



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

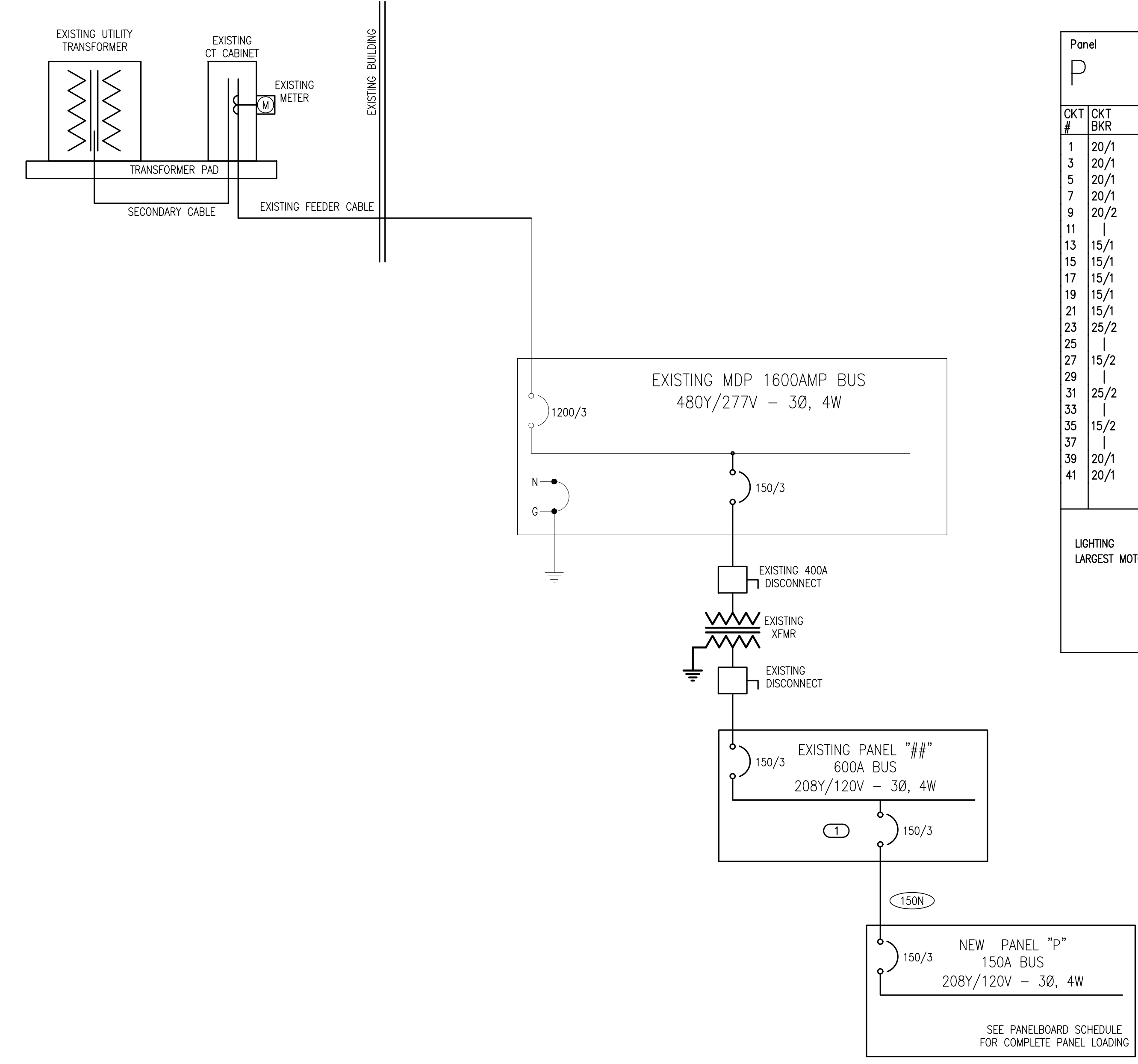
- GENERAL NOTES**
- AIC RATINGS ARE ESTIMATED BASED ON AVAILABLE DATA DURING DESIGN. CONTRACTOR TO VERIFY AVAILABLE FAULT CURRENT WITH UTILITY.
  - FAULT CURRENT, ARC FLASH, AND COORDINATION STUDY SHALL BE PERFORMED BY A THIRD PARTY ONCE EXACT PANEL PLACEMENT AND DISTANCES ARE DETERMINED. REFER TO SPECIFICATIONS SECTION 26 0573 FOR MORE INFORMATION.
  - PROVIDE A MINIMUM OF 10 SPARE 1P20A BREAKERS FOR EACH 120V SUB-PANEL.
  - THE EXISTING LOAD FOR PANEL ## WAS UNABLE TO BE VERIFIED DURING DESIGN. EC SHALL PERFORM A 30 DAY LOAD STUDY ON THE PANEL PRIOR TO PERFORMING ANY WORK IN ORDER TO DETERMINE THE EXISTING PEAK LOAD IN ACCORDANCE WITH NEC 220.87(1). FINAL RESULTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO BEGINNING WORK.

- KEYED NOTES**
1. EC SHALL PROVIDE NEW 150A/3P BREAKER WITHIN EXISTING PANEL ## IN ORDER TO FEED NEW PANEL P.

MECHANICAL EQUIPMENT SCHEDULE											
CALLOUT	DESCRIPTION	VOLTS	HP	KVA	MCA	MOCP	CIRCUIT	WIRE CALLOUT	DISCONNECT	DISC PROV BY	DISC INST BY
AC-1	(OUTDOOR) MINI SPLIT HEAT PUMP	208V 2P 2W		2.33	14	24	P-9,11	3/4"C,2#12,#12N,#12G	NON-FUSED	MC	EC
CP-1	CIRCULATION PUMP	120V 1P 2W	F HP	0.1			P-16	3/4"C,1#12,#12N,#12G	DUPLEX RECEPTACLE	EC	MC
EF-1	EXHAUST FAN	208V 2P 2W	1/4 HP	0.7	4.18	15	P-35,37	3/4"C,2#10,#10G	TOGGLE SWITCH	MC	EC
EFH-1	ELECTRIC FAN HEATER	208V 2P 2W		3.99	24	25	P-23,25	3/4"C,2#10,#10G	NON-FUSED	MC	EC
EFH-2	ELECTRIC FAN HEATER	208V 2P 2W		2.3	24	25	P-31,33	3/4"C,2#10,#10G	NON-FUSED	MC	EC
EFH-3	ELECTRIC FAN HEATER	120V 1P 2W		1.15	12	15	P-27,29	3/4"C,2#12,#12N,#12G	NON-FUSED	MC	EC
EFH-4	ELECTRIC FAN HEATER	208V 2P 2W		2.3	24	30	P-18,20	3/4"C,2#10,#10G	NON-FUSED	MC	EC
UH-1	GAS UNIT HEATER	120V 1P 2W	F HP	0.1	1.04	15	P-13	3/4"C,1#12,#12N,#12G	NON-FUSED	MC	EC
UH-2	GAS UNIT HEATER	120V 1P 2W	F HP	0.1	1.04	15	P-17	3/4"C,1#12,#12N,#12G	NON-FUSED	MC	EC
UH-3	GAS UNIT HEATER	120V 1P 2W	F HP	0.1	1.04	15	P-15	3/4"C,1#12,#12N,#12G	NON-FUSED	MC	EC
UH-4	GAS UNIT HEATER	120V 1P 2W	F HP	0.1	1.04	15	P-21	3/4"C,1#12,#12N,#12G	NON-FUSED	MC	EC
UH-5	GAS UNIT HEATER	120V 1P 2W	F HP	0.1	1.04	15	P-19	3/4"C,1#12,#12N,#12G	NON-FUSED	MC	EC
WH-1	GAS WATER HEATER	120V 1P 2W		0.24	2.5	15	P-14	3/4"C,1#12,#12N,#12G	DUPLEX RECEPTACLE	EC	EC

Panel P											
CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	Panel Summary			
1	20/1	0.54	ROOM 2 RCPT	a 2	20/1	0.319	LIGHTING	ROOM WEST 3	VOLTS	208Y/120V 3P 4W	
3	20/1	0.54	ROOM 4 RCPT	b 4	20/1	1.78	LIGHTING	MOUNTING SURFACE	AIC	65,000	
5	20/1	0.54	ROOM 4,5,6 RCPT	c 6	20/1	0.282	LIGHTING	FED FROM EXISTING PANEL	MAIN BKR	150	
7	20/1	0.36	EXTERIOR RCPT	a 8	20/1	0.18	ELECTRIC WATER COOLER RCPT	NEUTRAL	100%	LUGS	STANDARD
9	20/2	2.43	AC-1	b 10	20/1	0.18	TRAP PRIMER	NOTE	NEW		
11				a 12	20/1	0.18	TRAP PRIMER				
13	15/1	0.1	UH-1	a 14	15/1	0.24	WH-1				
15	15/1	0.1	UH-3	b 16	20/1	0.1	CP-1				
17	15/1	0.1	UH-2	a 18	30/2	2.3	EFH-4				
19	15/1	0.1	UH-5	a 20		0	SPACE				
21	15/1	0.1	UH-4	b 22	20/1	0	SPACE				
23	25/2	3.99	EFH-1	c 24	20/1	0	SPACE				
25				a 26	20/1	0	SPACE				
27	15/2	1.15	EFH-3	b 28	20/1	0	SPACE				
29				c 30	20/1	0	SPACE				
31	25/2	2.3	EFH-2	a 32	20/1	0	SPACE				
33				b 34	20/1	0	SPACE				
35	15/2	0.696	EF-1	c 36	20/1	0	SPACE				
37				a 38	20/1	0	SPACE				
39	20/1	0.18	ROOF RCPT	b 40	20/1	0	SPACE				
41	20/1	0	SPACE	c 42	20/1	0	SPACE				

	CONN KVA	CALC KVA		CONN KVA	CALC KVA		
LIGHTING	2.38	2.98	(125%)	MOTORS	13.7	13.7	(100%)
LARGEST MOTOR	3.99	0.998	(25%)	RECEPTACLES	2.7	2.7	(50%>10)
				TOTAL LOAD		20.4	
				BALANCED 3-PHASE LOAD		56.6 A	
				PHASE A		104%	
				PHASE B		102%	
				PHASE C		93.7%	



### 1 ELECTRICAL ONE - LINE DIAGRAM

NO SCALE