN STREAM BREAKERS.

EXTERIOR SERVICE COURTYARD



1 POWER RISER DIAGRAM
SCALE: N.T.S.



3 FIRE ALARM RISER DIAGRAM
NOT TO SCALE

- 3A NOTES:
- FURNISH AND INSTALL NEW ADDRESSABLE FIRE ALARM CONTROL PANEL - NOTIFIER NSP-320 TO MATCH THE EXISTING CAMPUS STANDARD. PANEL SHALL BE CAPABLE OF COMMUNICATING ALL SIGNALS TO THE EXISTING NOTIFIER FACP LOCATED AT BUILDING #1. VOICE EVACUATION SIGNAL WITHIN NEW BUILDING SHALL BE VIA BUILDING #1 FACP VOICE UNIT.
 - FURNISH AND INSTALL FIRE ALARM ANNUNCIATOR PANEL AT MAIN LOBBY VESTIBULE ENTRANCE.
 - FIRE ALARM INITIATING, CONTROL, AND NOTIFICATION DEVICES. QUANTITIES AS SHOWN ON FLOOR PLANS.
 - PROVIDE FIRE ALARM WIRING WITH UL LISTED FIRE ALARM CABLES PER SYSTEM MANUFACTURER'S RECOMMENDATIONS.
 - PROVIDE (2) SETS OF EXTERIOR GRADE (WATER-RESISTANT) #14 TWISTED SHIELDED PAIR COPPER CONDUCTORS IN 4" C.T. TO EXISTING BUILDING #1 NOTIFIER FIRE ALARM CONTROL PANEL. ONE SET IS FOR THE LOCAL BUILDING SIGNALS TO THE MAIN FACP IN BUILDING #1. THE SECOND SET IS FOR VOICE COMMUNICATION SIGNALS FROM MAIN FACP IN BUILDING #1 TO LOCAL BUILDING VOICE EVACUATION SPEAKER CIRCUIT. COORDINATE FINAL CABLE TYPE AND QUANTITY WITH THE MANUFACTURER'S RECOMMENDATIONS. INSTALL CABLE SURGE PROTECTION DEVICES AND ISOLATION MODULES PER MANUFACTURER'S RECOMMENDATIONS.
 - EXISTING NOTIFIER FIRE ALARM CONTROL PANEL IN BUILDING #1. COORDINATE ALL CABLE INTERFACING IN EXISTING FACP WITH FACILITIES GROUP PRIOR TO ROUGH-IN.

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		VA Project Number	
		CANNON DESIGN		POWER RISER DIAGRAM AND SCHEDULES		BEHAVIORAL HEALTH MINOR PROJECT		562-313	
		2170 Whitehaven Road, Grand Island, New York 14072 T: 716.773.6800 F: 716.773.6909		Approved Project Director		Location		Cannon project number	
		Boston • New York • Baltimore • Washington DC • Buffalo Toronto • Chicago • St. Louis • Calgary • Vancouver Victoria • San Francisco • Los Angeles • Shanghai				Date		03371.00	
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						Drawn		Department of Veterans Affairs	
						DJ			