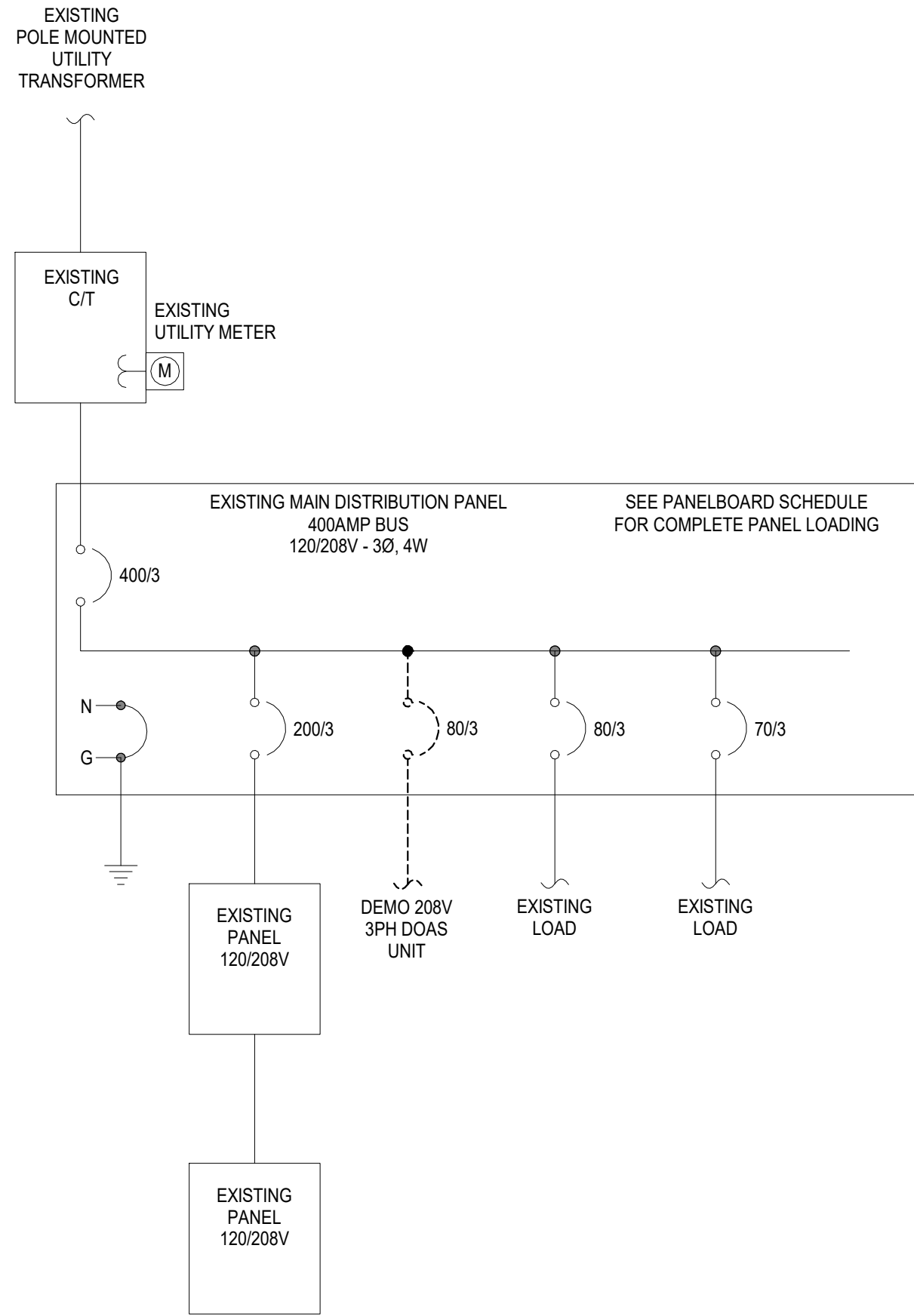
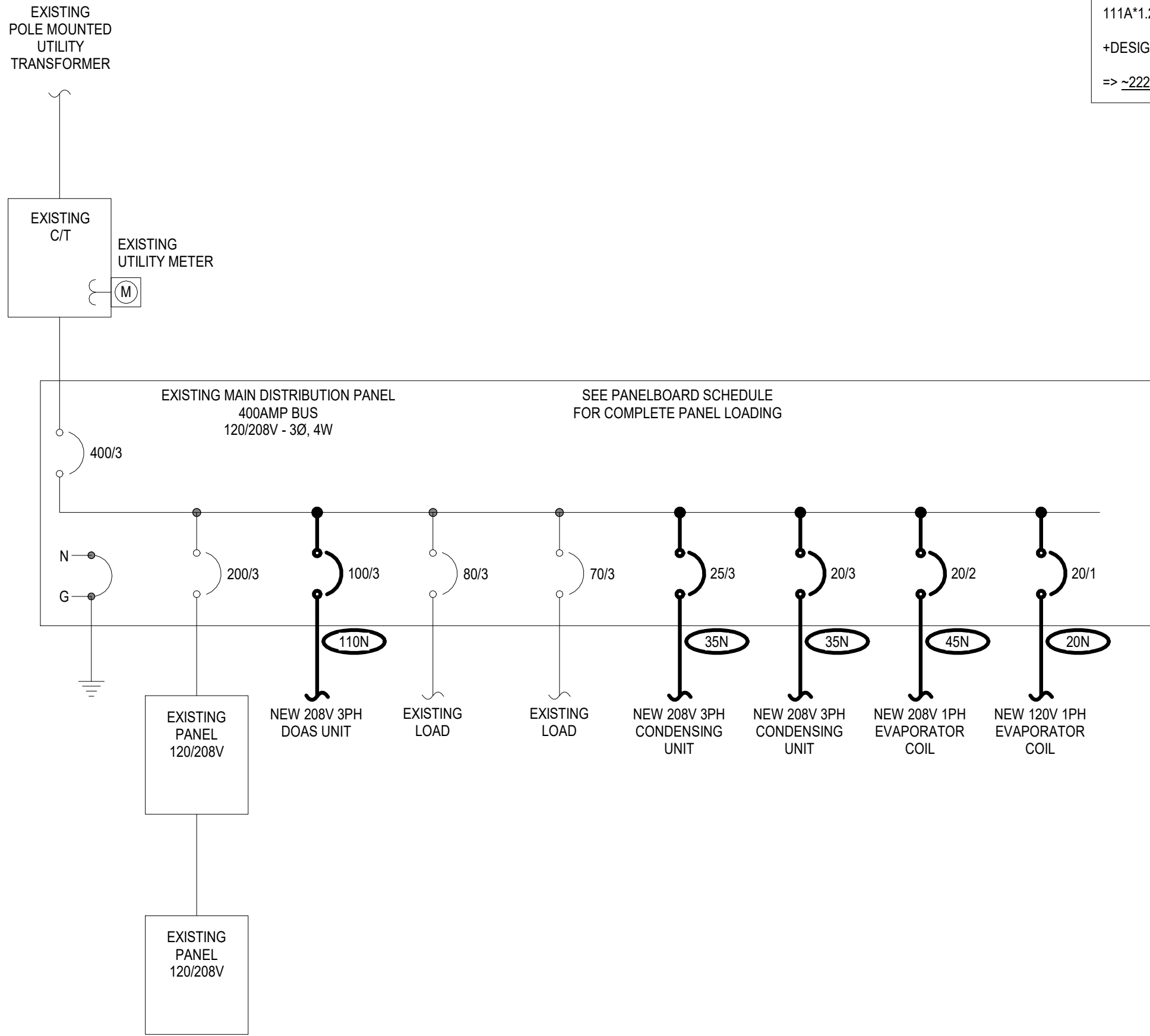
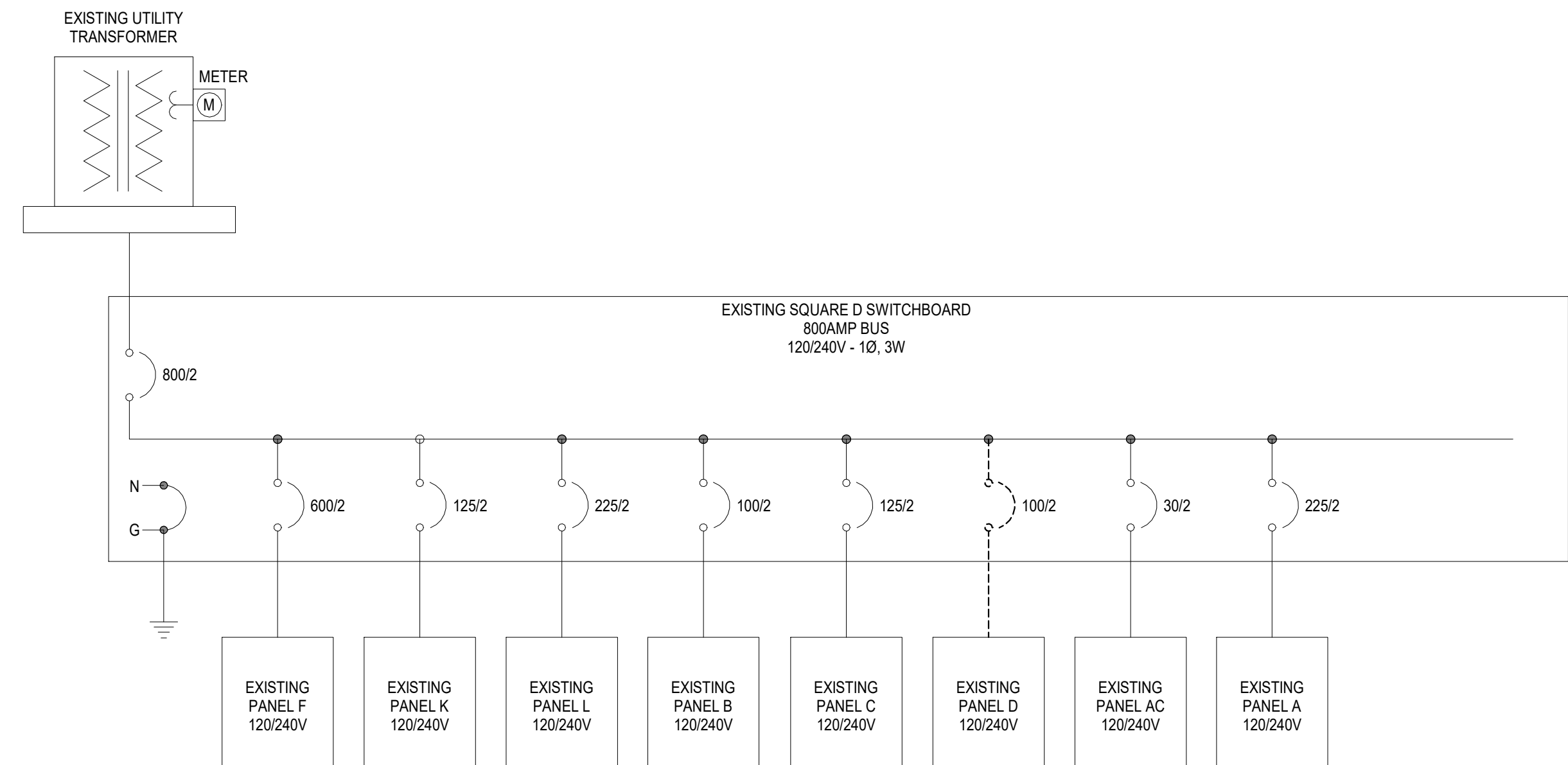




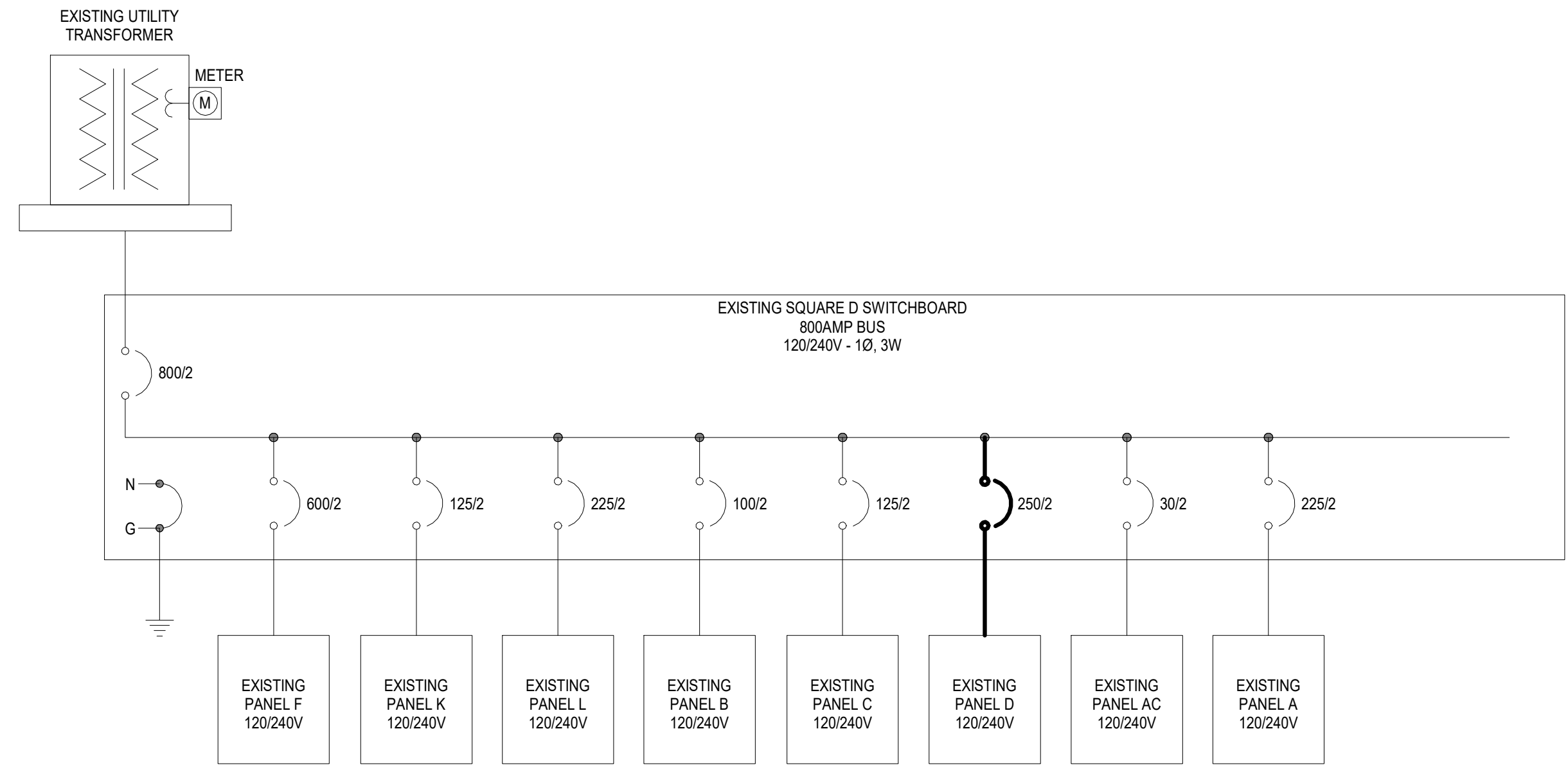
3 **ELECTRICAL ONE-LINE DIAGRAM - 3PH MDP - DEMO**
Scale: N.T.S.



1 **ELECTRICAL ONE-LINE DIAGRAM - 3PH MDP - NEW**
Scale: N.T.S.



4 **ELECTRICAL ONE-LINE DIAGRAM - 1PH MDP - DEMO**
Scale: N.T.S.



2 **ELECTRICAL ONE-LINE DIAGRAM - 1PH MDP - NEW**
Scale: N.T.S.

EXISTING LOAD ANALYSIS
EXISTING 3PH MDP LOAD ANALYSIS:
PEAK LOAD ASK REPORTED BY UTILITY: 111A/PHASE (40KVA)
111A*1.25 (PER NEC 220.87) = 139A/PHASE (50KVA)
+DESIGN LOAD = ~222A/PHASE (80KVA)
=> ~222A (80KVA) MAX ON THE PANEL 'MDP' 400A.

EXISTING LOAD ANALYSIS
EXISTING 1PH MDP LOAD ANALYSIS:
PEAK LOAD ASK REPORTED BY UTILITY: 312.5A/PHASE (75KVA)
312.5A*1.25 (PER NEC 220.87) = 390.625A/PHASE (93.8KVA)
+DESIGN LOAD = ~505.625A/PHASE (121.4KVA)
=> ~505.625A (121.4KVA) MAX ON THE PANEL 'MDP' 800A.

FEEDER SCHEDULE				
AMPS	CONDUIT SIZE 4W	CONDUIT SIZE 3W	PHASE CONDUCTORS	EQUIPMENT GROUND CONDUCTOR
20	3/4"	3/4"	#12	#12
25	3/4"	3/4"	#10	#10
30	3/4"	3/4"	#10	#10
35	1"	3/4"	#8	#10
40	1"	3/4"	#8	#10
45	1"	1"	#6	#10
50	1"	1"	#6	#10
60	1 1/4"	1 1/4"	#4	#10
70	1 1/4"	1 1/4"	#4	#8
80	1 1/4"	1 1/4"	#3	#8
90	1 1/2"	1 1/4"	#2	#8
100	1 1/2"	1 1/4"	#2	#8
110	2"	1 1/2"	#1	#6
125	2"	1 1/2"	#1	#6
150	2"	1 1/2"	#1/0	#6
175	2"	2"	#2/0	#6
200	2"	2"	#3/0	#6
225	2 1/2"	2"	#4/0	#4
250	3"	2 1/2"	250 kcmil	#4
300	3"	3"	350 kcmil	#4
350	3 1/2"	3"	500 kcmil	#3
400	(2) 2"	(2) 2"	2 SETS OF #3/0	#3
450	(2) 2 1/2"	(2) 2"	2 SETS OF #4/0	#2
500	(2) 2 1/2"	(2) 2 1/2"	2 SETS OF 250 kcmil	#2
600	(2) 3"	(2) 3"	2 SETS OF 350 kcmil	#1
700	(2) 3 1/2"	(2) 3"	2 SETS OF 500 kcmil	#1/0
800	(3) 3"	(3) 2 1/2"	3 SETS OF 300 kcmil	#1/0
900	(3) 3 1/2"	(3) 3"	3 SETS OF 400 kcmil	#2/0
1000	(3) 3 1/2"	(3) 3"	3 SETS OF 500 kcmil	#2/0
1200	(4) 3"	(4) 3"	4 SETS OF 350 kcmil	#3/0
1600	(5) 3 1/2"	(5) 3"	5 SETS OF 500 kcmil	#4/0
1800	(6) 3 1/2"	(6) 3"	6 SETS OF 400 kcmil	250 kcmil
2000	(6) 3 1/2"	(6) 3"	6 SETS OF 500 kcmil	250 kcmil
2500	(7) 3 1/2"	(7) 3"	7 SETS OF 500 kcmil	350 kcmil
NOTES: 1. FEEDER SIZES ARE ON THE PLAN WHERE 60 REFERS TO A 60A FEEDER WITHOUT NEUTRAL AND 60N REFERS TO A 60A FEEDER WITH NEUTRAL. 2. SOME FEEDER SIZES DO NOT MATCH BREAKER SIZE DUE TO UP-SIZING OF THE FEEDER FOR VOLTAGE DROP. 3. CONDUITS ARE SIZED PER NEC TABLES FOR THHN/THWN AND MAY BE UPSIZED FOR EASE OF PULLING OR DOWNSIZED AS ALLOWED PER NEC FOR CONDUIT TYPE(S) BEING INSTALLED. 4. ALL CONDUCTORS 100A AND LESS ARE SIZED PER 60 DEGREE LUGS, EC MAY SIZE CONDUCTORS FOR ACTUAL RATING OF LUGS PER NEC.				



Δ	DESCRIPTION	DATE

